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OFFICIAL GAZETTE UNITED STATES PATENT OFFICE

VOL. 250 - 251

MAY - JUNE

1918

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OFFICIAL GAZETTE

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UNITED STATES PATENT OFFICE.

VOLUME CCL.

MAY,

1918.

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WASHINGTON
GOVERNMENT PRINTING OFFICE
1918

ERRATA.

1,265,019, page 41, in heading, assignment, after the word "assignors" insert the words *of one-half*.

1,265,176, page 85, in heading, name of patentee, for "Charles Rackwell Clark" read *Charles Rockwell Clark*.

1,265,260, page 134, first claim, line 3, before the word "reducing" insert the word *silicious*.

1,265,401, page 146, in heading, assignment, name of assignee, for "Haskell & Barber Car Co., Inc." read *Haskell & Barker Car Co., Inc.*

1,265, 964, page 331, fourth claim, line 7, for the word "for" read *from*.

1,267,141, page 689, in heading, assignment, name of assignee, for "Nicholas Copper Company" read *Nichols Copper Company*.

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THE OFFICIAL GAZETTE

OF THE

United States Patent Office.

Vol. 250—No. 1. TUESDAY, MAY 7, 1918. Price—$5 per year.
[PUBLISHED MAY 24, 1918.]

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $5.00 per annum; single numbers, 10 cents each.

Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Trade-Marks	36—No.	121,535 to	121,572, inclusive.
Labels	4—No.	20,608 to	20,611, inclusive.
Prints	None.		
Reissues	5—No	14,466 to	14,470, inclusive.
Total	917		

Adverse Decisions in Interference.

PATENT NO. 1,131,190.

On April 10, 1918, a decision was rendered that Ezechiel Weintraub was not the first inventor of the subject-matter covered by claims 1, 2, 3, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 15, 16, 18, 19, 20, 21, 24, 31, 32, 40, 42, 46, 48, 50, 51, and 52 of his Patent No. 1,131,190, subject "Production of high-frequency currents," and no appeal having been taken within the time allowed such decision has become final.

PATENT NO. 1,145,509.

On April 10, 1918, a decision was rendered that Walter J. Pike and Roy J. Sutton were not the first inventors of the subject-matter covered by claims 1, 3, 7, 10, and 11 of their Patent No. 1,145,509, subject, "Electrochemical controlling apparatus," and no appeal having been taken within the time allowed such decision has become final.

Interference Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 8, 1918.

The Farmers' Preserving Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Miner, Read & Tullock, 91–115 State street, New Haven, Conn., for registration of a trade-mark and trade-mark registered August 10, 1909, No. 74,803, to The Farmers' Preserving Company, of Rising Sun, Del., and a notice of such declaration sent by registered mail to the said The Farmers' Preserving Company at the said address having been returned by the post-office undelivered, notice is hereby given that unless said The Farmers' Preserving Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Applications Made to the Federal Trade Commission for Licenses under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 1,067,530, dated July 15, 1913, to Carl Lindstrom, of Berlin, Germany. "Talking-machine." License applied for by American Parlograph Company, 123 Liberty street, New York city.

Patent No. 1,019,548, dated March 5, 1912, to Karl Spitzer, of Vienna, Austria-Hungary. "Suction device for dust-laden air." License applied for by The Hagen Corporation, Peoples' Bank Building, corner of Fourth avenue and Wood street, Pittsburgh, Pa.

Suspension of Actions on Applications.

RULE 77. If an applicant neglect to prosecute his application for one year after the date when the last official notice of any action by the Office was mailed to him, the application will be held to be abandoned, as set forth in Rule 171.

Suspensions will only be granted for good and sufficient cause, and for a reasonable time specified. Only one suspension may be granted by the Primary Examiner; any further suspension must be approved by the Commissioner.

Whenever action upon an application is suspended upon request of an applicant, and whenever an applicant has been called upon to put his application in condition for interference, the period of one year running against the application shall be considered as beginning at the date of the last official action preceding such actions.

Whenever, during a time when the United States is at war, publication of an invention by the granting of a patent might, in the opinion of the Commissioner, be detrimental to the public safety or defense or might assist the enemy or endanger the successful prosecution of the war, he may suspend action on the application therefor.

Printed Copies of Patents.

A printed copy of the complete specification and drawings of any patent published herein can be obtained for five cents.

12519

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business May 3, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 1	Apr. 1	166
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Jan. 11	Jan. 3	276
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 15	Mar. 21	131
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Mar. 13	Apr. 15	140
167	5. Bookbinding; Harvesters; Jewelry; Music	Jan. 24	Mar. 15	230
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Nov. 20	Feb. 7	411
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Jan. 14	Feb. 20	406
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Mar. 12	Mar. 25	353
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Nov. 15	Apr. 22	423
235	10. Carriages and Wagons; Motor Vehicles	Jan. 8	Mar. 25	602
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Jan. 25	Apr. 8	230
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Jan. 16	Feb. 12	617
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Jan. 12	Mar. 26	464
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 7	Mar. 6	187
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Mar. 27	Apr. 10	223
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Dec. 18	Jan. 12	527
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Mar. 15	Apr. 1	124
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 6	Feb. 23	334
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Feb. 6	Feb. 7	417
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	Mar. 28	Mar. 30	223
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 7	Mar. 9	214
249	22. Aeronautics; Firearms; Ordnance	Jan. 16	Mar. 21	297
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Feb. 2	Mar. 14	323
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	Mar. 23	Mar. 18	160
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	Mar. 14	Mar. 23	165
105	26. Electricity, Generation; Motive Power	Nov. 16	Mar. 14	481
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Mar. 12	Mar. 25	302
225	28. Internal-Combustion Engines	Dec. 5	Mar. 6	437
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 2	Feb. 18	435
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Jan. 24	Apr. 5	377
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Feb. 16	Mar. 4	220
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Nov. 1	Apr. 1	690
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Mar. 11	Mar. 11	183
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	Mar. 13	Apr. 8	93
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Dec. 29	Jan. 26	560
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Mar. 9	Mar. 23	564
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Nov. 16	Dec. 22	665
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	Apr. 16	Mar. 27	95
220	39. Water Distribution; Multiple Valves	Jan. 4	Feb. 15	397
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Jan. 28	Feb. 16	479
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Jan. 30	Feb. 23	334
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling	Nov. 21	Dec. 18	665
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Feb. 1	Apr. 1	252
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Feb. 18	Mar. 14	163
379	45. Clutches; Lubrication; Motors; Railway Brakes	Jan. 29	Jan. 19	355

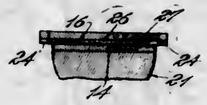
Oldest new case, Nov. 1; oldest amended, Dec. 18.
Total number of applications awaiting action 15,390

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	Apr. 1	Apr. 22	528
	Designs	Mar. 15	Mar. 21	501
	Labels and Prints	Mar. 21	Mar. 26	158

PATENTS

GRANTED MAY 7, 1918.

1,264,880. SHOE AND PROCESS OF MAKING THE SAME. WILLIAM H. BAIN, St. Louis, Mo. Filed Dec. 20, 1915. Serial No. 67,731. (Cl. 36—17.)



1. A welt shoe comprising an insole provided with a shank piece secured to the insole along its outer edge and extending across the under side of the shank with its inner edge loose, said shank piece having lips along its edges, an upper secured to said lips, and a welt extending from the heel end of the shank on one side around the toe to the heel end of the shank on the other side and secured to said upper and lips, whereby said upper and welt are loose from said insole along the inner edge of the shank.

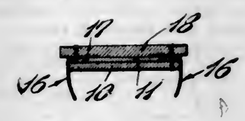
3. A welt shoe comprising an insole, and a welt continuous from heel to heel inseamed to the insole around the toe and fore-part and loose from the insole along the shank.

9. An insole for a welt shoe, said insole having a shank piece on its bottom face loose from the insole at its inner side and secured thereto at its outer side and provided with downturned edges adapted to receive the inseaming.

14. The process of making welt shoes which comprises channeling the insole around the fore-part, arranging a shank piece having downturned edges across the insole beneath its shank, lasting the upper to the insole, and inseaming the upper to the insole around the fore-part and inseaming only to the shank piece along the inside of the shank, whereby said upper is free of the insole along the inside of the shank.

[Claims 2, 4 to 8, 10 to 13, 15, and 16 not printed in the Gazette.]

1,264,881. SHOE. WILLIAM H. BAIN, St. Louis, Mo. Filed Dec. 20, 1915. Serial No. 67,732. (Cl. 36—12.)



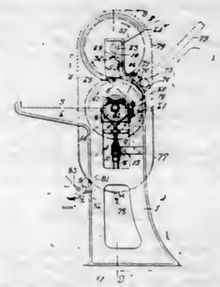
1. A McKay shoe or the like having an insole and an outsole fastened directly together, a shank piece secured to the insole, an upper lasted to the shank piece, the upper and shank piece both being secured to the outsole and free from the insole along the inner side of the shank.

2. A shoe having an insole and an outsole secured together around the forepart, and a shank piece secured to the insole at its ends, an upper lasted to the shank piece, the upper and shank piece being secured to the outsole and free from the insole along the inner side of the shank.

6. A shoe having an insole provided with a channel on its top side around the forepart and comprising a shank member on the under side loose from the insole along the inner side of the arch, an upper lasted to the forepart of said insole and to said shank member, and an outsole secured to said insole around the forepart and to said shank member, the outsole securing means to said insole being concealed in said channel and the securing means to said shank member being covered on the inner side of the shank by said insole.

[Claims 3 to 5 not printed in the Gazette.]

1,264,882. LAY-OUT AND TRANSFER MACHINE. EDWARD S. BEACH, Ridgefield, Conn., assignor, by direct and mesne assignments, to Multicolor Intaglio Press Company, Dover, Del., a Corporation of Delaware. Filed Dec. 16, 1916. Serial No. 137,471. (Cl. 101—33.)



1. The combination of means for receiving and supporting a demountable roll; an arcuate chambered squeegee roll; a transverse alining-bar located within the chamber of the squeegee roll; a presser foot; and means for raising and lowering the presser foot.

2. The combination of means for receiving and supporting a demountable roll; an arcuate chambered squeegee roll; a transverse alining-bar located within the chamber of the squeegee roll; a presser foot; means for raising and lowering the presser foot; and a water discharge pipe constructed and operable to discharge water on the demountable roll when it is in place.

3. The combination of means for receiving and supporting a demountable roll; an arcuate chambered squeegee roll; a transverse alining-bar located within the chamber of the squeegee roll; a presser foot; means for raising and lowering the presser foot; and means for approaching and separating the demountable roll when it is in position and the squeegee roll.

8. The combination of a roll on which a layout and transfer are to be made; a coöperating roll; a transverse alining bar; a presser foot; and a side-edge alining bar, the side-edge alining bar being detachably mounted on the presser foot; and a side-edge alining bar adjustable on the shaft of the coöperating roll.

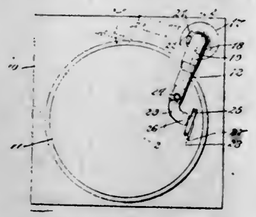
9. The combination of a roll on which a layout and transfer are to be made; sheet-alining means; a presser foot; means for raising and lowering the presser foot; and a coöperating roll.

[Claims 4 to 7 not printed in the Gazette.]

1,264,883. TALKING-MACHINE. WILLIAM G. BEARD, New York, N. Y., assignor to Henry C. Burnstine, New York, N. Y. Filed July 24, 1915. Serial No. 41,645. (Cl. 274—23.)

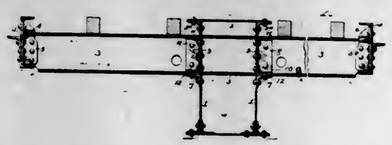
In apparatus for reproducing sounds, and in combination with the usual record supporting casing having an

opening in its top for the tone arm, an inverted cup in said opening having a notched bottom carrying a lifting ridge, a tone arm having a lug adapted to pass



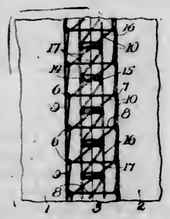
through said notch in the bottom and to rest on said ridge, a gimbal ring in said cup connected by pivots with said tone arm, and a securing ring for said gimbal ring screwing into said cup, substantially as described.

1,264,884. UNDERFRAME CONSTRUCTION FOR RAILWAY-CARS. ANTON BECKER, Columbus, Ohio, assignor to The Ralston Steel Car Company, Columbus, Ohio. Filed July 11, 1916. Serial No. 108,726. (Cl. 105—76.)



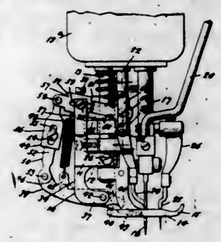
In a car underframe, the combination with a center girder, and a transverse I-beam passing through the center girder, of an angle bar secured to the center girder in position to support said I-beam, connecting brackets secured at respective sides of said I-beam, said brackets having vertical flanges secured to the center girder, said brackets also having upper and lower flanges formed with depressions to receive the flanges of the I-beam, and the lower flanges of said brackets secured to the angle bars.

1,264,885. SEAM FOR SEWED ARTICLES. JOSEPH BERGER, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 3, 1915. Serial No. 11,777. (Cl. 112—34.)



A duplex seam for sewed articles comprising two fabric sections, a retaining seam for joining the abutted edges of said fabric sections, said retaining seam including spaced pairs of opposed needle loops, a looper cross thread joining and anchoring said pairs of opposed needle loops on one face of the fabric, a cross thread joining the opposed pairs of needle loops on the other face of the fabric, and a covering seam disposed within the borders of the retaining seam and including spaced pairs of opposed needle loops located on opposite sides of said meeting edges, a looper cross thread joining and anchoring said opposed needle loops on one face of the fabric, and a cross thread for connecting and joining the needle loops of the covering seam on the other face of the fabric.

1,264,886. PICOT-EDGING ATTACHMENT. MAX A. BERGWARDT, Elizabeth, N. J. Filed July 29, 1916. Serial No. 112,100. (Cl. 112—6.)



1. In a picot edging attachment, the combination with a supporting bracket operatively carrying a pair of scissors, adapted to be applied to the presser-foot bar of a hemstitching machine having a reciprocable piercer-bar, of a member formed of extensibly adjustable links one being pivoted to one of the blades of scissors, a rocking bar on the bracket, having one of its ends pivoted to the second link of said member and having its other end pivoted to the piercer-bar, and means connecting the second blade of the scissors to the bracket for normally retaining in depressed position the cutting end of said second blade between the toes of the presser-foot of the machine.

2. In a picot edging attachment, the combination with a supporting bracket operatively carrying a pair of scissors, adapted to be removably applied to the presser-foot bar of a hemstitching machine having a reciprocable piercer-bar, of a member formed of extensibly adjustable links one being pivoted to one of the blades of the scissors, a rocking bar on the bracket, having one of its ends pivoted to the second link of said member and having its other end pivoted to the piercer-bar, means connecting the second blade of the scissors to the bracket for normally retaining in depressed position the cutting end of said second blade between the toes of the presser-foot of the machines, and means on the bracket, operable for allowing the cutting ends of the scissors to be adjustably raised and lowered between the toes of said presser-foot.

3. In a picot edging attachment, the combination with a supporting bracket operatively carrying a pair of scissors, adapted to be removably applied to the presser-foot bar of a hemstitching machine having a reciprocable piercer-bar, of an extensibly adjustable member having one of its ends pivoted to one of the blades of the scissors, a rocking bar on the bracket, having one of its ends pivoted to the second end of said member, means hinged to the second end of the rocking bar as well as being pivoted to the piercer-bar whereby said blade of the scissors will be swung upwardly and downwardly with the reciprocation of the piercer-bar, and means connecting the second blade of the scissors to the bracket for normally retaining in depressed position the cutting end of said said second blade between the toes of the presser-foot of the machine.

4. In a picot edging attachment, the combination with a supporting bracket operatively carrying a pair of scissors, adapted to be removably applied to the presser-foot bar of a hemstitching machine having a reciprocable piercer-bar, of an extensibly adjustable member having one of its ends pivoted to one of the blades of the scissors, means on the bracket as well as being connected to the extensible member and connected to the piercer-bar whereby the piercer-bar when reciprocated will impart reciprocation to said member to cause the blade of the scissors to move upwardly and downwardly, means connecting the second blade of the scissors to the bracket for normally retaining in depressed position the cutting-end of said second blade between the toes of the presser-foot of the machine, and means on the bracket, operable for allowing the cutting ends of the scissors to be adjustably raised and lowered between the toes of said presser-foot.

1,264,887. ELECTRIC FIXTURE. ALLEN A. BOWSER, Fort Wayne, Ind. Original application filed Oct. 15, 1914, Serial No. 866,759. Divided and this application filed Oct. 20, 1917. Serial No. 197,583. (Cl. 240—2.)

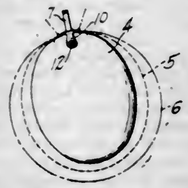


1. In an electric fixture, the combination with a fixed supporting plate, of a casing slidable thereon and adapted to be raised and lowered, a limp coiled electrical connection extensible between the plate and casing but forming no mechanical connection between them, and means comprising parallel flexible straps attached to corresponding points of adjacent coils and suspending and confining the electrical connection between them, the portions of the straps between the attachment points being folded inwardly between the coils when the connection is collapsed.

4. The combination with a fixed supporting plate, of a slidable casing adapted to be moved up and down on the plate, an electric lamp carried by the casing, and a flexible limp electric connection from the lamp to the plate having no rigidity but extensible to permit movement of the casing.

[Claims 2 and 3 not printed in the Gazette.]

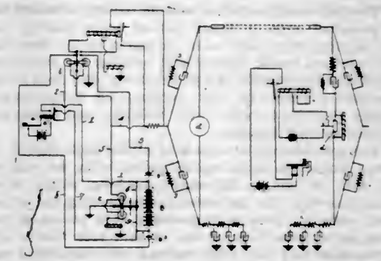
1,264,888. LENS-MOUNTING. JAMES HOYT BROWN, New York, N. Y. Filed Jan. 24, 1918. Serial No. 213,492. (Cl. 88—47.)



3. A lens mounting having arms shortened to a length coincident with that edge-length of lens which is of identical shape in different sizes of lenses, said arms being sufficiently rigid to cause the lens to break before the arms will bend, one of said arms having an adjusting screw therein.

[Claims 1 and 2 not printed in the Gazette.]

1,264,889. TELEGRAPHY. WILLIAM M. BRUCE, Jr., Springfield, Ohio. Filed Apr. 27, 1916. Serial No. 94,038. (Cl. 178—63.)



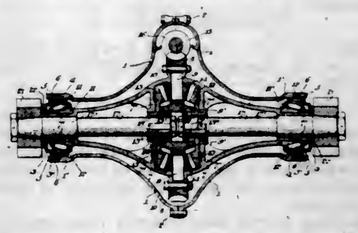
1. In a system such as described, in which impulses of opposite polarity are applied to a cable for a predetermined interval at the beginning and end of a character, an auxiliary current supply arranged and adapted to be used in conjunction with the main supply when the impulse is supplied and to remain in circuit with the conductor after the main supply is cut off and until a succeeding impulse of opposite polarity is applied.

2. In a system, such as described, a main battery and means for supplying impulses of opposite polarity therefrom for a definite time, auxiliary batteries of opposite polarity one of which is adapted to remain in circuit with the conductor after the main supply is cut off, in combination with a polarized receiving device which will be held in either operated position by one of said auxiliary batteries.

3. In a system such as described, a main battery and auxiliary batteries, means for causing said main battery to discharge current of opposite polarity in conjunction with one of said auxiliary batteries and for cutting off said main battery and leaving the auxiliary battery in circuit until an impulse of opposite polarity from the main battery is applied.

4. In a system such as described, having a sending apparatus for sending impulses of current of opposite polarity for a definite time and increasing these impulses by auxiliary current supply and causing said auxiliary supply to remain on the conductor after the main supply has been cut off, a receiving device which is moved in one direction by an impulse of one polarity and in the opposite direction by an impulse of another polarity, duplexing condensers in the sending end of the conductor, and shunts around said condensers as and for the purpose specified.

1,264,890. BEARING. TRACY V. BUCKWALTER, Canton, Ohio, assignor to The Timken Roller Bearing Company, Canton, Ohio, a Corporation of Ohio. Filed Oct. 26, 1917. Serial No. 198,727. (Cl. 74—34.)



1. The combination with an outer housing having bearing means at the opposite ends thereof, an inner housing having bearing means at the opposite ends thereof coacting with said bearing means first named whereby said inner housing is revoluble in said outer housing, independently revoluble alined shafts journaled in said inner hous-

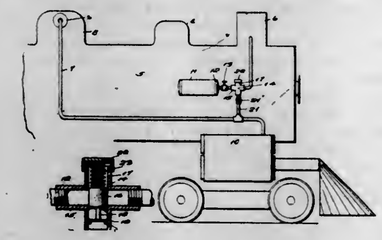
ing, differential mechanism carried by said inner housing for driving said shafts, and wheels fixed on the outer ends of said shafts.

2. The combination with a housing having extended ends each provided with an inner and an outer bearing, jack shafts having their outer ends journaled in the respective inner bearings, means within said housing for supporting the adjacent inner ends of and revolving said jack shafts, mechanism exterior to said housing for supporting it revolubly through its said outer bearings, and mechanism for revolving said housing.

3. The combination of a pair of alined jack shafts, differential driving mechanisms connected with the adjacent inner ends thereof, a differential housing within which said mechanisms are journaled, said housing having oppositely extended ends each provided with an inner bearing having an outer end of one of said jack shafts journaled therein and an outer bearing for supporting said housing revolubly, an outer housing having end hubs provided with inner bearings concentric with said outer bearings, antifriction devices disposed between said concentric bearings, and means within said outer housing for revolving said inner housing.

[Claims 4 to 8 not printed in the Gazette.]

1,264,891. SPARK-EXTINGUISHER. AL BURNS, Sunset, Idaho. Filed Aug. 18, 1917. Serial No. 186,936. (Cl. 169—12.)



1. Apparatus of the character described, comprising a storage tank for holding a fire extinguishing chemical under suitable pressure, an outlet pipe connected with the tank and leading to the stack of the engine, a pressure operated valve connected in the pipe, and a pipe connected with the pressure operated valve and adapted for connection with the steam supply pipe of the engine.

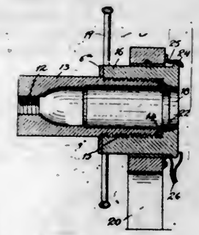
2. In apparatus of the character described, a storage tank for holding a fire extinguishing chemical under suitable pressure, an outlet pipe connected with the tank and leading to the stack of the engine, a valve connected in the outlet pipe, pressure operated means to shift the valve, and a pipe connected with the pressure operated means and adapted for connection with the steam supply pipe of the engine.

1,264,892. CHUCK. ACHESON M. CAMPBELL, Port Robinson, Ontario, Canada. Filed Apr. 16, 1917. Serial No. 162,565. (Cl. 279—1.)

1. A chuck of the class described comprising a body portion having a threaded orifice in one end thereof, a reduced conical portion on the opposite end of the body, a nut making threaded engagement with the body portion and provided with a tapering wall of the nut, means for rotating the nut, and means for draining off lubricant from the chuck.

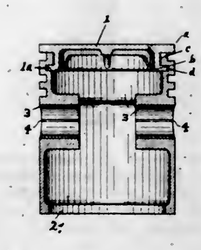
2. A chuck of the class described comprising a body portion, a nut making threaded engagement therewith, a split resilient conical ring engaging with the nut, a bracket rotatably supporting the nut, and a guard on the frame encircling the outer end of the nut and provided with an overflow.

3. A chuck of the class described comprising a body portion, a nut making threaded engagement with the body portion and provided with peripheral recesses, a hand wheel provided with projections designed to coact with the end walls of the recesses, and means located in the



body portion adapted to engage with the outer periphery of the work secured in the chuck when the hand wheel has been rotated.

1,264,893. PISTON FOR INTERNAL-COMBUSTION ENGINES. DONALD JAMES CAMPBELL, Muskegon Heights, Mich. Filed Jan. 22, 1916. Serial No. 73,726. (Cl. 74—85.)



1. A piston comprising a head portion and a skirt portion inseparably joined together in operative relation by a groove and flange connection.

2. A piston of the class described consisting of, a head portion made from a metal, the physical properties and characteristics of which are, high melting point, high resistance to deflecting stresses and relatively low thermal conductivity and expansion, and a skirt or barrel portion made from a metal, the principal physical property of which is lightness as compared with the metal of the said head, said parts being inseparably joined together in operative relation.

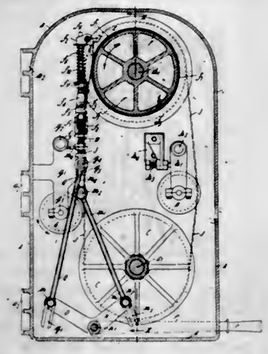
[Claims 3 to 6 not printed in the Gazette.]

1,264,894. ELECTRICALLY-OPERATED WINCH, SPECIALLY APPLICABLE AS AN ASH-HOIST. GEORGE F. D. CAMPBELL, Bootle, near Liverpool, England. Filed Sept. 8, 1914. Serial No. 860,742. (Cl. 254—186.)

1. In a winch, in combination; an electromotor; a belt pulley driven thereby; a belt, a winch drum driven by said belt from the said pulley; a brake device on the winch drum; a belt tension adjusting device; an operating lever; and a rod connecting the belt tension adjusting device to the lever on one side of the fulcrum thereof; and a rod connecting the brake lever device to the lever on the other side of the fulcrum thereof; substantially as described.

5. In a winch, in combination; an electromotor; a belt pulley driven thereby; a belt, a winch drum driven by said belt from said pulley; a belt tension adjusting device; a brake device on said drum; a common operating handle; means connecting the operating handle to the belt tension adjusting device and to the said brake; a fixed circular brake surface arranged concentrically with the winch drum; two semi-circular brake shoes connected to the

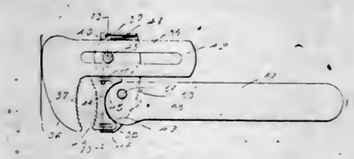
winch drum so as to rotate therewith but to be capable of outward movement relatively thereto; a pair of two armed levers movable about the axis of the brake drum, adjacent ends of the respective levers being connected together by spiral springs and one arm of each lever being connected to the brake blocks; substantially as described.



7. In a winch, in combination; an electromotor; a belt pulley driven thereby; a belt, a winch drum driven by said belt from the said pulley; a brake device on the winch drum; a belt tension adjusting device; a single operating handle adapted to control the brake device and the belt tension adjusting device; a hoisting rope coiled on the winch drum; a bracket; a fixed pulley over which the said rope passes to change its direction; a spring device one end of which is fixed to the said bracket; and an adjustable stop fixed to the rope and adapted in case of over-running to engage with the free end of the said spring device and compress it; substantially as described.

[Claims 2 to 4 and 6 not printed in the Gazette.]

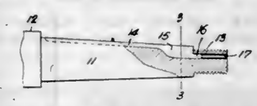
1,264,895. WRENCH. ALLAN G. CARMICHAEL, Kendall, Mont. Filed May 19, 1916. Serial No. 98,653. (Cl. 81—126.)



A wrench of the class described including a shank provided with a longitudinal slot and having a relatively fixed jaw at its outer end, a shell or casing mounted on the shank and provided with a pivot extending through the slot of the said shank, an adjustable jaw carried by the shell or casing and slidably mounted thereon to move toward and from the relatively fixed jaw and a lever or handle also mounted in the shell or casing and having an eccentric or cam portion arranged to engage and actuate the adjustable jaw, and means for limiting the relative movement of the lever or handle, said means including lugs or projections of the shell or casing and coacting projections carried by the handle or lever.

1,264,896. SELF-LUBRICATING AXLE. JAMES J. CARNEY, Bethel, Vt. Filed July 26, 1915. Serial No. 42,044. Renewed Sept. 24, 1917. Serial No. 193,013. (Cl. 64—27.)

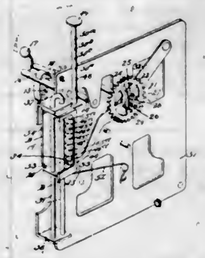
1. In a device of the character described, an axle having the bearing portion thereof terminating at one end in a shoulder and at the opposite end in a reduced threaded portion, a channel formed in said axle extending from the shoulder to the threaded portion thereof and deepened adjacent the threaded portion, and a tube extending through the threaded portion clear of the threads and communicating with the deepened portion of the channel.



3. In a device of the character described, an axle having the bearing portion thereof terminating at one end in a shoulder and at the opposite end in a threaded portion, a channel formed in said axle extending from the shoulder clear to the end of the threaded portion, a tube inserted in said channel traversing the threaded portion clear of the threads thereof, and a valve arranged to hold lubricant against reverse flow in the tube.

[Claim 2 not printed in the Gazette.]

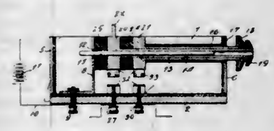
1,264,897. ALARM-CLOCK. MANNA D. CASE, Chicago, Ill. Filed Apr. 15, 1910. Serial No. 555,661. Renewed July 24, 1914. Serial No. 852,959. (Cl. 58—16.)



3. In an alarm clock, the combination of an alarm device, a time train, a member oscillated by said time train once during each revolution of the hour hand, means interposed between said alarm device and said member whereby the alarm device is released after a plurality of revolutions of said hour hand, and means for setting said first named means to selectively control the number of revolutions of the hour hand necessary before the alarm device is released.

[Claims 1, 2, and 4 not printed in the Gazette.]

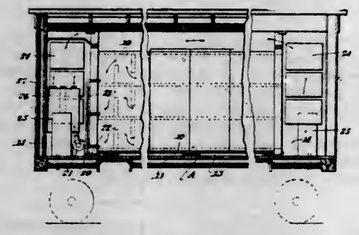
1,264,898. ELECTRIC SWITCH. FRANK D. CLAPPER, Altus, Okla. Filed Feb. 21, 1916. Serial No. 79,677. (Cl. 175—289.)



A switch including a casing having a dielectric lining, a plurality of circuit terminals mounted upon the bottom and sides of the casing, a dielectric supporting sleeve carried by an end wall of the casing, a pair of sleeves concentrically mounted in the dielectric sleeve, each of said last mentioned sleeves having an enlarged head the heads being spaced apart from one another, a supporting shaft in the inner one of the sleeves, a bracket support for the end of the shaft, said bracket forming one terminal of an external circuit, turning heads on the ends of the last mentioned sleeve, insulating washers between the heads and the bracket support, and a plurality of contact pins on each of the heads at irregular intervals

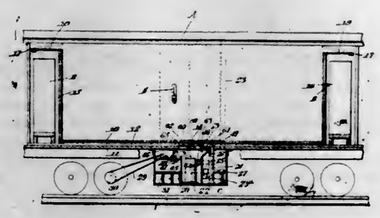
apart, certain pins being adapted to engage certain circuit terminals, depending on the positions of said heads, thus closing selected external circuits ending at the circuit terminals.

1,264,899. CAR. DANIEL CLARK, Edmonton, Alberta, Canada. Filed Aug. 11, 1916. Serial No. 114,486. (Cl. 257—7.)



In a car having side and end walls, a plurality of superposed longitudinally extending air circulating passageways in the side walls of the car, an air pump, a multi-nozzled pipe extending upwardly from the pump and having a nozzle thereof extending into each of the superposed chambers to supply air thereto, the car having a passageway for returning the air to the pump, and means in said passageway for changing the temperature of the air.

1,264,900. APPARATUS FOR CONTROLLING TEMPERATURE IN CARS. DANIEL CLARK, Edmonton, Alberta, Canada. Filed Mar. 3, 1917. Serial No. 152,427. (Cl. 257—7.)



2. A car having a double bottom with air ducts between divided by a central partition, a compartment below the partition having a temperature chamber through which air is adapted to normally pass, means for circulating the air and a bypass passageway adapted when opened to permit the air to circulate without passing through the temperature chamber and a plurality of staggered baffle plates in the air ducts.

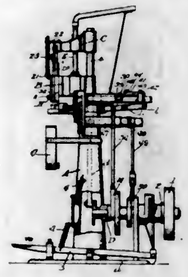
5. A car having a double wall and mechanical air circulating means, and means for heating or cooling the air, and a door adapted when open to permit natural circulation of the air without operation of the means for mechanically circulating the air.

6. In a car, a double wall, an air conduit leading from one side of the same, a plurality of air ducts having outlets or openings adjacent to the air conduit, the width of said openings being increased in proportion to the distance away from the opening of the air conduit.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,264,901. HANDLE-MACHINE. EDWARD CRAIG, St. Joseph, Mich. Filed Apr. 17, 1916. Serial No. 91,531. (Cl. 140—75.)

1. A machine for making and applying handles to the sides of receptacles, comprising mechanism for bending wire to form a staple of a width to serve as a handle, means to bend the two ends of the staple in the same direction at right angles to the plane of the staple, means to support the receptacle in position to receive the handle, and a driver to advance the wire toward the receptacle and thereby insert said ends in the receptacle.



3. The said machine, as specified in claim 1, said means including a former which also serves to guide the bent staple-ends during the insertion thereof by said driver.

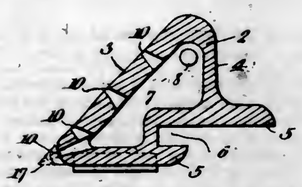
4. The said machine, as specified in claim 1, in combination with devices to feed the wire to said mechanism, and a cutter for severing the wire.

6. A machine for making and applying handles to the sides of receptacles, comprising mechanism for bending wire to form a staple of a width to serve as a handle, means to bend the two ends of the staple in the same direction at right angles to the plane of the staple, and a driver to insert said ends in the receptacle, said means including a pair of pivoted members which are disposed in the path of said driver to support the staple, and which are movable out of said path to permit insertion of said ends by the driver.

10. A machine for making and applying handles to the sides of receptacles, comprising mechanism for bending wire to form a staple of a width to serve as a handle, means to bend the two ends of the staple in the same direction at right angles to the plane of the staple, a driver to insert said ends in the receptacle, a toggle for operating said mechanism, and means to actuate said toggle.

[Claims 2, 5, 7 to 9, and 11 to 13 not printed in the Gazette.]

1,264,902. STOKER-BRIDGE. PAUL L. CROWE, New York, N. Y. Filed July 28, 1914. Serial No. 853,625. (Cl. 110—40.)



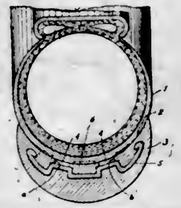
1. A stoker bridge formed hollow and having a substantially triangular form in cross section, the front inclined face thereof having perforations and the lower front edge being inclined rearwardly.

3. A stoker bridge formed hollow and substantially of triangular form in cross section with its front inclined wall having perforations of truncated conical form and having its lower front edge rounded with perforations through such rounded edge.

5. A stoker bridge formed hollow and of substantially triangular form in cross section, the front inclined face thereof having perforations and its rear under face provided with separated flanges forming a fork, the lower front edge of said face being rounded and inclined perforations extending therethrough.

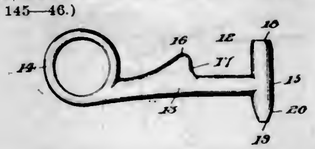
[Claims 2 and 4 not printed in the Gazette.]

1,264,903. SHOE FOR TIRES. THOMAS H. DEPEW, Pittsburgh, Pa. Filed May 3, 1917. Serial No. 166,254. (Cl. 152—33.)



A tire shoe comprising a resilient body, a metallic annulus embedded therein and formed with circumferential corrugations embedded in the body with the corrugations in a position spaced from adjacent portions of the body, and a ring of a thickness greater than the ribs and supported thereby.

1,264,904. NAIL-SET. TONY DE STEFAN, Lattimer Mines, Pa. Filed Dec. 28, 1917. Serial No. 209,264. (Cl. 145—46.)



3. An article of manufacture integrally formed in a one-piece structure comprising a shank, a ring, a striking anvil and an intermediately positioned enlargement carried by the shank in the axial plane of the shank, the said ring and enlargement forming oppositely positioned finger engaging portions during the holding operation and the opposite ends of the anvil being adapted for seating upon a nail and for engagement by a striking member respectively.

[Claims 1 and 2 not printed in the Gazette.]

1,264,905. GLOVE-SUPPORTING DEVICE. MARCELEAN DOLPHIN, New York, N. Y., assignor of fifty-one one-hundredths to Gustavus E. Strauss, New York, N. Y. Filed Nov. 13, 1916. Serial No. 131,066. (Cl. 223—19.)



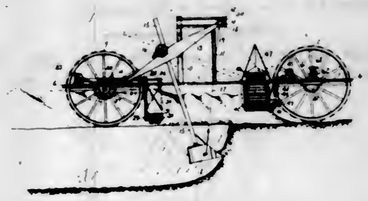
1. A glove supporting device which comprises a wire framework consisting of a single piece of wire bent to form a plurality of integral digital portions each comprising more than two integral wire portions all spaced from each other.

3. A glove supporting device which comprises a wire framework having a plurality of integral digital portions each comprising a plurality of integral wire portions all spaced from each other, and having a palm supporting loop, bent outwardly to lie in a plane spaced from that of the main portion of said framework.

10. A glove supporting device comprising a wire framework formed from a single length of wire and consisting of a plurality of portions each adapted to support a glove, said glove supporting portions each having a plurality of digital portions each comprising a plurality of wire portions all spaced from each other.

[Claims 2, 4 to 9, and 11 to 14 not printed in the Gazette.]

1,264,906. DITCHING-MACHINE. EARL W. DOTTEN, De Graff, Minn. Filed Sept. 17, 1917. Serial No. 191,771. (Cl. 214—90.)



3. The combination with a ditch digging machine of the character described comprising a self propelled vehicle having an open central hatchway therein, of a boom pivotally supported at one end adjacent the rear edge of the hatchway and at the opposite end swingingly supported above the hatchway, a dipper pivotally carried by the boom and operative through the hatchway and means for receiving the excavated material from the shovel and discharging it to one side of the machine.

4. The combination with a ditch digging machine of the character described, comprising a four wheeled vehicle and means for digging a ditch intermediate of the wheels of the vehicle, of berm cleaners mounted in front of the rearmost wheels of the vehicle whereby the leavings of the digging means on the berms of the ditch are removed.

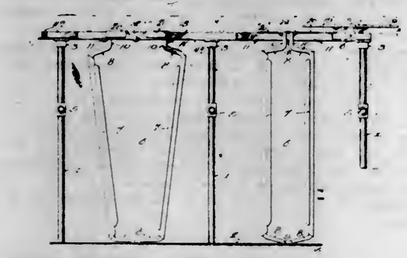
6. The combination with a four wheeled vehicle having a flat working deck with an open hatchway through the center thereof, an arcuate track above and transverse the hatchway, a shovel carrying boom pivotally mounted upon the deck at one end and swingingly supported upon the track at the opposite end, of a transversely disposed rotatable power shaft at the rear of the pivotal end of the boom and intermediate of the rear wheels of the vehicle, means operated by the shaft for operating the shovel carried by the boom, means operated by the shaft for swinging the boom laterally, a shaft at each end of the first mentioned shaft, operated thereby and extending to a point adjacent the front of the rear wheels of the vehicle, and means at said forward end of each shaft for operating a berm cleaner in front of each respective rear wheel of the vehicle substantially as described.

[Claims 1, 2, 5, 7, and 8 not printed in the Gazette.]

1,264,907. STANCHION. HERBERT H. DREW, Waterloo, Wis. Filed Mar. 23, 1917. Serial No. 156,821. (Cl. 119—148.)

1. A device of the class described, comprising a pair of neck bars, one being movable toward and away from the other, a stationary guide bar, a sliding bar movable on said guide bar, a pivoted latch plate straddling said guide bar and sliding bar, and means for holding the sliding bar in

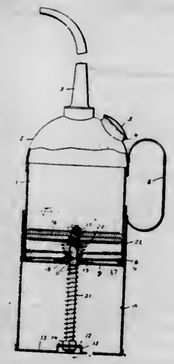
one position to retain said latch plate in operative position, the end of said latch plate engaging the movable neck bar and holding it against movement when the same is



adjacent the other neck bar, the movable neck bar also being slidable with respect to the latch plate when spaced from the other neck bar.

[Claims 2 to 6 not printed in the Gazette.]

1,264,908. OIL-CAN. JOHN J. DRURY, Troy, Ohio. Filed Aug. 26, 1916. Serial No. 117,070. (Cl. 221—42.)

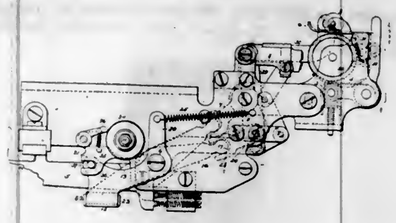


1. A dispensing can, including a supporting cylinder closed at its lower end, a can body vertically movable in said cylinder and equipped at its upper end with a delivery spout, said cylinder having the central portion of its lower end raised, a vertical plunger rod having its lower end extended downwardly through said raised portion and its upper end extending upwardly through the bottom of said can body, a plunger secured upon the upper end of said rod and movable in said can body, nuts secured upon the lower end of said rod and engaging opposite faces of said raised portion, and a spring encircling said rod and confined between the bottom of said can body and the upper face of said raised portion.

[Claim 2 not printed in the Gazette.]

1,264,909. STENOGRAPHIC TYPE-WRITING MACHINE. WILLIAM H. EBELHARE and CLARENCE G. ARVIDSON, Indianapolis, Ind., assignors to The Stenotype Company, Indianapolis, Ind. Filed Oct. 12, 1916. Serial No. 125,224. (Cl. 197—9.)

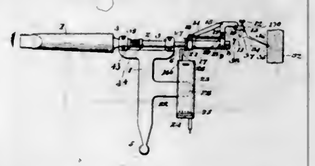
3. In a typewriting machine, the combination with pivotally-mounted key levers, ribbon mechanism and paper feed mechanism, of a universal bar disposed under the key levers, said bar provided at its respective ends with upwardly projecting arms, means pivotally supporting said arms, operating means for the paper feed mechanism connected with the free end of one of said arms in rear of the pivotal mounting of the key levers, and operating



means for the ribbon mechanism connected with the free end of the other arm of the universal bar at a point in front of the pivotal mounting of the key levers.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,264,910. CENTER-FINDER. WILLIAM ELSASSER, Irvington, N. J. Filed June 5, 1917. Serial No. 173,030. (Cl. 33—172.)



1. In a testing device of the character described, the combination with a shank adapted to turn with the headstock of a boring machine, of a feeler arm pivoted on said shank, a sleeve mounted to slide on said shank, means of connection between said arm and sleeve, whereby the swinging of the arm will slide the sleeve on the shank, a supporting bracket for the shank in which the latter is adapted to rotate, an indicator mounted on said bracket to be operated by the sliding of the sleeve on the shank, and means for holding said indicator at different angles of adjustment on said bracket.

6. In a testing device of the character described, the combination with a shank adapted to turn with the headstock of a boring machine, of a feeler arm pivoted on the shank, a sleeve mounted to slide on the shank, means of connection between said arm and sleeve, whereby swinging of the arm will cause the sleeve to slide on the shank, an indicator to be operated by said sleeve, a pointed instrument having a socket to engage the end of the feeler arm when its pointed end is engaged with a center cavity in a piece of work, for the purpose specified, a supporting bracket for the shank having a collar loosely fitted thereabout, a collar fast on the shank, and a spring interposed between said fast collar and the collar on the bracket for the purpose specified.

[Claims 2 to 5 not printed in the Gazette.]

1,264,911. WOMAN'S BURIAL-ROBE. KATHERINE FENNEMAN, Chicago, Ill. Filed Jan. 12, 1918. Serial No. 211,466. (Cl. 2—98.)

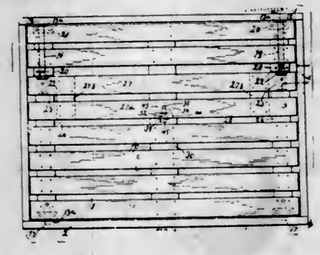
3. A woman's burial robe comprising a body or lining of waist length and relatively heavy material divided in the back and formed with a draw-string pocket at its lower edge, an outer or dress covering of relatively light, thin material including integral front waist and skirt portions stitched at the waist line to said draw-string pocket, said waist and skirt portions terminating laterally substantially at the median side lines of the garment, and



a draw-string in said pocket having its ends extending beyond the meeting ends of the latter.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,264,912. FOLDING BOX OR CRATE. CORNEL FLAGSTAD and OSCAR A. FLAGSTAD, Minneapolis, Minn., assignors to Folding Crate and Box Company, Minneapolis, Minn. Filed Apr. 23, 1917. Serial No. 163,818. (Cl. 217—47.)



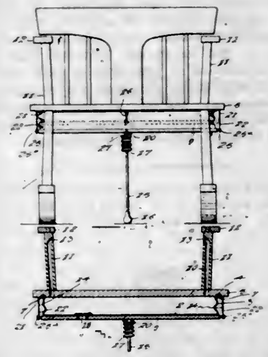
1. In a folding box or crate, a hollow base, end sections hinged to the base and adapted to fold into the hollow base, side sections hinged to the base and arranged to fold upon the end sections automatically interlocking metal catches on the upper corners of the sections to secure them together and prevent them from swinging outward beyond a vertical position, a non-extensible cover arranged to rest partly upon and pass partly down between the sections when they are set up, fixed fingers at one edge of the cover and at the opposite edge fingers guided to slide in a transverse direction of the cover, one of said side sections having metallic sockets inserted flush with the top edge and the inner side of each section for the fixed fingers to engage, the other side section having sockets for the slidable fingers to enter, said cover having an elongated hand hole, a lid arranged to close the hand hole, said lid being hingedly connected with the slidable fingers and means for locking the lid when the slidable fingers are in the sockets.

2. In a folding box or crate, a hollow base, end sections hinged to the base and adapted to fold into the hollow base, side sections hinged to the base and arranged to fold upon the end sections, automatically interlocking metal catches on the upper corners of the sections to secure them together and prevent them from swinging outward beyond a vertical position, a non-extensible cover arranged to rest partly upon and pass partly down between the sections when they are set up, fixed fingers at one edge of the cover and at the opposite edge fingers guided to slide in a transverse direction of the cover, one of said side sections having metallic sockets inserted flush with the top edge and the inner side of each section for the fixed fingers to engage, the other side section having sockets for the slidable fingers to enter, said cover having an elongated hand hole, a lid arranged to close the hand hole, said lid being hingedly connected with the slidable fingers and means for locking the lid when the slidable fingers are in the sockets, and sockets in the base for the reception of all of said fingers when the sections are folded and the cover placed upon them in the base.

4. In a folding box or crate, the combination with a cover having an elongated hand hole and a lid closing the same, said cover having fixed and also slidable catches for holding it to the box, said lid being hingedly attached to the slidable catches, and said cover being thinner for some distance where the lid rests upon it when open, so as to relieve strain on the hinges.

[Claims 3 and 5 to 7 not printed in the Gazette.]

1,264,913. ATTACHMENT FOR ROCKING-CHAIRS. ALEXANDER FRAZIER, Portland, Oreg. Filed Dec. 11, 1915. Serial No. 66,356. (Cl. 230—8.)



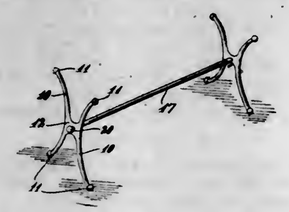
1. The combination of a rocking chair, a bellows secured to the under side of the seat of the rocking chair, said seat constituting the upper member of the bellows, springs located at opposite sides of the bellows and connected with the upper and lower members thereof for opening the bellows, and an operating rod extending downwardly and forwardly from the lower member of the bellows and secured at its upper end to the same and arranged to be carried into and out of contact with the floor by the rocking movement of the chair for operating the bellows, said operating rod being spirally coiled for a portion of its length to form a cushioning spring and the upper end of the latter being arranged contiguous to the lower member of the bellows.

2. The combination of a rocking chair, a bellows secured to the under side of the seat of the rocking chair, said seat constituting the upper member of the bellows, springs located at opposite sides of the bellows and connected with the upper and lower members thereof for opening the bellows, and an operating rod having a threaded upper end and extending downwardly and forwardly from the lower member of the bellows so as to be carried into and out of engagement with the floor by the rocking of the chair for operating the bellows, said lower member of the bellows having a threaded opening to receive the threaded upper end of the rod and the rod being spirally coiled contiguous to the lower member of the bellows to form a cushion and also to limit the penetration of the threaded portion of the operating rod.

1,264,914. KNIFE-REST. CLARA FRESH, New Bedford, Mass. Filed June 9, 1917. Serial No. 173,684. (Cl. 65—65.)

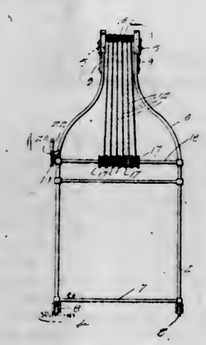
1. In a device of the class described, the combination with a pair of substantially H shaped support elements, said elements having spherical extremities, of a rod extending between said support elements, said rod having squared extensions at each end thereof and suited to enter corresponding openings formed in said support elements,

screws removably engaged in said extensions, and means for securing said support elements rigidly with said screws upon the opposite side of the supports from which said rod extends.



2. In a device of the class described, the combination with a pair of substantially H shaped support elements having spherical terminals and containing rectangular openings, of a rod extending between said elements, rectangular extensions at the ends of said rods adapted to be received within the openings within said supports, means for engaging screws in said extensions, and threaded knobs engageable with said screws adapted to be applied upon the outer side of said supports.

1,264,915. INVALID LIFTER AND CONVEYER. BRUCE B. GARDNER, Doland, S. D. Filed Nov. 12, 1917. Serial No. 201,670. (Cl. 5—44.)

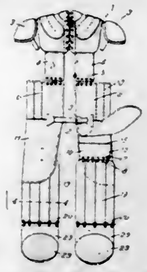


An invalid lifter and conveyer comprising a pair of channel members extending parallel in close proximity with each other and having their flanges disposed in the direction of each other, means connecting the channel members, flanges formed on the ends of the channel members, downwardly depending rods secured to said flanges, bracing rods connecting said rods, and raising and lowering means mounted upon the channel members and one of the pairs of end supporting rods for raising and supporting an invalid person.

1,264,916. ATHLETIC PROTECTIVE HARNESS. HUGO GOLDSMITH, Cincinnati, Ohio. Filed Mar. 10, 1916. Serial No. 83,398. (Cl. 2—190.)

4. In a protective harness for athletes and the like, in combination with a supporting member over the shoulders of the wearer, abdominal guards suspended therefrom by means of laces, thigh guards on the abdominal guards, leg guards suspended by laces from the said thigh guards, and knee guards suspended by laces from the leg guards.

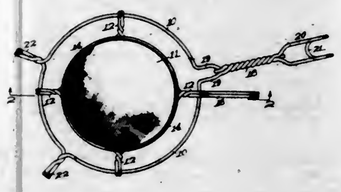
5. In a protective harness for athletes and the like, in combination with a supporting member on the body of the wearer, leg guards mounted thereon, eyelets on the leg guards and laces in the eyelets, and knee guards having eyelets whereby they may be adjustably mounted on the leg guards, with elastic straps to hold the leg guards in place.



6. In a protective harness for athletes, the combination of a pair of abdominal pads, one for each side of the abdomen, said pads having stiffening material therein, connection for said pads at the back of the wearer, and belt sections for the two pads at the front for retaining the pads against the body.

[Claims 1 to 3 not printed in the Gazette.]

1,264,917. STRAINER-HOLDER. IRVING A. GREEN, Worcester, Mass., assignor to Wire Goods Company, a Corporation of Massachusetts. Filed June 5, 1915. Serial No. 32,411. (Cl. 210—16.)



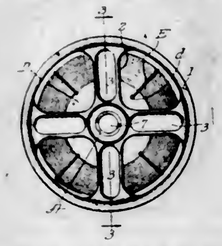
1. In a kitchen utensil, the combination of a holder consisting of a substantially circular resilient wire member provided with a radial handle, and means constituting with the handle a three-point support for the same, with a circular wire strainer frame adapted to be detachably connected with said holder at any angle thereon, said strainer frame having arms bent downwardly and inwardly at their ends to engage under the wire member and permit oscillation of the strainer on said wire member but prevent its removal without bending the arms, and having a radial hande projecting over said wire member and beyond it.

[Claim 2 not printed in the Gazette.]

1,264,918. REEL. J BIRCHARD GREEN, Chicago, Ill., assignor to Chicago Steel & Wire Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1915. Serial No. 32,490. (Cl. 242—77.)

1. A reel for wire or the like, comprising a hub having provisions to mount the reel for rotation, and flanges for said hub, spaced apart to hold the winding between them, having means for removing at least one of said flanges to permit loading of the reel, said flanges being of spider form and having spokes which are grooved to engage the ends of a friction brake device.

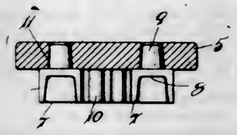
3. In combination, a reel for wire or the like, comprising a hub having provisions to mount the reel for rotation, and flanges for said hub, spaced apart to hold the winding between them, having means for rotatably removing at least one of said flanges to permit loading of the reel, said winding having a cylindric filler secured therein and upon which the wire is wound for shipment, and to facilitate placing of said winding on the reel, said filler having a bore fitting said hub to center the winding in the reel before and also after the removable flange is adjusted in place, and said filler serving frictionally to prevent relative rotation between said flanges.



6. A wire reel comprising a tube for rotation on a spindle inserted therein, a flange removably screwed onto one end of said tube, a flange fixed on the other end of said tube so that the tube terminates or practically terminates in the flanges and means for supporting and centering the wire in the reel before and also after the removable flange is screwed onto the tube, said means being compressed between the two flanges and of a diameter to engage the removable flange a distance from said tube, whereby said means serve to limit the screw adjustment of the removable flange toward the fixed flange, and so that said removable flange is held against unscrewing by frictional engagement with said means.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

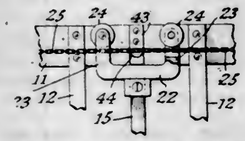
1,264,919. HORSESHOE-CALK. MICHAEL J. GRIFFIN, Hartford, Conn. Filed Mar. 3, 1917. Serial No. 152,385. (Cl. 168—41.)



2. A shoe calk comprising shanks and spurs, the former being of tapered form to permit entry into holes in a shoe located at variable distances apart, and a tie uniting the spurs and of a structure to permit variation in the distance between said shanks.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,264,920. TRIPPING ATTACHMENT FOR REVOLVING STEAM AND ELECTRIC SHOVELS. JOSEPH HAAS and CHARLES STRADA, New York, N. Y. Filed Nov. 1, 1915. Serial No. 58,990. (Cl. 214—146.)

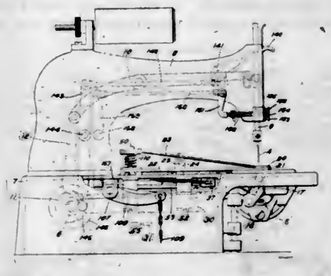


2. In an attachment of the class described, a trip line, a lever secured thereto, rollers adapted to support the line, a bracket having anchor teeth underlying the line, and means for drawing the said line out of its normal position for the purpose specified.

3. An attachment of the class described, comprising in combination, a looped line, a lever attached thereto, a weight suspended in the looped portion thereof, a bracket having teeth underlying the line, a yoke, rollers carried thereby, and overlying the line at opposite sides of the bracket, a hanger frame provided with a guide block, a slidebar mounted in the guide block and supporting the yoke, and means for depressing the slide bar and force it downwardly to engage the teeth and to draw an end portion of the line inwardly for the purpose specified.

[Claims 1 and 4 to 8 not printed in the Gazette.]

1,264,921. SEWING-MACHINE. CHRISTIAN H. T. HAGELSTEIN, Boston, Mass., assignor to The Reece Button Hole Machine Company, Boston, Mass., a Corporation of Maine. Filed Aug. 17, 1914. Serial No. 857,053. (Cl. 112—4.)



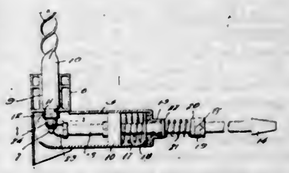
1. In a sewing machine, the combination with a frame, of stitch-forming mechanism carried thereby, a block slidably mounted on the frame, a work clamp pivotally connected to the block, and means operating first to oscillate the work clamp about its pivot a plurality of times during a plurality of immediately successive stitch-forming movements of the stitch-forming mechanism and then to vibrate the block in a direction at right angles to the oscillatory movement of the work clamp.

6. In a sewing machine, the combination with stitch-forming mechanism, of a work clamp made in two sections, means including cam mechanism for vibrating the work clamp first in one direction and then in another direction at right angles thereto thereby to form two sets of stitches extending in different directions, and means to contract the sections of the work clamp during the formation of the stitches and to spread said work clamp when the stitching is completed.

7. In a sewing machine, the combination with a stitch-forming mechanism, of a work clamp made in two separable sections, each having an inclined slot, a clamp-vibrating member having projections operating in said slots, means to move said clamp-vibrating member in a direction to vibrate the clamp laterally, and means operative at the beginning of the stitching operation to move said member longitudinally of the slots thereby to contract the clamp.

[Claims 2 to 5 and 8 not printed in the Gazette.]

1,264,922. ADJUSTABLE TOOL. JOSEPH HARRIS, West Toronto, Ontario, Canada. Filed May 31, 1917. Serial No. 172,031. (Cl. 145—69.)

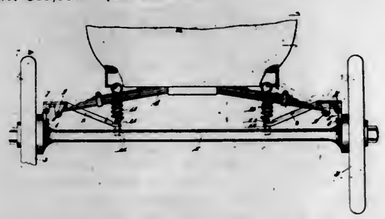


1. In a tool of the class described, the combination with a pair of angularly adjustable rotatable shafts, intermeshing gears on the adjacent ends of said shafts, a casing

for each shaft, said casing being pivoted at their adjacent ends and being capable of being moved to angular positions, a collar on one of said shafts, an expansion spring engaging at one end with said collar and at its opposite end with said casing, a second collar on said shaft, and an expansion spring engaging at one end with said casing and at its opposite end with said second collar.

2. In a tool of the class described, the combination with a pair of angularly adjustable rotatable shafts, intermediate gears on the adjacent ends of said shafts, casing for said shafts, pins for pivotally connecting said casings at adjacent telescoping ends, said casings being capable of being moved to various angular positions, and oppositely acting resilient members for one of said shafts to retain said intermeshing gears in engagement with one another.

1,264,923. SHOCK-ABSORBER. ANDREW P. HAWN, Goodland, Ind., assignor, by direct and mesne assignments, to The H. & D. Company, Goodland, Ind., a Corporation of Indiana. Filed July 8, 1914. Serial No. 849,666. (Cl. 267—19.)



1. A shock absorber for vehicles comprising a vehicle spring, a connecting device and a lever, the connecting device connected at one end to the vehicle body and at its other end to one end of the lever, the other end of the lever pivotally connected to the vehicle axle, the vehicle spring connected to the vehicle body and at one end to the lever intermediate its ends, the vehicle spring and lever arranged so that the prolongation of the vehicle spring in its normal position lies beneath the pivot point of the lever.

5. A shock absorber for vehicles comprising a vehicle spring, a connecting device and a lever, the connecting device connected at one end to the vehicle and at its other end to one end of the lever, the other end of the lever pivotally connected to the vehicle axle, the vehicle spring connected to the vehicle body and at one end to the lever intermediate its ends, said lever and spring inclined in opposite directions to the horizontal and crossing each other.

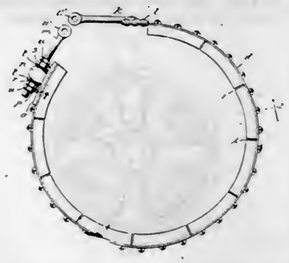
12. A shock absorber for vehicles comprising a lever attached at one end to the vehicle wheel supporting structure and intermediate its ends to the vehicle spring and formed at its other end to swing alongside of and below said vehicle spring, and a contractile spring connected to the last mentioned end and attached to a portion of the vehicle body.

[Claims 2 to 4, 6 to 11, and 13 to 17 not printed in the Gazette.]

1,264,924. BRAKE-BAND, BRAKE-SHOE, AND LINING THEREFOR. FRANK A. HEADSON, Milwaukee, Wis., assignor to H. W. Johns-Manville Company, Milwaukee, Wis., a Corporation of New York. Filed May 12, 1913. Serial No. 766,953. (Cl. 106—7.5.)

1. A composition for brake linings or similar articles comprising, in combination, a major portion of fibrous asbestos, cementitious material containing rubber and sulfur, and a filler containing a finely divided solid substance, all intermixed and forming a rigid body having the characteristics of a rigid mass condensed and hardened by compression and vulcanization.

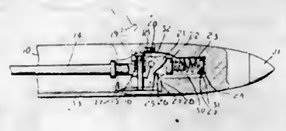
4. A brake shoe member formed of a composition comprising, in combination, a major portion of fibrous material containing fibrous asbestos, cementitious material containing rubber and sulfur, and a filler comprising a finely divided solid mineral substance, all intermixed and



forming a rigid body having the characteristics of a rigid mass condensed and hardened by compression and vulcanized.

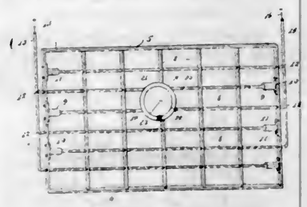
[Claims 2 and 3 not printed in the Gazette.]

1,264,925. LOOM-SHUTTLE. JOSEPH HENRY HEARNE, Sanford, N. C., assignor of one-half to Clawson Lee Williams, Sanford, N. C. Filed Feb. 20, 1917. Serial No. 149,744. (Cl. 139—27.)



As an article of manufacture, an attachment for standard loom-shuttles, the same being struck from flat pliable sheet metal and having terminal disks and a reduced soft connecting stem one of said disks being adapted for arrangement in the path, to receive the impact, of the heel of a bobbin spindle head, and the other disk being adapted for arrangement at the bottom of the socket for the spindle actuating spring, the stem being bendable in opposite directions to position and space the disks.

1,264,926. ELECTRICAL TORPEDO-NET. ALBERT HEDINA, Laporte, Ind. Filed Mar. 6, 1918. Serial No. 220,845. (Cl. 114—240.)



1. A torpedo net comprising a frame, and a series of relatively spaced electrical conductors arranged to have alternate opposite polarity carried by the frame.

7. A torpedo net comprising a frame, a series of insulated relatively spaced electrical conductors arranged to have alternate opposite polarity carried by the frame, the conductors of like polarity having their frame terminals fixed to the same and in opposite relation with the respective frame ends, and coiled springs formed at said terminal ends to normally hold the conductors under tension.

[Claims 2 to 6 not printed in the Gazette.]

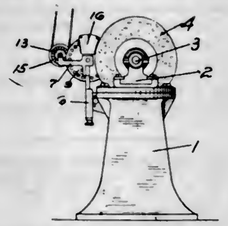
1,264,927. TORPEDO-NET. ALBERT HEDINA, Laporte, Ind. Filed Mar. 6, 1918. Serial No. 220,846. (Cl. 114—240.)



5. A torpedo net or the like comprising a frame, relatively spaced guide members extending longitudinally of and fixed to the frame, said guide members having eyes formed therein at intervals, vertical rods extending through said eyes and adapted for endwise movement, and tensioned springs interposed between the respective ends of the rods and the frame, whereby the respective end portions of the rods will be shifted in the direction of each other upon an intermediate portion thereof being broken away.

[Claims 1 to 4 not printed in the Gazette.]

1,264,928. DEVICE FOR FEEDING ROLLS FOR END-GRINDING. LEWIS R. HEIM, Danbury, Conn., assignor to The Ball and Roller Bearing Company, Danbury, Conn., a Corporation of Connecticut. Filed July 13, 1917. Serial No. 180,459. (Cl. 51—12.)



1. The combination with a grinding wheel, of a rotating carrier provided with holes or pockets to receive the blanks to be ground, and a guide arranged adjacent said grinding wheel and having an outwardly flaring or rearwardly tapering entrance so that said guide will position said blank relative to said grinding wheel.

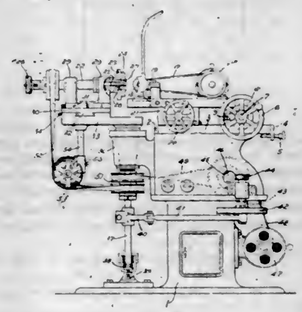
2. The combination with a grinding wheel, of a rotating carrier provided with holes or pockets to receive the blanks to be ground and having a geared periphery, a rotating pinion meshing with the said geared periphery of said carrier, and means for positioning the blanks inserted in said carrier before they reach said grinding wheel.

3. A grinding machine attachment comprising a suitable base, a support or standard separate from said base but attached thereto, a bracket separate from said standard but rigidly secured thereto, a rotating carrier mounted in said bracket and having holes or pockets to receive the articles to be ground, and means also mounted on said bracket for rotating said carrier.

4. A grinding machine attachment comprising a suitable base, a support or standard separate from said base but attached thereto, a bracket separate from said standard but rigidly secured thereto, a rotating carrier mounted in said bracket and having holes or pockets to receive the articles to be ground, said carrier having a geared periphery, a shaft also mounted on said bracket and provided with a pulley, and a pinion on said shaft for rotating said carrier.

5. A grinding machine attachment comprising a suitable support or standard, a bracket attached to said support or standard, a rotating carrier mounted in said bracket and having holes or pockets to receive the blanks to be ground, means also mounted in said bracket for rotating said carrier, and guiding means, also mounted in said bracket, for positioning the blanks inserted in said carrier before they reach the grinding wheel or wheels of the grinding machine.

1,264,929. GRINDING-MACHINE. LEWIS R. HEIM, Danbury, Conn., assignor to The Ball and Roller Bearing Company, Danbury, Conn., a Corporation of Connecticut. Filed July 13, 1917. Serial No. 180,460. (Cl. 51—4.)



1. In a grinding machine, the combination with a suitable base, of a carriage slidingly mounted on said base, a rotary grinding wheel mounted on said carriage, a rotating and oscillating work-holder, a hand wheel and gearing connections with said carriage whereby the latter may be adjusted toward and from said work-holder, a rotary index scale movable with said hand wheel and a stationary index or pointer coöperating with said index scale to enable the attendant to adjust the grinding wheel to any desired position with relation to said work-holder.

2. In a grinding machine, the combination with a suitable base, of a carriage slidingly mounted on said base, a rotary grinding wheel mounted on said carriage, a rotating and oscillating work-holder, a hand wheel and gearing connections with said carriage whereby the latter may be adjusted toward and from said work-holder, a rotary index scale movable with said hand wheel, a stationary index or pointer coöperating with said index scale to enable the attendant to adjust the grinding wheel to any desired position with relation to said work-holder, and an adjustable stop to limit the movement of said grinding wheel toward said work holder.

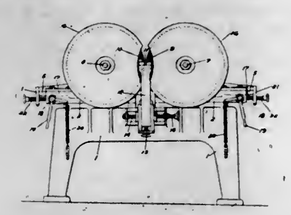
4. In a grinding machine, the combination with a grinding wheel and means for driving the same, of a work-holder comprising a base, a rotary work-carrying shaft supported by said base, an oscillating shaft by which said base is sustained, conical and step bearings for said shaft, and means for adjusting said step bearing vertically to relieve excessive friction on said conical bearing.

5. In a grinding machine, the combination with a rotating grinding wheel, of an oscillating work-head, a rotating work-carrying shaft or spindle mounted on said work-head so as to oscillate therewith, a pulley on said shaft or spindle, a pulley on the axis of said oscillating work-head, two idlers intermediate said pulleys, and a belt running over said pulleys and idlers and serving to drive said work-carrying shaft or spindle.

6. In a grinding machine, the combination with a rotating grinding wheel, of an oscillating work-head, a rotating work-carrying shaft or spindle mounted on said work-head so as to oscillate therewith, a pulley on said shaft or spindle, a pulley on the axis of said oscillating work-head, two idlers intermediate said pulleys, a belt running over said pulleys and idlers and serving to drive said work-carrying shaft or spindle, and means for regulating the tension of said belt.

[Claims 3, 7, and 8 not printed in the Gazette.]

1,264,930. ROLL-GRINDING MACHINE. LEWIS R. HEIM, Danbury, Conn., assignor to The Ball and Roller Bearing Company, Danbury, Conn., a Corporation of Connecticut. Filed July 13, 1917. Serial No. 180,461. (Cl. 51—4.)



1. A grinding machine comprising a rotary peripheral grinding wheel having a relatively high speed, an oppositely rotating regulating wheel having a relatively low speed and coöperating with said peripheral grinding wheel, means between said wheels for supporting the blanks while being ground, and means for yieldingly pressing one of said wheels toward the other.

2. A machine for grinding cylindrical or like blanks comprising a peripheral grinding wheel mounted to be bodily movable in one direction to a predetermined position, a peripheral regulating wheel having a relatively low speed located adjacent the predetermined position of said grinding wheel, a carrier, for supporting the blanks, mounted independently of and between said wheels, and means for yieldingly pressing said wheels toward each other.

3. A machine for grinding cylindrical or like blanks comprising relatively fast and slow grinding and regulating wheels having their peripheries coöperatively rotating in opposite directions, means for yieldingly forcing said wheels toward each other, means for limiting the movement of one or both of said wheels toward the other, and a blank-supporting carrier between said wheels.

9. A machine especially adapted for grinding the shanks of headed blanks, such as bolts, comprising a wheel having a grinding periphery driven at a relatively high speed, an oppositely moving regulating wheel driven at a relatively low speed, a blank-support between said wheels, shafts by which said wheels are carried, bearings for said shafts, spring-pressed slides on which said bearings are mounted and positioning means for limiting the movement of one or both of said slides toward the other.

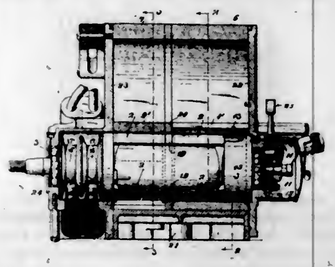
10. A grinding machine comprising a base having a pair of rotatably adjustable tables, a slide carried by each table, bearings and a shaft extending transversely of each slide, a wheel on each shaft arranged so that their peripheries coact, and a carrier supported by the frame and located between said wheels, one of said wheels being a regulating wheel and moving at a lower speed opposite to the grinding wheel.

[Claims 4 to 8 not printed in the Gazette.]

1,264,931. MAGNETO. OTTO HEINS, New York, N. Y., and CHARLES M. WILD, Springfield, Mass., assignors to Bosch Magneto Company, New York, N. Y., a Corporation of New York. Filed Dec. 27, 1915. Serial No. 68,841. (Cl. 123—149.)

1. In a magneto for electric ignition systems, a rotatable bipolar armature with polar projections, and a four-pole field member composed of two permanent magnets having poles embracing different axial parts of the armature, the polar projections of the armature being designed to bridge the spaces between the poles of a single one of the magnets at a time.

2. In a magneto for electric ignition systems, a rotatable bipolar armature with polar projections, and a four-pole field member composed of two permanent magnets having poles embracing different axial parts of the armature, the polar projections of the armature being designed to bridge the spaces between the poles of a single one of the magnets at intervals of 90 degrees.



3. In a magneto for electric ignition systems, a rotatable bipolar armature with polar projections, and a four-pole field member composed of two permanent magnets having poles embracing different axial parts of the armature, one axial part of the polar projections being designed to bridge the spaces between the poles of one of the magnets while the other axial part thereof simultaneously registers with the poles of the other magnet.

4. In a magneto for electric ignition systems, a rotatable armature of shuttle form, and a four-pole field member composed of two permanent magnets each having poles embracing a different axial part of the armature.

5. In a magneto for electric ignition systems, a rotatable bipolar armature of shuttle form, and a four-pole field member composed of two horse-shoe magnets each having pole shoes disposed on a diameter at right angles to that of the pole shoes of the other magnet and embracing a different axial part of the armature.

[Claims 6 to 20 not printed in the Gazette.]

1,264,932. BITUMINOUS BINDER AND PROCESS FOR MAKING THE SAME. GEORGE A. HENDERSON, St. Albans, W. Va. Filed Feb. 15, 1916. Serial No. 78,514. (Cl. 106—31.)

1. The process of producing an asphaltic binder which consists in subjecting artificial petroleum bearing asphalt in the presence of sulfur to sufficient heat to entrap the sulfur during volatilization and driving off of the major portion of the oily constituent.

2. A bituminous binder consisting of 5% to 10% sulfur and from 90% to 95% bituminous residuum of asphaltic base petroleum.

1,264,933. TIMER. FREDERICK C. HERSEE, Boston, Mass. Filed Apr. 19, 1917. Serial No. 163,131. (Cl. 123—167.)



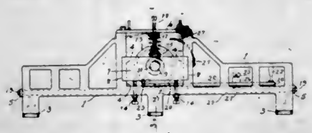
1. A timer including a movable contact and an annular raceway, said raceway being formed of a series of sections presenting a complete cylindrical metal pathway, successive sections having their ends overlapped peripherally and spaced apart axially.

6. A timer including a casing, a series of flanges projecting inwardly from the peripheral wall thereof, a series of contact members secured to said peripheral wall and arranged alternately with said flanges, each of said contact members being insulated from said casing and being of substantially channel shape with the side flanges of the channels projecting peripherally beyond said first mentioned flanges and spaced from the latter, and a movable contact member including a roller at all times in engagement with either said first mentioned flanges or the side flanges of said first mentioned contact members.

9. A timer including a series of sections presenting a continuous metal pathway, the adjacent ends of said sections being overlapped and spaced from each other, each alternate section being insulated from the remaining sections to form a contact, a movable contact member in continuous engagement with the cylindrical surface presented by said sections, and a spring pressed, pivoted and removable portion projecting from each contact section peripherally beyond the cylindrical surface portion of said contact and in the path of said movable contact member.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,264,934. PLANER. IRA T. HOWARD, Goshen, Ind. Filed Sept. 23, 1915. Serial No. 52,148. (Cl. 29—76.)

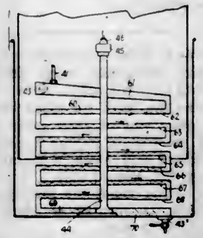


1. In a device of the kind described, in combination, a pair of frame side members having intermediate upright box guide, a pair of frame end members formed at spaced points inwardly of its opposite ends with right angular lugs, the ends of said frame side members abutting the ends of said frame end members as well as said lugs, and a pair of longitudinal carriage guide rods secured at their ends to said frame end members, and a frame top member secured flat upon the top edges of said upright box guides so as to hold the pair of frame side members against lateral displacement.

4. In a planer, a mount, a plurality of rotatable abrasive members carried by said mount, means for unyieldingly holding said rotatable abrasive members, said members being also rendered yieldable vertically, the abrading surfaces of said members being graduated in quality as to each other, and a planer carriage adapted to carry the object to be planed under said members.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,264,935. CARBURETER. WILLIAM MARTIN HUGHES, Arncliffe, near Sydney, New South Wales, Australia. Filed Apr. 22, 1916. Serial No. 92,835. (Cl. 261—112.)

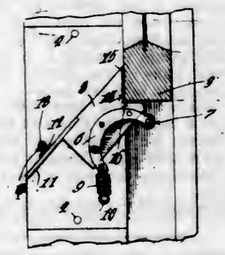


1. In an air gas making machine, a carbureter comprising a series of communicating closed flat bottomed trays arranged with each succeeding tray lower than the preceding, and the intermediate trays inclined upwardly in the direction of flow through them; means for introducing air and volatile oil under pressure into the uppermost of said trays, and means for educting air-gas and liquid residue from the lowermost of said trays.

2. A carbureter for an air-gas making machine comprising a series of superposed closed flat bottomed trays or chambers connected in zig-zag order at alternate ends, whereof the trays or chambers intermediate in the series are inclined upwardly in the direction of flow of air through them, the angles of inclination increasing progressively through the series, in combination with means for introducing air and volatile oil under pressure into the uppermost of said trays or chambers and means for educting air-gas and liquid residue from the lowermost of said trays or chambers.

3. A carbureter for an air-gas making machine comprising a series of superposed closed flat bottomed trays or chambers packed with corrugated wire gauze slips, said trays or chambers connected in zig-zag order at alternate ends, and those intermediate in the series inclined upwardly in the direction of flow of air through them, the angle of inclination increasing progressively through the series, in combination with means for introducing air and volatile oil under pressure into the uppermost of said trays or chambers and means for educting air gas and liquid residue from the lowermost of said trays or chambers.

1,264,936. WINDOW ATTACHMENT. CLARENCE J. HUTH, North Branch, N. Y. Filed Dec. 4, 1917. Serial No. 205,401. (Cl. 16—18.)



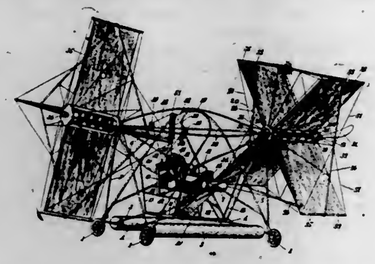
1. A sash fastener comprising a body, said body provided with a sash engaging notch, yieldable buffer means mounted within said notch, a plurality of crescent shaped plates secured to said body, the ends of said plates projecting beyond the side edges of said body, a friction roller carried by said plates, a spring engaging the opposite ends of said plates with respect to said roller, and means for limiting the swing of said body in one direction.

2. A sash fastener comprising a body, a sash engaging roller carried by said body near one side thereof and adapted to normally hold said body out of engagement with a sash, said body provided with sash engaging means adapted to firmly engage a sash when said sash engaging roller is thrown out of engagement with a sash, means for yieldably holding said sash engaging roller in an operative position, a stop plate projecting beyond the lower end of said body, a yieldable buffer carried by said plate, and a stop pin adapted to engage said yieldable buffer for limiting the swinging movement of said body.

3. A sash fastener of the class described comprising a body, said body provided with a substantially V-shaped notch upon one end thereof, a sash engaging roller carried by said body and adapted to normally hold said notch in an inoperative position, means for swinging said body as said roller is thrown out of engagement with a sash, and said substantially V-shaped notch adapted to fit over the lower end of a sash for firmly supporting the same against sliding movement and also adapted to firmly hold a sash against rattling while the same is being held in an adjusted position.

4. A sash fastener comprising a body, said body provided with a sash engaging notch formed therein, yieldable buffer means mounted within said notch, a plurality of side plates carried by said body, the ends of said side plates projecting beyond the sides of said body, a friction roller carried by said plates, and means engaging the opposite ends of said plates for yieldably holding said roller in engagement with a sash.

1,264,937. FLYING-MACHINE. OTTO E. ILIGAN, New York, and CARL ILIGAN, Corona, N. Y. Filed Aug. 15, 1914. Serial No. 856,893. (Cl. 244—14.)



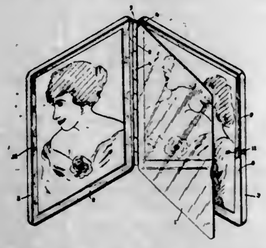
1. In a flying machine, front and rear supports comprising rotatable planes radiating from axes in the longitudinal central plane of the machine, means for changing the inclination of the forward set of planes and a propeller concentric with the rear set of planes.

7. In a flying machine, front and rear supports comprising rotatable planes radiating from axes in the longitudinal central plane of the machine and a propeller having a common axis with said planes.

12. An aeroplane steering mechanism, comprising a guiding member, a universally journaled shaft supporting the same, a pivoted rod engaging said shaft, means for moving said shaft with respect to said rod in one direction, and for oscillating said rod to move said shaft in another direction.

[Claims 2 to 6 and 8 to 11 not printed in the Gazette.]

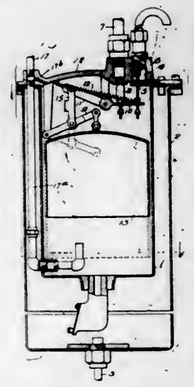
1,264,938. MIRROR AND CASING THEREFOR. WILLIAM A. JAMESON, Niagara Falls, N. Y., assignor to Wm. A. Rogers, Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed Mar. 12, 1917. Serial No. 168,310. (Cl. 40—152.)



1. In a device of the character described, in combination, a stamped metal case comprising cover sections having complementary hinge portions, a metal plate to fit within said casing and having reflecting surfaces, a common pivot rod for said sections and said plate, and means fixed within each of said sections but yieldable with respect thereto for holding a picture therein.

2. In a device of the character described, in combination, a flat metal plate having polished reflecting faces, a protective inclosing case therefor comprising cover sections hinged together, said plate being swingingly supported at the hinged edge of said sections, and a yieldable locking means for said sections.

1,264,939. VACUUM LIQUID-FEED DEVICE FOR INTERNAL-COMBUSTION ENGINES. WEBB JAY, Chicago, Ill. Filed July 18, 1917. Serial No. 181,440. (Cl. 158—36.)



1. In a vacuum fuel feed device comprising a chamber having a liquid fuel supply connection and means for alternating high and low pressure in the chamber, a buoy in the chamber, and connections for operating the pressure-alternating means, said buoy consisting of an inverted cup; the liquid supply connections being positioned for discharging within the cavity of such inverted cup buoy and thereby reaching the remainder of the chamber by passing around the lower margin of the buoy.

2. In a vacuum fuel device comprising a chamber having a liquid fuel supply connection and means for alternating high and low pressure in the chamber, a buoy in the chamber, and connections for operating the pressure-alternating means, said buoy consisting of an inverted cup; the liquid supply connections being positioned for discharge within the cavity of such inverted cup buoy, and said connections being free for return of liquid therethrough toward the source of supply, whereby said connection becomes occupied by air during the emptying of the chamber and said air is discharged into the buoy cavity on the recurrence of liquid flow to the chamber.

3. In a structure such as defined in claim 2, the liquid supply connection having an air vent opening into it leading from the chamber above the high liquid level thereof for breaking at that point the siphon formed by said connection when the same leads from a low level main supply source.

1,264,940. DOLLY FOR WASHING-MACHINES. JOHN D. A. JOHNSON, Muskegon, Mich. Filed Oct. 15, 1915. Serial No. 56,111. (Cl. 259—128.)

1. The combination, with the drive shaft of a washing machine, the lower end of such shaft being formed as a square block, of a dolly having a central square tube arranged to engage said block, a manually operable rotatable retaining disk formed with a corresponding square opening and a spring yieldingly pressing said disk to a position in which its opening is offset angularly with respect to the tube opening.

3. The combination, with the drive shaft of a washing machine, the lower end of such shaft being formed as a square block, of a dolly including a frame member formed with a central cylindrical recess, a retaining disk seated in said recess and formed with a square opening, a cap member secured to said frame member and inclosing said disk, a depending square tube rigidly secured to said frame member, and a spring yieldingly pressing said disk to a position in which its opening is offset angularly with respect to the tube opening.



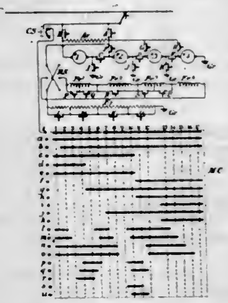
5. A dolly for washing machines comprising a metal frame having a central portion formed to engage the drive shaft of a washing machine and radial arms formed with opposite downwardly extending flanges or skirts having opposed arcuate bends forming incompletely circular seats, and washing members in the form of pins secured in said seats.

7. A dolly for washing machines comprising a metal frame having a central portion formed to engage the drive shaft of a washing machine and radial arms equipped with pairs of downwardly extending washing pins, the pins of each pair being tied together by a cross pin adjacent their bottom ends, whereby a slot is formed for the reception of portions of garments to be washed.

8. A dolly for washing machines comprising a metal frame having a central portion formed to engage the drive shaft of a washing machine and radial arms formed with depending flanges, a pair of washing pins in each arm seated within said flanges, the pins of each pair being tied together by a cross pin adjacent their bottom ends, whereby a slot is formed for the reception of portions of garments to be washed.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,264,941. CONTROL OF ELECTRIC MOTORS AND APPARATUS THEREFOR. PEARL N. JONES, Pittsburgh, and JAMES W. WELSH, Oakmont, Pa. Filed July 17, 1915. Serial No. 40,441. (Cl. 172—170.)



1. In the control of electric motors having separately excited field windings, the method of acceleration which consists in first connecting the motor armatures in series across the line, then increasing their speed by weakening their strength collectively, and also by further weakening the field strength of some of the motors individually, and then reconnecting the motor armatures into smaller groups across the line, while running them at the increased speed due to such weakening, and increasing their field strength substantially simultaneously with their reconnection, substantially as described.

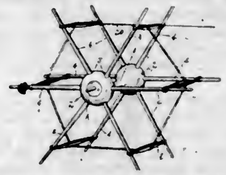
4. In the control of a plurality of electric motors, having separately excited field windings, the method which consists in first connecting the motor armatures in series across the line, then weakening the fields of one group of motors and reconnecting them in series-parallel with another group, then weakening the fields of the motors in both groups, and then successively connecting different armatures in parallel across the line, substantially as described.

9. The method of regeneratively operating a plurality of electric motors having separatively excited fields, which consists in increasing the field strength of some of the motors and then changing their connection from parallel to series-parallel, and decreasing their field strength in reconnecting them, and after reconnection, again increasing their field field strength, substantially as described.

15. The combination with a plurality of electric motors having separatively excited field windings permanently connected in series, of switch devices and connections arranged to connect the motor armatures in series, in series-parallel and in full-parallel without changing the connections of the fields, together with means for varying the strength of said fields in a fixed sequence in connection with the circuit changes of the armatures, substantially as described.

[Claims 2, 3, 5 to 8, 10 to 14, and 16 to 18 not printed in the Gazette.]

1,264,942. SWIFT-BRACE FOR REELS. MICHAEL E. KEELEY, Chadwicks, N. Y. Filed Jan. 18, 1916, Serial No. 72,850. Renewed Sept. 17, 1917. Serial No. 191,899. (Cl. 242—77.)



1. A swift brace for reels comprising a support having a tapered felt surface for preventing the crossing of the threads of silk disposed thereon.

4. In a swift brace for reels, a body portion having a longitudinal slot, a piece of felt having a projecting surface that tapers toward either end secured in said longitudinal slot, and orifices in said body portion, whereby the same may be assembled to the arms of the reel.

[Claims 2 and 3 not printed in the Gazette.]

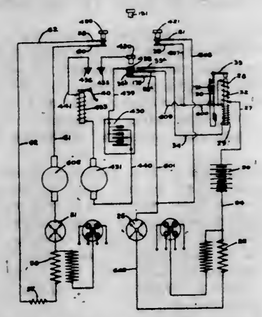
1,264,943. SYSTEM OF SELECTIVE ELECTRICAL DISTRIBUTION. CHARLES F. KETTERING and WILLIAM A. CHRYST, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Original application filed Nov. 20, 1912, Serial No. 732,483. Divided and this application filed May 1, 1916. Serial No. 94,664. (Cl. 123—148.)

1. In a system of electrical distribution, the combination with an electric machine having a slow initial starting circuit and an ignition circuit; of a selective switch comprising an element for closing the starting circuit concurrently with the closing of the ignition circuit.

2. In a system of electrical distribution, the combination with an electric machine having a slow initial starting circuit and a plurality of ignition systems; of a selective switch for controlling the ignition systems and starting circuit, whereby the starting circuit and the ignition systems may be brought into operation concurrently or the ignition systems may be brought into operation independent of the starting circuit.

3. In a system of electrical distribution, the combination with an electric machine, having a slow initial starting circuit, and ignition systems of the magneto type, single spark battery type and vibrating spark type; of a

selective switch for controlling said starting circuit and ignition systems, comprising independent elements for controlling the magneto type of ignition and the single spark battery type of ignition; and an independent operating element for concurrently controlling the closing of the starting circuit and the establishing of the vibrating spark circuit.

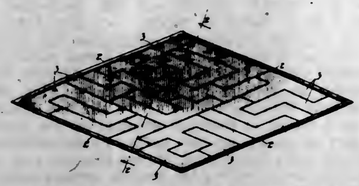


4. In a system of electrical distribution, the combination with an electric machine, having a slow initial starting circuit, and ignition systems of the magneto type, single spark battery type and vibrating spark type; of a selective switch for controlling said starting circuit and ignition systems, comprising independent elements for controlling the magneto type of ignition and the single spark battery type of ignition; and an independent operating element for concurrently controlling the closing of the starting circuit and the establishing of the vibrating spark circuit; and means coöperating with said controlling elements, whereby all of said elements may be operated concurrently.

5. In a system of electrical distribution, the combination with an electric machine, having a slow initial starting circuit, and ignition systems of the magneto type, single spark battery type and vibrating spark type; of a selective switch for controlling said starting circuit and ignition systems, comprising independent elements for controlling the magneto type of ignition and the single spark battery type of ignition; and an independent operating element for concurrently controlling the closing of the starting circuit and the establishing of the vibrating spark circuit; and means for maintaining the elements for controlling the single spark battery type of ignition and the magneto type in operative position without interfering with the operation of the element for controlling the starting circuit.

[Claims 6 and 7 not printed in the Gazette.]

1,264,944. PUZZLE. THOMAS W. LANCASTER, Chicago, Ill. Filed May 7, 1917. Serial No. 167,096. (Cl. 46—41.)

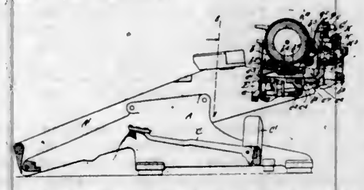


1. A puzzle having a plurality of interfitting pieces, which, when assembled, have the outline of a diamond, the sides of the pieces being parallel to the sides of the diamond and the ends of the pieces being parallel to the ends of the diamond, whereby all angles on the pieces are either obtuse or acute.

2. A sectional puzzle consisting of a diamond-shaped box and loose interfitting sections having rectilinear sides and ends, the angles of all of the sections being either acute or obtuse, and the box having a shallow, upstanding marginal flange or beading for retaining the sections and at the same time permitting them to be readily introduced or removed.

3. A puzzle consisting of a diamond-shaped box and a set of interfitting sections fitting into and covering the floor of the box, the sides and ends of the sections being rectilinear and parallel to the sides and ends of the box, whereby the angles are all either obtuse or acute, some of said pieces having acute reëntrant angles.

1,264,945. TYPE-WRITING MACHINE. EMMET G. LATTA, Syracuse, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Original application filed Nov. 2, 1911, Serial No. 658,153. Divided and this application filed Oct. 6, 1915. Serial No. 54,422. (Cl. 197—176.)



1. In a typewriting machine, the combination of a platen carriage, a support for the carriage, a main stop on the support, a carriage feed rack bar mounted on the carriage having a plurality of stops, and a forwardly extending line space lever traveling with the carriage and acting when moved in one direction to aline the rack bar stops with the main stop.

20. In a typewriting machine, the combination of a platen carriage, a carriage feed rack bar having tabulator and margin stops thereon mounted on the carriage, a line space lever acting when moved to rotate the platen, and move the rack bar to release the margin stops, or to cause operative action of the tabulator stops, and an auxiliary lever acting to release the margin stops without causing operative action of the tabulator stops.

33. In a typewriting machine, the combination of a platen carriage, a support for the carriage, a movable main stop on the support, a carriage feed rack bar mounted on the carriage and having a plurality of stops adapted to engage the movable main stop, means operated through said movable main stop to lock the carriage when said main stop is engaged by one of the rack bar stops, and means mounted on and moving with the carriage for alining the rack bar stops with the main stop.

[Claims 2 to 19 and 21 to 32 not printed in the Gazette.]

1,264,946. ADVERTISING DEVICE. CLINTON H. LEGGETT, New York, N. Y. Filed Aug. 1, 1916. Serial No. 112,494. (Cl. 46—40.)



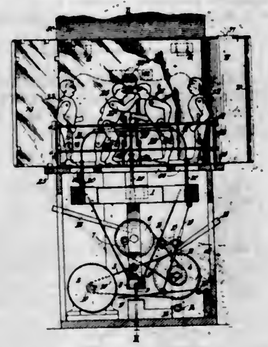
5. An advertising device, comprising a reciprocatory actuator, a figure rotatably and loosely mounted on said actuator, said figure being adapted to wabble somewhat with relation to said actuator, said figure having hinged legs, and a platform having means thereon adapted to coöperated with said figure to turn it as it moves up and down, and stops adapted to limit the bending of the legs, whereby said legs when they strike said means on the platform are preventing from bending.

13. An advertising device, comprising a cabinet, a motor in said cabinet, a platform or top on said cabinet,

an actuator, devices on said platform adapted to be set in motion by said actuator, a back behind said platform, and a mirror detachably connected to said back.

[Claims 1 to 4 and 6 to 12 not printed in the Gazette.]

1,264,947. ADVERTISING DEVICE. CLINTON H. LEGGETT, New York, N. Y. Filed Apr. 7, 1917. Serial No. 160,358. (Cl. 46—40.)



1. A device of the character described comprising a vibratory frame, a platform, figures, and connections between said frame and figures, whereby said figures are actuated by said frame, said figures having parts adapted to come into contact with said platform, said platform being covered with a light covering and being cut out at points beneath said figures.

4. A device of the character described comprising a vibratory frame, socket-pieces therein, a platform, and figures adapted to be actuated by said frame, a bar and a plurality of figures mounted on said bar, said bar having means for engaging said socket pieces.

[Claims 2, 3, and 5 to 17 not printed in the Gazette.]

1,264,948. STAPLE-FASTENER. CHARLES A. LINDBERG, Sturgis, Mich., assignor of one-third to James F. Jewett and one-third to Lloyd R. Hawkins, Sturgis, Mich. Filed Dec. 1, 1916. Serial No. 134,372. (Cl. 85—10.)



1. A fastener comprised of a body having an open end, prongs projecting from said body at the opposite end thereof, said body being adapted to receive the end of a reed or the like at said open end thereof, and stop means at the opposite end of the body formed integral therewith to prevent passage of a reed or the like through said body.

2. A fastener formed from a blank of sheet metal bent into cylindrical form having an open end, attaching prongs projecting from the opposite end of the cylinder, members turned inwardly between the prongs partially closing said opposite end, and tangs struck inwardly from the cylinder, substantially as described.

[Claims 3 and 4 not printed in the Gazette.]

1,264,949. METHOD FOR PRODUCTION OF CYANOGEN COMPOUNDS. AXEL RUDOLF LINDBLAD, Ludvika, Sweden. Filed June 1, 1916. Serial No. 101,039. (Cl. 204—64.)

1. Process for production of cyanogen compounds consisting in charging alkali silicate together with reducing agents and lime into an electric furnace, exposing the charge to the action of nitrogen while electrically heating the same to such a temperature that cyanogen compounds are formed, conducting the cyanogen compounds from the furnace together with other gaseous products formed in the process and collecting the same.

3. Process for production of cyanogen compounds consisting in charging alkali silicate together with carbon and lime-containing mineral into an electric furnace, exposing the charge to the action of nitrogen while electrically heating the same to such a temperature that cyanogen compounds are formed, conducting the cyanogen compounds from the furnace together with other gaseous products formed in the process and collecting the same.

6. A process for the production of cyanogen compounds consisting in charging alum-slate together with reducing agents and lime into an electric furnace, exposing the charge to the action of nitrogen while electrically heating the same to such a temperature, that cyanogen compounds are formed, conducting the cyanogen compounds from the furnace together with other gaseous products formed in the process and collecting the same.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,264,950. CUP-CONTAINER. LAWRENCE W. LUELLEN, New York, N. Y., assignor to Individual Drinking Cup Company, New York, N. Y., a Corporation of Maine. Filed Apr. 3, 1911. Serial No. 618,516. (Cl. 206—56.)



1. A container comprising a paste-board cylinder having at one end a neck of reduced area, and inwardly of such neck a series of longitudinally disposed ribs springing from the normal surface of the cylinder and merging into the surface of the neck.

5. In combination with a stack of nested paper cups, a tubular container therefor, having a permanent closure at one end and a removable closure at its other end, said removable closure being initially sealed to said container to form an original package for the cups, and a plurality of inwardly directed abutments projecting therefrom and adapted to support the cups within the container in such a way as to permit the cups to be successively separated when individually pulled from the stack after the removable closure has been detached from the container.

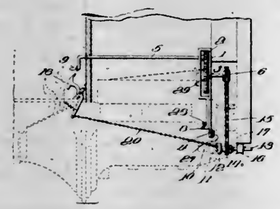
10. The combination with a stack of nested cup-like articles, of a container, forming an original package of the articles, having a permanent closure at one end and a removable closure at its other end, and means adjacent the latter end to support the stack and permit withdrawal of the terminal article when the removable closure has been detached from the container.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,264,951. MECHANICAL STARTER FOR INTERNAL-COMBUSTION ENGINES. GEORGE D. MAXSON, West Edmeston, N. Y. Filed June 8, 1917. Serial No. 173,572. (Cl. 74—54.)

1. A mechanical starter for motor vehicle internal combustion engines, comprising a supporting bracket at its

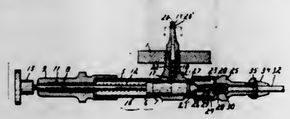
lower end having a foot and depending projection to fit and be bolted to the engine support, said bracket having a lateral brace coupled thereto and adapted to be secured to an adjacent portion of the engine, the upper portion of said bracket being of loop-like formation, a pinion, a gear wheel meshing with and driven by said pinion, said pinion and gear arranged in the bracket, an elongated driving shaft for said pinion adapted to extend through the vehicle dash and be provided with an operating handle, said



gear wheel being provided with a shaft projecting beyond said bracket and having a sprocket wheel, a rotary sprocket adapted to be supported in alinement with and normally operatively disconnected from the engine shaft, manually controlled means for establishing operative connection between said sprocket and the engine shaft, and a sprocket chain operatively connecting said sprocket wheel to said sprocket.

[Claims 2 to 4 not printed in the Gazette.]

1,264,952. PRIMING DEVICE FOR INTERNAL-COMBUSTION ENGINES. FRANK D. MALTBY, Battle Creek, Mich. Filed Dec. 30, 1916. Serial No. 139,837. (Cl. 103—75.)



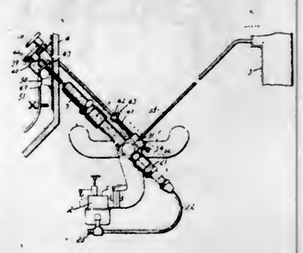
2. In a priming device, the combination of a cylinder having a delivery port in its side, a tubular inlet valve seat member having a conical valve seat in its inner end disposed in the inner end of said cylinder, a coupling member threaded upon said cylinder to embrace said valve seat member and clamp the same in position, a conical inlet valve provided with a fibrous facing seating in said valve seat member, a plunger reciprocating past said delivery port and in its inner position constituting a valve therefor so that on the in-stroke of the plunger a quantity of liquid is temporarily trapped above the inlet valve forcibly seating it, said plunger being adapted when in its inner position to engage the inlet valve and being provided with a packing disposed in a spaced relation to its inner end so that the packing is at the rear of the cylinder discharge when the plunger is in its initial position, and a spring urging said plunger to its inner position.

6. In a priming device, the combination of a cylinder having a delivery port in its side and provided with a conical valve seat at its inner end, a conical inlet valve provided with fibrous facing seating in said valve, a spring urging said inlet valve to its seat, a plunger reciprocating past said delivery port and in its inner position constituting a valve therefor so that on the instroke of the plunger a quantity of liquid is temporarily trapped above the inlet valve, said plunger being adapted when in its inner position to engage the inlet valve and being provided with a packing disposed in a spaced relation to its inner end so that the packing is at the rear of the cylinder discharge when the plunger is in its initial position.

9. In a priming device, the combination of a cylinder having a delivery port in its side and provided with an inwardly opening inlet valve, and a plunger reciprocating past said delivery port and in its inner position constituting a valve therefor so that on the in-stroke of the plunger a quantity of liquid is temporarily trapped above the inlet valve seating it, said plunger being provided with a packing disposed in a spaced relation to its inner end so that the packing is at the rear of the cylinder discharge when the plunger is in its initial position permitting the trapped liquid to gradually escape.

[Claims 1, 3 to 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,264,953. PRIMING AND DECARBONIZING DEVICE FOR INTERNAL-COMBUSTION ENGINES. FRANK D. MALTBY, Battle Creek, Mich. Filed Jan. 2, 1917. Serial No. 140,136. (Cl. 123—180.)



6. The combination with the manifold of an internal combustion engine, of a priming pump provided with a delivery passage arm adjustably mounted on said manifold, said arm being provided with a fuel delivery passage and with an air and water delivery passage terminating without the manifold in a transverse groove, a combined air and water inlet valve casing adjustably mounted on said arm to embrace said passage groove thereof and provided with a delivery port communicating with said groove and with air and water inlet ports, the water inlet port being connected with a source of water supply, and a valve adjustable to connect said water or said air inlet ports with the said delivery port or to close said ports.

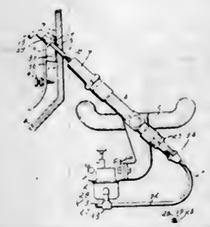
10. The combination with the manifold of an internal combustion engine, of a priming pump cylinder provided with a delivery passage arm having a pair of passages therein, one of said passages being a fuel passage, a valve for the other passage comprising a valve casing adjustably mounted on said arm so that it may be adjusted to different positions, a check valve for said fuel passage, and a plunger adapted when in its initial position to close said fuel passage, said plunger being also adapted for adjustment to constitute a regulating valve for said fuel passage.

15. The combination with a manifold, of an internal combustion engine, of a priming pump having a delivery passage arm provided with a pair of passages communicating with said manifold through said arm, said manifold having a single opening for said passage arm, one of said passages being a fuel passage, and a valve for controlling the other passage comprising a valve casing adjustably mounted on said arm.

[Claims 1 to 5, 7 to 9, 11 to 14, 16, and 17 not printed in the Gazette.]

1,264,954. PRIMING DEVICE FOR INTERNAL-COMBUSTION ENGINES. FRANK D. MALTBY, Battle Creek, Mich. Original application filed Dec. 30, 1916, Serial No. 139,837. Divided and this application filed Apr. 21, 1917. Serial No. 163,623. (Cl. 123—180.)

4. In a priming device, the combination with the manifold of an internal combustion engine, of a cylinder having a delivery port and a delivery and supporting arm engaged in an opening in said manifold, an atomizing nozzle mounted directly on said delivery arm and supported in said manifold thereby, a check valve for said delivery port arranged in said arm, a cylinder inlet valve, and a plunger reciprocating past said delivery port and in its inner position constituting a valve therefor, said plunger being adapted when in its inner position to engage the inlet valve, and a spring urging said plunger to its inner position.

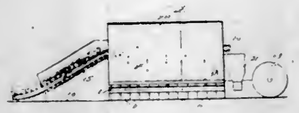


7. In a priming device, the combination with the manifold of an internal combustion engine, of a cylinder having a delivery port in its side, an atomizing nozzle projecting into said manifold, a return check valve for said port, an inlet valve for said cylinder, a plunger arranged in said cylinder to reciprocate past its said delivery port and constituting when in its inner position a closing valve therefor, said plunger being adapted to be adjusted so that it constitutes a regulating valve for said discharge port, a plunger rod, and a retracting lever for said plunger rod provided with an adjustable stop, said plunger rod being adapted for manipulation independently of said lever.

11. In a priming device, the combination with the manifold of an internal combustion engine, of a priming pump mounted on said manifold, and an atomizing nozzle projecting into said manifold and connected directly to said pump whereby the priming fuel is delivered directly from said pump into said manifold through said atomizing nozzle.

[Claims 1 to 3, 5, 6, and 8 to 10 not printed in the Gazette.]

1,264,955. PROCESS OF TREATING FRESHLY-CUT CROPS. ARTHUR J. MASON, Chicago, Ill. Filed Oct. 24, 1914. Serial No. 868,504. (Cl. 34—24.)

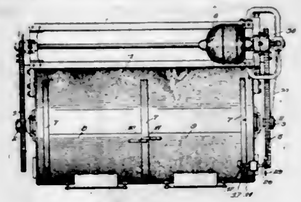


1. The herein described process of artificially curing freshly cut crops, which consists in bringing the material to be treated into the form of a layer or mat of approximately uniform thickness and density, and then forcing a body of commingled heated air and products of combustion through said layer from one side thereof until the moisture is expelled therefrom, and simultaneously venting all of the moisture laden drying agent freely to the atmosphere.

2. The herein described process of artificially curing freshly cut crops, which consists in bringing the material to be treated into the form of a layer or mat of approximately uniform thickness and density, moving said layer edgewise at a slow rate of travel, and, during such travel, subjecting said layer to the action of a body of commingled heated air and products of combustion, and simultaneously venting all of the moisture laden drying agent to the atmosphere.

[Claims 3 to 6 not printed in the Gazette.]

1,264,956. ELECTRIC CONTROLLING MECHANISM FOR WASHING-MACHINES. ERNEST W. MILLER, Norwood, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Jan. 25, 1916. Serial No. 74,101. (Cl. 74—46.)



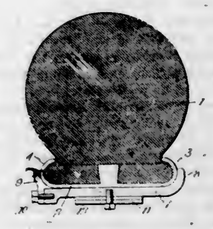
1. The combination with a receptacle, of a container rotatively arranged within the receptacle, an electric motor for driving said container, a motor circuit therefor, a movable door arranged in the receptacle to permit access to said container, a brake for the motor, and means controlled by the door and brake for opening said circuit when the door is opened or the brake is applied.

2. The combination with a receptacle, of a container rotatively arranged within the receptacle, an electric motor for driving said container, a motor circuit therefor, a movable door arranged in the receptacle to permit access to the container, a brake for the motor, means controlled by the door and the brake for requiring said door to be closed and the brake to be released before the motor circuit can be closed.

3. The combination with a receptacle, of a container rotatively arranged within the receptacle, an electric motor for driving said container, a motor circuit therefor, a movable door arranged in the receptacle to permit access to the container, a brake for the motor, means controlled by the door and the brake for requiring said door to be closed and the brake to be released before said motor circuit can be closed and automatically opening said circuit when the door is opened or the brake is applied.

4. The combination with a receptacle, of a container rotatively arranged within the receptacle, a door in the receptacle for permitting access to the container, an electric motor for driving said container, a motor circuit therefor, a brake coöperating with said motor, a brake operated switch that closes when the brake is released, a door controlled switch which closes when the door is closed, and a manual switch that must be closed to supply current to the motor.

1,264,957. COMBINED TIRE AND RIM FOR WHEELS. AUGUSTA V. MITCHELL, Washington, D. C. Filed July 8, 1914. Serial No. 849,814. (Cl. 152—7.)

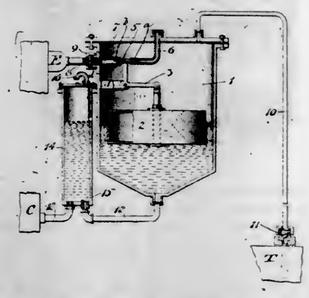


1. In a device of the class described, the combination with a metal wheel rim having upturned side flanges and spaced rounded projections formed on its surface, of

a circumferential rib on the outer surface of said rim between said side flanges having undercut sides, and a rubber tire fitting in said rim and vulcanized in place.

[Claim 2 not printed in the Gazette.]

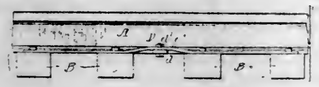
1,264,958. LIQUID-FUEL-FEEDING APPARATUS. ROBERT C. MITCHELL, Mount Vernon, N. Y. Filed June 3, 1916. Serial No. 101,514. (Cl. 158—36.)



1. In an apparatus of the character described, a tank, a liquid supply pipe leading into the same, a vent pipe leading into the same, an exhaust pipe leading into the same and automatically controlled valve mechanism cooperating with the exhaust and the vent pipes to vary the degree of vacuum in said tank by varying the area of the exhaust passage.

[Claims 2 to 7 not printed in the Gazette.]

1,264,959. RAIL-ANCHOR. WILLIAM M. MITCHELL, Louisville, Ky. Filed Feb. 14, 1918. Serial No. 217,176. (Cl. 238—4.)



1. The combination with a railway rail, of a tie-engaging bar extending at one side of a base flange of the rail and having a flat longitudinally disposed central portion at one side of the base flange of the rail and connected thereto by a part or member fused or welded to said base flange.

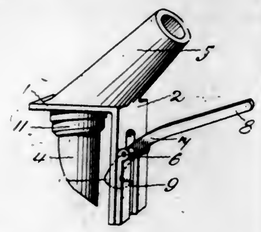
2. A rail anchor comprising a stud or flange fused or welded to the base flange of the rail at its edge, and a tie-engaging bar having its ends extending parallel with and in the plane of the base flange of the rail at one side thereof, the central portion of said tie-engaging bar extending horizontally and across said stud or projection and connected thereto.

3. A rail anchor comprising a stud or projection fused or welded to the base flange of the rail, and a tie-engaging bar arranged at one side of the base flange of the rail and extending parallel therewith and in the plane of said base flange substantially from end to end, said bar being connected to said stud or projection.

4. A rail anchor comprising a stud or projection fused or welded to the base flange of the rail at its edge, and a tie-engaging bar arranged at one side of the base flange of the rail and extending across said stud or projection and detachably connected thereto.

5. A rail anchor comprising a stud or projection fused or welded to the base flange of the rail at its edge, and a tie-engaging bar arranged at one side of the base flange of the rail and having a horizontal central portion extending across said stud or projection and detachably connected thereto, one of said parts being arranged out of the plane of the base flange of the rail where it crosses the other of said parts.

1,264,960. POURING ATTACHMENT TO TINS, CANS, AND THE LIKE. ERNEST MOSS, Christchurch, New Zealand. Filed Jan. 12, 1916. Serial No. 71,653. (Cl. 221—23.)

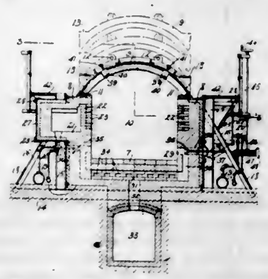


1. A pouring attachment for cans and the like, comprising an angle-plate adapted to embrace a corner of the can, a nozzle projecting inward from one member of the angle-plate and adapted to pierce the contiguous can wall, a pouring spout projecting outward from the angle-plate and being in communication with the nozzle, and a clamping member carried by the other member of the angle-plate and having a gripping portion adapted to move inwardly from the latter member and toward the first member so as to approach the point where the nozzle joins the same.

3. A pouring attachment for cans and the like, comprising an angle-plate adapted to embrace a corner of the can, a nozzle projecting inward from one member of the angle-plate and adapted to pierce the contiguous can wall, a pouring spout projecting outward from the angle-plate and being in communication with the nozzle, and a clamping lever pivoted on the other member of the angle-plate and having a gripping arm adapted to move inwardly from the latter member and toward the first member into operative position wherein it is disposed near to the first member at the point where the nozzle joints the same.

[Claim 2 not printed in the Gazette.]

1,264,961. FURNACE. ALBERT W. MOYER, Belmar, N. J. Filed Nov. 5, 1917. Serial No. 200,240. (Cl. 263—43.)



1. In a furnace of the character described, a furnace body embodying a hearth, side walls and a removable top for bridging the side walls, and a cradle for preventing spreading of the side walls while permitting removal of the furnace top comprising girders extending transversely of the furnace body entirely across beneath the hearth and projecting laterally beyond the side walls of the furnace, upright stays supporting the side walls and secured at their lower ends to the transverse girders and inclined braces extending from the outer laterally extended ends of the transverse girders to the upper portions of the upright stays.

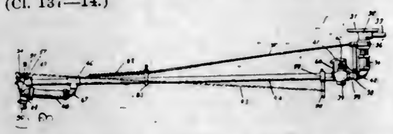
2. In a furnace of the character described, a furnace body embodying a hearth, side walls and a removable top for bridging the side walls, girders extending transversely of the furnace body beneath the hearth and projecting laterally beyond the side walls of the furnace, upright stays supporting the side walls and secured at their lower ends to the transverse girders, inclined braces extending from the outer laterally extended ends of the transverse girders to the upper portions of the upright stays, aprons carried by said inclined braces to form chambers alongside the furnace body and fuel feeding means located in the chambers thus provided.

8. In a furnace of the character described, a furnace body comprising a hearth, upright side walls rising from said hearth and a movable top wall arched over between the side walls and forming in conjunction with said side walls and hearth, a heating chamber, combustion chambers on the upper portions of the side walls at opposite sides of the furnace and in communication with the heating chamber through a plurality of lateral flues opening from said combustion chambers into the heating chamber, burners discharging into the combustion chambers and outlet flues extending from the lower portion of the heating chamber.

9. In a furnace of the character described, a furnace body comprising a hearth, upstanding side walls and a removable top arched over between the side walls and forming in conjunction with said side walls and hearth, a heating chamber, combustion chambers on the opposite side walls in communication with the heating chamber through transverse flues extending through the side walls from the combustion chambers into the heating chamber, burners discharging into the combustion chambers and a cradle for said furnace body comprising transverse girders beneath the hearth extending across between the opposite sides of the furnace, supporting stays at the outer sides of the side walls secured at their lower ends to the transverse girders and braces for said stays connected between the stays and the girders, whereby the side walls of the furnace are supported against spreading and without interfering with the removal of the furnace top.

[Claims 3 to 7 not printed in the Gazette.]

1,264,962. VEHICLE-WASHER. EDWARD MULLER, North Bergen, N. J. Filed June 8, 1915. Serial No. 32,817. (Cl. 137—14.)



1. In a device of the character described, the combination of a depending supply pipe, a delivery pipe extending laterally therefrom, a valve at the end of said delivery pipe, an extension at the opposite side of said valve from said delivery pipe, a hose leading from said extension, a lever for said valve arranged above the same diagonally of the delivery pipe and extension so that one end of itself projects laterally of said extension, means also at the side of said extension for operating said lever from below the valve and a flexible connection extending from said means to the hose over the outer end of the extension so that downward draft upon the hose will operate the valve.

2. In a device of the character described, the combination of a depending supply pipe, a delivery pipe extending laterally therefrom, a valve at the end of said delivery pipe, an extension at the opposite side of said valve from said delivery pipe, a hose leading from said extension, a lever arranged above said valve diagonally of the delivery pipe and extension so that one end of itself projects laterally of said extension, a bell crank lever also at the side of said extension having one arm connected to said lever to operate the same, and a flexible connection extending from said lever to the hose over the outer end of the extension so that downward draft upon the hose will operate the valve.

3. In a device of the character described, the combination of a depending supply pipe, a delivery pipe swiveled thereto, a valve at the end of said delivery pipe, an extension on the other side of said valve from the delivery pipe, a collar rotatably mounted on said depending supply pipe, a hanger for supporting the delivery pipe, and a guy rod for supporting the extension pipe, both said hanger and guy rod receiving support from said collar.

1,264,963. EYELETING-MACHINE. LOUIS MYERS, Detroit, Mich., assignor to Machine Appliance Corporation, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 21, 1917. Serial No. 163,545. (Cl. 218—15.1.)



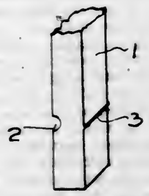
1. In an eyeleting machine, the combination of a base and anvil carried thereby, springs for supporting an eyelet above said anvil, a set above said springs, and a normally, projecting sheet metal member carried by the lower end of said set, said projecting member being hollow and having a plurality of downwardly projecting yielding prongs for entering the eyelet.

3. In a fastening machine, the combination of a frame, an anvil carried thereby, eyelet supporting springs located above said anvil, a set having at its lower end a radially yielding member having a plurality of concentrically arranged yielding prongs for entering the eyelet, means for reciprocating said set, and tracks forming a magazine for feeding fasteners to said springs, said springs each having a face portion overlying a portion of said tracks, and provided with a lateral projection at its upper end and extending continuously from said projection to said plunger.

4. In an eyeleting device, the combination of a support, an anvil carried thereby, a set, and a normally projecting sheet metal member carried by said set, said projecting member being hollow and having a plurality of projecting yielding prongs for entering an eyelet and frictionally holding the same.

[Claim 2 not printed in the Gazette.]

1,264,964. TYPE-BODY. WILLIAM NICHOLAS, Southport, Conn., assignor, by mesne assignments, to United States Graphotype Company, a Corporation of New York. Filed July 7, 1914. Serial No. 849,526. (Cl. 101—398.)



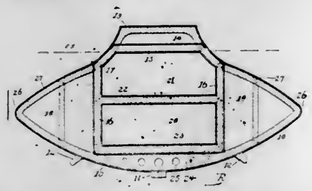
1. A font of type having bodies provided with nicks in the sides thereof corresponding with the bottom of the character face thereon, minute ribs projecting from the sides corresponding with the top of the character thereon, and adapted to contact an edge of said nick whereby one of said type will hold the other in a fixed position relatively thereto.

4. A font of type with nicks in one side of the body thereof, minute ribs projecting from the opposite side and located at a point to contact one or the other edge only

of said nicks, the height of said ribs being insufficient to disturb the alinement of the type to which it relates when composed in a form adjacent plain type surfaces.

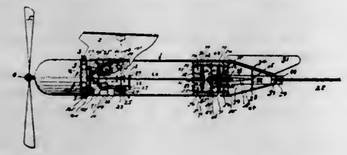
[Claims 2 and 3 not printed in the Gazette.]

1,264,965. HULL FOR SUBMARINE VESSELS. ROBERT S. NOAH, Annapolis, Md., assignor to Henry B. Reinhardt, trustee, Roland Park, Md. Filed Dec. 13, 1916. Serial No. 136,790. (Cl. 114—16.)



A submarine vessel whose hull is provided at each of two longitudinal sides with a straight buffer-edge extending for the greater part of the hull's length; an uppermost deck which is the highest part of the vessel and extends longitudinally and parallel with said buffer edges,—said deck being narrow relatively to the width of the hull between said two side buffer-edges, and two longitudinal roof-sections each having a depressed crosswise curve and each section adjoining an opposite side of said uppermost deck and therefrom inclining downwardly to one of said buffer-edges.

1,264,966. AUTOMATIC STEERING AND STABILIZING APPARATUS FOR AIRCRAFT. GUSTAVE NORDSTROM, Winnipeg, Manitoba, Canada. Filed Mar. 20, 1916. Serial No. 85,417. (Cl. 244—29.)



1. In an air craft, the combination of stabilizing means, power means to operate the stabilizing means, electrically operated means to control the operation of the stabilizing means, contacts parallel with the longitudinal axis of the aircraft, a suspended disk in spaced relation to which the contacts are positioned, a plurality of gyroscopes arranged to maintain the constancy of the plane of the disk, and means to move the contacts to change their position with reference to the disk.

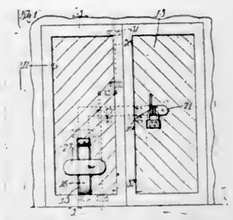
5. An air craft having an engine, a governor operated from the engine and altitude changing means operated by the governor, said means comprising a horizontal rudder, power means to operate the rudder, electrically operated means to control the operation of the rudder, a suspended disk, gyroscopic means by which the constancy of the plane of the disk is maintained, contacts positioned above and below the disk parallel with the longitudinal axis of the air craft, said contacts being carried by a member having operative connection with the governor to raise or lower the contacts in accordance with the movements thereof.

9. In an air craft, the combination of steering means, power means to operate the steering means, electrically operated means to control operation of the steering means, curved contacts fixedly secured to the air craft, insulating strips separating the rear and forward ends of the contacts in parallel alinement with the longitudinal axis of the air craft, a gyro-electro-magnetic compass suspended below the contacts having means adjustably connected therewith adapted to normally contact with one of the insulating strips and adapted to engage the contact members upon swerving of the craft from a direct course to close a circuit to steer the vessel back to the direct course.

11. In an air craft, the combination of steering and stabilizing means, electrically operated means to control the steering and stabilizing means, an engine, a shaft normally operated from the engine, a dynamo driven from the shaft, means to close circuits to operate the electrically operated means from the dynamo, a storage battery loaded from the dynamo and switch means operated by stoppage of the engine to change circuits to operate the dynamo from the battery.

[Claims 2 to 4, 6 to 8, and 10 not printed in the Gazette.]

1,264,967. DOOR-FASTENING. CHARLES M. OHLSEN, Chicago, Ill. Filed Sept. 22, 1917. Serial No. 192,643. (Cl. 16—66.)



1. The combination with a pair of doors mounted to swing inwardly, of a stiff leaf spring bowed outwardly of one door and fixed thereto by its lower end, horizontally alined brackets on the doors above the spring, a reciprocable bar movable into the brackets to fasten the doors in closed position, a depending shank on the bar secured at its lower end to the free end of the spring, and a guide for the shank fixed to said one door and positioned to limit the shank to vertical movement.

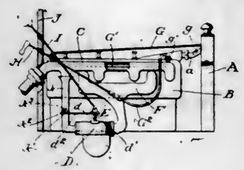
4. The combination with a door, and devices for fastening the same in closed position including a member movable to fasten or release the door, of vehicle operated means exposed outwardly of the door for moving said member to releasing position and normally spring pressed to hold the member in door-fastening position, and a lever manually operable from the inner side of the door for moving the member to releasing position.

5. The combination with a door, and devices for fastening the same in closed position including a member movable to fasten or release the door, of vehicle operated means exposed outwardly of the door for moving said member to releasing position and normally spring pressed to hold the member in door-fastening position, a lever manually operable from the inner side of the door for moving the member to releasing position, a rack on the lever, and a pawl pivoted to the door and engaging the rack to hold the lever in door-releasing position.

[Claims 2, 3, 6, and 7 not printed in the Gazette.]

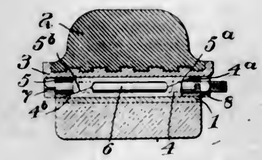
1,264,968. INTERNAL-COMBUSTION ENGINE. CHARLES OWENS, Chattanooga, Tenn. Filed Jan. 15, 1916, Serial No. 72,279. Renewed Dec. 3, 1917. Serial No. 205,234. (Cl. 123—25.)

In combination with an internal combustion engine and a water supply means for automatically generating and supplying a combustible mixture to the fuel intake of the engine, a pipe having one end directed downwardly into the water of the system and its other end communicating directly with the fuel intake between the carbureter, and the engine, said pipe being normally open and unobstructed throughout its entire extent and having a portion passing through the path of the exhaust gases to be acted on by direct contact therewith, and of dimensions to constitute a flash steam generator and superheater, said unobstructed pipe permitting it to be normally filled with superheated steam at substantially the same pressure as that caused by the suction action of the pistons, which steam is withdrawn and replaced by steam



generated by additional water, the supply of said additional water being governed solely by the suction created by the suction stroke of the piston, and the degree of applied heat from the exhaust of the engine.

1,264,969. DEMOUNTABLE TIRE. JOSEPH E. PERRAULT, Belmont, Mass. Filed June 19, 1917. Serial No. 175,679. (Cl. 152—7.)



1. In combination with a wheel rim and tire base, a pair of interposed overlapping wedge rings, each of said rings having slots extending inwardly from opposite edges and means for forcing said wedge rings in opposite directions.

2. In combination with a wheel rim and tire base, a self contained fastening device independent of said rim and tire base comprising a pair of interposed overlapping wedge rings, and bolts normally connecting said wedge rings and provided with means for forcing the rings in relatively opposite directions.

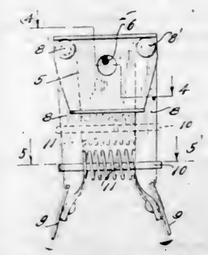
3. A self-contained fastening device independent of but adapted for use between a wheel rim and a removable tire base, comprising a pair of overlying continuous rings having reversely disposed coacting wedge surfaces and bolts passing transversely through said rings for forcing them in relatively opposite directions, each of said rings having slots extending alternately inwardly from opposite sides.

4. A self-contained fastening device independent of but adapted for use between a wheel rim and a removable tire base, comprising a pair of overlying continuous rings, each having a thick and a thin portion, the thick and thin portions of one ring having inclined faces coacting with correspondingly inclined faces on the thin and thick portions of the other ring and each of said rings having slots extending transversely from opposite edges and means extending transversely through the rings for forcing them in opposite directions.

1,264,970. SCRAPER FOR GRAIN-DRILLS. BERNARD R. PFEIFER, Jessie, N. D. Filed May 21, 1917. Serial No. 170,000. (Cl. 97—79.)

1. A device of the class described, comprising a support, a pair of scraper members, means pivotally connecting said members to the support, and means adjustable on the scraper members for regulating the scraping action.

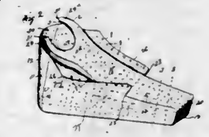
3. A device of the class described, comprising a support, a pair of scraper members pivotally connected thereto, means encircling said members to limit their separating movement, and pressure means intermediate said members tending to separate the same while permitting yielding thereof toward each other.



6. A scraper attachment for agricultural implements, comprising a plate and means for connecting said plate to said implements, a pair of scraper elements pivotally connected to said plate, a retaining ring encircling said elements and adjustable therealong, and a spring arranged intermediate the scraper members for pressing said members away from each other.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,264,971. PROTECTOR FOR CHILDREN. JOE PICKLES, Winnipeg, Manitoba, Canada. Filed Feb. 19, 1917. Serial No. 149,543. (Cl. 2—80.)



1. A garment shaped to provide a lower closed portion and an upper open portion at right angles to the closed portion and merging thereinto, the top of the closed portion being extended to form a tongue adapted to turn up in front of the open portion, and the sides of the open portion being shaped to form flaps adapted to be disengageably connected across the tongue.

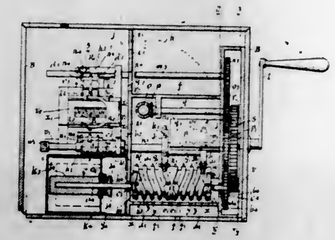
3. A garment having a lower closed portion and an upper open portion at right angles to the closed portion and merging thereinto, the said portions being formed from a bottom piece extending the length of both portions, and sides, rear end and top pieces joined together, the side pieces being shaped to provide a low portion and a high portion at right angles to the low portion seamed to the rear end piece on upwardly converging lines, the upper piece closing the top of the low portion and extending therebeyond to form a tongue in front of the open portion, and the sides of the open portion forming flaps adapted to be laced across the tongue.

4. A garment having an upper open portion and a lower closed portion extending laterally from the open portion, the said portions being formed with an oblong bottom piece extending the length of both portions and sides and a rear end piece seamed together and to the bottom piece around three sides thereof, the said side pieces being shaped to provide a low portion and a high portion adjacent the rear end piece, and flaps on the forward edges of the high portions, a top piece seamed to the front of the bottom piece, thence passing up over and seamed to the front and upper edges of the side pieces the length of their lower portions and extending therebeyond to form a tongue adapted to turn up and

form the front of the open portion, the flaps on the sides being adapted to overlap the tongue and to be disengageably connected therecross.

[Claims 2 and 5 not printed in the Gazette.]

1,264,972. MOTION-PICTURE APPARATUS. RICHARD H. PIETZSCH and ROBERT P. NICHOLS, Philadelphia, Pa., assignors to Cino Camera Company, Philadelphia, Pa., a Corporation of Delaware. Filed Apr. 21, 1915. Serial No. 22,730. (Cl. 88—18.)



1. In kinetographic apparatus, the combination with film holding means, of a frame movable laterally with respect to said means, and a film held by said means and moved laterally by said frame.

10. In kinetographic apparatus, the combination with a looped film, of film holding means with which one end of the loop communicates, a frame movable laterally with respect to said means and engaging said film at the other end of the loop, film feeding means engaging said film between said first named end of said loop and said holding means, and means intermittently feeding said film longitudinally with respect to said frame.

17. In kinetographic apparatus, the combination with film storage and film receiving means, of a frame movable laterally with respect to said means, a film moved laterally by said frame and looped on opposite sides of said frame between said frame and said storage and receiving means, means for feeding said film longitudinally between said loops, means for feeding said film from said storage means to one of said loops, and means for feeding said film from the other of said loops to said receiving means.

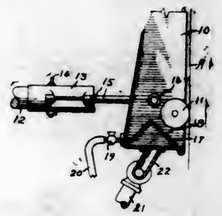
22. In kinetographic apparatus, the combination with film storage and film receiving means, of a frame movable laterally with respect to said means, a film moved laterally by said frame and looped on opposite sides of said frame between said frame and said storage and receiving means, means movable with said frame for intermittently feeding said film longitudinally from one of said loops toward the other of said loops, means for imparting a plurality of lateral step movements to said frame and thereafter a movement to said film feeding means, and film feeding means intervening between said loops and said storage and receiving means,

38. In kinetographic apparatus, the combination with film engaging means, of a film engaging sprocket movable laterally with respect to said means, and a film engaged by said means and looped between the same and said sprocket.

[Claims 2 to 9, 11 to 16, 18 to 21, 23 to 37, and 39 to 41 not printed in the Gazette.]

1,264,973. TOOL FOR REMOVING WALL-PAPER. JAMES H. POWERS, Saratoga Springs, N. Y. Filed May 4, 1917. Serial No. 166,458. (Cl. 126—271.1.)

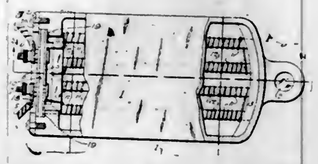
1. In a wall paper removing device, the combination of a hood, means for supporting the hood against and moving the same over a wall, a steam distributer mounted in the lower end of the hood and having inner and outer inclined faces and jet openings in the outer face adapted to face the wall at an angle, and means for admitting steam under pressure to said distributer for passage in jets through said openings against the wall at an angle,



the inner face of said plate providing between the same and said hood a pocket adapted to receive the water of condensation collecting in the hood.

[Claim 2 not printed in the Gazette.]

1,264,974. VULCANIZER. JOSEPH H. REEDER, St. Louis, Mo. Filed Sept. 7, 1917. Serial No. 190,265. (Cl. 219—19.)



1. In a device of the character described, the combination of a casing having a groove in its hollow interior, a frame adapted to fit into the said groove and to be contained in the said interior, a resistance wire borne by the said frame, means for holding the said frame at its end opposite the said end, insulation at the entrance to the said casing, and electrical conducting means connecting with the above-mentioned wire.

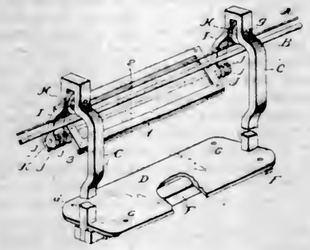
2. The combination of a hollow casing, a removable frame located therein, an electrical resistance wire borne by the said frame, asbestos and glass insulation located at the entrance to the said casing, binding-posts that pass through the said insulation, and electric wires connected to the said binding-posts, there being a flange against which inward movement of the said insulation is stopped.

3. The combination of a hollow casing, a removable frame located therein, an electrical resistance wire borne by the said frame, asbestos and glass insulation located at the entrance to the said casing, binding-posts that pass through the said insulation, electric wires connected to the said binding-posts, there being a flange against which inward movement of the said insulation is stopped, and a keeper plate for clamping the said insulation into place.

4. The combination of a hollow casing, a removable frame located therein, the said frame being composed of a pair of end-pieces and a plurality of longitudinal members, an electrical resistance wire borne by the said frame, asbestos and glass insulation located at the entrance to the said casing, binding-posts that pass through the said insulation, and electric wires connected to the said binding-posts.

5. The combination of a hollow casing, a removable frame located therein, an electrical resistance wire borne by the said frame, asbestos and glass insulation located at the entrance to the said casing, binding-posts that pass through the said insulation, electric wires connected to the said binding-posts, and a water pocket in the said casing.

1,264,975. LINEMAN'S CHAIR. GEORGE REPLOGLE, La Fayette, Ind. Filed Oct. 30, 1917. Serial No. 199,389. (Cl. 88—1.)

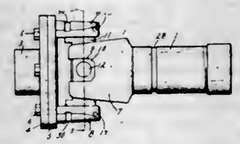


1. A suspending device for a cable inspector, adapted to be moved along in a line parallel and proximate to a cable or other conductor of electricity and provided with a mirror arranged to show the underside of the conductor to a person inspecting the upper side thereof.

8. A tiltable mirror, in combination with a lineman's chair and its suspending frame having downwardly presented disk-form bifurcations peripherally ridged, a bar attached to said mirror and having on its ends segmentally arranged ridges for engaging the ridges of said disk-form parts, pivot bolts extending through each pair of bifurcations and means for suspending said bar and mirror from said bolts, said means being adapted to be tightened for clamping said ridges into engagement into any position of tilting assumed by said mirror.

[Claims 2 to 7 and 9 to 11 not printed in the Gazette.]

1,264,976. UNIVERSAL JOINT. BERT O. RHODES, Kalamazoo, Mich., assignor to Acme Universal Joint Manufacturing Co., Kalamazoo, Mich. Filed Apr. 30, 1917. Serial No. 165,391. (Cl. 74—19.)



1. In a universal joint, the combination of shaft members having slot-like bushing seats extending longitudinally from the outer ends of their arms, the longitudinal sides of the seats being parallel, a journal member provided with fixed journals disposed at right angles and extending into said seats, flat sided bushings disposed in said seats and adapted to be introduced and removed therefrom laterally, said bushings having transverse grooves in their outer sides, said shaft member arms having bores alined with said grooves, and pins disposed in said bores to engage said grooves whereby the bushings are retained against lateral and longitudinal movement.

2. In a universal joint, the combination of a pair of shaft members having arms provided with bushing seats of non-circular cross section open at one side, the opening of the seats being equal to their greatest diameter so that bushings may be introduced laterally thereto, a journal member provided with fixed journals and extending into said seats, bushings conformed in cross section to said seats so that they are held against rotative movement, the outer sides of said bushings being transversely grooved, said shaft members having bores alined with said grooves when said bushings are in position, and pins disposed in said bores to engage said grooves whereby said bushings are supported against lateral and longitudinal movement.

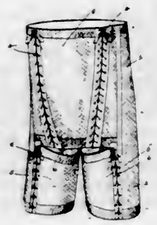
1,264,977. FLESH-REDUCING GARMENT. THEODORA WORMLEY ROGERS, Columbus, Ohio. Filed May 25, 1914. Serial No. 840,885. (Cl. 2—188.)



1. A garment comprising a combined corset and compressor, the corset being of non-elastic material, the compressor being attached to the lower edge of the corset and including an elastic portion which encircles the body at the hips to cause hip pressure, a pair of elastic thigh embracing portions attached to the hip embracing portion whereby the latter is held in position, and means common to both the corset and compressor for regulating the closeness of fit of the garment.

[Claims 2 and 3 not printed in the Gazette.]

1,264,978. MATERNITY-GARMENT. THEODORA WORMLEY ROGERS, Columbus, Ohio. Filed June 4, 1917. Serial No. 172,595. (Cl. 2—188.)



1. In a maternity garment, the combination with a body portion adapted to embrace the abdomen and having partial leg sections extending therefrom, of inner leg members detachably and removably connected with the outer leg members.

2. In a maternity garment, the combination of a body portion adapted to embrace the back, front and sides of the wearer and comprising an inserted detachable front section, of permanent partial leg sections, and removable leg sections connected with said permanent sections.

1,264,979. METHOD FOR TREATING SCALES OF FISH. SEIICHI SAKANE, Kyoto, Japan. Filed June 27, 1917. Serial No. 177,296. (Cl. 252.)

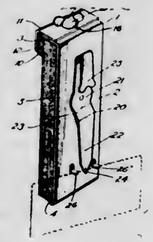
1. A method of treating scales of fish and obtaining therefrom a transparent celluloid-like substance, characterized by first treating any kind of fish scales with an alkali which removes all the fatty matters therefrom and destroys odors thereof, and then treating them with an acid not allowing the acid to destroy the natural lines of growth of the scales but to dissolve only the lime salts contained therein, thus causing only the organic matters to remain, substantially as and for the purposes hereinbefore set forth.

2. A method of treating scales of fish and obtaining therefrom celluloid-like substance, characterized by treating any kind of fish scales with an alkali which removes all the fatty matters therefrom and destroys all odors

thereof, then treating the same with an acid which dissolves all the lime salts leaving only organic matters and thus making the lines of growth conspicuous, and then steeping the same in a condensing agent, substantially as and for the purposes hereinbefore set forth.

3. A method of treating scales of fish and obtaining therefrom celluloid-like substance, characterized by treating any kind of fish scales with an alkali which removes all the fatty matters therefrom and destroys all odors thereof, then treating the same with an acid which dissolves all the lime salts leaving only organic matters and thus making the lines of growth conspicuous, and then steeping the same in a condensing agent and a softening agent, substantially as and for the purposes hereinbefore set forth.

1,264,980. SALES-SLIP HOLDER. WALTER H. SAWYER, Kansas City, Mo. Filed June 15, 1915, Serial No. 34,324. Renewed Sept. 20, 1917. Serial No. 192,415. (Cl. 211—37.)

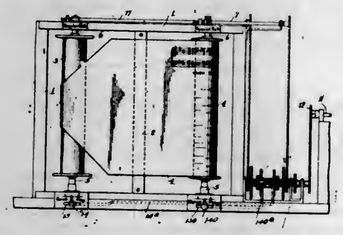


1. A combined check holder and punch comprising a supporting plate, having rearwardly projecting stop members thereon, and a marker secured to the back of said supporting plate, having an end projecting between said stop members and yieldable toward the said plate.

3. In a check holder and punch comprising a supporting plate having spaced stop ears projecting outwardly therefrom, a marker comprising a body portion secured to the supporting plate having an integrally formed arm extending therefrom; said arm being spaced from the supporting plate and having a pointed end portion projecting between said spaced ears and yieldable toward said supporting plate.

[Claims 2 and 4 not printed in the Gazette.]

1,264,981. AUTOMATIC MUSICAL INSTRUMENT. HERMANN B. SCHAAD, Great Neck, N. Y., assignor to The Aeolian Company, a Corporation of Connecticut. Filed July 1, 1916. Serial No. 107,089. (Cl. 84—166.)



1. The combination in an automatic musical instrument of an upright tracker-bar, a take-up spool, and means for operatively supporting said take-up spool and a music roll interchangeably with each other on opposite sides of the tracker-bar.

5. The combination in an automatic musical instrument of an upright tracker-bar, a take-up spool, means for operatively supporting said take-up spool and a music roll interchangeably with each other on opposite sides of the tracker-bar, the music-rolls being of either of two kinds, one intended to be played on the left hand side of the tracker-bar, the other on the right-hand side, means which indicates the kind of rolls intended to be played on the respective sides of the tracker, means for controlling the playing and rewinding of one kind of music-rolls, and other means for controlling the playing and rewinding of the other kind of music-rolls, said two control means being arranged in the same right and left-hand relationship as that existing between the operating positions of the music-rolls themselves.

9. The combination in an automatic musical instrument of a tracker-bar, a take-up spool, means for operatively supporting said take-up spool and a music roll interchangeably with each other on opposite sides of the tracker-bar, and oppositely directed hook means on said take-up spool.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,264,982. MEANS AND METHOD FOR METERING ELECTRICITY. EDMUND O. SCHWEITZER, Chicago, Ill. Filed Aug. 18, 1915. Serial No. 46,165. (Cl. 171—266.)



1. The method of metering and controlling the flow of current through a circuit upon which a varying voltage is impressed which comprises destroying the conductivity of said circuit when a predetermined quantity of current has passed therethrough, by electrolytically removing a portion of said circuit by a current proportional to but smaller than the current flowing through said circuit.

2. The method which comprises causing a fractional part of the electrical energy supplied to a given circuit to effect the electrolytic disintegration intermediate the ends of a metal conductor forming a part of said circuit at a rate proportional to the consumption of electricity whereby said circuit is opened at said point intermediate the ends of said metallic conductor after a predetermined quantity of electricity has been consumed.

3. The method of metering and controlling the supply of electricity to a circuit, which comprises electrolytically destroying the effective conductivity of a metal conductor forming a part of the circuit at a point intermediate the ends of the said metal conductor after a predetermined quantity of current has passed through said conductor.

4. The method which comprises causing a fractional part of the current supplied to a given circuit electrolytically to disintegrate one of the metallic conductors of said circuit intermediate its ends and thereby open said circuit.

[Claims 5 to 47 not printed in the Gazette.]

1,264,983. PRESSURE-BURNER. WILLIAM F. SEILKOP, Cincinnati, Ohio. Filed Oct. 17, 1917. Serial No. 197,106. (Cl. 158—27.4.)

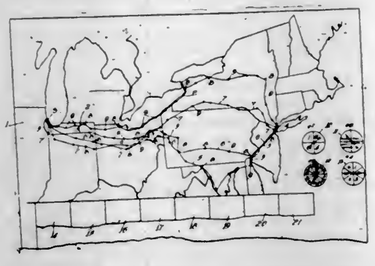
1. In a pressure-burner, an outer tube, an inner tube running through the inside of said outer tube, distributing means around said inner tube at the front end of said outer tube with a surrounding series of outlet orifices substantially in a single transverse plane, said inner tube having an outlet orifice, a hood inclosing the space around said outlet orifices and extending a considerable distance forwardly thereof and having a longitudinal



series of lateral perforations and an open front end, and supply connections to the respective rear ends of said tubes.

[Claims 2 to 4 not printed in the Gazette.]

1,264,984. GAME. JOHN H. SHARP, Chicago, Ill. Filed May 4, 1917. Serial No. 166,358. (Cl. 46—63.)



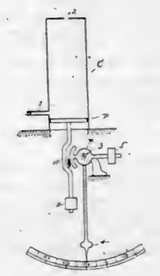
1. In a game of the kind described and in combination, means for displaying a railroad system, means for selecting the particular kind of train operating on the system, means for indicating the cost of said train selected, means for indicating the movements of the train, means for selecting any one of a plurality of accidents that might happen to the train selected, means for indicating the accident resulting therefrom, means for selecting a penalty for failure to operate the train as directed, and means for indicating the penalty selected.

2. In a game of the kind described and in combination, means for displaying a railroad system, means for representing trains to be operated thereon, means for selecting the particular kind of train operating on the system, means for indicating the cost of said train selected, means for directing the movements of the train, means for selecting any one of a plurality of accidents that might happen to the train selected, means for indicating the accident and loss resulting therefrom, means for selecting a penalty for failure to operate the train as directed, and means for indicating the penalty selected.

5. In a transportation game of the kind described and in combination, means for displaying diagrammatically a plurality of railroad systems, means for representing trains traveling on said systems, means for selecting the kind of train operating on said systems, means for indicating the cost of said trains selected, means for indicating and directing the movements of said trains, means for selecting any one of a series of accidents that might happen to said trains, means for indicating the particular accident and loss resulting therefrom, means for selecting a penalty for failure to operate any trains as directed, and means for setting forth the penalty selected.

[Claims 3, 4, 6, and 7 not printed in the Gazette.]

1,264,985. APPARATUS FOR AND ACTUATED BY GASES OF VARYING DENSITY. JOHN FREDERICK SIMMANCE and JACQUES ABADY, London, England. Filed Nov. 25, 1912, Serial No. 733,548. Renewed Nov. 27, 1916. Serial No. 133,812. (Cl. 265—44.)



1. The combination with a container for a column of gas open to the atmosphere at one elevation, of a movable gas bell subjected to the pressure of gas in said column at another elevation, and a means for counterbalancing said pressure.

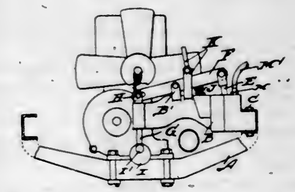
3. The combination with a container for a volume of gas in open communication with the atmosphere at one elevation, of a movable member subjected on one side only to the pressure of gas in said container at a different elevation, and means for counterpoising said movable member with a variable force.

7. The combination with a container for a column of gas discharging into the atmosphere at one elevation, of a movable member having an area greater than the section of said column, means for subjecting said movable member on one side to the pressure of gas in said column at a different elevation, and means for counterpoising said movable member with a force varying with position.

10. In a gas operated apparatus, means operated by variations in the specific gravity of the gas passing therethrough for varying the restriction to the gas to effect a substantially constant rate of flow of the gas.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

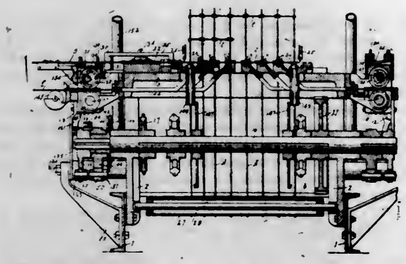
1,264,986. TIRE-PUMP. CHARLES P. SKUBLIN, Detroit, Mich., assignor to William A. Adams, Detroit, Mich. Filed May 28, 1917. Serial No. 171 471. (Cl. 230—27.)



1. In a tire pump, the combination of a casting adapted for engagement with the chassis of a vehicle having a pump cylinder formed therein, a reciprocating piston, an oscillating lever pivoted to the casting, a piston rod connecting the piston with one end of the lever, a sliding rod sleeved in the casting connected with the other end of the lever, a spring adapted to bear against the lever to force the piston to one end of its stroke, and a cam actuated by a prime mover adapted to operate said sliding rod against the action of the spring, whereby the piston is reciprocated.

2. In a device of the character described, the combination of a prime mover, a cam actuated thereby, of a casting adapted for attachment to the frame of a motor vehicle having a pump cylinder formed therein, a reciprocating piston for said cylinder, an oscillating lever pivoted to the casting, a piston rod connecting the piston with one end of the oscillating lever, a sliding rod sleeved in the casting pivotally connected with the other end of the oscillating lever, a spring supported by the casting adapted to force the sliding rod into operative relation with the cam, and manually operated means adapted to bear upon the oscillating lever to hold said sliding rod out of operative relation with the cam and against the action of the spring.

1,264,987. WIRE-WORKING MACHINE. WILLIAM H. SOMMER, Peoria, Ill., assignor, by mesne assignments, to The First Trust and Savings Company, Cleveland, Ohio, a Corporation of Ohio, and William E. Stone, Peoria, Ill., trustees. Filed Jan. 31, 1916, Serial No. 75,345. Renewed Mar. 14, 1918. Serial No. 222,508. (Cl. 140—11.)



1. In a wire fence machine, in combination, strand wire feeding means, a stay-wire feeding mechanism, means for operating said feeding mechanism to cause the same to alternately feed a short stay wire to certain of said strand wires and a comparatively longer stay wire to all of said strand wires, means for feeding tie-wire stock to the intersections of the short and longer stay wires with certain of said strand wires, and other means for feeding tie-wire stock to the intersections of the longer stay wires with certain other of said strand wires.

10. In a stay wire feeding mechanism for wire fence machines, in combination, stay wire feeding means, a shaft, a member connected to rotate with said shaft, a plate on said member adjustable toward and from the axis of said shaft, operating connections between said plate and said feeding means, means on said member for adjusting the position of said plate relatively to the axis of said shaft during the rotation of said shaft, and means for operating said plate adjusting means.

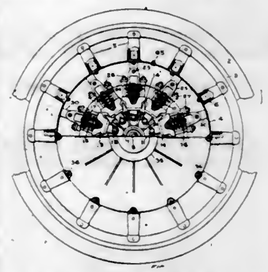
14. In a wire fence machine, in combination, strand wire feeding means, means for feeding stay wires to said strand wires, means for feeding tie-wire stock to the intersections of said stay wires with certain of said strand wires, and other means for feeding tie-wire stock to the intersections of said stay wires with certain other of said strand wires.

18. In a wire fence machine, tie-wire stock feeding mechanism comprising a driving shaft and a driven shaft, coöperating feeding wheels on said shafts, a pair of ratchet toothed wheels carried on said driving shaft, one secured to said shaft and the other loose thereon, said loose ratchet toothed wheel having teeth corresponding in number to the teeth on said fixed wheel and every other tooth of said loose wheel being a deep tooth, a pawl adapted to engage the teeth of both of said ratchet wheels, but only the teeth of said fixed wheel when said pawl engages a deep tooth on said loose wheel, and means for operating said pawl.

26. In a wire fence machine, in combination, feeding means for a stay wire, operating means for said feeding means, including a reciprocating member, means for operating said member including means for changing the distance of movement of said member during a given movement of said feeding means.

[Claims 2 to 9, 11 to 13, 15 to 17, and 19 to 25 not printed in the Gazette.]

1,264,988. WHEEL. JOHN H. SPANGLER, Minneapolis, Minn., assignor, by direct and mesne assignments, of ten-thirtieths to Otto I. Kjorlien and one-fifth to Georgie Kleopfert, Minneapolis, Minn. Filed Feb. 19, 1917. Serial No. 149,620. (Cl. 152—44.)



1. A wheel comprising a rim, a hub therefor having projections radiating therefrom with seats between said projections, bolts pivotally connected with said hub between said projections, springs encircling said bolts, housings seated between said projections and having freedom of radial movement with respect to said hub and projections, and means connecting said housings with said rim.

2. A wheel comprising a rim, a hub therefor, yokes having a pivotal connection with said rim, bolts pivotally connected at one end with said hub, housings seated on said hub and slidably connected with said yokes, helical springs encircling said bolts between said housings and said yokes, inward movement of said bolts compressing said springs against the bottom of said housings, and outward movement of said bolts compressing said springs between said housings and said yoke.

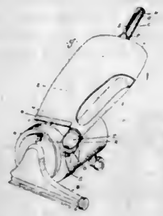
7. A wheel comprising a rim, a hub encircled thereby, couplings pivotally connected with said hub and with said rim, said couplings including housings loosely seated on the periphery of said hub and spring members mounted for compression in any position above, below or at one side of said hub when the load is applied thereto.

8. A wheel comprising a rim, a hub therefor having a plurality of peripheral recesses with projections between them, housings having rounded inner ends loosely seated in said recesses between said projections and being free to rock in said recesses, bolts loosely fitting within said housings and pivotally connected with said hub, yokes pivotally connected with said rim and having bolts for connection with said housings, helical springs arranged within said housings and encircling said first named bolts and put under compression by the upward and downward movement of said hub, said bolts having means at their outer ends on which said springs are seated, and said springs being compressed by the pull on said bolts in one direction and by the outward movement of said housings in the other direction.

[Claims 3 to 6 not printed in the Gazette.]

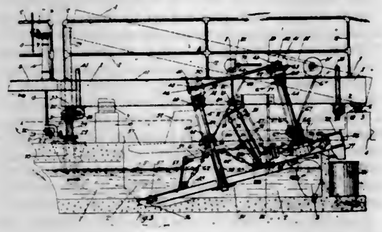
1,264,989. VACUUM-CLEANER DUST-BAG AND HOLDER THEREFOR. ALFRED J. STECKEL, Detroit, Mich., assignor to Fred Wardell, Detroit, Mich. Filed July 22, 1915. Serial No. 41,277. (Cl. 183—33.)

1. A dust bag for vacuum cleaners, comprising the bag proper having a seamed edge, and a collapsible fabric tube forming an inlet for the dust-laden air, having one edge stitched into said seam.



2. A dust bag for vacuum cleaners, comprising the bag proper having an inlet in its lower portion at one side of the bag and having an outlet occupying the remaining lower end of the bag, and a closure for said outlet extending substantially transverse to said inlet.

1,264,990. SEWAGE-TREATING APPARATUS. HARRY H. STEPHENS, Philadelphia, Pa., assignor to The Sanitation Corporation, New York, N. Y., a Corporation of Virginia. Filed July 25, 1914. Serial No. 853,223. (Cl. 210—14.)



1. In apparatus of the character described, the combination with a tank, of a rotary screen comprising flat and conical elements, scrubbing means engaging said flat element, rotary scrubbing means engaging the conical element, and driving means for said screen and said scrubbing means, said scrubbing means being driven independently of each other.

2. In apparatus of the character described, the combination with a tank, of a support disposed above said tank, a rotary shaft carried by said support and having its lower end free from said tank, an inclined screen secured upon and rotated and supported solely by said shaft, all the bearings for said shaft being disposed above the level of the liquid in said tank.

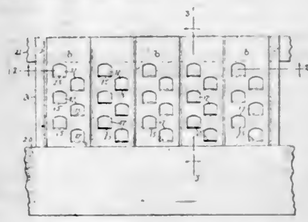
3. In apparatus of the character described, the combination with a tank, of a support disposed above said tank, a rotary shaft carried by said support, an inclined screen secured upon and rotated by said shaft, the bearings for said shaft being disposed above the level of the liquid in said tank, a pivot for said support, and means for moving said support upon said pivot for lifting said screen clear of the liquid in said tank.

4. In apparatus of the character described, the combination with a tank, of a support disposed above said tank, a rotary shaft carried solely by said support and having its lower end free from said tank, an inclined screen secured upon and rotated by said shaft and carried solely by said support through said shaft, bearings for said shaft disposed above the level of the liquid in said tank, said shaft and screen overhung beyond said bearings.

5. In apparatus of the character described, the combination with a tank, of a support disposed above said tank, a rotary overhung shaft carried solely by said support and having its lower end free from said tank, an inclined screen secured upon and rotated and supported solely by said shaft, bearings for said shaft disposed above the level of the liquid in said tank, and a motor on said support for driving said shaft.

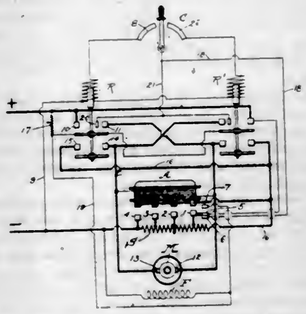
[Claims 6 to 19 not printed in the Gazette.]

1,264,991. BUILDING CONSTRUCTION. PEREZ M. STEWART, New York, N. Y., assignor to Gertrude F. Stewart, New York, N. Y. Filed Aug. 19, 1915. Serial No. 46,345. (Cl. 72—116.)



A corrugated metal sheet for walls of reinforced building constructions, comprising a corrugated metal sheet having valleys and crests of substantially uniform width and provided with walls substantially rectangular in cross section and vertically arranged to form studs of substantially uniform width in said corrugated metal sheet, the bottom walls of both the valleys and crests being provided with openings and with shelves extended from one edge of said openings transversely of said valleys and crests, with shelves of the valleys extended toward the plane of the top walls of the crests, and with the shelves of the crests extended in the opposite direction and toward the plane of the bottom walls of said valleys to form substantially horizontal supports for plastic material in both valleys and crests.

1,264,992. MOTOR CONTROL. WALTER C. STRANG, Yonkers, N. Y., assignor to Otis Elevator Company, New York, N. Y., a Corporation of New Jersey. Filed Aug. 22, 1913. Serial No. 786,072. (Cl. 172—288.)



1. The combination with an electric motor of reversing switches therefor, a resistance in the circuit of the motor armature, a device controlled by the motor for cutting out said resistance in starting, and means controlled by said device for preventing the operation of either of said reversing switches until the motor substantially comes to rest.

3. The combination with an electric motor, of electro-responsive motor reversing switches, an operating circuit for said switches, and means actuated by the motor while

starting for maintaining said operating circuit open until the motor substantially comes to rest.

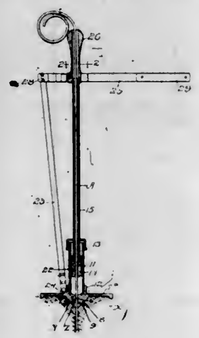
6. In a system of motor control, the combination with an electric motor, of electro-responsive apparatus for effecting the reversal of the motor, and means dependent upon the motor in starting for controlling the operating circuit of said electro-responsive apparatus to prevent reversal of the motor before substantial reduction in speed thereof.

14. The combination with an electric motor, of electro-responsive reversing switches therefor, and a device controlled by the motor in starting for controlling the operating circuit of said switches and a circuit to the field winding of the motor for preventing a too sudden reversal of the motor.

17. The combination with an electric motor, of electro-responsive reversing switches therefor, an operating circuit for said switches, a resistance in the motor circuit, an automatic device for controlling said resistance, and means operated by said device for preventing the operation of said reversing switches and for maintaining the motor field of predetermined strength while the motor is coming to rest.

[Claims 2, 4, 5, 7 to 13, 15, and 16 not printed in the Gazette.]

1,264,993. WIRE-DRIVING TOOL. LOUIS STROHACKER and EDWARD STROHACKER, Freeport, Ill. Filed Mar. 29, 1917. Serial No. 158,485. (Cl. 254—29.)



1. A wire driving tool, having a base arranged to rest on the ground and having a downwardly extending wire guiding aperture therein, opening directly to the ground, wire feeding means adjacent said base for feeding wire downward through said aperture, and actuating mechanism therefor.

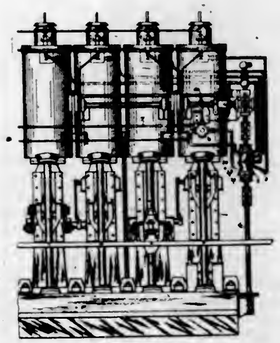
7. A wire driving tool comprising a base portion arranged to rest on the ground and having a downwardly projecting, perforated wire guiding tip, adapted to enter the ground, wire feeding means directly above said tip, and arranged to feed wire through said tip and actuating means for said wire feeding means.

13. A wire driving tool comprising a base arranged to rest on the ground, a wire feeding head having a central bore therethrough and guided thereabove and having wire gripping members, a tubular stem secured to said head, and arranged to guide the wire in a straight line to the head, a handle at the top of said stem, a lever support extending up from the said base, and a lever fulcrumed on said support and pivotally connected to said stem.

[Claims 2 to 6, 8 to 12, and 14 to 18 not printed in the Gazette.]

1,264,994. AIR STARTING MECHANISM FOR INTERNAL-COMBUSTION ENGINES. HENRY W. SUMNER, Winslow, Wash. Filed Jan. 22, 1917. Serial No. 143,687. (Cl. 123—181.)

2. An air starting and reversing mechanism for internal combustion engines, comprising an air supply pipe for each cylinder, a rotative valve mounted to turn in conformity with the engine shaft and to be shifted axially and having two peripheral discharge ports separated both axially and angularly, a valve casing having discharge ports connecting with the cylinder supply pipes and located in succession about the casing in the same zone and an air supply port located, one toward each end, and means for supplying the air to either of said supply ports at will.



3. The combination in an air starting and reversing mechanism for internal combustion engines, of a cylindrical valve mounted to be turned in conformity with the engine rotation and to have a limited axial movement, said valve having two distinct chambers separated lengthwise thereof and a discharge port for each chamber extending respectively in opposite directions from an axial plane, a casing in which said valve turns, said casing have a discharge port for each engine cylinder, all placed to be successively brought into communication with the discharge port in the valve as the valve is turned, and means for supplying the air to the chambers in the valve to produce an unbalanced pressure on the valve acting to shift it axially to bring the port in that chamber into registry with the discharge ports in the casing.

4. The combination in an air starting and reversing mechanism for internal combustion engines, of a cylindrical valve mounted to be turned in conformity with the engine rotation and to have a limited axial movement, said valve having a transverse, medium partition and open ends and a discharge port in the peripheral wall of each end, said ports extending oppositely from an axial plane, a casing surrounding said valve and having a discharge port for each engine cylinder, all located in successive spaced relation in the same zone, and two supply ports located in axially separated position at opposite sides of said discharge ports and communicating with the corresponding ends of the valve to shift the same axially to thereby bring the valve port at this end into registry with the discharge ports of the casing, and means for selectively controlling the supply of air to these casing supply ports.

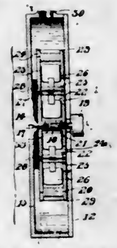
[Claims 1 and 5 to 8 not printed in the Gazette.]

1,264,995. BLOWER. JOHN C. SWAYKUS and ALEX TKACZ, Lackawanna, N. Y. Filed Mar. 10, 1917. Serial No. 153,865. (Cl. 230—11.)

1. A blower comprising a casing having an air outlet, a block revolubly mounted within the casing having pockets therein provided with outlet mouths peripherally of the block, fans journaled within the said pockets, gear connections between the said fans and casing, and means for revolving said block within the latter.

3. A blower comprising a casing having an air outlet, a gear fixed within the casing, a block journaled within said casing, fans journaled upon said block, and operative connections between the said fans and gear.

5. A blower including a block journaled for rotation having a pocket therein provided with an outlet mouth, a fan journaled within the said pocket, and means adapted



for revolving the said fan simultaneously with the rotation of said block.

[Claims 2 and 4 not printed in the Gazette.]

1,264,996. BUCKLE. JOHN HOWARD TABLER, Lanham, Md. Filed Mar. 10, 1917. Serial No. 153,951. (Cl. 24—200.)



A buckle comprising side pieces with lower straight bearing edges, a front cross-bar at the upper edges of the side pieces having a forwardly-projecting lifting-tongue, a plain cross-bar in the rear of the front cross-bar at a higher elevation than the same over which the free end of the strap is looped to pass under the front cross-bar and lifting-tongue, a plain cross-bar near the rear ends of the side pieces at the upper edges thereof to which the other end of the strap is attached, and a cross-piece extending between the side pieces above the lower edges thereof to bear upon the attached end of the strap and force the front cross-bar and lifting-tongue downward, whereby when the strap is under tension the buckle will be disposed on a line with the portions thereof extending from said buckle front and rear and maintain frictional engagement with the looped end of the strap, as herein shown and described.

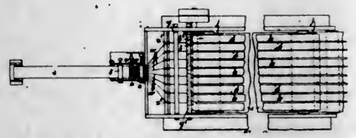
1,264,997. DENTAL-INVESTMENT COMPOUND. JAMES DAWKINS L. TENCH, Gainesville, Fla. Filed Aug. 10, 1916. Serial No. 114,243. (Cl. 106—6.)

1. A dental investment compound comprising carborundum powder and plaster of Paris in the ratio of two and one-half parts of the first to one part of the second, and thoroughly and intimately mixed in the form of a dry powder capable of becoming plastic on the addition of water.

3. A dental investment compound composed of a fine carborundum powder and dry plaster of Paris, intimately and uniformly mixed.

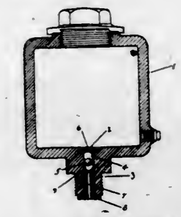
[Claim 2 not printed in the Gazette.]

1,264,998. MANUFACTURE OF PAPER YARN. JAMES THAME, London, England. Filed Feb. 11, 1915. Serial No. 7,654. (Cl. 28—21.)



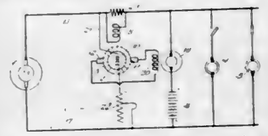
The method of manufacturing reinforced paper yarn which consists in simultaneously feeding a mass of pulp and relatively long vegetable fibers onto the intake end of a paper making machine, dividing the mass at or adjacent to its point of entry into a series of streams, maintaining the streams separated throughout their passage through the machine to produce a number of narrow paper bands having deckle edges, subjecting the bands to pressure to consolidate them and to incorporate the fiber therewith, twisting the bands into round threads, and finally drying the product.

1,264,999. GRAPHITE-FEEDING LUBRICATOR. WILLIAM G. THOMPSON, Newark, Ohio, assignor to The United States Graphite Company, Saginaw, Mich., a Corporation of Michigan. Filed Feb. 13, 1918. Serial No. 216,885. (Cl. 184—69.)



In a lubricator, a receptacle adapted to contain powdered graphite, said receptacle formed with a threaded boss adapted to be connected to the cylinder of a steam engine, a recess formed in said boss, an opening therein communicating said recess and receptacle, the wall of said opening formed with a longitudinal slot, connecting said recess and receptacle, a ball, a plug formed with a longitudinal orifice and received in said recess, the upper end of said plug formed with a valve seat to receive said ball, for the purposes set forth.

1,265,000. ELECTRICAL SYSTEM OF DISTRIBUTION. WILLIAM A. TURBAYNE, Niagara Falls, N. Y., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y., a Corporation of New York. Filed Feb. 15, 1913, Serial No. 748,662. Renewed Sept. 19, 1917. Serial No. 192,227. (Cl. 171—310.)



1. In an electrical system of distribution, a load circuit, a main source of current, an auxiliary source of current, and a regulating generator for determining the proportion of load on each source, said generator having means tending to produce a field of uniform polarity and magnitude and a winding diverting a varying flux from said field.

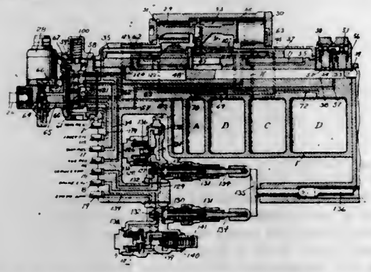
3. In an electrical system of distribution, a load circuit, a generator for supplying current thereto, an auxiliary source of current, and a regulating generator for determining the proportion of load on each source, said regulating generator having a rotatable armature, two sets of field poles, one set setting up a flux of uniform direction and magnitude and the other set of field poles varying responsive to conditions in said load circuit and acting to divert flux set up by said first set of field poles from the armature.

7. In an electrical system of distribution, a main generator, a load circuit, a storage battery connected across the load circuit, a regulating generator for regulating the charge and discharge of said battery, said regulating generator comprising a ring-wound armature, internal field

poles with polar faces adjacent the inner armature conductors, windings in said field poles connected across the generator leads through a variable resistance, external field poles provided with polar faces adjacent the outer armature conductors, and windings on said external field poles in shunt to a resistance in the main line, one internal field pole being opposite each external field pole adjacent internal and external poles being of opposite polarity, whereby variations in energization of said external field poles may control the diversion of flux set up in the armature core by said internal field poles.

[Claims 2, 4 to 6, and 8 to 10 not printed in the Gazette.]

1,265,001. EMPTY AND LOAD BRAKE. WALTER V. TURNER, Edgewood, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 1, 1914. Serial No. 864,433. (Cl. 188—11.)



1. In a load brake, the combination with an auxiliary reservoir from which fluid is supplied to effect an application of the brakes, of a plurality of normally charged chambers, a slide valve having positions for connecting one or more chambers to said auxiliary reservoir, a piston device operated by opposing fluid pressures for actuating said valve, and means controlled by the load on the car for defining the position of the slide valve and piston device.

2. In a load brake, the combination with an auxiliary reservoir from which fluid is supplied to effect an application of the brakes, of a plurality of normally charged chambers, a slide valve held to its seat by fluid under pressure and having positions for connecting one or more chambers to the auxiliary reservoir, a piston device having differential piston heads and movable in opposite directions by fluid under pressure for actuating said valve, and means controlled by the load on the car for determining the operating position of the slide valve and piston device.

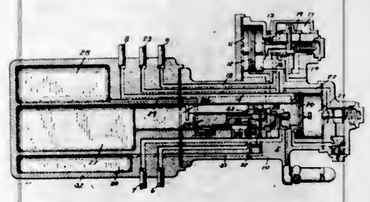
3. In a fluid pressure load brake, the combination with an auxiliary reservoir and a supplemental reservoir, of a plurality of chambers normally maintained charged with fluid under pressure from the supplemental reservoir and means for connecting one or more of said chambers to the auxiliary reservoir according to the load applied to the car.

4. In a fluid pressure load brake, the combination with an auxiliary reservoir, of a plurality of normally charged chambers, a valve having positions for connecting one or more of said chambers to the auxiliary reservoir, and means controlled by the load on the car for defining the position of said valve, and a differential piston operated by fluid under pressure for actuating said valve.

5. In a fluid pressure load brake, the combination with an auxiliary reservoir and a supplemental reservoir, of a plurality of chambers, a valve for charging the chambers with fluid under pressure from the supplemental reservoir and having positions for connecting one or more of said chambers to the auxiliary reservoir, of means controlled by the load on the car for refining the position of said valve.

[Claims 6 to 20 not printed in the Gazette.]

1,265,002. FLUID-PRESSURE BRAKE. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Dec. 31, 1915. Serial No. 69,621. (Cl. 188—15.)



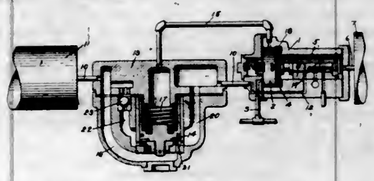
1. In a fluid pressure brake, the combination with a brake pipe, a pressure chamber, and a valve device subject to the opposing pressures of the brake pipe and pressure chamber for controlling the brakes, of a reduction reservoir and means operating upon the initial movement of said valve device to effect an application of the brakes for venting fluid from said pressure chamber to the reduction reservoir and for venting fluid from said reduction reservoir to the atmosphere upon a further movement of said valve device.

2. In a fluid pressure brake, the combination with a brake pipe, a pressure chamber, and a valve device subject to the opposing pressures of the brake pipe and pressure chamber for controlling the brakes, of a reduction reservoir and means adapted upon a reduction in brake pipe pressure for first venting fluid from the pressure chamber to the reduction reservoir and then from the reduction reservoir to the atmosphere.

3. In a fluid pressure brake, the combination with a brake pipe, a pressure chamber, and a valve device subject to the opposing pressures of the brake pipe and pressure chamber for controlling the brakes, of a reduction reservoir and means adapted upon a reduction in brake pipe pressure less than a predetermined degree for first venting fluid from the pressure chamber to the reduction reservoir and then from the reduction reservoir to the atmosphere.

[Claims 4 and 5 not printed in the Gazette.]

1,265,003. FLUID-PRESSURE BRAKE. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 12, 1916. Serial No. 96,997. (Cl. 188—1.)



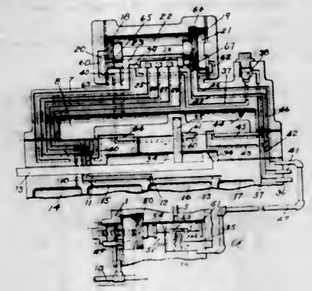
1. In a fluid pressure brake, the combination with a brake pipe, auxiliary reservoir, and a valve device subject to the opposing pressures of the brake pipe and auxiliary reservoir for controlling the brakes, of a supplemental reservoir from which fluid is supplied for recharging the auxiliary reservoir and means for limiting the recharge of the auxiliary reservoir to a predetermined degree less than brake pipe pressure.

2. In a fluid pressure brake, the combination with a brake pipe, auxiliary reservoir, and a valve device subject to the opposing pressures of the brake pipe and auxiliary reservoir for controlling the brakes, of a supplemental reservoir normally charged with fluid under pressure from which fluid is supplied for recharging the auxiliary reservoir and a valve device for cutting off the flow of fluid to the auxiliary reservoir when the pressure in the supplemental reservoir has reduced to a predetermined degree.

3. In a fluid pressure brake, the combination with a brake pipe, auxiliary reservoir, and a valve device subject to the opposing pressures of the brake pipe and auxiliary reservoir for controlling the brakes, of a supplemental reservoir normally charged with fluid under pressure from which fluid is supplied to the auxiliary reservoir, and a valve device subject on one side to the pressure of a spring and brake pipe pressure and on the opposite side to supplemental reservoir pressure for controlling the admission of fluid from the supplemental reservoir to the auxiliary reservoir.

4. In a fluid pressure brake, the combination with a brake pipe, auxiliary reservoir, and a valve device subject to the opposing pressures of the brake pipe and auxiliary reservoir for controlling the brakes, of a supplemental reservoir, a valve piston for controlling the recharge of the auxiliary reservoir from the supplemental reservoir, and a by-pass for charging the supplemental reservoir from the auxiliary reservoir and containing a check valve for preventing back flow from the supplemental reservoir to the auxiliary reservoir.

1,265,004. BRAKE-CYLINDER-PRESSURE REGULATOR. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed May 12, 1916. Serial No. 96,998. (Cl. 188—1.)



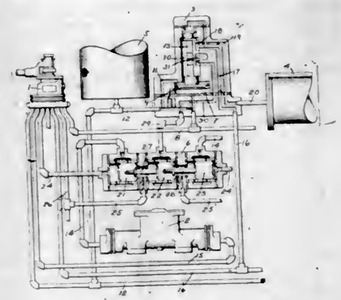
1. In a fluid pressure brake, the combination with an auxiliary reservoir from which fluid is supplied to effect an application of the brakes, of means controlled by the brake cylinder piston travel for cutting in additional volume to the auxiliary reservoir and means operated upon effecting a release of the brakes for cutting off said volume from the auxiliary reservoir.

2. In a fluid pressure brake, the combination with an auxiliary reservoir from which fluid is supplied to effect an application of the brakes, of chambers normally charged with fluid under pressure, a valve mechanism controlled by the brake cylinder piston travel for connecting said chambers to the auxiliary reservoir, and means operating in releasing the brakes for cutting off communication from said chambers to the auxiliary reservoir.

3. In a fluid pressure brake, the combination with an auxiliary reservoir from which fluid is supplied to effect an application of the brakes, of chambers normally charged with fluid under pressure, a valve mechanism controlled by the brake cylinder piston travel for connecting said chambers to the auxiliary reservoir, a supplemental reservoir from which fluid is supplied for recharging the auxiliary reservoir, and means operated upon a reduction in supplemental reservoir pressure by flow to the auxiliary reservoir for cutting off communication from said chambers to the auxiliary reservoir.

[Claims 4 to 7 not printed in the Gazette.]

1,265,005. SAFETY CAR-CONTROL EQUIPMENT. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 29, 1917. Serial No. 177,761. (Cl. 188—1.)



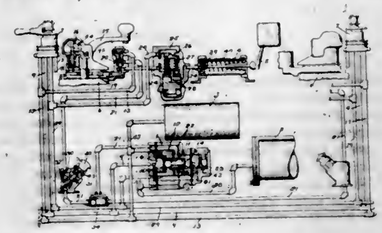
1. The combination with valve means for controlling fluid for effecting the operation of the car doors, of a valve controlled by said valve means for controlling fluid for effecting the sanding of the rails.

2. The combination with a check valve for controlling fluid for effecting the operation of the car doors, of a check valve operated by the first check valve for controlling fluid for effecting the sanding of the rails.

3. The combination with fluid operated motors for controlling the car doors at opposite ends of the car and a valve device for effecting an application of the brakes and adapted to supply fluid to said motors, of valve means for controlling communication from said valve device to the door motors and means operated by fluid pressure supplied at the operating end for operating said valve means to close communication from said valve device to the door motor at the non-operating end of the car.

[Claims 4 to 10 not printed in the Gazette.]

1,265,006. FLUID-PRESSURE BRAKE. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 29, 1917. Serial No. 177,762. (Cl. 188—1.)



1. In a safety car control equipment, the combination with means operated upon leaving one end of the car for effecting an application of the brakes, of means operated at the other end of the car for cutting out the first means to permit the release of the brakes.

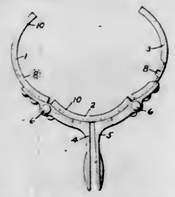
2. In a safety car control equipment, the combination with means operated upon leaving one end of the car for venting fluid to effect an application of the brakes, of means operated at the other end of the car for closing communication to the first means to permit the release of the brakes.

3. In a safety car control equipment, the combination with a controller handle adapted upon release at one end of the car to vent fluid for effecting an application of the brakes, of a double check valve operated at the other end

of the car for closing communication through which fluid is vented at the opposite end of the car to thereby permit the release of the brakes.

[Claims 4 to 12 not printed in the Gazette.]

1,265,007. COMBINED NUT-LOCK AND SWAB-PROTECTOR. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed June 29, 1917. Serial No. 177,765. (Cl. 64—12.)

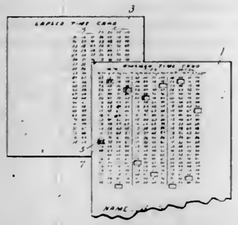


1. A swab protector comprising a main section and two other sections hinged to the main section to form a cylindrical protector.

4. A swab protector comprising a main section, two other sections hinged to the main section to form a cylinder, handles secured to the hinged sections, and springs tending to move the hinged sections to their closed position.

[Claims 2 and 3 not printed in the Gazette.]

1,265,008. ACCOUNTING MEANS. DANIEL M. TUTTLE, Canastota, N. Y., assignor to Stella S. Tuttle, Canastota, N. Y. Filed Feb. 18, 1914. Serial No. 819,407. (Cl. 235—85.)

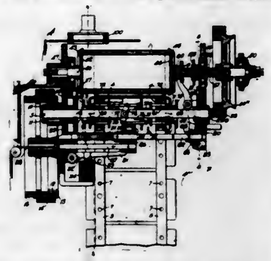


An accounting means including a primary card bearing consecutive time values columnized in definitely spaced relation and adapted to have certain ones of the time values corresponding to the times of beginning and ending work cut away, and a coöperating secondary card bearing consecutive numerical values columnized in the same spaced relation as those of the primary card and having a projection at the point where the numeral of lowest value is arranged thereon for entering the aperture indicating the time of beginning work on the primary card, whereby the result sought on the secondary card will appear through the aperture indicating the time of ending such work when the columns of numerals of both cards are in parallel relation.

1,265,009. PHONOGRAPH. GEORGE H. UNDERHILL, Boston, Mass. Filed Apr. 29, 1911. Serial No. 624,014. (Cl. 274—18.)

1. A multiple record phonograph having a record carrier comprising flexible carrying means having a plurality of record retainers, each being adapted to hold a cylindrical record resting loosely therein.

14. In a multiple record phonograph, the combination with means for holding a plurality of records, sound reproducing means, means for causing the traverse of said sound reproducing means relatively to said records in succession, and means for automatically varying the speed of traverse with reference to the particular record played.



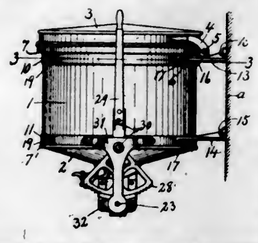
24. A multiple record phonograph having a record carrier, a pattern member, reproducing means, and means through said pattern member for controlling the order of reproduction of said records.

27. In a multiple record phonograph, the combination with reproducing mechanism having a plurality of diaphragms, means for holding a plurality of records, and means for automatically shifting the diaphragms dependent on the record to be played.

33. A multiple record sound-reproducing machine comprising, in combination, a carrier having record holders, adjustable contact members on said holders, electric circuits arranged for closure by said contacts in certain conditions of adjustment and devices controlled by the energy of said circuits for varying the acoustic qualities of the reproduction.

[Claims 2 to 13, 15 to 23, 25, 26, 28 to 32, and 34 to 37 not printed in the Gazette.]

1,265,010. MECHANICAL DISH-WASHER. WILLARD R. WALKER, Syracuse, N. Y., assignor to Walker Brothers Company, Syracuse, N. Y., a Corporation of New York. Filed July 28, 1916. Serial No. 111,930. (Cl. 141—9.)



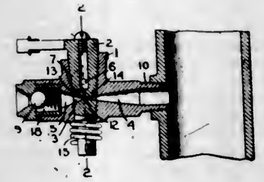
1. In a mechanical dish-washer, the combination of a vat having a lid, a band clamped to the periphery of the vat, a hinge having one section secured to the band and another section secured to the lid, and means for supporting the band.

3. In a mechanical dish-washer, the combination of a vat, a band clamped to the periphery of the vat and having portions thereof pressed outwardly to form recesses in the inner faces of the band, and supporting means for the band having headed bolts passed through apertures in the band and their heads seated in said recesses.

4. In a mechanical dish-washer, the combination of a vat, a rotary impeller therein, driving means for the impeller, and supporting means for said vat including a split band encircling the periphery of the vat and provided with means for tightening and loosening the same to allow the band and vat to be rotarily adjusted relatively to each other for properly positioning the impeller-driving means relatively to the supporting means for the vat, said supporting means being also provided with means for supporting a portion of the impeller-driving means.

[Claim 2 not printed in the Gazette.]

1,265,011. PRIMER FOR GASOLENE-ENGINES. HAROLD D. WATERHOUSE, Wollaston, Mass., assignor to Copley Motor Devices Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1917. Serial No. 155,185. (Cl. 137—7.)



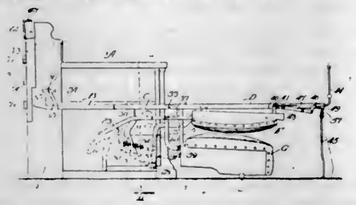
2. In a primer for gasolene engines, the combination with a valve casing having an air inlet port, a discharge port, and a gasolene inlet port, of a plug rotatably mounted in said valve casing and provided with a passage adapted in one position of said plug to form a communication between the air inlet port and the discharge port, some portion at least of said passage having a cross-sectional area considerably less than that of either the inlet port or the discharge port, and said plug also having a duct leading into said passage at its contracted portion and adapted to communicate with the gasolene inlet port, said duct being considerably smaller than said passage at its contracted portion, said ports, passage and duct having such a relative arrangement that movement of the plug to close the discharge port will also close the gasolene inlet port.

3. A primer for gasolene engines comprising a valve device having an air passage which is contracted considerably at some portion of its length and is adapted to be connected to the intake manifold of a gasolene engine, said valve device being provided with a gasolene supply duct which is considerably smaller in cross sectional area than the contracted portion of said passage and leads into said contracted portion, and also being provided with means to open or close said passage and duct simultaneously.

4. In a device of the class described, the combination with the intake pipe of a gasolene engine, of a valve device connected to said intake pipe and having an air passage which is contracted considerably at some portion thereof and communicates with said intake pipe, said valve device having a relatively-small gasolene supply duct leading into the contracted portion of said passage and connected to a source of gasolene supply, and also comprising a movable member adapted in one position to close both said passage and said duct and in another position to open both said passage and said duct.

[Claim 1 not printed in the Gazette.]

1,265,012. SOFA-BED. LOUIS E. WEINMANN, Chicago, Ill., assignor, by direct and mesne assignments, of one-third to Gold Furniture Company, a Corporation of Illinois, one-third to Kroehler Manufacturing Company, a Corporation of Illinois, and one-third to Pullman Coach Company, a Corporation of Illinois. Filed May 19, 1915. Serial No. 29,090. (Cl. 5—48.)



2. In a sofa bed and in combination, a stationary frame, a plurality of pivotally connected bed sections, one of said bed sections being mounted in the frame and another or outer of said sections being mounted and adapted to move out of the frame to constitute a bed bottom, a foot piece or bedding fastener pivoted to said last named section for movement toward and away from the latter in folding and unfolding the bed respectively, supporting legs turnably connected to the end cross-part or outer rail of said last named section, control links connected to and extending from said bedding fastener and legs respectively, and common operating means for said control links, said common means operating to release and extend said fastener and to extend said legs to operative or supporting position when said last mentioned section is swung outward, and to fold the said bedding fastener and legs into substantially parallel relation with the said outer section when the latter is moved to its folded or sofa position.

4. In a sofa-bed and in combination, a stationary frame, pivot members mounted at opposite ends in the said frame, a rear bed-section, slotted supporting plates fastened to and projecting upward from the rear part of said rear bed-section and having their slotted portions engaging over the said pivot-studs, an intermediate bed-section pivoted to said rear bed-section, a front bed-section pivoted to said intermediate bed-section, and a swinging arm mounted at one end in the said frame and carrying the said front bed-section at its other end, the rear part of said head bed-section being swingable on said plates downward below and rearward behind said pivots in unfolding and folding the device respectively.

6. In a sofa-bed, and in combination, a stationary frame, an arm pivoted to swing in the frame, a bed-section carried by the arm, a lifting spring secured at one end of the frame at a position intermediate the arc of motion of the said swinging arm, a link-connection between the free end of the spring and the said arm and pivoted to the latter, and means for limiting the movement of the said link arranged and adapted to increase the spring tension as the device approaches near its folded position, substantially as and for the purpose described.

8. In a sofa-bed and in combination, a frame, a sofa back member, a sofa seat member, front and rear bed-bottom sections lying in planes opposite one another and behind the said sofa back member when in folded condition, means connecting the adjacent edges of said sections, a locking-rail pivoted to said frame on a line adjacent to but displaced somewhat back from and below its gravity axis and adapted to swing over the upper end of the said sofa back member to house the latter and to lock it in folded position, and connections between the frame and the said sections which permit the latter to be separated at their upper ends and extend into a single horizontal plane to constitute a bed-bottom.

12. A convertible seat and bed device, comprising a main frame, a pair of links on each end thereof, a bed section carried swingingly by one of said links on each side, a back disposed adjacent to said section and having its upper part carried slidably thereby, a seat mounted swingingly on the first mentioned links, and link means connecting the lower part of said back to the other of said links on each side, said seat being connected to said other links and said means comprising a link on each side of the device.

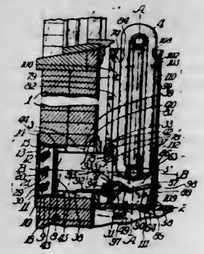
[Claims 1, 3, 5, 7, and 9 to 11 not printed in the Gazette.]

1,265,013. SECTIONAL ADJUSTABLE VENTILATOR-CASING. THEODORE WEINSHANK and SIDNEY E. FENSTERMAKER, Indianapolis, Ind. Filed Dec. 11, 1915. Serial No. 66,362. (Cl. 257—136.)

1. A sectional adjustable ventilator casing comprising a wall box, an intake air-duct freely insertible into the inner end of the wall box and having a resilient lip on its end to engage the inside of the wall box, the lip rendering the duct conformable to the cross-sectional dimensions of the box, a base box connected to the air-duct, and a radiator-inclosure on the base box.

4. A ventilator casing comprising a base box with an inlet-opening in its front, a damper hinged at its bottom to the inside of the base box below the inlet-opening and

having a wrist-pin on one end thereof, a radiator inclosure connected to the base box and having a sight-opening in the front wall thereof distant from the base box, an indicator plate having one side thereof pivoted to the front wall on one side of the sight-opening, and a controlling rod connected to the opposite side of the indicator plate and also to the wrist-pin of the damper.



6. A ventilator casing comprising a base box composed of a rear wall and rear end portions, the rear wall having an aperture therein and also a flange on its rear side extending about the aperture, the box being composed also of a front wall and forward end portions, the forward end portions being detachably secured to the rear end portions, each two adjacent end portions having each a semi-circular recess, the two recesses forming a circular aperture, the front wall having a doorway therein, an intake air-duct secured to said flange, a back damper hinged to the inside of the rear wall of the base box at the bottom of the aperture and operable in the air-duct, an ear secured to the damper, a fulcrum-arm secured to the rear wall below the aperture, a lever pivoted between its ends to the fulcrum-arm, a link connected to said ear and to the fulcrum-arm, a front damper hinged to the inside of the front wall of the box at the bottom of the doorway, and a link connected to the fulcrum-arm and the front damper.

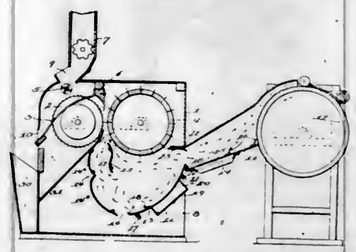
7. In a ventilator casing, the combination of a rectangular wall box, a base box having an aperture in the rear wall thereof, the rear wall of the box having a flange thereon extending about the aperture, and an intake air-duct comprising a bottom and a top and also end walls, one open end of the air-duct being inserted in and secured to said flange, the opposite end of the air-duct being inserted in said wall box, the bottom and top and also the end walls of the air-duct having each an outwardly-extending resilient lip thereon that yieldingly engages the inner side of the several portions of the wall box, with a radiator-inclosure upon the base box, and a damper hinged to the rear wall of the base box at the bottom of the aperture and operable in said air-duct.

10. In a ventilator casing, the combination of a base box comprising a front wall and a rear wall and also two end walls, the rear wall extending upward beyond the plane of the top of the remaining walls and having an aperture therein and also a flange on its outside extending about the aperture, each of said end walls being composed of two approximately equal parts secured together on a vertical plane; and a radiator-inclosure comprising a back wall having a recess receiving the upper portion of said flange, the back wall of the radiator-inclosure being secured to the rear wall of said box, a front wall secured to the front wall of the box, and two end walls connected to the front and rear walls of the radiator-inclosure and secured to the end walls respectively of the box.

[Claims 2, 3, 5, 8, and 9 not printed in the Gazette.]

1,265,014. COTTON-SEED LINTER. JAMES T. WEST, Rockingham, N. C. Filed Jan. 26, 1915. Serial No. 4,507. (Cl. 13—9.)

1. In a cotton seed linter, a casing having an outlet flue and having openings for the admission of air, means acting to induce an air current through said casing and into said flue, means to clean cotton fiber from cotton seed whereby the separated fiber passes into said casing above and with said air current and a pair of baffles arranged under said respective means to provide a vertical air passage in line with the air current which issues from between said means, the baffle nearest said flue being arranged to divide said air current into two streams, one of which carries lint and light motes and flows over said baffle directly toward said flue and the other of which carries heavier motes and flows downwardly through said air passage and under said baffle toward said flue.



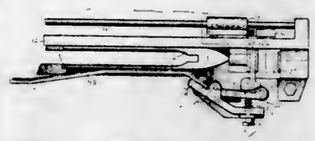
4. In a cotton seed linter, a casing having an outlet flue and having openings for the admission of air, means acting to induce an air current through said casing and into said flue, means to clean cotton fiber from cotton seed whereby the motes and separated fiber pass into said air current and a system of coöperating baffles for developing from said air current a mote laden stream which has an initial downward travel and a subsequent whirling motion, the downward travel of said stream effecting the precipitation, by combined gravity and momentum, of the heavier motes and the whirling motion effecting the independent precipitation, by gravity, of the lighter motes.

7. In a cotton seed linter, a casing having an outlet flue and having openings for the admission of air, means acting to induce an air current through said casing and into said flue, means to clean cotton fiber from cotton seed whereby the motes and separated fiber pass into said air current, and means for developing from said air current a stream laden with motes which has an initial downward travel whereby the heavier motes are precipitated by combined gravity and momentum and a subsequent travel toward said flue.

14. In a cotton seed linter, the combination with gin saws for cleaning cotton fiber from cotton seed and means for developing a current of air which carries away the fiber separated by said saws, of an inclined imperforate plate arranged immediately below the peripheries of said saws upon which any cotton seed which may escape between the saws with the separated cotton fiber will fall and by which a separate discharge of such intercepted cotton seed is effected.

[Claims 2, 3, 5, 6, and 8 to 13 not printed in the Gazette.]

1,265,015. SHUTTLE-CHECK. JOHN M. WHEATON, South Royalston, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 23, 1917. Serial No. 182,150. (Cl. 139—29.)



3. In a loom, in combination, a shuttle, a shuttle box, a binder, a picker, a member movable with said picker, and yielding connections between said member and said binder, said connections causing said member to directly resist movement of said picker and shuttle, and simultaneously applying increasing pressure on said shuttle through said binder, said direct resistance being thereafter diminished and said binder pressure being maintained uniform as the shuttle approaches final boxed position.

5. In a loom, in combination, a shuttle, a shuttle box, a member movable by said shuttle as it approaches final position in the shuttle box, a cam portion on said member and a straight portion adjacent said cam portion, a binder, and a cam roll yieldingly connected to said binder and positioned for successive engagement by said cam portion and said straight portion of said member.

7. In a loom, a shuttle, a lay, a binder pivoted to the lay, an arm mounted to swing about the same pivot, an adjustable spring connection between said arm and binder, a cam roll on said arm, and a shuttle-actuated member having a cam portion and a straight portion both positioned to engage said roll and to thereby apply increasing pressure to the binder and to thereafter maintain said increased pressure during the final boxing of the shuttle.

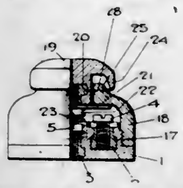
[Claims 1, 2, 4, and 6 not printed in the Gazette.]

1,265,016. DISPLAY-STAND. GEORGE M. WILLIAMS, Marshalltown, Iowa. Filed Sept. 4, 1917. Serial No. 189,553. (Cl. 211—20.)



In a display rack, a base having a seat therein, a post resting within the seat, a head rotatably mounted on the post and having internally threaded recesses therein, a ring having seats therein, arms having their outer ends reduced and adapted to rest in the seats in the ring, and the other end threaded to enter the recesses in the head, whereby as the arms are rotated about their individual longitudinal axes they are removed from the head.

1,265,017. PUSH-BUTTON SWITCH. JAMES M. WILSON, Newark, New Jersey, assignor to Splitdorf Electrical Company, Newark, N. J. Filed Apr. 1, 1915. Serial No. 18,430. (Cl. 200—27.)

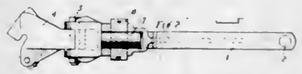


2. In a device of the character described, the combination of a switch base, a housing attached thereto to form a weather proof joint, a movable cap mounted in the top of said housing and having a weather proofing flange extending over the neck of said housing, switch contacts on said base, one of said contacts being on a lower level on the base than the other, a switching member carried by said cap and having a projection extending downward therefrom, resilient means extending from said lower level contact to said projection to hold said switching member out of engagement with the switch contacts, said projection contacting with the lower level contact when the resilient means is put under compression by operation of the switching member whereby a detrimental current is kept from passing through said resilient means.

4. In a device of the character described, the combination of a base carrying switch contacts, one of said contacts being on a higher level on the base than the other, a housing secured to said base, a movable cap seated within the top of said housing and having a protecting flange extending around the top thereof, a switching member carried by said cap to electrically engage itself with said switch contacts and a resilient member extending from said switching member to the switch contact of the lower level on said base to hold said cap in its normal position.

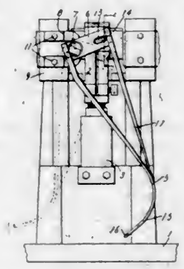
[Claims 1, 3, and 5 not printed in the Gazette.]

1,265,018. DRAW-BAR ATTACHMENT. HARRY F. WOERNLEY, Pittsburgh, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 8, 1914. Serial No. 865,663. (Cl. 213—42.)



. The combination with a coupler head, of a draw-bar, a casting carrying the coupler head and having a cylindrical shank adapted to extend into a corresponding cylindrical socket in the draw-bar, and a flat key adapted to extend through horizontally arranged slots in the shank and the draw-bar for securing said casting to the draw-bar, the slot in the shank being of greater width transversely than the key to permit rotative movement of the coupler head.

1,265,019. SAFETY-GUARD FOR MACHINES. EDWARD T. YEO and WILLIAM A. WIESMAN, Grand Rapids, Mich., assignors to Keeler Brass Company, Grand Rapids, Mich. Filed Mar. 27, 1917. Serial No. 157,760. (Cl. 74—105.)



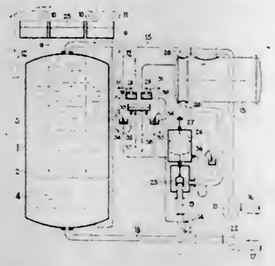
1. The combination with a machine including a frame, an actuated member, a crank shaft, and a connecting pitman therefor, of a bracket mounted on said frame, a rocker bar pivoted to said bracket at one end so that its opposite end is supported in front of the crank, such end being longitudinally slotted, a guard secured to the pivoted end of said rocker arm having its lower end curved forwardly and provided with a leather tip, a brace secured to the slotted end of said rocker bar and to said guard arm, and a pin on the pitman head disposed through said slot in said rocker bar, all coacting for the purpose specified.

2. The combination with a machine including a frame, an actuated member, a crank shaft, and a connecting pitman therefor, of a bracket mounted on said frame, a slotted rocker bar pivotally mounted on said bracket so that it is supported in front of the crank, a guard mounted on said rocker bar to sweep in front of said actuated member, and a rocker bar actuating pin on said pitman head disposed through said slot in said rocker bar, all coacting for the purpose specified.

7. An attachment for punch presses and the like machines comprising a bracket adapted to be mounted on the frame of the machine, a rocker bar pivotally mounted on said bracket, a guard carried by said rocker arm, and a pin secured to the head of the punch press pitman and slidably engaging said rocker arm.

[Claims 3 to 6 not printed in the Gazette.]

1,265,020. HOT-WATER HEATING INSTALLATION. WILHELM ZÜBLIN, Winterthur, Switzerland. Filed July 21, 1917. Serial No. 181,992. (Cl. 237—8.)



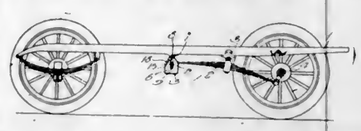
2. In a hot water heating installation, a heater for heating water, a hot water distributing system, a heat storage vessel with a heat insulating piston arranged therein to form two superimposed separate spaces, the lower one for cold water and the upper for hot water, both connected with the said heater and said hot water distributing system, and two independent circulating devices, one inserted between the said heater and the cold water space of said heat storer and the other inserted into said hot water distributing system for supplying the same with circulating water, the said circulating devices being so arranged that when a larger quantity of heated water is provided than is necessary for the hot water distributing system, the surplus water quantity is forced into the hot water space of the storage vessel, while in the case of an under supply a supplementary quantity of hot water is supplied from the hot water compartment of the storer and cold water flows to the cold water compartment thereof.

3. In a hot water heating installation, a heater for heating water, a hot water distributing system, a heat storer having two separate spaces, one for cold water, the other for hot water, both connected with said heater and said hot water distributing system, two independent circulating devices, one inserted between the said heater and the cold water space of said heat storer and the other inserted into said hot water distributing system for supplying the same with circulating water, a regulating valve interposed in the connection to said heater to regulate the flow of cold water thereto in dependence of a variable service condition, the said circulating devices being so arranged that when a larger quantity of heated water is provided than is necessary for the hot water distributing system, the surplus quantity is forced into the hot water space of the storer, while in the case of an under supply a supplementary quantity of hot water is supplied from the hot water compartment of the storer and cold water flows to the cold water compartment thereof.

5. In a hot water heating installation, a heater for heating water, a hot water distributing system, a heat storer having two separate spaces, one for cold water, the other for hot water, both connected with the said heater and said hot water distributing system, and circulating means, connected with the said heater and the said heat storer as well as with the hot water distributing system and so arranged that when a larger quantity of heated water is provided than is necessary for the hot water distributing system, the surplus water quantity is forced into the hot water space of the storer, while in the case of an under supply a supplementary quantity of hot water is supplied from the hot water compartment of the storer and cold water flows to the cold water compartment thereof.

[Claims 1 and 4 not printed in the Gazette.]

1,265,021. SHOCK-ABSORBER FOR AUTOMOBILES. ARTHUR B. ZUMWALT, Fulton, Cal. Filed Apr. 19, 1917. Serial No. 163,201. (Cl. 267—19.)



1. In a shock absorber, the combination with a support, of a casing having upstanding inverted substantially V-shaped side walls provided near their upper ends with a pair of transversely alined slots, said support having a portion received between said walls and pivoted thereto, said walls having therein a pair of transversely alined vertically extending slots, upstanding coiled springs in said casing supported on its base, a block supported on said springs and having a central transverse groove in its upper face, a spring having one end disposed in said groove, and a transversely extending bolt on said end having its ends vertically movable in the slots.

2. A shock absorber comprising a casing adapted to be pivotally connected to a support, the side walls of said casing being provided with a pair of transversely alined vertical slots, a pair of upstanding coiled springs in said casing, a block extending across and supported on the upper ends of said springs and having a central transverse groove in its upper face, a wear plate in said groove, a cantaliver spring having one end disposed on said plate, and a transversely extending bolt on said end, anti-friction rollers mounted on the ends of said bolt and vertically movable in said slots, and means for retaining the rollers on said bolt.

1,265,022. METHOD OF FORMING AND APPLYING TOOTH-FACINGS. DANIEL ANTON ZURBRIGG, Milford, Del., assignor to The L. D. Caulk Company, Milford, Del., a Corporation of Delaware. Filed May 7, 1917. Serial No. 167,019. (Cl. 32—17.)



1. A method of forming tooth facings and applying them to the backings of bridges or to similar backings, which involves the use of a matrix in the form of a shallow depression conforming in size and outline to the facing required, and which consists in filling the said matrix with cement suitable for tooth restoration; in locating the matrix and, with it, the cement contained therein relatively to the backing and the adjoining teeth to secure accurate alinement of the tooth facing and, by means of the matrix, applying the cement, while plastic, to the backing; and in maintaining pressure upon the matrix until the cement sets to effect the packing of the cement and its certain anchorage to the backing and to produce a molded tooth facing of the required form.

2. A method of forming tooth facings and applying them to the backings of bridges or to similar backings, which involves the use of a matrix in the form of a shallow depression conforming in size and outline to the facing required and which consists in filling the said matrix with cement suitable for tooth restoration; in locating the matrix and, with it, the cement contained therein relatively to the backing and the adjoining teeth to secure accurate alinement of the tooth facing and, by means of the matrix, applying the cement, while plastic, to the backing; in maintaining pressure upon the matrix until the cement sets to effect the packing of the cement and its certain anchorage to the backing and to produce a molded tooth facing of the required form; and, during the period in which pressure is exercised on the matrix in maintaining a backing strip under the backing.

1,265,023. ODOMETER. ROLLIN ABELL, Boston, Mass. Filed Apr. 16, 1910. Serial No. 555,957. (Cl. 235—95.)



1. An instrument of the character described, comprising in combination, a total register, a rotatable trip-ring encircling said total register and having indicating numerals, means arranged to drive said total register and said trip-ring, said trip-ring being rotatable in either direction from one indicating position to another, independently of said total register.

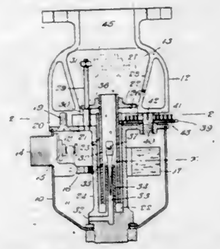
2. An instrument of the character described, comprising in combination, a dial, a total register arranged behind said dial and having indicating numerals, means arranged to drive said total register, a rotatable trip-ring arranged to encircle said total register, said trip-ring having indicating numerals and gear-teeth, and gearing arranged to transmit registering movement from said total register to said trip-ring, said trip-ring being rotatable independently of registering movement of said total register, from any indicating position to any other indicating position, said dial having sight openings arranged to show the effective numerals of said total register and said trip-ring respectively.

3. An instrument of the character described, comprising in combination, a total register and means arranged to drive the same, a rotatable trip-ring arranged to encircle said total register, said trip-ring having indicating numerals and gear-teeth, and intermittent gearing arranged to transmit registering movement positively from said total register to said trip-ring, said gearing being arranged to permit rotative movement of said trip-ring in either direction without causing registering movement of said total register.

[Claim 4 not printed in the Gazette.]

1,265,024. CARBURETER. ROLLIN ABELL, Milton, Mass., assignor to J. B. Carburetor Corporation, Los Angeles, Cal., a Corporation of California. Original application filed Nov. 9, 1911, Serial No. 659,393. Divided and this application filed Oct. 14, 1915. Serial No. 55,801. (Cl. 261—48.)

1. A carbureter comprising a well for liquid fuel, a nozzle extending upwardly in said well, said well having an opening above the top of said nozzle to admit air, a suction tube arranged to carry air and liquid fuel from said well, the lower end of said tube surrounding said nozzle below the top of the latter, and means arranged to feed liquid fuel through said nozzle to a predetermined level above the top of said nozzle, said well and suction tube cooperating to form an air passageway to conduct air downwardly from said opening to a plane below said predetermined level and below the top of said nozzle.



3. In a carbureter, a mixing chamber, a fuel chamber, an air chamber for both main and auxiliary air projecting downward into the fuel chamber, an inspirator nozzle mounted within the projecting part, a suction valve, a fuel valve adapted to coöperate with said inspirator nozzle and means for normally adjusting it to cause fuel to creep over the tip of said nozzle into the bottom of the air chamber and means to force the air through or over the puddle on its way to the mixing chamber, for the purpose described.

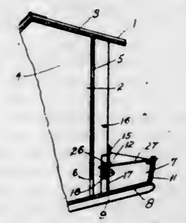
4. In a carbureter, a mixing chamber, an air chamber for both main and auxiliary air and a fuel chamber, mounted in a line one above the other, a suction valve between the mixing and air chambers, a fuel valve carried thereby, a fuel puddle chamber integral with the air chamber and extending downward into the fuel chamber, an inspirator nozzle mounted in the air chamber and adapted to coöperate with the fuel valve which is normally so adjusted with respect to the nozzle as to allow the fuel to creep over into the puddle chamber, for the purpose described.

7. In a carbureter, a mixing chamber, an air chamber for both primary and auxiliary air, a fuel chamber, a valve responsive to suction in the mixing chamber and a fuel valve controlled by the first mentioned valve, an inspirator mounted within said air chamber and opening at the bottom into the fuel chamber and having an opening at the top adapted to coöperate with the fuel valve to regulate the amount of fuel passing therethrough, said fuel valve having a self-alining point, for the purpose described.

8. In a carbureter, a mixing chamber, a main air chamber, a fuel chamber, said main air chamber being supported on said fuel chamber and having a central annular air funnel projecting downward into the fuel chamber, an inspirator mounted within said air funnel and having an opening into the fuel chamber, a suction valve between said mixing and air chambers, a fuel valve adapted to co-act with said inspirator and controlled by said suction valve to regulate the flow of fuel through the inspirator.

[Claims 2, 5, 6, and 9 to 11 not printed in the Gazette.]

1,265,025. FEED-RACK. ELDON AKER, Smithville, Mo. Filed July 31, 1916. Serial No. 112,346. (Cl. 119—53.)

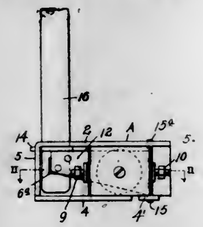


1. In a stock feeding device comprising a feed trough, a feed receptacle mounted in the trough and having a longitudinal opening at the base thereof, a vertically adjustable

feed control bar slidably mounted in spaced relation to and parallel with the said opening, and spaced division bars mounted transversely across the trough pivotally attached to a wall thereof and slidably attached to said bar.

[Claim 2 not printed in the Gazette.]

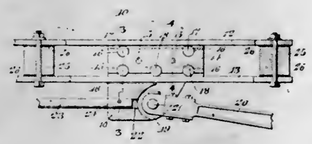
1,265,026. HOOD-LOCK. JAMES W. ALEXANDER, Pittsburgh, Pa., assignor to American Auto Lock Company, Pittsburgh, Pa., a Corporation. Filed June 14, 1917. Serial No. 174,767. (Cl. 70—50.)



1. A device of the class described comprising a main casing, a supplemental casing secured within said main casing and cut away at one end to form a projecting lug, an armature pivoted to said first named casing, a catch of non-magnetic material secured to said armature, a lug formed on said armature in line with the lug on said supplemental casing, an electromagnet secured within said supplemental casing and adapted to attract said armature when energized, and a coil spring mounted on said lugs for normally holding said armature out of engagement with said electromagnet.

2. In combination with an automobile having a hood, a lock comprising a main casing, a supplemental casing cut away at one end to form a projecting lug, an armature pivoted to said first named casing, catch and finger engaging members of non-magnetic material secured to said armature, said finger engaging member being adapted to pass through an aperture in said casing, a lug formed on said armature in a line with said lug on said supplemental casing, an electro-magnet secured within said supplemental casing and adapted to attract said armature when energized, a coil spring mounted on said lugs for normally holding said armature out of engagement with said electromagnet and a keeper secured to said hood and adapted to be engaged by said catch.

1,265,027. CROSS-HEAD. DAVID ALLDREAD, Bay City, Mich. Filed June 26, 1917. Serial No. 177,064. (Cl. 74—87.)

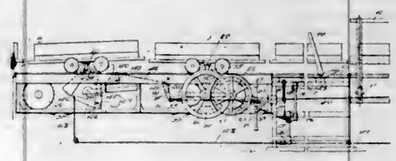


1. The combination with cross head guides, of a cross head having a body portion provided with spaced parallel side cheeks disposed at opposite sides of the guides, a block detachably fitted between the side cheeks and said guides and having transversely disposed channels in the top and bottom faces thereof, bearing rollers journaled in the channels and movable upon the guides, said cheeks serving to contact with the cross head guides, and closing the ends of the channels to retain the rollers therein.

2. The combination with cross head guides, of a cross head provided with a recess for receiving said guides, a block removably fitted within the recess, and bearing rollers carried by the block and movable over the guides.

[Claim 3 not printed in the Gazette.]

1,265,028. CAR-TIPPLE. ANDREWS ALLEN, Chicago, Ill., assignor to Wood Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 28, 1917. Serial No. 193,755. (Cl. 214—52.)

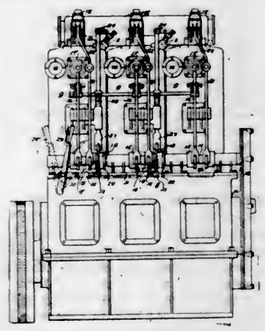


1. The combination with a rotary tipple having rails adapted to receive a car and a stationary track connecting with the rails in the tipple, of means for propelling a train of cars along the stationary track, and means for automatically stopping the train after a pre-determined distance of travel.

8. The combination with a rotary tipple having rails adapted to receive a car and a stationary track connecting with the rails in the tipple, of a driving chain having a part adapted to engage a car in the train and to propel the train along the stationary track, driving machinery for imparting movement to the chain, means for connecting the driving machinery to the chain and for disconnecting it therefrom, a moving part on the chain, another part adapted for engagement by the moving part on the chain, and means acting through the engagement of such two parts to disconnect the driving machinery from the driving chain.

[Claims 2 to 7 and 9 to 11 not printed in the Gazette.]

1,265,029. VALVE-SETTING GEAR FOR DIESEL ENGINES. JOHN W. ANDERSON, New London, Conn., assignor to Electric Boat Company, New York, N. Y., a Corporation of New Jersey. Filed Mar. 2, 1916. Serial No. 81,599. (Cl. 123—181.)



1. An internal combustion engine of the Diesel type comprising the combination of a plurality of cylinders arranged in line, inlet and exhaust valves for each cylinder, a spray valve for each cylinder, an air-starting valve for each cylinder, a shaft extending along the line of cylinders, a cam for each cylinder stationarily mounted upon the cam shaft in position for operating one of the said inlet and exhaust valves of the cylinder, a sleeve for each cylinder splined upon the cam shaft, two cams on each sleeve, one for operating the spray valve and one for operating the air-starting valve of the corresponding cylinder, and means for moving all of the sleeves axially upon the cam shaft to carry the cams on the sleeves into position for operating the air-starting valves and out of position for operating the spray valves or vice versa as desired; substantially as described.

5. In an internal combustion engine, in combination, a plurality of cylinders arranged in line, an inlet valve for each cylinder, an exhaust valve for each cylinder, a cam shaft carrying fixedly thereon a cam for one of said valves of each cylinder; an air-starting valve on one of the cylinders, a fuel-spray valve on each of said cylinders, and a cam sleeve rotatable with said cam shaft but axially adjustable thereon, said sleeve carrying a cam for said air-starting valve and a cam for the fuel-spray valve of the cylinder with which said air-starting valve is associated, means adapted to shift said sleeve axially of said cam shaft whereby in one adjustment of said sleeve but one of the sleeve-carried cams becomes effective, and in another adjustment the other of said sleeve-carried cams becomes effective, means actuated by one of said sleeve-carried cams, when effective as aforesaid, to operate predeterminedly said air-starting valve, means actuated by the other of said sleeve-carried cams, when effective as aforesaid, to operate predeterminedly the fuel-spray valve of the cylinder with which said air-starting valve is associated, and a second cam shaft carrying fixedly thereon a cam for the other of said inlet and exhaust valves on each cylinder, said two cam shafts being located on opposite sides of the line of cylinders; substantially as described.

[Claims 2 to 4 not printed in the Gazette.]

1,265,030. SUBSTANTIVE ORTHOOXYAZO DYESTUFFS AND A PROCESS OF MAKING SAME. EUGEN ANDERWERT, HERMANN FRITZSCHE, and HEINRICH SCHOBEL, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Original application filed Oct. 6, 1915, Serial No. 54,403. Divided and this application filed Jan. 24, 1917. Serial No. 144,242. (Cl. 8—1.)

1. The described process for the manufacture of new substantive orthooxyazodyestuffs consisting in combining an aromatic orthooxydiazobody with a 2:5:7-aminonaphtholsulfonic compound, diazotizing the resulting oxyazodyestuff and combining the thus obtained diazoazocompound with a naphthol compound.

2. The described process for the manufacture of new substantive orthooxyazodyestuffs consisting in combining an aromatic orthooxydiazobody with a 2:5:1:7-aminonaphtholdisulfonic compound, diazotizing the resulting oxyazodyestuff and combining the thus obtained diazoazocompound with a naphthol compound.

3. As new products the described orthooxyazodyestuffs containing the diazoderivative of a 2:5:7-aminonaphtholsulfonic compound coupled on the one hand with an aromatic orthooxydiazobody and on the other hand with a naphthol compound and constituting intense colored powders yielding with concentrated sulfuric acid deep colored solutions and dissolving in water to solutions changing their coloration on addition of sodium carbonate or of soda lye and dyeing cotton, wool, silk, mixed goods, straw, wood and paper various tints according to the methods used for the known substantive dyestuffs.

4. As new products the described orthooxyazodyestuffs containing the diazoderivative of a 2:5:1:7-aminonaphtholdisulfonic compound coupled on the one hand with an aromatic orthooxydiazobody and on the other hand with a naphthol compound and constituting intense colored powders yielding with concentrated sulfuric acid deep colored solutions and dissolving in water to solutions changing their coloration on addition of sodium carbonate or of soda lye and dyeing cotton, wool, silk, mixed goods, straw, wood and paper various tints according to the methods used for the known substantive dyestuffs.

1,265,031. SUBSTANTIVE ORTHOOXYAZO DYESTUFFS AND A PROCESS OF MAKING SAME. EUGEN ANDERWERT, HERMAN FRITZSCHE, and HEINRICH SCHOBEL, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Original application filed Oct. 6, 1915, Serial No. 54,403. Divided and this application filed Jan. 24, 1917. Serial No. 144,243. (Cl. 8—1.)

1. The described process for the manufacture of new substantive orthooxyazodyestuffs consisting in combining an aromatic orthooxydiazobody with a primary monoamin having relatively to the amino group a non substituted position para, diazotizing the resulting intermediate product and combining the resulting diazoazocompound with a 2:5:7-aminonaphtholsulfonic compound.

2. The described process for the manufacture of new substantive orthooxyazodyestuffs consisting in combining an aromatic orthooxydiazobody with a primary monoamin having relatively to the amino group a non substituted position para, diazotizing the resulting intermediate product and combining the resulting diazoazocompound with a 2:5:1:7-aminonaphtholdisulfonic compound.

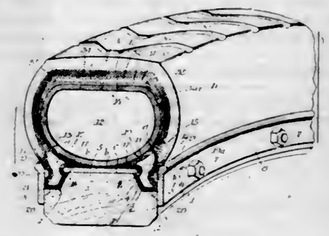
4. The described process for the manufacture of new substantive orthooxyazodyestuffs consisting in combining an aromatic orthooxydiazobody with a primary monoamin having relatively to the amino group a non substituted position para, diazotizing the thus obtained intermediate product, combining the resulting diazoazocompound again with a primary monoamin having relatively to the amino group a non substituted position para, diazotizing the resulting intermediate product and combining the thus obtained diazobody with a 2:5:1:7-aminonaphtholdisulfonic compound.

5. As new products, the herein described new substantive orthooxyazodyestuffs containing an aromatic orthooxydiazobody and a 2:5:7-aminonaphtholsulfonic compound coupled together by the diazoderivative of a primary monoamin having relatively to the amino group a non substituted position para and constituting intense colored powders, yielding with concentrated sulfuric acid deep colored solutions, dissolving in water to solutions changing intensively their coloration on addition of sodium carbonate or of soda lye and dyeing cotton, wool, silk, mixed goods, straw, wood and paper, according to the methods used for the known substantive dyestuffs.

6. As new products, the herein described new substantive orthooxyazodyestuffs containing an aromatic orthooxydiazobody and a 2:5:1:7-aminonaphtholdisulfonic compound coupled together by the diazoderivative of a primary monoamin having relatively to the amino group a non substituted position para and constituting intense colored powders, yielding with concentrated sulfuric acid deep colored solutions, dissolving in water to solutions changing intensively their coloration on addition of sodium carbonate or of soda lye and dyeing cotton, wool, silk, mixed goods, straw, wood and paper, according to the methods used for the known substantive dyestuffs.

[Claim 3 not printed in the Gazette.]

1,265,032. RESILIENT TIRE. WILLIAM E. ANDREW, Atlantic Highlands, N. J. Filed Feb. 23, 1912, Serial No. 679,338. Renewed Sept. 30, 1916. Serial No. 123,198. (Cl. 152—21.)



1. A tire-securing structure including in combination, a felly formed with a plurality of substantially flat shoe-engaging surfaces arranged in angular relation, some of said surfaces being cut to aline one with the other at opposite sides of the felly and adapted to support the shoe while others converge upwardly and thereby operate to retain it, a felly-band on the felly of less width than the felly and having edges projected beyond the upper surface of the felly, a shoe formed with a base-portion having its innermost surfaces converging toward the

felly-band to contact with and be retained by said felly-surfaces and the felly-band, coöperative means mounted on the felly and engaging said base-portion to retain the shoe movably in position; and a spacing and reinforcing element interposed between said means and the projecting edges of the felly-band.

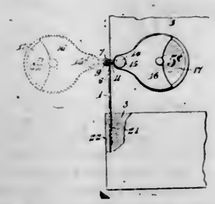
2. A tire-securing structure including in combination, a felly provided with independently-formed bearing and contacting-surfaces cut at an obtuse angle, a shoe having a base formed with a plurality of brace-portions adapted to overlie the felly, with a bearing-portion adapted to engage one of the aforementioned felly-surfaces, and with a contacting-portion arranged at an obtuse angle to the bearing portion and engaging another of the felly-surfaces, means for securing the base-portion to the felly, and a rigid holding-element formed in the shoe-base and disposed between the felly and said securing means.

3. A tire-securing structure including in combination, a felly provided with independently-formed bearing and contacting-surfaces cut at an obtuse angle, a shoe having a base formed with a plurality of base-portions adapted to overlie the felly, with a bearing-portion engaging one of the aforementioned felly-surfaces, and with a contacting-surface arranged at an obtuse angle corresponding to that of the surfaces of the felly and engaging another of the felly-surfaces, means for securing the base-portion to the felly including a plurality of side-clamping bands and a holding-ring arranged in juxtaposition to one of the clamping-bands and operatively engaging the base-portion of the shoe, and a holding element interposed between the felly and the holding-ring.

4. A tire-securing structure including in combination, a felly formed with bearing surfaces and with shoe-contacting surfaces diagonally disposed with relation to the bearing surfaces, a felly-band adapted to be secured to the felly and having its edges overhanging the diagonal contacting surfaces, a casing-member having a base formed with portions adapted to engage said bearing surfaces and with portions arranged at an obtuse angle to the engaging portions and conforming to that of the felly and adapted to engage said contacting surfaces and also the overhanging portions of the felly-band, means for securing the casing-member to the felly including clamping bands and a retaining ring interposed between each clamping band and the contacting surfaces of the felly, and a spacing strip interposed between each retaining ring and the corresponding overhanging edge of the felly-band.

5. A tire-securing structure including in combination, a felly formed with approximately flat bearing surfaces and with angulated shoe-contacting surfaces, a substantially flat metallic felly-band on the felly and overhanging the contacting surfaces, metallic clamping-bands attached to the felly, a metallic retaining ring connected to each clamping band, a casing member provided with a plurality of contacting surfaces adapted to be attached to the felly and each formed on one side with a recess in which the retaining ring is normally seated, and a protecting element engaging the felly-band.

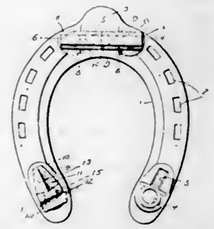
1,265,033. BOX-LID HOLDER. CLARENCE S. APPLAS and WALTER T. APPLAS, Moline, Ill. Filed Nov. 29, 1916. Serial No. 134,198. (Cl. 217—61.)



1. A device of the character described comprising a flat relatively thin plate having a slot in its end disposed angularly to the rear edge of said plate, to fit over the rear wall of a box next to the adjacent end wall thereof and against the end edge of the lid for said box when open, and a substantially U-shaped clamping loop swingingly supported at the upper end of the plate to embrace the edge adjacent thereto of the lid when said loop is in said position and to release the lid when in another position, the axis of movement of said loop being crosswise of said plate.

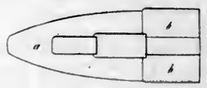
[Claims 2 to 4 not printed in the Gazette.]

1,265,034. HORSESHOE. ANDREW F. BARRON, Watervliet, N. Y. Filed June 27, 1914. Serial No. 847,628. (Cl. 168—41.)



A horseshoe having the toe portion thereof provided with a pair of spaced openings and a relatively long inwardly tapered groove forming a socket arranged between the openings, a two-part calk, each part having a long base, a securing shank at one end of the base and a comparatively short lug having tapering sides at the other end of the base, the securing shanks being arranged to fit in the openings of the shoe and the tapering lugs being arranged to engage in the socket to prevent the calk from turning on the shanks, the inner ends of the bases of the calk and lugs being positioned in abutting relation to each other to form a continuous calk, as and for the purpose specified.

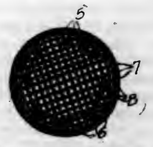
1,265,035. CONSTRUCTION OF HULLS FOR HYDROPLANES. LÉON BAZAINE, Issy-les-Moulineaux, France, assignor to Société Anonyme Des Etablissements Nieuport, Issy-les-Moulineaux, France. Filed June 3, 1914. Serial No. 842,770. (Cl. 114—66.5.)



1. A hull, a series of resiliently supported and pivotally mounted overlapping planes thereon, said planes increasing in size from bow to stern of said hull.

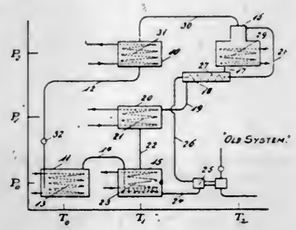
2. A hull having on the bottom thereof a plurality of longitudinally-extending planes, said planes being pivotally connected to and resiliently mounted on said hull, and a pair of planes connected to said hull and offset with reference to said first-mentioned planes.

1,265,036. GOLF-BALL. TOM BENDELOW, Chicago, Ill., assignor to Thomas E. Wilson & Company, Chicago, Ill., a Corporation of Maine. Filed July 14, 1917. Serial No. 180,525. (Cl. 46—4.)



A golf ball comprising a hard crust with surface markings thereon, a yielding interior, the surface markings on said crust comprising three sets of grooves encircling the periphery of the ball, the grooves in each of said sets being substantially parallel with each other, but being substantially at right angles with each of the other sets.

1,265,037. PROCESS OF AND APPARATUS FOR REFRIGERATION. JOHN C. BERTSCH, Edgewood Park, Pa. Filed Jan. 26, 1917. Serial No. 144,624. (Cl. 62—178.)



1. A refrigerating apparatus comprising a condenser, an evaporator connected thereto, a jet absorber receiving vapor from the evaporator and weak liquor at superior pressure, a compressor receiving solution from said absorber, a separator into which the compressor delivers, a return connection for weak liquor from the separator to the absorber, and means for compressing the gas passing from the separator to the condenser.

2. In a refrigerating apparatus, the combination with a main circuit for the refrigerant from and to the condenser, said circuit including a jet compressor for delivering gaseous refrigerant to the condenser, of a heater in circuit with the condenser and supplying high pressure gas to said compressor.

3. In a refrigerating apparatus, the combination with a main circuit for the refrigerant from and to the condenser, said circuit including a jet compressor for delivering gaseous refrigerant to the condenser, of a heater in circuit with the condenser and supplying high pressure gas to said compressor, and a pump in the heater circuit, driven by fluid circulating in the main circuit, for forcing fluid from the condenser to said heater.

4. In a refrigerating apparatus, the combination with a refrigerant circuit including a condenser and an evaporator, of a jet absorber and a jet compressor in the return part of the circuit between the evaporator and the condenser, a gas and absorbent separator between the compressor and the condenser, provided with connections, adapted to return the separated liquor to the absorber and the gas to the condenser, means to cool said separated liquor and means to apply pressure to said separated gas.

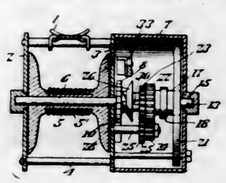
5. In a refrigerating apparatus, the combination with a main circuit for the refrigerant, including a condenser and an evaporator, of a jet absorber and a jet compressor in the vapor circuit between the evaporator and the condenser, and means to supply said absorber with cooled weak absorbent liquid and said compressor with gas under pressure, from said circuit.

[Claims 6 to 32 not printed in the Gazette.]

1,265,038. FISHING-REEL. PHILLIP H. BIEMAN, St. Louis Park, Minn. Filed Apr. 24, 1917. Serial No. 164,184. (Cl. 242—84.7.)

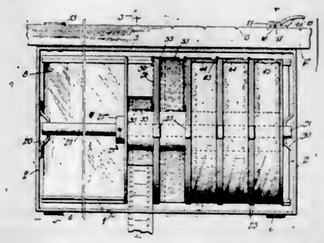
1. A fishing reel comprising a spool, a stationary clutch part connected therewith and having teeth thereon, a detent engaging with said teeth to prevent reverse movement of the spool, winding means for the spool, a sliding clutch part connected therewith and normally engaging with the other clutch part, and a lever for moving said sliding part into inoperative position and to disengage the detent from the teeth.

2. A fishing reel comprising a spool, a supporting shaft therefor, a disk secured to said shaft and having clutch teeth thereon, a detent engaging with said disk for preventing reverse movement thereof, a winding shaft, a drum secured thereon having gear teeth, a winding drum located on the first mentioned drum and provided with gear teeth, idle gears connected together and meshing with the before mentioned gear teeth, means for winding said



drum, a spring for returning the drum to normal position, a movable clutch part connected with the driving shaft and having teeth thereon adapted to engage with the teeth on the disk, and a lever for moving said part out of engagement with the teeth on the disk and to throw the detent into inoperative position.

1,265,039. AUTOMATIC FILM-THREADER. JACOB M. BOWER, Lander, Wyo., assignor of two-fifths to Newton Ripper, Lander, Wyo. Filed May 6, 1916, Serial No. 95,871. Renewed Sept. 25, 1917. Serial No. 193,215. (Cl. 242—70.)



1. In an apparatus of the class described, a reel shaft, a plurality of film reels supported thereby side by side for rotation, a roll of film wound upon each reel, and means applied to and connecting the following end of one film roll with the advancing end of the next adjacent film roll.

5. In an apparatus of the class described, a reel support, a plurality of film reels supported thereby for rotation, a roll of film wound upon each reel, a clip connected to the following end of one roll of film, a flexible element connected to the said clip and extending radially beside the said roll of film, and a clip connected to the other end of the said flexible element and to the advancing end of the next adjacent roll of film.

10. In an apparatus of the class described, a film end connection including a flexible element, swivels connected to the ends thereof, and a clip connected to one member of each swivel and comprising gripping plates arranged for the reception therebetween of a film end, one of the plates being slidable with relation to the other and one of said plates having a roughened surface to contact the surface of the said film end.

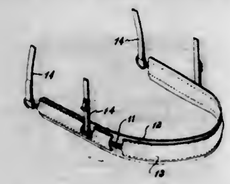
[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,265,040. HARNESS. SAMUEL H. BRECHEEN, Prosper, Tex. Filed Apr. 7, 1916. Serial No. 89,538. (Cl. 54—5.)

1. In a harness, a relatively wide backing strap of stiff composite material, a relatively narrow facing strap of leather, and a chain inclosed between the straps and free to move therein, said straps being stitched together along the upper and lower edge of the narrow strap.

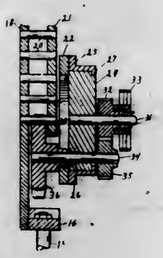
2. In a harness, a breech band, comprising a chain, supporting straps secured directly to the chain and connecting

said chain with the harness, a relatively wide backing strap of stiff composite material, a relatively narrow facing strap of leather and a chain inclosed between the



straps and free to move therein, said straps being stitched together along the upper and lower edge of the narrow strap.

1,265,041. MECHANICAL MOVEMENT. JOHN T. S. BROWN, Jr., Prospect, and LEON L. MILES, Louisville, Ky. Filed Dec. 24, 1917. Serial No. 208,633. (Cl. 74—27.)



1. A mechanical movement comprising a reciprocable driven element, a rotatable disk mounted in a plane parallel therewith and adapted to be advanced intermittently in a continuous direction, a driving pinion mounted coaxially of said disk, and an intermediate member having operative connection with said pinion and said element.

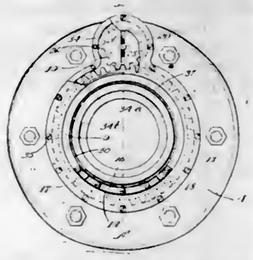
10. A base, guide rods erected thereon, spaced cross heads slidably mounted thereon, a plate secured to said cross heads, a plurality of longitudinally alined spaced pins extended laterally from said plate, a bridge plate having a central opening secured to said guide rods, intermediate their length, a disk positioned on said bridge plate over said opening and rotatably held thereon by peripherally engaging means, a pinion mounted co-axially of said disk, means for rotating said pinion, a shaft carried by the disk and extended from both sides thereof, a pinion on said shaft meshed with the first mentioned pinion, and a sprocket wheel thereon in operative engagement with said pins.

[Claims 2 to 9 not printed in the Gazette.]

1,265,042. ODOMETER-OPERATING MEANS. HARRY P. C. BROWNE, New York, N. Y. Filed Sept. 8, 1916. Serial No. 119,073. (Cl. 235—95.)

1. In a device of the class described: an axle; a wheel journaled upon the axle; registering means carried by the wheel; a gear loosely mounted upon the wheel; a part, containing a recess fitting said gear, upon the wheel; means for restraining the rotation of the gear; and means operated by the gear for actuating the registering means.

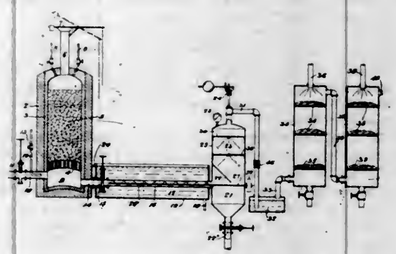
2. In a device of the character described: an axle; a wheel journaled upon the axle; registering means carried by the wheel; a plane surface formed upon the wheel and parallel to the plane of rotation of the wheel; a rim of uniform height formed upon the wheel and inclosing and perpendicular to said plane surface; a cover fitting on the top of the rim; a gear loosely fitting the cavity formed by the plane surface, rim and cover; means for restrain-



ing the rotation of the gear; and means operated by the gear for actuating the registering means.

[Claims 3 to 6 not printed in the Gazette.]

1,265,043. APPARATUS FOR MANUFACTURE OF HYDROGEN AND CARBON-BLACK. ROY H. BROWNLEE and ROY H. UHLINGER, Pittsburgh, Pa.; said Uhlinger assignor to said Brownlee. Original application filed Mar. 12, 1915, Serial No. 14,011. Divided and this application filed Jan. 15, 1916. Serial No. 72,218. (Cl. 134—60.)



1. Apparatus for making carbon black consisting of an inclosing chamber containing highly heated refractory material, means for excluding air therefrom, means for introducing a suitable hydrocarbon into said chamber and into contact with the refractory material, and means for separating the carbon from the hydrogen.

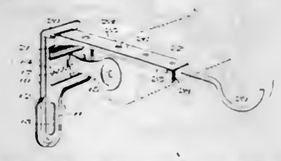
5. Apparatus for making carbon black and hydrogen consisting of an inclosing chamber containing highly heated refractory material, means for excluding air therefrom, means for introducing a suitable hydrocarbon into said chamber and into contact with the refractory material, means for introducing a combustible fuel into the chamber, and means for cooling the products to separate the carbon from the hydrogen.

12. Apparatus for making carbon black and hydrogen comprising a decomposing chamber having a filling of refractory material, means for heating said material, means for introducing hydrocarbon thereto, means for conducting carbon and hydrogen from said decomposing chamber and for cooling the same in transit, and means for collecting precipitated carbon and for carrying off the separated gases.

[Claims 2 to 4, 6 to 11, and 13 to 15 not printed in the Gazette.]

1,265,044. SHADE AND CURTAIN-POLE FIXTURE. JOSEPH F. BRUDERLY, Philadelphia, Pa. Filed July 26, 1916. Serial No. 111,422. Renewed Mar. 27, 1918. Serial No. 225,111. (Cl. 156—24.)

1. In a shade and curtain pole fixture, and in combination, a supporting plate having a slotted depending lug for the reception of a fastening screw, a laterally extending median section having a slot therein provided with a notched edge, and an upwardly extending member having a horizontally disposed loop thereon, said loop being mounted substantially directly above the notched edge; a shade-roller holder adjustably mounted in said slot, and a longitudinally adjustable curtain-pole support mounted in said loop and so disposed relative to said slot as to permit free lateral adjustment of said shade-roller holder in said slot.



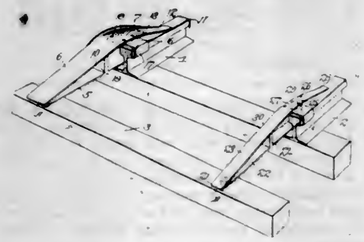
2. In a shade and curtain pole fixture, and in combination, a supporting plate having a receiving loop, a curtain pole support formed of thin metal and having a loop-engaging leg, the edges of said support being bent downwardly to form braces to engage the outer face of said loop and sustain said support against downward strains.

4. In a shade and curtain pole fixture, and in combination, a supporting plate having a receiving loop, a curtain pole support formed of relatively thin metal and having a loop-engaging leg at one end and a series of openings lengthwise its body, the edges of said support being turned downwardly and of increased width adjacent said leg to bear upon the face of said loop and sustain the support against downward strains, a downwardly turned perforated leg at the other end of said support, a pole-receiving member passing through said perforated leg and having an engaging hook at its rear end to engage the perforations in said pole support, and means to secure said member in various positions of adjustment relative to said support.

5. A supporting plate for shade fixtures having an attaching section adapted to be secured to the wall, and a fixture-receiving section laterally offset from said attaching section so as to give clearance between the fixture-receiving section and the wall to which the supporting plate is fastened.

[Claims 3 and 6 to 9 not printed in the Gazette.]

1,265,045. CAR-REPLACER. WILLIAM O. BUNNELL and QUINCY A. GATES, Wilkes-Barre, Pa. Filed Sept. 13, 1916. Serial No. 119,877. (Cl. 104—163.)

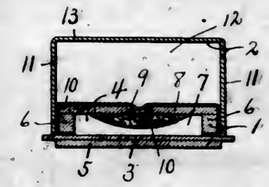


1. In a car replacer, the combination of a body bent to form an inclined plane portion and a base, a tongue formed on the body, said tongue terminating at a point over a rail for directing a wheel onto the same.

2. A car replacer including a body bent to form an inclined plane portion and base, a hook carried by the body and a tongue extending therefrom for engagement upon the head of a rail.

3. A device of the character described including a body bent to form an inclined plane portion, a base formed on the body, a tongue extending from the body for engagement with the head of a rail, a strap having one end secured to the underside of the tongue, and a hook formed on the free end of the strap for a purpose specified.

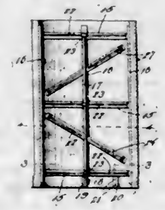
1,265,046. BOX. CHESTER WALBRIDGE BURNHAM, Oneida, N. Y., assignor to Oneida Community, Limited, Oneida, N. Y., a Corporation of New York. Filed Feb. 1, 1917. Serial No. 145,904. (Cl. 211—28.)



4. In a box, a bottom comprising an intermediate plate and lower and upper panel portions projecting downwardly and upwardly, respectively, therefrom, said panels being of substantially the same width and length, one of said panels having an inset portion and a fabric covering extending over the upper surface and side walls of said panel, and a cover telescoped outside of said panel and frictionally engaged with said fabric and having its lower edge in substantial contact with said intermediate plate.

[Claims 1 to 3 not printed in the Gazette.]

1,265,047. GASEOUS-FUEL MIXER. ANTONIO J. CANOVA, Jacksonville, Fla. Filed Dec. 1, 1916. Serial No. 134,489. (Cl. 48—180.)



1. In a gaseous fuel mixing device, a casing, a plurality of transversely extending mixing elements mounted therein in spaced relation, each element comprising a plurality of closely spaced layers of foraminous material, and a mixing element of similar construction mounted for oscillation between adjacent stationary elements.

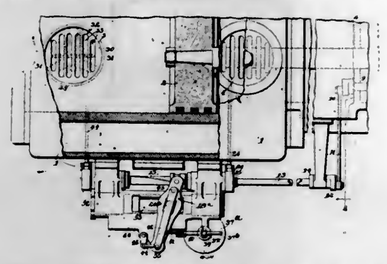
2. In a gaseous fuel mixing device, a casing, a plurality of stationary transversely extending mixing elements mounted therein in spaced relation, mixing elements mounted for oscillation within the casing between adjacent stationary elements, and means operable from without the casing for adjusting said movable elements, said elements comprising a plurality of closely spaced layers of fine mesh wire fabric.

3. In a gaseous fuel mixing device, a tubular casing open at either end, a plurality of transversely extending annular members mounted therein in spaced relation, strips connecting said rings, a rod extending longitudinally and centrally of the casing and passing through the rings, means supporting the ends of the rods upon the casing, and a plurality of closely spaced layers of fine mesh wire fabric stretched across each of said annular members.

4. In a gaseous fuel mixing device, a tubular casing open at either end, a plurality of stationary annular members disposed transversely and in spaced relation within the casing, strips connecting said annular members a rod extending longitudinally and centrally of the casing and through the rings, diametrically extending members supporting the ends of the rods upon the casing, a movable annular member between each adjacent aforesaid stationary annular members, trunnions provided upon said movable annular members, said casing having openings to receive the trunnions whereby to support said annular members for oscillation, means engaging the trunnions to retain the annular members against displacement

subsequent to adjustment, and a plurality of layers of fine mesh wire fabric inclosed within each of said stationary and movable annular members.

1,265,048. AIR-COMPRESSOR. CARL A. V. CARLSSON, Washington, D. C. Filed May 24, 1916. Serial No. 99,611. (Cl. 230—24.)



1. The combination with an air compressor having a series of air controlled valves, of a receiver connected wtih said compressor, and means controlled by the pressure in the receiver for holding open certain of said valves during a period when the valves are otherwise normally closed, said means including a stop finger, a cam roller, an oscillated cam, connections between said cam roller and said stop finger for operating the latter, means operated by the air from said receiver for shifting the position of the cam, said last-named means comprising a sleeve having spirally arranged engaging members for engaging the cam, and means for moving said sleeve longitudinally of its axis to cause the rotation of the cam.

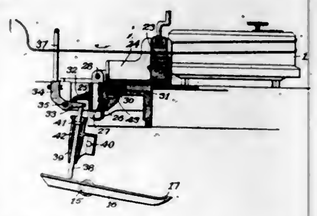
4. The combination with a compressor having a cylinder provided with automatic air valves at each end thereof, a receiver connected with said compressor, means for holding certain of said valves at each end of the cylinder open during a period when they are otherwise normally closed, said means comprising stop fingers, a pair of cams for operating said stop fingers, and means operated by the pressure from said receiver for rotating said cams about their axes in opposite directions and to the same extent.

6. The combination with a compressor having a cylinder provided with automatic air valves at each end thereof, a receiver connected with said compressor, means for holding certain of said valves at each end of the cylinder open during a period when they are otherwise closed, said means comprising stop fingers, a pair of cams for operating said stop fingers, and means operated by the pressure from said receiver for rotating said cams about their axes in opposite directions and to the same extent, said last-named means comprising a sleeve having helically arranged members on the outside surface thereof, one end of said sleeve having said helical members extending in one direction around the sleeve and the opposite end having the helical members extending in the reverse direction, and engaging portions of the cam, means for shifting the sleeve longitudinally of its axis in either direction, thereby causing the rotation of the cams in opposite directions, and means for holding the sleeve stationary until the pressure in the receiver reaches a predetermined point.

[Claims 2, 3, and 5 not printed in the Gazette.]

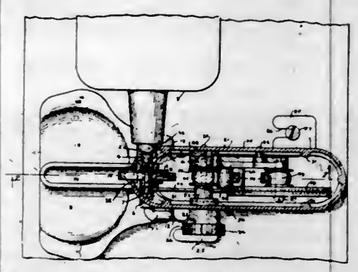
1,265,049. WIRE-DRAWING MACHINE. ELBERT H. CARROLL, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed June 24, 1914. Serial No. 847,106. (Cl. 205—16.)

1. In a wire drawing machine, the combination with a rotatable wire drawing block, of a treadle operable to connect and disconnect said block with its driving power, a die box yieldingly held in a predetermined position by the tension of the wire being drawn therethrough by said block, and adapted by the release of said tension to move in a predetermined path, and an independently movable connection between said die box and treadle, adapted by the movement of the former to rock the latter into inoperative position to disconnect said block from its driving power.



2. In a wire drawing machine, the combination with a rotatable wire drawing block, of a treadle operable to connect and disconnect said block with its driving power, a die box yieldingly held in a predetermined position by the tension of the wire being drawn therethrough by said block, and adapted by the release of said tension to move in a predetermined path, a pivoted member adapted to form an obstruction to a loop or kink in the wire, and independently movable means bearing against said treadle for holding said pivoted member in operative position, and bearing against a portion of said member which is interposed between said movable means and the path of movement of said die box, whereby said pivoted member is operable, either by a loop in the wire or manually, to move said treadle into inoperative position, independently of any movement by the die box.

1,265,050. GRINDING-MACHINE. HERMAN E. S. CHAYES, New York, N. Y. Filed Aug. 16, 1915. Serial No. 45,750. (Cl. 51—7.)



1. A device of the kind described, including a grinding wheel, an endless conveyer having a moistener attached thereto and coöperating with said wheel to moisten it, and means for expressing moisture from said moistener.

2. A device of the kind described, including a grinding wheel, an endless conveyer having a moistener attached thereto and coöperating with said wheel to moisten it and means for regulating the amount of moisture carried by the moistener.

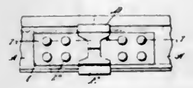
3. A device of the kind described, including a grinding wheel, an endless conveyer having a moistener attached thereto and coöperating with said wheel to moisten it and means for removing the excessive amount of moisture carried by the moistener.

4. A device of the kind described, including a grinding wheel, an endless conveyer having a compressible moistening member attached thereto and coöperating with said wheel to moisten it and means for compressing the moistening member for expressing excessive moisture therefrom.

5. A device of the kind described, including a grinding wheel, an endless conveyer having a moistener attached thereto and coöperating with said wheel to moisten it and rollers between which the endless belt is arranged to pass for expressing moisture from said moistener carried thereby.

[Claims 6 to 11 not printed in the Gazette.]

1,265,051. RAIL-JOINT AND METHOD OF MAKING SAME. EDWARD S. CLARK, St. Louis, Mo. Filed July 27, 1917. Serial No. 183,071. (Cl. 239—4.)



1. A method of producing an electrically welded rail joint, characterized by arranging fillers or metal rods transversely in the webs of two abutting rails, arranging fish plates or bars longitudinally of the rails at opposite sides of the webs and thereafter heating said fillets by an electric current so as to weld them to the webs of the rails and to said fish plates.

2. A method of producing an electrically welded rail joint, characterized by arranging fillers or metal rods transversely in the webs of two abutting rails, arranging fish plates or bars longitudinally of the rails at opposite sides of the webs, and thereafter raising said fillets to a welding temperature and subjecting the fillets and fish plates to pressure so as to weld the fillets to the webs of the rails and to the fish plates.

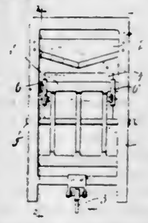
15. A rail joint, comprising bars or fish plates arranged on opposite sides of the webs of the rails, and fillets or metal rods arranged transversely of the webs of the rails and welded to said webs and to said fish plates.

19. A rail joint, comprising bars or fish plates arranged at opposite sides of the webs of the rails, toothed reinforcing elements interposed between the fish plates and the webs of the rails, and transversely-disposed connecting devices electrically welded to the webs of the rails, fish plates and said reinforcing elements, the connecting devices at the center of the joint being welded to the inner sides of the fish plates and the connecting devices at the ends of the joint being provided with heads that lap over the outer sides of the fish plates.

21. A rail joint, comprising fish plates arranged at opposite sides of the webs of the rails, reinforcing elements interposed between the fish plates and the webs of the rails and provided with teeth or ribs that are sunk into said parts, head supports and base supports at the center of the joint that reinforce the heads and the base flanges of the rails, said supports being permanently connected to the rails and to said fish plates, and fillets extending transversely through the webs of the rails and electrically connected to same and to said fish plates.

[Claims 3 to 14, 16 to 18, and 20 not printed in the Gazette.]

1,265,052. BOX-SHOOK MACHINE. ERNEST L. CLARK, St. Maries, Idaho. Filed Nov. 30, 1917. Serial No. 204,711. (Cl. 144—42.)



2. The combination with a knife holder having a grooved end and a countersunk opening, a head swiveled in the opening and a coiled spring engaging the head and countersunk portion, a knife secured in the head having a rounded cutting edge, and shoulders in the grooved end to limit movement of the head.

[Claim 1 not printed in the Gazette.]

1,265,053. METER-BOX. HORACE W. CLARK, Mattoon, Ill., assignor to H. W. Clark Co., Mattoon, Ill., a Corporation of Illinois. Filed Jan. 15, 1915. Serial No. 2,340. (Cl. 137—13.)



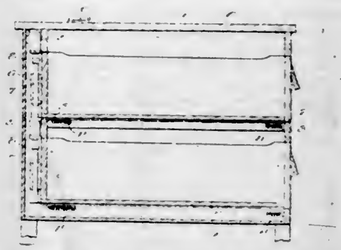
1. In a meter box, the combination of a body having an open top, a removable cover for the top, a locking-bar slidably connected to the underside of the cover, a key-operated rotatable shifter-plate for said bar and a lost-motion connection between said plate and said bar.

3. In a meter box, the combination of a body, having an open top, a removable cover for the top, a locking bar slidably mounted at the underside of the cover, a rotatable key-operated plate, and a stud-and-slot connection between the bar and said plate.

5. In a meter box, the combination of a body, having an open top, a cover for closing said top, flanges on the underside of the cover having a slot and a notch therein and a locking bar slidably mounted in said slots and notch.

[Claims 2, 4, and 6 to 12 not printed in the Gazette.]

1,265,054. ELECTRICAL DRAWER-LOCK. BRYANT W. CLAUSON, Rexford, Kans. Filed Apr. 10, 1917. Serial No. 160,962. (Cl. 45—94.)



1. The combination with an article of furniture and the slidable drawers thereof, of a plurality of magnets supported adjacent the rear portions of the drawer, apertured guide bars arranged in proximity of said magnets, slidable bolts received by the guide bars and having armature plates arranged on their upper ends, keepers carried on the adjacent ends of said drawers for receiving the bolts therein, at times, means for independently energizing the magnets, and means engaged with the forward portions of said article and the various drawers for imparting movement thereto subsequent to the releasing of the bolts.

[Claim 2 not printed in the Gazette.]

1,265,055. REGISTER. HARRY E. CLOVER, Elkhart, Ind., assignor to The Clo-Mix Company, Elkhart, Ind., a Corporation. Filed Dec. 20, 1916. Serial No. 138,047. (Cl. 98—49.)

1. In a register of the class described, the combination with the side and end walls of the register frame, of a grating carrier fastened to said frame walls and provided with a ledge and a lateral extension; a grating mounted upon said ledge; marginal flange member mounted upon said grating carrier lateral extension and bent around and beneath said grating carrier extension, said marginal

flange member having spaced lugs struck up therefrom adjacent the frame corners and adapted to maintain the spaced relation between said frame and its installation mount; and means for preventing the displacement of said grating from said ledge.



2. In a register of the class described, the combination with the side and end walls of the register frame, of a grating carrier mounted upon said frame walls and provided with a ledge and a lateral extension; a grating mounted upon said ledge; and a marginal flange member fastened to said grating carrier lateral extension and provided with an extension which is arranged above the ends of the bars of said grating.

5. In a register of the class described, the combination with the register frame, of tiltable damper blades provided with trunnion pin boxes; headed trunnion pins loosely mounted in said boxes and journaled in said frame wall, the heads of said pins preventing inward movement thereof; and an abutment member arranged over the heads of said trunnion pins whereby outward movement of said pins is prevented.

7. In a register of the class described, the combination with the register frame having a grating bar ledge below the frame marginal flange and tiltable damper blades journaled in said frame, each of said blades being provided with an arm, of a damper blade actuation bar operatively connected with said damper blade arms for tilting said blades, said actuation bar having a flange projecting laterally therefrom into slidable engagement with the frame wall, and having its upper end in slidable engagement with said ledge.

[Claims 3, 4, and 6 not printed in the Gazette.]

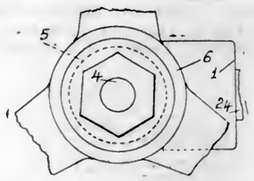
1,265,056. SHANK-STIFFENER AND HEEL-PLATE FOR SHOES. LEE ORA COBLER and JOSEPH E. DEANDREA, Dallas, Tex. Filed July 14, 1917. Serial No. 180,503. (Cl. 36—42.)



A shoe having a sole terminating at the breast of the heel of the shoe, a metallic plate secured inside of the shoe and extending over the sole and heel of the shoe, a metallic strip interposed directly between the plate and the heel of the shoe and means for securing the plate and strip respectively to the sole and heel of the shoe.

1,265,057. STEERING-GEAR-LOCKING MECHANISM. JAMES L. COOK, Springfield, Ill. Filed Dec. 1, 1917. Serial No. 204,824. (Cl. 70—129.)

1. In steering-gear locking-mechanism, the combination of a steering column; a casing adapted to be permanently attached to the steering-column and having a mortise to receive a locking bolt; a hub adapted to rotate on the steering column and having in its walls a radial hole adapted to accommodate a stud; and a pivoted locking-block having a stud adapted to enter the hole in the hub; and a bolt adapted to enter the mortise in the casing to lock the locking-block in the casing and the stud in the hole in the hub.



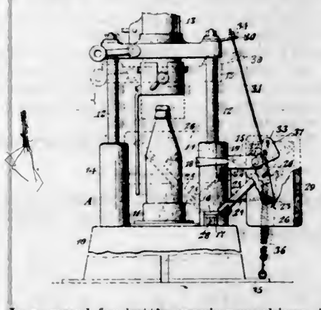
2. In steering-gear locking-mechanism, the combination of a steering column having a radial hole in its wall; a hub adapted to rotate on the steering column and having in its wall a radial hole registrable with the radial hole in the steering column; a casing stationary on the steering column; and a locking-block pivoted in the casing and having a stud adapted to occupy the radial hole in the hub and the radial hole in the steering column.

3. In steering gear locking-mechanism, the combination of a steering-column; having a radial hole; a hub rotative on the steering column and having a radial hole registrable with the radial hole in the steering column; a casing stationary on the steering-column; a locking-block pivoted in the casing and having a stud adapted to simultaneously occupy the radial hole in the hub and the radial hole in the steering-column; and a spring adapted to be compressed by pressing the locking-block inward in the casing and acting to turn the locking-block outwardly on its pivots to retract the stud of the locking-block from the alined radial holes in the steering-column and the hub.

7. In steering-gear locking-mechanism, the combination of a casing having a chamber; a locking-block occupying the chamber of the casing; pivots extending through the respective side walls of said chamber into said locking-block; and a strap inclosing the casing and covering and preventing access to the pivots.

[Claims 4 to 6 not printed in the Gazette.]

1,265,058. GUARD ATTACHMENT FOR BOTTLE-CAPPING MACHINES. FRED COOPER, Bloomfield, Mo., assignor of one-half to John A. Cooper, Bloomfield, Mo. Filed Aug. 31, 1917. Serial No. 189,149. (Cl. 74—105.)



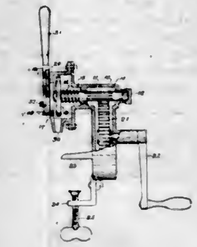
1. In a guard for bottle capping machines, the combination, with the main frame of the machine, the reciprocating capping plunger and the plunger carrying rods, of a bracket detachably fixed to the frame, an arm pivoted for vertically swinging movement in said bracket, a guard carried by said arm and movable thereby in front of the bottle holder to constitute a barrier or to inoperative position at one side of the machine, and means connected with one of the plunger carrying rods for automatically operating the arm to bring the guard to barrier position or to inoperative position on the lowering and ascending of the plunger.

3. In a guard for bottle capping machines, the combination with the main frame of the machine, the reciprocating capping plunger and the plunger carrying rods, of a support upon the frame, a vertically swinging guard plate movable to operative and inoperative positions, a swinging arm for the guard plate pivoted in the support, a bell crank lever pivoted on the support, a connection between one arm of the lever and the arm for the guard plate, and a connection between one of the plunger carrying rods and the other arm of the lever.

13. The combination with the plunger of a bottle capping machine, of a guard pivotally mounted on the machine at one side of the bottle holder of said machine for movement edgewise, a motion multiplying lever connected to said guard, a spring connected to said lever for moving the guard in the arc of a circle from a position beyond the machine to a position in front of the bottle holder, and a rod connected to the motion multiplying lever and having a loose connection with the plunger, which permits the plunger to work downwardly without affecting said connection so as to allow the spring to move the guard through the motion multiplying lever to its operative position.

[Claims 2 and 4 to 12 not printed in the Gazette.]

1,265,059. CHALK-RIMMER. LEE CRAWFORD, Spokane, Wash. Filed Feb. 10, 1917. Serial No. 147,917. (Cl. 90—12.)



A chalk trimmer comprising a frame, a clamp for holding the chalk, cutter blades mounted in a cutter frame on the end of a shaft rotatably mounted in front of said clamp, said shaft being slidably mounted in a bearing in said frame, a coil spring encircling said shaft between said bearing and said cutter frame, means for rotating said shaft and a projection in the end of said shaft extending outwardly beyond said cutter blades as a means for stopping the advancement of the cutter blades when the bottom of the opening in the chalk has been reached.

1,265,060. PACKAGE-TIE. ROBERT J. CREIGHTON, Carnduff, Saskatchewan, Canada. Filed Sept. 22, 1915. Serial No. 52,125. (Cl. 24—18.)

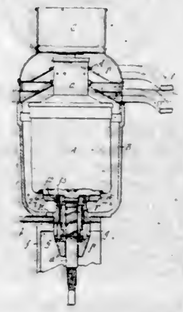


1. In a package tie, a tying cord, a pair of cord gripping arms, a releasing eye communicating with the gripping space between said arms and arranged whereby a pull upon the tying cord will move it into a gripped position between said arms and a further pull in the same direction will move the cord into said releasing eye.

2. In a package tie, a tying cord, a pair of gripping arms, a releasing eye communicating with the gripping space between said arms and arranged whereby a pull upon the tying cord will move it into a gripped position between said arms and a further pull in the same direction will move it into said releasing eye, and a resilient finger carried by one of said arms and forming a temporary check for the movement of said cord into said eye.

3. In a package tie, a tying cord, a pair of gripping arms, a releasing eye communicating with the gripping space between said arms and arranged whereby a pull upon the tying cord will move it into a gripped position between said arms and a further pull in the same direction move it into said releasing eye, a resilient finger attached to one of said arms and spanning the gripping space between the arms having its free end lying upon the gripping arm from which it is free from connection, said resilient finger forming a temporary check for the movement of said cord into said eye.

1,265,061. CENTRIFUGAL LIQUID-SEPARATOR. CHARLES B. DALZELL, Little Falls, N. Y., assignor to D. H. Burrell & Company, Little Falls, N. Y. Filed Mar. 27, 1917. Serial No. 157,616. (Cl. 233—21.)



1. In a centrifugal liquid separator, the combination of a revolving separator bowl, a stationary bowl case in which said bowl revolves, the space surrounding the bowl being free from obstructions that prevent air from rotating with the bowl in said space, and means which revolve with said bowl and are arranged to cause an air pressure in the bowl case which opposes any downward flow of air in the bowl case due to the revolution of the bowl.

2. In a centrifugal liquid separator, the combination of a revolving separator bowl, a stationary bowl case in which said bowl revolves, the space surrounding the bowl being free from obstructions that prevent air from rotating with the bowl in said space, and means revolving with said bowl and arranged to cause a flow of air upwardly through the space between the bowl and bowl case.

3. In a centrifugal liquid separator, the combination of a revolving separator bowl, a bowl case in which said bowl revolves, means for admitting air into the lower portion of said bowl case, and blades at the lower portion of said bowl which revolve with the bowl for causing an upward current of air through the space between the bowl and bowl case.

4. In a centrifugal liquid separator, the combination of a revolving separator bowl, a bowl case in which said bowl revolves, and blades on the lower portion of said bowl for causing an upward current of air through the bowl case.

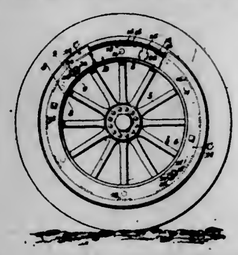
5. In a centrifugal liquid separator, the combination of a revolving separator bowl, a bowl case in which said bowl revolves, an air inlet in the lower portion of said bowl case, and blades which revolve with said bowl for causing air to flow upwardly in said bowl case from said air inlet.

[Claims 6 to 9 not printed in the Gazette.]

1,265,062. AUTOMOBILE-WHEEL RIM. ELAM H. DAVIS, Memphis, Tenn. Filed June 5, 1916. Serial No. 101,857. (Cl. 152—21.)

1. A wheel rim including a fixed section having a flange extending around the periphery of a felly, said flange being

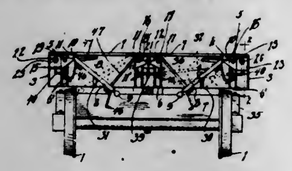
of a width less than the width of the felly, and a hook flange for engaging one of the beads of a tire casing base, an annular ring adapted to be connected to the felly, said ring at its periphery extending slightly beyond the periphery of the felly in spaced relation with the said flange of the fixed section, a removable section in the nature of an annular ring having a hook flange adapted to engage one of the beads of the tire casing base, said removable section being provided at spaced intervals along the base of its hook-flange with inwardly extending segments having downturned inner edges, said ring having its periphery at spaced intervals provided with recesses through which the



segments may be passed whereby to position the downturned edges of the segments in the space defined between the ring and the adjacent edge of the said fixed section flange, wedges formed on the periphery of the ring at spaced intervals having inclined inner faces against which the downturned edges of the segments are adapted to bear when the said removable section is turned in one direction whereby to wedge said section in place, and means for retaining the said movable sections against accidental reverse movement.

[Claims 2 to 7 not printed in the Gazette.]

1,265,063. DUMPING-CAR. DEE DEMPSEY, Mace, Idaho. Filed Dec. 4, 1917. Serial No. 205,403. (Cl. 105—14.)



1. The combination of a railway dumping car having freely pivoted floor sections and supporting means therefor, draft means on the car adapted for actuation by a locomotive, and connections between said draft means and supporting means whereby the latter means is withdrawn to permit dumping of a load.

2. The combination in a train of dumping cars each having dumping floor-sections, of means for coupling the cars together, and connections from these coupling means whereby the dumping floors are released to dump a load.

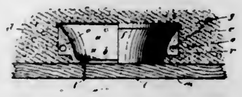
3. The combination in a train of railway cars each having a reversible, dumping floor section at the sides of its longitudinal center, a plurality of coupling devices carried by each car and adapted to couple with an adjoining car, and connections between said devices and sections, whereby the loaded sections may be selectively dumped.

4. The combination with a car floor, of a pivotal floor section, a resiliently supported rock shaft and suspending blocks thereon for the section, a supporting member for the section when loaded and draft means on the car for releasing the supporting member.

5. The combination with a car floor, of a pivotal floor section, a resiliently supported rock shaft and suspending blocks thereon for the section, a supporting member for the section when loaded and means on the car for releasing the supporting member.

[Claims 6 to 8 not printed in the Gazette.]

1,265,064. CONCRETE-INSERT. FORD DONLEY, Cleveland, Ohio, assignor to The Donley Brothers Company, Cleveland, Ohio, a Corporation. Filed Nov. 17, 1913. Serial No. 801,347. (Cl. 72—105.)



1. In combination with an annular insert shell for plastic material, an internal flange in said shell, a circular zone-shaped anchor-plate capable of insertion into the open end of said shall and fitted to rotate upon the inside of said flange, and a radial slot in said anchor-plate adapted to receive and seat an anchor-bolt so that said plate may be turned with said bolt.

3. In an insert for plastic hardening structures; a self-anchoring shell flaring outwardly, a removable cover for the larger end of said shell, an internal flange in the smaller end of said shell, notches formed in the inner edge of said flange adapted to receive and engage means for temporarily fastening said shell to a matrix, and bolt-anchoring means engageable with said flange and insertible through the smaller end of said shell.

[Claim 2 not printed in the Gazette.]

1,265,065. SHEET-METAL CAR END. IRA S. DOWNING, Cleveland, Ohio, assignor to Walter P. Murphy, Chicago, Ill. Filed Mar. 5, 1912. Serial No. 681,784. (Cl. 105—192.)



1. A sheet metal end structure for railway cars formed with strengthening ribs pressed out of the metal and running in a substantially horizontal direction, similarly formed strengthening ribs non-continuous with said horizontal ribs which extend in substantially vertical direction, with a flange adapted to support the roof of the car, and with an inturned bottom flange which rests upon the end framework of the car.

4. A car end composed of two sections of sheet metal provided with stiffening ribs or corrugations which aline at the junction of the sections, the said sections having connecting flanges extending from the protuberant sides of the corrugations.

6. In a car end, a sheet metal panel provided with stiffening corrugations and having an attaching flange at the ends of said corrugations.

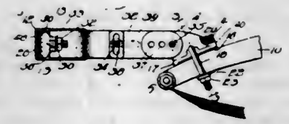
7. In a sheet metal car end, a plurality of sections secured together at their adjacent edges by means of flanges extending at an angle to the car end, corrugations pressed out of said metal and extending across the flanges

to stiffen the end in a direction at an angle to the flanges.

8. In a railway box car having a wood framing, the combination with said framing and the longitudinal sustaining members for the roof; of a sheet metal end structure provided at its lower edge with a horizontally extending flange which stiffens the structure transversely, and at its upper edge with a stiffening flange which serves also to support the longitudinal roof sustaining members, and formed with vertical corrugations which extend substantially from the roof of the car to the floor so as to act as beams rigidifying the sheet metal structure vertically.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,066. BUMPER FOR AUTOMOBILES. THOMAS I. DUFFY, Chicago, Ill. Filed Jan. 15, 1917. Serial No. 142,401. (Cl. 213—39.)



1. In a bumper, the combination with a bumper bar, of a closed leaf spring comprising a curved central member attached centrally thereof to said bar, converging members opposed to said curved member and terminals brought out from said converging members, and an attaching bracket fixed to said terminals.

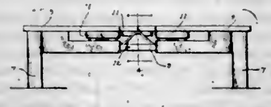
6. The combination with a bumper member having a rear bolt opening and a front longitudinally disposed slot, of a bracket overlapping said member and provided toward its rear end with a longitudinal series of bolt openings adapted, by endwise displacement of said member, to separately register with the rear opening of said member, and provided toward its forward end with a bolt opening, to register with said slot and clamping bolts fitted in said registering openings.

14. A bracket for attaching a bumper to the frame member of a vehicle formed to provide a saddle to engage a supporting surface on the frame member, angular clamping bolts connected to said bracket and extending on opposite sides of the frame member, the bracket having inclined pockets for engagement by the shorter inturned ends of said bolts, and nuts threaded to said bolts.

18. In a bumper, the combination with a channeled bumper bar and a leaf thrust resisting spring having a portion thereof lying between the flanges of said bar and against the web thereof, of a clamping block between the flanges of the bumper bar and bearing against said spring, a T bolt, the ends of the cross member of which are interlocked to the flanges of said bar, and a nut threaded to said bolt and adapted to act against said block.

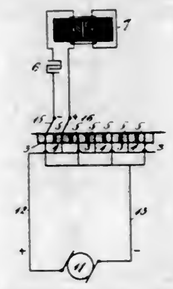
[Claims 2 to 5, 7 to 13, 15 to 17, and 19 not printed in the Gazette.]

1,265,067. EXTENSION-TABLE. LILLIAN M. DUNN, Camas, Wash. Filed Dec. 2, 1916. Serial No. 134,765. (Cl. 45—9.)



An extension table consisting of a frame mounted on suitable legs, a top mounted on said frame, a second frame slidably mounted in said first frame, a V-shape strip centrally positioned lengthwise in said second frame, leaves adapted to be carried on said second frame, leaf springs carried under said leaves and adapted to adjust said leaves in position to form a section of said top when desired, and said V-shaped strip limiting the upward movement of said leaves.

1,265,068. METHOD AND APPARATUS FOR PRODUCING ALTERNATING CURRENTS. REGINALD AUBREY FESSENDEN, Brookline, Mass., assignor to Submarine Signal Company, Waterville, Me., a Corporation of Maine. Filed Dec. 2, 1914. Serial No. 875,071. (Cl. 175—364.)

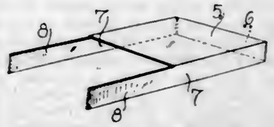


1. A method of producing alternating current from direct current which consists in first adjusting an electric current circuit containing a condenser so as to have a time constant less than one-half the period of the frequency desired, thereby enabling the condenser to be charged in less time than the time of one-half the period of the frequency desired, then connecting by means of a pole changer the adjusted electric current circuit to a source of continuous current, thereby charging the condenser of the said electric current circuit in one direction, then insulating the said current circuit, thereby preventing the condenser from discharging, then connecting the said electric current circuit in a reverse direction to a continuous current circuit, thereby annulling the residual charging of the condenser and giving it a charge of opposite polarity.

2. Apparatus for producing from a direct current an alternating current, which comprises a commutator, a source of direct current supply the terminals of which are continuously connected to the same terminals of said commutator, and an electric circuit containing a condenser, the terminals of said electric circuit being adapted to be connected with the alternately polarized terminals of said commutator for a period of time greater than the time required to charge the condenser, whereby the direction of the current in said electric circuit and the charge in said condenser are electrically reversed.

3. Apparatus for producing an alternating current from a direct current, comprising a source of direct current, a commutator the terminals of which are permanently connected to the terminals of said direct current source and an electric circuit containing a condenser, the terminals of said electric circuit being adapted to engage alternately the terminals of said commutator whereby said condenser will be charged and its charge reversed alternately, the time-constant of said condenser being less than one-half the period of alternation.

1,265,069. GUARD FOR MATCH-BOXES. WILLIAM A. FETSCH, St. Paul, Minn. Filed Mar. 17, 1917. Serial No. 155,578. (Cl. 229—9.)

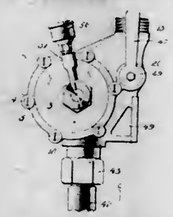


1. A guard device for match boxes consisting of a rectangular metal plate adapted to be arranged over the

matches contained in the box and having flanges on its longitudinal edges, a portion of each flange being free for resilient clamping engagement against one of the side walls of the box and said plate also having a flange on one of its ends to extend between the match heads and the opposed end wall of the box.

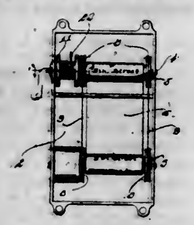
[Claims 2 and 3 not printed in the Gazette.]

1,265,070. PUMP. HENRY J. FEYZES, Cleveland, Ohio, assignor of one-half to The Peters Machine & Mfg. Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 7, 1915. Serial No. 19,624. (Cl. 103—44.)



A pump of the character set forth comprising a cylindrical casing, and a rotary element mounted within said casing, and eccentrically with respect thereto, said casing having an inlet and an outlet port which communicate with its interior through its cylindrical wall and are spaced angularly apart, said casing having an enlargement on that portion of its periphery which is located nearest the eccentrically mounted rotary element and said enlargement having a valve controlled by-pass communicating with said inlet and outlet ports for the purpose described.

1,265,071. INDICATOR FOR STREET-CARS AND THE LIKE. CHARLES FLINT, Spokane, Wash. Filed Apr. 26, 1916. Serial No. 93,668. (Cl. 242—55.)

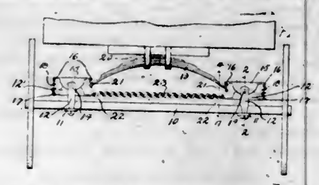


In a station indicator, the combination with a casing and a roller mounted therein, of a driving shaft and operating means therefor, a loose roller on the shaft having a socket, and a webbing passed over said rollers, a fixed spool on the shaft having a bearing hub in the casing and formed with a recess in one face, and a slidable locking pin in the spool adapted to engage in said socket and having a collar between the spool and socket of the roller adapted to be withdrawn into the recess.

1,265,072. VEHICLE-SPRING. JOE FREDRICKSON, Pelican Rapids, Minn. Filed Feb. 20, 1917. Serial No. 149,829. (Cl. 267—19.)

1. A suspension device for a vehicle including a body and an axle, clips detachably carried by the end portions of the axle of the vehicle and provided with upwardly extending arms, a pair of levers pivotally supported between the arms of each clip, springs connecting the levers of each pair at one end, a coil spring connecting the inner ends of one of each of the pairs of levers, and a semi-elliptical spring disposed between the inner ends of the others of the pairs of levers and connected therewith by links.

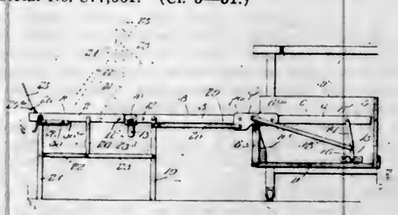
3. A suspension device for a vehicle including a body and an axle semi-elliptical spring secured to the vehicle body, a pair of levers pivotally mounted on the axle of the vehicle and each having one end pivotally connected to a corresponding end of the semi-elliptical spring, a



second pair of levers also mounted pivotally on the axle, springs connecting corresponding ends of the levers together, and a coil spring connected to the remaining ends of the second pair of levers.

[Claim 2 not printed in the Gazette.]

1,265,073. BED STRUCTURE FOR DAVENPORTS. HYMAN FREEDMAN and NATHAN M. FREEDMAN, Chicago, Ill., assignors to Davoplane Bed Company, Chicago, Ill., a Corporation of Illinois. Filed December 17, 1914. Serial No. 877,661. (Cl. 5—51.)



1. A bed structure for davenports, comprising standards adapted to be mounted upon the seat structure of the davenport, a mattress frame comprising three sections, each section consisting of two side rails, and the forward and rear sections each having an end rail substantially integral or unitary with their side rails, pivotal connections between the rear ends of the side rails of the intermediate section and said standards, hinge-plates, one end of each being pivotally secured to the side rails of said last mentioned section mediate its ends, pivotal connections between the forward ends of the side rails of the rear section and the ends of aforesaid hinge-plates opposite to those above mentioned, spacing plates, one of the ends of each respectively being pivoted to the forward ends of the side rails of the intermediate section and their opposite ends being pivoted to the rear ends of the side rails of the forward section, means for supporting the outer end of the intermediate section when in extended position, the same being folded adjacent the side rails of said section when folded, said means being operable by relative movement of the hinge-plates and intermediate sections, and means for supporting the outer end of the forward section when in extended position, the same being folded adjacent the side rails of said section when folded, said means being operable through the combined instrumentalities of the first mentioned supporting means and the side rails of the forward section.

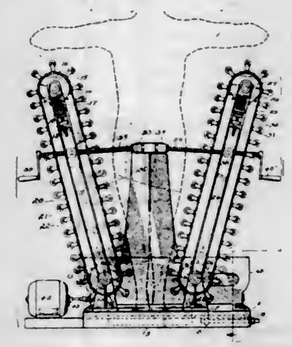
4. A foldable sectional mattress frame adapted to fold with the bedding thereon in made up form, comprising a pair of sections turnably connected or hinged together, hinge means therefor including a pair of spacing members or links the ends of which are connected pivotally to said sections, supporting means whereon the remote edge of one of said sections is swingingly mounted, a leg turnably connected to said section adjacent to said hinge means, automatic link means for folding and unfolding said leg in accordance with the movement of said section with respect to said supporting means, a leg turnably connected to the remote edge of the other section, and

jointed link control means therefor turnably connected both to the first mentioned leg and to said other section, whereby all of said legs may be folded and unfolded automatically in folding and unfolding said mattress frame.

6. A device of the class described, comprising a pair of bed sections turnably connected or hinged together, one being relatively stationary and the other being swingable thereon for folding and unfolding, the first mentioned section having leg means adjacent to its hinge edge, and said other section having folding leg means adjacent to its outer edge and leg folding control means therefor connecting medial parts of the first and last mentioned leg means, said control means including a pair of permanently connected positively operating links disposed pivotally in parallelogram relation to the last mentioned section and its said supporting means for all positions of the sections.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,074. MASSAGE-MACHINE. JAMES P. GARDNER, Chicago, Ill., assignor to The Reducing Machine Company, Chicago, Ill. Filed Oct. 12, 1914. Serial No. 866,316. (Cl. 128—16.)



1. In a massage machine, the combination of oppositely disposed vertically arranged yielding carriers, horizontal rollers mounted on said carriers, means for adjusting said carriers to bring the rollers in contact with the body of a person, and means for moving said carriers vertically to cause the rollers to move along the body.

2. In a machine of the character set forth, the combination of oppositely disposed belts, horizontal rollers carried by said belts, adjustable yielding supports for said belts, means for driving said belts in substantially vertical directions, and means whereby the belts may be moved toward or away from each other.

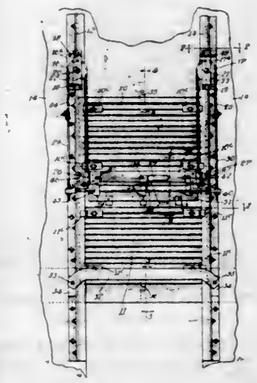
18. In a massaging device, the combination of a rigid frame, a sidewise movable frame, a series of rollers carried by each frame, means for causing bodily movement of said rollers relative to said frame, and spring means in the connection between each series of rollers and their support, substantially as described.

19. In a massaging device, the combination of a fixed standard, and a sidewise movable standard, a series of rollers reciprocably mounted on each standard, means for reciprocating said rollers, and means for adjusting said sidewise movable standard, substantially as described.

20. In a mechanical massaging device, the combination of a base, standards projecting from said base, one set of said standards being movable relative to the other, a roller support adjustably mounted on each of said standards, rollers carried by said roller supports, and mechanical means for reciprocating said rollers and supports, substantially as described.

[Claims 3 to 17, 21, and 22 not printed in the Gazette.]

1,265,075. ELEVATOR FIRE-DOOR. MILLARD GILMORE, Chicago, Ill. Filed Jan. 21, 1916. Serial No. 73,298. (Cl. 189—46.)



1. In a door for elevators, the combination of a vertically movable door for closing the opening in a wall, said door being movable downward to open the same and having rigidly secured to its upper edge a trucking bar, and a supporting bar supported clear from said wall and rigidly secured thereto for supporting said trucking bar in its open position for receiving the load that may be placed upon said trucking bar.

2. In a door for elevators, the combination of a vertically movable door for closing the opening in a wall, said door being movable downward to open the same and having rigidly secured to its upper edge a trucking bar, and a supporting bar supported clear from said wall and rigidly secured thereto for supporting said trucking bar in its open position for receiving the load that may be placed upon said trucking bar, said trucking bar consisting of an angle bar the outstanding flange of which is supported for substantially its entire length by said supporting bar when said door is in its open position.

[Claims 3 to 5 not printed in the Gazette]

1,265,076. PROCESS OF MAKING FERROPHOSPHORUS FROM IRON PHOSPHATIC MATERIAL. JOHN JEFFERSON GRAY, Jr., Rockdale, Tenn. Filed Aug. 2, 1916. Serial No. 112,865. (Cl. 75—45.)

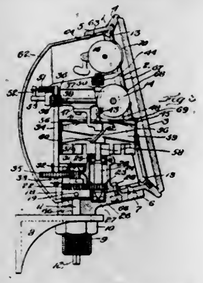
1. The process of making in a blast furnace ferro-phosphorus containing definite, uniform, proportions of more than 15% phosphorus from raw material consisting mainly of a phosphate of iron mixed with impurities which consists in preparing a suitable charge of solid carbon and said raw material, said carbon being in excess of that required to convert said material into high phosphorus pig iron; adding to said charge a suitable fluxing material for said impurities; and raising the temperature sufficient to reduce said iron phosphate to an iron phosphid and to flux off said impurities, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,265,077. SPEEDOMETER. LOUIS A. GREENLEAF, Beverly, Mass. Filed Apr. 17, 1913. Serial No. 761,750. (Cl. 264—12.)

1. A speedometer having a supporting base and a bezel rigidly secured thereto, actuating and indicating mechanism carried by the base and bezel, and an inclosing cover adapted to cooperate with the base and bezel

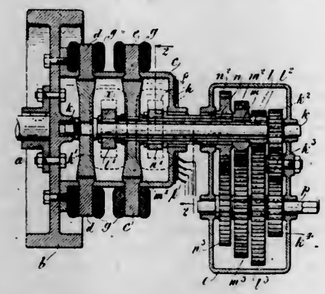
to inclose said actuating and indicating mechanism in a substantially air tight manner in combination with



means within said inclosure to generate a current of air and actuate the speed indicator thereby.

[Claims 2 and 3 not printed in the Gazette.]

1,265,078. TRANSMISSION FOR AUTOMOBILES. ALFRED W. GROTE, Brooklyn, N. Y. Filed June 30, 1917. Serial No. 177,951. (Cl. 74—59.)



1. A transmission comprising a driving shaft, a driven shaft, speed gears in constant mesh interposed operatively between said shafts, magnetic devices operatively interposed between said driving shaft and the driving gears and comprising a magnetic field and an armature for each speed gear, the one carried with the driving shaft and the other with the gear, with an air gap between and means to control the magnetic devices selectively.

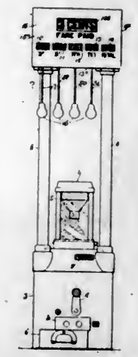
3. A transmission comprising a driving shaft, a driven shaft, speed gears in constant mesh interposed operatively between said shafts, separate shafts on which the driving gears are mounted, armatures on each of said last named shafts, magnetic field pieces carried with the driving shaft and coöperating with said armatures to couple them magnetically with the driving shaft and means to operate the magnetic devices selectively.

7. A transmission for automobiles comprising a flat wheel mounted thereon, a driven shaft, speed gears in constant mesh interposed operatively between said shafts, separate shafts on which the driving gears are mounted, armatures on each of said last named shafts, a circular casing mounted on the face of the flat wheel and inclosing said armatures, bearings in the end wall of said casing for said last named shafts, magnetic field pieces mounted in the peripheral wall of the casing for coöperation with the respective armatures and means to control the magnetic devices selectively to couple them magnetically with the driving shaft.

8. A transmission for automobiles comprising a driving shaft, a driven shaft, speed gears of different ratios in constant mesh interposed operatively between said shafts, a gear casing inclosing said gears, telescoped separate shafts on which the driving gears are mounted journaled in the end wall of the gear casing, armatures on each of said last named shafts, a circular casing for the armature carried with the driving shaft, said tubular shafts extending through the end wall of the circular casing and being journaled therein magnetically, field pieces mounted in the peripheral wall of the circular casing and coöperating with the armatures, field windings for the field pieces carried on the outer peripheral wall of the circular casing, contact rings for the respective field windings on the end wall of the circular casing, brushes coöperating with the rings and means to control the several circuits selectively.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,265,079. COLLECTION AND RECORDING OF FARES. FRANK A. GROVES, Dayton, Ohio, assignor to The Recording and Computing Machines Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 11, 1917. Serial No. 185,786. (Cl. 235—32.)



1. In an indicator, a frame, a transverse shaft having pivoted thereon a series of levers, means for holding each of said levers in their inoperative position, individual means to draw each of said levers into their operative position, a vertically extending lever pivoted at the outer end of the first-mentioned lever and loosely connected to a flash by a stud on said flash and a slot in said lever, a second transverse shaft on which a series of flashes are mounted, each of which is thus operatively connected to its respective lever and operating means, a third transverse shaft carrying affixed to it a series of bell crank levers, one end of each of which is loosely pinned through a pin and slot to its respective second-mentioned lever and on the other end of each of which is an individual counter corresponding to the respective flash with which it is in operative relationship, a fourth transverse shaft on which is located a series of levers adapted to be operated by the contact with the outer end of each lever with the stud on the second-mentioned lever when the second-mentioned lever is operated, thus operating a total counter and an audible signal, means operatively connected with said fourth-mentioned transverse shaft to operate said total counter and said audible signal, a fifth transverse shaft, a series of hooks on said transverse shaft, each of which is adapted to engage a corresponding hook on its respective flash to hold said flash in operative position, a sixth transverse shaft on which said flashes are pivotally mounted, and resilient means to hold said flashes, respectively, in their inoperative positions, whereby when the respective operative means is actuated its respective flash will be brought into view, held in place, and the individual and total counters as well as the audible signal operated.

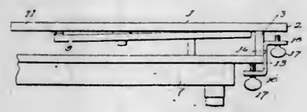
4. In an indicator, a frame, a plurality of levers pivoted thereto, means to actuate said levers, means attached to each of said levers to display a flash, means to actuate an individual counter, means to actuate a total counter, a plurality of apertures into each of which the outer end of one of said levers moves upon its respective operation, a plurality of shiftable means, one less in number than the number of apertures adapted to block the entrance to all of said apertures save one at a time, whereby when one lever moves into one aperture the blocking means will close the other apertures and prevent the other levers from entering into their respective apertures.

7. In an indicator, a frame, a shaft fixed therein, a plurality of flashes mounted on said shaft, each of said flashes having a pair of flash plates adapted for display one on each side of said indicator when the flash is brought into its operative position, a transverse arm at each end of each flash to support the respective ends of the display plates, means on one of said arms of each flash to engage a coöperating means on another shaft in said frame to hold said flash in its display position when it has been brought thereto, actuating means to bring each of said flashes into their operative positions, and means connected to said actuating means to operate an individual counter corresponding in denomination to its respective flash.

9. In a fare recorder, the combination, with an operating lever and a hand operated device for actuating said lever, of a spring retaining said lever against movement, a link connected to said lever and having a slot therein, a pivoted flash having an element riding in said slot in said link, a spring normally retaining said flash in concealing position, a latch holding said flash in viewing position, and means carried by said link for disabling said latch, said means having a lost motion connection such that part of the movement of the link occurs before the latch disabling movement begins.

[Claims 2, 3, 5, 6, 8, 10, and 11 not printed in the Gazette.]

1,265,080. IRONING-BOARD. THOMAS M. HALL, High Point, N. C. Filed June 23, 1917. Serial No. 176,585. (Cl. 68—10.)



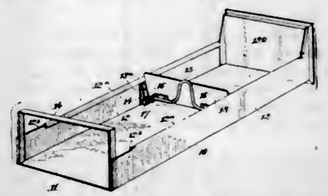
1. The combination with an ironing board of the class described, of a stationary support adjacent one end thereof, and clamping means associated with said end of the board adapted to clampingly engage the edge of a table between the stationary support or the projecting end of the board according to the position of said board.

2. The combination with an ironing board, a stationary support adjacent one end thereof, a swinging support adjacent the opposite end, clamping means associated with said board including a vertically disposed body portion secured to one end of the stationary support and extending below the same, oppositely bent laterally extending lips on the extremities of said body portion, and thumb nuts carried by said lips and longitudinally adjustable through the same.

1,265,081. FOLLOWER-BLOCK FOR FILING-CABINETS. JOHN HATFIELD, Brooklyn, N. Y., assignor to Universal Steel Cabinet Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed June 23, 1917. Serial No. 176,518. (Cl. 129—29.)

1. The combination with a filing case having a bottom and side walls flanged to provide slides or ways closed at the top and open toward the case bottom, of a follower having supporting members extending into said slides or ways, said members normally resting on the case bottom during free slidable movement of the follower, and means carried by the follower and coöperating with the case bottom for raising said members out of contact with said bottom and into clamping engagement with the closed top of the slides or ways.

4. The combination with a filing case having a bottom and side walls flanged to provide slides or ways, of a shiftable follower having plates extending into such slides and acting to support the follower on the bottom in one position and to frictionally engage said slides in another position of the follower, and means carried by the follower and coöperative with the case bottom to shift the follower between said positions, said means including a member pivoted to said follower and having crank arms and an offset, and shoes carried by said arms, said elements being relatively positioned to cause said shoes to act as fulcrum points during the follower shifting movements.



6. In follower structures for filing cases, a plate having angularly extending wings at its opposite ends, said plate having its vertical length inclined to the vertical, and plates secured to said wings and extending in directions both front and rear of the winged plate, said end plates having parallel top and bottom edges extending on horizontal planes with the plates extending in proximity to the plane of the lower edge of the inclined plate to locate the bottom edges of the end plates as supporting elements for the follower.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,082. PROCESS FOR IMPARTING A TRANSPARENT APPEARANCE TO COTTON. EDUARD HEBERLEIN, Wattwil, Switzerland. Filed July 20, 1917. Serial No. 181,813. (Cl. 8—20.)

1. The herein described process for imparting a transparent appearance to cotton consisting in treating the material with caustic alkali lye of at least 15° Baumé at a temperature below 0° C. until the transparent effect is produced.

6. The herein described process for imparting a transparent appearance to cotton, consisting in subjecting first the material to a treatment with sulfuric acid of over 50½° Baumé at a temperature below 0° C., then washing the material and treating it subsequently with caustic alkali lye of at least 15° Baumé at a temperature below 0° C.

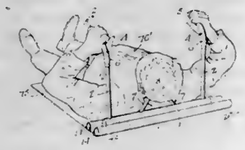
8. The herein described process for producing transparent pattern effects on cotton fabrics, consisting in treating the goods in places with caustic alkali lye of at least 15° Baumé at a temperature below 0° C., washing the goods after this treatment and subjecting them subsequently to a treatment with sulfuric acid of over 50½° Baumé and washing finally the goods.

9. The herein described process for producing transparent pattern effects on cotton fabrics, consisting in subjecting the goods in places for a few seconds to a treatment with sulfuric acid of over 50½° Bé., washing the goods after this treatment and treating them subsequently with caustic alkali lye of at least 15° Baumé at a temperature below 0° C.

13. The herein described process for imparting to cotton fabrics a transparent appearance showing pattern effects, consisting in acting alternately and repeatedly upon the fabrics with alkali lye of at least 15° Baumé at a temperature below 0° C. and with sulfuric acid of over 50½° Baumé in such a manner that a treatment with one of the said reagents takes place between two treatments with the other, the reagent employed at least at one of the said treatments being caused to react only in places on the fabrics and the latter being stretched at least at one of the said treatments and washed after each treatment.

[Claims 2 to 5, 7, and 10 to 12 not printed in the Gazette.]

1,265,083. MASSAGE APPLIANCE. HALBERT L. HOARD, Fort Atkinson, Wis. Filed Oct. 22, 1917. Serial No. 197,833. (Cl. 128—16.)

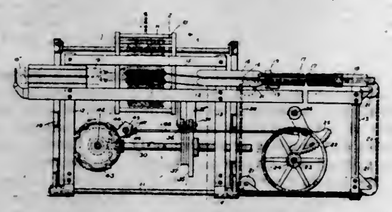


1. In a device of the described class, the combination of a horizontal bar, a pair of handles affixed to said bar, a pair of central members also affixed to near the center of said bar, said central members being each provided at its outer end with a roller bearing adapted, as said handles are moved, to traverse the head, neck and spine of the user.

6. In a device of the described class, the combination of a horizontal bar, a pair of handles affixed to said bar, a pair of central members also affixed to said bar, said central members being each provided at its outer end with a revoluble bearing adapted, as said handles are moved, to revolve as it traverses the head, neck and spine of the user, a spiral spring interposed between said rollers, a sheet, a pair of cylindrical members connected with said sheet, the space between said cylindrical members being adapted to form a groove for the reception of said first named bar.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,265,084. LOOM FOR WEAVING DOUBLE-PILE FABRICS. GEORGE F. HUTCHINS and HECTOR LE DOUX, Worcester, Mass., assignors to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Feb. 9, 1917. Serial No. 147,691. (Cl. 139—23.)



4. In a loom, in combination, a lay, a positively-operated shuttle mounted on said lay, means to move said shuttle to a predetermined intermediate position beyond the selvage, means to thereupon beat up the filling without changing the warp shed, means to move said shuttle to extreme position, and means to beat up the same filling a second time, said shuttle-moving means comprising an intermittent pinion and a continuously rotating intermittent gear meshing therewith, said gear giving said pinion a positive, irregular cycle of operation.

6. In a loom, in combination, a lay, a positively-operated shuttle, means to move the shuttle, and means to move the lay to beat up the filling, said means being effective to cause alternate picks of filling to be beaten up twice in succession and to cause the remaining picks of filling to be beaten up once only.

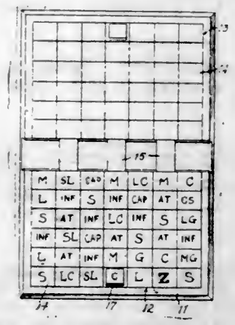
8. In a loom, in combination, a lay, a pair of shuttles mounted on said lay, a plurality of harnesses carrying binder, selvage, and pile warps, means to positively move said shuttles to an intermediate position beyond the selvage, means to move said lay to beat up the filling with the shuttles in intermediate position and without change of warp shed, means to move said shuttles to extreme position, means to thereupon move said lay to beat up said filling a second time and on the same beat to change certain of the binder and selvage warps only from one shed to the other, means to return said shuttle to initial position, and means to thereupon move said lay to beat up the filling last inserted and on the latter beat to change the pile warps and the remaining binder and selvage warps from one shed to the other.

9. In a loom, in combination, a lay, a shuttle, means to move the shuttle, means to give the lay a partial and a complete forward movement successively after the insertion of a pick filling in the shed, and means to tension the inserted filling between said movements, said lay-actuating means including two continuously rotating cams each provided with a plurality of successive operative projections, one cam being effective to move said lay positively in the forward direction and the other cam to move the lay positively in the rearward direction.

11. The method of weaving which consists in inserting a pick of filling in a warp shed, beating up said filling without changing the shed, applying tension to said filling in the direction in which it was inserted to tighten said filling in the shed, and thereafter beating up said filling a second time and on the same beat changing certain of the warp threads to the other shed.

[Claims 1 to 3, 5, 7, 10, and 12 not printed in the Gazette.]

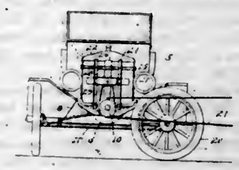
1,265,085. MILITARY GAME. RYUTARO ISHIDA, Los Angeles, Cal. Filed Dec. 6, 1917. Serial No. 205,773. (Cl. 46—21.)



1. A game apparatus comprising a board having two adjacent sections divided into squares, movable bridging pieces connecting said sections to form lines of communications between opposed squares of adjacent sections, and game pieces movable from one square to another and across said bridging pieces.

[Claims 2 and 3 not printed in the Gazette.]

1,265,086. ATTACHMENT FOR AUTOMOBILES. GEORGE S. JACOBS, Pontiac, Mich., assignor to The Geneva Tractor Company, Geneva, Ohio. Filed May 23, 1917. Serial No. 170,415. (Cl. 180—53.)



1. An attachment for automobiles comprising a bracket secured directly to the base of the automobile engine and extending forwardly beyond the frame and having a bearing at its forward end, and an auxiliary shaft secured to the engine shaft and extending out through said bearing and means engaging with said auxiliary shaft beyond the bearing for transmitting power.

3. The combination with an automobile having an engine, of a V-shaped bracket rigidly secured to the engine and projecting forwardly beyond the frame and provided with a bearing at its forward end, an auxiliary shaft coupled to the driving shaft of the engine and extending out through said bearing, a pulley secured to the forward end of said shaft, said pulley having notches in the end thereof, and a starting crank engaging with said auxiliary shaft and adapted to engage with said notches for turning the shaft.

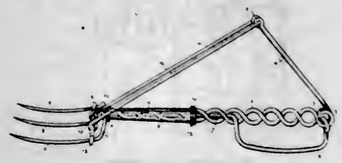
4. The combination with an automobile having an engine, of a rigid bracket formed of a single piece and securely fastened to the engine, said bracket extending forwardly beyond the engine frame and provided with an integrally formed bearing, a shaft connected with the driving shaft of the engine and extending out through said bearing, a frame connected with said bracket in advance of the radiator, a fan mounted on said frame, and means for driving said fan from said shaft.

5. An attachment for an automobile comprising a bracket formed of a single casting and adapted to be secured directly to the base of the engine, a combined supporting frame and fan guard secured to said bracket, an auxiliary shaft having a bearing in said bracket, a pulley for said shaft, a fan mounted in said frame, a pulley for driving said fan, and a belt connecting said pulleys.

6. The combination with an automobile having an engine, of a bearing member rigidly secured to said engine and extending out beyond the frame with a bearing in advance of the frame, an auxiliary shaft connected to the crank shaft of the engine and extending out through said bearing, a power pulley mounted on said auxiliary shaft, a combined fan supporting frame and guard connected to said bearing member in advance of the radiator, a fan mounted in said frame, a pulley for said fan, and a driving belt connecting said pulleys.

[Claim 2 not printed in the Gazette.]

1,265,087. COOKING-FORK. WILLIAM HAWKINGS JOHNSON, Pine Bluff, Ark. Filed July 20, 1917. Serial No. 181,914. (Cl. 30—5.)



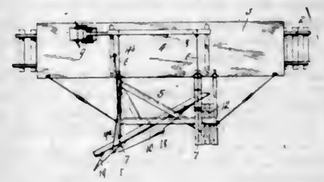
1. A fork comprising a handle, a pair of tines carried by the inner end of said handle, a slide bar mounted on said tines, a pair of spring arms carried by the outer end of said handle and projecting inwardly at an angle thereto, a pair of actuating arms connected to the inner ends of the spring arms and to said slide bar, and stop means to limit the movement of said slide bar in either direction on said tines.

2. A fork comprising a handle, a pair of tines carried by the inner end of said handle, a slide bar mounted on said tines, a sleeve mounted on the inner end of said handle and provided at opposite ends with lateral flanges, a slide ring mounted on said sleeve, a member connecting said slide ring with said slide bar, said lateral flanges limiting the movement of the slide ring in either direction, and spring tension means for reciprocating the slide bar on said tines.

[Claim 3 not printed in the Gazette.]

1,265,088. RAILROAD DITCHING-MACHINE. PAUL JONES and RALPH C. MILLER, Toledo, Ohio. Filed Nov. 21, 1916. Serial No. 132,552. (Cl. 37—22.)

1. In a railway ditching machine, a car, a frame pivotally connected at its inner end to a side of the car, a harrow extending transversely across the frame at the front end thereof and at substantially right angles thereto, a mold board carried by the frame to the rear of the harrow and being inclined so as to have its ends extend beyond the ends of the harrow, a vertically movable leveling arm pivoted at its inner end to the outer end of said mold board and inclining rearwardly therefrom, and means connected to the leveling arm and to the car limiting downward movement of said arm.



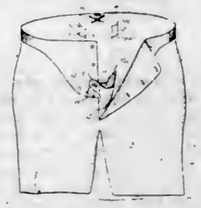
3. In a railway ditching machine, a car, a frame carried by the car, and a plow blade carried by the frame, said blade having a narrowed nose at its inner end and a central part having upwardly diverged sides with a bottom connecting said diverged sides, the outer of said diverged sides being rolled inwardly to provide a digging edge.

4. In a railway ditching machine, a car, a frame carried by the car, a series of vertical cutting blades depending from the frame and arranged at substantially right angles thereto and each having stepped upwardly inclined lower edges, the blades of one series being staggered in relation to the blades of the other series, and a plow blade carried by the frame and arranged to the rear of the vertical cutting blades, said plow blades extending diagonally of the vertical cutting blades.

7. In a railway ditching machine, a car, a frame carried by the car, and a plow blade carried by the frame and shaped to approximate the shape of the ditch to be cut, said blade having a central bottom part and upwardly diverged sides extending from the respective ends of said bottom part, the outer of said diverged sides being curved inwardly to form a digging edge and a series of vertical cutters carried by the frame in advance of said blade, said digging edge having its inner edge extending to approximately the center of the series of vertical cutters.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,265,089. GARMENT. OSCAR KENZY, Chicago, Ill. Filed Jan. 26, 1917. Serial No. 144,776. (Cl. 128—38.)



1. A device of the class described comprising a nether garment, a button carried at the front thereof and above the crotch, a normally substantially flat suspensory member attached to the rear of the garment and having a pair of horizontally spaced button holes at its front end both of which are arranged to receive the said button, whereby the member when secured to the button takes a bag like conformation and is supported in part from the front of the garment.

3. A device of the class described comprising a nether garment, having flaps at the front thereof, a button provided on the outside of the inner flap, a suspensory member having two strips extending alternately in and out

through the rear of the garment and attached to substantially the waist line of the garment, the front end of said member carrying two projections each provided with a button hole whereby the projections may be attached to said button to support the front end of the suspensory member.

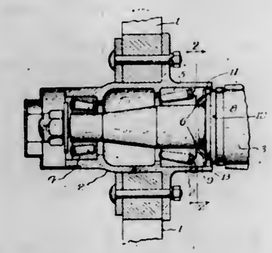
5. A device of the class described comprising a nether garment, a suspensory member having two strips at its rear end, resilient pieces secured to the strips and attached to substantially the waist line of the garment in such manner as to provide a greater upward pull along the outside edges of said strips than along the inside edges thereof, and means for supporting the front end of the member from the garment.

6. A device of the class described comprising a nether garment, a suspensory member having two rearwardly and upwardly extending strips, a plurality of slits provided in the rear of the garment, said slits being disposed in two substantially vertical rows, said slits being obliquely disposed relatively to the waist line, the lower slit having a greater angle of inclination than the next upper strip, said strips extending through said slits alternately on opposite sides of the rear of the garment and having their upper ends attached to substantially the waist line of the garment in a manner such that an upward pull is provided along the outer edges of the said strips.

8. A device of the class described comprising a nether garment, a normally flat suspensory member connected to and extending between the front and rear of the garment, and means at the front and rear of the member for holding the lateral edges thereof above the central portion of the member so as to give the member a bag like conformation.

[Claims 2, 4, and 7 not printed in the Gazette.]

1,265,090. BEARING-SPACER FOR AUTOMOBILE-TRUCK AXLES. HARRY ORLAND KING, Chicago, Ill., assignor to Phenix Truck Makers Inc., Chicago, Ill., a Corporation. Filed May 31, 1917. Serial No. 171,822. (Cl. 64—39.)



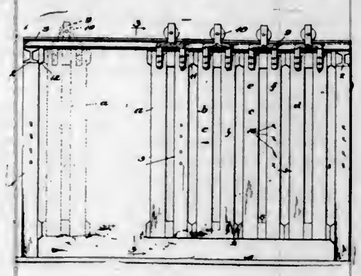
1. An automobile axle construction wherein there is a curved shoulder or fillet in the throat of the axle in the region of the shoulder on the inner race ring of an anti-friction bearing, the combination of a bearing ring, a bearing spacer covering the fillet of the axle and furnishing a shoulder for the bearing and said spacer also furnishing one side or wall of a groove wherein is located the packing washer for dust guard purposes.

4. In a construction of the class described a bearing spacer composed of a dish shaped ring adapted to cover a fillet in the throat of the axle and furnish a shoulder or abutment adapted to take the end thrust of the anti-friction bearing.

[Claims 2 and 3 not printed in the Gazette.]

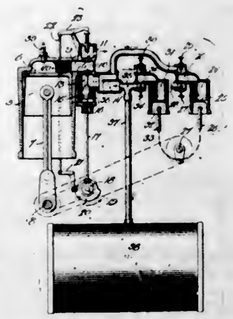
1,265,091. STOVE-ROOM FOR POTTERIES. FRANK M. KINNARD, Sebring, Ohio, assignor of one-half to Charles L. Sebring, Sebring, Ohio. Filed Oct. 2, 1916. Serial No. 123,230. (Cl. 34—26.)

1. A stove room of the character described comprising a pair of stationary, spaced end racks, shelves mounted in said racks, tracks connecting said racks at their upper extremities, movable racks suspended from said tracks, each of said movable racks comprising a pair of spaced tiers of shelves, said shelves arranged to receive molds having chambers in their lower sides, each of said shelves being of less width han the diameters of said chambers and spacing blocks mounted upon each of said racks.



2. In a drying rack for potteries comprising a pair of stationary end racks, shelves mounted in said racks, tracks connecting said racks at their upper extremities, pairs of co-joined relatively spaced movable racks suspended from said tracks, tiers of shelves upon each of said racks, the said shelves being designed to receive molds of greater diameter than the width of said shelves, spacing blocks upon the opposite sides of each of said co-joined pairs of racks, said spacing blocks being adapted to hold said movable racks apart to permit the circulation of air therebetween.

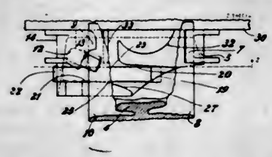
1,265,092. INTERNAL-COMBUSTION ENGINE. JOSEPH KOENIG, Two Rivers, Wis. Filed Dec. 11, 1916. Serial No. 136,170. (Cl. 123—68.)



1. An internal combustion engine comprising, in combination, a cylinder, a working piston in the cylinder, means for ignition in the cylinder, a supply chamber communicating with the cylinder, an inlet valve intermediate the cylinder and supply chamber and having its stem passed centrally through said chamber, a piston operable in said supply chamber and carried by the stem of said inlet valve, a duct in the wall of said chamber and communicating with the cylinder and with said chamber near the bottom thereof, and means for introducing fuel and neutral gases in said chamber substantially as described.

2. An internal combustion engine including a working cylinder, a supply chamber communicating with the working cylinder, an inlet valve disposed between said cylinder and chamber and having its stem passing through said chamber, a piston formed on the stem of said valve and reciprocatively mounted in said chamber, a fuel compressing chamber, a pipe connecting said cylinder and the supply chamber, a cylinder for compressing neutral gas, a pipe connecting said cylinder and the said chamber, a gas storage reservoir, and a pipe connecting said reservoir and the last named pipe whereby to control the pressure of neutral gas in the supply chamber.

1,265,093. RAIL ANCHOR OR ANTICREEPER. LOUIS L. KORACH, Chicago, Ill. Filed Aug. 4, 1916. Serial No. 113,126. (Cl. 238—4.)

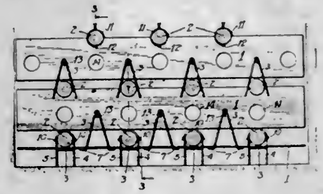


1. In a rail anchor, the combination of a main jaw member having opposite upwardly extending rigid jaw portions one of which is adapted to engage one side of a railway rail, a movable jaw member mounted in engagement with the other of said upwardly extending rigid jaw portions and with the opposite side of the rail, and a wedging member movable transversely with respect to the railway rail and located between and having its opposite sides in engagement with said jaw members and acting to press the movable jaw member in a direction lengthwise of the rail, to secure said jaw members in engagement with the rail.

4. In a rail anchor, the combination of a main jaw member having a plurality of upwardly extending rigid jaw portions spaced apart and adapted to admit a railway rail therebetween, one of which upwardly extending jaw portions is adapted to engage one side of the railway rail, a movable rail-engaging jaw member movably mounted in engagement with the other one of said upwardly extending rigid jaw portions and adapted to extend between said last mentioned jaw portion and the adjacent side of the rail, and a wedging member movable transversely with respect to the rail and located between and in engagement with and in movable relation to said movable jaw member and main jaw member, respectively, and acting to press the movable jaw member in a direction lengthwise of the rail to secure said jaw members in engagement with a railway rail.

[Claims 2 and 3 not printed in the Gazette.]

1,265,094. REINFORCING SYSTEM FOR CONCRETE. HENRY H. LAMPERT, Chicago, Ill. Filed Dec. 26, 1917. Serial No. 208,966. (Cl. 72—122.)



1. A reinforcing system for concrete, comprising a plurality of rods, spacing members supporting said rods in rows, and supporting members supporting said spacing members one upon and above the other.

5. A reinforcing system for concrete, comprising a plurality of rods, spacing members supporting said rods in rows, supporting members supporting said spacing members one upon and above the other, and wires carried by certain of said spacing members adjacent to and adapted to be twisted around the rods supported on said member.

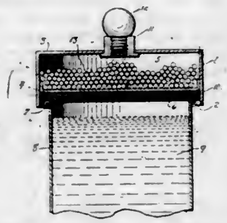
7. A reinforcing system for concrete, comprising a plurality of rods, spacing members in the form of thin metal strips supporting said rods in rows, and supporting members each comprising a pair of depending legs spaced apart at their lower ends and connected together at their upper ends, said legs having notches extending inwardly from the upper and lower ends thereof whereby the lower parts of said supporting members straddle one of said strips and have another of said strips resting in the notches in the upper ends thereof so as to support said strips one above another.

10. A reinforcing system for concrete, comprising a flat metal spacing member, supporting members for supporting said spacing member on a mold with the face thereof substantially parallel with one wall of said mold, a row of reinforcing rods supported on said spacing member, other supporting members supported on said spacing member, another flat metal spacing member mounted on edge on said other supporting members, and a row of reinforcing rods supported on said second-mentioned spacing member.

13. A reinforcing system for concrete, comprising a flat spacing strip arranged on edge for supporting reinforcing rods in a row, and members for supporting said strip, each of said members comprising a pair of legs connected together at their upper ends and spaced apart at their lower ends and having a slot extending inwardly from the upper end thereof so as to form a seat adapted to receive and support said strip.

[Claims 2 to 4, 6, 8, 9, 11, 12, and 14 not printed in the Gazette.]

1,265,095. RECEPTACLE-CLOSURE. JACOB VICKERY LANGHORNE, Englewood, Colo., assignor of one-half to Seaborn M. Batton, Denver, Colo. Filed June 4, 1917. Serial No. 172,691. (Cl. 217—81.)



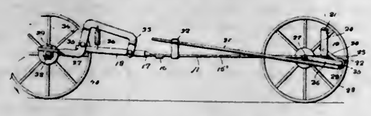
1. A hollow cover, having a substantially deep peripheral wall, a closed top and an open bottom, the said peripheral wall being of slightly greater dimensions, in cross-section, than the top of the receptacle to be covered, in combination with an interiorly disposed flat false bottom, located equidistant, as a whole, at a substantially spaced position from the lower open end of said cover, and forming with the top thereof a substantially deep upper compartment; a flat pliable sealing disk associated with the underneath face of said false bottom, and adapted to engage the top edge of the receptacle, in a cushioning air-tight relation, while the lower peripheral wall of the cover envelops the top of the receptacle; and means in the upper part of the cover for introducing a variable weighting means within the said upper compartment, for holding said cover fixed against ordinary displacement, when seated, substantially as described.

[Claim 2 not printed in the Gazette.]

1,265,096. HAY-WAGON. LEONARD LEVENS, Centralhatchee, Ga. Filed Apr. 18, 1917. Serial No. 163,077. (Cl. 214—1.)

1. In a device of the class described, a wheeled platform comprising a plurality of longitudinal bars spaced apart, means for tiltably supporting the rearward end of the platform to enable the same to be raised and lowered with respect to the ground, and means for resiliently supporting the forward end of the platform to permit the same to sag under the weight of a load placed thereon

permitting portions of said load to engage the ground intermediate the longitudinal bars.

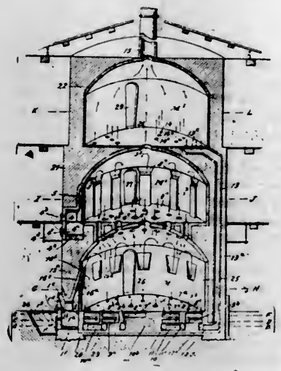


2. In a device of the class described, a platform comprising spaced longitudinal bars, a front axle having ground wheels, a member connected pivotally with the platform for movement in a vertical plane and connected pivotally with the front axle to permit the latter to swing in an approximately horizontal plane, a supporting spring connecting said member with the platform, a stop member to limit the upward movement of the platform under the tension of the spring, and means for so supporting the rearward end of the platform as to permit said rearward end to be raised and lowered.

4. A platform composed mainly of longitudinally disposed parallel bars arranged in spaced relation, a rear axle having a crank portion, bearings on the rearward end of the platform in which the crank portion of the axle is journaled, a reach bar extending forwardly with respect to the platform, a yoke pivoted on the reach bar and having a forked limb provided with a stop member to limit the movement of the reach bar with respect to the yoke, a spring connecting the yoke with the reach bar to hold the latter normally in engagement with the stop member, an arm projecting forwardly from the yoke, an axle which carries the front supporting wheels, and a pivotal connection between said axle and the arm which extends from the yoke, in combination with means for tilting the crank portion of the rear axle to effect vertical adjustment of the rearward end of the platform, and means for limiting such tilting movement.

[Claims 3 and 5 not printed in the Gazette.]

1,265,097. OVEN OR FURNACE FOR BAKING EARTHENWARE. GEORGE LITINSKY, Elkins, W. Va. Filed July 1, 1916. Serial No. 107,212. (Cl. 24—145.)

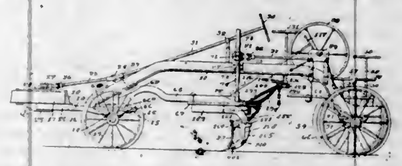


2. In an apparatus for baking earthenware, an upwardly elongated integral refractory main wall structure, inclosing a relatively elevated primary oven chamber therein and a secondary oven chamber immediately below the primary oven, a thin horizontal floor and ceiling structure between the two oven chambers, short gas passages through said floor and ceiling structures, a series of furnaces in the said main wall structure, arranged in the horizontal planes of the bottom part of the upper oven chamber, a supplemental series of furnaces in the said main wall structure, arranged in the horizontal planes of the bottom part of the lower secondary oven chamber, a bottom structure below the lower secondary oven chamber, elongated vertical escape flues in the main wall structure, and escape passages in the said bottom structure of the lower oven communicating with said escape flues.

4. In an apparatus for heating earthenware and for similar purposes, the refractory wall inclosing the oven chamber, a relatively deep bottom structure for the chamber having a number of independent zig-zag gas ducts, apertures communicating with each of said ducts and with the lower part of the chamber, and the escape ducts.

[Claim 1, 3, and 5 to 7 not printed in the Gazette.]

1,265,098. GRADING-MACHINE. THOMAS R. MCKNIGHT, Aurora, Ill., assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed July 20, 1914. Serial No. 852,010. (Cl. 21—191.)



1. In a grading machine, the combination of a frame, a rear axle pivotally connected with said frame to swing about a vertical axis, the pivot of said axle being adjacent to one side of the frame, wheels mounted on the end portions of said axle, and means for swinging said axle horizontally about said pivot to simultaneously adjust said wheels angularly.

2. In a grading machine, the combination of a frame, a rear axle pivotally connected with said frame to swing about a vertical axis, the pivot of said axle being adjacent to one side of the frame, wheels mounted on the end portions of said axle, and rack and pinion mechanism for swinging said axle horizontally about said pivot to simultaneously adjust said wheels angularly.

3. In a grading machine, the combination of a frame, a rear axle pivotally connected with said frame adjacent to one side thereof and adapted to swing horizontally, a rack connected to the frame adjacent the opposite side thereof, a pinion carried by the axle and meshing with said rack, a rod mounted on the axle and having a worm and worm-wheel for rotating said pinion, and a hand-wheel for rotating said rod.

4. In a grading machine, the combination of a frame, a rear axle pivotally connected with said frame to swing about a vertical pivot, said axle being composed of extensible members, the pivot of said axle being adjacent to one side of the frame, and means for swinging said axle horizontally about said pivot.

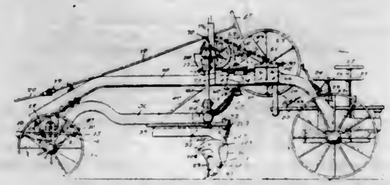
5. In a grading machine, the combination of a frame, a rear axle pivotally connected with said frame to swing about a vertical axis, said axle being composed of extensible members, the pivot of said axle being adjacent to one side of the frame, and rack and pinion mechanism for swinging said axle horizontally about said pivot.

[Claims 6 to 8 not printed in the Gazette.]

1,265,099. GRADING-MACHINE. THOMAS R. MCKNIGHT, Aurora, Ill., assignor to Western Wheeled Scraper Company, Aurora, Ill., a Corporation of Illinois. Filed June 9, 1915. Serial No. 33,026. (Cl. 37—49.)

1. A grading-machine, comprising a wheeled carriage, a scraper support connected therewith, a scraper, means connecting said scraper with said support and permitting endwise movement of said scraper and mechanism for moving said scraper endwise in a substantially horizontal plane.

4. A grading-machine, comprising a wheeled carriage, a rotary scraper-support, a scraper mounted on said support and movable longitudinally of itself independently thereof, and means for rotating said support and for simultaneously moving the scraper longitudinally of itself.



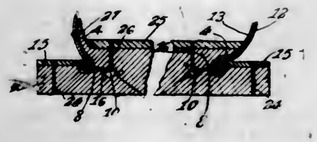
6. A grading machine, comprising a wheeled carriage, a rotary scraper support, laterally swinging means connecting said scraper support with said carriage, a scraper mounted on said support and movable longitudinally of itself in a substantially horizontal plane independently of said support, and means mounted on the carriage for moving said scraper longitudinally.

15. A grading machine, comprising a wheeled carriage, a laterally swinging scraper-supporting frame connected therewith, means for moving said scraper-supporting frame vertically, a scraper, means connecting said scraper with said frame and permitting endwise movement of said scraper, of mechanism independent of the operation of the means for moving said frame vertically for moving said scraper endwise.

19. A grading machine, comprising a wheeled carriage, a scraper-supporting frame connected with said carriage, scraper-supporting arms connected to said frame, a scraper having rods extending longitudinally thereof, certain of said rods having sliding engagement with said arms, members pivotally mounted upon said scraper-supporting arms and bearing laterally thereagainst, said members being adjustably secured at points removed from their pivots in fixed relation to said arms, said members having sliding engagement with certain of said rods.

[Claims 2, 3, 5, 7 to 14, 16 to 18, and 20 not printed in the Gazette.]

1,265,100. SHOE. AMOS MADSON, Pontiac, Ill. Filed Nov. 26, 1917. Serial No. 204,079. (Cl. 36—17.)



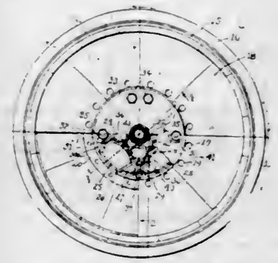
1. In a shoe, a one part sole having an upper channel at its margin and a downwardly opening channel spaced inwardly from the first mentioned channel, an upper having its lower edge fitting in the first mentioned channel, a welt, securing means extending through the welt, upper and sole between said channels, the welt extending upwardly over the securing means and resting on the sole, and securing means fastening the welt on the sole.

3. In a shoe, the combination of elements specified in claim 2 and further including securing means extending through the upper and lip to fasten them together.

7. In a shoe, a sole having a heel seat of reduced width providing shoulders, and having a marginal channel extending forwardly from said shoulders, an upper having portions fitting in said channel and a portion turned under the heel seat in rear of said shoulders, a welt secured to the upper within said channel and turned outwardly over the sole, a heel lift secured to the heel seat underneath the turned under portion of the upper, the shank edge of the lift having an upper beveled surface, the sole and welt being beveled at said shoulders to overlap said beveled surface of the lift, and securing means fastening the welt to the sole and extending rearwardly to engage through the beveled portion of the lift.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,265,101. CUSHION-WHEEL FOR VEHICLES. AUGUST J. MEYER, Chicago, Ill. Filed May 6, 1916. Serial No. 95,950. (Cl. 152—45.)



1. In a vehicle wheel, the combination of inner and outer concentric members forming the hub of the wheel, a plurality of inner supports carried by the inner member, each inner support comprising two adjacent supporting walls for engaging a resilient cushioning member, a plurality of outer supports carried by the outer member, each of the outer supports comprising two other adjacent walls for engaging each cushioning member, and resilient members in the space between said inner and outer supports, the adjacent inwardly extending ends of adjacent ones of said outer supports being inclined at an angle to each other and converging inwardly, and arms extending axially from said inner member for engaging the outer surfaces of said inwardly extending ends.

2. In a vehicle wheel, the combination of inner and outer concentric members forming the hub of the wheel, a plurality of inner supports carried by the inner member, each inner support comprising two adjacent supporting walls for engaging a resilient cushioning member, a plurality of outer supports carried by the outer member, each of the outer supports comprising two other adjacent walls for engaging each cushioning member, and resilient members in the space between said inner and outer supports, the outwardly extending ends of adjacent ones of said inner supports diverging outwardly from each other, and bosses projecting inwardly from said outer member into engagement with the outer surfaces of said outwardly diverging ends.

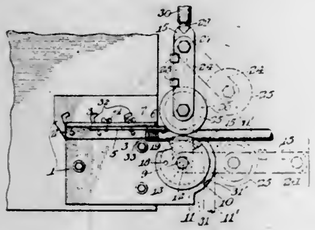
21. In a vehicle wheel, the combination of inner and outer members forming the hub of the wheel and movable radially relatively to each other, outer cushion supports extending inwardly from said outer member, inner cushion supports extending outwardly from said inner member, resilient cushions filling the compartments formed between said supports, resilient bumpers between said supports outside of said compartments, said supports being movable relatively to said members to compress said cushions and bumpers, wedge members extending from said inner and outer members between the sides of said supports, and projections from said outer member for radially engaging said bumpers, whereby movement of said members relatively to each other compresses said bumpers radially and laterally.

22. In a vehicle wheel, the combination of inner and outer members forming the hub of the wheel and movable radially relatively to each other, outer cushion supports extending inwardly from the outer member, inner cushion supports extending outwardly from said inner member, resilient cushions filling the compartments formed between said supports, and resilient bumpers between said supports outside of said compartments, said supports being movable relatively to said members to compress said

cushions and bumpers, said inner supports having inner substantially parallel ends laterally engaging alternate ones of said bumpers and said outer supports having inner substantially parallel ends laterally engaging intermediate ones of said bumpers.

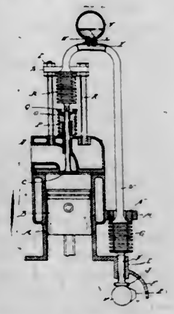
[Claims 3 to 20 not printed in the Gazette.]

1,265,102. PIPE-BENDING MACHINE. FRANCIS MORRIS, Philadelphia, Pa. Filed Dec. 6, 1916. Serial No. 135,304. (Cl. 153—46.)



A tube bending machine, comprising a base plate, provided with parallel slots each having parallel angularly directed offsets; a form secured thereto, a member mounted to oscillate upon said plate with the center of said form as an axis, a yoke pivotally mounted upon said member, a wheel carried by said yoke and adapted to follow the contour of said form upon the oscillation of said first member, an adjustable angle bar provided with means adapted to engage the sides of the said offsets of said slots within said plate to retain said bar in different parallel positions with respect thereto, and a stop carried by said bar and adjustable longitudinally thereof to hold the ends of tubes of various diameters while being bent by said machine, in close proximity to the said wheel in every position of said angle bar.

1,265,103. VALVE-OPERATING MECHANISM. OWEN M. NACKER, Detroit, Mich., assignor of one-half to Alanson P. Brush, Detroit, Mich. Filed June 4, 1917. Serial No. 172,816. (Cl. 121—97.)



1. In a valve-operating mechanism, the combination with a valve member and an actuating member therefor, of a fluid transmission therebetween comprising a longitudinally expansible chamber having one end in operative relation to one of said members, and an adjustable anchorage for the opposite end of said chamber.

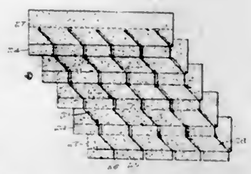
[Claims 2 to 6 not printed in the Gazette.]

1,265,104. DEVICE FOR ADJUSTABLY CONNECTING ALINED RODS. LEROY A. OGDEN, Grand Rapids, Mich. Filed May 7, 1917. Serial No. 166,790. (Cl. 85—36.5.)

1. In a device of the character described for adjustably connecting alined rods; a turnbuckle connecting the rods; a primary sleeve around the turnbuckle and one rod, said sleeve being held against rotation relatively to the turnbuckle; means for holding the primary sleeve against rotation relatively to said rod; a secondary sleeve around the other rod and threaded on the primary sleeve.

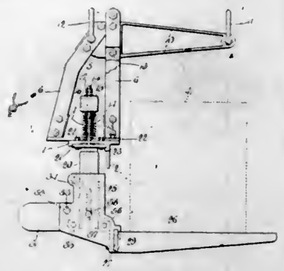
[Claim 2 not printed in the Gazette.]

1,265,105. ORNAMENTAL ROOF. FREDERICK C. OVERBURY, Hillsdale, N. J., assignor, by mesne assignments, to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Aug. 12, 1915. Serial No. 45,266. (Cl. 108—7.)



A roof covering consisting of a plurality of flat flexible shingle strips laid in overlapping horizontal rows and having spaced tabs or projections on their exposed lower portions, the strips in one row having exposed portions formed with substantially rectangular tabs with substantially parallel intervening vertical recesses, and the strips of an adjacent row having on their exposed portions tabs and intervening recesses extending upwardly and laterally.

1,265,106. BRICK-LIFTER. RAYMOND C. PENFIELD, New York, N. Y. Filed Jan. 31, 1917. Serial No. 145,627. (Cl. 57—9.)



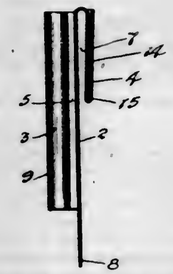
1. Apparatus of the class described having provision to engage and lift a plurality of bricks in stacked formation, by engaging the bottom of the stack, comprising a plurality of horizontally positioned lifting fingers adapted to be positioned under the bottom of said stack and automatic means to control the lifting force of each finger independently of all other fingers.

3. Apparatus of the kind described, comprising a lifting frame, a plurality of laterally extending lifting fingers carried by said frame adapted to be positioned under the bottom of the stack, yielding connections between said frame and each of said fingers, providing an automatic independently self-seating of each finger on the adjacent part of the stack.

5. Apparatus of the class described adapted to lift a stack of brick having the lower surface of the stack in an uneven plane without disturbing the said stack, comprising a lifting frame, means to maintain said frame in horizontal position, means to engage the bottom portion of the stack at a plurality of points, and automatic means to conform said plurality of engaging devices with the uneven plane of the bottom of the stack engaged thereby.

[Claims 2 and 4 not printed in the Gazette.]

1,265,107. POCKET-HOLDER. EDWARD WALTER PERRY and GEORGE ALBERT HUDSON, Neepawa, Manitoba, Canada. Filed Mar. 1, 1917. Serial No. 151,759. (Cl. 24—11.)



A new article of manufacture formed from a single piece of metal comprising continuous opposing front and back plates with their free ends fastened together and with corrugations formed in the back plate to provide vertically disposed spring pockets and a downturned spring tab continuous with the top edge of the front plate, said tab being provided on the front side with a marginal inturned flange.

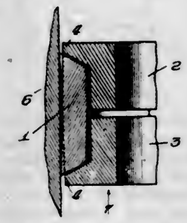
1,265,108. METHOD OF MAKING A HARD-RUBBER SUBSTITUTE AND THE PRODUCT THEREOF. PAUL PICKL, Chicago, Ill., assignor to Emma Pickl, Chicago, Ill. Filed Apr. 23, 1917. Serial No. 163,883. (Cl. 106—22.)

1. A method of making a hard rubber substitute which consists of grinding elaterite containing sulfur, adding a resinous substance to the same, and subjecting the mixture to heat.

6. A rubber substitute consisting of over 90 per cent. elaterite, three to five per cent. of resinous material and two to three per cent. of sulfur added to the natural sulfur contents of the elaterite.

[Claims 2 to 5 not printed in the Gazette.]

1,265,109. SELF-ADJUSTING PISTON-RING. LEO PONDELICK, Chicago, Ill. Filed Feb. 16, 1914. Serial No. 818,962. (Cl. 121—108.)

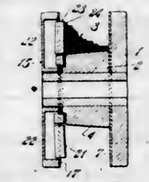


1. The combination with a cylindrical bore and a grooved element fitting the same, of a piston ring comprising a plurality of parts disposed in said groove, one of said parts being housed by the remainder thereof, the housed part consisting of a split ring having beveled convergent end surfaces, the housing portion comprising a pair of relatively non-contacting split rings having annular flanges presenting opposed beveled faces between which the housed part is engaged, the beveled faces of said flanges substantially parallel with and opposing the beveled ends of the housed part, said opposed beveled faces adapted to cause the said members to alter their relative diameters upon a thrust upon one of the members longitudinally of the axis of the bore, the resiliency of the said members serving to return the same to their normal relative diameters upon a cessation of said thrust.

2. In combination with a cylinder and a grooved piston, a packing ring including an outer split ring engaging the bore of the cylinder and having its edges disposed substantially conically about the axis of the cylinder; and a pair of inner elastic split rings slidably engaging the piston and equipped with relatively non-contacting portions housed by the said outer ring and normally carrying the latter, said inner rings equipped with conical faces opposed to and corresponding to the said faces of the outer ring; the conical disposition of the said opposed faces causing the said outer split ring to alter its diameter at one or the other end thereof upon a thrust on one or the other of the inner rings in a direction substantially longitudinally of the said axis, each of said split rings presenting toward one end of the groove of the piston a face parallel to said end and in a plane normal to the axis of the piston, thereby causing a longitudinal movement of the piston to exert a similarly longitudinal thrust upon one or the other of said split rings, according to the direction of said movement.

[Claim 3 not printed in the Gazette.]

1,265,110. SPOOL DEVICE. WILLIAM A. PRENTISS, Holyoke, Mass., assignor to George W. Prentiss & Company, trustees, Holyoke, Mass. Filed Aug. 9, 1917. Serial No. 185,261. (Cl. 242—77.)



1. A separable spool, comprising, a core, a fixed and a removable head secured to the core, means for temporarily securing the removable head in place on the core consisting of spring elements on the removable head that engage the core or hub of the spool to exert an outward pressure against the attaching means between the removable head and core.

5. A spool having a removable head, means for securing the same in place, comprising projections with enlarged heads on an end of the core, a slotted plate secured to the removable head to receive the heads of the projections, a spring device engaging the core for exerting an outward pressure on the removable head, and other spring devices to engage the coil to retain the layers of wire in place.

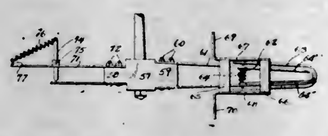
6. A spool comprising, in combination, a fixed and a removable head, a core or hub part, screws passed through the fixed head and into one end of the core screws in the other end of the core having threaded recessed ends and engaging the first mentioned screws, the last mentioned screws having enlarged heads for engaging recesses in the removable head to detachably retain the removable head in place, means consisting of spring fingers to lock the removable head against movement and other spring fingers having inclined surfaces for exerting a constant pressure on the ends of the coil when placed on the core.

[Claims 2 to 4 not printed in the Gazette.]

1,265,111. MAIL-BAG CATCHING AND DELIVERING DEVICE. LLOYD W. PRICE, Alvado, Ohio. Filed Feb. 17, 1916. Serial No. 78,972. (Cl. 258—17.)

1. In a mail bag transferring apparatus a collecting device comprising a support, an arm projecting from said support, a keeper pivotally mounted adjacent the outer

end of said arm, yieldable means for retaining said keeper extending substantially at right angles to said arm, means to retain said keeper extended substantially parallel to said arm against the action of the yieldable means, and means to be actuated upon engagement with a mail bag carrying structure moving upon said arm to release said keeper and permit the keeper to swing to a position at substantially right angles to the arm.

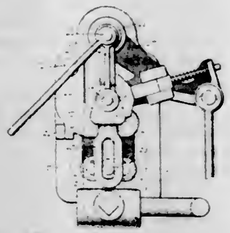


3. In a mail bag transferring apparatus, a collecting device comprising a support, an arm extending from said support, a keeper pivotally mounted adjacent the outer end of said arm, a spring connected with said arm and engaging said keeper and having a tendency to force said keeper to an open position, spaced collars slidable on said arm and said keeper whereby the keeper may be normally retained in a closed position with respect to the arm, and laterally projecting triggers associated with said collars to be engaged by a mail bag carrying structure passing upon the arm to automatically release said keeper.

5. In a mail bag transferring apparatus, a collecting device comprising a support, a head carried by said support, a receiving arm connected with said head, a keeper pivotally associated with the outer end portion of said receiving arm, a spring having a normal tendency to retain said keeper in an open position, spaced collars slidable on said receiving arm and said keeper to normally retain the keeper in a closed position, and laterally projecting triggers associated with said collars, to be engaged with a mail bag carrying structure moving upon said arm to effect the automatic releasement of said keeper.

[Claims 2 and 4 not printed in the Gazette.]

1,265,112. WARP STOP-MOTION. JOHN REGAN, New Bedford, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Apr. 6, 1917. Serial No. 160,276. (Cl. 139—92.)



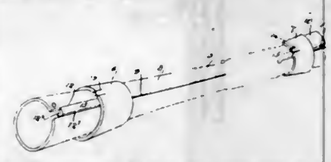
1. A warp stop motion having, in combination, a plurality of drop wires each having an opening therein, an actuator extending through said openings and normally freely movable therein, means to give said actuator operative oscillatory movements in two directions, and means to stop the loom when the movement of said actuator in either direction is prevented, each drop wire when unsupported by a warp thread being effective to prevent movement of said actuator.

3. A warp stop motion comprising a plurality of drop wires each having an opening therein with a wide lower portion and a narrow upper portion symmetrically disposed, a single rod of non-circular cross section extending freely through said wide lower portion of said openings when the wires are in normal position, means to oscillate said rod continuously, said rod being free to oscillate when in said wide portion but being held by the drop wire from movement in either direction when in the narrow portion of the opening in a fallen drop wire, and means to stop the loom when said rod is held from oscillation.

5. A warp stop motion comprising drop wires arranged in a plurality of sets, each drop wire having an irregular opening therein, an actuator rod of non-circular cross section extending through the openings in each set of drop wires, circular bearing blocks for each actuator rod, bearings for said blocks, arms connected to said blocks, a link connecting said arms, and actuating mechanism for moving said link, said rods and link being held from movement by a fallen drop wire and said actuating mechanism being thereby rendered effective to stop the loom.

[Claims 2 and 4 not printed in the Gazette.]

1,265,113. DETACHABLE FERRULE. HEINRICH W. REIMER, Steinbach, and JOHN L. PENNER, Winnipeg, Manitoba, Canada. Filed Dec. 4, 1916. Serial No. 134,986. (Cl. 55—2.)

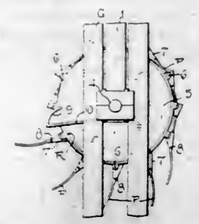


1. The combination with a tool provided with a tapering fastening head with the larger end thereof toward the tool and a handle having a tapering end, of a sleeve having the ends thereof formed into tapering sockets flaring outwardly toward the ends of the sleeve and provided with side slits and adapted to receive the tapering head and the tapering handle end, a catch formed as part of the socket receiving the handle and adapted to be driven into the handle and a pair of tapering jam collars slidably mounted on the sockets and adapted when moved endwise of the sleeve to jam the sockets on the contained head and handle end.

4. In combination a sleeve having the ends thereof formed into tapering sockets flaring outwardly toward the ends of the sleeve and having the sides of the sockets slit lengthwise of the sleeve, a pair of tapering jam collars mounted on the sockets, adapted when moved endwise of the sleeve to compress the sockets, and catches on said collars comprising inturned integral tongues.

[Claims 2 and 3 not printed in the Gazette.]

1,265,114. WATER-MOTOR. GEORGE C. RIDDLE, Riddle, Idaho. Filed May 26, 1917. Serial No. 171,309. (Cl. 170—109.)



2. A device of the character described comprising, in combination, guideways, slides engaged within the guideways and provided with means for moving the same, a rotor rotatably supported by the slides, paddles hingedly connected with said rotor, a wing carried by each of said paddles and coacting with the rotor for limiting the outward swinging movement of the paddles, an outstanding finger carried by the wing, and a trip member supported by one of the slides, said trip member being provided with an upstanding arcuate portion engageable with the finger carried by the wing of each of the paddles for throwing said shoulder in open position.

[Claim 1 not printed in the Gazette.]

1,265,115. PHONOGRAPHIC DRIVING MECHANISM. CHARLES F. ROBERTS, Chicago, Ill., assignor to Chicago Metal Products Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 28, 1916. Serial No. 117,172. (Cl. 74—26.)



2. A phonograph including a driving motor, a friction driving wheel driven thereby, a record turn table shaft movable in a direction normal to its axis, a driven wheel mounted on the shaft, said wheel having frictional engagement with said driving wheel and means tending to move the shaft and thus the driven wheel in a direction to provide a frictional driving connection between the wheels.

4. In a phonograph the combination of an electric motor, a friction wheel driven thereby, a record turn table provided with a downwardly extending flange around its peripnery, the inside face of said flange having engagement with said friction wheel and means tending to move the axis of rotation of said turn table away from said friction wheel to provide a frictional driving connection between the turn table and friction wheel.

6. A phonograph comprising a motor board, an electric motor supported from the underside thereof and having its operating shaft lying in a plane substantially parallel with the board, a second shaft extending through the board and driven by said motor, a friction wheel mounted on the end of said second shaft which terminates on the upperside of the board, a record turn table on the upperside of the board, a shaft therefor journaled in a movable arm, said turntable being provided with a downwardly extending flange around its periphery, the inside face of which engaging the said friction wheel, and means tending to move the movable arm and thus the turn table in a direction to provide a frictional driving connection between the turn table and wheel.

[Claims 1, 3, 5, 7, and 8 not printed in the Gazette.]

1,265,116. CULINARY IMPLEMENT. SARAH J. ROGERS, Richmond, Mo. Filed Jan. 15, 1917. Serial No. 142,527. (Cl. 53—8.)

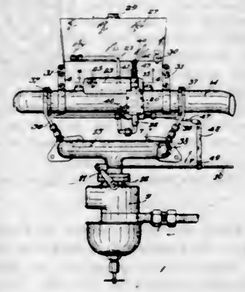


In a lid for culinary vessels, the combination with a pair of separate disks of identical size and shape, an annular concentric depressed portion adjacent the outer edge of each disk, an annular concentric depressed portion in each disk near the center thereof, a hinged ball in the center of each disk of a thickness substantially equal to or less than the depth of said depressed portions, and the edges of said disks having openings therein adapted to register.

1,265,117. AIR-MOISTENER FOR INTERNAL-COMBUSTION ENGINES. SIMON W. ROTHENBERGER, Minneapolis, Minn., assignor of one-fifth to Fredrick E. Cobb, one-fifth to Phillip R. Thomas, and two-fifths to Jay N. Pike, Minneapolis, Minn. Filed Mar. 26, 1917. Serial No. 157,321. (Cl. 123—25.)

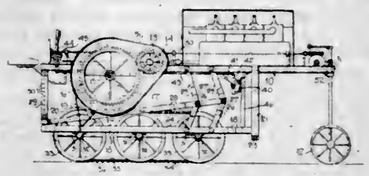
1. The combination with an internal combustion engine having a carbureter, of an air moistener arranged to deliver the vapor into the fuel intake of said engine and having air and water control valves, a connection for operating one of said valves from the throttle control of the carbureter, and an operating connection between said two valves.

2. The combination with an internal combustion engine having a carbureter, of an air moistener arranged to deliver the vapor into the fuel intake of said engine and having air and water control valves, a connection for operating the air valve from the throttle control of the carbureter, and a variable throw crank connection between said two valves.



3. The combination with an internal combustion engine having a carbureter, of an air moistener arranged to deliver the vapor into the fuel intake of said engine and having an air valve arranged to be opened by the suction stroke of the engine, said air moistener also having a choke valve and a water-controlled valve, said choke valve being interposed between said air valve and fuel intake, a connection for operating the choke valve from the throttle control of the carbureter, and a variable throw crank connection between the choke valve and the water-controlled valve.

1,265,118. CATERPILLAR-TRACTOR. JOSEPH G. ROUNTREE, Beeville, Tex. Filed Aug. 11, 1917. Serial No. 185,761. (Cl. 180—9.)



1. A tractor including a supporting frame, a power driven tractive element operatively supported upon the frame for movement in a vertical plane, a draw bar adapted to be connected to an object being drawn by the tractor, and toggle links pivoted to each other and to the main frame and operatively pivoted to the tractive element, said toggle links acting when the draw bar is relatively shifted rearward to move the tractive element downward in a vertical plane.

2. A tractor including a main supporting frame, an auxiliary frame disposed below the main frame, said auxiliary frame being pivotally supported at its rear end, an endless tractive element operatively mounted upon the auxiliary frame, a pair of toggle links pivoted to the main frame and to the auxiliary frame, and a draw bar connected to said toggle links and extending rearward therefrom, the toggle links being arranged to cause a depression of the forward end of the auxiliary frame when the draw bar is relatively retracted.

3. A tractor including a main frame, an auxiliary frame mounted upon the main frame for vertical movement, an endless tractive element mounted upon the auxiliary frame, a member operatively pivoted to the bars of the main frame and movable in a vertical plane, said element being operatively connected to the auxiliary frame, and a draw bar connected to said member and extending rearward therefrom to move said member downward in

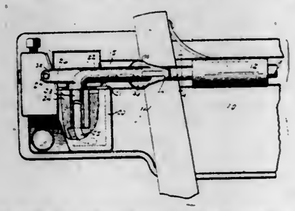
proportion to the draft on the draw bar to thereby shift the auxiliary frame and tractor downward in proportion to said draft.

4. A tractor comprising a main supporting frame, an endless tractive element operatively supported upon said frame and including transverse bars spaced from each other, a driving member mounted upon the main frame and having transversely extending members engaging between said bars on the upper flight of the tractive element, and means for driving said member.

5. A tractor including a supporting frame, an auxiliary frame mounted below the supporting frame, an endless tractive element operatively mounted upon the auxiliary frame and having spaced transversely extending bars, a driving wheel mounted upon the main frame and having lugs engaging between the bars of the tractive element, and means for driving said driving wheel.

[Claims 6 to 11 not printed in the Gazette.]

1,265,119. OILING DEVICE. EPPA H. RYON, Waltham, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed June 6, 1917. Serial No. 173,215. (Cl. 184—102.)



1. In a loom, in combination, a lay, a picker rod mounted thereon, and an oiling device for said rod comprising an oil reservoir mounted on said lay, a rigid metallic oiling member pivotally supported by said reservoir and having a portion extending downwardly therein, said member normally engaging said picker rod and being movable in a plane above the level of said reservoir into and out of such engagement, and material extending through said metallic member effective to convey oil from said reservoir through said member to said rod.

2. An oiling device for a loom picker rod comprising a pivoted lever yieldingly engaging said rod, and means to supply oil through said lever to said rod, said lever having a rod-engaging portion and having lugs on each side of said portion effective to prevent engagement of said rod-engaging portion with the picker.

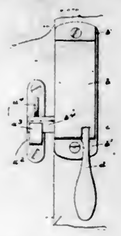
3. An oiling device for a loom picker rod comprising an oil reservoir, a pivoted lever, means to convey oil from said reservoir through said lever to said rod, a locking device for said lever, and a spring effective to hold said device in locking position and also to force said lever yieldingly against said rod.

4. An oiling device for a loom picker rod comprising an oiling member normally engaging said rod but movable outwardly therefrom by the picker, and means to supply oil to said member, said member being provided with means preventing the deposit of oil on said picker when engaged thereby.

1,265,120. LATCH FOR DOORS. THOMAS O. SCHRADER, Allentown, Pa., assignor to The Dent Hardware Company, Fullerton, Pa., a Corporation of Pennsylvania. Filed Apr. 6, 1917. Serial No. 160,121. (Cl. 70—49.)

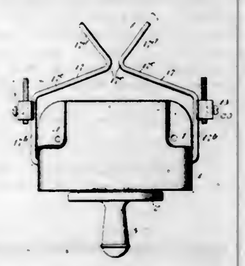
1. The combination, in a latch, of a keeper and a cam having a bolt formed therewith and engaging said keeper, a cross-pin, a rod mounted on said pin and connected with said cam, an operating lever-handle pivotally connected with said pin and a link connected with said handle and cam opposite the position of the bolt of said cam, substantially as and for the purposes described.

2. The combination in a latch, of a keeper and a cam having a bolt arranged to engage said keeper, a cross-pin, a rod slidably mounted on said pin and connected with said cam, a spring mounted on said rod, the terminals whereof respectively, bear against said pin and cam, an operating lever-handle pivotally connected with said pin and a link connected with said handle and cam opposite the position of the bolt of said cam, substantially as and for the purposes described.



3. The combination, in a latch, of a keeper and a cam having a bolt arranged to engage said keeper, said cam provided with a recess, a cross-pin, a rod mounted on said pin and connected with said cam, a spring mounted on said rod, the terminals whereof respectively, bear against said pin and cam, an operating lever-handle having a lug arranged to engage the recess of said cam, and said handle pivotally connected with said pin, substantially as and for the purposes described.

1,265,121. FUSE DEVICE. EDMUND O. SCHWEITZER and ALFRED HERZ, Chicago, Ill. Filed Mar. 13, 1914. Serial No. 824,412. (Cl. 175—277.)



1. A fuse device comprising plug and socket members provided with coöperating contacts, the plug member carrying a fuse connected with its contacts, arc dissipating horns connected with the casing contacts and line terminals on said horns.

4. A fuse device comprising plug and socket members provided with coöperating contacts, the plug member carrying a fuse connected with its contacts, and arc dissipating horns connected with the contacts of said socket member, said horns having connecting portions extending through apertures in the wall of said socket member.

6. The combination of a casing containing a fuse, and having terminals for the fuse inside of the casing, and arc dissipating horns connected with said interiorly arranged fuse terminals, said horns having connecting portions extending through the wall of the casing to said terminals.

7. The combination of a casing containing a fuse and having terminals for the fuse inside of the casing, and arc dissipating horns connected with said interiorly arranged fuse terminals, said horns being mounted upon and supported by said casing, and having connecting portions extending through the wall of said casing and connected with the fuse terminals inside of the same.

[Claims 2, 3, 5, and 8 not printed in the Gazette.]

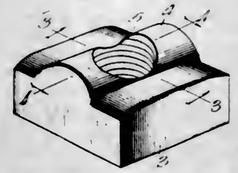
1,265,122. TAILOR'S MEASURE. THOMAS F. SCOTT, Patterson, La. Filed Apr. 4, 1916. Serial No. 88,892. (Cl. 33—2.)



2. A tailor's measure comprising a rod, circular in cross section and bent to the arc of a circle, a handle integrally formed on one end of the rod, and at an angle thereto, a U-shaped member secured to the rod on the outer surface thereof, a clip hingedly connected to the member, and a tape measure secured at one end to the clip.

[Claim 1 not printed in the Gazette.]

1,265,123. LOCK-NUT. WILLIAM E. SHARP, Chicago, Ill., assignor to Grip Nut Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 29, 1915. Serial No. 17,681. (Cl. 151—21.)

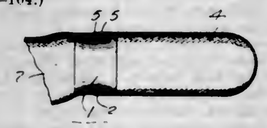


1. A bolt nut comprising a suitable nut provided with one flat face and with a diametrically disposed bead on the other face thereof intersected by the threaded bolt hole, the beaded part being compressed and the threads thereof distorted to slightly decrease the normal distance between the proximate threads thereof.

3. A bolt nut comprising a nut provided with one flat face and with a diametrically disposed bead on the other face thereof intersected by the threaded bolt hole, the threads near the upper surface of the nut being distorted to slightly decrease the normal distance between the proximate threads thereof.

[Claim 2 not printed in the Gazette.]

1,265,124. FINGER-COT. GROVER MARCUS SHUMAKER, Marion, Ohio. Filed Apr. 21, 1917. Serial No. 163,577. (Cl. 2—104.)



1. A finger cot having at its open end an extension adapted to enter within the cut off finger or thumb of a glove, said extension being of greater diameter than the finger of the glove and the finger or thumb of the user, and being semi-rigid to hold the glove extended.

3. A finger cot having at its open end spaced internal annular ribs, and a connecting ring of semi-rigid material having intermediate its ends external annular grooves for engagement by the ribs.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,125. TOY BANK. SAMUEL SIEGEL, New York, N. Y., assignor to Anna Siegel, New York, N. Y. Filed Sept. 7, 1916. Serial No. 118,810. (Cl. 46—36.)



1. A toy bank comprising a base-plate, a coin receptacle having a slot in its vertical side and mounted on one end of a platform, and a gun which is adapted to shoot a coin through said slot into said receptacle, and a support for said gun to which the latter is connected by a universal joint on the end of said platform opposite said receptacle.

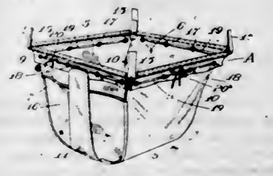
2. A toy bank comprising a platform, a coin receptacle having a slot in its vertical side and mounted on one end of said platform, a gun which is adapted to shoot a coin through said slot into said receptacle, a support for said gun which is connected by a universal joint to the end of said platform opposite said receptacle, and means for limiting the movement of said gun on the vertical and horizontal axes of said joint.

3. A toy bank comprising a platform, a coin receptacle mounted on one end thereof that has a slot in its vertical side, a door in the opposite side thereof, a gun which is adapted to shoot a coin through said slot into said receptacle, a support therefor which is connected to said platform by a universal joint, and means for causing the coin in said bank to bear against and force said door open.

4. A toy bank comprising a base-plate, a coin receptacle at one end of said base-plate having a slot in its vertical side, a door in one of its vertical sides, means within said receptacle for causing a movement of the coin therein to open said door, a gun which is adapted to shoot a coin through said slot into said receptacle, and a swiveled support at the end of said base-plate opposite said receptacle to which said gun is connected.

5. A toy bank comprising a base-plate, a coin receptacle at one end of said base-plate having a slot in its vertical side, a door in one of its vertical sides, means within said receptacle for causing a movement of the coin therein to open said door, a deflecting tongue for directing said coin downward which is integral with said means, a gun which is adapted to shoot a coin through said slot into said receptacle, and a swiveled support at the end of said base-plate opposite said receptacle to which said gun is connected.

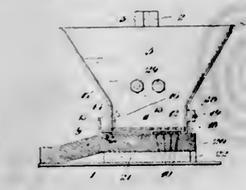
1,265,126. CHILD'S SWING-SEAT. BENNETT C. SILVER, Chicago, Ill. Filed Jan. 23, 1917. Serial No. 143,890. (Cl. 155—44.)



3. In a child's swing-seat, the combination with a rigid frame and suspending means therefor, of a textile seat the upper edges of which are provided with parallel rows of eyelets and folded over the rigid frame and having an open end with a restraining flap secured to the said seat at one end and means for fastening the free end of the flap to the body of the textile seat.

[Claims 1 and 2 not printed in the Gazette.]

1,265,127. WRAPPER-PASTING DEVICE. JOSEPH J. SLEEPER, Moores, Pa. Filed Apr. 29, 1916. Serial No. 94,299. (Cl. 93—61.)



1. A paste holder, comprising a receptacle having a pair of perforated bottoms spaced apart, and a sliding plate between said bottoms adapted to cut off the perforations in both bottoms.

2. A paste holder, comprising a receptacle having a perforated bottom, a sliding plate supported on the perforated bottom, and a removable perforated false bottom located inside the receptacle on top of the sliding plate.

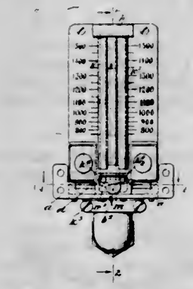
3. A paste holder, comprising a receptacle having a perforated bottom, a sliding plate supported on the perforated bottom, and a removable perforated false bottom located inside the receptacle and on top of the sliding plate, and upwardly projecting tongues on the false bottom having bent upper ends.

4. A device of the character described comprising a base plate, a pair of standards on the base plate, a paste holder, brackets on the ends of the paste holder, means permitting said paste holder a movement angularly relative to the brackets, and means on the brackets having vertical movement on the standards.

5. A device of the character described, comprising a pair of standards, brackets movable vertically on the standards, a paste holder supported by the brackets, and means permitting said paste holder an angular adjustment relative to the brackets.

[Claims 6 to 9 not printed in the Gazette.]

1,265,128. TACHOMETER. EDWARD A. SLYE, Hartford, Conn., assignor to The Veeder Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 2, 1917. Serial No. 194,316. (Cl. 264—19.)



1. In an instrument of the character described, the combination of an impeller chamber, an impeller therein, and a plurality of indicating tubes connected with the impeller chamber, one of said tubes being connected with the impeller chamber through a relatively restricted passage and another of said tubes being connected with the impeller chamber through a relatively free passage.

3. In an instrument of the character described, the combination of an impeller chamber, an impeller therein, a plurality of indicating tubes, one of said tubes being connected with the discharge of the impeller chamber through a relatively restricted passage and another of said tubes being connected with the discharge of the impeller chamber through a relatively free passage, and means to vary the degree of restriction of the connection between the first named tube and the discharge of the impeller chamber.

[Claim 2 not printed in the Gazette.]

1,265,129. MOUTH-MASK. FRANK D. SPOTSWOOD, Lexington, Ky. Filed Aug. 23, 1917. Serial No. 187,828. (Cl. 2—119.)

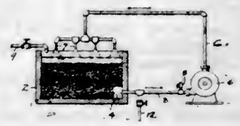


1. A mask including a body provided with a mask feature and adapted to be fitted by the user over a feature of the face for masking such feature of the face, and means carried by the body to normally lie thereagainst and movable to project laterally from the body to be received between the teeth of the user to support the body of the mask in position.

2. A mask including a body provided with a mask feature and adapted to be fitted by the user over a feature of the face for masking such feature of the face, and a flexible tab carried by the body and adapted to be swung laterally therefrom to be received between the teeth of the user to support the body of the mask in position.

[Claim 3 not printed in the Gazette.]

1,265,130. PROCESS OF CURING OLIVES. HOMER C. STALEY, Hayward, Cal., assignor to Hunt Brothers Company, San Francisco, Cal., a Corporation of California. Filed Feb. 12, 1917. Serial No. 148,276. (Cl. 99—1.)



1. The process of curing olives which consists in subjecting the olives to a lye bath and subsequently subjecting the olives to a bath of continuously artificially aerated circulating liquid.

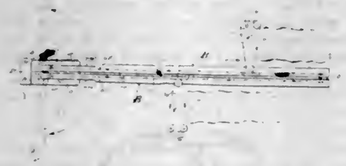
2. The process of curing olives which consists in subjecting the olives to a lye bath and subsequently subjecting the olives to a bath of moving liquid carrying minute particles of air in suspension.

3. The process of curing olives which consists in subjecting the olives to a lye bath and subsequently subjecting the olives in a tank to a liquid carrying minute particles of air in suspension, continuously withdrawing the liquid from the bottom of the tank, continuously adding air to said withdrawn liquid and intimately mixing said air and liquid, and forcing the mixture back into the tank.

4. The process of curing olives which consists in subjecting the olives to a lye bath and subsequently subjecting the olives in a tank to a moving stream of continuously artificially aerated and re-circulated liquid carrying minute particles of air in suspension.

5. The process of pickling olives comprising aerating a liquid and passing the liquid over and between the olives after they have been subjected to a lye solution.

1,265,131. LOADING-MACHINE FOR CONCRETE-MIXERS AND THE LIKE. HUGO O. STAMP, Milwaukee, Wis. Filed Mar. 23, 1916. Serial No. 86,059. (Cl. 193—8.)



1. A loading machine comprising a pair of conveyer members each including a lateral conveyer portion and adapted to pick up material from the ground and discharge same at a higher level, independent measuring hoppers at the discharge ends of said conveyer members, means for relatively moving the lateral conveyer portions, and independent means controlling the actuation of each conveyer member.

5. A portable material collector comprising a wheeled truck, a main conveyer connected with and extending from the truck and adapted to rest on the ground, means for lifting said main conveyer from the ground, a lateral conveyer carried at its inner end by the main conveyer, and a wheeled support for the lateral conveyer.

10. A loading machine including a main conveyer bed a lateral movable conveyer bed, arranged to discharge on the main conveyer bed, and a conveyer comprising a single endless chain member arranged in a main loop operating in conjunction with the main conveyer bed and in a second loop operatively associated with the lateral conveyer bed.

18. In a loading machine, a support, hopper sections carried on the support, pairs of upper and lower pivot shafts disposed respectively above and below the hopper sections having their axes in vertical alinement and intersecting portions of the hopper sections, conveyer members pivoted to the upper pivot shafts for vertical movement, and guide frames for the conveyer members pivoted on the lower shafts.

[Claims 2 to 4, 6 to 9, and 11 to 17 not printed in the Gazette.]

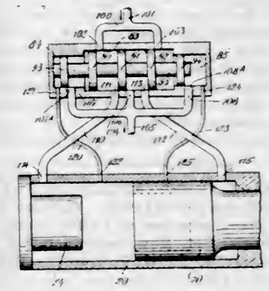
1,265,132. MOLDABLE PAPER-BOARD FOR CLOSURES, CONTAINERS, AND THE LIKE. HENRY W. STOKES, Philadelphia, Pa. Filed Nov. 14, 1917. Serial No. 202,066. (Cl. 92—69.)

1. As a new article of manufacture paper-board for caps, closures, containers and the like, comprising the combination of paper in crape form and a stiffening agent plastic under heat and pressure, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,265,133. ROCK-DRILL. THOMAS E. STURTEVANT, Dover, N. J., assignor to McKiernan-Terry Drill Company, Dover, N. J., a Corporation of New Jersey. Filed Apr. 21, 1917. Serial No. 163,550. (Cl. 121—20.)

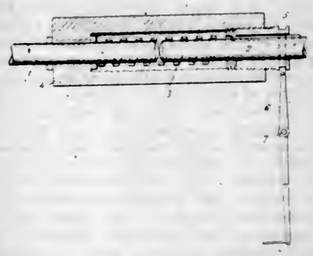
1. A rock drill comprising a cylinder, a piston therein, a valve casing having a central chamber with cylinder ports connected with the ends of the cylinder beyond the ends of the piston travel and having pressure and exhaust ports, said valve casing also having end chambers of less area than that of the central chamber, passages from the cylinder within the ends of the piston travel to the ends of the corresponding end chambers, a reciprocatory valve in all of said chambers arranged to be moved beyond its central position by motive fluid from the cylinder through said passages, and arranged to alternately connect the cylinder ports with the supply and exhaust ports, a relief port in said end chambers intermediate the ends thereof, each of said relief ports having a port extension of less area than that of said passages arranged to be opened by the valve in its central position to allow a part of the valve actuating fluid to escape from the end chambers.



3. A rock drill comprising a main cylinder and a piston therein, a valve casing having a central bore with cylinder ports connected with the ends of the main cylinder beyond the ends of the piston travel, and having pressure and exhaust ports, said valve casing also having alining end bores of smaller diameter, passages from the main cylinder within the ends of the piston travel to the ends of the corresponding end bores, and a piston valve comprising end pistons fitting the end bores and intermediate pistons fitting said central bore spaced from said end pistons and from each other, relief ports in the end bores intermediate their ends, said pistons being arranged to close all of said ports when the valve is in its central position and to open all of said ports when the valve is moved in either direction from its central position, each of said relief ports having a port extension of less area than that of said passages, on the sides of the relief ports toward the ends of the end bores, said valve pistons being so arranged that when moved beyond their central position to lead pressure between two of the larger pistons to the cylinder, pressure is present between another of the larger pistons and the adjacent end piston to complete the movement of the valve.

[Claim 2 not printed in the Gazette.]

1,265,134. GOVERNOR AND REGULATOR FOR ENGINES, MOTORS, &c. CARLOS A. SUNDT, Santiago, Chile. Filed July 18, 1917. Serial No. 181,231. (Cl. 264—11.)



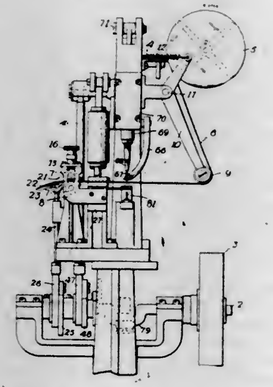
1. A governor or regulator for engines, motors, etc., comprising in combination a driving shaft, a driven shaft, a torsion spring having its ends directly connected to said shafts and formed with a number of convolutions surrounding the adjacent ends of the shafts to form a driving connection through which power is transmitted and which permits relative rotation of the driving and driven shafts, and means operated by said relative rotation of the shafts for governing or controlling the driving engine or motor.

4. A governor or regulator for engines, motors, etc., comprising in combination a driving shaft, a driven shaft,

a torsion spring directly connecting said shafts through which power is transmitted, a member rotatable with one shaft, a cylindrical member rotatable with the other shaft and surrounding the spring, the member rotatable with the one shaft being formed with screw threads engaged by corresponding threads of the cylindrical member on the other shaft, so that relative rotation of the driving and driven shafts produces relative displacement of the members with respect to each other, and means whereby the relative displacement effects a regulation of the driving engine or motor.

[Claims 2 and 3 not printed in the Gazette.]

1,265,135. MACHINE FOR ATTACHING FLAP-SECURING MEANS TO ENVELOPS. WILLARD E. SWIFT, Worcester, Mass., assignor to United States Envelope Company, Springfield, Mass., a Corporation of Maine. Filed Sept. 2, 1916. Serial No. 118,217. (Cl. 93—61.)



1. In a machine of the class described, the combination with eyelet-setting mechanism for affixing a washer to an article, of mechanism for successively forming and separating washers from a continuous strip of washer material, and means for conveying each washer from the forming mechanism to the eyelet-setting mechanism.

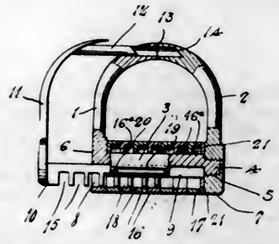
10. In a machine of the class described, the combination with eyelet-setting mechanism adapted to affix a washer to an envelop, of a washer conveying member adapted in one position to hold a washer in position for the action of said eyelet-setting mechanism, and in a second position to have a disk of washer material superposed thereon, and punching mechanism above said member, adapted in the second position of said member to deposit a disk of washer material thereon, said punching mechanism including means for forming a washer from said disk while the latter is supported on said member, and before movement of said member from the above second mentioned position.

14. In a machine of the class described, a reciprocating actuating means, disk punching mechanism having a yielding connection therewith, and means for punching out the centers of disks which are formed by said disk punching mechanism, said last named means having a positive connection with said actuating means.

[Claims 2 to 9 and 11 to 13 not printed in the Gazette.]

1,265,136. COMBINATION-PADLOCK. GEORGE TAVRA, Eureka, Cal. Filed July 26, 1917. Serial No. 182,991. (Cl. 70—19.)

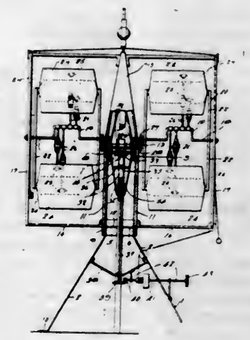
1. A combination padlock of the class described including a shackle divided at the outer portion and composed of relatively fixed and movable sections, a spindle fixed to one of the sections and forming a pivot for the other section, means for holding the pivoted section against sliding movement on the spindle, a locking member located at the relatively fixed section and conforming to the configuration of and fitting against the same and extending to the outer end thereof, said locking member being provided with an arm of a length to extend beyond the fixed section and engage the relatively movable section for holding the same against movement, said locking member being also slidable outwardly to release the relatively movable shackle, and means for locking the said locking member against such outward sliding movement.



4. A combination padlock of the class described including a shackle composed of relatively fixed and movable sections, the relatively fixed section being provided with an opening, a spindle fixed to the relatively fixed section and having a longitudinal groove extending inwardly from the said opening, said spindle being also provided with a longitudinal slot, a locking member provided with means for engaging the relatively movable shackle section and having an arm slidable in the groove and passing through the opening of the relatively fixed section, said arm being provided at intervals with lugs, rotary rings having flanges operating between the lugs and provided with notches for the passage of the lugs, said rings being mounted on the spindle, and a pin carried by the said arm and operating in the slot for limiting the movement of the locking member.

[Claims 2 and 3 not printed in the Gazette.]

1,265,137. WINDMILL. JAMES L. TAYLOE, Owensville, Mo. Filed Jan. 30, 1917. Serial No. 145,390. (Cl. 170—24.)

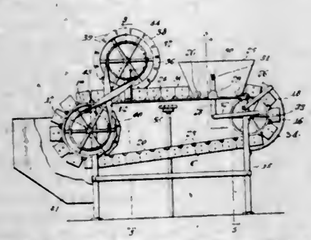


1. In a device of the class described, a standard, a sleeve rotatably mounted on the upper end of the standard, a frame secured to the sleeve and extending laterally therefrom at diametrically opposite points, a pair of rotary elements journaled in the frame, blades carried on said rotary elements, said blades adapted to feather as the elements rotate, and means supporting said elements in a horizontal axis on the sleeve.

5. In a windmill, a plurality of straps extending upwardly in spaced parallel relation, a ring connecting the lowermost ends of the straps, a ring connecting the upper ends of the straps, said rings being provided with annular grooves in the upper surfaces to form ball races, the rings and straps forming a standard, bearing balls within said ball races, a hollow cylindrical element adapted to fit upon the standard, the lower edge element being provided with an annular groove forming the ball races to engage the lowermost bearing balls, the ring between the upper end of the cylindrical element having a groove and this upper edge forming ball races to receive the upper side of bearing balls, a vane to cause the cylindrical element to rotate on the standard when any variation in the direction of the wind occurs, crank shafts extending outwardly from the cylindrical element at diametrically opposite points, rotors formed on said crank shafts, said rotors being provided with radiating arms, blades rotatably mounted between the ends of said arms and connecting the rods and connected to the blades when near their edges and to the crank shaft, whereby upon rotation of the rotors the blades will be feathered.

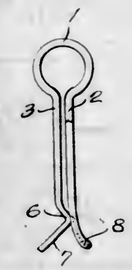
[Claims 2 to 4 not printed in the Gazette.]

1,265,138. BRIQUET-MOLDING MACHINE. CHARLES E. TAYLOR, Hillsboro, Ill. Filed Mar. 11, 1916. Serial No. 83,569. (Cl. 107—16.)



A device of the character described comprising a frame including end uprights and a flat top mounted thereon, drums journaled at the ends of said frame, a chain of molds trained about said drums and passing over the flat top of said frame, and a reciprocatory hopper resting upon and slidable along said top, the end walls of said hopper being apertured for the passage of said molds and the sides of said hopper straddling said molds in close relation thereto whereby said hopper and said molds will mutually guide each other, said sides further preventing the spilling of material from the molds as the molds emerge from the hopper.

1,265,139. CLOTHES-PIN. LEONIDAS L. TITTLE, Jr., Dayton, Ohio. Filed Nov. 16, 1915. Serial No. 61,824. (Cl. 24—139.)



1. A clothes pin comprising a single piece of wire formed intermediate its ends with a resilient butt-joint open ring having substantially parallel clamping arms extending from the ends of the ring, an ovoidally shaped loop formed on one of the arms, a lug formed on and adjacent one end of the other arm, said lug being adapted to normally extend slightly within the plane of the loop to coöperate with the said loop for clamping an article therebetween, and presenting diverging guides formed on the arms for facilitating the application of the pin to a clothes line, said clothes line being adapted to pass between the arms of the pin and to normally lie within the ring when the pin is applied thereto, said ring further being adapted to encircle an article looped over the clothes line.

2. As a new article of manufacture, a clothes pin formed of a single piece of resilient wire with a split ring intermediate its ends serving as a clothes-line engaging and supporting portion and from which extend arms, one of said arms having a portion thereof recurved to form a loop turned at right angles to the split ring so that the axis of the loop is in the same plane as the ring, the other arm extending approximately parallel to the loop and having its free end formed with a projection that normally lies within the loop, said split ring being adapted to encircle and engage with an article looped over a clothes line while the arms clamp another portion of the article therebetween, said ring further serving as a support for retaining the pin in an operative relation to the line and against accidental displacement.

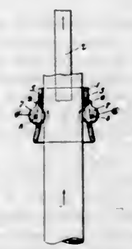
1,265,140. LOCK-PIN GRIP. THOMAS WILLIAM TODD, Bend, Oreg. Filed May 29, 1917. Serial No. 171,710. (Cl. 24—3.)



5. In a lock pin grip, a plate, a finger hold at the upper end of the plate, an inwardly extending extension formed on the lower end of the plate, a downwardly extending tongue formed on the outer end of said extension, a clamp member secured to said inwardly extending extension, a thumb piece on said clamp member positioned adjacent the finger hold, a clamping tongue on the clamp-member adapted to coöperate with the tongue for engaging over the pocket of the user, and a watch supporting means formed on the lower end of said tongue, as and for the purpose specified.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,265,141. CLAMPING-TOOL. WILLIAM TRIPPE, Holstein, Mo. Filed Dec. 24, 1917. Serial No. 208,540. (Cl. 57—9.)

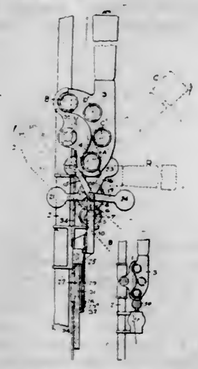


1. A clamping tool of the character described, comprising a sleeve arranged to encircle a detached part of a boring machine, and having slots near one end thereof, an eccentric cam disk supported in each of said slots, and a projection on each of said cam disks arranged to engage against the sleeve at the lower end of the slot when the cam disk is in that position which it occupies when the portion thereof having the shorter radius is toward the axis of the sleeve and arranged to engage against the sleeve above the slot to limit turning movement of the cam disk.

3. A clamping tool of the character described, comprising a sleeve arranged to encircle a detached part of a boring machine, and having slots near one end thereof, an eccentric cam disk supported in each of said slots in such position that the portion having the shorter radius extends inwardly beyond the plane of the inner surface of the sleeve, a projection on each of said cam disks arranged to engage against the sleeve at the lower end of the slot when the cam disk is in that position which it occupies when the portion thereof having the shorter radius is toward the axis of the sleeve and arranged to engage against the sleeve above the slot to limit turning movement of the cam disk, and serrations on the peripheries of the cam disks arranged to engage the detached part of the boring machine with pressure increasing according to the increase in power applied to the clamping tool and the resistance of the detached part.

[Claim 2 not printed in the Gazette.]

1,265,142. RAILROAD SIGNALING SYSTEM. JAMES J. TURNER, Pittsburgh, Pa. Filed Nov. 1, 1911. Serial No. 658,046. (Cl. 246—21.)



1. In railroad signal systems, the method of governing the movement of trains, consisting in interrupting at will the flow of the light rays a certain number of times within a given period and simultaneously swinging a semaphore into a predetermined position to indicate a certain signal during such interruptions, and interrupting the flow of light rays a different number of times within said period and simultaneously swinging a semaphore to a different position during such interruptions to indicate another signal.

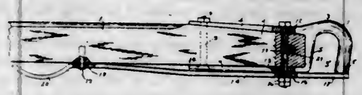
2. In a railroad signaling system, the combination of a lamp, a motor and a blinder operated by said motor and adapted at intervals to cut off the light rays from the lamp, and a second blinder independent of the first adapted to be connected to and operated in like manner by the motor and means whereby the first blinder may be operated alone or in conjunction with the second.

7. In railroad signal systems, the combination of a lamp, a semaphore carrying lenses of different colors adapted to be brought in line with said lamp, said semaphore being adapted to be placed in different positions, and means operatively connected with said semaphore for operating said semaphore and means displaying at will a different number of pulsations of light within a given period according to the position of the semaphore.

[Claims 3 to 6 not printed in the Gazette.]

1,265,143. VEHICLE-TRAILER-POLE HOOK. EDWARD TUTTLE and GEORGE W. KEITH, Seneca, Mich. Filed Aug. 4, 1917. Serial No. 184,396. (Cl. 24—241.)

1. A device of the class described comprising a pole; a hook having a bill secured to the pole end; a fastener member carried by the pole; and a hook closure member pivotally mounted adjacent the hook bill and provided with a springy extension member which is adapted to be sprung into and out of engagement with said fastener



member, said closure member being adapted to be swung transversely of the hook bill for opening or closing it.

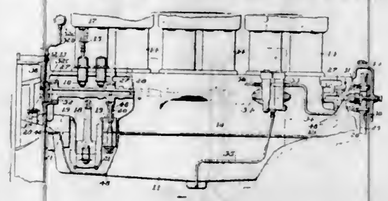
[Claim 2 not printed in the Gazette.]

1,265,144. WRENCH. FRANK MEAD VAN SICKLE, Layton, N. J. Filed May 28, 1917. Serial No. 171,526. (Cl. 81—57.)



As an improved article of manufacture, a wrench comprising a shank, said shank provided at one end with a handle and at its opposite end with an integral U-shaped portion, said U-shaped portion comprising a shank-portion and an outer plate portion, said shank-portion of the U-shaped end provided near the inner end of the U with an integral inwardly-extending bearing on its inner face, and an aperture formed in said bearing, and a registering aperture formed in the plate-portion of the U-shaped end, said last-mentioned aperture registered with the aperture of the bearing, an intermediate cog-wheel positioned between the plate-portion and the bearing of the shank-portion, means extending through said apertured portions of said plate portion and said shank-portion and through said intermediate cog-wheel, a secondary cog-wheel between the plate-portion and the shank-portion near the outer end of the U, said secondary cog-wheel being provided with a hub-portion extending through and beyond opposite sides of the U-shaped portion, a tool carried within the hub of said secondary cog-wheel, said shank being provided with an inwardly-extending integral bearing between the handle and the U-shape end, a primary cog-wheel engaging said last-mentioned bearing and meshing with said intermediate cog-wheel, means extending through the primary cog-wheel and said last-mentioned bearing of the shank, and constituting an axle for the primary cog-wheel, and a handle attached to said primary cog-wheel.

1,265,145. HYDROCARBON-MOTOR. JESSE G. VINCENT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 14, 1912. Serial No. 725,741. (Cl. 184—6.)

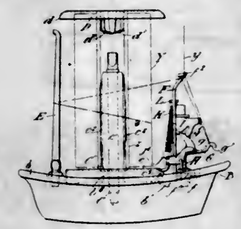


1. In a motor the combination with a crank case having two sets of bearings of a drilled out crank shaft mounted in one of said sets of bearings and a drilled out cam shaft mounted in the other of said sets of bearings, means for feeding oil under pressure to one of said shafts and a conduit connecting said shafts whereby the oil fed to one shaft is fed to the other.

17. In an internal combustion engine, a hollow shaft having port openings therein, means for supplying oil under pressure thereto, bearings for said shaft having port openings communicating with the parts to be lubricated, and means for causing said openings to register one at a time with the port openings in the shaft.

[Claims 2 to 16 and 18 not printed in the Gazette.]

1,265,146. SUPPLY-CARRIER FOR BRAIDING OR OTHER TEXTILE MACHINES. SIMON W. WARDWELL, Providence, R. I., assignor to Wardwell Braiding Machine Company, Portland, Me., a Corporation of Maine. Filed Nov. 21, 1913. Serial No. 802,274. (Cl. 28—24.)

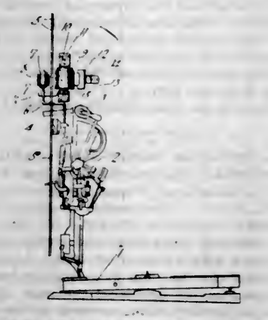


2. In a supply carrier for braiding or other machines, the combination with a rotatable cop-holder having a brake-wheel rotatable therewith, of a friction brake-lever pivoted on the carrier to adapt it to bear against the periphery of the brake-wheel to apply resistance to its rotation, a spring secured at one end to the brake-lever, means for fastening the opposite end of the spring at a plurality of different points at varying distances from the brake-lever, and a yarn-controlled lever pivoted to swing into contact with the brake-lever but normally held away therefrom solely through the action of gravity whereby a slight pull on the yarn will cause it to bear against the brake-lever and an increase in the tension on the yarn will cause it to act on the brake-lever to relieve the pressure of the latter on the brake-wheel.

5. In a supply-carrier for braiding- or other textile-machines, the combination with a cop-holder having a brake-wheel, of a standard arranged adjacent thereto and formed with an opening-having parallel sides with ratchet teeth in one of the sides, a member having slots fitted to the sides of the opening to adapt it to slide on the standard and arranged to engage the teeth thereof to hold it in place, a spring secured at one end to said member, and a brake-lever connected to the spring to be operated therefrom to engage the brake-wheel.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,265,147. VIOLIN-PIANO. JAMES L. WARNER, Girard, Kans. Filed Mar. 7, 1917. Serial No. 153,056. (Cl. 84—46.)

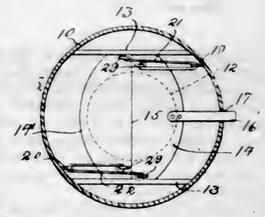


3. In a violin piano, a freely revoluble bowing head, a continuously operating actuating element, a string located between the bowing head and the actuating element, a key and means operated by the depression of the key for shifting the bowing head to simultaneously engage a string and the actuating element.

6. In a violin piano, a bowing head mounted to freely rotate, an endless belt, a string located between the bowing head and the belt, and out of line with the path of movement of the center of the bowing head, a key, means operated by the key for shifting the bowing head against the string and the belt simultaneously, means for applying rosin to the belt, and means for guiding the bowing head to the string and belt.

[Claims 1, 2, 4, 5, and 7 not printed in the Gazette.]

1,265,148. ODORLESS GARBAGE-RECEPTACLE. EMMET J. WARREN, Detroit, Mich. Filed Apr. 16, 1917. Serial No. 162,432. (Cl. 220—115.)



1. An odorless garbage container including a receptacle, a frusto-conical wall in the upper end thereof, horizontal supporting trackways mounted below the lower end of the wall, oppositely sliding closure plates mounted in the trackways, eye members carried by the inner face of the wall of the receptacle at diametrically opposite points and adjacent the ends of the said trackways, and cords connected at their ends to the corresponding ends of the plates and having their intermediate portions engaged through said eye members.

[Claim 2 not printed in the Gazette.]

1,265,149. PROCESS OF PRODUCING FERROPHOSPHORUS IN ROTARY FURNACES. HYLEMAN ALISON WEBSTER, Columbia, Tenn., assignor to John J. Gray, Jr., Rockdale, Tenn. Filed Oct. 13, 1916. Serial No. 125,409. (Cl. 75—45.)

1. The process of producing ferro-phosphorus in a rotary furnace containing above 10% phosphorus from phosphate rock which consists in charging into said furnace a suitable mixture of sub-divided phosphate rock, silica in excess and carbon; subjecting said mixture to the action of air and to a temperature above 1000° C. and below 1750° C., revolving the furnace in order to bring about an intimate contact of its constituents; maintaining incandescent carbon throughout the charge collecting the ferro-phosphorus and slag thus produced; and suitably recovering said ferro-phosphorus, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,265,150. PROCESS OF PRODUCING PHOSPHOR-COPPER COMPOUNDS. HYLEMAN ALISON WEBSTER, Columbia, Tenn., assignor to John Jefferson Gray, Jr., Rockdale, Tenn. Filed Dec. 28, 1916. Serial No. 139,348. (Cl. 75—1.)

1. The process of producing phosphor-copper compounds which consists in providing a charge containing copper bearing material, silica, phosphorus bearing material and sufficient carbon to liberate and reduce phosphorus oxids to elemental phosphorus; and heating said charge to a temperature sufficient to cause said elemental phosphorus to impregnate the copper present, substantially as described.

2. The process of producing phosphor-copper compounds in a blast furnace which consists in providing a charge of copper bearing material, silica, phosphate rock, and a sufficient excess of carbon to reduce any evolved phosphorus oxids to elemental phosphorus; admitting air preheated above 1150° F. to said furnace in restricted predetermined quantities; and raising the temperature of said charge material to a point sufficient to cause the reduced phosphorus to enter said copper, substantially as described.

1,265,151. WIRE-CUTTER FOR BAYONETS. EDMOND WILCZEK, Muskegon, Mich. Filed Feb. 19, 1918. Serial No. 218,138. (Cl. 42—90.)

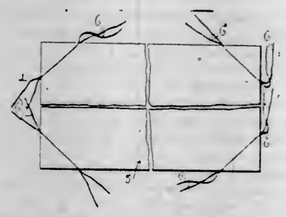


2. In combination with a bayonet having a right angular shank, a substantially U-shaped block arranged within the angle of the shank with the arms thereof projecting forwardly, a cutter wheel journaled upon a side of and adjacent the free end of each of said arms and provided with beveled cutting edges, said wheels overlapping each other and arranged for the cutting reception of a wire therebetween during its movement in entering the block between the arms thereof.

4. In combination with a bayonet having a blade provided with a right angular shank, a substantially U-shaped block positioned within the angle of the shank with the arms thereof projecting forwardly and arranged in planes substantially parallel with the blade, screw connecting means between said shank and said block, and cutting means associated with the inner edges of the arms of the block.

[Claims 1 and 3 not printed in the Gazette.]

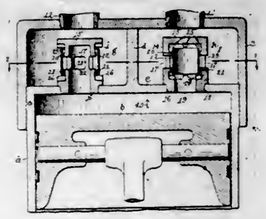
1,265,152. BED-SPRING COVER. MATTIE E. WILLIAMS, Louisburg, N. C. Filed Mar. 31, 1917. Serial No. 158,967. (Cl. 5—13.)



A bed spring cover consisting of a sheet of flexible material adapted to overlie all of the spring members, and tie strings secured in the cover at the corners thereof and having free end portions extending from the longitudinal and end edges of the cover and adapted to be tied to the upper convolutions of the corner spring members to positively hold the cover at its corners against shifting movement and displacement from the spring coils.

1,265,153. VALVE. PAUL WINSOR, Weston, Mass. Filed Aug. 1, 1916. Serial No. 112,594. (Cl. 103—66.)

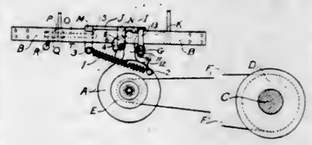
1. In a valve, in combination, a cylindrical casing closed at one end and open at its opposite end and provided in its body portion with ports separated by webs, flanges on said body portion coöperating with said ports to form valve seats, one of said webs having one surface in the same curve as the said flanges to form part of the valve seats, an expansible and contractible split cylinder coöperating with said seats and forming the valve proper to control the opening and closing of said ports and bodily movable circumferentially and axially with relation to said seats, and means for limiting circumferential and axial movements of said valve with relation to said ports.



3. In a valve, in combination, a curved valve seat and a substantially thin curved metal strip of a length greater than a semicircle and free to move bodily and capable of expanding and contracting and coöperating with said valve seat to be held thereto by the spring action of the strip itself.

[Claim 2 not printed in the Gazette.]

1,265,154. SUSPENSION FOR AXLE-LIGHTING DYNAMOS. JOSEPH LESTER WOODBRIDGE, Philadelphia, Pa. Filed Sept. 20, 1916. Serial No. 121,170. (Cl. 105—238.)



1. Means for suspending a dynamo from a vehicle comprising a longitudinal bar, a carriage supported by and adjustable along said bar, pivotal supporting means for suspending the dynamo from the carriage, projections extending downwardly from the carriage on either side of said bar, and a clamping device pivoted between said projections and beneath said bar, said device having an eccentrically curved surface adapted, upon rotation of the device about its pivotal axis to clamp the carriage to the bar.

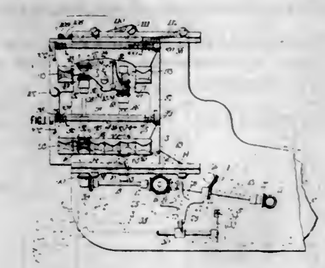
2. Means for suspending a dynamo from a vehicle comprising a longitudinal bar, a carriage supported by and adjustable along said bar, pivotal supporting means for suspending the dynamo from the carriage and normally carrying the weight of the dynamo, a second supporting means suspended from the bar normally idle but adapted to support the dynamo in case of failure of its normal support, and means for causing the point of suspension of the second supporting means to follow the travel of the carriage along the bar.

[Claims 3 to 5 not printed in the Gazette.]

1,265,155. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Jan. 17, 1912. Serial No. 671,742. (Cl. 235—59.)

1. In a combined typewriting and computing machine, the combination with a typewriter frame, a traveling carriage supported thereby, and a computing head, of controlling mechanism for governing the state of said computing head, a slidable frame mounted at the side of the typewriter frame, and means carried by said frame to individually coöperate with said controlling mechanism

in the different positions said frame may occupy for any position of the carriage.



4. The combination with a computing head, of controlling mechanism for governing the state of said computing head, a slidable plate for governing said controlling mechanism, said plate having an opening therein with a plurality of spaced fingers projecting into said opening, and a plurality of removable and replaceable locators secured by said fingers against movement longitudinally on said plate and arranged to position said controlling mechanism.

[Claims 2, 3, and 5 to 15 not printed in the Gazette.]

1,265,156. PRESSURE-RECORDER. CHARLES D. YOUNG, Columbus, Ohio, assignor, by mesne assignments, to American Steam Gauge & Valve Manufacturing Company, Boston, Mass., a Corporation of Massachusetts. Filed July 6, 1909, Serial No. 506,172. Renewed July 20, 1915. Serial No. 41,020. (Cl. 234—20.)

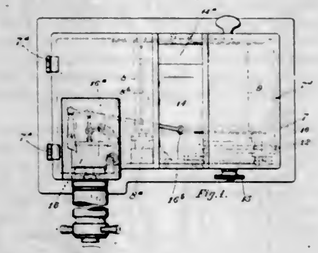


Fig. 1.

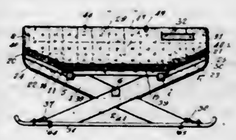
1. In a pressure recorder, in combination, a case for containing a paper tape and means for supporting and means for moving the tape, a movable marking device and means for moving the same, the means for moving the tape and the marking device being actuated by the same source of pressure or stress, said case being constructed to prevent unauthorized access of the attendant to the marking device and provided with an aperture to expose a portion only of the tape beyond the zone of operation of the marking device for the inscription of memoranda thereon by the attendant.

3. In a pressure recording apparatus, the combination of a pressure-actuated marker, means for moving said marker, a record roll holder having trunnions at its ends, bearings for mounting said holder, in which said trunnions are adapted to rotate, one of which bearings is yielding axially so that the holder may be removed, means for pressing said movable bearing toward the drum, means for preventing rotation of said bearing, a winding drum, and means for turning said drum to draw the record strip from the roll holder and wind it on the drum, the strip in passing from the holder to the drum being carried past and in contact with the marker.

5. In a pressure recorder, the combination with a case, of a record sheet and a support therefor within the case, a pressure actuated marker also within the case arranged to bear on the record sheet, mechanism operable by fluid pressures and connected with said marker for moving the same through distances proportional to such pressures, and means for moving the record sheet past the marker, the case being closed against unauthorized access of workmen to the marking device, and having a transparent portion over the path of movement of the marking device, through which the action of said device may be observed, and having also an aperture located so as to expose a portion of the record sheet near the path of the marker to permit the inscription of memoranda on the sheet.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,265,157. CHILD'S COT FOR VEHICLES. JOHN J. ZOFSAK, Greensburg, Pa. Filed Sept. 20, 1916. Serial No. 121,164. (Cl. 5—58.)



2. In a child's cot front and rear side walls of varying heights, supporting and connecting means between the said walls, a mirror angularly arranged in the higher wall, protective covering means for the child carried by the side walls, and a hinged flap-door and transparent window in said protective means for observing the occupant of the cot therethrough.

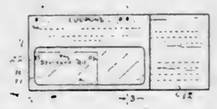
[Claim 1 not printed in the Gazette.]

1,265,158. CARBONIZING MATERIAL FOR STEEL ARTICLES. ROBERT R. ABBOTT, Cleveland, Ohio, assignor to The Case Hardening Service Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 7, 1913. Serial No. 783,534. (Cl. 148—25.)

1. A carbonizing mixture for steel articles comprising sawdust and soda-ash.

[Claim 2 not printed in the Gazette.]

1,265,159. COUPON-ENVELOP. VICTOR W. ALEXANDER, Milwaukee, Wis. Filed Oct. 16, 1916. Serial No. 125,781. (Cl. 283—23.)



1. The combination with an envelop constructed to seal a coupon therein and also permit a view of the data upon said coupon while inclosed, of a detachable leaf projecting from one edge of said envelop and provided with data to form an income tax blank relating to the inclosed coupon, whereby the coupon is in sight for record and comparison with the income tax blank data while inclosed against removal.

2. The combination with an envelop constructed to seal a coupon therein and also permit a view of the data upon said coupon while inclosed, of a detachable leaf projecting from one edge of said envelop and provided with data to form an income tax blank relating to the inclosed coupon, said leaf being arranged to fold against the envelop, and a second leaf projecting from another edge of

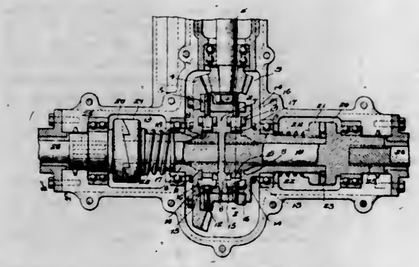
said envelop and also provided with data in blank relating to said coupon, whereby the coupon is in sight for record and comparison with the income tax blank data and also the blank data on said second leaf while the coupon is inclosed against removal.

5. The combination with an envelop constructed to seal a coupon therein and having a normally open end and a transparent wall to permit a view of the data upon said coupon while inclosed, of a detachable leaf projecting from one edge of said envelop and provided with data to form an income tax blank relating to the inclosed coupon, said leaf having a portion constructed to form a sealing flap for the open end of the envelop when said leaf is folded against the envelop on the side opposite to the transparent wall, whereby the coupon is in sight for record and comparison with the income tax blank data while inclosed against removal.

8. The combination with an envelop constructed to receive a coupon and also permit a view of the data upon the coupon while inclosed therein, of a detachable leaf connected to the envelop and provided with data to form an income tax blank relating to the inclosed coupon, whereby the data on the coupon and income tax blank may be readily compared.

[Claims 3, 4, 6, and 7 not printed in the Gazette.]

1,265,160. COMPENSATING DRIVING MECHANISM FOR MOTOR-VEHICLES. JOHN D. ALLEN, Philadelphia, Pa. Filed Mar. 7, 1917. Serial No. 153,074. (Cl. 74—7.)



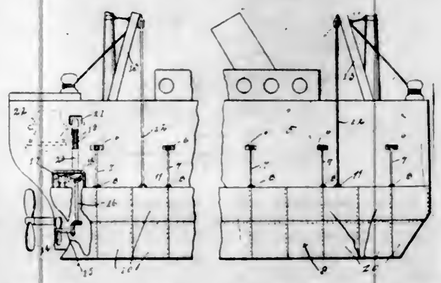
1. In a driving mechanism for motor vehicles, the combination of a hollow shaft, a divided shaft within the same and connected to the wheels, means connecting said shafts but operable only to transmit power from the outer one to the inner one on forward drive, pawls carried by said outer shaft, ratchets carried by said inner shaft, means to cause engagement between said pawls and ratchets on reverse drive, and means to hold said pawls and ratchets out of engagement on forward drive.

2. A reversible compensating transmission gearing, comprising a divided driven shaft, a hollow driving shaft surrounding the same, driving means on said hollow shaft, an overrunning clutch connecting said hollow shaft to each part of said driven shaft to drive the latter in one direction, an overrunning clutch connecting said hollow shaft to each part of said driven shaft to drive the latter in the other direction, and means, controlled by said driving means, to hold said last mentioned clutches out of engagement when said driving shaft is turning in the first mentioned direction.

9. A rear axle compensating drive for motor vehicles, comprising in combination a two-part shaft each part of which is rigidly connected to one of the wheels, a hollow shaft surrounding said two-part shaft, a driving gear mounted on said hollow shaft so as to have a limited turning movement thereon, a ratchet clutch member fast on each part of said two-part shaft, coöperating ratchet clutch members slidably mounted on the ends of said hollow shaft, a ratchet wheel fast on the inner end of each part of said two-part shaft, the teeth of said ratchet wheels facing in the opposite direction to those of said ratchet clutches, pawls carried by said hollow shaft in position to engage said ratchet wheels, and means carried by said gear to hold said pawls out of engagement when the power is being transmitted through said ratchet clutches.

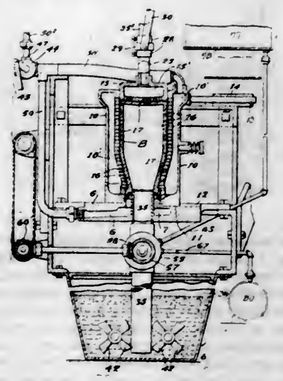
[Claims 3 to 8 and 10 to 12 not printed in the Gazette.]

1,265,161. TORPEDO-GUARD FOR SHIPS. THOMAS M. AUSTEN, Ithaca, N. Y. Filed July 5, 1917. Serial No. 178,722. (Cl. 114—240.)



In an apparatus of the class described, the combination with the hull of a ship, supporting members pivotally connected to the sides of said hull, guards connected to said supporting members and each including a plurality of plates assembled to provide downwardly converging sides and a top, means connected to said guards for raising and lowering the same, a propeller mounted in the stern of each guard, an electric motor carried by the top of each guard, a water tight casing for said motor, and means carried by the ship and connected to said electric motor for controlling the operation thereof.

1,265,162. PROCESS AND APPARATUS FOR MAKING BOTTLES FROM PAPER-PULP. HARRY C. AYERST, Seattle, Wash. Filed June 19, 1916. Serial No. 104,397. (Cl. 92—54.)

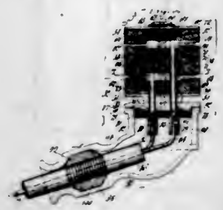


1. A process for making bottles from paper pulp, which consists in, first, introducing a quantity of pore-filling material into the interior of a bottle, second, causing said material to be deposited against the internal surface of the bottle by means of suction acting through the pores of the latter, and subsequently applying an internal pressure to the bottle wall to compact the same against the mold lining.

7. In an apparatus for forming bottles from pulp material, in combination with a mold having perforated walls, a reservoir for pulp material, a pipe making communicative connections between the interior of said mold and said reservoir, and suction devices having operative communication with the exterior of said mold, of a tank for storing pore-filling material, tubular connections between said tank and said mold, a source of storage or supply of air under pressure greater than the atmosphere communicatively connected with said mold, and a valve provided in said pipe for regulating the operations of all said connections with said mold.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,265,163. PLUG AND PLUG-RECEPTACLE FOR ELECTRIC CONDUCTORS. OTTO BAHLS and THEODORE SIEBERT, Jr., New York, N. Y. Filed Oct. 28, 1916. Serial No. 128,213. (Cl. 173—338.)



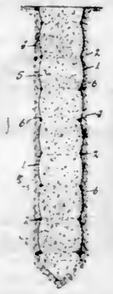
5. An electric connection, comprising a receptacle, a transverse insulated contact plate therein, a conductor connected to said plate, and a plug of insulating material provided with a transversely disposed recess therein, a contact plate disposed within said insulated recess, and providing a space within said recess adjacent said contact plate, a conductor connected to said plug contact plate, said plug contact plate being arranged in a plane relatively to the plate of the receptacle so as to frictionally engage the same when the plug is turned, a hollow handle on said plug provided with a portion of non-circular cross section, a cable extending through said handle, means connecting said cable to said conductor of said contact plate of said plug, and a pair of gripping means of non-circular contour within said portion of said handle of non-circular cross section adapted to prevent movement of said cable, said gripping means being prevented from rotary movement.

14. An electric connection, comprising a receptacle, a transverse insulated contact plate therein, a conductor connected to said plate, and a plug of insulating material provided with a transversely disposed recess therein, a contact plate disposed within said insulated recess, and providing a space within said recess adjacent said contact plate, a conductor connected to said plug contact plate, said plug contact plate being arranged in a plane relatively to the plate of the receptacle so as to frictionally engage the same when the plug is turned, a cover plate on said receptacle having an opening therein for insertion of said plug, and provided with projecting portions, means on said plug adapted to engage said receptacle when said plug is turned to lock said plug in said receptacle, and means adapted to eject said plug from said receptacle when said plug is turned to disengage said locking means, and a closure for said receptacle, comprising a plate provided with recesses, adapted to engage said projecting portions of said cover plate to lock the same thereon when turned in one direction, and inclined walls adapted to engage said projecting portion, when said closure is turned in the other direction to eject the same.

[Claims 1 to 4, 6 to 13, 15, and 16 not printed in the Gazette.]

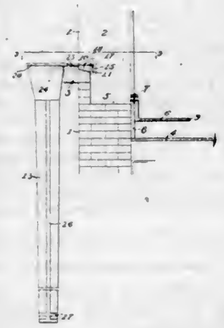
1,265,164. CONCRETE STRUCTURE, PILE, AND THE LIKE AND METHOD OF PRODUCING THE SAME. JAMES P. BARRY, Piedmont, and JOHN FRANCIS BARRY, Oakland, Cal. Filed Dec. 21, 1917. Serial No. 208,208. (Cl. 25—1.)

1. The improved method of making structures of the described character which consists in first sinking a flexible sheathing encircled by peripheral, spaced bands relatively non-yieldable; and then inserting in said bound sheathing a body filling and causing the sheathing between the bands to bulge peripherally under pressure.



2. A structure of the described character, comprising a flexible sheathing; spaced, peripheral bands relatively non-yieldable, encircling the sheathing; and a body filling in the sheathing, said filling and sheathing being bulged between the bands.

1,265,165. FIRE-ESCAPE. HENRY L. BARTLEY, Philadelphia, Pa. Filed Apr. 25, 1917. Serial No. 164,326. (Cl. 227—7.)



1. The combination with a window, of means providing slots adjacent the opposite side walls of the window, means providing a chamber below the window ledge, rods pivotally movable within said slots, a frame supported by said rods, and a tube connected to said frame, said ledge being adapted to support said frame, said tube, frame, and rods being adapted to fold within said chamber, and a cover for closing said chamber, substantially as described.

6. In a fire escape, a supporting structure, a tube suspended from the supporting structure, and elastic inserts extending longitudinally of the tube, substantially as described.

7. In a fire escape, a supporting structure, a tube suspended from the supporting structure, elastic inserts extending longitudinally of the tube, and elastic bands adjacent the lower portion of the tube and co-active with said inserts to retard the movement of a person dropping through said tube, substantially as described.

[Claims 2 to 5 and 8 not printed in the Gazette.]

1,265,166. FUMIGATOR. PERRY S. BAUER, Chicago, Ill. Filed Feb. 2, 1916. Serial No. 75,767. (Cl. 126—360.)

1. A fumigator comprising a casing, a disinfectant container supported at the upper end of said casing, a plural-

ity of openings in said casing, a cap containing a quantity of solid combustible material embracing the lower edge of said casing, a wick extending diametrically of said cap and of a length substantially equal to the diameter thereof, and igniting means for said wick adapted to extend through an oppositely disposed pair of said openings.

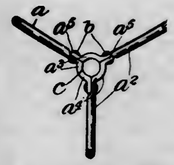


3. A fumigator comprising a casing, a disinfectant container supported at the upper edge of said casing, a cap containing a quantity of solid combustible material embracing the lower edge of said casing, a wick embedded in said combustible material extending to substantially the periphery of said cap in all directions and folded upwardly in a line extending diametrically of said cap, the length of said upwardly projecting portion being substantially equal to the diameter of said cap, a metal support for said wick embedded in said solid combustible material, and a cord disposed beneath the folded portion of said wick and provided with free ends serving as igniters for said wick.

6. A fumigator comprising a casing, a disinfectant container supported at the upper edge of said casing, a cap containing a quantity of solid combustible material embracing the lower edge of said casing, a wick embedded in said combustible material extending to substantially the periphery of said cap in all directions and folded upwardly in a line extending diametrically of said cap, the length of said upwardly projecting portion being substantially equal to the diameter of said cap, a metal support for said wick embedded in said solid combustible material, openings in said metal support adjacent the folded portion of said wick, and a cord disposed beneath the folded portion of said wick and provided with free ends serving as igniters for said wick.

[Claims 2 to 4 and 7 to 10 not printed in the Gazette.]

1,265,167. LAMP-SHADE HOLDER. AARON BLOCH, Brooklyn, N. Y. Filed Jan. 14, 1918. Serial No. 211,760. (Cl. 240—111.)

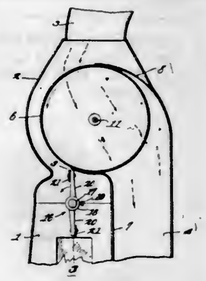


2. A lamp shade holder composed of separate parts provided at one end with flattened shanks having arc-shaped extensions provided at their ends with flat radial jaws, said shanks and jaws being secured together to form a circular head.

[Claim 1 not printed in the Gazette.]

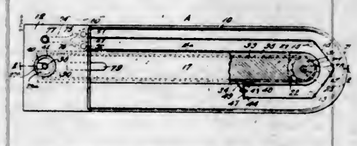
1,265,168. GAGE-BOX DISTRIBUTER. WALTER JAMES BRITTON, Spartanburg, S. C. Filed May 3, 1916. Serial No. 95,240. (Cl. 13—17.)

In a machine of the character described, an upright gage box, a screen housing at the upper end of said gage box, a rotatable cylindrical screen in said housing spaced from one side wall thereof to provide a cotton passage leading downwardly to the upper end of the gage box, the opposite wall of the gage box extending under and adjacent to said screen to said passage, a shaft rotatable in the gage box below the upper end of said wall of the



gage box, and arms carried by said shaft to work closely under the upper end of said wall of the gage box and across the lower end of said passage away from said screen.

1,265,169. PHOTOGRAPHIC DEVELOPING-MACHINE. HOWARD A. BURKHART, Petersburg, Ind. Filed Nov. 12, 1917. Serial No. 201,560. (Cl. 95—90.5.)



1. A photographic developing machine comprising a tank including a cover, a film spool holder mounted adjacent one end of the tank, and means in the tank for drawing a film vertically endwise in a horizontal plane through the tank.

2. A photographic developing machine, which comprises a tank including a cover, a film spool holder mounted adjacent one end of the tank, a division wall extending longitudinally of the tank, and movable means in the tank adapted to engage with one end of the film for extending and positioning the film upon opposite sides of the wall.

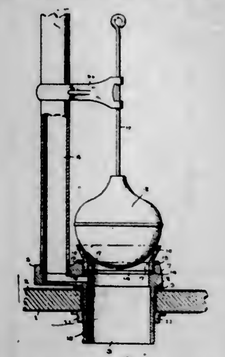
6. A photographic developing machine, comprising a tank having a cover, a film spool holder carried by the bottom wall of the tank for holding spools within said tank, and means for drawing a film vertically endwise in a horizontal plane through the tank, said means including a movable film carrier, operable on the bottom wall of the tank for supporting and spacing the film above said bottom wall.

[Claims 3 to 5 not printed in the Gazette.]

1,265,170. VALVE CONSTRUCTION. EUGENE BUSH and DOROTHY BUSH, Washington, D. C. Filed Mar. 20, 1917. Serial No. 156,098. (Cl. 4—5.)

1. In a device of the character specified, the combination with an outlet pipe for a flush tank, a head upon said outlet pipe within said tank provided with securing means, a metallic valve seat comprising a straight lower portion provided with securing means for engaging the securing means of said head, and an outwardly flared upper portion to provide a valve seat and also a hand or tool gripping rim to readily remove and replace said valve seat, and a ball valve coacting with said valve seat and slidably mounted in a support positioned remotely from and independently of said valve seat and said head.

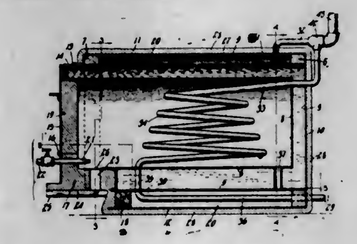
whereby to readily and remotely elevate said ball valve independently of said valve seat to provide for the ready



removal and replacing of said valve seat only relative to said head and without the removal of any other parts.

[Claim 2 not printed in the Gazette.]

1,265,171. WATER-HEATER. HUGH ROBERT BYNUM, Clarksdale, Miss. Filed Apr. 13, 1917. Serial No. 161,821. (Cl. 122—140.)

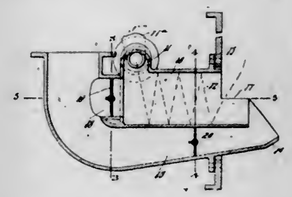


1. In a water heating apparatus the combination of a frame structure, a section providing a horizontally disposed heating chamber, a section inclosing the inner section and providing therewith a water space at the top, back, sides, and bottom, both of said sections located within the frame structure; an incasement mounted on the outside of the frame structure and surrounding said outer section and forming therewith an air heating chamber inclosing the water chamber at the top, sides and bottom; said surrounding air chamber communicating with the inner heating chamber and having an outlet for the passage of exhaust gases, a pipe coil located in said inner heating chamber, water feed pipes entering the lower side of the outer heating chamber and communicating with said water space and the coil, an outlet water pipe for said space and coil, and a fuel burner located in the inner heating chamber, substantially as set forth.

4. In a water heating apparatus the combination of a frame structure, an inner casing providing a heating chamber, an outer casing inclosing said inner casing and providing a water space therewith, an incasement surrounding said outer casing providing an air heating chamber therewith, an end section having an overhanging under portion provided with a vent opening, a slide for regulating said opening, a door hinged on said end section giving access to the inner heating chamber, a pipe coil in the inner heating chamber, means for feeding water to and taking water from said coil and the water spaces, means providing communication between said inner and outer heating chambers at the lower rear portion of the inner heating chamber, an outlet flue for the outer heating chamber, an asbestos lining covering the outlet flue and the heater body excepting the end sections thereof, and a fuel burner mounted on said end section, substantially as set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,265,172. APPARATUS FOR BURNING PULVERIZED COAL. VIRGINIUS Z. CARACRISTI, Bronxville, and JOHN E. MUHLFELD, Scarsdale, N. Y. Filed Sept. 1, 1916. Serial No. 118,014. (Cl. 110—104.)



1. In an apparatus for burning pulverized fuel, two chambers or channels located one above the other, the lower chamber forming an air-chanel which at its outlet end projects beyond the outlet of the upper chamber and has its outlet directed exclusively upwardly to discharge an ascending column of air, and means for supplying fuel to the upper chamber.

3. In an apparatus for burning pulverized fuel, a fuel feeding and mixing chamber, means for supplying fuel tangentially to said chamber, and directing the same helically therethrough, means for supplying combustion air to the fuel in said chamber, means for controlling the supply of said combustion air, means for supplying an underlying column of air to said fuel emerging from said chamber, said air adapted to be intermingled with the said fuel, and means for controlling the supply of air through said last named means.

4. In an apparatus for burning pulverized fuel, the combination with a furnace having a combustion chamber, of a burner comprising a fuel feeding and mixing chamber, means for supplying combustion air to the fuel in the chamber, and means for supplying an underlying ascending column of air to said fuel emerging from said chamber, the air of said column being adapted to be intermingled with said fuel in the combustion chamber, the combustion of said fuel proceeding progressively through said combustion chamber, to complete combustion at the end of said chamber.

5. In an apparatus for burning pulverized fuel, two channels for delivering fuel and air respectively, the outlet of the air-channel being below, and in advance of, the outlet of the fuel channel, and directed upwardly to discharge an ascending column of air.

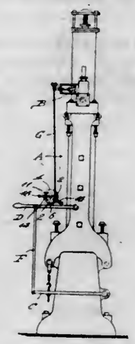
6. In an apparatus for burning pulverized fuel, two channels for delivering fuel and air respectively, the outlet of the air-channel being below the outlet of the fuel channel, and directed upwardly to discharge an ascending column of air adjacent to the fuel outlet.

[Claims 2 and 7 not printed in the Gazette.]

1,265,173. VALVE-ADJUSTING DEVICE FOR STEAM-HAMMERS. CARL J. CARLSON, Easthampton, Mass. Filed July 23, 1917. Serial No. 182,347. (Cl. 74—47.)

3. In a device of the class described, the combination of two circular members disposed side by side and turnably connected together, one of said members being provided with an arcuate slot near one edge thereof, a screw extending through said slot and threaded into the other member to lock said members in their relatively adjusted positions, a valve roll eccentrically connected to one of said members, and a movable operating member connected to the other.

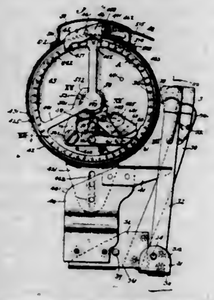
4. In a device of the class described, the combination of a lever, a supporting member rigidly united with said lever, an adjusting member turnably mounted on said supporting member, a rod eccentrically connected to said



adjusting member, and means for maintaining said supporting member and said adjusting member in their relatively adjusted positions.

[Claims 1 and 2 not printed in the Gazette.]

1,265,174. WORD-COUNTING ATTACHMENT FOR TYPE-WRITING MACHINES. HENRY BOUNDS CARY, Los Angeles, Cal., assignor of one-half to Arba W. Frost, Los Angeles, Cal. Filed Oct. 25, 1916. Serial No. 127,724. (Cl. 235—102.)



1. In a word counting attachment for typewriting machines, the combination of actuating means operable by key levers of the alphabet and keyboard characters of the upper or lower case of a typewriting machine, a registering device operable by said actuating means to count up to and including a fixed total number of words or characters or both, a second registering device connected with and operable by the first device to register multiples of said fixed number of words, means guarding said first registering device to prevent the actuating means registering more than one word or character at a time and also preventing the return of said first registering device to its zero position, means guarding said second registering device to prevent the return of the latter to its zero position, means for restoring said devices to their zero positions, and means for releasing both of the guarding means to permit said restoring means to return the devices to their zero position.

2. In a word counting attachment for typewriting machines, the combination of actuating means operable by key levers of the alphabet and keyboard characters of the upper and lower case of a typewriting machine, a registering device operable by said actuating means to count up to and including a fixed total number of words and characters, a restoring spring for said device adapted to have energy stored therein, as said device is actuated, means for releasing said spring to permit it to restore said device to its zero position when the total number of words registered on said device is less than said fixed number, a second registering device, means operable by the first registering device to cause the operation of the second registering device to register multiples of said fixed number of words, and means for releasing the energy stored in said spring and momentarily arrest its action each time the second registering device is actuated by the first.

3. In a word counting attachment for typewriting machines, the combination of actuating means operable by key levers of alphabet and keyboard characters of the upper and lower case of a typewriting machine, a registering device operable by said actuating means to count up to and including a fixed total number of words and characters, a restoring spring for said device adapted to have energy stored therein as said device is actuated, means for releasing said spring to permit it to restore said device to its zero position when the total number of words registered on said device is less than said fixed number, a second registering device, means operable by the first registering device to register multiples of said fixed number of words, means for automatically releasing the energy stored in said spring and momentarily arrest its action each time the second registering device is actuated by the first, a second spring for restoring said second registering device and adapted to have energy stored therein as said second device is actuated, and means for releasing said second spring to permit it to return the second registering device to its zero position.

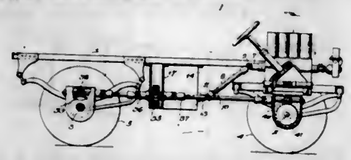
4. In a word counting attachment for typewriting machines, the combination of actuating means operable by key levers of alphabet and keyboard characters of the upper and lower case of a typewriting machine, a registering device operable by said actuating means to count up to and including a fixed total number of words and characters, a restoring spring for said device adapted to have energy stored therein as said device is actuated, means for releasing said spring to permit it to restore said device to its zero position when the total number of words registered on said device is less than said fixed number, a second registering device, means operable by the first registering device to cause the operation of the second registering device to register multiples of said fixed number of words, means for automatically releasing the energy stored in said spring each time the second registering device is actuated by the first, a second spring for restoring said registering device and adapted to have energy stored therein as said second device is actuated, means for releasing said second spring to permit it to return the second registering device to its zero position, and means for simultaneously operating both said releasing means at will to restore both devices of the registering mechanism to zero position.

5. In a word counting attachment for typewriting machines, the combination of a rotary register wheel carrying a series of pins engageable by operating means whereby the wheel is rotated, means actuated by the keys of the typewriter for engaging said series of pins, means whereby said wheel may be retracted to its zero position when it has moved less than a predetermined amount, a pawl having two points adapted to move into the path of said pins alternately, one to prevent the unintended retraction of the wheel and the other to prevent more than one step of said register wheel at a time, and a finger lever whereby the pawl may be lifted out of the path of said pins to permit the return of the wheel to its zero position.

[Claims 6 to 19 not printed in the Gazette.]

1,265,175. TRANSMISSION MECHANISM. EPHRAIEM CHAQUETTE, Saddle River, N. J., assignor of one-half to John Ratzer, Saddle River, N. J. Filed Sept. 21, 1916, Serial No. 121,431. Renewed Feb. 21, 1918. Serial No. 218,605. (Cl. 180—49.)

1. In a motor truck, the combination of a front axle, a rear axle, a front axle transmission shaft having a gear connection with the front axle, a rear axle transmission shaft having a gear connection with the rear axle, a gear upon each transmission shaft, an intermediate drive gear interposed between and in mesh with said transmission shaft gears, a motor, a change speed gear mechanism operatively connected with the intermediate drive gear, and a reversing gear mechanism interposed between the change speed gear mechanism and the motor.



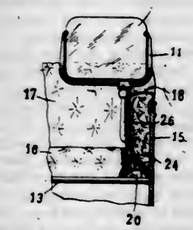
3. In a motor driven vehicle, the combination of front and rear axles, the front axle having a worm gear fixed directly thereto substantially midway of the ends thereof, and the rear axle having a worm gear fixed directly thereto to one side of the center thereof, means for supporting the front axle for swinging movement about a center in substantial vertical alinement with its worm gear, a motor supported at a point overlying the front axle to one side of the center thereof, an engine shaft projecting rearwardly from the motor, a rear axle transmission shaft having a worm to engage the worm gear to said rear axle, a front axle transmission shaft arranged to one side of the rear axle transmission shaft, and in substantial horizontal alinement therewith, said front axle transmission shaft having a worm to engage the worm gear of the front axle, and a reversible and variable speed gear connection between the engine shaft and said transmission shafts.

5. In a motor truck, the combination of front and rear axles, each having a worm engaging gear thereon, a motor arranged adjacent the front axle, a drive shaft projecting rearwardly from the motor, oppositely extending transmission shafts, the front axle transmission shaft having a worm to engage the gear of the front axle, and the rear axle transmission shaft having a worm to engage the gear on said axle, the engine shaft and said transmission shafts all being arranged in substantially the same horizontal plane, and a gear connection between the engine shaft and said transmission shafts, said gear connection being constructed and arranged whereby the speed of the axles may be varied and reversed.

7. In a motor truck, the combination of a frame or body part, front and rear axles, a motor arranged adjacent one side of the body part at the front end thereof, a worm gear drive means for the front and rear axle, said drive means permitting the front axle to swing about the central pivotal support, and reversing and change speed gear connection between said drive means and motor.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,265,176. VEHICLE WIND-SHIELD. CHARLES RACKWELL CLARK, Plainville, Conn. Filed June 12, 1913. Serial No. 773,153. (Cl. 21—148.)



1. In a wind shield construction a relatively flat base plate resting upon and secured to the seat at the junction of the seat and side cushions to be thereby disposed beneath the seat cushion and having a curved portion, a standard mounted thereon and having a curved portion engaging the curved portion of the base plate and adapted to adjustment to various angles in a vertical transverse plane toward and away from the side cushions, means accessible from on top of the base plate for securing the standard in its angularly adjusted relation on the base plate, and a wind shield carried by the upper end of the standard adjustable angularly on a vertical axis.

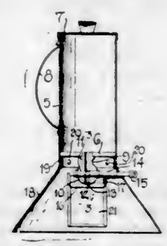
2. In combination with an automobile seat having a yielding side cushion and a removable seat cushion, a base secured at the end of the seat beneath the seat cushion, a supporting column comprising jointed upper and lower sections, said lower section being secured to the base and extending up between the end of the seat cushion and the face of the side cushion at an angle to fit the angle of the side cushion, the upper column section being angularly adjusted with respect to the lower section to fit the face of the side cushion, and a shield member adjustably mounted on said jointed column.

4. In an automobile wind shield, the combination of a base adapted to be secured to the seat of the vehicle, a supporting standard having a foot engaging the base, the foot of the standard and the base having segmental toothed engaging surfaces whereby the standard may be adjusted angularly in respect to the base to adapt the standard to fit the cushions of the seat, means for clamping the foot of the standard to the base accessible from on top of the base and an angularly adjustable shield element mounted on the standard.

7. In combination, a base having a toothed bearing surface arranged on a curve and slotted for the passage of a clamping screw, a standard having a foot provided with a toothed under surface curved to fit the toothed bearing surface of the base and provided with a lug engaging in the slot in the base to prevent endwise movement of the foot on the base, a clamping screw engaging the foot of the standard and passing through the slot in the base and a shield element carried by the standard.

[Claims 3, 5, 6, and 8 not printed in the Gazette.]

1,265,177. RECEPTACLE. WILLIAM W. COLEMAN, Atkins, Ark. Filed Oct. 18, 1916. Serial No. 126,374. (Cl. 65—31.)

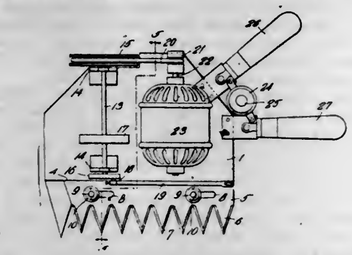


A receptacle of the character described including a cylindrical body having an outwardly flaring, supporting flange fixed to its lower end, a bottom wall secured in the cylindrical body above the point of connection of said flange, said flange being provided with an observation opening in one side thereof, a valve casing connected to said bottom wall and depending therefrom, and a rotary valve member mounted in said casing to control the discharge of the contents of the receptacle, said valve having a stem rotatably supported in said flange.

1,265,178. HEDGE-TRIMMER. WILLIAM R. COMBOUZOU, Baton Rouge, La. Filed Aug. 27, 1917. Serial No. 188,484. (Cl. 56—16.)

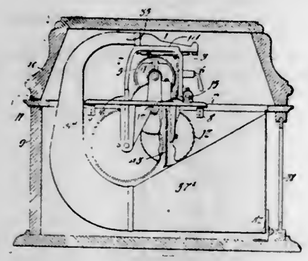
1. A trimmer of the class described comprising a base plate, a stationary blade carried thereby, a movable blade mounted to reciprocate thereon, guiding means for said movable blade carried by said fixed blade, an electric motor mounted on said plate, connections between said motor and movable blade whereby the latter is actuated by the former, handles extending laterally from said plate, and a controlling switch for said motor disposed between said

handles in position for convenient actuation by either hand of the operator.



2. A trimmer of the class described comprising a base plate having a fixed cutting blade made integral with one side edge thereof and provided with a shoulder at its base to form a guide, a movable blade mounted to reciprocate longitudinally on said fixed blade and guided by said shoulder, said movable blade having longitudinally extending slots therein, threaded studs carried by said fixed blade and projecting through said slots, washers, springs and nuts on said studs for holding said movable blade in sliding relation on said fixed blade, and means for actuating said movable blade.

1,265,179. PHONOGRAPH OR TALKING-MACHINE. JOHN P. CONSTABLE, West Orange, N. J., assignor to New Jersey Patent Company, West Orange, N. J., a Corporation of New Jersey. Filed June 21, 1915. Serial No. 35,265. (Cl. 274—2.)



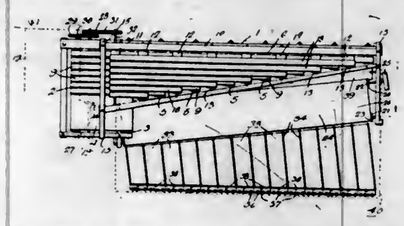
1. In a phonograph or talking machine, the combination of a record support, a reproducer movable substantially in a given plane to reproduce a record carried by said support, and a sound conveyer connected with said reproducer and having an exit portion movable at an angle to said plane during the movement of said reproducer in said plane, substantially as described.

9. In a phonograph or talking machine, the combination of a cabinet having an opening therein, a record support, a reproducer adapted to travel across a record carried by said support, and a sound conveyer connected with said reproducer and formed with an exit portion opposite said opening and having a motion of translation and rotation during the movement of the reproducer across the record, substantially as described.

[Claims 2 to 8 not printed in the Gazette.]

1,265,180. TOBACCO-SIZING MACHINE. BERENT O. DAHL, Viroqua, Wis. Filed Mar. 14, 1917. Serial No. 154,758. (Cl. 131—60.)

1. A sizing machine embodying two sets of belts for conveying articles therebetween, the delivery portions of the belts of each set being in stepped arrangement, the belts of the two sets being in staggered arrangement transversely thereof, and the delivery portions of the belts of one set terminating between the delivery portions of the belts of the other set, so as to release the articles alternately from the belts of the two sets.

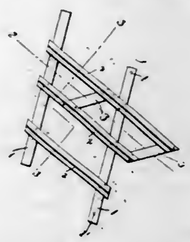


3. A sizing machine embodying a main frame, a series of rollers carried thereby, endless conveyer belts trained around said rollers, a secondary frame carried adjustably by the main frame, a series of rollers carried by the secondary frame, endless conveyer belts trained around the second mentioned set of rollers, the belts of the two sets having their delivery portions in stepped arrangement, and the rollers of the two series being in staggered arrangement to press the opposite belts between their rollers.

5. A sizing machine embodying conveyer belts having their delivery portions in stepped arrangement, an endless apron having its receiving portion below said delivery portions of the belts for the engagement of the projecting ends of the articles held between said belts, said apron being movable away from said delivery portions and tending to withdraw the articles from said belts, and receptacles adjacent to the delivery portion of said apron for receiving the articles therefrom and provided opposite to said apron with doors to open away from said apron and against which the articles are moved into the receptacles from said apron.

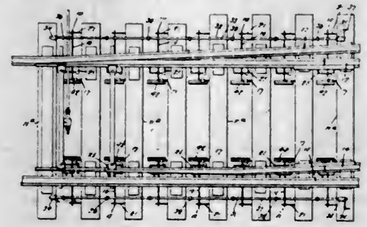
[Claims 2 and 4 not printed in the Gazette.]

1,265,181. ROAD-DRAG. SAMUEL F. DOUGLASS, Millerstown, Pa. Filed Jan. 31, 1917. Serial No. 145,729. (Cl. 37—5.)



A drag especially adapted to be used for filling and packing material in the rut of a road comprising a frame, a relatively long advance blade attached to the frame and disposed at an acute angle to the line of draft thereof, and a relatively short blade attached to the frame and located in front of the long advance blade and disposed at an acute angle to the line of draft of the frame and having its longitudinal dimension disposed at an angle to the longitudinal dimension of the long advance blade, said short blade having one end positioned at a point approximately midway between the ends of the long blade and the end portions of the long blade extending beyond the ends of the short blade, both of said blades being disposed approximately at equal angles to the line of draft of the frame, the parts being so arranged that when in operation the short blade will direct the hummock at one side of a rut into the rut and the long blade will direct the material of the hummock at the opposite side of the rut into the rut and simultaneously operate upon the material which is in the rut and which is located beyond the opposite ends of the short blade, the long blade being provided at points beyond the ends of the short blade with openings in which a draft appliance may be connected with the long blade at points behind the forward end of the short blade.

1,265,182. SWITCH-THAWING APPARATUS. THOMAS M. DUNNING, Jersey City, N. J. Filed Aug. 3, 1917. Serial No. 184,268. (Cl. 104—12.)



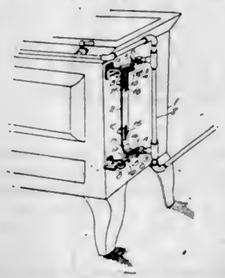
1. In a switch thawing apparatus, a series of separate heaters adapted to be supported on guides under two coacting rails so as to be guided to and from under the rails.

3. In a switch thawing apparatus, a series of separate heaters adapted to be supported under two coacting rails whereby the heaters may be tilted as well as being guided to and from under the rails, and a device operable for tilting the heaters in unison.

8. In a switch thawing apparatus, a rod adapted to be fixed on a crosstie under two coacting rails, and a receptacle for holding inflammable material, adjustable on the rod so as to be guided to and from under the rails.

[Claims 2, 4 to 7, 9, and 10 not printed in the Gazette.]

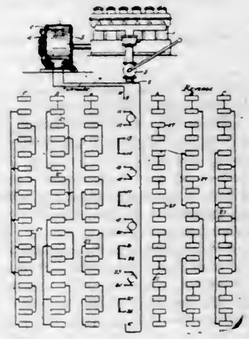
1,265,183. SAFETY ATTACHMENT FOR RANGES. FRANK JOHN EBLE, New York, N. Y. Filed June 29, 1916. Serial No. 106,699. (Cl. 126—42.)



In combination with a gas stove, a main supply pipe for the same, a pair of spaced branch pipes connected to said main pipe, valves in said branch pipes, parallel operating handles having bifurcated ends for engagement with said valves, ears projecting outwardly from said stove and secured thereto, said ears being provided with slots to receive said operating handles, integrally formed lugs projecting from both sides of said handles whereby to prevent the application of the handles in an inoperative position, said lugs disposed in parallel relation when the valves are closed, a locking strip slidably mounted on studs projecting from the side of said stove, said locking strip having outturned ends adapted to engage said lugs whereby to prevent the opening of both valves simultaneously.

1,265,184. METHOD OF CONTROLLING ELECTRICAL-POWER TRANSMISSION. HERBERT BRYAN EWBANK, Jr., Portland, Oreg. Filed May 1, 1916. Serial No. 94,696. (Cl. 171—315.)

1. A method of controlling electrical power transmission, which consists of driving a generator at different speeds to produce different voltages at the terminals of the generator, connecting across the terminals of the generator motors of predetermined resistance in varying connections, and interrupting the forcible drive of the generator between each two successive steps of motor connection in the outer circuit without braking the generator.

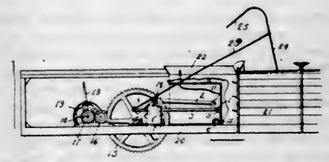


3. A method of controlling electrical power transmission, which consists of positively driving an electric generator, connecting a plurality of motors in series across the terminals of the generator, accelerating the motion of the generator until the same has attained a certain voltage, interrupting the positive drive of the generator, changing the connection of the motors in the outer circuit from a series connection to a connection including motors in parallel, and reëstablishing the positive drive of the generator without having brought the generator to a stop during the interruption of the positive drive of the same.

16. A method of controlling electrical power transmission, which consists of positively driving a generator at variable speed, successively altering the load resistance in the form of motors in the outer circuit and interrupting the positive drive of the generator between each two load conditions without electrically braking the motion of the generator while the positive drive is interrupted.

[Claims 2, 4 to 15, and 17 to 21 not printed in the Gazette.]

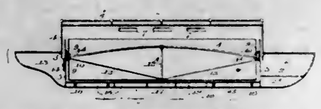
1,265,185. HAY-PRESS. ANTOINE FISET, Quebec, Quebec, Canada. Filed Jan. 20, 1917. Serial No. 143,517. (Cl. 100—3.)



1. The combination with a hay press having a reciprocating plunger mounted therein, rods connected to said plunger, bearings for supporting said rods, a feeding fork, and links connecting said rods with said fork.

2. The combination with a baling press having a reciprocating plunger arranged therein, of a fork pivotally supported upon said press, means for reciprocating said plunger, a pair of rods secured to said plunger, bearings supported upon said press, grooved rollers journaled within said bearings, said rods adapted to pass between said grooved rollers, and links connecting said rods with said fork.

1,265,186. LIFE-BOAT. HARRY FISHER, London, England. Filed Aug. 8, 1916. Serial No. 113,825. (Cl. 9—4.)

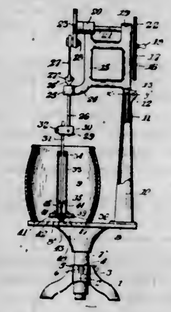


1. A boat having its bow and stern open, two transverse bulkheads in segmental form erected at some distance apart, a semi-cylindrical covering securely attached to the gunwale and extending fore and aft beyond the said bulkheads, two inverted segmental bulkheads securely attached at each end of the semi-cylindrical covering and being placed a short distance respectively from the first named segmental bulkheads, there being a space between the upper surface of the first named bulkhead and the covering and also a space between the lower edge of the second named segmental bulkhead and the bottom of the boat substantially as set forth.

4. In a life boat, an automatic ballasting tank attached to the keel of the boat, the ballast being automatically admitted to the tank, automatically retained in the tank, and automatically emptied from the tank when required by the same device, including a pipe or pipes led through the tank from the outside and athwartship on the inside, having one end open to the sea to admit the water ballast, the other end within the tank and on the opposite side open to deliver the water ballast, substantially as set forth and shown in the drawings.

[Claims 2 and 3 not printed in the Gazette.]

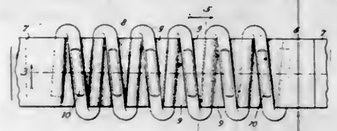
1,265,187. DASH-CHURN. JOHN MILLER FLEMING, Edmonton, Alberta, Canada. Filed July 2, 1917. Serial No. 178,223. (Cl. 259—118.)



In a device of the class described, a dasher comprising a central rod, a head having a central opening, a tubular member removably secured to the head and extending upwardly from the head around such opening and into the center of which the lower portion of the dasher rod extends, spider members for connecting the dasher rod to the cylindrical member, a disk valve bearing against the lower face of the head, a spider member supported within the cylindrical member in proximity to the head, a stem extending freely from the spider member to the lower end of which the valve disk is secured, a bearing piece carried by the upper end of the stem, and a compression spring extending between such bearing piece and the spider.

1,265,188. ART OF JOINING METAL STRIPS AND SEALING THE JOINT. ELLSWORTH EPHRAIM FLORA, Chicago, Ill., assignor, by direct and mesne assignments, to The National Binding Machine Company, New York, N. Y., a Corporation of New York. Filed Sept. 26, 1916. Serial No. 122,214. (Cl. 24—26.)

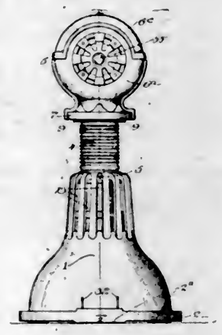
1. The method of joining and sealing the joint of the end portions of metal strips which consists in bringing said end portions into overlapping relation and surrounding them with a wire which winds around said strips with its turns spaced apart both longitudinally and transversely of the strips and then pressing the turns of said wire against the opposite surfaces of said end portions



to permanently flatten the alternate turns of the wire into substantially the same plane and permanently corrugate said end portions with the turns of the wire in the depressions between the successive shoulder portions of the corrugations.

[Claims 2 to 8 not printed in the Gazette.]

1,265,189. MOTOR-DRIVEN FAN. LLOYD D. FREELAND, Chicago, Ill., assignor to William J. H. Strong, Beloit, Wis. Filed Mar. 27, 1915. Serial No. 17,568. (Cl. 60—17.)



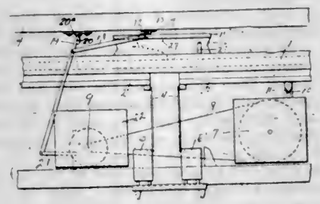
1. In combination, a base, a power cylinder extending upwardly and a heater extending downwardly from the upper end of the base and in axial alinement with the power cylinder, a casing surrounding the lower portion of the heater and having laterally extending means engaging with the base whereby the casing is supported by the base, and a burner extending into the casing below the heater, there being an air inlet opening in the lower end of said casing around said burner and a plurality of outlet openings near the upper end of the casing arranged to convey the hot gases of combustion away from the heater at a point substantially midway between the ends of the heater.

7. In combination, a base having pairs of opposed shoulders therein, a heater supported by said base, and a sleeve surrounding the heater, said sleeve having a flange adapted to lie between the pairs of shoulders, said flange being notched to permit the flange to pass certain of said shoulders.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,265,190. MUSICAL-INSTRUMENT RESERVOIR-CHECK. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Aug. 2, 1917. Serial No. 184,141. (Cl. 84—168.)

1. A collapsible and expansible air reservoir having a moving board and a check mounted to be moved into and way from a position to interrupt all motion of the said board at one certain position of the said board; a shiftable element independent of the said moving board; and a shifting element connected to the said shiftable element and to a movable part of the said check.

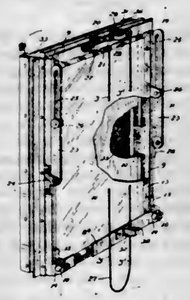


3. A collapsible and expansible air reservoir having a moving board and a check swingably mounted to be moved into and way from a position to interrupt all motion of the said board at one certain position of the said board; a shiftable element independent of the said moving board; and a shifting element connected to the said shiftable element and to a moving part of the said check.

8. A collapsible and expansible reservoir having a moving board, and a check mounted to be moved into and away from a position opposed to the expanding motion of the said board; and controlling means connected to the said check and having a lost motion element intermediate the said controlling means and the said check.

[Claims 2, 4 to 7, and 9 not printed in the Gazette.]

1,265,191. VENTILATOR. ROBERT T. GILES and PAUL W. KINSELLA, Chicago, Ill. Filed Aug. 21, 1916. Serial No. 115,922. (Cl. 189—69.)

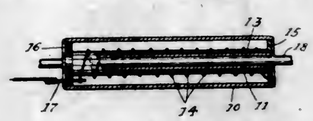


1. A ventilator comprising a fixed frame, a sash, a hinge supporting the sash on the lower bar of the frame, the elements of said hinge being detachable from each other in one position of the sash, and means for supporting the sash in such position that the disengagement of the hinge members will be prevented.

2. A ventilator comprising a fixed frame, a sash, a hinge supporting the sash on the frame, said hinge comprising a socket member having a circular seat and a peripheral opening leading thereto, a trunnion carried by the sash and having flattened sides, said trunnion being adapted to rest in said seat and to be displaced therefrom when the sash is swung to such a position that the flattened sides of the trunnion are in alinement with the peripheral opening of the socket member, and means for supporting the sash in such an open position that the disengagement of the trunnion is prevented.

3. In a ventilator, the combination with a rectangular frame having inwardly extending flanges on its side and top outer edges, outwardly projecting strips secured to the side edges of the frame and having inwardly projecting flanges forming channel-ways with the aforementioned flanges, a screen member slid between said flanges in the channel-ways and a hinged sash mounted on the frame, said sash having a flange on its lower bar which is adapted to engage the lower outer edge of the frame and to be located between the screen and said edge.

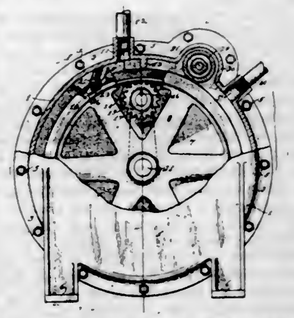
1,265,192. PRIMING-HEATER FOR AUTOMOBILES. ROBERT C. GROH and MARTIN A. HANSEN, St. Paul, Minn., assignors of one-fourth to Oliver J. Dufrene and one-fourth to Hans A. Svendsen, St. Paul, Minn. Filed Jan. 4, 1915. Serial No. 347. (Cl. 219—38.)



1. An electric priming heater for explosive engines comprising an outer shell, an inner shell, a coil of resistance wire wound about said inner shell and insulated therefrom, a metal head connecting one end of each shell, an insulating head connecting and supporting the other ends of said shells, one end of said coil being attached to and forming a contact with said metallic head and the other end passing through said insulating head and insulated from said other end.

[Claim 2 not printed in the Gazette.]

1,265,193. ROTARY ENGINE. JAMES H. GUINN, Long Beach, Cal. Filed May 31, 1917. Serial No. 173,020. (Cl. 121—89.)



1. A rotary engine comprising a housing having an annular chamber therein, a rotor yieldably suspended for rotation in said chamber, a driven element supported in said housing and constituting a support for said rotor and arranged for operation thereby, and steam supply and exhaust means connected with said chamber.

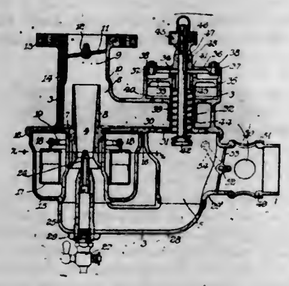
10. A rotary engine comprising a separable housing forming a compartment therewithin, a rotor yieldably supported relative to said housing within said compartment and forming a pressure chamber therearound, pressure supply and exhaust means for said chamber, a closure separating the pressure and exhaust portions of said chamber, means on said rotor and having an area corresponding to that of said pressure chamber for imparting motion to said rotor by the action of the pressure thereagainst.

[Claims 2 to 9 and 11 to 13 not printed in the Gazette.]

1,265,194. CARBURETER. CHARLES J. GUSTAFSON and FRANK C. MOCK, Chicago, Ill., assignors to Stromberg Motor Devices Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1914. Serial No. 844,399. (Cl. 261—41.)

1. In a carbureter, a carbureting chamber, an air inlet chamber, a Venturi tube leading from said air inlet chamber to said carbureting chamber, an auxiliary chamber

leading to an annular passage around the end of said Venturi tube, an automatic valve between said air inlet chamber and said auxiliary chamber, a cylinder, and a piston in said cylinder, said piston being mechanically connected with said valve, one side of said piston being exposed to the pressure in said auxiliary chamber, and the other side being exposed to said air inlet chamber.



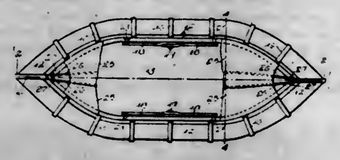
3. In a carbureter, a Venturi tube, a fuel nozzle therein, an air inlet chamber connected with said Venturi tube, an auxiliary chamber, the Venturi tube being extended into said auxiliary chamber, a restricted passageway leading from said auxiliary chamber and surrounding the outlet end of said Venturi tube, an opening between said air inlet chamber and said auxiliary chamber, a valve controlling said opening, and a valve controlling the air inlet to said air inlet chamber.

6. In a carbureter, a carbureting chamber, an air inlet chamber, an auxiliary chamber, an automatic valve between said air inlet chamber and said auxiliary chamber, a cylinder, a piston in said cylinder, said piston being mechanically connected with said valve, one side of said piston being exposed to the pressure in said auxiliary chamber, said cylinder being mounted over said auxiliary chamber and said air inlet chamber and said mechanical connection being in the form of a tube, a cover for said cylinder, a stem adjustably mounted in said cover, and a spring between a collar on said stem and a shoulder in said tube.

7. In a carbureter, a chamber having a valve controlled air inlet, a Venturi tube leading to said chamber from below and extending above the floor thereof, a fuel nozzle in said Venturi tube, a float chamber feeding said nozzle, means for connecting said chamber with an engine, a depression in said floor above the level of fuel in said float chamber, a throttle in said connecting means, and a tube leading from said depression below a level of fuel which may collect therein to a point in said connecting means above a running position of the throttle.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,195. COLLAPSIBLE LIFE-BOAT. HOWARD L. HAYFORD, Whitman, Mass. Filed Oct. 7, 1916, Serial No. 124,284. Renewed Aug. 4, 1917. Serial No. 184,538. (Cl. 9—2.)

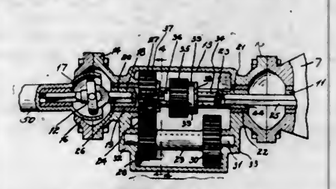


1. A life boat comprising a stiff bottom, a collapsible wall or curb attached at its lower edge to the bottom, provided with a stiffened upper edge, and adapted to be erected to surround the space above said bottom, an open or frame-shaped float surrounding the curb and attached thereto between said bottom and upper edge, the curb being collapsible to bring its upper edge and the bottom into close proximity to the float, and erecting means operable by a downward movement of the bottom to raise the upper edge of the curb.

4. A life boat comprising a stiff bottom, a collapsible wall or curb attached at its lower edge to the bottom, provided with a stiffened upper edge, and adapted to be erected to surround the space above said bottom, an open or frame-shaped float surrounding the curb and attached thereto between said bottom and upper edge, the curb being collapsible to bring its upper edge and the bottom into close proximity to the float, erecting means operable by a downward movement of the bottom to raise the upper edge of the curb, and a cover composed of two flexible sections connected with the longitudinal edges of the curb and adapted to meet and overlap above the space surrounded by the curb, and curved metal rods engaged with the meeting edges of said sections and hinged to the stiffened edge of the curb.

[Claims 2 and 3 not printed in the Gazette.]

1,265,196. REVERSIBLE CHANGE-SPEED MECHANISM. CLINTON C. HAYMOND, Los Angeles, Cal., assignor to Walter A. Rowe, San Francisco, Cal., and Gideon J. Woodward, Los Angeles, Cal. Filed June 7, 1917. Serial No. 173,398. (Cl. 74—58.)



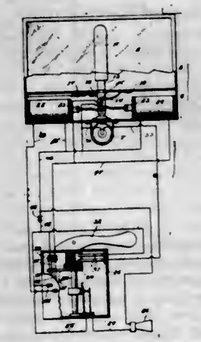
1. In combination with two shaft sections arranged in alinement with each other and at a space apart, a change speed mechanism adapted to be inserted therebetween and connected with each, said mechanism being adapted to be reversed end for end for changing the speed transmitted from one shaft to the other.

4. An auxiliary speed mechanism for vehicles, comprising a reversible element having independently movable alined shafts formed with coupling sockets in the outer ends thereof, whereby they may be reversed in position between the engine shaft and the power transmission shaft of the vehicle, and intermediate gearing forming a part of said element for communicating the same or different speeds from one alined shaft to the other.

6. An auxiliary change speed mechanism for motor driven vehicles, having a reversible element interposed between the motor element and the differential element, said reversible element having a casing adapted to be reversed in position and gearing comprising independently operable alined shafts, the outer ends of which project through the ends of the casing and are provided with coupling sockets, the inner end of one of said shafts having a gear fixed thereon, while the inner end of the other shaft has a splined engagement with a shifting gear, a shifting gear thereon, a counter shaft in said casing parallel with the alined shafts, a sleeve shaft on said counter shaft, gears of different sizes secured to the ends of said sleeve shaft, the gears upon the alined shafts having clutch projections upon their adjacent faces, means for moving the shifting gear upon the splined connection between the alined shafts, whereby the clutch projections on the gears of said shafts may be caused to move in unison, the said slidable gear being also movable to separate the clutch projections and bring its gear teeth into mesh with one of the gears on the counter shaft, whereby a different speed may be imparted from one of the alined shafts to the other, the coupling sockets on the alined shafts being adapted to interchangeably receive a power shaft coupling from the motor, or a universal joint coupling from the transmission shaft of the vehicle, whereby a greater or less speed may be communicated from one alined shaft to the other, according to which couplings the socket members are presenting.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,265,197. ELECTROMECHANICAL TRAFFIC-SIGNAL. HENRY W. HAWES, Lynn, Mass. Filed Mar. 2, 1917. Serial No. 152,113. (Cl. 177—337.)



1. The combination of a directional indicator mounted for movement to point in selected directions, electrically controlled means operating to turn said indicator to one side or the other, a switch for controlling the last named means, an audible signal, an electric circuit controlling said audible signal and including a circuit closer, a manually operable lever, an oscillatory and longitudinally shiftable shaft actuated by said lever, means on said shaft for operating the indicator controlling switch, and other means on said shaft for controlling the circuit closer of the audible signal.

2. The combination of a directional indicator mounted for movement to point in selected directions, electrically controlled means operating to turn said indicator to one side or the other, a switch for controlling the last named means, an audible signal, an electric circuit controlling said audible signal and including a circuit closer, a manually operable lever, an oscillatory and longitudinally shiftable shaft actuated by said lever, means on said shaft for operating the indicator controlling switch, and other means on said shaft for controlling the circuit closer of the audible signal, said shaft and lever being so mounted that the shaft may be turned without moving the same longitudinally and so that said shaft may be moved longitudinally without being turned.

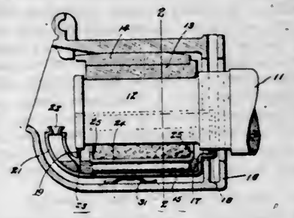
5. The combination of a directional indicator mounted for movement to point in selected directions, means for turning said indicator to one side or the other, an audible signal, an electric circuit controlling said audible signal and including a circuit closer, a manually operable lever, an oscillatory shiftable shaft actuated by said lever, an indicator controlling switch, means on said shaft for operating the indicator controlling switch, and other means on said shaft for controlling the circuit closer of the audible alarm.

[Claims 3 and 4 not printed in the Gazette.]

1,265,198. JOURNAL-LUBRICATOR. JAMES J. HENNESSY, St. Louis, Mo. Filed July 7, 1917. Serial No. 179,221. (Cl. 64—24.)

1. A journal lubricator provided with a liquid lubricant compartment and with a waste compartment, there being communication between said compartments, and a member mounted for rolling movement within the lubricant compartment and adapted to force liquid lubricant therefrom into the waste compartment.

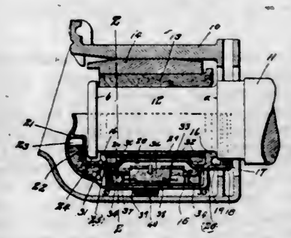
3. In a journal lubricator, a container adapted to be positioned in a journal box beneath the journal, said container being provided with a liquid lubricant compartment and with a waste compartment, and means within the liquid lubricant compartment and operated by inertia resulting from movement imparted to the journal for forcing liquid lubricant from its compartment into the waste compartment.



8. A journal lubricator having a liquid lubricant compartment and a waste compartment, and means loosely disposed within the liquid lubricant compartment and adapted while in motion to force liquid lubricant from the liquid lubricant compartment into the waste compartment.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,265,199. AUTOMATIC JOURNAL-LUBRICATOR. JAMES J. HENNESSY, St. Louis, Mo. Filed July 25, 1917. Serial No. 182,750. (Cl. 64—24.)



1. In a journal lubricator, a container adapted to be positioned in a journal box beneath the journal, said container being provided with a liquid lubricant compartment and with a waste compartment, and a pump actuated by the longitudinal movement of the journal during operation for forcing liquid lubricant into and through the liquid lubricant compartment.

3. In a journal lubricator, a container provided with a liquid lubricant compartment, a waste compartment and an overflow compartment, there being communication between said compartments, and means operated by inertia resulting from the longitudinal movement of the journal in the journal box while in operation for forcing liquid lubricant from the overflow compartment to the liquid lubricant compartment.

[Claim 2 not printed in the Gazette.]

1,265,200. SWITCH-OPERATING MEANS. JOHN BROWN HENNIGER and JOHN KIRBY GUTHRIE, Perth Road, Ontario, Canada. Filed Apr. 30, 1915. Serial No. 25,086. (Cl. 104—24.)



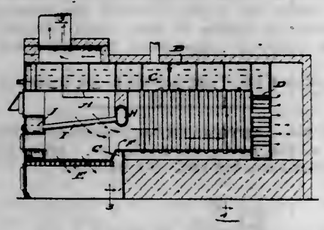
1. A switch operating means consisting of a switch throwing device located underneath the rail, said switch

throwing device consisting of a base, a lug attached to the point of the switch rail, a bar slidable in the base member, a segmental cog mounted on the base and engaging said lug and adapted to be operated by the sliding bar, means on the base for sliding said bar, and a tripping device mounted on the car for operating said bar sliding means.

3. A switch operating means consisting of a switch throwing device located underneath the rail, said switch throwing device consisting of a base, a geared wheel mounted to oscillate on said base, a bar slidable on said base, means on the bar for oscillating said gear wheel, a lug attached to the point of the switch rail, teeth on the lug for engaging the teeth of the gear wheel, a cam pivoted to the base and adapted to operate the said sliding bar, and means on the car for operating said cam.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,201. BOILER. MICHAEL E. HERBERT, Chicago, Ill. Filed Apr. 13, 1914. Serial No. 831,495. (Cl. 122—143.)



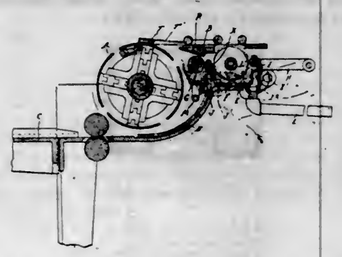
1. A boiler of the character described comprising inner and outer shells connected in spaced apart relation and forming a water chamber therebetween, the inner shell of which defines a combustion space and has outlet flues at its rear end extending through the rear end of the outer shell, said inner shell being provided with a plurality of depending water tubes in its rear portion, closed at their lower ends and opening at their upper ends into the said water chamber between the shells, a grate at the lower forward portions of the inner shell, a plate in the lower rear portion of the inner shell receiving and supporting the lower ends of the said water tubes, and a slotted bridge wall between the grate and the said tube supporting plate.

2. A boiler of the character described comprising spaced inner and outer shells forming a water chamber therebetween, extending along the top, rear end, and sides of the inner shell, a plurality of drop flues depending in the inner shell having their upper open ends secured to the top wall of the said inner shell and opening into the said chamber, a plate in the lower rear portion of the inner shell receiving and supporting the lower closed ends of said drop flues, a grate in the lower forward portion of the inner shell, a slotted bridge wall between the grate and the said flue supporting plate, and a water grate within the inner shell above the first named grate, including a rear manifold extending transversely through the inner shell above the said slotted bridge wall and communicating at its ends with the water chamber, a front manifold extending across the front of the inner shell and also opening into the water chamber, and tubes inclined upwardly from the front and the rear manifolds above the first named grate, all for the purpose described

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1,265,202. PASTE-APPLYING MECHANISM. HENRY C. HARR, Pittsburgh, Pa., assignor, by mesne assignments, to South Side Trust Company, trustee, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 21, 1913. Serial No. 796,448. (Cl. 91—51.)

1. A paste-applying mechanism, comprising a paste-holding receptacle having two compartments, paste-applying rolls respectively in said compartments, means for raising and lowering one of said rolls, means for supplying and removing paste from the receptacle, and a restricted connection between said compartments for supplying the paste from one to the other and for limiting the fluctuation in level in the compartment for the stationary roll occasioned in the other compartment by the raising and lowering of the roll.



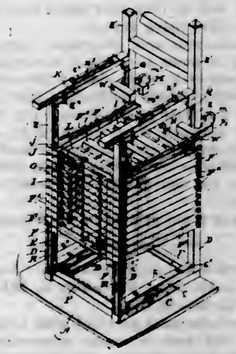
3. In a paste-applying mechanism, the combination with a paste-applying roll of means for raising and lowering said roll at predetermined intervals, a paste receptacle in which a portion of said roll is immersed, means for feeding paste into and out from said receptacle to maintain a constant supply therein, and an overflow for receiving the displaced paste when said roll is lowered in the receptacle.

5. The combination with means for feeding a paper strip, of a paste-applying roll arranged beneath the path of said strip, a receptacle in which said roll is partially immersed, means for vertically adjusting said roll to contact the periphery of the same with said strip and to also raise the roll into a higher position of adjustment, and means for varying the thickness of the film of paste upon said roll applied to said strip, the thinnest film being applied in the highest position of said roll.

7. In a paste-applying mechanism, the combination with a paste-holding receptacle, of a roll, timed means for raising and lowering said roll, and means for positively rotating said roll in one position of vertical adjustment, said means being inoperative in the other position of adjustment.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,265,203. COMBINED CHAIR, TABLE, AND FIRE-ESCAPE. YOSHITO IWATA, Buffalo, N. Y. Filed Mar. 23, 1916. Serial No. 86,224. (Cl. 227—9.)



1. In a fire escape, the combination of pivoted sections provided with side bars adapted to be folded into approximately parallel relation when not in use, certain of the side bars being provided with projections to center the bars in their folding operation and a detachable seat having portions adapted to fit between the folded side bars when nested and be supported by the adjacent projections.

5. A fire escape comprising pivotally related sections having side bars, said side bars being grooved lengthwise thereof, and a combined gripping and guiding member adapted to traverse the side bars when extended, said member being arranged to engage opposite faces of the side bars to grip the same when canted and having a projection adapted to engage the way formed by the grooved portion of the side bars.

9. In a fire escape, side bars adapted to extend along the face of a building, guiding means adapted to traverse said bars, and a foldable seat associated with said guiding means, said seat comprising horizontal and vertical members and diagonal foldable members extending from the vertical members to the outer portion of the seat, the horizontal and vertical members being pivoted together, and the diagonal foldable members each consisting of sections pivotally connected to each other, the foldable diagonal members at their upper ends being pivotally and slidably connected to the vertical members.

12. In a convertible device of the character described, a hollow supporting frame member, a base upon which the hollow frame member is adapted to rest, having cleats adapted to fit within the hollow frame member but removable therefrom, an extensible fire escape foldably related to said hollow frame member and adapted to rest thereupon when not in use and comprising spaced side bars adapted to receive therebetween said cleats of the base to enable said base to used as a top.

16. In a fire escape, a foldable body portion adapted to be extended to occupy a position along the wall of a building when in use and to present a seat support when in folded position, in combination with a back and arms having front and rear supporting portions, said front and rear supporting portions extending downwardly from the arms in substantially parallel relation and resting upon the said foldable body portion when the same is in folded position, the foldable body portion being pivotally connected to one of said supporting portions so that when the foldable body portion is extended the said front and rear supporting portions may engage around a window sill or the like.

[Claims 2 to 4, 6 to 8, 10, 11, 13 to 15, 17, and 18 not printed in the Gazette.]

1,265,204. METALLIC-FILAMENT LAMP AND PROCESS OF MAKING IT. HERMAN J. JAEGER, Weehawken, N. J. Filed July 27, 1917. Serial No. 183,134. (Cl. 176—7.)

6. The process of depositing on concentrated metallic filaments for incandescent lamps a metal forming the base of the refractory compound in the presence of an extenuated atmosphere of an inert gas, consisting in placing the chemical compound in close proximity to the filament, giving the lamp a cold exhaust, sealing it, and then heating the filament, thereby decomposing the compound and forming a deposit of its base on the filament.

7. The process of depositing on concentrated metallic filaments for incandescent lamps a refractory metal from a chlorid in the presence of an extenuated atmosphere of an inert gas, consisting in placing the chlorid in close proximity to the filament, giving the lamp a cold exhaust, sealing it, and then heating the filament, thereby decomposing the compound and forming a deposit of its base on the filament.

8. The process of depositing on concentrated metallic filaments for incandescent lamps a metal of the chromium group in the presence of an extenuated atmosphere of an inert gas, consisting in placing a compound of the chromium group in close proximity to the filament, giving the lamp a cold exhaust, sealing it, and then heating the filament, thereby decomposing the compound and forming a deposit of its base on the filament.

10. The process of depositing on concentrated metallic filaments for incandescent lamps uranium from uranium chlorid in the presence of an extenuated atmosphere of an inert gas, consisting in placing uranium chlorid in close proximity to the filament, giving the lamp a cold exhaust, sealing it, and then heating the filament, thereby decomposing the compound and forming a deposit of its base on the filament.

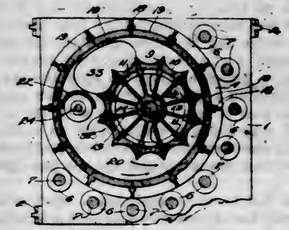
[Claims 1 to 5 and 9 not printed in the Gazette.]

1,265,205. PYROTECHNIC ARTICLE AND METHOD OF MAKING SAME. AARON JEDEL, New York, N. Y. Filed Apr. 23, 1915. Serial No. 23,452. (Cl. 52—6.)

2. A method of producing a pyrotechnic composition which consists of mixing finely powdered potassium chlorate, strontium nitrate and a fusible water-insoluble gum, placing said mixed powders in a mold and baking to melt said gum causing it to surround said nitrate and chlorate and to shape said materials into a briquet.

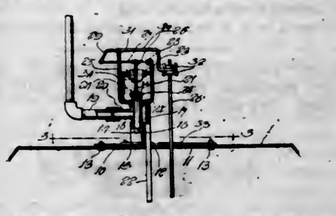
[Claim 1 not printed in the Gazette.]

1,265,206. MACHINE FOR EXTRACTING LIQUIDS FROM VARIOUS MATERIALS. CHARLES D. JENKINS, Boston, Mass., assignor to Peat Coal Limited, Boston, Mass., a Voluntary Association. Filed May 1, 1915. Serial No. 25,134. (Cl. 100—47.)



A machine of the character described comprising a member having a solid material engaging wall composed of wood arranged with its grain perpendicular to the material engaging face of said wall, and means for pressing the material against said wall so as to force the liquid through the grain of the wood.

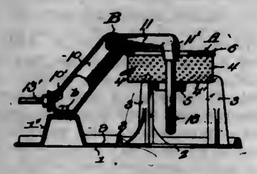
1,265,207. DEVICE FOR MOISTENING HOT AIR FROM FURNACES. WILLIAM JOHNSON, Sioux City, Iowa. Filed Apr. 19, 1917. Serial No. 163,229. (Cl. 137—104.)



1. Automatic water supply means including a receptacle, said means comprising a fixed pedestal having in its upper end a socket whose bottom is closed, a T-coupling having one end of its head threaded in said socket, whereby said coupling is rigidly supported, a casing having in its bottom an opening through which the other end of said head of the T-coupling is threaded, said end rising a slight distance into said casing and being chamfered to form a valve seat, the shank of said T-coupling having means for connecting a water supply pipe thereto, an outlet from said casing into said receptacle, a valve coacting with the aforesaid seat, and closing means for said valve including a float positioned in said receptacle.

2. A structure as specified in claim 1, said pedestal having a laterally extending portion formed with an opening, and said outlet being in the form of a pipe passing through said opening and threaded into said casing, whereby relative turning of the pedestal and casing is prevented.

1,265,208. LIQUID-FUEL BURNER. EDWARD C. KAHN, Milwaukee, Wis. Filed Sept. 7, 1915. Serial No. 49,232. (Cl. 158—71.)



1. A liquid fuel burner comprising a head, a generator associated therewith embodying an upwardly inclined chambered neck having an accumulator pocket at its base and a restricted outlet port at its discharge end, a hollow arcuate arm extending from the discharge end at a slight angle, the same being arranged in juxtaposition to the head, and a gas discharge pipe in communication with the end of the arm and depending therefrom, the lower end of which pipe is upturned to form a nozzle to feed the head.

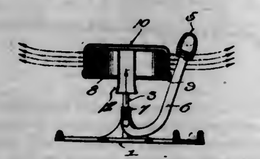
7. A liquid fuel burner comprising a base having gridded air passages extending therethrough, legs disposed about the air passages, a circular burner head adapted to rest upon the legs, a generator mounted upon the base having an arm surrounding a portion of the burner head, and a fuel discharge pipe in communication with the end of the arm, the said pipe being provided with an upturned end constituting a discharge nozzle which is positioned under said head between the latter and the air passages of the base-plate.

9. A liquid fuel burner comprising a cup having perforated side walls and a centrally disposed mixing mouth in its bottom wall, a complementary cap-ring nested within the cup and spaced therefrom to form a vapor chamber, a separable closure plate for the ring, and a generator having a nozzle adapted to discharge into the mixing mouth of said head.

11. A liquid burner comprising a cup having perforated side walls and a centrally disposed mixing mouth in its bottom wall, a cap ring nested within the cup, the same being Z-shaped in cross section to provide a portion adapted to seat on the mouth of the cup, and a second annular inwardly turned portion adjacent the bottom of the cup and a cap plate connected with said portion to form a separate bottom closure for the ring.

[Claims 2 to 6, 8, and 10 not printed in the Gazette.]

1,265,209. LIQUID-FUEL-BURNER HEAD. EDWARD C. KAHN, Milwaukee, Wis. Filed Oct. 27, 1916. Serial No. 128,006. (Cl. 158—116.)

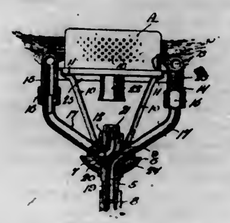


1. A burner head comprising an inner inverted cup shaped member having its mouth edge directed outwardly to form a channel, an outer inverted cup shaped member having jet apertures in its annular portion and having its mouth edge seated in said channel and a mixing tube depending from the inner member.

[Claim 2 not printed in the Gazette.]

1,265,210. FLUID-FUEL BURNER. EDWARD C. KAHN, Milwaukee, Wis. Filed Oct. 27, 1916. Serial No. 128,013. (Cl. 158—71.)

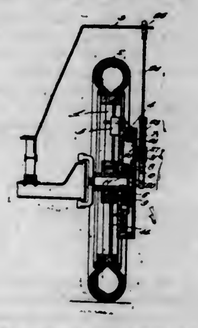
1. The combination with a burner head, of an annular generator chamber surrounding the burner head, a pair of tubes extending downwardly from the chamber, a supply head having a pair of passages formed therein and communicating with said tubes, a discharge nozzle communicating with one of said passages, a fuel supply communicating with the other of said passages, and a collector pocket formed in the generator chamber at the juncture of the tube communicating with the supply passage and said chamber.



3. In a burner, a supply head, an annular generator carried by the supply head, a discharge nozzle carried on the upper end of the supply head, a spider member having its hight portion secured on the head with its arms extending upwardly and a burner head carried by said arms, said annular generator surrounding the burner head, substantially as described.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,211. TIRE-PUMP. GEORGE KEITH, Sheridan, Ill. Filed Oct. 8, 1917. Serial No. 195,358. (Cl. 152—11.)



1. A tire inflating device comprising a flat casing and means for clamping it to the outer side of a vehicle wheel, said casing having a central hollow hub to receive the wheel hub, a tire pump in said casing, and operating means for said pump positioned in said casing and including a central driving wheel mounted on said hub of the casing, and means for holding said driving wheel against rotation with the casing.

3. The combination of a tire pump for application to a vehicle wheel, said pump having a driving wheel positioned adjacent the wheel hub, a crank arm connected to said driving wheel and having a pivoted hand hold formed with a longitudinal bore, a rod for reception in said bore when said hand hold is disposed longitudinally of said crank arm, whereby to prevent turning of the driving wheel with the vehicle wheel, and means for holding said hand hold at right angles to the crank arm when the pump is to be operated by hand.

[Claims 2 and 4 not printed in the Gazette.]

1,265,212. TRUNK. SAMUEL L. KLEBER, Pittsburgh, Pa. Filed May 3, 1917. Serial No. 166,216. (Cl. 190—24.)

A coupling strip for the purpose set forth comprising a length of metallic material bent upon itself to provide a vertical and a horizontal pocket disposed at right angles

with respect to each other, the outer wall of said vertical pocket being perpendicular and having its upper end bent inwardly against its inner face to provide means capable of embedding in the outer face of a side wall of a receptacle, the inner wall of said vertical pocket permanently extending throughout at an inclination toward the outer wall of said pocket and further having its upper end bent inwardly at a greater inclination than the remaining portion of said wall to provide means capable of embedding in the inner face of a side wall of a receptacle, the outer wall of said horizontal pocket being of greater length than the inner wall and having its free terminus bent inwardly to provide means to embed in the outer face of the bottom of a receptacle, the said means embedding in the said wall and bottom securing the coupling strip in position.



1,265,213. ELECTRIC WATER-HEATER. OTTO A. KNOPP, Oakland, Cal. Filed June 7, 1916. Serial No. 102,223. (Cl. 219—38.)



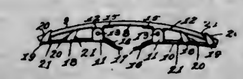
1. An electric water heater including an inclosing expansive shell; a heating element in said shell; and means for varying the wattage of said element by the expansion and contraction of said shell.

3. An electric water heater including an inclosing casing having inlet and outlet openings; a hermetically sealed expansive shell in said casing; a thermostatic heating element in said shell; and means for varying the wattage of said element by the expansion and contraction of said shell.

5. An electric water heater including an inclosing casing having inlet and outlet openings; a hermetically seated shell in said casing; a thermostatic heating element in said shell, and a liquid in said shell.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,265,214. COLLAR-CLASP. ALPHONSE M. KUNZ, St. Louis, Mo., assignor to Can't Slip Collar Bar Company, St. Louis, Mo., a Corporation of Missouri. Filed Oct. 15, 1917. Serial No. 196,742. (Cl. 24—81.)

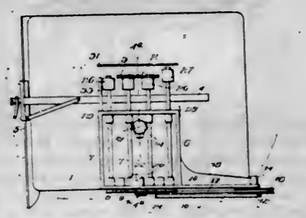


3. A clasp of the character described comprising a bent bar, a pair of spring actuated clamping members pivotally connected to said bar and arranged in such position as to be operated simultaneously by the thumb, and teeth forming a part of the clamping members and projecting at an angle and straddling the bar, substantially as specified.

4. A collar or garment clasp comprising a bar, the same being bent to conform with the contour of the neck, a pair of toothed clamping members attached to the bar, the outer surface of the teeth being suitably curved to allow for the adjustment of the collar and arranged to straddle the bar and means for holding the clamps in contact with the collar, substantially as specified.

[Claims 1, 2, and 5 not printed in the Gazette.]

1,265,215. FEEDING MECHANISM FOR SAW-TABLES. JOHN T. LEACH, Rochester, N. Y. Filed Mar. 26, 1915. Serial No. 17,085. (Cl. 143—55.)



2. The combination with a work supporting table and a cutting tool in operative relation therewith, of a frame, one side of which is provided with a bearing edge arranged to bear loosely upon the support, a shaft journaled upon the frame provided with a feed roll and extending at substantially a right angle to said bearing edge, means for rotating the shaft and means engaging the frame for yieldingly holding the roll in contact with the work piece and said bearing edge with said support.

[Claim 1 not printed in the Gazette.]

1,265,216. ACETYL CELLULOSE AND PROCESS OF MAKING THE SAME. WILLIAM G. LINDSAY, Newark, N. J., assignor to The Celluloid Company, a Corporation of New Jersey. Original application filed Apr. 8, 1911, Serial No. 619,685. Divided and this application filed July 11, 1914. Serial No. 850,431. (Cl. 23—24.)

1. The process of producing acetyl cellulose which consists in treating cellulose with acetic acid and alcohol, and then subjecting the impregnated cellulose to an acetylizing mixture comprising acetic anhydrid and benzene.

7. The process of producing acetyl cellulose which consists in treating cellulose with a preliminary bath comprising alcohol and a diluent therefor, which, without itself altering the cellulose as such, acts to induce acetylization when the treated cellulose is subjected to an acetylizing bath, and then subjecting the same to an acetylizing mixture of acetic anhydrid and a diluent.

8. The product containing a fibrous acetyl cellulose, unhydrolyzed, having its original structure unaltered, and being soluble in acetylene tetrachlorid.

[Claims 2 to 6 not printed in the Gazette.]

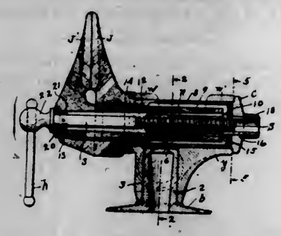
1,265,217. COMPOUND OF ACEYTL CELLULOSE AND PROCESS. WILLIAM GODSON LINDSAY, Newark, N. J., assignor to The Celluloid Company, a Corporation of New Jersey. Original application filed Jan. 29, 1914, Serial No. 815,110, Patent No. 1,199,799, dated Oct. 3, 1916. Divided and this application filed Sept. 1, 1916. Serial No. 118,001. (Cl. 106—40.)

1. A composition of matter containing an acetyl cellulose and camphor, obtained by dissolving the same in a common solvent, and a liquid monohydroxy aliphatic alcohol having more than two carbon atoms.

8. The process of making a composition of matter, which consists in dissolving an acetyl cellulose plastic in chloroform and camphor in a common solvent, adding a liquid monohydroxy alcohol having more than two carbon atoms, and drying the same.

[Claims 2 to 7 not printed in the Gazette.]

1,265,218. BENCH-VISE. JOHN R. LONG, Akron, Ohio. Filed July 23, 1917. Serial No. 182,146. (Cl. 81—41.)

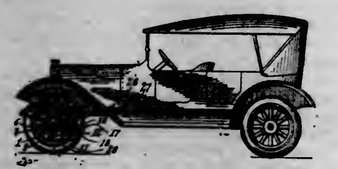


1. In bench vises, a base, a unitary yoke having dual bores at an angle to each other adapted to be engaged on the base and provided with wings having a recess between the same and a slot from said recess through the adjacent walls of said bores, in combination with jaws having portions engaged in said wings and a tightening screw adapted to lock said jaws upon the yoke and the yoke upon the base.

5. In bench vises, a unitary yoke having front and rear wings and constructed to draw said wings toward each other, in combination with an outer jaw having a shank rotatable in said yoke and provided with an angular internal bearing, an inner jaw having an angular shank slidably mounted in said bearing and clamping means comprising an operating screw engaging the ends of said outer shank against opposite sides of said wings.

[Claims 2 to 4 and 6 not printed in the Gazette.]

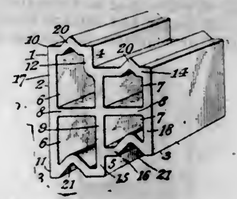
1,265,219. LIFTING-JACK. ROBERT B. LONG, Dayton, Ohio. Filed May 5, 1917. Serial No. 166,737. (Cl. 254—86.)



In a lifting jack for automobiles, the combination with an axle, a bifurcated leg pivotally connected with said axle, a shank having an adjustable connection with said leg, a shoe attached to said shank and having an extended portion with an aperture therein, a rigid arm connected to the automobile frame above the axle, an adjustable arm connected to said rigid arm, a spring-engaged plunger mounted on said adjustable arm in a position to enter the aperture in the shoe and to hold said shoe in the raised position, and means connected with said plunger for releasing it from engagement with the shoe.

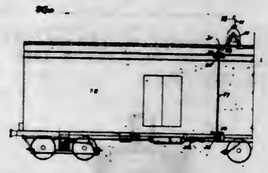
1,265,220. BUILDING CONSTRUCTION AND BLOCK THEREFOR. ROBERT W. LYLE, South River, N. J., assignor to William James Lyle, South River, N. J. Filed Oct. 4, 1912, Serial No. 722,870. Renewed Feb. 21, 1918. Serial No. 218,590. (Cl. 72—41.)

1. An improved building block, comprising an integral body having successive steps at its horizontal top and bottom surfaces and having horizontal longitudinal bores forming a hollow construction and producing a vertical internal dividing web or wall between the respective step portions, said body having a step head or step-extension at one of its horizontal surfaces of less width than the complementary step head or step-extension at the opposite horizontal surface, whereby when said blocks are superposed in reversed position in wall construction a continuous vertical tier of strain-resisting body walls will be formed throughout the superposed tiers or courses of the blocks.



[Claims 2 and 3 not printed in the Gazette.]

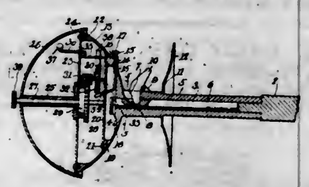
1,265,221. HAND-BRAKE FOR CARS. ALBERT L. MCCALLUM, Spokane, Wash. Filed May 4, 1916. Serial No. 95,492. (Cl. 188—40.)



1. A hand brake mechanism for cars, adapted for independent action and combined with an air-brake mechanism, comprising a brake lever, rack and pawl mounted on the car body, a floating beam underneath the car body adjacent the car trucks and connected with brake shoes, sheaves separately attached to the car body and to the floating beam and a cable connected at one end with said lever, passed over said sheaves and connected at the other end with the bottom of the car body.

2. A hand brake mechanism for cars, adapted for independent action and combined with an air-brake mechanism, comprising a brake lever, rack and pawl mounted on the car body, a segment attached to the lever, a floating beam underneath the car body adjacent the car trucks and connected with the brake shoes, sheaves separately attached to the car body and to the floating beam, and a cable connected at one end with said segment, passed over said sheaves and connected at its other end with the bottom of the car body.

1,265,222. BURGLAR-ALARM DOOR-LOCK. CLARENCE MCDADE, Middleport, Ohio, and FRANK CHAPMAN, Hartford, W. Va. Filed May 26, 1917. Serial No. 171,249. (Cl. 116—44.)



1. A burglar alarm door knob, comprising an inner and outer knob, a shaft on the inner knob provided with a longitudinal bore, a shaft on the outer knob adapted to turn in the bore, means for normally locking the shaft against relative revolution, a cam on the inner end of the shaft of the outer knob, and means actuated by revolution of the cam for sounding an alarm.

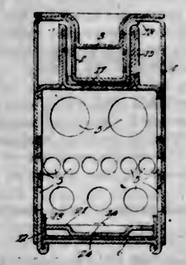
2. A burglar alarm door knob, comprising a knob, a spindle projecting from the knob and provided with a socket, a cam plate secured to the end of the spindle, another knob, a hollow shaft projecting from the knob and surrounding the spindle, said hollow shaft provided with a slot alining with the socket, a latch pivotally secured to the hollow shaft and swinging in one direction to enter the slot and socket and lock the shaft and spindle together and in the opposite direction to lock the hollow shaft and its knob against rotation, a spring actuated gear train in the last mentioned knob, means for winding the spring, a clapper oscillated by the gear train, and a latch bar for locking the gear train against motion and releasing the train when contacted by the cam plate.

1,265,223. ELECTRIC FUSE. ISRAEL MARCUS, Winthrop, Mass. Filed Nov. 27, 1916. Serial No. 133,704. (Cl. 175—273.)



A device of the class described comprising a cylindrical casing having a rectangular slot disposed midway its ends, caps fitted over the ends of said casing having centrally alined apertures, a pair of non-combustible transparent plates positioned over said slot, one of said plates being transversely curved to conform to the curvature of the inner wall of said casing and the other having its central portion bulged away from said first mentioned plate, a fuse wire having a reduced middle portion disposed between said plates in the space formed by said bulge, the ends of said fuse wire being bent laterally and disposed in the apertures in said caps, a second fuse wire disposed within the apertures in the caps and positioned at substantially right angles to said first mentioned wire whereby to prevent sparking when said first mentioned fuse wire is blown and loose non-combustible material disposed in said casing to fill the same and space said wires.

1,265,224. HYPODERMIC-NEEDLE STERILIZER. PORT RICO MARSHALL and HARRY L. GOSS, Horton, Kans. Filed Aug. 17, 1917. Serial No. 186,767. (Cl. 167—3.)



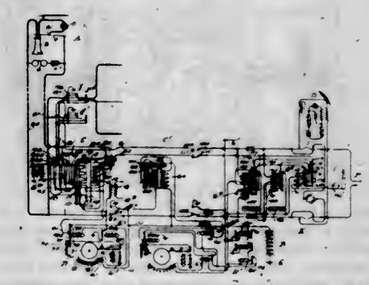
3. A sterilizer, comprising a casing, a slide in the casing, a plate on the slide provided with fuel holding depressions, a tank on the casing, and a cover for the tank.

4. A sterilizer, comprising a casing, a slide in the casing, retaining lugs rising from the slides of the slide, a latch rising from the rear end of the slide, a burner in the slide retained by the lugs and detachably secured by the latch, a tank on the casing and integral therewith, a tray in the tank, and a cover for the tank.

5. A sterilizer, comprising a casing, a burner in the casing, a tank on the casing, a cover for the tank, a container for the casing provided with a groove, and a cover closing the groove to form a compartment.

[Claims 1 and 2 not printed in the Gazette.]

1,265,225. SEMI-AUTOMATIC TELEPHONE SYSTEM. TALBOT G. MARTIN, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 3, 1911, Serial No. 612,084. Renewed May 28, 1917. Serial No. 171,584. (Cl. 179—27.)



1. In a telephone system, lines equipped for giving measured service, lines equipped for giving unmeasured service, a manual switchboard at which calls from said lines are answered, and automatic means for indicating to the operator the character of the line calling.

2. In a telephone system, a plurality of telephone lines of different kinds, means by which an operator may answer calls from any of said lines, and automatic means for indicating to the operator upon answering the character of the line calling.

3. In a telephone system, lines equipped for giving measured service, lines equipped for giving unmeasured service, a manual switchboard at which calls from said lines are answered, and automatic means for indicating to the operator the character of the line calling, said automatic means comprising mechanism for producing an audible signal when the operator answers the call.

43. In a telephone system, lines equipped for giving measured service, lines equipped for giving unmeasured service, a manual switchboard at which calls from said lines are answered through the medium of a receiver and a central battery, means common to a plurality of said lines electrically associated with the terminal of the line at the central office for indicating to the operator the character of the line calling, and signals by which calling subscribers indicate to the operator that a connection is wanted, said signals being each common to a plurality of lines.

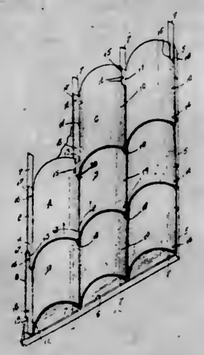
44. In a telephone system, a plurality of telephone lines of different kinds, means comprising a receiver and a central battery by which an operator may answer call from any of said lines, means common to a plurality of said lines electrically associated with the terminal of the line at the central office for indicating to the operator upon answering the character of the line calling, and signals by which calling subscribers indicate to the operator that a connection is wanted, said signals being each common to a plurality of lines.

[Claims 4 to 42 and 45 to 78 not printed in the Gazette.]

1,265,226. ROOFING. EDWIN A. MASTICK, Cleveland, Ohio. Filed Dec. 26, 1916. Serial No. 138,775. (Cl. 108—8.)

1. A roof comprising sheeting; spaced strips extending between the comb and eaves of the roof on the sheet-

ing; and shingles covering the sheeting and strips, each shingle having a narrow portion at one longitudinal edge disposed upwardly and secured to one of said strips and the remaining portion of said shingle being in arched form and providing a valley between said positions, the arch in each shingle being maintained therein by the upturned edge portion thereof being secured to one of said strips and the other longitudinal edge of the shingle being disposed in the valley of an adjacent shingle.



2. A roof comprising sheeting; and overlapping shingles disposed on the sheeting in vertical and horizontal rows, each shingle having a narrow longitudinal edge portion inclined and the remainder of such shingle being arched in form with a valley between said portions, said narrow portion of each shingle being secured against movement on the sheeting and the longitudinal edge of such shingle opposite to said narrow portion being disposed in the valley of an adjacent shingle in the same horizontal row of shingles, there being two substantially rectangular notches in each shingle, said notches each being of a length corresponding to the length of the lap in the vertical lines of shingles and the combined widths of said notches being substantially equal to the width of the narrow edge portion, one of said notches being in the lower end of said narrow edge portion and the other notch being in the diagonally opposite corner of said shingle therefrom.

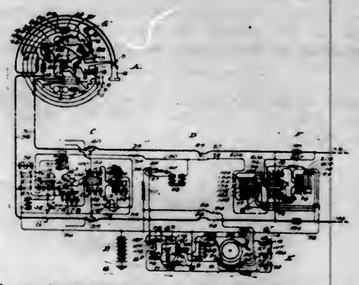
3. A roof comprising sheeting; spaced strips extending between the comb and eaves of the roof on the sheeting; and overlapping shingles covering the sheeting and strips disposed in horizontal and vertical rows, each shingle having a narrow portion at one longitudinal edge disposed upwardly and secured to one of said strips, and the remaining portion of such shingle being in arched form and providing a valley between said portions, the other longitudinal edge of said shingle being disposed in the valley of an adjacent shingle in the same horizontal row, there being two substantially rectangular notches in each shingle, said notches each being of a length corresponding to the length of the lap in the vertical lines of shingles and the combined widths of said notches being substantially equal to the width of the narrow edge portion, one of said notches being in the lower end of said narrow edge portion and the other notch being in the diagonally opposite corner of said shingle therefrom.

1,265,227. MILK-LIKE FOOD FOR THE FEEDING OF AGRICULTURAL STOCK. WILLIAM J. MELHUISH, Upper Parkstone, borough of Poole, England. Filed Apr. 23, 1917. Serial No. 164,033. (Cl. 99—11.)

1. A milk-like food for agricultural live stock made from any starchless legume with an oil having an iodin value not exceeding 120 such legume being ground coarsely, stirred in hot water to extract the soluble proteins and fats, and made to imitate the content of natural milk by the addition of such salts as are usually found in milk, a not-too-sweet form of sugar to yield the carbo-hydrates, butyric and citric acids, straining out the insoluble meal, thus yielding a fluid of the consistency and food value of mammalian milk.

[Claim 2 not printed in the Gazette.]

1,265,228. TELEPHONE-EXCHANGE TRUNKING SYSTEM. EDWARD A. MELLINGER, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 11, 1910, Serial No. 586,531. Renewed May 18, 1917. Serial No. 169,373. (Cl. 179—18.)



1. In a telephone system, a plurality of trunks, a plurality of non-numerical switches for automatically connecting with idle trunks, greater in number than said trunks, first selectors for automatically selecting idle switches in accordance with the first digit of the called number, and means serving automatically to prevent further seizure of idle switches after and while the trunks are all in use.

2. In a telephone system, a plurality of trunks, as many relays as there are trunks, a plurality of switches for automatically selecting idle trunks, greater in number than said trunks, means for automatically selecting idle switches, means for energizing a relay each time a trunk is selected, and means whereby the energizing of all of said relays serves to automatically prevent further seizure of idle switches.

3. In a telephone system, a plurality of trunks, a plurality of switches for automatically connecting with idle trunks, greater in number than said trunks, a set of relays for said trunks, one for each trunk, relay mechanism adapted when energized to establish a guarding potential for all idle switches, a circuit for said mechanism controlled by all relays of the set, and means for energizing a relay of said set each time a trunk is seized by a switch.

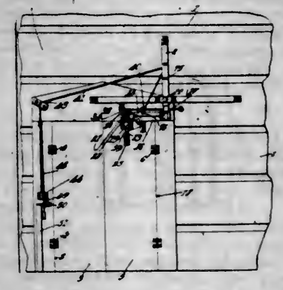
4. In a telephone system, a plurality of trunks, trunking switches, a master switch for selecting idle trunks for said switches, and electrically-controlled means automatically serving to prevent actuation of said master switch after and while all of said trunks are in use.

5. In a telephone syatem, a plurality of trunks, non-numerical trunking switches with which said trunks are multiplied, a master switch for selecting idle trunks ahead of the calls for said trunking switches, and means electrically controlled only by the simultaneous use of all said trunks to temporarily prevent further actuation of said master switch.

[Claims 6 to 94 not printed in the Gazette.]

1,265,229. DOOR-OPERATING MECHANISM. LOUIS MEIER, Milford, Ill. Filed June 27, 1917. Serial No. 177,308. (Cl. 268—9.)

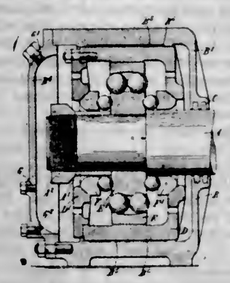
1. In a device of the class described, a support; a door hinged to the support; a frame outstanding from the support; a shaft journaled in the support; a shaft journaled on the door and disposed parallel to the shaft in the frame; links having their outer ends hinged to the respective shafts for swinging movement in a plane defined by the axes of the shafts; a rule joint connecting the inner ends of the links; means for manipulating the links from a distant point; a bar hinged at one end to the support; yieldable means for moving the other end of the bar inwardly with respect to the support, said yieldable means being effective to aid in swinging the inner ends of the links downwardly and to aid in closing the rule joint when the door is closed and when the door is fully opened; and a projection on the door, the projection being slidably engaged with the inner edge of the bar.



3. In a device of the class described, a support; a door hinged thereto; a horizontal frame outstanding from the support and located above the door; a brace extended downwardly from the support to the outer end of the frame; a shaft journaled in the outer end of the frame; a shaft journaled on the door and disposed parallel to the shaft on the frame; an outer link having its forward end pivoted to the shaft on the frame; an inner link; a rule joint connecting the forward end of the inner link with the rear end of the outer link; a pivot element connecting the rear end of the inner link with the shaft on the door; means for operating the door from a remote point and including a flexible element attached to one link; and a direction-changing idler on the brace, across which the flexible element passes.

[Claim 2 not printed in the Gazette.]

1,265,230. BALL-BEARING. CLARENCE HOPKINS MILLER, county of Bedford, England, assignor to Aktiebolaget Svenska Kullager-Fabriken, Gottenborg, Sweden. Filed Nov. 23, 1916. Serial No. 133,091. (Cl. 64—36.)

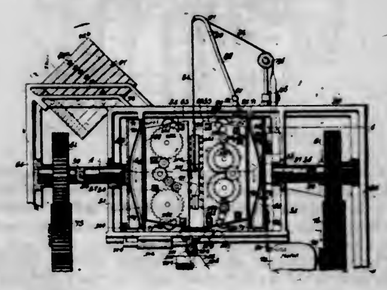


1. In a mounting for a ball bearing to provide for axial movement of the bearing without straining the ball bearing itself, the combination of a ball bearing, a member carrying the said ball bearing, means for transmitting the axial thrust from the shaft to the said member, and a housing wherein said member is free to move axially.

3. In a mounting for a ball bearing to provide for axial movement of the bearing without straining the ball bearing itself, the combination of a ball bearing, a member carrying the said ball bearing, means for transmitting the axial thrust from the shaft to the said member, a housing wherein said member is free to move axially, and coöperating bearing surfaces on said housing and said member provided with lubricating grooves and so proportioned that the edges at the front and rear of one surface in an axial direction meet or overlap the corresponding edges of the other surface at the ends of the relative movement of the said member and fixed housing.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,231. BORING-MACHINE. EMMA T. MILLER, San Antonio, Tex. Filed Apr. 13, 1917. Serial No. 161,836. (Cl. 144—94.)



1. In a boring machine, the combination of a pair of relatively movable boring heads, each having a pair of oppositely rotating members provided with projecting lugs, arms pivoted at one end adjacent said members and having inner free ends engageable by said lugs to raise the arms, a vertically movable weight actuated by said arms in their vertical movements, a frame in which the several parts are mounted, having a receptacle for blanks, a pair of arms pivoted for movement into and out of said receptacle, flexible connections attached at one end to said weight and extending through the outer ends of the last named arms, grappling members secured to the opposite ends of said flexible connections for movements with said arms into and out of the blank receptacle, and flexible controlling connections between said last named arms and one of the boring heads.

12. In a boring machine, the combination with a pair of boring heads between which a blank is held during the boring operation, movable away from one another at the end of the boring operation to permit the blank to drop, of a trough below the boring head having a lower opening through which the blanks are guided, a normally horizontal chip pan below the trough opening, a discharge chute for the blanks below and at one side of the said chip pan, a discharge chute for the chips below and at the opposite side of the chip pan, and means for periodically tilting the said chip pan to permit of the passage of a blank thereby and to discharge the contents of the pan into the said chip discharge chute, said means including connections leading to and actuated by one of said boring heads, whereby to time the tilting movement of the chip pan with the movement of the boring heads to release the blanks.

29. In a boring machine, the combination of relatively movable boring heads, each of which is provided therein with series of angularly disposed bits movable therewith and shiftable with respect thereto during the movement of the heads.

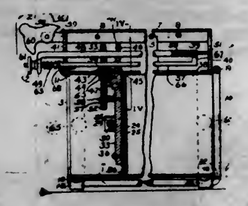
34. In a boring machine, of the character described, bit frames, each having spaced bit plates provided with companion recesses in their opposing faces, and bits having their heads between said plates with portions extending into and rotatable within said recesses.

[Claims 2 to 11, 13 to 28, 30 to 33, 35, and 36 not printed in the Gazette.]

1,265,232. CHEESE-SLICING MACHINE. JOSEPH S. MILLER, Pittsburgh, Pa. Filed Oct. 18, 1916. Serial No. 126,431. (Cl. 31—68.)

1. A cheese block slicing machine comprising an intermittently operable cheese block feeding mechanism including an automatically extensible combined shifting and

follower plate formed of two sections movable relatively one to the other and having a spring controlled coupling means therebetween.



3. A cheese slicing machine comprising a cheese block feeding mechanism, and operating means therefor including a reciprocatory actuating bar and a spring controlled clutching element pivotally connected with said mechanism and in normal clutching engagement with said bar, and a longitudinally movable shifting element engaging, when shifted in one direction, said clutching element for releasing the latter and returning said mechanism to normal position.

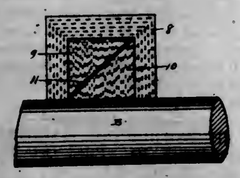
4. A cheese slicing machine comprising a cheese block feeding mechanism, and operating means therefor including a reciprocatory actuating bar and a spring controlled clutching element pivotally connected with said mechanism and in normal clutching engagement with said bar, and a regulating device associated with said operating means for controlling the movement of said mechanism to regulate the width of the slice and for returning said rod to initial position, and a longitudinally movable shifting element engaging, when shifted in one direction, said clutching element for releasing the latter and returning said mechanism to normal position.

5. A cheese slicing machine comprising a receptacle, a cheese block feeding mechanism arranged in the receptacle and having an automatically extensible combined shifting and follower plate formed of two sections movable relatively one to the other and having a spring controlled coupling means therebetween, and an adjustable partition arranged in the receptacle and permanently engaged by one of said sections of said plates.

9. A cheese slicing machine comprising a receptacle having an arc at the top thereof, an intermittently operable cheese block feeding mechanism within said receptacle, operating means for said mechanism pivotally connected therewith, a longitudinally movable rod for shifting said operating means, means pivotally supported from said arch for actuating said rod, and means for controlling the movement of said rod to provide for slices of uniform thickness, and a longitudinally movable shifting element capable of engaging the said operating means for restoring said mechanism to normal position when said shifting element is moved rearwardly.

[Claims 2, 6 to 8, and 10 not printed in the Gazette.]

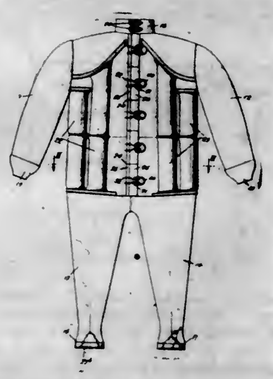
1,265,233. PACKING. NORMAN B. MILLER, Brooklyn, N. Y. Filed July 28, 1917. Serial No. 183,312. (Cl. 154—45.5.)



1. A packing comprising a casing, one side of which is open, and adapted to receive the wear of a rod, a filler within said casing comprising a plurality of obliquely disposed layers each of which is adapted to an independent movement in relation to each other and to said casing.

[Claims 2 to 5 not printed in the Gazette.]

1,265,234. LIFE-PRESERVING SUIT. NATHAN MOLDOVAN, ABRAHAM I. MADRIS, and ABRAHAM LEVITT, Brooklyn, N. Y. Filed Feb. 27, 1917. Serial No. 151,276. (Cl. 9—20.)

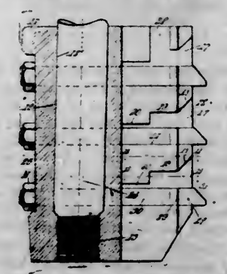


1. A life preserving suit, comprising a flexible body having a vertically disposed open front throughout its length to allow the suit to be removably applied on a person, a locking device having two complemental section members one on each marginal edge of the opening of the body one of said members being of resilient material and the other member being non-resilient and having a groove for removable reception of the first mentioned member to close the opening of the body, and clamps for releasably locking the members together.

3. A life preserving suit, comprising a flexible body with sleeves and legs, the body having a vertically disposed open front throughout its length to allow the suit to be removably applied on a person, and said body only being formed with vertical spaced folds exteriorly thereon to provide inclosures for floatable material, a locking device having two complemental sectional members one on each marginal edge of the opening of the body one of said members being of resilient material and the other member being of non-resilient material and having a groove for removable reception of the first mentioned member to close the opening of the body, and clamps for releasably locking the members together.

[Claim 2 not printed in the Gazette.]

1,265,235. CONNECTING-ROD ATTACHMENT. WILLIAM M. MONTGOMERY, Salem, W. Va. Filed June 24, 1914. Serial No. 847,090. (Cl. 24—135.)



4. A coupling clamp comprising a body having means for the rigid attachment thereto of a connecting rod and

having a longitudinal channel at one side, the body having a pair of transverse grooves at the sides of the channel, a pair of clamping blocks disposed within the channel and having lugs engaging said grooves, one clamping block resting against the bottom of the channel, and means carried by the body and engageable with the other block for moving it toward the first mentioned block for clamping a cable or polish rod therebetween.

7. A coupling clamp comprising a rigid one-part vertical clamp body having vertical means at one side for the rigid attachment thereto of the lower terminal of a depending connecting rod, and vertical means at another side of said body for rigidly clamping a cable.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

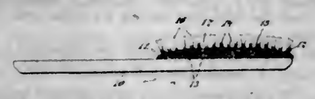
1,265,236. METHOD OF REMOVING GREASE FROM FRIED FOOD PRODUCTS. ELWOOD D. MOORE, New York, N. Y., assignor to Dernell Potato Products Co., Chicago, Ill., a Corporation of Delaware. Filed Mar. 16, 1917. Serial No. 155,335. (Cl. 99—11.)

1. The method of treating a fried food product to remove grease therefrom, which consists in subjecting the fried food product to a heat sufficient to render the grease fluent and simultaneously subjecting the grease to an unrestrained force which is greater than the adhesion between the grease and the food product.

5. The method of treating a greasy food product to remove grease therefrom, which consists in subjecting the food product to air at a temperature of about 300 degrees Fahrenheit and simultaneously subjecting the grease to an unrestrained force which is greater than the adhesion between the grease and the food product.

[Claims 2 to 4 not printed in the Gazette.]

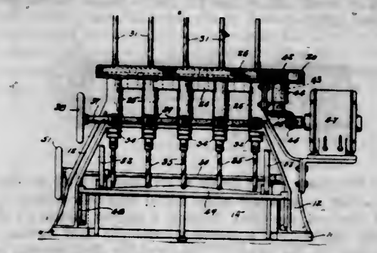
1,265,237. METHOD OF MAKING BRUSHES. WILLIAM MORRISON, Troy, N. Y. Filed Oct. 19, 1914. Serial No. 867,437. (Cl. 15—29.)



The herein described method of making brushes having a back with one of its faces substantially flat, consisting in coating the said flat face with adhesive material, securing granular material to the flat face of the brush-back by the adhesive material to form a roughened surface for the said back and allowing the adhesive material to harden, embedding bristles in a cementitious plate and applying the cementitious plate to the roughened surface of the brush-back while the plate and adhesive material are in a comparatively soft state for securing the plate to the said back.

1,265,238. PERFORATING AND BINDING MACHINE FOR LETTER-SHEETS. WILLIAM J. MORTON, St. Louis, Mo., assignor, by mesne assignments, to McBee Binder Company, Athens, Ohio, a Corporation of Ohio. Filed June 30, 1914. Serial No. 848,187. (Cl. 77—22.)

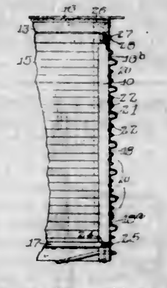
1. In a machine of the class described, the combination with a support for sheets to be perforated, of a frame above said support, a series of vertically disposed bearings formed on said frame, a housing on said frame above said bearings, sleeves arranged for sliding movement in said bearings, each sleeve being provided with a vertically disposed groove, a set screw seated in each bearing, the inner end of which set screw engages in the groove of the corresponding sleeve, each sleeve being provided with a row of teeth, spindles loosely mounted in said sleeves, the upper portions of all of which spindles extend upward through the housing, a series of connected pinions arranged within the housing and splined upon the spindles for operating the same, drills carried by the lower ends of said spindles, a horizontally disposed shaft mounted for rotation on the frame in front of the bearings, and



pinions carried by said shaft, which pinions mesh with the teeth on the sleeves.

[Claim 2 not printed in the Gazette.]

1,265,239. SHEET-METAL CAR END. WALTER P. MURPHY, Chicago, Ill. Filed Aug. 7, 1912. Serial No. 713,806. (Cl. 105—192.)



1. In a railway car, the combination with a wooden end sill and the flooring of the car, of a sheet metal end panel which overlaps the outer face of the sill and is secured thereto, and an angle-bar extending across the car from side to side and seated on said sill with its horizontal flange secured thereto and extending under said flooring, and its vertical flange secured to said end panel whereby an angular reinforcement and weather-protecting device is provided for said end sill.

2. In a railway car, the combination with a wooden end sill, of a sheet metal end panel which overlaps the outer face of the sill and is secured thereto, and an angle-bar extending across the car from side to side and seated on said sill with its horizontal flange secured thereto and its vertical flange secured to said end panel whereby an angular reinforcement and weather-protecting device is provided for said end sill.

3. In a railway car, the combination with a wooden end sill and the longitudinal truss rods of the car, of a sheet metal end panel which overlaps the outer face of the sill and is secured thereto, and an angle-bar extending across the car from side to side and seated on said sill with its horizontal flange secured thereto and its vertical flange secured to said end panel whereby an angular reinforcement and weather-protecting device is provided for said end sill; said truss rods extending through said end sill and overlapping portion of the panel and anchored against the latter.

4. In a railway car, the combination with the roof and ridge-pole of the car, of a sheet metal end structure which extends above the bottom of the ridge pole to form an abutment for the ridge pole to prevent longitudinal shifting of the roof, and a supporting and rigidifying member which extends across the upper portion of the end structure on which the ridge pole rests and to which the end structure is secured.

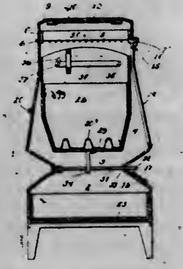
1,265,240. FORCE AIR-PUMP. DANIEL M. MYERS, Jefferson, Iowa, assignor of one-half to Alvin W. Phillips, Jefferson, Iowa. Filed Apr. 11, 1917. Serial No. 161,267. (Cl. 230—27.)



1. An air pump, comprising a cylinder having an inlet and an outlet at opposite ends, a rod operable within the cylinder through the inlet thereof, a valved piston at the inner end of the rod, a sleeve on the rod and having a limited play in the inlet of the cylinder and having its outer portion spaced from the rod and laterally apertured, a valve at the inner end of the sleeve, and means for securing a close fit between the inner end of the sleeve and the rod.

2. An air pump comprising a cylinder having inlet and outlet ports, a piston rod, a piston on the rod having an air port, a valve plate on the piston rod for controlling the port in the piston, a sleeve fitting in the inlet port and being of larger diameter than the rod and surrounding the same, said sleeve having openings therein and a packing box secured to the sleeve within the cylinder and surrounding the piston rod so that the said sleeve has limited movement with the piston rod.

1,265,241. FLAT-IRON HEATER. PAUL S. MYRICK, Tampa, Fla. Filed July 9, 1917. Serial No. 179,447. (Cl. 126—227.)

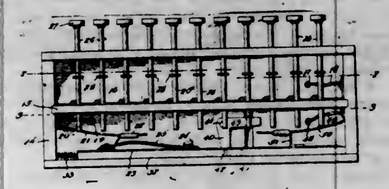


1. In a tool heater, the combination with a casing having an open front, a door closing the same, slotted bearings in the ends of the casing, its front wall having a transverse slot beneath said door, and a bar hinged to its rear wall and projecting through said slot; of a fire pot disposed loosely within said casing, trunnions projecting longitudinally from its lower portion and slidably mounted in said bearings, a fork depending from its bottom and standing astride said bar, and means for holding its upper portion within the casing.

2. In a tool heater, the combination with a casing having an open front, a door closing the same, slotted bearings in the ends of the casing, its front wall having a transverse slot beneath said door, and a bar hinged to its rear wall and projecting through said slot; of a fire pot disposed loosely within said casing, trunnions projecting longitudinally from its lower portion and slidably mounted in said bearings, a fork depending from its bottom and standing astride said bar, the upper end of the fire pot being open and having an arcuate slot in one extremity and the corresponding end wall of the casing having an arcuate slot with a notch opposite the slot in the pot, a latch pivoted inside the latter, and a pin through the free end of the latch and extending through the slot in the pot and the slot in the casing, for the purpose set forth.

[Claim 3 not printed in the Gazette.]

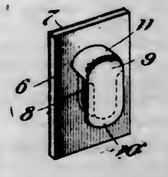
1,265,242. COMBINATION SWITCH APPARATUS. SAMUEL L. NEELY, Willard, Mo. Filed July 16, 1917. Serial No. 180,908. (Cl. 175—282.)



1. In a device of the class described, a slidable plate, a plunger adjacent said plate and adapted to engage the same, a contact insulated from and carried by said plate, and means for moving said plate to position said contact in the path of travel of said plunger.

[Claims 2 to 6 not printed in the Gazette.]

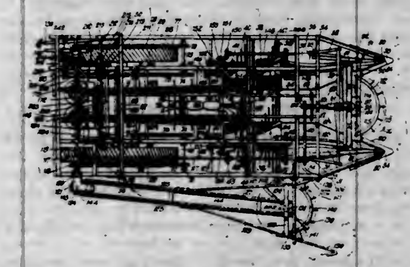
1,265,243. GARMENT-SUPPORTER. RUSSELL PARKER, Brooklyn, N. Y., assignor to Parker, Stearns & Company, Brooklyn, N. Y., a Corporation of New York. Filed Dec. 14, 1917. Serial No. 207,100. (Cl. 24—245.)



1. A hose supporter button comprising a base and a loop-engaging part, the latter having a flange spaced at one end from the base and having its other end connected to said base.

[Claims 2 and 3 not printed in the Gazette.]

1,265,244. CANE-STRIPPING MACHINE. CHARLES E. PIATT, Berkeley, Cal., assignor to Charles A. Brown, Harvey L. Hanson, and Arthur H. Boettcher, Copartners doing business under the firm-name of Brown, Hanson & Boettcher, Chicago, Ill. Filed Nov. 17, 1911, Serial No. 660,758. Renewed Sept. 17, 1917. Serial No. 191,902. (Cl. 130—31.)



1. In a cane stripping machine, a frame, large rotating drums carried by said frame, and spirally arranged chains or comparatively short length hung upon said drums.

6. In a cane stripping machine, a frame, a large rotating drum carried by said frame, the axis of said drum being adjustable in a vertical plane, and comparatively short chains hung from said drum.

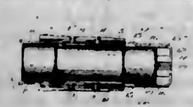
10. In a cane stripping machine, a frame, two drums rotating on longitudinal axes on said frame, two drums mounted on swinging axes on said frame, and whipping chains carried by each of said drums, said last named drums being in a different horizontal zone than said first named drums.

13. In a cane stripping machine, a frame having a longitudinal central passageway, metallic sheeting lining said passageway, and cane stripping devices carried by the side elements, said lining being cut out to permit the stripping devices to operate in the passageway, and said lining being turned back to house said stripping devices.

15. In a cane harvester, a frame, a plurality of large rotating drums mounted on said frame, and spirally arranged chains of comparatively short length hung upon said drums, said drums being arranged in different but overlapping horizontal planes.

[Claims 2 to 5, 7 to 9, 11, 12, and 14 not printed in the Gazette.]

1,265,245. FUSE-HOLDER. OSCAR H. PIEPER and ALPHONSE F. PIEPER, Rochester, N. Y. Filed Sept. 27, 1915. Serial No. 52,936. (Cl. 175—273.)



1. A fuse holder comprising a conducting member, a plurality of yieldable engaging portions attached at one end thereof, a support of insulating material attached at the opposite end of said conducting member, and a plurality of yieldable fuse engaging members secured to the support.

5. A fuse holder comprising a conducting member, a plurality of yieldable fuse engaging portions attached to and extending beyond one end of the conducting member, a support of insulating material attached to the conducting member and projecting beyond the opposite end thereof and having a series of slots or openings extending longitudinally from its outer end, and a plurality of fuse engaging members secured to the support and located in said slots.

7. A fuse holder comprising a conducting member threaded exteriorly at one end to receive a cap, a plurality of yieldable fuse engaging portions attached to the conducting member and extending beyond said end thereof, a support of insulating material attached at the opposite end of said conducting member, and a plurality of yieldable fuse engaging members secured to the support.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,265,246. BOLT-ANCHOR. HENRY W. PLEISTER, Westfield, N. J., assignor to Henry B. Newhall. Filed Sept. 20, 1916. Serial No. 121,105. (Cl. 85—2.4.)

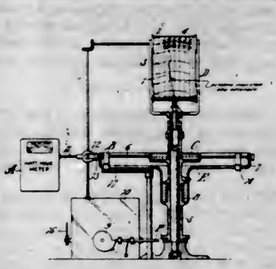


3. In a bolt anchor the combination of an expansible member having an inclined expanding surface reaching its nearest approach to the axis between the ends of the expansible member and from that point having a flaring surface, and a screw to coöperate with both of said inclined and flaring surfaces to insure that the maximum expansion of the expansible member will be at a point between its ends.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,265,247. MAXIMUM-DEMAND INSTRUMENT. GEORGE D. POGUE, St. Louis, Mo. Filed May 12, 1916. Serial No. 97,156. (Cl. 234—5.5.)

2. A maximum demand instrument in which the demand interval is made up of a number of sub-intervals of equal duration, a means whose condition is varied more or less during each sub-interval in direct proportion to the variation in the speed or rate of operation of the device with which the instrument is used during said sub-interval, and means which shows or expresses the average of the variations produced in the condition of said means during a number of sub-intervals that represent the demand interval.



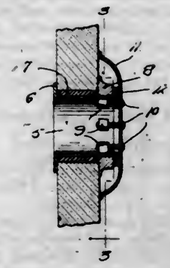
25. A maximum demand instrument provided with an indicating device, and an operating mechanism for said device including shiftable elements that are adapted to be moved more or less when the instrument is in operation and which can be arranged in their extreme positions when the instrument is not in use so as to enable the accuracy of the scale reading of the instrument to be checked up.

29. A maximum demand instrument adapted to be used with a metering or counting device, said instrument comprising a plurality of elements which at equal successive sub-intervals are brought one by one under the control of said device, and means for causing the condition or position of said elements to be varied more or less, depending upon the speed or rate of operation of said device during the various sub-intervals.

36. A maximum demand instrument adapted to be used in connection with a measuring or counting meter and comprising elements that represent sub-intervals of the prescribed demand interval, means for causing the condition or position of said elements to change consecutively more or less but in direct proportion to the variation in the rate of flow of a commodity passing through the meter, and means whereby the average condition or position of a certain number of said elements, taken collectively, is employed to express the average rate of flow of said commodity through the measuring meter during a demand interval immediately preceding the instant of observation, regardless of when such observation is made.

(Claims 1, 3 to 24, 26 to 28, 30 to 35, and 37 to 42 not printed in the Gazette.)

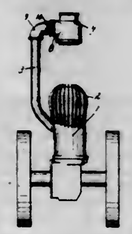
1,265,248. TRAP CLEAN-OUT. ERNEST REINHART and ANDREW MOE, Eau Claire, Wis. Filed June 18, 1917. Serial No. 175,492. (Cl. 4—18.)



In a device of the class described, the combination with a surface having an opening therein, of a ferrule extending through said opening and protruding beyond the wall of said surface at one end, a flange at the opposite end of

said ferrule engaging the inner walls of said surface, a washer interposed between said ferrule and the walls defining said opening, threads upon the exterior of the protruding portion of said ferrule, a draw-nut threaded upon said threads, bosses upon the interior of said ferrule, the said bosses being provided with longitudinally disposed interiorly threaded openings, a cover plate for closing the protruding end of said ferrule, retaining screws extending through said cover plate and being threadedly engaged in the openings in said bosses, and a washer interposed between the outer end of said ferrule and said cover plate.

1,265,249. AIR-COOLED INTERNAL-COMBUSTION ENGINE. MILTON H. RIX, Three Rivers, Mich., assignor to Sheffield Car Company, Three Rivers, Mich. Filed July 31, 1916. Serial No. 112,308. (Cl. 123—171.)



1. The combination with an internal combustion engine comprising a cylinder provided with longitudinally disposed heat radiating fins extending onto the head thereof, an exhaust pipe, and an ejector comprising a body member internally threaded at its ends, its inner end being of larger bore than its outer end, said member having a nipple at one side to which said exhaust pipe is connected, a tubular air passage member of uniform diameter disposed in said body member and threaded into the outer end thereof, there being an annular exhaust delivery chamber around said passage member, and a nozzle member threaded into the inner end of said body member to embrace said air passage member and spaced from said air passage member to provide an annular delivery orifice at the end thereof, said ejector being disposed in alinement with and in spaced relation to the head of the cylinder so that air is delivered against the head of the cylinder and longitudinally of its said radiating fins.

2. The combination with an internal combustion engine comprising a cylinder, an exhaust pipe, and an ejector comprising a body member internally threaded at its ends, its inner end being of larger bore than its outer end, said member having a nipple at one side to which said exhaust pipe is connected, a tubular air passage member of uniform diameter disposed in said body member and threaded into the outer end thereof, there being an annular exhaust delivery chamber around said air passage member, and a nozzle member threaded into the inner end of said body member to embrace said air passage member and spaced from said air passage member to provide an annular delivery orifice at the end thereof, said ejector being disposed in a spaced relation to the cylinder so that air is delivered against it.

[Claims 3 to 6 not printed in the Gazette.]

1,265,250. WOODEN BUILDING CONSTRUCTION. BYRD C. ROCKWELL, Camden, Ark. Filed Aug. 29, 1917. Serial No. 188,856. (Cl. 20—92.)

1. A wooden building construction formed of two boards having longitudinal grain, said boards being disposed with side surfaces facing and being provided with grooves extending transversely in said facing sides, the said grooves being undercut into the material at their margins to provide overhanging shoulders, a tenon member having tenons on opposite sides arranged to register in said grooves and fit behind the shoulder at one end of a groove on each board, and a coöperating tenon member having tenons adapted likewise to fit within said grooves and behind a shoulder at the opposite end of each groove, said tenon members bearing on each other along margins extending obliquely relative to the margins of the grooves.



5. The method of forming a wooden structural member which consists in forming boards with transversely extending dove-tail grooves in one side of each, disposing said boards with said grooves in counterfacing relationship, and forcing into said grooves by movement transversely of said boards wedging tenon members having tenons seating in said grooves and coöperating with the margins thereof, the relative movement of said tenon members operating to increase the distance between the effective margins of their tenons so as to exert a wedging pressure upon the margins of the grooves of both the boards.

[Claims 2 to 4 not printed in the Gazette.]

1,265,251. FISH-GUARD. JULIA A. RUSH, Waynesburg, Pa., assignor of one-half to Winfield S. Rush, Waynesburg, Pa. Filed June 27, 1917. Serial No. 177,323. (Cl. 61—5.)



1. In a fish guard for irrigating ditches, the combination of a frame mounted at the entrance of the ditch, and a plurality of rods carried by the frame and arranged in pairs in superposed relation, one rod of each pair being provided with a plurality of swinging plates extending downwardly between the adjacent pair of rods.

2. In a fish guard for irrigating ditches, the combination of a frame mounted at the entrance of the ditch, and a plurality of rods carried by the frame and arranged in pairs in superposed relation, one rod of each pair being provided with a plurality of swinging plates extending downwardly between the adjacent pair of rods, the said rods in each pair being laterally spaced apart to permit slight swinging movement of the said plates.

3. In a fish guard for irrigating ditches, the combination of a frame mounted at the entrance of the ditch, and a plurality of rods carried by the frame and arranged in pairs in superposed relation, one rod of each pair being provided with a plurality of swinging plates extending downwardly between the adjacent pair of rods, the said rods in each pair being laterally spaced apart to permit slight swinging movement of the said plates, the said

plates all being mounted on the foremost rods in each pair and having their lower edges overlapping the top edges of the adjacent plates.

1,265,252. ARTIFICIAL TOOTH. FRANK H. RUSSELL, Elko, Nev. Filed June 9, 1917. Serial No. 173,875. (Cl. 32—9.)

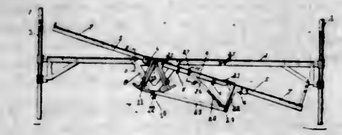


1. An artificial tooth comprising a crown having a base and an overhanging projection separated from the base by a groove, and a pan into which the base is set having an upstanding flange engaging in the groove.

2. An artificial tooth comprising a crown having a base and an overhanging projection separated from the base by a groove one wall of which is roughened, and a pan for receiving the base having a flange engaging in the groove.

3. An artificial tooth comprising a crown having a base and an overhanging projection separated from the base by a divided groove, and a pan into which the base is set having an upstanding flange engaging in the groove.

1,265,253. ADJUSTABLE BED. JOHN RUST, Kalamazoo, Mich. Filed Dec. 5, 1917. Serial No. 205,496. (Cl. 5—12.)



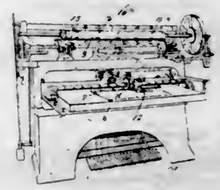
1. In an adjustable bed, the combination of a frame comprising side rails, hangers on said rails, a bed bottom comprising pivotally connected head, seat, and foot sections, segments on which said head section is mounted pivotally mounted on said hangers, a shaft carried by said hangers, pinions on said shaft coacting with said segments, depending arms on said foot section, links connecting said arms to said segments, links pivotally connected to said seat section and having a pin and slot connection with said arms limiting the upward swing of said foot section relative to said seat section, and rests for said seat section removably mounted on said side rails.

4. In an adjustable bed, the combination of a frame comprising side rails, hangers on said side rails, a bed bottom comprising pivotally connected head, seat and foot sections, segments on which said head section is mounted pivotally mounted on said hangers, a shaft carried by said hangers, pinions on said shaft coacting with said segments, depending arms on said foot section, and links connecting said arms to said segments.

9. In an adjustable bed, the combination of a supporting frame, a bed bottom comprising pivotally connected head, seat, and foot sections, the head section being supported for pivotal adjustment on said frame, adjusting members secured to said head section, links connecting said foot section to said adjusting members, and means limiting the upward swing of said foot section relative to said seat section so that after said sections are brought into alinement continued actuation of the head section tilts the bed bottom as a whole.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,265,254. PROCESS OF GUIDE-MARKING ETCHABLE SURFACES. CHARLES W. SAALBURG, Richmond Hill, N. Y., assignor to Multicolor Intaglio Press Company, New York, N. Y., a Corporation of Delaware. Filed Feb. 27, 1917. Serial No. 151,167. (Cl. 101—34.)

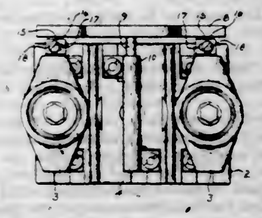


1. The process of providing a series of etchable surfaces with guide-marks for use in the subsequent location on and transfer to said surfaces of a series of photographically-sensitized carbon-tissue prints consisting in providing the subject-matter print or prints with photographable guide marks; in making a photographic print or prints from such subject-matter print or prints and thereby reproducing on the photographic prints the guide-marks on the subject-matter print or prints and thereby converting the photographic print or prints having the photographically reproduced guide-marks into a guide-marked pattern sheet for use in an engraving or other suitable reproducing machine; and in reproducing mechanically on said surfaces the guide-marks on such guide-marked pattern sheet.

2. The method of guide-marking etchable rolls, consisting in providing the face of a subject-matter picture to be reproduced by etching on the rolls, with location guide-marks; in frame printing a sheet of photographically-sensitized carbon tissue from the subject-matter picture and thereby producing a photgraphic tissue print of the subject-matter picture showing said location guide-marks; in fixedly assembling such print with a mount; and in mechanically reproducing the location guide-marks on an etchable roll by use of the guide-marks on the print as pattern guides.

3. The method of guide-marking etchable rolls, consisting in providing the faces of a series of subject-matter pictures each with location guide-marks; in making photographically-sensitized carbon-tissue prints from such subject-matter pictures and thereby providing each print with photographically reproduced location guide-marks; in making a layout of the series of prints on a mount by fixing each print to the mount; and in mechanically reproducing the location guide-marks on the series of prints on a roll to be etched; whereby a layout of location guide-marks corresponding to the layout of guide-marks on the series of prints is made on the peripheral surface of said roll.

1,265,255. SWITCH-OPERATING DEVICE. JOSEPH SACHS, Hartford, Conn. Filed Sept. 20, 1915. Serial No. 51,671. (Cl. 175—282.)

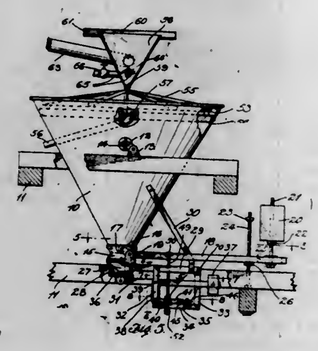


1. An electric switch comprising a plurality of connectors movable simultaneously to electrically open and

close the switch, a handle in the form of a crossbar provided with means for detachably and directly connecting the handle with each of the several connectors, and means for removably locking the handle in place independently of the connection of the handle with the connector.

[Claims 2 to 4 not printed in the Gazette.]

1,265,256. SETTLING-TANK. WALTER E. SAXE, Inglewood, Cal. Filed Oct. 11, 1915. Serial No. 55,313. (Cl. 83—82.)



1. A settling tank comprising a receptacle movably supported, an outlet valve member, pivoted levers supporting said receptacle and said valve member, counter weights therefor, means for locking the lever of said valve member against movement, whereby to hold said valve member closed, and means operated by the movement of said receptacle lever for controlling said locking means, whereby to automatically lock and unlock the same in the operation of said mechanisms.

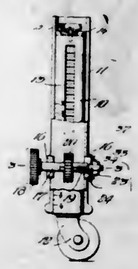
4. A settling tank mechanism comprising a receptacle having a vertical parallel ruler motion, a counterbalance lever supporting said receptacle and having angular supporting arms whereby their leverage is increased upon the depression of the receptacle and a counterbalance weight carried by said lever and arranged so that its leverage upon the supporting lever decreases as the receptacle is depressed.

11. A settling tank mechanism comprising a material receiving trough having an automatically controlled discharge outlet, means for discharging the materials to be treated in the said tank, a spreading member adapted to spread and retard the movement of the materials entering the tank and a discharge outlet for the liquid portions of the materials arranged beneath said spreader near the central portion thereof whereby the outlet flow of liquids will be increased in speed, for holding the lighter material in suspension after the depositing of the solid materials within the tank, and converging partition means leading to the said outlet and preventing a whirling action in the discharging liquids.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,265,257. BED-LEG. LEE L. SCHELLINGER, McGraw, N. Y. Filed Feb. 6, 1917. Serial No. 146,879. (Cl. 5—41.)

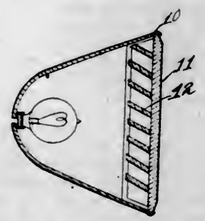
2. In combination with a tubular leg having a lower open end, and a side opening adjacent the said lower end, a post or leg extension adjustable within the said tubular leg having a caster at its lower end provided with a vertical rack, a pair of spaced laterally projecting lugs carried by the tubular leg at opposite sides of its opening, a shaft journaled through the said lugs having a milled head at one end and a reduced extension at its opposite end, a gear wheel having a squared opening and projecting partially through the opening of the leg and into engagement with the rack of the said extension, said shaft having an intermediate squared portion extending through and interfitting the squared opening of the gear wheel, and one of said lugs having a squared bore in its inner face into and out of which one end of the said squared portion of the shaft is shiftable by longitudinal movement of the latter with respect to the gear wheel and the said lugs, and a spring normally resisting longitudinal movement of the shaft and adapted to retain the same in locked position.



4. A tubular supporting member of the character described having a side opening and supports adjacent to said side opening, an extension or post projecting into said member through its lower end and adjustable with respect thereto, said extension or post having a longitudinal rack, a rotatable and longitudinally movable shaft journaled through said supports and having a handle, a gear carried by the shaft and projecting through the side opening of said supporting member into engagement with said rack, and relatively engaging means carried by said shaft and one of said supports and movable, upon longitudinal movement of the shaft, into and out of engaged position, to normally lock the shaft against rotation.

[Claims 1 and 3 not printed in the Gazette.]

1,265,258. HEADLIGHT-DEFLECTOR. WILLIAM SCHMIDT and ATTIE FILIPPONI, Trenton, N. J. Filed May 25, 1917. Serial No. 171,040. (Cl. 240—48.4.)



A deflecting device for an automobile headlight including a frame, a glass disk mounted in the frame and being clear and transparent, and a plurality of stationary transversely arranged jalousied dark-colored translucent glass slats secured to the said frame and in rear of the glass disk.

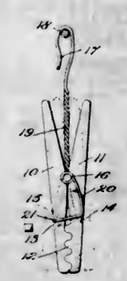
1,265,259. PAVEMENT COMPOSITION AND STRUCTURE. AUGUST E. SCHUTTE, Northboro, Mass. Filed Aug. 16, 1916. Serial No. 115,266. (Cl. 106—31.)

1. A pavement structure comprising wear-resisting material mixed with a bituminous cement having mineral fiber incorporated therewith.

3. A pavement structure having not less than 50% of wear-resisting particles, the spaces between said particles being filled with a bituminous cement having mineral fiber incorporated therewith.

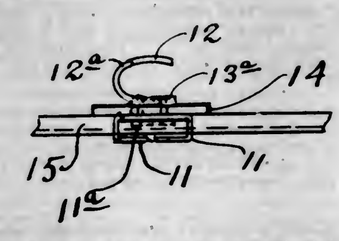
[Claims 2 and 4 to 6 not printed in the Gazette.]

1,265,260. CLOTHES-PIN. HÉLÈNE SEBRÉE, Brooklyn, N. Y. Filed Feb. 19, 1915. Serial No. 9,475. (Cl. 24—137.)



A clothes pin comprising two separable jaws having active portions and rear extensions diverging in V shape when said active portions are closed, and a spring wire arranged to hold them together, said wire forming a pivotal coil between said jaws, whose ends extend along and across the sides of said active portions and thence across the backs of the same, the intermediate portion of said coil being extended upward in two parts twisted together to form a shank, and opened to form a loop at the top which is bent as a whole to form a suspending hook.

1,265,261. MEANS FOR ADJUSTING THE SIZE OF LEGGINGS. JOSEPH SERTNER, Brooklyn, N. Y., assignor to Joseph Sertner and Samuel Hyman, (copartners,) New York, N. Y., doing business as Sertner Adjustable Service Legging Co. Filed Dec. 15, 1917. Serial No. 207,307. (Cl. 24—208.)

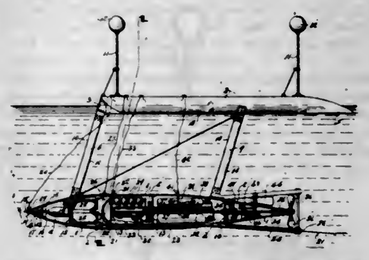


1. In a cloth legging a means for adjusting the size thereof comprising a strip of cloth adapted to be detachably connected to said legging near one edge thereof in any required position to make said legging fit the leg of any person, said strip being thereby curved edgewise thereof, hooks on said strip, eyelets on said legging near the other edge thereof and a means for detachably connecting said strip to said legging.

[Claims 2 to 6 not printed in the Gazette.]

1,265,262. TORPEDO. JAMES M. SEYMOUR, Jr., Newark, N. J. Filed May 19, 1917. Serial No. 169,615. (Cl. 114—21.)

1. The combination with a dirigible torpedo of an electric control cable, said cable being stored in the interior of said torpedo in the form of a hollow coil adapted to feed out the cable from its center, and the windings of said coil being secured together by adhesive material to hold the same against collapsing and tangling within the interior of the coil, said adhesive material yielding to the pull of said cable so that the windings of said coil are successively torn away and freed from their fellows as the cable issues from said torpedo when in motion.



2. A torpedo comprising a hollow hull provided with a compartment in its bow, a charge of high-explosive contained in said compartment, an impact firing-pin longitudinally movable through the nose of said torpedo into said compartment for detonating said explosive charge, spring means for maintaining said firing-pin in normal outwardly thrust position, a safety-pin passing transversely through the exterior projecting end of said firing-pin to restrain the same by engagement with the nose of said torpedo against rearward firing movement, and a hand-line connected with said safety-pin whereby the same may be withdrawn from said firing-pin to operatively free the latter for service.

3. A propeller driven dirigible torpedo comprising a hollow hull containing a primary mover for driving the propeller and a fuel supply for said primary mover, an electric starting means for said primary mover, a cut-in switch for energizing said starting means, and a hand-line extending from said switch exteriorly from said torpedo for operating said switch from without said torpedo to put the latter in motion.

4. A torpedo comprising a hollow hull provided with a surface float for supporting the same in submerged position, said hull having a compartment for storing electric control cable, a guide-tube arranged within said hull, said guide-tube having a bell-shaped receiving end positioned within so as to communicate with said compartment, the rearward end of said guide-tube projecting exteriorly of said hull and terminating at a point to the rear of and beneath the stern of said hull, an electric control cable, said cable being stored in said compartment in the form of a hollow coil adapted to feed out the cable from its center, the windings of said coil being secured by adhesive material against collapsing, said adhesive material yielding to the pull of said cable so that the windings of said coil are successively freed as the cable issues from the exit end of said guide-tube, a soft gasket secured in the exit end of said guide tube through which the cable passes, a removable plug adapted when withdrawn to admit water into said cable compartment, and a hand line extending between said plug and said surface float.

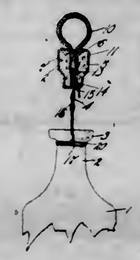
5. A torpedo comprising a hull carrying an explosive charge, propelling power plant and steering apparatus, and contact cable adapted to issue from said hull and trail back to a control point, a surface float for supporting said hull in submerged position, and hanger-members interconnecting said float with said hull, said hanger members having sharpened knife-like edges fore and aft, said surface float having a sharpened cut-water and a V-shaped bottom which broadens at the stern into a flat-bottom.

[Claim 6 not printed in the Gazette.]

1,265,263. BOTTLE-STOPPER. PEARLY SHARPE Kenora, Ontario, Canada. Filed Dec. 3, 1915. Serial No. 64,931. (Cl. 215—36.)

2. A bottle stopper including a body insertible into a bottle, a finger receiving ring formed from a plurality of

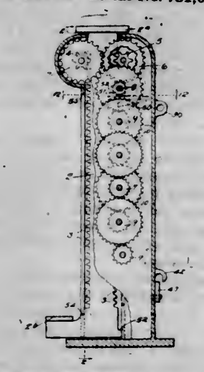
strands of wire, means for anchoring the ring to the body by bending certain of the ends of the strands about the body, and means for securing the body to the neck of the



bottle formed by bending certain other terminals of the strands of wire about the bottle neck.

[Claims 1 and 3 not printed in the Gazette.]

1,265,264. JACK. JAMES H. SHEAHAN, Freeport, Ill. Filed Nov. 13, 1912. Serial No. 731,079. (Cl. 254—97.)



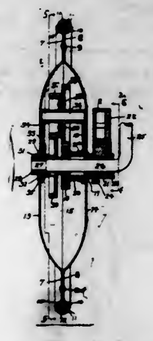
1. A portable jack comprising a suitable casing, a movable member mounted in said casing, a train of gears connected at one end with said movable member so as to move it with relation to the casing when operated, means for connecting a motor to said train of gears at different points therealong, and means for disconnecting the gears intermediate the connecting points of the motor.

4. A portable jack comprising a suitable casing, a movable member mounted in said casing, a train of gears connected at one end with said movable member, a shaft at the other end of said train of gears arranged so that power may be applied thereto to drive the gears and move said movable member and a retarding fan connected with said train of gears and adapted to retard the movement thereof as the movable member is moved toward its initial position.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,265,265. DRIVING MECHANISM FOR VEHICLES. STANLEY D. SHIMER, Bethlehem, Pa. Filed June 26, 1917. Serial No. 176,933. (Cl. 208—34.)

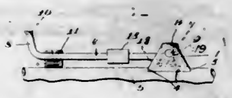
5. The combination with a vehicle including a frame and a driving shaft, of a driving wheel having a chamber therein, a gear wheel mounted within said chamber, a bearing secured to said frame and having an angular opening, a hub on said gear wheel having an extension providing an angular surface for fitting said angular opening of the bearing, another gear wheel carried by the driving wheel and rotatable independently thereof, and means for operatively connecting said driving shaft to impart said independent rotatable movement to the second-mentioned gear wheel, said gear wheels being in mesh with each other so that the second-mentioned gear wheel has planetary movement around the first-mentioned gear wheel, substantially as described.



7. The combination with a vehicle including a frame and a driving shaft, of a driving wheel made in two sections, said sections being secured together and having portions oppositely bulged to provide a chamber, a gear wheel mounted within said chamber, a bearing on said frame and having an angular opening, a hub on said gear wheel having an extension providing an angular outer surface for fitting said angular opening of the bearing, means on one of the sections of the driving wheel forming a bearing for the hub of the gear wheel, said section having a hole therein through which said hub extends, a stud shaft mounted to rotate with the driving wheel and located within said chamber, a second gear wheel mounted on said stud shaft and in mesh with said first gear wheel, a third gear wheel rotatable in conjunction with said second gear wheel, a fourth gear wheel having a hub secured to said driving shaft, and means on the other section of said driving wheel forming a rotatable support for said latter hub, substantially as described.

[Claims 1 to 4, 6, and 8 not printed in the Gazette.]

1,265,266. SIGHT FOR FIREARMS. JOHN O. SIMPSON, Ilion, N. Y., assignor to Remington Arms & Ammunition Company, Ilion, N. Y., a Corporation of New York. Filed Jan. 25, 1913. Serial No. 744,105. (Cl. 33—55.)



1. A gun sight comprising a base having upturned ears at opposite ends thereof, a leaf comprising a strip of sheet metal having one end bent to form a tubular bearing, and its opposite end bent at an angle to the major portion of the leaf and provided with a notched edge, the major portion of the leaf being provided with a lengthwise slot terminating short of said angularly extending part, a hinge pin extending transversely through the ears and through said tubular bearing of the leaf, a slide on the leaf and movable along the slot, a bow spring extending lengthwise of said bearing and having its intermediate portion in engagement with the bearing, and its ends engaging the ears of the base, and a screw extending through the leaf and having a part projecting on the lower side thereof, substantially as and for the purpose described.

2. A gun sight comprising a base having ears at opposite ends thereof, a leaf formed of a strip of sheet metal having one end bent to form a tubular bearing and its opposite end bent at an angle to the major portion of the strip and provided with a notch, the periphery of said bearing being provided with a concave surface extending

in the direction of the length of the bearing, a slide mounted on the strip, and a bow spring having its intermediate part in engagement with the concave surface of the bearing and its ends interlocked with the ears of the base for preventing displacement of the spring, substantially as and for the purpose specified.

[Claims 3 and 4 not printed in the Gazette.]

1,265,267. SIFTING-MACHINE. LOWE E. SIMPSON, Cincinnati, Ohio, assignor to The Orville Simpson Company, Cincinnati, Ohio. Filed July 20, 1917. Serial No. 181,739. (Cl. 83—56.)



1. A body to have a portion gyrated horizontally, a base disposed below the body, mechanism supported by the base for giving horizontal gyrating motion to one end of the body, a cylindrical supporting wheel disposed under one side of the opposite end of the body, a flat track carried by the body and resting on said wheel and adapted to move endwise and shift sidewise thereon, a second supporting wheel disposed under the opposite side of the body at the same end with the first mentioned wheel and provided with a peripheral surface V-shaped in cross-section, and a track carried by the body and having a V-shaped cross section engaging the periphery of said second supporting wheel, combined substantially as set forth.

2. A sifting machine comprising, a base, a sieve-box free for horizontal motion and disposed over the base, means disposed between the base and the sieve-box for giving vertical support to the sieve-box, mechanism supported by the base and connected with the sieve-box and adapted to gyrate a portion of the sieve-box horizontally, and a weight of constant value secured in fixed relationship to the sieve box, and disposed between the base and the point of connection between said mechanism and the sieve-box, combined substantially as set forth.

3. A gyrating-device comprising, a base, a vertical bearing carried by the base, an eccentric journaled in the bearing and having a crank-pin bearing bore extending lengthwise of it parallel with its axis, means for rotating the eccentric, and a crank-pin journaled in the bearing bore of the eccentric and projecting above the eccentric and adapted for articulate connection with the body to be gyrated, combined substantially as set forth.

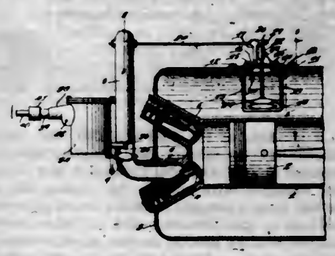
4. A gyrating-device comprising, a base, a vertical bearing carried by the base, an eccentric journaled in the bearing and having a crank-pin-bearing bore extending lengthwise of it parallel with its axis, means for rotating the eccentric, a crank-pin journaled in the bearing bore of the eccentric and projecting above the eccentric, an articulate connection between the body to be gyrated and the projecting upper end of the crank-pin, and a hollow fly-wheel surrounding said vertical bearing and rigidly connected with the upper end of said eccentric, combined substantially as set forth.

7. A sifting machine comprising, a horizontally shakable screen, an interstitial floor disposed below the screen, ball-pockets formed on the floor by means of ribs having inclined sides margining the pockets, and balls supported by the floor with their upper surfaces free of the screen and adapted to be knocked upwardly against the screen when struck by the inclined ribs, combined substantially as set forth.

[Claims 5 and 6 not printed in the Gazette.]

1,265,268. ATTACHMENT FOR INTERNAL-COMBUSTION ENGINES. EDWARD T. SINCLAIR, Oklahoma, Okla. Filed Mar. 6, 1917. Serial No. 152,961. (Cl. 123—25.)

3. In a device of the class described, the combination of an engine, a manifold communicating with said engine, a reservoir carried upon said mainfold, a pipe projecting from said reservoir and extending into said manifold, a float carried upon said reservoir, a lever pivotally mounted upon said reservoir and bearing upon said float, supply means communicating with said reservoir, a needle valve engaging said supply means, said needle valve being pivotally mounted upon said lever, said float being adapted to move said lever for cutting off the supply of water into said reservoir or permitting water to pass into said reservoir, thermostatic means carried upon said engine, a shaft automatically operated by said thermostatic means, and means connected to said shaft and carried within said manifold for gradually decreasing the supply of gas through said manifold and permitting the injection of water from said reservoir into said manifold as the temperature at the thermostat rises.



8. In a device of the class described, the combination of an engine cylinder having a water jacket mounted thereon, a manifold connected to said cylinder, a frame carried within said water jacket, a thermostat carried by said frame, a rod carried upon said thermostat, said thermostat being adapted to expand as temperature within said jacket increases, a bracket carried upon said water jacket, a shaft pivotally mounted upon said bracket and said manifold, a finger keyed upon one end of said shaft, an adjustable cap carried upon said rod, a spring connected to said finger for normally urging the same in one direction, said thermostat being adapted to lift said rod whereby said cap will engage said finger for turning said shaft as the temperature of water within said water jacket increases, and valve means carried within said manifold for regulating the passage of gas through said manifold, said shaft engaging said valve means for automatically operating the same.

[Claims 1, 2, 4 to 7, and 9 not printed in the Gazette.]

1,265,269. AUTOMATIC FEED MECHANISM FOR DRILL-PRESSES. GRANT SIPP, Paterson, N. J. Filed July 10, 1917. Serial No. 179,675. (Cl. 77—33.)

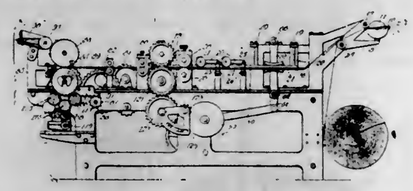


1. In combination, the frame, a tool-carrier including means movable in a definite direction therein, a going driving means, and a power-transmitting coupling to con-

nect said means with each other including a master member movable to one position to make, and to another position to break, the coupling and normally occupying one of said positions, said first-named means having means to move the master member during the movement in one direction of said first means.

[Claims 2 to 9 not printed in the Gazette.]

1,265,270. MACHINE FOR MAKING PAPER BAGS. DAVID W. SNYDER, Chicago, Ill. Filed Feb. 26, 1916. Serial No. 80,729. (Cl. 93—18.)



1. In a machine of the kind specified, the combination with mechanism for folding and applying adhesive to a web of paper to produce a flat tube, of a pair of rotatable members equipped with cutters for cutting the opposite walls of the tube, a plunger mounted to reciprocate within the tube and to pass between said rotatable members at intervals for causing grooves in the opposite faces of said plunger to become positioned to receive the cutter edges as the same penetrate the walls of the tube, and mechanism for reciprocating said plunger.

2. In a machine of the kind specified, the combination with mechanism for folding and applying adhesive to a web of paper to produce a flat tube, of a pair of rotatable members equipped with cutters for cutting the opposite walls of the tube, a plunger mounted to reciprocate within the tube and to pass between said rotatable members at intervals for causing grooves in the opposite faces of said plunger to become positioned to receive the cutter edges as the same penetrate the walls of the tube, means geared to said rotatable members for causing said plunger to move into position between the latter, and mechanism for returning said plunger to its normal position.

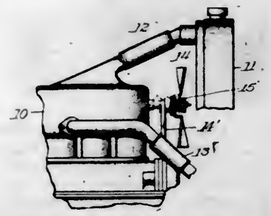
3. In a machine of the kind specified, the combination with mechanism for folding and applying adhesive to a web of paper to produce a flat tube, of mechanism for cutting said tube into predetermined lengths comprising a pair of rotatable members each provided with cutters for cutting opposite walls of the flat tube simultaneously, and a reciprocable member housed by said tube, and gearing between said reciprocable member and said rotatable members for causing the former to pass between said rotatable members at intervals to effect register of recesses in said reciprocable member with the cutters of said rotatable members.

4. In a machine of the kind specified, the combination with mechanism for folding and applying adhesive to a web of paper to produce a flat tube, of mechanism for cutting opposite walls of the flat tube into bag-blanks of predetermined length, said mechanism comprising cutters disposed on opposite sides of the path of travel of the tube, mechanism for moving the same at intervals toward said tube to penetrate the walls of the latter, and a companion reciprocable member within the tube constituting a female cutter member adapted to coact with said cutters to effect severance of the tube, and gearing between said cutters and said reciprocable member for moving the coacting cutting means synchronously into register with each other.

5. In a machine of the kind specified, the combination with mechanism for continuously moving a web of paper longitudinally, applying adhesive to the same contiguous to one side edge thereof, and folding the said web to cause the side edges thereof to overlap and adhere together to form a flat tube, of mechanism for cutting said tube into bag-blanks of predetermined length including two members carrying cutters for penetrating opposite walls of the flat tube simultaneously at predetermined intervals, a reciprocable member inclosed within the flat tube and provided with grooves adapted to receive the edges of the cutters, and gearing between the said cutter carrying members and said reciprocable member for moving the latter into register with said cutters at proper intervals.

[Claims 6 to 25 not printed in the Gazette.]

1,265,271. COOLING-FAN AND CONTROLLING MEANS. PARKE T. SNYDER, Chicago, Ill., assignor of one-half to Ross J. Beatty, Chicago, Ill. Filed Apr. 18, 1916. Serial No. 91,907. (Cl. 230—1.)



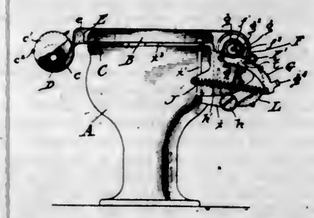
1. The combination with a fan, of means for varying the air moving capacity thereof, and a temperature responsive device carried by the fan and connected with said means.

7. The combination with an automobile radiator cooling fan, of means for varying the air moving capacity thereof, a bellows diaphragm carried by the fan, means for preventing movement of one end of the diaphragm with respect to the fan, and a connection between the other end of the diaphragm and the means for varying the air moving capacity of the fan.

11. A rotary flow inducing device and a thermostat which rotates with and is carried by said device for automatically varying the flow inducing capacity of the device as the temperature of the medium on which the device works varies.

[Claims 2 to 6, 8 to 10, and 12 not printed in the Gazette.]

1,265,272. AUTOMATIC SANITARY TOILET-SEAT PROTECTOR. ERNEST SPANOS, New York, N. Y. Filed May 20, 1916. Serial No. 98,793. (Cl. 4—18.)



1. In a device of the class described, the combination of a toilet seat mounted for pivotal movement above a bowl and normally elevated slightly above the same, a feed roll positioned at the side of said seat, a protecting web laid across said seat and in contact with the feed roll, a spring, connections between the seat and the spring, which connections place the spring under tension when the seat is depressed, and release the spring when the seat is elevated, driving connections between the spring and the feed roll for operating said roll, when the spring is released, to advance the protecting web across the seat, means for directing the used portions of the web into the interior of the bowl, and means for cutting off the used portions of the web from that portion thereof which remains unused, whereby the flushing of the bowl carries away the used portions of the web.

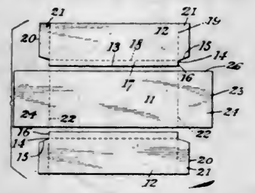
5. A device for feeding a web of paper across a toilet seat, embodying a seat pivotally mounted above a bowl and normally elevated slightly above the same, a feed roll for the paper web at one side of the seat, a spring, connections between the spring and a fixed support for energizing the spring when the seat is depressed and releasing said spring when seat is elevated, a pinion associated with the feed roll, and a rack coöperating with the pinion, said rack being operatively connected with the spring whereby, when the spring is released, the feed roll is advanced and the web fed across the seat, all of the web advancing mechanism being mounted on the seat and supported thereby.

9. In a device of the class described, the combination of a toilet seat mounted for pivotal movement above a bowl and normally elevated slightly above the same, a feed roll mounted on said seat at one edge thereof, a protecting web laid across said seat and in contact with the feed roll, a member pivotally supported on the seat, a link secured at one end to the pivoted member and precluded against longitudinal movement by a fixed pivot at its other end whereby pivotal movement of the seat oscillates the pivoted member, a spring coöperating with the pivoted member and adapted to be placed under tension by said member when the seat is depressed, said spring normally operating to oscillate the pivoted member into position to elevate the seat, and driving connections between the pivoted member and the feed roll for operating said roll when the seat is elevated to advance protecting web across the seat.

12. In a device of the class described, the combination of a feed roll, a spring motor for actuating the feed roll, a hanger for mounting the feed roll and its operating spring motor upon a toilet seat, means coöperating with the spring motor and with a fixed support for normally partially elevating the seat above the bowel with which it is associated, said spring motor being energized when the seat is depressed, and driving connections between the spring motor and the feed roll whereby, when the seat is released, the spring motor elevates said seat and simultaneously operates the feed roll.

[Claims 2 to 4, 6 to 8, 10, and 11 not printed in the Gazette.]

1,265,273. BOX-BLANK. JOHN STOGDELL STOKES, Moorestown, N. J., and HENRY G. SCHWERDTLE, Philadelphia, Pa., assignors to Stokes & Smith Company, Summerdale, Pa., a Corporation of Pennsylvania. Filed July 6, 1914. Serial No. 849,122. (Cl. 229—40.)



1. As a new article of manufacture, a wrapper blank to be applied exteriorly of a box shell, consisting of a plurality of separate members of thin flexible material adaptable for folding and attachment to said box-shell, the said members lying in substantially the same plane and having overlapped edges attached together and including a pair of oppositely disposed members with relatively short integral end laps of less width than said members, said end laps adapted to engage the walls of the box-shell when being covered, adjacent the corners thereof.

3. As a new article of manufacture, a wrapper blank for covering a box-shell consisting of four separate members of readily foldable material lying in substantially the same plane, so arranged as to form a central opening, said members including a pair of oppositely disposed members with notches formed near the ends thereof, to provide a foldable longitudinal lap and foldable transverse end laps on each of the opposed members, all of said members being attached together by overlapping certain portions of the foldable longitudinal laps on the opposed member, and certain portions of remaining oppositely disposed members.

[Claim 2 not printed in the Gazette.]

1,265,274. NON-ALCOHOLIC BEVERAGE. ALEXANDER L. STRAUS, Baltimore, Md. Filed Aug. 4, 1917. Serial No. 184,473. (Cl. 99—11.)

1. The herein described non-alcoholic beverage the same containing a base material consisting of a fermented malt liquor from which substantially all the alcohol has has been eliminated, and containing salt, sugar and hops, substantially as described.

7. The herein described non-alcoholic beverage the same composed of a base material consisting of beer from which the alcohol has been eliminated and containing substantially the same quantity of water as the original beer, and also containing salt, hops, gum arabic, sugar, quassia, a chill proof preparation, potassium meta-bisulfite and carbonic acid gas, substantially as described.

[Claims 2 to 6 not printed in the Gazette.]

1,265,275. NON-ALCOHOLIC BEVERAGE AND PROCESS OF PRODUCING THE SAME. ALEXANDER L. STRAUS, Baltimore, Md., assignor to Baltimore Process Company, Baltimore, Md., a Corporation of Delaware. Filed Oct. 15, 1917. Serial No. 196,723. (Cl. 99—11.)

1. The steps in the process of making a non-alcoholic, non-malt containing beverage from a liquor containing alcohol and derived from fermented glucose, which consist in eliminating from said liquor substantially all the alcohol present; and partially restoring the original taste of said liquor by adding to the product thus obtained suitable quantities of salt, a sweetening material, and hops, substantially as described.

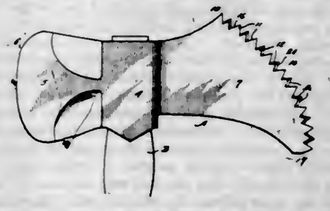
4. The steps in the process of making a non-alcoholic, non-malt containing beverage which consist in producing a fermented alcohol-containing liquor from a highly dextrined quality of glucose, and other materials; eliminating substantially all the alcohol present; and partially restoring the original taste by adding suitable quantities of water, salt, sugar, quassia, hops, and a foam producing material, substantially as described.

5. The steps in the process of making a non-alcoholic, non-malt containing beverage which consist in producing a fermented alcohol-containing liquor from a highly dextrined quality of glucose, and other materials; eliminating substantially all the alcohol present; and partially restoring the original taste by adding suitable quantities of water, salt, sugar, quassia, hops, gum arabic, meta-bisulfite of potassium, and carbonic acid gas, substantially as described.

8. The herein described non-alcoholic, non-malt containing beverage comprising a fermented glucose beer from which substantially all the alcohol has been eliminated and containing water, salt, sugar, quassia, a foam producing material, a preserving material, a chill proofing material and hops, substantially as described.

[Claims 2, 3, 6, and 7 not printed in the Gazette.]

1,265,276. AX. WILLIAM M. STEPHENS, Equinunk, Pa. Filed June 17, 1916. Serial No. 104,274. (Cl. 145—2.)



An ax comprising a head and a handle, said head provided with an arcuate toothed cutting portion, the one

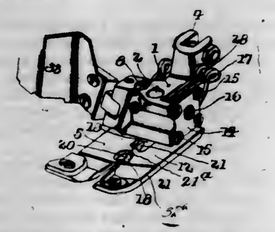
terminus of said cutting portion toward the hand gripping portion of said handle being farthest away from the longitudinal axis of said handle than the other terminus of said toothed cutting portion.

1,265,277. SAW-SET. WILLIAM H. STRICKLAND, Bristol, Va. Filed June 21, 1917. Serial No. 176,191. (Cl. 76—64.)



A saw set comprising two members, each member consisting of a handle part and a jaw part, one member having an enlargement on its jaw part with a bowl shape pocket in said enlargement and being further provided with a slot leading from the end of the jaw into the pocket above the bottom thereof and with a passage communicating with the rear portion of the pocket, an abutment screw extending diagonally through the jaw into the lower portion of the pocket beneath the slot, and the other member having its jaw part extending through the passage into said pocket and pivotally mounted in the passage.

1,265,278. PRESSER-FOOT FOR SEWING-MACHINES. SAMUEL GEORGE TATE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 12, 1916. Serial No. 77,979. (Cl. 112—13.)



1. A presser foot for sewing machines including in combination, a shank, main foot sections arranged side by side and having opposed recesses, means for supporting said main foot sections whereby one of said sections may move bodily vertically relative to the other, an auxiliary foot section located between the main foot sections in said recesses, and means for yieldingly supporting said auxiliary foot section for bodily vertical movements relative to said main foot sections.

3. A presser foot for sewing machines including in combination, a shank, foot sections arranged side by side and having a needle slot therein, said foot sections meeting in a line passing through said needle slot, means for supporting said foot sections on said shank whereby one of said sections may yield vertically, an intermediate foot section in rear of said needle slot, and means for supporting said intermediate foot section whereby the same may bodily yield vertically for engaging the enchained loops for chaining off when the fabric is passing underneath the forward end of the presser foot, said intermediate foot section having the forward end thereof beveled off to direct the fabric underneath said intermediate foot section.

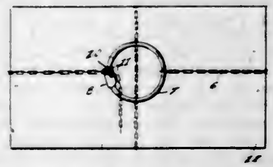
4. A presser foot for sewing machines including a shank, foot sections arranged side by side, and having a needle slot formed partly in each section, a stitch finger extending into the needle slot and carried by one of the said sections, an intermediate section located wholly in rear of said needle slot, means for yieldingly supporting one of said first-named sections on said shank, and means for yieldingly supporting said intermediate section on said shank.

5. A presser foot for sewing machines, including a shank, foot sections arranged side by side and having a needle slot formed partly in each section, a stitch finger extending into the needle slot and carried by one of said sections, and a projecting finger carried by one of said sections and overlapping the meeting lines of said sections to form the rear wall of the needle slot.

6. A presser foot for sewing machines, including a supporting shank, foot sections arranged side by side, means for yieldingly supporting each foot section on said shank whereby the same may yield independently of each other, said foot sections having two needle slots arranged one substantially in rear of the other and each needle slot being formed partly in each foot section, a stitch finger carried by one foot section and projecting into one needle slot, and a stitch finger carried by the other section and projecting into the other needle slot, said sections of the foot meeting on a line passing substantially between the stitch fingers.

[Claims 2 and 7 not printed in the Gazette.]

1,265,279. PACKAGE-TIE. HARLIE A. TOWNSLEY, New Hampton, Iowa, assignor of one-half to Eugene Julius Feuling, New Hampton, Iowa. Filed Feb. 11, 1916. Serial No. 77,695. (Cl. 24—17.)



2. A package tie including a split ring, one end of said ring being flat and provided with an aperture, the opposite end of said ring being reduced in thickness and directed angularly and positioned in said aperture, a head connected with the free end of said angular end to prevent the removal of said angular end from the aperture, a chain including a plurality of links adapted to engage the angular end of said split ring, said head also forming means for preventing the accidental displacement of the links.

[Claim 1 not printed in the Gazette.]

1,265,280. BOOT-TOP. CHARLES TWEEDIE, Jefferson City, Mo. Filed May 17, 1917. Serial No. 169,157. (Cl. 36—2.)



A boot top to be worn over a shoe, said boot top having quarters following the general lines of the upper portion of a high shoe, the lower edges of said boot top coinciding with the edges of the sole of the shoe along the heel and extending under the shank and secured together, the front portions of said boot top having means for securing them together, and the back lower portions of said boot top being sprung in a sufficient amount to make the lower edges of the boot top hug the shoe when the front portions are drawn together, and a stiffening flap sewed to one of the front edges of said boot top from top to bottom and lapping the other edge.

1,265,281. SHOE-TONGUE. CHARLES TWEEDIE, Jefferson City, Mo. Filed Nov. 26, 1917. Serial No. 204,037. (Cl. 36—54.)

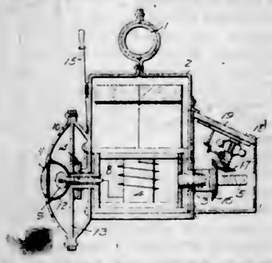


1. A shoe tongue comprising two parts sewed together end to end, the adjacent ends of said two parts being curved in, whereby said sewed tongue is transversely convex from end to end and bent inwardly at the middle to conform approximately to the shape of the front of the shoe.

3. A tongue for a boot top of the character described, said tongue comprising two parts sewed together end to end, the adjacent ends of said two parts being curved in, whereby said sewed tongue is transversely convex from end to end and bent inwardly at the middle to conform approximately to the shape of the front of the shoe, said tongue being reinforced and stiffened with suitable lining material and sewed to said boot top along one edge from end to end.

[Claims 2 to 4 not printed in the Gazette.]

1,265,282. COMBINED GENERATOR, LAMP, HORN, AND SPEEDOMETER. HARRY RANDOLPH VAN DEVENTER, Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J., a Corporation of New Jersey. Filed May 26, 1916. Serial No. 100,032. (Cl. 116—1.)



1. A device adapted to be secured to a vehicle and comprising in combination an electric generator, a lamp connected therewith, a speedometer, common actuating means for said generator and speedometer, and a common casing in and upon which all of the aforesaid devices are mounted to form a unitary structure, substantially as described.

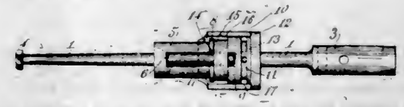
3. A device adapted to be secured to a vehicle and comprising in combination an electric generator, a lamp connected with the movable part of said generator, a speedometer, common actuating means for said generator and speedometer, and a casing in and upon which all of the aforesaid devices are mounted to form a unitary structure.

5. A device adapted to be secured to a vehicle and comprising in combination in a common casing and forming a unit structure an electric generator having an armature, a lamp connected to said armature and revoluble therewith, a sound-producing device including a diaphragm having a central aperture, a speedometer, means on said armature shaft for driving said speedometer, means connected to said armature shaft for operating the same, together with said speedometer and sound-producing device, substantially as described.

6. A device adapted to be secured to a vehicle and comprising in combination in a casing forming a unitary structure an electric generator, a lamp connected to said generator, a sound-producing device having a diaphragm mounted on said casing, means for connecting the moving part of said generator to said diaphragm at will, a speedometer, and common actuating means for said generator, sound-producing device, and speedometer, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

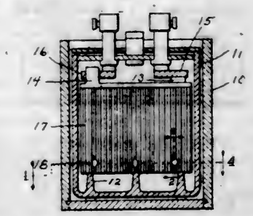
1,265,283. BOILER-TUBE EXPANDER. OTTO WIEDEKE, Dayton, Ohio, assignor of one-half to Gustav Wiedeke, Dayton, Ohio. Filed Oct. 26, 1917. Serial No. 198,575. (Cl. 153—82.)



1. In a tube expander, the combination of expanding rollers, a cage in which said rollers are placed said cage having a central longitudinal bore, a tapered mandrel adapted to penetrate said bore to expand the rollers, a helical spring carried on the small end of the mandrel and adapted to enter the bore of the cage and to occupy a portion thereof and thereby prevent the expanding rollers from passing out through the bore of the cage when the cage is at the small end of the mandrel, and means engaging the circumference of the cage and the rollers and serving to hold the rollers in the cage when the tool is not in use.

2. In a tube expander, the combination with a tapered mandrel, and a roller cage having an axial opening of maximum diameter to accomodate the greatest diameter of the working surface of the mandrel, of a series of reversible rollers mounted in said cage and engaged by said mandrel, said rollers being of uniform diameter throughout their length, a helical spring mounted on the small end of said mandrel and engaging the adjacent ends of said rollers when said rollers are relaxed and whereby the rollers are prevented from passing out between the end of the mandrel and the cage when the implement is being handled, and a stop on the end of the mandrel forming an abutment for said spring, substantially as specified.

1,265,284. SEPARATOR FOR STORAGE BATTERIES. IRA C. WILLIAMS and CHARLES F. WILLIAMS, Muncie, Ind., assignors to National Carbon Company, Inc., a Corporation of New York. Filed Feb. 21, 1917. Serial No. 150,144. (Cl. 204—29.)

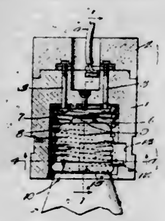


1. A separator for storage battery electrodes, comprising a porous body adapted to be supported between said electrodes, with its opposite faces in contact therewith, and tranverse acid resisting means within the side planes of said porous body for protecting it against destructive compressing action of adjacent electrodes.

3. A separator for storage batteries, which separator consists of a main portion of material having sufficient porosity to permit diffusion of electrolyte, and relatively hard, non-porous and acid resisting blocks secured in and extending through said main portion and flush with the surface thereof.

[Claims 2 and 4 to 9 not printed in the Gazette.]

1,265,285. LAMP-SOCKET. DANIEL WOODHEAD, Evanston, Ill. Filed Mar. 16, 1917, Serial No. 155,312. Renewed Feb. 18, 1918. Serial No. 217,993. (Cl. 173—356.)

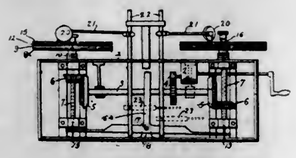


1. A socket for electric bulbs having a housing and a helical gripping spring in said housing into which the base screws, the inner end of the spring being fixed, and the housing having a shoulder for engaging the free outer end of the spring to permit unscrewing of the bulb, the shoulder being nearer the mouth of the housing than the free end of the spring is when the bulb is in place, whereby the operator must pull on the bulb and stretch the spring axially before the end of the spring will engage the shoulder.

8. A locking socket for electric bulbs, the socket having a housing closed at the side and inner end, a helical gripping spring in said housing into which the lamp base screws, the inner end of the spring being secured in the housing and the outer end being free, whereby the spring may be distended when the damp base is screwed into it, the free end of the spring having a prong projecting outward approximately radially and the socket having a chamber on the inside for accommodating the said prong and a notch communicating with said chamber for receiving and engaging said prong, the notch being farther from the inner end of the housing than the prong normally is when the bulb is in place.

[Claims 2 to 7 not printed in the Gazette.]

1,265,286. MACHINE FOR CONTINUOUS REPRODUCTION OF PHONOGRAPHIC COMPOSITIONS. CHARLES S. ANDRES and WILLIAM T. JONES, Philadelphia, Pa., assignors to Sound-O-Photoplay Co., Philadelphia, Pa., a Corporation of Delaware. Filed July 28, 1915. Serial No. 42,299. Cl. 274—10.)



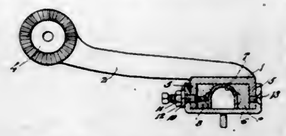
1. A device of the class described comprising in combination, a phonographic mechanism having and operating a plurality of turn-tables, false disk plates for the turn-tables, means for making said false disk plates come consecutively into operative frictional contact with their respective turn-tables and be rotated by the latter, reproducing means, means carried by the last mentioned means for electrically connecting the first named means into circuit whereby the latter will take up its cycle of operation.

3. A device of the class described comprising in combination, a phonographic mechanism having and operating a plurality of turn-tables simultaneously, false disk plates for the turn-tables adapted to make complete surface contact and substantial frictional engagement therewith, means for making the said false disk plates to come consecutively into operative connection with their respective turn-tables, and a fastening member contacting with false disk-plates and engaging the opening in the phonographic disk whereby the latter is secured on the risk-plates in a definite central relation when making said contact.

8. A device of the class described comprising in combination, a plurality of turn-tables, mechanism for rotating the turn-tables in unison, disk-plates adapted for supporting phonographic records disposed over the turn-tables and having spindles, reproducer supporting means, a bell-crank lever adapted to engage with the ends of the spindles, means for actuating the bell-crank lever, consisting of an arm pivotally secured to the bell-crank, a link, a crank, a shaft and a motor, and circuit closers secured on the reproducer supporting means whereby the bell-crank motor is operated at intervals and the disk-plates are alternately brought in and out of engagement with their respective turn-tables.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,265,287. CLAMP. JOHN B. AUFULDISH, Dayton, Ohio. Filed Aug. 7, 1916. Serial No. 113,658. (Cl. 248—3.)



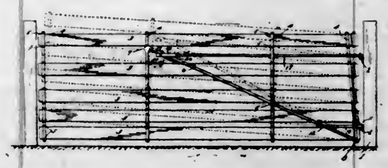
1. In a clamp, a housing comprising separable parts adapted to receive a supporting member between them, one of said parts having opposed surfaces spaced away from the opposite sides of said supporting member, clamping blocks to fit within the spaces between said supporting member and the respective opposed surfaces, and means to connect together the two parts of said housing and to actuate said blocks.

10. In a clamp, a housing comprising a substantially U-shaped portion, having its end walls adapted to be mounted on opposite sides of a supporting member, clamping blocks arranged within said housing near the end walls thereof and having their inner faces spaced apart, said housing also comprising a second portion adapted to be secured to said housing to close the spaces between the outer edges of the end walls thereof and prevent the lateral displacement of said clamping blocks, said clamping blocks having parts coöperating with one portion of said housing to support them in position while the two portions are being assembled, and means to move said clamping blocks toward each other to cause them to grip said supporting member.

15. In a clamp, the combination with a housing open at its top and bottom, of a pair of clamping blocks loosely mounted therein, the inner faces of said blocks being spaced apart to receive between them a supporting member and being provided with transverse recesses to divide the same into a plurality of gripping surfaces, and set screws threaded into said housing and acting on one of said blocks.

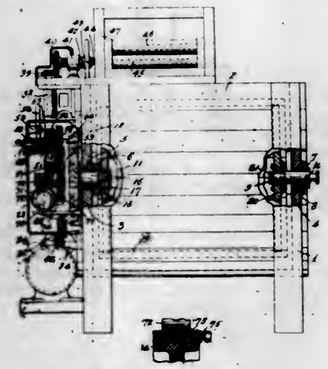
[Claims 2 to 9 and 11 to 14 not printed in the Gazette.]

1,265,288. FARM-GATE. IRA D. BATE, West Jefferson, Ohio. Filed May 18, 1917. Serial No. 169,432. (Cl. 39—87.)



In a gate, a plurality of rails, vertical braces, a pair of diagonal braces pivoted to the rear lower corner of the gate at their lower ends and adjacent to the top of the gate at their upper ends, a rigid toothed member carried by the upper ends of said braces, a reach rod having the rear end thereof formed to constitute a portion of the upper hinge of the gate and extending longitudinally forward of the latter, and a cross bolt carried by the forward end of said rod adapted to engage any of the teeth of said toothed member in order to effect a substantially vertical adjustment of said gate.

1,265,289. GEARING FOR WASHING-MACHINES. DANA H. BENJAMIN, Cleveland, Ohio, assignor to Solomon D. Guggenheim, Cleveland, Ohio. Filed May 27, 1915. Serial No. 30,825. (Cl. 74—50.)



1. A mechanical movement, comprising a driven member, oppositely rotatable driving members adapted to cooperate with the driven member by frictional engagement therewith, means operated in synchronism with the driving members for shifting said driving members alternately into engagement with the driven member, and means for driving said driving members.

4. In a mechanical movement, a casing, a friction wheel mounted therein, a frame pivotally secured to the casing, a pair of oppositely driven friction wheels carried by said frame and adapted to engage the friction wheel at the proper time, means for driving the friction wheels, and means for shifting said frame to bring the oppositely driven friction wheels successively into operative engagement with the friction wheel, and comprising a cam, a stop, one being fixed relative to the other and one mounted upon the pivoted frame, and means for driving said cam.

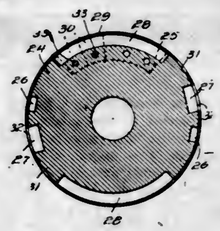
11. In a mechanical movement, a casing, a driven member having an internal V-shaped recess, a movable frame supported on the casing, oppositely driven friction wheels having V-shaped peripheries conforming to the V-shaped recess in the driven member, suitable gearing for driving said oppositely driven friction wheels, and means supported on the movable frame and engaging a fixed part for shifting the movable frame.

[Claims 2, 3, 5 to 10, and 12 not printed in the Gazette.]

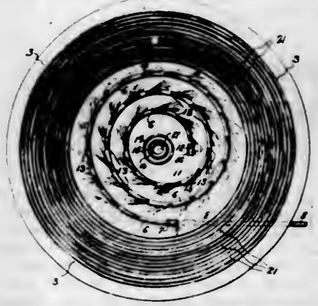
1,265,290. REPLANTER. WILLIAM CANTRELL, Fort Worth, Tex. Filed July 9, 1917. Serial No. 179,486. (Cl. 221—137.)

1. In a replanter, a seed wheel mounted for rotation, said wheel having seed pockets of different sizes formed therein, pockets of similar size being disposed in diametrically opposite relation, said wheel being also provided with diametrically opposite elongated grooves and a detachable band surrounding the wheel and having apertures adapted to register with the seed pockets of different sizes.

2. In a device of the class described, a seed wheel having circumferentially disposed seed pockets of different sizes, pockets of equal size being arranged in diametrically opposite relation, said wheel being also provided with elongated grooves arranged in diametrically opposite relation, said wheel being provided with arcuate recesses in the end faces thereof, in combination with a split resilient band surrounding the wheel and having terminal lugs seated and secured adjustably in the opposite recesses, said band being adapted for limited movement about the axis of the wheel and said band being provided with apertures adapted to be placed in registry with the variously sized seed pockets.



1,265,291. PHOTOGRAPHIC WASHING APPARATUS OR TANK. WILHELM BERGMAN, Arlington, N. J., assignor to B. & B. Photo Co., a Corporation of New Jersey. Filed Nov. 14, 1917. Serial No. 201,923. (Cl. 95—97.)



1. In a device of the kind described, a basin of inverted frustum shape, a water delivery means secured to the bottom of and within said basin, said water delivery means having a plurality of ejection perforations or jets adapted to discharge the water in upwardly inclined tangential streams, an overflow pipe leading out of said basin, a vertically adjustable extension connected with said overflow pipe, and means for holding said extension in desired adjusted position.

10. In a device of the kind described, a casing, an inverted frustum-shaped basin arranged within and supported by said casing, means rendering the bottom of said basin water-tight, a convolute water delivery pipe substantially coextensive in size with the bottom of said basin, a water-supply pipe, means connecting both ends of said convolute water delivery pipe with said water-supply pipe, said convolute water delivery pipe having a plurality of ejection perforations or jets adapted to discharge the water in upwardly inclined tangential streams, an overflow pipe leading out of said basin, a vertically adjustable extension connected with said overflow pipe, means for holding said extension in desired adjusted position, a screen-member surrounding and protecting said overflow pipe and its extension, the walls of said basin having a plurality of annular corrugations formed therein.

[Claims 2 to 9 not printed in the Gazette.]

1,265,292. WARPING-BEAM. EDWARD L. BESSE, Fairhaven, Mass. Filed Dec. 15, 1915. Serial No. 66,967. (Cl. 242—117.)

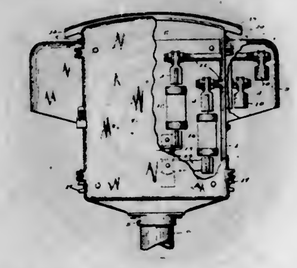


1. A warping beam comprising a barrel consisting of wooden lagging attached to disks spaced from the ends of the lagging; metallic bearings mounted in the ends of the barrel outside the disks, said bearings having flanges to support the ends of the barrel, and body portions; heads mounted on the body portions with their inner faces against the bearing flanges and the ends of the barrel; and mens to clamp the barrel heads and bearings together.

2. A warping beam comprising a barrel, wooden heads mounted at the ends of the barrel, band grooves formed near the center of the peripheral faces of the heads, and metallic reinforcing disks on the sides of the head, said disks having their edges bent over to embrace the edges of the heads and extending to the edges of the groove.

[Claims 3 and 4 not printed in the Gazette.]

1,265,293. ELECTRIC SERVICE-BOX. CARL H. BISSELL and HAROLD P. HASTINGS, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 25, 1913. Serial No. 744,093. (Cl. 247—12.)

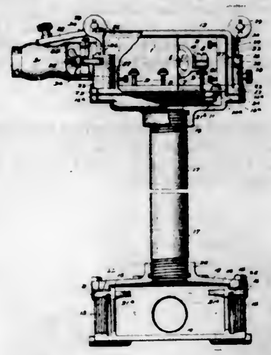


8. A service box comprising a hollow body having a top extending downwardly toward its ends, side walls, an opening in its front walls, and a closure for the opening, hollow shells arranged at opposite sides of the body and detachably secured to said side walls and formed of less width than said side walls, the shells having openings in their lower portions for the passage of wires, the front of the top being extended upwardly and forwardly beyond the plane of the inner face of the closure, and the ends of the top being extended downwardly and laterally beyond the planes of the opposing walls of the shells, and terminal members supported by the side walls of the body and arranged in the internal chambers of the body and the shells, substantially as and for the purpose set forth.

[Claims 1 to 7 not printed in the Gazette.]

1,265,294. ELECTRICAL APPLIANCE. CARL H. BISSELL and ELDA G. SMITH, Syracuse, N. Y., assignors to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Original application filed Aug. 7, 1914, Serial No. 855,546. Patent No. 1,227,241. Divided and this application filed May 4, 1917. Serial No. 166,301. (Cl. 247—12.)

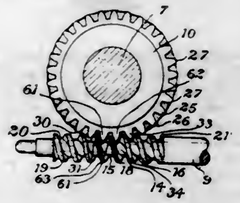
4. An electrical appliance comprising an electrical receptacle, a support therefor, and a housing including an upper section, a main base and an extension base, the support and the upper section being interchangeably mountable with the extension base on the main base, and the support and the upper section being mountable on



either the extension base or the main base, substantially as and for the purpose set forth.

[Claims 1 to 3 not printed in the Gazette.]

1,265,295. PHONOGRAPH. LE BONSIEUR, Elyria, Ohio, assignor to The Garford Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed Sept. 21, 1916. Serial No. 121,362. (Cl. 74—45.)



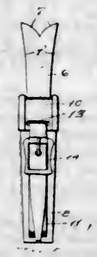
3. In a phonograph, the combination of a motor, a record support shaft and means through which the motor drives the record support shaft, governors for the motor and a governor shaft, a worm on the governor shaft provided with convolutions and valleys between the convolutions, the valleys increasing in depth from the end to the center of the worm and the convolutions increasing in height from the ends to the center of the worm, the core of the worm being thinner at the center than at the ends and a worm wheel on the record support shaft provided with a plurality of teeth, two of which engage convolutions of the worm simultaneously, there being one worm convolution between the convolutions of the worm engaged by the teeth of the worm wheel and there being two idle teeth between the busy teeth of the worm wheel.

[Claims 1, 2, and 4 to 10 not printed in the Gazette.]

1,265,296. VINE-CUTTER. FRED J. ROSSERT and CHARLES T. ROSSERT, Selma, Cal. Filed June 7, 1917 Serial No. 173,293. (Cl. 30—24.)

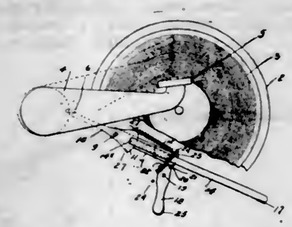
A device of the character described, comprising a relatively rigid handle portion to be disposed upon the inner side of the hand of the user and allowing the fingers to remain free for use, said handle portion comprising a section of sheet metal having its upper end bent into a downwardly curved hook to straddle the upper portion of the hand, the longitudinal edges of the sheet metal being bent outwardly upon themselves providing reinforcing and holding flanges, the downwardly bent hook being provided at its free end with an opening; a shank arranged upon one side of the handle portion between it and the holding

flanges and carrying at its upper end a forwardly projecting inclined blade, said blade being forked at its upper end and having upwardly diverging blunt edges forming a substantially V-shaped opening therebetween and longi-



tudinal cutting edges terminating at the outer ends of the blunt edges; a flexible strap arranged upon the opposite side of the handle portion and passed through the opening in the hook; and devices to bind the strap, handle portion, and shank together.

1,265,297. TALKING-MACHINE STOP. CHARLIE J. BOUSFIELD, Bay City, Mich., assignor to The Delpheon Company, Bay City, Mich., a Corporation of Michigan. Filed Aug. 7, 1916. Serial No. 113,583. (Cl. 74—46.)



1. In a stopping device for talking machines, a traveling tone arm, a controlling lever, a pivoted plate for operating said controlling lever, an operating lever pivoted to the plate, means on the tone arm for engaging said operating lever, said operating lever being adjustable to engage said means on the tone arm at any desired position of the tone arm during its travel and means on the plate for holding said operating lever in its adjusted position.

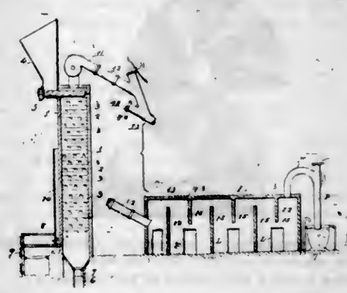
2. In a stopping device for talking machines, a traveling tone arm, a controlling lever, a pivoted plate for operating said controlling lever, an operating lever pivoted to the plate and adjustable thereon, a third lever pivoted to the plate for holding said operating lever in its adjusted position, and means carried by the tone arm for engaging the operating lever in any position of the tone arm during its travel.

6. In a stopping device for talking machines, a traveling tone arm, a controlling lever, a pivoted plate for operating said controlling lever, an operating lever pivoted to the plate, means on the tone arm for engaging said operating lever, said operating lever being adjustable to engage said means on the tone arm at any desired position of the tone arm, a third lever pivoted to the said plate for engaging and holding said operating lever in its adjusted position, a spring for holding said third lever into engagement with said operating lever, and means formed integral with the third lever for throwing said holding means out of engagement with said operating lever.

[Claims 3 to 5 and 7 to 12 not printed in the Gazette.]

1,265,298. DRIER. FREDERICK JOSEPH BOWMAN, Cleveland, Ohio. Filed Feb. 24, 1914. Serial No. 820,410. (Cl. 34—34.)

In a drier, in combination, a vertical tower, means for heating the air supplied thereto, series of distributing devices spaced apart in said flue, each series comprising parallel spaced angle plates having the apex of the angles projecting upward, the plates in each series bearing a staggered relation to the plates in adjacent series, some of the series of plates terminating in inclined end plates resting



against the walls of said tower, a blower for exhausting the air from said tower, a downwardly extending conduit into which said blower discharges the air from said tower, a settling tank for the fine material discharged from said pipe, and a trap for the air discharged from said tank.

1,265,299. WINDOW-SHADE HANGER. ORAN G. BUTLER, St. Louis, Mo. Filed May 1, 1917. Serial No. 165,786. (Cl. 156—23.)



1. A window shade bracket comprising an elongated plate, a supplemental supporting plate mounted at one end of the elongated plate and comprising a short plate having elongated opening, formed by outwardly pressed portions of the said plate, the said outwardly pressed portions being bent to provide retaining flanges embracing the marginal edge of the said elongated plate, marginal extensions formed on the said short plate and provided with longitudinal slots each having a fastening element extended therethrough, and a roller bracket projecting from the said short plate.

2. A window shade bracket comprising an elongated plate, a supplemental supporting plate mounted at one end of the elongated plate and comprising a short plate having elongated openings formed by outwardly pressed portions of the said plate, the said outwardly pressed portions being bent to provide retaining flanges embracing the marginal edges of the said elongated plate marginal extensions formed on the said short plate and provided with longitudinal slots each having a fastening element extended therethrough, and a roller bracket projecting from the said short plate, the adjacent end of the said elongated plate having longitudinal slots, and a fastening element carried by the separate portion of the said short plate and received in the said slot in the elongated plate for permitting longitudinal adjustment of the said short plate on the elongated plate.

1,265,300. DESIGN AND PUZZLE. PHILIP CARLOW, Seattle, Wash. Filed Dec. 13, 1917. Serial No. 207,000½. (Cl. 46—41.)

3. A puzzle comprising twenty blocks of equal size and similar shape, each of said blocks having one dimension

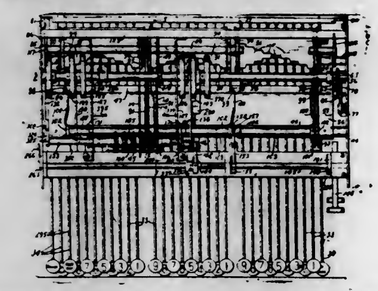
twice the length of another dimension thereof, and having its opposite sides differently colored, said blocks being adapted to be placed side by side to form complete figures



of varying configuration and having alternate spaces of different colors on opposite sides thereof.

[Claims 1 and 2 not printed in the Gazette.]

1,265,301. CASH-REGISTER. THOMAS CARROLL, Dayton, Ohio, assignor to The National Cash Register Company, Dayton, Ohio. Filed June 26, 1916. Serial No. 106,034. (Cl. 235—2.)



1. In a machine of the class described, the combination with an accounting device, of a pair of members movable to complementary extents for actuating the account device, means movable to an invariable extent for operating said members, and keys for moving said means and controlling the extents of movement of said members.

7. In a machine of the class described, the combination with an accounting device, of a pair of members movable to complementary extents for actuating the accounting device, a rack on each member, a pinion engaging said racks and movable to an invariable extent whereby said members are operated, and keys for moving said pinion to an invariable extent and controlling the extents of movement of said members.

12. In a machine of the class described, the combination with an accounting device, of a pair of members movable to complementary extents for actuating the accounting device, of means movable to an invariable extent for operating said members, keys controlling the extents of movement of said members, and a key coupler operated by said keys and constructed to operate said invariably movable means.

20. In a machine of the class described, the combination with totalizer elements, of a pair of complementarily movable members for each element, one of which is constructed to actuate its element, a pinion having an invariable bodily movement and a differentially rotary movement for operating each pair of members, a set of operating keys, and means whereby operations of the keys impart the invariable bodily movement to the pinions and positively limit the differential rotary movements thereof.

[Claims 2 to 6, 8 to 11, and 13 to 19 not printed in the Gazette.]

1,265,302. DIRIGIBLE OF THE RIGID TYPE. ADOLPHE CLÉMENT-BAYARD, Levallois-Perret, France. Filed Aug. 14, 1914. Serial No. 856,814. (Cl. 244—3.)



1. In a dirigible of the rigid type, the combination with a longitudinally disposed framework comprising vertical pylons, diagonally disposed wires, rings disposed transversely of the framework, balloonets located between said rings, an envelop covering the balloonets and rings, means for deflating the balloonets, and a tearing device for the envelop.

5. A dirigible of the rigid type, comprising a girder having a lower compression member and an upper tension member, uprights between these members, rings formed transversely of the girder and composed of framework members and a triangular system of bracing wires, the lower member being provided with two separated supports, balloonets located between the said rings, individual deflating means for balloonets, an envelop incasing the balloonets, and tearing and stripping means for the said envelop.

[Claims 2 to 4 not printed in the Gazette.]

1,265,303. COMBINED FURNACE-POKER AND CLINKER-EXTRACTOR. HARRY S. DAILEY, Bellefontaine, Ohio. Filed Mar. 21, 1917. Serial No. 156,316. (Cl. 126—324.)



1. In a combined furnace-poker and clinker extractor having a fixed claw, a pivoted claw adapted to coact with said fixed claw and clamp an object therebetween, and a protective housing adapted to receive said pivoted claw when said claw is retracted.

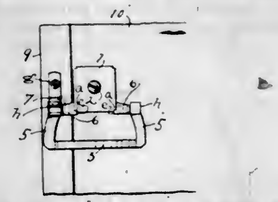
3. A device of the character described, comprising a hollow tube having a housing and a fixed claw on one end and a handle on the other, a claw pivoted in said housing and adapted to coact with said fixed claw, whereby an object may be clamped therebetween, means extending through said tube adapted to retract said pivoted claw in said housing, said means comprising a spring retracted rod, said housing adapted to receive said claw.

5. A device of the character described, comprising a hollow shank having a claw at one end and a portion of the tube adjacent thereto cut away to provide a housing, a claw pivoted in said tube and adapted to be extended from said tube through said housing, and means positioned in said tube for retracting said pivoted claw in said housing.

[Claims 2 and 4 not printed in the Gazette.]

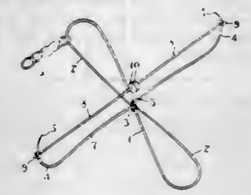
1,265,304. DOOR-CATCH. CHARLES J. DAVIDSON, Grand Rapids, Mich. Filed July 23, 1917. Serial No. 182,998. (Cl. 70—49.)

1. In a door fastening, a supporting element made of a single piece of sheet metal bent to form a hollow cube and having screw holes set in direct alinement, and having notches at the corners of one edge, a handle, a latch and an actuating body made of a single piece of sheet metal, the body having a slot for the passage of the supporting screw lugs formed on the handle to engage the notches in the support to form pivotal bearings for the handle, a spring in the support around the screw and arranged to hold the handle in normal position, and a catch arranged to be engaged by the latch to hold the door closed.



2. In a door fastening, a supporting element made of a single piece of sheet metal bent to form a hollow cube having two screw holes in direct alinement, also having notches at the two corners of one of the edges of the cube, two latches, a handle and a plate made of a single piece of sheet metal, lugs on the handle to engage the notches in the supporting element, the plate having a slot through it, a spring acting upon the plate, and a point on one wing of the supporting element, all arranged to be firmly secured to a door stile with a single screw, and a catch arranged to engage the latch to hold a door securely closed.

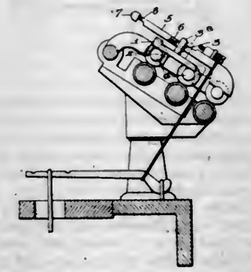
1,265,305. ANIMAL-TRAP. JACOB A. DAVIDSON, Toronto, Ontario, Canada. Filed May 2, 1917. Serial No. 165,977. (Cl. 43—23B.)



2. A trap comprising a length of spring wire formed into a pair of oppositely arranged loops forming a base, the end portions being wound in spring form around the central portion and having their outer ends formed into hook shape and adapted to spring together, and a pair of members loosely connected to said outer hook members and adapted to be abutted to hold the spring ends apart.

[Claim 1 not printed in the Gazette.]

1,265,306. TOP-ROLL SADDLE. EZRA DIXON, Bristol, R. I. Filed Sept. 6, 1917. Serial No. 190,056. (Cl. 19—33.)



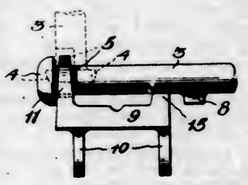
1. In a top roll saddle, a bottom saddle having a pair of depending spaced roll engaging fingers and an upwardly extending lug between its ends, said lug being split to form a pair of fingers and the bottom part of the split being enlarged, and a top saddle having a stem with a head on the free end of the stem and with a cutaway part forming a key adjacent the head, the key facing downwardly and being of a size so as to require considerable force to move same past the fingers and into the enlarged part of the split.

3. In a top roll saddle, a reversible bottom saddle having a pair of depending, spaced roll engaging fingers arranged at one end for being interchangeably engaged with the two rear top rolls, a top saddle, and means reversibly connecting the latter to the bottom saddle whereby in one position said fingers will be engaged with one rear top roll and when in its reversed position said fingers will be engaged with the other rear top roll.

4. In a top roll saddle, a bottom saddle having roll engaging means, spreadable fingers carried by the bottom saddle, and a top saddle having a part of greater thickness than but passable through the space between the fingers so as to effect a spreading of the fingers when inserted therebetween or removed therefrom.

[Claims 2 and 5 not printed in the Gazette.]

1,265,307. TOP-ROLL SADDLE. EZRA DIXON, Bristol, R. I. Filed Oct. 20, 1917. Serial No. 197,709. (Cl. 19—33.)



1. In a top roll saddle construction, a front saddle having a rearwardly extending shank formed on its extremity with an enlarged knob and a recess adjacent thereto on one side of the shank, a laterally extending lug formed on the opposite side of the shank and spaced forwardly of the recess, and a back saddle having an upwardly extending arm formed with a shank receiving aperture, the latter having an entrance slot leading through the upper end of the arm to provide spaced fingers for engaging in the recess of the shank on removing and mounting the back saddle over the knob from and to operative position on the shank.

3. In a top roll saddle, a front saddle and a back saddle, holding means on the back saddle, and means on the front saddle engageable with said first named means when the saddles are at relatively right angles, said means being formed to effect locking of the saddles upon relative pivotal movement following said right angular disposition.

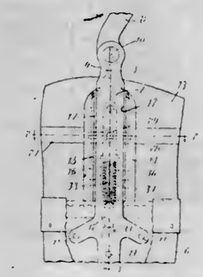
[Claims 2 and 4 not printed in the Gazette.]

1,265,308. ARTIFICIAL LIMB. HUBERT A. DOTY, Boston, Mass., assignor to The United Limb & Brace Co., Inc., a Corporation of Massachusetts. Filed Nov. 9, 1916. Serial No. 130,338. (Cl. 3—10.)

1. An artificial limb having, in combination, a lower member, hinge members connected with said lower member, a stump socket arranged to slide between said hinge members, metal plates secured to said stump socket adjacent to each of said hinge members, said plates having oppositely disposed grooves formed in the outer faces thereof, a lining formed of fiber having tongues constructed and arranged to fit the grooves in said plates each of said linings having a groove adapted to receive the hinge member adjacent thereto, and means for detachably securing said linings in their respective plates.

2. An artificial limb having, in combination, a lower member, hinge members connected with said lower member, a stump socket mounted upon said lower member between said hinge members, guide plates constructed and arranged to slide on said hinge members, a band surround-

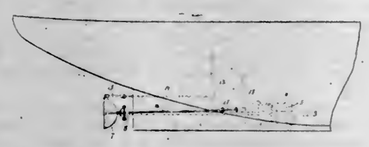
ing said stump socket, said band having circumferentially disposed slots therein adjacent to each of said hinge members, and means on said plates constructed and arranged to interlock with said band within said slots and secure said plates to said stump socket.



3. In an artificial limb a hinge member, a stump socket movable longitudinally of said hinge member, a plate attached to said stump socket, said plate having a recess adapted to receive a portion of said hinge member, opposite edges of said recess being grooved, a lining arranged in said recess between said hinge member and said plate, tongues disposed along opposite edges of said lining, adapted to fit the grooves in said plate and prevent a lateral movement of said lining relatively to said plate, and means for detachably securing said lining in said plate, whereby a longitudinal relative movement between said lining and said plate will be prevented.

[Claim 4 not printed in the Gazette.]

1,265,309. PROPELLING MECHANISM FOR VESSELS. THOMAS P. DUNNE, Meriden, Conn. Filed Oct. 22, 1917. Serial No. 197,753. (Cl. 115—12.)



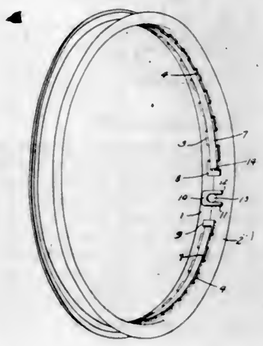
1. A propeller mechanism for vessels comprising a cylinder, a piston, a pipe leading from the cylinder through the stern of the vessel, a flat-faced rose on the outer end of the pipe, said face formed with a series of jet openings, with an inlet opening, and a valve adapted to close the said inlet opening.

2. A propeller mechanism for vessels comprising a cylinder, a piston, a pipe extending rearward from the cylinder through the stern of the vessel, a flat-faced rose-head, a swivel connection between the said pipe and rose-head, and means for moving the said rose-head.

1,265,310. DEMOUNTABLE RIM. JOHN W. DUTTON, Jr., Stockton, Cal. Filed Mar. 9, 1916. Serial No. 83,102. (Cl. 152—21.)

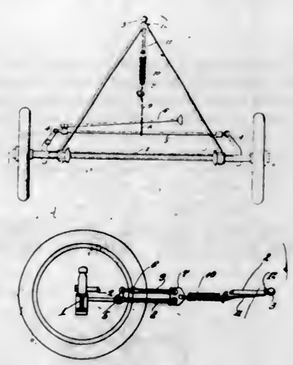
1. A demountable rim for pneumatic tires comprising a split rim, one portion of which is adapted to overlie the other portion of the rim and forming a broad abutment upon which the tire may be mounted, laterally and inwardly projecting locking lugs carried by each of the rim portions for securing them together, and a locking ring, the lugs of one portion of the rim bearing upon one side of the locking ring, and the lugs of the other portion of the rim bearing upon the opposite side of the locking ring.

2. A demountable rim for rubber tires comprising a split rim having laterally and inwardly projecting lugs, the lugs of one portion of the rim being adapted to interlock with the lugs of another portion thereof, a locking ring against which said lugs bear to secure the two parts of the rim together, and a guard plate carried by one portion of the rim and adapted to overlie the other portion thereof.



3. A demountable rim for rubber tires comprising a split rim having laterally and inwardly projecting lugs adapted to interlock with each other, a locking ring against which the inwardly projecting lugs bear to secure the two parts of the rim together, and two abutment blocks against which the ends of the ring bear when the parts of the rim are locked together.

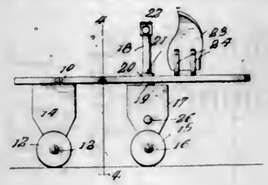
1,265,311. ANTIRATTLING DEVICE. FREDERICK S. EKLIFF, Detroit, Mich. Filed May 28, 1917. Serial No. 171,440. (Cl. 21—197.)



1. A device of the type described comprising an equalizing member, a spring attached thereto, a link connected to said spring and adapted to be connected to the radius rods of an automobile, and means connected to said member adapted for coupling said spring to the steering gear and spindle rods of an automobile.

2. A device of the type described comprising links adapted for engagement with the steering and spindle connecting rods of an automobile, an equalizing member connected to said links, a retractile spring connected to said equalizing member, and a link connected to said spring and adapted for engagement with the radius rods of an automobile to hold said spring under tension so that the retractile force thereof takes up lost motion of said connecting rods.

1,265,312. TOY. EDWARD A. ELLEFSEN, Pittsburgh, Pa. Filed Nov. 23, 1917. Serial No. 203,593. (Cl. 46—22.)



3. In a toy vehicle, a wheel supported platform, a pair of leaf springs having their intermediate points connected to the platform with their ends directed upwardly, and a wing mounted upon the ends of each pair of springs.

[Claims 1 and 2 not printed in the Gazette.]

1,265,313. STANDING-VALVE STRUCTURE. SAMUEL D. EWING, Sourlake, Tex. Filed Aug. 20, 1917. Serial No. 187,285. (Cl. 103—66.)

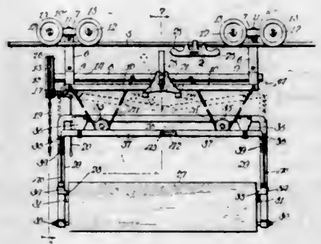


In apparatus of the character described, the combination with the working barrel of a pump provided at its lower end with internal screw-threads, of a strainer element arranged beneath and disposed in end to end relation to the working barrel and spaced therefrom and internally screw-threaded, of a tubular coupling provided at its opposite ends with external screw-threads to engage with the internal screw-threads of the working barrel and strainer element whereby the ends of the tubular coupling project into the same for a suitable distance, a tubular extension having a substantially smaller diameter than the tubular coupling connected with the upper end thereof and arranged within the lower portion of the working barrel and provided at its upper end with a valve seat, a cage screw-threaded upon the tubular extension and having outlet openings formed therein, and a ball valve freely movable within the cage to contact with the valve seat.

1,265,314. LITTER-CARRIER. JEREMIAH C. FITZGERALD, Kilbourne, Wis. Filed June 23, 1917. Serial No. 176,587. (Cl. 212—137.)

2. In a litter-carrier, the combination with an elevated track and a trip depending therefrom, of a carriage-frame mounted to travel upon the track and extending below the same, another or receptacle-carrying frame including a bail adjustably suspended from the first named frame, a receptacle tiltably mounted on the lower portion of said bail, a lock at the end of the receptacle, a trigger pivotally mounted on the carriage-frame and extended upwardly to strike said trip, said trigger having at its lower portion a pair of spaced apart extensions, a lever suitably fulcrumed on said bail and so located that when the bail is raised to its highest position, one of said extensions will rest on top of said lever and be so positioned as to be depressed by said extension when the trigger is tilted, and a connection uniting said lever and the bolt of the lock to unlock the receptacle when the trigger is tilted by contact with said trip.

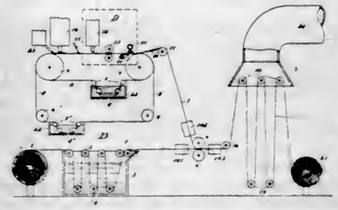
4. In a litter-carrier, the combination with a pair of wheeled hangers adapted to travel on an elevated track, of a winding shaft horizontally and longitudinally journaled on said hangers, a bar uniting the hangers, an upwardly extending trigger pivotally mounted on said bar and having on its lower portion a pair of spaced apart receiving sockets, a bail adjustably suspended from the



winding shaft and said bar, a receptacle tiltably mounted on the bail, a lever fulcrumed on the bail and so arranged that when the bail is raised to a suitable position said lever will contact with one of said sockets on the trigger to depress one end and raise the other end thereof by the tilting action of the trigger.

[Claims 1 and 3 not printed in the Gazette.]

1,265,315. METHOD OF MANUFACTURING PREPARED ROOFING. SILAS M. FORD, St. Paul, Minn. Original application filed Feb. 3, 1916, Serial No. 76,050. Divided and this application filed Oct. 6, 1916. Serial No. 124,185. (Cl. 154—40.)



1. The method of making prepared roofing, comprising the formation of strips of different colored water-proofing compound and joining these strips of different colored water-proofing compound on a foundation sheet separately prepared, so as to form a sheet of roofing material having a striped pattern.

[Claims 2 to 8 not printed in the Gazette.]

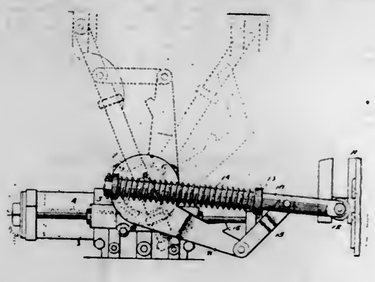
1,265,316. DOOR-OPERATING MECHANISM. PARIS R. FORMAN, Chicago, Ill., assignor to National Pneumatic Company, Chicago, Ill., a Corporation of West Virginia. Filed Aug. 26, 1915. Serial No. 47,512. (Cl. 268—8.)

1. In a door operating mechanism, a motor, a rock arm operated thereby, a door moving rod, a connection between said arm and rod to swing the latter, and a separate connection between said motor and said rod.

2. In a door operating mechanism, a motor, a rock arm operated thereby, a door moving rod, a connection between said arm and rod to swing the latter, and a separate slidable connection between said motor and said rod.

13. In a door operating mechanism, a motor, a rock member actuated thereby, a spring pressed rod connected

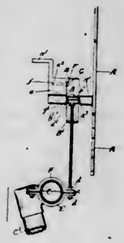
to the door and endwise movable relative to the rock member, a link pivotally connecting the rock member and



rod, and a stop to limit the rocking movement of the link relative to the rock member.

[Claims 3 to 12 not printed in the Gazette.]

1,265,317. SIGNAL FOR VEHICLES. HARRY FRYMAN, Great Grimsby, England. Filed Oct. 23, 1916. Serial No. 127,169. (Cl. 116—31.)



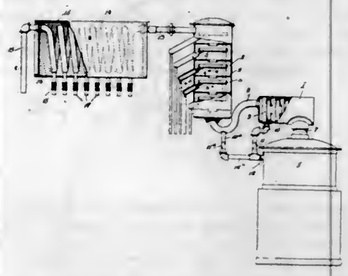
1. In a direction indicator, a supporting bearing plate formed of two superposed parts, means for securing the said parts together and to a vehicle, a shaft having a reduced middle portion which is journaled in the bearing plate, said shaft having an enlargement on one end portion, a spring catch bolt slidable in a hole in the said enlargement and adapted to engage with holes in the said bearing plate so as to hold the shaft in various predetermined positions, and a pointer secured on the other end portion of the shaft from the said enlargement.

3. In a direction indicator, a steering pillar provided with a handle bar, clips secured to the handle bar and arranged one on each side of the steering pillar, two rods projecting upwardly from the said clips and arranged in front of the handle bar, a bearing plate secured between the upper ends of the said rods, a hollow shaft journaled in the bearing plate and arranged in the same vertical plane as the steering pillar, means for retaining the shaft in various predetermined positions, a hollow pointer secured on the said shaft, an electric battery supported by the handle bar and arranged below it, an electric lamp inclosed in the hollow pointer, and wires passing through the hollow shaft and connecting the battery with the lamp.

[Claim 2 not printed in the Gazette.]

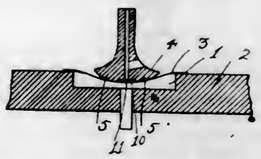
1,265,318. SECTIONAL DISTILLATION APPARATUS. GEORGE B. FURMAN, East Orange, N. J. Filed Aug. 26, 1915. Serial No. 47,411. (Cl. 195—13.)

1. A distillation apparatus comprising a still, a plurality of separators, a connection betwen the first separator and said still, a connection between two adjacent separators, a condenser operatively connected with the last separator and a return connection between said still and the connection between two adjacent separators whereby any condensate or the like in said return connection is conducted back to the still before it passes to a separator beyond the first separator.



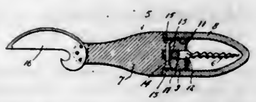
2. A distillation apparatus comprising a plurality of separators, a connecting pipe extending from one separator to the bottom of the next adjacent separator, a still, a tube connecting the top of said still with the first separator, a condenser, a pipe connecting the top portion of the last separator with said condenser, a return connection from the first separator to the still and another connection extending from the connecting pipe between two adjacent separators to said return connection.

1,265,319. PNEUMATIC-DIAPHRAGM FOLLOWER. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Nov. 5, 1917. Serial No. 200,385. (Cl. 84—156.)



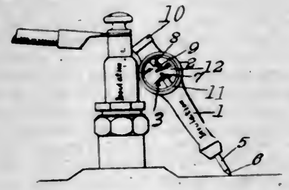
A diaphragm pneumatic having a follower attached to the said diaphragm at a central part only of a face of the said follower, and a single annular groove in the said face of the said follower and circumscribing the said attached part of the said follower, and a plain bearing part of the said face of the said follower outside the said groove and of greater area than said groove.

1,265,320. CORK-EXTRACTOR. FREDERICK M. GAYNOR, Jersey City, N. J. Filed Apr. 7, 1916. Serial No. 89,632. (Cl. 65—48.)



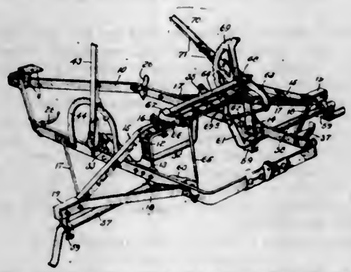
A cork screw comprising a body having an externally threaded reduced bifurcated end, forming a shoulder concentrically thereof, a screw member having a flattened end engaged in the bifurcation in the reduced end, a pivot on the reduced end, crosswise of the bifurcation and passed through the flattened end of the screw member to permit the swinging of the same at right angles to the longitudinal axis of the body at diametrically opposite sides thereof against the shoulder or to aline with the longitudinal axis of said body, and an internally threaded cap detachably engaged with the reduced end of the body to inclose the screw member when alining with the longitudinal axis thereof and to lock said member against the shoulder when at either side of the body.

1,265,321. SPARK-GAGE. FRANK B. GRAHAM, Lansing, Mich. Filed Nov. 16, 1916. Serial No. 131,739. (Cl. 175—183.)



A spark gage embodying an elongated member of insulating material having a laterally opening recess and an axial longitudinal bore extending from end to end and intersecting said recess, straight pins extending through the two portions of the bore and provided with spaced electrodes within said recess, one pin having a terminal projecting beyond one end of the body and pointed, and a metallic cap fitted upon and surrounding the other end of the body and attached to the other pin.

1,265,322. FRAME FOR AGRICULTURAL IMPLEMENTS AND THE LIKE. WILLIAM S. GRAHAM, Canton, Ill., assignor to Parlin & Orendorff Company, Canton, Ill., a Corporation of Illinois. Original application filed May 29, 1915, Serial No. 31,156. Divided and this application filed Jan. 17, 1916. Serial No. 72,476. (Cl. 97—36.)



1. The combination of a frame member, a transverse arch connecting the side portions of said frame member, a second arch connected to said first-named arch and extending at the sides beyond said first-named arch, and diagonally-extending brace-bars connecting each end of said second arch with said first-named frame member.

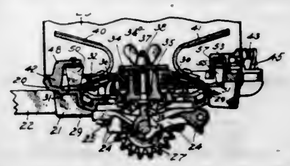
2. The combination of a frame member, a transverse arch connecting the side portions of said frame member, a second arch connected to said first-named arch and extending at the sides beyond said first-named arch and beyond said frame member, axle members journaled on said second arch and on said first-named frame member at opposite sides of the machine, and braces connecting the ends of said second arch with said first-named frame member.

[Claims 3 to 6 not printed in the Gazette.]

1,265,323. COTTON-SEED-DROPPING MECHANISM. WILLIAM S. GRAHAM, Canton, Ill., assignor to Parlin & Orendorff Company, Canton, Ill., a Corporation of Illinois. Filed Aug. 31, 1916. Serial No. 117,915. (Cl. 221—120.)

1. In a cotton-seed dropping mechanism, the combination of a seed plate having a series of cells in its outer periphery, and a cut-off pivotally mounted on an axis substantially tangential to the outer periphery of the seed plate and having an operative edge extending diagonally across the row of cells in the seed plate.

5. In a cotton-seed dropping mechanism, the combination of a seed plate having a series of cells in its outer periphery, means for rotating said seed plate, an agitating plate adapted to rotate with said seed plate, a spring-scraper held in fixed position extending into close proximity to the seed cells in said seed plate, and a lug on said agitating plate adapted to revolve close to said scraper adapted to loosen any seed which may have accumulated under or behind said scraper.



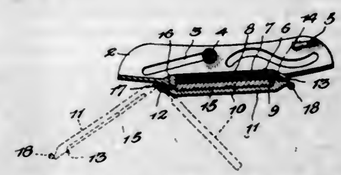
8. In a cotton-seed dropping mechanism, the combination of a bottom plate, a seed plate revolubly mounted thereon, means for rotating said seed plate, a cut-off plate in the form of a ring mounted on said bottom plate about said seed plate, and a cut-off pivotally mounted on said cut-off plate on an axis substantially tangential to the outer periphery of the seed plate and having an operative edge extending diagonally across the row of cells in the seed plate.

12. In a cotton-seed dropping mechanism, the combination of a hopper, a seed plate having a series of cells in its outer periphery, means for rotating said seed plate, diagonally-disposed means with which the lower face of said seed plate engages adapted for forcing the seed radially out of said cells as the seed plate rotates, and a by-pass along which a seed so forced out of a cell may be returned to the hopper.

16. In a cotton-seed dropping mechanism, the combination of a bottom plate, a seed plate having a series of cells in its outer periphery revolubly mounted on said bottom plate, means for rotating said seed plate, and a seed discharge-opening through said bottom plate underneath said seed plate, the forward edge of said discharge-opening in the direction of rotation of said seed plate being beveled for forcing the seed radially out of said cells, the bottom plate being cut away at its upper portion adjacent to the seed plate at the forward end of the seed discharge-opening on a bevel upward and inward, providing a by-pass along which a seed which may be clinging to the seed plate is moved out of engagement with the seed plate as the seed plate advances.

[Claims 2 to 4, 6, 7, 9 to 11, and 13 to 15 not printed in the Gazette.]

1,265,324. BUCKLE. AUGUSTUS A. GREENE, Providence, R. I. Filed May 26, 1917. Serial No. 171,267. (Cl. 40—152.)



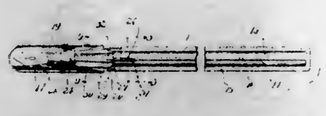
2. A member having a pocket set in its front face and adapted to receive a photograph, a retaining frame in the pocket, a cover for the pocket hinged at one side thereof, and formed with a recess registering with the pocket, said front face and cover having opposing grooves leading from their respective depressions to the hinge mounting of the cover, and an emblem-carrying leaf fitting the pocket and registering cover recess and formed with a hinge knuckle seating in the grooves and pivotally connected to the cover mounting.

3. A locket comprising a buckle body having a pocket formed in its front for receiving a photograph, a cover hinged to the buckle front on one side of the pocket and

having catch means for engaging on the opposite side of the pocket, and a medallion hinged in common with the cover and foldable over the buckle pocket.

[Claim 1 not printed in the Gazette.]

1,265,325. DUPLEX FOUNTAIN-PEN. SIMON GREENFIELD. New York, N. Y. Filed Sept. 20, 1916. Serial No. 121,184. (Cl. 120—42.)



3. In a fountain pen, and in combination with a one-pen feeder section thereof having independent channels extending longitudinally therethrough, a cylindrical valve having radii of greater length than the diameter of said channels rotatably arranged transversely in said feeder section with the vertical plane of its longitudinal center lying to one side of the parallel vertical plane of said channels in such manner that the periphery of the cylindrical valve between its longitudinal center and circumference will intercept said channels, transverse notches cut upon the diametrically opposite sides of the periphery of said valve at a spaced distance equaling the distance between said channels to enable the valve to open one channel while the other is closed, a head on said cylindrical valve exterior of the feeder section for the rotation of the same, and means combined with said head to indicate which channel is open or closed.

[Claims 1 and 2 not printed in the Gazette.]

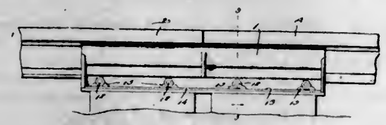
1,265,326. PROCESS OF MELTING VARNISH-GUMS. OTTO C. GRIEM, Detroit, Mich., assignor to Berry Brothers, Detroit, Mich., a Corporation of Michigan. Filed Nov. 17, 1917. Serial No. 202,553. (Cl. 134—26.)

1. The process of melting gums, comprising the protecting of the particles from air contact and while so protected fusing the same together.

4. The process of melting gums, comprising the covering of the particles with water, boiling until the particles are softened and flow together, pouring off the water and continuing to heat until completely melted.

[Claims 2 and 3 not printed in the Gazette.]

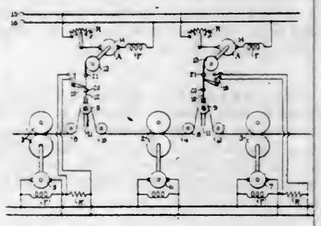
1,265,327. RAIL-FASTENER. JOHAN HANSEN, Tonopah, Nev. Filed June 20, 1917. Serial No. 175,910. (Cl. 239—6.)



1. A rail fastener comprising a pair of rail engaging members including base plates of a combined width considerably greater than the width of the base flange of the rail, whereby the marginal edges of the base plates are extended beyond the marginal edges of the base flange of the rail, the proximate edges of the base plates being provided with prongs projecting laterally and adapted for contact with each other, a vertical wall integrally formed with each base plate and extending longitudinally thereof, and provided with longitudinally spaced openings, bolts extended through the openings and engageable with the said walls for drawing the said walls toward each other to force the said tongues into tight engagement, and means carried by the walls and engageable with the webs of the rails at their meeting ends, for maintaining alinement of the rails and holding the said tongues in engagement with each other.

2. A rail fastener comprising a pair of rail engaging members including base plates of a combined width considerably greater than the width of the base flange of the rail, whereby the marginal edges of the base plate are extended beyond the marginal edges of the base flange of the rail, the proximate edges of the base plates being provided with tongues projecting laterally and adapted for contact with each other, a vertical wall integrally formed with each base plate and extending longitudinally thereof and provided with longitudinally spaced openings, bolts extended through the openings and engageable with the said walls for drawing the said walls toward each other to force the said tongues into tight engagement, and means carried by the walls and engageable with the webs of the rails at their meeting ends, and brace flanges extending from the said extended marginal edges of the base plates to the said web engaging means.

1,265,328. DEVICE FOR TAKING UP AND PAYING OUT SLACK. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 23, 1914. Serial No. 833,970. (Cl. 242—75.)

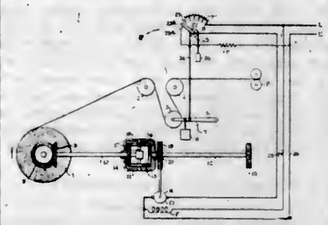


2. In a device for taking up and paying out slack, in combination, a plurality of rollers, one being adjustable relative to another and automatic adjusting means for said adjustable roller including an electric motor, said motor under certain conditions acting as a dynamic brake.

4. In combination, a mechanism including three sets of power-operated rolls feeding material from one to another in progression and at relatively different speeds and means responsive to variations in slack to vary the speed of the end sets of rolls in inverse relation upon corresponding variations in slack between the same and the intermediate set of rolls.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,265,329. FEEDING AND TENSIONING MECHANISM. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed May 16, 1914. Serial No. 839,048. (Cl. 242—75.)



3. In a mechanism for feeding material from a roll to a receiving machine, in combination, means to be operated in synchronism with the receiving machine, means automatically operated at varying speeds according to the amount of slack in the material fed, and means to be operated solely by said first means and jointly by both of said means to rotate the roll of material.

5. A drive for rolls of the character set forth including a variable speed gear train, a driving connection between one member of said gear train and the roll and independent driving members for other members of said gear train,

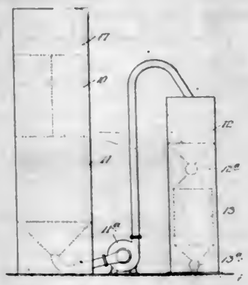
one of said driving members to be operated at a speed corresponding to the desired peripheral speed of the roll and the other of said driving members to be operated at varying speeds to compensate for the loss of peripheral speed of the roll by reduction of its diameter and means responsive to variations in the peripheral speed of the roll for automatically controlling said last mentioned driving member.

9. In a mechanism for feeding material from a roll to a receiving machine, in combination, a member to be operated in synchronism with the receiving machine, an operative connection between the same and the roll, and auxiliary operating means for the roll responsive to variations in the peripheral speed thereof to vary the speed ratio between the same and said member, said means acting automatically to accelerate and slow down the roll under different conditions.

16. In combination, a driven receiving mechanism having a substantially constant speed, a supply roll therefor decreasing in diameter during operation and hence decreasing in peripheral speed at constant speed, means between said element and said roll for insuring a positive drive of the latter at speed relatively equal to the speed of said mechanism, a normally inert motor adapted to increase the speed of said roll and means controlled by the tension of the material between said roll and said mechanism for automatically rendering said motor operative and controlling the same to maintain the peripheral speed of said roll at a substantially uniform rate with respect to the peripheral speed of said mechanism.

[Claims 1, 2, 4, 6 to 8, and 10 to 15 not printed in the Gazette.]

1,265,330. APPARATUS FOR TREATING TO AN IMPREGNATING FLUID, PARTICLES OF NON-UNIFORM MOISTURE CONTENT. GEORGE H. HESS, La Grange Park, Ill. Filed May 17, 1917. Serial No. 169,266. (Cl. 92—1.)

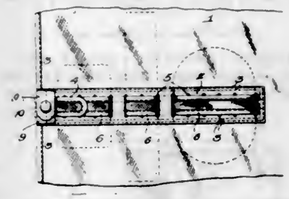


1. In apparatus for the purpose set forth, the combination of means for partially drying to a non-uniform moisture-content, pieces of material of non-uniform moisture-content, means for substantially equalizing the moisture-content of said partially dried pieces, and means for treating the particles of substantially uniform moisture-content to an impregnating fluid, said second-named means being constructed and arranged to furnish charges of the said pieces of substantially uniform moisture-content to said last-named means for the substantially uninterrupted successive operations of the latter.

[Claims 2 to 11 not printed in the Gazette.]

1,265,331. ADJUSTABLE KIT. FREDERICK WILLIAM HOLLAND, Brooklyn, N. Y., assignor to Herman Scheuer, Jacob H. Scheuer, and Alwin J. Scheuer, Copartners doing business under the firm-name of Herman Scheuer & Sons, Brooklyn, N. Y. Filed Feb. 11, 1918. Serial No. 216,542. (Cl. 150—34.)

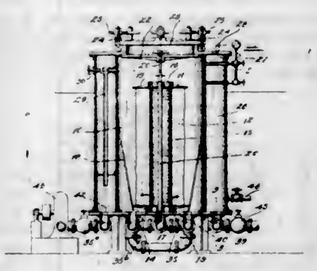
1. In an adjustable kit or the like, a casing, a strap secured at one end to the casing and having its opposite end free, a fastening strap for the free end of the first named strap, means to secure the fastening strap to the casing at spaced points to form a loop for the reception of the free end portion of the first named strap, said fastening strap having each of its ends free and of a length to mutually overlap, and interengaging means borne by the respective ends of the fastening strap, the free end of the first named strap being adapted to be superimposed on and over



the loop-forming part of the fastening strap and to be held thereon by the overlapped and fastened ends of the latter, the securing means for the fastening strap providing pivotal points for the respective ends of the fastening strap to allow such ends to be moved about such points to lock and remove the free end of the first named strap without threading of the latter.

[Claim 2 not printed in the Gazette.]

1,265,332. BEAM DYEING-MACHINE. EUGENE HOLT and LAFAYETTE HOLT, Burlington, N. C. Filed July 13, 1914. Serial No. 850,719. (Cl. 8—18.)



1. A yarn treating apparatus including a closed receptacle, a mixing tank jacketing such receptacle, and a circulating system for circulating fluid from said mixing tank in different directions through said closed receptacle.

5. A yarn treating apparatus having a vat or receptacle, an inclosed perforate yarn holding member, a circulating tank jacketing the vat or receptacle, a circulating system having valved ports in communication respectively with the receptacle within and without the beam and with the tank, and a valved supply pipe in communication with said tank and said vat and yarn holding member.

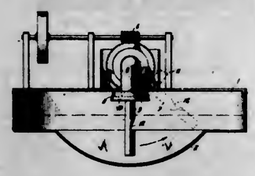
10. A yarn treating apparatus including a vat, a perforate yarn holding member inclosed within said vat, and a circulating system communicating with said vat through inclined ports and adapted to induce a flow of liquid from within to without said yarn holding member and vice versa.

12. A yarn treating apparatus including a vat having ports, a circulating system for introducing fluid into said vat through either port and withdrawing it through the other port, a perforate yarn holding member inclosed within said vat and having an open end disposed over one of said ports, guides converging toward said last mentioned port to be engaged by and thereby guide said yarn holding member into position, and means for securing said holder in position.

13. A yarn treating apparatus including a vat having ports, a circulating system for introducing fluid into said vat through either port and withdrawing it through the other, a perforate yarn holding member inclosed within said vat and having an open end disposed over one of said ports, guides converging toward said last mentioned port to be engaged by and thereby guide said yarn holding member into position, means for securing said holder in position, and a chamber jacketing said vat.

[Claims 2 to 4, 6 to 9, and 11 not printed in the Gazette.]

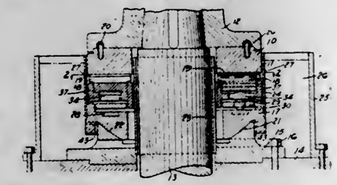
1,265,333. LIQUID-FEEDING APPARATUS. HENRY HOWARD, Brookline, Mass. Filed July 1, 1914. Serial No. 848,457. (Cl. 221—97.)



3. Apparatus for delivering substantially equal volumes of liquid comprising a liquid tank, a pipe of uniform cross-section mounted for rotation in said tank on an axis above the level of the liquid in the tank, said pipe closed at its outer end and provided with an opening on its advancing side, said opening extending to but not intersecting the median plane of the pipe.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,265,334. THRUST-BEARING. HARRY A. S. HOWARTH, Pittsburgh, Pa., assignor to Albert Kingsbury, Pittsburgh, Pa. Filed Aug. 16, 1916. Serial No. 115,122. (Cl. 64—25.)



1. A thrust bearing comprising a plurality of equalizing blocks, means for supporting the blocks at one side or the other of their centers depending on the direction of bearing operation, and bearing members mounted on the blocks and each arranged to have the resultant reaction of its support shifted automatically in response to the adjustment of the supporting means for the blocks.

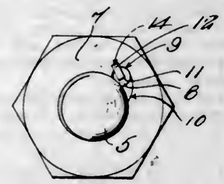
3. A bearing comprising a rotatable member having an annular bearing surface, a stationary base, a leveling washer thereon, an equalizing ring mounted on the leveling washer, a plurality of bearing balls mounted on the ring, a ball cage for holding the balls in position, equalizing blocks severally and tiltably mounted on the balls and bearing shoes, each bridging a pair of equalizing blocks and supported thereon.

5. A bearing comprising a rotatable member having an annular bearing surface, a stationary base, a leveling washer thereon, an equalizing ring mounted on the leveling washer, a plurality of bearing balls mounted on the ring, a ball cage for holding the balls in position, equalizing blocks severally and tiltably mounted on the balls and bearing shoes each bridging a pair of equalizing blocks and supported thereon, and means for permitting a limited rotative movement of the shoes and equalizing blocks upon the balls.

8. A thrust bearing comprising equalizing blocks, a plurality of bearing shoes each mounted upon a pair of said equalizing blocks, and means dependent upon the direction of bearing operation for supporting the blocks so that the resultant reaction of the support on each shoe is automatically shifted to one side of the center of the shoe.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

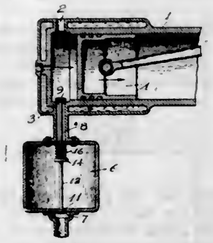
1,265,335. LOCK-NUT. LUTHER E. IMUS, Atolia, Cal. Filed June 4, 1917. Serial No. 172,750. (Cl. 151—25.)



1. In a lock nut, the combination of a bolt, a nut threaded thereon and having a tapering recess, a locking key mounted in said recess and engageable with the threads of said bolt and a substantially U-shaped releasing device engageable with said nut and locking key to prevent movement of the latter in said recess when the nut is forced in one direction.

2. In a lock nut, the combination of a bolt, a nut threaded thereon and having a recess in one surface, the recess being tapered and communicating with the inner periphery of the nut, a grooved locking key mounted in the enlarged end of said recess and engageable with the thread of the bolt and provided with an opening in one end thereof, and a substantially U-shaped releasing pin having one of its extremities mounted in the opening of said locking key and its other extremity in engagement with said nut whereby to prevent longitudinal movement of the locking key in said recess.

1,265,336. FUEL-GAGE. GEORGE E. INGRAM, Ronan, Mont. Filed Apr. 6, 1917. Serial No. 161,653. (Cl. 123—75.)



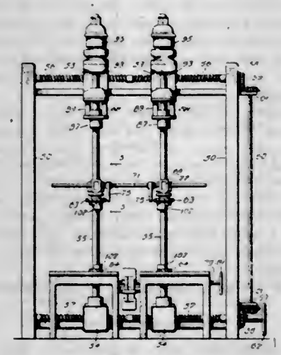
1. The combination with a cylinder and piston of an internal combustion motor of a fuel gas receiver having exhaust and intake ports, said exhaust port being connected to the intake of the cylinder; means for normally closing the exhaust port and opening the intake of the receiver and adapted to be operated by the suction stroke of the piston to open the exhaust and close the intake of the receiver whereby a charge of gas may be withdrawn from said receiver on the intake stroke of the piston to lower the pressure within said receiver.

2. The combination with a cylinder and piston of an internal combustion motor of a fuel gas receiver having an intake port and an exhaust port connected to the intake of the cylinder; suitable valves mounted within each intake; a common valve stem to both valves; means for moving the valve stem to normally close the valve in the

cylinder intake and for normally closing the valve in the receiver intake, the intake valve for the cylinder being opened and the intake valve of the receiver being closed by the suction stroke of the piston whereby fuel gas may be drawn from said receiver during said suction stroke and the pressure lowered within said receiver to draw a new charge thereinto when the valves are returned to normal positions.

3. The combination with a cylinder and piston slidably mounted therein of a fuel gas receiver having an intake port and an exhaust or outlet port connected to an intake of the cylinder; suitable valves mounted within each intake port; a common stem connecting the valves; and a suitable spring arranged to move the stem to normally close the intake valve of the cylinder and to open the intake valve of the receiver.

1,265,337. BOX-TRIMMING MACHINE. ARTHUR ISERT, San Francisco, Cal., assignor to Pacific Box Factory, San Francisco, Cal., a Corporation of California. Filed July 24, 1917. Serial No. 182,423. (Cl. 144—135.)



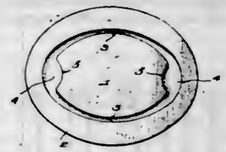
1. In a machine of the character described, a trimming mechanism including upper and lower cutter heads, vertical arbors on which said heads are mounted, upper and lower arbor heads supporting the upper and lower ends of said arbors, right and left horizontal screw shafts with which the said arbor heads have connection, and means for rotating said screw shafts to adjust the arbors toward and away from one another, each of said arbor heads having a relatively movable spring controlled boxing threaded on the said screw shafts to permit the arbor heads to yield on said shafts.

4. In a machine of the character described, a trimming mechanism including upper and lower cutter heads, vertical arbors on which said heads are mounted, upper and lower arbor heads supporting the upper and lower ends of said arbors, right and left horizontal screw shafts with which the said arbor heads have connection, and means for rotating said screw shafts to adjust the arbors toward and away from one another, each of said arbor heads having an inner chamber through which one of the screw shafts extends, a threaded boxing engaging the screw shaft and having limited movement in said chamber, and a spring extending between said boxing and one end of the chamber, for the purpose described.

[Claims 2, 3, and 5 not printed in the Gazette.]

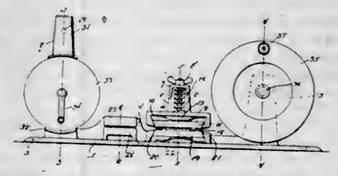
1,265,338. SERVING-DISH. BARTON P. JENKS, Providence, R. I., assignor to Gorham Manufacturing Company, Providence, R. I., a Corporation of Rhode Island. Filed Sept. 6, 1917. Serial No. 190,016. (Cl. 65—53.)

In a serving dish, a body having a raised central meat supporting platform and having a channel surrounding the platform, and a gravy pocket at each of the ends of the dish, the bottoms of the gravy pockets extending in the plane of the bottom of the channel at the ends of the



latter, said channels each having divergent bottoms extending from the transverse center of the platform and leading into the respective pockets.

1,265,339. STEEL-TAPE CLEANER. HENRY JONES, Oregon City, Oreg. Filed Sept. 14, 1915. Serial No. 50,666. (Cl. 51—15.)



1. A tape cleaning device, including a base, a plurality of standards for said base, winding means for said base on certain of said standards, one of said winding means being provided with an adjustable clamping member for receiving and fastening a tape holder, a plurality of cleaning blocks carried by said base and one of said standards, said blocks being yieldably mounted, adjusting means for one of said blocks, and guide means associated therewith.

2. A tape cleaning device including a base, a plurality of standards on said base, winding means for said base on certain of said standards, one of said winding means having an adjustable clamping member arranged thereupon for receiving and securing a tape holder, a plurality of cleaning blocks carried by said base and one of said standards, said blocks being yieldably mounted, adjustable means for one of the blocks, guide means associated therewith, and means for applying a cleaning liquid to said tape.

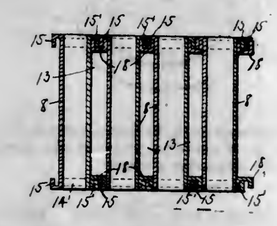
3. A tape cleaning device including a base plate having a plurality of standards thereon, one of the standards having a winding reel thereon and another of said standards having clamping means for retaining a tape carrying casing, a tape lubricator on the base, and abrasive blocks, one of the abrasive blocks being mounted on the base and the other of said abrasive blocks being yieldably mounted on one of the standards.

4. A tape cleaning device including a base having a plurality of standards thereon, winding means associated with said standards, a tape casing on another of the standards, a lubricator consisting of a wick cup and a fluid reservoir with an absorbent bottom over the wick cup, and abrasive blocks on the base for receiving the tape after it leaves the lubricator.

1,265,340. RADIATOR. MAX KAMAN, Rochester, N. Y., assignor to Minnie Kaman, Rochester, N. Y. Filed Aug. 13, 1917. Serial No. 185,814. (Cl. 257—128.)

1. In a sectional radiator, the combination with a plurality of sections, each section comprising a plurality of square tubes arranged in vertical and horizontal rows, the opposite ends of each tube having hook-flanges disposed on the top and bottom sides, and each tube at each end having hook-flanges disposed on its opposite lateral sides, the

hook-flanges of the adjacent tubes in both the vertical and horizontal rows contacting and gaging the vertical and horizontal water-spaces between the tubes, and a pair of channel-stays disposed between the adjacent vertical rows of tubes receiving and gripping said lateral hook-flanges.

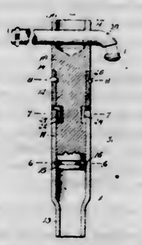


2. A radiator including a plurality of air flues disposed in vertical and horizontal tiers, each tube being square and having at its opposite ends top and bottom and also lateral hook-flanges adapted to contact corresponding hook-flanges of the adjacent tubes for providing between said tubes vertical and horizontal water spaces of uniform area, and a plurality of angular stays disposed between, and gripping the lateral hook-flanges of the adjacent vertical tiers of tubes.

3. In a sectional radiator, the combination with a plurality of sections, each section comprising a plurality of air-tubes spaced equi-distantly and said sections disposed horizontally, the corresponding tubes of the adjacent sections having vertically arranged flanges adapted to overlap each other for connecting said sections together, the tubes of each section having at their opposite ends hook-flanges adapted to space said tubes horizontally, said tubes also having similar hook-flanges for spacing said tubes vertically, and channels interposed between the opposite ends of the adjacent tubes receiving and gripping certain of said hook-flanges for locking the tubes of each section together as one part.

4. A radiator including a plurality of air tubes arranged in horizontal and vertical tiers, said tubes having hook-flanges at their opposite ends for spacing said tubes horizontally and having similar hook-flanges at their opposite ends for spacing said tubes vertically, and channel-stays disposed in the vertical spaces between said tubes and engaging the corresponding hook-flanges for locking the tubes together.

1,265,341. WRENCH. CHARLES G. KELLER, Poughkeepsie, N. Y. Filed Apr. 18, 1917. Serial No. 162,842. (Cl. 192—22.)



1. In combination, a solid bar having a cylindrical portion of reduced diameter at one end terminating in an annular shoulder and a recess in the periphery of said reduced portion, a sleeve encircling said reduced portion and recess and held against longitudinal movement in respect thereto, one end of said sleeve having a socket to receive a nut to be rotated, a roller within said recess and adapted to grip the inner surface of said sleeve adjacent one end of the recess, a roller shifting collar encircling said reduced portion and held against endwise movement by the end of said sleeve and said shoulder, and means carried by said collar for holding said roller away from the end of said recess and out of gripping position.

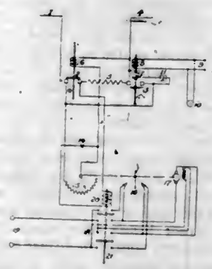
7. A wrench including two concentric members one constituting a wrench head and the other a socket member, the inner member having a recess encircled by the outer member, a pair of rollers within said recess, resilient means normally tending to separate said rollers to the limiting extent and hold each in frictional engagement with the inner surface of the outer member, and a surface of the recess, and means for holding either of said rollers in non-gripping position.

9. A wrench including two concentric members, the inner member having a recess encircled by the outer member, a pair of rollers within said recess, resilient means normally tending to separate said rollers to the limiting extent and hold each in frictional engagement with the inner surface of the outer member and a surface of the recess, a roller shifting device including a pair of projections extending in an axial direction and one serving to move one of said rollers into non-gripping position and the other serving to move the other of said rollers into non-gripping position, and means connecting said projections for permitting their alternate but not simultaneous operation.

13. A wrench including two concentric members one constituting a wrench head and the other a socket member, one of said members having a recess substantially covered by the other member, a pair of rollers within said recess, a sleeve encircling the inner member and having a pair of roller shifting prongs formed from bent metal and disposed upon opposite sides of said pair of rollers, and means for holding said sleeve in any one of three rotative positions to permit operation of either or both of said rollers.

[Claims 2 to 6, 8, and 10 to 12 not printed in the Gazette.]

1,265,342. ELECTRIC-ARC WELDING. OTIS ALLEN KENYON, New York, N. Y. Filed Mar. 14, 1918. Serial No. 222,420. (Cl. 219—8.)



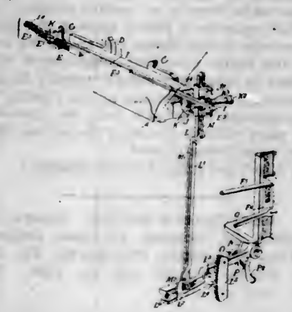
1. In electric arc welding, a welding arc and means for starting the arc with a maximum current and then automatically reducing the current.

3. In electric arc welding, a welding arc and means for starting the arc with a maximum current and then automatically reducing the current at a definite rate to a definite value.

6. In electric arc welding, a welding arc and means for starting the arc with a maximum current, then automatically reducing the current at a definite rate to a definite value and upon the cessation of the arc restoring the value of the starting current at a definite rate.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,343. TYPOGRAPHICAL CASTING-MACHINE. GEORGE P. KINGSBURY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 28, 1916. Serial No. 111,765. (Cl. 199—47.)



1. In a typographical casting machine, the combination of adjustable line clamping mechanism, adjustable slug ejecting mechanism, and interdependent means coöperating to insure the corresponding adjustments of the two mechanisms.

3. In a typographical casting machine, the combination of adjustable line clamping mechanism, adjustable slug ejecting mechanism, and a common adjusting device connected to both said mechanisms.

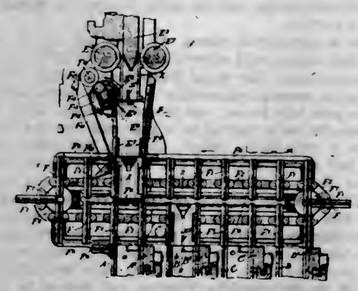
4. In a typographical casting machine, the combination of a pair of line clamping jaws relatively adjustable to vary the distance between them, an ejector blade variable in width, and interdependent means coöperating to insure the corresponding adjustment of said parts.

11. In a typographical casting machine, the combination of adjustable line clamping mechanism, adjustable slug ejecting mechanism, and a common operating device for effecting the adjustments of said mechanisms conjointly or independently, as desired.

18. In a typographical casting machine, the combination of adjustable line clamping mechanism, adjustable slug ejecting mechanism, a common adjusting device connected to both said mechanisms, means whereby the adjusting device may be disconnected from one of said mechanisms to permit the independent adjustment of the other, and means for maintaining the adjustment of the disconnected mechanism during the independent adjustment of the other mechanism.

[Claims 2, 5 to 10, and 12 to 17 not printed in the Gazette.]

1,265,344. TYPOGRAPHICAL MACHINE. GEORGE P. KINGSBURY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 28, 1916. Serial No. 111,766. (Cl. 199—40.)



1. Typographical distributing mechanism including a matrix conveyer comprising an endless series of pockets traveling in opposed immediately adjacent flights, the pockets of the two flights being arranged to communicate in the operation of the conveyer so as to permit the matrices to pass through the pockets of one flight into those of the other to avoid their inversion.

2. Typographical distributing mechanism including a matrix conveyer comprising an endless series of pockets traveling in opposed overlying flights, the said conveyer having its pockets open at both the top and bottom and relatively arranged so that those of the upper flight will register with those of the lower flight in the course of travel of the conveyer, for the purpose described.

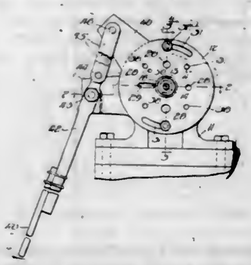
12. A channeled magazine provided with a series of matrix selectors, one for each channel, the said selectors being in the form of thin metal strips projecting partly across the entrance mouth of the magazine and lying between the matrix channels and formed with laterally projecting lips to coöperate with the matrices as they enter the magazine.

13. A channel magazine provided at its receiving end with a series of like matrix selectors, one for each channel.

26. In a typographic machine, the combination of a plurality of magazines containing matrices of different forms or fonts, a distributer to separate the matrices according to character irrespective of form, means for presenting the matrices so separated to the magazines successively, and fixed selectors located at or across the receiving ends of the magazines to control the delivery thereinto of matrices of corresponding form.

[Claims 3 to 11 and 14 to 25 not printed in the Gazette.]

1,265,345. METAL-CUTTING MACHINE. JOHN LA ROCK, Chicago, Ill. Filed Jan. 8, 1917. Serial No. 141,255. (Cl. 164—40.)



1. A cutting machine comprising a fixed recessed frame, a rocking recessed frame spaced therefrom, a pivot stud seated in the fixed frame on which the rocking frame is mounted, shearing blades provided with flat contacting cutting faces and with registering stock openings, one of said blades being mounted in the recess of the fixed frame and the other blade being mounted in the recess of the rocking frame and extending partially into the recess of the fixed frame and peripherally supported by the wall of the latter recess and means for operating the rocking frame.

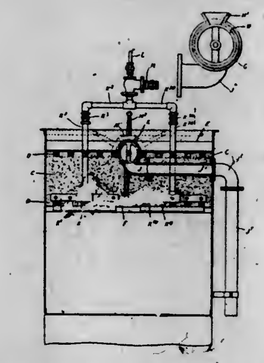
4. A cutting machine comprising a fixed recessed frame, a rocking recessed frame spaced therefrom, a pivot stud seated in the fixed frame on which the rocking frame is axially mounted, shearing blades having flat contacting cutting faces and provided with registering stock openings, one of said shearing blades being mounted in the recess of the fixed frame and the other blade being mounted in the recess of the rocking frame and extending partially into the recess of the fixed frame, means whereby the rocking frame may be operated, means acting on the said stud to press the cutting faces of said blades together, said rotative frame being provided with arcuate slots, combined stop and clamping studs anchored in the fixed frame and extending through said slots and nuts screw threaded to the ends of said studs.

6. A cutting machine comprising a frame provided with a circular recess surrounded by a rim, a fixed shearing element in said recess and terminating short of the outer edge of the rim, a recessed rocking member, a shearing element in the recess of the rocking member spaced from said frame and extending laterally therefrom and partially into the recess of said frame and peripherally engaging the wall of said frame recess and having face to face contact with the fixed shearing element, a stud extending through the fixed frame and its shearing element on which the rocking member and its shearing element are mounted, with means on the stud and acting against the frame for holding the shearing elements in shearing engagement, there being one or more stock openings in the shearing elements and their respective frames or members and means for operating the rocking shearing member.

7. The combination with a shearing machine provided with a fixed and a rocking shearing element having registering stock openings, of a stock gage comprising a rod fixed axially to the machine, a sleeve slidable on said rods with means to lock it thereon and a gage bar rotative on said sleeve with means to lock it to the sleeve.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,346. APPARATUS FOR THE SOFTENING AND PURIFICATION OF WATER. JENS JAKOB LASSEN and VILHELM FREDERIK HJORT, London, England. Filed Mar. 12, 1917. Serial No. 154,347. (Cl. 210—1.)



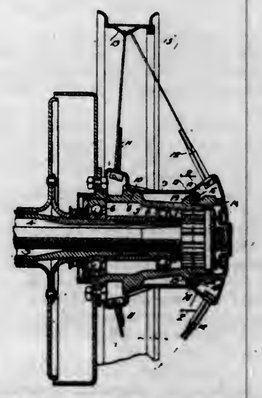
1. In apparatus for the softening and purification of water in which the normal direction of flow of the water is upward the combination of a vessel or container, a mass of filtering material in the upper part of said vessel through which filtering material the water flows in an upward direction, an inlet for the water to be filtered below the filtering mass, an outlet for the filtered water above the filtering mass, means for agitating the water by blowing a gaseous medium into it as it passes through the filtering mass to separate the sludge deposited therein, and means for drawing off the water and sludge thus separated from the filtering material the whole arrangement being such that the cleansing operation takes place without reversing the normal direction of flow of the water being treated.

2. In apparatus for the softening and purification of water the combination of a settling tank, a mass of filtering material in the upper part of the tank through which filtering material the water flows in an upward direction, a weir over which the filtered water passes, means for agitating the water as it passes through the filtering mass by blowing a gaseous medium such as steam or air into the water below the mass, and an outlet for drawing off the water with the sludge suspended therein from above the filtering mass at a level which is below that of the weir, the whole arrangement being such that the cleansing operation takes place without reversing the normal direction of flow of the water being treated.

3. In apparatus for the softening and purification of water in which the normal direction of flow of the water is upward the combination of a settling tank, a mass of filtering material in the upper part of said tank divided into a plurality of separate compartments through which material the water flows in an upward direction, means for agitating the water as it passes through the filtering material in any one compartment, and means for drawing off the water and sludge from that compartment while filtering continues to take place uninterruptedly in an upward direction through the remainder of the filtering mass, the whole arrangement being such that the cleansing operation takes place without reversing the normal direction of flow of the water being treated.

[Claims 4 to 7 not printed in the Gazette.]

1,265,347. DETACHABLE WHEEL. JOSEPH LEDWINKA, Philadelphia, Pa., assignor, by mesne assignments, to Budd Wheel Corporation, Philadelphia, Pa., a Corporation of Virginia. Filed July 19, 1916. Serial No. 110,198. (Cl. 21—31.)



1. In a detachable wheel, an axle hub sleeve and a wheel hub sleeve, and means to detachably clamp said sleeves together including an expansible circlet of balls, and means to expand said circlet into clamping relation.

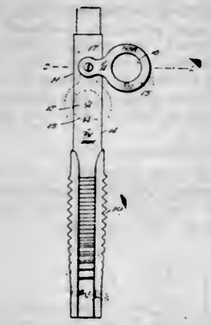
2. In a detachable wheel, an axle hub sleeve and a wheel hub sleeve, and means to detachably clamp said sleeves together including an expansible circlet of balls, and a screw cap having a beveled surface to enter said circlet and expand the same into clamping relation.

3. In a detachable wheel, an axle hub sleeve and a wheel hub sleeve, said sleeves mounted the one upon the other and having engaging seating surfaces, in combination with an expansible circlet of balls interposed between said sleeves, the outer sleeve having a bearing surface against which said balls act, and means to releasably expand said circlet for the balls thereof to engage said bearing surface.

4. In a detachable wheel, an axle hub sleeve and a wheel hub sleeve, said sleeves having coöperating annular seating surfaces, the wheel hub sleeve having a bearing surface, an annular expansible circlet of balls surrounding the axle hub sleeve, and means to expand said circlet to cause the balls thereof to engage said bearing surface.

5. In a detachable wheel, an axle hub sleeve and a wheel hub sleeve, said axle hub sleeve having an annular inclined seating surface adjacent its inner end and an annular retaining shoulder adjacent its outer end, said wheel hub sleeve having a coöperating annular inclined seating surface adjacent its inner end and reversely inclined bearing surface adjacent its outer end, an expansible circlet of balls encircling the axle hub sleeve and retained by the shoulder thereon, and means to expand said circlet to cause said balls to engage the bearing surface on said wheel hub sleeve.

1,265,348. TAP. CECIL E. LLOYD, Pensacola, Fla. Filed Sept. 29, 1917. Serial No. 193,932. (Cl. 10—141.)



1. A tap having its shank provided with an opening intermediate the ends thereof, a tab having an opening of the size of the bore required by said tap, and a pivot screw extending through a portion of the tab and threaded into the opening of the shank to movably support the tab permanently in connection with the tap.

2. A tap having an indicating tab forming a permanent part thereof, said tab being pivoted to its shank and provided with an opening of the size of a bore required for the use of the tap.

1,265,349. BRAKE-SOCKET FOR OPEN-MOUTHED BILGE-PUMPS. CECIL E. LLOYD, Pensacola, Fla. Filed Oct. 23, 1917. Serial No. 198,140. (Cl. 103—62.)

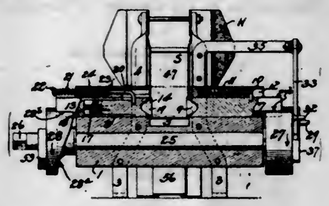


1. A brake socket for open mouthed bilge pumps having the usual cavity for the reception of a plunger yoke and having a pivot opening and a hand lever socket, provided with a generally vertical extension above its said yoke receiving cavity, said extension being apertured, for the purpose described.

2. A brake socket for open mouthed bilge pumps having the usual cavity for the reception of a plunger yoke and having a pivot opening and a hand lever socket, provided with a generally vertical extension above its said yoke receiving cavity, said extension consisting of laterally spaced ears and having apertures through the said ears for the purpose described.

1,265,350. AUTOMATIC NUT-CRACKING MACHINE. CHARLEY W. MCFARLAND and GEORGE N. GRIFFIN, Shawnee, Okla., assignors of one-third to Charles E. Wells, Shawnee, Okla. Filed Sept. 19, 1917. Serial No. 192,146. (Cl. 146—3.)

1. A nut-cracking machine including a body block, a main operating shaft journaled therein, cams at each end of said shaft, and a nut-cracking device including oppositely working plungers slidably arranged in the body block parallel to and above said shaft and also in the same vertical plane, said plungers being actuated by said cams.



2. A nut-cracking machine including a cracking device consisting of oppositely working plungers, one of which constitutes an anvil and the other of which includes a hollow body portion and a crushing head having a sliding telescopic engagement therewith, a spring actuated thrust bar constituting a veritable coupling between the crushing head and the said body of the plunger, cam and lever means for tripping said thrust bar to cause the crushing head to quickly move toward the anvil plunger, and means for moving both plungers toward each other.

3. A nut-cracking machine including a cracking device consisting of oppositely disposed spring retracted plungers, one of said plungers having a socket at one end and a transverse slot, and a crushing head having a shank portion fitting within the socket, a tapering thrust bar adapted to work in said slot and engage with the end of the crushing head shank, a trip lever pivotally supported at its intermediate portion and having a loose connection at one end with said thrust bar, a compressor bar pivotally supported at one end and pivotally connected at its intermediate portion with the end of the trip lever opposite the thrust bar, a spring engaging with said compressor bar, a control lever connected with one end of the compressor bar, cams for engaging the plunger elements, and a cam carried by one of said first mentioned cams for engaging with said control lever.

5. A nut-cracking machine including a cracking device consisting of oppositely working plungers, one of said plungers constituting an anvil, and having a spring for maintaining the same in normal retracted position and the other of said plungers being automatically adjustable and including a plunger body having a socket, a transverse slot in communication with the socket, a crushing head having a shank fitting within said socket, a spring support carried by said crushing head and having a spring thereon for maintaining the entire plunger assembly in retracted position, a trip actuated thrust bar constituting a coupling between the shank of the crushing head and the plunger body, means for bodily moving said plungers toward each other, and other means for causing a quick actuation of the thrust bar.

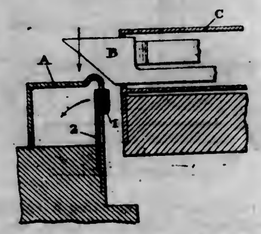
8. A nut-cracking machine including a main operating shaft, oppositely working plungers, cam wheels carried by said operating shaft for actuating said plungers, a nut-feeding device operated by one of said cams, a two-part nut feeding chute adapted to receive nuts from said feeding device to place them between the ends of said plungers, and cam lever means for actuating one part of said chute to release the cracked nut.

[Claims 4, 6, 7, and 9 to 11 not printed in the Gazette.]

1,265,351. AUTOMATIC LUBRICATING DEVICE FOR LOCKS AND BOLTS. GASTON MENIER, Paris France. Filed May 26, 1917. Serial No. 171,208. (Cl. 70—16.)

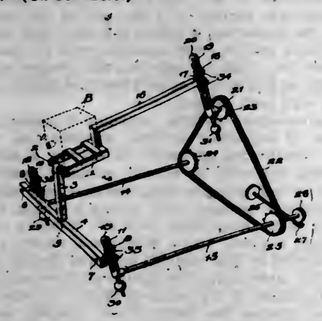
1. The combination with a lock having a beveled bolt, of a catch plate therefor having a face over which the beveled face of the bolt is adapted to slide when coming into engagement, a pad of material adapted to carry lubricant, and a springy support therefor mounted in the catch plate and adapted to hold said pad in the aperture behind the engaging face of said catch plate

in such a position that the pad must always be pressed back by the inclined face of the bolt when moving forward to engage behind the catch plate, whereby said pad is caused to wipe over the face of the bolt each time that the bolt engages in the aperture of the catch plate.



2. The combination with a lock having a beveled bolt, and a catch plate therefor having a face over which the bolt is adapted to slide when coming into engagement, of a pad of material adapted to carry lubricant, and a spring support therefor mounted in the catch plate in such a position as to form an obturating shutter for the catch plate so long as the bolt of the lock is not engaging with the catch plate, said pad being adapted to be pressed back by the beveled face of the bolt in entering into engagement behind the catch plate, and to wipe over the said face of the bolt while being pressed back thereby into the aperture of the catch plate.

1,265,352. MOTION-PICTURE PHOTOGRAPHY. WALTER HIBBARD MERRILL and THOMAS CHARLES MARTIN, Washington, D. C. Filed Mar. 28, 1916. Serial No. 87,262. (Cl. 88—16.6.)



1. The method of producing on a film of a motion picture camera a succession of differing perspectives of an object, for rendering the photograph stereoscopic when projected on a screen, which consists in photographing the object from a succession of differing angular positions in four different quadrants of a circle in a plane transverse to the principal axis of the camera lens.

6. The method of taking motion pictures which consists in imparting curvilinear motion in a closed path to the forward end of a camera and simultaneously a similar motion in a closed path of greater length to the rear or opposite end of said camera.

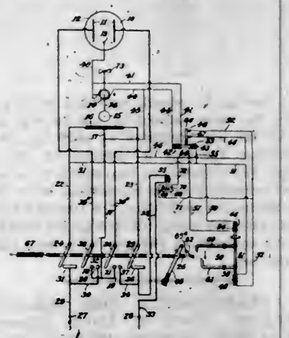
7. The combination with two members adapted to travel respectively in two closed curved paths, one of which is of greater length than the other, of motion transmitting means connected to said members, and a motion picture camera attached to said motion transmitting means whereby the forward portion of said camera may be moved in a closed path and the rear of said camera in another closed path simultaneously, and means to impart motion to said two members, substantially for the purpose set forth.

10. The combination with a motion picture camera, of rotating mechanism, and means to flexibly connect said camera to said mechanism to move said camera bodily in a closed curvilinear path, substantially for the purpose set forth.

15. A motion picture photographic film having thereon a group of images presenting combined vertical and horizontal perspectives, the groups repeated in succession, and a perspective of the last image of one group being immediately followed by an image having the same perspective as the first image of the preceding group.

[Claims 2 to 5, 8, 9, and 11 to 14 not printed in the Gazette.]

1,265,353. MEANS FOR CONTROLLING THE OPERATION OF ELECTROLYTIC CONDENSERS. RALPH D. MERSHON, New York, N. Y. Filed May 26, 1917. Serial No. 171,206. (Cl. 175—294.)



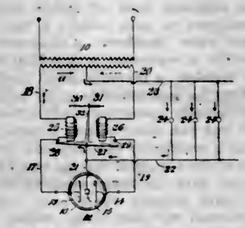
1. The combination with an electrolytic condenser, and means for connecting the condenser with an alternating current circuit, of means for impressing unidirectional charging current upon the condenser, and automatic means preventing actuation of the first-named means to connect the condenser to the alternating current circuit until the condenser is charged by the unidirectional current.

9. The combination with an electrolytic condenser, and a member shiftable at will to connect the condenser with an alternating current circuit and shiftable automatically to disconnect the condenser from said circuit, of means for supplying unidirectional charging current to the condenser to charge the same, mechanism normally preventing shifting of the said member to connect the condenser to said curcuit and normally preventing automatic shifting of said member to disconnect the condenser from the circuit; electromagnetic means, operating when the charging current reaches a predetermined value, to actuate said mechanism and thereby permit shifting of the said member to connect the condenser with the alternating current circuit, and operating, whenever the charging current falls to a predetermined value, to actuate said mechanism and thereby permit automatic shifting of the said member to disconnect the condenser from said circuit; electromagnetic means for actuating said mechanism to permit automatic shifting of said member, whenever the voltage in the alternating current circuit falls to a predetermined value, and electromagnetic means for actuating said mechanism to permit automatic shifting of said member whenever the voltage in said circuit becomes excessive.

[Claims 2 to 8 and 10 not printed in the Gazette.]

1,265,354. CURRENT-RECTIFYING APPARATUS. RALPH D. MERSHON, New York, N. Y. Filed Dec. 16, 1913, Serial No. 806,994. Renewed Mar. 30, 1918. Serial No. 225,838. (Cl. 175—364.)

1. In a rectifying apparatus, the combination of a circuit for unidirectional current-impulses, means to open and close the circuit periodically, an asymmetrical current-passing device in parallel with said means, and means for connecting the circuit with a source of alternating current, the means for opening and closing said circuit periodically being responsive in operation to the current impulses through the asymmetrical current-passing device.



2. In a rectifying apparatus, the combination of a circuit for unidirectional current-impulses, electromagnetically operated means in said circuit to open and close the circuit periodically, an electrolytic device connected in parallel with said means and permitting outflow of current in one direction only, and means for connecting the circuit with a source of alternating current, said electromagnetically operated means being responsive to current impulses flowing through the electrolytic device.

3. In a rectifying apparatus, the combination of a circuit for unidirectional current-impulses; an electromagnet energizable by current in said circuit; an asymmetrical current-passing device in series with the magnet; a vibratory armature connected to the circuit between the magnet and the asymmetrical device on one side of the latter; a contact in the circuit between the magnet and the asymmetrical device on the other side of the latter, and located in the path of the armature for coöperation therewith; and means for connecting the circuit with a source of alternating current.

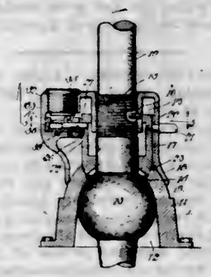
10. In a rectifying apparatus, the combination of a transformer; an electrolytic rectifier having outlet terminals in circuit with the transformer, and having an inlet terminal; a path for unidirectional current connected at one end to an intermediate point of the transformer and at the other end to the inlet terminal of the electrolytic rectifier; electromagnets in circuit with the transformer on opposite sides of the electrolytic rectifier; contacts between the electromagnets and the electrolytic rectifier; a contact lever actuated by the electromagnets to coöperate with the contacts alternately, said lever being connected with the outlet terminal of the electrolytic rectifier; and means for connecting the transformer with a source of alternating current.

13. The combination of a circuit carrying an alternating current, a load circuit, mechanical switching means for delivering impulses of said alternating current to the load circuit as direct current during a part of the half cycle intervals, an asymmetric rectifying device connected to opposite poles of said switching means for delivering the remainder of the half cycle intervals when said switching means is open-circuited, and electromagnetic means energized by current impulses through the asymmetric rectifying device to actuate said mechanical switching means.

[Claims 4 to 9, 11, and 12 not printed in the Gazette.]

1,265,355. LOCK FOR CONTROLLING-LEVERS. EPHRAIM MILLER, Chicago, Ill., assignor, by mesne assignments, to John Bernet, Chicago, Ill. Filed Apr. 17, 1916. Serial No. 91,563. (Cl. 70—128.)

1. In a lock for controlling levers, the combination with a lever of a bearing-support therefor, a lock-carrying member mounted on the lever to move therewith, a spring actuated bolt mounted on said member and adapted to be moved toward and from said lever, a sleeve rotatably and slidably mounted on the lever above said support and having means to engage the same, means to retract said bolt, and resilient means connected to said member and to said sleeve adapted to automatically rotate and raise said sleeve into released position when said bolt is retracted.



2. In a lock for controlling levers, the combination with a lever, of a bearing-support for the lever having a flared opening in its upper end, a lock-carrying member surrounding said lever and the upper portion of the bearing-support and fixed to the lever, a slidably and rotatably mounted sleeve surrounding the lever and located within said member, a spring connected to said member and sleeve to rotate and raise said sleeve out of engagement with the opening of the support, means for rotating and lowering said sleeve into locking position, a locking bolt carried by said member and adapted to be automatically moved into locking engagement with said sleeve when the same is lowered, and means to retract said bolt whereby said spring acts automatically to return said sleeve to release position.

3. In a lock for controlling levers, the combination with a lever, of a bearing-support for the lever having a flared opening in its upper end and rounded upper exterior, a lock carrying member surrounding said lever above the support and fixed to the lever, said lock carrying member having a diagonally disposed slot in its wall, a slidably and rotatably mounted sleeve surrounding the lever and located within said member, a rod or pin secured to said sleeve and extended through said slot, a spring connected at one of its ends to the sleeve and at its other end to said member and within the same, a locking bolt carried by said member and adapted to be moved toward and from the lever and into and out of engagement with said sleeve, and means to move said bolt.

4. In a lock for controlling levers, the combination with a lever having a rounded enlargement thereon, of a bearing-support for the lever housing said enlargement and having a flared opening in its upper end and rounded upper exterior, a lock carrying member surrounding said lever above the support and fixed to the lever, said member having a portion embracing the rounded part of said support, said member having a diagonally disposed slot in its wall, a slidably and rotatably mounted sleeve surrounding the lever and located within said member and having its lower end downwardly tapered to fit in the opening of said support, a rod or pin secured to said sleeve and extended through said slot, a spring connected at one of its ends to the sleeve and at its other end to said member and within the same, a spring actuated locking bolt carried by said member and adapted to be moved into and out of engagement with said sleeve, and means to retract said bolt.

1,265,356. COATED PAPER. JAMES MILN, Toronto, Ontario, Canada. Filed Feb. 28, 1916. Serial No. 80,903. (Cl. 41—38.)

1. In the hereindescribed article of manufacture, a sheet of paper having an etchable coating consisting of zinc white, satin white, and an adhesive.

2. In the hereindescribed article of manufacture, a sheet of paper having an etchable coating consisting of zinc white, satin white, glue, and glycerin.

3. In the hereindescribed article of manufacture, a sheet of paper having an etchable coating consisting of zinc white, satin white, glue and glycerin, combined in the proportions of forty parts of zinc white, fifty-three parts of satin white, five and seven-tenths parts of glue, and one and three-tenths parts of glycerin.

1,265,357. COATED PAPER. JAMES MILN, Toronto, Ontario, Canada. Filed Oct. 4, 1917. Serial No. 194,697. (Cl. 41—26.5.)

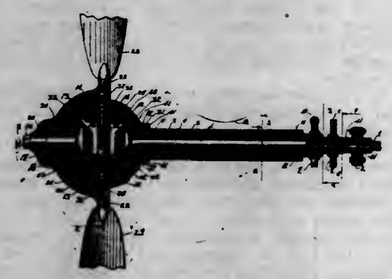
4. In the herein described article of manufacture, a sheet of paper having an etchable coating consisting of blanc fixe, china clay, glue, glycerin and aluminum acetate, in the proportion of two hundred and ninety pounds of blanc fixe, five hundred and eighty pounds of china clay, one hundred and twenty-five pounds of glue, two pounds of glycerin, and twelve ounces of aluminum acetate.

5. In the herein described article of manufacture, a sheet of paper having an etchable coating comprising a mineral body and aluminum acetate.

7. In the herein described article of manufacture, a sheet of paper having an etchable coating comprising a mineral body, and an agent to aid the etching qualities of the coating.

[Claims 1 to 3, 6, and 8 not printed in the Gazette.]

1,265,358. COMBINED DRIVING AND STEERING MECHANISM. ABRAM EMERSON MINIUM, Denver, Colo. Filed May 12, 1916. Serial No. 97,144. (Cl. 74—101.)



1. Operating mechanism for propellers, including driving and steering shafts mounted in self contained relation, a tubular shifting shaft surrounding same, and means for separately operating said shafts, in combination with an inner forked member fixed to said shifting shaft, and an oppositely disposed similarly forked outer member, the adjacent projecting ends of which members are pivotally connected to each other; a hub spindle journaled by said outer member; a propeller mounted on said hub spindle; a segmental rack interiorly fixed to said outer member; a pinion element meshing with said rack, and fixedly secured to said steering shaft interiorly of said members; and universally operating connections between said driving shaft and hub spindle, substantially as described.

2. Operating mechanism for propellers, including a driving shaft, a tubular shifting shaft, an intermediate tubular steering shaft, and operating means therefor, in combination with an inner semi-circular support affixed to said shifting shaft, and an oppositely disposed similar outer support, the adjacent ends of which supports overlap and are pivotally connected to each other; a hub spindle journaled by said outer support; a propeller mounted on said hub spindle; a segmental rack interiorly fixed to said outer support; a concavo-convex pinion element meshing with said rack and affixed to said steering shaft, with its convex face contiguous to the inner surface of said inner support; a convex-backed bevel gear fitting within the concave face of said pinion element and affixed to said driving shaft; a bevel gear affixed to said hub spindle; and an intermediate idle bevel gear meshing with said aforesaid gears, substantially as described.

3. Operating means for propellers, including a driving shaft, a tubular shifting shaft, an intermediate tubular steering shaft, and rotating means therefor, in combination with an inner forked member fixed to said shifting shaft, and an oppositely disposed similarly forked outer member, the adjacent ends of which overlap and are pivotally connected to each other; a hub spindle journaled by said outer members; a propeller mounted on said hub spindle; a segmental rack affixed to the interior of said outer member; a pinion element meshing with said rack and affixed to said steering shaft interiorly of said members; universally operating connections between said driving shaft and hub spindle; and a segmentally formed globular housing completely incasing said forked members, the open ends of the segments thereof overlapping in closed sliding relation, with the inner segment fixed to and rotatable with said shifting shaft only, while the outer segment is carried by said outer forked member and freely movable therewith in all directions, substantially as described.

4. In operating mechanism for propellers, the combination of a driving shaft; an inner forked support rotatably mounted adjacent the inner end of said shaft; an oppositely disposed similarly forked outer support, having its projecting ends located in overlapped relation with the complementary ends of said inner support; pivoting means therebetween lying in a plane at right angles to said driving shaft; means for rotating said inner support for shifting said pivoting means in its own axial plane; means for swinging said outer support around its pivotal axis, including rack and pinion elements positioned interiorly of said forked supports; a hub spindle journaled by said outer support; means universally connecting the inner ends of said hub spindle and said driving shaft; a segmentally formed globular housing, completely incasing said forked supports and contained mechanism, the open ends of the segments thereof overlapping in closed sliding relation, functioning as a ball and socket articulation, and the outer segment being carried by said outer forked support, being freely movable therewith in all directions; and a propeller hub element mounted on said hub spindle and supporting the plane of its propelling blades in axial alinement with said pivoting means, substantially as described.

1,265,359. METAL-CUTTING TOOL. EDMUND BURKE MOORE, Springfield, Vt. Filed Aug. 16, 1917. Serial No. 186,507. (Cl. 29—99.)

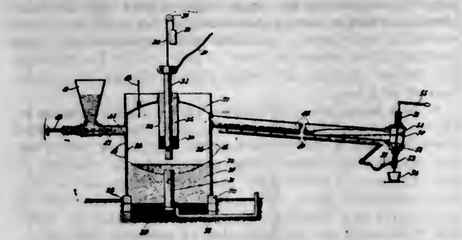


1. A metal cutting tool comprising a supporting body or holder having a cylindrical hole extending obliquely but substantially longitudinally in its front end and a cylindrical hole extending transversely near its front end and across the first mentioned hole, a cylindrical cutting blade or bit with a side flattened obliquely to the axis of and inclining away from the cutting end of the bit fitting the first mentioned hole, and a cylindrical locking pin or key with a side flattened obliquely to the axis of the pin fitting the second mentioned hole, the flattened inclined surface of the bit coöperating with the flattened inclined surface of the pin for locking the bit securely in place.

[Claim 2 not printed in the Gazette.]

1,265,360. PROCESS FOR PRODUCING ALKALI METALS OR THE LIKE. WALTER L. MORRISON, Canonsburg, Pa., assignor to Electric Reduction Company, a Corporation of Delaware. Filed Aug. 17, 1916. Serial No. 115,382. (Cl. 204—63.)

1. The process of producing alkali metals which consists in heating a compound of an alkali metal with a reducing agent to produce alkali metal vapor, the alkali metal compound and silicious reducing agent being so chosen that substantially no gases, as distinguished from metal vapor are produced by the reaction, and then condensing the alkali metal vapor.

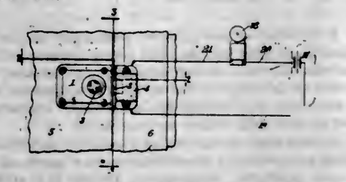


8. The process of producing alkali metals from compounds thereof, which consists in dehydrating the compound, then heating the same in the presence of a reducing agent to produce alkali metal vapor and condensing the vapor.

16. The improved process which consists in heating a basic silicate of an alkali metal with a non-carboniferous reducing agent, to produce alkali metal vapor, and burning the alkali metal to form peroxid thereof.

[Claims 2 to 7, 9 to 15, and 17 to 20 not printed in the Gazette.]

1,265,361. BURGLAR-ALARM. EMIL MURINGER, New York, N. Y. Filed May 29, 1916. Serial No. 100,507. (Cl. 200—30.)



4. An electrical burglar-alarm comprising a metal keeper for a bolt, a thin resilient metal contact plate slightly spaced from the inner surface of the bolt-holding wall of the keeper, insulation between the inner margin of the contact plate and said wall of the keeper, the outer margin of the contact plate being free in slightly spaced relation to the wall of the keeper and unsupported and adapted to be pressed into electrical connection with the keeper by the direct pressure thereupon of the side of the bolt upon transverse movement of the bolt in a direction to force the lock, a metallic fastener securing the insulation and the contact plate at its inner margin to the wall of the keeper, insulation interposed between said fastener and the contact plate, a metallic connecting strip held by said fastener in insulated relation to the contact plate and in electrical connection with the keeper, a binding post carried by the connecting strip, and another binding post carried by the contact plate.

[Claims 1 to 3 not printed in the Gazette.]

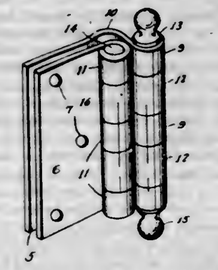
1,265,362. COMB. LOUIS MYERS, Detroit, Mich., assignor to Crystal Alloys Corporation, Detroit, Mich., a Corporation of Michigan. Filed Aug. 13, 1917. Serial No. 185,861. (Cl. 132—3.)



1. A hair comb, comprising a back or shank, a series of teeth extending laterally therefrom, and spherical enlargements adjacent to the outer ends of said teeth for limiting the entrance to the interdental spaces.

[Claim 2 not printed in the Gazette.]

1,265,363. ADJUSTABLE HINGE. CHARLES H. NIXON, Detroit, Mich. Filed Mar. 23, 1917. Serial No. 156,874. (Cl. 16—106.)



1. A hinge comprising two leaves, and a link pivotally connected to each of said leaves, said link having fixed engagement with the pivotal connection of one leaf and restrained against movement relative thereto by frictional engagement of the pivotal connection with said leaf.

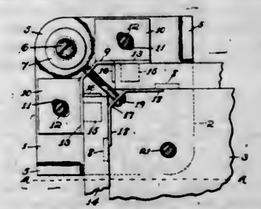
3. A hinge having two leaves each provided with a pair of correspondingly spaced pintle knuckles, the knuckles of one leaf being offset to overlie the plane of the face of said leaf by an arcuate extension embracing the knuckles of the companion leaf, a connecting link having knuckles interposed respectively between the knuckles of said leaves, and pintles pivotally connecting the knuckles of said link with the respective knuckles of said leaves, one of said pintles being restrained against pivotal movement by frictional engagement with the embracing knuckles.

4. A hinge having two leaves each provided with a pair of spaced pintle knuckles, one of said leaves having an offset arcuate extension for the reception of the knuckles of the companion leaf, a connecting link having knuckles interposed respectively between the knuckles of said leaves, pintles pivotally connecting the knuckles of said link with the respective knuckles of said leaves, one of said pintles being restrained against pivotal movement by frictional engagement with the knuckles of the connected leaf, and means to fixedly secure said pintle to the engaged knuckle of said link.

5. A hinge having two leaves each provided with a pintle knuckle, one of which knuckles is offset to overlie the plane of the face of its leaf by an angular extension adapted to embrace the knuckle of the companion leaf, a link connecting said leaves having knuckles respectively registering with the knuckles thereof, and pintles pivotally connecting the knuckles of said link with the respective knuckles of said leaves, one of said pintles being restrained against pivotal movement by frictional engagement with one of the embracing knuckles, and means to fixedly secure said pintle to the other embracing knuckle.

[Claim 2 not printed in the Gazette.]

1,265,364. PANEL-BOARD SUPPORT. EDWIN A. OLLEY, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 9, 1914. Serial No. 811,191. (Cl. 247—13.)



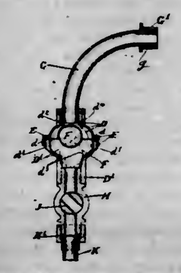
2. A support for panel boards comprising a base, a bracket rising from the base and having portions lapping the outer faces of two lining strips, the bracket also having lugs engaging the lower edges of the lining strips to

support the lining strips independently of the panel board, and a clamping member coacting with the inner faces of the lining strips, substantially as and for the purpose specified.

7. A sheet metal support for panel boards comprising a base plate for extending under the base of the panel board, a bracket rising from the base and having flanges for lapping the outer sides of two lining strips, said flanges having lugs struck therefrom and bent inwardly in position to engage the lower edges and the end edges of said lining strips, and the base being adapted to extend under the base of the panel board and having depressed portions forming feet which hold the greater portion of the base offset from a supporting wall, the base also having lugs struck therefrom and bent upwardly in position to engage edges of the base of the panel board, a clamping member arranged to engage the inner faces of the lining strips, and means connecting the clamping member and the bracket, substantially as and for the purpose described.

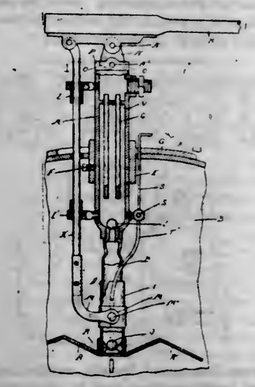
[Claims 1, 3 to 6, 8 and 9 not printed in the Gazette.]

1,265,365. AUXILIARY AIR-ADMISSION VALVE FOR INTERNAL-COMBUSTION ENGINES. CORNELIUS PARISH, Kingston-upon-Hull, England. Filed Nov. 21, 1916. Serial No. 132,551. (Cl. 137—32.)



An auxiliary air admission valve, comprising a valve casing formed of an upper and a lower section each provided with a valve seat, the upper section being dome-shaped and its valve seat being grooved to form air jets, means for connecting the said sections together, and a ball valve which engages with the said valve seats and which forms a converging annular passage with the top of the casing when engaging with the upper valve seat.

1,265,366. SPRAY-PUMP. ORLANDO W. PARSELL, Bad Axe, Mich. Filed Mar. 18, 1916. Serial No. 85,055. (Cl. 103—80.)

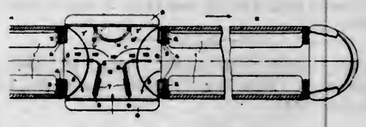


1. In a pump, the combination with a casing and a plunger thereon, of a pump barrel telescopically engaging said plunger, a rod slidably secured to said casing and held in parallelism to the axis of said plunger and barrel, the lower end of said rod being attached to the barrel, a lever for actuating the upper end of said rod pivotally attached thereto, and a fulcrum link for said lever connected to said casing, said link being provided with stop bearings upon opposite sides of said center for limiting the lateral angular deflection thereof during the operation of said lever.

4. In a pump, the combination with a casing forming an air chamber and delivery conduit, of a plunger depending therefrom and a barrel telescopically engaging said plunger, means for reciprocating said barrel in relation to said plunger, a relief-valve for said casing, and a conduit extending from said relief-valve to the mouth of said barrel and forming a means for agitating the liquid and preventing the accumulation of sediment thereat.

[Claims 2 and 3 not printed in the Gazette.]

1,265,367. PASSENGER-VEHICLE. ABRAM FRANK PAUL and ARNOLD J. TANNER, London, England, assignors to Prepayment Car Sales Company, New York, N. Y., a Corporation of West Virginia. Filed Feb. 1, 1913. Serial No. 745,586. (Cl. 105—19.)



1. A flexible or articulated passenger car or vehicle consisting of two sections or bodies connected together by an intermediate or centrally located platform or vestibule trucks for said bodies and an independent truck for said platform and means for detachably supporting one end of each of said bodies on said truck.

2. A passenger car having two sections or bodies flexibly connected together by a centrally located platform, a truck for said platform, independent trucks for said bodies, means for detachably supporting one end of each of said bodies upon said platform truck, and said platform being divided into separate ingress and egress passageways to and from said bodies.

3. A passenger car or vehicle divided into two sections, a truck for supporting each section, an intermediate platform or vestibule and an individual supporting truck therefor, a drop side frame for the latter truck whereby the platform or said intermediate portion is supported on a lower level than the flooring of the said sections, and means consisting of king-bolts whereby the said sections are pivotally connected to the said platform or intermediate portion.

4. A flexible or articulated passenger car or vehicle consisting of two sections or bodies connected together by an intermediate or centrally located platform or vestibule trucks for said bodies and an independent truck for said platform and means for detachably supporting one end of each of said bodies on said truck, the flooring of said intermediate platform or vestibule being carried by its truck on a lower level than the flooring of said bodies.

5. A passenger car or vehicle having a centrally located platform, a pair of end trucks and an intermediate truck for supporting the vehicle, the intermediate truck being provided with drop side frames for supporting the platform on a lower level than the flooring of the vehicle.

1,265,368. DRY-CLOSET. FRANK PAVLIK, Jr., Westminster, Colo. Filed Jan. 17, 1918. Serial No. 212,281. (Cl. 4—32.)

1. In dry closet fixtures, a container and seat therefor projecting substantially beyond the rear thereof, said seat being partly recessed, on its underneath face, to span the rear top edge of the container wall and provide a foul air passage thereover, in combination with a communicating ventilating chamber casing secured to said seat beneath said air passage, in detachable air tight contact with said container; a vent conduit; and a pipe coupling communicating between said vent conduit and said ventilating chamber, in detachably connected relation to the latter, substantially as described.



2. In dry closet fixtures, a container and seat therefor projecting substantially beyond the rear thereof, said seat being recessed, on its underneath face, to span the rear top of the container wall and provide a foul air passage thereover, in combination with a communicating ventilating chamber casing secured to said seat beneath said air passage, in detachable air tight contact with said container; eccentrically mounted clamp elements disposed on the underneath forward face of said seat, for detachably securing said seat and ventilating casing to said container; a vent conduit; and a pipe coupling communicating between said vent conduit and said ventilating chamber, in detachably connected relation to the latter, substantially as described.

6. In dry closet fixtures, the combination of a seated container, vent conduit, and detachable connecting coupling elements therebetween, constructed and functioning substantially as disclosed, the said vent conduit comprising an upper and a lower fixed metallic section, with a collapsible fabric tubing intermediately connecting same, substantially as described.

7. In dry closet fixtures, the combination of a seated container, vent conduit, and detachable connecting coupling elements therebetween, constructed and functioning substantially as disclosed, the said vent conduit comprising an upper and a lower fixed metallic section, with a collapsible fabric tubing intermediately connecting same, and split rings disposed in spaced and secured relation within said fabric tubing, for normally holding same laterally distended when in use, but permitting of the nesting of same for storage and shipment, substantially as described.

[Claims 3 to 5 and 8 not printed in the Gazette.]

1,265,369. BAKING-POWDER. ARNOLD H. PETER, New York, N. Y., assignor to Royal Baking Powder Company, New York, N. Y., a Corporation of New Jersey. Filed Sept. 16, 1916. Serial No. 120,435. (Cl. 99—10.)

1. A baking powder comprising as its acid constituent a mixture of lactid and an acid salt of lactic acid.

4. A baking powder comprising as its acid constituent a mixture of lactid and an acid salt consisting of the combination of calcium with four molecules of lactic acid.

6. As a new article of manufacture, an effervescent mixture containing a bicarbonate of alkaline metal and an acid constituent consisting of any of the substances defined in claims 1, 2, 3, 4, and 5.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,370. COMPOSITION FOR PRESERVING WOOD. FRITZ PETERS, Berlin, Germany. Filed Nov. 13, 1914. Serial No. 871,902. (Cl. 99—12.)

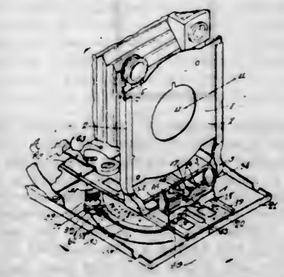
1. A composition of matter for preserving wood containing $C_6H_2(NO_2)_2OR$, in which R represents either hydrogen or a monovalent metal.

2. A composition of matter for preserving wood, containing dinitrophenol and a solubue salt of an inorganic acid incapable of attacking iron.

3. A composition of matter for preserving wood, containing dinitrophenol, a soluble salt of an inorganic acid incapable of attacking iron, and a fireproofing soluble salt.

4. A composition of matter for preserving wood, containing dinitrophenol and a soluble inorganic salt of chronic acid.

1,265,371. ATTACHMENT FOR PHOTOGRAPHIC CAMERAS. WILLIAM A. PETERS, Chicago, Ill., assignor to International Patent Licensing Corporation, Chicago, Ill., a Corporation of Delaware. Filed June 28, 1915. Serial No. 36,892. (Cl. 95—45.)



3. In a photographic camera, a lens-board carriage freely movable on a guide rail therefor, a stop for said carriage, stop engaging means movably mounted on said carriage and normally yieldingly held in engaging relation to and adapted to automatically engage said stop as said carriage is moved in one direction for locking the same against movement relatively to its guides, means mounted upon and movable relatively to said carriage adapted to be digitally engaged to reciprocate the latter, said last-named means operatively engaged with the first-named for automatically disengaging the same from said stop as movement is imparted to said digitally engageable means to move said carriage in one direction.

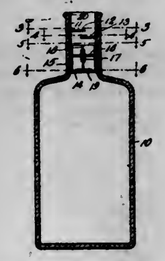
20. In a photographic camera having a lens-board carriage and a guide therefor, a stop disposed in the path of the carriage, manually controlled means on the latter for engaging the same with said stop, mechanism for moving said stop and carriage relatively to said guide a member asociated with said mechanism for engaging the latter to hold said stop at any point between the limits of its movement, inter-engaging means on said member and said carriage for throwing the latter into engaging relation to said mechanism as said carriage becomes engaged with said stop, and springs for normally holding said member and said stop at one limit of each of their respective movements, whereby when said carriage is moved relatively to said stop the said member will automatically move out of engaging relation to said mechanism and permit said stop to automatically return to its normal position.

31. In a photographic camera having a lens-board carriage and a guide therefor, a member movable longitudinally relatively to said guide, means on said carriage for engaging the latter with said member, a rocking lever engaged with the latter for reciprocating the same, a segmental member adapted to be disposed concentric with the pivot of said lever and provided along its concentric edge with means for effecting engagement with another part, a part carried by said lever for engaging said segmental member for holding said lever at any

point between the limits of its movement, a spring normally maintaining said segmental member out of engaging relation to said part, and interengaging devices on said segmental member and said carriage for throwing the former into engaging relation to said part on said lever as said carriage moves into engagement with said means.

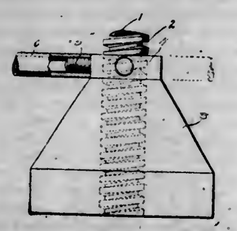
[Claims 1, 2, 4 to 19, 21 to 30, and 32 to 36 not printed in the Gazette.]

1,265,372. NON-REFILLABLE BOTTLE. NICK C. PETSONIS, Chehalis, Wash. Filed Aug. 3, 1917. Serial No. 184,312. (Cl. 215—65.)



A non-refillable attachment to be secured within the neck of a bottle or like container, the same consisting of a tubular member having its sides imperforate and open at one end to receive a closure and having a valve seat at its opposite end, a cylinder within the inner end of the tubular member, a guide carried by the cylinder, a valve within the cylinder to close against the seat of the tubular member and having a stem mounted in the guide of the cylinder, and flanges projecting from opposite sides of the tubular member to within a distance of the opposite walls, said flanges having their inner portions overlapped and the innermost flange forming a stop to limit the unseating of the valve by engaging the end of the stem thereof.

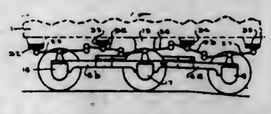
1,265,373. SHELVING. ALEXANDER JOHN PHILIP, Gravesend, England. Filed Nov. 23, 1915. Serial No. 63,062. (Cl. 211—27.)



A shelf supporting structure comprising a plurality of vertical supports, collars adapted to embrace and be adjustable along said vertical supports, said collars being provided with screwthreaded cylindrical lugs projecting radially therefrom, said lugs being adapted to receive the screw threaded ends of tubular bracing members.

1,265,374. SYSTEM OF EQUALIZATION FOR CAR-TRUCKS. JOHN A. PILCHER, Roanoke, Va. Filed Aug. 2, 1916. Serial No. 112,763. (Cl. 105—244.)

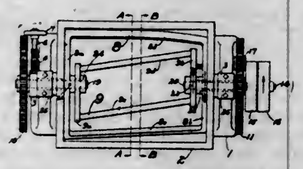
1. In a system of equalization for car trucks, a plurality of wheels and axles, spaced longitudinally of the truck with respect to each other and with oil boxes mounted on the said axles, a bar extending longitudinally of the truck and connecting the oil boxes one with the other and spacing the same, the said boxes being rigidly secured to the said bar and not being capable of relative vertical movement with respect thereto, the said oil boxes being capable of vertical movement with respect to each other only through the harmonious movement of the attached portions of the said bar, and in combination therewith a system of equalizing members separate from the said bar and extending longitudinally of the truck and above the same and adapted to receive loads from the car body and distribute and equalize them directly among the



oil boxes, the said lever system including a lever mounted adjacent each axle and having pivotal movement with respect to the said bar, the said levers being fulcrumed at their centers immediately in line with the oil boxes and supported thereby, and there being means in connection with said equalizer system for receiving car body loads and imparting the same to the said levers, and equalizing them therealong.

[Claims 2 to 7 not printed in the Gazette.]

1,265,375. DOUGH-MIXING MACHINE. BRYAN D. PINKNEY, Cincinnati, Ohio, assignor to The Triumph Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Oct. 25, 1917. Serial No. 198,369. (Cl. 259—105.)



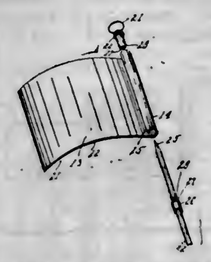
1. In a dough mixing machine, the combination comprising a receptacle, an agitator therefor, said agitator being composed of an outer mixing part and an inner kneading part arranged to rotate concentrically within said receptacle, said outer part being provided with oppositely disposed spiders and an oppositely composed pair of thrust mixer bars connecting the outer contiguous ends of the spiders, and arranged to travel in close proximity to the curved wall of the receptacle; said inner kneading part being provided with oppositely disposed spiders and an oppositely composed pair of inwardly-diverging kneader bars arranged to rotate within said outer mixer part, and means for imparting an opposite rotary speed to the inner kneading part of the agitator, substantially as described.

2. In a dough mixing machine, the combination comprising a receptacle, an agitator therefor, said agitator being composed of an outer mixing part and an inner kneading part, arranged to rotate concentrically in the opposite direction within said receptacle, a driving shaft connected to one end of the outer mixing part, the opposite end of the outer mixing part to rotate idly on the driving shaft of the inner kneading part of the agitator, a driving shaft connected to one end of said inner kneading part, the opposite end of the inner kneading part to rotate idly on the driving shaft of the outer mixing part of the agitator, gear mechanism for imparting rotary speed to the agitator, and means for running in reverse direction to the outer mixing part the inner kneading part for the purpose of both mixing and kneading the ingredients, substantially as described.

1,265,376. REVOLVING DISPLAY DEVICE. EDWARD LA PITT and EDWARD J. RUTHMAN, Cincinnati, Ohio. Filed Aug. 11, 1917. Serial No. 185,753. (Cl. 46—14.)

1. A revolving display device comprising vanes having means thereon telescoping one within the other and a bearing for the assembled vanes received in said means.

5. A revolving display device comprising vanes respectively provided with curled inner ends, said vanes assembled with their outer ends substantially equidistant from each other and said curled inner ends telescoped one within the other for frictionally maintaining their relation and forming a central bore, a bearing-plug frictionally received in one end of said bore, a stem provided with a retaining part received in said bore, said stem and bearing-plug provided with a step-bearing between them, and a bushing frictionally received in said bore about said stem under said retaining-part.



[Claims 2 to 4 not printed in the Gazette.]

1,265,377. TEMPLE FOR OPHTHALMIC MOUNTINGS. LAURENCE POSTON, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 24, 1917. Serial No. 203,776. (Cl. 88—52.)



1. A device of the character described, including a kerfed butt member and an ear hook having a socket to receive the butt, the kerf being flared in the direction of the socket, whereby forcing of the butt against the socket will expand the kerf to lock the parts together, substantially as described.

2. In a temple for an ophthalmic mounting, the combination with a non-metallic ear hook member, of a butt section having prongs, and interengaging parts on the butt and ear hook for spreading the prongs within the ear hook to lock the parts together.

4. In a temple, the combination with a non-metallic ear hook, of a metallic butt section having prongs inserted in and expanded while within the ear hook to secure the parts together.

5. In a temple, the combination with a semi-transparent or translucent ear hook, of a butt having its end anchored in the ear hook, the embedded portion of the butt being colored to correspond with the ear hook to render it substantially invisible.

[Claims 3 and 6 to 8 not printed in the Gazette.]

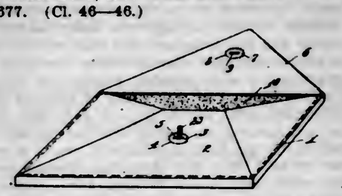
1,265,378. OXIDATION OF CRESOLS. UMBERTO POMILIO, Turin, Italy. Filed Aug. 20, 1917. Serial No. 187,296. (Cl. 204—19.)

2. A process for the production of salicylic acid or its salts, in which a fused mixture of o-cresol and caustic alkali is subjected to electrolysis.

3. An electrolytic process for the oxidation of cresols, in which the cresol is added in small quantities to a fused mass of caustic alkali with a small admixture of water at a temperature of about 110°–120° C. the temperature of the mixture is then raised to about 230°–235° C. and current is passed through the mixture until the oxidation is practically finished.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,265,379. SURPRISE OR JOKE TOY. STANLEY PRAWAT, South Bend, Ind. Filed Dec. 24, 1917. Serial No. 208,677. (Cl. 46—46.)

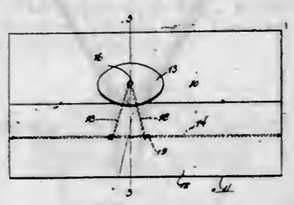


1. A device of the class described, comprising an envelop, an explosive substance disposed within the same, a combustible member adapted to ignite the explosive substance, a hand grip connected to said member and extending without the envelop, and means for frictionally igniting the combustible member by a pull on the hand grip.

2. A device of the class described, comprising an envelop, a combustible member arranged within the envelop, a supporting element for said member having an aperture therein to receive said member, abrasive means carried by said element adapted to frictionally ignite the combustible member upon withdrawal thereof through said aperture, an explosive substance disposed about said combustible member, and means for withdrawing the combustible member from its support.

3. A device of the class described, comprising an envelop, a mat disposed within the envelop, an explosive substance disposed within the mat, a combustible member adapted to ignite the explosive substance, a supporting element for the combustible member carried by the mat, abrasive means carried by said element for frictionally igniting the combustible member upon withdrawal thereof from its supporting element, and a hand grip connected with the combustible member and extending through the envelop.

1,265,380. ADVERTISING DEVICE. EUGENE A. QUIMBY, Haledon, N. J. Filed July 25, 1916. Serial No. 111,222. (Cl. 40—138.)



1. An advertising device comprising a body adapted to have an advertisement displayed thereon, a substantially horizontal track supported by said body and being vibratory with relation to said body, a carriage secured to said track and movable therealong, and an advertising element mounted on said carriage so as to move therewith and to move with relation thereto.

2. An advertising sign adapted to be carried by a car and comprising a sheet or plate having its lower portion turned upward so as to provide a flange and a housing, a track within said housing, a carriage engaged with said track and movable therealong, said carriage extending above the upper edge of said housing, and an advertising element supported by said carriage and having its lower edge in coöperative relation with the upper edge of said flange so as to hide said carriage from view, whereby the said advertising element has the appearance of floating from side to side of said sheet or plate as the car moves up or down grade.

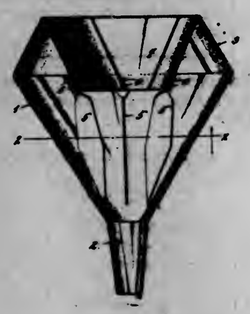
3. The combination of a sign member, a length of resilient wire having its ends secured to said sign member and having its intermediate portion spaced therefrom, a shield

connected to said sign member and hiding said wire from view, a carriage movably secured to said wire and extending upward therefrom, and a sign element secured to the upper portion of said carriage and being movable with said carriage and also being movable with relation thereto.

4. An advertising sign adapted to be carried by a car and comprising a sign member having its lower end formed with a housing the upper edge of which is substantially horizontal when the car is on a horizontal track, a track in said housing and being also substantially horizontal when the car is on a horizontal track, a carriage supported by said track and extending upward therefrom above the upper edge of said housing, and a sign element supported by the upper end of said carriage and extending downward below the upper edge of said housing, whereby, the said advertising element is movable with said carriage by the means of gravity and the vibration of said track when the car moves up or down grade, the said carriage being hidden by said housing and said sign element.

5. A sign comprising a base sign member, a track supported in approximately horizontal position thereon, a carriage having downwardly diverging branches which engage with said track and extending upward therefrom, a pivot carried by said downwardly diverging branches, an advertising device supported by said pivot and movable thereabout, and means coöperating with said advertising member for completely hiding the said carriage and track, whereby the said advertising element moves across said advertising member and also rocks with relation thereto when said track is inclined from the horizontal position and is caused to vibrate.

1,265,381. QUICK-EMPTYING FUNNEL. THOMAS T. RAMEY, Edwardsville, Ill. Filed Oct. 4, 1915. Serial No. 53,943. (Cl. 226—33.)

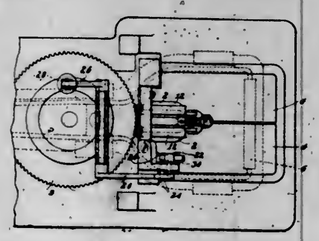


An improved funnel, comprising a main funnel having a suitable delivery device at its lower end; a funnel of less diameter located within said main funnel and united to the upper end of the latter, and forming the inner wall of an air chamber at the upper end of said main funnel, whereby the rise of the liquid from said main funnel into said air-chamber is obstructed; in combination with means for preventing the eddying of the liquid contained in said main funnel at the point of sudden enlargement of the liquid passage at the lower end of said inner funnel.

1,265,382. WORK-HOLDING CLAMP. EUGENE J. RAY, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 18, 1914. Serial No. 862,299. (Cl. 112—4.)

1. A buttonhole sewing machine, having in combination, a work holding clamp, a spring tending to close the clamp, a toggle for restraining the spring, and means for actuating the toggle to release and open the clamp.

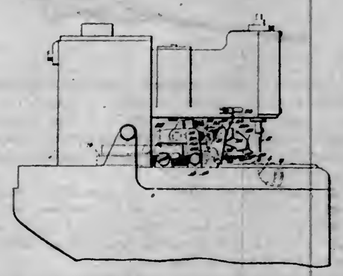
2. A buttonhole sewing machine, having in combination, a movable clamp carriage, a work clamp mounted on the carriage, a spring tending to close the clamp, a toggle for restraining the spring, a cam carrying gear for moving the clamp carriage, a cam on said gear and suitable connections for breaking the toggle to close the clamp, and a stationary cam for actuating the toggle to cause the clamp to open during the movement of the carriage.



5. A buttonhole sewing machine, having, in combination, a clamp carriage, work clamps pivotally mounted on the carriage, a rock shaft carrying leaf springs bearing on the clamps, a spring for operating the shaft to close the clamps, means for opening the clamps and for restraining the spring, and means for releasing the spring to close the clamps.

[Claims 3 and 4 not printed in the Gazette.]

1,265,383. WORK-CLAMPING MECHANISM. EUGENE J. RAY, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 16, 1916. Serial No. 125,948. (Cl. 112—4.)



1. A buttonhole sewing machine, having, in combination, stitch-forming mechanism, a work clamp comprising two clamping members, mechanism for automatically closing the clamping members and equalizing the pressure applied thereby to the work at the beginning of a buttonhole, and mechanism for automatically opening the clamping members at the completion of the buttonhole.

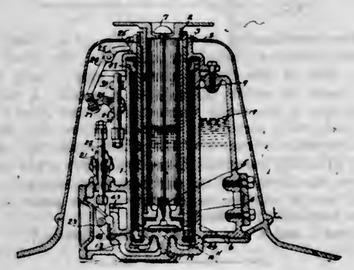
2. A buttonhole sewing machine, having, in combination, stitch-forming mechanism, a work clamp comprising two vertically movable clamp arms, two arms engaging the clamp arms and connected to equalize the pressure of the clamps on the work, and mechanism for automatically operating the equalizing arms to cause the closing and opening of the clamp.

6. A buttonhole sewing machine, having, in combination, stitch-forming mechanism, a work clamp comprising two clamp arms, a rock shaft, an equalising lever journaled on the rock shaft to turn about an axis at right angles thereto and provided with arms engaging the clamp arms, and mechanism for operating the rock shaft to cause the opening and closing of the clamps.

7. A buttonhole sewing machine, having, in combination, stitch-forming mechanism, a work clamp comprising two clamp arms, a rock shaft, an equalizing lever journaled upon the rock shaft between the clamp arms and provided with arms engaging the clamp arms, a lever for operating the rock shaft, and a spring between the lever and rock shaft through which pressure is applied to the clamp.

[Claims 3 to 5 not printed in the Gazette.]

1,265,384. CHAIR. GODFREY R. REEMANN, Philadelphia, Pa., and WILLIAM H. HULTGREN, Roselle Park, N. J. Filed Apr. 12, 1917. Serial No. 161,396. (Cl. 138—9.)



1. In an adjustable chair, supporting means for the seat of the chair, a fluid chamber, a pressure supply for placing under pressure a fluid in said chamber, to actuate the seat-supporting means, ports for the passage of fluid to and from said fluid chamber, and a slide valve automatically controlling said ports.

5. In an adjustable chair, supporting means for the seat of the chair, a fluid chamber, a pressure supply to generate pressure upon the fluid in said fluid chamber to adjust the chair seat supporting means, a self-adjusting valve for the application of pressure from the pressure supply, and the exhaust of pressure to the atmosphere, a hinged slide valve actuated in part by the direction of flow of the fluid to and from the pressure chamber to automatically maintain the chair seat in any elevated position should a reduction or variation of pressure from any cause occur at the source of pressure supply.

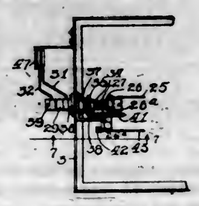
7. In an adjustable chair, plungers supporting the seat of the chair, a fluid chamber, a pressure supply for placing a fluid in said chamber under pressure to actuate the chair-seat supporting means, valves controlling the pressure supply and the flow of fluid under the action of the pressure supply, a brake to prevent horizontal rotation of one of the plungers, interlocking pedals having operating connections to the valves and the brake, and means for automatically returning the valves and brake to normal position by release of pressure from either one of the interlocking pedals.

9. In an adjustable chair, plungers supporting the seat of the chair, a fluid chamber, a pressure supply for actuating a fluid in said chamber to adjust the plungers, a self-adjusting valve controlling said pressure supply, a slide valve controlling the flow of the fluid under pressure and actuated in part automatically by the direction of flow of the fluid, a brake for preventing rotation of one of the said plungers which is adapted to be rotated by hand, interlocking pedals controlling said brake and valves, ports arranged to automatically limit the axial movement of the plungers under the action of the fluid under pressure, a valve within the rotatable plunger for facilitating discharge of air which would prevent action of the pressure actuated parts, and also to facilitate replenishment of such fluid as may escape by reason of leakage, and means for effecting the automatic return to normal position of the operating parts of the mechanism, by which the telescopic plungers and pressure actuated parts are brought to rest upon release of pressure from either one of the said pedals.

23. In an adjustable chair, a fluid chamber, hollow plungers therein forming a support for the seat of the chair, valve mechanism in one of said plungers for replenishing the fluid in said chamber with fluid from said plunger.

[Claims 2 to 4, 6, 8, and 10 to 22 not printed in the Gazette.]

1,265,385. AUTOMATIC SIGNAL. CHARLES C. RENSHAW, Chicago, Ill. Filed May 28, 1914. Serial No. 841,431. (Cl. 116—31.)



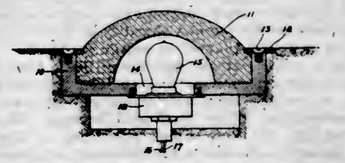
1. An automatic signaling device for automobiles comprising signal members, mechanism for pivotally supporting the same at the rear of an automobile, a clutch mechanism adapted to selectively engage the signal members and mechanism for operating the clutch mechanism connected with and operated by one of the operating levers of the automobile.

4. In a device of the class described, a plurality of signal members, a unitary clutch element therebetween, means for selectively elevating each one of said signal members into position for use, a plurality of driving means for said element, and mechanism connected to the controlling mechanism of a vehicle to cause movement of said driving means.

7. A signaling device for automobiles comprising a plurality of concentric shafts, signals rotatable on said shafts, a clutch on one of said shafts adapted to rotate the signals and mechanism for operating the clutch to engage any of the signals and adjust the signal to view position.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,265,386. ILLUMINATED TRAFFIC-BUTTON. WILLIAM B. RICHARDS, Pomona, Cal. Filed Sept. 4, 1917. Serial No. 189,633. (Cl. 240—1.)



1. A traffic indicator consisting of a circular box comprising a flat bottom and an annular flange; there being an opening at the center of the bottom; a hemispherical hollow glass bumber fitting within the flange and resting upon the bottom, a clamping ring overlapping the bumper at the top of the flange and secured to the flange by screws, a lamp socket secured to the lower face of the bottom and centrally located in the opening, and a lamp in the lamp socket extending upwardly into the hollow of the bumper.

[Claim 2 not printed in the Gazette.]

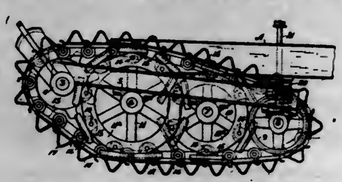
1,265,387. WATER-HEATER. EDWARD ROBSON, Trenton, N. J. Filed June 13, 1917. Serial No. 174,584. (Cl. 257—28.)

1. In a water heater, a cylinder having a water inlet and outlet, a hollow casting disposed within said chamber and extending substantially the entire length thereof, said casting consisting of a series of spaced, integrally

connected communicating chambers, steam supply means connected to one of the end chambers of the casting, an additional integral connection between the lower portions of said base chambers having a longitudinal bore to receive the waters of condensation, and a drain pipe connected to one end of said bore.

[Claims 2 and 3 not printed in the Gazette.]

1,265,388. TRACTOR. MARTIN E. ROZE, Stockton, Cal. Filed Oct. 11, 1917. Serial No. 195,907. (Cl. 21—150.)



1. In a vehicle of the self-laying track type, a supporting truck mechanism for the main frame including a roller having shoes arranged to supported the track.

2. In a vehicle of the self-laying track type, a truck frame, a driving sprocket and an idler journaled in the frame, an endless track carried by said sprocket and idler, an intermediate idler, and a plurality of shoes on said idler adapted to engage the track.

3. In a vehicle of the self-laying track type, a truck frame, a driving sprocket and an idler journaled in the frame, an endless track carried by said sprocket and idler, an intermediate idler, and a plurality of pivotally mounted shoes on said idler adapted to engage the track.

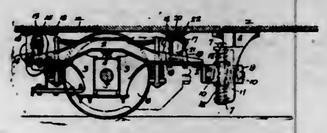
4. In a vehicle of the self-laying track type, a truck frame, a driving sprocket and an idler journaled in the frame, an endless track carried by said sprocket, a pair of intermediate idlers positioned between the driving sprocket and the first named idler, and a plurality of shoes pivotally attached to the intermediate idlers adapted to engage the track and carry the weight of the tractor.

5. In a vehicle of the self-laying track type, a truck frame, a driving sprocket and an idler journaled in the frame, an endless track carried by said sprocket, a pair of intermediate idlers positioned between the driving sprocket and the first named idler, a plurality of shoes pivotally attached to the intermediate idlers adapted to engage the track and carry the weight of the tractor, and pads on the track adapted to receive the shoes.

[Claims 6 to 8 not printed in the Gazette.]

1,265,389. CAR-TRUCK. KENNETH RUSHTON, Philadelphia, Pa., assignor to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 10, 1917. Serial No. 201,233. (Cl. 105—137.)

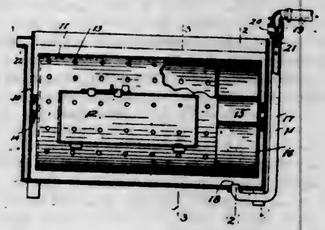
1. The combination of a car body; a truck mounted on the car body; a pivot for the truck at one side of the center thereof; an axle; bearings for the axle mounted on the truck frame; a roller at each corner of the truck frame farthest from the pivot; a rail above each roller secured to the car body; a bearing at the two opposite corners of the truck from the rollers; pivoted cradles mounted in the bearings; and pins depending from the car body and adapted to the sockets.



2. The combination in a car body, of a truck frame pivotally mounted under the car body, the pivot being at one side of the truck; a single axle; boxes in the truck frame in which the axle is mounted; a roller at each corner of the truck farthest from the pivot; a rail above each roller secured to the body of the car; bearings at the opposite corners of the truck from the rollers; cradles pivotally mounted in the bearings; a pin projecting from the bottom of the car body and resting in each socket; and a yielding connection at the pivot between the car body and the truck.

[Claims 3 and 4 not printed in the Gazette.]

1,265,390. PRINT-WASHER. JOHN O. SCHMITT, Cleveland, Ohio. Filed Mar. 9, 1917. Serial No. 153,564. (Cl. 95—93.)



1. In a machine of the character described, a tank, a drum rotatably supported in the tank, an air-wheel rotatable about a substantially horizontal axis and connected with the drum so as to rotate the same, and means whereby water and air are supplied to the tank beneath the air-wheel so that the air rising will rotate the same and the drum.

4. In a device of the character described, a water tank, a drum extending horizontally therethrough and rotatably supported therein said drum having perforations through which water may circulate, an air-wheel connected to the drum so as to rotate the same; and a water supply pipe connected to the bottom of the tank and having a discharge opening beneath the air-wheel, said pipe having an injector-like nozzle, and an air inlet opening adjacent the nozzle.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,391. REFILLABLE PLUG. RALPH A. SCHOENBERG, (now by judicial change of name Ralph A. Belmont,) New York, N. Y. Filed June 18, 1917. Serial No. 175,250. (Cl. 175—277.)

1. A refillable plug comprising a center contact; a shell; insulating material between the center contact and shell and provided with a passage separate from the opening for the center contact; and a fuse wire connected with said shell and extending through said passage and connected to said center contact.

3. A device of the character described comprising a shell; a contact fastened to said shell; and an insulating barrier supported by said contact.

6. A terminal contact for a refillable plug consisting of a washer with projecting lugs to hold it to the plug and with a screw-threaded aperture in its center and having a hole alongside of said center threaded aperture for the passage of a fuse wire; and a screw for fastening said wire to said washer.



8. A refillable plug comprising a shell with an outturned flange at its top; insulating material above said flange; insulating material below said flange; a metallic collar holding said insulating material in place and having a threaded extension; and a threaded cap to engage said threaded extension.

[Claims 2, 4, 5, 7, and 9 not printed in the Gazette.]

1,265,392. PASTRY-CONE HOLDER. MAX SCHWARZ, Richmond, Va. Filed July 13, 1917, Serial No. 180,400. Renewed Mar. 9, 1918. Serial No. 221,577. (Cl. 107—48.)



1. A pastry cone holder consisting of a hollow cone split in the plane of its axis, handles attached one to each of the parts of the hollow cone and hinged together at their farther ends, a spring arranged to hold the hinged handles normally apart, a stop to limit the opening of the hinge, and locking means to limit motion of the parts of the hollow cone relatively to one another in the direction of their axis.

2. A pastry cone holder consisting of a hollow cone split in the plane of its axis, handles attached one to each of the parts of the hollow cone and hinged together at their farther ends, a spring arranged to hold the hinged handles normally apart, and a stop to limit the opening of the hinge.

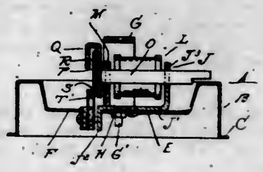
3. A pastry cone holder consisting of a hollow cone split in the plane of its axis, handles attached one to each of the parts of the hollow cone and hinged together at their farther ends, and a stop to limit the opening of the hinge.

4. A pastry cone holder consisting of a hollow cone split in the plane of its axis, handles attached one to each of the parts of the hollow cone and hinged together at their farther ends, and locking means to limit the motion of the parts of the hollow cone relatively to one another in the direction of their axis.

[Claims 5 to 7 not printed in the Gazette.]

1,265,393. ELECTRIC BELL. CARL J. SCHWARZE, Adrian, Mich., assignor to Schwarze Electric Company, Adrian, Mich., a Corporation of Michigan. Filed Sept. 1, 1917. Serial No. 189,259. (Cl. 177—7.)

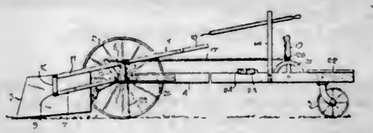
1. An electric bell, comprising a circular base formed of pressed sheet-metal having a marginal rearwardly-extending flange and a centrally depressed panel, a U-shaped yoke having its ends engaging perforations in said depressed panel and secured thereto, the central portion passing diametrically across said base, a bell centrally secured to said yoke and covering said depressed panel, an electro-magnet mounted within the yoke, an armature, a slidable striker on which said armature is mounted having its free end extending in proximity to the margin of said bell, and a vibrator for imparting a reciprocatory movement to said armature and striker.



3. An electric bell, comprising a base formed of pressed sheet-metal having a circular marginal flange extending rearward with laterally-extending perforated portions forming securing means, the central portion of said base having a depressed panel cut away at one point, a U-shaped yoke having its ends secured to said depressed panel at diametrically opposite points and a central portion extending across the panel above the same, a bell centrally mounted on said yoke, an electro-magnet mounted on said base within said yoke and comprising a Z-member the central portion thereof being secured to said panel, one of the flanges extending outward from said panel and the other flange extending rearward through said aperture, magnet cores secured to said outwardly-extending flange and arranged parallel to each other and said depressed panel, a non-magnetic bridge extending between the outer ends of said core pieces, a striker bar slidably secured in alined apertures in said outwardly-extending flange and non magnetic bridge, the outer end of said striker being in proximity to said bell, an armature mounted on the opposite end of said striker and provided with a return-bent portion, a vibrator mounted on said rearwardly-extending flange of said Z-member and extending outward through said aperture into engagement with the returnbent portion of said armature, and an insulated electrode also mounted on said rearwardly-extending flange and extending outward through said aperture into operative relation to said vibrator.

[Claim 2 not printed in the Gazette.]

1,265,394. SCRAPER. JOSEPH E. SEARS, Custer, Okla. Filed Feb. 27, 1918. Serial No. 219,477. (Cl. 214—73.)



1. A scraper comprising an axle, a pair of forwardly directed arms carried by the axle, a scraper pivotally engaged therewith, upstanding arms carried by the axle, a yoke having its arms pivotally engaged intermediate their lengths with said upstanding arms, the outer extremities of the arms of the yoke being engaged with the scraper, a bar extending rearwardly from the axle, and means carried by the bar and coacting with the yoke for holding said yoke against swinging movement.

3. A scraper comprising an axle, a pair of forwardly directed arms carried by the axle, a scraper pivotally engaged therewith, upstanding arms carried by the axle, a yoke having its arms pivotally engaged intermediate their lengths with said upstanding arms, the outer extremities of the arms of the yoke being engaged with the scraper, a bar extending rearwardly from the axle, means carried by the bar and coacting with the yoke for holding said yoke against swinging movement, and a hitching means carried by the outer end portion of the rearwardly directed bar.

4. A scraper comprising an axle, a pair of forwardly directed arms carried by the axle, a scraper pivotally engaged therewith, a yoke supported by the axle for swinging movement in a vertical direction, links pivotally engaged with the outer end portions of the arms of the yoke, said links being also pivotally engaged with the scraper, the pivotal connection of each of the links with the scraper being common to one of the arms of the yoke, and means operable independently of the yoke for imparting swinging movement to the scraper.

[Claim 2 not printed in the Gazette.]

1,265,395. SIDEWALK-LIGHT AND OTHER LIKE CONSTRUCTIONS. HENRY C. SEIPP, Pittsburgh, Pa. Filed Nov. 17, 1915. Serial No. 61,911. (Cl. 94—7.)



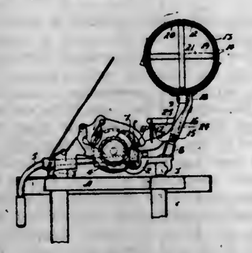
1. A unitary light container for side walk and other similar lights, comprising an outer sleeve having flanges at the bottom of teh same, an inner sleeve within the said outer sleeve, an upper lighting lens or tile secured within said outer sleeve and above said inner sleeve, a removable bottom plate having a central opening in the same connected to said flanges, and a lower transparent tile between said inner sleeve and said plate.

2. A unitary light container for side walks and other similar lights, comprising an outer sleeve having flanges at the bottom of the same, an inner sleeve within said outer sleeve, an upper lighting lens or tile secured within said outer sleeve and above said inner sleeve, a removable bottom plate having a central opening in the same connected to said flanges, a lower transparent tile between said inner sleeve and said plate, and means for removably connecting said plate to said flanges.

3. A unitary light container for side walks and other similar lights, comprising an outer sleeve having flanges at the bottom of the same, an inner sleeve within said outer sleeve, an upper lighting lens or tile secured within said outer sleeve and above said inner sleeve, a removable bottom plate having a central opening in the same connected to said flanges, a lower lighting lens or tile between said inner sleeve and said plate, and removable bolts passing through said flanges and plate and connecting with nuts on the upper face of such flanges for securing said plate to said flanges and to permit the removal of said plate.

[Claims 4 to 8 not printed in the Gazette.]

1,265,396. ADJUSTABLE COPY-HOLDER. ALBERT H. SHERWOOD, Oroville, Cal. Filed Oct. 23, 1917. Serial No. 198,012. (Cl. 120—32.)



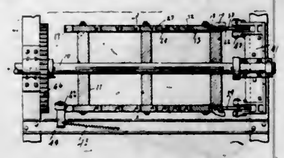
1. A copy holder for typewriters comprising a receiver secured to and adapted to travel with the carriage of the typewriter, a transparent, cylindrical member supported in the receiver, said cylindrical member adapted to receive the copy to be re-typed, and a spreader comprising a ring having a plurality of spring arms secured thereto adapted to be placed endwise within the cylindrical member to support the copy against the inner face of the cylindrical member.

4. The combination with the carriage, the platen and the spacing lever on a typewriter, of a receiver secured upon the carriage, a cylindrical copy holder supported by the receiver, a bearing ring on each end of the cylinder, teeth cut in the end of one of said rings, and a pivotally mounted lever engageable at one end with said teeth and at the opposite end with a pawl operated by the spacing lever.

7. A copy holder for typewriters comprising an open-ended trough-shaped receiver secured to and adapted to travel with the carriage of a typewriter, a transparent hollow cylindrical member adapted to be laid and to rest in the trough, the ends of said cylinder being entirely open and unobstructed to permit the free insertion therein of the copy to be retyped, means for securing the copy against the inner surface of the cylindrical member, means for transmitting movement from the spacing lever on the typewriter to intermittently rotate the cylinder while it is resting in the trough and means for locking the cylinder against movement in one direction.

[Claims 2, 3, 5, 6, 8, and 9 not printed in the Gazette.]

1,265,397. CLAMP. WILLIAM H. SOMMER, Peoria, Ill., assignor, by mesne assignments, to The First Trust & Savings Company, Cleveland, Ohio, a Corporation of Ohio, and William E. Stone, Peoria, Ill., trustees. Filed Mar. 20, 1916. Serial No. 85,363. (Cl. 140—105.)



1. In a clamp, in combination, a plurality of clamping and crimping bars, one of which is adapted to be moved longitudinally of the other, and a pivotally supported member adapted to engage with an end of said movable bar to lock it in crimping position.

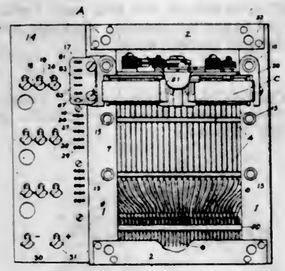
2. In a clamp, in combination, a plurality of clamping and crimping bars, one of which is adapted to be moved longitudinally of the others, means adapted to engage said movable bar to move it to crimping position, a pivotally supported member adapted to engage with an end of said movable bar to lock it in crimping position, means to impart slight additional movement to said movable bar after the crimping operation to permit said locking member to release itself by gravity, and means to move said movable bar to inoperative position.

7. In a clamp, in combination, a plurality of clamping and crimping bars, the outside bars having fixed positions and the center bar adapted to be reciprocated therebetween, said center bar having a cut-out portion at one end, a pawl pivoted between said fixed bars and operable in said cut-out portion of said center bar and adapted to have engagement with the end of said center bar to lock the same in crimping position, means to move said center bar to crimping position, and other means to move said center bar to permit said pawl to release itself from said center bar by gravity.

11. In a clamp, in combination, a revoluble support, clamping and crimping bars on said support, certain of said bars adapted to be reciprocated, means to move said reciprocal bars to crimping position, means to lock said reciprocal bars after being moved to crimping position, other means to impart additional movement to said reciprocal bars to release said locking means, means to impart reverse movement to said reciprocal bars to move the same to inoperative position, a support for said reversing means, yielding securing means for said support, and means to yieldingly hold said reversing means against said reciprocal bars.

[Claims 3 to 6 and 8 to 10 not printed in the Gazette.]

1,265,398. AUTOMATIC TELEPHONE CENTRAL-STATION APPARATUS. ALTON E. STEVENS, Providence, R. I. Filed Apr. 28, 1917. Serial No. 165,126. (Cl. 179—27.5.)



1. A vertical rack; horizontal contact banks of line terminals, one above another, the contact points being multipled together with bare vertical wire conductors; pins perpendicular to the face of the rack; one or more selector frames with holes therein to allow a selector to be removably mounted upon said pins; the free end portions of said contact bank terminals being engageable by the selecting brush of the selector.

2. A vertical rack; horizontal contact banks of line terminals, one above another, the contact points being multipled together with bare vertical wire conductors; pins perpendicular to the face of the rack; one or more selector frames with holes therein to allow a selector to be removably mounted upon said pins; the free end portions of said contact bank terminals being engageable by the selecting brush of the selector; jacks secured to said rack, whereby the selector circuits become connected or disconnected, when the selector is mounted on, or demounted from, the selector rack.

3. A vertical rack; horizontal contact banks of line terminals, one above another, the contact banks being multipled together by bare wire vertical conductors; a terminal board secured to the rack and having terminals therein horizontally adjacent to each contact bank of line terminals.

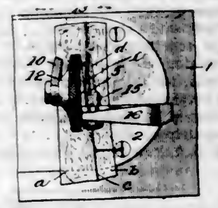
4. A vertical rack; horizontal contact banks of line terminals, one above another, the contact banks being multipled together by bare wire vertical conductors; pins perpendicular to the face of the rack; a terminal board secured to the rack, and having terminals and jacks therein horizontally adjacent to each contact bank of line terminals; one or more selector frames with holes therein, and with jacks, whereby each selector frame may be removably mounted upon said pins, and the selector circuits may become connected, or disconnected, when the selector is mounted on, or demounted from the selector rack.

5. A vertical rack; horizontal contact banks of line terminals, one above another; the contact points being multipled together by bare wire vertical multiple conductors; a multiple jack mounted upon said rack; insulated jack plugs mounted therein; each jack plug being connected to its individual vertical multiple conductor.

[Claim 6 not printed in the Gazette.]

1,265,399. MACHINE FOR STITCHING TAPE TO INNERSOLES. FRANS T. STRÖBECK, Beachmont, Mass., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed June 29, 1916. Serial No. 106,553. (Cl. 270—33.)

1. In a sewing machine, in combination, stitch-forming mechanism including a reciprocating straight needle, a work-support, a folder-guide comprising a body portion, having a tape-guiding channel whose delivering end is substantially U-shaped in cross-section, said folder-guide being so disposed adjacent the needle-path as to present the tape to the needle in the form of an upwardly opening trough, whereby the needle may descend into the trough.

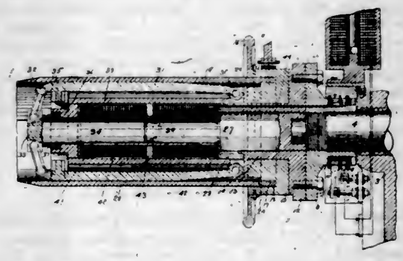


3. In a sewing machine, in combination, stitch-forming mechanism including a reciprocating needle, a work-support, a feeding implement, a presser-member opposed to said feeding implement and acting at one side of the line of stitching, and a tape-guide having a U-shaped channel adapted to deliver tape to the needle in trough-like form at one side of said presser-member, whereby the stitched tape is free from the action of pressure exerting surfaces.

7. A combined tape and work-guide for sewing machines comprising, in combination, a member having a tape-guiding channel whose delivering end is substantially U-shaped in cross-section and a work-guiding portion, said work-guiding portion having a work-guiding surface disposed adjacent the delivering end of said channel and extending away from the curved portion of said channel.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,265,400. BLOCK FOR AUTOMATIC BLOCKING MECHANISM FOR STRIP-MILLS. AUGUST SUNDH, Hastings-upon-Hudson, N. Y. Original application filed Oct. 11, 1915, Serial No. 55,361. Divided and this application filed Nov. 16, 1916. Serial No. 131,634. (Cl. 242—78.)



1. In a revolving block for a strip mill, the combination of a block capable of being collapsed, expansion mechanism within the block, an electromagnet, comprising a movable core, and levers connecting said core and expanding mechanism.

4. In a revolving block for a strip mill, the combination of a block capable of being collapsed, a magnet, a slot in said block, and means expanded by said magnet to clamp the strip between the block and said means after the strip has entered the said slot.

7. In a revolving block for a strip mill, the combination of a block, expansion mechanism within the block, an electromagnet within said block for expanding said mechanism to clamp the strip between it and the block, a slot in the block for the reception of the strip, said block comprising a plurality of sections hinged together.

23. In a blocking mechanism adapted to wind a strip coming from a strip mill, the combination of a rotatable block, rotating expanding mechanism within said block, means to expand said mechanism and thereby cause the strip to be attached to the block, said block being adapted to be collapsed by the weight of the strip thereon after the strip is wound, and means for collapsing automatically

the mechanism within the block after the strip is wound, leaving the coil of strip free on the block.

26. In a blocking device for a strip comprising a rotatable block adapted to wind a strip fed from a strip mill, the combination of internal expanding mechanism, and an external shell, said external shell comprising yieldable sections hinged together and secured to one permanent section, an opening in said shell between two of the yieldable sections, for the strip to enter, said last named sections being beveled and adapted when overlapping each other with the strip interposed between to form a smooth surface for the strip to wind on.

[Claims 2, 3, 5, 6, 8 to 22, 24, and 25 not printed in the Gazette.]

1,265,401. CAR-BOLSTER. ELLIS W. TEST, Michigan City, Ind., assignor to Haskell & Barker Car Co., Inc., a Corporation of New York. Filed Jan. 12, 1918. Serial No. 211,549. (Cl. 105—103.)

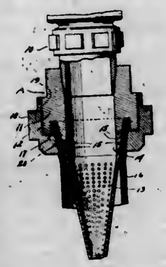


1. A body bolster of box form having lateral outwardly directed flanges adjacent its top and bottom, the lower part of the side members of the bolster being cut away adjacent each end, angle members having one flange attached to the sides of the bolster adjacent said cut away portions, said flange decreasing in width toward the ends of the bolster, the other flange of said angle members being inclined upwardly toward the end of the bolster, and reinforcing ribs between the flanges of said angle members, the edge of said cut-away portions being spaced apart from said last-mentioned flanges adjacent the reinforcing ribs to allow said ribs to extend under said edges.

2. A body bolster of box form having lateral outwardly directed flanges adjacent its top and bottom, the lower part of the side members of the bolster being cut away adjacent each end, angle members having one flange attached to the inner face of the side walls of the bolster adjacent said cut away portions, the other flange of said angle members being inclined upwardly toward the end of the bolster, a body side bearing block secured to the under side of said angle members, and reinforcing ribs between the flanges of said angle members above said bearing.

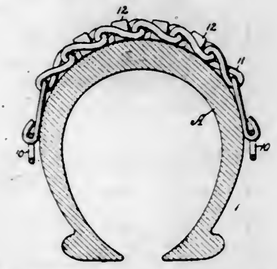
[Claim 3 not printed in the Gazette.]

1,265,402. ATTACHMENT FOR FEED-WATER INJECTORS. CLAUD L. TITUS, Nymore, Minn., assignor of one-fourth to John W. Smith and one-fourth to Harry E. Titus, Bemidji, Minn. Filed Apr. 14, 1916. Serial No. 91,195. (Cl. 210—16.)



A fitting for hose and the like consisting of a coupling body having a bore therethrough and provided at one end with a pipe attaching means, a tubular closed extension formed on the opposite end of the body by a continuation of the metal thereof immediately adjacent the hose, said extension continuing said bore for a distance and there being reduced and perforated at its end to provide a strainer, a beveled seat formed upon the outer face of the extension adjacent the body and the latter having an annular recess formed therein to extend said seat, and a coupling nut threaded on the body and having an inwardly directed flange to coöperate with said beveled seat to clamp a hose end therebetween.

1,265,403. CROSS-CHAIN FOR TIRES. FRANK R. TURNER, Dorchester, Mass. Filed Apr. 4, 1917. Serial No. 159,624. (Cl. 152—14.)

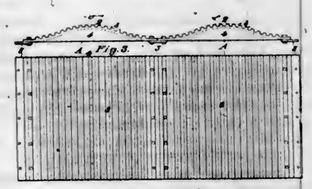


1. In a tire chain, a cross chain including links and blocks in the links between the sides of the latter, the sides of the blocks being united to the said sides of the links to form a homogeneous link unit, the said blocks presenting inner and outer surfaces to jointly form with the links the inner and outer bearing surfaces of the cross chain.

2. As an article of manufacture, a chain link and a hardened metal block in said link between the sides thereof and rigidly united at its opposite sides to the sides of the link to form therewith a homogeneous link unit, said block presenting an inner surface forming with the inner surfaces of the ends of the link the inner contact surface of the link unit.

3. As an article of manufacture, a chain link and a hardened metal block interposed between the sides of the link, each of said sides of the link being oblique to the adjacent side of the block and the respective sides of the link being of opposite obliquity, said block being united at both its side surfaces with the sides of the link forming a unitary homogeneous link unit, and said block presenting inner and outer surfaces in planes sufficiently proximate to the inner and outer surfaces of the link ends to take the wear jointly with said link ends.

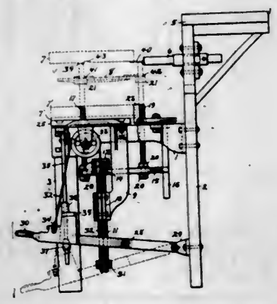
1,265,404. SPEED-ARRESTER FOR VEHICLES. SIEGFRIED F. TUTEUR, Sacramento, Cal. Filed Aug. 13, 1917. Serial No. 185,867. (Cl. 94—1.)



1. As a new article of manufacture, a vehicle speed arrester and danger warning adapted to be superimposed on the finished or normal top surface of a roadway, composed of a curved plate having a series of corrugations extending thereacross, said corrugations being formed so as to provide traction grips and to afford a means of warning by vibrating the vehicle, longitudinal ribs depending from the under face of and located at the sides of the curved plate for supporting the latter by seating on the finished surface of a roadway, said curved plate having its ends arranged to lie horizontally, and means to anchor said plate ends in a roadway or the like.

[Claim 2 not printed in the Gazette.]

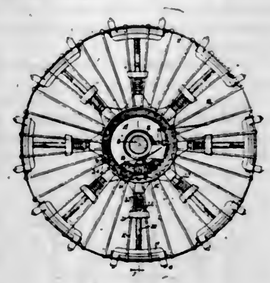
1,265,405. MOLDING-MACHINE. WILLIAM C. WALDA, Fort Wayne, Ind. Filed Jan. 18, 1917. Serial No. 143,014. (Cl. 22—48.)



1. In apparatus of the class described, a supporting frame; a vertically extending shaft mounted centrally in connection with the frame and being vertically movable therein; a spider fixed upon the shaft and having a series of slotted arms; a guide with which the spider engages; a series of parting posts vertically disposed and fixed respectively to the arms of the spider; an engaging member adjustably fixed on each post; and a mechanism for vertically shifting the shaft.

2. In apparatus of the class described, a frame adapted to support the drag of a molder's flask; means movable in the frame and adapted to engage and support the cope of a molder's flask; operating mechanism for elevating said means; and a stop for holding said mechanism at rest at a suitable point to support the cope slightly above the drag while the cope is being rammed.

1,265,406. TRACTION-WHEEL. DAVID ALDON WALLACE, Charles City, Iowa. Filed June 1, 1917. Serial No. 172,183. (Cl. 21—209.)



1. A traction wheel comprising a hub, a rim, shoes at the rim having means adapted to project through the rim, means tending normally to move the shoes toward the hub, a cam mounted revolubly on the hub, meshing gears associated with the cam, and means for frictionally engaging one of the gears whereby said cam is caused to rotate and move said shoes toward the rim whereby the means on the shoes project out of the rim.

2. A traction wheel comprising,—a hub, a rim, shoes at the rim having means adapted to project through the rim, yielding means normally tending to move the shoes from the rim toward the hub, a cam revolubly mounted on the hub and adapted to engage the shoes and secure them against the resistance of the yielding means, whereby the means on the shoes are caused to project through the rim, meshing gears coupled to the cam, and means for offering resistance to the rotation of one of the gears, whereby the cam is actuated.

3. A traction wheel comprising,—a hub, a rim, shoes at the rim having means adapted to project through the rim, means normally tending to move the shoes toward the hub, a cam revolubly mounted on the hub for actuating the shoes, a gear constrained to revolve with the cam, a pinion meshing with said gear, a second gear meshing with said pinion, and a brake mechanism associated with said second gear whereby motion may be imparted to the cam on the hub.

4. A traction wheel comprising,—a hub having flanges at the ends thereof, a rim, spokes securing the flanges of the hub to the rim, shoes at the rim having means adapted to project through the rim, a rod associated with each of the shoes and rising toward the hub, a guide for each of said rods secured to the spokes, a spring associated with the rod and guide normally tending to move the rod toward the hub, a cam revoluble on the hub and adapted to engage the rods and move the same against the resistance of the springs, a gear constrained to revolve with the cam, a pinion revoluble in one of the flanges of the hub and in mesh with the gear, a second gear in mesh with the pinion, and a brake for preventing the rotation of said second gear whereby rotary motion may be imparted to said cam when the wheel is rotated.

5. A traction wheel comprising,—a hub, a rim, shoes at the rim having means adapted to project through the rim, means normally tending to move the shoes from the rim toward the hub, a cam revolubly mounted on the hub for moving the shoes toward the rim whereby the means associated with the shoes are caused to project through the rim, a gear constrained to revolve with the cam, a pinion in mesh with the gear constrained to revolve with the hub of the wheel, a second gear in mesh with the pinion, and a brake associated with the second gear whereby the motion of same may be prevented and thereby a rotary motion may be imparted to the cam on the hub when the wheel is rotated.

1,265,407. METHOD OF SKINNING ANIMALS. VAN A. WALLIN, Grand Rapids, Mich. Filed Nov. 29, 1916. Serial No. 134,056. (Cl. 17—13.)



1. The method of skinning an animal which consists in slitting the hide from a point below the head and above the fore leg to a point below the tail and above the hind leg on the same side.

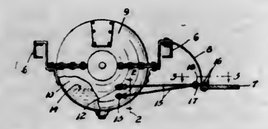
2. The method of skinning an animal which consists in slitting the hide from a point below the head and above the fore leg to a point below the tail and above the hind leg on the same side, and in extending said slitting upwardly from its extremities.

3. The method of skinning an animal which consists in slitting the hide from a point below the head and above the fore leg and thence rearwardly parallelly with the spine.

4. The method of skinning an animal which consists in slitting the hide at the animal's side on the line between the belly portion and the remainder of the hide.

5. The method of skinning an animal which consists in slitting the hide longitudinally of the animal and above the belly portion, whereby the belly portion is not divided.

1,265,408. ATTACHMENT FOR AUTOMOBILES. MERIT E. WILSON, Watertown, S. D. Filed Feb. 1, 1918. Serial No. 214,797. (Cl. 180—54.)



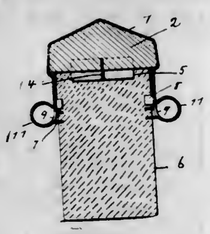
1. A vehicle having an engine and an oil chamber with a pet cock, in combination with an operating rod for opening and closing the pet cock, said rod having a crank, of a spring under strain to close the pet cock and having a slip connection with said crank, whereby the tension of the spring is decreased when the operating rod is moved into a position to open the pet cock.

3. A vehicle having an engine and an oil chamber with upper and lower pet cocks, in combination with a pair of operating rods for independently opening and closing the pet cocks, of a single spring operative on said two rods for independently and yieldingly holding the pet cocks in closed position and for holding the upper pet cock in an open position.

5. A vehicle having an engine and an oil chamber with upper and lower pet cocks, in combination with a pair of operating rods for independently opening and closing the pet cocks, each of said operating rods having a crank, of a single spring connection between said two rods for independently and yieldingly holding the pet cocks in closed position, said spring having slip connections with the cranks, whereby the tension thereof is decreased when either one of the operating rods is moved to an extreme position to open the respective pet cock.

[Claims 2 and 4 not printed in the Gazette.]

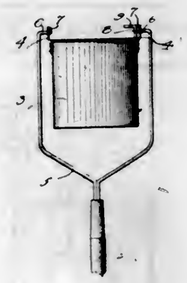
1,265,409. SOAP-HOLDER. JOHN WIRTH, New York, N. Y. Filed June 5, 1917. Serial No. 172,846. (Cl. 45—28.)



A soap holder comprising a bent plate having a pair of coiled resilient jaws, a block secured to said plate between said jaws, longitudinal and transverse blades depending from the block, further longitudinal and transverse blades extending inwardly from the jaws, said last named blades being stamped out of the body of said jaws.

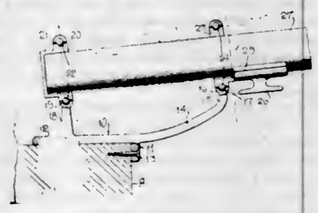
1,265,410. FRUIT-PICKER. ARTHUR R. WOLKEN, Gilman, Iowa. Filed Mar. 11, 1916. Serial No. 83,593. (Cl. 56—99.15.)

A fruit picker, including a receptacle, a pair of oppositely arranged apertured ears secured to the outer face of the receptacle and extending above the upper edge thereof, a shank secured to the inner face of said receptacle and extending above the upper edge thereof, in spaced parallelism with one of said ears, the upper end of said shank being forked and directed inwardly at right angles to provide a fruit detaching member; a handle forked at one end to provide parallel supporting arms, the free ends of said arms being bent and directed inwardly right angles to lie flat against the inner face of the ears, one of said angularly extended portions engaging the



through the apertures in said ears, and then extended at shank of the detaching member at all times to reinforce the latter while in use.

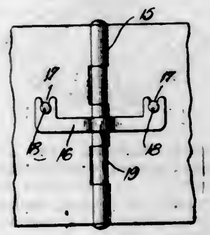
1,265,411. FLAG-POLE SUPPORT. JAPHET B. WOOLSTON, Trenton, N. J. Filed May 12, 1917. Serial No. 168,156. (Cl. 248—37.)



1. A flag pole holder comprising a base having forward and rear bearing rings formed upon their inner faces with raceways, inner forward and rear rings coacting with the outer forward and rear rings and formed upon their outer faces with raceways, and anti-friction elements disposed in said raceways, the inner rings being adapted to engage with a flag pole, the forward inner ring having an extension formed with a cleat.

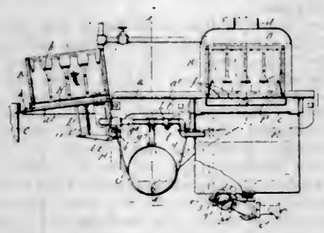
[Claims 2 and 3 not printed in the Gazette.]

1,265,412. COLLAPSIBLE RIM. LLOYD H. WRAY, Reedsville, Pa. Filed Apr. 5, 1916. Serial No. 89,201. (Cl. 152—21.)



A demountable vehicle wheel rim comprising a plurality of rim segments hingedly connected together, a pair of studs arranged one on each side of each hinged connection and projecting inwardly from the rim section, said studs being adapted to coöperate with a tire rim assembling tool while the tire is being mounted on the rim.

1,265,413. WASHING AND STERILIZING APPARATUS. KIRK K. WRIGHT, Buffalo, N. Y., assignor of one-half to Ralph G. Wright, Buffalo, N. Y. Filed Oct. 14, 1915. Serial No. 55,846. (Cl. 141—7.)



1. In an article washing and rinsing apparatus, the combination of a receiving portion for a crate of articles, a washing device which is arranged in proximity to said receiving portion, and from which the articles are placed into the crate on said receiving portion, a support on which a crate may be placed for rinsing and sterilizing the articles contained in the crate, means for spraying water and steam at said articles on said support, means for controlling the flow of water and steam to said articles, and a connection between said receiving portion and said controlling means, whereby water and steam are sprayed at said articles on said support while a crate rests on said receiving portion.

2. In an article washing and rinsing apparatus, the combination of a receiving portion for a crate of articles, a washing device which is arranged in proximity to said receiving portion at one side thereof and from which the articles are placed into the crate on said receiving portion, a support arranged at the other side of said receiving portion on to which a crate may be moved from said receiving portion for rinsing and sterilizing the articles contained in the crate, means for spraying water and steam at said articles on said support, a valve for controlling the flow of water and steam to said articles on said support, and a connection between said receiving portion and said valve, said connection being actuated by a crate when on said receiving portion to cause water and steam to be sprayed at said articles on said support.

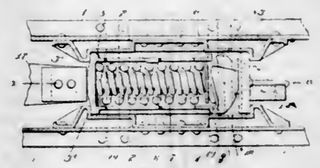
3. The combination of a support for articles to be cleansed comprising a portion on which an article is supported while being cleansed and a receiving portion for a second article which is to be cleansed, connections for supplying the cleansing medium to the first article, a valve for controlling the supply of cleansing medium to the first article, a movable rod located in the path of application of said second article to the receiving portion, and a connection between said rod and said valve whereby said valve is opened when the second article engages said rod.

4. The combination of a support for articles to be cleansed comprising a portion on which an article is supported while being cleansed and a receiving portion for a second article which is to be cleansed, connections for supplying the cleansing medium to the first article, a valve for controlling the supply of cleansing medium to the first article, a rod movably mounted on the receiving portion of said support, means for yieldingly holding said rod above the plane of said receiving portion, and a lever connected at one end with said valve and at the other end with said rod for opening the valve when said second article rests on said rod.

5. In a rinsing and sterilizing apparatus, the combination of means for supporting an article in position to be rinsed and sterilized, means for spraying water and steam on said article, a container for water connected with the spraying means, means for admitting steam to said container, means for admitting water to the container when the supply of steam to the container is cut off, and a vent valve which opens automatically when the steam is shut off to permit water to enter the container and which is closed by steam pressure when steam is admitted to the container, the steam when admitted to said container first forcing the water in the container to the spraying means and then passing to the spraying device.

[Claims 6 to 9 not printed in the Gazette.]

1,265,414. DRAFT-RIGGING FOR RAILWAY-CARS. WINFIELD H. YOST, Montreal, Quebec, Canada. Filed Jan. 7, 1911. Serial No. 601,430. (Cl. 213—64.)



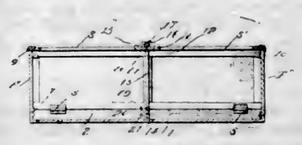
1. A draft rigging having draft-lugs secured at opposite ends of the draft rigging, a member arranged between the draft-lugs and adapted to engage with one set of said lugs, levers arranged between the end of said member and the other set of said lugs and yieldingly held in normal position, and coacting surfaces on adjacent faces of the levers whereby the levers will be held against any movement lengthwise of one another.

2. A draft rigging having a set of draft lugs at both ends of the rigging, a member longitudinally movable between the draft-lugs and adapted to engage with one set of said lugs, superimposed levers arranged between the end of said member and the other set of said draft-lugs, said levers being arranged to rotate about the end of said member, and coacting surfaces on the levers whereby movement of the levers lengthwise of one another is prevented.

3. A draft rigging for cars comprising draft-lugs, a hollow member, levers arranged at one end of the member and adapted to rotate about said end and into the member, spring-mechanism located in said member and bearing against the inner ends of the levers, said levers being provided with abutting surfaces on their correlated faces whereby relative transverse movement is prevented and a follower plate engaging said levers.

[Claims 4 and 5 not printed in the Gazette.]

1,265,415. KNOCKDOWN CRATE. JAMES E. YOUNG, Minneapolis, Kans. Filed Dec. 7, 1916. Serial No. 135,612. (Cl. 217—47.)

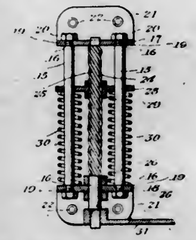


1. In a collapsible crate, a base having side and end flanges, side and end frames hingedly mounted on said flanges, top frames hingedly associated with said end frames, an intermediate partition hingedly mounted on said base, said partition end, top and side frames being collapsible in respective superposed relation, and swingable screw members carried by the partition and engageable with the side frames to lock the crate in collapsed position.

2. In a collapsible crate, a base having side and end flanges, side and end frames hingedly mounted on said flanges, top frames hingedly associated with said end frames, an intermediate partition hingedly mounted on said base, said partition end, top and side frames being collapsible in superposed relation, spaced transversely aligning eye members carried by the partition, and extending upwardly from the upper side thereof when the

same is collapsed, swingable screw members mounted on said eyes and adapted to project through the outer sides of the side frames when in collapsed position, and wing nuts engageable with the different portions of the screw members to clamp the side frames in position to securely lock the crate in collapsed relation.

1,265,416. DOOR-CLOSER. THOMAS C. ANDRE, Bridgeport, Wis. Filed July 24, 1917. Serial No. 182,485. (Cl. 16—96.)



1. In a door closing device, a frame comprising side members and end members detachably connected therewith, said end members having apertured lugs, a spirally flanger rod journaled in the end members, a head block guided on the side members and having a nut engaging the spirally flanged rod, and springs coiled about the side members and abutting terminally on the head block and on one of the end members.

2. In a door closing device, a frame comprising side members and end members detachably connected therewith, said end members having apertured lugs, a spirally flanged rod journaled in the end members, a head block guided on the side members and having a nut engaging the spirally flanged rod, and springs coiled about the side members and abutting terminally on the head block and on one of the end members, the spirally flanged rod being provided with an arm or crank at one end thereof.

3. In a door closing device of the class described, a frame comprising side members consisting of rods that also constitute guide members, said rods having reduced threaded ends, end members engaging the reduced ends of the side members, nuts whereby said end members are detachably secured, a head block slidably engaging the side members between the end members and having a nut, a spirally flanged rod rotatably mounted in the end members and engaging the nut in the head block, said rod having an arm or crank, curved springs mounted on the side members between the head block and one of the end members, said springs being exchangeable from one end of the frame to the other by detaching one of the end members and the head block.

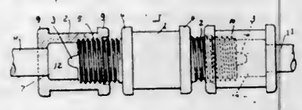
1,265,417. SPECTACLE-LENS MOUNT. LEW ARNTZ, Des Moines, Iowa. Filed Sept. 11, 1916. Serial No. 119,448. (Cl. 88—47.)



1. An improved lens mounting comprising a lens having an elongated slot adjacent to one end and extending inwardly therefrom, a mount shaped to fit against the edge of the lens adjacent to the slot and having side extensions adapted to overlap the lens surrounding said slot and to cover said slot, cement material in said slot and between the extensions on the mount, and a flexible pin extended through said extensions and the mounting, said pin being spaced apart from the glass of the lens whereby the movement of the extensions of the mount over the slot and of the pin through said cement will bend the pin to thereby draw said extensions tightly against the surface of the glass.

2. In an improved lens mounting, a lens having an elongated slot extended inwardly from one end thereof, a lens mount comprising a body portion adapted to fit against the edges of the lens adjacent to the end of said slot, ears extended from either side of said body portion and adapted to abut against the edge of said lens, and a pair of extensions adapted to cover said slot and the adjacent portion of the lens, and a flexible pin extended through said extensions and the slot in position spaced from the glass of the lens whereby pushing the mount and pin to position adjacent to the slot when the latter is filled with plastic cement will bend the pin to thereby draw the extensions together to cause the latter to fit closely against the glass of the lens.

1,265,418. ROD-COUPLING. CARL H. BALDWIN, Fellows, Cal. Filed Nov. 21, 1917. Serial No. 203,258. (Cl. 255—31.)



1. A rod coupling comprising a central member having extensions at its opposite ends, rods for connection adapted to abut the extensions of said coupling member, said ends of the rods and said member having interlocking elements to hold them against turning relatively to each other, and sleeves carried by said rod ends and engaging said extensions.

[Claims 2 to 4 not printed in the Gazette.]

1,265,419. PROCESS OF MANUFACTURING RUBBER BALLS. BERNARD R. BARVA and FERDINAND T. WICHMAN, Fort Wayne, Ind. Filed Jan. 22, 1917. Serial No. 143,601. (Cl. 18—55.)

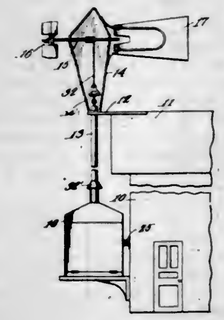
1. The process of manufacturing soft-solid rubber balls consisting of mixing rubber cement with an equal quantity by weight of a mixture of finely divided rubber and fabric, then drying the mixture; then compressing the mixture into a mold and then heating the mold and its contents for approximately one hour.

2. The process of manufacturing soft-solid rubber balls consisting of mixing equal quantities by weight of rubber cement and a finely divided mixture containing 30 to 40 per cent. rubber and 60 to 70 per cent. fabric; then drying the mixture for twenty-four hours; then compressing the mixture into a mold and finally heating the mold and its contents for one hour in a temperature of approximately 270 degrees Fahrenheit.

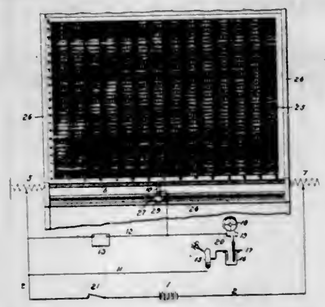
1,265,420. WEATHER-VANE. ALEXANDER R. BIEBER, Swiss, Mo., assignor of one-half to Albert I. Bieber, Swiss, Mo. Filed July 6, 1916. Serial No. 107,831. (Cl. 73—2.)

1. An anemometer comprising a wind wheel, a stationary dial having an opening, a vane, an indicating hand for traversing the dial, driving connections between the vane and the hand, a movable dial, visible through the opening of the stationary dial, driving connections between the wheel and the movable dial, and a third dial visible through the opening of the stationary dial and driven by the first movable dial.

2. An anemometer comprising a vane and a wind wheel, a shaft, driving connections between the shaft and the vane, a shaft carried concentrically on the first shaft, driving connections between the concentric shaft and the wind wheel, a stationary dial having an opening therethrough, a hand carried by the first shaft for traversing the dial, a dial carried by the second shaft and visible through said opening, a lug on the second dial, and an idly mounted dial also visible through the said opening, and a lug on said idly mounted dial for engagement by the first lug to advance idly mounted dial.



1,265,421. DIRECT-READING POTENTIOMETER. WILLIAM T. BOVIE. Boston, Mass. Filed June 19, 1916. Serial No. 104,404. (Cl. 73—51.)



1. An apparatus for measuring the concentration of ions in solution, having a main electrical circuit including a source of electromotive force and a resistance in series therewith, a movable contact coöperating with the resistance, a shunt circuit connecting the main circuit with the movable contact and including the solution to be measured, electrodes in the solution whose difference in potential depends upon the concentration of ions in the solution and a potential indicator, and a scale located in a predetermined position with relation to the resistance and uniformly divided into a plurality of main divisions, each of which is subdivided logarithmically to cause the position of the movable contact relative to the scale to be read in terms of the ionic concentration of the solution.

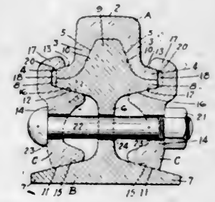
2. An apparatus for measuring the concentration of ions in solution, having a main electrical circuit including a source of electromotive force and a resistance in series therewith, a movable contact coöperating with the resistance, a shunt circuit connecting the main circuit with the movable contact and including the solution to be measured, electrodes in the solution whose difference in potential depends upon the concentration of ions in the solution and a potential indicator, and a scale associated with the resistance and divided into fourteen main divisions, each of which is subdivided logarithmically to cause the position of the contact relative to the scale to be read in terms of the ionic concentration of the solution.

3. An apparatus for measuring the concentration of ions in solution, having a main electrical circuit including a source of electromotive force and a resistance in series therewith, a shunt circuit including a movable contact coöperating with the resistance, the solution to be measured and a pair of electrodes in the solution whose difference in potential depends upon the reaction of the solution, means for determining when the two circuits have the same potential drop, and a scale associated with the resistance and divided uniformly into a plurality of main divisions, each of which is subdivided logarithmically to enable the position of the contact to be read directly in terms of the ionic concentration of the solution.

4. An apparatus for measuring the concentration of ions in solution, having a main electrical circuit including a source of electromotive force and a resistance in series therewith, a shunt circuit including the solution to be measured, a pair of electrodes in the solution whose difference in potential depends upon the concentration of ions in the solution and a movable contact coöperating with the resistance, a scale associated with the resistance and having ordinates arranged to provide a plurality of equal main divisions subdivided logarithmically, and abscissæ arranged to form a plurality of equal divisions.

5. An apparatus for measuring the concentration of ions in solution, having a main electrical circuit including a source of electromotive force and a resistance in series therewith, a shunt circuit including the solution to be measured, a pair of electrodes in the solution whose difference in potential depends upon the concentration of ions in the solution and a movable contact coöperating with the resistance, a scale associated with the resistance and having ordinates arranged to form a plurality of equal divisions subdivided logarithmically, and abscissæ arranged to form a plurality of equal divisions, and means for recording upon the scale the position of the movable contact relative thereto.

1,265,422. COMPOUND RAIL. JAMES K. BOYD, Wilkinsburg, Pa. Filed Mar. 2, 1918. Serial No. 220,025. (Cl. 239—16.)



1. In a compound rail, the combination of a rolled metal head having integral flanges, said flanges forming a longitudinal groove in the bottom surface of the head and having tapering horizontally extending lower edges, an integral rolled metal girder having a web and tapering horizontally extending top and bottom flanges, clamping members for securing the rail head on the girder, said clamping members having sloping surfaces engaging with oppositely sloping surfaces on the tapering flanges of the head and the top and bottom flanges of the girder in securing the rail head to the girder, and means for fastening the clamping members in holding engagement with the flanges.

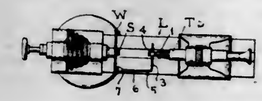
4. In a compound rail, the combination of a rolled metal head having integral flanges, said flanges forming a longitudinal groove in the bottom surface of the head and having tapering horizontally extending lower edges, an integral rolled metal girder having a web and tapering horizontally extending top and bottom flanges, a ridge on said girder above the top flanges thereof, said ridge having converging sides fitting the inclined side surfaces of the groove in said rail head, clamping members for securing the rail head on the girder, said clamping members having

sloping surfaces engaging with oppositely sloping surfaces on the tapering flanges of the head and the top and bottom flanges of the girder in securing the rail head to the girder, and means for fastening the clamping members in holding engagement with the flanges.

6. In a compound rail, the combination of an integrally formed rolled steel girder, said girder having a web and tapering oppositely extending top and bottom flanges with a longitudinal ridge above the top flanges of the girder, said ridge having upwardly converging sides, an integrally formed rolled steel head on top of said girder, said head having a longitudinal groove on the bottom thereof of the same contour as said ridge, and outwardly extending tapering flanges at the lower edges of the head, a series of clip fastenings for securing the head to the girder, said clips having a double taper groove in one side engaging with the oppositely inclined surfaces of the flanges on said head and top flanges of the girder, and having a foot engaging the inclined upper surface of the lower flange of said girder, registering holes in said clips and girder and bolts extending through said registering holes for fastening said clips to the girder in holding engagement with the flanges on the head and girder.

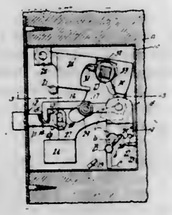
[Claims 2, 3, 5, and 7 to 12 not printed in the Gazette.]

1,265,423. TRUING ATTACHMENT FOR LATHES. FRED W. BURNETT, Shinnston, W. Va. Filed Apr. 17, 1917. Serial No. 162,791. (Cl. 33—169.)



An attachment of the class described comprising a chuck tapered toward one end and adapted to be inserted in the tail stock of a lathe, said chuck having a bore extending transversely therethrough, an L-shaped indicator having its short arm in the form of a round rod passed through the bore in said chuck, a set screw intersecting said bore and adapted to clampingly engage said indicator arm and hold it in adjusted position relatively to the chuck, the long arm of said indicator being flattened and thinned to render it flexible and yieldable when the free end thereof is engaged with an obstruction.

1,265,424. LOCK. WILLIAM NIXON BUTLER, Prairie Grove, Ark. Filed Feb. 6, 1918. Serial No. 215,568. (Cl. 70—51.)

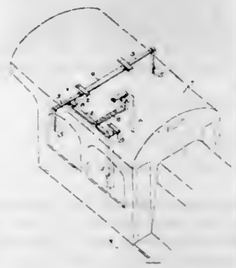


1. In a lock of the class described, a latch bolt, a pivoted weighted element engaging said latch bolt and normally tending to throw the same to the projected position, means to rock said element from the knob spindle of the lock, a locking lever pivoted between its ends and adapted at one end thereof to engage the latch bolt in the projected position of the latter to lock the same against withdrawal, a weight pivotally hung on the opposite arm of the locking lever, said weight being adapted to be engaged by a key inserted in the lock, and means to hold the pivoted weight of the locking lever against gravitational movement to thereby maintain the locked position of the latch bolt.

2. In a lock of the class described, a latch bolt, a pivoted weighted element having a slot and pin connection with the latch bolt and adapted to be actuated by the knob spindle of the lock to withdraw or project the latch bolt, the latch bolt having a recess therein, a locking lever pivoted between its ends, a hook on one arm of the lever adapted to engage the latch bolt in the recess thereof, a weight pivotally hung on the opposite arm of said lever and having recesses in the under side adapted to receive the bit of a door key, and a fixed rest pin with which the pivoted weight on the locking lever is adapted to be engaged and on which said weight may rest in the locking position of said lever.

3. A lock of the class described including a casing having a keyhole, a knob spindle, a pivoted weighted element adapted to be rocked by the knob spindle and adapted to actuate the latch bolt, said latch bolt having a vertical recess therein, a locking lever pivoted between its ends in the casing, one arm of the lever having a depending hook adapted to enter said recess of the latch bolt, a weight pivoted on the opposite arm of the lever and tending to maintain said lever out of engagement with the latch bolt, the lower end of said weight on the locking lever being adapted to be engaged by a key inserted in the lock for throwing the lever to the locking position, means to hold said pivoted weight against gravitational movement to thereby maintain the locking lever in locking position, a fixed pin in the casing in position for said pivoted weight to rest thereon when the lever is in the locking position, and fixed wards in the casing at angles to each other and positioned at opposite sides of the keyhole.

1,265,425. SIGNAL DEVICE. ROBERT CALLAGHAN, Philadelphia, Pa. Filed June 27, 1916. Serial No. 106,173. (Cl. 246—59.)



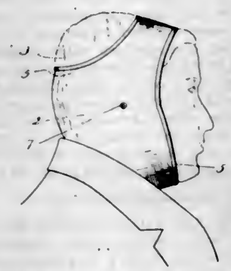
2. The combination of a vehicle cab; a member for striking an engineer in the cab and normally held in a set position; means for releasing said member; with a visual signal member normally maintained in a set position by said first member and releasable therewith.

3. The combination with a vehicle cab of a pivotally mounted bar constituting a visual signal; a member normally holding said bar in a set position and mounted to strike the engineer when released; means for normally holding said member in a set position; and a device external to the cab for actuating said means to release said bar and member.

5. The combination in a vehicle cab of a member mounted to strike the engineer when released and including two oppositely projecting portions; means for maintaining said member in a set position including a structure capable of engaging either of said projecting portions; with a device for actuating said means to cause said structure to disengage and thereby release said member under predetermined conditions.

[Claims 1, 4, and 6 not printed in the Gazette.]

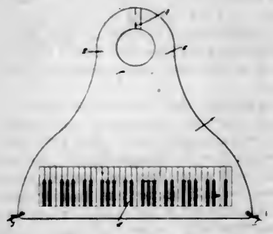
1,265,426. HEAD-COVERING. ABRAHAM CHERNOV, HYMAN STEIN, and ELIAS RUBEN, New Haven, Conn. Filed May 15, 1917. Serial No. 168,900. (Cl. 2—120.)



1. An article of manufacture of the character described, shaped to fit the human head and composed of sections of material, each section having three extended ends, two ends of one section being permanently united to corresponding ends of the other section forming retaining bands fitting and engaging the top and back of the head of the wearer, and the other end of each section being provided with means for detachably fastening both ends together under the chin of the wearer.

2. A head covering, useful as an auxiliary covering to a hat or cap, composed of two sections of material, each section having three extended ends, two of which are united together to form retaining bands engaging the back and top of the head of the wearer, the other or free ends being padded and covering parts of the head left exposed.

1,265,427. APRON. EMIL R. U. CIVITA, Pittsburg, Cal. Filed Jan. 19, 1918. Serial No. 212,660. (Cl. 35—12.)

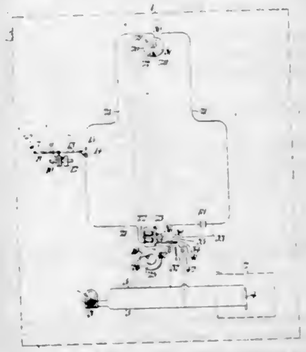


1. An apron having a neck-receiving opening in one end portion and the representation of a keyboard on its other end portion.

2. An apron having a neck receiving opening in one end portion, and the representation of a keyboard on its other end portion, and means for fastening the apron in spread position over the keyboard of an instrument to conceal the same from the user.

1,265,428. ELECTRIC SIGNALING CIRCUIT-CLOSING ALARM. RALPH SHERWOOD CLAYTON, Philadelphia, Pa., assignor of one-half to John Van Nest McHose, Philadelphia, Pa. Filed Jan. 28, 1915. Serial No. 4,948. (Cl. 177—314.)

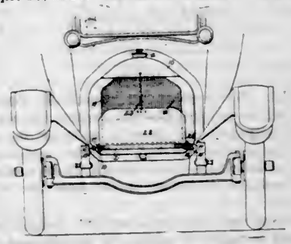
1. In an electric signaling circuit closing alarm for an automobile; the combination with an internal combustion engine having an electric ignition circuit and a clutch lever whereby said engine may, normally, be connected to operate the automobile; of an electric circuit including an electric generator, an audible alarm and a key controlled switch; of a switch cooperatively connected with said clutch lever, so constructed and arranged that, when said key controlled switch is closed, movement of said clutch lever to operate the automobile closes the circuit which sounds the alarm; a shunt of said circuit including a switch constructed and arranged to be tripped by the operation of said audible alarm to establish a circuit including said generator and said alarm, whereby the latter is continuously operated until said trip switch is manually reopened; and switch means cooperatively connected with said trip switch, constructed and arranged to automatically bridge and short circuit said ignition circuit; whereby, movement of said clutch lever, when said key controlled switch is closed, automatically sounds an audible alarm, establishes a circuit by which said alarm is continuously caused to sound, whether the clutch lever is restored to its original position or not, and renders said motor inoperative, so that the movement of said clutch lever is rendered ineffective.



3. The combination with an internal combustion engine having an electric ignition circuit and a lever whereby said engine may, normally, be caused to operate; of an electric circuit including an electric generator, an audible alarm and a manually controlled switch; of a switch cooperatively connected with said lever, so constructed and arranged that, when said manually controlled switch is closed, movement of said lever to operate the engine closes the circuit which sounds the alarm; a shunt of said circuit including a switch constructed and arranged to be tripped by the operation of said audible alarm to establish a circuit including said generator and said alarm, whereby the latter is continuously operated until said trip switch is manually reopened; and switch means cooperatively connected with said trip switch, constructed and arranged to automatically bridge and short circuit said ignition circuit; whereby, movement of said lever, when said key controlled switch is closed, automatically sounds an audible alarm, establishes a circuit by which said alarm is continuously caused to sound and render said engine inoperative, so that the movement of said lever is rendered ineffective.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,265,429. COVER FOR RADIATORS. FRANK MARIAN COCKRELL and JAMES MERCUR ROCKWELL, Liberty, Mo. Filed Apr. 10, 1917. Serial No. 161,037. (Cl. 257—132.)



A protective cover for radiators, the same being formed with an opening, and a curtain and curtain roller sup-

ported below the opening so that the curtain may have movement in an upward direction over said opening, a pullcord attached to the free edge of the curtain, guide means for the cord adapted to guide the same through a radiator and a motor hood, said guide means including a pulley, and means to mount the pulley on a radiator near the top, and a flap on the cover near the top forming a pocket into which the edge of the curtain may extend, the said flap being adapted to cover the said pulley when the latter is mounted in position.

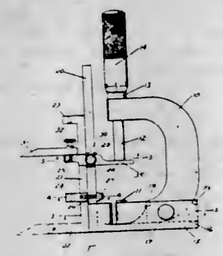
1,265,430. EMBROIDERY-MACHINE. WILLIAM COHEN, Bayonne, N. J. Filed Jan. 19, 1918. Serial No. 212,611. (Cl. 112—40.)



1. A hand embroidery machine of the character described comprising a frame square in cross section, provided with a bracket near the top and a cut-away portion at the bottom, a foot connected with said bottom, means on said bracket for supporting a plurality of spools of thread, a square reciprocating sleeve slidingly fitted into said frame, a needle carrying member connected with said sleeve, said carrying member being provided with needles for receiving thread from spools on said bracket, a feeding and tension member, means for actuating said feeding and tension member and the sleeve to cause the proper operation of said needles, and means connecting said sleeve with said last mentioned means whereby the tension means may operate before the sleeve.

[Claims 2 and 3 not printed in the Gazette.]

1,265,431. HEIGHT-GAGE ATTACHMENT FOR MICROMETER-CALIPERS. HENRY O. COSTELLO, Bridgeport, Conn. Filed June 29, 1917. Serial No. 177,824. (Cl. 33—170.)



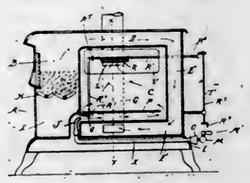
2. A device of the character described, comprising a base, a standard secured thereto, means for attaching a micrometer caliper to the base, a slide on the standard having lugs, a scriber attached to one of said lugs, and a stop on the slide which coöperates with the spindle of a micrometer caliper attached to the base to adjust the scriber.

3. A device of the character described, comprising a base provided with a standard, means for attaching a micrometer caliper to the base, a slide on the standard, a scriber attached to the slide, a stop on the slide which coöperates with the spindle of a micrometer caliper attached to the base, and means for locking the slide with the scriber at an adjustment determined by the adjustment of the micrometer spindle.

5. A device of the character described, comprising a base having a socket adapted to receive the frame of a micrometer caliper, and provided with a standard, means for securing the frame of a micrometer caliper to the base, a slide on the spindle having a stop adapted to coöperate with the spindle of a micrometer caliper, a scriber adjustably secured to the slide and means for securing the slide to the standard after the spindle of the caliper has been adjusted and the stop placed in contact therewith.

[Claims 1, 4, 6, and 7 not printed in the Gazette.]

1,265,432. COMBINED COAL AND GAS RANGE. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Detroit Stove Works, Detroit, Mich., a Corporation of Michigan. Filed Aug. 26, 1915. Serial No. 47,414. (Cl. 126—36.)



1. In a cook stove, the combination with an oven, of an ash-pit and superposed fire-box at one side thereof and flues extending from said fire-box over the top, down at one side beneath the bottom and to the rear of said oven, a gas burner having a portion arranged between said ash-pit and oven and discharging laterally through an aperture in the oven wall into the lower portion thereof, a removable deflector or false bottom arranged above the level of discharge of said burner, and co-acting dampers for respectively controlling said aperture and a discharge opening from the top of the oven and a common means actuating said dampers.

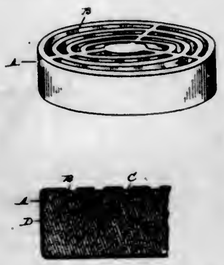
2. In a cook stove, the combination with an oven, a fire-box and flues for the products of combustion extending from said fire-box around said oven, of a gas burner arranged adjacent to a flueless portion of the oven wall and directed into said oven, dampers controlling the opening into said oven for said burner and an exit opening, a common actuating connection for said dampers by which both may be simultaneously opened or closed, a valve for the gas burner, and a stop on said actuating mechanism for preventing the opening of said valve when said dampers are closed.

3. In a cook stove, the combination with an oven, a fire-box and flues for the products of combustion extending from said fire-box around said oven, of a gas burner arranged to discharge into the oven adjacent the bottom thereof, a discharge flue in communication with said flues rising adjacent the oven at the rear thereof, and offset rearwardly to form a recess in the oven rear wall, an outlet being formed in said recess from the oven to said flue, a damper controlling said outlet arranged in said recess.

4. In a cook stove, the combination with an oven, a fire-box and flues for the products of combustion extending from said fire-box around the oven, a gas burner adapted to discharge into the oven, dampers respectively controlling the opening into said oven for said burner and an exit opening therefrom, a common actuating connection for said dampers by which both may be simultaneously opened or closed, a valve for the gas burner, and a stop on said actuating mechanism for preventing the opening of said valve when said dampers are closed.

5. In a cook stove, the combination with an oven, of a fire-box and flues for the products of combustion extending from said fire-box around said oven, means for heating said oven by the introduction of hot gases thereinto, a discharge flue rising adjacent the oven at the rear thereof and offset rearwardly to form a recess in the oven, an outlet being formed in said recess from said oven to the flue, and a damper controlling said outlet arranged in said recess.

1,265,433. ELECTRIC HEATING UNIT. RANSOM W. DAVENPORT, Detroit, Mich., assignor to Detroit Stove Works, Detroit, Mich., a Corporation of Michigan. Filed Jan. 24, 1916. Serial No. 74,006. (Cl. 219—63.)



1. In an electric heating unit, a resistor-support, comprising a non-homogeneous body having a loosely-compacted porous interior and a relatively thin hard and dense exterior coating.

2. In an electric heating unit, a resistor-support, comprising a grooved body of a non-homogeneous and porous character, the grooved surfaces being coated with a dense and impervious material.

3. In an electric heating unit, a unit resistor support formed of an electric and thermal insulating body of a porous nature and provided with a dense relatively impervious facing adhering to said insulating body.

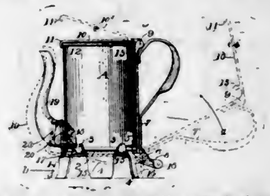
1,265,434. CISTERN-CLEANER. LEWIS F. DAVIS, Bowie, Tex. Filed May 25, 1917. Serial No. 170,903. (Cl. 210—3.)



A cistern cleaner including a casing, a valve in the bottom thereof, a rod connected to the top of the casing for lowering the casing into the cistern, a vertical tube carried by the top of the casing and communicating with the interior thereof, a tightly fitting stopper in the tube, a vertical rod extending longitudinally through the stopper and secured therewithin, a flexible element connected to the upper end of the rod for lifting the stopper from the tube, and a stop disk carried by the lower end of the rod and disposed within the casing and spaced below the upper wall of the casing whereby when the said stopper is entirely removed from the tube said disk will engage said upper wall and prevent the loss of the stopper.

1,265,435. CAN CONTAINER AND SERVER. THOMAS J. DAVIS, San Francisco, Cal. Filed July 10, 1916. Serial No. 108,532. (Cl. 65—61.)

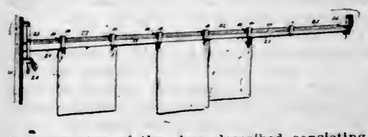
5. A can container and server comprising a base section adapted to receive a can, a handle pivotally mounted on one side of the base, an extending member formed on the lower end of the handle, a sliding bar carried by the base pivotally attached at one end to the extending member, a can perforating member secured to the opposite end of



the sliding bar, a cross-bar pivotally attached to the upper end of the handle, a perforating member secured to said bar and a latch formed on the bar engageable with the upper edge of the can.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

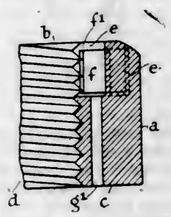
1,265,436. CLOTHES-LINE AND LOCKING-PIN THEREFOR. WILLIAM R. DERR and SAMUEL SMITH, New York, N. Y. Filed Aug. 21, 1917. Serial No. 187,491. (Cl. 68—3.)



5. An apparatus of the class described consisting of a clothes-line, a plurality of clothes-pins supported in proximity to said line and engaging the same, said clothes-pins consisting of hinged jaws, members engaging said jaws preventing the opening of the same, a connecting member extending between said holding members and adapted to move the same into and out of operative position, holding the jaws in closed position, or allowing them to open, respectively, and a lock associated with said connecting member, holding the same against movement.

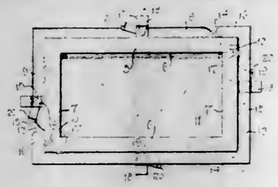
[Claims 1 to 4 not printed in the Gazette.]

1,265,437. LOCK-NUT. ARTHUR HENRY DEVLYN, Trundle, New South Wales, Australia. Filed May 29, 1917. Serial No. 171,680. (Cl. 151—25.)



A lock-nut comprising a nut having a screw-threaded bore and a laterally extending recess disposed outwardly of and leading into one side of said bore, said recess having a reduced outer extension, said nut having a longitudinal screw-threaded opening disposed outwardly of and near the bore of the nut and leading into said recess at one side thereof at a point inwardly of and spaced from the outer end wall of said recess; a fin having its inner portion arranged within said recess and its outer portion disposed in the reduced outer extension of the recess; and a screw-threaded deflector arranged within the longitudinal screw-threaded opening and having one end tapered to contact with the side of the fin at a point spaced from said end wall of the recess to bend the fin upon such end wall and thereby retain the same against accidental displacement and shift the same to the inactive position.

1,265,438. MOLD. JOSEPH J. DOLYAK, Youngstown, Ohio. Filed Mar. 2, 1918. Serial No. 220,084. (Cl. 25—119.)

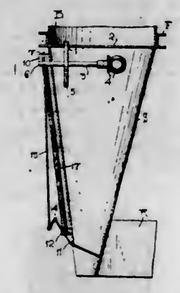


1. In a mold, two mold sections each having one side and one end wall, clamping members adapted for engagement exteriorly with the side and end walls of the respective sections adjacent their relatively opposite edges and having terminal arms to extend upon the walls of the other mold section, and wedges insertible between said clamping members and the mold walls to clamp the walls together at their abutting ends.

5. In a mold, a supporting base, mold walls adapted to be assembled upon said base, each of said walls having a longitudinally extending rib formed on its outer face, clamping bars having angularly disposed terminal lugs for engagement beneath the marginal edges of the base and over the ribs on the mold walls respectively, and wedge elements adapted to be driven between the terminal lugs on the upper ends of the clamping bars and said ribs whereby the mold walls are clamped upon the base and held against shifting movement relative thereto.

[Claims 2 to 4 not printed in the Gazette.]

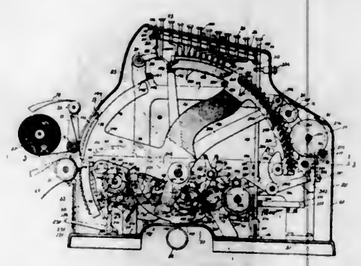
1,265,439. COTTON-PLANTER. ROBERT DUTCHER, Anadarko, Okla. Filed June 23, 1917. Serial No. 176,618. (Cl. 111—51.)



1. In combination with a planter including a seed box and a spout co-acting therewith and a rotating feed member carried by the spout and extending within the box; a swinging valve co-acting with the discharge end of the spout, a substantially horizontally disposed arm pivotally engaged with the spout, a rod operatively engaged with the arm and with the valve, a retractile member co-acting with the arm for normally maintaining the valve in closed position, and a trip rotating with the feed member and intermittently contacting with the arm for throwing the valve into an open position.

2. In combination with a planter including a seed box and a spout co-acting therewith and a rotating feed member carried by the spout and extending within the box; a swinging valve co-acting with the discharge end of the spout, said valve being provided with a tail substantially in the form of an inverted V, a substantially horizontally disposed arm extending in a direction transverse of the swinging valve and having its outer end portion pivotally engaged with the spout, a rod operatively engaged with the inner end portion of the arm and the free end portion of the tail piece of the valve, a retractile member co-acting with the arm for normally maintaining the valve in closed position, and a trip rotating with the feed member and intermittently contacting with the arm for throwing the valve into an open position.

1,265,440. CALCULATING-MACHINE. WILLIAM J. FABIAN, Evanston, Ill. Filed May 21, 1915. Serial No. 29,517. (Cl. 235—60.)



1. In a calculating machine, in combination, an oscillatable number positioning member, a set of numbers positioned thereby, an accumulator, driving means positively operable upon the number positioning member to move it through variable distances, other driving means operable upon the accumulator for moving it to a definite position and connection between the number positioning member and the accumulator operable to communicate motion from either one of said parts to the other.

6. In a calculating machine, in combination, a movable type selecting member, a fixed stop located adjacent the path of movement of said type selecting member, an actuating member movable toward the stop, and a set of studs carried by the said type selecting member and movable thereon to enter the path of movement of the actuating member at different distances from the stop.

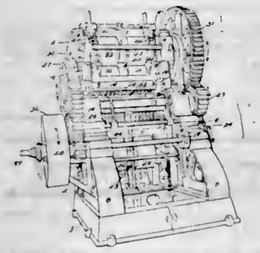
8. In a calculating machine, in combination, a row of oscillatable gear members, a set of number characters moved by the oscillations of each of said gear members, unitary driving means for advancing all of the said gear members simultaneously but in variable amounts, means for restoring the said gear members successively from one end of the row, an accumulator wheel rotated by each of the said gear members upon its return movement only and carrying mechanism acting between adjacent accumulator wheels.

9. In a calculating machine, in combination, a pair of type characters, a pair of movable members arranged side by side and each controlling the printing from one of the said type characters, a leaf carried by one of the movable members and extending in front of the other but spaced apart therefrom, a movable filler block normally occupying the space between the last mentioned one of the said movable members and the leaf and means for withdrawing the filler block.

11. In a calculating machine, in combination, an oscillating number wheel, an accumulator wheel, driving means for advancing the number wheel, means for returning the number wheel, connection between said wheels operable only to communicate motion from the number wheel to the accumulator wheel during the return movement of the number wheel and from the accumulator wheel to the number wheel for advancing the number wheel, driving means operable upon the accumulator wheel for turning the same in the direction for advancing the number wheel, and means for releasing the said connection between the wheels operable to permit the return movement of the number wheel without turning the accumulator wheel.

[Claims 2 to 5, 7, 10, and 12 to 30 not printed in the Gazette.]

1,265,441. BRIQUET-MACHINE. EMIL FERNHOLTZ, Los Angeles, Cal. Filed Apr. 18, 1912. Serial No. 691,757. (Cl. 25—90.)



1. In a machine of the character set forth, the combination with a mold, of pressure means to produce a briquet in the mold under full pressure, and means to discharge the briquet from the mold under a reduced pressure of both dies.

2. In a machine of the character set forth, the combination with a mold, of pressure means to produce a briquet in the mold under full pressure, means to reduce the pressure on the briquet in the mold, and means to gradually discharge air from the briquet while the briquet is under such reduced pressure.

3. A machine for making briquets comprising a mold, a support for the mold, top and bottom rams to work in the mold, slidably mounted holders for the top and bottom rams respectively, shafts mounted in the ram holders, bearing rollers mounted on the shafts, cams operating against the rollers, means to operate the cams, and spacer arms movable with one of said shafts at the ends thereof toward the ends of the other shaft and normally extending to within an eighth of an inch, more or less, of the other of said shafts when the rams are operating evenly, and adapted to intercept the depressed end of the roller shaft to restore the roller to a position parallel with the other roller and prevent cramping under full pressure.

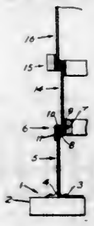
4. A briqueting machine comprising a mold; a top ram and a bottom ram to work in the mold; a top pressure cam operatably connected to the top ram and having a pressure-increasing face; and a bottom pressure cam operatably connected to the bottom ram and having a pressure face, lower level supporting face, lifting face, upper level pressure face and lift-out face; said pressure-increasing face being in commission and active to force down the top ram while the bottom ram is supported by the lower level supporting face to cause top pressure, and said pressure-increasing face continuing in commission while the lifting face of the bottom cam acts to raise the bottom ram to cause top and bottom pressure, and said pressure-increasing face continuing in commission while the pressure face of the bottom cam acts to raise the bottom ram to cause maximum pressure, and said lift-out face of the bottom cam being active to raise the bottom ram while the pressure-increasing face of the top cam is out of commission to cause reduction in pressure, said top ram being raised above the level of the mold by pressure of the bottom ram.

5. A briquet machine comprising a mold, top and bottom rams for the mold, a weight superposed on the top rams, and means to simultaneously operate the top and bottom rams for an interval of time to produce maximum pressure and then to operate only the bottom rams for another interval of time to raise the top rams together with the molded material and the superposed weight to effect ejective movement.

1,265,442. PORTABLE AND KNOCKDOWN STORAGE-BIN. MAXWELL B. FITCH, Corona, Cal. Filed Nov. 21, 1917. Serial No. 203,255. (Cl. 189—3.)

1. An interlocking binding bar Z-shaped in cross-section and having hooks extending from its ends.

2. A series of interlocking binding bars, each bar being Z-shaped in cross-section and having interlocking hooks extending from its ends, so that the bars may be hooked together to form a continuous band.



3. A series of wall plates fitting together end to end to form a tier, and a series of interlocking binding bars fitting the upper edge of the tier of plates to form a continuous band.

4. A series of wall plates fitting together end to end to form a tier, and a series of interlocking binding bars fitting together end to end and fitting the upper edge of the tier of plates to form a continuous band and hold the plates together and adapted to receive another tier of plates.

[Claims 5 to 7 not printed in the Gazette.]

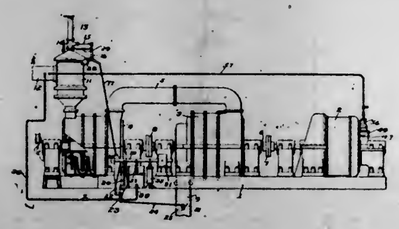
1,265,443. CONTROL MECHANISM FOR EXCAVATING-MACHINES. WILLIAM H. GABE, Iowa Falls, Iowa. Filed June 25, 1914. Serial No. 847,339. (Cl. 192—1.)

1. In a device of the class described, a main shaft, a pair of spaced drums rotatably mounted thereon, means for operatively connecting said drums with the shaft, a lever operatively connected with each of the last described means, a bar pivoted at each end to one of said levers, a pair of spaced parallel bars extended laterally from the intermediate portion of said first described bar, the parts being so disposed that the operator may move the first described bar longitudinally in either direction by placing himself between the last two described bars and pushing against one of them whereby the drums may be selectively rendered operative or both drums may be rendered inoperative.

3. In a device of the class described, a main shaft, means for imparting rotation thereto, a pair of driving devices rotatably mounted upon the shaft, drums on said shaft, a clutch device adapted to operatively connect each drum with the shaft, a lever adapted to move each clutch device into and out of operative engagement, the levers being so arranged that moving them in similar directions will render one clutch in operative and the other operative and being so arranged that in one position both clutches will be inoperative, a bar extended between the ends of said levers, and means operatively connected with said bar whereby an operator may move the bar to position to render either clutch operative and to render both clutches inoperative by swaying his body from side to side without moving the feet to thereby actuate said means.

[Claim 2 not printed in the Gazette.]

1,265,444. REGULATING APPARATUS FOR AIR-COMPRESSORS. PAUL E. GOOD, Riverton, N. J., assignor to Southwark Foundry & Machine Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 17, 1914. Serial No. 812,705. (Cl. 230—24.)



1. The combination with a compressor having an inlet and an outlet conduit, of a throttle valve in the fluid circuit of said compressor; a relief valve in the outlet conduit; and a single device actuated by fluid under pressure from said outlet conduit for opening the relief valve and closing the throttle valve when the pressure of said fluid exceeds a predetermined amount.

4. The combination of an engine; a compressor driven thereby; a governor for the engine actuated by fluid under pressure from the compressor and including means for regulating the speed of the engine to cause a relatively slight rise in the pressure of the fluid delivered by the compressor as the quantity of such fluid is diminished; a valve in the fluid circuit of the compressor; a device for causing throttling of said valve as the pressure of the fluid delivered by the compressor increases beyond a predetermined amount; and means also actuated by said device, for permitting escape of fluid under pressure from the outlet of the compressor when the flow through said outlet ceases.

7. The combination of a compressor having an inlet and an outlet conduit; a valve in the fluid circuit of the compressor; a cylinder connected to receive fluid under pressure from the outlet conduit; a piston in said cylinder connected to actuate said valve; a relief valve connected to the outlet conduit of the compressor; and means connecting said relief valve with the piston, the parts of said apparatus being adjusted to cause the relief valve to be opened after the first valve has been moved to a throttling position.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,265,445. BALL-AND-SOCKET JOINT. JOSEPH J. HAGEN, St. Louis, Mo. Filed May 19, 1917. Serial No. 169,639. (Cl. 74—17.)



1. A joint comprising a socket, a ball member seated in said socket, a screw threaded stem extending from said ball member, a nut fitted to said stem, and a yieldable nut locking member interposed between and fitted to said nut and socket so as to lock the nut and at the same time force the ball member onto its seat in the socket, said nut locking member being interlocked with the socket.

4. A ball and socket joint comprising a socket, a ball member seated in said socket, a screw threaded member adjustably secured to said ball member, and a locking device for preventing said screw threaded member from turning about its axis, said locking device being interlocked with said socket.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,446. MINE-CAR STOP. WILLIAM HARTMAN, Mascoutah, Ill. Filed Mar. 8, 1918. Serial No. 221,158. (Cl. 104—223.)



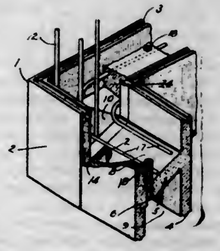
1. A mine car stop, comprising a rock shaft arranged longitudinally of and between the rails of the car track, and a plurality of members on said shaft that are adapted to cooperate with the mine car.

5. A mine car stopping and releasing mechanism, comprising a rock shaft arranged longitudinally of and between the track rails, a member splined onto said rock shaft that normally occupies a vertical or upright position so as to lie in the path of the axle of the car, and means whereby said shaft is rocked at certain times so as to move said member into an inclined position out of the path of the car axle.

7. A mine car stopping and releasing mechanism, comprising a rock shaft mounted in bearings between the track rails, a member splined to said shaft and adapted to cooperate with the car to stop the same when the shaft is rocked in one direction, and a spring interposed between said member and an adjacent bearing.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,265,447. BUILDING-BLOCK. RAYMOND M. HAVENS, Kansas City, Mo. Filed Aug. 26, 1916. Serial No. 117,050. (Cl. 72—30.)

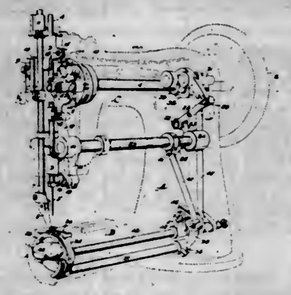


1. The combination in a building wall, of blocks, each having a transverse web dividing its interior into upper and lower chambers and one having end abutment against the side of the other; the said side being cut away above the web of the abutting block to provide communication between the upper chambers of said blocks, the web of the abutted block being cut away at its end to provide a vertical opening in the end of the block, and concrete in the said end opening and in the upper chambers of the abutting blocks forming a homogeneous vertical and horizontal key, substantially as set forth.

2. The combination in a building wall, of blocks, each having a transverse web dividing its interior into upper and lower chambers throughout the length of the blocks, one of said blocks being closed and the other open at its end, the open end block abutting against the side of the closed end block and the side of the latter being cut away above the plane of the web of the former to provide communication between the upper chambers of said blocks, and a concrete key located in said upper chambers and forming a homogeneous bond between the blocks.

3. The combination in a building wall, of blocks, each having a transverse web, one of the blocks having a closed end and the other an open end abutting against the side of the first, the web of the abutted block being cut away adjacent its closed end, a partition closing the lower chamber of the abutted block below the end of the web, the abutted side of the closed end block being cut away above the web of the abutting block to provide communication between the upper chambers of said blocks, and concrete located in the vertical and upper horizontal chambers of said blocks to form a homogeneous key between the abutting blocks and the blocks of adjacent courses.

1,265,448. FEEDING MECHANISM FOR SEWING-MACHINES. PARK A. HEER, Saybrook, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed June 23, 1914. Serial No. 846,727. (Cl. 112—8.)



1. In a sewing machine, the combination with a frame including a work-support, of a feeding implement, a movable support for said feeding implement, means for moving the feeding implement toward and from the work-support, pivotally connected plural-armed rockers arranged in substantially parallel relation with the movable support and directly connected thereto, and actuating means connected with one of said rockers, whereby the rockers are caused to act simultaneously and with like effect to impart bodily movements to said movable support.

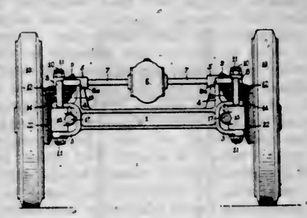
5. In a feeding mechanism for sewing machines, in combination, a feeding implement and means for actuating the same, a presser-member adapted to contact with the work, a guard-member for the feeding implement adapted to partake of its movements, and means controlled by the presser-member, for insuring the maintenance of the guard-member permanently free from engagement with the work.

8. In feeding mechanism for sewing machines, the combination with a movable frame, of a reciprocatory needle-bar mounted in said frame and carrying a needle, a second bar mounted in said frame and carrying a guard-foot surrounding the needle, a spring tending to press the guard-foot toward the work, a presser-bar, a stop carried by said presser-bar and adapted to maintain the needle-guard in elevated position above the work, a connection between the needle-bar and the guard-bar whereby the latter is caused to partake of the reciprocatory movements of the needle-bar, and means for imparting bodily lateral movements to the movable frame.

[Claims 2 to 4, 6, 7, and 9 to 11 not printed in the Gazette.]

1,265,449. AUTOMOBILE DRIVING-GEAR. JOHN HETTRICH, Lincoln, Nebr. Filed Nov. 30, 1917. Serial No. 204,562. (Cl. 74—101.)

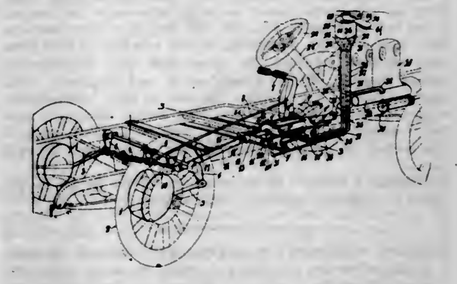
1. Driving gear of the specified class, comprising a fixed axle having a pair of terminal arms; a knuckle member pivoted between the arms, and having a cylindrical portion with a peripheral flange; a stub axle projecting coaxially from the knuckle member; a bearing wheel on the stub axle; a gear ring affixed coaxially to the wheel and having an internal annular flange coacting with the peripheral flange; and means for rotating the gear ring.



2. Driving gear of the specified class, comprising a fixed axle having at each end a pair of spaced arms; a knuckle member pivoted between each pair of arms, and having a cylindrical portion with an outstanding annular flange; a stub axle extending coaxially from the knuckle member; a bearing wheel on the stub axle; a gear ring affixed coaxially to the bearing wheel and having an internal annular flange spaced from the wheel; a plurality of antifriction balls between the flanges; and gearing for rotating the gear ring.

3. In a driving gear of the specified class, an integrally formed axle comprising at each end of the axle a pair of spaced arms with vertically alined journal bearings in the arms of each pair; a pair of spaced posts with horizontally alined bearings in the posts; and an intermediate framework connecting each post with the adjacent arm and having a journal bearing formed in the framework.

1,265,450. FLUID-PRESSURE BRAKE SYSTEM. JAMES A. HICKS, Cincinnati, Ohio. Filed Mar. 27, 1916. Serial No. 86,931. (Cl. 188—3.)



4. In combination with a brake, an element connected to said brake to operate said brake in one direction or the other, means to supply fluid under pressure to one side of said element to operate said brake in one direction, means to discontinue supply of fluid to said side of said element, and to confine the fluid thus supplied to said side of said element, means to apply some of said confined fluid to the other side of said element to operate said brake in the other direction, and means to permit escape of some of said fluid from the one side of said element to the atmosphere while fluid is being supplied to said side, while it is otherwise confined thereto, or while it is being admitted to said other side of said element.

9. In combination with a brake, means for manually operating said brake, a rod operatively connecting this

means to said brake, and means flexibly connected to said brake for operating said brake by power.

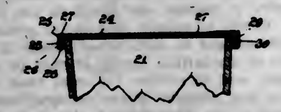
18. In combination with a brake, a cylinder, a plunger in said cylinder, an operative connection from said plunger to said brake, a fluid conducting connection to one end of said cylinder to apply fluid under pressure to said plunger to apply said brake, supply means to supply fluid under pressure through said fluid-conducting connection, and a controller to control application and release of said brake, interposed in said connection, comprising an auxiliary valve to relieve said pressure in said end of said cylinder, and means for locking said controller and said auxiliary valve to prevent release of said brake.

25. In combination with a brake, fluid-pressure-operated means for applying or releasing said brake, a fluid-conducting connection to said fluid-pressure-operated means, supply means to supply fluid under pressure to said fluid-pressure-operated means through said fluid-conducting connection, a controller interposed in said connection, comprising a part adapted to be brought into position to confine said fluid to said fluid-pressure-operated means, locking means to lock said part in its fluid-confining position, a replenishing connection to said fluid-pressure-operated means to replenish said fluid thus confined, a replenishing valve interposed in and normally closing said replenishing connection, and an operative connection between said replenishing valve and said locking means whereby said replenishing valve is opened when said locking means locks said part.

50. In combination with a brake and fluid-pressure-operated means for operating said brake, a controller comprising a casing and rotatable means in said casing, said rotatable means and said casing having means whereby the brake is applied or released accordingly as the rotatable means is turned in one direction or the other, and whereby said brake has its application maintained when the rotatable means is held in one position, a sector in said casing at one side of said rotatable means having a recessed part, a bolt mounted in said rotatable means to engage with said recessed part of said sector, a rotatable lock-member mounted in said rotatable means, a disk rotatably mounted on said lock-member adjacent to said bolt, a pin fixed in said disk away from the center thereof, said bolt having a slot open at one side only and shorter than the stroke said pin has when said disk is rotated, said pin projecting into this slot, another disk fixed on said lock-member to rotate therewith and having a curved slot which the pin of the other disk projects into, and of length permitting a half rotation of this fixed disk without rotating the loose disk, and key-released means holding the lock-member in one position, from which position a complete rotation of said lock-member causes a half rotation of said disk and a sliding of said bolt radially outwardly to hold it in said middle part of the sector, or radially inwardly out of this part of said sector.

[Claims 1 to 3, 5 to 8, 10 to 17, 19 to 24, 26 to 49, and 51 to 55 not printed in the Gazette.]

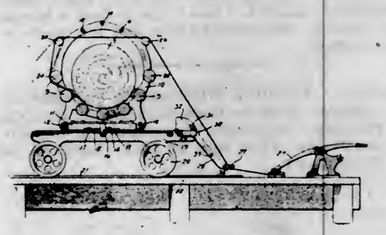
1,265,451. RECEPTACLE-CLOSURE. ALFRED INGRAM, Brooklyn, N. Y. Filed Mar. 19, 1914, Serial No. 825,751. Renewed Feb. 6, 1918. Serial No. 215,732. (Cl. 215—83.)



1. A receptacle closure including in combination with the receptacle, a cover, forming an angle with the receptacle wall, a plastic annulus adapted to contact both the receptacle wall and the cover in such angle, and a metallic contracting portion arranged with relation to said cover and annulus to be forcibly circumferentially contracted toward the receptacle wall, and when so contracted to compress the annulus flatwise between the metallic portion and receptacle whereby the plastic material is compressed against the wall and cover to seal the receptacle.

[Claim 2 not printed in the Gazette.]

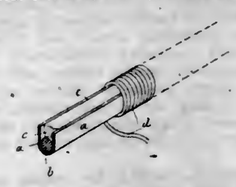
1,265,452. CLOTH-LAYING MACHINE. MOSES ISAACS, New York, N. Y. Filed Nov. 6, 1917. Serial No. 200,540. (Cl. 270—81.)



3. A machine as characterized comprising a cradle for holding a bolt of cloth, said cradle embodying a series of four or more rollers arranged in trough-like form and disposed in parallel relation, the uppermost of said rollers being disposed adjacent a horizontal plane coincident with the center of said bolt, and a plurality of guide rods over which the cloth composing said bolt is drawn when being delivered from said cradle, said guide rods being arranged to exert a lifting strain on said bolt when said cloth is drawn therefrom.

[Claims 1 and 2 not printed in the Gazette.]

1,265,453. METAL ELECTRODE USED IN ELECTRIC-ARC DEPOSITION OF METALS. ERNEST HENRY JONES, Canonbury, London, England. Filed Sept. 29, 1917. Serial No. 193,944. (Cl. 219—12.)



1. A metal electrode for use in electric arc soldering and electrically depositing metals, comprising a channel section metal case in which is contained all the necessary and proper constituents to insure the required mixture in the fused metal, and a suitable fusible covering, substantially as set forth.

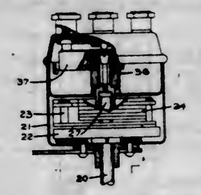
8. A metal electrode according to claim 1, for depositing "high speed" steel, comprising a mild steel channel section case, a cast iron rod secured in the case, a suitable proportion of compounded materials to form the "high speed" alloy placed in the case, and a suitable fusible covering, substantially as set forth.

[Claim 2 not printed in the Gazette.]

1,265,454. IGNITION SYSTEM. CHARLES F. KETTERING and WILLIAM A. CHRYST, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company, a Corporation of Ohio. Filed Apr. 3, 1916. Serial No. 88,546. (Cl. 123—166.)

1. In a device of the character described, the combination with a driving shaft; of an ignition system, including a cam carrying element connected to said driving shaft, said element having a slotted shank portion; a cam adapted to fit over said shank portion; and means for expanding said slotted shank into contact with the cam to maintain said cam in adjusted position.

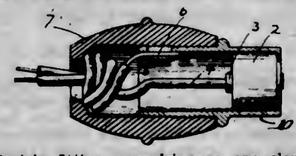
2. In a device of the character described, the combination with a driving shaft; of an ignition system, including a cam carrying element connected to said driving shaft, said element having a slotted shank portion; a cam adapted to fit over said shank portion; a distributer rotor carried by said cam; and means for expanding the slotted shank into contact with said cam to adjustably maintain the cam and rotor in adjusted position.



3. In a device of the character described, the combination with a driving shaft; of an ignition system, including a cam carrying element connected to the driving shaft; said element having an expansible shank portion; a cam adapted to fit over said shank portion; and means operable relative to the expansible portion for locking said cam in adjusted position.

4. In a device of the character described, the combination with a driving shaft; of an ignition system, including a cam carrying element connected to the driving shaft; said element having an expansible shank portion; a cam adapted to fit over said shank portion; and a locking element having a wedge-shaped head adapted to be forced into said shank portion to expand the same and thereby lock the cam in adjusted position.

1,265,455. ELECTRIC FITTING. GEORGE C. KNAUFF, Chicago, Ill., assignor to Edmunds & Jones Corporation, Detroit, Mich., a Corporation of New York. Filed Dec. 9, 1915. Serial No. 65,958. (Cl. 173—328.)

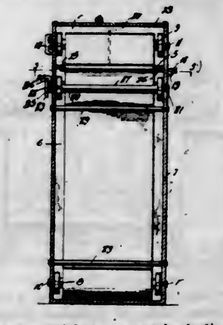


An electric fitting comprising as one element an insulating body having a groove longitudinally disposed thereon and as another element a metal shell housing at least a portion of said body and having an indentation integral with said shell entering said groove, a contact member carried by said body, and a pair of wires connected respectively to the contact member and the indented portion of the shell, the walls of the said groove being adapted to engage the said indentation to prevent rotational movement of the insulating body within the shell.

1,265,456. CAMERA. GEORGE PETER KOCH, New Brunswick, N. J. Filed June 28, 1916. Serial No. 106,413. (Cl. 242—71.)

1. The combination with a camera including an unwinding spool, and a removable winding spool for supporting a strip of film therebetween, of means for severing an exposed section of film which has been wound around the winding spool, thereby permitting the winding spool containing the exposed section to be removed from the camera, and an intermediate spool upon which the severed end of the unexposed section may be wound, and a slotted partition between said unwinding and winding spools.

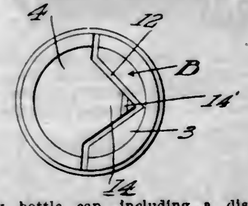
3. The combination with a camera including a casing, a partition therein having an opening and defining a major compartment, and an end compartment within the casing, an unwinding spool in the end of the major compartment opposite the end compartment, a winding spool within the end compartment, for supporting a strip of film which passes through the partition opening, means for severing a section of exposed film which has been wound upon the winding spool, and an intermediate slotted spool through which the film passes and located adjacent the partition within the major compartment for supporting the severed end of the unexposed film section, and for winding the film thereupon to expose the remainder.



5. The combination with a camera including an unwinding spool and a removable winding spool for supporting a film therebetween, a slotted partition between said spools, of an intermediate slotted spool through which the film passes, a reciprocable key mounted in the casing of the camera and splined to the intermediate spool, an enlargement on the casing having a recess, a head portion on the key adapted to be seated in the recess to lock the spool against rotation, said key being releasable to permit rotation, and means for severing an exposed section of the film which has been wound upon the winding spool, the intermediate spool supporting the severed end of the unexposed section and adapted to wind said end thereabout.

[Claims 2 and 4 not printed in the Gazette.]

1,265,457. MILK-BOTTLE CAP. FLOYD LANE, Falconer, N. Y. Filed Mar. 28, 1917. Serial No. 157,987. (Cl. 215—14.)



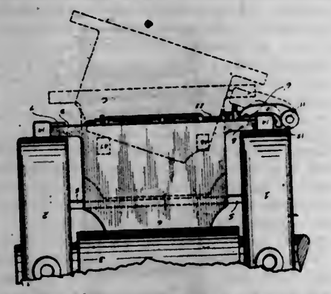
1. A milk bottle cap, including a disk comprising hingedly connected segmental sections, a segmental plate secured on one of the segmental sections and having its arcuate edge bent upwardly and defining, with the arcuate edge of the segmental section, a groove, and a tongue extending from the other edge of the segmental plate, a segmental plate secured to the other segmental section and having its arcuate edge bent upwardly and defining, with the arcuate edge of the segmental section, a groove, the said plate having a recess for the reception of the tongue, and a packing ring seated in the groove.

2. A milk bottle cap, including a disk comprising hingedly connected segmental sections of unequal areas, a dished disk comprising sections secured to the segmental sections, the upwardly extending periphery of the dished disk defining with the periphery of the first disk a groove, and a packing ring seated in the groove.

1,265,458. FORE-PLATE CARRIAGE. WILLIAM W. LEACH, Mansfield, Ohio, assignor of one-half to Albert I. Davey, Mansfield, Ohio. Filed July 25, 1917. Serial No. 182,604. (Cl. 80—43.)

29. In a carriage for rolling mill fore-plates, a frame provided with two parallel portions, a pair of lifting

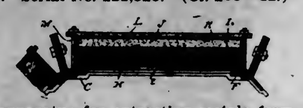
lever arms mounted upon one of said portions, a lifting lever arm of a different length mounted on the other portion, means to operate said lever lifting arms simultaneously for a free rearward or forward throw, and means to cushion and permit additional throw of the arms and operating mechanism in either direction by the actuation of the cushioning means.



41. In a rolling mill, a fore-plate, a pivoted frame, a plurality of lever arms of different lengths mounted on said frame, means for connecting said arms for simultaneous movement, means to impart a forward or rearward throw to said lever arms to engage, lift and impart a limited sliding movement to the fore-plate, and means to lock the frame to the rolling mill, and means to change the relation of one of the lever arms with respect to the others.

[Claims 1 to 28, 30 to 40, 42, and 43 not printed in the Gazette.]

1,265,459. APPARATUS FOR EXTRACTING METAL FROM ORES. JAMES N. LEWIS, Detroit, Mich., assignor to William L. Wilson, trustee, Detroit, Mich. Filed Oct. 28, 1916, Serial No. 128,186. Renewed Mar. 8, 1918. Serial No. 221,326. (Cl. 266—12.)



1. An apparatus for extracting metals from ores, comprising a receptacle, and a combined filtering and precipitating unit comprising separable filtering and precipitating materials, said unit forming a portion of the wall of said receptacle.

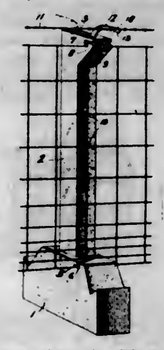
5. An apparatus for extracting metals from ores, comprising a container or receptacle for receiving a charge of ore from the solvent liquid, and a combined filtering and precipitating unit forming a removable portion of the wall of said container, said unit consisting of an inner perforated guard or screen, metal intercepting and holding material adjacent thereto, filtrous material adjacent to said intercepting material and precipitating material adjacent to said filtrous material.

7. In an apparatus for extracting metals from ores, a combined filtering and precipitating unit comprising filtrous material, a porous container for the precipitating material arranged in proximity thereto, and means for separably clamping said porous container and filtrous material against each other.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

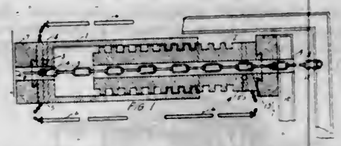
1,265,460. REINFORCED-CEMENT FENCE-POST AND ANCHOR-BLOCK FOR WIRE FENCES. ROBERT EMMETT LEWIS, Moultrie, Ga. Filed Nov. 27, 1916. Serial No. 133,664. (Cl. 256—49.)

1. In a fence, a base member formed with a slot to receive a strand of the fencing, a post rising from the base member and formed with an overhanging head, said head having a rearwardly and downwardly extending slot to receive a horizontal strand of the fencing and the face of the overhanging head formed with a vertical slot to receive a vertical strand of the fencing to permit the fencing to lie relatively close to the face of the post.



2. In a fence, a post formed with a base member and a head member, the base and head members each formed with slots for receiving, respectively, upper and lower strands of the fencing, and an anchor member affixed to the head member of the post to receive a supplemental wire strand, said anchor being formed with a notch within the strand receiving slot in the post head to receive the top strand of the fencing.

1,265,461. CHAIN JACK. JOHN W. LIPPINCOTT, Little Rock, Ark., assignor of one-half to Carrie A. Lippincott, Little Rock, Ark. Filed Mar. 11, 1918. Serial No. 221,787. (Cl. 105—15.)

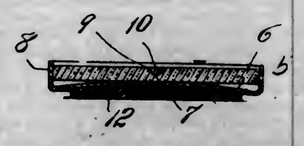


1. The combination in a chain jack, of a tubular outer shell internally threaded to engage or be engaged by an externally threaded tubular inner shell, both heads provided with means to engage a chain longitudinally positioned therein, both heads provided with a multiplicity of actuating means, and a retaining pin recessed head rotatably connected to both of said shells.

3. The combination in a freight car equipped with chains anchored to either end thereof and longitudinally disposed therein to engage compacting and stabilizing appliances, of jacks adapted to engage said chains and when actuated act upon said appliances to compact matter between said appliance and an end of said car, and a recess provided at each end of said jack to afford easy insertion of a retaining pin through a link of said chain to retain and stabilize said matter while in transit.

[Claim 2 not printed in the Gazette.]

1,265,462. VENTILATED VULCANIZING-PAN. ARTHUR B. LOW, Denver, Colo. Filed Apr. 27, 1916. Serial No. 93,894. (Cl. 18—18.)



1. A vulcanizer comprising a pan having a wall projecting upwardly from the outer edge of its bottom and containing fuel in solid form, said fuel directly engaging the inner surface of the bottom of the pan and in close proximity to the outer wall of the pan, the outer surface of the pan bottom being equipped with a layer of vulcanizable material, the pan being perforated to allow direct entrance of air to the fuel chamber.

4. The vulcanizing means herein described, comprising a pan, a layer of combustible material, and a layer of vulcanizable material, the two layers being arranged on opposite sides of the pan, said pan perforated near its bottom to permit air to enter near the bottom of the fuel.

[Claims 2 and 3 not printed in the Gazette.]

1,265,463. FORMALDEHYDE COMPOSITION AND THE PREPARATION THEREOF. DANIEL M. MCCARTHY, Brooklyn, N. Y. Filed Dec. 17, 1915. Serial No. 67,381. (Cl. 167—3.)

1. A new composition of matter consisting of a 5% solution of agar-agar mixed with a 40% solution of formaldehyde, in equal proportions.

2. A new composition of matter consisting of a 5% solution of vegetable substance containing gelose, and a 40% solution of formaldehyde, in equal proportions.

1,265,464. PHOTOGRAPHIC PAPER. ALFRED C. MCCLOSKEY, Philadelphia, Pa., assignor, by mesne assignments, of one-half to himself, one-fourth to A. Elton Davis, and one-fourth to Frederick J. Geiger, Philadelphia, Pa. Filed May 25, 1916. Serial No. 99,712. (Cl. 95—8.)



1. Photographic paper provided on each side with a ferro under coat and on one side with an outer coat containing ferric salts and on the other side with an outer coat containing ferrous salts.

2. Photographic paper provided on one side with a ferro under coat and an outer sensitizing coat containing ferric salts.

3. Photographic paper provided on one side with a ferro under coat and an outer protective coat containing ferrous salts.

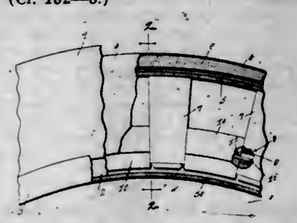
1,265,465. COMBINATION VALVE-CAP AND TOOL. WILLIAM PERRY MCCOMB, Conroe, Tex. Filed Nov. 13, 1916. Serial No. 131,113. (Cl. 152—12.)



1. As a new article of manufacture, an attachment for valve stem caps comprising a sheet of resilient material rolled into an open-sided sleeve of substantially the same diameter as a cap and adapted to be sprung open for engagement around the cap for constituting holding means therefor during rotation of the cap when removing a valve, said slit being slit a plurality of times and the slitted portions bent inwardly to provide stem gripping fingers.

2. In a device of the class described, the combination with a valve stem cap, a sleeve surrounding the same and having a series of yieldable fingers arranged to extend upwardly from the cap for frictional engagement with a valve stem when removing a valve therefrom by means of the cap, the material of the sleeve at one end thereof being slightly flanged inwardly and also having a groove spun therein intermediate the length of the sleeve for holding the sleeve against relative displacement with respect to the cap.

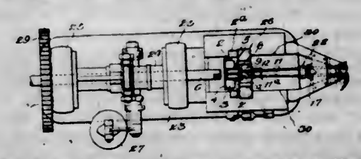
1,265,466. TIRE-FILLER. LEMUEL MCKINNON, Salt Lake City, Utah. Filed Aug. 27, 1917. Serial No. 188,417. (Cl. 152—5.)



1. In a wheel of the class described, a rim; a casing carried thereby; a filler in the casing and comprising a transversely arched tread band; circumferentially spaced resilient blocks carried by the band and having openings which are elongated in a direction parallel to the median plane of the wheel; reinforcing thimbles mounted in the openings and conforming internally to the shape thereof; spacers interposed between the blocks and supported upon their inner sides by the longitudinal edges of the casing; and a circumferential securing member extended through the thimbles and having movement therein parallel to the median plane of the wheel, the securing members passing through the spacers.

2. In a device of the class described, a rim; a casing carried thereby; a filler in the casing and comprising a transversely arched tread band; circumferentially spaced resilient blocks carried by the band; spacers disposed between the blocks, the spacers having relatively inclined sides, engaged, respectively, with the edges of the band and with the casing; and a tightening device passing through the blocks and the spacers.

1,265,467. SCREW-THREADING APPARATUS. FRANK P. MCMILLAN, Pittsburgh, Pa., assignor to National Tube Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 4, 1917. Serial No. 205,377. (Cl. 10—89.)



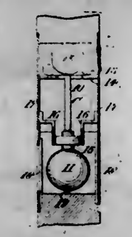
1. Screw threading apparatus comprising a die having bits or chasers and provided with means for removing the chips or cuttings formed by the bits or chasers in the thread cutting operations, said means reciprocating with and relative to said bits and chasers.

7. In screw threading apparatus, the combination of a carriage mounted to move toward and away from the work and carrying a die having bits of chasers, and means for removing the chips or cuttings, said means including a wiper supported upon a stationary part of the apparatus, in alinement with the space between adjacent bits of chasers, and in position to wipe out chips or cuttings from between the chasers during the retraction of the carriage, and adapted to move with and relative to said carriage in the operation of the apparatus.

10. In screw threading apparatus, the combination of a carriage movable toward and away from the work, a die carried by the carriage and provided with a plurality of bits or chasers, the carriage and the die having openings alined with the space between the cutting ends of the bits or chasers, and means for removing chips or cuttings from the bits or chasers, said means including a sectional wiper supported by a stationary part of the apparatus, in alinement with the said openings, and in position to be introduced therein during the retraction of the carriage, and said wiper having grooves to receive the cutting ends of the bits or chasers.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,265,468. LEVEL. CHRISTEN TORBEN MADSEN, Oakland, Cal. Filed Sept. 18, 1917. Serial No. 192,011. (Cl. 33—216.)



1. A level consisting of a chambered stock, a pendulum rod having a weight at its lower end, a ball bearing at its upper end, guides upon each side of the rod, and a roller journaled upon the rod and adapted to travel between the guides.

2. In a level of the character described, a pendulum rod with anti-frictional bearings at the upper end, a guide roller journaled upon the rod and a weight at the lower end of the rod and having a spur in line with the rod, and a coacting indicating means with which the spur coincides when a level is obtained.

1,265,469. HOOD FOR AUTOMOBILES. JOHN SAMUEL MALLORY, Henderson, Ky. Filed Oct. 17, 1917. Serial No. 197,048. (Cl. 74—56.)



1. A motor hood having in a side thereof a main inlet opening and a second exhaust opening rearward of the first opening, a series of shutters pivoted to the hood at each of said openings to turn about vertical axes, and means to variously adjust the angular positions of the respective shutters to cause the forward series of said shutters to take in air and the rear series at the opposite angle to the front shutters to exhaust said air, both series of shutters being movable from said intake and exhaust positions, to form closures of the respective openings, or to dispose the front shutters at an angle to deflect rain while permitting ventilation, the rear shutters furthermore being movable to reverse their angular positions to correspond with the air-intake adjustment of the front shutters for taking air into both openings and causing it to pass through the rear of the hood for conducting off the radiated heat from parts in the rear of the hood.

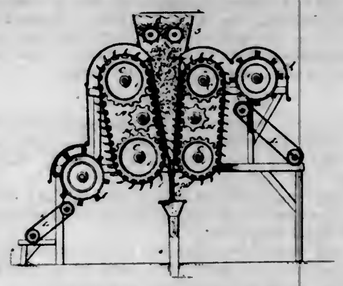
5. A motor hood having an air inlet opening at a side thereof, a series of shutters pivoted in said opening, and actuating means for said shutters and adapted to move the same to either of reverse positions or to an intermediate position to close the opening.

[Claims 2 to 4 not printed in the Gazette.]

1,265,470. COTTON-GIN. MARK W. MARSDEN, Philadelphia, Pa. Filed May 20, 1915, Serial No. 29,305. Renewed Nov. 1, 1917. Serial No. 199,799. (Cl. 13—9.)

1. In a machine of the type recited, the combination of a pair of aprons equipped with opposed ginning devices, grids coöperating with the aprons, and a valved seed outlet operatively disposed with relation to the grids.

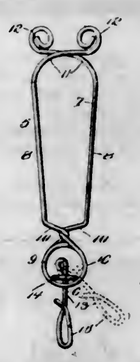
7. In a machine of the type recited, the combination of substantially vertically disposed confronting traveling aprons equipped with ginning teeth, and a grid for each apron extending from turn to turn thereof and whereof the arrangement is such that the opposing teeth extend through one grid and are centered upon the other.



9. In a machine of the type recited, the combination of substantially vertically disposed coöperating aprons equipped with ginning devices, stripping mechanism extending from turn to turn of the aprons, and suction flues coöperating with the aprons.

[Claims 2 to 6, 8, and 10 not printed in the Gazette.]

1,265,471. PAINT-BUCKET HOOK. HOWARD MARTIN, Aberdeen, Ohio. Filed Dec. 20, 1916. Serial No. 138,033. (Cl. 248—24.)



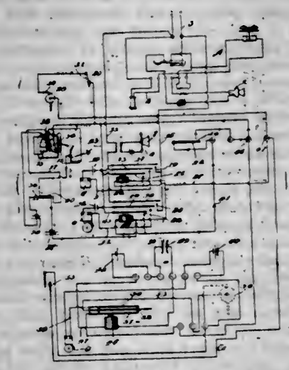
1. A hook adaptable for supporting paint buckets upon the rungs of a ladder, comprising a main hook provided with spaced arms terminally provided with inwardly curved portions, a coiled swivel formed at one end of said arms, spurs formed on the free end of said inwardly curved portion and bent at an angle to permit of the spread or contraction of the spurs, and a bucket supporting element connected with the coiled swivel of the hook.

[Claim 2 not printed in the Gazette.]

1,265,472. COMBINED BURGLAR OR FIRE ALARM. CARRY T. MATTHEWS, Kennebec, N. C. Filed July 14, 1916. Serial No. 109,353. (Cl. 179—5.)

1. In combination, an indicator, a signal, a circuit for said signal, an electric magnet for closing said circuit of the signal, a normally open circuit for said magnet, and a circuit closer adapted to close said circuit of said magnet, a second magnet having a circuit adapted to be closed by a manually actuated switch, said second magnet adapted when energized to disconnect said circuit closer from the signal circuit magnet and to connect said circuit closer to said indicator.

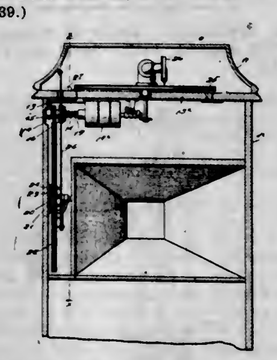
4. In a building protective system, a circuit including a circuit closer adapted to be actuated by an intruder, signal means adapted to be actuated by closure of said circuit, a circuit including a heated-actuated circuit closer, and signal means adapted to be actuated by closure of the second mentioned circuit; electro-mechanical means for prolonging a closure of said circuits, automatic means for opening said circuits after a closure of a predetermined



duration, and automatic means for rendering such opening permanent; a line circuit, transmitting means for said line circuit, and means in each signal circuit operable by closure of the particular circuit to enable the last-mentioned means to transmit the signal corresponding to the particular circuit.

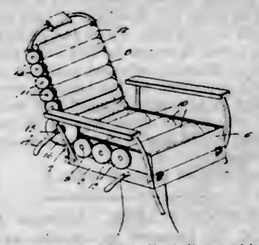
[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,265,473. WINDING MECHANISM FOR SPRING-MOTORS. SAMUEL W. MEREDITH and LEOPOLD BAUMANN, Sr., Philadelphia, Pa., and JAMES BLACK, Thorofare, N. J. Filed Feb. 15, 1917. Serial No. 148,875. (Cl. 185—39.)



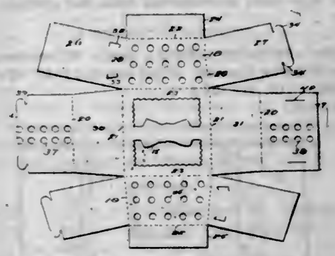
In an apparatus of the character described, the combination with the cabinet of a sound reproducing machine, of a lid pivoted thereto, a removable bed secured to the upper portion of the cabinet, a spring motor carried by the bed, said spring motor being provided with a winding shaft, a bracket secured to said bed, a gear carried by said bracket, a friction clutch connecting said gear with the winding shaft of said spring motor, a second gear pivotally connected to the inner side of said cabinet and normally engaging the first named gear, the first named gear being free to disengage the second named gear upon the removal of said bed, and means for imparting rotary motion in a common direction to the last named gear upon the upward and downward swinging movement of said lid for winding the spring of said spring motor, said means comprising a ratchet-wheel centrally connected to the latter named gear, a pair of arms pivoted centrally to said ratchet-wheel and having their outer ends normally disposed upon opposite sides of a vertical plane passed longitudinally through the axis of said ratchet, a second pair of arms connected to the first named pair of arms and to said lid whereby an oscillatory movement may be imparted to said arms upon the upward and downward movement of said lid, a spring pressed pawl carried by each of the arms of the first named pair, on of said pawls being arranged to engage the teeth of said ratchet-wheel upon the upward movement of said lid while the other of said lugs is adapted to engage the teeth of said ratchet wheel upon the downward movement of said lid.

1,265,474. SEAT AND BACK FOR BARBER-CHAIRS. MILOS NIKOLE MIKULIC, Kansas City, Mo. Filed Aug. 22, 1916. Serial No. 116,285. (Cl. 155—37.)



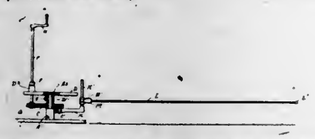
In a device of a class described in combination a pair of rectangular frames, means for supporting one of said frames in horizontal position, means for connecting the other frame at an angle with respect to the first frame, a series of rollers journaled within each frame so that the uppermost points in their peripheries project outwardly with respect to the outer edges of said frames, said rollers being also in contact with one another, a series of smaller gears carried by the rollers of the angularly positioned frame, being longer than the rollers of the other frame and having gears larger than the first named gear, the members of each set of gears adapted to intermesh, a gear larger than any of the first named gears positioned between the first and second named frames and meshing with one gear of each set, and an operating handle secured to the last named gear.

1,265,475. FRUIT-CARTON. LOUIS A. MILLER, Fresno, Cal., assignor to Schmidt Lithograph Company, San Francisco, Cal., a Corporation of California. Filed Feb. 29, 1916. Serial No. 81,192. (Cl. 229—35.)



A display carton comprising an apertured central top for displaying the fruit or contents, folding flaps coöperative to form the sides and ends of the box, inner bottom members forming between their edges a space, and outside bottom flaps having longitudinal rows of vent apertures and adapted to be laid over the inner members, the vents disposed to register with the space between the inner members, said outer flaps having respective interlocking means permitting relative longitudinal adjustment thereof for varying the area of the vent opening when said flaps are laid in overlapping positions.

1,265,476. PLAYGROUND DEVICE. WALTER C. MILLS, Union City, Ind. Filed Feb. 19, 1917. Serial No. 149,652. (Cl. 46—69.)

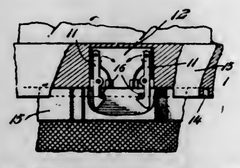


1. A play ground device, comprising a base member, a carrier member journaled for rotation on said base member, a deck member supported by said frame, an actuating device supported by the deck member, and power transmitting connections between the said actuating device and the said carrier member.

3. A play ground device, comprising a base member, a gear wheel journaled for rotation on said base member, an arm secured to said gear wheel and having an upright stud thereon, a rod fastened to said stud and capable of being secured at different adjusted positions on said stud, a deck member supported by the base member, a vertical shaft journaled in the deck member and having a crank on its upper end, a gear wheel secured on the lower end of said vertical shaft and which meshes with the first named gear wheel.

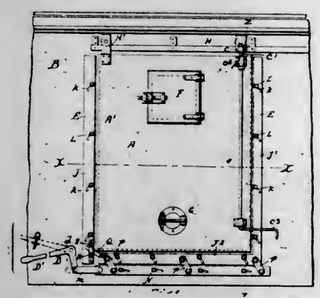
[Claim 2 not printed in the Gazette.]

1,265,477. WINDOW-SCREEN. MAURICE H. MILMAN, Brooklyn, N. Y., assignor of one-half to Eli Heller, Wilkes-Barre, Pa. Filed Mar. 10, 1917. Serial No. 153,921. (Cl. 156—14.)



The herein described improvement in window screens consisting of the upper rail of the screen formed with a recess, a pair of transverse pins arranged in said recess, the meeting edge of the sash formed with a recess in line with the recess of the screen rail, a pair of spring-actuated latches mounted in the recess of the sash and adapted to engage the pair of pins, handles for operating said latches, said lower rail of the sash being formed with a groove to fit snugly over the upper rail of the screen to make a close joint between the sash and screen.

1,265,478. BOX-CAR DOOR. JOHN MONTGOMERY, Toronto, Ontario, Canada. Filed Oct. 22, 1917. Serial No. 197,823. (Cl. 20—23.)



1. In a box car, the combination of a door frame, a door, a track upon which said door travels, means for forcing the door inwardly into position when closed, side plates attached to the outer surface of said frame and adapted to move inwardly over the joint of the door and frame when the door is forced inward, a bottom plate also adapted to move inwardly over the joint of the door and the sill when the door is forced inward, and means for compelling the side plates to move inwardly simultaneously with the bottom plate moving upwardly, said door being adapted to pass over one of said side plates when in its outward position, substantially as described.

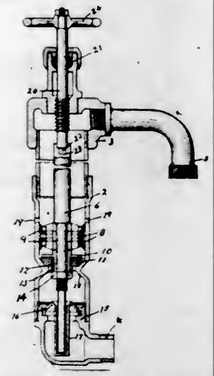
2. In combination with a door frame, a door traveling upon a track to open and close, means for moving the door laterally into a closed position, side plates attached to to outer surface of said frame adapted for covering the crack between the door and the jamb, a bottom plate attached to the outer surface of said frame adapted for closing the crack between the door and the sill, means whereby said side plates are moved inwardly, the bottom plate moved upwardly, and locking means for locking the plates in closed position, substantially as described.

4. In a closure for car doors, the combination of plates adapted to close the crack between the door and the door posts and sill and to recede from the closed position, with a longitudinally moving bar to actuate said plates, linkages between said bar and the lower plate, whereby the bottom and one of the side plates are operated, and a linkage between the lower plate and the other side plate whereby the longitudinal movement of the bar actuates the plates to open and close them, in substantially the manner described.

6. In a closure for car doors, the combination of a car provided with door posts and sill, a door adapted to open and close the opening of said car, an L-shaped side plate adapted to move diagonally to open and close the crack between the door and door frame and the sill, a second plate adapted to move diagonally to cover the opposite vertical crack of the door, and means operating upon the arm of the L-shaped plate to simultaneously operate the plates, substantially as described.

[Claims 3 and 5 not printed in the Gazette.]

1,265,479. HYDRANT. EDGAR M. MOORE, Pittsburgh, Pa. Filed Aug. 23, 1917. Serial No. 187,797. (Cl. 137—13.)

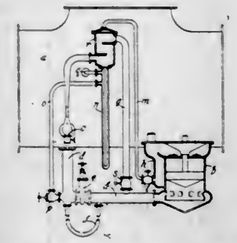


1. In combination with a casing having a valve stem and valve therein, and an automatic cut-off valve loosely mounted in the lower end thereof adapted to be seated by the pressure of liquid within said casing when said valve stem is removed and to be normally held open by said valve stem, said cut-off comprising a valve member provided with a tubular stem having a closed bottom end and an open upper end and said stem being adapted to receive the lower end of said valve stem.

2. A hydrant of the class described comprising a casing, a vertically movable main valve stem mounted within said casing, a valve on said stem, said main valve stem projecting below said valve an appreciable distance, and an automatic cut-off valve loosely mounted in the lower end of said casing and comprising a valve member provided with a downwardly projecting tubular stem portion having a closed bottom, said projecting portion of said main valve stem being adapted to fit within said tubular stem of said last-named valve to guide and control the movement thereof.

3. A hydrant of the class described, comprising a casing, a vertically movable main valve stem mounted within said casing, a valve on said stem, said main valve stem projecting below said valve an appreciable distance, and an automatic cut-off valve loosely mounted in the lower end of said casing and comprising a valve member provided with a downwardly projecting tubular stem portion having a closed bottom, said projecting portion of said main valve stem being adapted to fit within said tubular stem of said last named valve to guide and control the movement thereof, a seat formed within said casing against which said cut-off valve is adapted to seat when said main valve is withdrawn from said casing, and an inwardly extending flange at the lower end of said casing against which said valve is adapted to seat when said main valve is closed.

1,265,480. METHOD OF PRODUCING LOW VACUUM IN STEAM-CONDENSERS. DONALD BARNS MORISON, Hartlepool, England. Filed June 12, 1917. Serial No. 174,391. (Cl. 257—51.)

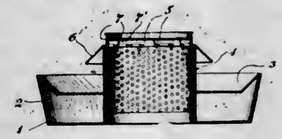


1. The method of working low vacuum condensing apparatus at normal power conditions, consisting in withdrawing from the condenser, in addition to the air which enters the vacuum system, a relatively much larger volume of condensable vapor than is withdrawn according to existing practice.

5. The method of working low vacuum condensing apparatus comprising a steam jet or jets, a condensing device, air discharging apparatus and means for circulating water through the main condenser, consisting in withdrawing from the condenser under normal power conditions by said jet or jets not less than 15 pounds of vapor per one pound of air withdrawn, and condensing said vapor in said condensing device in which a vacuum lower than that in the main condenser is maintained by said air discharging apparatus.

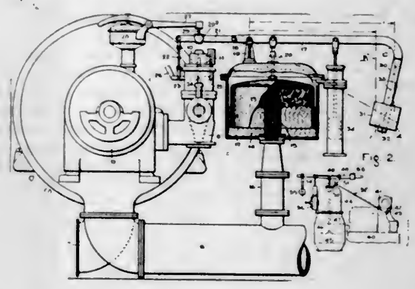
[Claims 2 to 4 not printed in the Gazette.]

1,265,481. INSECT-TRAP. WILLIAM A. MOSBY, San Antonio, Tex., assignor of one-half to Robert M. Lother, San Antonio, Tex. Filed Oct. 3, 1916. Serial No. 123,550. (Cl. 43—22.)



A flanged container designed to receive a poisonous fluid, said container having the inner edge of its said flange formed with a continuous inturned downwardly flared rim and the bottom of the container being centrally provided with a round opening, a cylindrical member surrounding the opening and projecting above the top of the container, a ring member of reticulated material within the sleeve and being of a length only slightly less than that of the sleeve, said sleeve at its upper portion being formed with a downwardly turned continuous flange directed toward the flange of the container, said ring at the top thereof being slitted to provide a plurality of vertically disposed fingers, and angularly disposed fingers arranged between the vertical fingers and overlying the flange at the top of the sleeve, and a flanged closure engaged and supported by the vertical fingers.

1,265,482. GOVERNING MECHANISM FOR COMPRESSORS AND EXHAUSTERS. SANFORD A. MOSS, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Mar. 31, 1916. Serial No. 87,961. (Cl. 230—24.)



1. The combination of a compressor, a prime mover for driving it, a regulator for the prime mover, a governor which moves in response to changes in a condition of the fluid handled by the compressor, a lever having a depending arm rigidly connected thereto, said lever being moved by the governor, a weight carried by the depending arm, and means connecting the lever to the regulator.

3. In a compressor set, the combination of a motor, a compressor driven thereby, regulating mechanism for the motor, and means for operating it comprising a pivoted lever, means connecting the lever to the regulating mechanism, means for tilting the lever in response to variations in a condition of the fluid being handled by the compressor, a depending arm rigidly connected to the lever, and a weight carried by the arm.

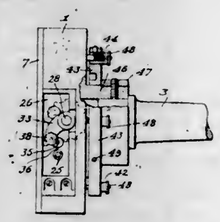
6. In a compressor set, the combination of a motor, a compressor driven thereby, regulating mechanism for the motor, means for operating it comprising a pivoted lever, means connecting the lever to the regulating mechanism, an inverted bell float having a liquid seal, a rod connecting it to the lever, a conduit connecting the interior of the float to the compressor, a depending arm rigidly connected to the lever, and a weight carried by the arm.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,483. FACING-TOOL. ERVIN S. MUMMERT and JOSEPH O. DIXON, Hanover, Pa. Filed May 4, 1917. Serial No. 166,374. (Cl. 82—1.)

1. A facing tool, comprising a rotary head, a tool holder mounted and movable radially therein, means for feeding said tool holder either outwardly or inwardly, means carried by said head and movable in one direction for operating said feeding means, a pivoted bracket intermediate said operating and feeding means, gears carried by said bracket and meshing with gears on said operating and feeding means and shiftable by the movement of said bracket on its pivot to transmit motion from said operating means to said feeding means in either direction, and automatically locking means for retaining said bracket

in either transmitting position or in an intermediate position with said gears inactive.

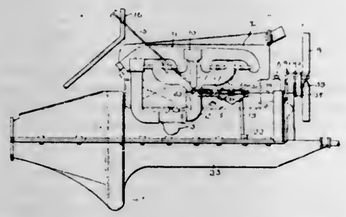


10. A facing tool, comprising a rotary head, a tool holder mounted and movable radially therein, means for feeding said tool holder, a tool holding sleeve in said holder slotted in one side to receive a tool and having rack teeth in its outer face, and a pinion in said holder engaging said rack teeth to adjust said sleeve and its tool in said holder.

13. A facing tool, comprising a rotary head, a tool holder mounted and movable radially therein, means for feeding said tool holder, a toothed feed wheel in said head for operating said tool holder feeding means step by step, and a plurality of means for operating said toothed feed wheel step by step each comprising a plug mounted in a portion of the device adapted to be maintained against rotation, a spring-pressed plunger in said plug, a finger piece for withdrawing said plunger against said spring tension, and a pin on said finger piece adapted to enter an aperture in said plug to permit said plunger to project into operative position, or when withdrawn and turned to contact with the outer face of said plug to maintain said plunger withdrawn in inoperative position.

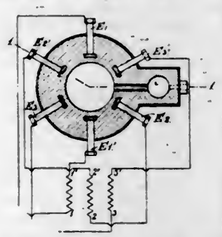
[Claims 2 to 9, 11, 12 and 14 not printed in the Gazette.]

1,265,484. **AIR-MIXER FOR GASOLENE-ENGINES.** DAVID H. NASH, Church Road, Va. Filed Jan. 23, 1917. Serial No. 143,991. (Cl. 123—106.)



The combination with an engine including a manifold and an exhaust pipe, of a hot air intake pipe having one end disposed through the manifold and its other end associated with the exhaust pipe to receive heated air, a cap closing the end of the air intake pipe that extends through the manifold, said air intake pipe having a plurality of apertures therein and disposed within the manifold to permit the heated air in the air intake pipe to enter the manifold, a valve located in the air intake pipe, a supporting structure carried by the engine, brackets carried by the supporting structure, a rod slidable in said brackets, an arm secured to said rod and pivoted to the valve, a governor swivelly connected to said rod, a shaft journaled to the supporting structure and secured to the governor, means rotating said shaft by the engine, adjuating nuts threaded to one end of the rods, and a coil spring surrounding the rods and having one end disposed against one of the brackets and its other end secured between the adjusting nuts for normally urging the rod forwardly to close the valve.

1,265,485. **ELECTRICAL FURNACE.** HANS NATHUSIUS, Friedenshütte, Kreis Beuthen, Germany. Filed Oct. 5, 1914, Serial No. 865,057. Renewed Mar. 30, 1918. Serial No. 225,850. (Cl. 204—64.)

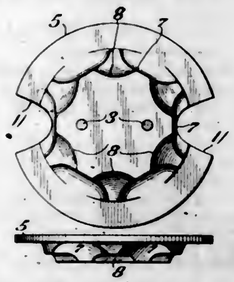


1. A closed electric furnace having a heating or reducing chamber whose walls are composed of electrically resistant material which is electrically conductive when heated, said walls having fixedly embedded in an air tight manner outside of the chamber electrodes symmetrically disposed at the circumference of the chamber parallel to its axis which project over the whole length of the chamber and a source of multiphase current connected with said electrodes in such a way, that the potential differences between any of the electrodes correspond to the distance and the resistance between such electrodes.

2. A closed electric furnace having a heating or reducing chamber whose walls are composed of electrically resistant material which is electrically conductive when heated said walls having fixedly embedded in an air tight manner outside of the chamber a plurality of annular disposed sets of electrodes disposed symmetrically at the circumference of the chamber parallel to its axis and a source of multiphase current connected with said electrodes in such a way that the potential differences between any of the electrodes correspond to the distance and the resistance between such electrodes and that there is also potential difference between the adjacent sets of electrodes.

3. A closed electric furnace having a heating or reducing chamber whose walls are composed of electrically resistant material which is electrically conductive when heated, said walls having fixedly embedded in an air tight manner outside of the chamber a plurality of annular disposed sets of electrodes disposed symmetrically at the circumference of the chamber parallel to its axis, said annular sets of electrodes being connected with as much subdivisions of the secondary windings of a source of multiphase current as there are annular sets of electrodes in such a way that the potential differences between any of the electrodes correspond to the distance and the resistance between such electrodes and that there is also potential difference between the adjacent sets of electrodes.

1,265,486. **CHAIN-LOCK.** JOHN Q. NEAL, Bude, Miss. Filed May 4, 1916. Serial No. 95,429. (Cl. 24—116.)

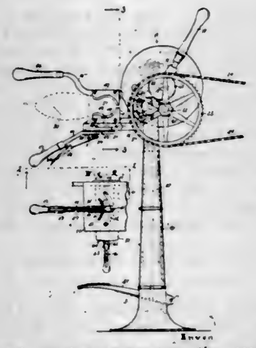


4. A chain lock including a body composed of two complemental disk sections rigidly associated with each other and having their outer peripheries provided with chain receiving slots and their adjacent inner faces provided with means for receiving and locking a chain.

6. A chain lock including a body composed of two complemental disk sections provided on their outer peripheries with chain receiving slots and further being reduced and provided with a plurality of alternately arranged circumferentially and radially extending recesses, means for rigidly connecting the sections to a support so that the recesses and slots register with each other to permit of the links of a chain being arranged in a substantially removable locked engagement with the recesses.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,265,487. **HEEL-CUTTING APPARATUS.** WILLIAM J. NESBITT, Los Angeles, Cal. Filed Feb. 13, 1917. Serial No. 148,410. (Cl. 12—42.)



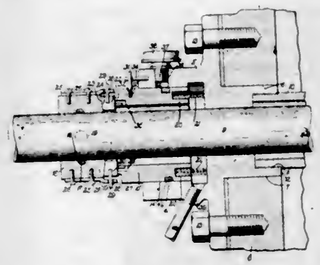
1. In heel cutting apparatus, the combination of a frame, a shoe holding device adjustably mounted on said frame, a shaft on said frame, an arm freely movable provided with a bearing and having its lower end part pivotally mounted on the shaft, a handle on the upper part of said arm, a shaft mounted in said bearing, a circular saw and a spur wheel mounted on the ends of the last mentioned shaft, a spur wheel loosely mounted on the first mentioned shaft and in mesh with the first mentioned spur wheel, a sprocket wheel rotatably mounted on the frame, and a spur pinion connected to the sprocket wheel and in mesh with the second mentioned spur wheel.

2. Heel cutting apparatus provided with a circular saw for cutting the heel of a shoe, said saw having a comparatively thin marginal portion with teeth thereon, and said saw being stiffened by having one side thereof of gradually increased thickness from the marginal portion to the central portion of the saw, and the other side of said saw being dished from the periphery inwardly to reduce frictional contact of the saw with the heel in cutting the latter, substantially as set forth.

1,265,488. **SHAFT-PACKING.** FREDERICK THOMAS NOLAN, Jacksonville, Fla. Filed June 18, 1917. Serial No. 175,352. (Cl. 286—7.)

1. In a shaft packing, a shaft, a collar having means by which it may be secured for rotating with the shaft, a second collar disposed around the shaft and spaced therefrom to form a passage between the second collar and the shaft to reduce friction, the second collar having an end disposed adjacent an end of the first collar, resilient means for pressing the second collar in the direction of the first collar, a member extending radially at the outer side of the second collar and provided with an eye at its outer end, and a pin extending longitudinally of the axis of the collars and disposed in the eye member to prevent the second collar from rotating with the first collar while permitting the movement of the second collar longitudinally of the axis of the collars.

2. In a shaft packing, a collar having means by which it may be secured for rotating with a shaft, a second collar having one end disposed adjacent an end of the first collar, there being orifices in the other end of the second collar, springs in the orifices for pressing the second collar in the direction of the first collar, means which will prevent the second collar from rotating with the first collar while permitting the movement of the second collar longitudinally of the axis of the collars, a compensating ring between the two collars, and means which will rotate the compensating ring with the first collar while permitting a radial movement of the compensating ring relatively to the first collar.



3. In a shaft packing, a collar having means by which it may be secured for rotating with a shaft, one end of the collar being curved radially, a second collar having an end disposed adjacent the said end of the first collar, resilient means at the other end of the second collar for pressing the second collar in the direction of the first collar, means which will prevent the second collar from rotating with the first collar while permitting a movement of the second collar longitudinally of the axis of the collars, a compensating ring disposed between the two collars, the end of the compensating ring next to the first collar being curved radially to fit the curved end of the first collar, and means which will rotate the compensating ring with the first collar while permitting the radial movement of the compensating ring relatively to the first collar.

4. In a shaft packing, a collar having means by which it may be secured for rotating with a shaft, a second collar having one end disposed adjacent an end of the first collar, the inner diameter of the second collar being greater than the inner diameter of the first collar and there being orifices in the other end of the second collar, springs in the orifices for pressing the second collar in the direction of the first collar, and means which will prevent the second collar from rotating with the first collar while permitting the movement of the second collar longitudinally of the axis of the collars, there being an opening from the interior of the second collar through the first mentioned end of the second collar.

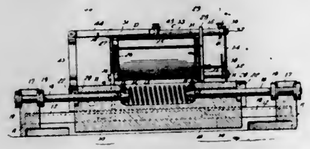
5. In a shaft packing, a stuffing box having a bearing and an opening beyond the bearing, a shaft journaled in the bearing, a collar in the opening spaced from the bearing, the inner diameter of the collar being greater than the diameter of the shaft to prevent friction, a second collar beyond the first collar and secured for rotating with the shaft, means which will prevent the first collar from rotating with the second collar while permitting the movement of the first collar longitudinally of the axis of the collars, there being an opening from the interior of the first collar through the end thereof adjacent the second collar.

[Claims 6 to 8 not printed in the Gazette.]

1,265,489. **RECORDING MECHANISM.** JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Jan. 31, 1916. Serial No. 75,320. (Cl. 234—36.)

1. In a recording mechanism of the character described, the combination with a base plate, of a member slidably

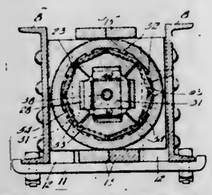
mounted on said base plate, said member having a central recess, a spring mounted within said recess, followers co-operating with said spring and said member, means for



preventing movement of each of said followers in one direction, and automatically operated means for recording movement of said member relatively to the base plate.

[Claim 2 not printed in the Gazette.]

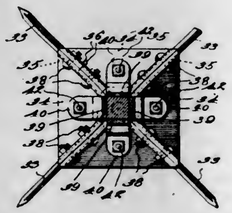
1,265,490. DRAFT-RIGGING FOR RAILWAY-CARS. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Aug. 12, 1916. Serial No. 114,520. (Cl. 213—64.)



1. In a draft rigging for railroad cars, a draft gear comprising a shell, friction elements including friction shoes within the shell, a plurality of removable friction plates within the shell, adapted to be engaged by the friction shoes, the shell being provided with longitudinal ribs, the friction plates being mounted on said ribs.

[Claim 2 not printed in the Gazette.]

1,265,491. SOIL-PULVERIZER. LESTER D. OBITTS, Wellington, Ohio. Filed Dec. 7, 1917. Serial No. 206,021. (Cl. 97—62.)



1. In a soil pulverizer, a shaft supported for rotation, said shaft being of square cross section, clamping members abutting on the side faces of the shaft, said clamping members having convergent grooved side edges, teeth seated in the grooves of proximate clamping members, and means for drawing the clamping members together to clamp the teeth therebetween.

3. In a soil pulverizer, a shaft supported for rotation, clamping members surrounding the shaft, said clamping members having convergent and contacted grooved side edges and oppositely extended flanges adjacent thereto, teeth seated in the grooves of approximate clamping members, and bolts extending through the flanges for drawing the clamping members together to retain the teeth therebetween.

[Claims 2 and 4 not printed in the Gazette.]

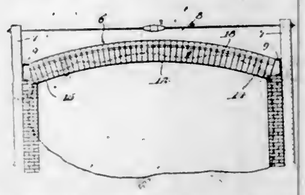
1,265,492. WOMAN'S WORK AND SPORT GARMENT. HANS LUDWIG OCHSNER, Alpena, Mich., assignor of one-third to Nelson M. Eddy, Alpena, Mich. Filed Oct. 3, 1917. Serial No. 194,528. (Cl. 2—42.)



4. A garment of the character described including a skirt having side slits extending upwardly from the lower edges thereof and forming front and rear sections provided at their adjacent side edges with fastening means intermediate the ends of the slits and at the ends of the slits with triangular webs, each of said sections being foldable in a vertical direction with its lower portion outermost and being extendible around the upper portion of the skirt in overlapping relation with the side edges of each of the sections adjacent to one another, the said fastening means serving to connect the sections in both the extended and folded positions, whereby the lapping fold of the front sections forms a pocket at the front of the garment.

[Claims 1 to 3 not printed in the Gazette.]

1,265,493. ROOF CONSTRUCTION FOR FURNACES. FRANK ORTH, Indiana Harbor, Ind. Filed Apr. 18, 1916. Serial No. 91,876. (Cl. 263—46.)

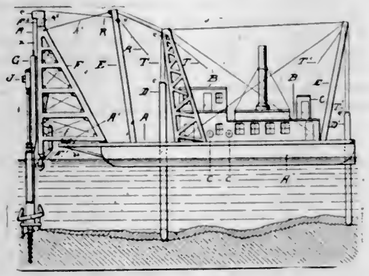


1. In a heating furnace, the combination with the side thrust members, of a series of transverse ribs spanning the width of the furnace and having their ends resting against the thrust members and supported thereby, the ribs arching over the body of the furnace, each rib being provided with a longitudinal horizontal shoulder on each side and near its upper portion, the side faces of the ribs below said shoulders being vertical, and a series of replacement blocks between consecutive ribs and supported thereby, each replacement block being provided in its upper portion with a horizontal shoulder adapted to seat directly on the rib shoulder and be fully supported thereby, and the side face of the block below said shoulder being horizontal and resting squarely on the shoulder of the rib, substantially as and for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

1,265,494. GANG-DRILL FOR SUBAQUEOUS EXCAVATION. RALPH G. PACKARD, Brooklyn, N. Y. Filed Apr. 24, 1917. Serial No. 164,301. (Cl. 255—51.)

1. A gang-drill for subaqueous work consisting of a floating vessel provided with anchoring and warping devices and a plurality of swinging cranes having vertical front members hinged together by horizontal girders, in combination with drill columns flexibly and slidably connected with said front members, each drill column being provided with legs automatically adjustable to the inequalities of the rock-bottom, and with a drill and drill actuating mechanism slidably connected with one of the aforesaid drill columns.

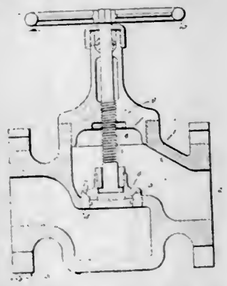


6. In combination a floating vessel for subaqueous rock excavation with anchoring and warping devices, a swinging crane mounted on said vessel, said crane having a vertical front member, a drill column flexibly and slidably connected with the vertical front member of the crane so as to be raised and lowered along said front member, legs at the lower end of said drill-column automatically adjustable to the inequalities of the rock-bottom, a drill and drill actuating mechanism slidably mounted so that it may be raised and lowered along said column.

11. A drill-column having an offset, a tubular extension of said column below said offset forming a guide and guard for a drill-steel and having at its lower end a casting carrying legs that automatically adjust themselves to the inequalities of the rock bottom, an automatically telescoping extension at the lower end of said drill-column and brackets on opposite sides of said column above the automatically adjustable legs and a casting on the offset, said brackets and casting being constructed and arranged to hold duplicate hydraulic hoists in position, and in combination with said hoists.

[Claims 2 to 5, 7 to 10, and 12 to 14 not printed in the Gazette.]

1,265,495. VALVE. JOHN M. PALMER, Chicago, Ill. Filed Oct. 15, 1915. Serial No. 56,014. (Cl. 137—4.)

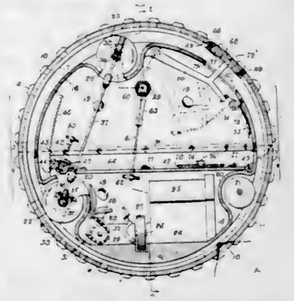


1. In combination, a valve chamber having an inlet and an outlet and a port connecting them, a valve seat surrounding said port, said valve seat having its engaging surface of chilled metal but being otherwise soft and a valve member having a face for face to face engagement with said seat.

2. In combination a valve chamber having an inlet and an outlet and a port connecting them, a valve seat surrounding said port, said valve seat having its engaging surface of chilled metal but being otherwise soft and a valve member having a face for face to face engagement with said seat, said valve member having its engaging face of chilled metal but being otherwise soft.

3. In combination a valve chamber having an inlet and an outlet and a port connecting them, a valve seat surrounding said port, said valve seat having its engaging surface of chilled iron but being otherwise soft and a valve member having a chilled face for face to face engagement with said seat.

1,265,496. ENGINE OF WARFARE. ARSENE J. PARÉ, Brockton, Mass. Filed May 1, 1917. Serial No. 165,707. (Cl. 115—20.)

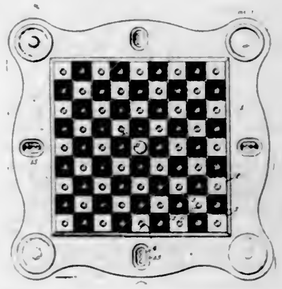


1. An engine of warfare, comprising two spherical shells, one within the other, the inner shell being self-leveling and having wheels arranged to roll on the internal surface of the outer shell, and being capable of lateral movement relatively to the outer shell, propelling mechanism carried by the inner shell and arranged to drive one or more of said wheels, and means for shifting the inner shell laterally to steer the course of the outer shell.

8. An engine of warfare, comprising a spherical outer shell having a man hole and a detachable closure therefor, an inner shell within said outer shell, a swinging holder pivoted to the inner shell and engaged with said closure to shift the latter to and from its operative position, said holder being accessible within said shell and said closure being removable inwardly with said holder, said inner shell having wheels arranged to roll on the internal surface of said outer shell, propelling mechanism carried by said inner shell and arranged to drive one or more of said wheels, and hoisting means carried by said inner shell and arranged to lift said holder and move said closure to its operative position, said closure having a socket and said holder being adapted to enter said socket.

[Claims 2 to 7 not printed in the Gazette.]

1,265,497. GAME DEVICE. GEORGE HENRY PARKER, Stamford, Conn., assignor to Christine Raff Parker, Stamford, Conn. Filed Mar. 14, 1917. Serial No. 154,674. (Cl. 46—63.)



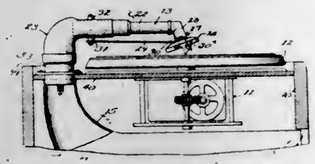
2. A game device including, in combination, a playing board having a checkered surface providing eighty playing spaces, a plurality of distinctive sets of playing pieces adapted for predetermined initial arrangement thereon and movable thereover, each of said sets including men pieces and a crown piece, the permissible moves of said

crown pieces and said men pieces being different by rule, and a move indicator for said pieces operable to indicate fortuitously one or more permissible moves for each of said pieces, dependent upon their instant position.

5. A game device comprising, in combination, a base, a checkered board thereon having an odd number of rows of an odd number of spaces each whereby a central space is provided, a disk disposed beneath said board and within said base and rotatably mounted concentrically with said checkered board, said disk having distinctive playing indicia thereon movable to expose certain thereof from above said board, and a rotating handle for said disk projecting through said central space of said board.

[Claims 1, 3, 4, and 6 to 8 not printed in the Gazette.]

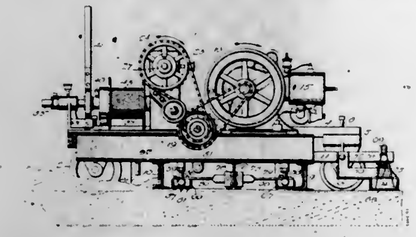
1,265,498. TALKING-MACHINE MECHANISM. ARCHIE E. PARNALL, Chicago, Ill., assignor to Frank W. Williams, Chicago, Ill. Filed Sept. 18, 1916. Serial No. 120,819. (Cl. 274—23.)



1. A talking machine mechanism comprising a record support, an extensible tone arm, a sound box mounted to rotate about an axis lying in a vertical plane through the axis of the tone arm from a position in which the needle will properly engage a laterally undulating groove record to a position in which it will properly engage a hill and dale groove record, means whereby extending said tone arm will cause rotation of said sound box, and am amplifier connection constructed so that it can be made to communicate either with an amplifier below the record support or with an amplifier above the record support.

2. A talking machine mechanism comprising a record support, an extensible tone arm, a sound box mounted to rotate about an axis lying in a vertical plane through the axis of the tone arm from a position in which the needle will properly engage a laterally undulating groove record to a position in which it will properly engage a hill and dale groove record, said tone arm comprising two sections telescopically connected, one of said sections supporting said sound box and means whereby the extension of said tone arm will cause rotation of said sound box, said means including a link pivotally connected to said sound box and adapted to be pivotally connected to the other section in two different positions of rotative adjustment.

1,265,499. MACHINE FOR MAKING CONCRETE PAVEMENTS AND THE LIKE. ALAN JAY PARRISH, Paris, Ill. Filed Aug. 1, 1917. Serial No. 183,908. (Cl. 94—6.)

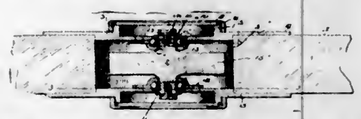


1. A machine for making concrete pavements and the like, comprising a carriage, means for advancing the carriage to successive operative positions, a frame carried by said carriage, a walking beam pivotally mounted on the frame, and a tamping device at each end of said walking beam, one of said tamping devices being in advance of the other.

8. A machine for making concrete pavements and the like, comprising a carriage, means for advancing the carriage to successive operative positions, a walking beam pivotally mounted on the frame, and a tamping device at each end of said walking beam, one of said tamping devices being in advance of the other.

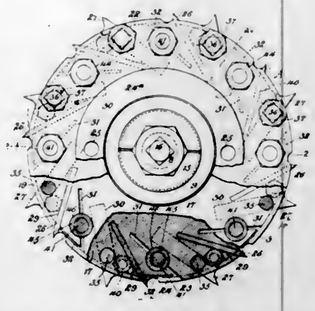
[Claims 2 to 7 and 9 to 31 not printed in the Gazette.]

1,265,500. LEVEL. JOHN A. PAYNE and HENRY E. CUNNINGHAM, Little Rock, Ark. Filed Apr. 16, 1913. Serial No. 761,579. (Cl. 33—215.)



A level including a stock, opposed graduated spaced plates applied to said stock opposite a chamber therein, said plates each having an outstanding annular flange, a transparent member applied to the outer edge of the latter, an annular cap threaded upon said annular flange for the retention of said transparent member thereon, a gravity member having central lateral trunnion-like pivots hung in apertures in said graduated plates, indices applied to said trunnion-like pivots playing in front of said graduated plates, means for holding said indices upon said pivots, said means consisting of headed-screws receivable in lateral screw-threaded holes provided in the ends of respective trunnion-like pivots, said indices each provided with a collar, centrally perforated, a reduced outer end portion of each trunnion-like pivot being received by or encircled by the collar of a respective index, when a respective headed-screw is inserted into its screw-threaded hole, and race-forming members applied to the inner surfaces of said plates and equipped with bearing-balls engaging said trunnion-like pivots.

1,265,501. CUTTER-HEAD. HENRY H. PAYZANT, Everett, Wash., assignor of one-half to Earl M. Rogers, Everett, Wash. Filed May 1, 1917. Serial No. 165,655. (Cl. 144—90.)



1. A cutter head for wood planing machines for the utilization of small pieces of short discarded cutter tools, comprising a body portion composed of two disks in face to face contact with tool-receiving recesses or seats in the facing portions, and other tool-receiving seats extending entirely through the disks, said last-named tool-receiving seats being in the form of slots and having associated therewith other registering slots extending through both disks, and expansion members extending through the last-named registering slots for forcing the intervening portions of the two disks into clamping relation to a tool or tools in the second-named slots, whereby the cutter head is adapted to carry tools built up by the association of otherwise useless portions of discarded cutters.

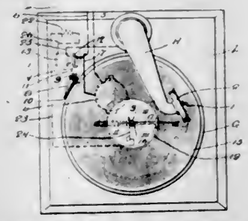
5. A cutter head for wood planing machinery for the utilization of discarded strips of cutter tools comprising a body portion consisting of two disks in face to face relation with seats formed in the facing portions of the respective disks to receive tools and one of the disks having set screws for holding the tools in their seats, and said disks being provided with companion entering slots at their peripheral portions located between the tool receiving seats with certain of the companion slots arranged to receive tools and the other adjacent ones of the companion slots having expansion means associated therewith to spread the intervening portions of the disks into clamping relation to the tools seated in the slots.

8. A cutter head for wood planing machines, comprising a pair of disks in face to face contact and each provided with a series of peripherally entering slots to receive tools, and other peripherally entering slots each associated with and spaced from one of the tool-receiving slots, and expansion means extending through and engaging both disks and associated with each of the second-named slots for simultaneously forcing the metal of the disks between the slots toward the tool-receiving slots, whereby to clamp tools therein.

12. A cutter head for wood planing machinery, comprising a pair of disks in face to face contact and formed with pairs of slots, with the slots of one disk registering with those of the other, and expansion means extending through certain registering slots in the disks and connecting and acting upon both disks to simultaneously close the neighboring registering slots upon tools lodged therein.

[Claims 2 to 4, 6, 7, 9 to 11, 13, and 14 not printed in the Gazette.]

1,265,502. PHONOGRAPH. MARSHALL B. PEAL, Brooklyn, N. Y. Filed Apr. 20, 1916. Serial No. 92,563. (Cl. 274—42.)



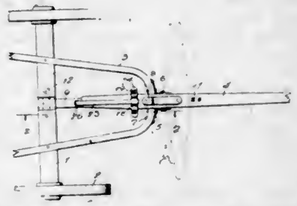
1. A contact device for a phonograph disk, comprising a contact forming member carried by the disk extending radially from the central standard receiving opening of the disk, the inner end of the contact forming member being adapted to engage the central standard of the phonograph, the outer end portion of the contact forming member being adapted to be engaged by the stylus of the phonograph, and said contact forming member having a bendable portion bendable to alter the length of said contact forming member.

4. A contact device for a phonograph disk, comprising a contact forming member carried by the record disk, said contact forming member being made up of two parts, one part being disposed at one surface of the record disk and the other part being disposed at the opposite surface of the record disk, and means extending through the central standard receiving opening of the disk serving to hold said two parts together and adapted to form engagement with the central standard of the phonograph.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,265,503. TONGUE-SUPPORT FOR VEHICLES. JOHN M. PENN, Red Oak, Iowa. Filed Oct. 9, 1915. Serial No. 55,029. (Cl. 21—63.)

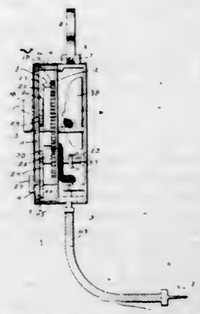
1. In a tongue support, the combination with an axle and a tongue pivotally mounted with respect to the axle, of a pair of springs of different degrees of resiliency, said springs including coil and leaf springs, one of which is pivotally connected to the tongue and slidably connected to the axle, while the other is connected to the tongue and to the first mentioned spring, and a support between the tongue and the leaf spring to provide a cantaliver suspension.



2. In a tongue support, the combination with an axle and a tongue pivotally mounted with respect thereto, of a leaf spring, one end of which is pivotally secured to the tongue, the other end of the spring being slidably connected to the axle, a support secured to the tongue and connected to the leaf spring intermediate its ends, and a coil spring having a degree of resiliency different from that of the leaf spring, said coil spring having one end secured to tongue and its other end connected with the leaf spring between the support and the slidable connection with the axle.

3. In a tongue support, the combination with an axle and a tongue pivotally mounted with respect thereto, of a leaf spring having one of its ends pivotally secured to the tongue and its other end slidably connected to the axle, a coil spring connected to the tongue and to the leaf spring adjacent its slidably connected end, and means to support the leaf spring intermediate the coil spring connection and the pivoted securement, said means operating further to limit the leaf spring movement at which time the spring acts as a cantaliver.

1,265,504. BURGLAR-ALARM. LOUIS PEPIN, Busby, Mont. Filed Aug. 31, 1915. Serial No. 48,327. (Cl. 116—44.)

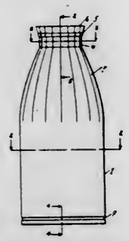


1. In a burglar alarm, the combination with a support having a stationary member and a movable member, of a casing carried by one of the members, a sounding device located within the casing, a shaft journaled within the casing and adjacent the sounding device, means for rotating the shaft, means carried by the shaft for engaging the sounding device when the shaft is rotated, means rotatably connected to the shaft and adapted to be clamped between the movable and stationary members for holding the shaft against rotation, and when released to permit the shaft to rotate, a ratchet carried by the shaft, a pawl engaging in the ratchet for normally holding the shaft against rotation and means for disengaging the pawl from the ratchet when the holding means is clamped between the movable member and the stationary member of the support, as and for the purpose specified.

2. In a burglar alarm, the combination with a support having a stationary member and a movable member, of a casing carried by one of the members and having a

sounding device therein, a shaft journaled within the casing and located adjacent the sounding device, means for rotating the shaft, means carried by the shaft for operating the sounding device when the shaft is rotated, a gear wheel carried by the shaft, a second gear wheel located within the casing and meshing with the first gear, a flexible and rotatable element having one end connected to the second gear and having its other end extending beyond the casing, a flat head carried by the last-mentioned end of the flexible element, the said head being adapted to be detachably clamped between the stationary and movable members of the support so as to hold the flexible element and the shaft against rotation, and when released to permit the shaft and the flexible element to rotate, for the purpose specified.

1,265,505. PAPER BOTTLE AND PROCESS OF MANUFACTURING SAME. JESSE H. PERRAULT, Detroit, Mich. Filed Jan. 19, 1916. Serial No. 73,002. (Cl. 93—60.)



1. The process of forming a bottle consisting in forming a cylindrical body of a plurality of plies of paper, separately creasing the plies at one end of said body to form plaits and rolling said plaits in overlapping relation to form the breast and neck of said bottle, and pressing a groove in the neck of said bottle to hold the plies together and to receive a cap.

2. The process of forming a bottle of paper consisting in rolling the paper to form the cylindrical body, inserting the bottom with a downwardly projecting flange, folding the bottom walls of the bottle onto the same, and creasing the same, as specified.

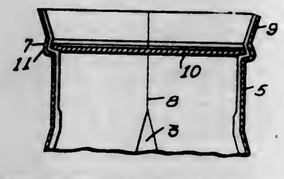
3. A paper bottle made up of a plurality of plies, the breast of the bottle formed by creasing the separate plies and overlapping the same, and a retaining groove for the cap formed in the neck of the bottle, as specified.

4. A bottle formed of one or more plies of paper and a bottom for said bottle with a flange extended downwardly and the sides of said bottle being folded and creased onto the said flange.

5. A bottle made up of one or more plies of paper, with a neck formed by plaiting the paper and overlapping the same in layers, with a groove for the cap formed therein.

[Claims 6 to 8 not printed in the Gazette.]

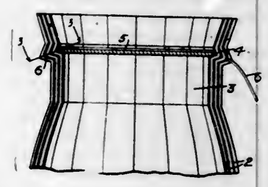
1,265,506. PAPER BOTTLE. JESSE H. PERRAULT, Detroit, Mich. Filed Jan. 19, 1916. Serial No. 73,003. (Cl. 229—3.)



1. A paper bottle with the paper disposed with the fibers transverse to the neck, an angular crease in the neck in the direction of the said fibers, with a downwardly inclined bottom portion, and a cap disposed in the said groove.

[Claim 2 not printed in the Gazette.]

1,265,507. PAPER BOTTLE AND OPENER. JESSE H. PERRAULT, Detroit, Mich. Filed Jan. 19, 1916. Serial No. 73,004. (Cl. 229—51.)

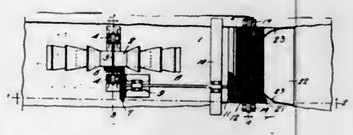


1. A receptacle made up of layers of paraffined paper, with annular grooves formed therein with angular projections, a waxed cord disposed between the layers in the angular projections with a projecting end whereby the same may be withdrawn severing the successive layers for opening the receptacle, and a cap retained within the annular groove.

9. A receptacle made up of layers of paper with the fibers disposed transversely to the receptacle, with annular grooves formed therein with angular projections, and a cord disposed between the layers in the angular projections with a projecting end whereby the same may be withdrawn severing the successive layers for opening the receptacle.

[Claims 2 to 8 not printed in the Gazette.]

1,265,508. FISH-EXCLUDER. HENRY O. PETERSON, Clear Lake, Minn. Filed Oct. 15, 1917. Serial No. 196,680. (Cl. 61—5.)



In a fish excluder for waterways, a screen to be positioned across the waterway, and a shield for resting on the bottom of the waterway in which the excluder is to be located and arranged in advance of the screen adjacent thereto, said shield being curved upwardly and contacting at its free edge with the front stretch of the screen and having upstanding laterally curved sides, the inner ends of which curve toward each other and project inwardly beyond the ends of the screen and contact with the screen, said sides extending to the top of the ditch in connection with which the excluder is to be used.

1,265,509. VENTILATOR. ALBERT W. PHELPS, Fresno, Cal. Filed Feb. 19, 1917. Serial No. 149,433. (Cl. 98—22.)

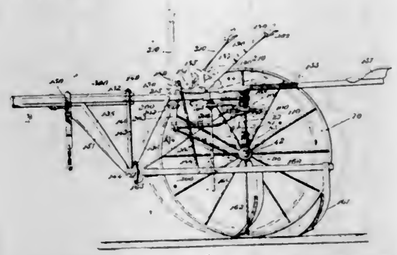


1. The combination with a car, of a pump having separate chambers, nozzles for the chambers respectively, a tube having its intake end surrounding one of the nozzles and spaced therefrom, the discharge end of said tube opening into the car, a second tube having its intake end surrounding the other nozzle and spaced therefrom, the discharge end of said second tube extending outside of the car, and a third tube having its discharge end communicating with the chambers, said third tube having its intake end projecting outside of the car.

4. The combination with a car, of a pump having separate chambers, nozzles for the chambers respectively, tubes having their intake ends surrounding the nozzles of some of the chambers and spaced therefrom, the discharge ends of said tubes opening into different portions of the car, another tube having its intake end surrounding the nozzle of another of the chambers and spaced therefrom, the discharge end of the last named tube extending outside of the car, still another tube having its discharge end communicating with the chambers, the last named tube having its intake end projecting outside of the car, and valves to control the flow of air from the last named tube to the chambers respectively.

[Claims 2 and 3 not printed in the Gazette.]

1,265,510. STRADDLE-ROW WHEELED CULTIVATOR. SPENCER HERMANUS PHELPS, Evansville, Ind., assignor to Blount Plow Works, Evansville, Ind., a Corporation of Indiana. Filed Nov. 1, 1915. Serial No. 59,008. (Cl. 97—35.)

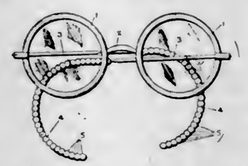


1. A cultivator comprising a frame, pivoted elbow axles connected therewith, and means for shifting said axles bodily forward or backward relatively to said frame and maintaining a vertical position thereof during such shifting.

26. A cultivator comprising elbow axles, elbow sleeves disposed at the angles thereof, and provided with platforms and circular grooves, supporting wheels disposed on the axle spindles of said elbow axles and having hubs engaging said grooves, rockers adapted to swing on said platform, a frame, and mechanism connecting said frame with said rockers.

[Claims 2 to 25 not printed in the Gazette.]

1,265,511. TEMPLE. LAWRENCE POETON, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 13, 1917. Serial No. 191,233. (Cl. 88—52.)

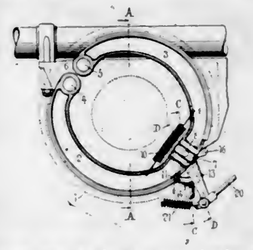


3. A temple piece, an ear loop connected therewith, a plurality of members loosely mounted thereon, a flattened head at the end of the ear loop and the outermost of said members being forced over the flattened head to retain the same against movement thereon.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,265,512. BRAKE MECHANISM. FINLEY R. PORTER, Port Jefferson, N. Y., assignor to Finley Robertson Porter Company, Inc., Port Jefferson, N. Y., a Corporation of Delaware. Filed Apr. 12, 1916. Serial No. 90,661. (Cl. 74—13.)

1. In a brake mechanism, a drum, brake shoes, a brake lever, means operated thereby for expanding the shoes into frictional engagement with the drum and wear compensation means forming the operative connection between the brake lever and shoe expanding means to automatically adjust the brake lever.

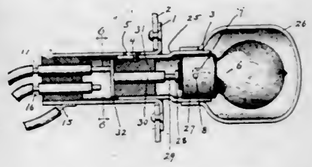


2. In a brake mechanism, a drum, brake shoes, a brake lever, a cam operated thereby for expanding the shoes into frictional engagement with the drum, and wear compensating means forming the operative connection between the brake lever and shoe expanding cam, to automatically adjust the brake lever.

5. In a brake mechanism, a drum, brake shoes, a brake lever, a cam shaft operated thereby for expanding the shoes into frictional engagement with the drum and wear compensating means interposed between the brake lever and cam shaft to automatically adjust the brake lever comprising a ratchet fixed to the cam shaft, a trip lever, said brake lever and trip lever being loosely mounted on the cam shaft and having pawls engaging said ratchet, and fixed stops engaging the trip lever to limit its swinging movement.

[Claims 3 and 4 not printed in the Gazette.]

1,265,513. DASHBOARD-LAMP-SOCKET. EDWARD S. PRESTON, Chicago, Ill. Filed May 23, 1917. Serial No. 170,419. (Cl. 173—328.)



1. In a lamp socket, a pair of relatively movable casing members one of which is interlocked with the lamp, a pair of circuit terminals carried by the other casing member and normally completing the circuit to the lamp, spring means for resisting a relative movement of the casing members in one direction, and an auxiliary circuit terminal connected in shunt with one of the aforesaid terminals and arranged for closing its portion of the circuit only upon a relative movement of the casing members in the said direction.

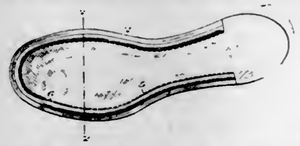
7. A lamp socket, including a holder, means carried by the holder for holding the lamp and permitting a movement of the lamp with respect to the holder, a spring for resisting the said movement, a circuit terminal continuously connected to one terminal of the lamp, and an auxiliary member in shunt with said terminal and arranged for affording electrical connection to the same lamp terminal upon a movement of the lamp with respect to the holder against the resistance of the spring.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,265,514. INSOLE. ARTHUR RACICOT and ALEXANDER N. RACICOT, Webster, Mass. Filed Sept. 29, 1917. Serial No. 194,040. (Cl. 36—22.)

1. As a new article of manufacture, an insole for boots and shoes, comprising a bottom layer, a rib filler arranged

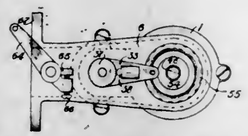
against one side of said layer, and layers of rubber and textile material arranged over the rib filler and against



the outer surface of the first-named layer and vulcanized together and to said first-named layer.

[Claim 2 not printed in the Gazette.]

1,265,515. CARBURETER. CHARLES L. RAYFIELD, Chicago, Ill. Filed Apr. 16, 1914. Serial No. 832,157. (Cl. 261—35.)



6. In a device of the class described, fuel supply means, a spring resisted air inlet valve connected thereto to positively open said fuel supply means correspondingly with said air valve, and mechanism interconnected for movement with said air valve in a direction opposite thereto to force fuel under pressure through said fuel supply means as the same is opened.

11. In a device of the class described, a carbureting chamber, fuel inlet means directed thereinto, a main air inlet at the lower end of said chamber, an auxiliary air inlet valve at one side of said chamber, and a supplemental air inlet valve within the carbureting chamber adapted to be regulated by the opening movement of the auxiliary air inlet valve.

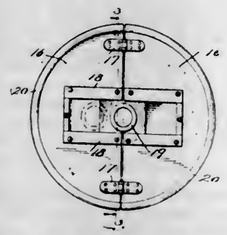
19. In a carbureter a fuel inlet valve, an air inlet valve, means adapted to open said fuel inlet valve when actuated by the opening movement of said air inlet valve, and means adapted to retard the closing of said fuel inlet valve while permitting a free closing movement of said air inlet valve.

25. In a carbureter of the class described, a fuel valve normally partly open to admit fuel therethrough, a piston movable with the fuel valve adapted to pump fuel through said valve as the valve opens, means operated by the suction of the engine to automatically open said fuel valve and operate the piston, and an air inlet for the carbureter.

28. In a carbureter of the class described, an air inlet valve, and means for retarding the opening movement of said air inlet valve and permitting free closing movement thereof by disengagment from said retarding means.

[Claims 1 to 5, 7 to 10, 12 to 18, 20 to 24, 26, 27, and 29 to 34 not printed in the Gazette.]

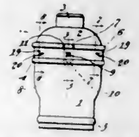
1,265,516. STOOL. JOHN WILLIAM RECK, Kingsburg, Cal. Filed Feb. 6, 1918. Serial No. 215,600. (Cl. 155—22.)



2. A folding or knock down stool comprising a foot piece provided with a threaded socket, a seat or top piece also provided with a threaded socket, and a standard adapted to be screwed into the said sockets of the said foot and seat or top piece, said seat or top piece consisting of two parts hinged together, and means for holding said parts of the said seat or top piece rigid when in position for use, said means consisting of angle bars attached to said seat or top piece and providing a guideway, and a sliding part fitting in said guideway and which is provided with said threaded socket of the said seat or top piece.

[Claim 1 not printed in the Gazette.]

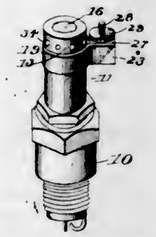
1,265,517. INCANDESCENT-LAMP SOCKET. JACOB RIBAYSEN, Chicago, Ill. Filed June 15, 1916. Serial No. 103,732. (Cl. 173—362.)



1. An incandescent lamp socket comprising a shell and a cap, a segmental depression formed in said shell having an arcuate slot therein, a slidable bolt mounted in said cap and adapted to enter said slot, a projection formed on said shell, and a tooth in said cap adapted to register with and be forced over said projection for engaging the same, withdrawal of said bolt and turning of the cap disengaging said projection and tooth.

[Claims 2 to 4 not printed in the Gazette.]

1,265,518. SPARK-PLUG. ALFRED LEANDER RIGGS, Ebensburg, Pa. Filed Oct. 29, 1917. Serial No. 198,941. (Cl. 123—169.)



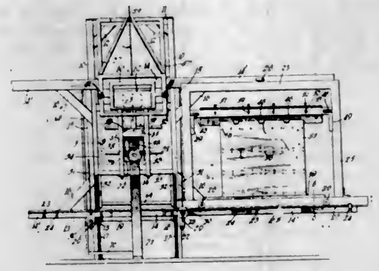
1. In a spark plug, a cap removably mounted upon the insulating core, said cap being slitted to provide adjustment, a clamp for securing the cap upon the core, means carried by said clamp for engagement with said core and means located at the open end of said cap for engagement with the clamp.

2. In a spark plug, a cap removably mounted upon the insulating core, said cap being slitted to provide adjustment, a clamp for securing the cap upon the core, means carried by said clamp for engagement with said core and means including an outwardly extending flange formed on said cap for engagement with the clamp.

3. In a spark plug, a cap removably mounted upon the insulating core, said core having formed therein a circumferentially arranged groove, a clamp surrounding said cap, means carried by said cap for engagement with said clamp and lugs formed on said clamp for engagement with the groove in the insulating core.

4. The combination with a spark plug provided with a removable cap, of a clamp securing said cap upon said plug, said clamp including outwardly extending terminal portions, an adjusting screw for securing said clamp in position, a terminal block pivotally secured between said terminal portions upon said screw, a nut for holding the screw in position and laterally extending flanges carried by the terminal portions and engageable with one edge of said block and nut.

1,265,519. PRINTING APPARATUS. HIRAM K. RIGHTMIRE, Chicago, and SIGARD E. BERG, Oak Park, Ill., assignors to Rightmire-Berg Company, a Corporation of Illinois. Filed May 25, 1917. Serial No. 171,043. (Cl. 95—73.)



1. In combination, a support; two frames, one being mounted on the support and the other mounted on the first-mentioned frame, said frames being adapted to move in directions at substantially right angles to each other; a negative-holding means mounted in the support and adapted to move toward and away from said frames; a pressure plate mounted for movement toward and away from the frames on the opposite side of frames from the negative-holding means; and a connection between the pressure plate and negative-holding means causing said pressure plate and negative-holding means to move simultaneously toward and simultaneously away from said frames.

2. In combination, a frame; work-holding means on the frame; a negative holder mounted at one side of the frame; a pressure plate mounted at the other side of the frame; and a connection between the negative holder and the pressure plate adapted to move both the negative holder and pressure plate toward the frame and clamp work in the work-holding means.

8. In combination, a support, a frame movably associated with the support; two elongated members adaptable for movement side by side in the frame and both members being substantially parallel with one side of the frame; sensitized sheet holding means and backing sheet holding means on said side of the frame; sensitized sheet holding means on one of the elongated members; backing sheet holding means on the other of said elongated members; and means for adjusting the elongated members independently of each other in the frame toward and away from said frame side.

12. In combination, a negative having markings thereon; a member mounted adjacent the negative; indicating means on said member adapted to register with the markings on the negative; a frame mounted for movement over the negative; and a lay-out sheet in the frame having markings thereon adapted to register with the indicating means on said member.

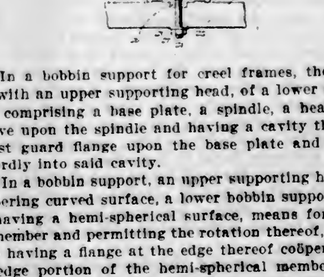
18. In combination, a negative; a frame mounted for movement across one side of the negative; a lay-out sheet in the frame; and means associated with the negative and coöperating with the lay-out sheet adapted to facilitate the movement of said frame to a predetermined position with respect to the negative.

[Claims 3 to 7, 9 to 11, and 13 to 17 not printed in the Gazette.]

1,265,520. HOLDER FOR SWINGING CLOSURES. OSCAR C. RIXSON, New Rochelle, N. Y. Filed Jan. 26, 1917. Serial No. 144,632. (Cl. 16—22.)

1. A holder for swinging closures, comprising a tubular member, a rod freely slidable in said tubular member, means for pivotally securing said tubular member and rod to a swinging closure and its frame, a pair of segmental shaped friction shoes carried by said rod and concealed within said tubular member, and means for adjusting said shoes to vary the friction between them and the inner wall of said tubular member.

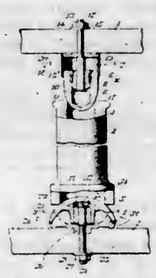
2. A holder for swinging closures, comprising a tubular member, a flat rod freely slidable in said tubular member, means for pivotally securing said tubular member and rod to a swinging closure and its frame, arc shaped friction shoes having lugs fitting into slots in said flat rod, and an adjusting screw carried by said flat rod engaging one of said friction shoes for varying the friction between said shoes and the inner wall of said tubular member.



3. A holder for swinging closures, comprising a tubular member, a rod freely slidable in said tubular member, means for pivotally securing said tubular member and rod to a swinging closure and its frame, a friction shoe carried by said rod concealed within said casing, an adjusting screw carried by said rod, and a piece interposed between said shoes and said adjusting screw.

4. A holder for swinging closures, comprising a tubular member, a telescoping rod in said member, means for pivotally securing said tubular member and rod to a swinging closure and its frame, a pair of friction shoes carried by said rod, an adjusting screw adapted to alter the frictional contact of said shoes and being arranged transversely of the tubular member and wholly within the same, said tubular member having an aperture in its side affording access to said screw.

1,265,521. BOBBIN-HOLDER. THOMAS PETER ROONEY, New Bedford, Mass. Filed Dec. 20, 1916. Serial No. 138,027. (Cl. 242—130.)



1. In a bobbin support for creel frames, the combination with an upper supporting head, of a lower supporting head comprising a base plate, a spindle, a head fitted to revolve upon the spindle and having a cavity therein, and a dust guard flange upon the base plate and projecting upwardly into said cavity.

2. In a bobbin support, an upper supporting head having a tapering curved surface, a lower bobbin supporting member having a hemi-spherical surface, means for mounting the member and permitting the rotation thereof, and a base plate having a flange at the edge thereof coöperating with the edge portion of the hemi-spherical member and preventing the entrance of dust to the mounting means therefor, the base plate and head being spaced apart to form an annular cavity between said elements.

[Claim 3 not printed in the Gazette.]

1,265,522. SAFETY STEERING DEVICE. FREDERICK M. Ross, Cincinnati, Ohio, assignor to The Frederick M. Ross Manufacturing Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Mar. 17, 1916. Serial No. 84,923. (Cl. 21—200.)



1. In combination in a safety steering device for automobiles, a pivot pin secured to a relatively fixed portion of an automobile, a stationary cam mounted on the pivot pin and adapted to have cam-adjusting movement about the pivot pin, means for securing the cam in adjusted positions upon the pivot pin, an arm pivotally mounted at one end on the pivot pin and having its opposite end arranged for attachment to a relatively movable member of the steering gear of an automobile, a movable cam adapted to engage the stationary cam and reciprocally mounted on the arm, a spring mounted on the arm and normally urging the movable cam into engagement with the stationary cam, an adjustment means mounted on the arm and adapted to change the tension of the spring, and means for connecting the arm with the steering mechanism.

2. In a safety steering device for automobiles, the combination of a stationary cam adapted to be adjustably secured to a relatively fixed portion of an automobile, a movable cam having a shank extending therefrom, said cam being located adjacent to the stationary cam, an arm pivotally mounted adjacent to the stationary cam and having its outer end turned at right angles to the shank of the movable cam, a screw threaded sleeve mounted in the end of the arm and adapted to receive the shank, a spring located between the end of the arm and the movable cam, adapted to force the movable cam into yielding engagement with the stationary cam, an adjustment nut mounted on the screw threaded sleeve and adapted to vary the tension of the spring, and means for connecting the arm with the steering mechanism.

1,265,523. CAR-ROOF. THOMAS NATHAN RUSSELL, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, a Corporation of Illinois. Filed Sept. 1, 1914. Serial No. 859,675. (Cl. 108—5.)



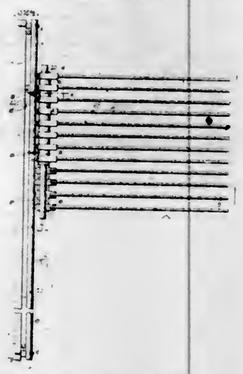
1. In a car roof, the combination of roof sheets having interior and exterior interlocking seam flanges formed on their side edges, the said flanges being spaced from each other to allow play of the interior flanges relative to the exterior flanges, and means securing each sheet at one eaves-corner, by gripping the eaves end of the exterior seam-flange, the other eaves-corner being free to move within its seam, whereby each sheet is held positioned along one eaves-to-ridge seam-line only and is free of the shifting of the substructure of the roof under the body and other side seam flange of such sheet.

5. In a car roof, the combination of roof sheets formed with and directly united by exterior and interior interlocking side seam flanges, and seam clips supported on the eaves of the car and supporting exteriorly from below the said flanges.

10. In a freight car roof, the combination of roof sheets united by side seams consisting of interlocking side flanges requiring to be telescoped together, and united at the ridge by U-bends adapted to be superposed one on another, the sheet at one side of the ridge having an outward U-bend and the sheet at the other side of the ridge having a return U-bend contained within the outward U-bend.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

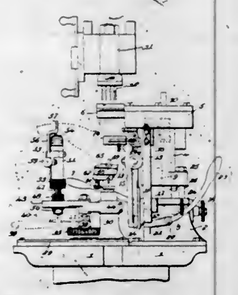
1,265,524. INDOOR CLOTHES-RACK. FRED A. SANDMANN, Brooklyn, N. Y., assignor of one-half to Harry E. Bartow, New York, N. Y. Filed Aug. 25, 1917. Serial No. 188,158. (Cl. 68—34.)



1. A clothes rack, comprising a round bar adapted to be secured to a support in a fixed and spaced relation thereto and provided with a plurality of apertures, a rod, a plurality of hubs having clothes arms and mounted to turn on said rod, spacing collars on the rod between the said hubs, means for securing the hubs on the rod, eyes secured to sundry of the said collars and mounted to slide and turn on the said bar, and a pin adapted to be passed through an aperture of the bar below an eye.

2. A clothes drier, comprising a round bar adapted to be secured to a support in a fixed and spaced relation thereto, a head consisting of a rod, a plurality of hubs having clothes arms fixedly secured thereto and mounted to turn on the rod, collars between the said hubs, means for securing the hubs on the rod, means carried by the head for mounting it on the rod so as to turn and slide thereon, and means for holding the said head in the position to which it is adjusted on the bar.

1,265,525. HEEL-NAILING JACK. WILLIAM E. SCARLETT, East Lynn, Mass. Filed May 2, 1914. Serial No. 836,014. (Cl. 12—127.)



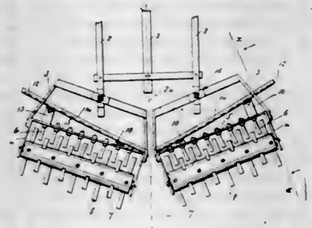
1. In a heel nailing machine, a jack post adapted to hold a shoe with a heel thereon in operative relation to a nailing plate, and an operating device for said jack post adjustable to different initial positions to raise it vertically to variable and predetermined positions at a single full movement of said operating device from a selected initial position to a determinate limiting position for bringing heels of different heights to operative position.

5. Apparatus of the kind described, comprising a support having a jack post slidably fitted therein, operating means for adjusting said jack post longitudinally in said support disposed adjacent the base of said support, and a rest for the front portion of the last having a bracket mounting carried by said support and extending over said operating means for the jack post so as to clear the same in all positions of the movement thereof.

7. Apparatus of the kind described, comprising means for supporting the back part of a shoe in position for heel nailing and means associated therewith for supporting and alining the forepart of the shoe, said alining means consisting in a pair of upstanding spaced apart guides with means for simultaneous adjustment whereby one is in position to aline rights and the other lefts of any style or size of shoe.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,265,526. RIDGING AND PULVERIZING MACHINE. ANTON SCHAEFER, Spring Grove, Ill. Filed Feb. 26, 1918. Serial No. 219,241. (Cl. 97—38.)

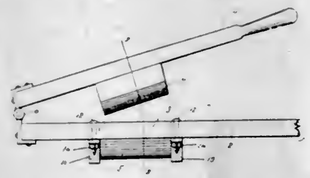


1. In a ridging and pulverizing machine, a draft device, two frames secured to the draft device, harrow teeth carried by the said frames, toothed rollers journaled in the said frames behind the harrow teeth and arranged one on each side of and at a predetermined angle to the center line of draft, and ridging blades secured to the frames in front of the harrow teeth and arranged at a different predetermined angle from the toothed rollers.

3. In a ridging and pulverizing machine, a draft device, two frames secured to the draft device, harrow teeth carried by the said frames, toothed pulverizing rollers mounted in the said frames behind the harrow teeth and arranged one on each side of and at an angle to the center line of draft, reversible ridging blades having scraping edges at top and bottom, and means for securing the ridging blades to the frames in front of the harrow teeth at different distances above their points.

[Claim 2 not printed in the Gazette.]

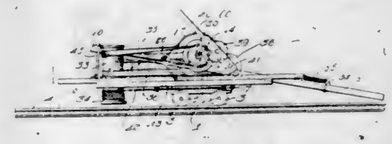
1,265,527. VEGETABLE-SLICING MACHINE. ANTON SCHAEFER, Spring Grove, Ill. Filed Mar. 9, 1918. Serial No. 221,436. (Cl. 146—7.)



1. A slicing machine, comprising a stationary support provided with a hole, a series of spaced knife blades secured together and arranged in the form of a segment of a cylinder, curved clamping bars provided with fastening devices and engaging with the end portions of the blades and detachably supporting them under the said hole, and means for forcing the articles to be sliced against the edges of the knife blades.

2. A slicing machine, comprising a stationary support provided with a hole and having recesses in its underside at opposite sides of the hole, a series of spaced knife blades secured together and arranged in the form of a segment of a cylinder with its ends engaging with the said recesses, curved clamping bars provided with fastening devices and engaging with the end portions of the blades and detachably supporting them under the said hole, and means for forcing the articles to be sliced against the edges of the knife blades.

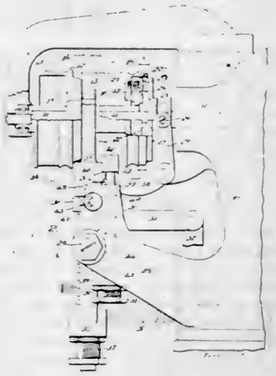
1,265,528. SHOVEL. FREDERICK E. SCHNEIDER, Highland, Wis., assignor of one-fourth to Edward P. Cody and one-fourth to James P. Shea, Highland, Wis. Filed May 2, 1917. Serial No. 165,934. (Cl. 214—137.)



1. In a shovel, a truck, a platform swivelly mounted on said truck, a drive shaft mounted on the platform and extending transversely thereof, guides extending longitudinally of the platform, a crank shaft mounted on the guides in parallel relation to the drive shaft, a shovel arm slidable through the guides, a shovel at the forward end of the shovel arm, and means controlling the movements of the shovel arm.

[Claims 2 and 3 not printed in the Gazette.]

1,265,529. DRIVING AND STOPPING MECHANISM. AUGUST R. SCHOENKY, Somerville, Mass., assignor to Reece Shoe Machinery Company, Boston, Mass., a Corporation of Maine. Filed Aug. 18, 1916. Serial No. 115,912. (Cl. 74—46.)



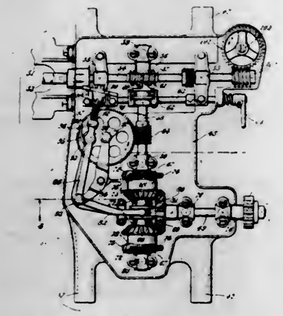
1. In a driving and stopping mechanism for power driven machines, in combination, high and low drive mechanisms adapted to operate in the same direction; a driven shaft; means to disengage the high speed mechanism from said shaft; means to stop the shaft thereafter; and means to engage the low speed drive after said shaft has been stopped.

4. In a driving and stopping mechanism for power driven machines, in combination, an operating shaft; high and low speed drive means adapted to operate said shaft in the same direction; means to disengage said high speed means from said shaft; means coacting with said shaft to stop it after the high speed has been disengaged; and means to thereafter engage said low speed drive means.

8. In a driving and stopping mechanism for power driven machines, in combination, an operating shaft; high and low speed drive means on said shaft; a stop cam on said shaft; starting and stopping means coacting with said cam; and means controlled by said stopping means to engage the low speed drive.

[Claims 2, 3, 5 to 7, and 9 to 16 not printed in the Gazette.]

1,265,530. GEARING. AUGUST E. SCHUETTE and JULIUS H. KINTZELE, St. Louis, Mo., assignors, by mesne assignments, to St. Louis Washing Machine Company, a Corporation of Illinois. Filed Sept. 25, 1916. Serial No. 121,918. (Cl. 74—50.)



1. Gearing of the character described, comprising a drive shaft, a pinion attached to the drive shaft, a driven shaft, a pair of gears loose on the driven shaft meshing with said pinion, a clutch movable to positions to clutch said gears alternately to said driven shaft, a lever movable to actuate said clutch into alternate engagement with said gears, a pair of cams, means for actuating said cams by said driven shaft for imparting initial movement in opposite directions to said lever, and a spring acting on said lever to impart the final movements to said lever in both directions.

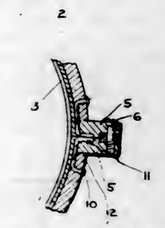
3. Gearing of the character described, comprising a drive shaft, a pinion rigid on said drive shaft, a driven shaft, two gears loosely mounted on said driven shaft, a clutch movable to positions to clutch said gears alternately to said driven shaft, a lever for moving said clutch to positions to clutch said gears alternately to said driven shaft, cams for imparting initial movements to said lever alternately in opposite directions, an arm pivoted to said lever, a spring encircling said arm and being placed under compression by the initial movements of said lever by said cams, and a pivoted abutment for said spring against which said spring is held in imparting the final movements to said lever in opposite directions after the initial movements have been imparted to said lever by said cams.

9. Gearing of the character described, comprising a drive shaft, a driven shaft, a pinion rigid on one of said shafts, gear wheels loose on the other shaft meshing with said pinion, a clutching member for controlling said gearing, a lever connected to said clutching member for actuating the same in opposite directions, an arm in connection with said lever, a toggle arm in connection with the arm of the lever, a cam roll on one of said arms, cams arranged to operate against said roll to impart initial movements to said lever in alternately opposite directions, a spring having one end abutting against the arm on said lever and encircling the other arm, a pivoted abutment for said spring whereby said spring is compressed when said arms are moved by said cams, said spring being arranged to impart the final movements to said arms, and a device operated by said driven shaft for operating said cams.

10. In driving gearing of the class described, a drive shaft, a driven shaft, gearing connecting said shafts, a clutching member for controlling said gearing, a toggle connected to said clutching member, a spring acting to break said toggle, a cam roll on said toggle, and a cam adapted to engage opposite sides of said roll to alternately shift said clutching member in opposite directions.

[Claims 2, 4 to 8, and 11 not printed in the Gazette.]

1,265,531. OPHTHALMIC MOUNTING. ELMER L. SCHUMACHER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 30, 1917. Serial No. 204,646. (Cl. 88—47.)



3. In a device of the character described, the combination with a lens frame having abutment plates projecting therefrom, of a supplemental rim encircling the frame, and staples having interlocking engagement with the rim and with the abutment plates for securing the parts together.

6. In a device of the character described, the combination with a frame having connecting plates projecting therefrom, of a rim encircling the frame and having its ends abutting the plates, staples embedded in and projecting from the rim, the plates having apertures to receive the staples, and the projecting portions of the staples extending through the apertures and being clenched against the plates to securely connect the parts, substantially as illustrated.

[Claims 1, 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,265,532. RACE-KNIFE. OZBERT M. SCOTT, Seattle, Wash. Filed May 7, 1917. Serial No. 167,125. (Cl. 7—11.)

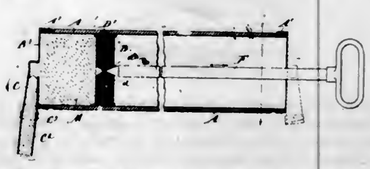


2. A race knife comprising a blade shank that is provided with a curved tip and is recessed to form a shoulder, a blade having a curved marking element and adapted to fit the end of said blade shank and means for securing said blade to said shank.

3. The combination with a race blade having a blade shank that is provided with a curved tip and is recessed to form a shoulder, of a separable marking blade adapted to fit within said curved tip and rest against said shoulder and a pin to co-act with said curved tip, and said shoulder to secure said marking blade to said blade shank.

[Claims 1 and 4 not printed in the Gazette.]

1,265,533. GREASE-CONTAINER. FREDERICK H. SEARLE, Toledo, Ohio, assignor to himself, Robinson P. Searle, Toledo, Ohio, and Henry A. Searle, Council Bluffs, Iowa. Filed July 19, 1917. Serial No. 181,456. (Cl. 221—78.)



1. The container described, consisting of a cylindrical body having its ends screw-threaded, interchangeable heads threaded to match to either of said ends, one of said heads having a delivery nozzle and the other closed, a plunger in said body having a central recess in each face and arranged to be exposed by the removal of said closed head, and to be moved axially toward said delivery head by pressure applied through a rod introduced through such open end of said body and engaged in such recess.

3. The container described, consisting of a cylindrical body, removable heads closing the ends of said body, and an unconnected plunger in the latter adapted to be forced axially in either direction without removal from said body by pressure applied thereto through an open end of said body afforded only by the removal of the corresponding head.

[Claims 2 and 4 not printed in the Gazette.]

1,265,534. SUITCASE-LOCK. ERNEST H. SHAFF, Grand Haven, Mich. Filed Apr. 23, 1917. Serial No. 164,001. (Cl. 70—115.)



1. A hasp including a fixed member having steps and a flanged tongue, a movable member having ears, an abutment adapted to engage the steps, and a spring mounted beneath the flanged tongue and engageable in the movable member at the steps for holding the movable member in an erect position.

2. A hasp comprising an attaching plate having a flanged tongue, a movable member pivotally mounted upon said attaching plate a flat spring bearing upon said movable member and engaging said flanged tongue, so that said spring will be held against displacement and will urge said movable member in one direction.

6. In a device of the class described, the combination of a lock body, having a housing, a latch bolt reciprocally mounted within said housing, said latch bolt having upstruck portions on its side edges, said upstruck portions having notches provided with overhanging portions, a tumbler positioned upon said latch bolt, said tumbler passing within the notches of said upstruck portions, said upstruck portions fitting upon said tumbler for holding the same against displacement, means for urging said tumbler in one direction, parallel tongues formed in the longitudinal axis of said latch bolt, a flat spring passing between said tongues and bearing upon the housing whereby said spring will be held against displacement and will urge said latch bolt in one direction, said tumbler being adapted to releasably retain said latch bolt in a set position.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,265,535. RATCHET-WRENCH. WILLIAM HETTRICK SHANNON, Astoria, Ill. Filed Feb. 5, 1918. Serial No. 215,504. (Cl. 81—59.)

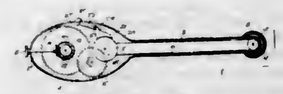


1. A ratchet wrench comprising a handle, a wrench head pivoted thereto, said head having a curved channel formed therein concentric with its axis of rotation, ratchet teeth provided on the head outside the channel, a spring for automatically moving the head about its axis in one direction, a toothed pawl for engagement with the ratchet teeth of the head for forcing the latter in the opposite direction, said pawl having an extension terminating in a lug entering the curved channel in the head, and a second spring bearing against the pawl for forcing the said lug against the outer wall of the curved channel to hold the head against movement by the first named spring.

3. A ratchet wrench comprising a handle, a wrench head pivoted thereto, a spring for automatically moving the head about its pivot in one direction, said head having ratchet teeth on its exterior, a pawl for engagement with the ratchet teeth, a spring for the pawl having a greater force than the sprlug for the head, and means provided on the pawl to engage the head when said pawl is out of engagement with the ratchet teeth, said means serving as a friction brake to hold the head against movement by its spring.

[Claim 2 not printed in the Gazette.]

1,265,536. ROTARY TOOTH-BRUSH. GABRIEL SHARPS, Karnak, N. D. Filed Apr. 13, 1917. Serial No. 161,807. (Cl. 15—37.)



A rotary tooth brush comprising a casing formed to fit within the hand and terminating in a reduced extension, a transverse shaft journaled in the free end of said extension, and extending beyond one side thereof, a brush secured upon the projecting end of said shaft, a driven shaft journaled in said casing parallel with said first named shafts, an operative connection between said shafts, and means for controlling the speed of rotation of said brush comprising a drum secured upon said second named shaft, a bracket extending inwardly from the inner wall of said casing, a lever pivoted intermediate its ends upon said bracket, a brake shoe on one end of said lever having an arcuate face engaging the periphery of said drum, a spring secured to said bracket and engaging said lever for urging said shoe into contact with said drum, and a push button on the other end of said lever projecting outwardly through the side wall of said casing at its central portion.

1,265,537. GLASS SYRINGE. IVAN R. SHULL, Millville, N. J., assignor to Becton, Dickinson & Co., Rutherford, N. J., a Corporation of New Jersey. Filed Dec. 21, 1916. Serial No. 138,176. (Cl. 73—166.)

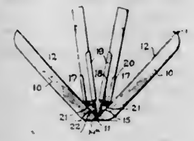


1. A glass syringe, comprising a barrel provided with a graduation and a plunger mounted to reciprocate in the barrel, the plunger being hollow and provided with a reflecting lining on its inner surface, the said reflecting lining coacting with the said graduation to permit accurate reading thereof.

2. A glass syringe, comprising a barrel and a plunger mounted to reciprocate in the barrel, the contacting sur-

faces of the barrel and the plunger being ground and the barrel being provided with graduation marks, the said plunger being hollow and having its inner surface silvered to provide a reflecting surface for the rays of light.

1,265,538. CIGARETTE-CASE. LAZAR SINGER, New York, N. Y. Filed Sept. 10, 1917. Serial No. 190,515. (Cl. 206—41.)



1. A structure of the kind described comprising opposed lids hinged together, independent holders supported by the hinge of the lids, and means carried by the lids beneath the holder and in close proximity to the hinge for engaging and separating the holders when the lids are opened.

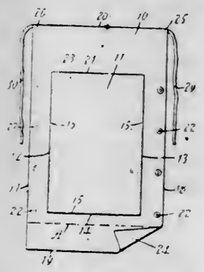
2. A cigarette case comprising a pair of hinged lids, diverging spring arms rising from the hinge of the lids, independent holders supported on the aforesaid arms, catches on the holders, and fingers carried by the lids and arranged to engage the aforesaid catches whereby the opening of the lids separates the holders.

3. A cigarette case comprising a pair of lids hinged together at one end, sleeves carried by the hinge pintle and having diverging arms, and independent cigarette holders supported on the outer ends of the aforesaid arms.

4. A cigarette case comprising a pair of lids hinged together at one end, sleeves on the hinge pintle, arms carried by the sleeves and having flanges at their outer ends, and independent cigarette holders secured to the flanged ends of the arms.

[Claim 5 not printed in the Gazette.]

1,265,539. SCOUT-BLANKET. MABEL H. SLATER, Webster, Mass. Filed Apr. 7, 1917. Serial No. 160,389. (Cl. 5—5.)

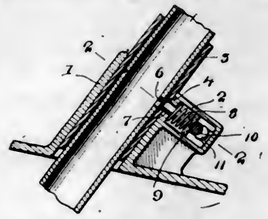


1. A scout blanket comprising a substantially rectangular flexible body portion and a substantially rectangular auxiliary body portion attached on three sides thereof to said main body portion and forming a pocket open at one end thereof to receive a human body, said main body portion extending to a substantial distance beyond said auxiliary body portion on the opposite sides and open end thereof, whereby the opposite sides of said main body portion may be folded over said auxiliary body portion and attached to each other and said end portion may be folded over toward said folded side portions, forming a breathing space, between said folded side and end portions.

[Claim 2 not printed in the Gazette.]

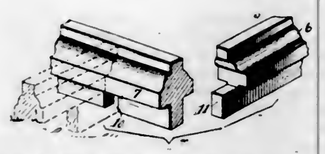
1,265,540. STEERING-WHEEL LOCK. TAUMAN A. SMITH, Mobile, Ala. Filed Dec. 29, 1916. Serial No. 139,568. (Cl. 70—90.)

In combination with a steering shaft having an opening and a column having an opening, a casing mounted in a fixed position with relation to the column, a spring retracted bolt slidably mounted in the casing and adapted to enter the said openings when the same are in register with each other, a shaft journaled in the casing and having a cam adapted to engage the bolt to move the same to a projected position, said bolt having branches which lie



at the opposite sides of the shaft and cam whereby the cam and shaft serve as a guide for the bolt and the branches serve as a guide for the shaft, and a key operated lock located in the casing for controlling the movement of the shaft.

1,265,541. WINDOW-SASH. WHEELER E. SMITH, Pueblo, Colo. Filed Nov. 1, 1916. Serial No. 128,947. (Cl. 20—56.)

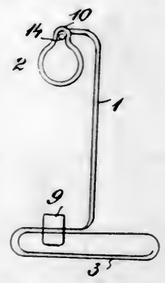


2. A window sash comprising side stiles and top and bottom rails, a vertical mullion having its ends secured within the top and bottom rails of said sash and provided with a notch horizontally disposed, mullions having their ends seated in the side stiles and provided with outwardly projecting end portions extending into and abutting within the notch of the vertical mullion.

4. A window sash comprising stiles and rails and intersecting mullions, said mullions having longitudinally disposed tongues, one mullion having its tongue notched at the intersection of said mullions, the body of the intersecting mullions being cut away and shaped to conform with the shape of the body of the other mullion, the tongues of said intersecting mullions extending into and abutting within the notch of the first mentioned mullion.

[Claims 1 and 3 not printed in the Gazette.]

1,265,542. SCARF-HOLDER. LUDWIG SPÄNGLER, Vienna, Austria. Filed Nov. 9, 1915, Serial No. 60,540. Renewed Oct. 2, 1917. Serial No. 194,414. (Cl. 24—56.)



1. In a scarf holder the combination of a shank, means carried by the lower end of the shank for clamping the

scarf to the breast portion of the shirt an arm projecting laterally from the upper end of the said shank, and an eyelet carried by the outer end of said arm and adapted to be attached to the collar stud, substantially as and for the purpose described.

[Claims 2 to 9 not printed in the Gazette.]

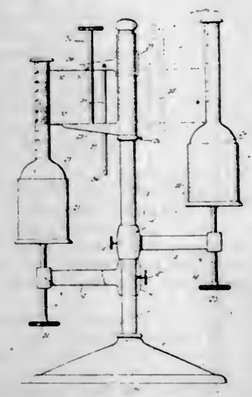
1,265,543. EMERGENCY REPAIR-LINK FOR ANTI-SKID-CHAINS. JAMES R. STACK, Duluth, Minn. Filed Apr. 30, 1917. Serial No. 165,521. Renewed Apr. 4, 1918. Serial No. 226,778. (Cl. 59—85.)



1. An emergency link comprising a body substantially rectangular in cross section provided with a slot open on one face of the body and at one end, one end of said body being V-shaped, its apex having a cylidrical shank terminating in a flat head to enter one end of said slot of an adjacent link, said body adjacent its V-shaped portion on its face opposite the face having the slot provided with a cylindrical opening to receive the head of the shank of an adjacent link, the other end of the body having a V-shaped recess, to receive the V-shaped end of an adjacent link, when said adjacent link is moved pivotally, using the head as a fulcrum.

2. An emergency link comprising an elongated body provided with a cylindrical opening near one end and having an elongated slot open on the face of the body opposite said opening, said slot adjoining and communicating with the opening, said body where the opening and slot adjoin having shoulders, one end of said body having a shank terminating in a flat head to pass through the closed end of the slot and adapted to enter said opening, whereby said head may fulcrum on said shoulders when two links are connected, said body at its end opposite the shank having male and female connections with an adjacent link, whereby two links may be united.

1,265,544. TEST-TUBE READER. ASHLEY U. STEDMAN, Warsaw, N. Y. Filed Mar. 17, 1917. Serial No. 155,439. (Cl. 73—51.)



A device of the character described comprising a base, a standard carried by said base, carrying arms adjustably mounted on said standard, test tube supports adjustably carried by said arms, a sleeve rotatively mounted on said standard, an indicating arm radiating from said sleeve, a second sleeve adjustably mounted on said first named sleeve, an indicating arm projecting from said last named sleeve, means to retain said indicating arms in vertical alinement, and means to adjust said second named arm vertically with respect to said first named arm.

1,265,545. REFRACTORY MATERIAL AND PROCESS OF MAKING SAME. CHARLES B. STOWE, Lakewood, Ohio. Filed Aug. 29, 1917. Serial No. 188,805. (Cl. 18—47.5.)

1. The process of making a molded article of refractory material which consists of forming the article out of a mixture of magnesium carbonate and water, coating the article with pulverized iron oxid and burning it at a temperature to cause the carbon di-oxid and water of the mixture to be driven off, and to cause some of the iron oxid coating to unite with magnesium oxid at the surface of the article.

2. The process of making a molded article of refractory material which consists of forming the article out of magnesium carbonate with which has been burned iron oxid, coating the article with pulverized iron oxid, and then burning it at a temperature which will cause a portion of the iron oxid to unite with the surface material of the body of the article.

6. A molded article composed of basic refractory material such as magnesium oxid having a sheath formed by first coating the article with metallic oxid carrying material, and then burning the article so coated at a temperature which will cause a portion of the metallic oxid to chemically unite with some of the material of which the body of the article is composed.

[Claims 3 to 5 not printed in the Gazette.]

1,265,546. GOGGLES. HARRY H. STYLL, Southbridge, Mass. Filed Nov. 30, 1917. Serial No. 204,648. (Cl. 88—43.)



1. A pair of goggles including spaced frames, a bridge member including a rectangular frame of a single piece of wire, one end of said wire being bent to form a loop and the other end movably disposed within the loop.

5. A device of the class described including a pair of lens frames, a substantially rectangular connecting member of yieldable material disposed between said frames, said connecting member being formed of wire and having one of its ends extending inwardly between the frames and thence downwardly and a nose rest carried by the lower end of the downwardly extending arm.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,265,547. EXTRACTION OF LEAD FROM ITS ORES OR LEAD-CONTAINING MATERIALS. HENRY LIVINGSTONE SULMAN and HUGH FITZALIS KIRKPATRICK PICARD, London, England, assignors to The Metals Extraction Corporation Limited, London, England. Filed June 28, 1917. Serial No. 177,599. (Cl. 75—18.)

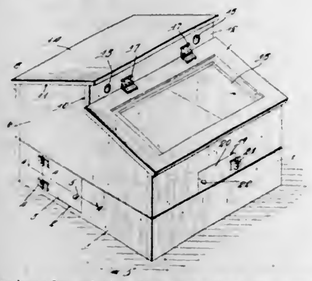
1. A process for the extraction of lead from lead-containing material when the lead is in the form of sulfate, which consists in treating the said material to dissolve the lead with brine and a solution of a salt capable of forming a sulfate substantially insoluble in brine.

5. A cyclic process for the extraction of lead from lead-containing material when the lead is in the form of sulfate which consists in treating the said material with brine to dissolve the lead, then treating the resulting solution with a salt capable of forming a sulfate substantially insoluble in brine, precipitating the lead, separating the precipitate and treating a fresh batch of lead-containing material with the solutions produced.

11. A cyclic process for the extraction of lead from lead-containing material when the lead is in the form of sulfate which consists in treating the said material to dissolve the lead with brine and a solution of calcium chlorid, precipitating the lead with solid dry sodium carbonate, separating the precipitate, and thereafter adding to the brine a further quantity of calcium chlorid and treating a fresh batch of lead-containing material therewith.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,265,548. CHICKEN-BROODER. LLOYD C. TEEL, Mentone, Ind. Filed May 28, 1917. Serial No. 171,503. (Cl. 119—32.)



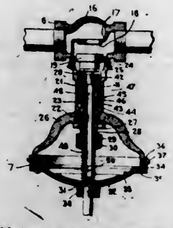
1. In a brooder of the class described, the combination with a body, of a top-structure thereon provided with a horizontal strip having ventilating openings, a pair of hanger-brackets fastened to said horizontal strip of the top-structure near the ends of the said strip and near the ventilating openings, a heating pipe up near the roof-structure and resting on said brackets, and means for supplying heat to said heating pipe.

[Claim 2 not printed in the Gazette.]

1,265,549. PROCESS FOR FIREPROOFING WOOD. CLYDE H. TEESDALE, Madison, Wis., and ROBERT E. PRINCE, Elgin, Ill., dedicated, by mesne assignments, to the Government of the United States and the people thereof. Filed Jan. 23, 1917. Serial No. 144,093. (Cl. 99—12.) (Dedicated to the public.)

A paint consisting of zinc borate mixed with any other pigment and ground in a drying oil.

1,265,550. HUMIDIFIER. ALBERT W. THOMPSON, Fitchburg, and EDWARD W. COMFORT, Winchester, Mass., assignors to The G. M. Parks Company, Fitchburg, Mass., a Corporation of Massachusetts. Filed Apr. 5, 1916. Serial No. 88,986. (Cl. 261—39.)

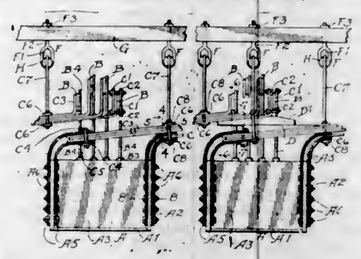


1. In a humidifying system a water vaporizing instrumentality having means including a conduit for supplying a gaseous fluid under pressure thereto, means for automatically controlling the flow of gaseous fluid in said conduit including a motor controlled valve having mechanism operable in a predetermined succession to shut off the supply of gaseous fluid and to vent the section of the conduit intermediate of said valve and said vaporizing instrumentality whereby the latter will be rendered inoperative quickly.

8. In a humidifying system, a water vaporizing instrumentality having means including a conduit for supplying a gaseous fluid under pressure thereto; a compound valve in said conduit comprising a main valve casing having an apertured partition dividing the same into inlet and outlet chambers and provided with a valve seat, a chamber valve stem casing detachably connected to said main valve casing and communicating with the outlet chamber thereof, a hollow vented valve stem reciprocably mounted in said casing and provided with a head adapted to coöperate with said valve seat, a cylindrical spring actuated valve surrounding said valve stem and connected thereto and adapted to be seated upon the head of said valve casing when the main valve is open and to be removed therefrom when the main valve is closed whereby the air in the outer chamber of said valve casing will be vented through said valve stem, a motor adapted to actuate said valve stem in one direction and a spring to actuate the same in the opposite direction.

[Claims 2 to 7 not printed in the Gazette.]

1,265,551. ELECTROLYTIC APPARATUS. CHARLES HARRISON THOMSON, Maryville, Tenn. Filed Apr. 7, 1917. Serial No. 160,469. (Cl. 204—19.)



1. In an apparatus of the nature described, a series of pots, electrode supports above said pots, electrodes supported by said supports, and electrical conductors connecting one pot with the electrode supports of the next pot and having broad faces approximately paralleling and partially overreaching but spaced from similar faces of the next preceding and the next following of said conductors, substantially as described.

2. In an apparatus of the nature described, a series of pots, electrode supports above said pots, electrodes supported by said supports, and conductor members extending in a common upright plane from one pot to the electrode supports of the next pot, substantially as described.

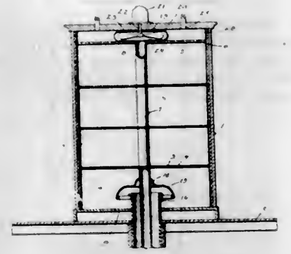
15. In an apparatus of the nature described, a series of pots, a plurality of electrode supports above each of said pots, electrodes supported by said supports, electrical conductors connecting one pot with the electrode supports of the next pot and having broad faces approximately paralleling but spaced from similar faces of the next preceding and the next following of said conductors, filling means for making direct contact between the conductors leading from one pot and the conductors leading from the next pot of the series, and means for clamping said conductors and said filling means against each other, substantially as described.

18. In an apparatus of the nature described, a series of pots, a plurality of electrode supports above each of said pots, electrodes supported by said supports, electrical conductors connecting one pot with the electrode supports of the next pot and having broad faces approximately paralleling but spaced from similar faces of the next preceding and the next following of said conductors, insulation means between the conductors leading from one pot and the conductors leading from the next pot of the series, and means for clamping said conductors and said insulation means against each other, substantially as described.

25. In an apparatus of the nature described, a series of pots, electrode supporting means above each pot, electrodes supported by said supporting means, electrical conducting means connecting one pot with the electrode supporting means of the next pot and approximately paralleling and extending above and spaced from a portion of the conducting means leading from the last-mentioned pot to the electrode supporting means of the next pot of the series, and filling means occupying the space between the conducting means of one pot and the conducting means of the next pot of the series, substantially as described.

[Claims 3 to 14, 16, 17, and 19 to 24 not printed in the Gazette.]

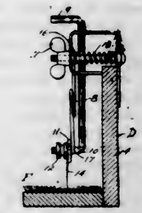
1,265,552. REFRIGERATOR. GEORGE F. TRIPP, Flint, Mich. Filed June 23, 1916. Serial No. 105,435. (Cl. 257—121.)



1. The combination with a refrigerator provided at the top with an air chamber communicating with the interior of the refrigerator, of a cold air pipe communicating at its upper end with the refrigerator at the bottom thereof and extending downwardly therefrom and being of sufficient length to extend into the ground so as to be chilled thereby, and a warm air pipe connected at its upper end with a casing, a fan within the casing, said pipe extending downwardly through the refrigerator into the cold air pipe and arranged to discharge air into the cold air pipe at the bottom thereof.

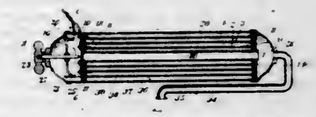
2. The combination with a refrigerator provided at the top with an air chamber communicating with the interior of the refrigerator, of a cold air pipe communicating at its upper end with the refrigerator at the bottom thereof and extending downwardly therefrom and being of sufficient length to extend into the ground so as to be chilled thereby, a warm air pipe connected at its upper end with a casing, a fan within the casing, said pipe extending downwardly through the refrigerator into the cold air pipe and arranged to discharge air into the cold air pipe at the bottom thereof, said cold air pipe projecting above the bottom of the refrigerator, and a hood mounted on the warm air pipe and extending over the upper end of the cold air pipe in spaced relation with the same and projecting below the upper edge thereof.

1,265,553. PAPER-HOLDER. FRANK TYLER, East Highlands, Cal. Filed June 16, 1917. Serial No. 175,070. (Cl. 211—29.)



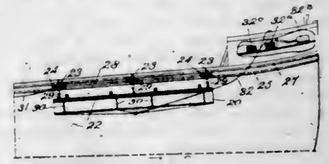
In a paper holder the combination of a bracket comprising a finger adapted to engage the rear face of a supporting wall and a loop projecting forward of said finger having the end thereof adapted to engage the front face of said wall, a tightening member for compressing said loop to grip said wall, said tightening member having its adjustment head disposed at the front of said loop, a needle bar slidably secured in said bracket for straight line movement, said bar having an offset portion at the bottom, a torsion spring having one end thereof bearing upon said tightening member and one end upon the offset portion of said bar tending to project the same, the free end of said offset portion being threaded, and means mounted on said threaded end for removably confining a needle.

1,265,554. ELECTRIC WATER-HEATER. SALVADOR M. VALDES, San Antonio, Tex., assignor of one-half to F. H. Seiber and Mrs. Eva H. Kuhn. Filed Nov. 28, 1916. Serial No. 133,909. (Cl. 219—40.)



In a water heater, the combination with a horizontal cylindrical metallic shell having a water inlet in one side, insulating disks fitting closely within the shell near its ends, one of them having a water outlet opening and both of them having concentric grooves in their faces, a series of concentric nested metallic tubes disposed within the shell with their extremities in said grooves and one extremity of the innermost tube projecting through said opening, the tubes being provided with staggered water openings, and projections on one end of said tubes passing through the remaining disk; of cupped heads fitted to the extremities of the said shell and with the disks respectively producing chambers whereof one is in communication with the central tube, a water-outlet pipe communicating with the head of this chamber, connections within the other chamber between the projections of certain tubes including the outermost, connections between the projections of the remaining tubes including the innermost, feed and return wires leading into this chamber, the return wires being attached to the said first-named connections, and a switch located within this chamber between the feed wire and the other connections and with its handle projecting beyond the head, for the purpose described.

1,265,555. COLLISION AND TORPEDO MAT AND APPARATUS FOR MANIPULATING SAME. WASHINGTON B. VANDERLIP, New York, N. Y. Filed July 11, 1917. Serial No. 179,827. (Cl. 114—229.)



1. The combination with a vessel of an outboard support extending in the direction of the length of the vessel and a mat structure normally carried by and shiftable lengthwise on said support, said structure having means connected with the support to permit positioning of the mat over an opening in the hull, said means including a keel line connected to the mat structure and carrying a weight operative to sink the line when cast overboard and gradually decrease the weight factor during travel of the line to position.

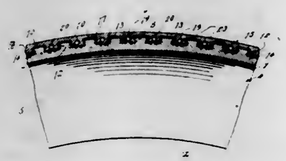
4. The combination with a vessel, of outboard supports extending in the direction of length of the opposite sides of the vessel above the water line, a mat structure carried

by and shiftable lengthwise on one of said supports, said structure being normally positioned at the bow of the vessel, a keel line connected to the mat structure and having a hanger at its free end normally located inboard and adapted to be mounted on the support at the opposite side of the vessel, said line having means whereby it may be cast over the bow of the vessel and positioned beneath the vessel keel, detachable connections between the mat and its support whereby the mat may be located above a hull opening to be closed, detaching of the mat from its support, permitting the mat to be lowered over the opening, and means for supporting the mat in its lowered position.

6. The combination with a vessel, of outboard supports extending in the direction of length of the opposite sides of the vessel above the water line, independent mat structures for and shiftable lengthwise of the supports, said structures being normally positioned at the bow of the vessel, and means individual to each structure for rapidly positioning it at its point of application relative to the hull of the vessel, said means including a securing line normally located inboard, said line having one end secured to the mat structure and having its other end carrying a member adapted to be positioned on the opposite support.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,265,556. INTERCHANGEABLE TIRE-TREAD. WILLIAM I. VARNER, Athens, Ga. Filed Mar. 31, 1917. Serial No. 158,864. (Cl. 152—16.)



1. A tire comprising a tire body, a plurality of transversely extending dove-tails formed on the periphery of the tire body, a tread, a plurality of inwardly extending transverse dove-tails formed on the inner surface of the tread and adapted to fit between the dove-tails of the tire body, and means extending through the dove-tails to expand the same whereby to prevent accidental displacement of the tread.

2. A tire comprising a tire body, a plurality of transversely extending dove-tails formed on the periphery of the tire body, a tread, a plurality of inwardly extending transverse dove-tails formed on the inner side of the tread and adapted to fit between the dove-tails on the tire body, and bolts extending through the last mentioned dove-tails to expand the same, as and for the purpose specified.

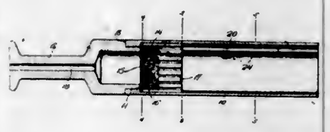
6. In a tire, a tire body, a plurality of transversely extending dove-tails formed on the periphery of the tire body, a tread, a plurality of dove-tails formed on the tread and adapted to fit between the dove-tails of the tire body to lock the tread and body against relative rotation, said dove-tails being corrugated to prevent the tread from moving laterally off of the body.

[Claims 3 to 5 not printed in the Gazette.]

1,265,557. CIGARETTE. MICHAEL WALKOS, Detroit, Mich. Filed Aug. 17, 1917. Serial No. 186,777. (Cl. 131—22.)

1. A device of the class described comprising a container open at one end and having a longitudinally disposed filling opening therein, a mouth piece secured to said container, a closure for said longitudinally disposed filling opening and a compression element carried by said closure for engagement with the contents of the container.

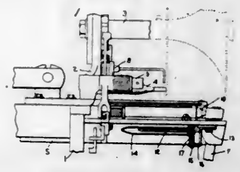
2. A device of the class described comprising a container open at one end and having a longitudinally disposed filling opening therein, a closure for said opening, a mouth piece secured to the container, a filtering device positioned within the container adjacent said mouth piece



and a compression element carried by the closure and abutting the filtering device to provide a stop for the latter.

[Claim 3 not printed in the Gazette.]

1,265,558. FILLING-END-WITHDRAWING MEANS FOR WEFT-REPLENISHING LOOMS. CHARLES H. WARREN, Atlanta, Ga., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 17, 1917. Serial No. 191,701. (Cl. 139—85.)



1. In a weft replenishing loom, a lay provided with a shuttle box and having an opening therethrough to permit the discharge of the abandoned filling carrier and to permit the movement of the picker, a picker, and means movably mounted on the lay and operated by the picker to engage and withdraw from the shuttle the trailing end of the discharged filling carrier.

2. In a weft replenishing loom, a lay provided with a shuttle box and having an opening therethrough to permit the discharge of the abandoned filling carrier and to permit the movement of the picker, a picker, and a device comprising a member movably mounted on the lay and projecting across said opening and acting when struck by the picker to engage and withdraw from the shuttle the trailing end of the discharged filling carrier.

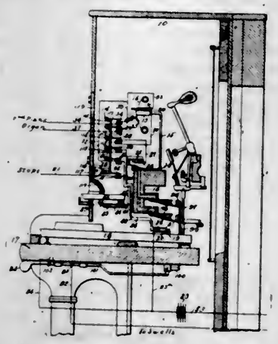
5. In a weft replenishing loom, a lay provided with a shuttle box and having an opening therethrough to permit the discharge of the abandoned filling carrier, a device mounted on the lay comprising a fixed finger and a loop member movable to straddle said finger, and means acting upon the discharge of the filling carrier to swing said loop member into engagement with the trailing end and carry it about said fixed finger and thus withdraw it from the shuttle.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,265,559. COMBINED AUTOMATIC MUSICAL INSTRUMENT. SAMUEL S. WATERS, Washington, D. C. Filed Dec. 12, 1911. Serial No. 665,266. (Cl. 84—193.)

1. In combination with a piano having the usual keys, a pair of contacts for each key, a main electric circuit, branch circuits from said main circuit one for each pair of contacts and including the same, a plurality of dependent instruments, magnets carried by the instruments for playing the same and included in said branch circuits, a set of gang switches for each dependent instrument for optionally closing and opening the circuits to the magnets carried by each of said instruments, a set of normally closed circuit breakers in said branch circuits, and adjustable means for opening and holding open any number of said circuit breakers to control the playing of the dependent instruments.

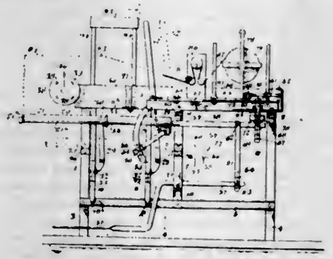
8. In combination with a piano having the usual keys, a pair of contacts for each key, a main circuit, branch circuits therefrom including the contacts, a set of gang switches on the piano in the branch circuits for opening and closing the same, an organ, organ player magnets in the branch circuits, a second set of gang switches on the piano in the branch circuits for closing the organ-player magnets in the branch circuits, a circuit breaker in the branch circuits for rendering any desired number of the circuits inert, stop-magnets on the organ for controlling the organ stops, an independent branch stop-circuit for each stop magnet, and a switch for each stop-circuit mounted on the piano.



12. In combination with a master player piano, a dependent instrument, electric circuits connecting said instrument to said piano to play the same simultaneously, normally closed circuit breakers arranged in the circuits, slides adapted for engagement with the circuit breakers whereby to open any desired number of the circuits, and indicating means connected to said slides for indicating the position of the same.

[Claims 2 to 7, 9 to 11, and 13 to 16 not printed in the Gazette.]

1,265,560. BOX-STRAPPING MACHINE. THOMAS R. WATSON, Monterey, Cal. Filed May 1, 1917. Serial No. 165,713. (Cl. 144—25.)



1. The combination with a frame, of an arm pivotally mounted for lateral swinging movement at each side of said frame, rotatable clamping devices journaled in the forward ends of said arms and adapted to engage each end of a box, means for actuating said arms to move the devices into engagement with said box, and means for locking said arms in their engaged position.

7. The combination with a frame, of a movable box support, clamping devices for engaging the box, means for mounting and operating said box support to move the same away from the box, means for locking the box support when in position to engage the box, and means for locking said clamping devices in their engaged position upon the movement of the box support to its inactive position.

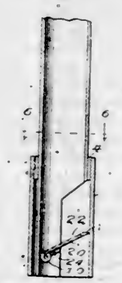
17. The combination with a frame, of a movable box support, clamping devices, means for moving said clamping devices into and out of engagement with the box, detent means for locking said clamping devices in engagement with the box, means for mounting said box support so as to be movable in a downward and rearward direction away from the box, a latch for holding the box support in its active position, and a foot operated lever controlling said latch and said detent, said detent means being retained in its locked position by the weight of the latch when the latter is in its inoperative position.

22. The combination with a frame, of clamping devices for engaging a box, a movable box support, means for mounting said box support to allow the same to be moved toward and away from the box in a downward and rearward direction, a lever for operating the clamping devices, and a connection between said lever and said box support for moving the latter.

49. The combination with side frames and transverse members connecting the same, said members being adjustable to vary the width of the space between the frame, a longitudinally extending arm for the opposite ends of a box mounted on each side frame, clamping devices on the ends of each arm, independent supporting brackets mounted on each side frame to receive rolls of binding material, and independent tensioning devices for the said material also supported by said brackets, said brackets being disposed between said arms.

[Claims 2 to 6, 8 to 16, 18 to 21, 23 to 48, and 50 not printed in the Gazette.]

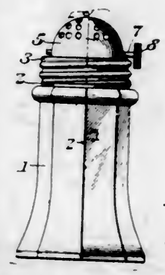
1,265,561. ROPE-CUTTING DEVICE. HOMER E. WEAVER, Knox, Pa. Filed Aug. 14, 1917. Serial No. 186,158. (Cl. 255—34.)



1. In a device of the class described, a tube having a tool joint at its upper end, said tube being reduced at its lower end to produce a semi-circular wall portion, and a cutting blade hingedly supported on said wall portion and foldable within the cross sectional area of the tube.

[Claims 2 and 3 not printed in the Gazette.]

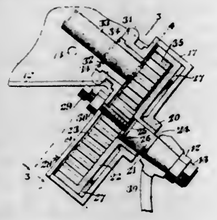
1,265,562. CONDIMENT-HOLDER. LOUIS JOHN WESSEL, Terre Haute, Ind. Filed June 12, 1915. Serial No. 33,742. (Cl. 65—45.)



A condiment holder comprising a receptacle, a hemispherical perforated cover disposed upon the mouth there-

of and having an internal diameter greater than the diameter of the mouth opening to provide a peripheral stop shoulder, an outwardly extending annular flange on said cover, a ring threaded upon the end of the receptacle and engaging said flange, a shaft extending through said cover and revoluble therein, and scraper blades secured on said shaft and freely movable within said cover, said blades being engageable with said stop shoulder to maintain them always within the cap and being swingable back and forth when said receptacle is shaken.

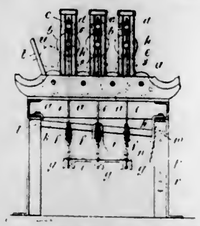
1,265,563. STEERING MECHANISM. EARL E. WEST, Bridgeport, Ill., assignor of one-half to Emery A. Locke, Bridgeport, Ill. Filed Feb. 23, 1916. Serial No. 79,945. (Cl. 74—79.)



1. The combination with a steering post, and a steering arm, of a casing open at one side, an internal gear fitting into said casing and opening outwardly therethrough, a friction ring mounted in the bottom of the casing for contact with the lower flat face of the gear wheel, a connection between said gear wheel and the steering arm, a cover for the casing to inclose the same and the gear wheel, a tension screw threaded through the cover for contact with the bottom of the gear wheel to force the same more or less against the friction ring, a bearing carried by the cover to receive the lower end of said steering post, a pinion mounted on the lower end of said steering post, and means for adjusting said bearing to advance and retard the pinion with respect to the teeth of said gear wheel.

2. The combination with a steering post, and a steering arm, of a casing for attachment to the frame of a vehicle, an internal gear fitting in the casing, a friction ring in the casing for engagement with the gear to retard and resist the turning thereof, a steering shaft carried by the gear and projecting outwardly through the casing to support said steering arm, a pinion mounted on said post and fitting in said internal gear to mesh therewith and turn the gear by the operation of the post, and a screw projecting into the casing and being adapted to be turned up into engagement with said gear for binding the latter to the desired extent against said friction ring.

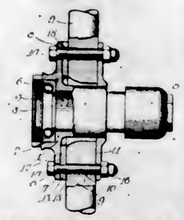
1,265,564. NEEDLE SCOURING AND POLISHING MACHINE. LIONEL ALFRED WHARRAD, Redditch, England. Filed Jan. 30, 1917. Serial No. 145,532. (Cl. 51—10.)



1. In a needle scouring and polishing machine, the combination of lower rollers having a fixed plane of rotation and arranged to support and have contact with a packet or bundle of needles, and an upper roller mounted to have a floating resilient movement and free to move downwardly toward and upwardly from the lower rollers in contact with the packet or bundle of needles and also provided with means having direct contact with the upper portion of the surface thereof for giving it a positive downward movement at intervals for setting up a kneading action on the packet or bundle of needles.

2. In a needle scouring and polishing machine, the combination of lower rollers disposed in alinement and having fixed planes of rotation and arranged to support and contact with a packet or bundle of needles, an upper resiliently controlled floating pressure roller disposed over the lower rollers and also contacting with the packet or bundle of needles under treatment, and a cam directly engaging the upper portion of the surface of the upper roller and having cam projections which impart to the latter roller a positive downward movement at intervals to set up a kneading action relatively to the packet or bundle of needles, the resiliency of the packet or bundle of needles causing the upper roller to rise at intervals when liberated from the maximum cam pressure thereon.

1,265,565. DEMOUNTABLE WHEEL. ISAAC N. WHITE, Chicago, Ill. Filed Mar. 28, 1917. Serial No. 157,868. (Cl. 21—31.)



1. In a demountable wheel, a wheel hub member having an extending flange with unthreaded perforations, a metal ring having threaded perforations registering with the said other perforations, bolts inserted through the registering perforations for drawing the ring tightly against the flange, and means for preventing the removal of the bolts.

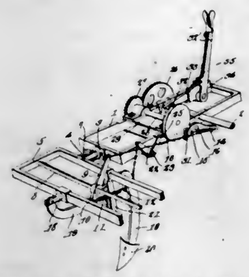
2. In a demountable wheel, the combination with a hub member having a perforated flange, of a ring having threaded perforations, bolts inserted through the perforations of the flange and ring for holding the bolts in place and the ring against the flange, a wheel telescoped over the hub member having perforations adjacent the center through which the bolts are inserted, and removable fastening means at the outer ends of the bolts to hold the wheel in place against the ring.

3. In a demountable wheel, the combination with a hub member having a perforated flange, of a ring having threaded perforations, bolts inserted through the perforations of the flange and ring for holding the bolts in place and the ring against the flange, a wheel telescoped over the hub member having perforations adjacent the center through which the bolts are inserted, and removable fastening means at the outer ends of the bolts to hold the wheel in place against the ring, said means comprising a perforated metal plate and nuts at the ends of the bolts to engage against the plate to clamp the wheel between it and the said ring.

4. The combination with a flanged wheel hub having unthreaded perforations in the flange, of a ring with threaded perforations corresponding to those of the flange, bolts inserted through the holes of the flange and threaded into the holes of the ring to draw it tightly against the flange thereby holding the bolts in place, a wheel telescoped over the hub having perforations to fit over the bolts, a plate secured to the outer side of the wheel having a perforation to fit over the hub and other perforations through which the bolts also extend, and fastening nuts attached to the ends of the bolts and against the said plate of the wheel for holding the wheel in place.

5. In a demountable wheel, the combination with a hub having a perforated flange, of a ring having corresponding threaded perforations, bolts extended through the perforations of the said ring, means for holding the bolts in place in the ring, a wheel secured to the bolts, and a speedometer gear attached to the said ring beyond the outer edge of the flange.

1,265,566. PLANTER. WILLIAM M. WILKEY, Kingman, Ind. Filed Mar. 17, 1917. Serial No. 155,511. (Cl. 111—30.)



In a planter, the combination with a dropper actuating shaft yieldingly held against movement, a pivoted marker beam extending under the shaft, and an arm upon the shaft, of a dog having an arm, a bell crank lever, rod connections between one arm of the lever and the arm of the dog, and between the arm on the dog and the arm on the shaft, a flexible connection between the bell crank lever and the marker beam, a drive gear, a slide, a shaft journaled on the slide, a tappet revoluble with the said shaft, a gear secured to said shaft, and means for shifting the slide to move the gear into and out of mesh with the drive gear.

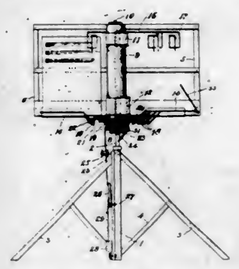
1,265,567. COTTON GIN OR LINTER SAW-GUMMING MACHINE. FRENCH B. WILLIAMS, Little Rock, Ark., assignor of one-half to H. N. Strozier, Little Rock, Ark. Filed Mar. 1, 1917. Serial No. 151,728. (Cl. 76—28.)



In a machine of the class described, a frame structure, a driven shaft supported for rotation and having pinions near the ends thereof, top and bottom shafts arranged respectively above and below the driven shaft and having spur wheels meshing with the pinions on said shaft, a rod connecting the spur wheels of the upper shaft, a rock shaft having hammers provided with forwardly extending striking arms and with rearwardly extending beveled arms, the latter arranged in the path of said rod, tappet members on the bottom shaft, levers having forwardly extending arms and rearwardly extending arms, the latter lying in the path of the tappet members, links pivotally connected with the forwardly extending arms of the levers, a bar carried by said links, and chisels carried by said bar, said chisels being arranged in the path of the striking arms of the hammers carried by the rock shaft.

1,265,568. MUSIC-LEAF TURNER. TOM WILLIAMS, Marysville, Kans. Filed Sept. 12, 1916. Serial No. 119,700. (Cl. 84—17.)

1. A music leaf turner, including a rotatably mounted member, a plurality of leaf turning arms pivotally mounted in said member, a projection depending from and formed intermediate of the ends of each leaf turning arm, a drum adapted to be intermittently rotated and mounted adjacent said member, catches lying in the same transverse plane and projecting from the drum, said catches being adapted to successively engage the projections for swinging the leaf turning arms, a bracket having a cam surface engageable by each projection for partially rotating the rotatable member for placing the next projection in position to be turned, and means for intermittently rotating the drum.

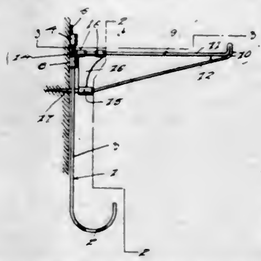


3. A music leaf turner including a rotatably mounted member, a plurality of leaf turning arms, pivotally mounted on the member, a projection on each of the arms, a rotatably mounted drum arranged adjacent said member, catches on the diameter and extending from the drum for successively engaging the projections, a cable having an elastic end connected to a stationary object and having an intermediate portion arranged about the drum, and a pivotally mounted foot actuating lever in connection with the other end of the cable for causing the cable to frictionally engage the drum to consequently actuate the leaf turning arms.

5. A music leaf turner comprising a rotatable member, a supporting bracket having said member rotatably mounted therein and having a cam surface thereon, a plurality of leaf turning arms pivotally mounted on said member to move in the same plane, a projection depending from each arm, a rotatable drum mounted eccentrically to the member, catches formed to lie in same plane and extending from the drum, and means for rotating the drum to cause one of the catches to engage one of the projections and swing the arm until the projection strikes the cam surface of the bracket, said member being thereby partially rotated for releasing the catch and for placing the next projection in position to be engaged by one of said catches.

[Claims 2 and 4 not printed in the Gazette.]

1,265,569. PORTABLE HAT AND COAT HOOK. JAMES W. WILLIS, Walkerville, Ontario, Canada. Filed Sept. 30, 1916, Serial No. 123,048. Renewed Mar. 14, 1918. Serial No. 222,511. (Cl. 248—24.)

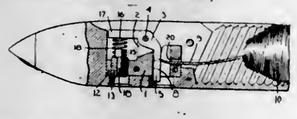


1. A device of the class described comprising a hook member, an arm associated with the hook member and adapted for vertical sliding movement and vertical swinging movement thereon, and an attaching prong carried by the arm.

4. A device of the class described comprising a hook, an arm pivotally mounted on the hook and formed of a single length of wire bent upon itself to provide upper and lower spaced sections, a web extending across the space between the sections, and an attaching member removably carried by the web.

[Claims 2 and 3 not printed in the Gazette.]

1,265,570. SHUTTLE. EDWIN F. WILMOT, Allston, Mass., assignor to The Carton Belting Company, Allston, Mass., a Corporation of Massachusetts. Filed Nov. 17, 1916. Serial No. 131,813. (Cl. 139—46.)



3. A filling tension device, adapted to be positioned in a shuttle body recessed to receive the device and a filling mass, and comprising a base, a member carried by the base and having a portion adapted to bear against a portion of said base, a filling guiding means formed on said bearing portion of the member and adapted to guide filling from the mass to said base and member bearing portions, and tension means acting upon said member to cause a yieldable frictional drag to be given to filling led between said member and base portions.

4. A filling tension device, adapted to be positioned in a shuttle body recessed to receive the device and a filling mass, and comprising a base, the base being provided with an opening, a member carried by said base, said member having a reduced portion extending in said opening, and tension means acting upon said member to cause its reduced portion to be yieldably held against a portion of the base thereby to cause a frictional drag to be given to filling led between said base portion and member, said reduced portion aiding the threading of the filling between the member and base portion and the extension of the member in the opening preventing accidental unthreading.

[Claims 1, 2, and 5 not printed in the Gazette.]

1,265,571. COMBINATION RAILROAD-TIE. LYDELL L. WILSON, East Randolph, N. Y. Filed Jan. 11, 1918. Serial No. 211,400. (Cl. 238—3.)



1. A railroad tie comprising connected metallic I-beams lengthwise of the tie, wood cushion blocks on said I-beams to receive the rails thereon, cement concrete shaped to form a tie around said I-beams and to hold said wood cushion blocks in spaced relation on said tie, and means for attaching the railway rails to said tie.

4. In a railroad tie the combination of two I-beams having spaced openings through the webs of the same and extending lengthwise of the tie, wood cushion blocks on said I-beams, cement concrete surrounding said I-beams and extending through said spaced openings therein, said cement concrete and wood cushion blocks having holes therethrough, fastener blocks having holes therethrough, and rail attaching bolts extending through said holes in said parts.

6. In a railroad tie the combination of lengthwise metallic I-beams, spool-shaped sleeves connecting said I-beams to one another and holding the same in spaced relation, said I-beams and sleeves embedded in cement, cushion blocks on said tie held by said cement, said sleeves having tubular openings therethrough larger than said bolts, and cap-nuts for said bolts fitting into the lower ends of said tubular openings in said sleeves to form grease cups of said sleeves.

9. In combination with railroad rails and ties, fastener blocks for the railroad rails one each side of each rail, said fastener blocks having a groove therein, and a sheet metal cover for each fastener block having a tongue thereon slidably engaging in said groove when in the raised position and locking on said tie when in the lowered position.

17. In combination with a railway tie, a rail, and fastening means for the rail, covers for the fastening means, and means to hingedly connect the covers to the fastening means to allow the covers to be raised and lowered at will.

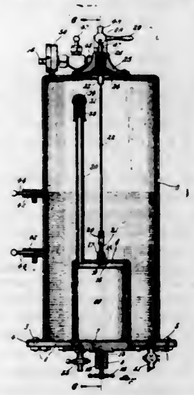
[Claims 2, 3, 5, 7, 8, 10 to 16, 18, and 19 not printed in the Gazette.]

1,265,572. RAILROAD-TIE. MARSHALL GUY WINTERS, Everett, Pa. Filed Apr. 26, 1917. Serial No. 164,684. (Cl. 238—6.)



A railroad tie embodying a pair of spaced sections each of which includes a body formed of concrete, means for reinforcing the body, metallic means anchored in and connecting the sections when they are molded for imparting a resiliency to the tie as a whole, the upper surface of each of the sections being provided with a transverse groove having inclined side walls, blocks formed of wood having their outer edges beveled to abut the inclined walls of the recesses when the blocks are situated therein, bolts extending transversely through the blocks for bracing the blocks and other bolts anchored in the bodies of the sections and engaging the blocks for preventing longitudinal movement of the blocks and adapted to be engaged by rail clamping means.

1,265,573. HYDROCARBON GAS AND METHOD OF PRODUCING THE SAME. LINUS WOLF, Chicago Heights, Ill., assignor to The Thermalene Company, Chicago Heights, Ill., a Corporation of Illinois. Filed June 16, 1915. Serial No. 34,511. (Cl. 48—216.)



1. The process of making gas comprising subjecting a carbid to the action of a suitable reagent to form acetylene and utilizing the heat evolved to gasify another carbon compound to combine with the acetylene.

2. The process of making gas from acetylene and a hydrocarbon comprising gasifying the hydrocarbon by the heat evolved by the formation of acetylene from a carbid, and combining the gases.

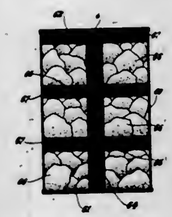
3. The process of making acetylene-oil gas comprising gasifying an oil by the heat evolved by the formation of acetylene from a carbid, and combining the gases.

13. A gas consisting of a combination of acetylene and oil gas purified by cooling in combination.

14. A gas consisting of acetylene and oil gas formed together as to time and place and combined and purified by cooling in combination.

[Claims 4 to 12 not printed in the Gazette.]

1,265,574. HYDROCARBON-GAS CARTRIDGE. LINUS WOLF, Chicago Heights, Ill., assignor to The Thermalene Company, Chicago Heights, Ill., a Corporation of Illinois. Original application filed June 16, 1915, Serial No. 34,511. Divided and this application filed Sept. 13, 1915. Serial No. 50,372. (Cl. 48—60.)



1. A gas producing body comprising an acetylene-forming carbid, and a volatile component adapted and arranged to gasify by the heat evolved in the formation of the acetylene from the carbid.

2. A gas producing body comprising an acetylene-forming carbid, and a volatile hydrocarbon adapted and arranged to gasify by the heat evolved in the formation of the acetylene from the carbid.

3. A gas producing body comprising an acetylene-forming carbid, and an oil adapted and arranged to gasify by the heat evolved in the formation of the acetylene from the carbid.

4. A gas producing body comprising a carbid, and a vehicle carrying a volatile gas-forming component.

5. A gas producing body comprising a carbid, and a vehicle carrying a hydrocarbon.

[Claims 6 to 12 not printed in the Gazette.]

1,265,575. METHOD OF SHAPING FILAMENTS. DANIEL K. WRIGHT, Paterson, N. J., assignor to General Electric Company, a Corporation of New York. Filed Apr. 15, 1914. Serial No. 832,121. (Cl. 140—71.)



1. The method of shaping a filament, which consists in winding the wire which is to compose the filament in a coil comprising a plurality of convolutions, and passing an electric current through the coil in such a way that certain portions thereof carry a much greater current than the other portions.

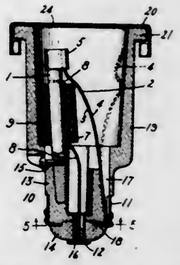
4. The method of shaping a filament, which consists in winding a plurality of turns of the wire which is to compose the filament upon two suitably spaced conducting supports and passing an electric current through the wire by using the supports as electrodes.

6. The method of shaping a tungsten filament, which consists in winding the wire which is to compose the filament into a coil comprising a plurality of convolutions and heating certain portions of said coil to a temperature of approximately 2000° C. while maintaining other portions of the wire at substantially their normal temperature.

8. The method of treating a tungsten wire, which consists in winding it upon a suitable form in such a way that it will comprise a plurality of straight sections of uniform length separated by bends, and passing an electric current through the wire in such a way that the straight portions will carry a much greater current than the bends.

[Claims 2, 3, 5, 7, and 9 not printed in the Gazette.]

1,265,576. ELECTRIC CUT-OUT. GILBERT WRIGHT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 5, 1915. Serial No. 25,908. (Cl. 175—275.)



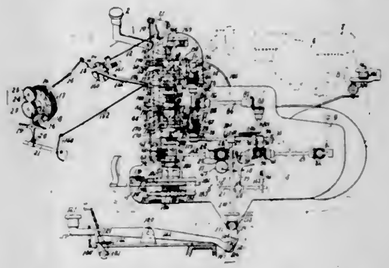
1. An electric cut-out comprising an insulating support having a socket, a pair of terminals associated with said support, a relatively rigid contact member in said socket and means detachably securing it therein accessible at one side of the support, said member being in electrical connection with one of said terminals, a spring contact member secured to said support and in electrical connection with the other of said terminals, fusible means holding said spring contact member flexed toward said rigid member and serving to keep said members in electrical connection with one another, and heater means for releasing said spring contact member electrically connected between said terminals.

3. In an electric cut-out, the combination of a base comprising insulating parts, center contact means serving to secure said parts together, and a screw shell having a portion clamped between said parts, a spring contact member having one end clamped between said portion of said screw shell and one of said insulating parts, and another contact member secured to said base, and a heater coil connecting said latter contact with the center contact.

5. A fuse member for an electric cut-out consisting of a U-shaped metal yoke and a metal bar secured against the ends of the U by readily fusible solder.

[Claims 2 and 4 not printed in the Gazette.]

1,265,577. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Feb. 2, 1912. Serial No. 674,901. (Cl. 235—59.)

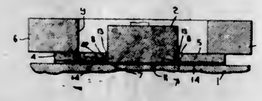


20. In a computing machine, the combination with a plurality of computing heads, of manual means for individually controlling the state of each head, automatic controlling means for controlling the states of all of said heads according to a predetermined plan, and means for

reversing the states of all active computing heads whether set under control of said manual means or said automatic means.

[Claims 1 to 19, 21, and 22 not printed in the Gazette.]

1,265,578. METHOD OF FOLDING SHEET MATERIAL. FRANK ZALESKI, Somerville, Mass., assignor to Reece Shoe Machinery Company, Boston, Mass., a Corporation of Maine. Filed Mar. 31, 1917. Serial No. 158,860. (Cl. 12—146.)



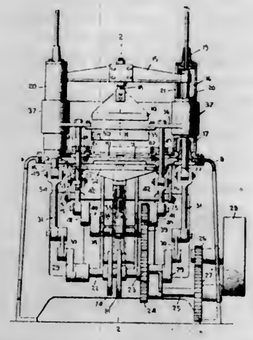
1. The method of folding sheet material which consists in upturning the marginal portion of a sheet and then forcing the peripheral part of the upturned portion toward that part of the sheet which is not upturned thereby to form an outwardly extending fold in that part of the upturned marginal portion which is immediately circumjacent the portion of the sheet which has not been upturned.

3. The method of folding sheet material which consists in upturning the marginal portion of a sheet and then forcing the peripheral part of said upturned portion toward that portion of the sheet which has not been upturned in the direction of the upturned portion thereby to form in said upturned portion an outwardly-extending fold.

8. The method of folding sheet material which consists in upturning the marginal portion of a sheet, forming in the upturned marginal portion an outwardly-extending fold, one ply of which occupies the plane of that portion of the sheet which has not been upturned and retaining the peripheral part of said upturned marginal portion in its upturned position while the fold is being made.

[Claims 2, 4 to 7, and 9 to 12 not printed in the Gazette.]

1,265,579. MACHINE FOR MAKING COMPOSITE INSOLES. FRANK ZALESKI, Boston, Mass., assignor to Reece Shoe Machinery Company, Boston, Mass., a Corporation of Maine. Filed June 21, 1917. Serial No. 176,222. (Cl. 12—22.)



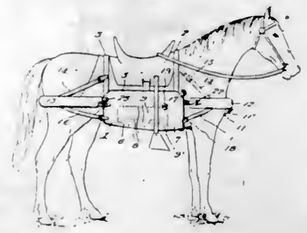
1. In a machine for making composite insoles, the combination with means to upturn the marginal portion of a blank of sheet material, of means to form in said upturned portion an outwardly-extending fold constituting the feather edge of the insole.

3. In a machine for making composite insoles, the combination with means to upturn the marginal portion of a blank of sheet material, of means to form in the part of said upturned portion immediately circumjacent the portion of the blank which has not been upturned, an outwardly-extending fold which constitutes the feather edge of the insole while retaining the peripheral edge of the upturned portion in its upturned position to constitute a lip.

5. In a machine for forming composite insoles, the combination with folding blades, of a die member cooperating with said blades to upturn the marginal portion of a blank of sheet material against the side of the die member, means to cause said folding blades to press said marginal portion against the side of said die member and then to move relative to the die member, thereby to form an outwardly-extending fold in said marginal portion.

[Claims 2, 4, and 6 to 21 not printed in the Gazette.]

1,265,580. ANIMAL LIFE-PRESERVER. MICHAEL ZOFCHAK, Pittsburgh, Pa. Filed Oct. 29, 1917. Serial No. 199,030. (Cl. 9—17.)

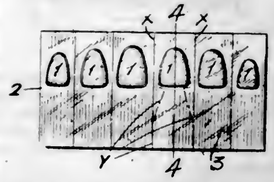


1. In an animal life preserver, the combination with a water-proof pouch of a size to underlie the animal's belly and sub-divided into a central compartment and a frame compartment surrounding it, and means for inflating the compartments selectively; of a harness for fastening the device upon the animal.

2. A life preserver comprising a pouch of water-proof fabric made of two sheets stitched together around their edges, an inner line of stitching paralleling and marginal line and forming a frame, a nipple for inflating this frame, parallel rows of stitches within the frame forming fingers and leaving one end of all the fingers in connection with each other, and a nipple for inflating the connection.

[Claims 3 and 4 not printed in the Gazette.]

1,265,581. MATRIX FOR USE IN TOOTH RESTORATION. DANIEL ANTON ZURBRIGG, Milford, Del., assignor to The D. L. Caulk Company, Milford, Del., a Corporation of Delaware. Filed May 7, 1917. Serial No. 167,018. (Cl. 32—17.)



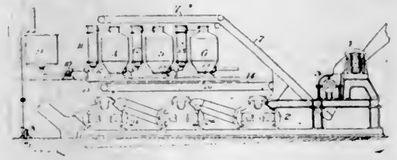
1. A matrix for use in tooth restoration composed of relatively stiff material which may be readily cut or trimmed and having a molding portion in the form of a shallow depression conforming in size and outline to the front portion of an actual tooth for which an artificial facing is to be substituted, the said molding portion serving as a carrier for the cement used in the restoration.

2. A matrix for use in tooth restoration having a molding portion in the form of a shallow depression conforming in size and outline to the front portion of a natural tooth for which an artificial facing is to be substituted and serving as a carrier for the cement used in the restoration, the said matrix having projecting from its molding portion a finger tab by which it may be readily manipulated and being composed of relatively stiff material which may be readily cut to enable the trimming of the molding portion and the severing of the tab.

3. A blank of relatively stiff material which may be readily cut and which is impressed with a plurality of tooth restoration matrices, said matrices being arranged in spaced relation to one another and each matrix differing in form from the others.

4. A blank having a plurality of tooth restoration matrices formed as integral parts thereof and arranged in a row at regular intervals, the blank having an extended plain portion parallel to said row and having its material selected to enable the severing from it of a strip carrying any desired matrix, without injury to the adjoining matrix.

1,265,582. PROCESS FOR EXTRACTING SUCROSE FROM SUGAR-CANE. ANDREW ADAMS, Kahuku, Hawaii. Filed Aug. 25, 1915. Serial No. 47,243. (Cl. 127—17.)

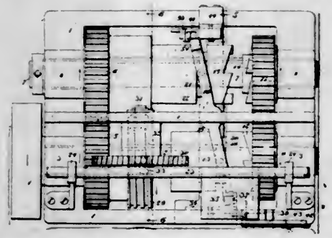


1. In apparatus of the class described, the combination with a crusher and a shredder, of a liming tank, means for conveying juice from the shredder to the tank, a heater, a diffusion cell connected to said heater, means for conveying the juice from the liming tank to the cell, a mill, and means for conveying the shredded cane from the cell to the mill.

3. In apparatus of the class described, means for crushing and shredding the cane, means for separating the shredded cane from the juice which is freed by the crushing and shredding means, means for receiving the cane from the shredder, means for receiving the cane from the last mentioned means and for freeing the juice therefrom, the first mentioned receiving means being constructed and arranged to receive the juice from the last mentioned receiving means and for filtering said juice.

[Claims 2 and 4 not printed in the Gazette.]

1,265,583. DRIVING MECHANISM. LEON G. ADAMS, St. Louis, Mo. Filed July 29, 1916. Serial No. 111,987. (Cl. 74—50.)



1. Driving mechanism, comprising a drive shaft, an additional shaft, a gear rigid on the drive shaft, a gear rigid on the additional shaft and meshing with the gear on the drive shaft, a driven mechanism, a pinion loose on the drive shaft permanently engaging the driven mechanism, a pinion loose on the additional shaft permanently engaging the driven mechanism, clutch devices movable to different clutching positions wholly by the drive shaft independently of the driven mechanism aforesaid, for clutching said pinions alternately upon said shafts, and optional means for preventing movement of said clutch devices from any clutching position.

2. Driving mechanism, comprising a drive shaft, an additional shaft, means for driving the additional shaft from the drive shaft, a driven element, a pinion loose on the drive shaft and a pinion loose on the additional shaft, both permanently engaging said driven element, a clutch device for each of said pinions, mechanism driven wholly by said drive shaft independently of the driven element aforesaid, for shifting said clutch devices alternately into and out of clutching position as required to clutch said pinions alternately upon said shafts, and optional means for preventing shifting of said clutch devices out of any clutching position in which they may be placed.

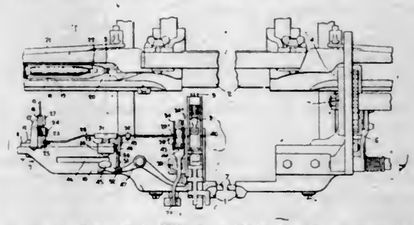
6. Driving mechanism comprising a drive shaft, a driven shaft operated thereby, pinions loosely mounted upon said shafts respectively, clutch members upon said shafts respectively for clutching said pinions to the shafts upon which they are mounted, a lever for shifting said clutch members into and out of engagement with said pinions, actuating mechanism driven by said drive shaft for oscillating said lever, means for disconnecting said actuating mechanism from said lever, and means for holding either of said clutch members in engagement with the corresponding pinion.

8. Driving mechanism comprising a drive shaft, a shaft driven by the drive shaft, pinions loosely mounted on said shafts respectively, a clutch member upon each of said shafts for locking said pinions alternately in connection with their shafts, a lever for shifting said clutch members alternately into and out of engagement with said pinions, a releasable element engaging said lever, an actuator for moving said element to operate said lever as required to shift said clutch members, a spring actuated latch device for holding said clutch members in engagement with said pinions, and an additional device for holding both of said clutch members disengaged from said pinions.

12. Driving mechanism comprising a drive shaft, an additional shaft driven by the drive shaft, a pinion loosely mounted upon each of said shafts, clutch mechanism for locking said pinions alternately in engagement with said shafts respectively, a lever controlling said clutch mechanism, a pivoted element engaging said lever, a reciprocating member for actuating said pivoted element and thereby said lever, means driven by the drive shaft for moving said reciprocating member, and optional means for disengaging said pivoted element from said lever, whereby either of said pinions may be maintained in clutched engagement with its shaft at the option of the operator.

[Claims 3 to 5, 7, and 9 to 11 not printed in the Gazette.]

1,265,584. AUTOMATIC FILLING-REPLENISHING LOOM. FREDERICK T. ARTZ, Manchester, N. H., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 5, 1915. Serial No. 54,271. (Cl. 139—85.)



1. In an automatic filling replenishing loom comprising feeler mechanism and stop mechanism including a shipper and a knock-off lever therefor, means connected to the knock-off lever adapted to render the feeler mechanism inoperative during the stoppage of the loom and to release said feeler mechanism upon restoration of the shipper to running position.

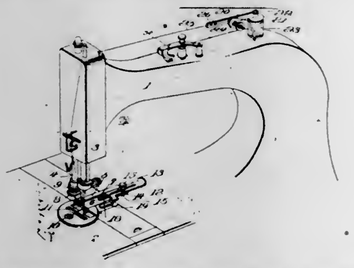
3. In an automatic filling replenishing loom having a shuttle equipped with a filling carrier having a feeler re-

cess in the barrel thereof, transferring mechanism, a controller shaft therefor having a latch normally positioned in the path of a vibrating actuator, a feeler, a bell crank lever having one arm connected to said feeler, a central pivoted transmitter connected at one end to the other arm of said bell crank lever and having its opposite end underlying said latch whereby the feeler upon entering the feeling recess in the filling carrier upon substantial exhaustion of filling will permit said latch to lie in the path of the vibrating actuator and be caused thereby to initiate the action of the transfer mechanism.

5. In an automatic filling replenishing loom, transferring mechanism, feeler mechanism, a pivotally mounted transmitter connected to said feeler mechanism and operable thereby to control the action of the transferring mechanism, stop mechanism including a shipper and a knock-off lever therefor, a sliding member connected to said knock-off lever engaging said transmitter and adapted to render the transmitter inoperative upon the actuation of the knock-off lever and thereby prevent automatic action of the transferring mechanism during the stoppage of the loom and to release said transmitter upon the restoration of the shipper to running position.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,265,585. HEMSTITCHING ATTACHMENT FOR SEWING-MACHINES. FRANK H. BACHELDER, Orange, Mass. Filed Dec. 6, 1917. Serial No. 205,730. (Cl. 112—9.)



1. A hemstitching attachment comprising a body-portion having parallel arms separated by a slot, the free end of one of the arms having an outwardly projecting arm with a vertical open-ended slot forming two horizontal arms in the same horizontal plane adapting the said arm for attachment to the bottom of the lower end of the presser-foot holder.

7. A hemstitching attachment comprising a body-portion having parallel arms separated by a slot, one of said arms having at its free end a member for attachment to the sewing machine presser-foot holder, the other arm having a needle opening in communication with the slot and located in a line with the said attachment member, and a sliding adjustable gage on the arm which is provided with a needle opening, the gage adapted to guide the edges of the goods being hemstitched at adjustable distances from the needle opening.

[Claims 2 to 6 not printed in the Gazette.]

1,265,586. WHEELED RECIPROCATING TOY. ALFRED Z. BAKER, New York, N. Y., assignor to T. B. Toy Company, Newark, N. J. Filed Nov. 28, 1917. Serial No. 204,383. (Cl. 46—45.)

2. In a toy of the class described, a carrier, wheels for said carrier, an axle for said wheels having a crank, a member mounted to slide on the carrier, means connecting the sliding member to the crank, said carrier and member having predetermined representations on their outer surfaces, and means carried by said carrier and member and projecting through the member and carrier respectively and adapted to be actuated by the movement of the sliding member on the carrier.

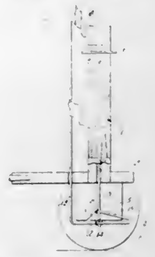
7. In a toy of the class described, a member having wheels, a second member slidable along the first member and operable by the movement of the wheels, each of said members having an opening, and a flexible member secured



to the inner face of each member so that the flexible member on one projects through the opening of the other.

[Claims 1, 3 to 6, and 8 to 10 not printed in the Gazette.]

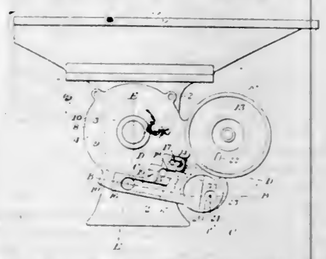
1,265,587. TOY. ALFRED Z. BAKER, New York, N. Y., assignor to T. B. Toy Company, Newark, N. J. Filed Dec. 21, 1917. Serial No. 208,257. (Cl. 46—45.)



2. In a wheeled toy, a platform, wheels, an axle engaging the wheels and supporting the platform, said axle having a crank, a pair of rods passing through the platform, a cross member uniting the two rods, a ring connecting said cross members to the crank, members associated with said rods above the platform, and flexible members associated with the members connected to the rods.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,265,588. CARBURETER FOR EXPLOSIVE-MOTORS. FRANÇOIS BAVEREY, Lyon, France, assignor to Societe Du Carburateur Zenith, Lyon, France, a Corporation of France. Original application filed Feb. 7, 1914, Serial No. 817,277. Divided and this application filed Mar. 29, 1917. Serial No. 158,234. (Cl. 261—41.)



1. In a carbureter, the combination of an intake arranged to supply a fuel mixture to the engine, an air passage leading to the intake, a plurality of jets each having a passage leading therefrom to the intake, said passage being small relative to the air passage, means for admitting air to said passages to form an emulsion, and a throttle arranged to simultaneously vary the size of the air intake and the area of the emulsion passages substantially as described.

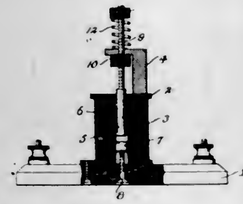
2. In a carbureter, the combination of an air intake arranged to supply a fuel mixture to the engine, a plurality of jets each having a passage leading therefrom into the air intake, means for admitting air to said passages to form an emulsion, and a throttle arranged to simultaneously vary the size of the air intake and to successively open or close the emulsion passages, substantially as described.

4. In a carbureter, an air conduit, a plurality of fuel conduits discharging thereinto, some of said fuel conduits being provided with two sources of fuel supply, one providing a supply variable per unit of time, and one constant per unit of time, and a throttle arranged to simultaneously vary the area of the air conduit and the area of the fuel conduits, substantially as described.

8. In a carbureter having an intake arranged to supply a fuel mixture to the engine, an air passage leading thereto, a well open at one end to the atmosphere, means for feeding fuel to the well, a plurality of emulsion passages communicating with the intake, means for admitting air to each passage, a plurality of sunken jets communicating with the well and each emulsion passage, and a valve arranged to simultaneously vary the size of the intake and the area of the emulsion passages, substantially as described.

[Claims 3, 5 to 7, and 9 not printed in the Gazette.]

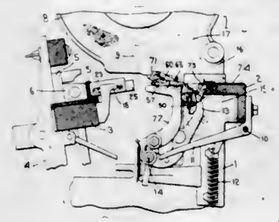
1,265,589. TELEGRAPH-SOUNDER. ARTHUR W. BEAUPRIE, Atlanta, Ga. Filed Feb. 12, 1916. Serial No. 77,928. (Cl. 175—344.)



A telegraph sounder for use with alternating currents comprising a non-conductive base, a vertical solenoid connected to the base, a divided core for said solenoid, a part of said core being fixed with relation to the solenoid coil, the fixed and movable parts of the core being adapted for magnetic contact in use to avoid chattering under current changes, a bracket mounted on the solenoid, a connection from the movable part of the core extending through the bracket, adjustable stops on said connection on each side of the bracket, and a spring between one of said stops and the bracket.

1,265,590. WEFT CLAMPING AND PARTING MECHANISM FOR LOOMS. ELISHA F. BEAVERSTOCK, Holyoke, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 25, 1917. Serial No. 193,083. (Cl. 139—85.)

1. In a weft replenishing loom a support movable toward and from the lay and provided with a long weft receiving slot extending into and transversely of its end, a fixed clamping member secured to the side of said support beneath said slot, a pivoted clamping member pivoted on said support and swinging from an open position above said slot into a coöperative clamping relation with said fixed clamping member, a pusher slidably mounted between said support and said fixed clamping member and acting when projected to push the end of a severed weft out of said slot and over the same side of the fixed clamping member as occupied by the other end of said weft.

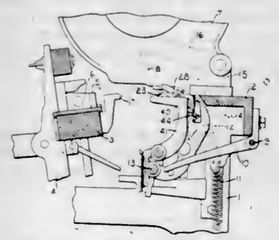


3. In a weft replenishing loom, a support movable toward and from the lay and provided with a long weft receiving slot extending into and transversely of its end, coöperating clamping members secured to the side of said support opposite said slot, a pusher slidably mounted between the said support and said clamping members and acting when projected to push a severed weft end held by the clamping members out of said slot so that both ends of the weft will hang over the same side of one of the clamping members and thus be free when the clamping members are opened.

4. In a weft replenishing loom the combination of elements set forth in claim 3 together with means to sever the weft of an abandoned filling carrier at each side of said support.

[Claims 2 and 5 to 11 not printed in the Gazette.]

1,265,591. WEFT CLAMPING AND PARTING MECHANISM FOR LOOMS. ELISHA F. BEAVERSTOCK, Holyoke, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 25, 1917. Serial No. 193,084. (Cl. 139—85.)



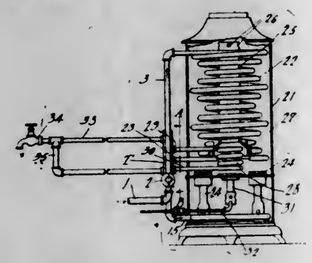
1. In a weft replenishing loom a support movable toward and from the lay, a fixed cutting blade and a fixed clamping blade carried thereby, a pivot pin mounted in said support and extending through said blades, a cutting blade and a clamping blade secured together and journaled on said pivot pin between said fixed cutting and clamping blades, a helical spring on said pivot pin passing through said movable clamping blade and abutting said fixed clamping blade and said movable cutting blade, and means for adjusting said pivot pin to adjust the fixed clamping blade toward and from the support.

2. In a weft replenishing loom the combination of features set forth in claim 1 together with a stud mounted and longitudinally adjustable in said support forward of said pivot pin, extending through slots in said movable cutting and clamping blades and into said fixed clamping blade, and having a shoulder engaging the outer face of the movable clamping blade.

3. In a weft replenishing loom the combination of features set forth in claim 1 in which the fixed cutting blade is bent or concaved toward the movable cutting blade about an axis substantially normal to the cutting edge.

[Claims 4 to 9 not printed in the Gazette.]

1,265,592. WATER-HEATER. ADOLF BELER, Pittsburgh, Pa. Filed June 8, 1916. Serial No. 102,544. (Cl. 126—351.)

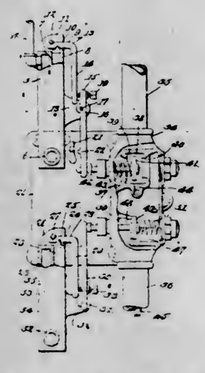


1. Water heating apparatus including a main coil, a supplemental coil at the lower end of and encircled by the main coil, burners for heating the main coil, means operated by the pressure of water flowing through the main coil for opening the supply of fuel to said burners, a thermostat including a tubular member in communication with the main coil, mechanism controlled by the thermostat for regulating the flame from the burners, an independent burner for heating the contents of the supplemental coil, said supplemental coil being in communication at each end with the tubular member of the thermostat, a service pipe extending from said tubular member of the thermostat, a return pipe connecting the outer end portion of the service pipe to said tubular member of the thermostat, and means close to the junction of the service and return pipes for drawing off the fluid contents of the pipes.

3. A water heating apparatus, comprising a main coil, burners for the main coil, a service pipe, a circulation medium between the service pipe and main coil, means for admitting water to the main coil, means for admitting gas to the burners, a supplemental coil communicating with the circulation medium, an independent burner for the supplemental coil, and a flue encircling the upper end of and rising from the supplemental coil and passing through the main coil.

[Claim 2 not printed in the Gazette.]

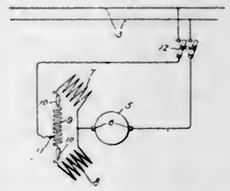
1,265,593. REGULATING-VALVE FOR WATER-HEATERS. ADOLF BELER, Pittsburgh, Pa. Filed Oct. 7, 1916. Serial No. 124,346. (Cl. 126—351.)



1. A water heater comprising a burner, a fuel conduit including a valve casing leading to the burner, an inlet valve in the casing, there being seats between which the valve oscillates, an outlet valve in the casing, a water heating coil, thermostatic means through which the water passes to the intake of said coil for operating the outlet valve to supply fuel to the burner, and independent thermostatic means for oscillating the inlet valve between its seats to regulate the supply of fuel to the burner.

2. A water heater, comprising a burner, and a pilot burner associated therewith, a fuel conduit including a valve casing leading to the burner, an inlet valve in the casing, there being seats between which the valve normally stands, an outlet valve in the casing, a water heating coil, thermostatic means through which the water passes to the intake of said coil for operating the outlet valve to supply fuel to the burner, and independent thermostatic means for forcing the inlet valve against one seat to cut off the fuel from the burner or allowing the valve to contact the other seat to cut fuel off from the burner and pilot.

1,265,594. DYNAMO-ELECTRIC MACHINE. SVEN R. BERGMAN, Nahant, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 18, 1917. Serial No. 175,323. (Cl. 171—228.)



1. A dynamo-electric machine comprising an armature winding, a field winding adapted to produce a magnetic flux having an exciting component and a compensating component, a second field winding adapted to produce a magnetic flux having an exciting component opposing the exciting component of the first flux and a compensating component acting in conjunction with the compensating component of the first flux, the combined compensating components of said two fluxes being substantially equal and opposite in effect to the armature magnetization, and means for varying the relative effects of the exciting components of said two fluxes.

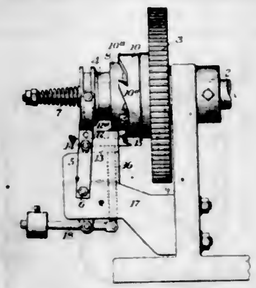
3. A dynamo-electric machine comprising an armature winding, a field winding having its magnetizing axis displaced approximately 45 electrical degrees from the magnetizing axis of the armature winding, a second field winding having its magnetizing axis displaced approximately 90 electrical degrees from the magnetizing axis of the first mentioned field winding and approximately 45 electrical degrees from the magnetizing axis of the armature winding, said two field windings being connected in parallel with one another and in series with said armature winding, and means for varying the relative amounts of current flowing in said two field windings.

6. A dynamo electric machine comprising an armature winding, two field windings adapted to produce a resultant magnetic flux which substantially neutralizes the armature reaction and provides an exciting field, and means for varying the effective value of said exciting field by varying the relative amounts of current flowing in said two field windings.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,265,595. CLUTCH. FLORENCE C. BIGGERT, Jr., Pittsburgh, Pa. Filed Aug. 14, 1917. Serial No. 186,213. (Cl. 192—9.)

1. In an automatic clutch, the combination with a driven member and a driving member, of a movable clutch member carried by the driven member and adapted to be moved into and out of clutching engagement with the driving member, a clutch shifting cam carried by the driving member, and means operated by the driven member for determining the time of action of said cam and for then causing the cam to operate to disengage the clutch, substantially as described.



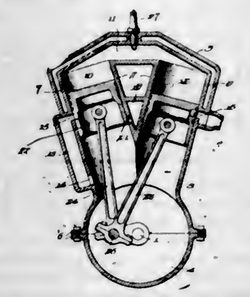
3. In an automatic clutch, the combination with a driving member and a driven member, of a shiftable clutch member carried by the driven member and movable into and out of engagement with the driving member, a shifting cam carried by the driving member and having as many cam projections thereon as there are teeth or jaws on the clutch member, a shifting lever engaging said clutch member, and a spring normally acting on the shifting lever, a cam on the clutch member for controlling said dog, and means for holding the clutch member in disengaged position, substantially as described.

5. In an automatic clutch, the combination with a driven member and a driving member, of a clutch member mounted on the driven member for movement into and out of clutching engagement with the driving member, a shifting lever, a cam carried by the driving member, a dog carried by the shifting lever, a cam carried by the driven member and arranged to engage and control the said dog, and a weighted locking pin coöperating with said dog, substantially as described.

7. In an automatic clutch, the combination with a driving member, and a driven member, of a shiftable clutch member carried by one of the first mentioned members and movable into and out of engagement with the other member, a shift cam, and a clutch shifting dog arranged to be actuated by the cam, there being inclined faces on the dog and the cam arranged to permit the dog to move into operative position in front of the cam, substantially as described.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,265,596. INTERNAL-COMBUSTION ENGINE. WILLIAM J. BLATT, Hollidaysburg, Pa. Filed Oct. 28, 1916. Serial No. 128,271. (Cl. 123—53.)



An internal combustion engine embodying companion cylinders arranged in angular relation to each other, a cylinder head common to both cylinders, a crank case common to both of said cylinders, a combustion chamber common to both of said cylinders, one of said cylinders being formed with a by-pass leading from the crank case to said combustion chamber, a spark plug located centrally of said common cylinder head, the other cylinder being formed with an exhaust port, pistons working in said cylinders, a common crank shaft, and connecting rods between said pistons and the same crank arm of said shaft, the arrangement of the intake and exhaust ports being such that one piston travels in advance of the other piston, causing the exhaust port to be opened before the inlet port and also to be closed while the inlet port is opened, and a charge receiving chamber located between the cylinders and formed by the walls thereof, the wall of said charge receiving chamber being formed with a port leading to the crank case and covered and uncovered by one of said pistons, the last named port being so located that in one position of the piston in the charging cylinder, said port is closed while the discharge end of the by pass is open.

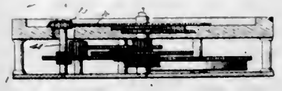
1,265,597. HOUSING FOR SPRING-HINGES. EMIL BOMMER, Brooklyn, N. Y. Filed May 29, 1917. Serial No. 171,631. (Cl. 16—25.)



1. A housing for the springs of spring hinges, comprising two parallel spaced barrels adapted to contain the springs, and a flat three-ply web located between said barrels, said web and barrels being made of a single piece of sheet metal, one of those edges of said piece which extend lengthwise of the barrels being on one of the outside plies of said web, and adjacent to one of said barrels, the other longitudinal edge being on the other outside ply to the web and adjacent to the other barrel, said barrels having unbroken surfaces from end to end, the central ply connecting said barrels, while the outside plies are formed by the ends of said piece of sheet metal, the transverse edges of the web, between the barrels, having sheaths formed by bending outer ply portions of the web, forming end parts of said piece of sheet metal, from one face of the web to the opposite face thereof.

2. A housing for the springs of spring hinges, comprising two spaced parallel barrels and a three-ply web between them, said web and barrels being made of a single piece of sheet metal, the central ply connecting said barrels, while the outside plies are formed by the ends of said piece of sheet metal, the transverse edges of the web, between the barrels, having sheaths formed by bending outer ply portions of the web, forming end parts of said piece of sheet metal, from one face of the web to the opposite face thereof.

1,265,598. WATCH. HELGE A. BORRESEN, Marquette, Mich. Filed July 11, 1914. Serial No. 850,422. (Cl. 58—59.)



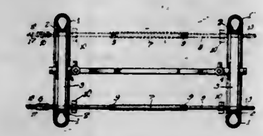
1. A watch having concentrically arranged minute, hour and second hands, an escape wheel pinion, and means whereby said escape wheel pinion directly and permanently drives said second hand.

[Claims 2 and 3 not printed in the Gazette.]

1,265,599. WHEEL-ALINING GAGE. CHARLES LEONARD BOWDEN, Chicago, Ill. Filed Feb. 26, 1916. Serial No. 80,617. (Cl. 33—180.)

2. The combination with a base adapted to stand in stable position upon a plane floor, of an inwardly extending member supported by and above one end of the base in position for making contact with the outer lateral face of

a wheel rim, two scale bearing contact members approximately alining with the member first mentioned supported side by side by and above the opposite end of the base and arranged for independent adjustment to and from the corresponding part of the rim of a companion wheel upon the same axle, and means for independently locking said two contact members, whereby a pair of wheels having been gaged upon one side of their center by the use of one of said two members may be gaged upon the opposite side by the use of the other of said two members and the amount of any variation may be indicated by the adjacent scales.



5. The combination with a floor supported base bar of adjustable length provided at its ends with upwardly extending arms to lie outside the planes, respectively of the pair of wheels, an inwardly projecting contact member borne by one of said arms, independently slidable scale bars projecting oppositely inward from the opposite of said arms, means by which the height of said member and bars may be adjusted, and means for independently locking the two bars.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,265,600. PIE-CRIMPER. JOHN H. BREWER, Silverton, Oreg. Filed May 29, 1917. Serial No. 171,747. (Cl. 107—49.)

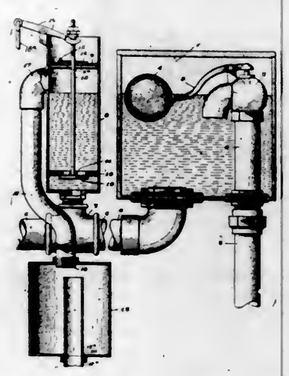


As a new article of manufacture, a pie crimper comprising a single strand of material bent to provide a looped handle, an L-shaped shank formed on said handle, a cutting member formed integral with the handle at the point of intersection of the shank therewith, a crimping roll journaled on the horizontal portion of the L-shaped shank for rotary movement, a disk on the free end of said shank, and a prong member arranged on the shank of the handle exteriorly of the crimping roll and inwardly of said disk, substantially as and for the purpose specified.

1,265,601. APPARATUS FOR FLUSHING WATER-CLOSETS. ROBERT A. BROOKS, Chicago, Ill. Filed June 29, 1917. Serial No. 177,818. (Cl. 4—5.)

1. Apparatus for flushing a battery of water closets comprising a service pipe supplying water at high pressure, a master tank, a float-controlled inlet valve of large capacity in said tank, a series of water containers arranged to contain water at the level of the master tank, a common supply pipe of large capacity in communication with said master tank and said containers, flushing pipes for the respective closets, and flushing devices in said containers arranged when operated to initiate a flush or water which is immediately drawn directly from said inlet valve through said master tank and supply pipe.

3. Apparatus for flushing a battery of water closets comprising a service pipe, a master tank, a float-controlled inlet valve in said tank, a common supply pipe in communication with said master tank and extending through all the closets, a casing inclosing a piston chamber communicating with said supply pipe in each closet, said casing being arranged to contain water at the level of the master tank, a flushing pipe connected above the water level with said casing and constituting therewith a siphon, a piston in said chamber for expelling the water therein into the flushing pipe to start siphonic action, and means for interrupting the siphonic action.



6. A flushing device for flushing water closets comprising a master tank, means for maintaining a constant level therein, a vertically disposed casing formed with a perforated cross-partition dividing it into a piston chamber and a timing chamber and arranged to contain water in the piston chamber at the level of the master tank, a flushing pipe communicating with said piston chamber above the water level and constituting therewith a siphon, and a piston in said piston chamber for expelling water into the flushing pipe to start siphonic action and also expel water through the orifices in said partition into said timing chamber to temporarily seal the top of the siphon.

9. A flushing device for flushing water closets comprising a master tank, means for maintaining a constant level therein, a vertically disposed casing formed with a perforated cross-partition dividing it into a piston chamber and a timing chamber and arranged to contain water in the piston chamber at the level of the master tank, a flushing pipe communicating with said piston chamber above the water level and constituting therewith a siphon, a piston in said piston chamber and a piston stem connected thereto and extending upwardly through said cross-partition, and a loosely fitting disk surrounding said stem above said partition and arranged to cover the orifices therethrough.

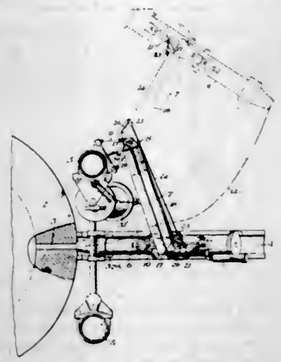
13. In a siphonic flushing device, a timing device for interrupting the siphonic action comprising a water chamber arranged above the top of the siphon and having restricted communication therewith, and means for supplying said chamber with a charge of water to seal it from the air at the beginning of each flushing operation, the exhaustion of water from said chamber acting to admit air to the top of the siphon and interrupt the siphonic flow.

[Claims 2, 4, 5, 7, 8, 10 to 12, 14, and 15 not printed in the Gazette.]

1,265,602. CLAY-GUN-OPERATING MECHANISM. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Jan. 28, 1918. Serial No. 214,070. (Cl. 266—42.)

1. Clay gun operating mechanism comprising a horizontally swinging carrier, a clay gun supported therefrom in a manner to permit independent movement of the gun in horizontal and vertical planes, and means for modifying the path of travel of the gun in a horizontal direction by changing the angular relations between the gun and the carrier, substantially as described.

9. Clay gun operating mechanism comprising a horizontally swinging boom, a member swiveled to said boom for rotary movement about a substantially vertical center which is eccentric with the center of movement of the boom, a clay gun tiltably supported by said member, means for rotating said member as the boom and gun are swung, and means for tilting the gun into and out of its clay-discharging position, substantially as described.



12. In clay gun-operating mechanism, the combination with a carrier mounted to swing in a horizontal direction about a fixed axis, of a gun mounted on the carrier to swing therewith and also to swing on the carrier both in a horizontal and a vertical direction, and connections whereby as the carrier and gun are swung about said fixed axis, the gun is also moved both horizontally and vertically with respect to the carrier, substantially as described.

[Claims 2 to 8, 10, and 11 not printed in the Gazette.]

1,265,603. DEVICE FOR CUTTING UP CARCASSES. JOHN KIRKWOOD BROWN, Belfast, Ireland. Filed Jan. 3, 1917. Serial No. 140,375. (Cl. 143—68.)



1. A portable power-driven reciprocating saw or cutting device comprising a casing, a motor in the casing, gear wheels in the casing and connected to the motor and driven therefrom, a crank pin on one of the wheels, a rod attached at one end to the crank pin and at the other end to a reciprocating crosshead so as to reciprocate the latter, a saw connected to the crosshead so as to reciprocate therewith, rods supporting said crosshead, and roller bearings on which said rods move during their reciprocation.

2. A portable power-driven reciprocating saw or cutting device comprising a casing, a motor in said casing, gear wheels in said casing on the motor shaft, gear wheels within said casing meshing with the first-named wheels, a crank pin disposed between and connected to both of said last-named wheels, a rod disposed between said wheels and having one end connected to said crank pin, a crosshead to which the other end of said rod is connected, guides formed in an extension of said casing, roller bearings in said guides, and rods at opposite sides of said crosshead movable in said guides and upon said roller bearings.

1,265,604. ENSILAGE-CUTTING-WHEEL CONSTRUCTION. FRED J. BULLOCK, Shortsville, N. Y., assignor to Papec Machine Company, Shortsville, N. Y., a Corporation of New York. Filed May 2, 1916. Serial No. 94,941. (Cl. 146—27.)

1. A wheel having spaced lugs formed on the sides thereof, supports provided with legs embracing said wheel extending between said lugs, fastening members connecting said legs, said supports being provided with integral fan blades, and adjustable fan blades carried by said supports.



2. A wheel having supports provided with spaced legs secured thereto, said supports having integral fan blade portions and movable fan blade portions, the face of the adjustable blade portion being flush with the integral portion of said supports.

3. A wheel having a fan support provided with spaced legs embracing the wheel and extending outwardly therefrom forming an integral blade portion for said support, said support having an adjustable blade section secured thereto having its face flush with the integral blade portion.

4. A wheel having fan supports secured thereto provided with integral blade portions, and adjustable blade portions carried by said supports, the adjustable blade portion having a face flush with the integral blade portion of said support.

5. A wheel having spaced lugs secured to the side faces thereof, a fan support provided with spaced legs straddling said support and extending between the lugs thereof, said support being provided with an integral blade portion, and an adjustable blade portion carried by said support.

[Claims 6 to 11 not printed in the Gazette.]

1,265,605. HORN. PETER C. BURNS, Chicago, Ill., assignor to American Electric Company, Chicago, Ill. Filed Oct. 29, 1912, Serial No. 728,375. Renewed Sept. 19, 1917. Serial No. 192,223. (Cl. 116—1.)

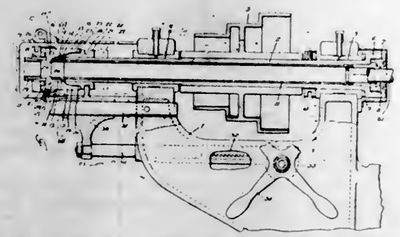


A device of the character described having a diaphragm, a single spherical striker located centrally of said diaphragm to actuate said diaphragm, a toothed element adapted to strike said striker and propel it toward said diaphragm to vibrate said diaphragm, a casing, a plate, means whereby said toothed element is pivotally mounted between said casing and said plate, means supported by said plate for confining the movements of said striker, a motor to drive said toothed element, and gearing interposed between said motor and said toothed element.

1,265,606. CHUCKING-DEVICE. FREDERIC C. BUSCH, Cleveland, Ohio, assignor to Bardons and Oliver, Cleveland, Ohio, composed of George C. Bardons and John G. Oliver. Filed Oct. 26, 1916, Serial No. 127,931. Renewed Sept. 15, 1917. Serial No. 191,653. (Cl. 29—112.)

1. In a machine of the class described, the combination with a hollow spindle; of a chucking device mounted upon one end of said spindle; a rod slidably mounted in and extending outward past the other end of said spindle; means coöperating with the rod and the chucking device, whereby

movement of the rod imparts movement to the work engaging members of the chucking device; a thrust collar secured to the rod; and means mounted on said spindle and adapted, when operated, to press upon the thrust collar and re-act upon said spindle to draw the rod through said spindle.

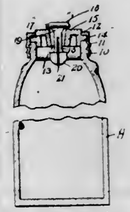


9. In a machine of the class described, the method of converting a push-out chuck operating device to a draw-back chuck operating device which consists; of removing the push-out chuck from spindle, 2; removing the thrust collar, 19, and thimble, 29, from hollow spindle, 2; inserting into the hollow spindle, 2, the rod, 35, on which is secured the thrust collar, 36; adjusting thrust collar, 36, into contact with knuckle, 28, of lever, 15, when short arm, 24, of said lever is in contact with follower, 12, and follower, 12, is in contact with the bottom of slot, 14, in spindle, 2; mounting a drawback chuck upon the head end of spindle, 2; and making mechanical connections between rod, 35, and the work engaging member of said drawback chuck; whereby, when the lever, 15, is rocked in the manner it is rocked to operate a push-out chuck, said lever will fulcrum on follower, 12, and cause knuckle, 28, to exert longitudinal, backward pressure upon thrust collar, 36, to draw rod, 35, through said spindle, 2, thereby causing the work engaging member of the draw-back chuck to engage the work, as described.

13. The combination with a lathe having a hollow spindle adapted to receive a chuck operable either by a push-rod or a pull-rod extending through said hollow spindle, of means for operating said rod embodying a pivoted lever, means for swinging said lever on its pivot, and devices whereby the same rocking movement of said lever on its pivot will operate a chuck of the push-rod type or a chuck of the pull-rod type.

[Claims 2 to 8, 10 to 12, and 14 to 17 not printed in the Gazette.]

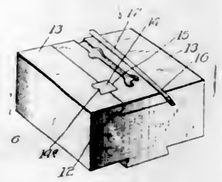
1,265,607. CONDIMENT-HOLDER. GEORGE J. CARLISLE, Chicago, Ill. Filed Feb. 20, 1917. Serial No. 149,866. (Cl. 65—45.)



2. In a salt cellar, a removable cap having an opening in the top thereof constituting a valve seat, a valve formed entirely of a single piece of resilient material embodying a shank of a diameter less than the diameter of the opening, a valve head formed on one end of the shank and a guard head formed on the other end smaller than the valve head but larger than the opening, the guard head and the shank being bifurcated to permit of the contracting and the insertion of the guard head through the opening so that the shank will slide through the opening during shaking of the cellar and being prevented from having accidental displacement by the guard head while the valve head will normally engage the opening to close the same.

[Claim 1 not printed in the Gazette.]

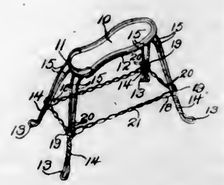
1,265,608. DROP-HAMMER. WINFRED H. CARPENTER, Muncie, Ind. Filed Sept. 15, 1916. Serial No. 120,224. (Cl. 78—25.)



1. In a drop forge hammer, a die holder having a recess in the face thereof and a die plate secured within the recess, the surface of said die plate being flush with the surrounding surface of the die holder.

2. In a drop forge hammer, a die plate holder having a cavity extending across the face thereof with impact receiving shoulders upon opposite sides of said cavity, a projection from one of said shoulders into said cavity on one edge thereof, a die plate within the cavity with its surface flush with said shoulders having a recess receiving said projection, and means for securing the die plate in the cavity.

1,265,609. FOOT-REST. CHARLES A. CARRY, Washington, D. C. Filed Aug. 12, 1916. Serial No. 114,534. (Cl. 155—9.)



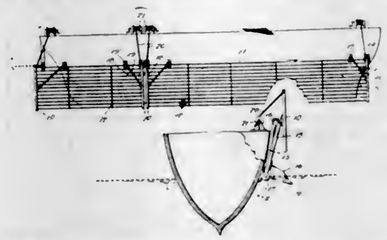
1. A foot rest of the character described comprising a foot-supporting plate provided at its ends with depending flanged portions, curved leg-attaching plates secured to the foot-supporting plate and abutting said flanged portions, wire legs connected with said leg-attaching plates, each leg comprising a wire bent into loop form to provide a foot, and a brace member provided with means for closely engaging all of the strands of the wires forming the respective legs.

3. A foot rest of the character described comprising a foot supporting plate, legs attached to said foot supporting plate, each leg comprising a single wire rod bent into loop form and twisted to provide a foot, the strands of the wire diverging from the twisted portion to the foot supporting plate, and a rectangular brace member having its corners provided with attaching means passing exteriorly around and closely embracing the diverging strands of the respective legs.

[Claim 2 not printed in the Gazette.]

1,265,610. SHIP-PROTECTOR. RICHARD J. CHAPMAN, Terry, S. D. Filed Sept. 12, 1917. Serial No. 191,016. (Cl. 114—240.)

1. A ship protector comprising independent protector sections, each of said sections including end bars, nets connecting said bars, means for hingedly connecting the bars to and spacing the same from the hull of the vessel, locking bars having one of their ends hingedly secured to the hull of the vessel and hooks located upon the opposite ends of the locking bars for engagement with the end bars to hold the sections against pivotal movement when in an operative position.



3. A ship protector comprising independent protector sections, each of said sections including end bars, nets connecting said bars, a spacing and supporting bar hingedly secured to each of said end bars at a point intermediate the length of the latter and locking bars having one of their ends hingedly secured to the hull of the vessel and their opposite ends provided with means for removably engaging the ends of each of the end bars.

5. A ship protector comprising independent protector sections, each of said sections including end bars, nets connecting said bars, combined means for hingedly connecting said bars to and spacing the same from the hull of the vessel, means hingedly secured to said vessel for holding the protector sections in operative position and a stop carried by the combined connecting and spacing means engageable with the hull of the vessel for limiting the movement of said sections in one direction.

[Claims 2 and 4 not printed in the Gazette.]

1,265,611. COMBINATION BOILER AND ROASTER. CAMBY CLARKE, Peck, Mich. Filed July 17, 1917. Serial No. 181,099. (Cl. 53—1.)



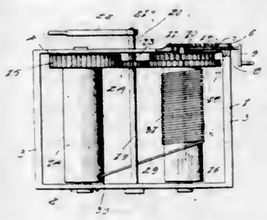
1. A boiler or roaster of the class described including a hollow body, a cover removably secured upon said body, a perforated baffle plate located in the body, handles constituting guides secured to the end walls of the body, and a rack removably associated with the body, said rack having its ends bent upwardly and extended through the guides of the body and beyond the top thereof to permit the device to be lifted as a whole.

[Claims 2 and 3 not printed in the Gazette.]

1,265,612. STUMP-PULLER. WILLIAM A. COCKE, Cartersville, Va. Filed Apr. 20, 1917. Serial No. 163,437. (Cl. 254—183.)

1. A machine of the class described including a frame, a relatively stationary drum rotatably mounted in the frame, a relatively movable drum located in the frame and in close proximity to the stationary drum, a shaft rotatably mounted centrally of the frame, a gear carried by the stationary drum, a pair of gears carried by the movable drum, a movable gear carried by the shaft and adapted to mesh with the gears of the drums, said gear of the shaft adapted to move into engagement with each of the gears of the movable drum for rotation in a reverse direction and means for moving the movable drum toward and away from the stationary drum, as and for the purpose specified.

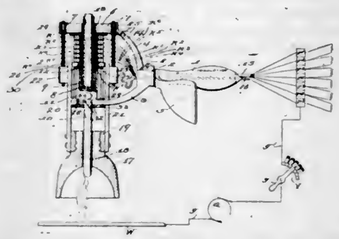
6. A machine of the character set forth comprising a frame, a drum, a gear carried by the drum, a second drum, gears of different diameters carried by the second drum, a shaft journaled in the frame and located between the drums, a gear movable on the shaft, and a drum shifting



means located in the frame for engagement with the gears of various diameters of the second named drum for moving them into mesh with the gear of the shaft for rotation with the shaft and other drum.

[Claims 2 to 5 not printed in the Gazette.]

1,265,613. ART OF ARC WELDING, HEATING, AND THE LIKE. CHARLES L. COFFIN, Parks, Ga., assignor to Electric Metal Working Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 5, 1916. Serial No. 89,130. (Cl. 219—8.)



1. Method of electric arc welding and heating consisting in subjecting the material to be heated to the heating action of an electric arc and mechanically imparting movement through the movement of one electrode of the arc to a protective starting resistance when one electrode is moved toward the other electrode beyond a predetermined distance to insert such a resistance in circuit prior to the contact of the electrodes, thereby preventing an excessive rush of current upon bringing the electrodes in contact and establishing the arc.

10. In the art of electric arc welding and heating, electrodes for producing the arc, and a protective resistance coöperating therewith, whereby one electrode cannot approach the other electrode beyond a predetermined distance without such movement first mechanically inserting the protective resistance in circuit prior to establishing the arc, and such protective resistance will be removed as one electrode is withdrawn from the other.

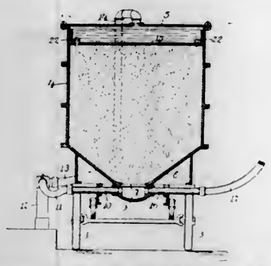
24. In an arc welding and heating apparatus, the combination of relatively movable electrodes for the arc, a protective starting resistance embodying a series of contacts connected to resistance sections, and means including a contact coöperative with said contacts for automatically and mechanically controlling the amount of resistance in the arc circuit according to the distance apart of the electrodes.

[Claims 2 to 9 and 11 to 23 not printed in the Gazette.]

1,265,614. FIRE-EXTINGUISHING APPARATUS. LEON B. CONANT, Boston, Mass. Filed Apr. 7, 1917. Serial No. 160,400. (Cl. 169—9.)

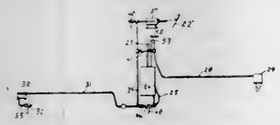
A fire extinguisher comprising a portable container, a mixing chamber communicating with the bottom of the

container, a sliding gate between the container and mixing chamber, means for opening and closing the gate, pipes projecting from and communicating with opposite sides of the mixing chamber, means for coupling hose to the outer ends of said pipes, a removable cover for the



container, a pipe connected with said cover, a valve for the last-mentioned pipe, means for coupling a hose to the end of said pipe, whereby a hydrant can be connected with the pipe leading to the cover, and also to the mixing chamber, and a suitable discharge nozzle with the other side of the mixing chamber.

1,265,615. TRAIN SAFETY DEVICE. SAMUEL G. CONKLING, Saugerties, N. Y., assignor of one-half to Louis Schaffert, Brooklyn, N. Y. Filed July 24, 1913. Serial No. 780,858. (Cl. 246—59.)

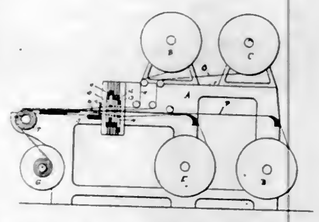


1. In a means for automatically stopping a train when running into a closed block, the combination with a detent fixed adjacent the track, of a valve carried by the train positioned relatively close to the road bed, said valve having three pipes leading transversely therethrough, one of said pipes leading from a brake releasing cylinder to an exhaust, a second pipe leading from a source of compressed air to said first mentioned pipe and the third pipe leading from the source to a motive power shut off cylinder, a valve plug for said valve having three passageways therethrough, one of said passageways in one position of the plug maintaining open communication through said second mentioned pipe and closing communication through the other two pipes and a relatively short trip affixed to and normally depending from said plug adapted to be engaged by said detent to close said second mentioned pipe and simultaneously to open communication through the other two pipes.

4. In a device of the class described, the system comprising a compressed air reservoir, a cylinder, a pipe connecting said reservoir and said cylinder, a manually actuated two way valve in said pipe adapted in one position to open said reservoir to said cylinder and in the other position to open said cylinder to the outside, a second cylinder, a pipe leading from said reservoir to said second cylinder, a normally closed valve in said second named pipe adapted to be actuated by a track detent, a third pipe leading from said second named pipe between the normally closed valve and the second cylinder to the first named pipe between the two way valve and the first named cylinder whereby communication will be established between both of said cylinders and said reservoir by the opening of the normally closed track detent valve irrespective of the position of the manually controlled valve.

[Claims 2 and 3 not printed in the Gazette.]

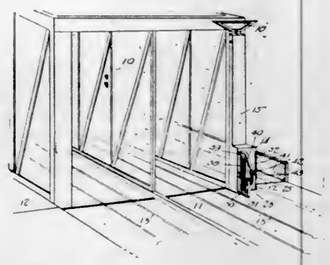
1,265,616. TAPESTRY-LOOM. WILLIAM HILL COOPER, Amsterdam, and CHARLES H. COLLINS, Albany, N. Y., assignors to S. Sanford & Sons, Inc., Amsterdam, N. Y., a Corporation of New York. Filed July 24, 1916. Serial No. 110,902. (Cl. 139—23.)



1. In a tapestry weaving loom, a series of heddles, one through which the border yarn passes and the other through which the body yarn passes; lever and rod connections which each of said border and body yarn heddles; cam operated levers; a housing carried by each of said levers; rods connected with each of said heddles, respectively, adapted to reciprocate in said housing; and means for locking each of said cam levers in connection with the rod connected with its housing, substantially as described.

2. In a tapestry loom provided with one or more border yarn beams, one or more body yarn beams, jute and cotton beams mounted in the usual manner; a series of heddle frames; heddles in said frames carrying the body yarn, border yarn, jute and cotton yarns; a cam shaft; cam wheels on said shaft; cam levers engaging said cam wheels; means for connecting the border yarn heddle frame with the cam levers; means for connecting the body yarn heddle frame to the cam levers; said connecting means being adapted to permit of the motion of the cam levers without moving the heddle frames; said connecting means provided with a lock which, when closed, causes the movement of the heddle frames under the direction of the cam levers, substantially as described.

1,265,617. BRIDGE-GATE. DAVID H. COSHAM, Chicago, Ill. Filed Oct. 10, 1917. Serial No. 195,749. (Cl. 14—54.)



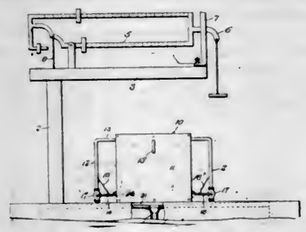
1. The combination with the movable span of a drawbridge, and the approach thereto; of a vertically swinging gate on the approach, a slidable bar controlled by the span, a rock shaft carrying the gate, and a rocker arm on said shaft to which the slidable bar is connected.

2. The combination with the movable span of a drawbridge, and the approach thereto; of a vertically swinging gate on the approach, a slidable bar controlled by the span, a rock shaft carrying the gate, a rocker arm on said shaft to which the slidable bar is connected, a second vertically swinging gate operating in the opposite direction from the first mentioned gate, a rock shaft carrying the second mentioned gate, crank arms on both rock shafts, and a rod connecting said crank arms.

3. The combination with the movable span of a drawbridge, and the approach thereto; of a vertically swinging gate on the approach, a slidable bar, an abutment on the span engaging the bar when the span is closed and holding the bar from sliding, means for sliding the bar when the abutment clears the bar as the span opens, a rock shaft carrying the gate, and a rocker arm on said shaft to which the slide bar is connected.

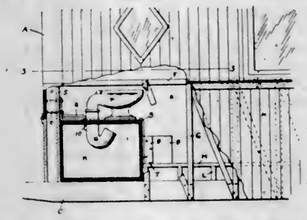
4. A gate comprising a bar pivoted at one end to swing in a vertical plane, an extension bar pivoted at one end to the outer end of said gate bar, a link connected to the pivoted end of the extension bar and extending rearwardly therefrom for swinging the extension bar into alinement with the gate bar when the latter lowers, the rear end of the link having a downward bend provided with a longitudinal slot, and a stationary pin seating in said slot.

1,265,618. PLATFORM-SCALE. PETER E. CRADY and FRANK H. ROBILLARD, Burlington, Vt. Filed Mar. 18, 1916. Serial No. 85,221. (Cl. 93—181.)



The hereindescribed construction of scales for weighing liquids, including a platform and a pivoted beam connected therewith, a liquid supply pipe to the rear of the platform and having an outlet nozzle arranged over the platform, a spring influenced valve for the pipe and a handle for said valve, a catch engaging with the handle to hold the valve in one position, an electric magnet, a spring armature for the magnet connected with the catch, a slotted guide for the scale beam of electric conducting material, insulated from the remainder of the scale and from the beam, when the beam is in one position but in the path of contact with the said beam when the beam is in another position, and said guide being in electric circuit with a battery, the magnet, and the beam.

1,265,619. TOILET-COMPARTMENT. HARRISON TAYLOR CRONK, New York, N. Y., assignor to Cronk-Salter Company, New York, N. Y., a Corporation of New York. Filed Jan. 10, 1913. Serial No. 741,301. (Cl. 4—32.)



1. The combination with an underframe for passenger cars, a floor spaced above said underframe, a refuse tank resting directly on said underframe and having a side thereof abutting said floor.

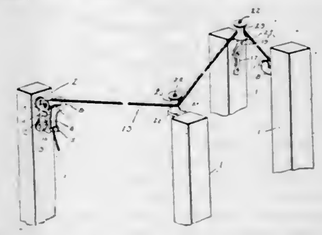
3. In a car toilet compartment, supporting sills, sleeper carried by said sills, an upper toilet compartment floor supported from said sleeper, a second tank supporting floor resting on said sills below said first mentioned floor, and a tank adapted to rest on said lower floor and abutting said upper floor whereby the tank within the car extends above and below a toilet floor.

4. In an inclosed toilet compartment, a bracket, a hopper supported on said bracket above the floor of the compartment, and a refuse tank disposed between the floor and hopper and beneath a portion of said bracket.

8. The combination with an open frame including spaced apart bracket and a hopper supported by said brackets, of a removable tank insertible within said frame and means providing a fluid connection between said tank and hopper.

[Claims 2 and 5 to 7 not printed in the Gazette.]

1,265,620. CLOTHES-LINE HOLDER AND FASTENER. MICHAEL F. CUBIAC, Detroit, Mich., assignor of forty-eight one-hundredths to John A. Swanson, Detroit, Mich. Filed May 19, 1916. Serial No. 98,619. (Cl. 24—133.)



A device of the character set forth comprising a vertically disposed elongated base plate, a pivot lug extending outwardly from the outer face of the base plate at a point between the ends thereof, a clamping arm located at the lower end of the base plate and extending laterally from one side edge thereof and having its outer face serrated, a bolt carried by the pivot lug and extending laterally therefrom beyond said side edge of the base plate and located outwardly beyond said clamping arm, an angle clamping lever vertically disposed and pivoted intermediate its ends to said bolt, one arm of said lever extending downwardly and inwardly from said bolt in the direction of said clamping arms and having a vertical clamping face coacting with the serrated face of said clamping arm, a pair of relatively spaced lugs extending outwardly from the outer face of said clamping arm at a point below the lower end of said lower arm, a pair of relatively spaced lugs extending inwardly from said lower arm at a point above said clamping arm, the upper arm of said clamping lever extending laterally and outwardly and thence upwardly and outwardly with respect to said lever arm, a bolt carried by the upper end of said upper arm and extending laterally therefrom in the direction of and arranged parallel to said base plate, and a grooved roller journaled upon said last named bolt.

1,265,621. BLOW-TORCH. GEORGE T. CUNNINGHAM, Shreveport, La. Filed June 26, 1917. Serial No. 177,120. (Cl. 158—27.4.)

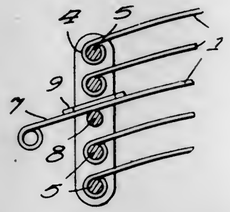


1. A torch comprising concentric pipes, a mixing device comprising a filler secured at the ends of said pipes, said filler being provided with a central passage communicating with the interior of the inner pipe and an annular group of longitudinal openings communicating with the interior of the outer pipe, each opening of said annular group being connected with the central passage

by means of a duct, a plug inserted within each opening of said annular group, said plug terminating within the opening of said group in proximity to the duct connected therewith.

[Claim 2 not printed in the Gazette.]

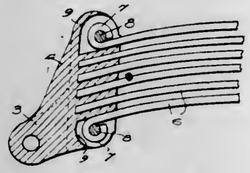
1,265,622. VEHICLE-SPRING. ENOS P. CURREY, Toledo, Oreg. Filed Sept. 13, 1917. Serial No. 191,207. (Cl. 267—33.)



1. A spring including a plurality of superposed spaced leaves, blocks arranged between the intermediate portions of said leaves, shackles for connecting the free ends of certain of the leaves, the ends of one of said leaves being extended beyond said shackles and having bearing thereon, and bearing plates engaged with the shackles and the extended ends of said leaf.

2. A spring including a plurality of superposed spaced leaves, shackles engaged with the free ends of the leaves, the ends of one of said leaves being loosely engaged with said shackles, and bearing plates slidable in the shackles and having bearing on the loosely engaged ends of said leaf.

1,265,623. SPRING CONNECTION. ENOS P. CURREY, Toledo, Oreg. Filed Sept. 27, 1917. Serial No. 193,492. (Cl. 267—33.)



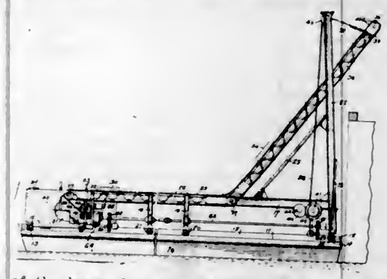
1. An end connection for springs, including a bracket having horizontally alined openings formed in the upper and lower extremities thereof, spaced supporting elements arranged on the bracket intermediate said horizontally alined openings for receiving the ends of spring leaves thereon, other leaves of the spring having ends receivable between the alined openings, bolts passing through said openings and supporting said last mentioned ends, and an apertured bearing lug formed integral with one side of the bracket to permit securing of the same to an object.

3. An end connection for springs, including a bracket having spaced superposed supports extending diagonally thereacross for receiving the ends of springs thereon, and an apertured bearing lug formed integral with the bracket to permit securing of the same to an object.

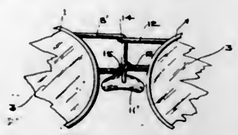
[Claims 2 and 4 not printed in the Gazette.]

1,265,624. BARGE-CONVEYER. DANIEL DARROW, New York, N. Y. Filed Jan. 29, 1917. Serial No. 145,137. (Cl. 214—15.)

The combination with a deck loading barge, of a loading and unloading apparatus therefor comprising a frame extending transversely of the barge but movable lengthwise above the deck thereof, a vertically adjustable boom at one end of the frame adapted to be swung outboard of the barge, a conveyer belt carried by said frame and boom and having a horizontal reach extending across the major portion of the barge deck at convenient height for manual loading thereon and unloading therefrom, together with means for driving said conveyer belt.



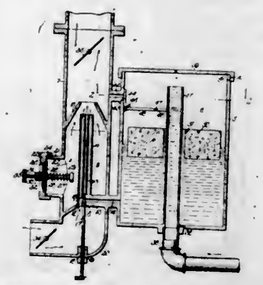
1,265,625. GOGGLES. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Dec. 26, 1917. Serial No. 208,943. (Cl. 88—44.)



2. In a device of the class described, including a pair of lens frames, U-shaped members having their ends connected with the frames one of said members having its side portions looped around the intermediate portion of the other member to provide eyelets embracing the intermediate portion of the second frame, whereby to provide a pivotal connection between the two frames, and a nose bridge supported by the pivotal connection.

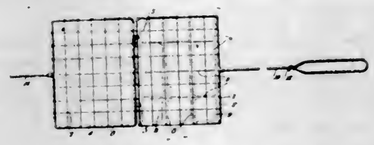
[Claims 1 and 3 not printed in the Gazette.]

1,265,626. CARBURETER. DAVID MARTIN DE WITT, Russellville, Ark. Filed Oct. 6, 1916. Serial No. 124,070. (Cl. 261—54.)



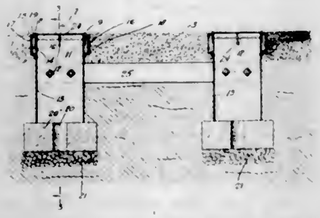
A carbureter, comprising a suction tube closed at its lower end, air and fuel nozzles in the said tube, the air nozzle opening through the closed end of the said tube, a spring pressed valve in the suction tube, a vacuum chamber adapted to contain a liquid fuel and having at its lower portion a passage leading to the fuel nozzle and at its upper portion a passage leading to the suction tube, above the nozzles, a valve controlling the passage leading to the suction tube, and means in said chamber for opening the valve controlling the passage leading to the suction tube when the fuel falls below a predetermined level.

1,265,627. MARSHMALLOW-TOASTER. BERNICE MARIE DICKEY, Indianapolis, Ind. Filed Mar. 2, 1917. Serial No. 152,135. (Cl. 53—5.)



A marshmallow toaster comprising a wire frame defining a rectangular receptacle, a handle extending from one upper edge thereof, a rectangular frame defining a cover hinged upon the opposite upper edge of said receptacle, a handle on said cover frame coöperating with said first named handle, wire mesh covering the sides and bottom of said receptacle, wire mesh covering said cover frame, and longitudinal and transverse partition strips of wire mesh permanently secured upon the ends and sides of said receptacle defining rectangular compartments for the individual reception of marshmallows.

1,265,628. ROADWAY. SANFORD BOUTON DICKINSON, Bath, N. Y. Filed Feb. 7, 1918. Serial No. 215,856. (Cl. 104—178.)



1. A roadway structure for unflanged vehicle wheels comprising a central roadway, a side roadway arranged on each side of said central roadway, and a pair of tracks on each of said side roadways, each of said tracks comprising flat metallic wheel receiving plates formed with an upstanding flange on each side, and supporting posts for sustaining said plates and holding the same in alinement.

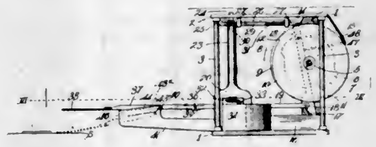
4. A roadway structure comprising spaced roadways having tracks and a central roadway therebetween, each of said tracks comprising a series of independent metallic plates provided with upstanding flanges on each edge and depending flanges on each edge, a post at the abutting ends of each pair of plates, said posts overlapping said abutting ends and in turn being overlapped by said depending flanges, a securing member extending through said flanges of each plate and through the respective posts connecting the plates to said posts whereby the plates for supporting vehicle wheels are carried by the posts while the animals drawing the vehicles may travel said central roadway.

6. A roadway structure provided with a pair of metallic tracks, each of said tracks being formed with a plurality of independent plates having flat plates having upstanding flanges on each edge, each of said plates being provided with a rail member arranged substantially centrally and extending longitudinally of the plate, whereby a trolley car may use said tracks, and ordinary vehicles may use said tracks, and means for simultaneously supporting said plates and holding same in alinement.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,629. BATTER-CAKE MACHINE. JOHN W. DIXON and HENRY EDEN, Kansas City, Mo. Filed Aug. 25, 1916. Serial No. 116,939. (Cl. 107—7.)

1. In a machine of the character described, a peel, means for advancing the same, means for depressing the peel in the initial portion of its advance movement, and means for reëlevating the peel as its advance movement is concluded.



2. In a machine of the character described, a peel, means for advancing the same, means for depressing the peel in the initial portion of its advance movement, means for reëlevating the peel as its advance movement is concluded, and means for inverting the peel when reëlevated.

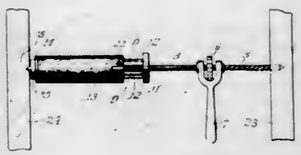
10. In a machine of the character described, a peel, means for advancing the same, means for depressing the peel in the initial portion of its advance movement, means for reëlevating the peel as its advance movement is completed, and means to swing the peel laterally.

11. In a machine of the character described, a peel, means for advancing the same, means for depressing the peel in the initial portion of its advance movement, means for reëlevating the peel as its advance movement is completed, means to swing the peel laterally, and means to rotate the peel to lumping position during said swinging movement.

15. In a machine of the character described, a shaft supported for rotatable and endwise movement, a peel carried by said shaft, means for reciprocating said shaft, a gear wheel mounted upon said shaft to turn the same without interfering with its reciprocating movement, a shaft geared to said gear wheel, a rack bar geared to said shaft, means to operate the rack bar in one direction while the shaft is at the end of the first half of its reciprocatory movement, and a spring to reverse the operation of the rack bar before the shaft makes the second half of its reciprocatory movement.

[Claims 3 to 9, 12 to 14, and 16 to 20 not printed in the Gazette.]

1,265,630. ADJUSTABLE FEED FOR BORING DEVICES. HENRY T. DONOHUE, Chicago, Ill. Filed Feb. 14, 1916. Serial No. 78,195. (Cl. 77—54.)



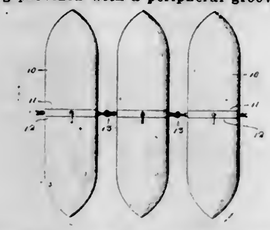
2. An adjustable feed for boring devices comprising a tubular member provided with means for engaging a support, and a member provided with means for engaging a bit shank extending within said tubular member and rotatable and slidable therein, said tubular member being provided on its interior with a mutilated thread, and said rotatable member being provided with a mutilated thread movable into and out of interengagement with said first mutilated thread by rotation of said rotatable member.

[Claim 1 not printed in the Gazette.]

1,265,631. FLOATING RAFT. PAUL DROCAR, Tarrs, Pa. Filed Sept. 21, 1917. Serial No. 192,557. (Cl. 114—44.)

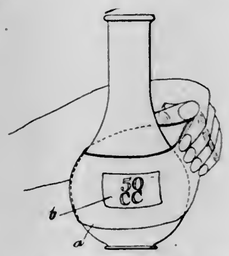
A device of the character described comprising a buoyant body formed as a closed hollow cylindrical shell, its

ends terminating in points, the central portion of said body being provided with a peripheral groove, an annular



band disposed within said groove and thereby prevented from longitudinal movement, and attaching means carried by said band.

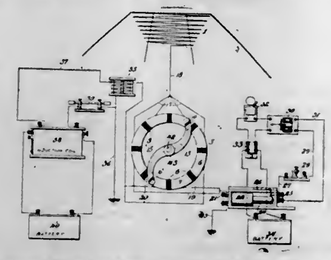
1,265,632. STENCIL-MOUNT. WALTER R. EIMER, New York, N. Y. Filed Apr. 20, 1917. Serial No. 163,362. (Cl. 33—174.)



1. In a stenciling device for bottles and the like comprising a stencil plate, a backing therefor of soft material, to fit snugly against the surface prepared for etching, said soft material having a clearance to expose the stencil apertures at the reserve side of the plate, and projecting beyond the plate to afford means for holding said device in operative position, while tracing through the stencil apertures upon the etching surface.

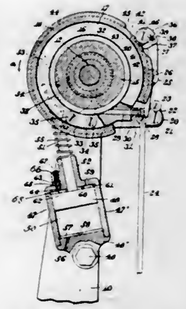
2. In a stenciling device for bottles and the like comprising a stencil plate, a mount secured thereto, composed of a sheet of soft surfaced material of sufficient area to wrap about the bottle, whereby the ends of said sheet may be drawn together and grasped by the operator's hand, said mount having a clearance to expose to the etching surface the stencil apertures in said plate.

1,265,633. AUTOMATIC WIRELESS SIGNAL. GUSTAF ENGELBREKT, Superior, Wis. Filed June 27, 1916. Serial No. 106,204. (Cl. 250—9.)



A wireless signal system comprising an automatic sending outfit, an automatic receiving outfit, an aerial, and an automatic switch for coupling the respective outfits in alternation to the aerial, said automatic switch comprising an even number of contacts in circular series, with one half of the contacts connected to the aerial and the other half of the contacts connected in alternation to the sending and receiving outfits, said switch being provided with a rotatable bridging member for electrically connecting diametrically opposite contacts in the order of rotation of the bridging member.

1,265,634. DASH-POT. EDWARD ERICKSON, Cliftondale, Mass., assignor to Victor Shoe Machinery Company, Lynn, Mass., a Corporation of Massachusetts. Original application filed Sept. 16, 1916, Serial No. 120,903. Divided and this application filed Mar. 15, 1917. Serial No. 155,107. (Cl. 74—69.)

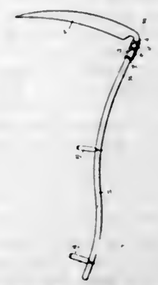


1. In a device of the class described, a cup-shaped casing having a central opening in its end wall and an annular groove formed in its inner cylindrical wall with one side of said groove in the same plane with the inner face of the end wall; a piston therein provided with a rod extending through said opening; a disk of flexible material with its edge positioned in said groove, said disk being provided with an opening therethrough offset from a passage in the end wall of said casing; and a closure for said casing.

4. In a device of the class described, a casing the inner end of which is provided with a central opening and both ends of which are each provided with a passage at one side of the axis of said casing; a piston in said casing provided with a rod extending through said opening and having a shouldered head at its outer end; a spring around said rod between said head and casing and normally retaining said piston at the inner end of said casing; a pivoted connection for the outer end of said casing; and a disk valve at each end of said casing provided with an opening therethrough offset from the said passage in the end wall of said casing, said disk valves being each alternately opened and closed by the movement of said piston.

[Claims 2 and 3 not printed in the Gazette.]

1,265,635. SCYTHE. JOHN C. EUBANK, Campbellsville, Ky. Filed Feb. 9, 1917. Serial No. 147,653. (Cl. 56—27.)

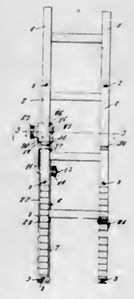


1. A scythe comprising a blade having a tapered shank, a coupling member, a socket carried by said member intermediate its ends and adapted to receive said tapered shank, means for securing said tapered shank to the coupling member, a tubular handle adapted to be positioned on the coupling member and receive one end of said socket, and means for securing said handle to the coupling member.

3. A scythe comprising a blade having a tapered shank, a coupling member consisting of a forward portion having a reduced extension, both of which are formed with a single tapered socket, an apertured ear extending from said enlarged portion adapted to coöperate with said socket to support said tapered shank, securing means extending through said ear and shank, the rear end portion of said coupling member consisting of a concavo-convex supporting arm, said reduced extension disposed concentrically of said supporting arm, a pipe handle adapted to be engaged over said reduced extension and rest in said concavo-convex supporting arm, a U-bolt embracing said handle and extending through said ears, nuts for the free ends of said U-bolt and a clamping bolt disposed through said handle and the rear end of said supporting arm.

[Claim 2 not printed in the Gazette.]

1,265,636. ADJUSTABLE LADDER-FOOT. EMERSON W. FARNSWORTH, Buckhannon, W. Va. Filed Aug. 10, 1917. Serial No. 185,556. (Cl. 228—5.)



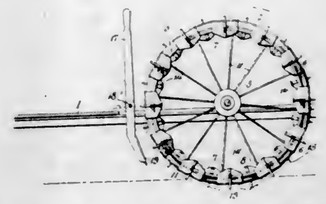
1. In a device of the class described, a ladder comprising a stile; a rack on the stile; a support mounted to reciprocate on the stile longitudinally thereof; a stop bar pivoted to the support and adapted to engage the rack; a clamp engaging the rack and the support; and a pawl pivoted to the stile, the support having teeth coacting with the pawl, the said teeth being spaced apart less widely than are the teeth of the rack.

2. In a device of the class described, a ladder comprising a stile; a trough-shaped support slidable longitudinally of the stile and including a back and a side, the side being cut away to form a shoulder, and the back being provided at its upper end with a lip; and a clamp engaging the back and coöperating with the stile, the clamp including a part supported on the shoulder, and a part engaged beneath the lip.

3. A ladder comprising stiles and rungs; racks carried by the stiles; a support slidable on one stile, longitudinally thereof, and adapted to be mounted on either stile; a U-shaped stop bar engaging the rack and disposed on the outer side of said stile to clear the rungs, the support having a socket, and the stop bar including a finger mounted in the socket, the finger being reversible in the socket when the support is shifted from the outside of one stile to the outside of the other stile; and means for removably holding the finger in the socket.

4. In a device of the class described, a ladder comprising a stile; a rack on the forward surface of the stile; a support slidable longitudinally of the stile and of trough shape in cross section to receive the rear portion of the stile, the support being provided at its lower end with a transverse foot extended beneath the lower end of the stile and serving as a wear plate for the lower end of the stile when the support is elevated to bring the foot against the lower end of the stile; and a stop bar pivoted to the support and coacting with the rack.

1,265,637. TRACTION-WHEEL. GEORGE N. FIDDLER, Pollock, S. D. Filed May 29, 1917. Serial No. 171,678. (Cl. 21—209.)



1. In a grip for a traction wheel, a channel spade adapted to be attached to the rim at the edge and to extend longitudinally therewith, a traction spade extending from the outer face of said channel spade at right angles thereto and transversely of the rim, said channel spade and traction spade being formed in one casting and having straight ground engaging edges, the ground engaging edge of the traction spade being extended beyond the ground engaging edge of the channel spade, and means for securing the grip to the rim.

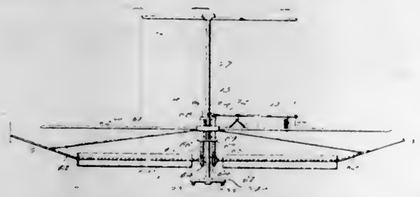
2. In a grip for a traction wheel, a casting comprising a plate forming a channel spade adapted to be arranged longitudinally of the wheel rim and projecting outwardly and inwardly beyond the rim, a flange projecting from one face of said plate intermediate of the outer and inner edges and coextensive with the length of said plate and adapted to be attached to the outer face of the rim of the wheel, and a second plate projecting from the opposite face of the first-mentioned plate at right angles thereto and arranged radially, providing a traction spade adapted to grip the soil.

3. In a grip for traction wheels, a channel spade adapted to be arranged longitudinally of the wheel rim at the outer edge thereof and projecting outwardly and inwardly beyond the same, a flange projecting inwardly from the inner face of said channel spade at a point between the inner and outer edges of the same and providing attaching means for connecting the channel spade to the outer face of the wheel rim, a traction spade arranged at right angles to the channel spade and projecting at its outer edge beyond the outer edge of the channel spade, and separate means for connecting the inner portion of the channel spade to the inner face of the rim.

4. The combination with a traction wheel having a rim, of a channel spade attached to the edge of the rim, projecting outwardly and inwardly therefrom in a longitudinal line, a flange projecting from an intermediate portion of the inner face of said channel spade and adapted to overlap the rim, means for securing said flange to the rim, a traction spade projecting from the outer face of said channel spade at right angles thereto, the outer edges of both spades being sharpened and the outer edge of the traction spade projecting beyond the outer edge of the channel spade, and a brace connecting the inner end of said channel spade to the inside of the rim.

5. In a grip for traction wheels, a channel spade adapted to be arranged longitudinally of the wheel rim at the outer edge thereof, and projecting inwardly and outwardly from said rim, a flange projecting inwardly from said channel spade and arranged lengthwise the same at a point intermediate of the inner and outer edges and providing attaching means for connecting the same to the wheel rim, and a traction spade arranged at right angles to the channel spade and projecting at its outer edge beyond the outer edge of the channel spade, the channel spade, flange and traction spade being formed of one casting and the outer edges of the channel spade and traction spade being sharpened.

1,265,638. AEROCRUISER. THOMAS M. FINLEY, Westplains, Mo. Filed Apr. 10, 1917. Serial No. 160,978. (Cl. 244—6.)



1. An airship of the class described including a body having a central longitudinal trough at the bottom dividing the bottom into side portions, said side portions being composed of angularly related sections adapted to gather and pack the air.

4. An airship of the class described including a body substantially crescent shaped in cross section having a central longitudinal trough and provided with opposite angular related bottom sections extending longitudinally of the bottom and adapted to gather and pack the air.

14. An airship of the class described including a body approximately crescent shaped in cross section and having a central longitudinal bottom trough and provided with a tapered transversely curved terminal portion, said body being also provided with a horizontally tapered wedge shaped top section surmounting the said tapered portion and adapted to divide the air laterally, side troughs located at opposite sides of the body in rear of the tapered top section and arranged to receive the air divided by the same, pivoted blades mounted on the troughs and operable to depress the body, and lifting propellers carried by the body and arranged to counteract the effect of the said blades to produce a firmness and steadiness of the body in the air.

24. An airship of the class described including a frame work having tubular members adapted to form conduits for a heating medium, a fabric covering supported by the frame work, a fastening device comprising a band arranged on the tubular members, and a shank extending from the band and piercing the covering and provided with an exterior nut, an approximately semi-tubular shield of non-heat-conducting material arranged on the outer portion of the tubular member and interposed between the same and the fabric covering, and an outer plate or shield having an inner lining and interposed between the nut and the fabric covering.

[Claims 2, 3, 5 to 13, 15 to 23, and 25 to 32 not printed in the Gazette.]

1,265,639. PLANE FOR AIRSHIPS. THOMAS M. FINLEY, Westplains, Mo. Filed Apr. 10, 1917. Serial No. 160,979. (Cl. 244—3.)



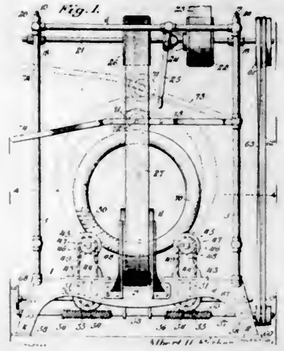
1. An airship of the class described including a body having a tapered end portion, and side troughs arranged exteriorly of the body at opposite sides thereof and having terminal portions converging along the tapered end portion of the body.

4. An airship of the class described including a body having a tapered end portion, and horizontally disposed longitudinal side troughs located at opposite sides of the body and composed of horizontal top portions and inner and outer inclined side portions, said troughs being provided with inclined terminal portions forming extensions of the said horizontal top portions of the troughs and extending upwardly therefrom and converging along the tapered portion of the body.

8. An airship of the class described including a body provided with a longitudinal plane forming a trough having top and side walls and located above the bottom of the airship, said longitudinal plane being provided with openings, and pivoted blades mounted in the openings and adjustable to direct the air upwardly or downwardly through the said openings.

[Claims 2, 3, 5 to 8, and 9 to 14 not printed in the Gazette.]

1,265,640. TIRE-WRAPPING MACHINE. ALBERT H. FISHER, Lincoln, Nebr. Filed Dec. 23, 1913. Serial No. 808,426. (Cl. 242—6.)



1. In a tire wrapping machine, a rotatable shuttle, guides therefor shaped to restrict the movements of the shuttle to that of rotation, and a drive belt in underrunning sustaining relation to the shuttle and supporting the weight thereof.

5. A tire wrapping machine comprising a basic member and superstructure, a hollow rotatable shuttle mounted on the basic member, carriages on the basic member at opposite ends of the shuttle, rotatable supports for a core and tire carcass thereon mounted on the carriages, driving means for the supports, means for adjusting the carriages toward and from the shuttle, a drive shaft mounted on the superstructure, a pulley on the drive shaft, a belt carried by the pulley and encircling the shuttle in underriding relation thereto, driving connections between the drive shaft and the driving means for the core supporting devices on the carriages, and a guide member mounted on the superstructure in position to engage a core and tire carcass thereon traversing the shuttle, said guide member having a constant tendency to remain in engagement with the core and tire carcass.

7. In a machine for wrapping tires, a rotatable shuttle mounted for rotation upon a substantially horizontal axis, carriages at opposite sides of the shuttle and each having thereon a rotatable support for the tire core and carcass to sustain said tire core and carcass at spaced points in an upright position in traversing relation to and extending above the shuttle, means for adjusting both carriages simultaneously toward and from each other, and driving means common to both rotatable supports.

8. In a tire wrapping machine, a rotatable ring-shaped shuttle provided with a peripheral belt face and circumferentially extended edge guides on opposite sides of the shuttle defining between them a path for a driving belt for the shuttle.

[Claims 2 to 4 and 6 not printed in the Gazette.]

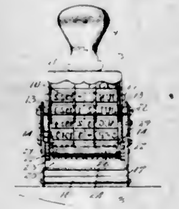
1,265,641. METHOD OF PRODUCING PRINTING-SURFACES. OSCAR FOERSTER, New York, N. Y., assignor of one-half to Arthur Jaeger, New York, N. Y. Filed Mar. 26, 1917. Serial No. 157,551. (Cl. 95—5.6.)

1. The method of producing grain screen plates having a fine, sharp, irregular grain comprising coating a plate with a bichromated gelatin containing grain producing material, exposing it to the action of light, removing the unaltered gelatin, rendering the gelatin surface adhesive, dusting thereon a non-actinic powder and finally removing the powder adhering to the high points in the gelatin coating.

2. The method of producing grain screen plates having a fine, sharp, irregular grain comprising coating a glass plate with bichromated albumen, exposing the back thereof to the action of light, removing the unaffected albumen, coating the albuminized plate with bichromated gelatin containing grain producing material, exposing the double-coated plate to the action of light, removing the unaffected gelatin, rendering the surface adhesive, dusting thereon a non-actinic powder and finally removing the powder adhering to the high points in the gelatin coating.

3. The method of producing grain screen plates consisting in coating a plate with bichromated gelatin containing a grain producing substance, exposing it to the action of light, removing the unaffected gelatin, hardening the remaining gelatin, rendering the surface adhesive, dusting thereon a non-actinic powder and finally removing the powder adhering to the high points in the gelatin coating.

1,265,642. SELF-INKING HAND-STAMP. HARRY S. FOLGER and CASPER L. REDFIELD, Chicago, Ill.; said Folger assignor, by direct and mesne assignments, to R. D. Swisher Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1914. Serial No. 851,041. (Cl. 101—103.)



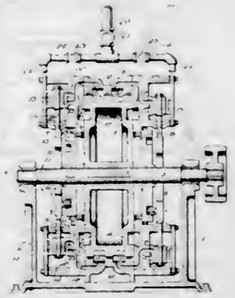
1. The combination with a hand stamp having a frame provided with rack teeth, of an outer frame consisting of plates located on opposite sides of the stamp, said plates being provided with guiding slots parallel with the racks formed on the stamp frame, ties connecting said plates together, projections on said stamp engaging said slots to guide the stamp in the outer frame, a pad carrying frame pivoted to the outer frame, gears connected to the pad carrying frame at its pivoting points and engaging the racks on the stamp, and a spring mounted upon the pivotal support for the pad carrying frame and acting to turn said gears to elevate the stamp.

5. In a stamping machine, a main frame, a printing mechanism frame slidably mounted therein, a straight rack with a plurality of teeth on said frame, an ink pad carrier swingingly mounted on the main frame, a gear with a plurality of teeth on the carrier meshing with the rack to swing the carrier away from and toward the printing mechanism frame during reciprocation.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,265,643. ROTARY STEAM-ENGINE. RICHARD CLAYTON FRASER, Central City, Colo., assignor of one-third to William R. Fraser, Durango, Colo. Original application filed May 9, 1917, Serial No. 167,532. Divided and this application filed Oct. 11, 1917. Serial No. 196,003. (Cl. 253—65.)

1. In a compound rotary motor, a rotor having series of pockets with inclined bottom walls, each pocket having a substantially radial impact face, a casing inclosing the rotor, a source of fluid pressure, and means including connected, diametrically opposed valves, for controlling the supply of high pressure initially to one series of pockets and concurrently connecting a given high pressure pocket to one of a second series, and means providing for the exhaust of pressure from the latter series, the bottom of said pockets all symmetrically inclining in the coördinate series and terminating at their inner and deeper ends at the roots of their respective impact faces.

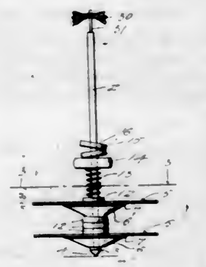


4. In a compound rotary motor, a rotor having series of pockets, each pocket having a substantially radial impact face, a casing inclosing the rotor, a source of fluid pressure, and mechanically operated valves for controlling the supply of high pressure initially to one series of pockets and concurrently connecting a given high pressure pocket to one of a second series, and means for providing for the exhaust of pressure from the latter series.

7. In a reversible, compound rotary motor, a casing, a rotor in said casing having a set of series of impact faces symmetrically facing one direction on the rotor, another set of series of faces symmetrically facing and disposed to face oppositely to those of the other set, whereby pressure applied to one set causes rotation in a direction reverse to that applied to the other set, a supply for fluid pressure, a valvular control means for each set of faces on the rotor, manually operable valves for controlling passage of fluid to said means to determine direction of rotation of the rotor, each set including high and low pressure impact faces, and exhaust means for the low pressure faces, said control means mechanically operated.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

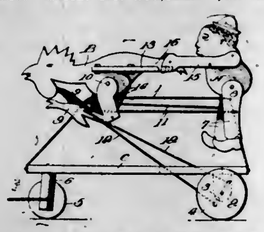
1,265,644. TOP. HARRY A. FREDERICK, New Rochelle, N. Y. Filed Oct. 9, 1917. Serial No. 195,585. (Cl. 46—32.)



1. A top comprising a shank a plurality of various shaped members detachably mounted on the shank, means to space said members, resilient means adapted to engage the upper member, and lock washers for engaging the spring, as and for the purpose specified.

2. A top comprising a shank, a plurality of members detachably mounted on the shank, spring means for holding the members in position on the shank, said shank having its upper end provided with a longitudinal bore, and plates detachably mounted in the bore.

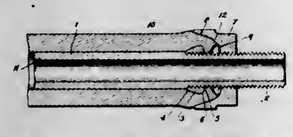
1,265,645. WHEELED TOY. WILLIAM FULD, Baltimore, Md., assignor to Carrie A. Fuld, Baltimore, Md. Filed Apr. 23, 1917. Serial No. 163,894. (Cl. 46—45.)



1. A wheeled toy comprising a base having miniature figures mounted thereon legs pivotally mounted on one of the figures, legs and other movable members pivotally mounted on the other figure, means connecting the legs and other movable members of one figure together for oscillatory movement, means connecting the legs of the different figures together for oscillatory movement and means connected to the legs of one of the figures whereby they are actuated when the base is propelled.

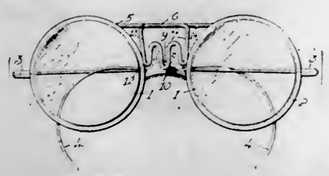
[Claim 2 not printed in the Gazette.]

1,265,646. CONNECTING DEVICE. NICHOLAS FURDUY, Philadelphia, Pa. Filed July 14, 1917. Serial No. 180,628. (Cl. 285—79.)



A connecting device for hose including a tube having a threaded portion and a collar located within its length, a portion of said tube including the collar being designed to be pushed within a hose until the hose end overlies the collar, and a member designed to be screwed on said threaded portion of the tube and having a recess designed to surround the collar so that the surface which forms said recess compresses the end of the hose against the collar, said collar flaring from its inner end and having an outer end surface extending substantially at right angles to its longitudinal axis, said threaded portion being adapted to extend beyond the hose for attachment to some coöperating member.

1,265,647. EYE-PROTECTOR. LEO O. GAGNON, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Oct. 13, 1917. Serial No. 196,408. (Cl. 88—41.)



2. A device of the character described, including lens rims, oppositely disposed L-shaped members having their termini secured to opposite rims, and a central member comprising a pair of upwardly extending loops connected by a central depending loop, said central member being integral with the L-shaped members at their lower points of attachment to the lens rims and having a crest pad secured to the depending loop whereby said depending loop automatically centers the pad on relative adjustment of the lens rim and allows of independent adjustment of the pad by bending of the central looped member.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,265,648. PROCESS OR METHOD OF TREATING LEATHER. ELIJAH P. GILLILAND, Norwood, Mass. Filed June 4, 1914. Serial No. 843,002. (Cl. 91—68.)

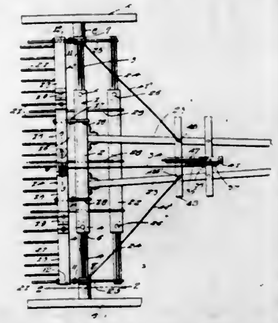
1. A method of treating leather comprising the steps of applying a surface coating consisting of a wax, a resin and a filler in compound and then applying coatings of a gelatinous compound.

4. A method of treating leather, comprising the application thereto, of a waxy substance, a filler as described and a resin in solution with alkali, and then applying a succeeding coat of gelatin.

6. A method of producing a stainless porous leather comprising the steps of applying to the surface thereof a wax, or waxy solution in a saponified body with a silicate and a resin and further application of a gelatinous body.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,265,649. HAY-RAKE. WILLIAM I. GOSSUM, South Fulton, Tenn. Filed July 12, 1916. Serial No. 108,888. (Cl. 56—67.)

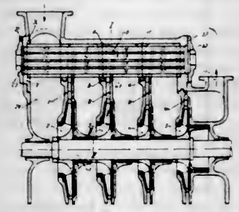


A rake comprising a hollow rectangular member, axles telescopic in the ends of said member, means holding the axles in adjusted position, wheels journaled on said axles, a tooth supporting bar consisting of a pair of intermediate sections and outer sections and said sections normally extending parallel with the axles and member, means pivoting the sections to the axles, teeth secured to said sections, hinges secured to the forward faces of the inner ends of the outer sections and to the outer ends of the intermediate sections, a hinge secured to the rear face of the inner end of the intermediate section, said hinges permitting the intermediate sections to be swung forwardly in parallel relation and simultaneously moving the outer sections in the direction of each other, means holding the intermediate sections against movement when parallel with the member, a telescopic member secured to the axles and member and forwardly thereof and adapted to support the intermediate sections when in a folded position, and cleaning tines carried by the telescopic member.

1,265,650. COOLING DEVICE IN MULTISTAGE CENTRIFUGAL COMPRESSORS. BENJAMIN GRAEMIGER, Zurich, Switzerland, assignor to the Firm of Aktiengesellschaft der Maschinenfabriken Escher Wyss & Co., Zurich, Switzerland. Filed Apr. 14, 1917. Serial No. 162,057. (Cl. 230—6.)

1. In a multistage centrifugal compressor, a cooling device comprising a plurality of cooling channels arranged substantially parallel to the axis of the compressor and forming passages between their walls to direct the air, being compressed, in paths perpendicular to the axis of the compressor.

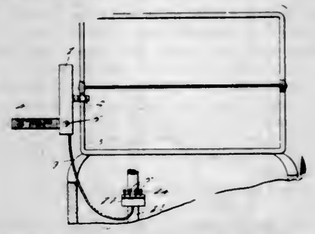
2. A multistage centrifugal compressor comprising a casing, a plurality of cooling bodies separate therefrom and having cooling channels arranged substantially parallel to the axis of the compressor.



5. In a multistage centrifugal compressor, a cooling device comprising separately made bodies having cooling channels substantially parallel to the axis of the compressor-shaft and mounted in the lateral partition walls of the pressure-stages, cooling channels of one pressure-stage being arranged coaxially to cooling channels of a neighboring stage, substantially as described.

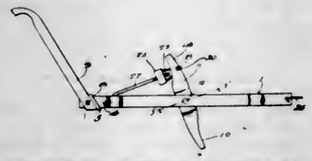
[Claims 3, 4, and 6 not printed in the Gazette.]

1,265,651. DIRECTION-INDICATOR FOR AUTOMOBILES. THOMAS J. HAYNES, South Boston, Mass. Filed Mar. 20, 1917. Serial No. 156,062. (Cl. 40—67.)



A direction indicator comprising a receptacle secured to the steering post of an automobile, a removable bottom wall on said receptacle and having an opening, a flexible tube having one end disposed within said opening and flared to retain the same therein, a partition within said receptacle and having apertures, operating rods slidable in the apertures and through the top wall of said receptacle, cables connected to the ends of the operating rods and extending through the flexible tube, a roller journaled in said receptacle and supporting the ends of the cables connected to the operating rods, a casing secured to the automobile and having its side wall open, a semaphore arm pivoted within said casing and connected to the cables whereby upon operating the operating rods the semaphore will be swung exteriorly of the casing, and springs connected to the semaphores and to the casing for returning said semaphores within said casing.

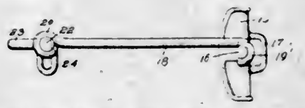
1,265,652. REVERSIBLE PLOW. JONATHAN HEACOCK, Highlands, N. C. Filed Jan. 8, 1916. Serial No. 71,049. (Cl. 97—26.)



1. In a plow structure, the combination, of a plow beam having its intermediate portion enlarged, said intermediate portion being provided with a longitudinally extending slot, a pin extending transversely through said beam intermediate the ends of said slot, a standard pivotally mounted upon said pin, a rod carried by said beam, a nut adjustably mounted upon one end of said rod, a hook carried by said nut and adapted for engagement with one end of said standard for holding it rigidly in position, the ends of said standard being curved oppositely.

2. In a plow structure, the combination, of a plow beam having its intermediate portion enlarged, said intermediate portion being provided with a longitudinally extending slot, a pin extending transversely through said beam intermediate the ends of said slot, a standard pivotally mounted upon said pin, a rod carried by said beam, a nut adjustably mounted upon one end of said rod, a hook carried by said nut and adapted for engagement with one end of said standard for holding it rigidly in position, the ends of said standard being curved oppositely, a clevis connected to the front end of said beam, said clevis having its forward side curved for providing two sockets upon each side of said beam.

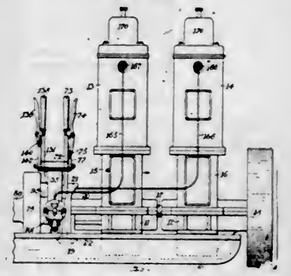
1,265,653. SPUDDING ATTACHMENT FOR WELL-DRILLING MACHINES. CHARLES M. HEETER, Butler, Pa. Filed Sept. 14, 1916. Serial No. 120,182. (Cl. 255—33.)



1. Spudding mechanism comprising a cable engaging shoe, reins to which the shoe is secured, and a connecting device pivotally carried by the reins and having two branches projecting therefrom, one branch adapted to connect with a jerk line and the other branch adapted to connect with an anchor line.

[Claims 2 to 5 not printed in the Gazette.]

1,265,654. INTERNAL-COMBUSTION ENGINE. ALBERT HEIMANN, New York, N. Y. Filed Apr. 6, 1916. Serial No. 89,293. (Cl. 123—41.)



1. In an internal combustion engine, the combination with a cylinder, a pump and a shaft, of a reciprocating device, means for actuating the same to operate the pump, and means independent of the aforesaid means for adjusting the position of the reciprocating device to determine the time of operating the pump to inject the fuel into the engine cylinder.

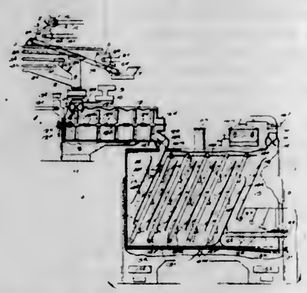
6. In an internal combustion engine, the combination with a cylinder, a pump and a shaft, of a rocker member, devices in which the same is mounted, a reciprocating member mounted to slide in the said rocker member, means for actuating the reciprocating member from the said shaft to operate the said pump, means for adjusting the position of the rocker member to determine the time at which the reciprocating member operates the pump to inject the fuel into the engine cylinder, and means dependent upon the speed of the shaft for varying the stroke of said reciprocating member.

10. In an internal combustion engine, the combination with a cylinder, a pump, a plunger therefor and a shaft, of a frame member, a rocker disk mounted therein, a reciprocating member mounted to slide in the rocker disk, means for actuating the reciprocating member from said shaft and which dependent upon the speed of the shaft determines the stroke of the reciprocating member, means for adjusting the position of the rocker disk and maintaining the same in its adjusted position to determine the time at which the reciprocating member operates the pump to inject a charge of fuel into the engine cylinder, and means for adjusting the stroke of the pump plunger.

26. In an internal combustion engine, the combination with cylinders, and the engine shaft, of a frame connected to and extending laterally of the engine, a pump mounted in each end of the said frame, a plunger for each pump, a pipe connection from the discharge of each pump to an engine cylinder, a rocker disk mounted to turn in said frame, a reciprocating member mounted to slide in said rocker disk, means for actuating the reciprocating member from the said shaft so as to vary the length of its stroke dependent upon the speed of the shaft, means for adjusting the position of said rocker disk and reciprocating member to determine the time at which the pumps are operated to inject the fuel into the engine cylinders, and means for simultaneously adjusting to the same extent the stroke of said pump plungers.

[Claims 2 to 5, 7 to 9, 11 to 25, and 27 to 31 not printed in the Gazette.]

1,265,655. FIBROUS COMPOSITION AND PROCESS FOR MAKING THE SAME. GEORGE A. HENDERSON, St. Albans, W. Va. Filed Feb. 12, 1916. Serial No. 77,953. (Cl. 106—31.)

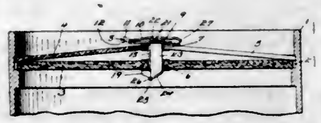


1. The process of manufacturing a composition of matter for paving purposes consisting in shearing, then shredding wood into beveled, ragged edged particles of substantially uniform thickness of not exceeding ½" and of irregular lengths and breadths graduating in descending scale of sizes from those approximately 1"x½" to ¼"x¼", measuring and mixing 40% thereof with 50% of those in sizes graded from ½"x½" to a cube whose diameter is the thickness of the particles, mixed with 10% of sizes graded from that of the largest cube to those of dimensions corresponding to the average thickness of the ragged edges of the particles; then mixing particles *in vacuo* with a preheated bitumen of approximately 70 standard penetration, in quantity approximately 50% in excess of that required in the completed product; then agitating the mixture while strongly heated a predetermined length of time to partially volatilize the oil of the bitumen to reduce such penetration to approximately 40, to abnormally enlarge the particles and to separate and expel from their expanded pores all moisture, sap, essences, cellular tissue and pulpy matter, by destructive distillation thereof, and, by the influence of the fan creating the vacuum, expelling from the chamber containing them, all such products, together with the fumes from the heated bitumen, simultaneously impregnating the expanded pores of the particles, by their absorption of the melted bitumen: then draining superheated bitumen through the particles, during vibration of their container, to settle the particles horizontally; then, when still heated to sufficient fluidity, expressing the excess bitumen from the particles, retaining in their expanded pores merely enough to completely fill them when subsequently contracted, to coat them, to fill the voids between the particles when finally compressed, and to bind them to each other; then cooling the mass and gradually compressing the same into shape, during and after contraction of the ingredients, substantially as described.

12. A monolithic pavement structure consisting in graded woody particles of uniform thickness, and irregular lengths and breadths, from which have been removed sap, cellular tissue and moisture, impregnated and coated with a cementitious preservative and compressed into shape.

[Claims 2 to 11 not printed in the Gazette.]

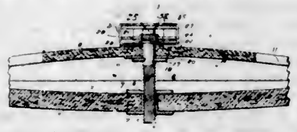
1,265,656. BARREL-HEAD SEAL. ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Filed July 1, 1915. Serial No. 37,576. (Cl. 217—78.)



1. A barrel head seal and fastener including a main seal member having a body plate and an extension formed with the latter, an auxiliary seal member removably engaged through said body plate and cooperating with the main seal member, said main seal member having a shank depending from said body plate, said extension being adapted to be bent back over said body plate to cover and protect the auxiliary seal member, the edges of said extension and said body plate being adapted to be clamped together, and locking ears carried by the shank of the main seal member.

[Claims 2 to 4 not printed in the Gazette.]

1,265,657. BARREL-HEAD AND SEAL. ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Filed July 1, 1915. Serial No. 37,577. (Cl. 217—78.)

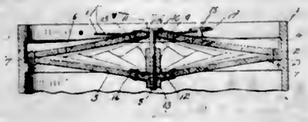


1. A barrel head fastener and seal comprising a head tightening and expanding screw having a portion of its head end threaded, a screw operating member mounted upon said threaded portion, means for rotating said screw operating member and inclosing the same, and means for limiting free rotation of said member upon said head tightening and expanding screw in one direction and locking together said member and said screw.

6. The combination with an inner head member, an outer radially slit head member, means for connecting said outer radially slit head member at its slit portions with the said inner head member, a head tightening and expanding screw carried by said outer radially slit head member, means for preventing withdrawal of said screw, said screw having threaded engagement with said inner head member, a screw rotating member mounted upon the head of said screw, means for locking together said screw rotating member and said screw for rotation in one direction, an outer seal member for inclosing and rotating said screw rotating member in either direction, and a sealing and screw head protecting disk carried by said outer seal member.

[Claims 2 to 5 not printed in the Gazette.]

1,265,658. HEAD FOR BARRELS AND THE LIKE. ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Filed Aug. 7, 1915. Serial No. 44,238. (Cl. 217—78.)

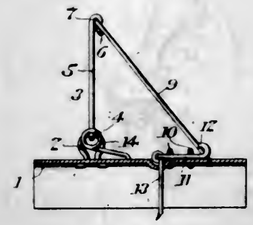


1. A receptacle closing head comprising a pair of expanding disks connected at their outer edges and capable of making a tight joint at their edges with a receptacle when they are expanded.

6. A head comprising a pair of corrugated disks having convex outer faces, the edges of said disks being interlocked and the corrugations of said disks being offset from one another, means for drawing together the central portions of said disks to cause an expansion of the same and thereby increase the diameter of the head, and spaced securing members for connecting the edges of said disks and causing said edges to move together during expansion of said disks.

[Claims 2 to 5 and 7 not printed in the Gazette.]

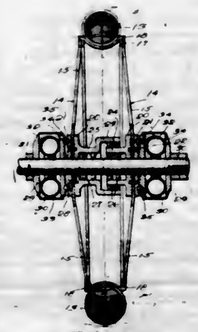
1,265,659. TRAP. JOHN HOLSWORTH, Evarts, Alberta, Canada. Filed Sept. 4, 1915. Serial No. 49,127. (Cl. 43—27.)



A trap of the character described comprising a base of substantially inverted U-shaped formation in cross section, spaced ears rising from the base adjacent one end, a yoke pivotally mounted between said ears for vertical swinging movement toward and away from the base, trapping mechanism associated with the yoke and operating through spaced openings in the base, a trigger for said trapping mechanism including a rod mounted upon the base for horizontal sliding movement, said rod having a hooklike terminal adapted to engage said yoke to hold said trapping mechanism normally in inactive position, a pair of spaced guides on said base embracing said rod, said base having a depression with an opening therein, and an actuating pin extending through said opening and fulcrumed upon the edge thereof and vertically disposed beneath said base, the upper extremity of said pin being coiled about the adjacent extremity of said rod and swingingly connected therewith, and said depression receiving said coil of the actuating pin, whereby said rod is permitted to wholly contact the base to insure sliding movement in a true horizontal plane.

1,265,660. RESILIENT WHEEL. CHARLES HORSTER, Haileybury, Ontario, Canada, assignor of one-half to Michael Madorski, Gow-Gauda, Ontario, Canada. Filed Aug. 23, 1917. Serial No. 187,778. (Cl. 152—29.)

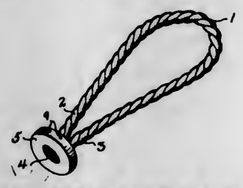
1. In a wheel of the character described, a circumferentially contractible and expansible rim, including a plurality of sections, each section being provided at its opposite edges with radially disposed flanges, said flanges being provided near their outer edges with shoulders; a plurality of resilient disks arranged upon the opposite sides of the rim, each disk being provided with radially extending slits which extend through the outer edge thereof and terminate at points near and spaced from the central portion of the disk for providing a solid hub portion, said slits providing a plurality of segmental members corresponding in number and arrangement to the sections of the rim; means for connecting the segmental members with the outer sides of the flanges of the rim to engage beneath the shoulders thereof; a plurality of hub sections secured to the solid hub portions of the disks and mounted for longitudinal movement toward and away from each other; and yielding means to oppose the longitudinal movement of the hub sections away from each other.



2. In a wheel of the character described, a circumferentially contractible and expansible rim, including a plurality of sections, each section being provided at its opposite edges with radially disposed flanges, said flanges being provided near their outer edges with shoulders; a plurality of resilient disks arranged upon the opposite sides of the rim, each disk being provided with radially extending slits which extend through the outer edge thereof and terminate at points near and spaced from the central portion of the disk for providing a solid hub portion, said slits providing a plurality of segmental members corresponding in number and arrangement to the sections of the rim; means for connecting the segmental members with the outer sides of the flanges of the rim to engage beneath the shoulders thereof; a plurality of hub sections connected with the hub portions of the disks; a spindle upon which the hub sections are mounted to move longitudinally; stops carried by the spindle and arranged outwardly of and near the outer ends of the hub sections; and yielding means arranged between the stops and the hub sections.

3. In a wheel of the character described, a plurality of rim sections arranged in end to end relation, the corresponding ends of the rim sections being provided with inwardly projecting transverse lugs carrying transverse tongues, the corresponding opposite ends of the rim sections being provided with inwardly extending transverse lugs provided with transverse grooves for the reception of the transverse tongues, a plurality of resilient disks arranged upon opposite sides of the rim sections and secured thereto, said disks being provided with radially extending slots which pass through the outer edge thereof and extend inwardly to terminate at points disposed near and spaced from the central portions of the disks providing central hub portions, hub sections secured to the solid hub portions of the disks and movable longitudinally toward and away from each other, and yielding means to oppose the longitudinal movements of the hub sections away from each other.

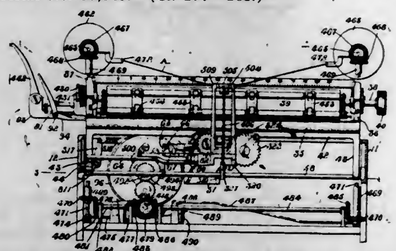
1,265,661. ROPE-LOOP. ELIAS W. HOWELL, Camden, N. J. Filed Jan. 24, 1918. Serial No. 213,605. (Cl. 24—129.)



1. A rope loop having a metallic band surrounding and compressing the strands thereof, said band having nail holes extending therethrough in alinement with the compressed strands, and nails extending through said holes and through the respective compressed strands, substantially as described.

[Claim 2 not printed in the Gazette.]

1,265,662. RECORDING MECHANISM. JOHN T. HOWIESON, New York, N. Y., assignor, by mesne assignments, of one-half to Burroughs Adding Machine Company, Detroit, Mich., a Corporation of Michigan. Original application filed July 29, 1901, Serial No. 70,060. Divided and this application filed Apr. 6, 1916. Serial No. 89,349. (Cl. 197—165.)



1. A ribbon movement comprising, in combination with the usual spring barrel as a motor, rotatable spools; separate driven mechanisms for said spools comprising in connection with gears on the spools, shafts having at one end a gear coöperating with the spool gears and having another gear at the other end; separate shafts adapted to drive the first named shafts; driving mechanism driven by the spring barrel; and means for shifting said driving mechanism into and out of coöperation with said second named shafts.

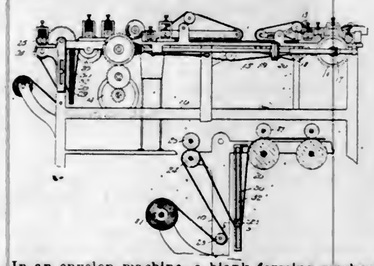
2. A ribbon movement, comprising rotatable ribbon spools, separate driven mechanisms for said spools, driving mechanism adapted to coöperate with one or the other of the driven mechanisms and comprising a shiftable shaft having a driving pinion, a pair of levers or bell cranks connected with the spool mechanisms and having means of engagement with the shaft, one of said levers coöperating with the driving shaft at any one time, and means controlled by the movement of the ribbon for operating said levers for shifting the driving pinion.

[Claims 3 to 12 not printed in the Gazette.]

1,265,663. ENVELOP-MAKING MACHINE. WILLIAM P. HUGUELET, Chicago, Ill. Filed June 6, 1917. Serial No. 173,157. (Cl. 93—63.)

1. In an envelop machine, a blank-forming mechanism, gumming and folding mechanism, driving means for the blank-forming mechanism, a countershaft composed of alined sections one of which is operatively connected to said driving means and the other to the gumming and folding mechanism, and a coupling between said shaft sections, the coupling being adjustable to vary the angular position of the second-mentioned shaft section relative to the first-mentioned shaft section.

2. The combination with the driving means of an envelop machine; of a countershaft composed of alined sections one of which is operatively connected to said driving means, a coupling between said shaft sections, the coupling being adjustable to vary the angular position of one of the shaft sections relative to the other shaft section, said coupling comprising disks on the adjacent ends of the shaft sections, one of said disks having arcuate slots, and fasteners passing through said slots into the other disk.



3. In an envelop machine, a blank forming mechanism, gumming and folding mechanism, driving means for the blank forming mechanism, and an angularly adjustable driving connection between said driving means and the gumming and folding mechanism.

1,265,664. DENTAL MULTIPLE-JAW CERVIX-CLAMP. JAMES W. IVORY, Philadelphia, Pa. Filed Dec. 18, 1917. Serial No. 207,654. (Cl. 32—20.)



1. An auxiliary jaw for a dental cervix clamp composed of a jaw proper, and a sleeve-like body carrying the same, said body being adapted to be fitted on a member of the clamp.

3. An auxiliary jaw for a dental cervix clamp consisting of a jaw proper and a sleeve-like body carrying the same, said body being adapted to be fitted on a member of the clamp, and a device on said body adapted to engage said member to retain it thereon.

5. A dental cervix clamp having a bow, and means for primary connection of the clamp with a tooth, and a separate auxiliary jaw attachable to said bow beyond said means.

7. An auxiliary jaw for a dental cervix clamp having a bow, a sleeve-like member carrying said jaw, and a resilient device on said member, said member being adapted to be mounted upon said bow, and said device being adapted to frictionally engage said bow.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,265,665. LEADING-IN CONDUCTOR. RICHARD JACOBY, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 8, 1914. Serial No. 830,511. (Cl. 176—36.)

1. An article of manufacture comprising a wall of glass having sealed therethrough a conductor composed of the same materials throughout its length and having at a plurality of points where surrounded by the glass a greater coefficient of expansion than the glass and at a plurality of other points where surrounded by the glass the same coefficient of expansion as the glass.

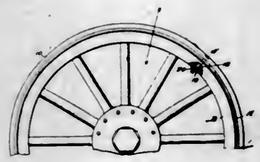
2. An article of manufacture comprising a body of glass and a conductor sealed thereinto having at one point a lower coefficient of expansion than the glass and at points on each side of that point the same coefficient of expansion as the glass.



3. An article of manufacture comprising a body of glass and a conductor sealed thereinto, said conductor having a coefficient of expansion at one point greater, at another point less and at an intermediate point the same as that of the glass.

[Claims 4 to 6 not printed in the Gazette.]

1,265,666. EMERGENCY-TIRE. FRANK JARVIS, Kings Park, N. Y. Filed May 2, 1917. Serial No. 165,945. (Cl. 152—23.)



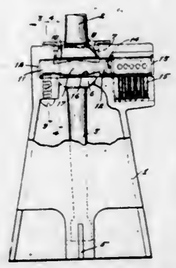
1. An emergency tire embodying a metallic split band, split bands of relatively softer material concentrically disposed about the opposite sides of the metallic band respectively, said bands being secured together throughout their lengths, said metallic band having its ends projecting beyond the corresponding extremities of the other bands, and means coöperating with said projected extremities of the metallic band for detachably securing the ends of the tire together and to the rim.

2. The combination with a rim having a valve stem opening, of an emergency tire embodying a plurality of split concentrically disposed bands, the extremities of one of said bands being projected beyond the meeting extremities of the tire, said projected extremities being apertured and overlapped, and a headed bolt passed through said overlapped extremities and opening in said rim for securing the tire upon the latter, and means for holding the bolt in position.

3. The combination with a rim having a valve stem opening, of an emergency tire embodying a plurality of split concentrically disposed bands, the extremities of one band projecting beyond the corresponding extremities of the other bands and adapted to be disposed in overlapped relation, said projected extremities having openings adapted to aline with the opening of the rim, a headed bolt passed through said openings, the meeting ends of the outermost band defining an opening whereby the head of the bolt is counter-sunk in the tire, and means for holding said bolt in position to secure the tire upon the rim.

1,265,667. LOCK-CONTROLLED LEVER-LOCKING MECHANISM. GEORGE C. JENSEN, Oakland, Cal. Filed May 21, 1917. Serial No. 169,902. (Cl. 70—128.)

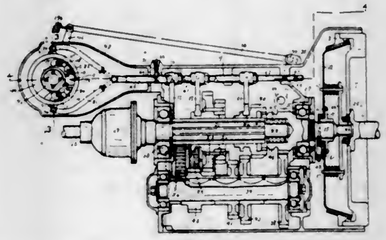
1. In combination with a lever fulcrumed within its length for universal swinging movement and provided at its fulcrum point with an open ended bore, a guide transversely through which the lower end of said lever passes when lateral movement is imparted thereto, a rotatable bolt extending through said bore and capable of rotative movement to engage the upper and lower surfaces of opposing ends of said bore to lock the lever from lateral movement with the lower end thereof within said guide, and lock controlled means for retaining said bolt in said position.



2. In combination with a lever fulcrumed within its length for operative movement in two parallel planes perpendicular to each other and for selective movement in a plane transverse to said planes of operative movement, said lever provided in its fulcrum with an open ended transverse bore, a guide through which the lower end of said lever passes when in its plane of selective movement, a rotatably mounted bolt projecting through said bore and when in one position permitting of selective movement of said lever and when in another position contacting with the opposite faces of one end of said bore for locking said lever in its plane of selective movement within said guide, and lock controlled means coöperating with said bolt.

[Claims 3 to 8 not printed in the Gazette.]

1,265,668. SPEED-CHANGING MECHANISM. FRANK JOHNSON, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 22, 1913. Serial No. 790,997. (Cl. 74—58.)



3. In a speed changing mechanism, the combination of a plurality of gear shifting rods, each adapted to be shifted longitudinally in both directions from neutral position, operating devices for shifting said rods, each embodying a revoluble collar and a connecting rod, a revoluble actuator, a series of pairs of dogs carried thereby, one pair for each operating device, one dog of each pair adapted to move a shifting rod to neutral position and the other dog to move said rod and the gears connected thereto to operative position, and a cam to properly position each pair of dogs.

10. In a speed changing mechanism, the combination with a plurality of rods for shifting the slidable gears of a vehicle transmission, of a pair of links connected to each of said rods, each link of each pair adapted to shift the rod and gears connected thereto longitudinally into engaging position at one side of neutral, a revoluble collar connected to each link, a drum on which said collars are

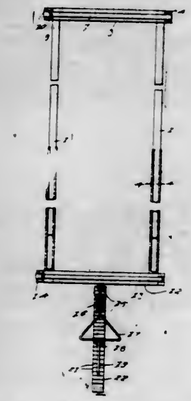
mounted, engaging members for each collar mounted on the drum, a selector to predetermine the collar and its direction of movement by said drum, means to oscillate the drum, and an indicator connected to the selector to position the same.

16. In a speed changing device, the combination of a case, transmission gears therein, rods for shifting said gears slidably in the case and provided with circumferential grooves which are in line when the rods are in neutral position, interlocking bars slidable in the case transversely to the rods and having pointed ends adapted to enter said grooves and to prevent the movement of more than one rod from neutral position at one time, a revoluble actuator, a series of collars mounted thereon, one for each direction in which each rod is movable from neutral position, connectors mounted on the actuator and adapted to engage said collars, and a selecting device to position said connectors.

21. In a gear changing device, the combination of a plurality of gear shifting rods, each adapted to be shifted longitudinally in both directions from neutral position, operating devices for shifting said rods, each embodying a revoluble collar and a connecting rod, a revoluble hollow drum, a series of pairs of dogs carried thereby, one pair for each operating device, one dog of each pair adapted to move a shifting rod to neutral position and the other dog to move said rod and the gears connected thereto to operative position, and a rotary selector mounted within said drum comprising a series of cams, one for each collar, and for each pair of dogs to be positioned thereby.

[Claims 1 and 2, 4 to 9, 11 to 15, 17 to 20, and 22 and 23 not printed in the Gazette.]

1,265,669. TROUSERS-STRETCHER. RENORD C. JOHNSTON, Buffalo Gap, Tex. Filed Jan. 27, 1917. Serial No. 144,843. (Cl. 223—19.)

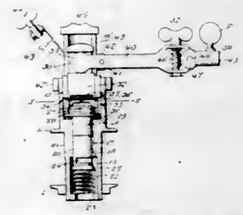


1. A trousers stretcher comprising a pair of telescopic members, upper and lower clamping members connecting the upper and lower ends of the telescopic members together for receiving a pair of trousers, a rack bar adapted to be secured to a permanent object, a coil spring connected to the lower clamping member, a substantially triangular-shaped stirrup connected to the coil spring, and a catch connected to the stirrup and engaging the rack bar to stretch the trousers.

[Claim 2 not printed in the Gazette.]

1,265,670. TANK-VALVE. EDWARD J. KAIER, Mahanoy City, Pa. Filed May 15, 1917. Serial No. 168,819. (Cl. 277—27.)

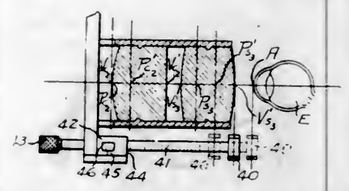
1. A valve embodying a hollow casing provided with an entrance passage, a valve chamber and a restricted passage establishing communication between the said passage and chamber, a valve seat located at the entrance of the restricted passage within the entrance passage, a hollow valve for said seat, said valve having a stem projecting within and guided by the restricted passage, a spring within the entrance passage to force the valve upon its seat, a valve carrying section removably secured within the



casing and a valve seat carried by the removable section and having a stem also projecting into the restricted passage for engagement with the stem of a first mentioned valve to operate the latter against the action of the spring.

[Claim 2 not printed in the Gazette.]

1,265,671. OPHTHALMIC TEST-LENS SET. GUSTAV A. H. KELLNER, Rochester, N. Y., assignor to Bausch & Lomb Optical Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 9, 1916. Serial No. 124,492. (Cl. 88—22.)



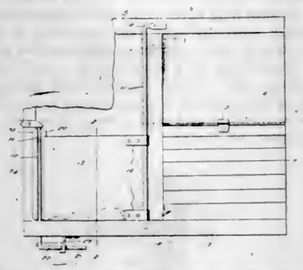
1. The combination with a support adapted to be adjusted before the eyes of a patient, of a plurality of lenses of different refractive qualities each having means for engagement with the support whereby said lenses may be interchangeably held in position to test the refraction of either or both of the patient's eyes, the principal points, vertices and support engaging means of each of the lenses being so coördinated that when the lenses are selectively arranged in position before an eye of the patient, the same vertex and the same principal point of each of the lenses may occupy the same position relatively to each other and relatively to the eye.

5. In an apparatus for testing eyes, the combination with a trial frame having a pair of alined test lens holders one for supporting sphero lenses and the other for supporting cylinder lenses before an eye to be tested, of a plurality of sphero test lenses of different dioptric powers having their principal points and their holder engaging means disposed in the same relative positions, and a plurality of cylinder test lenses of different dioptric powers each of said cylinder lenses when placed in its respective holder being adapted to provide a working principal point in the plane common to the rearmost principal point of all of the spherical test lenses when placed in position in their respective holder.

8. The combination with a trial frame having a test lens holder, a plurality of plano convex and plano concave test lenses of the same center thickness and each having their principal points and their vertices in the same position relatively to the plano surface of the lens, of a plurality of mountings one for each of the lenses, said mountings each having a portion adapted to engage the lens holder and a lens seat adapted to engage with the plano surface of the lens held therein at its periphery, the lens holder engaging portions of all of the mountings being disposed in the same relative position.

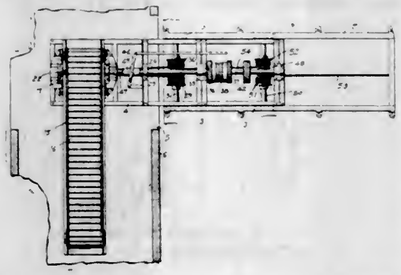
[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,265,672. SWINGING CAR-DOOR AND HANGER. LUTHER T. KENNY, Hawarden, Iowa. Filed Apr. 11, 1916. Serial No. 90,326. (Cl. 20—28.)



In a device of the class described, in combination, with a door frame having a longitudinal bottom sill, a hanger secured to the side of said frame and having a portion extending in the door opening of the frame and disposed horizontally, a rod vertically journaled in said longitudinal sill having its upper end rotatably received in the last-named projecting portion of the hanger, said rod being formed below said sill with a right angular crank by which it is adapted to be rotated, a door swinging in a horizontal plane within the door opening, an angle iron member having three sides two of which are arranged in parallelism and the third connecting the first two sides at right angles, said rod being secured in the corner of the third and one of the first two sides of said member so as to move said angle iron member in unison with itself so that one of the said parallel sides may serve as a stop against which said door may bear, a lug depending from said sill, a latch arm pivoted at one end upon said lug, said latch arm being provided with a notch having a long and a short side edge, said notch adapted to engage the crank of said rod to lock it against rotation.

1,265,673. CAR-LOADER. OLE KJELSTAD, West Duluth, Minn. Filed July 6, 1915. Serial No. 38,329. (Cl. 193—19.)



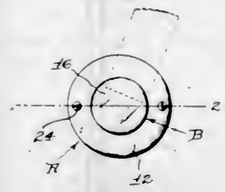
1. A car loader comprising a carriage, a turn-table mounted thereon, a loader belt frame having slots therein for longitudinal movement on said turn table, a loader belt mounted in said loader frame, a driving means including a shaft projecting through said slots and having a driving connection with said belt and independently operable means connected with said driving means for moving said carriage and loader frame into a car and for moving said loader frame longitudinally on said turn-table during the feeding operation of said loader belt.

2. In a box car loader, a carriage, a turn-table mounted thereon, a loader belt frame having slots therein for longitudinal movement on said turn table, idle rolls mounted in said loader frame, a loader belt passing over said rolls, means for moving said loader frame longitudinally on said turn-table, and means including a shaft projecting through said slots and geared to said belt for feeding said belt during such longitudinal movement.

3. A box car loader comprising a carriage, a loader frame mounted thereon and provided with longitudinal slots therein, idle rollers mounted in said frame, a loader belt carried by said rollers, a shaft projecting through the slots in said frame and geared to said belt, means for driving said shaft to operate said belt, and means for moving said frame lengthwise with respect to said shaft.

4. A car loader comprising a carriage, a turn-table mounted thereon, a loader belt frame having anti-friction bearings on said turn-table for longitudinal movement thereon, a loader belt mounted in said loader frame, a shaft journaled in bearings on said turn-table between the upper and lower stretches of said belt and above the lower portion of said loader frame, and geared to said belt for driving the same, means for moving said loader frame back and forth on its bearings on said turn-table and for simultaneously driving said shaft to operate said belt.

1,265,674. TRAIN-CHECK HOLDER. EDWARD LOUIS KLINGEL, St. Paul, Minn., assignor of one-half to Charles Albert Kellogg, Minneapolis, Minn. Filed Mar. 19, 1917. Serial No. 155,717. (Cl. 40—11.)



1. In a check holder, a base having an annular recess therein, a post rigidly secured at one end to the base and passing axially through said recess, a fixed annular grip member concentrically secured on the other end of said post and resting adjacent to the mouth of said recess, a movable annular grip member mounted upon said post, said member being inclosed within said recess and adapted to slide and tilt upon the post and a spring coiled about the post and interposed between said base and movable grip member to yieldingly hold the latter against said fixed grip member.

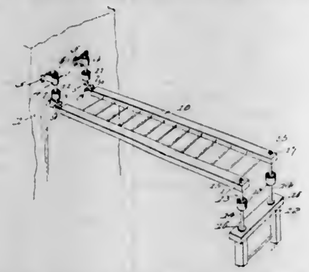
4. In a check holder, a base having an annular recess therein, a post rigidly secured at one end to the base and passing axially through said recess, a fixed annular grip member concentrically secured on the other end of said post and resting adjacent to the mouth of said recess, a movable annular grip member centrally mounted upon said post, said member being inclosed within said recess and adapted to slide and tilt upon said post and a spring coiled about said post and interposed between said base and movable grip member to yieldingly hold the latter against said fixed grip member, said movable grip member being formed with an annular beveled margin upon the face thereof adjacent said fixed grip member to permit the insertion of checks between said members.

[Claims 2 and 3 not printed in the Gazette.]

1,265,675. PERCH STRUCTURE. CLINTON KLOCK, Middleport, Pa. Filed July 3, 1917. Serial No. 178,397. (Cl. 119—25.)

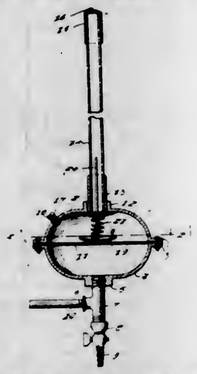
The combination in a perch structure of a horizontal perch, with a vertical supporting member for one end thereof, a pair of shanks attached to the other end of the perch, arms hingedly connected to the shanks, means for attaching the arms to a wall that they may stand vertically thereon, members connecting the perch to the vertical support, and oil cups in surrounding relation to said members and the said arms said oil cups being attached

at their bottoms to the arms and to the members but standing in spaced relation thereto for the remainder of



their height, whereby vermin are prevented from access to the perch either from the ground or from the wall to which the perch is connected.

1,265,676. GAGE. WILLIAM KLUMP, East Orange, N. J. Filed Dec. 20, 1916. Serial No. 137,988. (Cl. 73—110.)



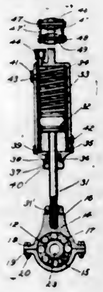
1. A gage comprising a hollow body, a diaphragm extending centrally through the body and separating the body into an upper and lower compartment, a tube extending upwardly from one end of the body and communicating with the body, a pipe on the under side of the body adapted for connecting the device to a piping system, a liquid gage element within the body and positioned on the upper side of the diaphragm, a coil spring having one end bearing against the upper side of said diaphragm and the opposite end against the body, a guard receiving the lower end of the spring and positioned between said spring and said diaphragm, and a stem secured to said guard and extending upwardly therefrom into said tube, as and for the purpose specified.

[Claim 2 not printed in the Gazette.]

1,265,677. VEHICLE-SPRING. WILLIAM S. KNAPP, Kansas City, Mo. Filed Oct. 23, 1916. Serial No. 127,108. (Cl. 21—97.)

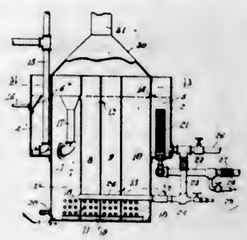
1. The combination with a vehicle body, a supporting axle and ground wheel, of an axle extension comprising a flanged plate secured to the exterior of said wheel and having an axle extended therefrom concentric with the body supporting axle, a boxing mounted on said axle extension, a standard threaded into said boxing and adapted for vertical adjustment thereon, a nut on said standard for locking the standard at an adjusted position, a cushioning device mounted on said standard, a standard mounted on the cushioning device, and means for pivotally suspending the vehicle body from the last named standard.

2. The combination with a vehicle body having a supporting axle, ground wheels and body supporting devices mounted on said axle between said wheels, of axle extensions mounted on the exterior of said wheels, cushions mounted on said axle extensions, each comprising a boxing for revolubly receiving said axle extension, a cylinder, a piston slidable in said cylinder, a rod mounted in said boxing and connecting with said piston, a coil spring contained within said cylinder between said piston and the upper end of the cylinder, a standard on said cylinder, and means for suspending the vehicle body from said standard, for the purpose set forth.



3. The combination with a vehicle body having ground wheels, an axle, and body supporting devices mounted on said axle exteriorly of and adjacent the wheels, axle extensions mounted on the exterior of said wheels, cushions mounted on said axle extensions, each comprising a boxing having anti-friction members for revolubly containing said axle extension, a cylinder having air ports at opposite ends, a piston slidable in said cylinder, a piston rod mounted on said boxing, a compression spring in said cylinder adapted for bearing against the upper end of said cylinder and said piston, a standard on said cylinder, and means for suspending said vehicle body from said standard.

1,265,678. REBOILER AND CONDENSATE-PURIFIER. ARTHUR E. KRAUSE, Jersey City, N. J. Filed Mar. 3, 1917. Serial No. 152,204. (Cl. 210—1.)

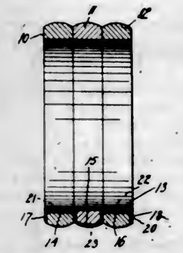


1. Apparatus such as described comprising a container divided into a plurality of chambers connected for flow of water therethrough, means for supplying heat to water in such container, means for the removal from the water of solid material in suspension in such water in a late chamber of the series, and means for the return to an early chamber of the series of material in suspension so removed.

[Claims 2 to 5 not printed in the Gazette.]

1,265,679. FINGER-RING. MAGDALENE HOMAN KROPF, New York, N. Y. Filed Sept. 7, 1917. Serial No. 190,157. (Cl. 63—15.)

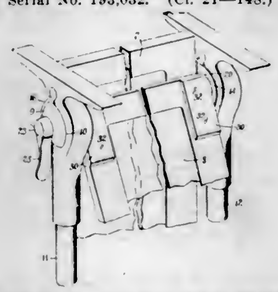
1. A multiple ring, comprising a plurality of bands arranged side by side with their centers in alinement, and a sinuous clamp for uniting said bands, said clamp being sunk into the sides of some of said bands and into alternate opposite faces thereof.



4. A multiple ring, comprising a plurality of bands arranged side by side with their centers in alinement, and a clamp for uniting said bands weaving in and out of said bands and being sunk into the material thereof, said clamp being of springy material, whereby the said bands are forced continuously into contact with one another.

[Claims 2 and 3 not printed in the Gazette.]

1,265,680. WIND-SHIELD. PETER N. LANDINE, Milford, Conn., assignor to The Rostand Manufacturing Company, Milford, Conn., a Corporation of Connecticut. Filed Sept. 8, 1915. Serial No. 49,512. Renewed Sept. 24, 1917. Serial No. 193,032. (Cl. 21—148.)



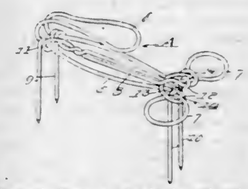
1. A wind shield comprising supports having bearings, a shield member having tubular hubs journaled in the bearings on said supports, means for securing said shield member in various angularly adjusted relations on the supports, a second shield member having hubs journaled directly in the tubular hubs of the first shield member and supported directly by said tubular hubs, and means for securing the hubs of the second shield member in adjusted relations in the outer tubular supporting hubs of the first shield member while said outer tubular hubs are free to rotate in their bearings in the standards, whereby while the second shield member is thus locked to the first shield member, the first shield member may be rocked in its bearings to adjust both the shield members, and whereby the second shield member may be set at different angles with respect to the first shield member without changing the adjustment of the first shield member with respect to the supports.

2. A wind shield comprising supports having bearings, a shield member having tubular hubs journaled in the bearings on said supports, means for securing the shield member in angularly adjusted relations on the supports, hub brackets journaled directly in the tubular hubs of the shield member, clamping means for securing one of said hub brackets in angularly adjusted relations within the tubular hub in which it is mounted, and a second shield member detachably secured to the hub brackets, whereby the second shield member may be secured in different angular relations with respect to the first shield member and the first shield member may be rocked in its bearings on the supports to vary the relation of both the shield members, and whereby the second shield member may be detached from its supporting hub brackets without disturbing the first shield member.

4. A wind shield comprising supporting standards each provided with an open hub socket, a wind shield member having tubular hubs seated in said open hub sockets, a second wind shield member having hubs journaled directly within and supported by the tubular hubs of the first wind shield member, means for securing the second shield member in adjusted relation to the first shield member while the first shield member is free for adjustment in the hub sockets whereby by swinging the first shield member on its tubular hubs both the shield members may be adjusted as a unit, and whereby the second shield member may be adjusted with respect to the first shield member independently of the adjustment of the first shield member on the supports, clamping segments engaging over the tubular hubs seated in the open hub sockets, and means for clamping said segments on the tubular hubs adapted also to release said clamping segments whereby upon release of said clamping segments the first shield member carrying with it the second shield member may be freely adjusted or both the shield members may be removed as a unit from the supports.

[Claim 3 not printed in the Gazette.]

1,265,681. HOOK AND EYE. MABEL A. LARRIMORE, Baltimore, Md. Filed July 12, 1917. Serial No. 180,148. (Cl. 24—229.)



A hook formed from a single length of wire bent to form a terminally closed bill, outwardly bowed shank portions, eyes, braces and a pair of prongs, the braces being twisted about the shank portions and also twisted together, and a single length of wire bent to form a medial loop trained between the braces and shank portions and twisted about said braces and terminating in prongs.

1,265,682. TOY HANGER. JAMES LARSEN, Green Bay, Wis. Filed July 23, 1917. Serial No. 182,318. (Cl. 46—37.)



1. In combination with a high chair, a bow forming a toy hanger and pivotally secured at its ends to said chair, and means for permitting adjustment of said bow.

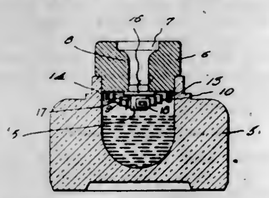
2. In combination with a chair, a bow forming a toy hanger and pivotally secured at its ends to said chair, said bow being of sufficient size to clear the back of said chair when being swung in inoperative position, and means

for adjustably maintaining said bow in operative position.

3. In combination with a high chair having a table board pivotally secured to its back, a bow forming a toy hanger and pivotally secured at its ends to the sides of the table board, said bow being of sufficient size to clear the back of the chair when being swung in inoperative position, and a notched plate adapted to receive the side of said bow.

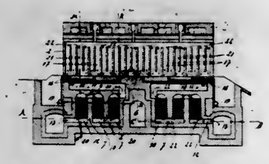
4. In combination with a high chair having a table board pivotally secured to its back, a resilient bow forming a toy hanger and pivotally secured at its ends to the sides of the table board, said bow being of sufficient size to clear the back of the chair when being swung in inoperative position, and a notched plate arranged at the side of the table board, said bow entering one of the notches of said plate.

1,265,683. INK-BOTTLE. WILLIAM LAY, Kulm, N. D. Filed July 27, 1916. Serial No. 111,655. (Cl. 120—68.)



In a device of the class described, in combination, an ink bottle, provided with a cylindrical neck portion, a cylindrical stopper fitting snugly into said neck so as to close said bottle, the bottom of said stopper being flat, said stopper being formed with a central cylindrical bore, a cylindrical plug formed with an intermediate flange, the outer portion of said plug projecting into said bore, while its flange engages said flat bottom of said stopper, while its lower portion projects below said stopper, a fusee spring band having its largest coil engaging the flat bottom of said stopper, a series of staples securing said last-named coil against the bottom of said stopper, the smallest coil of said spring band encircling the lower portion of said plug, and a fastener securing said smaller coil against said plug.

1,265,684. REGENERATOR COKE-OVEN. EUGÈNE LECOCQ, Brussels, Belgium. Filed May 6, 1913. Serial No. 765,972. (Cl. 202—9.)



1. In a regenerator coke oven, the combination with a plurality of ovens and their combustion chambers having their major axes horizontally disposed, of a supporting structure for said ovens and combustion chambers, forming a plurality of chambers disposed directly beneath said ovens and having their major axes vertically disposed, and a regenerator formed in each of said last named chambers.

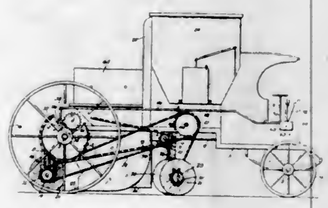
3. In a regenerator coke oven, the combination with a plurality of ovens and their combustion chambers having their major axes horizontally disposed, of a supporting masonry structure for said ovens and combustion chambers comprising vertically disposed longitudinal and transverse walls forming towers of masonry and intermediate chambers, said intermediate chambers having their major axes vertically disposed and disposed directly beneath said ovens, a regenerator in each of said last named chambers, said supporting structures having ducts therein having suitable connections between said regenerators.

5. In a regenerator coke oven, in combination with the ovens and combustion chambers a supporting structure comprising longitudinal walls and cross walls forming towers of masonry, each tower providing a chamber having its major axis vertical, a regenerator arranged in each of said chambers, ducts connecting said regenerators to each other, to form two groups of regenerators for each oven, each group being arranged parallel to the corresponding combustion chamber.

6. In a regenerator coke oven, in combination with the ovens and combustion chambers a supporting structure for said ovens and combustion chambers, said supporting structure comprising longitudinal walls and cross walls forming towers of masonry, chambers providing in each of said towers, a regenerator arranged in each of said chambers, ducts connecting said regenerators in series to each other, whereby two groups of regenerators are formed for each oven, each group being arranged in the same axis as that of the corresponding combustion chamber, ducts arranged in the axes of the combustion chambers, each of said ducts being connected to a group of regenerators, underneath conduits extending the whole length of each oven and communicating with the ducts arranged in the axes of the combustion chambers and suitable ducts connecting the said underneath conduits with the combustion chambers.

[Claims 2 and 4 not printed in the Gazette.]

1,265,685. STREET-SWEEPING MACHINE. GEORGE V. LEHEW, Akron, Ohio. Filed Sept. 15, 1916. Serial No. 120,392. (Cl. 15—17.)

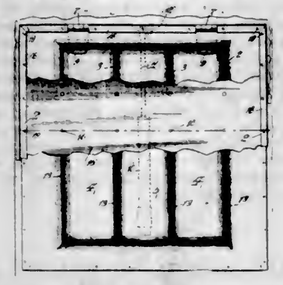


1. In a device of the class described, a brush shaft, a brush carried thereby, means for driving said shaft, means for changing the elevation thereof and means for starting the rotation of the brush shaft before the brush is in contact with the surface of the roadway, said means last named including a rock shaft, an arm carried thereby, a spring held and pivotally mounted arm engaged by the arm first named, a clutch member, and means for operating the latter from the spring held arm and providing a limited degree of lost motion, a movable bearing for the brush shaft, and a rod connected therewith, and with the arm on the rock shaft.

2. In a device of the class described, a frame work, a motor mounted therein, a shaft driven by said motor, a brush shaft, movable bearings for mounting the brush shaft, wheels for supporting said frame, means for driving said wheels from the shaft first named, mechanism for driving and controlling the brush shaft including a clutch, a rock shaft, and means controlled thereby for throwing the clutch members into engagement and thereafter throwing the brush into contact with the surface of the roadway.

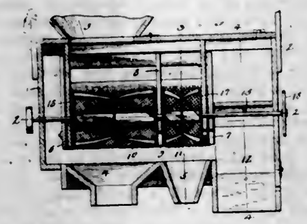
1,265,686. TRAP-DOOR. OLIVER L. LINK, St. Charles, Mo. Original application filed May 18, 1912, Serial No. 698,124. Divided and this application filed May 23, 1914. Serial No. 840,493. (Cl. 105—84.)

1. A trap door made from a plate of sheet metal, said plate having a rectangular rib formed thereon, and a pair of parallelly arranged ribs adjoining said rectangular rib, said plate having a flat surface formed between said pair of ribs, said flat surface providing means of allowing a door operating mechanism to be engaged closely against the under side of said plate.



2. A trap door for vestibule platforms comprising a plate of sheet metal, said plate being reinforced by a rectangular shaped depressed portion which is formed adjacent the edges thereof, the central portion of said plate being without depressed reinforcing portions so as to provide a flat surface, said flat surface of said plate being for the reception of a door operating mechanism which is to be engaged closely against the underside of said plate.

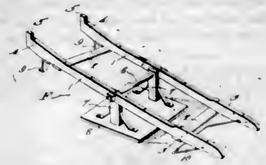
1,265,687. SEPARATOR AND GRADER. EARL G. LINKHART and RALPH H. LINKHART, North Vernon, Ind. Filed Feb. 23, 1916. Serial No. 80,012. (Cl. 83—40.)



1. A machine of the character described comprising a casing, a frame located in the casing, a partition located in the frame and having an opening at the lower portion thereof, a relatively fine screen mounted upon the frame between one end thereof and the partition, a relatively coarse screen mounted upon the frame between the other end thereof and the partition, reels journaled for rotation at the opposite sides of the partition, means for discharging a blast of air transversely through the relatively coarse screen at a point beyond the end of the fine screen and means for discharging a blast of air through the casing beyond the edge of the relatively coarse screen.

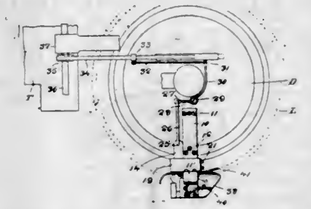
2. A machine of the character described comprising a casing, a frame located in the casing and provided at one end with a discharge outlet, a partition located in the frame between the ends thereof and having an opening at the lower portion of its edge, reels journaled for rotation in the frame at the opposite sides of the partition, a relatively fine screen located between one end of the screen and the partition, a relatively coarse screen located between the other end of the frame and the partition, a chute located at the side of the frame opposite the relatively coarse screen, a chute located at the side of the casing beyond the end of the frame, said chutes communicating with each other, means for directing a blast of air transversely through the relatively coarse screen at a point beyond the end of the fine screen and means for directing a blast of air through the material discharged through the opening at the end of the frame.

1,265,688. AUTOMOBILE-JACK. JAMES H. LIVELY, Republic county, Kans., assignor of one-half to L. Lively, Arcadia, Ind. Filed Mar. 20, 1917. Serial No. 156,130. (Cl. 254—88.)



A device of the character described comprising a base, spaced vertical uprights extending from said base, a substantially rectangular frame having its side bars disposed against the upper ends of said uprights, a pivot rod extending through said uprights and the side bars of said frame, the forward ends of said bars normally resting upon the ground, inclined portions on the rear ends of said bars, shoulders at the extreme rear ends of said inclined portions forming stops, said inclined portions and stops being engaged by the axle of a vehicle driven over said frame, foot members on the under sides of the rear ends of said side bars for limiting the downward movement thereof, and a pivoted U shaped yoke on the forward end of said frame for holding the same in elevated position after the rear end is depressed.

1,265,689. CUTTER FOR LOOPING-MACHINES. BANKS W. LOY, Gibsonville, N. C. Filed Jan. 24, 1917. Serial No. 144,234. (Cl. 112—19.)

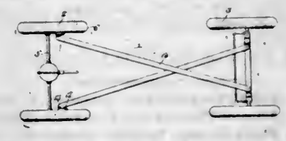


1. The combination with a looping machine, of a cutter comprising an attaching plate, a stationary cutter blade, a movable cutter blade, means for guiding the work to said blades and combined means including an adjusting element carried by the attaching plate for guiding and tensioning the movable cutter blade.

3. The combination with a looping machine, of a cutter comprising a movable cutter blade and a stationary cutter blade, guiding elements, a bell crank lever connected to the movable cutter blade and a cam operated pawl disposed at right angles to said movable blade for operating the same.

[Claim 2 not printed in the Gazette.]

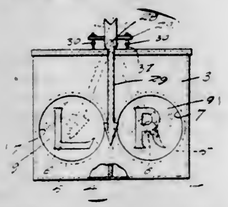
1,265,690. DRIVING-GEAR FOR MOTOR-VEHICLES. OLOF A. LUNDGREN, Cleveland, Ohio, assignor of one-third to A. Schneider, Cleveland, Ohio. Filed Sept. 12, 1916. Serial No. 119,709. (Cl. 180—75.)



Driving gear for motor vehicles embodying in connection with a vehicle frame, circular bearing members for the wheels, wheels surrounding said bearing members

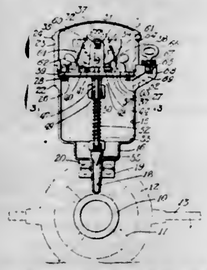
and rotatable thereon, each of the driving wheels embodying an internal gear face, a driving axle extending through both of the driving wheels, pinions fast on said driving axle and meshing with the internal gear faces of the driving wheels, and braces each fastened at one end to the bearing member of one of the driving wheels and connected at its forward end to the front axle.

1,265,691. AUTOMOBILE-SIGNAL. LLOYD H. MADEN, Jonesboro, Tenn. Filed Jan. 27, 1917. Serial No. 144,900. (Cl. 116—31.)



An automobile signal comprising a casing having spaced characters on the front wall thereof, spaced bearings carried by the top wall of the casing, a shaft journaled in said bearings and projecting beyond the front wall of the casing, an indicating member secured to the shaft and depending downwardly over the front wall and normally disposed between the characters, and means for oscillating the shaft to cause the indicating member to point to either of the characters.

1,265,692. AUTOMATIC PIPE-THREADING LUBRICATOR. MORRIS MALLOVE, Brooklyn, and JACOB GREENBERG and PHILIP KIEVES, New York, N. Y. Filed Dec. 17, 1917. Serial No. 207,441. (Cl. 10—126.)

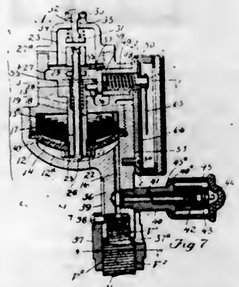


2. In a pipe thread cutter lubricator, the combination with a hollow casing having an outlet closely adjacent to the pipe to be cut, and a cover removably engaged with said casing, of a valve movable reciprocatively in said casing adapted to control the opening in said outlet, a disk fitted to the upper portion of said casing, lugs formed with said disk, a weight pivoted in said lugs, a lever operated transversely in said casing, a screw in said weight contractible with said lever whereby its movement may be adjusted, a second lever operated by the first named lever, connections between said second lever and said valve, means for the admission of air to said casing, means for controlling said air admission, and a hand operated pump in said casing whereby air may be forced interiorly thereof.

[Claims 1 and 3 not printed in the Gazette.]

1,265,693. SAFETY-VALVE. COLEMAN J. MANNING, Medford, Mass. Filed Feb. 23, 1917. Serial No. 150,315. Renewed Apr. 3, 1918. Serial No. 226,529. (Cl. 137—53.)

2. A safety valve comprising a casing having an inclosed space, a pressure inlet communicating with one side of said space, and a pressure outlet communicating with the opposite side thereof, a diaphragm forming one side of a pressure-receiving chamber communicating with said inlet, a spring normally holding the diaphragm in position to contract said chamber, a guide in the casing, a tubular stem attached to the diaphragm and movable in said guide, the bore of said stem opening into said chamber and having a valve seat, a spring-pressed relief valve normally closing said seat and provided with a rod extending through and movable with said stem, the rod and stem forming a relief duct communicating with the pressure outlet, a dust-excluding valve for said outlet, having a stem extending through the outlet and forming an abutment for the valve rod, and a spring adapted to normally close the outlet valve and yield to the displacing pressure of the valve rod.


Fig 7

8. A registering safety valve comprising a casing having a pressure inlet and a pressure outlet, a spring-pressed diaphragm forming one side of a pressure chamber communicating with said inlet, a tubular stem attached to and movable with said diaphragm, and provided with a slotted head, a guide in the casing for said stem, an indicator-box attached to the casing and provided with a tubular shank extending through one side of the casing, a rock-shaft journaled in said shank and provided at one end with a wrist-pin engaging the slot in the stem-head, and a pointer in the indicator-box movable by rocking movements of the rock-shaft, a spring being provided to prevent loose movement of the wrist-pin in said slot.

[Claims 1, 3 to 7, and 9 to 13 not printed in the Gazette.]

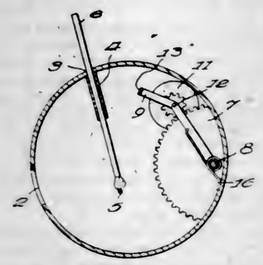
1,265,694. METHOD OF TREATING BAGASSE FOR THE RECOVERY OF ITS VALUES. MARK W. MARSDEN, Philadelphia, Pa., assignor to Sugar Cane By-Products Company, Philadelphia, Pa., a Corporation of Delaware. Filed Nov. 11, 1915. Serial No. 60,900. (Cl. 127—10.)

1. The method herein-described, which consists in reducing bagasse to a uniformly divided state, removing all but about ten per cent., more or less, of the natural moisture content, separating the pith from the fiber and grinding it to substantially the fineness of flour, boiling the ground pith in the presence of water in order to remove objectionable soluble matter, washing and pressing the clear pith and forming it into a paste, and thereafter proceeding as usual for the recovery of glucose.

2. As an article of manufacture, a paste prepared from the separated and purified pith component of bagasse, said pith being ground to substantially the fineness of flour and emulsified with water.

1,265,695. CIGAR AND CIGARETTE LIGHTER. WINFIELD S. MARR, Enid, Okla. Filed Aug. 13, 1917. Serial No. 186,026. (Cl. 51—20.)

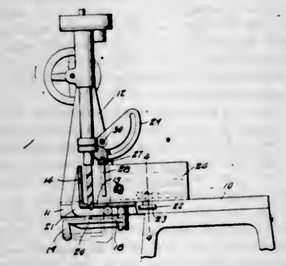
2. A device of the character described, including an annular casing having openings varying in size formed in the peripheral surface thereof, a segmental gear arranged in the casing and secured to the inner peripheral surface thereof, a gear meshing with and movable over said segmental gear, an abrasive means carried by said gear, and means connected with the gear and extending through a



slot formed in the casing for permitting movement of the gear and abrasive means.

[Claims 1 and 3 not printed in the Gazette.]

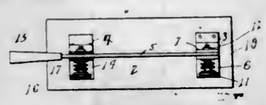
1,265,696. WORK-HOLDER FOR LETTER-SHEET-PERFORATING MACHINES. WILLIAM J. MORTON, New York, N. Y., assignor to McBee Binder Company, Athens, Ohio, a Corporation of Ohio. Original application filed June 30, 1914, Serial No. 848,187. Divided and this application filed Mar. 29, 1916. Serial No. 87,481. (Cl. 77—63.)



1. The combination with a perforating and binding machine table, of a member hinged to the front edge of said table, which member is substantially L-shape in cross section, and a lever pivotally mounted on the underside of the table and adapted to engage beneath said hinged member to hold the lower portion thereof in horizontal alinement with the table.

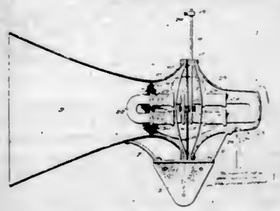
[Claims 2 to 6 not printed in the Gazette.]

1,265,697. ELECTRIC SWITCH. FRANK E. SUMMERS, near Memphis, Mo. Filed June 24, 1915. Serial No. 36,144. (Cl. 175—282.)



In a device of the class described, in combination, an insulator block, a contact arm consisting of a flat base portion secured to said block and an upright portion, a movable contact arm consisting of a main upright portion, an intermediate inclined portion and a shoulder foot portion parallel to the main upright portion, a pair of integral hooks formed dependingly upon the shoulder foot portion of said movable contact arm, the base portion of the fixed contact arm being formed with openings in which said hooks project so as to have slight play, a bolt passing through the upright portions of both contact arms and adapted to hold the shoulder foot portion of the movable contact arm in frictional engagement with one base portion of the first-named contact arm, said bolt having a head, a spring coiled around said bolt and engaging said bolt head and said upright portion of the fixed contact arm, a nut on said bolt, and a knife blade pressing between said contact arms so as to cause said shoulder foot portion to slide as said hooks move within said last-named openings against the tension of said spring.

1,265,698. ELECTRICAL SIGNALING APPARATUS. FRANK E. SUMMERS, Memphis, Mo. Filed Feb. 12, 1917. Serial No. 148,058. (Cl. 177—7.)



1. A signaling device including a support, a diaphragm mounted therein, two armatures connected to opposite sides of the diaphragm, two permanent magnets mounted upon opposite members to the diaphragm in attractive relation to the armatures, and a plurality of connected coils disposed upon the poles of the permanent magnets, one of the armatures being extended and having a fulcrumed resilient tuning terminal.

4. An electric signaling device including a two part casing having an open amplifying member, a perforated diaphragm disposed between said members, two armatures connected upon opposite sides of and to the diaphragm, two double poled permanent magnets mounted upon opposite sides of the diaphragm and in attractive relation to the respective armatures, a plurality of electrically connected coils mounted upon the poles of said permanent magnets, a resilient fulcrumed tuning terminal having one of said armatures disposed exteriorly of the casing, and an adjustable weight mounted upon said terminal.

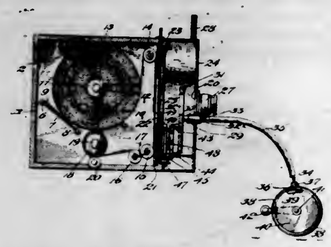
6. An electric signal device including a two member casing one of which is an amplifying horn, a diaphragm having its periphery supported between said members and said diaphragm being provided with perforations, two armatures one upon each side of the diaphragm connected to the center of the diaphragm, two horse-shoe magnets disposed to have their poles in attractive relation to the respective armatures, one of the magnets being supported in one member of the casing, a support for the other member having its terminals connected between the diaphragm and the amplifying member, a plurality of electrically connected coils mounted upon the poles of said magnets, a resilient fulcrumed terminal for one of the armatures projecting exteriorly of the casing, and forming a tuning device for the diaphragm, and an adjustable weight mounted upon said terminal.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,699. CAMERA. WILLIAM M. THOMAS, New York, N. Y., assignor to Thomas Oberkirch Company, Limited, New York, N. Y., a Corporation of New York. Filed Apr. 29, 1914. Serial No. 835,095. (Cl. 88—17.)

1. A moving picture machine comprising a film operating casing including a shutter, means for operating said shutter, film feeding devices having the effective portions thereof extending through an opening in the rear of said casing, a film magazine independent of said casing and adapted to be fitted to said casing, a shutter slide mounted in the forward portion of said film magazine and adapted

to be withdrawn when said film magazine is attached to said casing, an opening in said film magazine through which said film feeding members are adapted to operate when said shutter slide is withdrawn, and means within said film magazine for causing the winding and unwinding of the said film.



2. In a device of the character described a casing constructed to carry a suitable lens, a shutter adapted to intercept the light from said lens at predetermined intervals, film feeding mechanism carried by and mounted within said casing and having effective portions extending through an opening in the rear portion of the said casing, in combination with a detachable film magazine adapted to cooperate with and be secured to said casing and to completely carry the entire length of film, an opening being provided in said film magazine to permit the effective operation of said film feeding devices, means within said magazine adapted to carry a film and to guide said film with a portion thereof adjacent the zone of operations of said film actuating mechanism, and means whereby the movement of the film effects the unwinding and rewinding thereof.

5. In a device of the character described a suitable lens, a shutter operating with said lens to intercept the light therefrom at predetermined intervals, film feeding devices operating in synchronism with said shutter, in combination with a detachable film supporting means whereby the portion of the film being unwound is maintained in contact with the portion of the film being rewound to cause the movement of the film to automatically unwind and rewind the said film, and a casing for said means, which casing comprises a portion of the exterior casing of the device.

6. A device of the character described comprising a suitable lens, a shutter coöperating with said lens to intermittently intercept the light passing through said lens, a film feeding mechanism operating in synchronism with said shutter, in combination with film guiding devices operative to guide a portion of the film adjacent the zone of effective operations of the film feeding mechanism, a detachable casing supporting said film-guiding devices and adapted to comprise a portion of the exterior casing of the said device, and means whereby a contact under pressure is maintained between the coil of unwound film and the coil of rewound film whereby the movement of the film causes the winding and rewinding to be automatically performed.

7. In a moving picture machine a suitable lens, a shutter operative in connection with said lens to intermittently intercept the light passing through said lens, film operating mechanism adapted to intermittently move a film to expose individual picture lengths thereof, a casing inclosing and supporting the film-operating mechanism, in combination with film guiding devices adapted to maintain a portion of film within the effective zone of operations of said film feeding devices and a second casing adapted to be attached to and detached from the first-mentioned casing, said second casing inclosing and supporting the guiding devices, and film winding mechanism including means constructed to maintain the peripheries of the wound and unwound coils of film in contact under pressure whereby the rewinding of the film is automatically produced by the unwinding thereof.

[Claims 3 and 4 not printed in the Gazette.]

1,265,700. PROCESS OF TREATING WHEAT AND OTHER GRAINS. ARNOLD C. VON HAGEN, Kansas City, Mo. Filed Sept. 1, 1916. Serial No. 117,999. (Cl. 83—28.)

1. The process of treating grain which consists in mixing with the natural grain in the presence of moisture, a substance including an element of the halogen group, thereby disseminating said substance on the surface of the grains throughout the mass of grain, said substance operating during contact with the grain to release said element from said substance throughout the mass of grain on the surfaces of the grains, and maintaining the grain during treatment in a moist but unsaturated condition to enhance the release of said element, prevent dilution thereof, and enable said element to combine chemically with the substances on the surface of the grains and thereby exert a germicidal action on the grain.

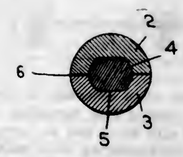
2. The process of treating grain which consists in mixing with the natural grain in the presence of moisture, a substance including chlorin, thereby disseminating said chlorin on the surfaces of the grains throughout the mass of grain, said substance operating during contact with the grain to release said chlorin from said substance on the surface of the grains and throughout the mass of grain, and maintaining the grain during treatment in a moist but unsaturated condition to enhance the release of said chlorin, prevent dilution thereof, and enable said chlorin to combine chemically with the substances on the surface of the grains, and thereby exert a germicidal action on the grain.

3. The process which consists in treating the grain by coating the natural grain with hypochlorite in the presence of moisture insufficient in amount to saturate the grain, said hypochlorite operating during contact with the moisture and the grain, to release chlorin, and effect the chemical combination of the released chlorin of the hypochlorite with the organic substances on the grain, thereby exerting a germicidal action.

4. The process which consists in treating the grain by coating the natural grain with an alkaline substance to neutralize the acidity of the grain, simultaneously coating the grain with hypochlorite in the presence of moisture insufficient to saturate the grain, the said hypochlorite operating during contact with the moisture and the grain to release chlorin, and effect a chemical combination of the released chlorin of the hypochlorite with the organic substances on the grain, thereby exerting a germicidal action.

5. The process which consists in treating the grain by coating the natural grain with calcium hydroxid to neutralize the acidity of the grain, and simultaneously treating the grain with calcium hypochlorite, maintaining the grain during treatment in a moist but unsaturated condition, said hypochlorite operating during contact with the grain in the presence of moisture, to release chlorin, and effect a chemical combination between the released chlorin of the hypochlorite and the organic substances on the grain, thereby exerting a germicidal action.

1,265,701. TOY TORPEDO. ALLEN F. CLARK, West Hanover, Mass., assignor to The National Fireworks Distributing Company, Boston, Mass., a Corporation of Arizona. Filed Oct. 23, 1916. Serial No. 127,074. (Cl. 86—20.)

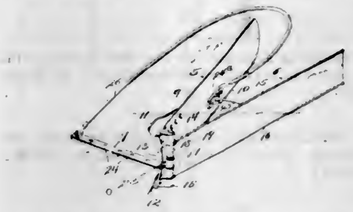


1. The process of making toy torpedoes consisting: first, of reducing a quantity of argillaceous substance to powder-like form; second, of compressing such substance in a mold and forming a recess in the molded substance; third, of inserting an explosive charge in said recess; and fourth, of sealing said recess.

4. A toy torpedo comprising a body portion formed by pulverized argillaceous substance shaped under pressure in substantially a dry state, said body portion being formed of complementary members providing an interior recess to receive an explosive charge, whereby upon explosion of the torpedo the body portion will revert to powder-like form.

[Claims 2 and 3 not printed in the Gazette.]

1,265,702. ROAD SCRAPING, GRADING, AND DITCHING MACHINE. GEORGE R. COOK, Carrollton, Ga., assignor of one-half to James B. F. Dial, Carrollton, Ga. Filed Aug. 25, 1917. Serial No. 188,178. (Cl. 37—5A.)



1. A road scraping, grading and ditching machine comprising a blade, a runner movably connected at its front end to the front end of said blade, the blade and runner both having upper and lower working edges and the blade provided in addition with upper and lower points at its front end, a laterally-extending rigid draft bar connected to the front end of the runner and extending across in contacting adjacency to the front end of the blade, a rigid connecting rod adjustably extending across from the inner side of the runner to to the inner side of the blade, and a rigid rod adjustably connected to the draft bar and extending rearwardly clear of and around the rear end of the blade and attached to an intermediate portion of the inner side of the latter close to the point of engagement therewith of the adjusting rod and whereby a rigid connection is provided between the draft bar and the inner side of the blade and the runner.

2. A road scraping, grading and ditching machine comprising a blade and a runner movably connected to each other at their front ends, a rigid draft bar connected to the front end of the runner and extending across the front end of the blade, and rigid connecting means between the draft bar and the intermediate inner opposing side portions of the blade and runner, the said draft means entirely clearing the working side of the blade and the rear end of the latter.

[Claim 3 not printed in the Gazette.]

1,265,703. PRIE-DIEU. HENRY DREISOERNER, St. Louis, Mo. Filed Feb. 14, 1916. Serial No. 78,227. (Cl. 155—6.)



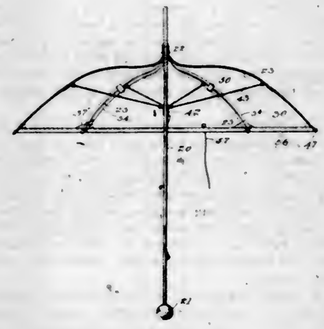
1. A priedieu having connected kneeling-supports slidably mounted therein and movable into position for use, respectively, at either side of the device, and a seat pivotally mounted therein above said supports.

3. In a priedieu, in combination with side members having mounted thereon a kneeling-support, a seat pivotally mounted between said side members above said kneeling-support, a cleat secured on the inner side of each side member at the forward edge and affording supports on its upper and rear side, a cross-bar connecting said side members and positioned to engage the upper side of the rear end portion of the seat when the latter is turned downward into contact with said cleats, and a brace-bar extending between the side members and adapted to be engaged by the outer edge of the seat at the same time that the under side of its rear edge portion engages the rear side of said cleats in the turned-up position of said seat.

4. In a priedieu, the combination of a fixed elevated hand rest, a seat adjustable outwardly on one side of the priedieu, knee-supporting means constructed to form a knee support on the same side of the priedieu as said seat and adjustable outwardly at the opposite side of the priedieu to support a person kneeling at the priedieu on the side opposite to the seat, means for supporting said seat in its outwardly adjusted position and in a folded position, said priedieu being unobstructed adjacent said kneeling support on the same side as said seat, whereby said seat when in said folded position leaves an unobstructed kneeling space on the same side of the priedieu as said seat.

[Claims 2 and 5 to 8 not printed in the Gazette.]

1,256,704. UMBRELLA. FRANK W. HOWARD, New York, and GEORGE B. CANNON, Jr., Brooklyn, N. Y. Filed May 22, 1915. Serial No. 29,790. (Cl. 135—31.)



1. An umbrella comprising a stick, a crown sleeve attached to said stick, an umbrella cover having a central opening attached to said sleeve, said cover consisting of a plurality of substantially triangular cover sections of water-proof paper, said sections having superposed edges sewed together to form a plurality of seams composed of layers, said seams extending radially on the cover from said stick and lying against said ribs, eyelets passing through the edge of said cover at said seams for attaching the outer edges of the cover to said ribs, said eyelets lying in the plane of the adjacent portion of the cover and lying with their flat sides against the outer sides of the ribs, and means on the ribs for engaging said eyelets to retain the same adjacent the ends of the ribs.

5. An umbrella comprising a stick, a crown sleeve attached to said stick, an umbrella cover having a central opening attached at said sleeve, a plurality of ribs attached to said stick at said sleeve, said cover consisting of a plurality of substantially triangular sections of water-proof paper sewed together at their side edges, said cover having overlaps at the edges thereof producing an increased number of layers of said paper, eyelets passing through said cover at said overlaps, said ribs having outwardly turned ends forming eyes engaging said eyelets.

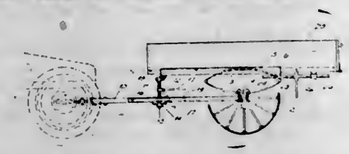
7. An umbrella comprising a stick, a crown sleeve on said stick, a plurality of ribs having flat extensions lying against the side of said stick and clamped against said

stick by said sleeve, said extensions having recesses formed in the outer faces thereof, and said sleeve having an offset portion engaging said recesses and preventing said extensions from moving longitudinally with respect to the sleeve.

9. In an umbrella, the combination of a stick, a plurality of ribs having integral flexible extensions extending longitudinally and lying against the sides of said stick, and constructed to flex at the point of connection with said stick to permit the opening and closing of the umbrella, and a sleeve fitting tightly over said extensions and forcing the same into said stick to secure said extensions to said stick and prevent movement of said extensions relatively to the stick.

[Claims 2 to 4, 6, 8, and 10 not printed in the Gazette.]

1,265,705. TRAILER FOR AUTOMOBILES OR OTHER VEHICLES. HENRY L. LITCHFIELD, Waterloo, Iowa, assignor to The Litchfield Manufacturing Company, Waterloo, Iowa, a Corporation of Iowa. Filed Nov. 24, 1915. Serial No. 63,145. (Cl. 21—137.)



1. In combination, a wheeled axle, a tongue connected to the axle for hauling the same, a body above the axle and tongue, and supporting means between the body and the axle and tongue for holding the body parallel with or at an angle to the tongue, and means for adjusting the position of the body in the direction of the length of the tongue.

3. In combination, a wheeled axle, a tongue member secured to and projecting from said axle, a load-carrying member arranged above the axle and the tongue member, springs between the load-carrying member and the axle, a screw threaded post arranged between the tongue member and the load-carrying member, one of the latter members having a screw threaded part engaging with said post, means including a pivoted handle for turning said post, and said tongue having a slot therein for the reception of the handle.

7. In a vehicle trailer, a wheeled frame supporting a slidably mounted load-carrying body, a reach for connecting said trailer with the towing vehicle, means for adjusting said body in a line parallel with said reach and means for adjusting the angle between said frame and said reach.

10. In combination, a towing vehicle, a wheeled axle, a reach connecting said wheeled axle to the towing vehicle, a load-carrying body, and means for supporting said body partly from the reach and partly from the axle so as to permit the body to be adjusted in the direction of the length of the reach to vary the distribution of the static load between the towing vehicle and said axle.

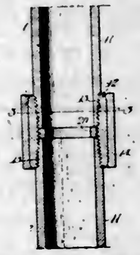
11. In combination, a towing vehicle, a wheeled axle, a reach connecting said axle to the towing vehicle, and a load-carrying body mounted on the axle and reach so as to be adjustable longitudinally and permit the whole load to be borne by said axle or a considerable part of the static load to be borne by the towing vehicle to increase the tractive capacity of the towing vehicle from a position of rest.

[Claims 2, 4 to 6, 8 and 9 not printed in the Gazette.]

1,265,706. COLLAR AND LEAD RING AND PROCESS OF COUPLING DRILL-PIPES. HUGH A. BARDEEN, Los Angeles, Cal. Filed Apr. 28, 1917. Serial No. 165,290. (Cl. 285—193.)

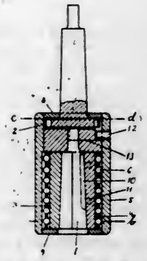
1. The method of reconstructing worn pipe collars which comprises turning down the collar to an even thickness and shrinking thereon.

2. The method of reconstructing worn pipe collars which comprises turning down the collar to an even



thickness, shrinking a jacket thereon, and upsetting the end of the jacket to prevent axial movement of the jacket on the collar.

1,265,707. DRILL-CHUCK. NILS GUSTAF BERGLUND, Vedevåg, Sweden. Filed July 6, 1917. Serial No. 179,052. (Cl. 29—124.)

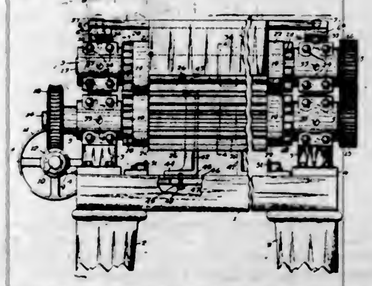


1. In a drill-chuck the combination of a fixed part (4), a loose part (3) which enters into a longitudinal groove in the fixed part, a ball-bearing (6) which surrounds the fixed and the loose parts and a cylinder (5) surrounding the ball-bearing and provided with a longitudinal slot (7), substantially as described.

6. In a drill-chuck the combination of a fixed part (4), a loose part (3) which enters into a longitudinal groove in the fixed part, a roller-bearing (6) which surrounds the fixed and the loose parts and a cylinder (5) surrounding the roller-bearing and provided with a longitudinal slot (7), a loose part (10) provided with pins (11) entering into holes in the fixed part (4), substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,265,708. PLAITING-MACHINE. ROBERT G. CLARK, Brooklyn, N. Y. Filed May 26, 1917. Serial No. 171,089. (Cl. 223—42.)



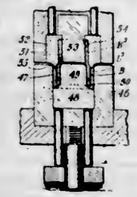
1. A plaiting machine having a plurality of bodily rotating and relatively oscillating plaiting blades.

8. A plaiting blade for plaiting machines substantially V-shaped in cross-section at its executive side and having its angularly arranged sides concaved from vertex to base of the blade.

13. A plaiting machine having, in combination, a plurality of sets of interacting plaiting and feeding blades, means for rotating the sets of blades relatively, means for giving to the plaiting blades successively, during each rotation, independent movements to feed in and press the material, the blades of each set performing this function successively and alternately.

[Claims 2 to 7, 9 to 12, and 14 to 17 not printed in the Gazette.]

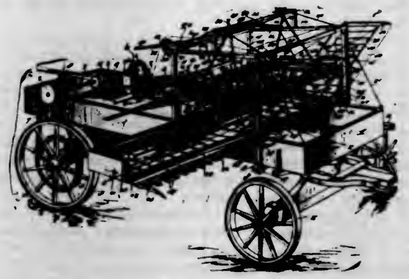
1,265,709. METHOD OF MAKING PIPE-COUPLINGS. CHARLES ALBERT DIES, Chicago, Ill., assignor to Clayton Mark, Chicago, Ill. Filed Feb. 15, 1912. Serial No. 677,789. (Cl. 113—51.)



1. The process of making pipe coupling parts, which consists in cold working a blank by a series of die-reducing operations into a flanged tubular blank, then by longitudinally applied compression bending and compressing the flange downwardly against the exterior of the blank as a reinforcement therefor, and swaging a compressed seat at the juncture of the blank and flange as a bearing for another member of the coupling.

2. The process of making pipe coupling parts, which consists in forming a flat sheet metal blank into tubular form and in flanging one end thereof, bending the flanged portion of the blank outwardly and compressing it downwardly by longitudinally applied compression against the exterior of the blank, so as to present a wall directed axially of the blank and acting as a reinforcement for the body of the blank adjacent the juncture of the flange and the body, and swaging a compressed seat at such juncture as a bearing for another member of the coupling.

1,265,710. CANE OR CORN TOPPER OR HEADER. PRICE FERGUSON, Tuttle, Okla., assignor to Mark Ferguson, Blanchard, Okla. Filed Mar. 1, 1913. Serial No. 751,501. (Cl. 56—131.)

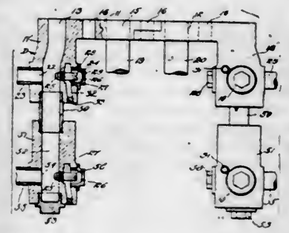


1. In a machine as set forth, a wagon, a drive shaft, connections between the rear wheels of the wagon and said drive shaft, a main frame detachably supported on the wagon, a supplemental frame vertically adjustable and guided in the main frame, said supplemental frame having laterally operable conveyer belts at the rear of a topping mechanism, a cane topping severing mechanism carried by the supplemental frame, a reel device for throwing the tops on one of the conveyer belts, gear connections between said belts, the severing mechanism and the reel, and said drive shaft for operating said mechanisms simultaneously, means for adjusting the reel, cutters and conveyers together within the frame, means for independently adjusting one of the conveyers, means for adjusting the reel, and means to throw the mechanism in and out of engagement with the driving shaft.

2. In a machine as set forth, a wagon, a drive shaft, connections between the driving shaft and the rear wheels, a main frame detachably supported on the wagon, a supplemental frame vertically adjustable and guided in the main frame, said supplemental frame having laterally operable conveyer belts at the rear of a topping device, a cane topping severing mechanism carried by said supplemental frame, a reel device for throwing the tops on one of the conveyer belts, gear connections between said belts, the severing mechanism and the reel and said drive shaft for operating said mechanisms simultaneously, means for adjusting the supplemental frame and holding the same in adjusted positions, and means for independently adjusting the inclination of an inclined conveyer adjustable with the supplemental frame.

[Claims 3 to 8 not printed in the Gazette.]

1,265,711. TRACK-SANDER. JOHN H. HANLON, Somerville, Mass., assignor to Hanlon Locomotive Sander Company, Winchester, Mass., a Corporation of Massachusetts. Filed Sept. 13, 1917. Serial No. 191,097. (Cl. 291—11.)



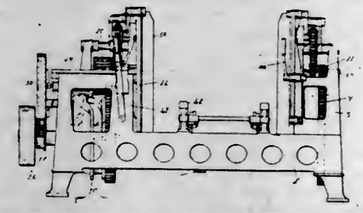
1. The outside sander for locomotives provided with a sand box having a boss through which are separate passages for connection with a plurality of sand discharge passages, said sander comprising a body for attachment to said boss and having independent sand passages therethrough registering with the passages in said boss, one of said passages constituting a gravity sander and the other of said passages being intercepted at substantially right angles by a straight passage, there being an air nozzle opposite said discharge passage.

2. The outside sander for locomotives provided with a sand box having a boss through which are separate passages for connection with a plurality of sand discharge passages, said sander comprising a body for attachment to said boss and having independent sand passages therethrough registering with the passages in said boss, one of said passages constituting a gravity sander and the other of said passages being intercepted at substantially right angles by a straight passage, there being an air nozzle opposite said discharge passage, and a plug closing an opening into said passage laterally opposite said air nozzle.

3. In a device of the character described, a downwardly projecting member having a sand inlet passage therein, with an outlet passage at one side thereof, an air nozzle at the opposite side of said inlet passage, said member having an air chamber into which said nozzle extends, at one side of which is a pocket in which the inner end of the nozzle is located, there being an inlet opening in said air chamber which is located at one side of said pocket.

[Claims 4 to 7 not printed in the Gazette.]

1,265,712. MACHINE FOR APPLYING CHINE-HOOPS TO CYLINDRICAL BODIES. HENRY C. HERR, Pittsburgh, Pa., assignor to Fiber Barrel Machinery & Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 30, 1913. Serial No. 798,356. (Cl. 153—1.)



1. The combination with a bed, of duplicate mechanisms mounted upon opposite ends of said bed, each comprising a standard, a rotary horizontally-arranged shaft, a head mounted on said shaft, a series of rolls surrounding said head, mechanism for moving said rolls correspondingly inward and outward, and a cam controlling said mechanism driven in timed relation to said rotary shaft; a carriage on which one of said duplicate mechanisms is mounted movable longitudinally of said bed, mechanism for correspondingly driving said duplicate mechanisms, permitting of the movement of said carriage, and means for moving said carriage timed with the movement of said duplicate mechanisms to cause a sequence of operations; substantially as shown and for the purpose described.

2. The combination with a bed, of duplicate mechanisms mounted upon opposite ends of said bed for engaging and rolling chine-hoops upon opposite ends of a cylindrical body, inclined cross-tracks on said bed, a stop for arresting a cylindrical body on said inclined cross-tracks in axial alinement with said duplicate mechanisms to retain the same during the operation of the engaging and rolling of the hoops upon the body, and means for withdrawing said stop to permit the hooped barrel to roll off said inclined cross-tracks at the completion of the operation.

3. The combination with means for pressing a hoop in engagement with a cylindrical body, of a relatively-movable member, a series of rolls mounted upon said member surrounding the periphery of said hoop, a separate punching roll adapted to contact with the periphery of said hoop, means adapted to actuate said series of rolls into contact with the periphery of said hoop, and means adapted to actuate said separate punching roll into contact with the periphery of said hoop, both of said last-mentioned means including a cam member common to both.

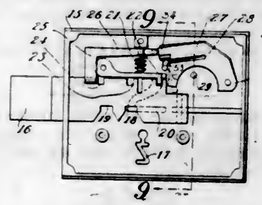
4. The combination with an annular member for bearing against the end of a hoop, of a concentrically-arranged, relatively-movable member, eccentric serrated bushings in said last-mentioned member, studs engaging said bushings, rock-arms pivoted upon said studs, rollers attached to said rock-arms and adjustable screws engaging the serrations of said bushings, whereby the positions of the rolls relative to said annular member may be adjusted to compensate for variations in thickness of the stock of the body to which the hoop is applied.

5. The combination with a revoluble member adapted for engagement with a cylindrical body having a hoop thereon, of a stationary member having a grooved bearing, rolls pivoted upon said stationary member, arranged adjacent to the periphery of said hoop, and a ring member engaging said grooved bearing in the stationary member, movable relative thereto and pivotally connected to said rolls.

[Claim 6 not printed in the Gazette.]

1,265,713. SAFETY DOOR-LOCK. BENJAMIN KOVACS, New York, N. Y. Filed Oct. 14, 1916, Serial No. 125,625. Renewed Mar. 23, 1918. Serial No. 224,392. (Cl. 70—72.)

In a lock, the combination with a casing and a bolt horizontally slidable therein, said bolt having two spaced notches in its under side adapted to be engaged by a key and also having notches in its top side, of a spring actuated tumbler pivoted to the casing and engageable with the top side notches, means for actuating said tumbler coincidently with the sliding of said bolt when the bolt key is manipulated, an offset right-angled element combined with said bolt and a plurality of semi-disk-like tumblers pivoted in such manner as to engage with said bolt and



said right-angled element to positively prevent the unlocking movement of the bolt when in locked position, said semi-disk-like tumblers having alined grooves for the suitable reception of the said right-angled member when the bolt is in unlocked position, the said semi-disk-like tumblers being operable by a separate key from the outside of the casing.

1,265,714. PRESSED-STEEL CAR END. VINTON E. SISSON, Chicago, Ill., assignor to Walter P. Murphy, Chicago, Ill. Filed June 23, 1913. Serial No. 775,294. (Cl. 105—192.)



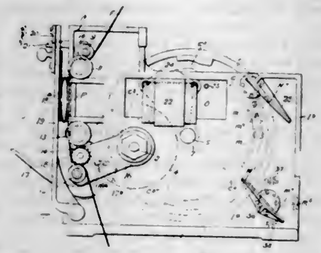
1. The combination with the end framing of a railway car, of a sheet metal end for the car comprising an end sheet formed with pressed vertical stiffening and reinforcing ribs, an angular member secured to the lower portion of said end sheet and anchored to the under frame of the car, and a channeled, transversely extending reinforcing member provided with marginal flanges secured to the upper edge of the sheet.

3. The combination with the body of a railway car, of a metal end structure for the car comprising an end sheet, an angular, transversely extending member at the bottom of the car body to which the lower edge of the end sheet is secured, and means providing a channeled, transversely extending member at the upper edge of the sheet, said sheet being formed with corrugations which extend from substantially the lower to the upper edge of the sheet so as to distribute stresses on the end sheet to the aforesaid transversely extending members.

4. The combination with the body of a railway car, of a metal end structure for the car comprising an end sheet formed with substantially vertical corrugations which terminate within the edges of the sheet and are spaced distances apart substantially equal to their width whereby the corrugated portion of the sheet consists in effect of a series of ribs which function as beams of substantially equal strength, and means constituting transverse stiffening members at the upper and lower edges of the sheet which transmit the stresses from the corrugations to the body of the car.

[Claim 2 not printed in the Gazette.]

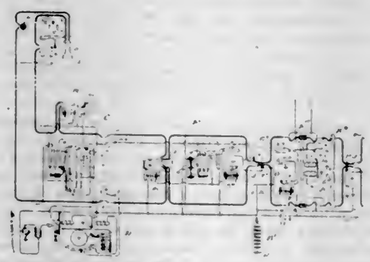
1,265,715. MOVING-PICTURE MACHINE. CLARENCE L. TOMLINSON, New York, N. Y., assignor to George Reynolds, Los Angeles, Cal. Filed May 3, 1916. Serial No. 95,018. (Cl. 88—16.8.)



1. In a moving picture machine, in combination; a source of light; a film carrying pictures; an objective lens; a reflecting surface to receive light rays from the film; means for causing a synchronous movement of the film and the reflecting surface; means for varying the speed of movement of the reflecting surface according to the focal distance of the objective lens; and a second reflecting surface opposite the first reflecting surface and fixed relatively thereto.

[Claims 2 and 3 not printed in the Gazette.]

1,265,716. MEASURED-SERVICE TELEPHONE SYSTEM. GEORGE A. YANOCHOWSKI, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 4, 1914. Serial No. 816,404. Renewed Apr. 30, 1917. Serial No. 165,609. (Cl. 179—8.)



1. In a telephone system, a calling and a called subscriber's line, a registering device associated with said called line, means including an automatic switch for establishing connection between said lines, said switch including a pair of line wipers and a private wiper, a trunk-release circuit including said private wiper, and means controlled over said private wiper for operating the meter on the called line after said connection has been established.

2. In a telephone system, a calling and a called subscriber's line, a registering device on said called line, an operator's cord circuit adapted to be connected with the calling line, means including an automatic switch for extending connection from said cord to said called line, said switch including a pair of line wipers and a private wiper, a trunk-release circuit including said private wiper, and means controlled by said operator over said private wiper for operating the meter on the called line after the connection has been established.

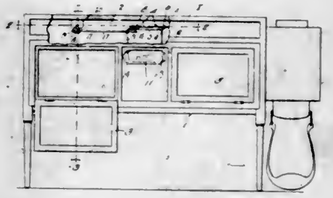
3. In a telephone system, a calling and a called subscriber's line, a registering device on said called line, an operator's cord circuit adapted to be connected with the calling line, an automatic connector switch for connecting with the called line means including a trunk-selecting switch for extending connection from said cord circuit to said connector, a holding circuit for said trunk-selecting switch, and means controlled by said operator over said holding circuit for operating the meter on the called line after said connection has been established.

4. In a telephone system, a calling and a called subscriber's line, a registering device on said called line, an operator's cord circuit adapted to be connected with the calling line, an automatic connector switch for connecting with the called line, means including a trunk-selecting switch for extending connection from said cord circuit to said connector, a holding circuit for said trunk-selecting switch, means for increasing the flow of current in said holding circuit, and means controlled by said increased current for causing the operation of the meter on the called line after said connection has been established.

5. In a telephone system, a calling and a called subscriber's line, a registering device associated with the called line, an operator's cord circuit adapted to be connected with the calling line, an automatic connector switch for connecting with the called line, means for extending a connection from said cord circuit to said connector, a relay in said connector, means for closing a circuit through said relay without operatively energizing the same when connection is established with said connector, means controlled by said operator for increasing the flow of current through said relay to thereby operate the same, and means controlled by the operation of said relay for operating the registering device on the called line.

[Claims 6 to 42 not printed in the Gazette.]

1,265,717. INCUBATOR ATTACHMENT. PETER M. AZOLINE and ALBERT J. AZOLINE, Torrington, Conn. Filed Oct. 4, 1917. Serial No. 194,751. (Cl. 73—52.)



1. The combination with an incubator having an opening in one wall provided with a transparent cover; of a track in the egg chamber of said incubator above the plane occupied by the eggs, a thermometer carrier mounted to travel on said track, said track being arranged at an oblique angle to the wall having the opening therein and from which the track extends to facilitate the movement of the carrier thereon without binding.

2. The combination with an incubator having an opening in one wall provided with a transparent covering; of a pair of laterally spaced track rails extending from the wall having the opening therein toward the opposite side of the incubator, a U-shaped carrier having arms slidably engaged with said rails, a thermometer carried by said carrier, a lever engaged with said carrier, and means located outside said incubator and engaged with said lever for actuating it to move said carrier toward and away from said opening.

3. The combination with an incubator having an opening in one wall provided with a transparent covering, of a pair of laterally spaced track rails extending from the wall having the opening therein, toward the opposite side of the incubator, a U-shaped carrier having arms slidably engaged with said rails, a thermometer carried by the cross bar of said carrier, a lever engaged with one of said arms, a rotatable rod arranged transversely in said incubator, and engaged with said lever, and means outside said incubator for turning said rod whereby the lever is rocked

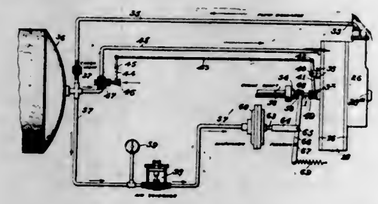
and the carrier moved toward or away from said opening.

4. An incubator having a transparency in one side wall thereof, a track arranged in said incubator adjacent said transparency, a carrier mounted to slide on said track and having a thermometer depending therefrom; a rod extending transversely of said incubator, means operable from outside said incubator for rotating said rod, a lever disposed between said track and rod and fulcrumed intermediately of its ends, one end of said lever being engaged with said rod and the other end with said carrier whereby the movement of the rod operates to reciprocate the carrier to move it toward or away from the transparency in the wall of the incubator.

5. The combination with an incubator chamber; of a pair of laterally spaced track rails extending thereacross, a carrier mounted to slide on said rails, a thermometer depending from and secured to said carrier and held securely against tilting, a lever fulcrumed intermediately of its ends, and engaged at one end with said carrier, a rod rotatable in said incubator and engaged with the other end of said lever whereby the thermometer may be moved transversely of the incubator chamber from the exterior thereof.

REISSUES.

14,466. PNEUMATIC STARTING DEVICE FOR INTERNAL-COMBUSTION ENGINES. CHARLES G. EIDSON, Anniston, Ala., THOMAS DAVIS, Detroit, Mich., and DAVID E. CROUSE, Auburn, N. Y., assignors, by mesne assignments, to The John Ford Starter Company, a Corporation of Maryland. Filed Jan. 21, 1918. Serial No. 213,080. Original application filed Jan. 14, 1916, Serial No. 72,069. Divided and application filed Aug. 10, 1916, Serial No. 114,201. Original No. 1,233,855, dated July 17, 1917. (Cl. 230—32.)



1. In a starting device for internal combustion engines, the combination of a shaft, a sleeve slidable with respect to the shaft, a clutch member carried by the shaft, a clutch member carried by the sleeve and arranged to engage the first named clutch member for connecting the sleeve with the shaft, a rotor mounted on said sleeve and having a feathered connection with the sleeve whereby the rotor is connected with the sleeve for rotative movement while the sleeve is free to move longitudinally of the rotor, and a stator disposed concentrically with respect to said rotor.

2. In a starting device for internal combustion engines, the combination of a shaft, a sleeve movable longitudinally on the shaft, a clutch member on said sleeve, a clutch member on said shaft arranged to be engaged by the first named clutch member, a rotor having feathered connection with said sleeve whereby the sleeve may move longitudinally with respect to the rotor but is rigidly connected with the rotor for rotative movement, a stator disposed concentrically of the rotor, an air cylinder, a piston in said air cylinder, an eccentric strap, a rod connecting said strap with said piston, an eccentric carried by said shaft and arranged to receive said eccentric strap, said eccentric and said strap being in operative engagement in any position of the shaft.

3. In a starting device for internal combustion engines, the combination of a shaft, a sleeve movable longitudinally on the shaft, a clutch member on said sleeve, a clutch member on said shaft arranged to be engaged by the first named clutch member, a rotor having feathered connection with said sleeve whereby the sleeve may move longitudinally with respect to the rotor but is rigidly connected with the rotor for rotative movement, a stator disposed concentrically of the rotor, an air cylinder, a piston in said air cylinder, an eccentric strap, a rod connecting said strap with said piston, an eccentric carried by said shaft and arranged to receive said eccentric strap, said eccentric being wider than said strap so as to operatively engage the strap in any position of the shaft.

4. In a starting device for internal combustion engines, the combination of a motor, an air pump driven by the motor, an air reservoir, a longitudinally movable shaft common to said motor and to said air pump, a clutch carried by the shaft for connecting the latter with the drive shaft of the engine, an automatic pneumatic clutch operating device connected with said reservoir and having means for shifting the clutch on said shaft, and manually operated means for shifting the shaft independently of said automatic operating means, said motor and said air pump being operatively connected with said shaft in any position of the latter.

5. In a starting device for internal combustion engines, the combination of a motor, an air pump driven by the motor, an air reservoir, a longitudinally movable shaft common to said motor and to said air pump, a clutch carried by the shaft for connecting the latter with the drive shaft of the engine, an automatic pneumatic clutch operating device connected with said reservoir and having means for shifting the clutch on said shaft, manually operated means for shifting the shaft independently of said automatic operating means, said motor and said air pump being operatively connected with said shaft in any position of the latter, and a second clutch carried by said shaft and adapted to be brought into engagement by the operation of said manual means for connecting the motor with the shaft.

6. In combination an air reservoir, an engine shaft, a rotor operated by compressed air, a rotor shaft slidable axially in relation to the rotor, clutch means between the rotor and the slidable shaft, means for setting said clutch to turn the shaft and also move the shaft longitudinally, a clutch between the rotor shaft and the engine shaft which is set and released by the axial movement of the rotor shaft and means for automatically releasing the last mentioned clutch and an air pump operated by the rotor shaft.

7. In combination an engine shaft, an air reservoir, a compressed air starting motor, a shaft therefor movable axially in relation to said motor, a clutch member fixed on the said axially movable shaft, a clutch member on the engine shaft to be engaged therewith and disengaged therefrom by the axial movement of the shaft, a second clutch member fixed on the motor shaft, a companion clutch member in splined connection with the motor to be rotated thereby and means for moving said companion clutch member axially to engage the said second clutch member fixed on the shaft and to move said shaft axially to be clutched to the engine shaft and a pump operated from the starting motor shaft, substantially as described.

8. In combination an engine shaft, an air reservoir, a compressed air starting motor, a shaft therefor movable axially in relation to said motor, a clutch member fixed on the said axially movable shaft, a clutch member on the engine shaft to be engaged therewith and disengaged therefrom by the axial movement of the shaft, a second clutch member fixed on the motor shaft, a companion clutch member in splined connection with the motor to be rotated thereby, and means for moving said companion clutch member axially to engage the said second clutch member fixed on the shaft and to move said shaft axially to be clutched to the engine shaft, and an air pump operated from a portion of the motor shaft extended on the side of the motor opposite that on which the said clutches are arranged, substantially as described.

9. In combination an air reservoir, a compressed air motor comprising a rotor and stator, a rotor shaft, an engine shaft, a clutch betwen the rotor shaft and engine shaft, means for operating the rotor shaft longitudinally to connect with the engine shaft, an air pump operated by the rotor shaft, means under control of the operator for shifting the rotor shaft in one direction to set the clutch for driving the engine shaft and pneumatically operated means having connection with the air reservoir for operating the shaft in the opposite direction, substantially as described.

10. In combination an air reservoir, a compressed air motor comprising a rotor and stator, a rotor shaft, an engine shaft, a clutch between the rotor shaft and engine shaft, means for operating the rotor shaft longitudinally to connect with the engine shaft, an air pump operated by the rotor shaft, means under control of the operator for shifting the rotor shaft in one direction to set the clutch for driving the engine shaft, and pneumatically operated means having connection with the air reservoir for operating the shaft in the opposite direction, said pneumatically operated means including a spring which is compressed when a certain pressure is present in the tank and the clutch is set, and which spring will move the shaft in said opposite direction when said pressure is maintained and the operator releases the said shaft shifting means, substantially as described.

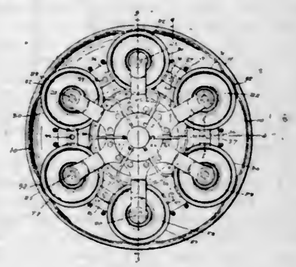
11. In combination a compressed air reservoir, a starting motor, a shaft therefor, an engine shaft, a clutch between said starting shaft and the engine shaft, a clutch between the motor and its shaft, means for operating said clutch under the control of the operator, pneumatically operated means for throwing the first mentioned clutch out of operation when a predetermined pressure is reached in the tank and a pump for restoring pressure in the tank, substantially as described.

12. In combination a compressed air reservoir, a pump for supplying said reservoir, an engine shaft, a starting motor operated by compressed air, a shaft common to the starting motor and the pump, and movable axially, a clutch between the said shaft and the engine shaft and which is controlled by the longitudinal movement of the shaft, a clutch between said shaft and the motor with means for operating said clutch, including a manually operated member, which also operates the shaft longitudinally and sets the first mentioned clutch in position to drive the engine, air operated means for releasing the said first mentioned clutch when the pressure in the reservoir has been restored by the pump, and means for automatically resetting said clutch to drive the pump when the pressure in the reservoir is reduced, substantially as described.

13. In combination a compressed air reservoir, a pump for supplying said reservoir, an engine shaft, a starting motor operated by compressed air, a shaft common to the starting motor and the pump, and movable axially, a clutch between the said shaft and the engine shaft and which is controlled by the longitudinal movement of the shaft, a clutch between said shaft and the motor with means for operating said clutch, including a manually operated member, which also operates the shaft longitudinally and sets the first mentioned clutch in position to drive the engine, air operated means for releasing the said first mentioned clutch when the pressure in the reservoir has been restored by the pump, and means for automatically resetting said clutch to drive the pump when the pressure in the reservoir is reduced, said air operated means including a spring which is compressed when pressure is maintained in the reservoir and the first mentioned clutch is set, the said resetting means including a spring which becomes effective when the reservoir pressure is reduced below a prescribed minimum.

14. In combination a compressed air tank, a starting rotor, a shaft therefor slidable axially through the rotor, a pump operated by the said shaft, an engine shaft coaxially arranged in respect to the slidable shaft, clutch means for connecting the slidable shaft and the engine shaft and which is set by the sliding of said shaft in one direction, a spring for pressing said shaft in said direction, pneumatically operated means operated from the air in the tank opposing the action of said spring when the pressure in the tank is at a predetermined degree, a clutch between the rotor and the said shaft and means for operating the last mentioned clutch, said means being under the control of the operator, substantially as described.

14,467. VEHICLE-WHEEL. HENRY B. COATS, Veedersburg, Ind. Filed Apr. 27, 1917. Serial No. 165,039. Original No. 1,193,455, dated Aug. 1, 1916, Serial No. 752,655, filed Mar. 7, 1913. (Cl. 152—46.)



1. A vehicle wheel including an outer structure having a recessed tire rim, a central hub structure, a series of annular pneumatic cushions for supporting the hub structure within said external structure, and a clencher rim surrounding each cushion with its outer portion embedded in a part of the recesses in the tire rim.

2. A vehicle wheel including a tire rim, a centrally located member, a hub located loosely within said centrally located member, a series of intermediate cushion receiving rims held under compression by and between said tire rim and centrally located member, and cushions in said cushion receiving rims for supporting said hub.

3. A vehicle wheel having a main body comprising a tire rim, a circular series of annular cushion-receiving rims nested within the tire rim, means for preventing relative rotation of said cushion rims within the tire rim, and a central member nested between and acting upon the several cushion-receiving rims in such manner as to firmly nest said cushion receiving rims within the tire rim with said tire rim under tension.

4. A vehicle wheel having a main body comprising a tire rim, a circular series of annular cushion-receiving rims nested within the tire rim, means for preventing relative rotation of said cushion rims within the tire rim, a central member nested between and acting upon the several cushion-receiving rims in such manner as to firmly nest said cushion receiving rims within the tire rim with said tire rim under tension, an annular cushion mounted in each of said cushion-receiving rims, a hub member radially movable relative to the main wheel body, and means carried by said hub member for engaging the eyes of the annular cushions.

5. A vehicle wheel having a main body comprising an annular metal tire rim, a circular series of metal cushion-receiving rims nested within the tire rim, and means for holding said annular series of cushion-receiving rims outwardly against tension in the tire rim a hub located loosely within said holding means, and cushions in said cushion receiving rims for supporting said hub.

6. A vehicle wheel including a tire rim, a centrally located member, a hub located loosely within said centrally located member, a series of intermediate cushion-receiving rims held under compression by and between said tire rim and centrally located member, each of said parts being provided with means for laterally engaging the adjacent part or parts so as to prevent the relative lateral displacement thereof, and cushions in said cushion receiving rims for supporting said hub.

7. A vehicle wheel including a tire rim, an annular series of cushion receiving rims in engagement with said rim, a hub, a member loosely surrounding said hub located centrally within said series of cushion rims and engaging the inner portions thereof, and adapted to force

said cushion rims outwardly and hold the same under compression against said tire rim, and cushions in said cushion receiving rims for supporting said hub.

8. A vehicle wheel including a tire rim, a centrally located member, and a series of intermediate cushion receiving rims held under compression by and between said tire rim and centrally located member.

9. A vehicle wheel having a main body comprising an annular metal tire rim, a circular series of metal cushion-receiving rims nested within the tire rim, and means for holding said annular series of cushion-receiving rims outwardly against tension in the tire rim.

10. A vehicle wheel including a tire rim, a centrally located member, and a series of intermediate cushion-receiving rims held under compression by and between said tire rim and centrally located member, each of said parts being provided with means for laterally engaging the adjacent part or parts so as to prevent the relative lateral displacement thereof.

11. A vehicle wheel including a tire rim, an annular series of cushion-receiving rims in engagement with said rim, and a member located centrally within said series of cushion rims and engaging the inner portions thereof, and adapted to force said cushion rims outwardly and hold the same under compression against said tire rim.

12. A vehicle wheel including a tire rim, an annular series of cushion-receiving rims in engagement with said rim, and a member located centrally within said series of cushion rims and engaging the inner portions thereof and when combined with the foregoing parts having a diameter such as to force the cushion rims outwardly against the tire rim and maintain the same under compression.

13. A vehicle wheel having a main body comprising a rim, a circular series of cushion-receiving rings nested within the rim, and a central ring nested between and acting upon the several cushion-receiving-rings in such manner as to firmly nest said cushion-receiving-rings within the rim with said rim under tension.

14. A vehicle wheel having a main body comprising a rim, a circular series of cushion-receiving-rings nested within the rim, a central ring nested between and acting upon the several cushion-receiving-rings in such manner as to firmly nest said cushion-receiving-rings within the rim with said rim under tension, an annular cushion mounted in each of said cushion-receiving-rings, a hub member radially movable relative to the main wheel body, and means carried by said hub member for engaging the eyes of the annular cushions.

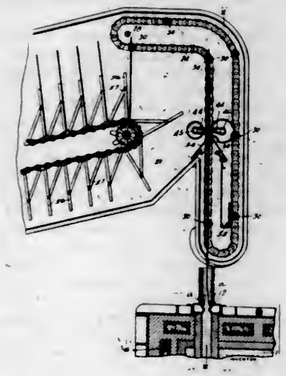
14,468. MANUFACTURE OF GLASS PLATES OR SHEETS. HALBERT K. HITCHCOCK, Pittsburgh, Pa., assignor of one-half to Hitchcock Experiment Company, a Corporation of New Jersey. Filed Apr. 3, 1916. Serial No. 88,747. Original No. 1,128,448, dated Feb. 16, 1915, Serial No. 275,462, filed Aug. 23, 1905. (Cl. 49—17.)

1. An apparatus for the manufacture of glass having in combination a receptacle for molten glass, a drawing orifice, and means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level, the bottom opening of said orifice being of less area that its area at the glass level, and means for heating the orifice wall.

2. A glass drawing orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level, said orifice being of gradually increasing area in successive planes from its bottom opening upwardly to the level of the glass, and means for heating the orifice wall.

3. A glass drawing orifice having a gradually increasing area upwardly from its bottom opening to its top and having the level of the glass below its top and above its most restricted area, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation.

4. A glass drawing orifice having a gradually increasing area upwardly from its bottom opening to its top and having the level of the glass below its top and above its most restricted area, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation, and means for heating the walls or said orifice.



5. A glass drawing orifice having increasing dimensions in the direction of flow of the glass through said orifice and having the level of the glass in said orifice below its top but above its bottom or restricted portion.

6. A glass drawing orifice having increasing dimensions in the direction of flow of the glass through said orifice and having the level of the glass in said orifice below its top but above its bottom or restricted portion, said orifice being so arranged that its walls are heated.

7. A glass drawing orifice having increasing dimensions upwardly in the direction of flow of the glass through said orifice and being partly submerged below the glass level and extending above said glass level.

8. A glass drawing orifice flaring upwardly and having its restricted lower portion submerged below the glass level and its upper enlarged portion extending above said glass level.

9. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing orifice, and means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and having a restricted section and flaring upwardly to a plane above the level from which the glass is withdrawn, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation.

10. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing orifice, and means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and having a restricted section of a shape similar to the finished article and flaring upwardly to a plane above the level from which the glass is withdrawn, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation.

11. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing orifice, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and having a restricted section and flaring upwardly to a plane above the level from which the glass is withdrawn, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation, and means for regulating the temperature of the orifice wall.

12. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing orifice, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and having a restricted section of a shape similar to the finished article and flaring upwardly to a plane above the level from which the glass is withdrawn, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation, and means for regulating the temperature of the orifice wall.

13. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing surface, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and flaring upwardly to a plane above the level from which the glass is withdrawn, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation, and means for heating the orifice wall.

14. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing surface, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and having a restricted section of a shape similar to the finished article and flaring upwardly to a plane above the level from which the glass is withdrawn, whereby the surface from which the glass is withdrawn is of enlarged area to permit such surface to lose heat by radiation, and means for heating the orifice wall.

15. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing orifice, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and having a bottom inlet of less area than the surface from which the glass is withdrawn, and means for regulating the temperature of the orifice wall.

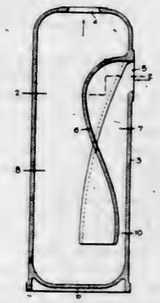
16. An apparatus for the manufacture of glass having in combination a receptacle for the molten glass, a drawing orifice, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and having a bottom inlet of less area than the surface from which the glass is withdrawn, and means for heating the orifice wall.

17. An apparatus for the manufacture of glass having in combination a receptacle for molten glass, a drawing orifice, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and being of increasing area from its bottom inlet upwardly to the level from which the glass is withdrawn, and means for regulating the temperature of the orifice wall.

18. An apparatus for the manufacture of glass having in combination a receptacle for molten glass, a drawing orifice, means for drawing the glass upwardly from said orifice, said orifice having a peripherally continuous wall extending from within the glass to a plane above the glass level and being of increasing area from its bottom inlet upwardly to the level from which the glass is withdrawn, and means for heating the orifice wall.

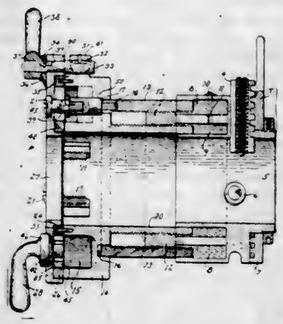
14,469. MUFFLER. WERNER M. NORDGREN, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Mar. 27, 1918. Serial No. 225,135. Original No. 1,255,556, dated Feb. 5, 1918, Serial No. 59,541, filed Nov. 4, 1915. (Cl. 121—116.)

A muffler comprising a casing closed at one end and having an exit opening at the other end, said casing having an inlet opening in one side adjacent the end having the exit opening, and a partition wall which extends from a point between said openings toward the closed end of the casing, terminating short thereof, said partition being rounded out opposite the inlet opening to form with the side wall of the casing a pocket, and gradually approaching the side wall toward the closed end of the casing and



at the same time gradually widening out so as to form a long narrow outlet passage between said partition and the side wall.

14,470. DIE-STOCK. JAMES A. PHELPS, Cleveland, Ohio, assignor to Borden Company, Warren, Ohio, a Corporation of Ohio. Filed Mar. 4, 1918. Serial No. 220,379. Original No. 1,036,001, dated Aug. 20, 1912, Serial No. 641,635, filed July 31, 1911. (Cl. 10—120.5.)



1. In a die stock, a work holder, a die holder rotatably mounted thereon to move longitudinally, a die carried by the die holder, and a member rotatable with the die holder and movable at a different rate of longitudinal speed and connected to the die to move same radially.

2. In a device of the character described, the combination of a work holder, a die holder having a screw threaded engagement therewith, a die carried by the die holder, a member having a screw threaded engagement with the work holder, the pitches of the above mentioned screw threads being varied, and operative means connected to the said member and die to move the die radially upon the die holder being rotated.

3. In a device of the character described, the combination of a rotary frame, dies carried thereby, a member having an inclined engagement with the die and rotatable with the frame but capable of relative longitudinal movement, and a differential screw-threaded mechanism for causing the relative longitudinal movement.

4. In a device of the character described, the combination of a rotary frame, dies carried thereby, a member having an inclined engagement with the dies and rotatable with the frame but capable of relative longitudinal movement, and a device adapted to be clamped to the work to be threaded and having respectively different screw-threaded connections with the die carrier and said member.

5. In a die stock, the combination of a member adapted to be clamped to the work to be threaded, a rotary die

carrier having a screw threaded engagement with said clamped member by threads of the same pitch as those to be cut, another member having a screw threaded engagement with said clamped member by threads of a different pitch, and an inclined device engaging the dies and moved relative thereto by reason of such differential threading.

6. In a die stock, the combination of a member adapted to be clamped to the work to be threaded, a rotary die-carrier having a screw threaded engagement with said clamped member by threads corresponding to those to be cut, another member having a screw threaded engagement with said clamped member by threads differing from those to be cut, and means provided with inclined surfaces engaging shoulders on the dies and carried by the member having the thread different from the thread to be cut.

7. In a die stock, the combination of a sleeve adapted to be clamped stationarily to the work and having internal and external threads, a die carrier having external threads engaging the internal threads of the sleeve, a member having internal threads engaging the external threads of the sleeve, said external threads of the sleeve being of a different pitch from the internal threads, dies carried by the die carrier, and means having an inclined engagement therewith and connected with the member which engages the external threads of the stationary sleeve.

8. In a die stock, the combination of a member adapted to be clamped to the work, a rotary die carrier screw threaded to said member, a recession-controller screw threaded to said member by a thread of different pitch from the die carrier thread, and independent means for moving the dies outwardly to free them from the cut pipe.

9. In a die stock, a work holder, a die holder rotatably mounted thereon to move longitudinally, a die carried by the die holder, and a cam plate rotatable with the die holder and at a different rate of longitudinal speed and having a cam to move the die radially.

10. In a device of the character described, the combination of a work holder, a die holder having a screw threaded engagement therewith, a die carried by the die holder, a member having a screw threaded engagement with the work holder, the pitches of the above mentioned screw threads being varied, and a cam plate movable with the said member and having a cam which diverges away from the center of the work holder toward one end thereof, the said cam being engaged to the said die.

11. In a device of the character described, the combination of a work holder, a die holder rotatably mounted thereon, a die carried by the die holder, a plate rotatable with the die holder and having a longitudinal movement therewith, a cam plate carried longitudinally with the said plate and rotatable therewith having a cam thereon which curves laterally away and diverges toward one end from the center of the die holder and which engages the said die, means for moving the said plate longitudinally with respect to the die holder upon the die holder being rotated, and means for rotating the cam plate with respect to the said plate.

12. In a device of the character described, the combination of a work holder, a die holder rotatably mounted thereon, a die carried by the die holder, a plate rotatable with the die holder and having a longitudinal movement therewith, a cam plate carried longitudinally with the said plate and rotatable therewith having a cam thereon which curves laterally away and diverges toward one end from the center of the die holder and which engages the said die, means for moving the said plate longitudinally with respect to the die holder upon the die holder being rotated, means for rotating the cam plate with respect to the said plate, and means for adjusting the said plate with respect to the die holder to adjust the die therein.

13. A device of the character described comprising a work holder, a die holder having a screw threaded engagement with the work holder, a die carried by the die holder, a sleeve concentric with the die holder and having a screw threaded engagement with the work holder, the screw threads of the die holder and sleeve being varied in pitch, a plate mounted to moove with the said sleeve, a cam ring mounted to move with the said plate and having a cam thereon which curves laterally away and diverges toward one end from the center of the die holder and which engages the said die and means for rotating the cam ring with respect to the said plate.

14. A device of the character described comprising a work holder, a die holder having a screw threaded engagement with the work holder, a die carried by the die holder, a sleeve concentric with the die holder and having a screw threaded engagement with the work holder, the screw threads of the die holder and sleeve being varied in pitch, a plate mounted to move with the said sleeve, a cam ring mounted to move with the said plate and having a cam thereon which curves laterally away and diverges toward one end from the center of the die holder and which engages the said die, means for rotating the cam ring with respect to the said plate, and means for adjusting the said plate with respect to the die holder to adjust the die therein.

15. In a die stock, the combination of a sleeve adapted to be clamped stationarily to the work, a die carrier having a screw threaded engagement with said sleeve by a thread having a pitch corresponding to the thread to be cut, another member having a threaded engagement with said stationary sleeve by a thread of finer pitch than the thread to be cut, dies carried by the carrier, and an inclined device engaging the dies and connected with the member having the finer thread.

16. In a die stock, the combination of a sleeve adapted to be clamped to the work, a die carrier having a screw threaded engagement with said sleeve by a thread having a pitch corresponding to the thread to be cut, a second member having a threaded engagement with said sleeve by a thread of finer pitch than the thread to be cut, dies carried by the carrier, a device on a forward side of the dies having an inclined engagement therewith, and means extending movably through the die carrier parallel with the axis thereof and connecting said inclined device with said second member.

17. In a die stock, the combination of a sleeve adapted to be clamped to the work and having internal and external threads, a die carrier engaging the internal threads, a movable sleeve engaging the external threads, dies carried by the die carrier, a bodily movable annular member in front of the dies and having an annular recess on its rear side, a cam plate in said recess having inclined ribs engaging the dies, and means connecting the movable front member with said movable sleeve.

18. In a device of the character described, the combination of a work holder having concentric annular recesses in the front end thereof, a die holder and a sleeve having a screw threaded engagement with the wall between the recesses and adapted to telescope into the said recesses, the screw threads of the respective parts being varied in pitch, dies carried by the die holder, and an operative connection between the said sleeve and dies for moving dies radially upon the die holder and sleeve being rotated.

19. In a device of the character described, the combination of a work holder having concentric annual recesses in the front end thereof, a die holder and a sleeve having a screw threaded engagement with the wall between the recess and adapted to telescope into said recesses, the screw threads of the respective parts being varied in pitch, and the die holder and sleeve having a snug sliding engagement with the unthreaded walls of said work holder bounding said recesses, dies carried by the die holder, and an operative connection between the said sleeve and dies for moving the dies radially upon the die holder and sleeve being rotated, there being means for admitting oil to said annular recesses.

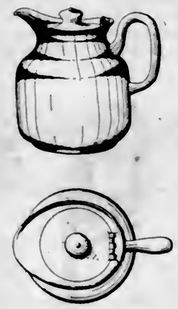
DESIGNS.

52,001. SEMI-INDIRECT LIGHTING-FIXTURE REFLECTOR. HARRY C. ADAM, St. Louis, Mo. Filed Sept. 21, 1917. Serial No. 192,597. Term of patent 14 years.



The ornamental design for a semi-indirect lighting-fixture reflector, as shown.

52,002. CASING FOR VACUUM-INSULATED PITCHERS. GEORGE P. ALTENBERG, Cincinnati, Ohio, assignor to The Icy-Hot Bottle Company, Cincinnati, Ohio, a Corporation of West Virginia. Filed Mar. 4, 1918. Serial No. 220,408. Term of patent 14 years.



The ornamental design for a casing for vacuum insulated pitchers, substantially as shown.

52,003. SHADE-BOWL. JOHN BEISWANGER, Steubenville, Ohio, assignor to Gill Brothers Company, Steubenville, Ohio, a Corporation of West Virginia. Filed Feb. 1, 1918. Serial No. 215,008. Term of patent 7 years.



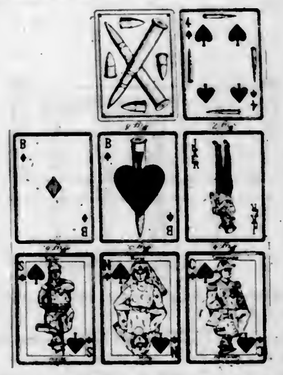
The ornamental design for a shade bowl, substantially as shown and described.

52,004. BADGE OR EMBLEM. WARREN G. DANIEL, Boone, Iowa. Filed Oct. 16, 1917. Serial No. 197,372. Term of patent 14 years.



The ornamental design for a badge or emblem, as shown.

52,005. SET OF PLAYING-CARDS. CHARLES G. DECKER, Brooklyn, N. Y. Filed Dec. 1, 1917. Serial No. 204,988. Term of patent 7 years.



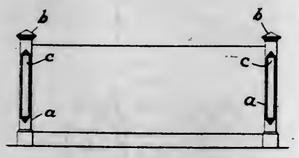
The ornamental design for a set of playing cards, as shown.

52,006. CARD-HOLDER. IDA B. EDMUNDS, Kansas City, Mo. Filed Feb. 9, 1918. Serial No. 216,356. Term of patent 3½ years.



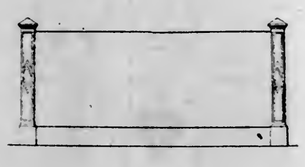
The ornamental design for a card holder as shown.

52,007. OUTDOOR SIGN. ELLIS E. ERICKSON, Irvington, N. J., assignor to Newark Sign Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 3, 1917. Serial No. 159,553. Term of patent 7 years.



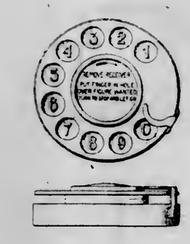
The ornamental design for an outdoor sign, as shown and described.

52,008. OUTDOOR SIGN. ELLIS E. ERICKSON, Irvington, N. J., assignor to Newark Sign Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 3, 1917. Serial No. 159,554. Term of patent 7 years.



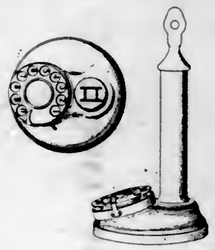
The ornamental design for an outdoor sign, as shown and described.

52,009. CALLING DEVICE. OSCAR F. FORSBERG, Yonkers, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Jan. 25, 1915. Serial No. 4,384. Term of patent 14 years.



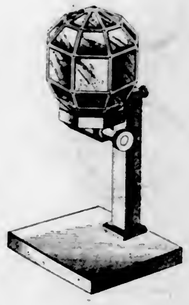
The ornamental design for a calling device, as shown.

52,010. DESK TELEPHONE-STAND. OSCAR F. FORSBERG, Yonkers, N. Y., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed June 25, 1915. Serial No. 36,408. Term of patent 14 years.



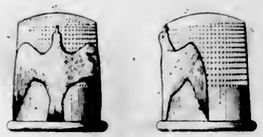
The ornamental design for a desk telephone stand, as shown.

52,011. DISPENSING-URN. JOSEPH A. FRANKLIN, Chicago, Ill., assignor to Celro-Salto Nut Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 16, 1917. Serial No. 155,365. Term of patent 3½ years.



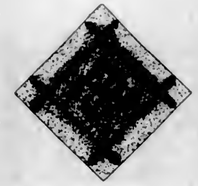
The ornamental design for a dispensing urn, as shown.

52,012. THREAD-CUTTING THIMBLE. THERESA B. GATES, Richmond, Cal. Filed Feb. 11, 1918. Serial No. 218,006. Term of patent 14 years.



The ornamental design for a thread cutting thimble, as shown.

52,013. CARPET, RUG, OR SIMILAR ARTICLE. LOUIS ROTHEIMER, Cleveland, Ohio, assignor to H. G. Fetterolf Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 8, 1917. Serial No. 206,351. Term of patent 3½ years.



The ornamental design for a carpet, rug, or a similar article as shown and described.

52,014. RING. JOSEPH C. WHITEHOUSE, Cincinnati, Ohio, assignor to Whitehouse Brothers, Cincinnati, Ohio, (a Copartnership consisting of Joseph C. Whitehouse and William H. Whitehouse.) Filed Feb. 5, 1918. Serial No. 215,545. Term of patent 3½ years.



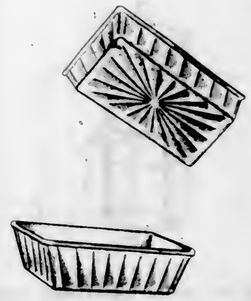
The ornamental design for a ring, as shown.

52,015. MONUMENT. WILLIAM A. ARNOLD, Lowell, Mass. Filed Apr. 19, 1917. Serial No. 163,296. Term of patent 14 years.



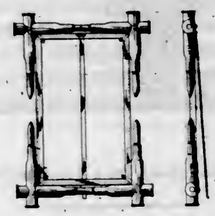
The design for a monument as shown.

52,016. BAKING-DISH. JOHN BEISWANGER, Steubenville, Ohio, assignor to Gill Brothers Company, Steubenville, Ohio, a Corporation of West Virginia. Filed May 18, 1917. Serial No. 169,591. Term of patent 14 years.



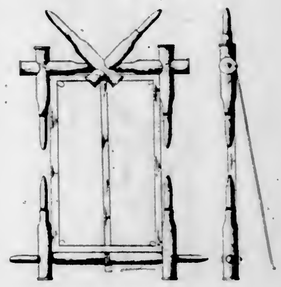
The ornamental design for a baking dish substantially as shown and described.

52,017. PICTURE-FRAME. JOHN BENKO, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,349. Term of patent 3½ years.



The ornamental design for a picture-frame, as shown.

52,018. PICTURE-FRAME. JOHN BENKO, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,350. Term of patent 3½ years.



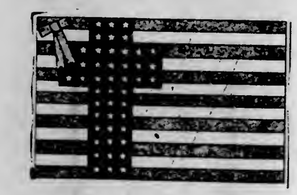
The ornamental design for a picture frame, as shown.

52,019. COFFEE-BREWING POT. HENRY C. BIETTE, Pittsburgh, Pa. Filed Feb. 23, 1918. Serial No. 218,913. Term of patent 14 years.



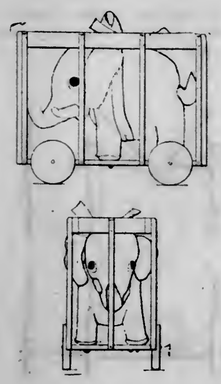
The ornamental design for a coffee brewing pot as shown.

52,020. FLAG. EDWARD T. COYAN, Pittsburgh, Pa. Filed Jan. 12, 1918. Serial No. 211,689. Term of patent 7 years.



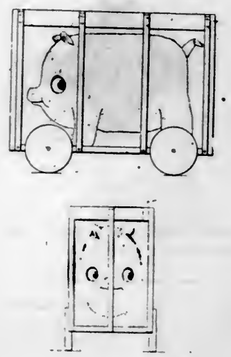
The ornamental design for a flag, as shown.

52,021. FIGURE TOY. GRACE G. DRAYTON, New York, N. Y. Filed Feb. 2, 1918. Serial No. 215,203. Term of patent 3½ years.



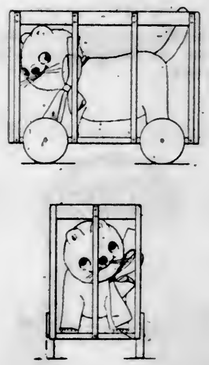
The ornamental design for a figure toy, as shown.

52,022. FIGURE TOY. GRACE G. DRAYTON, New York, N. Y. Filed Feb. 2, 1918. Serial No. 215,204. Term of patent 3½ years.



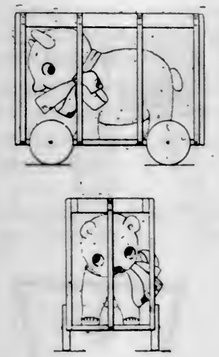
The ornamental design for a figure toy, as shown.

52,023. FIGURE TOY. GRACE G. DRAYTON, New York, N. Y. Filed Feb. 2, 1918. Serial No. 215,205. Term of patent 3½ years.



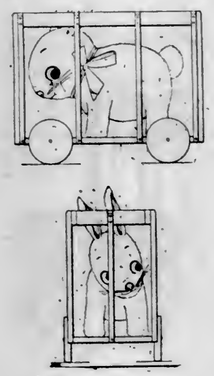
The ornamental design for a figure toy, as shown.

52,024. FIGURE TOY. GRACE G. DRAYTON, New York, N. Y. Filed Feb. 2, 1918. Serial No. 215,206. Term of patent 3½ years.



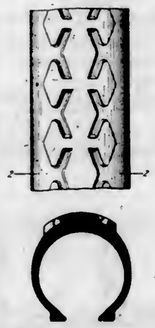
The ornamental design for a figure toy, as shown.

52,025. FIGURE TOY. GRACE G. DRAYTON, New York, N. Y. Filed Feb. 2, 1918. Serial No. 215,207. Term of patent 3½ years.



The ornamental design for a figure toy, as shown.

52,026. AUTOMOBILE TIRE. JESSE FROEHLICH, New York, N. Y. Filed Mar. 16, 1918. Serial No. 222,974. Term of patent 7 years.



The ornamental design for an automobile tire as shown.

52,027. TIRE. GEORGE H. LEWIS, Chicopee Falls, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed July 24, 1917. Serial No. 182,553. Term of patent 14 years.



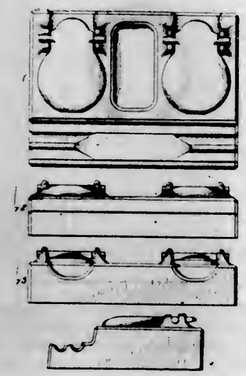
The new, original, and ornamental design for a tire, as shown.

52,028. FINGER-RING OR SIMILAR ARTICLE OF JEWELRY. CHARLES H. SPENCER, Chicago, Ill. Filed Mar. 6, 1918. Serial No. 220,878. Term of patent 7 years.



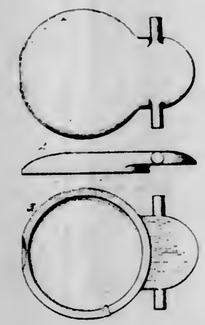
The ornamental design for a finger ring or similar article of jewelry, as shown.

52,029. INKSTAND. FRANK A. WEEKS, Plainfield, N. J. Filed Feb. 9, 1918. Serial No. 216,361. Term of patent 14 years.



The ornamental design for an inkstand, as shown.

52,030. COVER FOR AN INKSTAND. FRANK A. WEEKS, Plainfield, N. J. Filed Feb. 9, 1918. Serial No. 216,362. Term of patent 14 years.



The ornamental design for a cover for an inkstand, as shown.

52,031. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed Mar. 9, 1918. Serial No. 221,545. Term of patent 14 years.



The ornamental design for a phonograph cabinet, substantially as shown.

52,032. PHONOGRAPH-CABINET. JOSEPH WOLFF, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed Mar. 9, 1918. Serial No. 221,544. Term of patent 14 years.



The ornamental design for a phonograph cabinet, substantially as shown.

TRADE-MARKS

PUBLISHED MAY 7, 1918.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 87,171. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MENTHO-LISTINE CHEMICAL CO., Houston, Tex. Filed June 7, 1915.



Particular description of goods.—A Mouth-Wash and Tooth-Paste.
Claims use since May 1, 1913.

Ser. No. 89,534. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CAPDAU AND BRESLIN, New Orleans, La. Filed Sept. 30, 1915.

LAXAGAR

Particular description of goods.—Medicine for Stomach and Bowel Disorders.
Claims use since July 15, 1915.

Ser. No. 89,925. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NAAS-SANDERSON CO., Evansville, Ind. Filed Oct. 18, 1915.



Consisting of a graphic pictorial representation of the Dixie highway, (commonly called the "Dixie-Bee Line,") whereon divers vehicles are traveling and which is flanked with fields of vegetation under cultivation and harvest, no claim being made to the word "Line" except as shown in the drawing.
Particular description of goods.—Coffee.
Claims use since Sept. 5, 1915.

Ser. No. 99,556. (CLASS 15. OILS AND GREASES.) FRED C. ROEGGE, Cleveland, Ohio. Filed Nov. 25, 1916.

GASCOILENE

Particular description of goods.—Synthetic Liquid Hydrocarbon Fuel Similar to Gasolene or Kerosene.
Claims use since about Apr. 1, 1916.

Ser. No. 99,558. (CLASS 15. OILS AND GREASES.) FRED C. ROEGGE, Cleveland, Ohio. Filed Nov. 25, 1916.

GASCOILENE

Particular description of goods.—Synthetic Liquid Hydrocarbon Fuel Similar to Gasolene or Kerosene.
Claims use since about Apr. 1, 1916.

Ser. No. 99,886. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) J. AND J. BALDWIN AND PARTNERS, LIMITED, Halifax, England. Filed Dec. 13, 1916.



Particular description of goods.—Wire Brushes for Raising a Soft Warmth-Retaining Surface on Knitted Woolen Fabrics.
Claims use since November, 1914.

Ser. No. 100,623. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) U. T. HUNGERFORD BRASS & COPPER CO., New York, N. Y. Filed Jan. 15, 1917.



Particular description of goods.—Electric Insulated Weatherproof Underwriters' Wire.
Claims use since July 1, 1898.

Ser. No. 101,068. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) MORRIS D. KOPPLE, New York, N. Y. Filed Jan. 31, 1917.

Master

Particular description of goods.—Lathes.
Claims use since Dec. 15, 1916.

Ser. No. 102,058. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HELENA J. TITUS, New York, N. Y. Filed Mar. 10, 1917.

Valaze

Particular description of goods.—Preparations for Toning, Beautifying, Cleansing, Tinting, Protecting, Stimulating, Preserving, Restoring, and Bleaching the Face, Hands, Skin, and Complexion, and Tonics, Washes, and Shampoos for the Hair, Scalp, and Dandruff.
Claims use since Dec. 1, 1914.

Ser. No. 102,415. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) INTERNATIONAL DAUB COMPANY, Wilmington, Del. Filed Mar. 24, 1917.

OLORIS

Particular description of goods.—Toilet Soaps.
Claims use since Oct. 27, 1916.

Ser. No. 102,708. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ATLANTIC DRIER & VARNISH CO., Philadelphia, Pa. Filed Apr. 4, 1917.

MOLESKIN

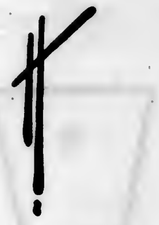
Particular description of goods.—Paste Paints, Ready-Mixed and Liquid Paints.
Claims use since about July 1, 1916.

Ser. No. 102,872. (CLASS 39. CLOTHING.) UNION MILLS, INC., Hudson and New York, N. Y. Filed Apr. 10, 1917.

UNION

Particular description of goods.—Knitted Underwear, Two-Piece Garments, Sweater-Coats, and Sweaters.
Claims use since 1897.

Ser. No. 103,175. (CLASS 37. PAPER AND STATIONERY.) HOLMES COMPANY, Chicago, Ill. Filed Apr. 21, 1917.



"H" in the fanciful and elongated form shown in the drawing.
Particular description of goods.—Plain and Engraved Stationery—Namely, Envelops and Letter-Sheets.
Claims use since June 1, 1902.

Ser. No. No. 103,201. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ELLA R. BERRY, St. Louis, Mo. Filed Apr. 23, 1917.



Particular description of goods.—Freckle-Creams, Massage-Creams, Rouge, Freckle and Moth Eradicators, Eye-Washes, Hair and Scalp Tonics, Hair-Dye, Superfluous-Hair Destroyers, and Tonic Laxatives.
Claims use since on or about the 1st day of April, 1888.

Ser. No. 103,754. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STEELEVILLE MILLING COMPANY, Steeleville, Ill. Filed May 12, 1917.

DISCOVERER

Particular description of goods.—Self-Rising Wheat-Flour.
Claims use since about Apr. 23, 1917.

Ser. No. 103,959. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MARY L. LEWIS, Americus, Ga. Filed May 19, 1917.



Particular description of goods.—Hair-Pomade.
Claims use since Feb. 25, 1917.

Ser. No. 104,449. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BATCHELOR FLOUR MILL CO., Waterville, Me. Filed June 15, 1917.



Particular description of goods.—Wheat-Flour, Whole-Wheat Flour, Bran-Flour, Graham Flour, Buckwheat-Flour, Pancake-Flour, Self-Raising Flour, Bran, Middlings, Bolted or Fine Cornmeal, Granulated or Coarse Rye-Meal and Barley-Meal, and Mixed Feed.
Claims use since the 15th day of November, 1916.

Ser. No. 104,884. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE EMBOSSING COMPANY, Albany, N. Y. Filed July 6, 1917.



Particular description of goods.—Toy Blocks, Dominoes, Checkers, Toy Construction Outfits, and Toy Modeling Outfits, Modeling-Tools, and Plastic Modeling Materials.
Claims use since June 15, 1917.

Ser. No. 105,295. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GUSTAV C. HOENCKE, Houston, Tex. Filed July 26, 1917.



The picture being fanciful.
Particular description of goods.—A Fluid Eye-Tonic.
Claims use since the 3d day of July, 1917.

Ser. No. 106,101. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) ALFRED L. SIMON & CO., New York, N. Y. Filed Sept. 6, 1917.



Particular description of goods.—Millinery Goods—Namely, Fancy and Ostrich Feathers, Wings, Quills, Plumes, Tips; Artificial Flowers, Fruits, Grains, and Leaves; Wreaths and Boutonnières, Pompoms, Rosettes, Hat-Linings, Hat-Tips, Hatbands, Hat Ornaments, Embroideries, Cabuchons, Hat-Braids, Silk Hat-Braids, Straw Hat-Braids; Fur Pelts and Fur Heads, Tails, and Paws.
Claims use since Aug. 22, 1917.

Ser. No. 106,445. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FERGUSON-MCKINNEY MFG. CO., St. Louis, Mo. Filed Sept. 26, 1917.

"EL PICADOR"

Particular description of goods.—Certain Colored Cotton Goods—Namely, Drills.
Claims use since July, 1916.

Ser. No. 106,958. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) OKLAHOMA CITY MILL & ELEVATOR CO., Oklahoma, Okla. Filed Oct. 25, 1917.

GOLD CERTIFICATE

CERTIFICADO DE ORO

Particular description of goods.—Wheat-Flour.
Claims use since July 23, 1917.

Ser. No. 106,971. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) HEWITT & RUNNELS, Bay City, Mich. Filed Oct. 26, 1917.

PREVENTO

Particular description of goods.—A Liquid Polish for Stoves.
Claims use since May 1, 1915.

Ser. No. 107,568. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE F. E. PARTRIDGE RUBBER CO., LTD., Guelph, Ontario, Canada. Filed Nov. 23, 1917.

GUIDE

Particular description of goods.—Tires, Said Tires Being Usually Composed of Rubber, Fabric, and Certain Minerals and Colors.
Claims use since the 23d day of August, 1917.

Ser. No. 107,697. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) WILLIAM E. WILLIAMS, New York, N. Y. Filed Nov. 30, 1917.

WEW

Consisting of the word or characters "WEW."
Particular description of goods.—Globe-Valves, Angle-Valves, Cross-Valves, Snifting-Valves, Relief-Valves, Throttle-Valves, Gate-Valves, Check-Valves, and All Kinds of Brass, Bronze, Iron, and Steel Body Valves, Steam and Water Valves, and Boiler Gage-Cocks.
Claims use since about Jan. 1, 1913.

Ser. No. 107,786. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEO. A. DEATEL, Baltimore, Md. Filed Dec. 6, 1917.

Festone

Particular description of goods.—Remedies for Indigestion.
Claims use since Oct. 15, 1917.

Ser. No. 107,909. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROLLO H. FERRY, Spokane, Wash. Filed Dec. 12, 1917.

FORMOZINC

Particular description of goods.—A Dental Preparation—a Healing Antiseptic Astringent Lotion for the Treatment of Pyorrhea During and After Instrumentation and Also for Use as a Mouth-Wash, Also for Use After Extraction and in Connection with Sore and Bleeding Gums and Canker Conditions of the Oral Cavity.
Claims use since July 14, 1917.

Ser. No. 108,038. (CLASS 39. CLOTHING.) HURWITCH BROTHERS, Boston, Mass. Filed Dec. 18, 1917.

KNOBBY KNICKER

No claim is made to the word "Knicker" apart from the mark shown in the drawing.
Particular description of goods.—Knickers.
Claims use since Dec. 11, 1917.

Ser. No. 108,136. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) WILLIAM ZOLPER, Wilmington, Del. Filed Dec. 24, 1917.

BLOW UP THE KAISER

Particular description of goods.—Lung-Testing Toys.
Claims use since about Dec. 6, 1917.

Ser. No. 108,141. (CLASS 39. CLOTHING.) RUNOSUKE FUJITA, New York, N. Y. Filed Dec. 26, 1917.

TOYO

Particular description of goods.—Panama Hats.
Claims use since 1916.

Ser. No. 108,294. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COAST FISHING CO. INC., Wilmington, Cal. Filed Jan. 4, 1918.

TREASURE

Particular description of goods.—Canned Sardines Packed in Cotton-Seed Oils and Spiced Tomato Sauce.
Claims use since Dec. 2, 1917.

Ser. No. 108,453. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) HOWLETT & HOCKMEYER CO., New York, N. Y. Filed Jan. 14, 1918.

LANCIA

Particular description of goods.—Pile Fabrics and Corduroys Treated so as to be Waterproof.
Claims use since Jan. 1, 1918.

Ser. No. 108,473. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE COOLRITE CO. INC., Ithaca, N. Y. Filed Jan. 15, 1918.

COOLRITE

Particular description of goods.—Compositions for Preventing Freezing and Overheating of Liquid Cooling Media of Automobiles, Aeroplane Motors, and the Like.
Claims use since Nov. 26, 1917.

Ser. No. 108,543. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JAMES MACDONALD, New York, N. Y. Filed Jan. 19, 1918.



Particular description of goods.—Toilet Preparations and Cosmetics—viz., Complexion-Powder and Rouges.
Claims use since Nov. 1, 1914.

Ser. No. 108,548. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) PATTERSON DRUG COMPANY, Lynchburg, Va. Filed Jan. 19, 1918.

PETRO-MULSION

Particular description of goods.—A Medical Preparation for the Treatment of Throat and Lung Affection.
Claims use since November, 1916.

Ser. No. 108,587. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) E. F. HOUGHTON & CO., Philadelphia, Pa. Filed Jan. 22, 1918.

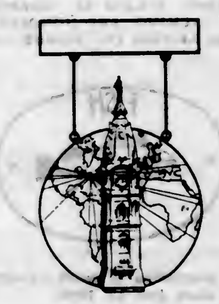
SULFOL

Particular description of goods.—An Oil for Use in the Softening, Strengthening, and Dyeing of Textiles.
Claims use since June, 1915.

Ser. No. 108,699. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NORTHERN CHEMICAL CO. OF MICHIGAN, Detroit, Mich. Filed Jan. 30, 1918.

Particular description of goods.—Soot Destroyer and Remover.
Claims use since January, 1900.

Ser. No. 108,720. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) QUAKER CITY SUPPLY CO., Philadelphia, Pa. Filed Jan. 31, 1918.



Particular description of goods.—Leather.
Claims use since November, 1917.

Ser. No. 108,735. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) WACLEPO MFG. CO., Fort Wayne, Ind. Filed Jan. 31, 1918.

WACLEPO

Particular description of goods.—A Liquid Preparation for Removing Dirt, Grease, &c., from Automobiles.
Claims use since 1914.

Ser. No. 108,805. (CLASS 15. OILS AND GREASES.) ORIENTAL OIL COMPANY, Dallas, Tex. Filed Feb. 4, 1918.

KLINGO

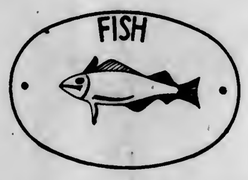
Particular description of goods.—Heavy Lubricating-Grease.
Claims use since Dec. 24, 1917.

Ser. No. 108,822. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ELMER CANDY CO., INC., New Orleans, La. Filed Feb. 5, 1918.



The picture being fanciful.
Particular description of goods.—Candy.
Claims use since Oct. 17, 1917.

Ser. No. 108,903. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Feb. 8, 1918.



Particular description of goods.—Leather Belting.
Claims use since Aug. 12, 1909.

Ser. No. 109,018. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMALGAMATED MACHINERY CORPORATION, Chicago, Ill. Filed Feb. 16, 1918.

Amalgamated

Particular description of goods.—Metal-Working Machinery—Namely, Lathes, Boring-Machines, Drilling-Machines, Lathe-Carriages, Internal-Combustion Engines, and Refrigerating-Machines.
Claims use since July, 1915.

Ser. No. 109,234. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) ANDOVER LAXINE WATER COMPANY, Andover, Ohio. Filed Feb. 27, 1918.



The trade-mark, which is the bust portrait, male head, and facsimile signature of G. S. Anderson, M. D., who is a member of the firm.
Particular description of goods.—Mineral Water.
Claims use since Feb. 15, 1918.

Ser. No. 109,284. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) STEEL FABRICATING COMPANY, Chicago Heights, Ill. Filed Feb. 28, 1918.

STEFCO

Particular description of goods.—Sectional Steel Buildings.
Claims use since about October, 1915.

Ser. No. 109,310. (CLASS 10. FERTILIZERS.) THE AMERICAN AGRICULTURAL CHEMICAL COMPANY, New York, N. Y. Filed Mar. 2, 1918.



Particular description of goods.—Fertilizers.
Claims use since Nov. 1, 1917.

Ser. No. 109,410. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOSEPH BIER, M. D., New York, N. Y. Filed Mar. 7, 1918.

LAUDANT

Particular description of goods.—A Healing Prophylactic Powder for External Use in the Treatment of Diseased Conditions of Mucous Membrane, Such as Catarrh, Inflammation of the Mouth, Throat, or Nose, Leucorrhea, Vaginitis, Internal Hemorrhoids, and to Cleanse and Heal Cuts, Sores, and Wounds, to Disinfect and Maintain a Healthy Condition of the Mouth, Antiseptically Cleanse and Whiten the Teeth, Remove Nicotin from the Teeth and Bridgework, and to Eradicate Perspiration and Body-Odors by Sponge-Bathing.
Claims use since about Oct. 15, 1917.

Ser. No. 109,415. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.

IVALEUR

Particular description of goods.—Pipe-Bits and Cigar-Holders. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917.

Ser. No. 109,417. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.

IVALEUR

Particular description of goods.—Dominoes, Checkers, Dice, Dice-Cups, Poker-Chips, Parlor-Balls, Game-Markers, Billiard-Markers, Umpire-Indicators, Pool-Triangles, Hand or Toy Whistles, and Rattles. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917.

Ser. No. 109,425. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.

IVALEUR

Particular description of goods.—Organ-Stop Keys, Organ-Stop Buttons, Banjo-Keys, Guitar-Buttons or End Pins, Guitar Bridge-Pins, and Zither-Rings. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Jan. 4, 1918.

Ser. No. 109,426. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.

IVALEUR

Particular description of goods.—Register-Wheels Used in Speedometers and Indicating and Measuring Appliances. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Jan. 12, 1918.

Ser. No. 109,446. (CLASS 27. HOROLOGICAL INSTRUMENTS.) WESTERN CLOCK CO., Peru, Ill. Filed Mar. 8, 1918.

JACK O'LANTERN

Particular description of goods.—Clocks and Watches.
Claims use since Feb. 23, 1918.

Ser. No. 109,453. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN CAMPBELL & CO., New York, N. Y. Filed Mar. 9, 1918.

LANUGENE

Comprising the word "Lanugene."
Particular description of goods.—Coal-Tar Products—viz., Anilin Dyes and Anilin Colors Known as "Direct Colors."
Claims use since 1910.

Ser. No. 109,454. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN CAMPBELL & CO., New York, N. Y. Filed Mar. 9, 1918.

AMIDINE

Comprising the word "Amidine."
Particular description of goods.—Coal-Tar Products—viz., Anilin Dyes and Anilin Colors Known as "Direct Colors."
Claims use since 1910.

Ser. No. 109,575. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) FRANK J. LEISER, New York, N. Y. Filed Mar. 15, 1918.

Philharmonic

"Philharmonic."
Particular description of goods.—Phonographs, Sound-Boxes, Tone-Arms, Needles, and Disks.
Claims use since Mar. 12, 1918.

Ser. No. 109,587. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE COMBINATION RUBBER MFG. CO., Bloomfield, N. J. Filed Mar. 16, 1918.

VIKING

Particular description of goods.—Rubber Tires and Inner Tubes.
Claims use since about Mar. 16, 1917.

Ser. No. 109,666. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SMITH, KLINE & FRENCH CO., Philadelphia, Pa. Filed Mar. 16, 1918.

NUBOGITOL

Particular description of goods.—An Insecticide.
Claims use since Mar. 6, 1918.

Ser. No. 109,670. (CLASS 43. THREAD AND YARN.) CHENEY BROTHERS, South Manchester, Conn. Filed Mar. 20, 1918. Under ten-year proviso.

CHENEY

Particular description of goods.—Spun-Silk Yarn, Machine-Twist Knitting-Silk, Reeled Silk, and Sewing-Silk.
Claims use since about 1875.

Ser. No. 109,676. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) REDMANOL CHEMICAL PRODUCTS CO., Chicago, Ill. Filed Mar. 20, 1918.

REDMANOL

Particular description of goods.—A Phenolic Condensation Product or Material for Use as a Molding Compound for Pipes, Pipe-Stems, Cigar and Cigarette Holders, and other Smokers' Supplies, also for Use as a Compound for Making Dental and Surgical Instruments and Appliances and Handles Therefor, also for Use in Making an Electric Insulating Material, and also for Use as an Ingredient for Making Paints, Varnishes, and Lacquers.
Claims use since on or about June 25, 1914.

Ser. No. 109,677. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ADOLPHE SCHWOB, INC., New York, N. Y. Filed Mar. 20, 1918. Under ten-year proviso.

CYMA

Particular description of goods.—Watches, Watchcases, and Watch-Movements.
Claims use since the year 1893.

Ser. No. 109,678. (CLASS 27. HOROLOGICAL INSTRUMENTS.) ADOLPHE SCHWOB, INC., New York, N. Y. Filed Mar. 20, 1918. Under ten-year proviso.

Admiral

Particular description of goods.—Watches, Watchcases, and Watch-Movements.
Claims use since the year 1893.

Ser. No. 109,801. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE HAMPDEN WATCH COMPANY, Canton, Ohio. Filed Mar. 26, 1918.

AVIATOR

Particular description of goods.—Watches and Watch-Movements.
Claims use since Sept. 7, 1917.

Ser. No. 109,802. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE HAMPDEN WATCH COMPANY, Canton, Ohio. Filed Mar. 26, 1918.

THE *Mary Jane*

Particular description of goods.—Watches and Watch-Movements.
Claims use since Mar. 4, 1918.

Ser. No. 109,803. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE HAMPDEN WATCH COMPANY, Canton, Ohio. Filed Mar. 26, 1918.

PAUL REVERE

Particular description of goods.—Watches and Watch-Movements.
Claims use since Mar. 4, 1918.

Ser. No. 109,804. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE HAMPDEN WATCH COMPANY, Canton, Ohio. Filed Mar. 26, 1918.

NATHAN HALE

Particular description of goods.—Watches and Watch-Movements.
Claims use since Mar. 4, 1918.

Ser. No. 109,805. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE HAMPDEN WATCH COMPANY, Canton, Ohio. Filed Mar. 26, 1918.

THE MINUTE MAN

Particular description of goods.—Watches and Watch-Movements.
Claims use since Mar. 4, 1918.

Ser. No. 109,869. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE E. INGRAHAM CO., Bristol, Conn. Filed Mar. 29, 1918.

DIAMOND

Particular description of goods.—Clocks.
Claims use since Jan. 1, 1918.

Ser. No. 109,899. (CLASS 38. PRINTS AND PUBLICATIONS.) FOOTE MINERAL CO., Philadelphia, Pa. Filed Mar. 29, 1918.

Mineral
Foote-Notes

Particular description of goods.—A Monthly Publication Devoted to Semirare Ores and Their Products.
Claims use since about January, 1917.

Ser. No. 109,926. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) JOS. SCHLITZ BREWING CO., Milwaukee, Wis. Filed Apr. 2, 1918.

Schlitz

Particular description of goods.—Lager-Beer.
Claims use since May 1, 1888.

Ser. No. 109,997. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) GEORGE WINCKLER, New York, N. Y. Filed Apr. 4, 1918.

IMPEROID

Particular description of goods.—Tooth, Nail, Hair, Mustache, Artists', Clothes, and Bathing Brushes.
Claims use since September, 1917.

Ser. No. 110,002. (CLASS 38. PRINTS AND PUBLICATIONS.) ALVIN A. BRATTON, Columbus, Ohio. Filed Apr. 5, 1918.

Better Letters

Particular description of goods.—Booklets or Lessons Issued Periodically.
Claims use since Mar. 15, 1918.

Ser. No. 110,062. (CLASS 38. PRINTS AND PUBLICATIONS.) THE WASHINGTON TIMES COMPANY, Washington, D. C. Filed Apr. 8, 1918.

THE NATIONAL DAILY

Particular description of goods.—Newspapers Published Daily and Sunday.
Claims use since Sept. 17, 1917.

TRADE-MARK REGISTRATIONS GRANTED

MAY 7, 1918.

121,535. COMPOUND OF EVAPORATED SKIMMED MILK AND VEGETABLE FAT AS A MILK SUBSTITUTE. EN-ZO COMPANY, Denmark, Wis.
Filed November 7, 1917. Serial No. 107,214. PUBLISHED JANUARY 15, 1918.

121,536. MOLASSES. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y.
Filed December 24, 1917. Serial No. 108,116. PUBLISHED FEBRUARY 19, 1918.

121,537. SYRUP FOR USE AS A FOOD. THE AMERICAN SUGAR REFINING COMPANY, Jersey City, N. J., and New York, N. Y.
Filed December 22, 1917. Serial No. 108,092. PUBLISHED FEBRUARY 19, 1918.

121,538. REFRACTORY CEMENT. GEORGE A. BALZ, Rahway, N. J.
Filed January 15, 1918. Serial No. 108,472. PUBLISHED FEBRUARY 19, 1918.

121,539. FRESH POTATOES. BEAUFORT TRUCK GROWERS ASSOCIATION, Beaufort, S. C.
Filed September 28, 1917. Serial No. 106,470. PUBLISHED JANUARY 29, 1918.

121,540. GAMES AND OUTFITS OF TOY SOLDIERS AND PISTOLS. MILTON BRADLEY CO., Springfield, Mass.
Filed January 8, 1917. Serial No. 100,442. PUBLISHED JANUARY 29, 1918.

121,541. BREAD. BRAUN BROS., & CO., Pittsburgh, Pa.
Filed February 17, 1917. Serial No. 101,439. PUBLISHED FEBRUARY 12, 1918.

121,542. CARD GAMES. ROLAND W. BROWN, Lincoln, Nebr.
Filed January 4, 1918. Serial No. 108,291. PUBLISHED FEBRUARY 19, 1918.

121,543. PRUNES, DRIED APRICOTS, PEACHES, PEARS, NECTARINES, RAISINS, PITTED PLUMS, DRIED APPLES, AND DRIED FIGS. CASTLE BROTHERS, San Francisco, Cal.
Filed January 15, 1917. Serial No. 100,612. PUBLISHED FEBRUARY 19, 1918.

121,544. SNAP-FASTENERS. CARR FASTENER COMPANY, Cambridge, Mass.
Filed June 29, 1917. Serial No. 104,744. PUBLISHED NOVEMBER 27, 1917.

121,545. EXTRACT IN LIQUID AND POWDERED FORM USED AS CORE-BINDER IN MANUFACTURING IRON CASTINGS. THE CHAMPION FIBRE COMPANY, Canton, N. C.
Filed November 17, 1917. Serial No. 107,429. PUBLISHED FEBRUARY 19, 1918.

121,546. ICE CREAM. LOUIS A. CORNING, Elmira, N. Y.
Filed December 19, 1917. Serial No. 108,058. PUBLISHED FEBRUARY 19, 1918.

121,547. ATOMIZERS OR SPRAYING INSTRUMENTS USED FOR MEDICAL AND SURGICAL PURPOSES. THE DE VILBISS MANUFACTURING COMPANY, Toledo, Ohio.
Filed January 11, 1918. Serial No. 108,416. PUBLISHED FEBRUARY 19, 1918.

121,548. DENTAL CREAM. BEMPER L. DIEFFENBACHER, Los Angeles, Cal.
Filed October 23, 1917. Serial No. 106,908. PUBLISHED FEBRUARY 19, 1918.

121,549. MUSTARD, SPICES, AND FLAVORING EXTRACTS FOR FOODS. J. T. FARGASON COMPANY, Memphis, Tenn.
Filed December 24, 1917. Serial No. 108,122. PUBLISHED FEBRUARY 19, 1918.

121,550. HAM, BACON, SHOULDER, LARD, AND SAUSAGE. W. S. FORBES & CO. INC., Richmond, Va.
Filed April 16, 1917. Serial No. 103,020. PUBLISHED FEBRUARY 19, 1918.

121,551. STORE AND DISPLAY FIXTURES COMPRISING FIXTURES FOR SUPPORTING AND DISPLAYING GOODS. FRANKEL DISPLAY FIXTURE COMPANY, New York, N. Y.
Filed April 23, 1917. Serial No. 103,207. PUBLISHED FEBRUARY 19, 1918.

121,552. CHOCOLATES AND CANDIES. E. GREENFIELD'S SONS, New York, N. Y.
Filed December 26, 1917. Serial No. 108,146. PUBLISHED FEBRUARY 19, 1918.

121,553. OLIVE-OILS, CORN SALAD-OILS, SALAD PEANUT-OILS, AND SALAD-OIL PRESSED FROM COTTON-SEED. J. H. HAKIM & CO., New York, N. Y.
Filed August 11, 1917. Serial No. 105,595. PUBLISHED JANUARY 22, 1918.

121,554. TEA. HEDGES-BUCK COMPANY, Stockton, Cal.
Filed December 18, 1917. Serial No. 108,036. PUBLISHED FEBRUARY 19, 1918.

121,555. CHEESE. J. S. HOFFMAN COMPANY, Chicago, Ill.
Filed November 14, 1917. Serial No. 107,367. PUBLISHED FEBRUARY 19, 1918.

121,556. HEAT-RESISTING COMPOUND FOR COATING CRUCIBLES, FIRE-BRICK, LADLES, AND SAGGARS. H. H. JARRETT & CO., New York, N. Y.
Filed December 29, 1917. Serial No. 108,216. PUBLISHED FEBRUARY 19, 1918.

121,557. COFFEE-FLAVORED TAFFY. H. JEVNE CO., Los Angeles, Cal.
Filed October 31, 1917. Serial No. 107,050. PUBLISHED FEBRUARY 19, 1918.

121,558. BROOMS. WILLIAM EDWIN KILLINGER, Oklahoma, Okla.
Filed July 25, 1917. Serial No. 105,262. PUBLISHED FEBRUARY 19, 1918.

121,559. CANNED BEEF. LIBBY, MCNEILL & LIBBY, Chicago, Ill.
Filed October 19, 1917. Serial No. 106,864. PUBLISHED FEBRUARY 19, 1918.

121,560. CERTAIN NAMED DENTAL, MEDICAL, AND SURGICAL APPLIANCES. MACGREGOR INSTRUMENT COMPANY, Boston, Mass.
Filed January 3, 1916. Serial No. 91,881. PUBLISHED FEBRUARY 19, 1918.

121,561. CAPSULES FOR DISEASES OF THE URINARY ORGANS AND BLADDER. EDWARD J. MOORE SONS, New York, N. Y.
Filed November 25, 1916. Serial No. 99,554. PUBLISHED FEBRUARY 6, 1917.

121,562. CANDY. NOVELTY CANDY CO., Chicago, Ill.
Filed March 28, 1917. Serial No. 102,528. PUBLISHED FEBRUARY 19, 1918.

121,563. MINERAL WATER. LOUISE A. PAGE, Saterville Springs, N. Y.
Filed January 13, 1917. Serial No. 100,588. PUBLISHED FEBRUARY 13, 1917.

121,564. CERTAIN NAMED RUBBER GOODS. EUGENE PEARL, New York, N. Y.
Filed November 15, 1917. Serial No. 107,399. PUBLISHED FEBRUARY 19, 1918.

121,565. HAMS, BACON, LARD, AND SAUSAGE. LOUIS PFAELZER & SONS, Chicago, Ill.
Filed September 27, 1916. Serial No. 98,270. PUBLISHED FEBRUARY 19, 1918.

121,566. ELECTRIC SWITCH-LOCKING DEVICES. PRINGLE ELECTRICAL MFG. COMPANY, Philadelphia, Pa.
Filed November 24, 1916. Serial No. 99,526. PUBLISHED JANUARY 8, 1918.

121,567. CERTAIN NAMED GAMES, TOYS, AND SPORTING GOODS. WILLIAM READ & SONS, INC., Boston, Mass.
Filed July 6, 1917. Serial No. 104,891. PUBLISHED FEBRUARY 19, 1918.

121,568. ALFALFA, ALFALFA-MEAL, AND PINTO-BEANS. SOUTHERN COLORADO LUMBER CO., Trinidad, Colo.
Filed July 30, 1917. Serial No. 105,363. PUBLISHED FEBRUARY 19, 1918.

121,569. CUTTER-CASES, REAMER-CASES, DRILL-CASES, DRILL-CASE BASES, AND DRILL-BLOCKS. UNION TWIST DRILL CO., Athol, Mass.
Filed October 31, 1917. Serial No. 107,078. PUBLISHED DECEMBER 11, 1917.

121,570. FLOUR MADE FROM WHEAT. WARNER, MOORE & CO., Richmond, Va.
Filed June 28, 1917. Serial No. 104,739. PUBLISHED FEBRUARY 19, 1918.

121,571. MEDICINE USED FOR PREVENTING AND RELIEVING CERTAIN NAMED DISEASES. WILLIAMS BROS. CHEMICAL CO., St. Louis, Mo.
Filed October 1, 1917. Serial No. 106,548. PUBLISHED FEBRUARY 5, 1918.

121,572. TWINES, CORDAGE, MANILA, HEMPEN, TARRED, COTTON, SISAL, JUTE, LINEN, AND BRAIDED ROPE. FRANK W. WINNE & SON INCORPORATED, Philadelphia, Pa.
Filed November 16, 1917. Serial No. 107,421. PUBLISHED FEBRUARY 19, 1918.

TRADE-MARK REGISTRATIONS RENEWED.

15,422. TABLE AND DAIRY SALT. DIAMOND CRYSTAL SALT COMPANY, St. Clair, Mich.
Registered May 8, 1888. Renewed May 8, 1918.

15,731. NEEDLES. HENRY MILWARD & SONS, Redditch, England; Henry Milward & Sons, Limited, assignee.
Registered July 31, 1888. Renewed July 31, 1918.

LABELS

REGISTERED MAY 7, 1918.

20,608.—*Title:* "AMERICAN SPECIAL." (For Wheat-Flour.) THE RUSSELL MILLING COMPANY, Russell, Kans. Filed March 22, 1918.

20,609.—*Title:* "IVRIPIC." (For Toothpicks.) WAUSAU MANUFACTURING COMPANY, Wausau, Wis. Filed April 3, 1918.

20,610.—*Title:* "VEGETABLE COMPOUND WITH VIBURNUM." (For a Medicine.) DUPAR & COMPANY, Des Moines, Iowa. Filed December 5, 1917.

20,611.—*Title:* "AROMAS." (For Cigars.) MANILA COMMERCIAL CO., Manila, Philippine Islands. Filed March 1, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE THE AMERICAN SUGAR REFINING COMPANY.

Decided February 4, 1918.

TRADE-MARKS—DESCRIPTIVE—"KANELASSES" FOR MOLASSES.

The word "Kanelasses" applied to cane-molasses is clearly descriptive. The law cannot be "avoided by merely resorting to phonetic spelling."

Mr. F. L. Fishback and *Mr. Edwin S. Hall* for the appellant.

Mr. T. A. Hostetler for the Commissioner of Patents.

ROBB, *J.:*

Appeal from a decision of the Patent Office denying registration of the word "Kanelasses" as a trade-mark for food-syrup.

The syrup to which this mark is applied is made from sugar-cane. We think the test is whether the words "cane molasses" would be registerable. Obviously they would not, for these words would aptly describe applicant's product, which is cane-molasses or cane-syrup. We have repeatedly said that the law prohibiting such registrations could not be avoided by merely resorting to phonetic spelling. The mark "Kanelasses" conveys, and obviously was intended to convey, to the purchasing public definite information as to the character of the product sold under it. Certainly any producer of cane-molasses would be entitled to sell it under that name.

It follows, therefore, that the Patent Office properly refused registration to this applicant. The decision is affirmed.

Affirmed.

Court of Appeals of the District of Columbia.

CRAGG *v.* STRICKLAND.

Decided March 4, 1918.

INTERFERENCE—PRIORITY—DILIGENCE.

Where S. completed drawings of the device of the issue just prior to C.'s entry into the field and immediately commenced the construction of a machine and was diligent until the filing of his application, which was a few months after C. filed his application, *Held* that priority was properly awarded to S.

Mr. C. J. Williamson for the appellant.

Mr. R. F. Rogers for the appellee.

ROBB, *J.:*

This is an appeal from concurrent decisions of the Patent Office tribunals in an interference proceeding in which priority of invention was awarded Strickland.

The proceeding is novel in that there is involved but a single count, reading as follows:

In a tobacco stemming machine, the combination with means for feeding the leaves, of means engaging and acting on the stem butts for separating the latter and passing them singly to a stemming machine.

The invention relates merely to a feeding mechanism, as tobacco-stemming machines were old. Cragg entered the field early in June, 1905, and his application was filed two months later or on August 5, 1905. For some time previous to Cragg's date of conception Strickland had been endeavoring to perfect an improved stemming-machine, of which the feeding mechanism of the issue was to be a part. There is evidence that drawings of this stemming-machine and including the device of the issue were completed just prior to Cragg's entry into the field and that immediately thereafter the construction of a machine in accordance therewith was commenced and that this work progressed without interruption until the filing of the Strickland application early in December of 1905. Each of the tribunals of the Patent Office has ruled that this amounted to diligence, and this ruling we accept. There is no doubt that Strickland was the first to conceive the invention and, while it is true that work on an independent device does not constitute diligence, it does not necessarily follow that because one applicant has completed his invention in a given time the other will be charged with a lack of diligence if he exceeds that time in perfecting his embodiment of the invention. Where the claim is general, as here, one embodiment may be more complicated than another. Certainly we are not prepared to say, under the evidence before us, that Strickland was not proceeding in good faith to complete his embodiment when Cragg entered the field, nor do we find him lacking in reasonable diligence from that time until the filing of his claim a few months later.

The decision is affirmed.

Affirmed.

Supreme Court of the United States.

ROCK SPRING DISTILLING COMPANY AND ROSENFIELD *v.* W. A. GAINES & COMPANY.

Decided March 18, 1918.

1. TRADE-MARKS—PRIOR ADJUDICATION—SIMILAR GOODS.

Blended whisky and straight whisky being goods of the same descriptive properties, a decree based on the use of the trade-mark on blended whisky is conclusive between the parties on the question of its use on straight whisky.

2. SAME—SAME—"OLD CROW" WHISKY.

Where there is pleaded in bar a previous decision in a suit by the present plaintiff against one H. for alleged infringement of the trade-mark, in which decision the court had held that the defendant H. had been prior in adoption and use of the work "Crow" or the words "Old Crow" employed as a descriptive term in dealing with whisky and continued to a limited extent up to the time of the institution of the suit in good faith, and the defendant was not guilty of infringing, it is now held that that prior adjudication was conclusive as between G. and the present defendant, who is privy with H., the previous defendant, and the previous decision did not merely adjudge a defensive right to H. merely extending to the territory and trade of that previous defendant at the time the previous bill was filed. It had, in fact, adjudged title to the party H. in view of previous adoption and use.

ON WRIT of certiorari to the United States Circuit Court of Appeals for the Sixth Circuit.

STATEMENT OF THE CASE.

This is a bill in equity brought by the Gaines Company against the Rock Spring Company to restrain the latter from using the trade-mark of the former. The trade-mark is registered and is employed by the Gaines Company to designate a brand of straight rye or straight Bourbon whisky manufactured by that company.

The following are the facts of the bill, stated narratively: The Gaines Company is the owner of a whisky-distillery in Woodford county, Ky., known and named as the Old Crow Distillery. It is the only one in the State that is or ever has been designated by the name of "Crow" or "Old Crow."

Its product has been at all of the times mentioned in the bill straight rye and straight Bourbon whisky and to it there has at all times been applied the trade-mark consisting of the words "Old Crow" by being imprinted or branded on the wooden box containing the whisky and imprinted upon labels affixed to bottles containing the whisky. The trade-mark is now and for many years past has been used by the company and its predecessors in commerce among the States.

On February 26, 1909, it filed in the Patent Office, in pursuance of the act of February 20, 1905 (33 Stat., 724), in due form and under the conditions required, an application for registration of the trade-mark and a certificate of registration for the same was duly issued and for many years past has been used by the company as a trade-mark for its straight rye and straight Bourbon whisky.

The Gaines Company, availing itself of certain acts of Congress, began and has ever since maintained the bottling of the "Old Crow" in bond and it was then and has ever since remained the only "Old Crow" whisky bottled in bond and has an extensive sale throughout the United States and in foreign countries; and when so bottled in bond it is known as and called "Old Crow Bottled in Bond," is so marked, and commands a high price.

The Rock Spring Company is a corporation, has a distillery in the county of Daviess, Ky., and is the owner of a distillery situated therein known as Distillery No. 18, operated by Silas Rosenfield, one of the defendants.

The Rock Spring Company, in fraud of the Gaines Company's rights and in infringement of its trade-mark, made or caused to be made and sold or caused to be sold in Kentucky a certain spurious straight Bourbon whisky, not the product of the Gaines Company, and branded the same with the words "Celebrated Old Crow Whiskey Bottled in Bond," have caused the same to be bottled in bond, have applied to the labels thereon the words "Old Crow" in script type, and have caused the same to be sold and transported in interstate commerce, and this with the intent to mislead and deceive the public, and are doing so and will continue to do so unless restrained.

An injunction is prayed and an accounting.

Demurrers were filed by the Rock Spring Company and Rosenfield, which were overruled, and they then answered, pleading a prior adjudication based upon the following alleged facts: A suit was brought in the United States Circuit Court for the Eastern Division of the Eastern District of Missouri by W. A. Gaines & Company against Abraham M. Hellman and Moritz Hellman charging infringement of the trade-mark and unfair competition. The bill was subsequently amended making Max Kahn, administrator, with will annexed, of the estate of Abraham M. Hellman, deceased, a party to the suit. Upon the issues framed a decree was entered in favor of the complainants, an injunction granted and an accounting ordered.

The decree was reversed by the United States Circuit Court of Appeals for the Eighth Circuit with directions to dismiss the bill on the ground that the evidence clearly showed that the predecessors in business of the appellants therein had adopted the words "Old Crow" as a trade-mark for whisky as early as the year 1863 and the evidence failed to show that the predecessors of the Gaines Company had used the words as a trade-mark prior to the year 1870.

A petition for certiorari to review the decision was denied by the Supreme Court of the United States.

Other proceedings were had in the suit pending its appeal and afterward. The suit, however, was finally dismissed on the merits because of the decision of the court of appeals and the action of the Supreme Court of the United States.

Defendants are in privity with the parties recovering under those decisions and decrees and are manufacturing whisky under contracts of agency from them or their successors and neither have nor claim any right except through such contract.

The Hellman Distilling Company filed a petition to be permitted to intervene, which was denied. (— Fed., —.)

After hearing, a decree was entered sustaining the plea of former adjudication based on the decree of the District Court for the Eastern District of Missouri and accordingly and for that reason the bill of complaint, so far as it sought relief for any infringement of the trade-mark "Old Crow" in connection with its use on whisky was dismissed. And it was further decreed that the registration of the trade-mark July 20, 1909, could not and did not invalidate or nullify the estoppel.

The decree was reversed by the circuit court of appeals and thereupon this certiorari was applied for and allowed.

Mr. William T. Ellis and *Mr. Luther E. Smith* for the petitioners.

Mr. Daniel W. Lindsay, Mr. James L. Hopkins, and *Mr. Edmund F. Trabue* for the respondent.

Mr. Justice MCKENNA, after stating the case as above, delivered the opinion of the Court.

The decree of the District Court for the Eastern District of Missouri, directed by the decision of the United States Circuit Court of Appeals for the Eighth Circuit, is pleaded in bar, and whether it is such depends upon the issues that were made or passed upon in those courts.

The bill of complaint in the case alleged that in 1835 one James Crow (he is the James Crow of this suit) invented and formulated a novel process for the production of whisky which he did not patent or

seek to patent but kept for his own use until his death in 1855.

During all of the time after 1835 the whisky so produced was known and styled as "Old Crow" whisky and the designation was adopted and used as a trade-mark.

After the death of Crow one William F. Mitchell, to whom Crow had communicated his secret process, continued the distillation so designated and in 1867 a partnership, styled Gaines, Berry & Co., obtained possession of the distillery wherein the whisky distilled by the indicated process continued to be produced by the same process until the partnership was succeeded by W. A. Gaines & Co., and the latter company succeeded also to all of the partnership assets of the other and continued to produce the whisky until the incorporation of the complainant, when all these assets were acquired by it.

When the name "Old Crow" was applied by Crow it was a valid trade-mark and since its adoption it has always been applied to the whisky produced by the indicated secret process, and since that time has indicated to the public whisky distilled on Glenn's Creek, in Woodford county, Ky., and nowhere else.

Complainant caused the same to be registered in the Patent Office under the provisions of the act of Congress so providing. The value of the trade-mark is $500,000 and an integral part of the good-will of complainant's business and the whisky is of greater value than any other of equal age.

Since January, 1903, the defendants, in violation of complainant's rights and good-will, has made or caused to be made and sold in the city of St. Louis a certain spirituous or alcoholic fluid not made under complainant's process and has labeled it with the words "Old Crow" without license from the complainant and against its consent. Such unlawful use will greatly lessen the value of complainant's business and good-will, and complainant is without adequate remedy at law.

There was the usual prayer for an accounting and an injunction.

There was a supplemental bill to the same effect, but charging that A. M. Hellman & Co. had become the successors of the original defendants and had continued the acts alleged in the original bill.

To the bill the defendants answered, with denials, and alleged the use of the word "Crow," "Old Crow" and "J. W. Crow" in connection with their own business upon packages of whisky and in their and their predecessor's business from 1863 and prior thereto; that the whisky sold by complainant was an unrefined, harmful and deleterious article and that the whisky sold by them was a brand largely free from impurities.

The defendants also filed a cross-bill which, however, was not insisted upon.

These, then, were the issues, and upon them and the evidence adduced to sustain them the circuit court entered a decree establishing complainant's right to the words "Old Crow" as a trade-mark, enjoined the use thereof by defendants and found them guilty of unfair competition in business and ordered an accounting. The circuit court of appeals reversed the decree.

The latter court made a careful review of the evidence, denominating it a mass of the relevant and irrelevant, and felt that it was not necessary to consider the comparative excellence of the whiskies, and remarked that the evidence did—

not show that Glenn's Creek in any way entered into the composition of the whisky—

and that—

there was no secret about the process employed by Crow nor did it differ materially from that employed by every other distiller of the same period.

To the objection that the "designative words" were rarely used by the Hellmans and that their product was of inferior quality, the court replied that the right to use could not be measured by the extent to which the Hellmans employed it, "whether more or less frequently," nor—

by the overshadowing comparative amount of the complainant's (Gaines & Company's) sales under the designation "Old Crow" whisky, nor by asserted superiority of its product.

The court concluded as follows:

(1) That inasmuch as the defendants' predecessors in business prior to the use or the adoption of the designative word "Crow" or the words "Old Crow" as a trade-mark, employed those words in descriptive terms in connection with their business as dealers in whisky in St. Louis, Mo., and said predecessors and the defendants so continued to use the same, to a limited extent, up to the time of the institution of this suit, in good faith, they are not guilty of infringing the complainant's claimed trade-mark; and (2) that the defendants are not guilty of having engaged in unfair competition with the complainant in the prosecution of their business.

It will be observed that the issues in that case were the same as those in the present case as to the right to the use of the word "Crow" with any of its qualifications. But in this case there is another ground of recovery alleged, that is, the application for and the receipt of the certificate of registration for the word as a trade-mark for straight rye and straight Bourbon whisky. The district court, however, adjudged that the decree of the circuit court in Missouri and its affirmance by the circuit court of appeals constituted a bar to this suit. To the judgment of the Circuit Court of Appeals of the Sixth Circuit, reversing the action of the district court, this certiorari is directed.

The circuit court of appeals, however, did not yield to all of the views of the Gaines Company. It refused to decide, as urged to do, that the defendants in this suit were not in privity with the defendants in the other and it rejected the contention that the use of the trade-mark established in the Hellman Company for a blended whisky was not an adjudication of the right to use it upon a straight whisky. In the rulings on both contentions we concur. The first needs no comment; we adopt that of the court on the second. The court said that—

whatever the extended classifications and subclassifications of the Patent Office practice may contemplate, neither the common law nor the registration statute can intend such confusion as must result from recognizing the same trademark as belonging to different people for different kinds of the same article. Established trademarks directly indicate origin; but if they have any value, it is because they indirectly indicate kind and quality; and to say that the seller of a blended whisky might properly put upon it a mark which was known to stand for a straight whisky, or vice versa, would be to say that he might deceive the public not only as to the origin but also as to the nature and quality of the article.

The philosophy of this might be questioned. But it seems to have become established, and, however it may be disputed in reason, there is an opposing consideration. As said by Circuit Judge Sanborn in *Layton Pure Food Co.* v. *Church & Dwight Co.*, (C. C. A., 182 Fed., 35, 39:)

> Uniformity and certainty in rules of property are often more important and desirable than technical correctness.

And this reasoning prevailed with the circuit court of appeals which, after citing cases, said that it was forced to think—

> that whatever was adjudicated regarding complainant's title to the trademark applies to its use of both kinds of whisky.

And, of course, conversely we may say that, whatever was decided against its title to its trade-mark applies to its use on both kinds of whisky. In other words, if defendants were adjudged to have title to the words "Crow" or "Old Crow" on blended whisky, they have a right to use it on straight whisky without infringing any right of complainant. We come back, therefore, to the question as to what was adjudged in the prior suit.

To this question the Court of Appeals of the Sixth Circuit gave great care and in an opinion of strength decided the negative of it. The court, in concession to the argument, assigned a prior use to the Hellmans, but expressed the view that the existence of such—

> general or *prima facie* exclusive right is not inconsistent with an inability to enforce it against some persons and under some circumstances.

And it was added:

> Instances may arise where the affirmative conduct or the laches of the first appropriator, and with reference to what he was at first entitled to call an infringement, has been such that on the principles of estoppel or the rule of laches a court of equity cannot tolerate that he should enforce against the later user the right which might have been originally perfect. * * * Under these considerations and upon reference to the pleadings and the proofs in the Hellman case, we conclude that the latter case is of the class where the refusal to give an injunction to the first appropriator of the mark may be justified upon the ground of his laches or estoppel; and so this ground of support must be considered in determining what is the true basis of that decree.

The court hence concluded that it, the decree, did not adjudge title to the Hellmans but adjudged them a "defensive right and nothing more," and, explaining the right, the court said that it—

> does not extend to any whisky not mixed or blended so as to be of the same general type as that to which defendants (Hellmans) had been making or to trade or territory in which they were not selling when the bill was filed.

We are not able to assent. The court admitted that the language in the body of the opinion of the Circuit Court of Appeals for the Eighth Circuit is consistent with the interpretation petitioners put upon it, that is—

> that the trademark, in its general, *prima facie*, affirmative aspect, belonged to the Hellmans prior appropriation,

but the court added that the last paragraph of the opinion indicated—

> that the two judges (only two sitting) did not unite in putting the decision on that ground.

We think this was an oversight. The opinion was that of the court, though delivered by one judge, and the conclusion was the conclusion of the court and necessarily had to be, else there would have been no decision or decree. And it was thoroughgoing. It is manifest from the excerpts we have made from the opinion that the judgment of the court was not limited as to time or territory; nor did the pleadings so limit it. The complainant in that case (respondent here) alleged that it was the sole and exclusive owner of the trade-mark and had used it from 1835 to the present time, being virtually the successor of the first producer of the product.

Defendants (petitioners) contested the claim and asserted a right in themselves based on prior adoption and continuous use, and that right was adjudged to them.

Decree of the circuit court of appeals reversed and that of the district court affirmed.

THE OFFICIAL GAZETTE OF THE United States Patent Office.

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Patents	824—No.	1,265,718 to No.	1,266,541,	inclusive.
Designs	16—No.	52,033 to No.	52,048,	inclusive.
Trade-Marks	117—No.	121,573 to No.	121,689,	inclusive.
Labels	None.			
Prints	None.			
Reissues	2—No.	14,471 to No.	14,472,	inclusive.
Total	960			

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 16, 1918.

Greek American Confectionery Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Jacobs Candy Company, Ltd., 827–835 Carondelet street, New Orleans, La., for registration of a trade-mark and trade-mark registered September 20, 1910, No. 79,572, to the Greek American Confectionery Co., New York, N. Y., and a notice of such declaration sent by registered mail to said Greek American Confectionery Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Greek American Confectionery Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 8, 1918.

The Farmers' Preserving Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Miner, Rend & Tullock, 91–115 State street, New Haven, Conn., for registration of a trade-mark and trade-mark registered August 10, 1909, No. 74,808, to The Farmers' Preserving Company, of Rising Sun, Del., and a notice of such declaration sent by registered mail to the said The Farmers' Preserving Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said The Farmers' Preserving Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

Disclaimer.

969,738.—*Harold E. White*, Schenectady, N. Y. CONTROL OF ELECTRICALLY-OPERATED SWITCHES. Patent dated September 6, 1910. Disclaimer filed May 17, 1918, by the assignee, *General Electric Company*.

Enters this disclaimer—

"As to claims 1 and 19 of said patent, which claims read as follows:

"1. In combination with a power circuit, a plurality of contactors intended for operation in succession to effect certain connections in said power circuit, auxiliary switches coöperating with certain of said contactors each arranged to control the operation of a succeeding contactor, means for holding each auxiliary switch open while its coöperating contactor is open, an electromagnet coöperating with each auxiliary switch for controlling the closing of said auxiliary switch, and means for maintaining the auxiliary switch substantially at rest during the closing operation of the coöperating contactor.

"19. In combination with a power circuit, a plurality of contactors intended for operation in succession to effect certain connections in said power circuit, control circuits for said contactors, auxiliary switches each coöperating with a contactor and arranged to control the control circuit of a succeeding contactor, a connection between each contactor and its auxiliary switch whereby when the former is open the latter is held open and when the former is closed the latter is permitted to close, an electromagnet the energization of which depends upon the current in the power circuit arranged to prevent the closing of said auxiliary switch if the current in the power circuit exceeds a certain value, and means independent of the magnitude of the current in the power circuit for maintaining the auxiliary switch open until the closing of the corresponding contactor and until the increase in current in the power circuit, due to the closing of that contactor, has taken place."

Adverse Decisions in Interference.

PATENT NO. 1,247,274.

On April 19, 1918, a decision was rendered that John Hoferle was not the first inventor of the subject-matter covered by claim 2 of his Patent No. 1,247,274, subject, "Door check and closer," and no appeal having been taken within the time allowed such decision has become final.

APPLICATIONS UNDER EXAMINATION.

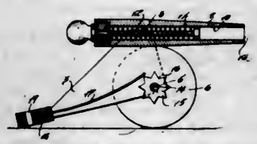
Condition at Close of Business May 10, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 9	Apr. 11	174
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Feb. 8	Feb. 23	275
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 18	Mar. 26	134
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Mar. 18	Apr. 23	153
167	5. Bookbinding; Harvesters; Jewelry; Music	Feb. 16	Mar. 21	239
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilisers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Dec. 19	Nov. 21	402
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Jan. 18	Mar. 6	391
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Mar. 20	Mar. 26	326
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Nov. 15	Apr. 22	423
235	10. Carriages and Wagons; Motor Vehicles	Jan. 12	Apr. 2	509
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Jan. 30	Apr. 17	229
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Jan. 19	Feb. 27	609
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Jan. 17	Mar. 28	503
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 8	Mar. 18	178
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Apr. 10	Apr. 13	230
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Dec. 29	Jan. 12	543
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Mar. 15	Apr. 6	122
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 12	Feb. 20	368
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Feb. 12	Feb. 16	416
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	Apr. 3	Apr. 8	218
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 17	Mar. 9	239
249	22. Aeronautics; Firearms; Ordnance	Jan. 23	Apr. 2	278
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Feb. 18	Mar. 26	315
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	Apr. 8	Mar. 18	176
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	Mar. 20	Apr. 1	159
105	26. Electricity, Generation; Motive Power	Nov. 16	Mar. 18	494
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Feb. 25	Mar. 25	297
225	28. Internal-Combustion Engines	Jan. 4	Mar. 29	435
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 2	Mar. 1	430
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Jan. 26	Apr. 12	377
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Feb. 16	Mar. 4	220
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Nov. 1	Apr. 8	681
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Mar. 15	Apr. 2	172
804	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	Mar. 29	Apr. 26	90
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Dec. 29	Jan. 26	537
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Mar. 16	Apr. 9	536
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Nov. 23	Jan. 10	665
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	Apr. 16	Mar. 27	111
220	39. Water Distribution; Multiple Valves	Jan. 18	Feb. 25	379
273	40. Beverages; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Feb. 16	Mar. 9	468
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Feb. 5	Feb. 23	324
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling	Nov. 26	Jan. 4	660
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Feb. 1	Apr. 1	245
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Mar. 27	Mar. 27	167
379	45. Clutches; Lubrication; Motors; Railway Brakes	Jan. 29	Jan. 26	360
	Oldest new case, Nov. 1; oldest amended, Jan. 4.			
	Total number of applications awaiting action			15,337
163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	Apr. 2	Apr. 27	600
	Designs	Mar. 15	Mar. 21	475
	Labels and Prints	Mar. 21	Mar. 26	182

PATENTS

GRANTED MAY 14, 1918.

1,265,718. TOY. FRANK T. AHERN, New York, N. Y., assignor to Ferdinand Strauss, Yonkers, N. Y. Filed Apr. 7, 1917. Serial No. 160,376. (Cl. 46—46.)



In a device of the kind described, in combination, a carriage consisting of a flat base portion, a pair of laterally spaced triangular frame members integrally formed upon said flat base portion of said carriage, an axle passing through the lower front ends of said frame members, a cannon barrel mounted between the upper front ends of said frame members, a star wheel fixed upon said axle between said frame members, a pair of wheels secured to the free ends of said axle for rotating the latter, and a yieldable elongated tongue, having one end fixedly secured within said flat base portion, said tongue extending longitudinally between said frame members and engaging the teeth of said star wheel.

1,265,719. SNAP-FASTENER. INGEMAR ANDERSON, Ridgefield Park, N. J. Filed Feb. 26, 1917. Serial No. 150,976. (Cl. 24—217.)



1. A snap fastener comprising a flat ring provided with circumferentially extending slots and spring elements, said spring elements being depressed circumferentially below the plane of the body of said flat ring at the portion thereof in which said circumferential slots are located, and provided with a central opening therethrough and radially extended slots extending from said central opening to said circumferentially extended slots, and a complementary piece provided with a projection thereon of larger diameter than said central opening, adapted to be inserted therethrough.

[Claims 2 and 3 not printed in the Gazette.]

1,265,720. NOTE-READING DEVICE. ARMIDA ANDREE, Manistee, Mich. Filed Aug. 5, 1916. Serial No. 113,401. (Cl. 84—85.)



A music chart made of flannelet which has upon it one large staff consisting of movable strips of tape, and figures constructed of blotting paper, which adhere to the flannelet.

1,265,721. NECKTIE-FORM. ALFRED AUDIFFRED, Virginia City, Mont. Filed Apr. 23, 1917. Serial No. 163,804. (Cl. 2—84.)

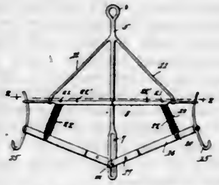


1. A tie form comprising an approximately T shaped body portion, having its vertical stem bulged outward and transverse top bar curved backward; pinch-slots pierced in the vertical stem to receive a hold-cord; and a hold-cord passed through the pinch-slots in the vertical stem and adapted for engagement with the collar button.

3. A tie form comprising a vertical stem bulged outward at the center; a transverse top bar connected medially with said stem; and a cord looped over the ends of the transverse top bar to illustrate the method of looping the necktie and as means of attachment to the collar button.

Claims 2, 4, and 5 not printed in the Gazette.]

1,265,722. GAMBREL. FRED C. BAARS, Elkader, Iowa. Filed Feb. 6, 1918. Serial No. 215,621. (Cl. 17—80.)



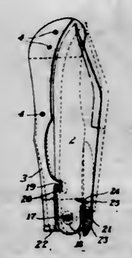
1. In a gambrel, a frame comprising a hanger bar and a cross bar suitably connected, the cross bar having an aperture near each end, levers, means for pivotally supporting the levers intermediate their lengths, means for oscillatably holding the inner ends of the levers, and a hook pivotally connected to each lever, each of the said hooks having curved shanks slidable in an aperture of the cross bar.

2. In a gambrel, a hanger bar and a cross bar suitably connected, said cross bar having a slot intermediate its length and recesses on the upper edge of the slotted portion of the said cross bar, said cross bar having an aperture near each end, levers, means for pivotally supporting the levers from the cross bar, means for oscillatingly connecting the levers to the hanger bar, hooks pivotally connected to the levers, and curved shanks on the said levers guided in the apertures of the cross bar.

3. In a gambrel, a hanger bar and a slotted cross bar having recesses in its upper edge, links having T-heads fitted in the recesses, and said links extending through the slot of the cross bar, levers pivoted to said links, hooks pivotally connected to the levers, means connected to the hooks and guided by the cross bar for controlling the action of the hooks, and means for guiding the inner ends of the levers.

4. In a gambrel, a hanger bar and a slotted cross bar having recesses in its upper edge, links having T-heads fitted in the recesses, said links extending through the slot of the cross bar, levers pivoted to the said links, hooks pivotally connected to the lever, means connected to the hooks and guided by the cross bar for controlling the action of the hooks, means for guiding the inner ends of the levers, and a yieldable member on each link between a lever and the cross bar.

1,265,723. KNIFE. GUSTAV A. BADER, Rochester, N. Y. Filed Feb. 15, 1917. Serial No. 148,814. (Cl. 30—10.)



1. A knife having in combination a blade spring, a blade coöperating with the spring, an interlocking connection between the blade and the spring for holding the blade against movement in one position, and means for moving one of the first two named parts bodily longitudinally and transversely to break such interlocking connection and also to reduce the tension of the spring on the blade in order to permit the blade to move to the other position.

2. A knife having in combination a blade spring, a blade coöperating with the spring, an interlocking connection between the blade and the spring for holding the blade in closed position, and means for moving one of said first two named parts bodily longitudinally and transversely for breaking such interlocking connection and also reduce the tension of the spring on the blade to permit the blade to move to open position.

3. A knife having in combination a blade spring, a blade coöperating with the spring, interlocking connection between said blade and the spring for holding the blade in open position and means for shifting bodily longitudinally and transversely one of said parts to reduce the tension of the spring on the blade and to permit the blade to swing to closed position.

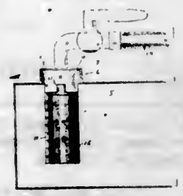
4. A knife having in combination a blade spring, a blade coöperating with the spring, interlocking connection between the blade and the spring for holding the blade in closed position, interlocking connection between the blade and the spring for holding the blade in open position, and means for shifting bodily longitudinally and transversely one of the first two named parts to reduce the tension of the spring on the blade to permit the blade to swing from either of its extreme positions to the other.

5. A knife having in combination a blade spring, a blade coöperating with the spring and means for shifting the pivotal axis of the blade toward and from the spring transversely of the length of the spring for decreasing the tension of the spring on the blade to permit the latter to swing more readily from open to closed position or vice versa.

[Claims 6 to 18 not printed in the Gazette.]

1,265,724. LIQUID-CONTAINER INDICATOR. WILLIAM W. BALCOM, Sioux City, Iowa. Filed Aug. 9, 1916. Serial No. 113,907. (Cl. 116—15.)

1. A filling signal for a liquid-containing tank having a liquid receiving opening in its top, comprising a tube extending from the opening to a point below the normal liquid level, the tube being substantially all inclosed by the tank, and having a side opening, and a whistle within the tube over the latter opening.



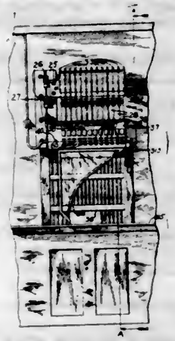
2. In a filling signal for a liquid container having an opening to admit liquid and eject air, an open ended tube adapted to be introduced into the opening and extend a distance below the normal liquid level, the side of the tube having an apertured portion below the normal liquid level, and an opening above the apertured portion, and a dished apertured plate secured to the side of the tube over said opening to afford a whistle sounded by air displaced by filling the container.

3. The combination with a liquid container, of a tube depending from the top thereof to a point below the normal liquid level and adapted to admit liquid into and eject air from the container, the side of the tube having an apertured portion below the normal liquid level and an opening above the apertured portion, and a dished apertured plate secured to the side of the tube and over the opening to provide a whistle sounded by air displaced by filling the container.

4. In a filling signal for a liquid container having an opening therein, a tube to extend through the opening a distance below the normal liquid level, adapted to receive a filling spout and having a whistle in its side actuated by air displaced in filling the container, and a guard within the tube and spaced from the whistle to keep the spout from contact with the whistle.

5. In a filling signal for a liquid container having an opening therein, a tube to extend through the opening a distance below the normal liquid level, adapted to receive a filling spout, and having a whistle in its side actuated by air displaced in filling the container, and members extending across the tube, and above and below the whistle to keep the spout from contact with the whistle.

1,265,725. TICKET-PRINTING MECHANISM. HENRY CHARLES BANWELL, London, and FREDERICK PHILLIPS, Bromley, England, assignors to The National Cash Register Company, Dayton, Ohio, a Corporation of Ohio, (incorporated in 1906.) Original application filed Dec. 20, 1915, Serial No. 67,807. Divided and this application filed July 24, 1916. Serial No. 110,948. (Cl. 101—66.)



1. In a machine of the class described, the combination with a feeding device common to a plurality of ticket strips, of a plurality of printing devices, one for each ticket strip, and carried by said feeding device, and means for selecting the strip to be fed by said feeding device and to be printed upon by the corresponding printing device.

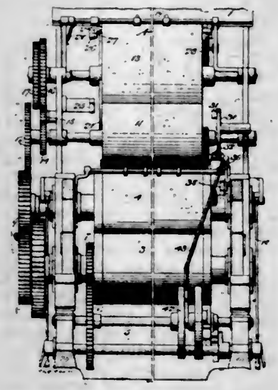
18. In a machine of the class described, the combination with a feeding device common to a plurality of ticket strips and normally out of feeding relation therewith, of a plurality of printing devices one for each ticket strip an carried by said feeding device, means for selectively establishing feeding relation between any desired strip and said feeding device, whereby the selected strip is fed by the feeding device and printed upon by the corresponding printing device, and means for operating the printing device for the selected strip.

27. In a machine of the class described, the combination with a plurality of ticket issuing mechanisms, each including a printing device, of individual inking devices normally out of inking position, a shaft carrying said inking devices, means for selectively moving the inking devices into inking position, the shaft being rotatable to move all of the inking devices together for the purposes described, and an arm normally locking said shaft against rotation.

38. In a machine of the class described, the combination with a main operating mechanism, of locking means therefor, a plurality of printing devices, one for each of a plurality of ticket strips and operated by the operating mechanism, an impression device for each ticket strip and normally out of coöperative relation with the corresponding printing device, said impression devices independently movable, manipulative means for moving the desired impression device into coöperative relation with the corresponding printing device, and means operated by the operated impression device for disabling said locking means, and constructed to retain the operated impression device in moved position during the operation of the machine.

[Claims 2 to 17, 19 to 26, and 28 to 37 not printed in the Gazette.]

1,265,726. SHEET-FEEDING MECHANISM FOR PRINTING-PRESSES. HOWARD M. BARBER, Stonington, Conn., assignor, by mesne assignments, to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1912. Serial No. 723,731. (Cl. 271—53.)



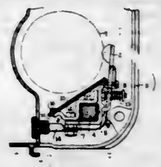
1. In a sheet feed rotary printing machine, high speed printing cylinders, a source of sheet supply and mechanism for insuring increased speed with accurate sheet register, comprising continuously moving means arranged to take the sheets from the source of sheet supply at a low speed and feed them to the printing cylinders at a high speed.

2. In a sheet feed rotary printing machine, high speed printing cylinders, a source of sheet supply and mechanism for insuring increased speed with accurate sheet register, comprising continuously moving means arranged to take the sheets from the source of sheet supply at a low speed and feed them to the printing cylinders at the surface speed thereof.

10. In a rotary printing machine, printing cylinders, a source of sheet supply and means for feeding sheets therefrom to the printing cylinders comprising a sheet feeding cylinder, a transfer cylinder and a geared connection including irregular gears between the transfer and sheet feeding cylinders.

[Claims 3 to 9 and 11 not printed in the Gazette.]

1,265,727. CIRCUIT-CONTROLLER. THOMAS E. BARNUM, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1916. Serial No. 89,859. (Cl. 200—24.)



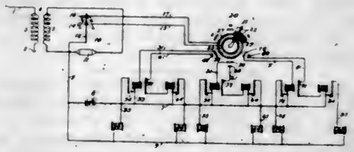
1. Contact supporting means for circuit controllers, comprising a base and a bracket having means to secure the same to said base, said bracket having mounting parts for alternative forms of contacts and being adjustable with respect to said base for positioning either of said mounting parts in a given relation with respect to said base.

3. Contact supporting means for circuit controllers comprising a supporting base, bracket sections to surround said base, one of said bracket sections having a bearing part and a stop part for the contact to be attached thereto and bolts securing said bracket sections together in a clamped relation upon said base, one of said bolts being extended to provide a stem for a tension device for the contact to be attached thereto.

9. In a circuit controller, in combination, a contact member, a supporting base, a sectional bracket to be clamped about said base, one section of said bracket having a bearing mounting and a stop for said contact, said sections having parts jointly constituting a support for an insulating shield, said bracket being further provided with a part for mounting an alternative form of contact and being readily shiftable with respect to said base for positioning of said last mentioned part.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,265,728. TELEGRAPH SYSTEM. JOHN HUME BALL, East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 12, 1917. Serial No. 180,168. (Cl. 178—33.)



1. In a telegraph system wherein the different characters of a message are represented by different combinations of alternating current impulses of various strengths, a line relay selectively responsive to impulses of different strength, in combination with a plurality of pairs of selecting relays, and distributer means for successively connecting said line relay to said pairs of selecting relays.

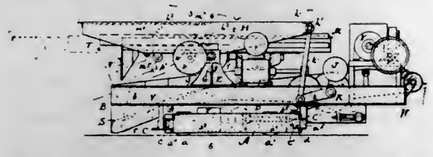
2. In a telegraph system wherein the different characters of a message are represented by different combinations of alternating current impulses of various strengths,

a line relay selectively responsive to impulses of different strengths, in combination with a plurality of selecting relays selectively responsive to the selective actuation of said line relay, and distributer means for successively connecting said line relay to said selecting relays.

3. In a telegraph system, a selectively responsive line relay, a plurality of relays associated in pairs, a distributer for including said relays in pairs with said line relay, and contacts controlled by a relay in each of said pairs of relays to disable the other relay of a pair.

4. In a telegraph system, a line relay selectively responsive to alternating currents of various strengths, a plurality of selecting relays associated in pairs, a distributer for selectively including said pairs of relays to permit an individual relay to be selected by said line relay, and switching means controlled by said distributer to prevent stray momentary currents from affecting the non-selected relay of a pair.

1,265,729. LOADING-MACHINE. FRANK BILLINGS, Cleveland, Ohio. Filed Jan. 12, 1911. Serial No. 602,176. (Cl. 193—49.)



1. In loading machinery, the combination of a rocker adapted to tilt upon a horizontal axis, and mechanism for tilting it, with a hoe having an extensible shank comprising an outer tubular member which is movably supported on said rocker and an inner member which telescopes into the outer member, a rack fixed to the outer member, a pinion supported by the rocker and engaging said rack, means for turning the pinion, a rack upon said inner shank member, a rack upon the rocker, and a pinion mounted in bearings on the outer hoe shank and engaging with the two last mentioned racks.

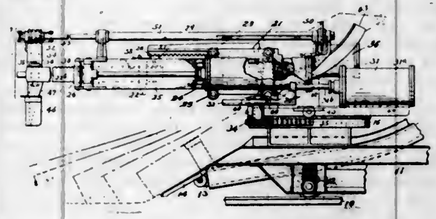
2. In loading machinery the combination of a rocker adapted to tilt upon a horizontal axis, a hoe shank movably supported by said rocker, means for moving said hoe shank, a counterbalance having a roller mounted at its rear end, grooved track irons fixed to the rocker for engagement by said roller, a pinion rotatably mounted upon the rocker, a rack fixed to the counterbalance engaging with said pinion, and means for driving said pinion.

3. In loading machinery, the combination of a wheel truck, a superstructure frame mounted theeron to move in a horizontal plane, an inclined apron fixed to the front end of said frame, a conveyer mounted on said frame and extending from the front to the rear end thereof and projecting at its front end beneath said apron, a rocker mounted on said frame and adapted to tilt on a horizontal axis, a hoe having a shank which is movably supported on said rocker, three independent motors, and mechanisms through which said motors may respectively swing the frame, tilt the rocker and operate the hoe.

[Claims 4 to 10 not printed in the Gazette.]

1,265,730. LOADING OR MINING AND LOADING MACHINE. FRANK BILLINGS, Cleveland, Ohio. Filed Sept. 3, 1912. Serial No. 718,191. (Cl. 193—49.)

1. In a machine of the character described, a wheeled frame adapted to run along a track, and provided at its lower front end with a material receiving element into which material is adapted to be deposited, a ram formed to resist heavy stresses transversely and longitudinally extending from the forward end of the machine, said ram adapted to be provided at its forward end with a working tool, said ram being mounted on the frame for reciprocating movements forwardly and rearwardly with the working tool traveling at a variable height substantially down to the plane of the track, and for swinging movement laterally to either side of the machine and vertically from a plane above the center of the machine to substantially the plane of the track, and means for imparting to said ram in any of said directions and between any of the limits stated movements of a gradual character or rapid strokes or blows whereby said ram may be employed for scraping material toward the frame or for delivering picking or hammering blows to material to be loosened or broken.



4. In a loading machine, a frame provided at its lower front end with a material receiving element, means for moving material laterally and rearwardly, comprising a hoe shank movably supported by the frame; a hoe supported on the shank so that it may be set or fixed at widely different angles with respect to the shank, and an adjusting member connected to the hoe for varying the angle of the hoe and for holding the same in any desired angular position with respect to the shank so that it will face in the direction the material is being moved whether the material is moved laterally or rearwardly.

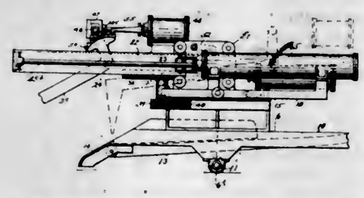
8. In a loading machine, a frame, a housing supported by said frame for rocking movement about a substantially horizontal axis, a ram mounted for reciprocating movement in said housing, means for rocking the housing and for reciprocating the ram, and guiding means for the ram comprising a member movable with the rim and cooperating with a relatively fixed part for gradually increasing the inclination of the ram as the ram is moved rearwardly in the housing when inclined upwardly.

10. In a loading machine, a wheeled frame provided at its forward end with an upwardly inclined apron and having a conveyer which extends from the apron lengthwise through the frame, a turntable mounted on the frame for rocking movement about a vertical axis, a cradle mounted on the turntable for rocking movement about a horizontal axis, a ram mounted to reciprocate in the cradle and adapted to be provided at its forward end with a working tool, said parts being so arranged that the ram may be moved forwardly and rearwardly with the rearward limit of movement substantially at the rear end of the apron and that the ram may be swung laterally to either side of the machine and may be swung vertically from a plane above the center of the machine down substantially to the plane or surface over which the machine is adapted to be run, fluid pressure motors, one connected to the turntable, one to the cradle, and one to the ram, and means for controlling said motors so that the latter may impart to the ram strokes of variable speed, length and power, forwardly and rearwardly, with the working tool traveling at a variable height which may be as low as the surface or plane over which the machine is adapted to be run, and laterally and vertically, whereby said ram may be given sharp quick strokes in any of said directions and between the limits stated, enabling the ram to be used for picking, hammering, or material breaking purposes, or whereby said ram may be given relatively slow movements so that loosened material may be scraped rearwardly toward the frame and up the apron to the conveyer.

[Claims 2 to 3, 5 to 7, and 9 not printed in the Gazette.]

1,265,731. LOADING OR MINING AND LOADING MACHINE. FRANK BILLINGS, Cleveland, Ohio. Filed Sept. 3, 1912. Serial No. 718,194. (Cl. 193—49.)

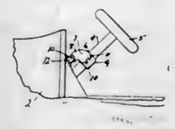
1. In a machine of the character described, a frame, an inclined apron at the lower front end of the frame and extending downwardly below the same, and means for moving material rearwardly along a level beneath the frame and thence up along said inclined apron, comprising a turntable supported on said frame for movement about a vertical axis, a ram mounted on said turntable for reciprocating movement forwardly and rearwardly, said ram being composed of two parts, the forward part being pivotally supported ont he rear part for swinging movement



vertically, and motive means for actuating the turntable, ram and the forward portion of the ram, the forward end of the ram being provided with a scraping tool having an unobstructed range of movement to the right or left of the axis of the machine, backwardly and forwardly toward and from the apron and vertically to and from substantially the plane of the lower end of the apron.

[Claim 2 not printed in the Gazette.]

1,265,732. AUTOMOBILE-LOCK. FLETCHER O. BOSWELL, Philadelphia, Pa. Filed July 13, 1917. Serial No. 180,265. (Cl. 70—90.)

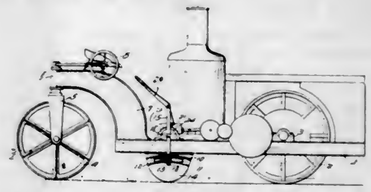


1. In combination, a vehicle having a steering post provided with a notch, a casing surrounding said post, said casing having a hole in alinement with the notch, a clamp comprising two hinged members, a semi-circular lug at the free meeting edge of each member having threads on its arcuate portion, said members having channels therein, in the region of the semi-circular lugs, said channels alining with the hole in the casing, and a pivoting lug projecting from one of said members, a bracket carried by the vehicle to which the clamp is pivoted by means of the last named lug, a lock support having threaded engagement with the semi-circular lugs for holding the clamp closed, and a combination lock carried by the lock support, the bolt of said lock registering with the channels, the hole in the casing and the notch in the steering post for locking the latter.

2. In combination, a vehicle having a steering post provided with a notch, a clamp comprising two hinged members, a semi-circular lug at the free meeting edge of each member, said members having a channel therein in the region of the semi-circular lugs, said channels alining with the notch in the steering post and a pivoting lug projecting from one of said members, a bracket carried by the vehicle to which the clamp is pivoted by means of the last named lug, a lock support surrounding the semi-circular lugs for holding the clamp closed and a lock carried by the lock support, the bolt of said lock registering with the channels and the notch in the steering post for locking the latter.

3. In combination, a vehicle having a steering post provided with a notch, a clamp comprising two hinged members, a semi-circular lug at the free meeting edge of each member, said members having channels therein in the region of the semi-circular lugs, said channels alining with the notch in the steering post and a pivoting lug projecting from one of said members, a bracket carried by the vehicle to which the clamp is pivoted by means of the last named lug, a lock support surrounding the semi-circular lugs for holding the clamp in a closed position, said lock support having a bolt opening therein communicating with the channels in the clamp members, a lock carried by the lock support, said lock being provided with a lock bolt adapted to register with the bolt opening in the lock support, the channels in the clamp members and the notch in the steering post for locking the latter and a key slidably mounted in the clamp and adapted to lie across the path of travel of the lock bolt when the latter is withdrawn from the notch int he steering post.

1,265,733. TANDEM-ROLLER ATTACHMENT. FRANK O. BROWN, Dallas, Tex., assignor of one-half to Bailey R. Anderson, Dallas, Tex. Filed May 9, 1917. Serial No. 167,585. (Cl. 94—4.)

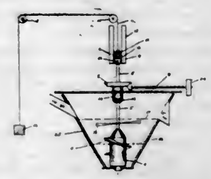


1. An attachment for tandem rollers including bearing plates depending from the sides of the tandem roller and provided with arcuate slots, a relatively small roller journaled for sliding movement in the slots so as to be adjusted longitudinally and vertically of the tandem roller, means for adjusting the relatively small roller, and means for holding the relatively small roller in a set position.

2. An attachment for tandem rollers including bearing plates depending from the sides of the tandem roller and having opposed arcuate slots therein, bearing boxes slidable in the slots and adjustable vertically with respect to the frame and longitudinally with respect to the front and rear rollers of the tandem roller, a relatively small ground engaging roller, spindles projecting from the ends of the small roller and journaled in the boxes so as to be adjusted with the boxes, manually operable means for adjusting the relatively small roller, and means for maintaining the small roller in various positions of adjustment.

[Claim 3 not printed in the Gazette.]

1,265,734. CLASSIFIER. WILLIAM A. BRUNKER, Salt Lake City, Utah. Filed Feb. 14, 1917. Serial No. 148,589. (Cl. 83—82.)

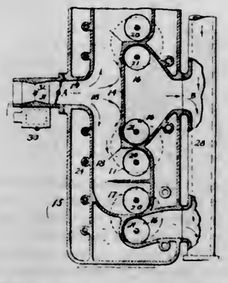


1. A classifier comprising a settling tank with inlet and overflow means at the top, a discharge orifice at the bottom, a bushing extending up into said tank, a revolving tubular valve yieldably supported for vertical movement and fitting loosely over said bushing, said valve carrying a worm propeller rigidly fastened to said tube and axially disposed around it, means for revolving said tubular valve, external weights applied so as to counterbalance said revolving valve.

2. A classifier comprising a settling tank with inlet and overflow means at the top and a sand discharge orifice

at the bottom, a vertical shaft or square cross-section having at its lower end a tube valve rigidly fastened to it, said tube being formed with a worm or spiral disposed around the outside remote from the lower end, a bushing extending through said discharge orifice and projecting above the bottom of said tank and being partly inclosed by said tube valve, a gear and pinion for imparting rotary motion to said vertical shaft, said gear having a square hole in the hub to receive said vertical shaft in such a manner that the shaft is free to move vertically with respect to said gear, a weight to counter-balance the weight of the shaft and its fittings, suitable connection between said weight and the upper end of said shaft to allow the shaft to revolve freely and move vertically up or down, means for agitating the solution above the sand level in the tank.

1,265,735. INTERNAL-COMBUSTION ENGINE. ALANSON P. BAUSH, Detroit, Mich. Filed Nov. 27, 1916. Serial No. 133,544. (Cl. 123—52.)



1. In a multiple cylinder internal combustion engine, the combination of an intake manifold which is in valve controlled communication with the several cylinders of the engine, means by which to heat a small portion only of the wall of said manifold, means to substantially prevent the spread of heat from said heated portion to other portions of the wall of the said manifold, and means to so direct the flow of the charge mixture in said manifold that the inertia of the relatively heavy unvaporized fuel content of said mixture will cause it to impinge against said heated portion of the wall of the intake manifold.

2. In a multi-cylinder internal combustion engine, the combination of a low velocity inlet manifold which discharges downward through valve controlled openings into the several cylinders of the engine, a carbureter whose air tube is horizontal and of smaller diameter than the inlet manifold and is connected with and is disposed at right angles to said inlet manifold, and a hot plate within the inlet manifold located opposite the juncture between it and the said air tube and in the path of the stream of air and fuel spray which is discharged by the air tube into the inlet manifold.

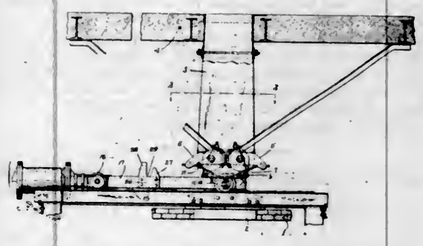
3. In a multi-cylinder internal combustion engine, the combination of a low velocity inlet manifold which discharges downward into the several cylinders, a carbureter whose fuel discharge jet opening is above the plane in which said manifold discharges into the cylinders, and whose air inlet tube is of smaller diameter than said inlet manifold,—which air tube is connected with and discharges into said inlet manifold at right angles thereto, and a hot plate within the inlet manifold opposite said air tube and in the path of the stream of air and fuel spray discharged from said air tube, and means to cool a large part of the walls of said inlet manifold.

4. In a multi-cylinder internal combustion engine, the combination with a substantially horizontal inlet manifold which discharges downwardly into the several cylinders through valve controlled openings thereto, a substantially horizontal air tube of smaller diameter than said manifold which discharges into said manifold at a point about midway between its ends, a carbureter connected with said air tube, and a hot plate within said manifold across the path of the stream of air and fuel spray which the air tube discharges into said manifold.

5. In a multi-cylinder internal combustion engine, the combination of the head plate which contains a longitudinally extended inlet manifold that is in valve controlled communication with the several cylinders, there being an inlet opening through the side of said head plate communicating with said inlet manifold, an exhaust passage within said head plate which is separated from the inlet manifold by a thin partition wall that is located opposite the inlet opening to said inlet manifold, and water jacketing spaces within said head plate surrounding the inlet manifold.

[Claims 6 to 9 not printed in the Gazette.]

1,265,736. FURNACE-CHARGING APPARATUS. STERLING H. BUNNELL, New York, and CHARLES GILBERT PETERSON, Lockport, N. Y., assignors to The Griscom-Russell Company, a Corporation of Delaware. Filed Jan. 26, 1916. Serial No. 74,424. (Cl. 214—35.)



1. In a furnace charging apparatus the combination of a fuel container arranged adjacent the charging hole of the furnace, a closure for said container supported in fixed position with relation to said container but movable to open and closed position, a closure for said charging hole separate and disconnected from said container, closure means for maintaining said container closure closed against the weight of its contents and means independent of said last named means and operating at a single movement to open the closure of the charging hole and immediately thereafter open the closure of the container.

2. In a furnace charging apparatus the combination of a fuel container arranged adjacent the charging hole of the furnace, a self-locking closure for the said container and a closure for said charging hole, and a reciprocating member having means operating at a single movement of said member to open the closure of said charging hole and immediately thereafter to open the closure of said container, and upon its return movement to shut the closures on both said container and said charging hole.

3. In a furnace charging apparatus a container for the fuel, a dumping door at the discharging end of said container, means for opening and closing said door comprising a toggle-mechanism arranged to be set when the door is closed to hold it in closed position, a furnace having its charging hole immediately beneath said container, a cover for said charging hole, and a control member having means adapted to engage and turn said toggle mechanism to open and close said door for removing and replacing said cover in sequence with the opening and closing of said container.

[Claims 4 to 13 not printed in the Gazette.]

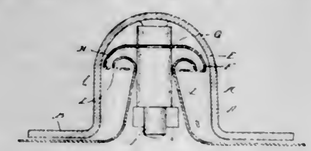
1,265,737. MOP. LAURA FRANCES BUNTING, Pocomoke City, Md. Filed Nov. 13, 1916. Serial No. 131,082. (Cl. 15—51.)

An article of the character described, comprising a handle provided with a threaded end and also having a longitudinal bore, a reservoir engaged in said bore and having a threaded end, a pair of centrally perforated disks forming a clamp, concentrically arranged inner and outer threaded ferrules on the inner disk and detachably engaged with the threaded ends of the reservoir and handle,



respectively, and a mop secured between the disks and having a packing centrally thereof and extended over the perforations in said disks.

1,265,738. CAR-ROOF. RICHARD W. BURNETT, Chicago, Ill. Filed June 29, 1917. Serial No. 177,689. (Cl. 108—5.4.)



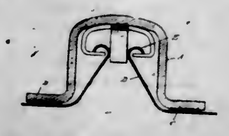
1. In a car-roof, the combination with inverted channel carlines, of roofing sheets having upstanding side flanges housed within the channel of the carline and laterally and outwardly extending portions at their upper ends, clips having depending and inwardly-turned portions for engaging and supporting the outwardly-turned portions of the sheet, and spacing means between the upstanding flanges of the sheets for holding the same in engagement with their supports.

5. In a car-roof, the combination with an inverted channel carline, of roofing sheets having upstanding flanges housed within the channel of the carline, said flanges terminating in laterally, outwardly extending portions, a hanger-bolt supported within the channel of the carline and depending between the flanges of said sheets, a clip apertured to be sleeved upon said hanger-bolt and provided with depending inwardly-extending portions at its opposite ends for engaging the laterally-extending portions of said flanges, a tubular spacer sleeved upon said hanger forming a shoulder for supporting said clip and a spacer between said flanges for retaining the same in engagement with the clip, and means detachably engaging said hanger for supporting said tubular sleeve.

6. In a car-roof, the combination with an inverted channel carline, of a roof sheet having an upstanding flange terminating in an outwardly-extending hook, and a shelf supported by the carline on which said flange rests.

[Claims 2 to 4 and 7 not printed in the Gazette.]

1,265,739. CAR-ROOF. RICHARD W. BURNETT, Chicago, Ill. Filed June 29, 1917. Serial No. 177,690. (Cl. 108—5.4.)



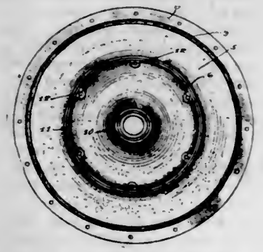
1. In a car-roof, the combination with an inverted channel carline, of roofing sheets having upstanding flanges housed within the channel of the carline, said flanges terminating in laterally, outwardly extending portions, and a supporting clip secured within the carline having depending end portions terminating in laterally, inwardly extending portions for engaging and supporting the laterally, outwardly extending portions of the sheets, said clips being also provided with a portion bendable to extend between the flanges of said sheets and form a spacer to retain the same in engagement with the clips.

2. In a car-roof, the combination with an inverted channel carline, of roofing sheets having upstanding flanges housed within the channel of the carline, said flanges terminating in laterally, outwardly extending portions, and a supporting clip having a portion fitting against and attached to the top portion of the carline, depending portions adjacent to the opposite sides of the carline terminating in laterally, inwardly extending portions and a portion extending from the attachment portion of the clip centrally of the carline, the inwardly-extending portions of said clip forming supports with which the laterally-extending portions of the sheet flanges may be engaged, and the central portion of the clip being bendable downward to form a spacer between said flanges, retaining the same in engagement with their supports.

5. In a car-roof, the combination with a carline of inverted channel section, of roofing sheets having upstanding flanges housed within said carline, means permanently attached to the carline within the channel thereof adapted for the detachable engagement of said flanges therewith to support said sheets, and means also permanently attached to the carline for locking said flanges from disengagement.

[Claims 3 and 4 not printed in the Gazette.]

1,265,740. WHEEL. ROBERT J. BURROWS and EDWIN B. ROSS, Buchanan, Mich., assignors, by mesne assignments, to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Jan. 2, 1915. Serial No. 200. (Cl. 21—69.)



1. A metal wheel, comprising a hub, a tire-supporting rim having a substantially flat tread portion and inwardly-directed substantially perpendicular flanges near the margins of such tread portion and integral therewith, oppositely-disposed curved members connected with the marginal portions of said flanges and extending therefrom toward and uniting with each other, forming an integral rim-structure box-like in cross-section, their convex surfaces being toward the tread, and means connecting said curved members with the hub.

3. A metal wheel, comprising a hub, a tire-supporting rim having a substantially flat tread portion and inwardly-directed substantially perpendicular flanges near the margins of such tread portion and integral therewith, oppositely-disposed curved members connected with the marginal portions of said flanges and extending therefrom toward and uniting with each other, forming an integral rim-structure box-like in cross section, their convex surfaces being toward the tread, and a continuous web connecting said curved members with the hub, said web being connected with the hub by integral oppositely-curved members.

5. A metal wheel, comprising an integral box-like rim-structure substantially rectangular in cross-section, the

inner side thereof being formed by two curved members joined together at an angle, the convex surfaces of said members being toward the tread, a web cast integral with said curved members at their juncture, a hub, and two oppositely curved members integral with the hub and joined integrally together and to said web.

7. A metal wheel, comprising a hub, a tire-supporting rim having a substantially flat tread portion and inwardly-directed substantially perpendicular flanges near the margins of such tread portion and integral therewith, oppositely-disposed curved members connected with the marginal portions of said flanges and extending therefrom toward and integrally united with each other, forming an integral rim-structure box-like in cross-section, their convex surfaces being toward the tread, a web connecting said curved members with the hub, and a brake drum projecting laterally from and cast integral with said web.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,265,741. WHEEL. ROBERT J. BURROWS and EDWIN B. ROSS, Buchanan, Mich., assignors, by mesne assignments, to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed Jan. 2, 1915. Serial No. 201. (Cl. 21—69.)



1. The combination with a wheel comprising a hub, a rim and a web connecting said hub and rim together, said web having an intermediate support, of a brake-drum having a flange at its inner margin adapted to bear against said support, a gear-ring adapted to fit within said brake-drum and bear against said flange, and means for securing said gear ring and said brake-drum to said web.

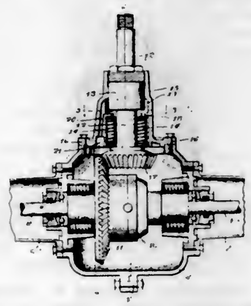
2. The combination with a wheel comprising a hub, a rim and a web connecting said hub and rim together, said web having an intermediate support, of a brake-drum having a flange at its inner margin adapted to bear against said support, a gear-ring adapted to fit within said brake-drum and bear against said flange, a ring fitting between said gear ring and said support, and means for securing said gear ring and said brake-drum to said web.

3. The combination with a wheel comprising a hub, a rim and a web connecting said hub and rim together, said web having an intermediate support, of a brake-drum having a flange at its inner margin adapted to bear against said support, a gear-ring adapted to fit within said brake-drum and bear against said flange, and bolts passing through said flange, gear-ring and web for securing the brake-drum and gear-ring to said web.

1,265,742. AXLE FOR MOTOR-VEHICLES. ROBERT J. BURROWS, Buchanan, Mich., assignor to Clark Equipment Company, Buchanan, Mich., a Corporation of Michigan. Filed May 15, 1917. Serial No. 168,671. (Cl. 74—7.)

2. An axle for motor vehicles, comprising a suitable housing, a drive-gear adapted to rotate therein, a sleeve connected to said housing, a drive-shaft extending through said sleeve, said shaft being geared to said drive-gear, and bearings in said sleeve for said shaft, said sleeve having a plurality of ducts to permit oil to flow from said housing to said bearings and back to said housing.

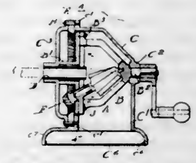
4. An axle for motor vehicles, comprising a suitable housing, a drive-gear adapted to rotate therein, a sleeve connected to said housing, a drive-shaft extending through said sleeve, said shaft being geared to said drive-gear, and bearings in said sleeve for said shaft, said sleeve having a duct for conducting oil from said housing to said bearings, and a return duct for conducting surplus oil back to said housing.



6. An axle for motor vehicles, comprising a suitable housing, a drive-gear adapted to rotate therein, a sleeve connected to said housing, a drive-shaft extending through said sleeve, said shaft being geared to said drive-gear, and a plurality of sets of bearings for said shaft in said sleeve, said sleeve having a duct for conducting oil from said housing to said shaft between said sets of bearings.

[Claims 1, 3, 5, and 7 to 13 not printed in the Gazette.]

1,265,743. PENCIL-SHARPENER. CHARLES S. BURTON, Oak Park, Ill. Filed Dec. 22, 1913. Serial No. 808,069. (Cl. 120—96.)



1. A pencil-sharpening machine comprising means for holding the pencil and a cutter mounted for rotation, said cutter having straight cutting edges each positioned in a plane at a distance from the axis of rotation and parallel thereto and each in its respective plane diverging from a line therein parallel to said axis, and means for rotating such cutter about its said axis.

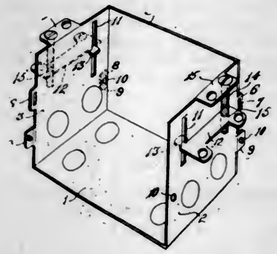
6. In a pencil sharpening machine or the like, a milling device comprising a revolving carrier, a milling cutter mounted in said carrier for independent rotation therein, said milling cutter having its axis of rotation so disposed as to have no plane in common with the axis of said carrier and having its cutting edges departing farther and farther from the axis from end to end, and means for revolving said milling cutter.

7. In a pencil sharpening machine or the like, a means for guiding a pencil, a milling device comprising a revolving carrier, a milling cutter mounted in said carrier for independent rotation therein, said milling cutter having its axis of rotation so disposed as to have no plane in common with the axis of said carrier and having its cutting edges departing farther and farther from the axis from end to end, and means for giving said milling cutter a planetary movement about said pencil guide.

[Claims 2 to 5 not printed in the Gazette.]

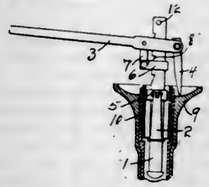
1,265,744. WALL-BOX FOR ELECTRICAL APPARATUS. CLAIR C. CANFIELD, Crafton, Pa., assignor of one-fourth to Alexander P. Lindsay, Pittsburgh, Pa. Filed Apr. 6, 1915. Serial No. 19,534. (Cl. 247—6.)

A receptacle for electrical apparatus comprising a metal box having a bottom and side walls for inclosing an electrical fixture, lugs extending laterally from opposing side walls adjacent the fronts thereof for supporting the electrical fixture within the box, a pair of supporting ears for the box slidably attached thereto beneath the lugs, adapted to be secured to the wall so that the box may be adjusted forwardly or rearwardly with respect to the supporting ears and provided with a threaded hole, and screws



mounted for rotation in the lugs but held against longitudinal movement with respect thereto adapted to be screwed into the threaded holes in the supporting ears whereby the box may be adjusted forward or backward with respect to the face of the wall when the screws are turned.

1,265,745. SLEEVE-EXTRACTOR. GEORGE L. CARPENTER, Fort Worth, Tex. Filed June 5, 1917. Serial No. 172,939. (Cl. 29—88.2.)



1. A sleeve extractor comprising a lifting member provided with a rack formed thereon, a collar slidable on said lifting member, coöperating gripping members pivotally connected to said collar and provided with lugs at their operating ends for engaging a sleeve to be extracted, the lower part of said lifting member being wedge-shaped for expanding said gripping members, a lever pivotally connected to said lifting member, a link bar pivotally connected to said lever and to said collar for causing said collar to engage said rack, and a pry pivotally connected to said lever to bear against the housing of the sleeve.

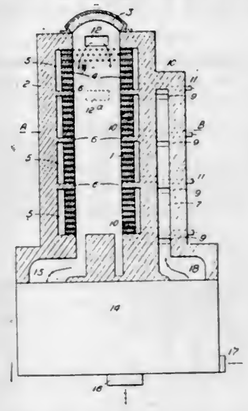
[Claim 2 not printed in the Gazette.]

1,265,746. HEATING APPARATUS. ALPHONSE BAUDOUIN CHANTRAINE, Marcinelle, Belgium. Filed Aug. 18, 1914. Serial No. 857,322. (Cl. 263—9.)

2. A furnace comprising a plurality of superimposed hollow sections, each section provided with means for regulating an air supply about a central combustion chamber within said sections, one or more gas supply openings communicating with said combustion chamber and a recuperative air preheating means in communication with said combustion chamber and with said air supply means.

3. A vertical furnace comprising a central combustion chamber, a gas inlet communicating with the upper end of said chamber, a cover for said chamber, a distributed air inlet means arranged symmetrically about said central combustion chamber and an outlet means communicating with the bottom of said chamber.

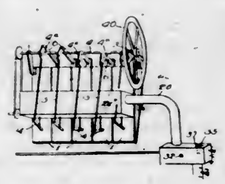
8. A furnace comprising a combustion chamber, a gas inlet to said chamber, an air chamber, a multiplicity of ducts establishing communication between said air chamber and said combustion chamber to produce a multiplicity of heating flames, said ducts being disposed so as



to cause the flames to impinge upon the material to be heated and means for controlling the temperatures at different points of the combustion chamber.

[Claims 1, 4 to 7, 9, and 10 not printed in the Gazette.]

1,265,747. AIR-MOTOR. MELVILLE CLARK, Chicago, Ill., assignor to Melville Clark Piano Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 8, 1916. Serial No. 135,753. (Cl. 230—36.)



1. In an air motor, in combination with motor pneumatics and the valves which control them; an exhaust air chamber whose communication with the motor pneumatics is controlled by said valves; a flexible and compressible air trunk leading from said air chamber for communication with exhaust devices, and a choke device at the entrance to said chamber from said air trunk, and means for adjusting said choke device and for securing it as adjusted to regulate the opening into said air chamber according to the capacity of the air trunk as limited by its collapse when connected with the exhaust devices.

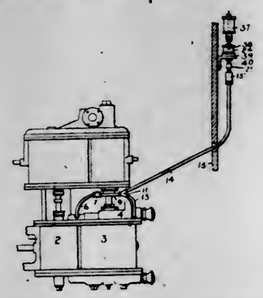
4. In combination with an air motor and an air trunk by which the same is operated; a valve chamber interposed between the air trunk and the motor comprising a valve seat having an elongated tapering port, one of the side walls of said port constituting a choke device pivoted to the valve seat at the apex of the angle formed by the converging sides of said tapering port; a screw extending out through the valve seat and exteriorly-accessible for adjusting said pivoted side of the port, and a valve in the chamber mounted for sliding longitudinally over the port for opening and closing it.

6. In an air motor, in combination with motor pneumatics and a crank shaft which they actuate; a fly wheel loose on the crank shaft; collars loose on the shaft at opposite sides of the fly wheel; abutments on the opposite sides of the fly wheel and on the collars respectively, posi-

tioned respectively for engagement by rotation of the fly wheel in opposite directions, and springs connecting said collars respectively with the shaft for reaction in opposite directions around the shaft.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,748. LUBRICATING DEVICE. NELSON T. CLINE and ROBERT M. LONG, Pittsburgh, Pa. Filed Jan. 31, 1918. Serial No. 214,572. (Cl. 184—24.)



1. A lubricating device for air compressors comprising a lubricant supply pipe having a casing provided with a normally seated check valve to close said pipe to supply, lubricant feed pipes connected with the supply pipe and leading to the high and low pressure cylinders of a compressor and providing means whereby the lubricant supplied to the supply pipe on the unseating of said valve will be fed to the high pressure cylinder by the action of the pistons in said cylinders, and a receptacle having therein a reservoir and a well, said well having a port in its side for establishing communication with the reservoir, said reservoir connected with a lubricant source, and said receptacle connected with said casing and having means for establishing communication between the well and the casing for feeding lubricant to the latter.

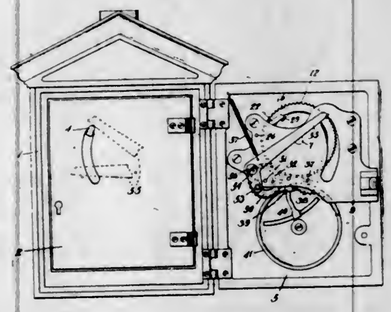
2. A lubricating device for air compressors comprising a lubricant supply pipe having a casing provided with a normally seated check valve to close said pipe to supply, and lubricant feed pipes connected with the supply pipe and leading to the high and low pressure cylinders of a compressor and providing means whereby the lubricant supplied to the supply pipe on the unseating of said valve will be fed to the high pressure cylinder by the action of the pistons in said cylinders, the feed pipe leading to the high pressure cylinder provided with a check valve for closing it during the feed of the lubricant through the other feed pipe, from the supply pipe to the low pressure cylinder caused by a suction stroke of the piston in the low pressure cylinder, and a receptacle having therein a well, said well having a port in its side for establishing communication with the reservoir, said reservoir connected with a lubricant source, and said receptacle connected with said casing and having means for establishing communication between the well and the casing for feeding lubricant to the latter.

3. A lubricating device for air-compressors comprising a Y-shaped coupling, a supply pipe attached to one of the inclined legs of said coupling, a feed pipe connected to the other of the inclined legs of and leading to one of the compression chambers of the compressor, and a feed pipe connected with the horizontal leg of the coupling and having interposed therein a check valve, said last mentioned leg leading to another of the compression chambers of the compressor.

4. A lubricating device for air-compressors comprising a Y-shaped coupling, a supply pipe attached to one of the inclined legs of said coupling, a feed pipe connected to the other of the inclined legs of and leading to one of the compression chambers of the compressor and a feed pipe connected with the horizontal leg of the coupling and having interposed therein a check valve, said last mentioned leg leading to another of the compression chambers of the compressor, and a means to provide a normally seated and suction operated check valve carried by said supply pipe and normally cutting off feed of lubricant to the supply pipe.

[Claims 5 to 10 not printed in the Gazette.]

1,265,749. SIGNAL-BOX WITH LOCAL-ALARM MECHANISM. FREDERICK W. COLE, Newton, Mass., assignor to Gamewell Fire Alarm Telegraph Co., New York, N. Y., a Corporation of New York. Filed May 10, 1915. Serial No. 26,934. (Cl. 177A—373.)



1. A signal-box having a normally unwound signaling-mechanism with a pull for operating it, a local-alarm mechanism having an actuating-spring, means for winding said spring, a controlling-member arranged to hold the local-alarm mechanism while its spring is being wound, and to release it and move into position to hold the winding-means while the local-alarm mechanism is operating, a pivoted arm arranged for engagement with said pull to wind the signaling-mechanism, and means operated by said spring for moving said arm in one direction to operate the pull and to release said arm, permitting independent return movement thereof to normal, said operating means being restored by the actuating-spring.

3. In a signal-box, the combination of a normally unwound signaling-mechanism having a pull, a local-alarm mechanism adapted to be wound, means for winding said local-alarm mechanism, a pivoted bell-crank lever, one arm of which is arranged to move in the path of the pull to engage and operate said pull, a cam driven by the local-alarm mechanism to engage the other arm of said lever to move it to operate and then release the pull, and then resume its normal position.

[Claims 2 and 4 to 10 not printed in the Gazette.]

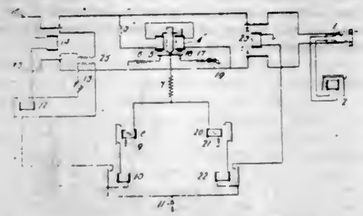
1,265,750. HAT-PIN. WILLIAM REID COLLIER, Austin, Tex. Filed Oct. 2, 1916. Serial No. 123,336. (Cl. 24—155.)



1. A device of the class described including end members, a tubular guard hingedly connected to the back face of one of the members, a pin hingedly connected to the back face of the other member, a coiled spring fixedly secured at its ends to said members and constituting a flexible elastic connection between the members, said spring forming the body of the device, and stiffening springs fixedly connected to the members and housed within the end portions of said coiled spring and normally meeting at the center of the spring.

[Claim 2 not printed in the Gazette.]

1,265,751. SIGNALING SYSTEM. ROY D. CONWAY, Chatham, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 9, 1917. Serial No. 179,416. (Cl. 179—4.)



1. In a signaling system, a line circuit, means connected to said line circuit at an intermediate point thereof responsive to a signaling current of any frequency impressed on either end of said line, means responsive to a definite frequency of signaling current impressed on either end of the line selectively controlled by said first mentioned means, and means controlled by said last mentioned means for connecting a separate source of signaling current to the other end of said line.

2. In a signaling system, a line circuit, a polarized relay connected to said line at an intermediate point and responsive to a periodically varying current at any frequency when impressed on either end of said line, means controlled by said polarized relay for producing in local circuits a current in synchronism with that impressed upon the line, and means included in said local circuits operable in response to a certain definite frequency for connecting a source of signaling current of a different frequency to the other end of the line.

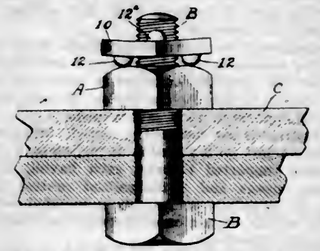
7. In a signaling system, a line circuit, switching means responsive to a periodically varying current of any frequency impressed on either end of said line, two local circuits independent of said line circuit, means controlled by said switching means for producing a current in said local circuits in synchronism with the current impressed upon the line, and means controlled by current in said local circuits for impressing on the opposite end of said line signaling current having a different frequency.

11. In a signaling system, a line circuit, a polarized relay bridged across said line at an intermediate point thereof adapted to vibrate in synchronism with the signaling current of any frequency connected to either end of said line and having an armature with two operative positions, two local circuits arranged to close when said armature is in either of its operative positions, a tuned relay responsive to a particular frequency of current only and a resistance connected in each of said local circuits, two sources of current having different voltages arranged to be included in said local circuits upon the operation of said armature to produce in both of said local circuits a periodically varying current having a frequency in synchronism with the signaling current operating said polarized relay, two sources of periodically varying signaling currents having different frequencies, and a plurality of relays controlled by each of said tuned relays for connecting to one end of said line one of said sources of periodically varying signaling current when a signaling current having a frequency corresponding to that of the other of said sources of periodically varying current is impressed upon the other end of said line.

[Claims 3 to 6, 8 to 10, and 12 not printed in the Gazette.]

1,265,752. LOCK-NUT. THOMAS MARION DANIELS, Chicago, Ill. Original application filed July 8, 1915. Serial No. 38,680. Divided and this application filed Mar. 20, 1917. Serial No. 155,982. (Cl. 151—21.)

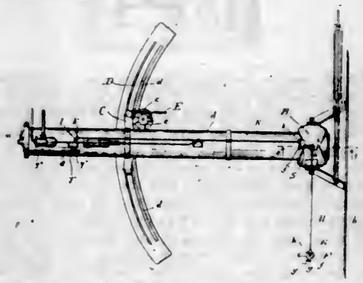
1. A lock nut provided with a threaded aperture and having upon each face a plurality of bosses remote from the edge of the nut and located between said edge and said aperture, said bosses being oppositely disposed and adapted to effect a distortion of the nut and its threads when the nut is screwed down upon the proximate structure, substantially as described.



3. An apertured lock nut provided upon each face with two oppositely disposed rounded bosses and two oppositely disposed depressions having rounded walls, each boss on each face being in alinement with a depression on the opposite face, whereby the lock nuts may be nested for shipping and storing purposes, substantially as described.

[Claim 2 not printed in the Gazette.]

1,265,753. APPARATUS FOR AIMING AND LAUNCHING AUTOMOBILE TORPEDOES. GREGORY CALDWELL DAVISON, New London, Conn., assignor to Electric Boat Company, New York, N. Y., a Corporation of New Jersey. Filed Dec. 5, 1914. Serial No. 875,565. (Cl. 114—238.)



1. The combination with an angularly movable torpedo launching-tube, of an automobile torpedo having gyroscopic steering gear, and a connection from the gyroscopic steering gear to the tube including means actuated upon angular movement of the tube to convert the accompanying movement of the training component of the gyroscopic steering gear into a movement of translation, whereby the steering gear remains set for a course to the mark irrespective of the position of the tube; substantially as described.

2. The combination with a vessel, of a torpedo launching-tube mounted to discharge its torpedo transversely of the direction of movement of the vessel and below the surface of the water, said launching tube being free to move angularly with the torpedo during such discharge and being normally uninfluenced by the movement of the vessel through the water, whereby, as the torpedo issues into the water its tendency to bind in the muzzle of the launching tube is met and suppressed by an accompanying angular movement of the tube, an automobile torpedo in the tube having gyroscopic steering gear, and a connection from the gyroscopic steering gear to the tube including means actuated upon angular movement of the tube to convert the accompanying movement of the training component of the gyroscopic steering gear into a movement of the translation, whereby the steering gear remains set for a course to the mark irrespective of the position of the tube; substantially as described.

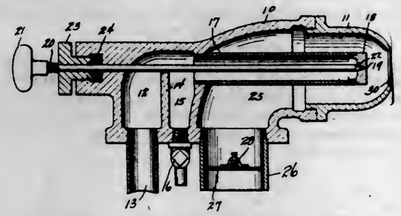
5. The combination of a torpedo launching tube for automobile torpedoes having gyroscopic steering gear, an aiming device and means adapted to operatively connect said aiming device with the gyroscopic steering gear of a torpedo at rest in said tube in such manner that said steering gear is trained with said aiming device; substantially as described.

7. An apparatus for controlling torpedo firing comprising sighting means, a torpedo, direction-maintaining apparatus for the torpedo, and means controlled by said sighting means to modify the action of said direction-maintaining apparatus upon said torpedo.

9. An apparatus for controlling torpedo firing comprising a basal support for a plurality of torpedoes, a plurality of torpedoes supported thereby, each having direction-maintaining means and a centralized control for said plurality of torpedoes operatively associated with and adapted to modify the action of the direction-maintaining means of said torpedoes.

[Claims 3, 4, 6, and 8 not printed in the Gazette.]

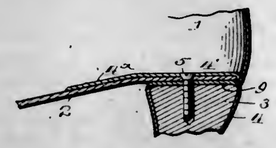
1,265,754. OIL-BURNER. ALBERT DEEM, Indianapolis, Ind. Filed June 5, 1916. Serial No. 101,842. (Cl. 158—76.)



1. An oil burner having a housing, an oil chamber in said housing having an inlet thereto, an air chamber having an inlet, a damper in said air inlet, external means for operating said damper, a valve opening between said oil and air chambers, a needle valve adapted to seat in said opening, a handle at the outer end of said needle valve, a spring between said handle and the end of said housing for normally holding said needle valve in open position, a reservoir between the oil inlet and air chamber over which the oil must pass for retaining any sediment in the oil, and a casing on the end of said housing and air chamber having its outer end curved for restricting the passage of air current whereby the oil and air will be more uniformly mixed and a spray formed.

[Claim 2 not printed in the Gazette.]

1,265,755. HEEL-ATTACHING MEANS. HARRY P. DICKERSON, Sherman, Tex. Filed Nov. 21, 1917. Serial No. 203,230. (Cl. 36—42.)

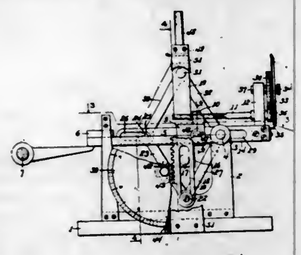


3. In combination with the sole, heel and heel covering, of a plate fitting between the sole and heel of the shoe to retain the covering in position, and means for fastening the sole, heel and plate in relative position.

[Claims 1 and 2 not printed in the Gazette.]

1,265,756. COMPUTING APPARATUS. ALBERT L. DOEPKEN, Wheeling, W. Va. Filed Mar. 21, 1917. Serial No. 156,291. (Cl. 235—61.)

1. A computing apparatus comprising, in association with a weight-actuated part of a weighing mechanism, a table having one end pivotally supported and its opposite end supported by and vertically movable with said weight-actuated part, a carriage mounted upon and vertically movable with said table and horizontally adjustable along the latter according to the unit of price, a visual price-indicating device, and means including vertically guided lazy tongs interposed between said carriage and said indicating device whereby the latter is actuated to an extent governed by the extent of movement of the table and the position occupied by said carriage.

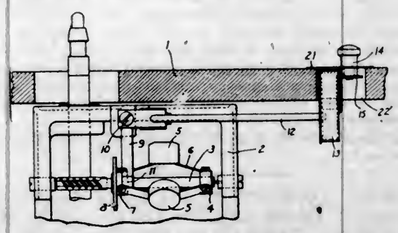


2. A computing apparatus comprising, in association with a weight-actuated part of a weighing mechanism, a table having one end pivotally supported and its opposite end vertically movable and under the control of said weight-actuated part, a carriage mounted upon said table in permanently horizontal position and adjustable thereon according to the unit of price, both when said table occupies horizontal position and inclined position, a visual price-indicating device, and means including vertically guided lazy tongs interposed between said carriage and said indicating device whereby the latter is actuated to an extent governed by the vertical distance traversed by said carriage when said table is lowered.

3. A computing apparatus comprising, in association with a weight-actuated part of a weighing mechanism, a table having one end pivotally supported and its opposite end vertically movable and under the control of said weight-actuated part, said table being normally sustained in a horizontal position, a carriage mounted upon and adjustable along said table according to the unit of price, a visual price-indicating device, and means including vertically-guided lazy tongs under the control of said carriage whereby, when said table is lowered, said indicating device is actuated to an extent governed by the vertical distance traversed by said carriage in moving from the normal level of the table to the lowered position of the latter.

[Claims 4 to 11 not printed in the Gazette.]

1,265,757. SPEED REGULATOR AND INDICATOR FOR PHONOGRAPHS. JAMES H. DOOLEY, East Orange, N. J., assignor to De Camp and Sloan, Inc., Newark, N. J., a Corporation of New Jersey. Filed Dec. 26, 1916, Serial No. 138,748. Renewed Oct. 17, 1917. Serial No. 197,173. (Cl. 74—45.)



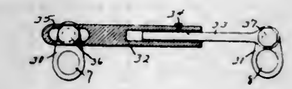
2. In a speed control the combination with a speed governor including a rotary disk axially movable on change of speed, of a brake arm movable toward and from the disk, an extension on said arm, a rotary drum having

numbers thereon, the drum having a spiral slot in one face, an apertured plate adjacent the drum, a rotary head turning in said plate, a gear on the head meshing with the drum to turn the drum and bring its indications to appear successively at the apertured plate, a support for the drum comprising a base having parallel arms, a spindle supporting the drum to turn between said arms, one of said arms having a slot extending radially of the drum and adjacent the said spiral grooved face of the drum, said arm extension projecting through said slotted arm into the spiral groove, whereby turning of the drum by the head will swing the extension and arm.

5. In a speed control the combination with a speed governor including a brake arm, an extension on said arm, a rotary drum having indications on its periphery, the drum having a spiral slot in one face, an apertured plate adjacent the drum, a rotary head turning in said plate, a gear on the head meshing with the drum to turn the drum and bring its indications to appear successively at the apertured plate, a support for the drum comprising a base having parallel arms, each arm being bifurcated at the base and connected by two bars secured to the said plate on opposite sides of the said head, a spindle supporting the drum to turn between said arms, one of said arms having a slot extending radially of the drum and adjacent the said spiral face of the drum, said arm extension projecting through said slotted arm into the spiral groove, whereby turning of the drum by the head will swing the extension and arm.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,265,758. GIN AND LINTER SAW-TOOTH CUTTER. CHARLES W. EADS, Altus, Okla. Filed June 26, 1917. Serial No. 176,963. (Cl. 76—28.)



1. A gin saw tooth cutter comprising a frame, a series of plunger guides mounted on said frame, a chisel carrying plunger and a driving plunger mounted in each guide, springs (one for each plunger) for driving said plungers, a rocker-shaft provided with cams for retracting and releasing the chisel carrying plungers, a driving shaft provided with cams for retracting and releasing the driving plungers, and means operatively connecting said driving shaft and said rocker shaft whereby said driving shaft automatically actuates said rocker-shaft.

4. A gin saw tooth cutter comprising a frame, a series of plunger guides mounted on said frame, a chisel carrying plunger and a driving plunger mounted in each guide, a shaft provided with a cam for drawing said chisel carrying plunger for drawing the chisel from the throat of a saw tooth and a spring for actuating said plunger to set the chisel in the throat of the saw tooth, a spring for actuating said driving plunger, and a shaft provided with a cam for compressing said spring and releasing said plunger after compressing said spring for causing said driving plunger to hammer on said chisel carrying plunger.

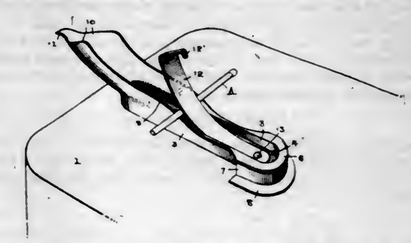
7. A gin saw cutter comprising a frame, a series of chisels operatively mounted on said frame, each chisel having its blade terminated by a flat surface at right angles to the length thereof, means for setting said chisels in the throats of the saw teeth, and means for driving the chisels.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,265,759. SPOUT. RICHARD W. EDMONDS, Atlanta, Ga. Filed Oct. 1, 1917. Serial No. 194,162. (Cl. 221—5.)

1. The combination, in a spout, of a basin provided with an orifice in its bottom; a flexible throat extending upwardly from one side of the basin; and a flexible tip provided upon the outer extremity of said throat.

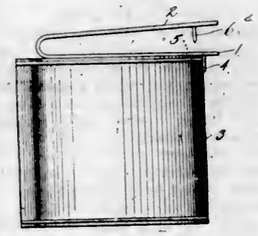
5. The combination, in a spout, of a basin provided with an orifice in its bottom; laterally extending ears provided at one end of said basin, adapted to form an outwardly extending throat connected with said basin;



and a pointed tip provided upon the outer end of said throat.

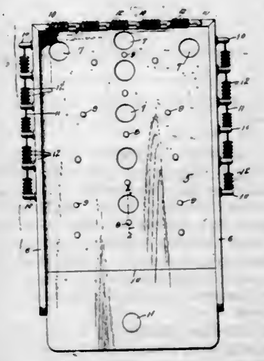
[Claims 2 to 4 and 6 not printed in the Gazette.]

1,265,760. CAN-OPENER. GOMER W. EDWARDS, Johnstown, Pa. Filed Sept. 12, 1916. Serial No. 119,686. (Cl. 164—119.)



As a new article of manufacture, a can opener formed from a single piece of material bent into a U-shape and having a cutter tongue formed by striking a triangular piece from one of the limbs adjacent the end, which tongue is bent inward and projects toward the opposite limb, a bearing and spacing member formed by striking a tongue from the other limb, which tongue is bent downward and extends approximately at right angles to said latter limb, said cutter being operative within the hole produced by striking out the tongue, when the limbs have their free ends moved toward each other.

1,265,761. GAME. OTTO C. EHRENHARDT and ADAM BERENT, Buffalo, N. Y. Filed Oct. 7, 1916. Serial No. 124,397. (Cl. 46—61.)



In a device of the class described, a game board having a row of spaced depressions arranged centrally thereof, the said board having depressions adjacent one end and

upon each side of said row, a peg for each of the depressions in said row and the said pegs being alined centrally of the board and each being positioned in advance of its respective depressions, a row of pegs upon each side of said row of depressions and in advance of the depressions at the end of the board, and the said board having a ring inscribed thereon in alinement with said central row of depressions.

1,265,762. TELEMETER. OTTO EPPENSTEIN, Jena, Germany, assignor to the Firm of Carl Zeiss, Jena, Germany. Filed Oct. 15, 1912. Serial No. 725,785. (Cl. 88—2.7.)



1. Horizontal telemeter with an entrance opening at either end, comprising a horizontal part containing two objective lenses, an ocular prism system lying between the said lenses, an ocular system and a measuring device and comprising further a vertical part at either end of the horizontal part, either vertical part containing an objective prism system adapted to raise the said entrance openings above the head of the observer and consisting of three simple reflecting prisms, the hypotenuse-surfaces of two of which prisms being perpendicular to one plane and perpendicular to each other, while the third prism deflects the axial ray in a plane perpendicular to said plane and parallel to the direction of the axial ray entering the objective prism system.

2. Horizontal telemeter with an entrance opening at either end, comprising a horizontal part containing two objective lenses, an ocular prism system lying between the said lenses, an ocular system and a measuring device and comprising further at either end of the said horizontal part two vertical tubes, an inner and an outer one, each such inner tube having the members of an objective prism system, rigidly fixed to its ends and being yieldingly journaled within and coaxially to the said outer tubes, which latter tubes are themselves rigidly fixed by their bottom ends to the ends of the said horizontal part, and the said objective prism systems being adapted to raise the said entrance openings above the head of the observer and consisting of three simple reflecting prisms, the hypotenuse-surfaces of two of which prisms being perpendicular to one plane and perpendicular to each other, while the third prism deflects the axial ray in a plane perpendicular to said plane and parallel to the direction of the axial ray entering the objective prism system.

1,265,763. DUST-COLLECTOR. WILLIAM J. FENDER, Silver Creek, N. Y. Filed Mar. 29, 1917. Serial No. 158,390. (Cl. 183—84.)

1. A dust collector comprising a conical separating chamber having a tangential inlet for the dust laden air, an outlet at the small end of the separating chamber, a front outlet tube arranged in the large end of the separating chamber and having a contracted front end, a rear outlet tube arranged within said front tube and separated from the latter by an intervening space, the front ends of said tubes being of the same diameter, and an auxiliary chamber communicating with the space between said tubes.

2. A dust collector comprising a tapering separating chamber provided with a tangential inlet at its large end for the dust laden air, an outlet in its small end for the heaviest dust particles and an outlet in its large upper end for the partly clarified air, and means for effecting a final separation of dust from the air as the same passes through said outlet in the large end of said chamber comprising a front outlet tube projecting into the central part of the large end of said separating chamber, a rear outlet tube arranged in the rear part of said front tube and separated from the latter by an annular passage which communicates at its front end with the space between the front ends of said tubes, the front end of said rear tube being in rear of the front end of said front tube and the front ends of said tubes being of the same diameter, and a chamber communicating with the rear end of said annular passage and provided with an outlet.



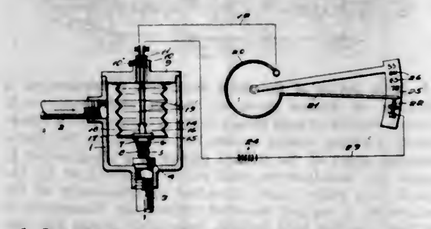
3. A dust collector comprising a tapering separating chamber provided with a tangential inlet at its large end for the dust laden air, an outlet in its small end for the heaviest dust particles and an outlet in its large end for the partly clarified air, and means for effecting a final separation of dust from the air as the same passes through said outlet in the large end of said chamber comprising a large front outlet tube projecting axially into the central part of the large end of said chamber and having a cylindrical rear part and a forwardly tapering front part, and a small rear outlet tube which is arranged in the rear part of said front tube and which is of cylindrical form and of smaller diameter than the rear part of said front tube and separated from the latter by an intervening annular passage and having its front end arranged in rear of the front end of said front tube, and a chamber communicating with the rear end of said annular passage and having an outlet.

1,265,764. SHIELD FOR WORKMEN. EDOARDO FERRARA, Milan, Italy, assignor to Secondo Sacerdote, Milan, Italy. Filed Aug. 5, 1915. Serial No. 43,873. (Cl. 2—149.)



A shield comprising a rigid rectangular frame, a transparent medium occupying a portion of said frame, flexible foraminous material occupying the remainder of said frame and extending beyond said frame to provide a protecting flap, rigid triangular frames connected to opposite vertical edges of said frame and disposed at right angles thereto, foraminous material within said triangular frames, and supporting members connected to said triangular frames and to each other and each disposed in the same plane as the corresponding triangular frame.

1,265,765. ELECTROTHERMOSTATIC DEVICE. HARRY A. FERRIS, Cheyenne, Wyo. Filed Mar. 2, 1917. Serial No. 152,051. (Cl. 236—4.)



1. In apparatus of the character described, the combination with an expansible chamber for receiving volatile liquid, of separate electric heating elements projecting into the chamber for heating the volatile liquid, means arranged within and connected with the expansible chamber to be shifted thereby and normally electrically connecting the separate electric heating elements and adapted to automatically break such connection upon the expansion of the chamber for a predetermined amount, a circuit connected with the electric heating elements, thermostatic means connected with the circuit, and a member connected with the extensible chamber to be shifted thereby.

3. In apparatus of the character described, as a sub-combination, a tubular expansion member to hold a volatile liquid, an electric heating device arranged within the tubular expansion member, and a contact normally engaging the device to complete a circuit through the same and connected with the tubular expansion member to be moved thereby.

5. In apparatus of the character described, a shell having a fluid inlet and outlet, a longitudinally extensible tube disposed within the shell and having one end secured to the end of the shell and its opposite end closed and adapted for receiving a volatile liquid, an electric heating device extending into the tube, a contact connected with the closed end of the tube and normally contacting with the electric heating device, a valve having a yielding connection with the closed end of the tube and serving to control the passage of fluid through the outlet of the shell, a circuit connected with the electric heating device, and a thermostat connected in the circuit.

[Claims 2 and 4 not printed in the Gazette.]

1,265,766. GUN-SIGHT. REGINALD A. FESSENDEN, Brookline, Mass. Filed June 23, 1915. Serial No. 35,957. (Cl. 33—47.)



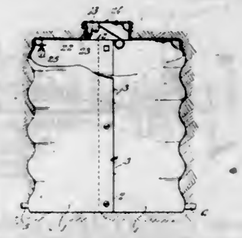
1. In a device of the kind described a plate having a forked opening, the curvature of the sides of the fork being such that the horizontal distance between the sides of the fork is a function of the trajectory of the gun to which the device is attached.

2. In a device of the kind described a plate having a forked opening, the curvature of the sides of the fork being such that when the target is just completely seen between the sides of the fork the gun will have the correct elevation for the target.

3. In a device of the kind described, a plate having a forked sighting field, the edges of said forked sighting field approaching each other at their base to give an unobstructed vision between them, and having between them at their base a sight member, and finding fields located on each side of the sight member adapted to offer an unobstructed vision of the object to be aimed at.

4. A device of the kind described comprising a forked plate, the forks of said plate being in the same plane, the opposing edges of the lower parts of said forks being oppositely recessed to form openings through which the object to be aimed at may be found, said plate having a pointed projection located between the bases of said forks to serve as a sight.

1,265,767. METER-BOX. CALVIN C. FOUTS, Middletown, Ohio. Filed Feb. 7, 1917. Serial No. 147,048. (Cl. 137—13.)



1. A meter box comprising a substantially cylindrical housing of sheet metal divided longitudinally into two substantially equal sections, the adjacent portions of said sections overlapping, means for rigidly connecting said sections one to the other, a closure having a flange arranged to overlap the upper edges of said sections when they are connected one to the other, and fastening devices carried by said closure, said sections of said housing having parts to coöperate with said fastening devices to retain said closure in its closed position.

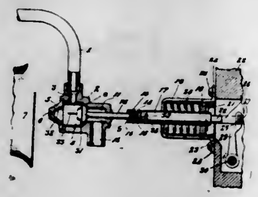
2. A meter box comprising a substantially cylindrical housing of sheet metal divided longitudinally into two substantially equal sections, the adjacent portions of said sections overlapping, means for rigidly connecting said sections one to the other, one of said sections having an opening near the upper edge thereof, and the other of said sections having an inwardly extending lug near the upper edge thereof, a closure having a flange arranged to overlap the upper edges of said sections when they are connected one to the other, and having at one side thereof a part adapted to enter the opening in the one section when the closure is moved to its closed position, and having on the other side thereof a latch adapted to engage the lug on the other section of said housing when said closure is in its closed position.

3. In a device of the character described a housing having an opening near the upper edge thereof and having a shoulder near the upper edge thereof substantially opposite said opening, a closure for said housing having a depending flange, a lip secured to said closure and extending downwardly and outwardly to a point beyond said flange, said lip and said flange being spaced apart to receive the upper edge of said housing between them, said lip being arranged to enter the opening in said housing when the closure is placed in position thereon, a latch pivotally mounted on said closure adjacent to said shoulder, and means for causing said latch to engage said shoulder when said closure is in position on said housing.

4. In a device of the character described a housing having an opening near the upper edge thereof and having a shoulder near the upper edge thereof substantially op-

posite said opening, a closure for said housing having a depending flange, a lip secured to said closure and extending downwardly and outwardly to a point beyond said flange, said lip and said flange being spaced apart to receive the upper edge of said housing between them, said lip being arranged to enter the opening in said housing when the closure is placed in position thereon, a bar pivotally mounted on said closure near said shoulder and having a depending portion forming a latch to engage said shoulder, and having an inwardly extending portion serving to move said latch toward said shoulder, said closure having an opening to receive an implement by means of which said inwardly extending portion of said bar may be manipulated to actuate said latch.

1,265,768. VAPORIZER-NOZZLE. JOSEPH C. FULLER, Perth Amboy, N. J., assignor of one-half to Clifford V. Williamson, Perth Amboy, N. J. Filed Feb. 21, 1917. Serial No. 150,134. (Cl. 158—120.)

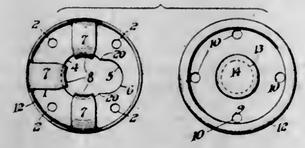


1. A vaporizer including a casing provided with an inlet passage, a nozzle opening and a vent, means to normally close the said vent, means adapted to close the nozzle opening, and means to simultaneously actuate both of said vent and nozzle controlling means to simultaneously open the said vent and close the said nozzle opening.

7. A vaporizer including a casing having an inlet passage, a nozzle opening and a vent, a valve to normally close said vent, means to actuate said valve, and means to connect said valve and actuating means to provide a lower thermal conductivity between said valve and actuating means when the valve is closed than when it is opened.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

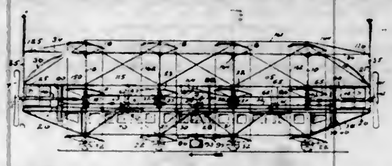
1,265,769. GARMENT-FASTENER. WILLIAM J. GALT, Jr., Philadelphia, Pa., assignor to The De Long Hook and Eye Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 17, 1915. Serial No. 14,882. (Cl. 24—224.)



1. A garment fastener comprising ball and socket members, the said socket member having an opening therethrough one portion of which is circular and of greater diameter than the largest diameter of the ball of the ball member and the other portion of which opening is of smaller diameter than the first-named portion to receive the neck of the ball after it has been inserted through the said first-named portion, and spring prongs or fingers which extend inwardly from the outer edge of the said socket member and around the inner edge of the portion of the said opening having the larger diameter.

[Claim 2 not printed in the Gazette.]

1,265,770. AEROPLANE. LLOYD C. GLISSON, Atlanta, Ga. Filed Aug. 18, 1911, Serial No. 644,861. Renewed Oct. 2, 1917. Serial No. 194,419. (Cl. 244—29.)



1. In a device of the class described, a framework, a plurality of planes mounted therein and transversely thereof, certain of said planes being arranged above others therein forming series, means for connecting the corresponding edges of the several planes in a given series to permit the simultaneous and uniform control of all the planes in a series, bars extending longitudinally of the framework, a weight mounted within the framework, a rod for carrying said weight, adjustable means for connecting the aforesaid bars and rod and including telescoping members, one of which is connected with the weight and bars and the other with a supporting device, and means for cushioning the movement of the weight and the devices connected therewith.

7. In a device of the class described, a framework, a plurality of flanged planes arranged therein and extending transversely thereof, said planes being concave on their underside and being braced transversely, and means for controlling a plurality of planes in a series so that the edges thereof shall have the same inclination and means controlling a plurality of series so that the edges of planes of different series shall present unequal resistances.

11. In a device of the class described, a framework, a lifting device carried within the upper portion thereof, a longitudinal plane extending below said device, propelling means carried by the framework, curved transverse planes coöperating with the plane first mentioned, deflecting devices on the curved planes, means for controlling the inclination of certain of the transverse planes and their deflecting devices with reference to the first-mentioned plane, and independently of the other transverse planes, and means for controlling automatically and simultaneously all of the planes set by the controlling means first mentioned.

[Claims 2 to 6, 8 to 10, and 12 not printed in the Gazette.]

1,265,771. BOAT-LAUNCHING APPARATUS. ARTHUR GROHMANN, Wilmington, Del. Filed Oct. 14, 1916. Serial No. 125,719. (Cl. 9—22.)

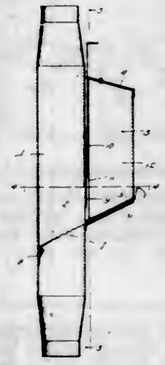


1. An apparatus for launching a life boat from the deck of a ship comprising a pivotally supported davit, an actuating mechanism therefor comprising a member adapted to swing in the plane of the davit, and a cam engaging said member and controlling and limiting the extent of said swing.

7. An apparatus for launching a life boat from the deck of a ship comprising pivotally supported davits, an actuating rack link pivoted to each davit and extending crosswise of the ship, a driving pinion for said rack link, and a swinging yoke mounted on the same center as the pinion and embracing the rack link acting to hold it at all times in mesh with the pinion, together with camways for guiding and limiting the throw of the rack links.

[Claims 2 to 6 not printed in the Gazette.]

1,265,772. ANTIFREEZING DEVICE FOR WATER-PIPES. JOHN L. GROO, Salt Lake City, Utah. Filed Mar. 22, 1917. Serial No. 156,701. (Cl. 137—72.)

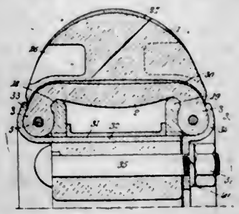


1. The combination with a water pipe having in one side an opening, of a pervious partition extending across said pipe below said opening for supporting an anti-freezing medium therein in the path of the water passing through said pipe, and a hopper on the exterior of the pipe for supplying said medium to said partition through said opening.

2. The combination with a water pipe having an opening in its side, of a hopper on the exterior of said pipe discharging into said opening, said hopper having an inclined bottom equipped with a guide, and a pervious slide in said guide movable across said pipe to support therein an anti-freezing medium supplied by said hopper.

3. The combination with a water pipe having an opening in its side, of a hopper on the exterior of said pipe for supplying an anti-freezing medium to said pipe through said opening, the opposed sides of said hopper having their inner edges bent inwardly to form attaching flanges secured to the pipe and then again inwardly to form vertical guide flanges located in the hopper and spaced from said pipe, a valve slidably mounted between said pipe and flanges for controlling the aforesaid opening, and means in the pipe for supporting the anti-freezing medium discharged from the hopper.

1,265,773. TIRE FOR VEHICLE-WHEELS. JORGE GUERRERO, Paris, France. Filed Apr. 7, 1916. Serial No. 89,597. (Cl. 152—5.)



A tire of the character described, comprising in combination, an elastic band, adapted to carry a tread and provided with beads at its edges, a rubber sheet between said band and tread, metal rings supporting said band resting against the inner sides of said beads, and distance pieces for keeping the rings apart, and terminal lugs on said pieces engaging in recesses of said rings, a metal rim adapted to be secured to the felly of the wheel, a flange on one side of said rim for the reception of one of the beads of said tire, and a flange oppositely arranged to said first named flange and means for securing it to the felly.

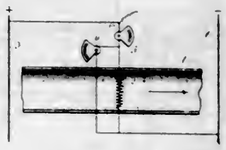
1,265,774. SLIPPER. MAX GUSTIN, New York, N. Y. Filed Apr. 6, 1917. Serial No. 160,086. (Cl. 36—25.)



1. As an article of manufacture the combined sole and heel of a slipper, said sole comprising an outer molded layer, a similarly shaped layer superposed thereon, a binding applied along the edges of said last mentioned layer to form a border of an outline corresponding to the outline of the sole and heel, and a cushion on said sole, said cushion comprising a bottom molded layer of lesser length and width than the sole, a molded layer having a shank embedded therein superposed on said bottom layer, layers of padding material disposed on said bottom and shank layers, and covering means extending over said padding layers and secured underneath said bottom layer, said cushion being disposed within the inner edge of said border and upstanding therefrom, the border being thus left free to have an upper attached thereto.

[Claim 2 not printed in the Gazette.]

1,265,775. METER. WILLIAM S. HADAWAY, Jr., New Rochelle, N. Y. Filed Dec. 26, 1912. Serial No. 738,644. (Cl. 73—167.)



1. The method of measuring the flow of fluids which consists in passing a stream of said fluid into heat exchanging relation to a body or medium to cause a heat transfer at a determinable rate and determining the temperature effect on the body or medium of the heat transfer.

3. The method of measuring the flow of fluids which consists in determining the cooling effect of a stream of the fluid on heat dissipating means subjected thereto and to which heat is supplied at a determinable rate.

15. In combination, a conduit through which a stream of fluid is directed, a heating element mounted in said conduit, means for supplying electrical energy to said heating element, an ammeter for measuring the current flowing through said heating element, and a voltmeter for measuring the potential drop across the same.

22. The method of measuring the flow of fluids which consists in passing a stream of fluid into heat exchanging relation to a body or medium having a different temperature than the fluid, maintaining the rate of heat energy supply to the body or medium constant and determining the effect on the body or medium of the heat transfer.

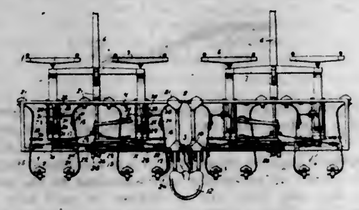
29. The method of measuring the flow of fluids which consists in passing a stream of fluid into heating proximity to an electric heater, supplying electric energy to said heater at a rate to maintain it at a temperature which exceeds that of the fluid by a constant amount and measuring the rate at which energy is so supplied.

[Claims 2, 4 to 14, 16 to 21, 23 to 28, and 30 not printed in the Gazette.]

1,265,776. CULTIVATOR. WILLIAM P. HARPER, Abilene, Kans. Filed Nov. 1, 1915. Serial No. 59,026. (Cl. 97—35.)

1. In a cultivator having a shovel beam comprising two sections, one hinged to the other so as to swing laterally

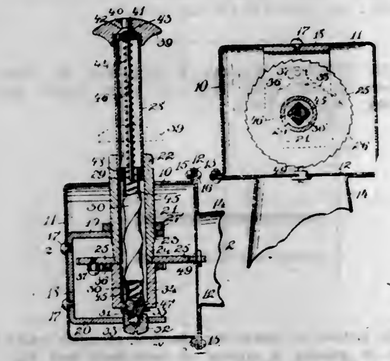
relatively to the other, the combination with said sections, of two shovels secured one to each section, a rock shaft,



and means actuated by the rock shaft for swinging laterally the swinging section.

[Claims 2 and 3 not printed in the Gazette.]

1,265,777. ALARM. LOUIS G. HARTDORN, Brooklyn, N. Y. Filed July 12, 1915. Serial No. 39,265. (Cl. 116—1.)



1. A diaphragm horn comprising a rotatable spiral bar, a sleeve sliding on the bar to rotate the bar, a handle on the sleeve, the handle having an oiling aperture therein, a valve for the aperture, and a spring abutting on the valve and the bar to normally hold the sleeve in extended position and the valve closed.

3. A diaphragm horn comprising a longitudinally movable sleeve, a handle on the sleeve, an aperture through the handle, a valve that moves outwardly to close the aperture, and a spring bearing against the valve to yieldingly hold the valve shut and to hold the sleeve in extended position.

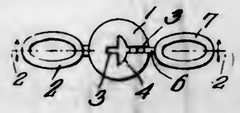
5. A diaphragm horn comprising a longitudinally movable sleeve, a handle on the sleeve, an aperture through the handle, a valve that moves outwardly to close the aperture, a spring bearing against the valve to yieldingly hold the valve shut and to hold the sleeve in extended position, a bar around which the sleeve slides, the bar having a bore therein, and a stem on the valve extending into the bore of the bar.

7. A diaphragm horn comprising a guide, a stem sliding in the guide, the stem having a rectangular opening, a spiral bar to fit said opening and to be rotated by the longitudinal operation of the stem, a handle on the top of the stem, a bore in the bar, an oiling aperture giving access to the interior of the stem, and a bearing on which the bar rests, the bar having an oil duct leading from the bore to said bearing.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,265,778. FASTENING DEVICE. WILLIAM A. HARTLINE, Penns Grove, N. J. Filed Nov. 22, 1917. Serial No. 208,408. (Cl. 24—222.)

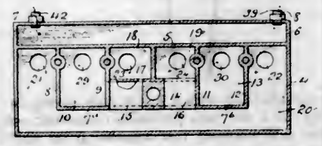
1. In securing means, a hollow member having a slot and an enlarged opening communicating therewith, a link having an integral shank operable in the slot of said member and a securing head carried thereby corresponding in size to the said enlarged opening and provided with an



integral rib insertible into the hollow member through said slot.

[Claim 2 not printed in the Gazette.]

1,265,779. MANIFOLD FOR EXPLOSIVE-ENGINES. GEORGE H. HAYES, Hazelton, Kans. Filed Aug. 13, 1917. Serial No. 186,069. (Cl. 257—241.)



1. In a manifold for explosive engines, a casing having two chambers and provided with a passage having two branches respectively discharging into said chambers, a conductor for the explosive mixture discharging into said passage, the casing having at one side of said chambers a chamber for receiving water, the casing being provided at each side of said two chambers with an inlet port for exhaust gases, the casing having an outlet port for exhaust gases, and provided with a passage connecting said inlet ports with the outlet port and in which said two chambers and the passage having the two branches are located.

2. In a manifold for explosive engines, a casing having a longitudinal partition forming a compartment for water having an inlet for water and an outlet for steam at one side of said partition, the casing having two longitudinal partitions parallel with the first named partition, transverse partitions connecting said first named partition with the two longitudinal partitions so as to form therewith two chambers, a conductor having two branches respectively discharging into said two chambers, a transverse partition extending from the first named partition to said conductor and forming two central chambers intermediate of the first two chambers, the casing having ports respectively communicating with said four chambers and having an outlet port for exhaust gases, and provided at the outer side respectively of said two first named chambers with two ports, a passage connecting the last named ports and said outlet port, and four passages connected with the last named passage and embracing said two branches and communicating with the two central chambers.

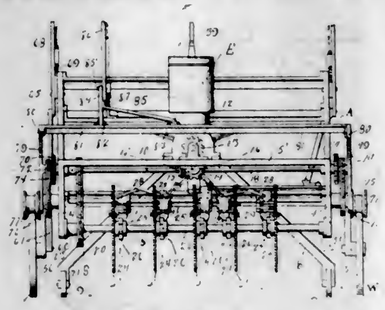
[Claim 3 not printed in the Gazette.]

1,265,780. BAYONET-PROJECTOR. MIKE HLUSTIK, South Brownsville, Pa. Filed Sept. 12, 1917. Serial No. 191,006. (Cl. 42—86.)



The combination with a rifle, of a casing located below the same, a rod movably mounted in said casing, a bayonet connected with the end of said rod, a trigger pivoted to the rifle and having a part engaging with said rod to hold the same in retracted position, and a second part located adjacent the trigger guard of the rifle.

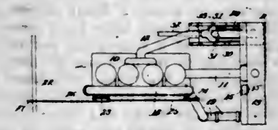
1,265,781. ICE-CUTTING MACHINE. JAMES FREDERICK HODGSON, Winchester, Va. Filed Oct. 5, 1914, Serial No. 865,155. Renewed Mar. 23, 1918. Serial No. 224,393. (Cl. 125—14.)



1. In an ice cutting machine, the combination with a wheeled frame and a motor mounted thereon, of a saw shaft extending transversely of the frame, driving connections between the motor and the saw shaft, a circular saw mounted centrally of the shaft, a plurality of saws mounted on the shaft at each side of the center saw, means common to all of the side saws for adjusting the latter longitudinally of the shaft, and independent means for shifting the central saw longitudinally on the shaft.

[Claims 2 and 3 not printed in the Gazette.]

1,265,782. MEANS TO PREVENT FREEZING OF THE WATER-COOLING SYSTEMS OF AUTOMOBILES. MARCUS HOOPS, Springview, Nebr. Filed May 24, 1917. Serial No. 170,693. (Cl. 123—174.)



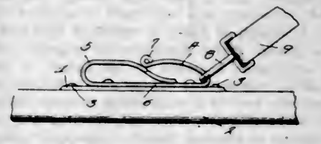
1. An appliance for preventing the freezing of automobile radiators and water pipe connections comprising an engine, a radiator casing, a heating chamber located adjacent the radiator casing, means for diverting the exhaust gases of the engine to one end of said chamber, an exhaust means connected to the opposite end of said chamber, and an auxiliary heating chamber located adjacent the aforesaid heating chamber and coacting with said exhaust means as and for the purposes set forth.

3. An appliance for preventing the freezing of automobile radiators and water pipe connections, comprising an engine, a radiator casing, a heating chamber located adjacent the radiator casing at the inner side of the latter and at the lower portion thereof, a plate disposed adjacent the lower portion of the radiator casing at the front thereof, means connecting said plate and said chamber to clamp them against the outer and inner sides of the radiator casing to support them in position and to provide a dead air space at the lower portion of the radiator casing, means for conveying the exhaust gases of the engine to said chamber, and an exhaust conveying means connected to the chamber to convey the exhaust gases from said chamber to the atmosphere.

4. An appliance for preventing the freezing of automobile radiators and water pipe connections comprising an engine, a radiator casing, a heating chamber secured to the inner side of the radiator casing at the lower portion thereof, means for conveying the exhaust gases from the engine to said chamber at one end thereof, means whereby the exhaust gases may be exhausted from said chamber at the end opposite the end at which the exhaust gases are admitted thereto, and an auxiliary heating chamber adjacent to the main heating chamber and inclosing portions of the water pipe connections and the exhaust conveying means.

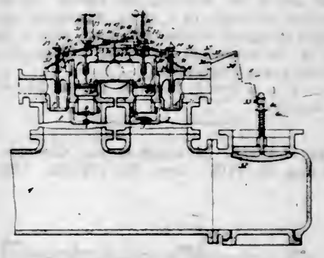
[Claims 2 and 5 to 8 not printed in the Gazette.]

1,265,783. HOLDBACK FOR VEHICLES. LAWRENCE HUIBREGTSE, Gallen, Mich. Filed Jan. 9, 1917. Serial No. 141,417. (Cl. 21—27.)



A holdback comprising a resilient metallic strip having a flat attaching portion between its ends and having one end portion bent upwardly and over the attaching portion in spaced relation thereto to form a hook, the opposite end portion of the strip being bent upwardly and over the attaching portion in spaced relation thereto and extending to and engaging the bill of the hook, said second end portion having its free extremity directed from the bill of the hook diagonally toward and into engagement with the attaching portion within the inclosure of the hook.

1,265,784. APPARATUS FOR RAISING OR FORCING LIQUIDS. HERBERT ALFRED HUMPHREY, Westminster, London, England, assignor to Humphrey Gas Pump Company, a Corporation of New York. Original application filed June 13, 1908, Serial No. 438,427. Divided and this application filed Feb. 12, 1910, Serial No. 543,533. Renewed Feb. 9, 1917. Serial No. 147,721. (Cl. 160—1.)



1. In apparatus for raising or forcing liquid having two combustion chambers each fitted with an admission valve for combustible mixture and an exhaust valve for burnt products, and a play pipe having free and uninterrupted communication with said combustion chambers wherein a column of liquid of sufficient bulk and path of travel to acquire useful momentum is propelled outwardly by the energy of expansion of an ignited combustible charge and a column of liquid flows inwardly toward the chambers to expel burnt products from one chamber and compress a fresh combustible charge in another chamber, and means whereby the admission valve in each chamber controls the exhaust valve in the other chamber.

5. In apparatus for raising or forcing liquid having two combustion chambers each fitted with an admission valve for combustible mixture and a coöperating exhaust valve for burnt products, and wherein a column of liquid is propelled outwardly by the energy of expansion of an ignited combustible charge and a column of liquid flows inwardly toward the chambers to expel burnt products from one chamber and compress a fresh combustible charge in another chamber, means whereby the admission valve in each combustion chamber opens under suction and in automatically closing releases the coöperating ex-

haust valve which exhaust valve is then free to open when the pressure within its combustion chamber has fallen to a suitable extent, and is adapted to be shut by impact of liquid and in closing to release the coöperating admission valve, and means whereby each valve on shutting is locked until released as aforesaid.

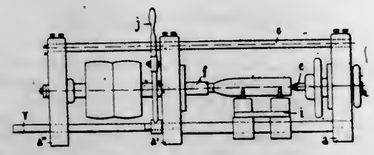
10. In apparatus for raising or forcing liquid having two combustion chambers each fitted with an admission valve for combustible mixture and an exhaust valve for burnt products, and a play pipe having free and uninterrupted communication with said combustion chambers in which a column of liquid of sufficient bulk and path of travel to acquire useful momentum is propelled outwardly from a combustion chamber by the energy of expansion of an ignited combustible charge and a column of liquid flows inwardly toward a combustion chamber to expel the products of combustion from one chamber and compress a fresh charge in another chamber, a puppet valve in each chamber automatically operated, and a locking device fitted to each admission valve and adapted to be operated by the piston valve of the other chamber.

16. The combination of a play pipe for the reciprocation of a body of liquid of sufficient bulk and path of travel to enable it to acquire useful momentum, a plurality of expansion chambers in free communication with the play pipe and having intake and discharge valves as means for causing an outstroke of the liquid by the force of an expansible charge in an expansion chamber and means for utilizing the kinetic energy of the outstroke to introduce a fresh expansible charge.

19. The combination of a play pipe for the reciprocation of a body of liquid of sufficient bulk and path of travel to enable it to acquire useful momentum, a plurality of expansion chambers in free communication therewith and having intake and discharge valves as means for causing an outstroke by the force of an expansible charge in an expansion chamber, and means for utilizing the kinetic energy of the return stroke to compress a fresh expansible charge in another chamber and to exhaust the first chamber, and means for utilizing the kinetic energy of the outstroke to introduce part of an expansible charge and the kinetic energy of another outstroke, due to the elastic cushion in one expansion chamber, to introduce the balance of the expansible charge.

[Claims 2 to 4, 6 to 9, 11 to 15, 17, and 18 not printed in the Gazette.]

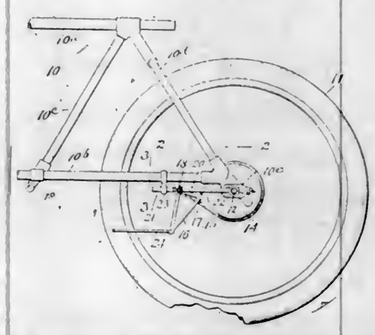
1,265,785. LATHE. MAXENCE ISNARD, Grenoble, France. Filed Aug. 25, 1916. Serial No. 116,912. (Cl. 82—2.)



1. In a lathe, the combination of a frame-work comprising a series of vertical triangular frames arranged in spaced, parallel relation transversely of said framework, said frames having alining horizontal openings formed through their apices and bases, and tie rods extending through said openings and rigidly secured to said frames to join the same together; a centering device mounted in the frame at end of the series; a work spindle rotatably mounted in the other end frame of the series and in the intermediate frame in line with said centering device; and tool-carrying means located between the first-named end frame and the intermediate frame and arranged to travel longitudinally of the framework; said tool-carrying means being movably transversely of the framework independently of its longitudinal movement, to bring the tool nearer to or farther from the work.

[Claim 2 not printed in the Gazette.]

1,265,786. BRAKE MECHANISM FOR MOTOR-CYCLES AND THE LIKE. WILFRED G. JOHNSON, Elyria, Ohio, assignor to W. B. D. Alexander, Cleveland, Ohio. Filed May 22, 1915. Serial No. 29,712. (Cl. 208—60.)

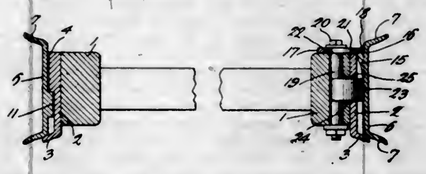


1. In combination in a vehicle of the class described, a frame, a rear wheel with a supporting stud or shaft serving as an axle for the wheel, the frame having a portion extending forwardly alongside the rear wheel, a brake including a drum rotatable with the wheel and a band surrounding the drum, a rod connected at its rear end to the axle and supported at its front end on said portion of the frame extending alongside of the wheel, a brake lever pivotally supported on the rod at a point between the connections of said rod with the axle and frame, said lever being connected to the band so that when shifted it will tighten or release the latter, and brake operating means connected to said lever.

3. In a vehicle of the class described, a frame, a rear wheel, an axle for the wheel, a brake including a drum rotatable with the wheel and a brake band surrounding the same, a brake lever and a supporting rod therefor connected at its rear end to the axle and at its forward end adjustably supported on the frame, said lever being pivotally supported on said rod between the points of connection thereof with the frame and axle, and being substantially triangular in shape one point of the triangle being connected to one end of the band, another point of the triangle being connected to said rod, and means for rocking said lever connected to the third point of the triangle.

[Claim 2 not printed in the Gazette.]

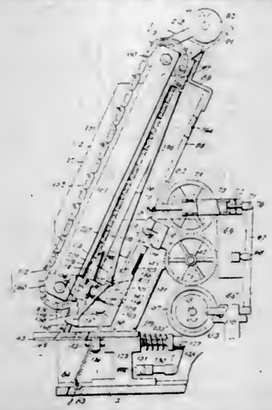
1,265,787. DEMOUNTABLE RIM. CLARENCE S. JOHNSTON, Glendive, Mont. Filed May 12, 1917. Serial No. 168,228. (Cl. 152—21.)



1. In a device of the class described, a wheel body having outwardly extended projections; a rim surrounding the wheel body and having inwardly extended projections locked behind the projections on the wheel body when the rim is moved circumferentially with respect to the wheel body, the rim having a longitudinal rib; a locking member mounted on the wheel body for inward and outward movement and coacting with the rib to prevent lateral movement of the rim in one direction; and means mounted on the wheel body for actuating the locking member.

[Claims 2 and 3 not printed in the Gazette.]

1,265,788. FEEDING MECHANISM FOR VENDING-MACHINES. ELIAS H. KELLEY, New York, N. Y. Original application filed Dec. 17, 1909, Serial No. 533,638. Divided and this application filed Dec. 3, 1910. Serial No. 595,339. (Cl. 211—23.)



1. A feeding mechanism for vending apparatus comprising an endless chain of links journaled together at intervals by pivot-pins extending beyond the links on opposite sides of the chain; driving means coöperating with the extensions of said pins for traversing the chain; and mechanism for actuating the driving means.

5. A vending machine comprising delivery mechanism, including a weighted actuating device; means for controlling the initial position of said weighted device and setting the same in operation; and means for setting the controlling means in operation.

22. A feeding mechanism for vending machines having, in combination, means for engaging the articles to be delivered; and means for actuating the engaging means including an inclined track; a weighted car traveling thereon; a rack-bar carried by the car; a tension-device engaging the rack-bar; a gear coöperating with the rack-bar; and means for disengaging the gear from the rack-bar to enable the tension-device to control the action of the car.

27. A vending machine, having, in combination, means for delivering articles therefrom in variable quantities; means for severing the articles at a single operation, regardless of the amount of delivery; mechanism for operating the delivery means; and means for actuating the severing means under control of the delivery means.

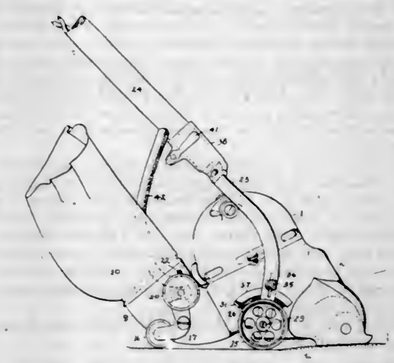
37. In combination with the delivery mechanism of a vending machine, means for supporting a plurality of reels of articles to be delivered, means for locking the articles upon the holder, and means whereby, when one reel is exhausted, another can be supplied to the holder without disturbing the locking means.

[Claims 2 to 4, 6 to 21, 23 to 26, 28 to 36, and 38 to 53 not printed in the Gazette.]

1,265,789. VACUUM CLEANING-MACHINE. JAMES B. KIRBY, Cleveland, Ohio. Filed Sept. 15, 1913. Serial No. 789,746. (Cl. 15—60.)

1. A suction cleaner comprising a nozzle section tiltably mounted upon a support arranged substantially midway of its length and having at its forward part a transversely-extending, downwardly-facing, elongated inlet mouth, a handle pivotally connected to said section, and spring tension means connecting said nozzle section and handle and adapted to rock the nozzle section and lift the nozzle from the surface when the handle is moved from upright to operating position.

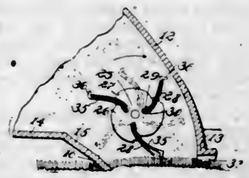
2. In a suction cleaner, a tiltable casing having a nozzle formed at its forward part with a transversely-extending, downwardly-facing, alongated inlet mouth, supporting wheels journaled to said casing substantially midway of its length with their axes parallel to said inlet mouth, a handle pivoted to said casing upon an axis transverse to said handle and parallel to the wheel axis, and a tension device between said handle and casing arranged to tend to raise the inlet mouth from the floor when said handle is held in operating position.



7. In a vacuum cleaning machine, a casing having a pair of oppositely extending axial projections, supporting walls rotatably secured upon said projections, a handle having a yoke one arm of which is pivoted to one of said projections and the other arm of which is formed with a notched end engaged with the other of said projections, a member rotatably mounted upon said last named projection and detachably engaged with said yoke, and a convolute spring connecting said member and casing and arranged to rotate such member in a direction to raise the yoke, said yoke having its notch on the side toward which the tension of the spring tends to move it and arranged to be detached from said projection without disconnecting the spring from said member and casing.

[Claims 3 to 6, 8, and 9 not printed in the Gazette.]

1,265,790. AGITATING DEVICE FOR VACUUM-CLEANER NOZZLES. JAMES B. KIRBY, Cleveland, Ohio. Filed Feb. 17, 1915. Serial No. 8,906. (Cl. 15—60.)



1. In a vacuum cleaner, a nozzle having an elongated downwardly facing inlet mouth, an agitating device revolubly mounted inside said nozzle and parallel with said mouth, and comprising a plurality of beating members, pivoted upon axes parallel with said mouth, said device including vanes set in the air passageway whereby the device is rotated.

6. In a vacuum cleaner, a nozzle having an elongated downwardly facing inlet mouth, an agitating device revolubly mounted inside said nozzle and parallel with said mouth, said device comprising a plurality of longitudinally extending radiating blades, and a flexible sheet covering the rear face of each blade, and formed at its outer edge with teeth projecting beyond the edge of said blade, said teeth projecting in the direction of rotation of said blades, and said sheet being attached to said blade only at the edge opposite said toothed edge.

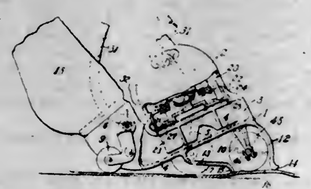
10. A vacuum cleaner having a nozzle formed with an elongated inlet mouth surrounded by work-engaging jaws, and an agitating device pivoted in said nozzle parallel with said mouth, said device comprising a plurality of flexible members having teeth projecting transversely of the pivot axis and arranged after being presented to the working surface to be raised and subjected to the air stream whereby adherent matter is removed.

14. In a cleaner, a suction nozzle having an elongated inlet mouth surrounded by work engaging jaws, and an agitating device rotatably supported within said casing with its axis parallel to said mouth said device having a plurality of radiating vanes and also having a plurality of flexible teeth, one of said jaws being formed with air passageways debouching upon said vanes, there being air passageways formed between the base of each vane and the neighboring vanes.

21. In a cleaner, in combination, a suction nozzle having an elongated inlet mouth surrounded by work engaging jaws, one of which is formed to admit air between the same and the work-surface, a rotatable agitating device journaled within said casing upon an axis substantially parallel with said mouth and having vanes exposed to the air entering past said jaw, and means for raising and lowering said nozzle so as to adjust the other jaw with reference to the work-surface.

[Claims 2 to 5, 7 to 9, 11 to 13, 15 to 20, and 22 not printed in the Gazette.]

1,265,791. VACUUM CLEANING-MACHINE. JAMES B. KIRBY, Cleveland, Ohio. Original applications filed Apr. 4, 1913, Serial No. 758,804, and Sept. 15, 1913, Serial No. 789,745. Divided and this application filed Oct. 30, 1916. Serial No. 128,385. (Cl. 15—60.)



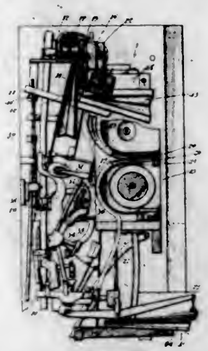
1. In a suction cleaner, a casing having a fan chamber and a nozzle, said fan chamber having a bottom inclined relatively to the plane of the mouth of the nozzle with the rear portion of said bottom adjacent to said plane and its forward portion spaced therefrom, said nozzle being located beneath said forward portion, and the said bottom being formed with an intake aperture which opens into the rearward part of the nozzle.

3. In a suction cleaner, a casing having a fan chamber and a nozzle, said fan chamber having a bottom inclined relatively to the working surface with its rearward portion closely adjacent to such working surface and its forward portion elevated thereabove, said nozzle being located beneath and forwardly of such elevated portion, the forward portion of said nozzle forming a brush receiving chamber lying partly beneath the elevated portion of said fan chamber, and the bottom wall of said fan chamber having a central intake opening communicating with the rearward part of said nozzle.

8. In a suction cleaner, a casing having in its upper part a substantially cylindrical fan chamber arranged with its axis inclined rearwardly from the vertical and having beneath the front part of said fan chamber a substantially triangular nozzle, and said fan chamber having an axial intake opening communicating with the interior of said nozzle at its rearmost point, the front part of said nozzle having a downwardly opening mouth, and a rotatable brush journaled inside said nozzle in the angle between said mouth and the bottom of said fan chamber.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,265,792. EXPRESSION DEVICE FOR AUTOMATIC MUSICAL INSTRUMENTS. PAUL B. KLUGE, Chicago, Ill., assignor to The Cable Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 3, 1916. Serial No. 88,675. (Cl. 84—160.)



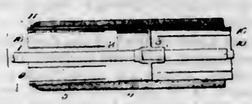
1. A note sheet controlled player piano comprising a piano action, sheet controlled means for emphasizing one part of the musical composition with respect to another part, comprising a plurality of independently movable devices, each acting mechanically on a number of piano action units, and sheet controlled modulating means for varying the emphasis.

8. A player-piano having means for producing solo effects by automatically controlling the length of stroke of the hammers by acting upon the hammer-operating action between the strings and the striking pneumatics, and also having sheet-controlled means for modulating the solo theme by varying the effective length of hammer-stroke.

9. The combination with the piano-hammers and an adjustable hammer-rest rail, of means mounted for movement independently of said rail to provide a rest for one or more of said hammers, and sheet-controlled means for actuating said hammer-rest rail.

[Claims 2 to 7 and 10 to 16 not printed in the Gazette.]

1,265,793. SPLIT MANDREL. LOUIS G. LARSEN, Bridgeport, Conn., assignor to American Graphophone Company, Bridgeport, Conn., a Corporation of West Virginia. Filed Mar. 10, 1916. Serial No. 83,328. (Cl. 274—40.)



1. A taper mandrel for sound-record tablets having a rigid intermediate portion and resilient end portions.

2. A taper mandrel for sound-record tablets having a rigid intermediate portion and its ends slotted to provide a plurality of spring tongues.

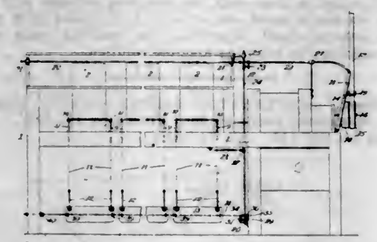
3. A mandrel for sound-record tablets comprising a rigid intermediate portion and a plurality of spring tongues, said tongues being provided with elevations adjacent their outer ends.

[Claims 4 to 21 not printed in the Gazette.]

1,265,794. STOP MECHANISM FOR COMBING-MACHINES. CLAES ALBIN LINDBERG and JOSEPH HINDLEY, New Bedford, Mass. Filed June 7, 1917. Serial No. 173,266. (Cl. 74—46.)

1. The combination with a roll and its driving means of a tensioning weight and means automatically controlled by displacement of said tensioning weight for moving said driving means to inoperative position.

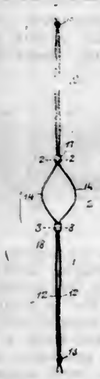
8. An automatic stop for combing machines having a plurality of piercing rolls and tensioning weights therefor comprising a spring operated belt-shifter, a detent for holding it against operation, a chain communicating with all the tensioning weights on said combing machine and



connected with said detent, and means on said detent for holding said chain normally under tension, said tensioning means being adapted to release the detent upon the displacement of any of said weights.

[Claims 2 to 7 not printed in the Gazette.]

1,265,795. BOTTLE-STOPPER FASTENER. FELIX LORIMER, Boston, Mass. Filed Nov. 15, 1917. Serial No. 202,226. (Cl. 215—24.)



3. A stopper fastener comprising two cords collectively forming an elongated flexible ligature, and connecting members coupling the cords together at adjustably spaced apart points, the end portions of said cords being adapted to be detachably connected and form a stopper downhold, while the intermediate portions of said cords between said connecting members form band members which bear on opposite sides of a flanged bottle neck, and are maintained by said connecting members in the form of a band encircling the bottle neck, when the end portions are connected, said connecting members being adjustable relatively to each other to vary the size of said band, one of said connecting members being attached to the cords, and the other slidable thereon.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,265,796. MATRIX-MAT. FRANK S. LOW, New York, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 25, 1914. Serial No. 847,313. (Cl. 154—46.5.)

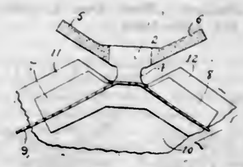
2. A matrix mat consisting of fibrous material and hygroscopic starchy material which will not be decomposed by the heat to which it is subjected.

4. A matrix mat having a sheet of fibrous absorptive paper impregnated with a solution of hygroscopic starchy material which will set when moisture is removed therefrom and which will not be decomposed by the heat to which it is subjected.

17. A matrix mat having a sheet fibrous absorptive material containing modified starch and margesium acetate and a facing of tissue paper affixed thereto by means of a paste containing ordinary starch and magnesium acetate.

[Claims 1, 3, 5 to 16, and 18 to 20 not printed in the Gazette.]

1,265,797. KITE. HENRY LURZ, Jersey City, N. J. Filed July 25, 1917. Serial No. 182,619. (Cl. 244—22.)



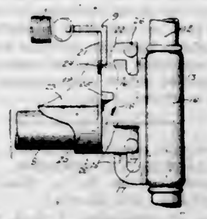
1. In a kite the combination of a body of sheet material, a reinforcing member of sheet material comprising a body portion and a head portion, said head portion being provided with oppositely extending arms and said head portion being adapted for folding down over said body portion, and means for securing said arms and body to said kite body whereby a pocket is provided for the end of a kite stick.

2. In a kite the combination of a body of sheet material having edge flaps, and a reinforcing member folded over onto said body, said body edge flaps being adapted to be folded over said reinforcing member and secured thereto, whereby a pocket is provided for the end of a kite stick and the edges of the kite adjacent said pocket are reinforced.

5. In a kite the combination of a body of sheet material having edge flaps, a reinforcing member of sheet material comprising a neck, two opposite upper laterally extending arms and two opposite lower laterally extending arms, said lower arms being more than twice the width of said upper arms respectively, so that when said upper arms are folded over onto said lower arms and said lower arms folded over onto themselves respectively, said lower arms will overhang said upper arms and present contacting surfaces with themselves respectively, said body edge flaps being of sufficient width when folded over said folded arms of the reinforcing member to overhang said arms and contact with the body of the kite, means for securing said folded portions together, means for securing said reinforcing member to the kite body, and means for securing said flaps to said arms and to the kite body.

[Claims 3, 4, and 6 to 9 not printed in the Gazette.]

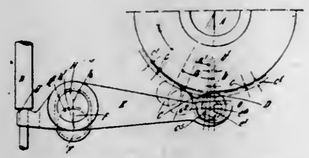
1,265,798. CORNER-LOCK FOR BEDS OR THE LIKE. BURTNETT MCINTOSH, Brooklyn, N. Y., assignor to Frank A. Hall, Montclair, N. J. Filed July 7, 1916. Serial No. 107,884. (Cl. 5—55.)



In a corner fastener, the combination of a corner post, a plate secured to the corner post provided with vertical outstanding recessed portions and an intermediate binding

edge, a side rail, a wing plate provided with a socket on its rear face to receive the side rail and a vertical outstanding plate on its front face, said vertical outstanding plate provided with projections adapted to engage in the recessed portions of the corner post plate, and an integral transverse lug arranged at the juncture of the vertical outstanding plate and the wing plate and adapted to cooperate with the binding edge on the corner post plate to frictionally lock the parts in position.

1,265,799. INJECTION OF FUEL IN INTERNAL-COMBUSTION ENGINES. JAMES MCKECHNIE, Barrow-in-Furness, England, assignor to Vickers Limited, Westminster, England. , Filed Dec. 2, 1916. Serial No. 134,642. (Cl. 123—109.)



1. Fuel injecting mechanism for internal combustion engines, comprising an injection valve, a valve lever, a lever operating cam, and an adjustable eccentric fulcrum for the said lever, so positioned that its path of adjustment is approximately tangential to the cam and causes both radial and tangential adjustment of the cam end of the lever, the outline of the cam being so formed with relation to the path of adjustment of the lever end that correct timing of the point at which the valve opens is obtained for all adjustments.

2. Fuel injecting mechanism for internal combustion engines, comprising an injection valve, a valve lever, a lever operating cam and an adjustable fulcrum for the lever so positioned that on adjusting the fulcrum for power regulation the cam end of the lever moves along a path substantially following the contour of the leading edge of the cam, whereby the opening of the injection valve begins at practically the same point in the engine stroke for different positions of the lever.

3. Fuel injecting mechanism for internal combustion engines, comprising an injection valve, an adjustable valve lever, a lever operating cam having the outline of its leading surface so related to the path of adjustment of the lever as to time the valve opening for all adjustments of the lever, a fuel pump including a suction valve, a suction valve cam, an adjustable cam lever through which the suction valve is operated and means for effecting the simultaneous adjustment of the injection and suction valve levers.

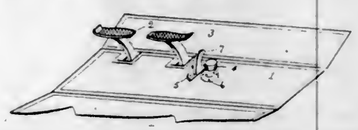
4. Fuel injecting mechanism for internal combustion engines, comprising an injection valve, a valve lever, an adjustable eccentric fulcrum on which the said lever is mounted, a lever operating cam having the outline of its leading surface so related to the path of adjustment of the lever as to time the valve opening for all adjustments of the lever, a fuel pump including a suction valve, a suction valve cam, a cam lever operating the suction valve, an adjustable eccenfric fulcrum for the said cam lever, and an operative connection between the two adjustable fulcrums by which simultaneous adjustment of the two levers is effected.

1,265,800. PROCESS OF PRODUCING 1:2:4 METHYL-HYDROXY-ISOPROPYL BENZENE. RALPH HARPER MCKEE, Ridgefield Park, N. J. Filed Apr. 7, 1917. Serial No. 160,493. (Cl. 23—24.)

1. A process of producing 1:2:4 methyl-hydroxy-isopropyl benzene which consists in subjecting "spruce turpentine" to a sulfonating treatment, producing an alkali metal salt of the sulfonic acid formed, fusing such alkali metal salt with caustic alkali and adding an acid to the resulting mass.

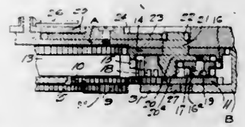
2. A process of producing 1:2:4 methyl-hydroxy-isopropyl benzene which consists in subjecting "spruce turpentine" to a sulfonating treatment, combining an alkali metal radical with the resulting sulfonic acid to form an alkali metal salt of such acid, fusing such salt with caustic alkali, dissolving the resulting mass and neutralizing the resulting alkaline solution.

1,265,801. ACCELERATOR SAFETY-GUARD. JAMES E. MARRINER, Portland, Me. Filed Dec. 17, 1917. Serial No. 207,414. (Cl. 74—81.)



In a vehicle, the combination with a brake pedal and an accelerator pedal of a vehicle, of an accelerator pedal safety guard comprising a post fixedly positioned between said pedals and spaced apart from each of them, the height of the post being greater than that of the accelerator pedal and less than that of the brake pedal when said pedals are in their normal position.

1,265,802. WINDING-INDICATOR. JOSEPH MAZER, McAlester, Okla. Filed Mar. 1, 1913, Serial No. 751,472. Renewed Mar. 19, 1918. Serial No. 223,478. (Cl. 58—85.)



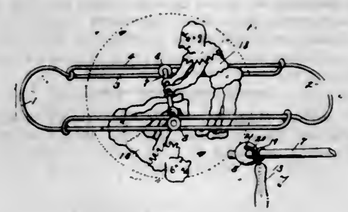
1. In winding indicator mechanism, the combination of a main-spring barrel, winding mechanism including a ratchet-wheel, a gear-wheel, connections between said gear-wheel and the ratchet-wheel, a rotary disk member, a double planetary gear carried by said disk, said planet-gear meshing with said gear-wheel, a second gear wheel separated from the first gear-wheel by said rotary disk member, said second gear being engaged by the teeth of said double planet pinion, connections between said second gear wheel and the main-spring barrel, an arbor on said rotary disk member forming a bearing for said second gear wheel, a pinion on said arbor adapted to pass through the opening through which said arbor is inserted, an indicator-hand wheel, and connections between said pinion and said indicator-hand wheel.

4. In indicator winding mechanism, the combination of the main-spring barrel, winding mechanism including a ratchet-wheel, a gear wheel having crown teeth, connections between said gear wheel and the ratchet-wheel, a rotary disk member having a recessed portion and located within the crown teeth of said gear, a double planet gear carried by said disk-member in said recessed portion, the crown teeth of said gear wheel internally meshing with one set of the teeth of said double planet gear, a second gear wheel spaced from said first gear wheel by said disk-member, connections between said second gear wheel and the main-spring barrel, said second gear wheel having crown teeth meshing internally with the second set of teeth in said double planet gear, an arbor on said rotary disk member forming a bearing for said second gear wheel, a pinion on said arbor, an indicator-hand wheel, and connections for said pinion and said indicator-hand wheel.

6. In winding indicator mechanism, the combination of the top and bottom plates on which the mechanism is mounted, a main-spring barrel, winding mechanism including a ratchet-wheel, a gear-wheel with crown teeth having a bearing in one of said plates, connections between said gear-wheel and the ratchet-wheel, a rotary disk-member, a double planetary gear carried by said disk member, said planet-gear meshing internally with the crown teeth of said gear-wheel, a second gear-wheel with crown teeth separated from said first gear by said disk-member, said second gear being internally engaged by the teeth of said planet-gear, connections between said second gear and the main-spring barrel, an arbor on said disk forming a bearing for said second gear, a pinion on said arbor, an indicator-hand wheel, and connections between said pinion and said indicator-hand wheel.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,265,803. ACROBATIC TOY. CHARLES A. MEURER, Terrace Park, Ohio. Filed June 4, 1917. Serial No. 172,573. (Cl. 46—40.)

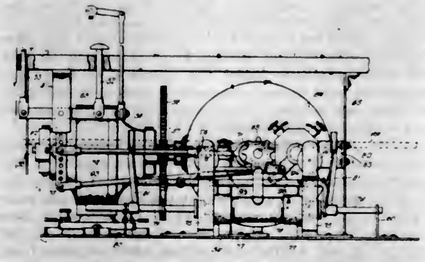


1. An acrobatic toy comprising a pair of frame members longitudinally shiftable toward and away from each other, and a rotatable member carried between the frame members and caused to rotate by the shifting of the same.

3. An acrobatic toy comprising frame members shiftable toward and away from each other, and a rotatable member carried between the frame members and caused to rotate by the shifting of the same, the rotatable member having stops or pins fixed thereto, with manikins loosely mounted on said rotatable member and adapted to be picked up and caused to rotate by the engagement with the stops on the bar.

[Claim 2 not printed in the Gazette.]

1,265,804. MECHANISM FOR ACTUATING AND LOCKING ELEVATOR-DOORS. EMMETT S. MILLER, Chicago, Ill. Filed Dec. 3, 1917. Serial No. 205,120. (Cl. 187—52.)



1. In control mechanism for elevators, means for actuating the shaft door and cage gate comprising a reciprocable carriage mounted upon the cage, means for detachably securing the cage gate to said carriage, a latch mounted on said carriage and actuated by the movement thereof to engage and disengage said shaft door, a power belt connected to said carriage, a motor for actuating said belt, a compound switch interposed in the circuit of said motor, means for actuating one element of said switch, and devices carried by said power belt adapted to actuate the opposite switch element.

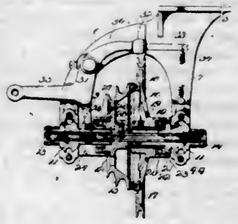
4. In control mechanism for elevators, means for actuating the shaft door and cage gate comprising a reciprocable carriage mounted upon the cage, means connecting the cage gate thereto, a device on said carriage adapted to engage the shaft door, a power belt connected to said carriage, a motor for actuating said belt, a compound switch interposed in the circuit of said motor, a rod connected to one of the movable elements of said switch, an actuating lever to which the opposite end of said rod is connected, a rod connected to the opposite movable element of said switch, an intermittently movable device to which the last mentioned rod is connected, and means operated by the movement of said power belt adapted to reciprocate said intermittently movable device.

6. In control mechanism for elevators, means for actuating the shaft door and cage gate comprising a reciprocable carriage mounted upon the cage, means connecting the cage gate thereto, a device on said carriage adapted to engage the shaft door, a power belt connected to said carriage and having stops thereon, a motor for actuating said belt, a compound switch interposed in the circuit of said motor, a rod connected to one of the movable elements of said switch, an actuating lever to which the opposite end of said rod is connected, a rod connected to the opposite movable element of said switch, a reciprocable piston-rod, arms adjustable thereon and projecting from opposite portions thereof the upper ends of said arms adapted to be engaged by the stops carried by said power belt, and a U-shaped frame connected to said last-mentioned rod the parallel members of said frame being loosely mounted on said piston-rod and adapted to be engaged and moved by said arms while the latter are in engagement with said belt-stops.

10. In control mechanism for elevators, means for cushioning the movements of the shaft door and cage gate comprising a cylinder and piston therefor, a piston rod extended through opposite ends of said cylinder, a reciprocating device adapted to actuate the door and gate, and members carried by opposite portions of said piston rod adapted to be engaged by said reciprocating device whereby said piston rod is moved in opposite directions.

[Claims 2, 3, 5, and 7 to 9 not printed in the Gazette.]

1,265,805. POWER-TRANSMITTER. CHARLES MITCHELL, Poughkeepsie, N. Y., assignor to Willcox & Gibbs Sewing Machine Co., New York, N. Y., a Corporation of New York. Filed May 28, 1917. Serial No. 171,531. (Cl. 74—46.)



1. In a power transmitter, the combination of supporting means, two bearing sleeves arranged opposite each other endwise and each directly supported from the supporting means, a shaft extending from one bearing sleeve into the other, a driving and a driven pulley or wheel supported by said bearing sleeves and shaft, and means under control of an operator for moving said pulleys relatively into engagement with each other to impart movement from the driving to the driven pulley.

2. In a power transmitter, the combination of supporting means, two bearing sleeves arranged opposite each other endwise and each directly supported from the supporting means, a shaft extending from one bearing sleeve into the other, a driving and a driven pulley or wheel, one pulley mounted upon one of the bearing sleeves and the other pulley mounted upon the shaft between the bear-

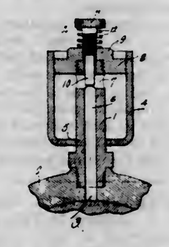
ing sleeves, and means under control of an operator for moving said pulleys relatively into engagement with each other to impart movement from the driving to the driven pulley.

3. In a power transmitter, the combination of supporting means, two bearing sleeves arranged opposite each other endwise and each directly supported from the supporting means, a shaft extending from one bearing sleeve into the other, a driving and a driven pulley or wheel supported by said bearing sleeves and shaft, a follower on one of the bearing sleeves, and means under control of an operator for actuating the follower and through it moving one of the pulleys into driving engagement with the other.

11. In a power transmitter, the combination of supporting means, two bearing sleeves carried by the supporting means and arranged opposite each other endwise, a shaft extending from one bearing sleeve into the other and rotatably supported thereby, a driving pulley secured to said shaft between the bearings, a driven pulley rotatable on one of said bearing sleeves, means for moving said pulleys relatively into engagement with each other to drive the driven pulley from the driving pulley and a ball-race for each pulley disposed to take the end thrust thereof when the pulleys are held in driving engagement with each other, the ball-race for the driving pulley being non-rotatable therewith when said pulley is running idle.

[Claims 4 to 10 not printed in the Gazette.]

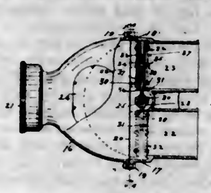
1,265,806. LUBRICATING DEVICE. PURLEY C. MITCHELL, Benton Harbor, Mich. Filed May 31, 1917. Serial No. 171,840. (Cl. 184—43.)



1. In a device of the character described, a stem adapted to be secured to a rotating member having a bearing surface, said stem having a transverse opening near the outer end thereof and having a passageway to connect said opening with said bearing surface, a lubricant receptacle slidably mounted on said stem and extending outwardly beyond the transverse opening in the stem, a follower rigidly secured to said stem beyond said transverse opening and having a sliding fit within said receptacle to permit the latter to have outward movement relatively thereto, an adjusting rod screw threaded into said follower and extending into the passageway of said stem to regulate the amount of lubricant which can enter said passageway through said opening.

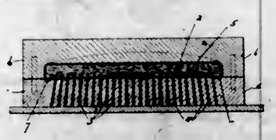
2. In a device of the character described, a stem adapted to be secured to a rotating member having a bearing surface, said stem having an opening near the outer end thereof and having a passage-way to connect said opening with said bearing surface, a lubricant receptacle slidably mounted on said stem and extending outwardly beyond the opening in said stem, a follower slidably mounted in said receptacle to permit the latter to have outward movement relatively thereto and having a central opening therein, the inner part of said opening being screw-threaded to receive the end of said stem, and the outer portion of said opening being of smaller diameter than said inner portion, and a rod having a portion screw-threaded into the outer portion of said opening in said follower and having an inner portion extending through said opening into the passage-way in said stem to regulate the amount of lubricant which can enter the same, said rod having at its outer end means for adjusting the same.

1,265,807. VALVE. CHRIST MOE, Hanska, Minn. Filed Jan. 27, 1916. Serial No. 74,591. (Cl. 137—4.)



A valve casing having an intake and two outlets, of a valve stem, an arm on the valve stem located in the valve casing and having on its free end the ball member of a ball and socket joint, a double-faced valve comprising a pair of laterally spaced valve plates between which said arm projects and having on their inner faces coöperating half sockets affording the socket member of said ball and socket joint, and nut-equipped bolts detachably connecting said valve plates and holding the members of said ball and socket joint assembled said bolts being located on opposite sides of said ball.

1,265,808. MAKING BRUSHES. JOHN MORRISON, Leominster, Mass. Filed Apr. 13, 1916. Serial No. 90,966. (Cl. 15—34.)



1. That improvement in the art of making brushes which consists in simutaneously molding into form and intimate contact under the influence of heat from the composition itself, a bristle-supporting body of composition while hot and a receptacle and cover therefor of thin sheet-material, said sheet-material and composition being plastic when heated.

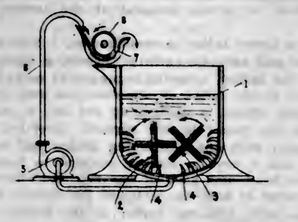
2. That improvement in the art of making brushes which consists in inturning under the influence of heat from the composition edge-portions of a receptacle of thin sheet-material over the edges of a bristle-supporting body of hot composition contained within said receptacle, said composition and sheet-material being plastic when heated.

3. That improvement in the art of making brushes which consists in supporting bristles in an apertured die-plate with ends projecting beyond a molding-surface on the plate, applying to said ends of the bristles a hot mass of plastic composition covered by a receptacle of thin sheet-material plastic under the influence of heat, and compressing said heated composition and said receptacle into form and intimate contact between said die member and a coöperative die-member.

4. That improvement in the art of making brushes which consists in supporting bristles in an apertured die-plate with ends projecting beyond a molding-surface on the plate, applying to said ends of the bristles a hot mass of plastic composition covered by a receptacle of thin sheet-material plastic under the influence of heat, and compressing said heated composition and said receptacle into form and inturning the edge of the receptacle upon the molded face of the composition, between said die-plate and a coöperative die-plate.

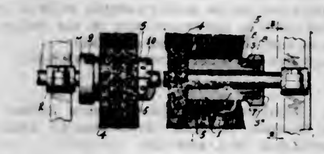
1,265,809. APPARATUS FOR REGENERATING OLD PAPER. BERTRAND ANDRÉ NAVARRE, Lyon, France. Filed Sept. 14, 1917. Serial No. 191,450. (Cl. 92—20.)

In an apparatus of the character described, the combination of a vat for receiving the paper to be treated and water and a detergent, with agitators mounted near the bottom of said vat at an angle of 45° and with their blades overlapping during rotation, triturating teeth at the bottom of said vat mounted for coöperation with said blades, a bucket above said vat having a grooved bottom, a conduit connecting said vat and bucket, a pump



for transferring the pulp from said vat into said bucket, and a grooved roller rotating in said bucket for rolling and crushing the paper pulp during its passage between the grooved bottom and the grooved roller, substantially as described.

1,265,810. COMBER DOFFER-BRUSH. HARMON O. NELSON, Whitinsville, Mass., assignor to The Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed July 29, 1915, Serial No. 42,466. Renewed Mar. 28, 1918. Serial No. 225,365. (Cl. 19—22.)



1. The combination in a cotton comber of the doffer brush shaft and the doffer brush thereon arranged to be removable therefrom without withdrawal of the latter from the machine, and comprising two brush-stocks shaped to surround the brush shaft, each stock having metallic shoes permanently secured to its opposite ends, a pair of locking rings encircling the shaft and adapted to removably engage adjacent shoes on the assembled stocks, and shroud flanges on said rings obstructing entrance of air to the crevices between said adjacent shoes.

[Claims 2 to 4 not printed in the Gazette.]

1,265,811. COMPOSITE MACHINE ELEMENT. OLOF OHLSON, Newton, Mass., assignor to Waltham Watch Company, Waltham, Mass., a Corporation of Massachusetts. Filed Aug. 22, 1916. Serial No. 116,366. (Cl. 74—28.)



1. A machine element comprising a central member of sound-deadening material, and flanking members of wear-resisting material on opposite sides of said central member, said flanking members both having coaxial offset portions frictionally interengaged with one another in the zone of the sound-deadening material.

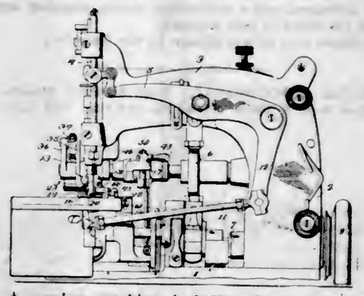
2. A machine element comprising a central member of sound-deadening material, and flanking members of wear-resisting material on opposite sides of said central member, one of said flanking members being of sheet or plate metal and having an integral axially displaced offset portion, and the other of said members surrounding and in frictional contact with the major part of said offset portion.

6. A machine element comprising a disk of wear-resisting relatively rigid material having its central part offset to provide a web and a wall connecting said web with the peripheral part or rim of the disk, a washer of material having the same properties of which the inner portion is turned out to form an axially extending wall of a size to fit and bear friction tight against one of the surfaces of the wall of said disk, and a ring of sound-deadening material surrounding the wall of said washer and confined between the peripheral parts of the disk and washer, the peripheral parts of the disk and washer being formed with an initial set or distortion whereby they tend to occupy positions in which the distance between them is less than the thickness of the outer part of said ring.

8. A gear comprising a disk and a washer offset at their inner parts to form coaxial cylindrical walls, one of which surrounds and fits friction tight upon the other and a fiber ring surrounding the wall of one of the aforesaid members and located between the outer or peripheral portions of said members, the outer portions of said members being distorted or sprung toward one another whereby such portions exert pressure against the opposite sides of the fiber ring adjacent to the outer circumferences thereof.

[Claims 3 to 5 and 7 not printed in the Gazette.]

1,265,812. SEWING-MACHINE. LANSING ONDERDONK, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 31, 1913. Serial No. 757,945. (Cl. 112—24.)



17. A sewing machine including in combination a presser foot, means carried thereby for folding over an edge of fabric, a trimmer carried by the presser foot for engaging and trimming said folded-over edge in advance of the folder, and means whereby said trimmer may be rendered ineffective, a feeding mechanism including a feed dog for engaging and feeding said folded-over edge through the folder, and means whereby said feed dog may be raised with the presser foot.

18. A sewing machine including in combination stitch forming mechanism and a cloth plate, a presser foot, a trimming device and a feeding device, a single implement to raise said presser foot, trimming device and feeding device above said cloth plate.

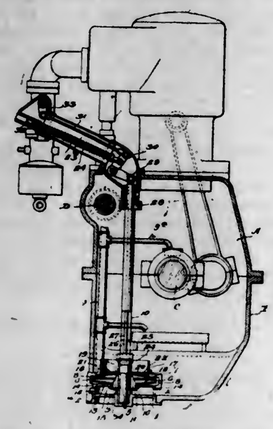
23. A sewing machine including in combination stitch forming mechanism, a presser foot, a trimming device co-acting with said presser foot, a flexible connection between said trimming device and its operating mechanism, a feeding device co-acting with said presser foot and a second flexible connection between said feeding device and its operating mechanism whereby the said presser foot, the trimming device and feeding device can be raised simultaneously without destroying their operating connections.

[Claims 1 to 16 and 19 to 22 not printed in the Gazette.]

1,265,813. COMBINED SPEED-GOVERNOR AND LUBRICATOR. GORDON C. PHARO, Marysville, Cal., assignor to The Pharo Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 24, 1917. Serial No. 157,130. (Cl. 264—19.)

1. A device of the class described having, in combination, a rotary impeller the rotor of which is provided with

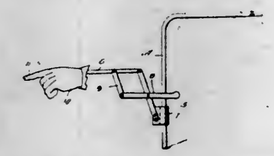
independent discharge passages, speed governor mechanism controlled by the pressure of discharge from one of



said passages, and a lubricating system supplied with oil from the other of said passages.

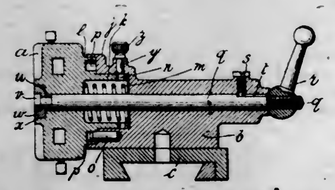
[Claims 2 to 15 not printed in the Gazette.]

1,265,814. AUTO-SIGNAL. JOHN M. PIPP, Muncie, Ind. Filed Sept. 8, 1916. Serial No. 119,109. (Cl. 116—31.)



In a device of the class described in combination with a support, a base plate secured upon such support, a diagonally disposed arm fixed upon said plate, a lever fulcrumed between its ends to said fixed arm between the ends of the latter and having a handle knob formed at its outer end, a lever fulcrumed at its inner end to the outer end of said fixed arm, an indicator hand secured to the outer end of said last named lever, and a link pivotedly connected at one end to the outer end of the first named lever and to said second named lever at its outer end at a point in back of said indicator hand.

1,265,815. TURRET TOOL-HOLDER FOR LATHES. FREDERICK PRICE, Stechford, Birmingham, England, assignor of one-half to Charles Birch, Walsall, England. Filed Oct. 10, 1917. Serial No. 195,782. (Cl. 29—49.)



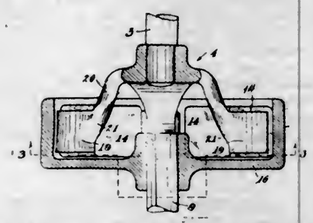
1. In a turret lathe, the combination with a turret mounting comprising a holder, a turret rotatable in said holder, a positioning device to maintain the turret in position on the holder after rotation, a spring to move the turret endwise to clear the positioning device, and means to limit the endwise movement of the turret, of a removable washer on said limiting means normally positioned in a recess in the turret, but capable, following an adjustment of the limiting means relatively to the turret, of removal to permit removal of the turret from the holder.

3. In a turret lathe, in combination, a holder, a turret rotatable and movable endwise therein, a positioning device on the holder, a spring arranged to move the turret relatively to the holder in one direction and clear of the positioning device, a controlling rod and a nut thereon to move the turret in the opposite direction and into engagement with the positioning device said rod having a head and a neck, a washer adapted to removably fit upon the head and neck of the rod and enter a recess in the turret to hold the latter in the holder, and means to temporarily lock the turret in the holder while the washer is being removed from the rod for the purpose described.

7. In a turret lathe, in combination, a holder having a socket therein, a turret, a spigot part on said turret rotatable and slidably fitting within the socket of the holder, a spring arranged between the turret and holder and acting to urge the turret from the holder, a rod passing through said turret and holder, a removable washer on said rod engaging the turret, an adjusting nut handle on the rod engaging the holder, said rod, washer and nut handle serving to draw the turret into the holder, a positioning pin in the holder engaged by one of a series of holes in the turret when the latter is drawn into the holder, and a peg in the holder adapted to enter one of a series of holes in the spigot part of the turret, substantially as and for the purpose described.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,265,816. FRICTION-CLUTCH. ANDREW ROBERT ROBERTSON, Glasgow, Scotland. Filed June 12, 1915. Serial No. 33,662. (Cl. 192—3.)

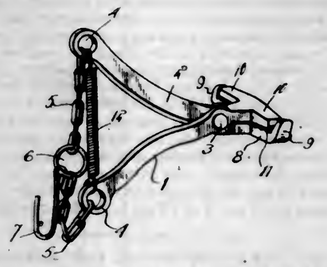


1. In a friction clutch, the combination of a driving shaft; a driven shaft; a cup-shaped member secured to the driven shaft; a block engaging member secured to the driving shaft and comprising arms each provided at its outer end with a substantially cylindrical enlargement having its axis substantially parallel to said shafts; and friction blocks each having a curved face adapted to contact the inner face of the wall of said cup-shaped member, each block being provided with beveled end faces respectively adapted to contact one of said enlargements.

3. In combination with a vertically disposed driving shaft and a vertically disposed driven shaft below said driving shaft; a device of the character described comprising a cup-shaped member secured to the upper end of the driven shaft; an annular wall on said cup-shaped member, block engaging means secured to the lower end of said driving shaft; said block engaging means comprising fingers extending downwardly into said cup-shaped member at their free ends with vertically disposed cylindrical enlargements; and blocks loose and mechanically free disposed in said cup-shaped member and between said enlargements; the lower portions of said fingers being bent inwardly a sufficient distance for said enlargements to form guides for said blocks; said blocks being engaged by said enlargements and rotated thereby so as to be thrust outward by centrifugal force into engagement with the annular wall of said cup-shaped member; the fingers in their downward extent forming a space between them so that they will never act to bind the blocks against the coupling member when the driven shaft is angularly displaced relative to said driving shaft.

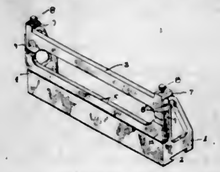
[Claim 2 not printed in the Gazette.]

1,265,817. WIRE-CLAMP. HANS J. ROGGENKAMP, Firesteel, S. D. Filed Aug. 16, 1916. Serial No. 115,304. (Cl. 24—133.)



A device of the class described, comprising a pair of pivotally connected handles adjacent ends of each of which terminates in a pair of transversely disposed jaws of relatively narrow width and having their planes disposed at right angles to those of said handles, the inner adjacent faces of said jaws being serrated and one pair of said jaws having angular lips formed upon the outer ends thereof and of the same width as said jaws and adapted to overlap the end of the adjacent jaw of the other pair when said jaws are in their operative positions.

1,265,818. WORK-HOLDER FOR MACHINES. BERNHARD L. SCHMIDT, Davenport, Iowa. Filed July 19, 1917. Serial No. 181,548. (Cl. 51—4.)



1. The combination with a machine, of a work-holder therefor comprising a frame adapted for adjustment on the frame across the path of the tool, a pair of parallel jaw-bars and means for adjustably connecting them together, and means for adjustably hanging the upper one of said jaw-bars to said frame, so that both bars may be adjusted vertically together, for the purpose set forth.

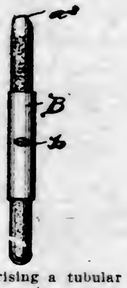
2. The combination with a machine, of a work-holder therefor comprising a frame adapted for adjustment on the frame across the path of the tool, a pair of parallel jaw-bars and means for adjustably connecting them together, said means for adjustably connecting said jaw-bars together consisting of bars rigidly attached to the upper bar and adjustably connected to the lower bar, and means for adjustably attaching the upper one of said jaw-bars to said frame, for the purpose set forth.

3. The combination with a machine, of a work-holder therefor comprising a frame adapted for adjustment on the frame across the path of the tool, a pair of parallel jaw-bars and means for adjustably connecting them together, and means for adjustably hanging the upper one of said jaw-bars to said frame consisting of a screw swiveled into the upper jaw-bar and tapped into the transversely movable frame, whereby both bars together may be vertically adjusted, for the purpose set forth.

4. The combination with a machine, of a work-holder therefor comprising a frame adapted for adjustment on the frame across the path of the tool, a pair of parallel jaw-bars and means for adjustably connecting them together, and means for adjustably attaching the upper one of said jaw-bars to said frame, whereby both bars may be vertically adjusted together, said jaw-bars both having their ends slidingly resting against the front face of said frame.

5. The combination with a machine, of a work-holder therefor consisting of a frame adapted for adjustment on the frame across the path of the tool, said frame consisting of end uprights and a top cross-bar, a pair of parallel bars extending from one upright to the other and having their ends resting slidingly against the front edges of said uprights, means at each end of the bars for adjustably hanging the lower bar to the upper bar, and means for adjustably hanging the upper bar upon the aforesaid top cross-bar, whereby both bars may be vertically adjusted together in sliding relation with the front edges of the uprights.

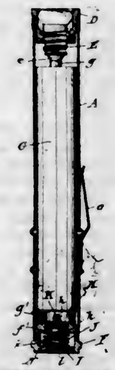
1,265,819. TUBE-CONTAINER FOR MEDICAL PREPARATIONS. EDWIN M. SCHUHMANN, Chicago, Ill., assignor to Chicago Glass Products Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1917. Serial No. 190,350. (Cl. 206—63.3.)



1. A container comprising a tubular casing closed at both ends thereof and having a scored or weakened line extending in a circumferential direction, and paper adhesively secured to said container covering said scored or weakened line.

[Claim 2 not printed in the Gazette.]

1,265,820. FLASH-LIGHT. EDWARD W. SEYMOUR, New York, N. Y. Filed Apr. 10, 1917. Serial No. 160,913. (Cl. 240—8.5.)



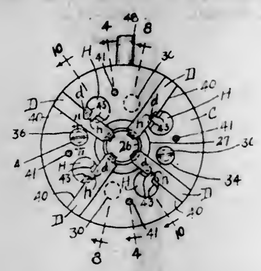
1. In a device of the class described, the combination of a casing provided at its forward end with a lamp, a battery cell within the casing, a plug for closing the rear end of the casing, push-button mechanism mounted in the plug for completing a circuit through the lamp when said mechanism is pressed into advanced position, means for normally retracting the push-button mechanism, and means for locking said mechanism in advanced position, whereby

the lamp may be mechanically maintained in illuminated condition.

10. In a device of the class described, the combination of a casing provided at its forward end with a lamp socket, a lamp, provided with a contact, seated in said socket, a plug for closing the rear end of the casing, and a battery cell, provided at its opposite ends with contacts, positioned within the casing and clamped between the plug and the lamp, with the contact of the lamp in engagement with the contact of the cell, in combination with push button switch mechanism mounted on said plug and insulated with respect to the cell, said push button mechanism being coöperable with the contact at the rear of the cell for completing a circuit through the lamp, and means for locking the push button mechanism in circuit-closing condition when desired.

[Claims 2 to 9 not printed in the Gazette.]

1,265,821. DEVICE FOR CUTTING SCREW-THREADS. THOMAS SHEHAN, Cleveland, Ohio. Filed June 21, 1917. Serial No. 176,073. (Cl. 10—94.)



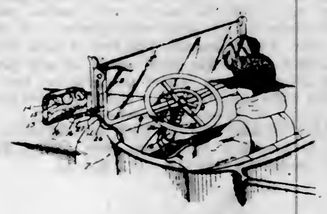
1. In a device for cutting screw-threads, a cutter-head provided in its forward portion with guideways arranged substantially radially of the cutter-head, cutters engaging the guideways and each provided in one side thereof with a recess extending transversely of the respective cutter, a shaft associated with each cutter and extending transversely and rearwardly of the cutter and having bearing in the cutter-head, and a ring rotatably mounted on the cutter-head and operatively connected with the shafts, each shaft being provided in its forward end-portion with two recesses which extend longitudinally and are spaced circumferentially of the shaft and having the wall or partition between said recesses forming a tooth which engages the recess in the cutter associated with said shaft, and the cutters being adapted to be shifted outwardly or inwardly according as the aforesaid ring is rotated in the one or the other direction.

8. In a screw-thread-cutting device, a stock, a cutter-head forward of and supported and shiftable forwardly from the stock and provided with guideways arranged substantially radially of the cutter-head, cutters engaging the guideways, a ring rotatably mounted on the cutter-head, shafts extending endwise of and having bearing in the cutter-head and operatively connected with the cutters and with said ring and having their axes parallel with the axis of the ring, spiral springs acting to rotate said ring in the direction required to withdraw the cutters from their operative position, and means whereby said ring is locked against rotation, said locking means being adapted to be rendered inoperative by a shifting of the ring with the cutter-head forwardly the required extend from the stock, the cutters being adapted to be simultaneously shifted outwardly or inwardly according as said ring is rotated in the one or the other direction, said ring being provided at its forward end with an annular recess extending circumferentially of the cutter-head, and the aforesaid springs being arranged within said recess and circumferentially of the cutter-head and attached at one end to the cutter-head and at the other end to the ring.

14. In a screw-thread-cutting device, a stock having a body and comprising a collar mounted on and adjustable circumferentially of said body, means for securing said collar in the desired circumferential adjustment, a cutter-heat forward of and supported and movable forwardly from the body of the stock and having substantially radially arranged guideways and comprising a plate which forms the rear end face of the cutter-head and is larger diametrically than the adjacent portion of the body of the cutter-head, resilient means acting to retain the cutter-head in its rearward and normal position, a ring rotatably mounted on the cutter-head next forward of the aforesaid plate, cutters operatively connected with said ring and engaging the aforesaid guideways, and resilient means acting to rotate said ring in the direction required to withdraw the cutters from their operative position, the aforesaid collar having a flange loosely embracing and extending circumferentially of the aforesaid plate and arranged concentrically relative to said ring, said ring and said flange being provided the one with holes and the other with pins engaging said holes, and said pins being arranged to become disengaged from said holes upon the required movement of the cutter-head forwardly from the stock.

[Claims 2 to 7 and 9 to 13 not printed in the Gazette.]

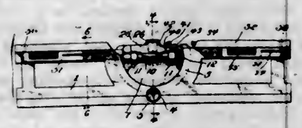
1,265,822. DIRECTION-SIGNAL FOR AUTOMOBILES. EDWARD T. SHERMAN and ELIZABETH M. SHERMAN, Minneapolis, Minn. Filed July 14, 1917. Serial No. 180,689. (Cl. 240—23.)



2. A signaling device comprising a casing having in its sides opposite pairs of light openings, a light casing between each pair of light openings, a lamp for each light chamber, laterally spaced pairs of translucent color plates movable from hidden positions into positions between the light openings and lamps, and means for moving the color plates from their hidden positions.

[Claim 1 not printed in the Gazette.]

1,265,823. LEVEL. AXEL J. SKJONSBYE, Bourkes, Ontario, Canada. Filed Apr. 20, 1917. Serial No. 163,530. (Cl. 33—210.)



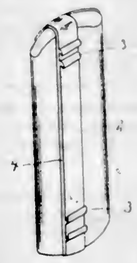
1. In an instrument of the class described, the combination with a stock, and arms pivotally mounted at the ends thereof and adapted to be turned outward at right angles to the length of the stock; of a pendant element pivotally mounted at the center of the stock and having threaded sockets disposed respectively on axes parallel with its pivot and at right angles thereto, and a spirit level carried by said element for the purpose set forth.

3. In an instrument of the class described, the combination with a stock having a substantially semi-circular housing at its mid-length comprising a back plate and an inturned flange around the curved edge of said plate, the flange being pierced with an opening at its mid-length, and a lens in said opening; of a weighted element of substantially semi-circular contour, whose curved edge is movably mounted in said flange and provided with a scale passing across said opening, said element having a transverse hole concentric with its curved edge, a shaft through said hole and the back plate of the housing and means for limiting the rotation of said shaft.

4. In an instrument of the class described, the combination with a stock, a keeper thereon, a nut movable within said keeper and having spaced jaws, and a screw swiveled in said keeper and threaded through said nut; of a shaft rotatably mounted in the stock, a radial arm on the shaft projecting between the jaws of the nut, a pendant weighted element movably mounted on said shaft, and means for securing it thereto at will.

[Claims 2, 5, and 6 not printed in the Gazette.]

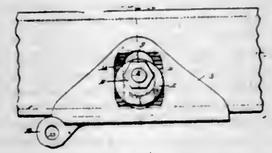
1,265,824. SAFETY-GUARD FOR EYEGLASS-CASES, WALLETS, &c. ALBERT H. SMITH, Darby, Pa. Filed May 15, 1916. Serial No. 97,470. (Cl. 24—3.)



1. A safety guard comprising an endless elastic band having integral arcuate projections arranged in sets, the projections of one set extending in the direction opposite to the direction of the other set.

[Claims 2 and 3 not printed in the Gazette.]

1,265,825. ADJUSTABLE SHACKLE-SUPPORTING CLIP FOR VEHICLE-SPRINGS. FRANK N. SPRAGUE, Sedgwick, Colo. Filed Apr. 10, 1917. Serial No. 161,067. Renewed Mar. 28, 1918. Serial No. 225,347. (Cl. 267—37.)



1. The combination with the side bar of a vehicle, the axle, a leaf spring secured midway of its length to said axle and at one end to said side bar, and a two part shackle one member of which is secured to the other end of the spring, of means for securing the other member of the shackle, comprising a clip having an apertured lug, means for connecting the said other member of the shackle to said lug, and means for adjustably securing said clip to the said side bar.

2. The combination with the side bar of a vehicle, the spring, and an attachment on one end of the spring, of a clip adjustably secured upon said side bar, and means for connecting said attachment to said clip.

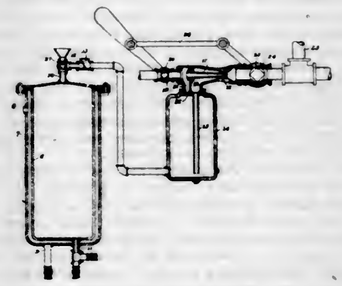
5. The combination with a fixed object of a clip for the purpose specified, comprising a channel form of casting having slots in its sides and an apertured lug at one end, washers having circular bosses which enter said slots, and apertures which extend through said washers eccentric to their axial centers, a bolt extending through an aperture in said fixed object and through the apertures in said washers, and a clamping nut on the end of said bolt.

6. A clip of the character described, comprising a channel form of casting having vertical slots in its opposite sides, one end of its base being formed with a lug having a bolt-receiving aperture, washers having circular concentric bosses which enter said slots, and having bolt holes eccentric with respect to the axes of the bosses, and a bolt extending through said washers having a clamping nut on its threaded end, whereby said clip may be adjustably secured to an object.

8. The combination with a vehicle axle, a side bar, and a spring secured midway of its length to said axle, and at one end to the end of said side bar, of a channel clip on said side bar having an apertured lug on one end, and vertical slots in its opposite sides, washers on opposite sides of said clip having concentric circular bosses which enter said slots, and bolt holes eccentrically positioned with respect to the axes of the bosses, a bolt extending through an aperture in said side bar and said washers and having a clamping nut on its outer end, the meeting faces of said clip and said washers being serrated, and a shackle for automatically controlling the resiliency of said spring, which is pivotally connected to the lug on said clip and to the other end of said spring.

[Claims 3, 4, and 7 not printed in the Gazette.]

1,265,826. WASHING APPARATUS. OTTO SPEEHR, Brooklyn, N. Y. Filed Dec. 31, 1917. Serial No. 209,807. (Cl. 8—8.)



1. In a washing apparatus, the combination of a heated vaporizer for a disinfecting or cleansing agent, and an injector connected to said vaporizer and adapted to inject vapor therefrom into a washing machine.

3. The combination of a vaporizer, a receiver connected thereto, an injector having a steam supply pipe thereto and connected to a water supply line, and a branch passage from the steam pipe into the receiver, to heat the vapor therein and maintain same under pressure.

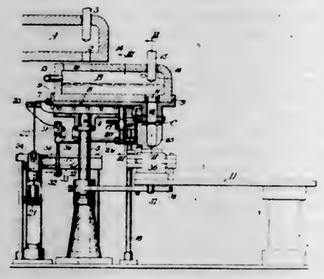
5. In a washing apparatus, the combination of a vaporizer for a disinfecting or cleansing agent, provided with means to create pressure therein, a tank for vapor connected thereto and adapted to be supplied with vapor therefrom in consequence of such pressure, and means to inject vapor from said tank into a washing machine.

[Claims 2 and 4 not printed in the Gazette.]

1,265,827. MECHANISM FOR MAKING GLASS ARTICLES. THOMAS STENHOUSE, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va., a Corporation of West Virginia. Filed Oct. 23, 1914. Serial No. 868,169. Renewed Sept. 23, 1916. Serial No. 121,907. (Cl. 49—55.)

1. In mechanism for making articles of glass, a continuously movable mold carrier, a plurality of molds mounted thereon, a spout in a furnace, a receptacle in position to

receive glass from the furnace and to deliver it to the molds, delivery mechanism connected with the receptacle, and means adapted to maintain the delivery mechanism in vertical alinement with each successive mold during the discharge of the glass into such mold.



3. In mechanism for making articles of glass, a furnace spout, a receptacle positioned below the spout adapted to receive molten glass therefrom, the said receptacle having a pivotally movable support and being also movable horizontally on a line intersecting the axis of its support, a plurality of molds movable under one end of the receptacle and means for delivering the glass from the receptacle to the molds in succession.

4. In mechanism for making articles of glass, a furnace spout, a receptacle positioned below the spout adapted to receive molten glass therefrom, the said receptacle being comprised of fire clay and having in its upper face an elongated aperture adapted in all positions to remain in vertical alinement with the furnace spout, the said receptacle being positioned upon a base plate, the base plate being supported upon a rotatable member and being movable longitudinally thereto, and mechanism connected with the receptacle for delivering the glass from the receptacle into a plurality of molds in succession.

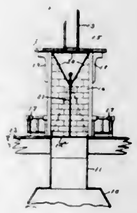
5. In mechanism for making articles of glass, a continuously movable mold carrier, a plurality of molds mounted thereon, a spout in a furnace, a receptacle beneath the spout mounted for pivotal and longitudinal movement, glass severing and supporting means connected with the receptacle, mechanism on the mold carrier adapted to move the receptacle in the direction of travel of the molds and means for returning the receptacle to initial position.

6. In mechanism for making articles of glass, a continuously movable mold carrier, a plurality of molds mounted thereon, a receptacle arranged to receive the glass as it flows from a furnace spout, an outlet from the receptacle and glass severing mechanism connected therewith, a support for the receptacle, the said receptacle having a pivotal movement about the axis of its support, and a concavely shaped member adapted to move the receptacle longitudinally of said support to maintain the outlet in alinement with each of said molds in succession.

[Claim 2 not printed in the Gazette.]

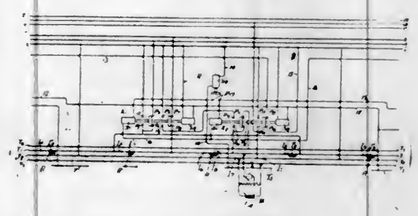
1,265,828. HEAT-DISTRIBUTING DEVICE. FRANK W. STEVENS, Albion, Iowa. Filed June 19, 1916. Serial No. 104,455. (Cl. 126—122.)

1. A heat-distributing device, comprising a floor formed with a hole, a furnace casing communicating with said hole, a partition formed with a hole above and communicating with the hole in the floor, a templet of triangular shape mounted in the upper portion of the latter hole and having deflecting walls overhanging the hole in the floor, a register overlying the hole in the floor, said templet being formed with a longitudinally extending slot over the hole in the floor, and a damper extending through the slot in the templet and adapted to be moved across said register.



2. A heat-distributing device, comprising a floor formed with a hole, a furnace casing communicating with said hole, a partition formed with a hole above and communicating with the hole in the floor, the sides of the hole in the partition being lined with brick and formed with facings of mandrel and plinth on either side of the partition, a templet of triangular shape mounted in the upper portion of the latter hole, and a damper projecting within and extending downwardly from said templet and adapted to be moved across the register.

1,265,829. ELECTRIC-RAILWAY SYSTEM. KENNETH E. STUART, Philadelphia, Pa. Filed Aug. 29, 1914. Serial No. 859,153. (Cl. 246—36.)



1. In an electric railway system, the combination with a car, of a motor thereon, armature and field contact conductors extending along the path of travel of said car and divided into insulated sections for supplying current to the motor armature and field, respectively, means for supplying current to said contact conductor sections, electro-magnetic switching mechanism remaining in the position to which last actuated controlling connections between said current supplying means and said contact conductor sections, and contact elements placed at intervals along the path of travel and engaged by a car to control said electro-magnetic switching mechanism.

18. In an electric railway system, a car, a motor thereon, subdivided armature and field contact conductors extending along the path of travel of said car for separately supplying current to the motor armature and field, and automatic switching mechanism controlled by another car for simultaneously isolating a section of armature contact conductor and a section of field contact conductor, said switching mechanism in another position reënergizing said field and armature sections at full voltage and low voltage, respectively.

26. In an electric railway system, a car, a motor thereon, a subdivided contact conductor extending along the path of travel of said car for supplying current to said motor, a plurality of sources of current of different voltages, and automatic switching mechanism controlled by another car for connecting neighboring sections of said contact conductor with different of said sources of current, whereby the voltages impressed upon said sections decrease in the direction of travel of said car, for connecting a succeeding section in a motor braking circuit

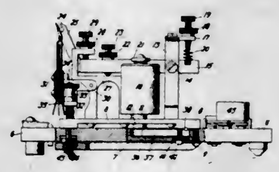
or to one of said sources of current of low voltage, and a succeeding section to one of said sources of current of higher voltage, or for connecting all said sections to one of said sources of current.

31. In an electric railway system, a car, a motor thereon, a subdivided contact conductor extending along the path of travel of said car, a controller associated with a section of said contact conductor for bringing the same into a motor braking circuit or connecting the same with a source of energy, a circuit closed by said controller when in braking position, a contactor controlling another section of said contact conductor controlled by said circuit, a second contactor controlling said circuit, a car controlled contact controlling said second contactor to close said circuit, said first named contactor controlling a section of contact conductor for motor braking a car to rest, a third contactor controlling a section of contact conductor in the rear of said last named section, said last named contactor adapted to be controlled by said circuit, and a second car controlled contact controlling said second contactor to open said circuit.

41. In an electric railway system, the combination with a car, of a motor thereon, motor armature and field contact conductors extending along the path of travel of said car, a return contact conductor, means for dividing said armature and field contact conductors into sections, means for connecting a section of armature contact conductor to said return conductor for bringing the motor armature into a braking circuit while the motor field is excited from said field contact conductor, a supplemental brake on said car, and a winding on said car controlling said brake and connected with said field contact conductor.

[Claims 2 to 17, 19 to 25, 27 to 30, and 32 to 40 not printed in the Gazette.]

1,265,830. POLARIZED REPEATING SOUNDER. ADOLPH R. SWOBODA, Montclair, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Sept. 13, 1915. Serial No. 50,376. (Cl. 175—327.)

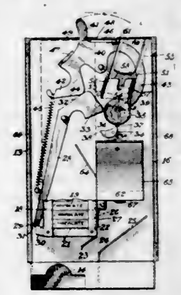


1. In a polarized sounder, a base, an electromagnet carried by said base, a permanent magnet carried by said base and having its free ends adjacent the cores of said electromagnet, and means for adjusting the position of said permanent magnet to vary the air-gap between it and the cores of the electromagnet.

7. In a polarized sounder, an insulating base having an opening therethrough, a metal base mounted upon said insulating base, and provided with a transversely extending groove, an electromagnet mounted upon said metal base with the lower ends of its cores adjacent the opening in said insulating base, a U-shaped permanent magnet having its legs turned back upon themselves and having grooves extending transversely of said turned-over portions, a semi-circular clamping member, means for engaging said semi-circular member for supporting said permanent magnet from said metal base with the turned-over portions within the opening in said insulating base adjacent the cores of the electro magnet, a non-magnetic pivotal pin lying in said grooves between said metal base and said permanent magnet, and means for swinging said permanent magnet about said pivotal pin to vary the distance between the ends of said turned-over portion and the cores of said electromagnet.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,265,831. VENDING-MACHINE. LOUIS C. TARASCH, New York, N. Y., assignor to Penny Package Corporation, New York, N. Y., a Corporation of New York. Filed June 12, 1915. Serial No. 33,664. (Cl. 194—88.)



1. In a device of the class described, a package ejecting mechanism including a vertically extending-package-ejecting-lever pivoted intermediate its length with its upper arm offset laterally from a vertical line passing through the fulcrum, said offset arm provided with a substantially straight edge coin engaging surface normally facing downward, a cradle provided with a concaved coin receiving surface spaced from the normal position of said straight surface a distance less than the diameter of the coin necessary to operate the mechanism, a manually controlled actuating member having a movement toward said straight surface and between the same and said cradle adapted to engage a coin inserted between the member and cradle to force the coin onto the concaved surface of the cradle, to act through the coin to actuate the lever and finally to move the coin off the cradle.

7. In a device of the class described, the combination of a package ejecting lever provided with a downwardly facing coin engaging edge, a coin cradle facing said edge and provided with a coin guiding portion curved toward said edge whereby a coin moving along said guiding portion will engage said edge to raise the same and thus actuate the lever, and manually actuated means for forcing the coin along said guiding portion of the cradle, said manually actuated means having a further movement after the actuation of the ejecting lever operable to move the coin positively from the cradle.

8. In a device of the class described, the combination of a back plate provided with means for attaching the same in position on the back of a theater chair, a unit including a base plate, a receptacle for the packages to be vended, a coin controlled package ejecting mechanism and a coin box, all mounted on one face of said base plate, said unit demountably carried by said back plate and designed to be removed therefrom as a unit, and an inclosing casing adapted to be positioned on said back for inclosing said unit and means for locking the casing in place.

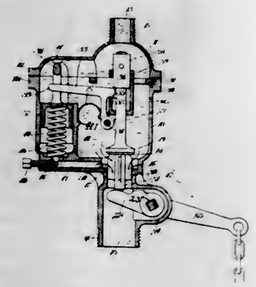
10. A device of the class described, comprising an inclosing casing provided with a coin slot, an actuating lever slot and a vending outlet, of a unit adapted to be contained within said casing and provided with a coin chute, a mechanism actuating lever and a receptacle for the packages to be vended and means for positioning said insert so as to bring the coin slot and lever slot into operative relation respectively with the coin chute and lever and to bring the reservoir into operative relation with the outlet.

[Claims 2 to 6, 9, 11, and 12 not printed in the Gazette.]

1,265,832. FLUSHING-VALVE. BURCHARD THOENS, New York, N. Y. Filed July 7, 1915. Serial No. 38,594. (Cl. 137—93.)

1. In a flushing valve, the combination of a casing having an inlet and an outlet, a valve in said casing con-

trolling said outlet, means for operating said valve, a device for holding said valve open, and means for releasing said device after a predetermined time so that said valve may close said outlet, said releasing means comprising a piston and a cylinder in which said piston works, said cylinder having a passageway connected therewith which constitutes an inlet and outlet for said cylinder, the outer end of said passageway being located near said valve controlled outlet, the valve operating so that it will be on one side of the end of said passageway when the valve is open and on the opposite side when the valve is closed, whereby water may flow from said cylinder across one side of said valve when said valve is open and into said cylinder across the other side of said valve when the valve is closed.



2. In a flushing valve, the combination of a casing having an inlet at the top and an outlet at the bottom thereof, a valve in said casing controlling said outlet, means for operating said valve, a device adapted to engage said valve and hold it open when it has been operated, means for operating said device to release said valve after a predetermined amount of water has flowed through said outlet, said releasing means comprising a cylinder open at one end to the water pressure and having a passageway in communication with its other end which constitutes an inlet and an outlet and opens at a point adjacent the outlet of the casing, a piston in said cylinder and normally sustained in a predetermined position, the water pressure at one side of said piston being removed when said valve is open and the water flowing out of said cylinder through said passageway and out of the casing through said outlet therein, whereby said piston operates said device to release the valve, to permit said valve to close said outlet in the casing, permitting water to flow into said cylinder through said passageway to return said piston to its normal position.

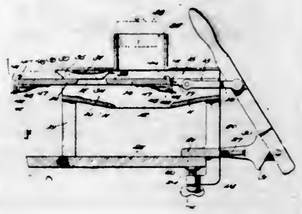
3. In a flushing valve, the combination of a casing having an inlet at the top and an outlet at the bottom, a conical valve seat at said outlet, a conical valve controlling said outlet and seating on said valve seat, means for operating said valve, a device adapted to hold said valve open when the same has been operated by said means, means for operating said device to release said valve after a predetermined amount of water has flowed through said outlet, said releasing means comprising a cylinder open at one end to the main water pressure and having a passageway leading from its other end to a point adjacent the said valve seat, said passageway constituting an inlet and an outlet for said other end of the cylinder, a piston working in said cylinder and normally sustained in a predetermined position and normally having the main water pressure on opposite sides thereof, said valve being adapted to be carried above the outlet end of said passageway, whereby the water pressure at one side of said piston is removed and said piston descends in the cylinder and operates said device to release the valve, said valve when released returning to its seat and moving across the end of said passageway and water entering said passageway and cylinder to restore said piston to its normal position.

4. In a flushing valve, the combination of a casing having an inlet at one end and an outlet at the other end, a valve in said casing controlling said outlet and having a stem extending into the casing, a head on said stem, and a sleeve fitting said head and coöperating therewith to form a dash pot to cushion said valve, means for operating said valve, a pivoted lever adapted to engage the head on said valve stem and hold said valve open when it has been operated, and means for operating said device to release said valve after a predetermined amount of water has flowed through said outlet, said releasing means comprising a cylinder in said casing and open adjacent the inlet end of said casing, said cylinder having a passageway at its other end leading to a point adjacent said outlet of the casing, said passageway constituting both an inlet and an outlet for said other end of the cylinder, a piston working in said cylinder and having water pressure on its opposite sides, and a spring in the cylinder supporting said piston, the water at the lower side of said piston flowing out through said passageway and out of the casing through said outlet when said valve is open, whereby the piston moves in said cylinder and engages said lever to release the valve after a predetermined movement of the piston, said passageway serving to admit water into said cylinder when said valve is closed, whereby the piston is restored to its normal position.

5. In a flushing valve, the combination of a casing having a chamber provided with an inlet and an outlet below said inlet, a valve seat adjacent said outlet, a valve controlling said outlet and fitting said seat, means for operating said valve, means for holding said valve open a predetermined interval of time comprising a cylinder, a piston working in said cylinder, said cylinder having one end thereof open to water pressure from said inlet and having a duct connected to the other end thereof, said duct leading to a point adjacent said valve seat, whereby when said valve is seated water may flow over one side of said valve into said cylinder to balance the pressure on opposite sides of said piston, and whereby when said valve is open water may flow from said chamber and from said cylinder into said outlet under said valve to release the pressure on one side of said piston.

[Claims 6 and 7 not printed in the Gazette.]

1,265,833. SLICING-MACHINE. CLARENCE E. TUCKER, Herndon, Va. Filed Sept. 14, 1917. Serial No. 191,446 (Cl. 146—7.)

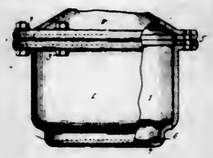


1. In a device of the class described, a reciprocating member having an intermediate opening and upwardly directed supporting ribs, a cutter carried by said ribs and extending over said opening, a receptacle for the material to be sliced with which the cutter coöperates when the reciprocating member is operated, and a plurality of gage members of different thicknesses supported upon said reciprocating member one at a time whereby the thickness of the reciprocating member is controlled to produce slices of corresponding thickness.

7. In a device of the class described, a reciprocating member having an intermediate opening and upwardly directed supporting ribs, said ribs having recesses in their ends formed in steps at the inner ends thereof, a cutter carried by said ribs and extending over said opening, a plurality of gage members of different thicknesses supported upon said reciprocating member and having notches to respectively engage the steps of said recesses, and catch devices operating to hold the outer ends of the gage members locked to the reciprocating member.

[Claims 2 to 6 not printed in the Gazette.]

1,265,834. UNIVERSAL JOINT. BERTIS H. URSCHEL, Bowling Green, Ohio, assignor to The Universal Machine Company, Bowling Green, Ohio, a Corporation. Filed Oct. 8, 1917. Serial No. 195,215. (Cl. 64—91.)



1. A casing for a universal joint, comprising two cup-shaped members pressed or stamped from sheet metal, each having a flanged mouth, the flange consisting of a flat circumferential rim bent backwardly and pressed upon itself to form a double thickness of sheet metal, and means for joining the flanges.

2. A casing for a universal joint, comprising a cup-shaped member pressed or stamped from sheet metal and having a flanged mouth, the flange consisting of a flat circumferential rim bent backwardly and pressed upon itself to form a double thickness of sheet metal, combined with another cup-shaped member having a corresponding flange, and means for rigidly joining said two flanges, said cup shaped members having—opposite the flanges—openings therethrough, one of said openings being surrounded by a circumferentially corrugated rim.

1,265,835. MACHINE FOR MAKING CIGARETTE-PAPER BOOKS. GEORGE W. UTSMAN, West Durham, N. C., assignor to William D. Hester, Durham, N. C. Filed Feb. 16, 1918. Serial No. 217,533. (Cl. 270—41.)



2. In a machine for making cigarette books, the combination of means for supplying a cover strip, means for supplying a wrapper strip; an annularly recessed roll and a coacting roll having a peripheral portion entering the recess of the opposed roll and coacting therewith to longitudinally crease the cover strip at opposite sides of the wrapper strip and partially fold the sides of the cover; and fold forming means for turning the opposite sides of the cover strip over each other and upon the wrapper strip; with presser rolls at the end of the fold forming means between which rolls the folded cover strips and inclosed wrapper strips are passed between the creasing rolls and through the fold-forming means, substantially as described.

3. In a machine for making cigarette books, a fold-former formed of a sheet metal plate bent to form a wide receiving end with upturned sides, said sides converging until separated the desired width of the book cover, and then turning inward and gradually overlapping, the overlapped portions having opposite notches in their overlapping inner edges near the outlet end to facilitate threading sheets of material through the former substantially as described.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,265,836. METHOD FOR PREPARING BLUE COLORING MATERIALS. RAYMOND VIDAL, Asnières, France. Filed Aug. 18, 1916. Serial No. 115,577. (Cl. 8—1.)

1. The herein described process which consists in first boiling paramidophenol and cresol until a sample of the product dissolves bright blue in alkalis, then adding sulfur, and continuing to boil until the evolution of hydrogen sulfid appears to stop.

2. The herein described process which consists in first boiling paramidophenol and cresol, while returning the condensed vapors to return to the boiling mass, until a sample of the product dissolves bright blue in alkalis, and then adding sulfur to the mass and continuing to boil until the evolution of hydrogen sulfid appears to stop.

3. The herein described coloring material produced by the boiling of paramidophenol and cresol first alone and subsequently with sulfur, said material being soluble in alkalis, in sodium sulfid, and in a mixture of alkalis with alkaline hydrosulfites, said material dyeing vegetable fibers directly in indigo blue shades resistant to acids and to chlorin.

1,265,837. METHOD FOR PREPARING DIRECT-DYEING BLACK COLORING MATERIALS. RAYMOND VIDAL, Asnières, France. Filed Aug. 18, 1916. Serial No. 115,576. (Cl. 8—1.)

1. The herein described process for the production of direct-dyeing black coloring materials, which consists in boiling paramidophenol with sulfur and cresol until the evolution of hydrogen sulfid slackens, while returning the condensed vapors to the boiling mixture.

2. The herein described process which consists in boiling paramidophenol with sulfur and cresol until the evolution of hydrogen sulfid slackens.

3. The herein described coloring material produced from paramidophenol, sulfur, and cresol, said material dyeing and printing fabrics in fast black shades which do not turn copper color and are highly resistant to chlorin and to acids, insoluble in water, but soluble in alkaline sulfids and in alkalis to which an alkaline hydrosulfite has been added.

1,265,838. PROCESS FOR AGING ALCOHOLIC LIQUIDS. JOHN VON GLAHN, Brooklyn, N. Y. Filed Oct. 9, 1914. Serial No. 865,798. (Cl. 195—10.)

1. A process for rapidly aging alcoholic liquids containing fusel oils which comprises impregnating finely divided wood with an aged alcoholic liquid and allowing the unaged alcoholic liquid to remain in intimate contact with the impregnated wood, and finely divided charcoal.

3. A process for rapidly aging raw whisky, which comprises allowing the raw whisky to remain in contact for a protracted period with a mixture of wood containing aged whisky and charcoal.

[Claims 2 and 4 not printed in the Gazette.]

1,265,839. INDICATOR. JOHN W. WALDEN, Oklahoma, Okla. Filed Nov. 6, 1917. Serial No. 200,594. (Cl. 116—50.)

1. An indicator comprising a container having one face open, a transparent plate substantially closing the open face of the container but terminating a distance above the lower wall of the container, a partition plate arranged within the container to afford a rear compartment, a chart, means for supporting the chart in front of the partition plate, a rod supported by the sides of the container below the transparent plate, and an index detachably and slidably engaged with the rod and of a length to extend rearwardly of the transparent plate and to overlie the chart positioned in advance of the partition.

5. An indicator comprising a container having one face open, a transparent plate substantially closing the open face of the container but terminating a distance above the lower wall of the container, a chart, means for supporting the chart rearwardly of the transparent plate, a rod supported by the sides of the container below the transparent plate, said rod being angular in cross section and having its forward face arranged on a bevel, an index having an end portion provided with relatively movable

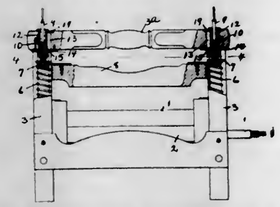
jaws detachably and slidably engageable with the rod, said index being of a length to overlie the chart, the jaws of the index member frictionally engaging the rear and for-



ward faces of the rod, the free end portion of the jaw engaging the forward face of the rod being provided with a forwardly directed finger.

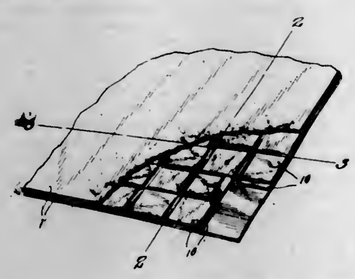
[Claims 2 to 4 not printed in the Gazette.]

1,265,840. CLOTHES-WRINGER. BYRON A. WALKER, Erie, Pa., assignor to Lovell Manufacturing Company, Erie, Pa., a Corporation of Pennsylvania. Filed June 28, 1915. Serial No. 36,601. (Cl. 68—32.)



In a clothes wringer, the combination of a frame including a top bar with a keyhole slot therethrough; a pressure nut having a projection thereon adapted to pass through said keyhole slot and to lock on the underside of the cross bar by rotating movement away from the slot; a pressure screw arranged in said nut; a presser roll; a spring adjusted by said screw operating on said presser roll; and a plate secured to the top of the cross bar and bridging the projection in the keyhole slot to prevent the expulsion of the nut when the projection on the nut is turned into register with the projection in the keyhole slot at the bottom of the bar.

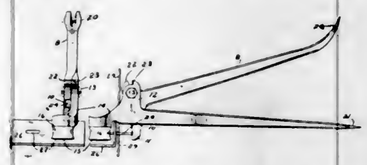
1,265,841. WOOD FABRIC. ENOS L. WALKER, St. Louis, Mo. Filed Aug. 27, 1917. Serial No. 188,381. (Cl. 154—45.9.)



1. As a new article of manufacture, a wood fabric composed of a mat woven from comparatively thin wooden strips, and a facing sheet of comparatively thin material applied to one of the faces of said mat.

[Claims 2 to 6 not printed in the Gazette.]

1,265,842. STAPLE-PLIERS. JAMES W. WALKER, Sioux City, Iowa. Filed June 12, 1916. Serial No. 103,094. (Cl. 1—50.)



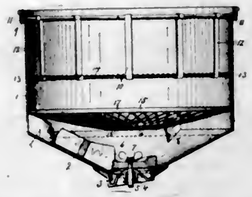
1. In a device of the class described, a staple spreading member comprising a cylinder greater in diameter than the width of the staple and having a grooved periphery to receive the prongs of the staple.

2. In a staple-setting tool, a pair of relatively movable handles, a part on one handle adapted to engage the head of a staple, and a cylindrical part on the other handle, having a peripherally grooved portion, said parts being movable relatively toward and from each other by movement of the handles, said cylindrical part being greater in diameter than the width of the staple, and the grooved portion being adapted to enter between and thereby spread the staple prongs when said parts are moved relatively toward each other.

4. In a stapling tool, a pair of pivoted handles having jaws thereon movable toward and from each other, one of said jaws being engageable with the head of a staple and the other operable to spread the staple prong when the jaws are moved relatively toward each other, the end of one of the jaws being provided with a longitudinal notch to receive one of the prongs to facilitate straightening the prongs by engaging them between the jaws.

[Claims 3 and 5 not printed in the Gazette.]

1,265,843. MECHANICAL DISH-WASHER. WILLARD R. WALKER, Syracuse, N. Y., assignor to Walker Brothers Company, Syracuse, N. Y., a Corporation of New York. Filed July 28, 1916. Serial No. 111,929. (Cl. 141—9.)



4. In a mechanical dish-washer, the combination of a vat, a rotary impeller movable across the bottom of the vat, a dish-supporting tray within the vat some distance above the impeller and a baffle grid within the vat between the impeller and dish-supporting tray, and provided with a circular series of arms spaced uniform distances apart circumferentially and inclined downwardly from their outer ends toward the center, said arms having longitudinally concaved faces facing in a direction opposite that of the rotation of the impeller.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,265,844. MACHINE FOR OPENING ENVELOPS. JAMES V. WASHBURNE, Fulton, N. Y. Filed Apr. 21, 1914. Serial No. 833,421. Renewed May 11, 1916. Serial No. 96,940. (Cl. 164—66.)

1. In a machine of the character described, the combination of a cutter movable about an axis, a base, and supporting means fixed to the base, a shear plate loosely mounted on the supporting means and forming a bed for the article to be cut, said shear plate being movable on the supporting means toward and from the cutter, and a normally fixed member coacting with the shear plate between the ends thereof for limiting the movement of the shear plate from the cutter, said shear plate when released from the normally fixed member being movable on the supporting means from the cutter, substantially as and for the purpose described.



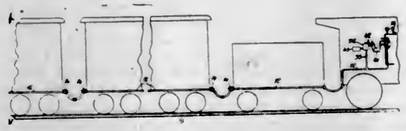
10. In a machine of the character described, the combination of a cutter, a shear plate arranged in position to coact with the cutter and movable toward and from the cutter, a movable stop coacting with the shear plate for determining its position with respect to the cutter, and means coacting with the stop and movable relatively thereto for adjusting the position of said stop, substantially as and for the purpose specified.

17. In a machine of the character described, the combination of a shear-plate, a cutting-cylinder, a support for the shear-plate, a stop member in contact with the forward end of said support, and provided with a hole, a screw of smaller diameter than said hole passing therethrough and screwed into a hole in said support, and another screw passing through the said support by means of which said stop member may be tilted.

29. In a machine for opening envelops having a base with hollow end sections and open at the rear between said sections, the combination of a tray removably secured within said opening, a shear-plate, a cutting-cylinder, a support for the shear-plate, a stop member, means for adjustably connecting the stop member to the forward end of said support, and a screw for tilting said stop member.

[Claims 2 to 9, 11 to 16, and 18 to 28 not printed in the Gazette.]

1,265,845. SAFETY DEVICE. JAMES N. WEIKLY, Jersey City, N. J. Filed Aug. 14, 1913. Serial No. 784,685. Renewed Oct. 3, 1917. Serial No. 194,594. (Cl. 188—8.)



1. A valve analogous to an angle cock of a train line and composed of a stationary part and a movable part, a through way in each, adapted to register one with the other, said parts being provided with a plurality of vents, one of which opens at a different radial point from the other, and passages adapted to register with the ports of said vents at different intervals in the movement of the movable part

2. A valve analogous to an angle cock of a train line and composed of a stationary part and a movable part, through ways in each adapted to register one with the other, said parts being provided with a plurality of vents, one of which opens at a different radial point from the other, and with passages adapted to register with the ports of said vents at different intervals and in the movement of the movable part and with passages leading from the thoroughway to said first named passages.

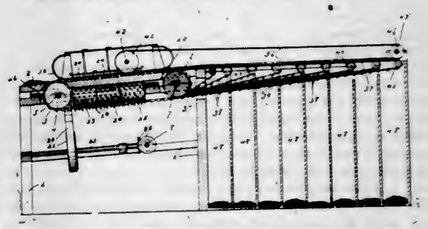
3. A valve analogous to an angle cock of a train line and composed of a stationary part and a movable part, through ways in each, adapted to register one with the other, said parts being provided with a plurality of vents at different levels, one of which opens at a different radial point from the other, and with passages adapted to register with the ports of said vents at different intervals in the movement of the movable part.

4. An angle cock provided with a casing adapted to be connected to the car section and to the hose section of a train line and provided with a vent, a plug located in said casing and adapted to register with the ports of the through way of the casing for a portion of the movement of said plug and a passage whose port is adapted to register with the port of said vent during a part of the period of registry of the through way ports, the face of a part adjacent to the line of contact between the plug and casing being provided with a channel which extends some distance along said face, greater than the port opening of the vent passage.

5. An angle cock composed of a plug and a casing provided with a vent opening directly to the open air and ports and passages, substantially as described, whereby the vent opening is in registered connection with the through way of the plug for more than half of the throw of said plug, but closed again before the plug has moved a full throw.

[Claims 6 to 9 not printed in the Gazette.]

1,265,846. BROOM-CORN SEEDING AND SORTING MACHINE. AUGUST F. WEYMER, Syracuse, N. Y., assignor to The A. F. Weymer Co., Syracuse, N. Y., and American Broom and Brush Co., Amsterdam, N. Y., both Corporations of New York. Filed May 13, 1914. Serial No. 838,381. (Cl. 130—30.)



2. In a broom-corn seeding machine, the combination of feeding means arranged to engage transversely arranged heads of broom-corn, and a plurality of rotary seeding drums arranged with their peripheries substantially tangent to the plane of movement of the broom-corn and having peripheral heckling pins extending into said plane, the drums being arranged different distances from the feeding means, substantially as and for the purpose set forth.

3. In a broom corn seeding and sorting machine the combination of feeding-mechanism for transversely arranged heads of broom corn, a rotary drum mounted at one side of said feeding mechanism, and yielding means engageable with the upper sides of said heads to press said heads upon the drum substantially as and for the purpose described.

5. In a broom corn seeding and sorting machine the combination of a feeding mechanism adapted to engage transversely arranged heads of broom-corn and a plurality of rotary seeding drums each separate from the other and with their axes in the same plane and successively arranged at different distances at one side of said feeding mechanism, each of said drums having on its periphery projections engageable with the brush of the heads substantially as and for the purpose described.

6. In a broom corn seeding and sorting machine the combination of feeding mechanism for transversely arranged heads of broom corn, a plurality of rotatory drums mounted at one side of said feeding mechanism, and arranged at different distances from the said feeding mechanism and yielding means engageable with the upper sides of said heads to press said heads upon the drum substantially as and for the purpose described.

7. In a broom corn seeding and sorting machine the combination of seeding mechanism adapted to remove seeds from the brush of heads of broom corn, a cutter for severing the stalks of said heads, means for supporting the stalks against the thrust of said cutter comprising a wheel having a groove in its periphery, the said cutting mechanism arranged to actuate in said groove and means for feeding the heads past the seeding and cutting mechanism substantially as and for the purpose described.

[Claims 1 and 4 not printed in the Gazette.]

1,265,847. TRUNK-TRIMMING. GEORGE HENRY WHEARY, Racine, Wis. Filed Feb. 17, 1915. Serial No. 8,881. (Cl. 70—3.)



2. A trunk trimming, comprising an angular body section member, an angular top cover member, and a third member, all of said members having a tongue and recess engagement with each other, the third member and the top cover member being locked together when engaged by the body section member.

3. A trunk trimming, comprising an angular body section member having tongues projecting from one of its edge portions, an angular top cover member having an edgewise engagement with the body member and provided with recessed portions into which some of the tongues of the body member extend, said top cover member also provided with an endwise projecting tongue, and a third member having an edgewise engagement with the other two members and provided with recessed portions which are entered by the tongue of the top cover member and one of the tongues of the body member.

4. A trunk trimming, comprising an angular body section member having tongues projecting from one of its side portions, said tongues projecting from the ends of part circular ribs embossed outwardly from said body member, an angular top member having an edgewise engagement with the body member and provided with part circular ribs embossed outwardly therefrom to form recesses into which some of the tongues of the body member extend, one of the ribs of the top member having a tongue projecting therefrom, and a third member having an edgewise engagement with the other two members and provided with a part circular rib to form recesses which are entered by one of the tongues of the body member and the tongue of the top cover member, said top cover member and the third member being locked together when engaged by the body member.

[Claims 1 and 5 not printed in the Gazette.]

1,265,848. FOLDING COT. ERNEST J. WHEELER, Springfield, Mass., assignor to The United States Spring Bed Company, Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 9, 1917. Serial No. 201,037. (Cl. 5—5.)

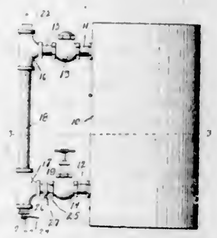
1. In a foldable cot, the combination with centrally located end members that are pivotally connected together, the end members being foldable outward into a plane with the upper surface of the centrally located members, of legs pivotally connected to the ends of the centrally located members, a brace bar directly and pivotally connected to the inner ends of the centrally located members, braces connecting the upper ends of the legs together, foldable braces extending from the braces connecting the upper ends of the legs to the brace connecting the inner ends of the centrally located members, the foldable braces having a hinge connection with said braces whereby the legs and said members may be folded into a small compass, as described.



5. In a foldable cot, the combination with sections that are pivotally connected, of legs pivotally connected to the cot for supporting the same, links for retaining the legs in their open position, braces for supporting the end sections and friction devices for retaining the braces in either their locking or unlocking positions on the legs, said friction devices comprising a pin or stud on the brace, a wire attached at one end to the cot, a spring attached to its other end and also to the cot, as described, whereby a tension effect is produced on the stud for holding the brace in different positions.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,265,849. ELECTRIC WATER-HEATER. JESSE F. WHEELOCK, Dobbins, Cal. Filed May 19, 1914. Serial No. 839,580. (Cl. 219—40.)



A water heating apparatus, comprising in combination, a water tank, a hollow column of conductive material rising parallel to the tank and having its upper and lower ends connected to communicate with the interior of the tank, said column being formed of electro-conductive material, an electric heating element rising within the column in insulated relation thereto, a check valve between the upper end of the column and the tank and a regulating valve between the lower end of the column and the tank, the water in the column acting as a conductor between the heating element and the walls of the column and the quantity thereof determining the intensity of the heat, and the regulating valve determining the height of the water in the column, whereby to regulate said heat intensity.

1,265,850. FURNITURE-CASTER. ANNA WIERSZEWSKA, Weirton, W. Va. Filed Sept. 21, 1917. Serial No. 192,467. (Cl. 16—157.)

1. A caster comprising a post having a chamber therein and entrance slots in the sides thereof, arms depending from said post pivotally mounted within the chamber thereof and extending through the said slots, and a traction ball arranged beneath said post between the said arms.

2. A caster comprising a post having a chamber therein and entrance slots in the sides thereof, arms depending from said post pivotally mounted within the chamber thereof and extending through the said slots, a traction ball arranged beneath said post between the said arms, adjusting means for the arms carried by the post, and anti-friction means between the ball and the said post and arms.

3. A caster comprising a post having a chamber therein and entrance slots in the sides thereof, arms depending from said post pivotally mounted within the chamber thereof and extending through the said slots, a traction ball arranged beneath said post between the said arms, extensions upon the said arms within the said chamber, a conical screw adjustably carried by the post projecting within said chamber between the said extensions, and anti-friction means between the bottom of the post to the traction ball.



4. A caster comprising a post having a conical face at one end and a flange at its opposite end and arranged with a chamber in communication with side slots and with a central bore at the flanged end of the post, anti-friction members arranged in the bottom of the post, a retaining plate for the said anti-friction members, a traction ball arranged beneath the post in contact with said anti-friction members, curved arms pivoted within said chamber and extending through the said slots terminating laterally of said ball and arranged with diverging curved extensions within the said chamber, and a conical screw positioned within said bore adjustably arranged between and in contact with the said extensions.

1,265,851. MECHANISM FOR INSTALLING TRANSMISSION LINE-WIRES. HARRY C. WILLIAMS, Irvington, N. J., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Nov. 2, 1917. Serial No. 199,999. (Cl. 247—23.)



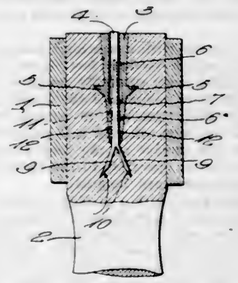
4. The combination of a yoke, rotatable means for attaching a pulling line to said yoke and rotatable means whereby a plurality of line wires may be connected to said yoke.

5. The combination of a yoke, rotatable means for attaching a pulling line to said yoke, and a transposing mechanism consisting of a plurality of rotatable eyes grouped in pairs and connected to rotatable members whereby the wires connected to each pair of eyes may be transposed.

8 In a device for connecting a plurality of transmission line wires to a pulling line the combination of a yoke, a bolt rigidly attached to said yoke, said bolt having a shoulder of non-circular cross-section and a head having a diameter greater than the maximum dimension of said shoulder, a rotatable member pivoted upon said bolt and having a slot of substantially the same shape and size as the cross-section of said shoulder, whereby said member is adapted to fit said shoulder and rest upon said head, thereby being prevented from rotating, and a spiral spring co-axial with said bolt whereby the said member may be held thus fixed.

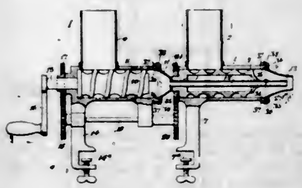
[Claims 1 to 3, 6, and 7 not printed in the Gazette.]

1,265,852. HANDLE ATTACHMENT. HARRY B. WING, Crested Butte, Colo. Filed Aug. 28, 1917. Serial No. 188,634. (Cl. 145—81.)



In a handle fastening, the combination of a tool having an eye, a wooden handle having a portion disposed in said eye, a wedge member, of oblong form in cross-section, embedded in the portion of the handle in the eye and having lateral teeth on its long sides and also having a longitudinal-central bore extending throughout its length and provided with intermediate abutments and a reduced portion extending inwardly from said abutments; said wedge member being bifurcated from its inner end to a point outwardly beyond the said lateral teeth, and a locking member occupying the said bore of the wedge member and having a bifurcated inner portion and also having the tangs of said bifurcated portion spread apart beyond the inner end of the wedge member, whereby they form anchors in the handle to lock the whole; the said locking member throughout its length being of a size in cross-section to snugly fit the outer portion of the bore in the wedge member, whereby said locking member serves as it passes through the reduced or contracted portion of the bore to expand the wedge.

1,265,853. MACHINE FOR MAKING LUNCH-ROLLS. WILLIAM E. WISEMAN, Palacios, Tex. Filed May 18, 1917. Serial No. 169,486. (Cl. 107—1.)



1. In a machine of the character described, a cylinder having a funnel end provided with a contracted outlet, a feed screw within the cylinder and having a longitudinal central bore, a second funnel exteriorly of the cylinder and abutting the feed screw at its end remote from the first funnel, a tube having a smooth outer surface extending from the second funnel through the bore in the feed screw and terminating at a point inwardly from the re-

duced end of the first funnel to provide a core former, means for feeding material through the tube, said means being located in rear of the second funnel, and means for rotating the feed screw.

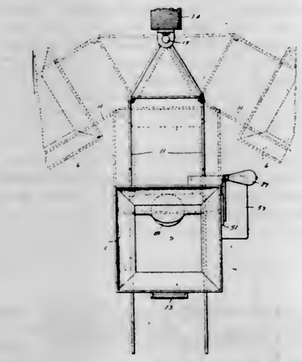
3. The combination with a pair of cylinders, individual clamps for securing said cylinders to a support, feed screws rotatably mounted within said cylinders, one of the feed screws being formed with a central longitudinal bore, a funnel on one end of each cylinder, a tube extending from the funnel of one cylinder entirely through said bore in proximity to the other funnel with the free end of the tube spaced inwardly from the discharge end of the last-named funnel, arms on one cylinder engaging lugs on the other cylinder for retaining the cylinders in longitudinal alinement and fixed relation, and means for feeding material into the cylinders at their ends remote from the funnels.

5. In combination with a machine having a discharge outlet through which food is forcibly fed therefrom, a frame, a polygonal drum rotatably mounted in said frame below and slightly in advance of the discharge outlet and having its periphery grooved to receive the food discharged by the machine, whereby said polygonal drum will be rotated by the impact of the food issuing from the machine and a cutter operative in the groove to sever the material in predetermined lengths.

8. The combination with a machine having a discharge outlet for feeding food therefrom, of a frame, a drum rotatably mounted on said frame having a polygonal grooved periphery and mounted below and in front of the discharge outlet of said machine, whereby the force of the food issuing from the machine will rotate the drum, a gear fixed to said drum, a second gear rotatably mounted above said drum and meshing with said first-mentioned gear, and a knife carried by said second gear, and adapted to be rotated therewith to cut the food into definite lengths.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,265,854. MACHINE FOR MAKING DOUGHNUTS, &c. PERCY J. WIXEY, Cleveland, Ohio, assignor of one-half to George W. Heene, Cleveland, Ohio. Filed Mar. 6, 1917. Serial No. 152,790. (Cl. 107—14.)



1. The combination with a dough-cutting and dropping machine, of a rigid swinging support on which the machine is slidably mounted, to permit the cuttings to be dropped at different places.

2. The combination with a dough-cutting and dropping machine, of a track on which the machine is slidably mounted, to drop the cuttings at different places, said track being pivoted at one end thereof, to swing horizontally.

3. The combination with a dough-cutting and dropping machine, of a swinging track comprising a pair of rigid bars between which the machine is mounted, and a single pivotal support for said bars.

1,265,855. PLASTIC COMPOSITION. CHARLES B. WOOD, Charleston, W. Va. Filed July 1, 1914. Serial No. 848,455. (Cl. 106—39.1.)

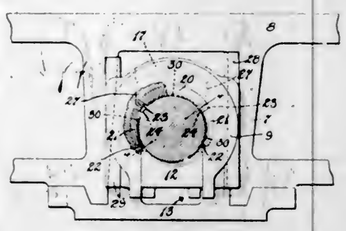


1. A resilient flexible plastic composition adapted to be employed as a substitute for rubber and including shellac, alcohol and fibrous material saturated with formaldehyde in substantially the proportions stated.

3. The process of producing a resilient flexible plastic composition adapted to be employed as a substitute for rubber, which consists in dissolving shellac in concentrated alcohol to form a thick paste, arranging fibrous material in layers, pouring the paste on the layers of fibrous material and mixing the ingredients thoroughly together, subjecting the mixture to pressure and finally saturating the pressed material with formaldehyde.

[Claim 2 not printed in the Gazette.]

1,265,856. LOCOMOTIVE DRIVING-BOX. WILLIAM E. WOODARD, Schenectady, N. Y. Filed Feb. 17, 1917. Serial No. 149,164. (Cl. 64—10.)



1. The combination with a locomotive driving axle having a journal and a portion of smaller diameter than the journal, of an integral locomotive driving box having a gap greater than the diameter of the reduced portion and smaller than the diameter of the journal, and a bearing in said box adapted to engage the journal a substantial distance above and below the horizontal center line thereof, the gap in the bearing being also less than the diameter of the journal and greater than the diameter of the reduced portion, whereby the box and the contained bearing may be passed over the reduced portion of the axle and slipped on the journal.

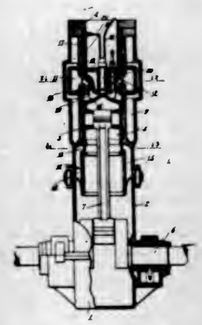
6. A locomotive driving box having an opening to receive a driving box bearing, a plurality of spaced lugs on the box and extending into said opening, and parts composing the bearing fitted into said opening between the lugs.

8. An integral locomotive driving box having a driving box bearing composed of three parts, namely two wing members adapted to engage the driving axle on opposite

sides, above and below the horizontal center line thereof, and an intermediate member adapted to engage the top portion of the axle.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,265,857. INTERNAL-COMBUSTION ENGINE AND METHOD OF BURNING FUEL-OIL THEREIN. LEON WYGODSKY, Baltimore, Md., assignor to Baltimore Oil Engine Company, Baltimore, Md., a Corporation of Delaware. Filed May 31, 1916. Serial No. 100,769. (Cl. 123—33.)



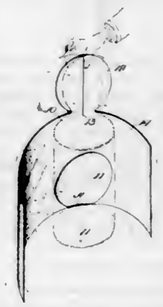
1. An internal combustion engine comprising in combination an engine cylinder having near its opposite ends two ports, one adapted to serve as an exhaust port and the other as a transfer port, a piston within the cylinder and provided with a sleeve extension adapted to travel across the rearward of such ports to open and close the same, said piston having a port adapted to open and close the forward of said cylinder ports, said cylinder having also a head provided with a projection extending longitudinally into the cylinder to a point beyond that cylinder port which is proximate to such head, such projection spaced away from the cylinder walls to provide a space for the travel of the sleeve extension of such piston, and further spaced away from the path of such sleeve projection from about the rear limit of the rear cylinder port, to provide a clear passage for the flow of gases through such port; said engine further comprising a compression chamber wherein air may be compressed by motion of the piston, and a duct connecting such compression chamber with said transfer port; the construction being such as to permit close approach of the piston to said cylinder head with consequent small clearance space.

2. An internal combustion engine comprising in combination an engine cylinder having near its opposite ends two ports, one adapted to serve as an exhaust port and the other as a transfer port, a piston within the cylinder and provided with a sleeve extension adapted to travel across the rearward of such ports to open and close the same, said piston having a port adapted to open and close the forward of said cylinder ports, said cylinder having also a head provided with a projection extending longitudinally into the cylinder to a point beyond that cylinder port which is proximate to such head, such projection spaced away from the cylinder walls to provide a space for the travel of the sleeve extension of such piston, and further spaced away from the path of such sleeve projection from about the rear limit of the rear cylinder port, to provide a clear passage for the flow of gases through such port; said piston provided with an inward projection arranged to approach closely the sides of said cylinder head projection when the piston is near the rearward limit of its stroke, whereby the clearance space is reduced; such engine further comprising a compression chamber wherein air may be compressed by motion of the piston, and a duct connecting such compression chamber with said transfer port.

3. An internal combustion engine comprising in combination an engine cylinder having near its outboard end a transfer port and having near its inboard end an exhaust port, a piston within the cylinder and provided with a sleeve extension adapted to travel across said exhaust port to open and close the same, said piston having also a port adapted to open and close the transfer port, said cylinder having also a head provided with a projection extending longitudinally into the cylinder to a point beyond the exhaust port, such projection spaced away from the cylinder walls to provide a space for the travel of the sleeve extension of the piston and further spaced away from the path of such sleeve projection from about the rear limit of the exhaust port to provide a clear passage for the flow of gases through such port; said engine further comprising a compression chamber wherein air may be compressed by motion of the piston, and a duct connecting such compression chamber with said transfer port.

[Claims 4 to 8 not printed in the Gazette.]

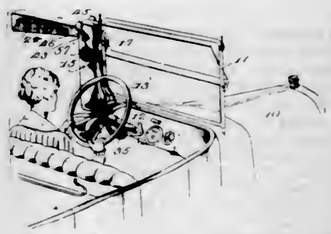
1,265,858. LINING FOR PRESERVING VESSELS. HARRY E. YOCUM, Hancock, Md. Filed Feb. 27, 1917. Serial No. 151,304. (Cl. 220—98.)



1. The combination with a cylindrical preserving vessel, of a lining therefor including an elongated body having its extremities free and slidably overlapped to provide a container fitting within the receptacle to normally expand against the cylindrical wall thereof, and top and bottom flaps projecting from the side edges of the body at oppositely disposed points adjacent one end of the body, the bottom flap being solid and entirely closing the bottom of the said container resting upon the bottom wall of the vessel and the top flap being bent inwardly upon the body to removably fit within the upper extremity of the container and formed of coacting halves having straight confronting edges meeting to entirely close the upper end of the container.

[Claim 2 not printed in the Gazette.]

1,265,859. DIRECTION-INDICATOR FOR AUTOMOBILES. LEWIS T. YOUNG, Marion, Ohio. Filed June 26, 1917. Serial No. 177,043. (Cl. 40—67.)

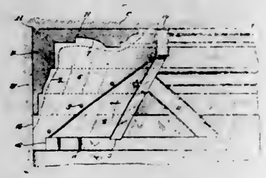


1. A direction signal including a housing formed in one side with a slot, a shaft fixed in the housing with its ends

projecting through the walls thereof, a plurality of semaphore arms swingingly supported upon the shaft and projectable through slots formed in the housing, means for selectively swinging the semaphore arms to project them from the housing, and a pair of lights supported by the ends of the shaft to direct their rays one against the front face and the other against the rear face of any projected arm.

[Claim 2 not printed in the Gazette.]

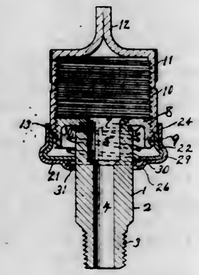
1,265,860. CORNICE-MOLD. PAOLO ZAPPILE, New York, N. Y. Filed Mar. 9, 1917. Serial No. 153,675. (Cl. 72—131.)



2. The herein described running mold, the same comprising a slipper having across its upper face an upright blade extending to the corner of the slipper and whose front and upper edges are cut out roughly to conform with the configuration of the cornice to be produced, the rear extremity of its upper edge being carried upward into a heel, a templet secured to the front face of said blade with its working edge projecting beyond the edge of the blade and its front end coincident with the corner of the slipper, the latter projecting beyond said templet to produce a shelf terminating short of the front end of the templet, and a handle on the slipper.

[Claim 1 not printed in the Gazette.]

1,265,861. GREASE-CUP. OSCAR ZERK, Cleveland, Ohio, assignor, by mesne assignments, to George W. Bowen, Auburn, N. Y. Filed May 26, 1913. Serial No. 769,851. (Cl. 184—48.)

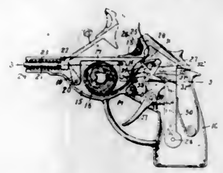


1. In a grease cup and in combination, a base, a cap threaded thereon to move about the axis of the same and lengthwise thereof, a part movable lengthwise of the base and having surfaces coacting with complemental surfaces on the cap for holding the cap from accidental turning, means tending to yieldingly hold said part with the surfaces thereof engaged with the coacting surfaces of the cap, and means inclosing the yielding means and the coacting surfaces of the cap and said part for housing and concealing the same when the cap is engaged with the base, substantially as and for the purpose described.

11. In a grease cup, the combination, with the cup and cap, a detent device coöperating with the cap, and a tension spring for holding the detent device and cap in engagement, said spring being a substantially cylindrical helix each coil of which has a tendency to move past the adjacent coil and the extreme coils of which are held in substantially parallel planes.

[Claims 2 to 10 and 12 to 24 not printed in the Gazette.]

1,265,862. TOY PISTOL. LOUIS ZIEGLER, Irvington, N. J., assignor to Consolidated Fireworks Company of America, New York, N. Y., a Corporation of New York. Filed Aug. 19, 1916. Serial No. 115,771. (Cl. 42—57.)



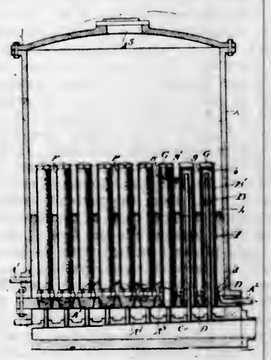
3. In a pistol, a magazine for cap tape open on its upper side, a starwheel mounted for rotation and having its prongs extending into contact with the tape for advancing the same, a spring-depressed closure for said magazine, said closure means serving to hold the cap tape in contact with the starwheel prongs, and also serving the additional functions of an anvil block and a guide for the cap tape, and trigger means for rotating the starwheel step by step.

4. In a pistol, a magazine for cap tape open on its upper side, a hammer, a starwheel mounted for rotation and having its prongs extending into contact with the tape for advancing the same, said prongs serving also for operating the hammer, a spring-depressed closure for said magazine, said closure means serving to hold the cap tape in contact with the starwheel prongs, and also serving the additional functions of an anvil block and a guide for the cap tape, and trigger means for rotating the starwheel step by step.

5. In a pistol, a starwheel mounted for rotation, a hammer, a lug on the hammer extending into the path of the starwheel, a trigger having an upward extension in the path of the prongs of the starwheel, and means whereby the movement of the trigger serves to impart step by step rotation to the starwheel engaging a prong thereof when moved in one direction and moving past the prongs thereof when moved in the opposite direction.

[Claims 1, 2, and 6 to 11 not printed in the Gazette.]

1,265,863. EVAPORATOR. WILLIAM G. ABBOTT, Jr., Wilton, N. H. Filed Jan. 13, 1915. Serial No. 1,996. (Cl. 257—231.)



3. In an evaporator, the combination of a pair of concentric tubes, means to circulate fluid along the space between the tubes, and a member fitting over the end of the inner tube, the member having an outwardly flaring surface outwardly to deflect the fluid issuing from said space.

4. In an evaporator, the combination of a pair of concentric tubes, means to circulate fluid along the space between the tubes, and a member fitting over the end of the inner tube, the member having an outwardly flaring surface outwardly to deflect the fluid issuing from said space, and having spacing fingers extending inwardly between the tubes radially to position the tubes with respect to each other.

[Claims 1 and 2 not printed in the Gazette.]

1,265,864. PROCESS OF PREPARING STABLE SOLUTIONS OF DI-METHYLAMINO-TETRAMINO-ARSENOBENZENE. LORENZ ACH, Mannheim, ALBERT ROTHMANN, Heidelberg, and GUSTAV GIEMSA, Hamburg, Germany, assignors to Farbwerke vorm. Meister Lucius & Bruening, Höchst-on-the-Main, Germany, a Firm. Filed Jan. 10, 1914. Serial No. 811,452. (Cl. 167—7.)

4. The process of producing preparations useful for therapeutic purposes which consists in subjecting a salt of di-methylamino-tetramino-arsenobenzene to the action of a soluble bicarbonate in the presence of water.

6. As a new chemical composition, a solution containing di-methylamino-tetramino-arsenobenzene probably in the form of a carbamate, said solution having a yellowish color which darkens upon exposure to air, and being decomposed by treatment with hydrochloric acid with formation of di-methylamino-tetramino-arsenobenzene.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,265,865. PROCESS OF PREPARING DERIVATIVES OF BISMETHYLAMINOTETRAMINOARSENOBENZENE WHICH ARE SOLUBLE IN WATER. LORENZ ACH and HERMANN DIETERICH, Mannheim, Germany, assignors to Farbwerke vorm. Meister Lucius & Bruening, Höchst-on-the-Main, Germany, a Firm. Filed June 15, 1915. Serial No. 34,247. (Cl. 23—24.)

1. The process which consists in dissolving a derivative of 4.4¹-bismethylamino-3.5.3¹.5¹-tetraminoarsenobenzene substituted in the benzene nucleus in water by means of an alkaline bicarbonate.

2. The process which consists in suspending a derivative of 4.4¹-bismethylamino-3.5.3¹.5¹-tetraminoarsenobenzene substituted in the benzene nucleus in water in the presence of an alkaline compound, then introducing into the whole carbon dioxid.

8. A solution of the 2.2¹-dichlor-4.4¹-bismethylamino-3.5.3¹5¹-tetraminoarsenobenzene in an aqueous alkaline bicarbonate bath.

9. As new products, aqueous solutions of carbaminates derived from 4.4¹-bismethylamino-3.5.3¹.5¹-tetraminoarsenobenzene substituted in the benzene nucleus, being of a yellow color and giving a neutral reaction on turmeric paper, yielding, when treated with hydrochloric acid, carbonic acid and a bismethylamino-tetraminoarsenobenzene substituted in the benzene nucleus, the aqueous solutions yielding on addition of alcohol and ether the carbamate in form of yellow brownish flakes.

10. As a new product, the aqueous solution of the carbaminate of 2.2¹-dichloro-4.4¹-bismethylamino-3.5.3¹.5¹-tetraminoarsenobenzene, being of a yellow color and giving a neutral reaction on turmeric paper, yielding, when treated with hydrochloric acid, carbonic acid and 2.2¹-dichloro-4.4¹-bismethylamino-3.5.3¹.5¹-tetraminoarsenobenzene, the aqueous solution yielding on addition of alcohol and ether the carbamate in form of yellow-brownish flakes.

[Claims 3 to 7 not printed in the Gazette.]

1,265,866. EXPANSION-BOLT. CHARLES N. ACKERMAN, Chicago, Ill. Filed Jan. 31, 1916. Serial No. 75,250. (Cl. 72—105.)

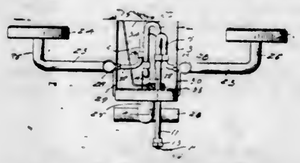
1. The combination of a bolt carrying two tapering wedge members, the upper one of which is slidable on and removable from the bolt stem, and two ductile sleeves, respectively overlying the tapering portions of said wedges, said wedge-members both tapering in the same direction, the upper sleeve having a cylindrical bolt-encompassing portion and a flaringly bored wedge-encompassing portion, said flaring portion leaving normally exposed below it a portion of the wedge member shorter than the cylindrical portion of the sleeve.



2. The combination of a bolt carrying two tapering wedge members, the upper one of which is slidable on and removable from the bolt stem, and two ductile sleeves, respectively overlying the tapering portions of said wedges, said wedge-members both tapering in the same direction, each sleeve having a cylindrical bolt-encompassing portion and a flaringly bored wedge-encompassing portion, said flaring portion leaving normally exposed below it a portion of the wedge member shorter than the cylindrical portion of the sleeve.

3. The combination of a bolt having an upwardly tapering head, a ductile sleeve thereon, externally cylindrical and internally fitting contiguous parts of the head and stem; a spacer to overlie the said sleeve; a wedge collar upwardly tapering, mounted on the bolt above the spacer, and a second ductile sleeve on said collar, externally cylindrical and internally shaped substantially to conform to contiguous parts of the collar and stem.

1,265,867. OIL-BURNER. ALMON ALMY, Bellefontaine, Ohio. Filed May 31, 1917. Serial No. 172,012. (Cl. 158—59.)



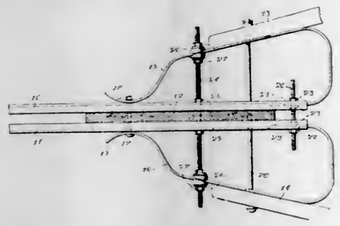
1. An oil burner including a generating burner, a generating tube extending through and located above the burner so as to be heated by the same and provided with an outlet, a mixing tube connected with the generating burner and having the outlet of the generating tube discharging into it, said mixing tube being provided with an air inlet arm or extension located at the said outlet.

8. An oil burner of the class described including a generating burner, a lower mixing tube connected with the generating burner, upper mixing tubes mounted upon the burner at opposite sides thereof and having supporting arms rigid with the generating burner, said mixing tubes being provided with air inlet arms, generating tubes piercing the generating burner and having approximately U-shaped portions located above the generating burner, said generating tubes having outlets connected with the

mixing tubes, supply pipes connected with the generating tubes, a needle valve casing connected with the supply pipes and provided with a plurality of needle valves for controlling the flow of oil into the said pipes, and an oil supply connected with the needle valve casing.

[Claims 2 to 7 not printed in the Gazette.]

1,265,868. VEHICLE-TONGUE. MARTIN E. ANDERSON, De Kalb, Ill., assignor of one-third to himself, one-third to Frank G. Anderson, and one-third to Andrew O. Anderson, De Kalb, Ill. Filed Aug. 24, 1916. Serial No. 116,621. (Cl. 21—36.)

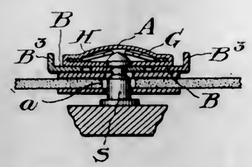


1. The combination of a tongue, and means for attaching said tongue to the hounds of a vehicle, comprising attaching members secured to opposite sides of the tongue having flexible outer bearing portions in the form of metal straps adapted to bear against the hounds of the vehicle, a screw-threaded rod secured to said tongue and extending transversely to said straps, oppositely-notched clips upon opposite end portions of said rod embracing said straps, and nuts upon said rod for clamping said clips in the desired adjusted position upon said straps.

2. The combination of a tongue, and means for attaching said tongue to the hounds of a vehicle, said means comprising resilient metal straps secured at the end portions to opposite sides of the tongue and movable longitudinally thereof and having their intermediate portions bowed outwardly to yieldingly bear against the hounds, a rod projecting from opposite sides of the tongue, and means adjustable on said rod for engaging said straps.

3. The combination of a tongue, and means for attaching said tongue to the hounds of a vehicle, said means comprising resilient metal straps secured at their end portions to opposite sides of the tongue and movable longitudinally thereof and having their intermediate portions bowed outwardly to yieldingly bear against the hounds, means for slidingly connecting the said bowed portions to the hounds, a rod projecting laterally at each side of the tongue, and movable means on said rod for engaging said straps and holding them in adjusted positions with respect to said rod.

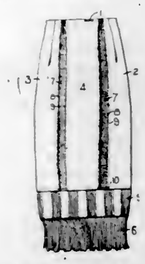
1,265,869. FASTENER. LOUIS ARKIN, Boston, Mass. Filed June 25, 1917. Serial No. 176,820. (Cl. 24—211.)



1. A socket member of a fastener comprising a casing having a stud-receiving aperture, a pair of stud-retaining plates within said casing movable in the same plane, said plates having interlocking, normally engaged, hook-like ends notched to provide a stud aperture, a spring yieldingly to hold said plates in normal engagement and each of said hooklike ends having a guide movable in a guide channel in the complemental plate, stud releasers connected to said retaining plates and extending outside said casing, a stud holder disposed above said plates to prevent tipping of said stud within the casing and a spring plate adapted to be engaged and stressed by the insertion of the stud into the socket to force the stud from the socket without manipulation of said stud.

[Claim 2 not printed in the Gazette.]

1,265,870. ADJUSTABLE SKIRT. HARRY ARONSON, Roxbury, Mass., assignor to Boston Superior Petticoat Company, Boston, Mass., a Firm. Filed May 19, 1914. Serial No. 839,633. (Cl. 2—42.)

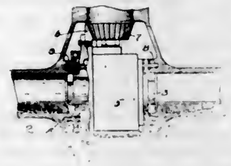


1. A skirt comprising an inelastic adjustable waist band, a body portion having a plurality of breadths of inelastic material, narrow strips of insertion of relatively elastic material intermediate of and sewed to the adjacent edges of said breadths and extending downwardly throughout substantially the entire length of said body portion and a flounce of inelastic material secured to the bottom of said body portion.

4. A loose garment, such as a petticoat or skirt, provided with a plurality of gores united at their longitudinal edges by a yieldable seam structure, said seam-structure being adapted to remain in normal unstretched position throughout the main body of the garment under ordinary conditions, but to absorb shocks due to sudden or abnormal strains and thereby conserve the stitching of said seam-structure, which comprises a transversely elastic strip of material extending between the adjacent margins of the gores.

[Claims 2 and 3 not printed in the Gazette.]

1,265,871. BEARING. GEORGE D. BAILEY, Chicago, Ill., assignor to Geo. D. Bailey Co., a Corporation of Illinois. Filed Feb. 20, 1917. Serial No. 149,933. (Cl. 64—49.)



1. In a bearing of the class described, a pair of bearing members disposed closely adjacent one another with the outer margins of said bearing members beyond the faces between which they are used flared apart and rolling means interposed therebetween to maintain said bearing members in separated relation.

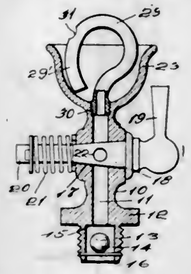
4. A bearing of the class described comprising two bearing members, the outer marginal portions of each thereof beyond the faces between which they are placed bulged outwardly to form a race space greater than the distance between the exterior surfaces of the main portion of said bearing members, and rolling means disposed in said bulged out portions to maintain said bearing members in separated and rotative relation.

6. In a device of the class described, the combination with the members between which the bearings are to be used having adjacent parallel faces, of a ball or roller bearing having a part engaged between said faces and a part projecting beyond said faces.

12. A bearing comprising members adapted to be engaged between the parallel faces of two elements and the margins of the members flared beyond said faces, and balls or rollers in said flared portions.

[Claims 2, 3, 5, 7 to 11, and 13 to 15 not printed in the Gazette.]

1,265,872. COMBINED PRIMING AND VAPORIZING DEVICE. WILLIAM N. BECKETT, Savannah, Ga. Filed Apr. 6, 1917. Serial No. 160,261. (Cl. 123—187.5.)



1. A device of the character described, comprising a tubular body portion for connection with an engine cylinder or the like, a liquid fuel holding receptacle connected with one end of the tubular body portion and having no direct communication therewith, and an air supply pipe passing through the liquid fuel holding receptacle with one end thereof discharging into the tubular body portion and having an extension projecting downwardly into the receptacle with the intake end of such extension arranged beneath the level of the liquid fuel therein.

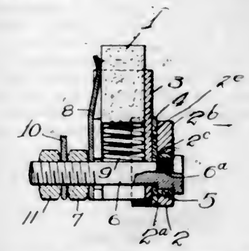
2. A device of the character described, comprising a tubular body portion for connection with an engine cylinder or the like, a liquid fuel holding receptacle connected with the tubular body portion and having no direct communication therewith, an air supply pipe extending longitudinally through the liquid holding receptacle and having one end thereof disposed above the maximum liquid level thereof and in communication with the atmosphere and its opposite end discharging into the tubular body portion and having no direct communication with the liquid fuel holding receptacle, and a liquid fuel take-up pipe secured to the air supply pipe with a portion thereof disposed above the maximum liquid level within the receptacle and having its intake end arranged in the lower portion of the receptacle below the liquid level thereof.

7. A device of the character described, comprising a tubular body portion adapted for connection with the cylinder of an engine or the like, a liquid fuel holding receptacle connected with the body portion, a curved pipe having one end extending into the tubular body portion and its opposite end discharging into the receptacle beneath the liquid level thereof, said pipe having an air inlet aperture disposed above the maximum liquid level of the receptacle, a check valve to prevent the passage of back pressure into the tubular body portion, and a cut-off valve associated with the tubular body portion.

[Claims 3 to 6 not printed in the Gazette.]

1,265,873. BRUSH-MOUNT FOR ELECTRIC MOTORS. JOSEPH BERG, Chicago, Ill., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill., a Corporation of Virginia. Filed Jan. 27, 1917. Serial No. 144,839. (Cl. 200—24.)

1. The combination of a frame and a hollow brush holder thereon, the frame having a seat for the holder comprising a surface upon which the latter is lodged and a surface transverse thereto, adjacent to the lateral surface of the holder, together with a securing bolt passing through the seat and the holder, transversely of the lodgment surface, the said transverse surface engaging the holder to prevent pivotal movement upon said bolt, and a brush in said holder.



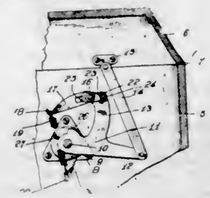
3. The combination of a frame member having a channel, a socket member lodged therein, a brush slidably carried in such socket, and a bolt passing through the frame and socket transversely of the bottom of the channel for holding the socket therein, means insulating the bolt and the socket from the frame, means for attaching a conductor to the bolt, and a spring contact member secured by said bolt with a yielding portion in contact with the brush in the socket.

7. The combination of a frame member and a tubular brush holder of non-circular cross-section secured thereto, said holder having a slit at one side, a yielding contact member adapted to engage the brush in the holder through such slit and a single securing bolt in the frame passing through both the tubular holder and the yielding contact member for retaining said part on the frame, said bolt being fitted with two nuts, one of which is adapted to clamp the brush holder and contact member to the frame, the other nut serving to secure a conductor wire to the bolt.

8. The combination of a frame, a tubular brush holder thereon, a bolt passing transversely through said tubular holder for securing it to the frame, a brush slidably carried in the holder, and a spring pocketed therein, so as to react between said brush and the said securing bolt.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,265,874. COVER-SUPPORT FOR PHONOGRAPHS. MARTIN BERSTED, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Dec. 10, 1917. Serial No. 206,435. (Cl. 217—60.)



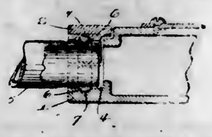
1. In a cover support for phonographs, the combination of a base adapted to be secured to the side wall of the phonograph cabinet, a member pivotally supported on said base, a link connecting the free end of said member to the hinged cover of the phonograph, an arm projecting from said member substantially perpendicular thereto and midway between its ends, a lever pivotally mounted on said arm, means for adjusting said lever about its pivotal axis relatively to said arm, an arm projecting from said base and a spring connecting said lever and last mentioned arm.

[Claim 2 not printed in the Gazette.]

1,265,875. PIPE CONNECTION. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed June 2, 1913. Serial No. 771,129. (Cl. 247—1.)

5. The combination with a threaded pipe, of an extensible and contractile split nut semicircular in cross

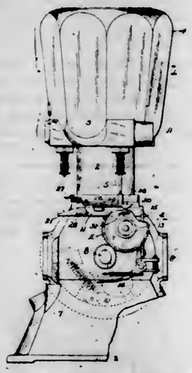
section threading on the pipe, and a body provided with a clamp having a pipe opening for receiving the pipe, and an internal annular groove around the opening for receiving the nut, the groove fitting the nut, said clamp including members separated in a direction lengthwise of the axis of the opening and the groove, and means for clamping one of the members toward and from the other in a direction at an angle to the axis of said opening, substantially as and for the purpose specified.



8. The combination with a pipe and a body to which the pipe is connected; of a pipe joint between the pipe and the body comprising a contractile, split, internally-threaded ring threading on the pipe, and means associated with the body for contracting the ring on the pipe without turning the ring, substantially as and for the purpose specified.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,265,876. SPARK AND EXHAUST MECHANISM FOR EXPLOSIVE-ENGINES. MOSES BOMBERGER, Cumru township, Berks county, Pa., assignor to Orr & Sembower, Inc., Reading, Pa. Filed July 27, 1916. Serial No. 111,561. (Cl. 123—118.)

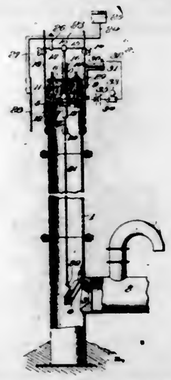


In an explosive engine, the combination of an exhaust valve, a rotary timing wheel carrying an exhaust-control cam and an adjustably fixed spark-control contact, an interposed pivotally mounted valve-operating lever having a circuit-making contact piece insulatedly fixed thereto, and a governor controlled latch for said lever; said timing wheel contact being adapted to raise the lowered lever in making circuit, and to clear the lever contact piece when the lever is in latched position, substantially as set forth.

1,265,877. SAFETY-VENT FOR OIL-STORAGE TANKS. WILLIAM M. BOWLES, Shawnee, Okla. Filed Feb. 7, 1916. Serial No. 76,699. (Cl. 220—121.)

1. A vent for oil storage tanks having an outlet, a permeable filling of non-heat conducting material arranged within the said outlet, a tube extending through the said filling, a rod slidably mounted in the tube and fitting closely therein, a fusible element above the filling normally supporting the rod against downward movement within the tube, an inlet to the said vent, a valve for closing the inlet, and connection between the said rod and valve normally supporting the valve in open position.

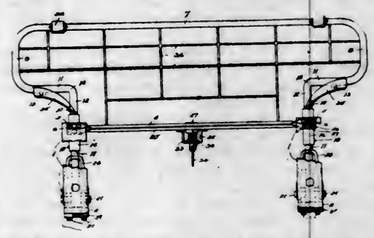
6. In a vent for oil storage tanks, a vent pipe, spaced upper and lower heads disposed within the outlet end of said pipe, a compressible filling of fibrous non-heat conducting material disposed between the said heads, a tubular guide fitted through openings formed in the heads, the heads being foraminous, nuts threaded upon the tubular guide and bearing against the upper and under faces of the lower head whereby to secure the guide against displacement with relation to the said head, the upper head being slidably movable upon the guide, bolt rods



fitted through the heads, nuts threaded upon the bolt rods and bearing against the upper head and adjustable to force the same downwardly toward the lower head whereby to compress the filling, a fusible element located above the tubular guide, a rod fitting slidably within the tubular guide and connected with the said fusible element, the vent pipe having an inlet, a valve for closing the inlet, and connection between the valve and the said rod normally supporting the valve in open position.

[Claims 2 to 5 not printed in the Gazette.]

1,265,878. AUTOMOBILE-FENDER. AUGUST H. BRAKENSIEK, St. Louis, Mo. Filed Jan. 8, 1917. Serial No. 141,151. (Cl. 105—130.)

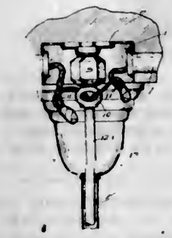


1. In a device of the class described, a stationary frame adapted to be fixed to the chassis of a vehicle, a trip operated fender hingedly connected to said frame, and means for adjusting the fender laterally or longitudinally.

3. An automobile fender comprising, in combination, a pair of L-shaped arms adapted to be fixed to the chassis of a vehicle, a cross-bar adjustably secured to and connecting said arms, forwardly extending arms hingedly connected to each L-shaped arm, a resilient depressing means engaging each hinged arm, a tubular member adapted to be slidably mounted upon the free end of each hinged arm, a buffer arranged in each tubular member between the free end of each hinge-arm and the end of each tubular member, a stop to limit the telescopic movement of each tubular member upon each hinge-arm, a shank integral with each tubular member, a fender-bar having a shank at each end arranged at a right angle to each shank integral with said tubular member, an elbow adjustable on each of the aforesaid shanks, a net protection for the fender, a wheel guard carried by each of the aforesaid elbows, a cross-bar connecting said tubular members and adjustable thereon, and a locking mechanism carried by said cross-bar.

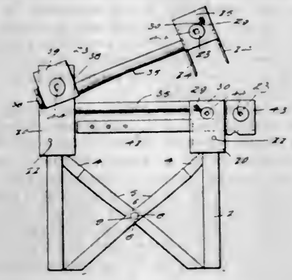
[Claim 2 not printed in the Gazette.]

1,265,879. COMBINATION TERMINAL AND FIXTURE BOX. DAVID BYRNE, Toledo, Ohio, assignor of one-third to William M. Gore and one-third to Charles T. Lawton, Toledo, Ohio. Filed July 30, 1917. Serial No. 183,551. (Cl. 247—5.)



In a combined fixture holder and terminal box, a fixture holder having arms extending laterally therefrom and a threaded boss, a member having a depression, the depression having the form the same as the contour of the arms of the fixture holder for receiving the fixture holder, a knockout disk located in the bottom of the depression for receiving the threaded boss of the fixture holder and a plurality of knockout disks for receiving electric wires.

1,265,880. QUILTING-FRAME. WILLIAM H. CAPEHART, Newell, Ala. Filed Mar. 21, 1917. Serial No. 156,385. (Cl. 45—24.)



1. A quilting frame comprising supporting legs, bearings removably secured to the upper ends of each of the legs, rollers removably secured to each of said bearings, a second set of bearings removably mounted upon certain of the first named bearings, a roller carried by said second named bearings and arranged parallel with the first named rollers, said second named bearings and roller adapted to be swung upwardly to permit placing thereon fabric material to be quilted, and means to hold the rollers against independent rotation, as and for the purpose specified.

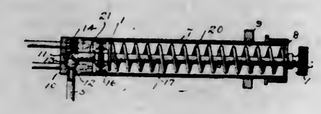
2. A quilting frame comprising vertical standards, said standards arranged in pairs, cross braces connected to each pair of standards, bearing housings removably secured to the upper ends of each of the standards, a roller removably secured between the opposing side faces of each of the bearings, a second pair of bearing housings removably arranged on the upper ends of one pair of said first named housings, a roller removably secured to said second named bearings and parallel with the rollers in the first named bearings, a pair of rollers journaled in and removably secured in the first named bearings and arranged at right angles to the first named rollers, bearing blocks removably secured to the outer faces of one pair of bearing housings, a pair of rollers removably journaled in the second named bearings and bearing blocks and at right angles to the first named rollers and parallel with the first named right angularly related rollers, extensions removably mounted on certain of said bearings, bearing blocks carried by the outer ends of said extensions adapted to receive one of the first named rollers therein, and means for holding the rollers against rotation.

3. A quilting frame comprising standards, said standards arranged in spaced pairs, cross braces rigidly supporting the standards in the spaced pairs, reinforcing rods connected to each of the cross braces at the medial portions thereof, bearings removably secured to the upper ends of the standards, one pair of bearings constituting the rear of the frame, the opposite pairs constituting the front thereof, a second pair of bearing housings seated upon the upper ends of the rear bearing housings, large rollers removably journaled between the pairs of opposing side faces of the rear bearing housing, a large roller journaled between the opposing faces of the front bearings, bearing blocks arranged on the outer side faces of the front bearings and removably associated therewith, studs removably inserted through the bearing blocks and bearings and into the rollers journaling the same thereto, smaller rollers journaled in the bearing blocks, and upper bearings, a second set of smaller rollers keyed in and removably secured in the rear and front bearings and at right angles to the larger rollers, means extending through certain of said bearings and blocks holding the rollers against independent rotation, and extensions slidably mounted transversely through the lower rear bearings and horizontally adjustable with relation thereto, and bearing housings carried by the outer ends of said extensions and adapted to receive the roller journaled in the rear lower bearings, as and for the purpose specified.

4. A quilting frame comprising a plurality of standards arranged in spaced pairs, each pair rigidly connected together by cross braces, one leg of each pair constituting the front and one leg of each pair constituting the rear thereof, bearings removably mounted upon the upper ends of the rear legs, bearing housings removably mounted upon the upper ends of the front legs, said rear bearings provided with transversely extending openings arranged at right angles to one another, said rear bearings provided with transversely alined openings and arranged at right angles to one another, said rear bearings being divided to provide upper and lower bearing housings, bearing blocks removably supported to the outer side faces of the front bearing housings in alinement with the top bearing housings, rollers journaled in the opposing side faces of the upper and lower bearings at the rear end thereof, a roller journaled in the opposing side faces of the front bearing housings, means extending through the bearing housings and into the rollers journaling the same thereto, means arranged in the bearings and engaging said first named means for holding the rollers against independent rotation, and a plurality of smaller rollers journaled in the front and rear bearings and bearing blocks and within the upper bearings and bearing blocks and arranged at right angles to the larger rollers, extensions slidably mounted in the rear bearings, bearing blocks carried by the outer ends of the extensions adapted to receive one of said first named bearing rollers therein, as and for the purpose specified.

5. A quilting frame including a support, a pair of relative spaced rollers journaled on said support, a pair of bearings carried by the support, means adjustably mounted on the support and provided with a pair of bearings, and a third roller adapted to be journaled on either of said pair of bearings.

1,265,881. PRIMING-PUMP FOR EXPLOSIVE-ENGINES. LEE F. CHANEY, Springfield, Ohio. Filed Oct. 26, 1915. Serial No. 58,064. (Cl. 103—75.)



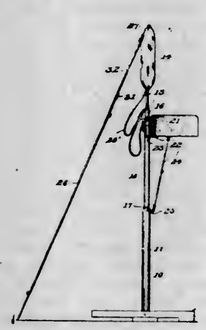
2. A pump comprising a cylinder, a reciprocatory piston therein, a laterally disposed port in said cylinder, a valve therefor movable laterally under the influence of said piston, the construction and arrangement being such that the inlet valve will be locked by the movement of the piston.

4. In a construction of the character described a cylinder having a laterally disposed port, a reciprocating piston within the cylinder, a valve for said laterally disposed port and a cam member actuated by the movement of the piston, adapted to engage and actuate said valve upon the movement of the piston.

6. A pump comprising a cylinder, a reciprocatory piston therein, inlet and outlet valves, said inlet valve being movable into and out of the path of the piston, and a cam extension on said piston actuating the inlet valve toward its seat by the movement of the piston.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,265,882. SOLDIER'S CHAIR. JOZEF CHMIELEWSKI, Hamtramck, Mich., assignor of one-fourth to Jan Ratkoski, Hamtramck, Mich. Filed Aug. 13, 1917. Serial No. 185,910. (Cl. 155—6.)

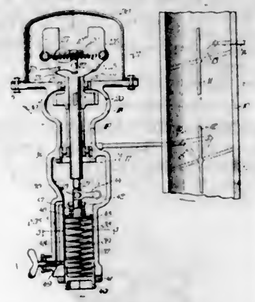


3. A device of the class described comprising a chair-bed having a supporting base, rail sections secured to the said base, a spanning bar for the said sections, an intermediate pair of rail sections telescoping within the said base sections thereof, a supporting seat hinged to the said intermediate sections, a supporting brace hinged between the said seat and said bar, telescoping end rail sections carried by said intermediate sections, a cushion arranged at the free end of said end sections, and an adjustable supporting strut hinged to the free end of the said cushion.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,265,883. HYDROCARBON-MOTOR. HAROLD D. CHUACH, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 21, 1915. Serial No. 46,658. (Cl. 264—4.)

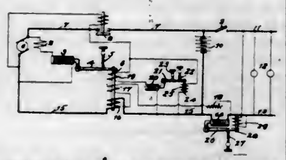
4. In a hydrocarbon motor, the combination with a throttle valve thereof, of a governor and connections, said connections including means to move said valve directly with the governor as the motor slows down and to move said valve sluggishly with the governor as the motor speeds up.



19. In a governor, a rotatable shaft, ball members pivoted thereon, a spring connecting said ball members, and an eccentric for adjusting the tension of said spring.

[Claims 1 to 3, 5 to 18, and 20 to 22 not printed in the Gazette.]

1,265,884. ELECTRIC REGULATION. JOHN L. CREVELING, New York, N. Y., assignor to Safety Car Heating and Lighting Company, a Corporation of New Jersey. Filed Sept. 29, 1911. Serial No. 651,895. (Cl. 171—313.)



1. The combination with a generator, a storage battery, a translation circuit and a regulator for the translation circuit, of means for regulating the generator, means for controlling said regulating means responsive to voltage fluctuations, means for controlling said regulating means responsive to current fluctuations, means for assisting the current responsive means embracing an adjustable resistance and a solenoid coil in shunt relation with the translation circuit regulator.

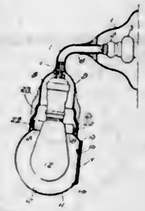
5. The combination with a generator having a field winding, a storage battery, a translation circuit and a translation circuit regulator, of means for controlling the generator comprehending a variable resistance in circuit with the field winding, means for controlling said variable resistance responsive to voltage fluctuations, means for controlling said variable resistance responsive to current fluctuations and means embracing an adjustable resistance and a solenoid in shunt relation with the translation circuit regulator, for modifying the current responsive controlling means.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,265,885. LIGHTING-FIXTURE. DAVID CROWNFIELD, Cambridge, Mass. Filed Dec. 4, 1916. Serial No. 134,818. (Cl. 240—73.)

1. A lighting fixture supporting therein a light socket, and having a shell surrounding said socket, a sliding cover having at one end a sliding engagement with said shell, in combination with a globe having a collar adapted to be received within said shell and screws on said shell adapted to engage said collar to support said globe, said sliding cover in one position being spaced away from, surrounding and covering said supporting means.

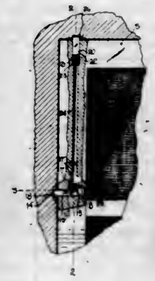
5. In a depending lighting fixture, a globe extending around the light source, an annular shell surrounding one end of the light source, inwardly extending screws for attaching the globe to the annular shell and a cover surrounding the annular shell and adapted to slide on the shell into engagement with the globe, the cover being spaced away from the shell at its lower end, and making a normally tight joint at an acute angle therewith at its upper end.



6. In a lighting fixture, in combination, means to support the fixture on the wall or ceiling, a wall canopy concealing the supporting means, a stem emerging from said wall canopy, a lamp socket attached to the stem, a shell concealing the socket having screws at its lower extremity to exteriorly support a shade, and a sliding cover to conceal the screws and hold them locked when in supporting relation to the shade, the wall canopy, supporting stem, socket cover and shell, sliding cover and shade all having a flowing non-dust catching outline and surface.

[Claims 2 to 4 and 7 to 9 not printed in the Gazette.]

1,265,886. DOOR-LATCH. PETER J. CUNNINGHAM, Jarbidge, Nev. Filed Oct. 24, 1917. Serial No. 198,238. (Cl. 70—42.)



1. The combination with a door, sliding latch bolts mounted in the door and movable at right angles to each other, an operating member rotatably mounted in the door, an operating connection between one of said latch bolts and said member, the other of the latch bolts having an operating movement in a plane at right angles to the axis of said member and having one of its ends normally intersecting the plane of said member, an element carried by the operating member and disposed in parallel relation to its axis, means on said latch bolt with which said element coacts whereby the latch bolt is retracted simultaneously with the retraction of the other of the latch bolts in the rotation of the operating member in one direction, and means for projecting the latch bolts to their normal positions.

2. The combination with a door having a transverse opening therein adjacent its free vertical edge and a latch bolt mortise intersected by said opening, of a horizontally movable latch bolt in said mortise, a rod rotatable in said transverse opening, said latch bolt having spaced pins fixed therein projecting into the transverse opening, means on the rod disposed between said pins and co-acting therewith to move said latch bolt, a second latch bolt vertically movable in the door at its upper end, a flexible connection between the latter latch bolt and said rod, whereby the bolts will be simultaneously retracted upon the turning of said rod in one direction, a coil spring co-acting with the latter latch bolt to project the same to its normal position and reverse the turning movement of said rod, and a stop member to be engaged by the latch bolt actuating means on said rod and limit such reverse turning movement of the rod.

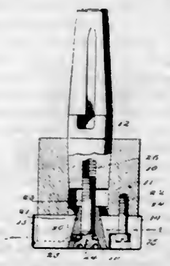
1,265,887. TELEGRAPH-KEY. BENJAMIN DE ALCALA, New Orleans, La. Filed Mar. 6, 1917. Serial No. 152,785. (Cl. 178—104.)



1. In a telegraph key the combination with a base, of a key lever pivoted thereon and electrically connected to one wire of the line and provided with a contact point, a handle carried by said lever, a contact point carried by the base and electrically connected to the other wire of the line, said points being normally out of contact, a switch pivoted to said lever having its outer end free and arranged below said handle and its inner end bifurcated and formed into a weight which is elevated above its outer end and whose gravity normally holds the fingers of said switch in electrical connection with said last mentioned contact point.

[Claims 2 to 5 not printed in the Gazette.]

1,265,888. EXPANSIBLE REAMER. DELANO H. DUGAR, Elyria, Ohio. Filed Feb. 3, 1917. Serial No. 146,477. (Cl. 77—75.5.)



1. A device of the character described including a body, an attaching shank, a cutting blade adjustable outwardly upon the body, means slidably coacting with the blade for adjusting the said blade, and means for adjusting said first mentioned means and engaging the said shank for connecting the shank with the body.

2. A device of the character described including a body provided with a bore and formed with a slot communicating with the said bore, a cutting blade slidably mounted in said slot to project into the bore, a shank fitted in one extremity of the bore, a plug slidable in the opposite extremity of the bore and formed to coact with said blade, and means for sliding the plug within the bore to adjust the said blade and engaged with the said shank for connecting the shank with the body.

3. A device of the character described including a body, a cutting blade adjustable outwardly thereon, means co-acting with the blade for adjusting the said blade, and means loosely connected to said first-mentioned means and having the said first-mentioned means mounted to travel therewith for adjusting the said first-mentioned means.

4. A device of the character described including a body, a cutting blade adjustable outwardly thereon, means coacting with the blade for adjusting the said blade, means coacting with said first-mentioned means for adjusting the said first-mentioned means and free to rotate thereon, and means rotatably connecting the said first-mentioned means with the said second-mentioned means to travel therewith.

5. A device of the character described including a body provided with a bore having a tapered portion, a shank fitted in the tapered portion of said bore, a blade adjustable outwardly upon the body, and means arranged within the bore for adjusting the said blade and operatively connecting the shank with the body.

[Claims 6 to 11 not printed in the Gazette.]

1,265,889. COUPLING. FREDERIC ECAUBERT, Brooklyn, N. Y. Filed Jan. 5, 1916. Serial No. 70,465. (Cl. 64—92.)



1. A flexible coupling, comprising in combination, a pair of shaft sections provided with interengaging toothed ends and axial abutment surfaces, and disposed in general axial alinement but capable of angular displacement with respect to each other, one of the adjacent ends having an outer surface of spherical curvature, and a one-piece coupling shell projecting rigidly from the other adjacent end and embracing and conforming in contour with said spherical surface, the aperture of said projecting shell being of less diameter than portions of the shaft section on either side thereof.

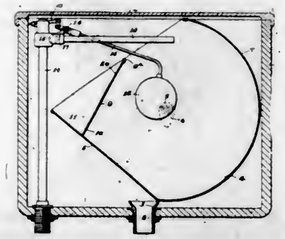
2. A flexible coupling, comprising in combination, a pair of shaft sections provided with interengaging toothed ends and axial abutment surfaces, and disposed in general axial alinement but capable of angular displacement with respect to each other, one of the adjacent ends having an outer surface of spherical curvature, and a one-piece coupling shell removably mounted upon the adjacent end of the other section and embracing and conforming in contour with said spherical surface, the aperture of said projecting shell being of less diameter than portions of the shaft section on either side thereof.

3. A flexible coupling comprising in combination, shaft sections having interengaging toothed ends and axial abutment surfaces arranged in general axial alinement, one of said ends having an outer surface with spherical curvature centered at the axial abutment, and a one-piece coupling shell projecting rigidly from the end of the other shaft section with an inner surface conforming and contacting with said outer surface of spherical curvature and maintaining said abutment surfaces in constant axial contact, the aperture of said projecting shell being of less diameter than portions of the shaft section on either side thereof.

1,265,890. FLUSH CLOSET-TANK. JAMES A. EGAN, East Onondaga, N. Y. Filed Oct. 1, 1915. Serial No. 53,610. (Cl. 4—5.)

2. A flush closet tank comprising a receptacle or tank having an outlet, and a normally upright capsizable bucket mounted in the receptacle or tank and arranged to return to its upright position when empty and to remain in its upright position when filled, the bucket being open at its top and having a baffle plate extending from the open side to the wall on the discharge side of the bucket, said plate being formed with an outlet adjacent said side wall on the discharge side of the bucket, substantially as and for the purpose specified.

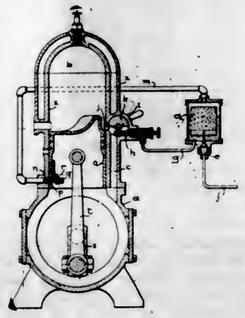
5. A flush closet tank comprising a receptacle or tank having an outlet, a normally upright capsizable bucket located in the receptacle or tank, the bucket being cylindrical in general form and pivoted at its axis and having a flat side and an open top side arranged in converging planes intersecting the cylinder, and a plate or wall located in the bucket, and extending from the open side toward the flat side, and diverging from the edge at the open side as it approaches the flat side, and being formed with an outlet adjacent the flat side, substantially as and for the purpose specified.



7. A capsizable bucket pivoted on a horizontal axis and arranged to normally balance in upright position, the bucket having a discharge nozzle arranged above and at one side of its axis and arranged farther from the axis in a radial line than the outline of the body of the bucket, and a partition having an outlet therethrough located between the discharge portion and the body of the bucket to normally confine the contents of the bucket within the body of the bucket whereby the bucket is held from upsetting by its contents, substantially as and for the purpose specified.

[Claims 1, 3, 4, 6, and 8 not printed in the Gazette.]

1,265,891. GAS-ENGINE. LEWIS M. ELLIS, Detroit, Mich., assignor, by mesne assignments, to Bessemer Gas Engine Company, a Corporation of Pennsylvania. Filed Aug. 29, 1912. Serial No. 717,662. (Cl. 123—73.)



1. In an internal combustion engine, a cylinder; a reciprocating piston within said cylinder; a compression chamber; a working chamber; a by-pass connecting said compression and working chambers; a reservoir adapted to contain a liquid fuel; a delivery apparatus communicating with said reservoir and adapted to supply a liquid fuel to said by-pass; a conduit whereby said fuel reservoir and compression chamber are placed in communication with one another and through which conduit a relatively free and unrestricted flow of fluid may occur during the greater part of each successive cycle of operation of the engine, and a restricted flow when fuel is being supplied by said delivery apparatus as aforesaid; and means for restricting the flow through said conduit, said restriction being uniform through a portion of the stroke of the piston when fuel is being supplied by said delivery apparatus.

2. In an internal combustion engine, a cylinder; a reciprocating piston within said cylinder; a compression chamber; a working chamber; a by-pass through which

said compression and working chambers are placed in communication with one another toward the end of the working stroke of the piston; a throttle valve adapted to control the flow through said by-pass; a reservoir adapted to contain a liquid fuel; a delivery apparatus communicating with said reservoir and adapted to supply a liquid fuel to said by-pass; a conduit whereby said fuel reservoir and compression chamber are placed in communication with one another and through which conduit a relatively free and unrestricted flow of fluid may occur during the greater part of each successive cycle of operation of the engine, and a restricted flow when fuel is being supplied by said delivery apparatus as aforesaid; and means for restricting the flow through said conduit, said restriction being uniform through a portion of the stroke of the piston when fuel is being supplied by said delivery apparatus.

10. In an engine of the class described, a cylinder; a reciprocating piston within said cylinder; a compression chamber; a working chamber; a by-pass connecting said compression and working chambers and through which said chambers are placed in communication with one another toward the end of the working stroke of the piston; a throttle valve adapted to control the flow through said by-pass; a reservoir adapted to contain a liquid fuel; a delivery apparatus communicating with said reservoir and adapted to supply a liquid fuel to said by-pass; a conduit communicating with said fuel reservoir and with said compression chamber and whereby said reservoir and chamber are placed in communication with one another, and through which conduit a flow of fluid may occur between said compression chamber and said fuel reservoir, said piston having an opening or vent port adapted to register with the end of said conduit which communicates with said compression chamber toward the end of the working stroke of the piston; and means carried by and partaking of the movement of said piston for varying the area of said opening or vent part.

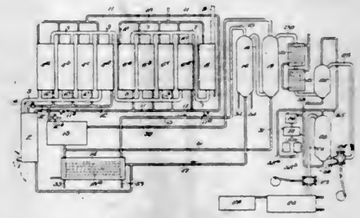
12. In an internal combustion engine, a cylinder; a reciprocating piston within said cylinder; a compression chamber; a working chamber; a by-pass connecting said compression and working chambers; a reservoir adapted to contain a liquid fuel; a delivery apparatus communicating with said reservoir and adapted to supply a liquid fuel to said by-pass; a conduit whereby said fuel reservoir and compression chamber are placed in communication with one another and through which conduit a relatively free and unrestrained flow of fluid may occur during the greater part of each successive cycle of operation of the engine, and a restrained flow at the moment of greatest opening of the by-pass; and means for restraining the flow through the conduit at the moment of greatest opening of the by-pass when fuel is being supplied by said delivery apparatus.

16. An internal combustion engine comprising a combustion chamber, means for supplying liquid fuel to the combustion chamber, means for compressing air, means whereby the pressure of the compressed air is utilized to increase the pressure on the fuel in the fuel supplying means, said means including an air conduit in communication with the air compressing means, and movable means for controlling the application to and escape of air from the fuel supplying means, the escape of said air taking place through a passage of maximum free cross-section less than the minimum cross-section of the air conduit whereby less resistance is offered to the application of air pressure to the fuel supplying means than to its escape therefrom, whereby a rapid flow of fuel is secured at one period in the cycle of the engine and a gradually decreasing flow is secured thereafter.

[Claims 3 to 9, 11, and 13 to 15 not printed in the Gazette.]

1,265,892. METHOD AND APPARATUS FOR SEGREGATING AND RECOVERING GASES. FREDERIC AUGUSTUS EUSTIS, Milton, Mass. Filed Dec. 19, 1917. Serial No. 207,953. (Cl. 23—1.)

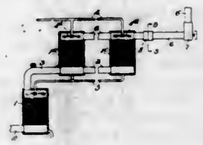
1. The method of recovering SO_2 or the like from furnace or other gases containing the same, comprising causing a liquid to absorb SO_2 from said gases, thereafter extracting the SO_2 from the liquid solution by subjecting the solution to the combined effect of heat and vacuum, and thereafter subjecting the extracted SO_2 gas to a cooling agency to deprive it of water vapor with which it may still be associated.



22. Apparatus for segregating and recovering gases from other gases associated therewith, comprising in combination means for subjecting the associated gases to contact with a liquid whereby the gas to be recovered will be absorbed from other gases, a vacuum extractor, means to heat the liquid after it leaves the absorber and before it leaves the vacuum extractor, a douche tank to which a gas from the extractor passes, means to supply liquid to the douche tank to cool the gas and precipitate moisture therefrom, a refrigerator to which the gas from the douche tank passes, and a desiccator containing a supply of a liquid agent having an affinity for water vapor, to which the gas from the refrigerator passes.

[Claims 2 to 21 and 23 not printed in the Gazette.]

1,265,893. ART OF AND APPARATUS FOR TREATMENT OF CORROSIVE GASES. FREDERIC AUGUSTUS EUSTIS, Milton, Mass. Filed Dec. 19, 1917. Serial No. 207,954. (Cl. 23—1.)



2. The art of treating effluent gases bearing an anhydrid of acid from a source which delivers them with condensed water-vapor into apparatus vulnerable to such acids, for the purpose of rendering them less harmful, comprising raising the temperature of the gases above the dew-point of the contained water-vapor before they enter such apparatus.

11. In gas treating apparatus, the combination of means for progressively depriving the gases of condensed liquids consisting of a scrubber adapted to condense and remove a part of the condensable liquid and a heater acting on the gas effluent from the scrubber adapted to raise the effluent gas above the dew-point of the contained liquid vapor.

[Claims 1 and 3 to 10 not printed in the Gazette.]

1,265,894. HEADLIGHT-CONTROLLER FOR VEHICLES. LEWIS R. EWART, Cody, Wyo. Filed Apr. 24, 1917. Serial No. 164,110. (Cl. 240—61.)

1. In a headlight-controller, a sleeve provided with an inclined upper edge and upper and lower interior shoulders, a shaft carrying a headlight provided with a depending sleeve, said shaft provided with an inclined shoulder adapted to engage the inclined upper edge of the sleeve, an additional straight shoulder to seat on the upper

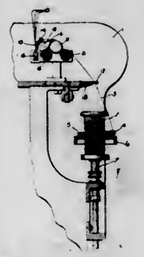
internal shoulder of the sleeve, a spring adapted to bear on the lower shoulder of the sleeve, a screw-nut on said



shaft on which said spring is seated, and said nut adapted to adjust the tension of the said spring.

[Claim 2 not printed in the Gazette.]

1,265,895. TWISTING AND DOUBLING APPARATUS. THOMAS H. FAIRCHILD, Jonesboro, Tenn., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed May 15, 1917. Serial No. 168,668. (Cl. 28—34.)



1. In a doubling and twisting apparatus, the combination with a rotatable yarn receiver and means to twist and wind yarn thereon, of a feed roll, a top roll loosely resting on and rotated by frictional contact with the feed roll, and a yarn guide situated on the feeding side of the feed roll and having two guide eyes so situated that the yarn which is delivered from both guide eyes passes between portions of the feed roll and top roll that have frictional engagement with each other at substantially the same point whereby if the yarn breaks between the top roll and yarn receiver, the broken end will be caught by and wound in the loop of yarn that encircles the top roll.

2. In a doubling and twisting machine, the combination with a rotatable yarn receiver and means to twist and wind yarn thereon, of a feed roll, a top roll loosely resting on and rotated by frictional contact with the feed roll, a back-bar, and a yarn-guide sustained by the back-bar and having two guide-eyes, one situated above the other, the ends from the creel being carried through the lower guide-eye and thence between the rolls and around the top roll, thence through the upper guide-eye and between the rolls again to the yarn receiver.

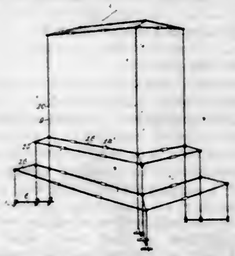
1,265,896. HOG-YOKE. JAMES HENRY FARMER, Stonewall, Okla. Filed Mar. 9, 1918. Serial No. 221,521. (Cl. 119—138.)



3. An animal yoke comprising a length of wire bent upon itself to form the opposed sides of the yoke and having twisted portions constituting relatively rigid arms projecting above and below the yoke proper, one twisted portion of the wire of the upper yoke arm being laterally extended at its junction with one side of the yoke to form an open loop and the other twisted portion of said arm terminating in an eye having loose sliding engagement on one side of said loop, the other side of the yoke proper having a terminal hook on its upper end adapted for engagement through said loop, said eye coacting with the hook to yieldingly urge the hook bill over the closed end of the loop.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,265,897. SECTIONAL DEVICE FOR DEMONSTRATING THE OUTLINES OF OBJECTS. CHARLES HAMILTON FAWCETT, Independence, Iowa. Filed Jan. 4, 1917. Serial No. 140,641. (Cl. 189—36.)

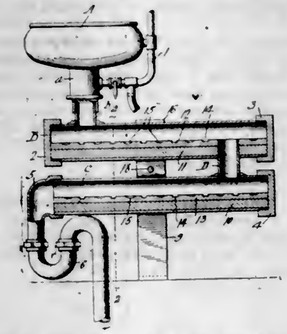


In a device of the character described, a knock-down structure composed of a plurality of sets of base-blocks, each set comprising a row of like bodies, each body having an elongated basal part and having an upwardly extended part provided with a vertical socket, said basal part having a horizontal transverse orifice, a rod passed horizontally through all the basal horizontal orifices in each set, each block having a vertical rod seated removably in its vertical socket, and rods detachably connected angularly between the said vertical rods forming a connected self-supported skeleton frame.

1,265,898. GOLD-CATCHING DENTAL-CUSPIDOR ATTACHMENT. ROBERT M. FIGG, Le Mars, Iowa. Filed July 17, 1917. Serial No. 181,165. (Cl. 32—5.)

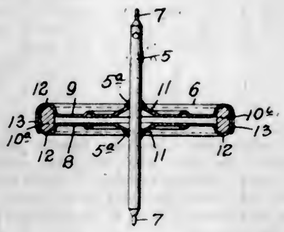
1. A gold catching device of the character described including a housing comprising two superposed tubular members held in spaced relation, said members being connected near one end, and said upper tubular member being arranged to be brought into connection with a dental spittoon, caps for closing the ends of said upper member, said lower member at one end being connected to an S-trap, a cap for closing the other end of said lower member, a flat top base member closely fitting into the bottom portion of each of said tubular members and a removable tray-forming member held upon each of said base members, each tray member having a plurality of transverse grooves arranged in spaced relation, with a plurality of semi-circular depressions between said grooves.

2. A dental spittoon attachment comprising two connected tubular members one of said members being adapted to be connected to a dental cuspidor, the other member ar-



ranged to be connected to an S-trap, and a gold catching tray removably held within each of said tubular members, all arranged as and for the purpose set forth.

1,265,899. FLY-WHEEL. JOHN C. FORSTER, Pittsburgh, Pa. Filed July 25, 1917. Serial No. 182,655. (Cl. 74—6.)



2. An approximately balanced rotor comprising a pair of sheet metal disks overlapping at their outer edges to form a wheel having a hollow rim and an annular weight in said rim.

5. A rotor comprising a pair of flanged grooved disks having central perforated bosses, an annular weight between the rim portions of said disks, and a central spindle extending through the perforations of said bosses and soldered to the bosses, said disks having their flanges overlapping and locked together.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,265,900. ARTIFICIAL BAIT. WILLIAM A. FOSS, Cleveland, Ohio. Filed July 31, 1916. Serial No. 112,224. (Cl. 43—30.)

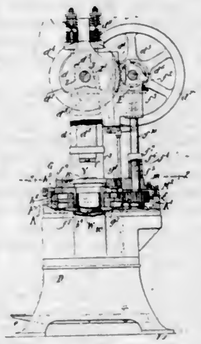


1. In a fishing device, the combination of a concavo-convex body, a fish hook rigidly secured to said body, a substantially flat freely flexible tail strip having its front end extended to lap a portion of said body and extending and free to wiggle rearwardly of the body, means to secure the front end of the strip to the body, and means for causing the extension to wiggle.

4. In a fishing device, the combination of a fish hook, a rod connected to said hook, and a spinner pivoted on the rod and comprising two front members extending rearwardly and outwardly from the rod and two members extending rearwardly and inwardly from the front members respectively.

[Claims 2, 3, and 5 to 9 not printed in the Gazette.]

1,265,901. METHOD OF PRODUCING FLAT SURFACES ON THE EDGES OF STAMPINGS AND DRAWN SHELLS. CHARLES R. GABRIEL, Brooklyn, N. Y. Original application filed Apr. 24, 1914, Serial No. 834,105. Divided and this application filed Oct. 21, 1916. Serial No. 126,991. (Cl. 113—42.)

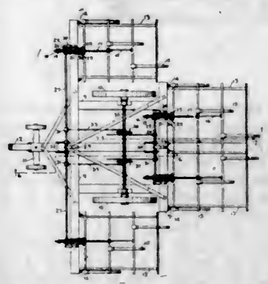


1. The described method of trimming the flash or scrap from stampings, which consists in holding the stamping by pressure in direction perpendicular to the plane of the cut to be made, and then shearing the flash by outwardly directed cuts in a plane parallel with and closely adjacent the plane of said flash.

4. The described method of trimming flash or scrap from stampings, which consists in holding the stamping by clamping it between dies within a cutting edge encircling the stamping, such cutting edge and the upper face of the upper clamping die being in the plane of the cut to be made and parallel with and closely adjacent the plane of said flash, and then shearing the flash by outwardly directed cuts in said plane against said encircling cutting edge.

[Claims 2 and 3 not printed in the Gazette.]

1,265,902. CULTIVATOR. KARL F. GERHARD, Hatton, Wash. Filed Aug. 28, 1916. Serial No. 117,339. Renewed Mar. 19, 1918. Serial No. 223,466. (Cl. 97—36.)



1. In combination, a cultivator frame, an axle journaled in said frame, driving wheels mounted on and adapted to revolve said axle, a cultivator rack pivotally connected to said frame, means for swinging said rack on its pivotal connection with said frame, said means comprising a brace

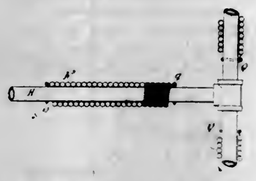
secured to and extending upwardly from said rack, a rod pivotally secured to said brace, a sleeve slidably mounted on said rod, springs encircling said rod and opposing the opposite sides of said sleeve, stops mounted on said rod to position the outer ends of said springs, a shaft journaled to said cultivator frame, a crank non-rotatably mounted on said shaft and pivotally connected to said sleeve, means operated by said axle for rotating said shaft, said last mentioned means comprising a disk mounted on said axle and adapted to be revolved by said axle, pins projecting from said disk, a lever mounted on said shaft, a connection rod pivoted at one end to said lever, an upright piece secured to said connecting rod, means for moving said connecting rod to thrust said upright piece into the path of rotation of said projection pins, and means for retaining said shaft and said crank in a predetermined position at predetermined times, said means comprising a latch lever mounted on said shaft, and a locking strap for engaging said latch to retain said latch in a predetermined position.

4. In combination, a cultivator frame, an axle journaled in said frame, means for revolving said axle, a cultivator rack pivotally connected to said frame, a shaft journaled in said frame, an operative connection between said rack and said shaft, a lever mounted on said shaft, a connecting rod pivoted at one end to said lever, means operated by said axle for shifting the position of said lever, means for retaining said rack in a raised position, said means comprising a latch lever mounted on said shaft, and a locking strap for engaging said latch to retain said latch in a predetermined position.

5. In combination, a cultivator frame, an axle journaled in said frame, means for revolving said axle, a cultivator rack pivotally connected to said frame, a shaft journaled in said frame, an operative connection between said rack and said shaft, a lever mounted on said shaft, a connecting rod pivoted at one end to said lever, means operated by said axle for shifting the position of said lever, a latch lever mounted on said shaft, a pivotally mounted locking strap, and a spring for holding said strap in locking engagement with said lever.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,265,903. DEVICE FOR FASTENING WIRES TO PIPES. EDWARD E. GOLD, New York, N. Y., assignor to Gold Car Heating & Lighting Company, New York, N. Y., a Corporation of New York. Original application filed Nov. 7, 1911, Serial No. 658,985. Divided and application filed Jan. 3, 1912, Serial No. 669,272. Divided and this application filed Oct. 23, 1913. Serial No. 796,877. (Cl. 257—262.)



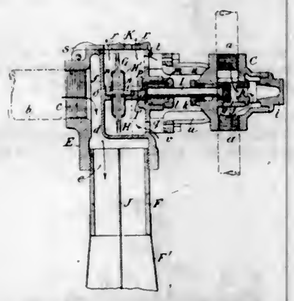
1. A pipe and means for securing a wire thereto comprising a split metal band having a portion conforming to the surface of said pipe and having a portion bent outwardly therefrom forming a closed loop through which said wire may be passed, said band being secured to said pipe by being welded thereto on each side of said loop.

2. A pipe and means for securing a wire thereto comprising a split metal band having a portion conforming to the surface of said pipe and having a portion bent outwardly therefrom forming a closed loop through which said wire may be passed, said band passing around said pipe and having its meeting ends at a distance from said loop, and said band being secured to said pipe by welding one of such welds securing both said meeting ends thereto.

3. A heating pipe and a coil of radiating wire wound thereon, and means for securing the end of said wire to said pipe comprising a split band passing around said pipe having a portion extending outwardly from said pipe forming a closed loop adapted to receive the end of said wire, said band being welded to said pipe at each side of said loop.

4. A heating pipe and a coil of radiating wire wound thereon, and means for securing the end of said wire to said pipe comprising a split band passing around said pipe having a portion bent outwardly from said pipe forming a closed loop adapted to receive the end of said wire, said band being welded to said pipe at each side of said loop, and one of said welds securing both the meeting ends of said band to said pipe.

1,265,904. VAPOR-VALVE FOR STEAM-HEATING. EDWARD E. GOLD, New York, N. Y., assignor to Gold Car Heating & Lighting Company, New York, N. Y., a Corporation of New York. Filed Sept. 6, 1917. Serial No. 190,078. (Cl. 236—19.)



1. A vapor valve comprising a steam-inlet valve, a thermostat operatively connected thereto, and a discharge passage for spent fluid from the radiator, the thermostat being arranged exteriorly to said passage and out of direct conductive contact with the spent fluid, but adjacent to such passage so as to receive heat indirectly from such fluid.

4. A vapor valve comprising a steam-inlet valve, a thermostat operatively connected thereto, a chamber inclosing said thermostat, the latter being out of contact with the walls of the chamber, a discharge passage for spent fluid from the radiator, adapted to direct such fluid against a wall of said chamber to heat the latter and thereby to expand the thermostat, the fluid being excluded from said chamber, and said chamber having a removable portion, by opening which access may be gained to said thermostat.

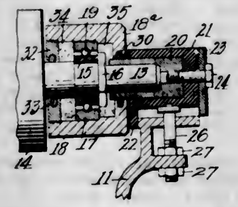
7. A vapor valve comprising a steam-inlet valve, a thermostat operatively connected thereto, and a discharge passage for spent fluid from the radiator, the thermostat being arranged exteriorly to said passage and out of direct conductive contact with the spent fluid but adjacent to such passage so as to receive heat indirectly from such fluid, the thermostat being detachably mounted to facilitate its removal and displacement.

[Claims 2, 3, 5, 6, and 8 to 14 not printed in the Gazette.]

1,265,905. NAPPING-MACHINE. HARRY S. GREENE, Woonsocket, R. I. Filed June 18, 1917. Serial No. 175,367. (Cl. 26—19.)

3. In a napping machine, a shaft, cylinder heads thereon, a plurality of napping rolls, ball bearings for said rolls spaced apart on said heads and each comprising an inner ball race fixed to a roll shaft and a rotatable outer ball race, and means to drive the outer ball race at substantially the angular velocity of the napping roll and the inner ball race.

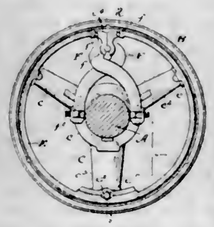
5. In a napping machine, a shaft, cylinder heads thereon, a plurality of napping rolls, bearings for said rolls rotatably mounted in said heads and means to positively rotate said bearings, said means comprising flanged disks loose on the cylinder shaft and having internal cylindrical surfaces engaging the outer surfaces of said bearings and means to drive said disks to rotate said bearings, said latter means comprising a gear fixed to the cylinder shaft and driving connections from said gear to said flanged disk.



6. In a napping machine, a shaft, cylinder heads thereon, a plurality of napping rolls, bearings for said rolls rotatably supported by said heads, and means to rotate said bearings and said rolls in fixed speed relation.

[Claims 1, 2, and 4 not printed in the Gazette.]

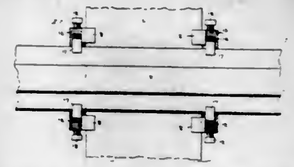
1,265,906. CLUTCH. GEORGE W. HALE, Cleveland, Ohio, assignor, by mesne assignments, to The Reliance Gauge Column Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 8, 1912. Serial No. 689,243. (Cl. 192—13.)



1. In a clutch, the combination of a driving and a driven member, one being hollow and concentrically inclosing the other, an expansible split ring non-rotatably but radially movable with respect to the inner member, two crossed interpivoted fingers having their outer ends in pivotal engagement with the ends of said ring, the point of pivotal connections between said fingers lying radially within the points of pivotal engagement of the outer ends of said fingers with said ring, said fingers being adapted to have a combined outward movement from said inner member, and means for spreading the inner ends of said fingers and at the same time moving the two fingers together in a radial direction.

2. In a clutch, the combination of a driving and a driven member, one being hollow and concentrically inclosing the other, an expansible split ring non-rotatably but radially movable with respect to the inner member, two crossed interpivotal fingers having their outer ends in pivotal engagement with the ends of said ring, the point of pivotal connection between said fingers lying radially within the points of pivotal engagement of the outer ends of said fingers with said ring, said fingers being adapted to have a combined outward movement from said inner member, and a cone shaped sleeve adapted to engage and spread the inner ends of said fingers and at the same time move the two fingers together in a radial direction.

1,265,907. RAIL-FASTENING MEANS. HOWARD HARSH, Osakis, Minn. Filed Aug. 16, 1917. Serial No. 186,445. (Cl. 238—4.)



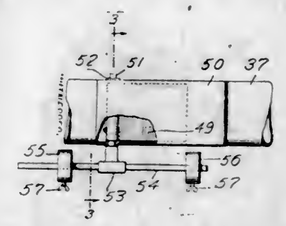
1. The combination with a tie and rail mounted thereon, of a pair of plates arranged on opposite sides of the tie, a bolt extending through the tie and connecting said plates together, means to permit of a limited vertical adjustment of said bolt, means for adjusting said plates longitudinally of the tie on said bolt, and means carried by said plates for engaging and holding the rail to said tie.

2. The combination with a tie and rail mounted thereon, of a pair of plates, means projecting inwardly from said plates over the upper and lower edges of the tie, means extending through the tie and connecting said plates, means for adjusting said plates longitudinally of the tie, spike carriers carried by each plate, and spikes adjustably mounted in said carriers and adapted to lockingly engage the rail.

3. The combination with a tie and rail mounted thereon, of a pair of plates arranged on opposite sides of the tie, means for attaching the plates to the tie, a pair of oppositely disposed bosses carried by each plate and each provided with a socket, a rail engaging spike mounted in each of said sockets, and means for maintaining said spikes in adjusted position.

4. The combination with a tie and rail mounted thereon, of a pair of plates arranged on opposite sides of the tie, means for adjusting the plates to the tie, a pair of bosses arranged on the outer face of each plate and each provided with a socket, a rail engaging spike mounted in each of said sockets, and a set screw extending through one wall of each socket, and adapted to engage the spike to hold it in adjusted position.

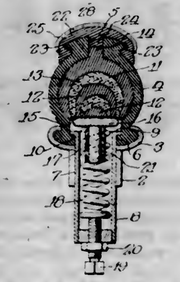
1,265,908. PNEUMATIC ELEVATOR AND DISTRIBUTER FOR COTTON-GINS. JOSEPH LUTHER HART, Chickasha, Okla. Filed Jan. 13, 1916, Serial No. 71,946. Renewed Nov. 24, 1917. Serial No. 203,862. (Cl. 13—19.)



2. In a pneumatic elevator and distributer for cotton gins, the combination with the distributing pipe connected with the several gins intermediate its ends, a fan connected with one end of the distributing pipe, of means in connection with the distributing pipe and arranged between the suction pipe and the gins for cleaning the cotton as it passes from the suction pipe to the gins, and a bypass pipe connected at one end to the distributing pipe at the end adjacent to the fan and connected at the other end to the cleaning means, and means for regulating the flow of air through the bypass pipe and controlled by the flow of the air through the system.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,265,909. **RESILIENT TIRE.** WILLIAM L. HARVEY, Chicago, Ill., assignor to Harvey Tire and Rubber Company, Chicago, Ill., a Corporation of Maine. Filed May 31, 1917. Serial No. 171,824. (Cl. 152—8.)



1. A tire comprising a casing, a core positioned within said casing and being provided with a tongue, said casing being split around its outer circumference, means for clamping said tongue between the adjacent edges of said casing, and resilient means adapted to retain said core and said casing under predetermined pressure.

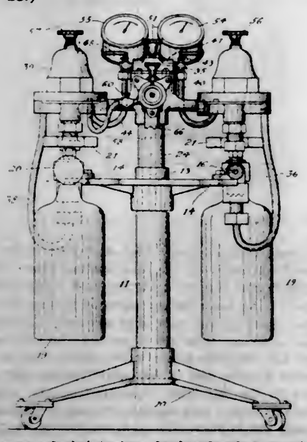
3. A tire comprising a casing, an inner core and an outer tread member, said core and said tread member each being provided with a tongue, said casing being split around its outer circumference and means for clamping said tongues between the adjacent edges of said casing.

4. A tire for motor vehicles comprising a casing split around its outer circumference, a tread member for said casing having a tongue adapted to project between the adjacent edges thereof, a plurality of spring clips adapted to firmly clamp said tongue between said edges and to hold said tread member securely in position.

5. A tire comprising a casing, an inner core and an outer tread member, said core and said tread member each being provided with a tongue, said casing being split around its outer circumference, means for clamping said tongues between the adjacent edges of said casing, and resilient means adapted to retain said core and said casing under predetermined pressure.

[Claims 2 and 6 not printed in the Gazette.]

1,265,910. **APPARATUS FOR DELIVERING A MIXTURE OF GASES.** JAY A. HEIDBRINK, Minneapolis, Minn. Filed Sept. 26, 1912. Serial No. 722,455. (Cl. 128—13.)



1. A gas administering device having a mixing chamber, means for supplying thereto from independent sources of supply a plurality of gases each under pressure and in fixed proportions at their respective pressures, and means for definitely regulating and determining the aggregate volume of flow of said gases into the mixing chamber at their respective pressures while maintaining said fixed proportions.

4. A gas administering device having a mixing chamber provided with a plane-faced wall and having independent separated apertures opening through said wall, means for conducting a plurality of gases from independent sources of supply independently through each of said apertures into the chamber in predetermined relative proportions, a closure having a plane-surfaced wall held fixed in spaced parallel relation with said wall of the chamber for controlling the flow of gases through said apertures, and means to move the closure bodily so that the plane face thereof will be caused uniformly to approach or recede from said wall to vary at will the aggregate flow of gases into the mixing chamber while maintaining their respective delivery proportions constant.

12. A gas administering device comprising a pair of separate containers one having nitrous oxid and the other oxygen stored under pressure therein, a mixing chamber, means for conducting said gases independently from the containers to the mixing chamber, means in said conducting means for varying at will the relative pressures at which said gases are delivered, independent gages each having connection with one of said conducting means and each provided with a scale for indicating the pressure at which gas is being delivered, the oxygen gage being provided with a scale for indicating the percentage of oxygen in the mixture of gases being delivered at the indicated oxygen pressure when the pressure of the nitrous oxid as indicated upon its scale is at a predetermined point.

14. A gas administering device having a mixing chamber, a respirator tube connected with the mixing chamber, a disk therein, a gas bag having connection with the mixing chamber on the inner side of said disk, and means controlled by the position of the disk so as to permit breathing of gas mixture from the mixing chamber at all times and to prevent or permit, as desired, entrance of the exhalations of the patient to the gas bag and consequent rebreathing of the gas mixture.

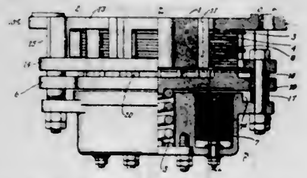
16. A gas administering device having a mixing chamber, a respirator tube connected with the mixing chamber having a perforated partition, a gas bag having connection with the mixing chamber on the inner side of said partition, a disk normally coöperating with said partition to open and close communication with the mixing chamber and gas bag during breathing so as to permit breathing of the gas mixture and prevent rebreathing, a spindle on which said disk vibrates between fixed stops, and controllable means for moving said spindle bodily endwise so as to position the stops thereon so that the disk will be held spaced from said partition during exhalation to permit rebreathing of gas mixture.

[Claims 2, 3, 5 to 11, 13, and 15 not printed in the Gazette.]

1,265,911. **MULTIPLE-FRICTION-DISK DEVICE.** CLARK T. HENDERSON, Milwaukee, Wis., assignor, by mesne assignments, to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Feb. 1, 1913. Serial No. 745,719. (Cl. 74—70.)

1. In a multiple friction disk device, in combination, a frame, a shaft, two sets of friction disks, one set being locked to the shaft, the other set being locked to the frame, the disks being spaced from the shaft for air space, certain of said disks being provided with radial ventilating passages communicating with said space, and the frame having outlets to permit free discharge of air from the passages, a pressure device carried by said frame to effect frictional engagement of said disks and an electromagnet fixed to and supported by said frame to relieve said disks of the pressure of said device.

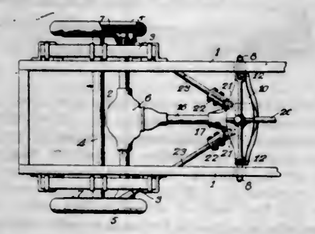
2. In a multiple friction disk device, in combination, coöperating friction disks, mechanical means for pressing said disks into frictional engagement, an electromagnet for relieving said disks of the pressure of said mechanical means, and means associated with said electromagnet for



causing it to also act upon certain of said disks to separate the same magnetically.

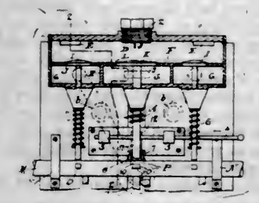
[Claims 3 to 6 not printed in the Gazette.]

1,265,912. **MOTOR-VEHICLE.** ARTHUR O. HIGINBOTHAM, Worcester, Mass., assignor to Charles B. Foster and Company, a Copartnership of Worcester, Mass., and consisting of Charles B. Foster, Arthur O. Higinbotham, and Jerome R. George. Filed Aug. 6, 1914. Serial No. 855,523. (Cl. 180—73.)



In a motor vehicle, the combination with the driving wheels thereof, of means for transmitting the impelling force of said wheels to the frame of the vehicle, a member pivotally connected to said frame for movement about an axis transverse to said frame, and a second member pivotally connected to said first member for movement about an axis substantially perpendicular to the plane of said frame, said transmitting means having a pivotal connection with said second member for movement about an axis extending longitudinally of said frame.

1,265,913. **INTERNAL-COMBUSTION ENGINE.** JOSEPH HILL, Toronto, Ontario, Canada. Filed Aug. 10, 1917. Serial No. 185,448. (Cl. 123—60.)



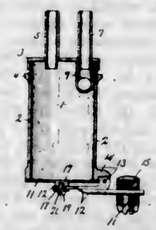
1. The combination with a pair of double-acting cylinders, a double-headed piston mounted in each of the said cylinders, and means whereby said pistons are connected together, of a combustion chamber at each end of the said cylinders, provided with ports opening into said cylinders; a port-provided wall extending longitudinally of said combustion chamber; two vertical walls connecting said longitudinal wall with the lower wall of said combustion chamber thus forming three alined port-provided chambers beneath said longitudinal wall; the two outer chambers receiving the fresh charges and the intermediate chamber receiving the exhaust; a puppet valve operating through each of the said chambers and controlling the ports in said longitudinal wall; means for operating said valves, and unitary igniting means for said combustion chamber.

2. The combination of a pair of double-acting cylinders, a double headed piston mounted in each of the said cylinders, means whereby said pistons are connected together; a combustion chamber at each end of the said cylinders provided with ports opening into said cylinders; and each further provided with two intake and one exhaust port-provided chambers separated therefrom by a wall; intake valves for said intake chambers; means for operating same; an exhaust valve for said exhaust chamber; and means brought into contact with the stem of one of said exhaust valves whereby the said valve can be held open for the purpose specified.

3. The combination of a pair of double-acting cylinders, a double-headed piston mounted in each of the said cylinders, means whereby said pistons are connected together; a combustion chamber at each end of the said cylinders provided with ports opening into said cylinders; and each further provided with two intake and one exhaust port-provided chambers separated therefrom by a wall; intake valves for said intake chambers; means for operating same, an exhaust valve for said exhaust chamber; and means brought into contact with the stem of one of said exhaust valves whereby the said valve can be held open for the purpose specified, comprising a bell-crank lever, one arm of which projects underneath the stem of one of said exhaust valves; means whereby said bell-crank lever is pivoted in place, and a push-rod provided with a cam-surface, carried by said plate and in such position as to operate against said bell-crank lever to hold the designated exhaust valve open.

4. The combination of a pair of double-acting cylinders and a combustion chamber at each end thereof and offset therefrom and provided with ports opening thereinto; a wall extending longitudinally of said combustion chambers and provided with three alined ports; a vertical wall positioned between each two of the said alined ports and connecting said longitudinal wall with the bottom wall of said combustion chambers, thus dividing the portion of the said combustion chambers underneath said longitudinal wall into three port-provided chambers, the outer ones of which receive the fresh charges, and the intermediate one receiving the exhaust.

1,265,914. **MILKING-MACHINE.** ARTHUR V. HINMAN and RALPH L. HINMAN, Oneida, N. Y. Filed Oct. 6, 1914. Serial No. 865,319. (Cl. 31—98.)



1. In a milking machine, a milk chamber having a milk inlet, an air exhaust connection, a milk outlet and a counter-weighted valve for said outlet, said counter-weight adjustable to allow said valve to open under different weights of milk.

3. A milking apparatus comprising a milk chamber having a milk inlet, and an opening for the discharge of milk from the chamber, a valve for said opening, and means for allowing said valve to open under different weights of milk.

5. In a milking apparatus, a milk chamber having an air exhaust tube piercing the upper end of the same and terminating in a substantially closed bottom positioned within the chamber, said tube provided with a plurality

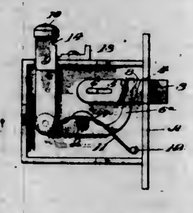
of relatively small openings through its side wall, a milk inlet to said chamber, and an outlet adapted to discharge milk into a receptacle at normal atmospheric pressure, a valve for said outlet, said valve positioned outside the chamber and adapted to be held in air-tight relation with said chamber by the exhaust of air therefrom.

7. In a milking machine, a tubular milk chamber comprising two removably connected parts, one of said parts having a member adjustable thereon and adapted to receive between it and the other part, a portion of a milk receptacle, a milk inlet, a valved outlet, and means for exhausting air from said chamber.

12. In a pneumatic milking machine, a cylindrical milk-chamber having a suction connection at one end, a milk inlet near said end in connection with a teat cup, a valved milk ouflet at the other end, and means to bring the milk into rotary motion in the milk chamber whereby the milk may be kept rotating as long as it remains in said chamber and means to produce intermittent suction in said milk chamber.

[Claims 2, 4, 6, 8 to 11, and 13 to 18 not printed in the Gazette.]

1,265,915. AUTO AND SCREEN DOOR LATCH. GEORGE E. HITCHCOCK, Flint, Mich., assignor of one-third to Myer Brown, Flint, Mich. Filed Dec. 19, 1916. Serial No. 137,749. (Cl. 70—42.)

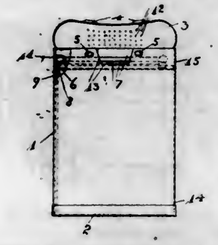


1. A door-latch comprising a case, a reversible slide-latch, slidably mounted within the case, said latch provided with recesses in either side thereof, a pivotally mounted lever arranged below and substantially parallel with the slide-latch, the outer end thereof being bent in the form of a cam and adapted to be received within one of the recesses within the slide-latch, said lever being pivoted centrally of its body portion in such a manner as to cause the cam to move inwardly and upwardly through the recesses, and a vertically arranged actuated plunger pivotally connected to the outer free end of said lever whereby the cam is caused to impart a horizontal movement to said slide-latch when actuated.

2. A door-latch comprising a case, a reversible slide-latch, slidably mounted within the case, said latch provided with recesses in either side thereof, a pivotally mounted lever arranged below and substantially parallel with the slide-latch, the outer end thereof being bent in the form of a cam and adapted to be received within one of the recesses within the slide-latch, said lever being pivoted centrally of its body portion in such a manner as to cause the cam to move inwardly and upwardly through the recesses, a vertically arranged actuated plunger pivotally connected to the outer free end of said lever whereby the cam is caused to impart a horizontal movement to said slide-latch when actuated, a spring arranged beneath the plunger whereby the plunger and latch are held in an outward position, and a lock adapted to engage a notch in the side of the plunger whereby the plunger and latch may be held in a close position against the tension of the said spring.

1,265,916. TOBACCO-RECEPTACLE. TAKUJI HOSOGAI, Los Angeles, Cal. Filed Dec. 19, 1916. Serial No. 137,841. (Cl. 206—38.)

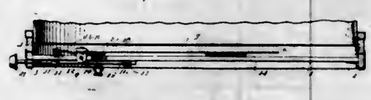
1. A can body having its ends open, a partition in said body dividing the body into two compartments, one being larger than the other and adapted to receive tobacco, said small compartment to hold matches, said partition having an opening therein, a pipe cleaning member extending through the opening, and a handle on said member lying



in the match compartment and engaging and holding the matches in place, and lids for closing said open ends.

[Claim 2 not printed in the Gazette.]

1,265,917. DRUM-SNARE. HARRY B. JAY, Chicago, Ill. Filed June 2, 1917. Serial No. 172,429. (Cl. 84—127.)



3. A snare for drums, comprising a base member, means for rigidly attaching said member to a drum adjacent the head thereof, a clamping member movably mounted on said base member, a plurality of resilient fingers rigidly mounted at one end on said clamping member, yielding means for normally rocking said clamping member so as to carry the free ends of said members away from such drumhead, and cam means for rocking said clamping member so as to carry said free ends into contact with such drumhead.

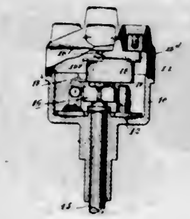
6. A snare for drums, comprising a base member, means for rigidly attaching said member to a drum adjacent the head thereof, a plurality of resilient fingers shiftably mounted on said base member, means for shifting said fingers into and out of contact with such drumhead, and a deadening pad on said base member adapted to have said fingers rest thereon when in one position.

8. A snare for drums, comprising an elongated base member, means for rigidly attaching said member to a drum adjacent the head thereof, a clamping bridge pivotally mounted on said base member adjacent one end thereof and transversely thereto, a plurality of spring wires rigidly mounted at one end on said clamping bridge, a deadening pad on said base member adapted to have the free ends of said wires rest thereon, said clamping bridge having a part extending at each side thereof, a compression spring bearing between one of said parts and said base member for normally rocking said bridge so as to carry the free ends of said wires into contact with said pad, a manipulative member journaled on said base member, and an adjustable cam on said manipulative member adapted to coact with the other of said bridge parts for rocking said bridge so as to shift the free ends of said wires into contact with such drumhead.

[Claims 1, 2, 4, 5, and 7 not printed in the Gazette.]

1,265,918. CIRCUIT-BREAKER AND DISTRIBUTER UNIT. WILLIAM O. KENNINGTON, Detroit, Mich., assignor to Remy Electric Company, Anderson, Ind., a Corporation of Indiana. Filed Apr. 14, 1916. Serial No. 91,056. (Cl. 123—168.)

1. In a circuit breaker, a pair of relatively movable contacts, a cam for shifting one of the contacts, a shaft by which the cam is supported and rotated, the said shaft being formed or provided with a conical seat or bearing for the cam, and axially adjustable means engaging with the shaft for binding the cam in firm engagement with its tapered seat, whereby the cam by the release of such means may be angularly adjusted with respect to the shaft and then secured thereto in any adjusted position.



2. In a circuit breaker and distributer unit, a pair of relatively movable contacts, a cam for operating the same, a rotary shaft carrying and supporting the cam, and having a conical portion constituting a seat for the cam, axially movable means engaging the shaft and adapted to force the cam down in any angularly adjusted position it may occupy firmly upon its conical seat, and a distributer segment adapted to be rotated with the cam in fixed angular relation thereto.

3. In a circuit breaker and distributer unit, a pair of relatively movable contacts, a cam for operating or controlling the same, a rotary shaft carrying the same and having a conical portion constituting a seat for the same. Means for forcing the cam in any angular position it may occupy with respect to the shaft upon its conical seat, and a distributer segment having a rigid driving connection with the cam.

[Claims 4 to 7 not printed in the Gazette.]

1,265,919. PRIMER. FREDERICK O. KILGORE, Somerville, Mass., assignor to Spray Primer Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 16, 1916. Serial No. 78,747. (Cl. 103—75.)



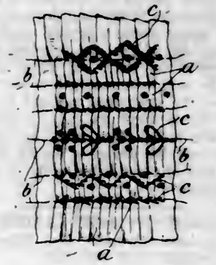
2. In an apparatus of the character described, in combination, a pump cylinder provided at one end with valve chambers, fluid inlet and outlet valves located in said chambers, devices movable in said valve chambers and cooperating with said valves to close the same, a piston in said cylinder, a cone attached to said piston to move therewith and coöperating with said devices to effect a closing of said valves when the said piston is moved on one stroke and to permit said valves to be opened when the piston is moved on its stroke in an opposite direction.

8. In an apparatus of the character described, in combination, a cylinder, a valve chamber communicating therewith, a valve in said chamber, a piston in said cylinder, a device coöperating with said valve and movable laterally with relation to said piston, and means movable with the piston and coöperating with said device for positively closing said valve and for maintaining it closed by movement of the piston in one direction and to permit said valve to be opened by movement of the piston in the opposite direction.

11. In an apparatus of the character described, in combination, a cylinder provided with a fluid outlet, a piston in said cylinder, and means operatively connected with said piston to be positively moved thereby for cutting off communication between said cylinder and its outlet on the suction stroke of said piston.

[Claims 1, 3 to 7, 9, 10, and 12 not printed in the Gazette.]

1,265,920. METHOD OF SMOCKING. ISRAEL LACK, Brooklyn, N. Y. Filed Apr. 25, 1917. Serial No. 164,435. (Cl. 2—16.)

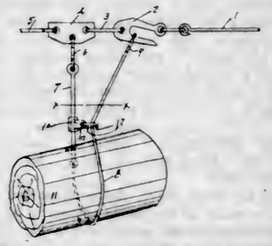


1. A method of smocking, comprising gathering a piece of fabric in a plurality of gathers of folds to present a gathered body of fabric upon which embroidering may be performed, holding the gathered fabric in gathered condition, embroidering on the held gathered fabric and removing from the fabric the means for holding it in gathered condition, the embroidering then acting to hold the fabric in the gathered condition.

2. A method of smocking, comprising gathering fabric, holding the gathered fabric in position by lines of stitches, embroidering on the gathered fabric held by the lines of stitches, and removing the lines of holding stitches after the embroidery has been placed upon the goods.

3. A method of smocking, comprising gathering fabric, holding the gathered fabric in position by lines of chain stitches, embroidering on the gathered fabric held by the lines of stitches, and removing the lines of holding stitches after the embroidery has been placed on the goods.

1,265,921. CARGO-SLING. ALFRED LAFRANCHI, Snohomish, Wash. Filed Mar. 28, 1917. Serial No. 157,881. (Cl. 57—11.)



1. In a device of the class described, the combination of a rigid bar, the upper end of which is secured to a haulage line and the lower end of which is secured to one end of a sling cable, an open hook secured to the haulage line, a loop on the other end of the sling cable, said loop engaging the said hook, a sliding hook mounted upon the said bar and engaging the said sling cable, whereby the object may be tightly held in the loop of the sling cable.

2. In a cargo sling, the combination of a rigid bar having an eye at either end and secured at its upper end to a splice plate, an open hook to the eye of which is secured one end of a haulage line, a link connecting said splice plate and hook, a line, one end of which is secured to the lower end of the rigid bar, and the other end of which is

provided with a loop which is adapted to engage the open hook, a sliding snatch hook, slidably mounted upon the said bar and adapted to engage the said sling line, downwardly extending teeth upon the under face of the said snatch hook, which are adapted to engage the object within the loop of the sling, whereby the said object is prevented from engagement with the sling.

3. In a device of the class described the combination of a rigid eye bar, a splice plate linked to one end of said bar, an open hook linked to said splice plate, a hauling line secured to the eye of the said hook which points away from the said splice plate, a flexible cable secured at one end to the free end of the said eye bar and terminating in an open loop at the other end which normally detachably engages the said hook, an open hook slidably mounted at its eye upon the said rigid bar and engaging the said flexible cable intermediate its ends, a haul back line secured to the said splice plate, whereby when the haulage line is slacked and the device is drawn by the haul back line the open end of the flexible cable is disengaged from the first mentioned hook.

1,265,922. COMBINED STEP-LADDER AND RACK. EDWARD H. LANIER, Newport, Ky. Filed June 10, 1916. Serial No. 102,984. (Cl. 45—13.)



2. In a piece of furniture, vertically disposed side pieces with cross pieces to form a step ladder, and a framework hinged thereto to form a support, said framework provided with a resilient seat thereon, with means for concealing the ladder and the resilient seat comprising a flat board, with coat hooks thereon, and means for securing the board to the ladder portion, said board provided with a hinged support to permit the board to stand as an easel when removed from the ladder portion.

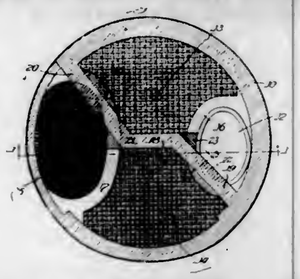
[Claims 1, 3, and 4 not printed in the Gazette.]

1,265,923. HOT-BLAST STOVE. JAMES I. LARIMER, Joliet, Ill. Filed Mar. 6, 1917. Serial No. 152,816. (Cl. 263—19.)

1. In a hot blast stove, the combination of a plurality of passes, a dome at the upper extremity of the stove, and a wall intersecting the space within the dome, said wall being disposed at an oblique angle to the flow of gases and adapted to deflect the same from one pass into the next pass, substantially as described.

5. In a four-pass stove, the combination of walls defining a space above the passes and a deflecting wall substantially zigzag bisecting said space and providing inclined surfaces against which the gases are caused to impinge when being directed into an adjacent pass, substantially as described.

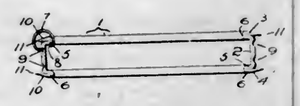
6. In a four-pass stove, the combination of an outside shell and a dome top, the space within the dome being utilized for changing the direction of the gases, the first and fourth passes being located on diametral opposite sides of the stove and defined by arcuate walls which join said outside shell at their extremities, a transverse vertical wall uniting said arcuate walls and extending to the dome top, and walls also extending to the roof and joining said transverse wall, said last named walls acting



to deflect the gases into adjacent passes, substantially as described.

[Claims 2 to 4 and 7 not printed in the Gazette.]

1,265,924. SPINNING-RING AND METHOD OF FORMING THE SAME. JAMES K. LANNING, Fall River, Mass. Filed Dec. 15, 1915. Serial No. 67,015. (Cl. 118—59.)



1. A reversible spinning ring stamped or bent from sheet metal and of one piece throughout, said ring having like upper and lower traveler flanges, either of which may constitute a base, each of said flanges having a thin, outer edge which is of less thickness than the normal thickness of the sheet metal, said flange markedly increasing in vertical thickness inwardly from said edge, the top of each flange sloping upwardly and inwardly to provide a friction-reducing, inclined zone, and the inner edge of the flange being of markedly greater vertical extent than said outer edge.

3. A spinning ring stamped or bent from sheet metal and of one piece throughout, said ring having a traveler flange, the upper and under surfaces whereof are machined or ground to provide a thin, outer edge which is of less thickness than the normal thickness of the sheet metal, said flange markedly increasing in vertical thickness inwardly from said edge, the top of said flange sloping upwardly and inwardly to provide a friction-reducing, inclined zone and the inner edge of the flange being of markedly greater vertical extent than said outer edge.

4. A spinning ring stamped or bent from sheet metal and of one piece throughout and provided with a traveler flange, the body of said ring having a formation to prevent contact of the outer and inner ends of the traveler with the body of the ring in the spinning operation, said traveler flange having a thin, outer edge markedly increasing in vertical thickness inwardly from said edge, the top of said flange sloping upwardly and inwardly to provide a friction-reducing, inclined zone and the inner edge of the flange being of markedly greater vertical extent than said outer edge.

7. A spinning ring stamped or bent from sheet metal and of one piece throughout, said ring having a traveler flange provided with a machined or ground, thin, outer edge, and the outer wall of the ring having an annular groove for the clearance of the traveler end and to prevent contact of the traveler end with the body of the ring.

9. A reversible spinning ring stamped or bent from sheet metal and of one piece throughout, said ring having like upper and lower traveler flanges, either of which may constitute a base, each of said flanges having its outer portion machined or ground to provide a thin, outer edge which is of less thickness than the normal thickness of the sheet metal, said flange markedly increasing in vertical thicknesa inwardly from said edge, the top of each flange sloping upwardly and inwardly to provide a friction-reducing, inclined zone and the inner edge of the flange being of markedly greater vertical extent from said upper edge.

[Claims 2, 5, 6, 8, and 10 not printed in the Gazette.]

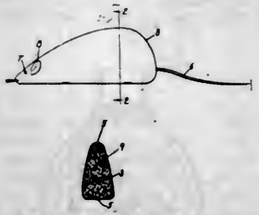
1,265,925. WRENCH. JOHN R. LONG, Akron, Ohio. Filed May 21, 1917. Serial No. 170,006. (Cl. 81—110.)



1. A pipe wrench having a handle provided with a jaw across the end thereof and a series of saw teeth on its inner edge next behind said jaw, a single yoke slidably engaged over said handle and an outer jaw having a shank at right angles to the face of the jaw thereon and pivoted in said yoke, and said shank provided with an extension behind said pivot provided with an inner straight inclined edge and a single tooth at the inner end of said edge adapted to engage in said series of teeth, and means in said yoke in engagement with said handle adapted to limit the movement of the yoke thereon.

2. A pipe wrench as described having a handle with a fixed jaw across the end thereof and a series of teeth in the edge of said handle next behind said jaw, a yoke engaged over said handle having ears projected outward beyond the edge thereof and an outer jaw pivoted between said ears and having a straight inclined inner edge provided with a tooth opposite said pivot adapted to engage in said series of teeth and to swing clear of the same for adjustment of the said outer jaw back and forth.

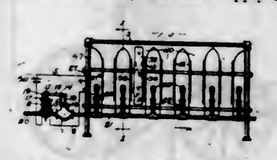
1,265,926. CATNIP MOUSE. EVELYN M. LUDLAM, Waltham, Mass. Filed Feb. 9, 1916. Serial No. 77,277. (Cl. 46—37.)



A device of the class described having, in combination, a pliant destructible cloth envelop substantially of the form of a mouse and a filling therefor including catnip, whereby said cloth envelop is impregnated by said catnip and appeals to the sight, taste, touch and smell of a cat.

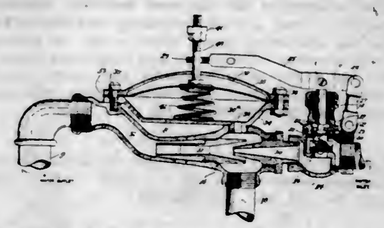
1,265,927. HEAT-REGULATING SYSTEM. HARRY LEWIS, WILLIAM R. SCOTT, and CHARLES DELL, Pittsburgh, Pa., assignors to Pittsburgh Automatic Heat Regulator Company, Pittsburgh, Pa., a Corporation of Delaware. Filed June 1, 1916. Serial No. 101,098. (Cl. 236—4.)

In a heat regulating system, a valve and valve stem therefor with a horizontally disposed lever carrying on its free extremity an armature, said armature being adjustable longitudinally of the lever, an electro-magnet having a pole or poles, and accompanying terminals, a fuel supply pipe below and parallel with said lever, said magnet being supported on cross-bars located above and below the fuel supply pipe, means for adjustably holding the cross-bars to said pipe, said fuel supply and delivery



line connected to the aforesaid valve body, an electric circuit, means for utilizing the heat generated by the fuel for electrically affecting a thermostat, a thermostat to energize the electric circuit, and deënergize same at a predetermined time interval or temperature, and thereby control the flow of fuel through the aforesaid valve, and regulate the amount of heat produced by the fuel passing through same.

1,265,928. HEATING SYSTEM AND HYDRAULIC VACUUM-GENERATOR. BRYCE W. MCCLYMONT, Detroit, Mich. Filed July 24, 1916. Serial No. 110,905. (Cl. 230—24.)



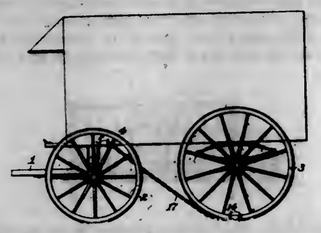
A hydraulic vacuum generator comprising an injector casing adapted to receive motive fluid, a sectional diaphragm casing mounted on said injector casing, a nipple connecting the lower section of said diaphragm casing to said injector casing to have pressure reduced therein by the passage of motive fluid through said injector casing, fastening means for connecting the sections of said diaphragm casing with one of said fastening means attaching said diaphragm casing to said injector casing, a diaphragm between the sections of said diaphragm casing, a valve connected to said injector casing and controlling the supply of motive fluid thereto, an operating lever for said valve extending above said diaphragm casing, means connected to the top of said diaphragm and extending out of said diaphragm casing adapted to actuate said operating lever to close said valve when said diaphragm is flexed in a downward direction, and means in said diaphragm casing adapted to restore said diaphragm and said lever actuating means to normal position.

1,265,929. VEHICLE-CHECK. CHARLES A. MACLELLAN, Boston, Mass. Filed Mar. 6, 1917. Serial No. 152,673. (Cl. 21—8.)

1. In a device of the character described, in combination, a tread supporting frame comprising opposite sides of longitudinally extending links connected together, the said sides being connected by a cross link at the forward end of the frame and by transverse cross chains at intervals, the connected longitudinal links being capable of relative movement to permit the frame to flex substantially to the curvature of a wheel, and means whereby said frame may be attached to the felly of a wheel.

2. A vehicle drag comprising a frame having a plurality of rows of connected longitudinally extending links loosely associated to permit the frame to conform to the curvature of a wheel, a cross link connecting the rows at their for-

ward ends, transverse cross chains extending between the rows at intervals, and means for attaching the frame to the felly of a wheel.

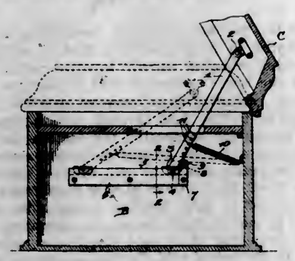


3. In a vehicle drag in combination, a supporting frame composed of a multiplicity of loosely connected links forming two spaced longitudinal sides and a forward end, cross chains each comprising a plurality of links extending between the longitudinal sides, and means for securing the frame to the felly of a wheel.

4. In a device of the character described, supporting means for a tread, a tread comprising two sets of cross chains the sets being spaced apart, a pair of fasteners pivotally mounted relatively to said supporting means to render the device quick-detachable and means adapted to secure said tread to a point on the vehicle.

5. In a device of the character described, supporting means for a tread, a tread comprising two sets of cross chains the sets being spaced apart, a pair of fasteners pivotally mounted relatively to said supporting means to render the device quick-detachable and means adapted to secure said tread to a point on the vehicle, said means comprising a lug forwardly of the cross chains.

1,265,930. SUPPORT FOR HINGED COVERS. ISAAC B. MACOMBER, Portsmouth, R. I. Filed Mar. 7, 1917. Serial No. 153,221. (Cl. 217—60.)

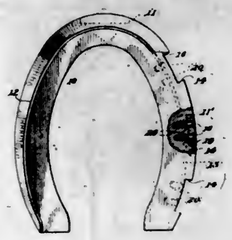


2. A support for hinged box covers including a link pivoted to the cover, a track, friction means pivotally connected to the link and provided with a broad flat friction face slidable along the track, and spring means connected at one end to the link and having its opposite end anchored to act on the link directly and independently of the mounting of the link for exerting tension thereon in a rearward and downward direction to increase the frictional contact between said first means and the track.

[Claims 1 and 3 not printed in the Gazette.]

1,265,931. HORSESHOE. MATHEW MAGICH, Detroit, Mich. Filed Dec. 8, 1917. Serial No. 206,187. (Cl. 168—19.)

1. A device of the class described comprising an arch-shaped plate, an upwardly and inwardly projecting flange portion carried by the outer edge of said plate terminating a distance from one end of the plate, the said plate having notches in its outer edge at the unflanged portion thereof, depending calks removably secured within the said notches, similar calks depending from the outer edge of said plate at the opposite side of the shoe and a curved flange section integrally mounted upon the said detachable calks seated upon the portions of said plate between the notches adapted for engaging the adjacent free edge of the said plate flange.



2. A device of the class described comprising an arch-shaped plate having an inwardly projecting hoof engaging flange portion at one side thereof and with receiving notches at its opposite side, calks arranged within the said notches, a detachable flange section mounted upon said calks adapted for forming a continuation of the said plate flange when the device is assembled and hold-fast devices arranged through the said calks detachably secured to the plate.

1,265,932. CONTAINER. LEWIS C. MALTBY, Washington, D. C., assignor to The Stone Straw Company, Washington, D. C., a Corporation of New Jersey. Filed Aug. 12, 1916. Serial No. 114,632. (Cl. 229—93.)



2. A tubular container made of flexible material having the ends folded and overlapped, and then countersunk, with an annular space between the inner wall of the tube and the countersink.

[Claims 1 and 3 not printed in the Gazette.]

1,265,933. CONTROLLING DEVICE. LEWIS A. MAPEL, St. Louis, Mo., assignor to Mechanical Development Company of Missouri, St. Louis, Mo., a Corporation of Missouri. Filed May 15, 1916. Serial No. 97,681. (Cl. 161—27.)



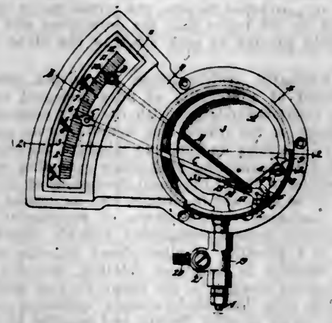
1. A controlling device, comprising a time indicator provided with a movable member that can be set in different positions representing different periods or intervals of time, a controlled element, an electric switch comprising a part that is adapted to be moved in one direction by said movable member to change the condition of said controlled element at the end of a period or interval, and means for moving said switch part to restore the controlled element to its former condition without disengaging said switch part from said movable member.

8. A controlling device, comprising a housing, a time indicator arranged inside of said housing and provided with a dial and a hand that can be set in different positions on the dial so as to represent periods or intervals of different duration, a switch-actuating device moved by said time indicator, an electric switch comprising a movable element that is adapted to be engaged by said switch-actuating device at the end of a period or interval and moved in one direction so as to change the condition of the circuit in which said switch is arranged, a spring that normally exerts pressure on said movable element tending to move it in the opposite direction, and a manually-operable means adapted to be actuated after the switch has been operated by the time indicator for moving the movable element of the switch so as to restore the electric circuit to its former condition without disengaging said movable member from said switch-actuating device.

4. A controlling device, comprising a housing, a time indicator carried by said housing, an electric switch governed by said time indicator, a plurality of contacts arranged so that the movable element of the switch will have to engage both of said contacts to close the circuit in which the switch is arranged, a manually-operable actuating device connected to the movable element of the switch, and means which tends to hold the movable element of the switch normally in engagement with one of said contacts and out of engagement with the other contact.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,265,934. GAGE. LEWIS A. MAPEL, St. Louis, Mo., assignor to Mechanical Development Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 29, 1917. Serial No. 145,149. (Cl. 73—109.)

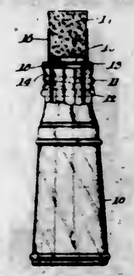


1. A gage, comprising a Bourdon spring, a pivotally mounted indicating hand, a dial, and a chain or similar element connected at one of its ends to the free end of said spring and at its opposite end to said hand at a point intermediate the free end of said hand and its axis of movement for moving the hand away from zero on the dial when the Bourdon spring flexes in one direction and for permitting said hand to return to and stand at zero on the dial when said hand strikes a stop and said spring flexes in the opposite direction beyond a certain limit.

10. A gage, comprising a Bourdon spring, a pivotally mounted indicating hand, a flexible element that transmits movement from said spring directly to said hand, means for varying the length of the portion of said element that extends between said spring and arm, a device carried by said arm to which said flexible element is connected, and means for enabling said device to be adjusted toward or away from the axis of oscillation of said arm so as to vary the relative degree of movement imparted to said arm by said spring.

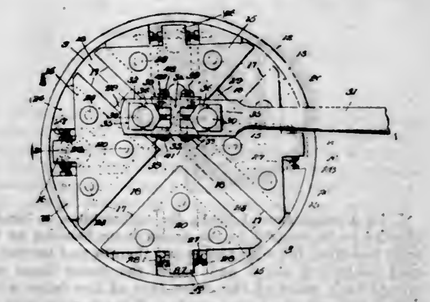
[Claims 2 to 9 not printed in the Gazette.]

1,265,935. CONDIMENT-CONTAINER. FREDERICK A. MASON, Providence, R. I. Filed Oct. 23, 1917. Serial No. 198,101. (Cl. 65—45.)



A sealing closure for condiment container comprising a perforated cap formed of thin sheet material having its body threaded to engage the threaded neck of a container, a ring packing bottomed in said cap to form a tight joint between it and the neck of the container, an outwardly extending tubular neck portion on said cap, and a readily removable stopper fitting into said neck.

1,265,936. DEVICE FOR CONVERTING MOTION. EDGAR D. MEADE, Olean, and HERBERT F. YOUNGLOVE, Buffalo, N. Y. Filed June 5, 1917. Serial No. 172,982. (Cl. 74—5.)



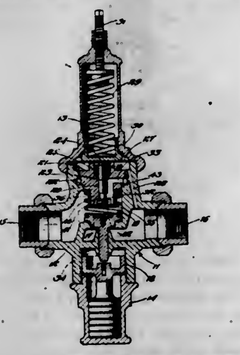
1. A device of the class described comprising a body mounted for rotation and including a laterally directed rim, a plurality of members movably supported on said body with their confronting edges in spaced relation to form guideways crossing each other in angular relation, coacting angular members disposed between said supporting members and the rim of the rotative body, means for adjusting said angular members toward and away from each other to effect the adjustment of the supporting members, sliding members movable in said guideways, and an operating member pivotally coupled to said sliding members.

[Claims 2 to 4 not printed in the Gazette.]

1,265,937. PRESSURE-REGULATOR. GEORGE S. MELCHER, Sharon, Mass., assignor to Charles W. McConnel, Boston, Mass., Eldon MacLeod, Westwood, Mass., and Fannie B. Look, Northampton, Mass., trustees, doing business under the name of Mason Regulator Company. Filed Mar. 13, 1917. Serial No. 154,605. (Cl. 50—11.)

1. A pressure regulator comprising a valve body having an inlet and an outlet opening, a partition between said openings having a hole therethrough, a main valve controlling the passage of fluid through said partition, a piston for opening the main valve and a spring for operating it in the other direction which tends to close the main valve, said body having a communication port between said inlet opening and said piston, an auxiliary

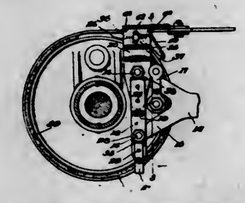
valve controlling the passage of fluid through said communication port, means for operating said auxiliary valve, and a housing about said auxiliary valve having a strainer therein, said main valve spring being inter-



posed between said main valve and said housing whereby said housing is secured in position.

[Claims 2 to 4 not printed in the Gazette.]

1,265,938. AUXILIARY BRAKE FOR AUTOMOBILES. JOSEPH O. MICHAUD, Fort Kent, Me. Filed Mar. 26, 1917. Serial No. 157,441. (Cl. 21—8.)



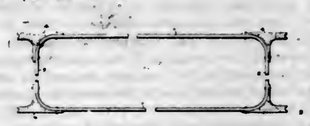
1. In a supplemental brake for automobiles, a bracket adapted to be secured to the brake drum housing by the bolts fastening the rear radius rod thereto and having its ends projecting above and below the brake drum and toward each other at the outer face of the drum, a pin passed through the upper portion of the bracket and adjacent terminal to provide a guideway, a brake band encircling the brake drum and having one end bent upon itself and secured to form an eye about the pin and its opposite end extended between the bracket and pin, a spring connected to the bracket and to the rebent terminal of the brake band to normally hold the brake band out of engagement with the drum, and means for tightening the brake band to bring it into engagement with the brake drum.

2. In a supplemental brake for automobiles, a pair of bracket sections secured to each other with the overlapping end of one section bent out from the other and with the free end of the other section bent laterally and downwardly to form a brake band guide, a further bracket section secured to the free end of the first section and bent upwardly and outwardly to form another guide, with its ends secured to the first section having an outwardly directed terminal, the first sections being formed with bolt receiving openings adjacent the outwardly directed terminals whereby cotter pins may be passed between such terminals and nuts threaded upon bolts passed through the openings to lock the nuts against turning movement, and a brake band supported by and guided in the bracket.

3. In a supplemental brake for automobiles, a bracket adapted for attachment to a brake drum housing, a brake band supported and guided by the bracket with one end fixed thereto and the other end movable therethrough and formed with alined openings, clamping plates engaging against opposite faces of such end, prongs formed on one of the clamping plates and projecting through adjacent openings, clamping means passed through the clamping plates at one side of the brake band to secure them to each other and to the brake band, a wire secured to the clamping means, and means for exerting strain upon the wire to tighten the brake band.

4. In a supplemental brake for automobiles, a bracket adapted to be secured to the brake drum housing and having ends projecting above and below the brake drum and toward each other at the outer face of the drum, a pin passed through the upper portion of the bracket and adjacent terminal to provide a guideway, a brake band encircling the brake drum and normally held out of engagement therewith, the said band having one end secured about the pin and the other end extended between the bracket and pin, and means for tightening the brake band to bring it into engagement with the drum.

1,265,939. LAMINATED MOTOR-CAR FRAME. MELVILLE W. MIX, Mishawaka, Ind., assignor to Dodge Manufacturing Company, Mishawaka, Ind., a Corporation of Indiana. Filed Jan. 31, 1916. Serial No. 75,352. (Cl. 21—182.)



1. A laminated vehicle frame, comprising longitudinal and transverse members constituting sides and ends formed of a plurality of plies suitably cemented in interlaced relation and set perpendicular to the general plane of the frame, metallic corner pieces secured to the sides and ends of the frame, and projections extending parallel to the frame from the corner pieces adapted to have springs, etc., attached thereto, the corner pieces being so assembled on the frame that the projections will be approximately parallel to each other in the plane of the frame.

2. A laminated vehicle frame, comprising sides and ends formed of a plurality of plies cemented to each other in interlaced relation with the plies perpendicular to the plane of the frame, and metallic corner members secured to the sides and ends to reinforce the same and provided with supporting projections extending substantially parallel to one of the lineal dimensions of the frame adapted to be attached to springs, etc., as desired.

3. A laminated vehicle frame, of rectangular shape with rounded corners, comprising suitably joined sides formed of a plurality of plies placed edgewise and cemented together in interlaced relation, metallic corner reinforcements secured to the frame on two sides, and projections from the reinforcements extending outward from the frame parallel thereto and adapted to receive springs, etc.

4. An article of manufacture comprising a composite vehicle frame composed of longitudinal and transverse portions having a plurality of laminated plies cemented together and assembled in edgewise relation, metallic reinforcements secured to the plies, and means projecting from the reinforcements parallel with the frame adapted to be attached to springs, etc.

5. A composite vehicle frame, comprising both sides and ends formed of a plurality of plies cemented together in interlaced relation, independent metallic corner pieces fastened both to the ends and sides, and projections from such corner pieces extending outward therefrom in a plane substantially parallel to the frame.

1,265,940. RADIATOR. CHARLES S. MOONEY, Detroit, Mich. Filed Sept. 5, 1916. Serial No. 118,370. (Cl. 257—125.)

1. In a radiator, a water column element comprising opposed sheet metal sides with mating impressions forming a water passage through the element, the margins of

the sides being slotted to permit longitudinal extension of the element.



2. In a radiator, an upper header, a lower header and a series of water column elements connecting the headers, each consisting of a pair of sheet metal sides oppositely impressed to form a tortuous, continuous and uninterrupted water channel from end to end thereof, the exterior conformation of the sides forming air-baffling projections and radiating fins having slots affording lateral and longitudinal elasticity to the element.

1,265,941. MANUFACTURE OF COVERED FRAME-PIECES FOR CHAIRS AND OTHER ARTICLES. HAROLD B. MORRIS, Glendale, Cal. Filed July 19, 1916. Serial No. 110,217. (Cl. 144—309.)



1. The method herein described of preparing a frame piece for chairs and other articles, which consists in attaching to the frame piece a piece of sheet metal where a bend is to be made, softening the piece, applying covering material thereto and then bending the covered piece.

3. The method herein described of preparing a frame piece for covered chairs and other articles, which consists in softening the piece, applying thereto a previously formed sleeve of flexible covering material resembling the covering of the finished article, and then bending the piece, thereby causing the flexible sleeve to assume a corresponding form.

10. The method herein described of preparing a frame piece for chairs and other articles, which consists in reinforcing the portion where a bend is to be made, softening the reinforced portion, applying to said portion a flexible sleeve of covering material, and then bending the piece, thereby causing the sleeve of covering material to assume a corresponding form.

[Claims 2 and 4 to 9 not printed in the Gazette.]

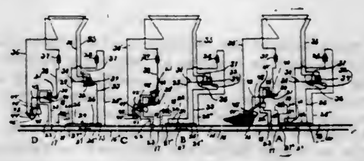
1,265,942. HORSESHOE. ANTON MRAKITSCH, Detroit, Mich., assignor of one-fifth to George Kwetcher, one-fifth to John Binder, one-fifth to Vincent Brukler, and one-fifth to Caspar Winiger, Detroit, Mich. Filed Mar. 2, 1917. Serial No. 151,977. (Cl. 168—19.)

In a horseshoe, members provided with integral toe and heel clips and having the toe ends thereof pivotally connected to a toe piece and the heel ends thereof provided with interiorly screw-threaded openings, means for connecting the heel ends of said members, comprising screw bolts having flattened heads provided with openings of a greater diameter than the screw-threaded openings of said members, heel calks having stems extending through the bolt openings and screwed into the openings of said members, upstanding flanges carried by said bolt heads engaging the outer sides of said members and preventing lateral swinging movement of said screw bolts, said flanges relieving the stems of said heel calks of strains due to any spreading action of said members, a nut screwed on said screw bolts adapted for drawing the heel ends of said mem-



bers toward each other, and jam-nuts on said screw bolts at the ends of said nut.

1,265,943. PRESSURE-OPERATED AND ELECTRICALLY-CONTROLLED TRAIN-CONTROL SYSTEM. WILLIAM B. MURRAY, Danville, Ill., assignor to The Miller Train Control Corporation, Staunton, Va., a Corporation of Virginia. Filed June 4, 1914. Serial No. 842,896. (Cl. 246—58.)



4. In a train control system, a track, a vehicle to travel thereon, a movable device carried by the vehicle and comprising a plurality of relatively movable parts, means to lock and unlock said relatively movable parts, a cylinder mounted upon the vehicle, a piston mounted within the cylinder, means connecting the piston and one relatively movable part of the device, a conduit for supplying pressure to the cylinder, a primary valve connected with the conduit, mechanically operated means to actuate the primary valve, a ramp arranged in the path of travel of the mechanically operated means, and train stopping means connected with the other relatively movable member and adapted to be actuated thereby.

8. In a train control system, a track, a vehicle to travel thereon, a pressure supply tank, a shell having means of communication with the pressure supply tank and having an upwardly opening valve arranged therein to open against pressure within the shell, a valve stem connected with the valve and extending downwardly below the shell, a reciprocatory shoe carrying member connected with the vehicle and having its upper end arranged to engage with the valve stem, a ramp to engage and move the shoe, pressure operated and electrically controlled apparatus carried by the vehicle to stop the same, and a conduit connecting the apparatus with the shell.

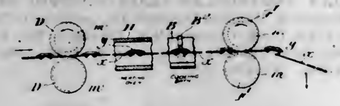
9. In a train control system, the combination with an air brake valve embodying a stem and lever connected therewith to turn the same, of a pinion loosely mounted upon the stem and provided upon one side with a recess to receive the lever, a reciprocatory rack-bar engaging the pinion and carrying an upstanding crank, a cylinder arranged near and above the rack-bar, a piston mounted to reciprocate within the cylinder, a piston rod connected with the piston and adapted to engage the upstanding crank, and means to supply pressure to the cylinder.

10. In a train control system, a track, a vehicle to travel thereon, a source of pressure carried by the vehicle, pressure operated apparatus carried by the vehicle, a conduit connecting the pressure operated apparatus with the source of pressure, a primary valve connected in the conduit, a reciprocatory bar adapted to operate the primary valve and carrying a shoe, a ramp disposed in the path of

travel of the shoe to move it, electrically controlled apparatus adapted when deënergized to be operated by the pressure operated apparatus, means electrically connecting the electrically controlled apparatus with the shoe, means for connecting and disconnecting the ramp with and from a source of current, pressure operated train stopping means, a conduit connecting the pressure operated train stopping means and the source of pressure, and a valve connected in the last named conduit and moved with the electrically controlled means to be operated thereby.

[Claims 1 to 3, 5 to 7, and 11 not printed in the Gazette.]

1,265,944. PROCESS OF AND APPARATUS FOR HEAT TREATMENT OF METAL OBJECTS. CHARLES NAPIER, Springfield, Mass., assignor to Napier Saw Works, Incorporated, Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 21, 1918. Serial No. 212,906. (Cl. 266—3.)

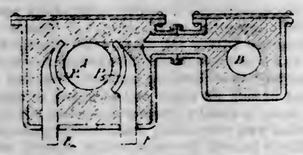


1. The process of heat-treating metal objects comprising connecting them in a chain by temporary link-members having a relatively considerable mass adjacent to a predetermined portion of said objects, and progressively subjecting the chain during predetermined times first to an annealing heat and then to the action of a cooling fluid, whereby to temper the objects and leave the portions adjacent to said link-members in their annealed condition.

3. A link-member adapted to join metal objects together in a chain during heat-treatment comprising means for engagement with the objects, and means adapted to contact with a substantial surface of the adjacent object, whereby to protect a substantial predetermined part of the member adjacent to the place of engagement of said link-member from rapid cooling.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,265,945. ELECTRIC FURNACE. HANS NATHUSIUS, Friedenshütte, Kreis Beuthen, Germany. Filed Jan. 15, 1914. Serial No. 812,209. (Cl. 204—64.)



1. A closed electric furnace having a heating or reducing chamber whose walls are composed of electrically resistant material which is electrically conductive when heated, said walls having fixedly embedded therein in an air tight manner outside the chamber symmetrically disposed at opposite sides of its sets of electrodes, said sets of electrodes embracing the chamber; and means for supplying current to said electrodes.

4. A closed electric furnace having a heating or reducing chamber and a second chamber communicating with the first mentioned chamber, the walls of the heating or reducing chamber being composed of electrically resistant material, which is electrically conductive when heated, said walls having fixedly embedded therein in an air tight manner entirely outside of the chamber and symmetrically disposed at opposite sides of it sets of electrodes which terminate in electrode plates, said sets of electrodes and plates embracing the chamber; and means for supplying current to said electrodes in such a manner that a potential difference exists between any two and all of the electrodes substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,265,946. SHOE-LACE-FASTENING DEVICE. SARAH G. NOLAN, Washington, D. C. Filed May 25, 1917. Serial No. 170,944. (Cl. 24—117.)

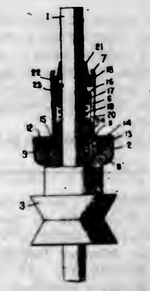


2. A device of the class described comprising a ring-like member having a plurality of radially disposed slots, a bar extending across the center of said ring and lying in the plane therewith, and pointed prongs projecting from the opposite sides of the bar for the purpose specified.

4. A device of the class described comprising a member having an open center, a cross bar projecting from said member and arranged within the center, a segment carried by the cross bar and disposed in the same plane with said member, said segment having its opposite ends slightly spaced from the member thereby forming slots through which the ends of the lace are passed to said center, and means on said bar to engage the ends of the lace for the purpose specified.

[Claims 1 and 3 not printed in the Gazette.]

1,265,947. BOBBIN-CLUTCHING MEANS FOR ROTATABLE SPINDLES. CHARLES E. NUTTING, Hopedale, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Oct. 31, 1917. Serial No. 199,469. (Cl. 242—46.5.)



1. The combination of a rotatable bobbin spindle and bobbin rest, a plurality of centrifugally-acting, bobbin-clutching members mounted upon and bodily rotatable therewith, radially interengageable means on said spindle and on said members to restrict the radial movement of said members, vertically acting means to effect in co-operation with said members the expansion thereof, and means carried by the bobbin rest engaging the lower ends of said members and acting to prevent said members from moving vertically and thereby prevent vertical engagement of said radially interengageable means and acting to permit the required radial movement of said members.

2. The combination of a rotatable bobbin spindle and bobbin rest, the said bobbin rest having a vertical recess therein concentric with said spindle, a plurality of centrifugally-acting bobbin-clutching members mounted upon and bodily rotatable therewith and provided with radially projecting feet at their lower ends located in said recess, radially interengageable means on said spindle and on said members near the upper ends thereof to restrict the radial movement of said upper ends, means located between said spindle and said members and yieldingly actuated vertically to effect in coöperation with said members the expansion thereof, and an expansible ring engaging the outer vertical wall of said recess and overlying said feet and acting to prevent said members from moving vertically thus to prevent vertical engagement of said radially interengageable means and acting to permit the required radial movement of said members.

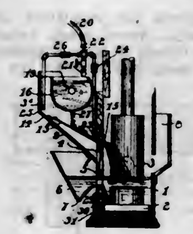
3. The combination of elements as set forth in claim 2 in which in addition the feet of said bobbin-clutching members are provided with an annular groove on the upper surface thereof fitting beneath said ring.

4. The combination of a rotatable bobbin spindle and bobbin rest having a vertical recess therein concentric with said spindle, a plurality of centrifugally acting bobbin-clutching members mounted upon and bodily rotatable therewith and provided with radially projecting feet at their lower ends located in said recess, and an expansible ring engaging the outer vertical wall of said recess and overlying said feet.

5. The combination of elements as set forth in claim 4 in which the feet of the said bobbin-clutching members are provided with an annular groove on the upper surface thereof fitting beneath said ring.

[Claims 6 and 7 not printed in the Gazette.]

1,265,948. STAMP-MILL OR THE LIKE. MARTIN RODERICK O'SHAUGHNESSY, Cobalt, Ontario, Canada. Filed Aug. 16, 1915. Serial No. 45,835. (Cl. 83—56.)



1. In combination, a receptacle with a side screen, a stationary flood trough adjacent to said receptacle and leading to said screen, and a tilting trough adapted to discharge in said flood trough, said flood trough having a pivoted false bottom adapted to discharge material therefrom into said receptacle above said screen.

2. In combination, a receptacle with a side screen, a stationary flood trough adjacent to said receptacle and leading to said screen, and a tilting trough curvilinear in cross section at the bottom and one of the longitudinal walls, the other longitudinal walls being formed straight whereby when the tilting trough is filled, it will overbalance and discharge in said flood trough, said flood trough having a pivoted false bottom adapted to discharge material therefrom into said receptacle above said screen.

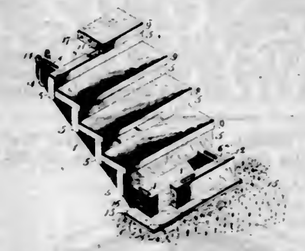
3. In combination, a receptacle with a side screen, a stationary flood trough adjacent to said receptacle and leading to said screen, and a tilting trough in the said flood trough adapted to be automatically tilted under gravity and intermittently fill the flood trough, and means located adjacent to the bottom of the flood trough whereby the material from the trough is discharged into the receptacle above said screen and through said screen.

4. A stamp mill comprising a mortar box, stamps operatively arranged in said mortar box, a discharge screen arranged in a suitable opening in said mortar box, a flood trough arranged along the exterior of said mortar box, a dividing plate arranged in said flood trough, means of communication from one side of said dividing plate to the interior of said mortar box and means of communication from the other side of said dividing plate to the exterior of said screen, and means for intermittently supplying a liquid to said trough on both sides of said dividing plate.

5. A stamp mill comprising a mortar box, stamps operatively arranged in said mortar box, a discharge screen arranged in a suitable opening in said mortar box, a flood trough arranged along the exterior of said mortar box, a dividing plate arranged in said flood trough, means of communication from the other side of said dividing plate to the exterior of said screen, means for continuously supplying a liquid to said trough on the side of said dividing plate communicating with the interior of said mortar box and means for intermittently flooding said flood trough on both sides of said dividing plate.

[Claims 6 to 9 not printed in the Gazette.

1,265,949. CONCRETE DOOR-STEP. JAMES TOLEAFUS OSBORN, West Point, Miss., assignor of one-half to Charlie Kerr McGee, West Point, Miss. Filed July 7, 1917. Serial No. 179,234. (Cl. 72—96.)



1. In a step construction, the combination of stringers, risers, and treads, all preformed out of concrete, the rear side of each tread abutting against the outer portion of the riser next above, and the forward edge of each tread overlying the upper side of the riser next below, and the under portion of each tread, and the upper portion of each riser and each tread-receiving portion of the stringer, being formed with registering openings, the said openings being filled with fresh cement, whereby the treads are securely held to the stringers and the risers at certain predetermined points without the necessity of placing cement at other points.

2. In a step construction, the combination of stringers, risers, and treads, all preformed out of concrete, the rear side of each riser having vertical grooves and the bottom side of the riser having notches forming continuations of said grooves, the riser and tread portions of the stringers engaging said grooves and notches, whereby the stringers are held in vertical position and secured against rocking movement.

1,265,950. ANTISKIDDING DEVICE. ELIJAH R. PARKER, Rifle, Colo. Filed Apr. 8, 1916. Serial No. 89,866. (Cl. 24—71.)

4. A device of the class described, comprising a plurality of arms, a latch lever pivotally mounted upon said arms, a latch pivotally mounted upon said lever, said lever being adapted to hold said arm in a set position, and a loop engaging said latch lever for releasably holding said latch lever in a set position.

7. A device of the class described comprising an arm, a latch lever pivotally mounted upon said arm, said latch lever being formed of a single strip of metal bent intermediate its ends so as to fit upon itself throughout its entire length, one end of said strip being bent around the other end thereof, whereby said latch lever will be held

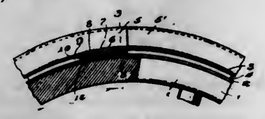
in a folded condition, the end which is bent around constituting a shoulder, a latch pivotally mounted upon said latch lever, said latch lever being adapted to hold said latch in a set position, and a lever loop releasably engaging said shoulder for holding said latch lever in a set position.



8. A device of the class described comprising an arm, a latch lever pivotally mounted upon said arm, said latch lever being formed of a single strip of metal bent intermediate its ends so as to fit upon itself throughout its entire length, one end of said strip being bent around the other end thereof, whereby said latch lever will be held in a folded condition, the end which is bent around constituting a shoulder, a latch pivotally mounted upon said latch lever, said latch lever being adapted to hold said latch in a set position, and means engaging said shoulder for holding said latch lever in a set position.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

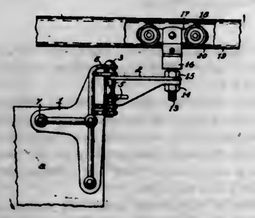
1,265,951. WHEEL. LOUIS H. PERLMAN, New York, N. Y. Filed Sept. 23, 1916. Serial No. 121,826. (Cl. 152—21.)



1. In a wheel structure, a demountable rim of the channel type having a cross cut providing end portions, one of the end portions being formed with an outstanding tongue, and the other end portion with a depression adapted to receive the tongue, the tongue having its outer end formed on an oblique line so that one edge of the tongue is longer in a circumferential direction than the other, and means for preventing separation of the ends.

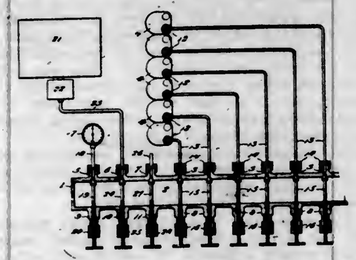
[Claims 2 to 6 not printed in the Gazette.]

1,265,952. DOOR-HANGER. GEORGE M. PIPER, Cedar Falls, Iowa, assignor to Wagner Manufacturing Company, Cedar Falls, Iowa, a Corporation of Iowa. Filed June 30, 1917. Serial No. 177,962. (Cl. 20—20.)



The arrangement of doors hinged to each other and to a jamb of a doorway, with a swiveled, rule-joint hinge-connection of the outermost door to a carriage on an overhead track, whereby the doors can be swung to any open position without shifting the parts of said hinge-connection to or beyond a dead center, and whereby the doors may be located in or beyond the plane of the track.

1,265,953. INDICATING AND TESTING APPARATUS. MORDAUNT E. PITTMAN, Center, Tex. Filed Apr. 18, 1916. Serial No. 91,950. (Cl. 73—31.)

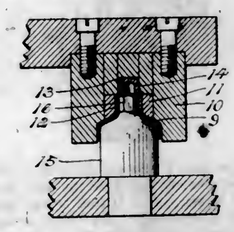


1. An indicating and testing apparatus of the class described comprising a header, connections between the cylinders of an engine and the header and each including a valve to close against the back pressure from the header, a gage to indicate pressure in the header, and a regulating pressure relieving valve for the header.

3. An indicating and testing apparatus of the class described comprising a header, connections between the cylinders of an engine and the header and each including a valve to close against back pressure from the header, a gage to indicate pressure in the header, a regulating pressure relieving valve for the header, and means to vary the closing pressure on the first-named valve.

[Claim 2 not printed in the Gazette.]

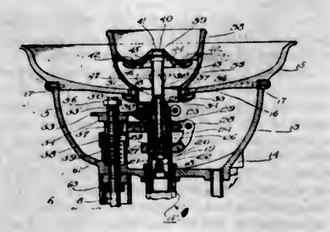
1,265,954. PROCESS OF FORMING GREASE-CUPS. ALEXIS R. PRIBIL, Detroit, Mich., assignor, by mesne assignments, to George W. Bowen, Auburn, N. Y. Filed Mar. 1, 1912. Serial No. 681,001. (Cl. 113—51.)



1. The herein-described process of pressing single piece grease-cup bases from flat sheet-metal blanks, the same consisting in applying pressure to one side only of the central part of the blank and to the opposite side of a part of the blank surrounding said central part and thereby forming a central hollow elongated projection extending axially from said surrounding part of the blank, applying pressure to opposite sides of the outer part of the blank by opposing circular surfaces having their radii arranged at an angle to the longitudinal axis of the hollow projection, and thus forming a circumferential rim extending laterally from the base of the projection, supporting the blank on the interior surface of the inner part of the rim, and applying pressure to the exterior surface only of the hollow projection and thereby reducing its diameter and thickening its wall, applying pressure to the exterior and interior surfaces of the outer part of the circumferential rim and thereby forming said outer part into a cylindrical flange having its longitudinal axis coincident with the longitudinal axis of said projection, and applying pressure from the interior of the base of the projection outwardly and also against the exterior of the base of said projection for forming said base into a hollow hexagonal shape, substantially as and for the purpose described.

2. The herein-described process of pressing single-piece grease-cup bases from flat sheet-metal blanks, the same consisting in applying pressure to one side only of the central part of the blank and to the opposite side of the outer part of the blank and thereby forming at such central part a hollow elongated projection extending axially of the blank from said opposite side of the outer part of the blank, applying pressure to opposite sides of the outer part of the blank by opposing circular surfaces of truncated conical form having their radii arranged at an obtuse angle to the longitudinal axis of the hollow projection, and thus forming the outer part of the blank into a truncated conical rim extending laterally from the base of the projection, supporting the blank on the interior surface of the inner part of the rim and applying pressure to the exterior surface only of the hollow projection and thereby reducing its diameter and thickening its wall, applying pressure to the exterior and interior surfaces of the outer part of said rim and thereby forming said outer part into a cylindrical flange having its longitudinal axis coincident with the longitudinal axis of said projection, applying pressure from the interior of the projection outwardly and also against the exterior of the projection near the base thereof for forming the same into a hollow hexagonal shape, and applying pressure to the exterior and interior surfaces of the blank between the cylindrical flange and the base of the projection, substantially as and for the purpose set forth.

1,265,955. DRINKING-FOUNTAIN. JOSEPH D. RAMSEY, Dorchester, Mass. Filed Feb. 21, 1912. Serial No. 679,203. (Cl. 137—109.)



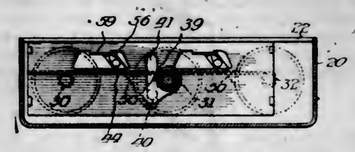
1. A drinking fountain, comprising water delivery mechanism including an upwardly directed delivery orifice, and a housing therefor, having a top portion formed as a removable bowl with a central upwardly convexed portion having an aperture in line with said delivery orifice and spaced away therefrom.

5. A drinking fountain, comprising water delivery mechanism having an upwardly directed orifice, a housing therefor having an aperture to permit issuance of the water delivered by said orifice and small enough to prevent insertion of a finger therethrough, and a guard movably mounted to open and close said aperture at will, said guard being located within said housing whereby it is protected from casual meddling.

8. A drinking fountain, comprising water delivery means having a controlling valve, a housing therefor, valve operating means having an operating rod extending up through said housing, said housing having an upstanding collar around said rod, and said rod having a depending sleeve fitted over said collar, said sleeve having operating connection to the valve, and a spring for normally holding said rod lifted, said spring being housed within said collar and sleeve.

[Claims 2 to 4, 6, 7, and 9 not printed in the Gazette.]

1,265,956. RAZOR-BLADE SHARPENER. CHARLES RAUCH, St. Louis, Mo., assignor to Twinplex Sales Company, composed of Herbert S. Gardner, St. Louis, Mo. Filed Mar. 29, 1915. Serial No. 17,579. (Cl. 51—16.)



1. In a sharpening appliance of the character described, the combination of a pair of oscillatory sharpening elements, a movable blade-holder having a rider, a reciprocatory bar, a handle, an operative connection between said handle and bar to reciprocate the latter, actuating means connecting said bar and elements to oscillate the latter by the reciprocation of the former, and means on said bar co-acting with said rider to hold the blade in the blade-holder against said sharpening elements, substantially as described.

2. In a sharpening appliance of the character described, the combination of a pair of oscillatory sharpening elements, a movable blade-holder having a rider, a reciprocatory bar, a handle, an operative connection between said handle and bar to reciprocate the latter, actuating means connecting said bar and elements to oscillate the latter by the reciprocation of the former, means on said bar co-acting with the rider to hold the blade in the blade-holder against said sharpening elements, and means to shift the blade-holder at each change of direction of rotation of said elements, substantially as described.

3. In a sharpening appliance of the character described, the combination of a pair of oscillatory sharpening elements, a movable blade-holder having a rider, a reciprocatory bar, a handle, an operative connection between said handle and bar to reciprocate the latter, actuating means connecting said bar and elements to oscillate the latter by the reciprocation of the former, means on said bar co-acting with said rider to hold the blade in the blade-holder against said sharpening elements, and spring means to shift the blade-holder at each change of direction of rotation of said elements, substantially as described.

4. In a sharpening appliance of the character described, the combination of a pair of oscillatory sharpening elements, a pivoted oscillatory blade-holder having a rider, a reciprocatory bar, a handle, an operative connection between said handle and bar to reciprocate the latter, actuating means connecting said bar and elements to oscillate the latter by the reciprocation of the former, and means on said bar co-acting with said rider to hold the blade in the blade-holder against the sharpening elements, substantially as described.

5. In a sharpening appliance of the character described, the combination of a pair of oscillatory sharpening elements, a pivoted oscillatory blade-holder having a rider, a reciprocatory bar, a handle, an operative connection between said handle and bar to reciprocate the latter, actuating means connecting said bar and elements to oscillate the latter by the reciprocation of the former, means on said bar coacting with said rider to hold the blade in the blade-holder against said sharpening elements, and means to rock said blade-holder at each change of direction of rotation of said elements, substantially as described.

[Claims 6 to 11 not printed in the Gazette.]

1,265,957. DISINFECTANT-PAD. ISIDORE RESSLER, Detroit, Mich. Filed Oct. 9, 1916. Serial No. 124,511. (Cl. 167—3.)

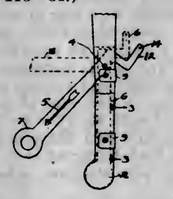
A disinfectant pad, comprising a pasteboard sheet coated on each side for the major portion of its length with a comparatively thick body formed of a composition capable

of slowly volatilising to give off antiseptic and disinfecting effluvia, the material completely enveloping the included portion of the pasteboard and presenting a maxi-



mum surface for contact with the atmosphere, the protruding portion of the pasteboard being arranged as a hanger for suspending the pad.

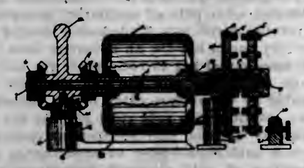
1,265,958. AUTOMOBILE-SIGNAL. HARRY RICHTER, Minneapolis, Minn. Filed Mar. 28, 1917. Serial No. 158,103. (Cl. 116—31.)



1. In an automobile signal the combination, with a top bow of an automobile, of a guard, means for mounting said guard to said top bow, a signal arm hinged to said guard, an inward extension from said signal arm positioned inside of curtains carried on said top bow, with the signal arm positioned outside of said curtains, said guard concealing said signal in one position of said signal.

2. In an automobile signal the combination, with an automobile top bow, of a pair of guard members spaced apart, a curtain carried by said top bow, means on one of said guard members for attachment to said top bow, a signal arm hinged between said guard members and positioned outside of said curtains, and an inward extension of said signal arm positioned inside of said curtains, said signal arm being swingable to an operable position outside of said guard members, or to a concealed position between said guard members.

1,265,959. ROTARY SPARK-GAP. ROBERT C. RICHTER, New York, N. Y. Filed Apr. 13, 1917. Serial No. 161,922. (Cl. 250—38.)



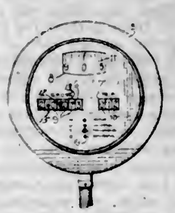
1. In a rotary spark gap structure, the combination with electrodes, means for rotating said electrodes in opposite directions relative to each other, and means for varying the point in the travel of said electrodes where they pass each other during the rotation of said electrodes.

6. In a rotary spark gap structure, the combination with a pair of disks opposed to each other, of a hollow shaft on which one of said disks is carried, a second shaft passing through said hollow shaft and on which the other of said disks is carried, means for simultaneously rotating said shafts in opposite directions, and means for shifting the normal position of said shafts relative to each other.

10. In a rotary spark gap structure, the combination of a source of motive power, a hollow shaft connected therewith, a shaft extending through said hollow shaft and adapted to rotate freely therein, gears mounted on each of said shafts, a gear meshing with both of said first named gears to rotate said shafts in opposite directions, electrode carrying disks on each shaft, means for changing the relative positions of said disks during rotation of the same, and means for locking the disks in their adjusted positions.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

1,265,960. ODOMETER. WILBERT H. RINEBOLD, Fostoria, Ohio. Filed Sept. 24, 1917. Serial No. 192,997. (Cl. 116—49.)

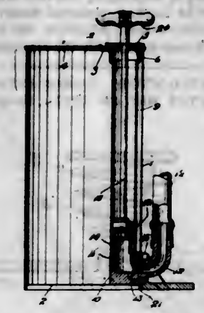


1. A device of the character described comprising a casing provided with a sight opening and numeral wheels readable through the sight opening, of indicative characters or symbols contradistinguished from each other on certain of the numeral wheels contiguous to certain of the numerals thereon, said characters indicating at the expiration of predetermined periods of operation of the device that different parts of the vehicle motor mechanism require attention.

2. A device of the character described comprising a casing provided with a sight opening and numeral wheels readable through the sight opening, of characters or symbols on the face of the hundredths numeral wheel adjacent certain of the numerals indicating that the vehicle motor requires oiling at the end of a predetermined period of operation of the machine, other characters on the face of the numeral wheel indicating that the universal driving connections require oiling at other predetermined periods of operation of the machine, an additional character or symbol on the face of said wheel indicating that the transmission gearing requires oiling at the expiration of another period of operation of the machine, and characters or symbols on the face of the thousandths numeral wheel opposite certain of the numerals thereon indicating that the differential gearing requires oiling at the expiration of certain predetermined periods of operation of the machine.

1,265,961. GREASE-DISPENSING MECHANISM. DAVID RUNYEN, Grand Rapids, Mich., assignor to The Runyen Manufacturing Co., Grand Rapids, Mich., a Corporation of Michigan. Filed June 15, 1917. Serial No. 174,920. (Cl. 221—80.)

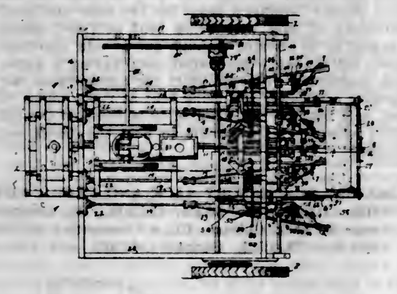
1. In a device of the character described, a receptacle, a segment permanently secured to and partially closing the upper end of the receptacle, a cover hinged to said segment for completely closing the receptacle, a casting secured at the bottom of the receptacle below the segment, a lateral extension to the casting, a conical tapered seat on the upper side of the casting, there being a passage through the casting from the upper side within the limits of said seat and through said lateral extension, a tube secured to said extension, a member secured to the segment, an annular ring depending from said member through the segment, a barrel normally resting at its lower end on the tapered seat of the casting, and at its upper end entered a short distance into the ring, guiding means on the casting entering into the lower end of the barrel, a piston in the barrel, a rod connected thereto and extending through said member, an operating handle on the upper end of the rod,



and a foot member located on the outside and at the bottom of the receptacle.

[Claims 2 to 6 not printed in the Gazette.)

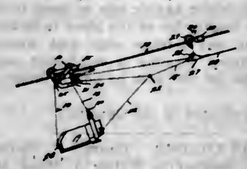
1,265,962. TWO-ROW CULTIVATOR. JOHN E. SAMUELSON, Ophiem, Ill. Filed July 29, 1914. Serial No. 853,846. (Cl. 97—35.)



1. In a cultivator, a main frame, a plurality of shovel frames, swinging supports for said frames, shovels on said frames, toothed standards, hingedly attached to the rear ends of the frames, boxes slidable and adjustable on said standards, a revoluble shaft mounted transversely of the main frame, a plurality of brackets mounted on said shaft and united by universal joints to said boxes, and means for rotating the shaft for withdrawing the shovels from contact with the soil.

[Claims 2 and 3 not printed in the Gazette.]

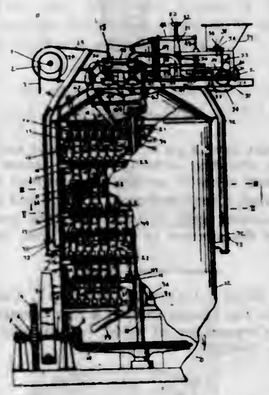
1,265,963. DRAG-LINE EXCAVATOR. HENRY B. SAUERMAN, Chicago, Ill., assignor of one-half to Jesse A. Shearer, Indianapolis, Ind. Filed July 26, 1915. Serial No. 41,840. (Cl. 37—19.)



2. In a dredging apparatus, the combination with a track member and means for slacking and tightening the same, of a carrier slidably mounted on said track, a drag line, a cable connection between said drag line and the forward end of the bucket, a second cable connection between said drag line and the forward end of the bucket, said second connection passing over a support on the carrier and having a button engaging the carrier to limit rearward movement of said last-mentioned cable, the said support and a dumping line connected to the bucket passing from thence upwardly over a support on the carrier and thence forwardly to and around a support on the drag line, and from thence forwardly to a block slidably mounted upon the track and cable, and the said last mentioned supports.

[Claim 1 not printed in the Gazette.]

1,265,964. HYDRATOR. JOHN C. SCHAFFER, Tiffin, Ohio. Filed Apr. 26, 1915. Serial No. 24,173. (Cl. 83—73.)



1. A housing embodying a vertical shell with inwardly extending converging arms, a relatively rotatable shaft in said shell with outwardly extending diverging arms midway between the arms of the shell, uniformly spaced platforms sustained by said shell and shaft arms providing annular discharge ways at the overhanging remote ends of the arms, and plows carried by the platform-sustaining arms to coact with material on the relatively traveling platforms therebelow for progress continuity in annular gravity delivery between successive opposite radial travels.

2. A material agitating apparatus including a housing, a vertical shaft therein, outwardly extending arms carried by the shaft, in a plurality of horizontal series, inwardly extending arms carried by the housing in a plurality of horizontal series alternating with the arms of the shaft, stationary imperforate platforms carried by the housing arms, movable imperforate platforms carried by the shaft, plows carried by the housing and shaft carried arms, and gravity separation means for material in the line of material progress including a retarding flange on said fixed and movable platforms over which the material is carried to flow by the plows whereby the plows may work up the lighter particles for more rapid progress.

3. A material agitating apparatus including a vertical series of arms in alternate horizontal sets, stationary and movable platforms supported by the arms, material progressing plows above each of said platforms and secured to said arms and disposed for forwardly agitating material in the normal material travel direction, and a material flow retarding plow associated with said material progressing plows and oppositely disposed for impeding material travel.

4. A material agitation apparatus comprising alternating horizontal sets of stationary and movable arms disposed in a vertical series, a housing mounting the stationary arms, platforms carried by the stationary and movable arms providing with the housing a plurality of chambers, plows carried by the arms for moving material across the platforms, air supply means for exterior of the housing for affecting material being agitated by the plows over a

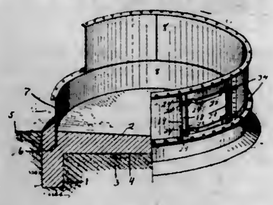
lower platform, and exterior of the housing by-pass means for material affected air from the lower platform to avoid an upper chamber.

1,265,965. ARTIFICIAL LIMB. RICHARD SCHEIBEL, St. Louis, Mo. Filed June 12, 1916. Serial No. 103,295. (Cl. 32—2.)



A leg socket having an interior lining of moisture proof material, a stocking, spirally wound layers of muslin saturated with adhesive material wound over the same, a second stocking, a coating formed of chalk and glue applied over the stocking and a tinted moisture proof coating applied over the mixture of chalk and glue, substantially as specified.

1,265,966. SILO. JULIUS H. SCHLAFLY, Canton, Ohio, assignor to The Canton Culvert & Silo Company, Canton, Ohio, a Corporation of Ohio. Filed May 17, 1913. Serial No. 768,239. (Cl. 189—3.)



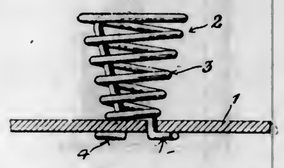
1. A silo formed of a plurality of sheet metal sections, provided with curved body portions and out-turned integral abutting margins arranged to form out-standing horizontal and vertical seams and means for fastening the abutting margins of each seam together, the upper out-turned margin of each horizontal seam and one of the out-turned margins of each vertical seam provided with an integral auxiliary portion disposed parallel to the adjacent body portion of the section, extending over the edge of the other out-turned margin of the seam, and adapted to protect, stiffen and brace the same, and said upper out-turned margin of each horizontal seam being sufficiently wider than the out-turned margins of said vertical seams to permit the horizontally disposed auxiliary portion thereon to overhang the upper ends of the sub-jacent vertical seams including the integral auxiliary portions thereof.

2. A silo formed of rectangular sheet metal sections arranged in annular tiers, the sections in each tier provided at their vertical edges with integral out-standing, abutting, connected flanges forming vertical joints, and said sections also provided at their horizontal edges with integral, outstanding flanges; the out-standing flanges on the lower horizontal edges being provided with auxiliary, depending, portions, said depending portions being continuous in each tier and overhanging the outermost edges of the flanges forming said vertical joints.

3. A silo formed of a plurality of sheet metal sections arranged in annular tiers, the sections forming each tier being united by integral, out-standing flanges forming vertical joints and adjacent tiers being connected by integral out-standing flanges forming horizontal joints, and the super-jacent flange of each horizontal joint extending beyond and having a depending portion overhanging the sub-jacent flange of said horizontal joint and also the flanges forming the vertical joints in the sub-jacent tier.

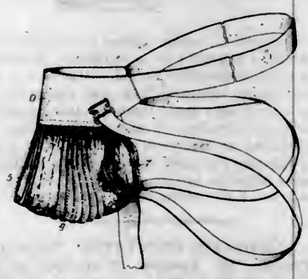
[Claims 4 and 5 not printed in the Gazette.]

1,265,967. UTENSIL-KNOB. JOSEPH ANTHONY SCHLEHR, Chicago, Ill. Filed Mar. 26, 1917. Serial No. 157,547. (Cl. 16—172.)



A device of the character described for attachment to a plate, said plate being provided with a pair of spaced apertures, and said device consisting of an inverted truncated cone-shaped body formed of a single strand of wire bent into vertically spaced substantially horizontal coils, each coil from the lower to the upper end of said body being increased in diameter to provide an open top for said cone-shaped body, the upper extremity of said wire being bent downwardly through the body adjacent the inclined wall thereby forming a brace for the same and the lower extremity of said wire being bent at right angles and adapted to be inserted through one of said apertures, the lower coil of said cone-shaped body having a major portion contacting with said plate the extremity of the wire forming said lower coil being bent at right angles to said coil, said bent portion adapted to be inserted through the other aperture in said plate to hold the device securely thereon.

1,265,968. SUSPENSORY SACK AND FABRIC THEREFOR. HERBERT C. SHAW, Chicago, Ill., assignor to Bauer & Black, Chicago, Ill., a Corporation of Illinois. Filed Nov. 19, 1915. Serial No. 62,275. (Cl. 128—38.)



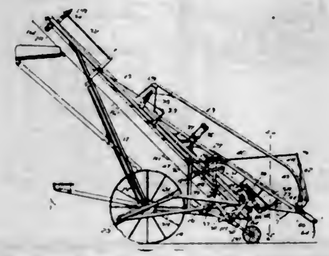
1. A suspensory sack or pouch composed of a single piece of knitted fabric having one or more inelastic cords knitted therein lengthwise of the piece in immovable relation thereto at one selvage edge and wholly inclosed within the stitches forming a reinforced relatively inelastic rear edge for the sack or pouch integral with the fabric piece.

[Claim 2 not printed in the Gazette.]

1,265,969. HAY-LOADER. ERNEST C. SMITH, Hoosick Falls, N. Y., assignor to Walter A. Wood Mowing and Reaping Machine Co., Hoosick Falls, N. Y., a Corporation of New York. Filed Oct. 30, 1916. Serial No. 128,475. (Cl. 56—64.)

1. In a hay loader, in combination, a frame having a forwardly and upwardly inclined deck, a carrying wheel

located in front of the lower end of the deck, a raking and elevating bar movable over the deck and in rear of its lower end, a crank concentric with the carrying wheel, a link connecting the crank with the lower end of the raking and elevating bar, a pair of other cranks pivoted to the frame one above and one below the said link, respectively, and a second link connected to the free ends of the two last-mentioned cranks and to the first-mentioned link.

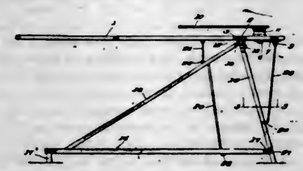


3. In a harvesting machine, in combination, a traveling frame, a crank turned in a vertical plane by the travel of the frame, an oscillating rake, two other cranks pivoted to the frame at different levels to swing in vertical planes, a link connecting the free ends of the two last-mentioned cranks, a second link connecting the first-mentioned link and the rake, and means actuated by the turning of the first-mentioned crank for swinging the second-mentioned link and the two second-mentioned cranks.

6. In a hay loader, in combination, a traveling frame having a forwardly and upwardly inclined deck, a plurality of parallel rake bars movable over the deck and in rear of its lower end, a cross-piece connecting all of the said rake bars intermediate their ends, a pair of actuating links, one at each side of the traveling frame adjacent the lower end of the deck, an inverted U-shaped frame supported in a substantially vertical plane and arching over all of the said rake bars adjacent their lower ends, the ends of the U-shaped frame being connected with the said actuating links, other links extending between the actuating links and the ends of the said cross-piece, a supporting strap extending between the cross member of the said U-shaped frame and the lower end of each of the said rake bars and means guidedly supporting the rake bars in line with the said cross piece.

[Claims 2, 4, 5, and 7 to 21 not printed in the Gazette.]

1,265,970. IRONING-BOARD. WIRT W. STILLEY, Newport News, Va. Filed July 3, 1917. Serial No. 178,377. (Cl. 68—10.)

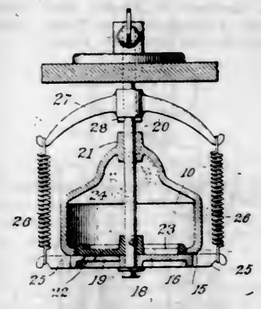


1. The combination of a support comprising a pair of legs, a hook carried by the upper ends of said legs, an ironing board adapted to rest upon the legs, and a bail pivoted to the legs and having offset portions near their points of pivotal connection with the legs and adapted to engage the ironing board near the end thereof or extend over the ironing board and engage the hook carried by the upper ends of the legs.

2. The combination of a support comprising a pair of downwardly diverging legs, connections between the respective ends of the legs, a beam hinged to the connection between the lower ends of the legs and extending laterally therefrom, a brace hinged to the connection between the upper ends of the legs and extending downwardly therefrom and secured to the beam near the outer end thereof, an ironing board adapted to rest near one end upon the connection between the upper ends of the legs, a detachable connection between the brace and the ironing board and a detachable connection between the ironing board and the legs, the last mentioned detachable connection being disposed at that side of the legs remote from the brace.

3. The combination of a support comprising a pair of legs connected near their ends, a beam and a brace therefor hingedly connected with the connections between the legs, an ironing board constructed to rest upon the upper ends of the legs or across the sides of the same, means for holding the beam and brace in a set position relative to the legs, and a bail carried by the legs and adapted to engage the ironing board or be extended over the ironing board and engage the legs.

1,265,971. CUT-OUT VALVE. GEORGE H. TABER, Binghamton, N. Y. Filed June 5, 1916. Serial No. 101,821. (Cl. 137—7.)



1. In a device of the class described, in combination, a central body portion, an inlet branch extending thereto, a tail pipe branch extending therefrom, a disk valve member having sector shaped ports, a port plate coöperating with the valve member and secured to the central body portion of the device, springs connected to lugs on the port plate and to rigid arms above the device and located without the body of the valve and spaced therefrom for maintaining the valve member in frictional engagement with the port plates.

2. In a device of the class described, in combination, a central body portion, an inlet branch extending thereto, a tail pipe branch extending therefrom, a port plate having a plurality of ports and secured to the central body portion, a rotatable ported valve member in coöperative relation with the ported plate, resilient means for pressing the valve member against the port plate and a deflector within the central body portion of the device for directing the gases toward the ports in the valve and ported plate.

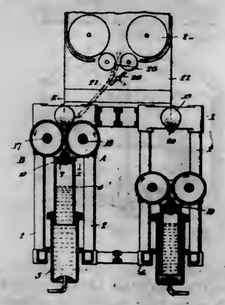
3. In a device of the class described, in combination, a central body portion, inlet and exhaust branches extending therefrom, a port plate secured to the central body portion and provided with a plurality of ports for the egress of the exhaust gases, a valve member having ports adapted to be placed in or out of registration with the port plate by rotating the valve member, a deflecting baffle within the central body portion of the device for directing the gases toward the exhaust openings and resilient means located without and spaced from the body portion of the device and connected with the valve member for pressing the valve member against the port plate.

4. In a device of the class described, in combination, a central body portion of cylindrical form, branches extending into said body portion at the sides thereof and alined with one another, one of said branches being of smaller diameter than the opposite branch, a deflector within the

body portion in front of the smaller branch portion and a cut out valve at the bottom of the cylindrical body portion for permitting the egress of the exhaust gases.

5. In a device of the class, described, a cut-out valve comprising in combination a central body portion, means for admitting and discharging gases therefrom, a ported plate secured to the body portion and forming a seat for a valve member, a ported valve member in cooperative relation to the ported plate and within the body portion, a shaft secured to the valve member and having a bearing in the ported plate and central portion of the valve casing, said shaft extending through the body portion and carrying a kick pedal on the upper end thereof, a pair of springs fastened at their lower ends to the ported plate and spaced from the body portion of the device, an equalizer bar connecting said springs at their upper ends and having a portion adapted to press the before mentioned shaft downwardly and maintain the valve member tightly against its seat on the ported plate whereby the valve member is frictionally held in any desired set position.

1,265,972. METHOD AND APPARATUS FOR BALING COTTON AND THE LIKE. JOHN A. TAFT, San Antonio, Tex., assignor to Reagan Bale Company, San Antonio, Tex., a Corporation of Texas. Filed July 3, 1917. Serial No. 178,357. (Cl. 100—1.)



1. A cotton press provided with a plurality of rolls, one receiving the bat from the other and acting upon different parts of the bale as it is being formed, and means for rotating the second roll slower than the first.

7. In a bale forming press having means for feeding a bat thereto, a core pin, a pair of compression rolls for receiving the bat and winding it about the core pin, and means for driving said rolls, one of said rolls being operative at a slower speed than the other to exert a circumferentially effective compression throughout a comparatively small portion of the bale as it is being formed, and a circumferentially effective tension throughout the remainder of the bale.

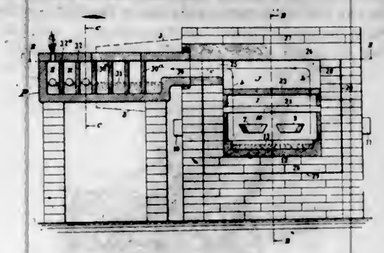
8. The method of forming a round cotton bale, which consists in subjecting the bale to a circumferential compression force effective throughout less than half of the circumference of the bale, and a circumferentially effective tension force effective throughout the remaining portion of the bale.

11. In a round bale forming press, means for rolling the bat into a bale, and mechanism for operating said means to produce a circumferential compression force effective throughout less than half of the circumference of the bale, and a circumferentially effective tension force effective throughout the remaining portion of the bale.

13. In a bale forming press in combination, a core pin, a pair of opposed rolls for receiving a bat and winding it about the core pin, and means for driving said drums, one of said drums being operative at a greater peripheral speed than the other to exert a tightening tension on the windings.

[Claims 2 to 6, 9, 10, 12, and 14 not printed in the Gazette.]

1,265,973. ELECTRIC ZINC-DISTILLING FURNACE AND CONDENSER. JOHN THOMSON, New York, N. Y., assignor to John Thomson Press Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 19, 1916. Serial No. 72,906. (Cl. 204—64.)



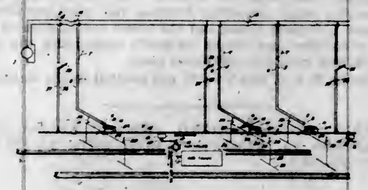
1. An electric furnace for distilling spelter having a condenser in which there is a plurality of staggered plates around the ends of a portion of which both fume and condensed metal may flow but around another portion of which only fume can flow.

4. In an electric furnace for distilling spelter contaminated with another metal, or metals, a condenser having a plurality of automatic trapped taps for withdrawing the condensed metal from different vertical zones of said condenser.

7. A liquid metal condenser having a tubular trapped tap for withdrawing metal as and when condensed from any desired portion, but near to the surface, of a bath contained within the condenser.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,265,974. SAFETY MECHANISM FOR AUTOMATICALLY APPLYING AIR-BRAKES. LEE A. THORNBURG, Odenville, Ala., assignor of one-fourth to T. A. Lambert, Odenville, Ala. Filed Sept. 24, 1917. Serial No. 192,957. (Cl. 188—2.)



1. An automatic air brake applying apparatus comprising, in combination with an air brake system, an electric train circuit and its source of electric supply, of a normally open train circuit, magnets in said open circuit, mechanism controlled by each magnet to cause the application of the brakes on its respective car, normally open branch circuits connecting said train circuits, and a switch in each branch circuit movable responsive to the derailment of a truck to energize said normally open train circuit and instantly apply the brakes controlled by all magnets in said latter circuit.

[Claim 2 not printed in the Gazette.]

1,265,975. BLASTING-POWDER. WILLIAM TAMSEN, Silverton, Oreg. Filed Apr. 16, 1917. Serial No. 162,495. (Cl. 52—1.)

A composition of matter for use as a blasting explosive, comprising approximately 13% yellow wax, 7% soap stock, 21% sulfur, 11% niter, 22% potassium chlorate and 26% nitro-starch.

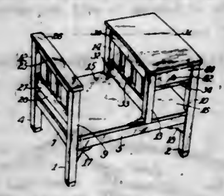
1,265,976. ICE-CUTTER. GEORGE W. TRIBBEY, Marshfield, Oreg. Filed Mar. 30, 1917. Serial No. 158,632. (Cl. 62—111.)



5. An ice cutter of the character set forth, comprising a shaft having a plurality of triangular, longitudinally arranged cutting blades, said shaft being tapered adjacent to the upper ends of said blades, and a transverse cutter blade adapted to rest on the upper ends of the longitudinal blades and to be forced outwardly by the tapered portion of the shaft.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,265,977. CHAIR AND TABLE COMBINED. GEORGE VORDERMARK, Indianapolis, Ind. Filed May 19, 1916. Serial No. 98,523. (Cl. 45—31.)



1. An improved chair and table structure comprising four upright corner members, the lower portions of the members constituting supporting-legs and the upper portions constituting pillars, a plurality of rails secured to the corner members to constitute a seat frame, the front and rear rails being longer than the remaining side rails, two intermediate pillars secured to the front and rear rails respectively, a seat secured upon the front and rear rails and also upon one of the side rails on one side of the intermediate pillars, an arm-rest connected to the tops of two of the corner members, a top rail secured to the upper portions of the remaining two corner members, a top rail secured to the upper portions of the intermediate pillars, two slide bars secured to the top rails respectively, a table top secured upon the top rails and the pillars and also upon the corner members to which the top rails are connected, and a drawer mounted on the slide bars.

2. An improved chair and table structure comprising four upright corner members, the lower portions of the members constituting supporting-legs and the upper portions constituting pillars, a plurality of rails secured to the corner members to constitute a seat frame, the front and rear rails being longer than the remaining side rails, a seat and also a shelf integrally connected together and secured upon the frame rails, two intermediate pillars secured to the front and rear rails respectively, a top rail secured to the upper portions of the intermediate pillars, a top rail secured to the upper portions of two of the other pillars, two slide bars secured to the two top rails respectively, a table top secured upon the top rails and the pillars to which the rails are connected, a face-piece secured at one end of the slide bars to two of the pillars, a face-piece secured at the opposite end of the slide bars to two others of the pillars, two drawers mounted on the slide bars with their rear ends adjacent each to the other, the front members of the drawers normally being above the face-pieces respectively, the drawers being movable each away from the other, a stop block secured to one of said slide bars between the rear ends of the two drawers, panel-work connected to the intermediate pillars, and an arm-rest and panel-work connected to the remaining two of the pillars.

1,265,978. VENTILATOR. ARTHUR WADE and HARRY L. VAN ZILE, New York, N. Y., assignors to Van Zile Ventilating Corporation, New York, N. Y., a Corporation of New York. Filed Sept. 26, 1917. Serial No. 193,245. (Cl. 189—61.)



1. A ventilator, comprising in combination spaced opaque devices in the plane of said ventilator, view intercepting members extending in planes substantially perpendicular to the plane of said opaque devices, and other view intercepting members inclined to the plane of said opaque devices for intercepting a view at a different angle from that intercepted by the said first members.

2. In a ventilator, the combination of view intercepting members in the air passages through said ventilator, an apertured slide guided on said ventilator, for controlling the air through said passages, the casing of said ventilator having a slot transverse of the direction of movement of and located away from one edge of said slide, and a lever pivoted to the opposite edge of said slide and having operating means projecting through said slot.

[Claims 3 to 6 not printed in the Gazette.]

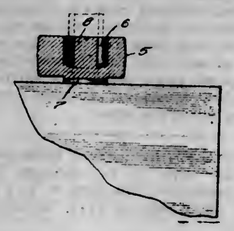
1,265,979. HARROW. HARRY URBAN WAKEFIELD, Darks Mill, Tenn. Filed Dec. 27, 1917. Serial No. 209,061. (Cl. 55—76.)



1. A harrow including a plurality of toothed bars linked together, a lever arm having a downwardly bent end connected to the foremost bar, a connecting rod pivotally secured to the lever arm, a block having a longitudinal channel slidable on the connecting rod, means for securing the block in adjusted position on the rod, a bar depending from the block, a hook at the end of the bar, and a looped member secured to the rearmost toothed bar and engageable by the hook.

2. A harrow including a plurality of toothed bars linked together, a lever arm having a downwardly bent end connected to the foremost bar, a connecting rod pivotally secured to the lever arm, a block slidable on the connecting rod, means for securing the block to the rod, means for pivotally connecting the block to the rearmost toothed bar, and means for detachably securing the lever arm to the block.

1,265,980. METHOD OF REMOVING BATTERY-TERMINALS. ERNEST W. WEINMANN, Chicago, Ill. Filed Dec. 8, 1916. Serial No. 135,870. (Cl. 29—84.)

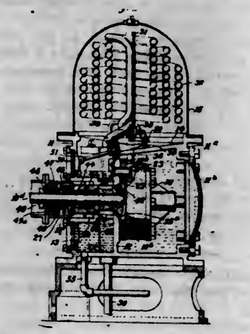


1. The method of removing a battery terminal which consists in forming an annular groove through the terminal, concentric with the original battery post or connection.

3. The method of disassembling and assembling batteries which consists in boring annular holes through the terminals for removing them while leaving projecting posts, then removing the groups by raising the same with the covers thereon from the jars, and then reassembling the battery parts by inserting the groups with the covers thereon, and finally burning other terminals onto said posts or projections.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,265,981. GAS-COMPRESSING APPARATUS. EDWARD T. WILLIAMS, New York, N. Y. Filed May 25, 1915. Serial No. 30,282. (Cl. 230—6.)



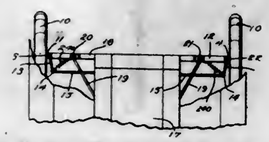
1. In a compressing apparatus, the combination of a pump chamber having a partition providing a well and having a manhole opening in its side opposite said partition; an open-ended tubular member extending from the partition and across the well; a compressor in the pump chamber, mounted on the partition and having a bearing member extending into the aforesaid tubular member; releasable means for holding the compressor in position on the partition and permitting removal of the compressor and its bearing member through the said manhole opening; and a removable closure for the latter.

6. In a compressing apparatus, the combination of a pump chamber having a partition providing a lubricant well at one side; a compressor mounted on the partition outside the lubricant well; an actuating shaft extending across the lubricant well to the compressor; and a bearing member for the shaft, extending from the compressor toward the outer wall of the lubricant well and adapted to receive lubricant therefrom.

8. In a compressing apparatus, the combination of a pump chamber having a well for lubricant and having a tubular member spanning the well and provided with a port to receive lubricant from the well; a compressor arranged in the pump chamber and having an actuating shaft extending through said tubular member; a bearing for said shaft in the tubular member, having a port to receive lubricant from said member; and means providing an oil reservoir around the shaft at the outer end of said bearing to prevent access to air to lubricant exuding from said bearing.

[Claims 2 to 5, 7, and 9 not printed in the Gazette.]

1,265,982. STEERING DEVICE FOR AUTOMOBILES. GEORGE H. WILSON, Minneapolis, Minn. Filed Aug. 9, 1915. Serial No. 44,374. (Cl. 21—200.)



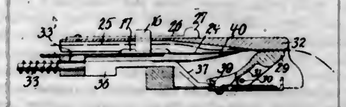
In combination with the front wheels of an automobile and means for oscillating the same for steering, a pair of oval-shaped plates, holes in the larger end thereof for attaching the same to the pintles of the steering knuckles, another pair of oval-shaped plates, holes in the larger end of said last-named plates for attaching the same to the brace bolts of the axletree, a pair of tension coil springs acting between said oval-shaped plates for holding the wheels normally in a forward traveling position, hooks bent on the ends of said springs, and a plurality of smaller holes in each of said oval-shaped plates varying in distance from the point of attachment of said plates for engagement with the hooks of said coil springs to give different amounts of tension in said coil springs.

1,265,983. GAITER. AUGUST WOLFF, Corona, N. Y. Filed Mar. 9, 1917. Serial No. 153,673. (Cl. 36—2.)



A gaiter consisting of a stiff sole, an upper consisting of a toe portion secured upon the edges of said sole, one side of said upper formed with an elongated extension and the opposite side thereof having a short tab extension beyond said sole, a reinforcing marginal strip secured upon the upper longitudinal edge of said upper and also upon the transverse end edge of said first and second-named extensions, a transverse series of fastener elements secured upon the tab extension, and a transverse series of cooperating fasteners secured upon said first-named extension and adapted to interlock with the other fasteners, the marginal strips of both extensions adapted to contact when said fasteners are interlocked.

1,265,984. PRACTICE-GUN. LOUIS ZIEGLER, Lyndhurst, N. J. Filed Sept. 20, 1917. Serial No. 192,300. (Cl. 42—57.)



3. In a practice gun, means at the muzzle for exploding charges in cap tape, a barrel extending rearwardly therefrom, and means including a slide and slide-way for feeding the tape through the barrel to the explosion means.

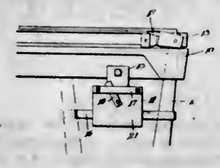
5. In a practice gun, a barrel, means comprising a spring for drawing cap tape through the barrel, means for holding said means in its advanced position, said spring acting in such position to prevent reverse movement of the tape, a hammer, a trigger, and means operated by said trigger for engaging and advancing a strip of cap tape when so held.

8. In a practice gun, a barrel having a slide-way therein, a slide in said barrel having a handle projecting through said slide-way, a spring on said slide member adapted to engage and advance a strip of cap tape through the barrel, and means at the mussle for exploding the charges in said cap tape.

12. In a practice gun, an anvil, a hammer pivoted between its ends and having a lug on the end opposite the striking end thereof, a slide member having a projecting finger and a cut-away part on one side thereof, and means comprising a trigger for reciprocating said slide member whereby said hammer is actuated by said finger engaging said lug, said lug being released when it enters the said cut-away portion of the slide member.

[Claims 1, 2, 4, 6, 7, and 9 to 11 not printed in the Gazette.]

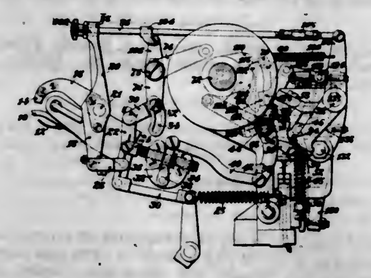
1,265,985. PICKER-CHECK FOR LOOMS. JAMES S. ADAMS and MEDICUS DAY, Belton, S. C. Filed May 12, 1916. Serial No. 97,105. (Cl. 139—22.)



1. In a picker check for looms, the combination with a picker stick of a stationary bracket member adjacent thereto, a two-arm lever pivoted to said member and having one arm on each side thereof, a horizontally disposed rod, pivotally connected to one of said arms and having laterally projecting abutments thereon, said rod being bodily movable longitudinally by the picker stick on contact with either of said abutments as it approaches the end of its stroke in either direction, and friction means acting on the other of said arms normally tending to retard the movement of said pivoted member and said rod.

[Claims 2 to 4 not printed in the Gazette.]

1,265,986. WAX-THREAD-SHOE-SEWING MACHINE. FRED ASHWORTH, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 2, 1916. Serial No. 101,256. (Cl. 112—20.)

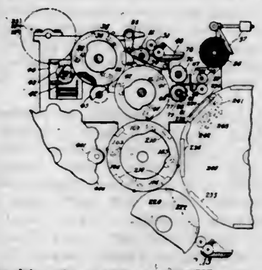


1. A shoe sewing machine, having, in combination, a work support, a presser foot lever provided with a lifting handle, a presser foot on said lever, means acting automatically to lock and unlock the presser foot lever during each cycle of operations of the machine, a manually operable plunger mounted to move independently of said lifting handle, and means actuated by said plunger for unlocking the presser foot lever.

2. A shoe sewing machine, having, in combination, a work support, a presser foot lever provided with a lifting handle, a presser foot on said lever, means acting automatically to lock and unlock the presser foot lever during each cycle of operations of the machine, a manually operable plunger mounted to move independently of and into engagement with said lifting handle, and means actuated by said plunger during its independent movement for unlocking the presser foot lever.

3. A shoe sewing machine, having, in combination, a work support, a presser foot lever provided with a lifting handle, a presser foot on said lever, means acting automatically to lock and unlock the presser foot lever during each cycle of operations of the machine, a plunger mounted to move independently of and into engagement with said lifting handle, and means acting upon stopping the machine to move said plunger to lift the presser foot lever and to unlock the presser foot lever during the independent movement of the plunger.

1,265,987. MACHINE FOR MAKING WINDOW-ENVELOPS. WILLIAM H. BANZETT, Bergenfield, N. J., assignor to Mercantile Corporation, Dayton, Ohio, a Corporation of New York. Filed Apr. 19, 1916. Serial No. 92,088. (Cl. 93—63.)



1. In a machine for making window envelops from a continuous strip of paper, in combination, rotary cutter means and coacting rotary die rolls for severing the web into rhomb shaped blanks, said blanks having two sides parallel to the path of the web and two sides diagonal to the side of said web, said blank having its major axis at an angle to its line of travel as it is severed from the web, means for thereafter advancing the blanks with their major axes normal to their subsequent direction of travel, means for cutting oblong window apertures in the blanks said apertures extending parallel with the major axes of the blanks, means for gumming the aforesaid apertures, means for applying patches of transparent material over pre-cut window apertures and means for advancing the patched blanks to mechanism for performing subsequent operations thereon such as printing and folding.

2. In a machine for making window envelops from a continuous strip of paper, in combination, coacting rotary cutter and rotary die means for severing the web and forming said web into rhomb shaped blanks, said blanks having two sides parallel to the sides of the web and other sides diagonal to said sides whereby the major axes of the blanks are at an angle to the line of travel of the blanks as they are severed from the web, means for thereafter adjusting the blanks to a position in which their major axes are normal to their direction of travel, means for thereafter advancing the blanks with their axes normal to their direction of travel, means for cutting oblong window apertures in said blanks, said apertures extending parallel to the major axes of the blanks, means for gumming the blanks about the apertures and means for applying transparent patches in register with the gummed portions of

the blank to cover the said apertures, and means for performing subsequent operations on the blanks.

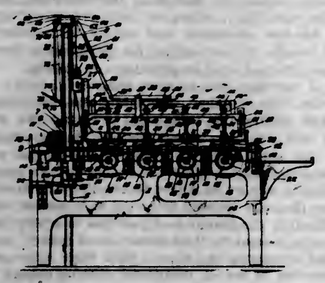
8. In a machine for making window envelops from a continuous web of paper, in combination, coacting rotary cutters and rotary dies for cutting the said web into rhomb shaped envelop blanks, said blanks having their major axes at an angle to the line of travel of the web, means for advancing said blanks through mechanism for performing subsequent operations thereon, means adapted to receive the blanks as they come from the cutter devices and adapted to present the said blanks to said blank advancing means with the major axis of the said blanks normal to their direction of travel therein, means for cutting window apertures in the blanks, said apertures extending parallel to the major axes of the rhomb shaped blanks, means for gumming the said paper about said windows, means for applying and registering patches over the said windows, said patches being secured by the gum to the paper of the blanks; and means for performing subsequent operations on the blanks.

4. In a window envelop machine, in combination, means for continuously advancing a web of paper, a cutter means associated therewith and adapted to cut the said web into rhomb shaped envelop blanks, said blanks having their major axes at an angle to the sides of the web, means for continuously advancing the blanks as they come from the cutter devices and in the same relative position as in the web, a second blank advancing means, and means intermediate the first mentioned blank advancing means and said second mentioned blank advancing means adapted to receive blanks and to present the blanks with their major axes normal to their direction of travel in the second mentioned blank advancing means, means associated with the aforesaid means for cutting window apertures in the blanks, gumming the margins of the apertures and applying patches thereover, and means for delivering the patched blanks to a mechanism for completing the folding of the envelop.

5. In a window envelop machine, in combination, means for successively advancing a series of rhomb shaped envelop blanks, said blanks being advanced with their major axes at an angle to their line of travel; means for successively receiving said advancing blanks and advancing them and delivering them with their major axes normal to their subsequent direction of travel; means for successively cutting window apertures in the blanks; means for successively gumming the blanks; means for successively applying patches thereto; means for printing the said blanks and means for thereafter folding the blanks.

[Claims 6 to 11 not printed in the Gazette.]

1,265,988. MACHINE FOR GUIDE-MARKING A PLURALITY OF ETCHABLE SURFACES. EDWARD S. BEACH, Ridgefield, Conn., assignor, by direct and mesne assignments to Multicolor Intaglio Press Company, Dover, Del., a Corporation of Delaware. Filed Feb. 27, 1917. Serial No. 151,188. (Cl. 101—33.)



1. The combination of a frame constructed to receive a plurality of parallel rolls to be guide-marked; mechanism for rocking them simultaneously through an arc of a circle; a movable flat pattern-carrier; and a movable roll-marking mechanism, said mechanism comprising means for rotating the rolls and moving the pattern carrier simultaneously and corresponding distances.

2. The combination of a frame constructed to receive a roll to be marked; a movable pattern carrier; and a movable roll-marking mechanism; and mechanism under the control of the operator for rotating the roll and moving the pattern-carrier simultaneously and equal distances.

3. The combination of a frame constructed to receive a roll to be marked; a flat movable pattern carrier; and a movable roll-marking mechanism comprising a roll-marking device at one side of the carrier and means at the other side of the carrier for actuating said device.

4. In a roll-marking machine, a rock shaft; a rocker arm on the shaft; a marker on the rocker arm; and bearings for a roll to be marked; said bearings and rocker being relatively disposed to permit the marker to form a mark on the roll end in a plane through the axis of the roll.

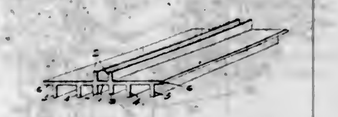
1,265,989. STENCIL FOR SAND-BLAST ETCHING. OTTO G. BUCHER, Omaha, Nebr. Filed Aug. 18, 1916. Serial No. 115,734. (Cl. 101—127.)



1. A stencil-forming member for sand-blast etching, comprising a sheet of paper, a relatively thick tough pliable adhesive coating on one side of said sheet adapted to adhere to a smooth surface as of glass less firmly than to the paper, the opposite side of said sheet having a design outlined thereon, and a thin coating of a transparent hard material overlying said design and hardening the paper sheet to facilitate cutting of the sheet along the outlines of the design to form a stencil after the adhesive coating is applied to the object to be etched.

2. A stencil-forming member for sand-blast etching, comprising a backing-sheet of material such as paper, having a design outlined upon one side thereof, a dried transparent coating of sizing material overlying said design and stiffening the paper to facilitate cutting thereof upon the outlines of the design, and a relatively thick coating of a tough pliable sand-blast-resistant material strongly adherent to the other side of said backing-sheet, said sand-blast-resistant coating adapted to adhere to a smooth surface as of glass less firmly than to the backing-sheet, whereby severed portions of the stencil-forming member may be readily stripped from such a surface to expose portions thereof through the remaining parts of said member.

1,265,990. CAR PART. SAMUEL A. BENNER, Pittsburgh, Pa. Filed Dec. 8, 1913. Serial No. 805,421. (Cl. 189—41.)



1. A blank for a car part consisting of a rolled section comprising a web having a plurality of flanges projecting from one face thereof, said blank being rolled, pressed or bent longitudinally to cause said flanges to form laterally opening channel members extending along each side of the finished structure.

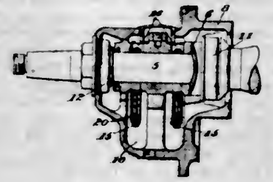
2. A blank for a car consisting of a rolled section comprising a web having a plurality of flanges projecting from one face thereof, said blank being rolled, pressed or bent longitudinally to cause said flanges to form laterally opening channel members extending along each side of the finished structure, said web having one or more strengthening flanges extending longitudinally thereof intermediate its side edges.

3. A blank for a car part consisting of a rolled section comprising a web having a plurality of flanges projecting from one face thereof, said blank being rolled, pressed or bent longitudinally to cause said flanges to form laterally opening channel members extending along each side of the finished structure, said blank having one or more strengthening flanges extending from opposite faces thereof forming truss members in the completed structure.

4. A blank for a car part consisting of a rolled section comprising a web having a plurality of flanges projecting from one face thereof, said web being so rolled, pressed or bent longitudinally that the opposite sides of said web and certain of said flanges form I-beams extending longitudinally along each side of the completed structure.

[Claims 5 to 9 not printed in the Gazette.]

1,265,991. LUBRICATION. CARL O. BERGSTROM, Boston, Mass., assignor to B. F. Sturtevant Company, Boston, Mass., a Corporation of Massachusetts. Original application filed Aug. 12, 1912, Serial No. 714,618. Divided and this application filed Feb. 14, 1916. Serial No. 78,181. (Cl. 64—31.)



1. The combination with a rotating shaft, of a stationary bearing having a parallel sided slot formed therein, and a lubricating ring supported by the shaft within the slot, having side faces tapering inwardly from the inner to the outer surface of the ring, and having a series of annular grooves formed in the inner surface of the ring, the widest portion of the ring fitting the slot with sufficient closeness to prevent wabbling of the ring while permitting a fairly free rotation thereof within the slot.

2. The combination with a rotating shaft, of a stationary bearing having a parallel sided slot formed therein, and a lubricating ring supported by the shaft within the slot, having side faces tapering inwardly from the inner to the outer surface of the ring and having a series of annular V-shaped grooves formed in the inner surface of the ring, the widest portion of the ring fitting the slot with sufficient closeness to prevent wabbling of the ring while permitting a fairly free rotation thereof within the slot.

1,265,992. HORSE-COLLAR. EDWARD BOHACZYK, Salem, Mass. Filed Apr. 13, 1917. Serial No. 161,741. (Cl. 54—19.)

In a horse-collar, the combination with a pair of arcuate elements adapted to surround the neck of an animal, of a hinge engaging said elements at the upper ends thereof, means for normally causing separation of the lower ends of said elements, a plate secured to the lower end of one of said elements having an enlarged head extending laterally in opposite directions transversely of said element, a pair of hooks pivotally carried at the end of the opposite element, means for maintaining said hooks in normal engagement with the extension of said head, a spreader slidably contained in operative relation to said hooks, means for normally advancing said spreader, and a cord engaged with said spreader constructed and arranged to cause the release of said head upon manual operation thereof.



1,265,993. CRUTCH. WILLIAM F. BONDS, Tucumcari, N. Mex. Filed Sept. 19, 1917. Serial No. 192,180. (Cl. 135—50.)



A crutch comprising a frame having a bottom and an intermediate cross piece at the lower end of said frame, a staff forming the lower end of the crutch slidable through openings in the bottom and intermediate cross pieces, the lower end of said staff slidable through the bottom cross piece being of slightly less diameter than the upper end immediately above said cross piece and so form a stop shoulder to abut against the bottom cross piece, a hand grip on the upper end of the staff, an expansion spring connected at its lower end to said frame, and an adjustable collar on the staff to which the upper end of said spring is attached, said spring forming a yielding buffer between the staff and the frame and through the adjustability of the collar the resiliency of said buffer may be adjusted to the weight of the user of the crutch.

1,265,994. ICE-SKATE. FRANK E. BROWN, Webster City, Iowa. Filed Mar. 30, 1917. Serial No. 158,677. (Cl. 46—50.)



1. An ice skate comprising a runner, heel and toe plates one of which is adjustable, a pair of flexible plates secured on the lower side of the adjustable plate to extend down-

wardly and with the extension spaced apart a distance corresponding substantially to the thickness of the runner, said runner on that end on which the adjustable plate is to be mounted having openings formed therethrough, one of the pair of plates being provided with clamp bolt receiving openings and the remaining plate having screw-threaded openings therethrough registering with the openings of the first mentioned plate, and clamp bolts passed through the bolt receiving openings and the openings of the runner and then screwed into the threaded openings to draw in the flexible plates and clamp the same in rigid mounting on the runner.

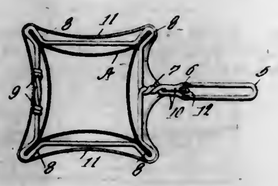
[Claim 2 not printed in the Gazette.]

1,265,995. BOBBIN-BEARING. WILLIAM B. CARGAL and WINSTON TANKERSLEY, Dalton, Ga. Filed Mar. 1, 1918. Serial No. 219,908. (Cl. 242—130.)



A bobbing bearing comprising a cylindrical metal head having a cylindrical central neck formed integrally with its lower end, the lower end of said neck having formed integrally therewith a central vertical bearing stem, the upper end of said head having a circular socket formed at its bottom with a ball race, said head and neck having a central bore closed at its lower end and opening at its upper end into said socket, ball bearings in said race, a metal plug for reception in the bobbin, a cone integral with said plug and received in said socket on said ball bearings, a spindle integral with said cone and received in said bore, said spindle having a pointed lower end resting on the closed lower end of said bore, a second cone slidable and rotatable on the aforesaid bearing stem, a stop for retaining said second cone on said stem when the bobbin is removed, and a nut threaded on said stem for coaction with said head in securing the device in place.

1,265,996. BAG-HOLDER. FRANK W. CERNY, Mesa, Ariz. Filed Dec. 6, 1917. Serial No. 205,842. (Cl. 83—26.)



1. A bag holder formed of a single wire secured together at its ends providing a frame with integral inwardly opening and outwardly extending loops forming bag clamps and a handle integral with said frame.

2. A bag holder, comprising a single wire bent to provide a frame and an outwardly extending loop, the inner end of the said loop being formed to provide a bag clamp exterior to the frame opening into the loop, and said frame being closed and having loops integral therewith.

3. A bag holder and carrier formed of a single length of wire and comprising a handle having a constricted opening therethrough, and an open frame formed with outwardly extending and inwardly convergent loops adapted to engage a bag with the inner and outer surfaces thereof and to coöperate with the constricted opening of the handle for holding a bag substantially as shown.

1,265,997. PNEUMATIC POWER-BOAT. GEORGE W. CHRISTOPH, Warehouse Point, Conn., assignor to Sterling Blower Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 16, 1916. Serial No. 125,869. (Cl. 115—12.)

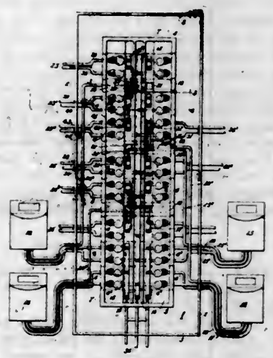


1. The combination in a pneumatically propelled boat of an air conduit extending from the bow to the stern and arranged below the gunwales of the boat, an exhaust fan interposed in said conduit, means to drive the fan, and intake and discharge members connected to the forward and rear ends of said conduit and extending, respectively, above the gunwales of the boat at the bow and stern thereof.

3. A pneumatically propelled boat having a power driven exhaust fan located substantially below the gunwales of the boat, intake and discharge conduits extending from the fan and below the gunwales of the boat to the bow and stern, respectively, intake and discharge members pivotally connected to the bow and stern ends, respectively, of said conduits to turn on a vertical axis and extending above the gunwales of the boat, and means to turn said members in unison toward the same side of the boat whereby the latter may be steered.

[Claim 2 not printed in the Gazette.]

1,265,998. METERING-PANEL. HENRY H. CURTIS, Springfield, Mass., assignor to C. & P. Electric Works, Springfield, Mass., a Voluntary Association. Filed Apr. 6, 1917. Serial No. 160,146. (Cl. 247—13.)



3. In a metering panel, the combination with a plurality of fuse-block sections arranged side by side and to which consumption circuits are connected, a single channeled metering section for said sections, a meter having a metering wire leading to the metering section and means for connecting a plurality of consumption circuits to the metering section, whereby one meter is employed for measuring the combined current in several consumption circuits.

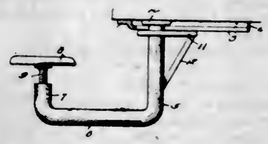
4. A meter section or block for a metering panel, comprising a member formed with a channel or groove therein on the underside thereof extending its length and having a vertical opening communicating with the channel or groove near its inner end for receiving the metering wire.

6. A system of electrical distribution comprising supply circuits, fuse block sections, meter circuits and consumption circuits, a panel board having a channeled section therein for receiving a wire from the meter and means comprising plates and connecting wires between the fuse block sections and the channeled section for connecting the terminal of the meter wire where it leaves the channeled section to the various consumption circuits, as described.

11. A metering-section for a metering panel comprising a block-like elongated structure having a continuous channel in its under side leading from its outer end surface inward toward its inner end and terminating in an opening extending to its upper surface for receiving a wire from a meter.

[Claims 1, 2, 5, 7 to 10, and 12 not printed in the Gazette.]

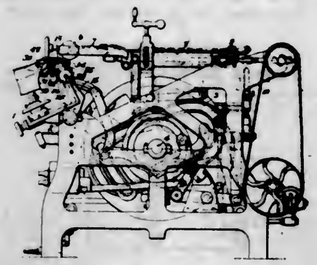
1,265,999. PIANO-SEAT ATTACHMENT. MARTIN CUSANELLI, Woodside, N. Y. Filed Apr. 21, 1917. Serial No. 163,655. (Cl. 155—22.



2. In a piano seat attachment, the combination with a plate adapted to be secured to the lower side of the key board and provided with a dropped casing having a longitudinal slot; of a post having at its lower end a lateral arm carrying a seat, a round head at its upper end slidably and rotatably mounted within said casing and of a greater diameter than the width of said slot, a bearing plate rigidly secured to the post beneath its head and sliding in contact with the lower face of said casing when the post is adjusted, said plate being of segmental formation with its major area on that side of the post opposite said arm, and a brace connecting the post with this plate at the point of its longest radius.

[Claim 1 not printed in the Gazette.]

1,266,000. SOLE-LEVELING MACHINE. CHARLES DE MINICO, Portsmouth, Ohio, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 2, 1915. Serial No. 43,244. (Cl. 12—34.)



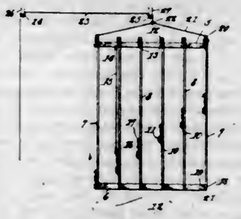
1. A leveling machine, having in combination, a leveling roll, a shoe supporting jack, mechanism for changing the relative longitudinal position and lateral inclination of the roll and jack, and a sole edge support projecting beneath the outstanding margin of the sole to support the sole during the operation of the leveling roll.

4. A leveling machine, comprising, a toe post, a head mounted upon the toe post, a pair of oppositely disposed sole edge supporting members fulcrumed upon the head and arranged to project beneath the edge of the sole when in operative position, and means for adjusting the two members toward and from one another to accommodate varying classes of work.

9. A leveling machine comprising a toe post, a toe rest, a sole edge support, means for adjusting the toe rest and sole edge support vertically with relation to the toe post, and connections between the toe rest and sole edge support to provide for vertical and lateral adjustments of the sole edge support relative to the toe rest.

[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

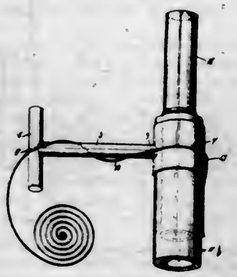
1,266,001. DRYING-CAGE FOR PHOTOGRAPHIC FILMS. BERTRAM L. DICKASON, Council Bluffs, Iowa. Filed Sept. 13, 1917. Serial No. 191,236. (Cl. 34—26.)



1. In a film drier, a cage, an upper and a lower frame, vertically disposed members supported by the upper and lower frames, cross bars adjustably connected to the said vertically disposed members, stationary cross bars on the said vertically disposed members, clip engaging hooks on the said cross bars, and means for suspending the structure.

[Claims 2 and 3 not printed in the Gazette.]

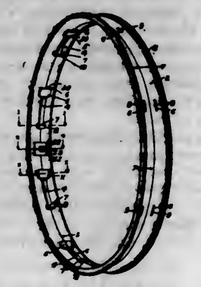
1,266,002. WRAPPING-TOOL. WILLIAM S. DOWNING, Houghton, Mich. Filed Oct. 6, 1917. Serial No. 195,161. (Cl. 140—93.)



2. In a wrapping tool, a plate, a shank extending at right angles to said plate, a guide on said shank adjacent the juncture of the plate with the latter, the said shank having a hand grip comprising a pair of angularly disposed arms at its outer end, the said grip and shank having angularly disposed openings disposed at an angle to the said guide, whereby a strand passed through said openings and engaged in said guide will pass partly around the said shank.

[Claim 1 not printed in the Gazette.]

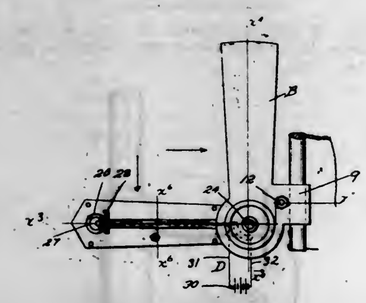
1,266,003. DEMOUNTABLE RIM. SCHUYLER C. EDDY, Kalamazoo, Mich. Filed Feb. 27, 1917. Serial No. 151,228. (Cl. 152—21.)



1. In a separable demountable rim, the combination of a pair of annular rim members, the inner edges of said rim members lying in engagement with each other, said rim members being provided with a plurality of slots disposed in pairs with a slot in one rim member in line with a slot in the other rim member; a plurality of locker bars of spring metal, each of said bars being pivoted to the inner face of one of said rim members, each of said locker bars being provided with a head having downwardly extending lugs adapted to engage in said slots, the end of each head being under cut; said rim members being provided with semicircular notches forming a valve stem hole when the rim members are assembled in proper relation; a pin secured to one of said rim members in line with said notch; and a block secured to the other rim member in line with the notches and provided with a notched portion adapted to receive said pin; all coacting substantially as described and for the purpose specified.

[Claims 2 to 5 not printed in the Gazette.]

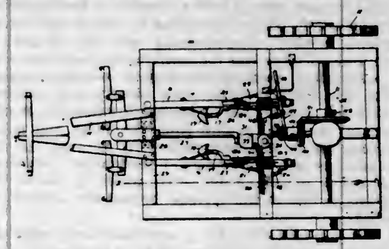
1,266,004. VEHICLE-SIGNAL. ALBERT LEE ELIEL, Los Angeles, Cal., assignor of one-half to Angus W. McDonell, Los Angeles, Cal. Filed Dec. 1, 1916. Serial No. 134,420. (Cl. 116—31.)



3. A vehicle signaling means, comprising a housing, a signaling member pivoted within the housing and adapted to be projected from or concealed within said housing, said signaling member comprising substantially flat sheets riveted face to face to one another and each provided longitudinally with an outwardly struck concavity and with an opening adjacent to its outer end and in communication with the concavity, said concavities registering to provide a channel to receive means to support illumination, said openings registering with one another, a source of illumination within the openings, and a means to support illumination mounted within the concavities and connected with the source of illumination.

[Claims 1 and 2 not printed in the Gazette.]

1,266,005. COTTON CHOPPER AND CULTIVATOR. JAMES L. ERWIN, Greensboro, N. C., assignor of one-half to Paul W. Mack, Greensboro, N. C. Filed May 5, 1917. Serial No. 166,666. (Cl. 97—45.)



1. A cotton chopper and cultivator comprising a frame, wheels fixed on an axle supporting said frame, a pair of cultivating implements suspended below the frame, a horizontal crank shaft extending longitudinally in the central line of the frame and mounted in bearings thereon, driving gear between the axle and the crank shaft, a sleeve slidable vertically on a support carried by the frame, an arm pivotally connected at one end to said sleeve and at its opposite end to the crank of the crank shaft and adapted to be moved by said crank shaft in a path transversely of the row of plants under treatment, and a chopping blade adjustably mounted on the lower end of said arm for engaging and removing certain plants from the row.

[Claim 2 not printed in the Gazette.]

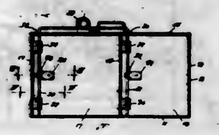
1,266,006. CABLE CONSTRUCTION. HENRY W. FISHER, Huguenot Park, N. Y., assignor to Standard Underground Cable Company, Pittsburgh, Pa. Filed July 10, 1916. Serial No. 108,376. (Cl. 173—264.)



1. The method herein described of making a stranded cable conductor which consists in gathering a bundle of strands, compressing the bundle when gathered with incidental development of sharp edges, and enveloping the compressed and sharp-edged bundle in a superadded layer of a smooth surface conductor.

2. A cable conductor composed of a central bundle of strands brought together and compacted and shaped one upon another by pressure into a bundle having incidentally developed sharp edges, and a layer of smooth surfaced conductor enveloping the compressed and sharp edged bundle.

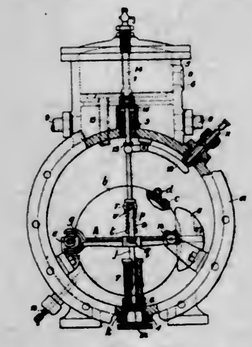
1,266,007. SAFETY RECEIVING-BOX. JOSEPH FRIEDLAND, Brooklyn, N. Y. Filed Feb. 10, 1917. Serial No. 147,852. (Cl. 232—41.)



1. A safety receiving box, comprising a casing having separated compartments with an entrance leading into each compartment and having doors one for opening and closing each entrance, retaining elements removably arranged in the compartments one at each entrance, a locking device on each door for releasably engaging the retaining element at the entrance of the door when closed, and means on the retaining elements as well as on the casing whereby a separate lock may be used to releasably hold the elements against removal from the casing.

[Claim 2 not printed in the Gazette.]

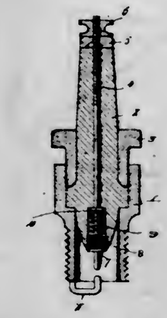
1,266,008. APPARATUS FOR SEPARATING FLUIDS OF DIFFERENT SPECIFIC GRAVITIES. JAMES SANDFORD GANDER, Stratford, London, England. Filed Jan. 13, 1916. Serial No. 71,904. (Cl. 210—5.)



1. Apparatus for separating fluids of different specific gravities comprising a closed container, an inlet for admitting the fluids to the chamber, an outlet for discharging the fluids from said container, a closed water tight float pivoted in said container, said float being adapted to rise in one of the fluids and to sink in the other fluid, a valve adapted to open and close one of said outlets, and means for converting the radial movement of the float to a motion to move the valve, and means whereby the amount of lift of the valve may be altered, while the machine is in active operation.

[Claims 2 to 9 not printed in the Gazette.]

1,266,009. SPARK-PLUG. FRANK GARACA, Bessemer, Ala. Filed June 20, 1917. Serial No. 175,914. (Cl. 123—169.)

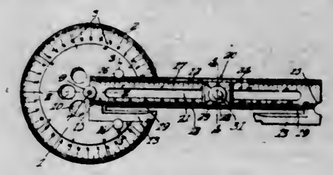


1. A spark plug comprising a shell, a porcelain body secured therein and having a recess in its lower end, stationary and movable electrodes, means for adjusting the movable electrode, with relation to the stationary electrode, and yieldable means associated with said movable electrode and adapted to be arranged in said recess.

2. A spark plug comprising a stationary and movable electrode, said movable electrode consisting of a rod passing through the body of the plug, said rod having a screw threaded upper end, a nut engaging said end and bearing against the top of the plug, a collar on the lower end of said rod and a spring compressed between said collar and a part of the plug.

3. A spark plug comprising a shell and a porcelain body held therein, said body having a recess in its lower end, stationary and movable electrodes, said movable electrode consisting of a rod passing through the body and through said recess, said rod having a screw threaded upper end, a nut engaging with said upper end, a collar on said rod and a coil spring in the recess and engaging said collar.

1,266,010. COMPASS. CHARLES F. GOLDEN, Chill, Ind. Filed June 25, 1917. Serial No. 176,817. (Cl. 33—26.)



1. An instrument of the nature indicated embodying a plate, an arm attached to said plate, an adjustable marking element carried by said arm, and a yieldable pivot point carried by said plate and projecting downwardly therefrom, said plate having an opening adjacent to said pivot point for exposing it from above.

3. An instrument of the character described, embodying a plate having an upstanding stud and a recess extending from said stud, a plunger movable vertically within the stud and having a pivot point at its lower end, and an arm adapted to fit in said recess and having a notch to accommodate said stud.

6. An instrument of the character described, embodying a plate having a recess with rabbets along the edges thereof, an arm adapted to fit said recess and having rabbets to interfit the aforesaid rabbets, and screws carried by said plate at opposite sides of said recess to bear on said arm and clamp it on the first mentioned rabbets.

9. An instrument of the character described, embodying an arm, and a slide movable along the arm and constructed to clamp it, said slide having a finger piece operable for clamping and loosening the slide, and a spring raised marking element carried by said finger piece and movable vertically therein.

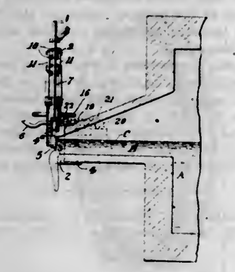
13. An instrument of the character described, embodying an arm having a slot and lower rabbets along said slot, a clamping member movable in said rabbets, a second clamping member movable on the arm, the first mentioned member having an upstanding sleeve projecting through the second mentioned member, a tubular finger piece threaded on said sleeve to clamp said members to the arm, a plug attached to the upper end of said finger piece, a stem slidable through said plug and within said sleeve, said stem having a marking element at its lower end, and a spring between said sleeve and stem for yieldably raising the latter.

[Claims 2, 4, 5, 7, 8, and 10 to 12 not printed in the Gazette.]

1,266,011. CONTROLLING MECHANISM FOR GLASS-FURNACES. ROBERT GOOD, Jr., Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va., a Corporation of West Virginia. Filed Sept. 3, 1914. Serial No. 859,986. (Cl. 49—55.)

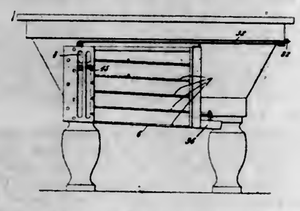
1. In an apparatus for flowing molten glass from a furnace or the like, a delivery spout, a clay bushing having an orifice therein through which the glass flows, and a water-cooled gate adapted to be moved across said orifice for regulating the flow of glass therefrom, the said

gate having a pivotal mounting, the said mounting having spring mechanism for pressing the gate against said bushing.



2. In apparatus for flowing molten glass from a furnace or the like, a delivery spout, a clay bushing about an orifice in the spout through which the glass flows, a water-cooled gate, mechanism for moving said gate across said orifice, and resilient means mounted in said mechanism remote from the gate for causing the mechanism to force the gate against the bushing.

1,266,012. POOL-BALL RACK. GEORGE F. GOSS, deceased, Wallaceton, Pa.; by Leonard J. Goss, administrator, Wallaceton, Pa. Filed June 12, 1917. Serial No. 174,358. (Cl. 46—12.)



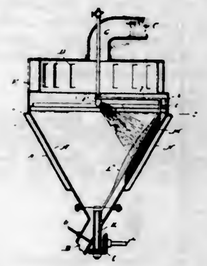
1. A pool ball rack having vertically spaced runways, a vertical plate, a slide movable along said plate and having a ball carrier to register with said runways, means for raising the slide when unoccupied, movable stops carried by said plate for limiting the downward movement of said slide, and means for retracting the stops in succession and holding them retracted.

2. A pool ball rack embodying vertically spaced runways, a vertical plate having a slot, a slide movable along said plate at one side thereof and having a ball carrier to register with said runways, means for raising the slide when unoccupied, movable stops carried by said plate at that side opposite to the slide and extending across said slot, said carrier having a portion projecting through said slot to be stopped by said stops, and means for retracting the stops in succession and holding them retracted.

3. A pool ball rack embodying vertically spaced runways, a vertical plate, a slide movable along said plate and having a ball carrier to register with said runways, stops pivoted to said plate to limit the downward movement of said slide, and means for swinging said stops out of the way and holding them retracted in succession.

4. A pool ball rack embodying vertically spaced runways, a vertical plate having a slot, a slide movable along said plate, a carrier pivoted to said slide for holding a pool ball, said carrier having a lug extending through said slot, means for raising the slide when the carrier is unoccupied, stops pivoted to said plate at that side opposite to the slide and projecting upwardly across said slot to limit the downward movement of said lug, and means for swinging said stops away from the slot in succession and holding them in retracted position.

1,266,013. PROCESS AND APPARATUS FOR DESICCATING LIQUID SUBSTANCES. CHESTER EARL GRAY, Eureka, Cal. Filed Sept. 30, 1915. Serial No. 53,386. (Cl. 127—9.)

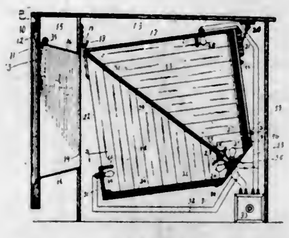


1. In apparatus for removing the moisture content of liquid substances and delivering the solids separated therefrom, the combination with a chamber having a circularly arranged stationary drying surface, of means for depositing the liquid substance on said surface in comminuted form including means for creating a cyclonic drying air current through the chamber and over the drying surface for causing the particles of substance to move toward and remain in proximity to said surface when detached therefrom and for carrying off the moisture, and means for mechanically detaching the solid particles of the substance progressively from said surface and for effecting a progressive movement of the same along said surface toward the point of discharge.

2. In apparatus for desiccating liquid substances, the combination with a desiccating chamber having a curved wall forming an internal continuous supporting surface, of a rotary liquid depositing device for progressively depositing the liquid on said internal supporting surface, means for rotating the said devices, means for progressively removing the dried substance from the supporting surface in front of the liquid depositor, and means for directing a whirling body of drying air through said chamber.

[Claims 3 and 4 not printed in the Gazette.]

1,266,014. ADVERTISING DEVICE. JAMES L. GRIBBLE and GUY L. WILLETT, Louisville, Ky. Filed Jan. 15, 1917. Serial No. 142,409. (Cl. 88—1.)



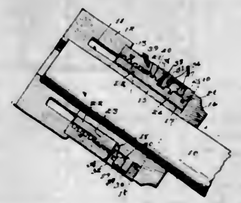
1. In apparatus as characterized, a dark chamber having an opening in a wall thereof, a box within said chamber, hooks positioned on the wall of the chamber above the said opening, means extended from the forward portion of said box and adapted to be engaged in said hooks, and means extended from a wall of the chamber and adapted to be adjustably engaged with the rear of the box to hold it at different angles to the opening.

2. In apparatus as characterized, a dark chamber, an exhibition box, said chamber and box having alined sight openings, a transparent reflecting medium suitably positioned within the box, a reflector removably positioned

in a corner of the box, and means for adjusting the box at an angle to the sight opening in the chamber.

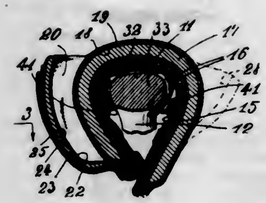
3. In apparatus as characterized, a chamber having a frontal sight opening, a light tight exhibition box suspended within said chamber, said box having an opening in alinement with the frontal opening in the chamber, a transverse beam within the box in proximity to a rear corner thereof, a pane of glass extended from said beam to the corner of the box opposite thereto, a removable back on the box, a removable tray within the box, said back and tray adapted to carry objects to be exhibited, illuminating means removably positioned in the rear of the transverse beam, said illuminating means comprising a double faced reflector adapted to reflect light respectively on the back and tray and means for alternately illuminating the back and tray.

1,266,015. LOCK FOR MOTOR-VEHICLE STEERING-WHEELS. BERT HARRINGTON and ADAM W. CLARKE, Des Moines, Iowa. Filed Sept. 21, 1916. Serial No. 121,458. (Cl. 70—129.)



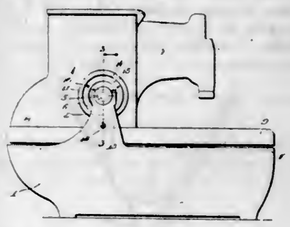
In an automobile steering wheel lock, the combination of a steering post, a wheel mounted thereon, having a hub provided with openings, a fixed cylindrical member mounted on said post, a cylinder slidably but non-rotatably mounted on said member having an upwardly extending locking bolt adapted to selectively enter said openings, and having a downwardly extending member, said cylinder and last described member being provided with external screw-threads, an internally screw-threaded collar or cylinder mounted on said externally screw-threaded cylinder, abutting against said hub at its upper edge, said fixed member having at its lower portion a shoulder having a groove for said downwardly extending member to travel in, locking rings superimposed on each other above said shoulder, and adapted to coact with said downwardly extending member for locking said cylinder in different positions, the parts being so arranged that said last collar is held against downward movement by said locking rings and said shoulder.

1,266,016. SAD-IRON HOLDER. WILLIAM H. HAWKES, Central Nyack, N. Y. Filed July 25, 1916. Serial No. 111,188. (Cl. 68—27.)



In a holder the combination with a flexible body, textile coverings disposed over its entire outer surface, a pocket extending along the entire length of said holder upon one side, said pocket being substantially level with the top of said body open at its upper edge and adapted to receive all of the fingers of one hand, a second pocket on the opposite side of said body adapted to receive the thumb only, said second pocket being angularly disposed with reference to the top of said body, padded flexible material forming the outer walls of said pockets, and metallic reinforcing plates on the exterior of said pockets.

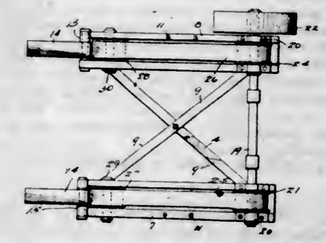
1,266,017. SAFETY DEVICE. GEORGE S. HILL, Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 22, 1916. Serial No. 92,943. (Cl. 74—13.)



1. The combination of a stationary base, a head pivotally mounted upon the base upon a substantially horizontal axis located in the rear of the center of gravity of the head and adapted to have a limited tipping movement about said axis, the front of the head normally resting upon the stationary base and being adapted to be raised by the operator against the action of gravity, and cooperating friction members connected with the stationary base and the tipping head respectively when the head is being lowered, one of said members being automatically disconnected when the head is being raised.

2. The combination of a stationary base provided with a pair of upwardly extending bearing supports, a tipping head pivotally mounted upon said supports and adapted to have a limited tipping movement about an axis located behind the center of gravity of the head, the front of the head normally resting upon the base, a friction band secured to one of said supports, means for adjusting the band, a friction ring coöperating with the band, and a one direction clutch for connecting the head and ring when the head is being lowered, said clutch being inoperative when the head is being raised.

1,266,018. POWER PLANT. FRANKLIN C. HOLMAN, Pueblo, Colo. Filed Mar. 29, 1917. Serial No. 158,290. (Cl. 74—106.)

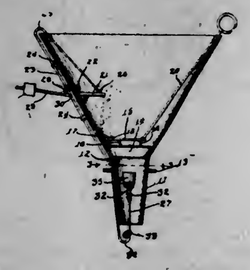


1. The combination with a supporting base, of a tiltable frame thereon, and cross bars on the base for supporting the frame at its ends, a skid-brace hinged at the front of the frame, and a power developing apparatus on the frame including friction belts for coaction with the driving wheels of an automobile.

2. The combination with a supporting base having a pair of pointed fulcrum blocks and transverse cross bars,

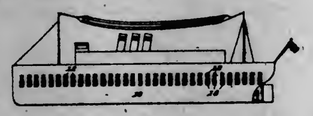
of a tiltable frame having notched fulcrum plates resting on the blocks, and a hinged skid-brace at the front of the frame, a driving shaft journaled at one end of the frame and a pair of pulleys thereon located at the sides of the frame, a stud shaft and an idle pulley located at the front end of each side of the frame leaving an open space therebetween and a pair of friction belts passing over the pulleys, whereby the driving wheels of an automobile may be supported in a depression of the belts between the driving pulleys and the fulcrum point of the frame.

1,266,019. FUNNEL. JOHN HUTZELMAN and IGNACIO BERESFORD, Warner Springs, Cal.: said Beresford assignor to said Hutzelman. Filed Nov. 1, 1915. Serial No. 59,129. (Cl. 226—33.)



In combination with a funnel, a valve within the lower portion of the funnel and hinged thereto, a catch supported within the funnel for holding the valve open, a rod exterior to the funnel and having its upper end extending over and into the funnel and connected with the catch, a float at the lower end of the rod to be actuated by the liquid for automatically disengaging the catch from the valve, and a weighted arm pivoted to the funnel and connected with the said rod to exert an upward pressure thereon.

1,266,020. SHIP-PROTECTOR. JAN JAKUBIK, Windber, Pa. Filed Sept. 7, 1917. Serial No. 190,173. (Cl. 114—240.)



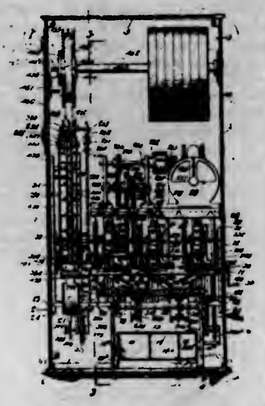
7. In a ship, in combination, with the side thereof, a series of torpedo impact members, each of said members being constructed in the same way and composed of a base plate secured to said side, a depending V-shaped plate adapted to have the opposing inclined sides converging forwardly of said side, and curving forwardly and downwardly from said bracket, a rubber cover shaped similarly to and secured upon each inclined side of said plate, and spring braces connecting said plate and the side of the ship.

[Claims 1 to 6 not printed in the Gazette.]

1,266,021. VENDING-MACHINE. ELIAS H. KELLEY, New York, N. Y. Filed Dec. 17, 1909. Serial No. 533,638. (Cl. 194—93.)

23. A vending machine having, in combination, means for delivering articles therefrom in variable quantities; operating mechanism for actuating said delivery means; and means for variably setting the active element of the delivery means whereby to vary the extent of movement of the delivery means.

59. A vending machine having, in combination, means for delivering different quantities of articles therefrom, a plurality of tripping devices for controlling the operations of the delivery means; and means whereby one or the other of said tripping devices may be brought into action so as to control the amount the machine will deliver.



74. A vending machine having, in combination, delivery means; a plurality of coin controlled devices; operating mechanism connecting the delivery means with the coin-controlled devices; and means whereby either one of the coin-controlled devices may trip the operating mechanism into operation and cause the delivery mechanism to deliver the requisite number of articles.

100. A vending machine having, in combination, means for guiding and delivering articles from a single strip including an endless device, means on said device for cooperating with the strip, and means for variably driving said device so as to deliver as many articles as may be required.

171. A ticket-issuing machine provided with a feeding mechanism for issuing a ticket-strip, means for determining the degree of movement of said feeding mechanism so as to control the issuance of the desired number of tickets, and means for causing said feeding mechanism to operate automatically whenever said controlling means is actuated.

[Claims 1 to 22, 24 to 58, 60 to 73, 75 to 99, 101 to 170, and 172 to 177 not printed in the Gazette.]

1,266,022. TYPOGRAPHICAL MACHINE. DAVID S. KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Feb. 15, 1917. Serial No. 148,716. (Cl. 199—33.)



1. In a typographical machine, the combination of a distributer presenting a series of combinations at different points in its length, a channeled magazine, and an intermediate magazine entrance having channels leading from the distributer combinations to the corresponding channels of the magazine, the said entrance channels being constituted by sets of opposing grooves formed in the opposite side plates of the entrance and lying in vertical planes passing through the releasing points of the corresponding distributer combinations.

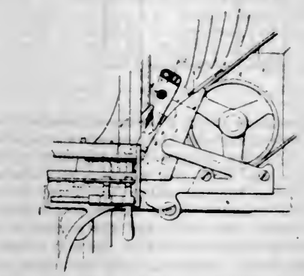
6. In a typographical machine, the combination of a distributer presenting a series of type or matrix releasing combinations at different points in its length, and a coöperating member having a corresponding series of channels to receive the released type or matrices therefrom, the said channels being constituted by sets of opposing grooves, and all of the several sets being located in the same position with respect to the releasing points of their corresponding distributer combinations.

11. In a typographical machine, the combination of type or matrices of varying body thicknesses, each formed with a distributing combination and with projecting ears, a distributer having a combination to coöperate with those of the type or matrices and effect their release therefrom at the same point, and a grooved member to receive the released type or matrices and having its groove arranged in a vertical plane passing through the releasing point of the distributer combination, the said type or matrices having their combinations and projecting ears arranged in the same plane irrespective of their body thickness to correspond to the relation existing between the aforesaid groove and distributer combination.

15. In a typographical machine, the combination of a font of type or matrices each formed on its opposite edges with projecting ears and provided at its upper end with a distributing combination, the said projecting ears and combination being arranged in the same plane and located at the forward side of each type or matrix throughout the font, a distributer having a series of combinations to coöperate with those of the type or matrices and effect their release therefrom at different points according to character, and a coöperating member formed with sets of opposing grooves to receive the released type or matrices, and said sets of grooves being located in vertical planes passing through the releasing points of the corresponding distributer combinations, for the purpose described.

[Claims 2 to 5, 7 to 10, and 12 to 14 not printed in the Gazette.]

1,266,023. TYPOGRAPHICAL MACHINE. DAVID S. KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Feb. 24, 1917. Serial No. 150,688. (Cl. 199—28.)



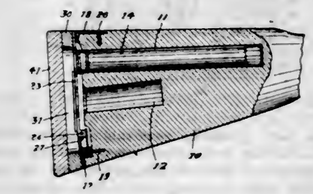
1. In a typographical machine comprising matrices formed with projecting ears at their opposite ends, the combination of a magazine to contain the matrices, an assembler wherein the matrices are composed in line, means for delivering the matrices to the assembler in unreversed position, and guiding means to coöperate with the matrices in their passage to the assembler, the said guiding means including a flange to engage the projecting ears at both ends of the matrices at one side and confine them to their proper path of travel.

4. Typographical assembling mechanism capable of handling matrices formed with projecting ears and including, in combination, an assembler wherein the matrices are composed in line, a conveyer belt for delivering matrices to the assembler, rails leading from the discharge end of the belt to the entrance of the assembler, and a trough-shaped guide overlying the rails, the said guide facing downward toward the rails and having its flanges arranged in position to engage the projecting ears of the matrices as they pass therealong.

8. Typographical assembling mechanism capable of handling matrices formed on opposite edges with projecting ears and including, in combination, an assembler wherein the matrices are composed in line, a conveyer belt for delivering matrices to the assembler, intermediate rails constructed and arranged to receive the matrices from the discharge end of the belt and deliver them to the assembler in unreversed position, and a pair of guide flanges overlying the rails and arranged in position to engage the projecting ears of the matrices on their opposite edges as they pass therealong.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,266,024. GUN-STOCK. LAWRENCE F. KENNEDY, St. Paul, Minn. Filed Oct. 10, 1914, Serial No. 866,067. Renewed Aug. 29, 1917. Serial No. 188,872. (Cl. 42—71.)



1. In combination with a gun having a chamber in the stock opening through the butt end thereof, a metallic butt plate secured to the end of said stock and having a gate opening into said chamber, a recoil absorbing member, and means securing said member to the butt plate in such manner that the member may be removed from in front of the gate to permit opening thereof.

2. In combination with a gun having a chamber in the stock opening through the butt end thereof, a metallic butt plate secured to the end of said stock and having a gate opening into said chamber, and a recoil absorbing member including a resilient recoil pad hingedly connected to said metallic plate.

3. In combination with a gun having a chamber in the stock opening through the butt end thereof, a metallic butt plate secured to the end of said stock and having a gate opening into said chamber, a recoil absorbing member including a resilient recoil pad connected by means of inset hinges with said metallic plate, and means for locking said recoil member in closed position to form a butt-end continuation of the gun-stock.

[Claim 4 not printed in the Gazette.]

1,266,025. WHEEL. ALBERT LESTER KNAUSS, Sugar City, Idaho. Filed Dec. 9, 1916. Serial No. 136,029. (Cl. 152—43.)

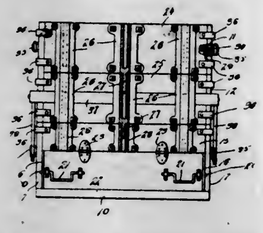
In a device of the class described, in combination, a wheel, having spokes and a ring like member, an annular member secured against one edge of said ring like member, a cap having a base flange of the same width and diameter as said annular member secured to the other edge of said ring like member, an annular rubber cushion fitting said ring like member of said annular member and the mentioned flange, a hub embraced by said rubber cushion, a rotatable shaft in said hub, a transverse block formed integrally about the outer end of said cap and having a rectangular bore closed at its outer end, a rec-

tangular slidable member of a length equal to the width of said block and slidable therein, and a connecting link



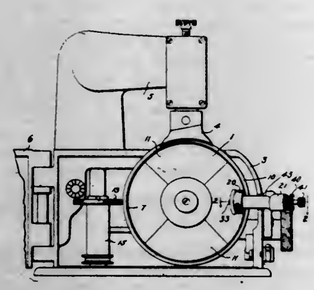
pivotally connecting said shaft and said rectangular member.

1,266,026. END-GATE. MILES J. LARKIN and FRANK J. LITEL, Tekamah, Nebr. Filed June 24, 1916. Serial No. 105,705. (Cl. 21—21.)



A wagon body including removable upper sections, an end gate including removable upper sections, plates secured to the outer faces of the sections of the end gate and provided with vertically extending sockets, depending pins extending from the lower ends of the sockets and fitting into the sockets of the adjoining sections of the end gate, a yoke carried by one of the sections of the end gate and held in place by the sockets carried thereby, and supporting arms pivotally connected with said wagon body and pivotally connected with the end portions of said yoke for supporting the end gate in an open position.

1,266,027. SKIVING-MACHINE. ALBERT LATHAM, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 13, 1915. Serial No. 45,402. (Cl. 69—9.5.)



1. A skiving machine comprising a tubular skiving knife, a grinding disk engaging with one surface of the knife to form a bevel cutting face, and a grinding disk supported in operative relation to the opposite surface of the knife with the face of the disk arranged to contact with the moving surface of the knife.

3. A skiving machine comprising a tubular skiving knife, a casing, a bracket secured to the outside of the casing, a spindle supported in the bracket and projecting within the casing, a grinding disk mounted upon the inner end of the spindle and arranged with one face in operative relation to the inner surface of the knife, and means for moving the grinding disk into contact with the knife.

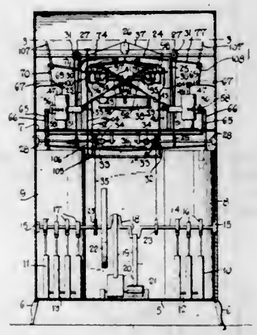
4. A skiving machine comprising a tubular skiving knife, a grinding disk positioned in operative relation to one surface of the knife, and means for supporting the disk with its face in operative relation to the surface of the knife, constructed and arranged to cause the knife surface to be ground by the face of the disk in a series of intersecting lines to form a serrated cutting edge.

6. A skiving machine comprising a skiving knife, a stationary bracket, a spindle slidingly supported in the bracket, a grinding disk mounted upon the end of the spindle in operative relation to the knife, a spring for normally moving the disk into contact with the knife, and an adjustable stop for limiting the movement of the disk toward the knife.

8. A skiving machine comprising a skiving knife, a bracket having a recess formed therein, a spindle slidingly mounted in the bracket, a grinding disk secured to the spindle, a spring located in the recess and normally tending to move the grinding disk into contact with the knife, and a stop adjustably secured in the bracket to limit the movement of the disk toward the surface of the knife.

[Claims 2, 5, 7, and 9 not printed in the Gazette.]

1,266,028. AUTOMATIC VIOLIN-PLAYER. LEDRA M. LAWTON, North Collins, N. Y. Filed Mar. 27, 1915. Serial No. 17,461. (Cl. 84—222.)

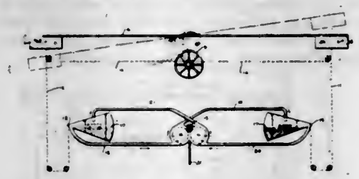


1. The combination with a stringed musical instrument, of bows operating upon the respective strings of the instrument, a plurality of cylinders, individual operating mechanisms for the respective bows each including a reciprocable element mounted within one of the cylinders, air pressure and vacuum tanks, valves controlling communication between said tanks and the respective cylinders, an operating means for each of the said valves, and means for selectively actuating said operating means, whereby the air is admitted to said cylinder and a vacuum created therein alternately to move the reciprocable element in opposite directions and operate the respective bows.

[Claims 2 to 12 not printed in the Gazette.]

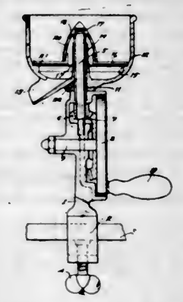
1,266,029. BALANCING APPARATUS. LOUIS H. LEHMAN, New York, N. Y. Filed May 19, 1915. Serial No. 29,201. (Cl. 244—29.)

1. In an apparatus of the class described, a liquid circulating system whereby any tendency of said apparatus to become unbalanced is opposed by the automatic shifting of the liquid circulated therein, said opposition set in action by a pump, and containers at opposite sides of said system adapted to pocket said liquid according to the balance of said apparatus.



2. In an apparatus of the class described, a liquid circulating system provided with containers at opposite sides of said apparatus and means for automatically charging and discharging said containers to oppose any change in the horizontal balance of said apparatus, said means being adapted to drive said liquid in opposite directions to each of said containers.

1,266,030. EXTRACTOR. JOHN F. LINS, San Francisco, Cal. Filed Jan. 17, 1918. Serial No. 212,193. (Cl. 100—49.)

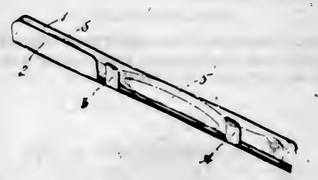


1. In a fruit juice extractor, the combination with a bowl or receptacle provided with an open top and further provided with an outlet at its base, a rotatable shaft extending upwardly therethrough, an extractor cone carried thereby, a strainer removably positioned in the base of said receptacle above the outlet therein and surrounding said shaft at a point below said cone, and an agitator arm radiating from the base of said cone for contacting with the surface of said strainer to agitate the pulp received thereon.

2. In a fruit juice extractor, the combination with a bowl or receptacle provided with an open top and further provided with an outlet at its base, a rotatable shaft extending upwardly therethrough, a hollow extractor cone provided with ports in the wall thereof communicating with the interior of said cone, a strainer removably positioned in the base of said receptacle above the outlet therein and surrounding said shaft, said strainer provided at a point beneath said cone with an opening to permit the passage of the juice passing through said ports therethrough, and an agitator radiating from the base of said cone for contacting with the surface of said strainer to agitate the pulp received thereon.

1,266,031. SURGICAL-INSTRUMENT SHIELD. RICHARD P. MCCULLY, Brooklyn, N. Y., assignor of one-half to Charles H. McCully, Brooklyn, N. Y. Filed Nov. 21, 1917. Serial No. 203,139. (Cl. 206—16.)

1. An instrument shield comprising front and back plates with means for connecting the same and holding the same spaced, one of said plates being shorter than the other and being located adjacent to one end of the latter, with means for holding an instrument in place in said shield whereby the sharp or pointed end of said instrument will be located between said plates to be protected thereby.

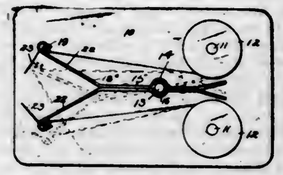


3. An instrument shield comprising a base, a back wall extending upwardly therefrom throughout substantially the full length of said base, a front wall shorter than the back wall and projecting upwardly therefrom at one end of said base to form a protecting space at one end of said shield with yielding means to permit an instrument to be introduced into and removed from said shield at one edge thereof, said means comprising spaced spring fingers projecting upwardly from the base.

5. An instrument shield comprising a base, a pair of plates projecting upwardly therefrom and forming a protecting space between them, one of said plates being shorter than the other, with means for holding an instrument in place in said shield with the sharp or pointed end of the instrument in the space between said plates.

[Claims 2 and 4 not printed in the Gazette.]

1,266,032. THREAD CUTTER AND HOLDER. JAMES M. MAJORS, Ottumwa, Iowa. Filed June 11, 1917. Serial No. 174,132. (Cl. 242—135.)

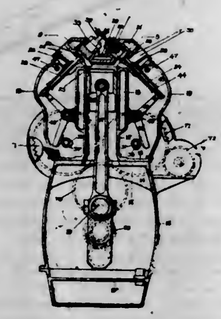


1. In a device of the class described, a support, a vertical pin having one end fixed in the support, an arm pivotally mounted on said pin, a thread guide formed at the free end of said arm and adapted to permit thread to slide freely therethrough when pulled in one direction and to retard the movement of thread therethrough when the thread is pulled in another direction sufficiently to move the arm upon its pivot, means operatively connected with said arm adapted to limit its movement caused by pulling the thread in the last described direction and to also lock the thread from movement in one direction through the guide when the arm reaches its limit, and a second edge disposed adjacent to the thread guide in such position that the thread will have to be pulled from the guide in the direction, which causes movement of the arm with the consequent locking of the thread in order to pass the thread across the cutting edge.

2. In a device of the class described, a base, a pair of spools mounted thereon in position spaced from each other, an arm pivoted intermediate of its ends to said base, a thread guide formed at one end of said arm adapted to permit free movement of thread therethrough in one direction and to frictionally engage said thread when pulled therefrom in another direction, a stop device secured to said base in the path of travel of the other end of said movable arm, a second thread guide secured to said base adapted to cause the thread to travel between said stop and the cutting end of said arm when the thread is pulled through the first described guide, a blade secured to the base in position spaced from the first described guide whereby pulling the thread through the first described

guide to position where it may be cut on said blade moves the movable arm to position where the stop and coacting part of the arm engage the adjacent portion of the thread to lock it from movement.

1,266,033. INTERNAL-COMBUSTION ENGINE. ANTHONY J. METZ, Des Moines, Iowa. Filed Feb. 7, 1917. Serial No. 147,238. (Cl. 123—59.)



1. In an engine, an upright cylinder, a water jacket surrounding the sides of said cylinder, a removable head above said cylinder having a water jacket, casing members on opposite sides of said cylinder spaced from the water jacket, means for detachably connecting said casing members with said removable head, said head being formed to leave a space above the cylinder, and being formed with passages from said space extending laterally, whereby exhaust gases from said cylinder may pass from the cylinder through said spaces and passages, by making substantially a quarter turn, valve seats in said passages, valves adapted to coact with said seats having stems slidably mounted in said head, and means within the compartments formed by said casing members for actuating said valves.

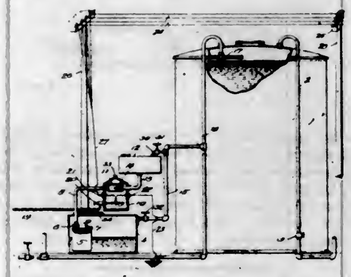
3. In an engine, an upright cylinder, a water jacket surrounding the sides of said cylinder, a removable head above said cylinder having a water jacket, casing members on opposite sides of said cylinder spaced from the water jacket, means for detachably connecting said casing members with said removable head, said head being formed to leave a space above the cylinder, and being formed with passages from said space extending laterally, whereby exhaust gases from said cylinder may pass from the cylinder through said spaces and passages, by making substantially a quarter turn.

6. In a device of the class described, a plurality of engine cylinders, a crank shaft below the cylinders, a crank case therefor, compartments arranged alongside said cylinders above said crank shaft and crank case, pairs of valves arranged on opposite sides of each cylinder, adjacent to the upper end thereof, a valve operating mechanism in each of said compartments, including a cam shaft having cams thereon, a rocker arm shaft, a sleeve on said rocker arm shaft for each cylinder, an arm on each sleeve, operatively connected with one of said cams, and pairs of arms on each sleeve operatively connected with the adjacent pair of valves.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,266,034. AUTOMATIC FIRE PREVENTER AND EXTINGUISHER. HENRY DAVID MILLER, Lawton, and SAMUEL BUDD LIPPINCOTT, Oklahoma, Okla. Filed June 12, 1917. Serial No. 174,277. (Cl. 169—11.)

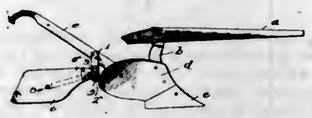
1. An automatic fire extinguisher for oil tanks comprising in combination, a receptacle containing a solution of sodium bicarbonate and having an outlet delivering to the tank, a jar for sulfuric acid in the receptacle and having a discharge at its top delivering to the receptacle, a burner casing provided with a burner, a pipe leading from the jar and extending into the casing above the burner, a tank of water having a discharge pipe leading into the last named pipe in the burner casing, said pipe being normally closed by a fusible plug within the pipe from the receptacle, an electric circuit having a spark gap in the burner casing at the burner, an aerial above the tank, the circuit being connected at one end to the aerial and grounded at the other.



2. An automatic fire extinguisher for oil tanks comprising in combination, a receptacle containing a solution of sodium bicarbonate and having an outlet delivering to the tank, a jar for sulfuric acid in the receptacle and having a discharge at its top delivering to the receptacle, a burner casing provided with a burner, a pipe leading from the jar and extending into the casing above the burner, a tank of water having a discharge pipe leading into the last named pipe, in the burner casing, said pipe being normally closed by a fusible plug within the pipe from the receptacle, and an electric circuit having a spark gap in the burner casing at the burner.

[Claims 3 to 9 not printed in the Gazette.]

1,266,035. PLOW ATTACHMENT. JAMES F. MOFFETT, West Newton, Pa.. Filed July 5, 1917. Serial No. 178,759. (Cl. 97—18.)

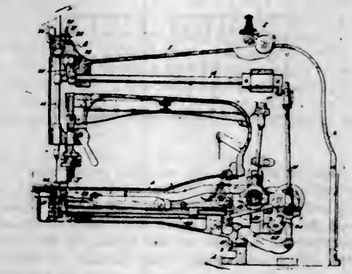


4. An attachment for a walking plow comprising a deflecting plate provided at one end with a bearing sleeve, a plate adapted to be secured to one handle of a plow and provided with a depending stud adapted to be inserted through said bearing sleeve so as to pivotally secure the deflecting plate to the plow handle for adjustment about a vertical axis, a stay rod pivotally secured at one end to the plate intermediate the ends thereof, a plate adapted to be secured to the other handle of the plow and provided with a slot for slidably receiving said stay rod, and means for adjustably securing the stay rod through said last mentioned plate.

[Claims 1 to 3 not printed in the Gazette.]

1,266,036. MULTIPLE-NEEDLE SEWING-MACHINE. GEORGE E. MOLYNEUX, Bayonne, and GEORGE S. GATCHELL, Roselle Park, N. J., assignors to The Singer Manufacturing Company, a Corporation of New Jersey. Filed July 19, 1915. Serial No. 40,564. (Cl. 112—5.)

1. A sewing machine having a plurality of needles set in a plane crossing the line of feed, a single looper cooperating therewith to form stitches, thread-controlling devices adapted for differentially timed action upon the needle-threads, and thread-guides coöperating with said devices, said thread-controlling devices operating to take up substantially all of the slack thread formed during the first part of the down stroke of the needles and to successively tighten the needle-loops as they are shed from the looper.

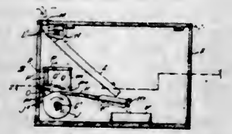


16. In a sewing machine, the combination with stitch-forming mechanism including a plurality of needles, of means for effecting the differential control of the needle thread-loops, including a series of spring-pressed thread-engaging-arms, and positively acting means for moving said arms, the degree of movement differing in successive arms.

23. In a sewing machine, the combination with stitch-forming mechanism including a plurality of needles fixed relatively to one another and a looper, of means for controlling the nascent needle thread-loops, comprising a series of spring-pressed arms, and means for effecting the movement of said arms to impose a tension upon the needle-threads during the descent of the needle.

[Claims 2 to 15, 17 to 22, and 24 not printed in the Gazette.]

1,266,037. VENDING-MACHINE. ROBERT MOORE, McFarlan, N. C. Filed May 4, 1916. Serial No. 95,352. (Cl. 194—25.)

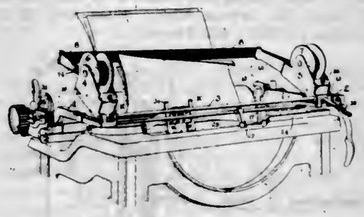


1. In a check controlled vending apparatus, a shaft, a cam wheel rigidly mounted on said shaft at one end, means for locking said cam wheel against rotation in one direction, means for releasing said cam wheel to rotate in the opposite direction, said means including a coin chute to guide the coin; a normally balanced horizontally disposed trigger locking at one end the cam wheel, and having an open ended coin receiving trough at its opposite end, a stop-gate adjacent the open end of said trough, a projection on said cam wheel to engage the trigger when partly tripped by the coin, a checking device to prevent overthrow of the trigger, consisting of a pivoted lever adapted to be engaged at one end by said trigger, a pivoted beam, a spring connected at one end to said beam and at its opposite end to the pivoted checking lever, said beam carrying rods at opposite ends, one rod adapted to be engaged by the projection on the cam wheel and to cause the rod at the opposite end to force the trigger into locking engagement with the cam wheel upon a complete revolution of the shaft.

2. In a check controlled vending apparatus, a rotary shaft, a disk carried at one end thereof, a shouldered notch in the periphery of said disk, a pivoted trigger adapted to engage at one end said notch and at its opposite end to receive a deposited check, and to be partially tripped thereby, yielding means for limiting such partial tripping operation, means carried by said disk for further tripping said trigger to discharge the check therefrom, and means actuated by said further tripping means to restore the trigger to its locked position upon rotation of said disk.

[Claims 3 and 4 not printed in the Gazette.]

1,266,038. DUPLICATING MECHANISM FOR TYPEWRITERS. EDWARD F. MUMM, Milwaukee, Wis. Filed July 8, 1915. Serial No. 38,732. (Cl. 197—153.)



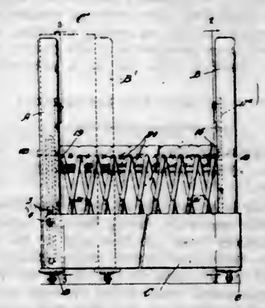
1. A duplicating attachment for typewriters and the like applicable to standard machines without altering the construction thereof, comprising supporting means adapted to be readily applied to the carriage of a machine in a fixed position, means pivoted to said supporting means carrying a plurality of ribbon reels and supporting a supplementary printing ribbon adjacent the printing line of the platen of the machine and means coöperating with said reels for automatically moving the ribbon lengthwise of the platen.

11. The combination with a typewriter of an attachment adapted to readily be applied thereto comprising supports readily mountable adjacent the ends of the platen of the machine, a shaft journaled in said supports, means on said shaft carrying ribbon reels and supporting and guiding a supplementary printing ribbon wound on said reels adjacent the printing line of the platen and means carried by said supports coöperating with means on the frame of the typewriter for automatically actuating the reels to move the ribbon lengthwise of the platen as the typewriter is operated.

19. A duplicating attachment for typewriters and the like comprising two supplementary ribbon reels and supplementary ribbon guides adapted to be attached to the carriage of a standard machine and pivoted to move the supplementary ribbon into and out of duplicating position, independent means for rotating each reel, a shaft for operating each of said means, an arm adapted to be operatively connected to either shaft, and means for actuating said arm upon the return of the carriage to the end of a line of print.

[Claims 2 to 10 and 12 to 18 not printed in the Gazette.]

1,266,039. BED. EDNA M. NAKAZAWA, New York, N. Y. Filed May 5, 1916. Serial No. 95,649. (Cl. 5—58.)

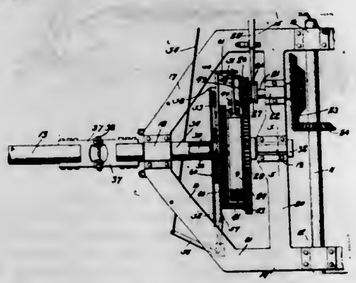


2. A bed including head and foot members, sides connecting such members, a mattress frame slidably and piv-

otally mounted on one of said members and arranged to fold in a plane parallel therewith, and a U-shaped member pivoted to one of the first mentioned members and arranged to fold parallel with the latter and unfold at right angles thereto to limit the separation of the head and foot members.

[Claims 1 and 3 not printed in the Gazette.]

1,266,040. SELF-DUMPING GEAR FOR HARVESTERS. OLE OLSON, Jr., Avoca, Minn. Filed May 29, 1917. Serial No. 171,737. (Cl. 74—46.)



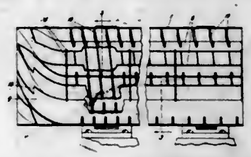
1. A device of the character described comprising a frame, a driving shaft rotatably connected with the frame, a counter-shaft rotatably connected with the frame and driven from the driving shaft, a clutch gear slidable upon the counter-shaft, a hollow shaft rotatably connected with the frame and provided with a transversely extending slot communicating with its bore, a spindle connected with the frame and extending into the hollow shaft and provided with a pin extending through the slot thereof, a housing mounted upon the hollow shaft, a gear rotatably mounted upon the spindle and positioned for engagement by the clutch gear, a second clutch comprising a drum extending from the last mentioned gear into the housing, a band positioned about the drum and having one end connected with the housing, a lever pivotally connected with the wall of the housing and engaging the free end of the band, resilient means connected with the housing for yieldably holding the same in a set position, and a trigger extending from the gear carrying the drum for engaging the band engaging lever to swing the same and draw the band tightly about the drum and cause the hollow shaft to rotate with the gear.

10. A device of the character described comprising a frame, a driven shaft carried by the frame, a drive shaft carried by the frame, a stationary supporting element having operative connection with the driven shaft to limit rotation thereof, a drum rotatable upon the stationary support, means for transmitting rotary movement from the driving shaft to the drum, a carrier carried by the driven shaft, clutch means carried by the carrier for engaging the drum, manually operated means for bringing the clutch means into an operative position, and means carried by the drum for bringing the clutch means into an operative position once for each revolution of the drum.

[Claims 2 to 9 not printed in the Gazette.]

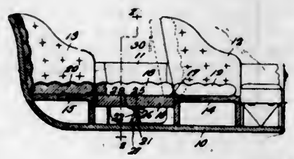
1,266,041. KELP-DRIER. SIMON RUDOLPH OPPENHEIM, Keeler, Cal. Filed June 7, 1917. Serial No. 173,368. (Cl. 34—5.)

1. A drier for kelp and like material comprising a cylindrical rotatably mounted drum, having internal vanes extending obliquely from the feed end of the drum part way along the drum, and thence longitudinally along the drum, parallel to the axis of the drum, to the delivery end of the drum, said vanes being directed so that their inner ends are advanced in the direction of rotation to form lifting pockets, and cross plates extending between said longitudinally extending vanes and extending obliquely with reference to the longitudinal direction so as to move the material longitudinally of the drum.



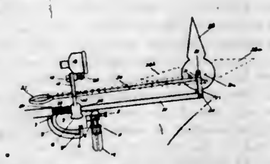
2. A drier for kelp and like material comprising a cylindrical rotatably mounted drum, having internal vanes extending obliquely from the feed end of the drum part way along the drum, and thence longitudinally along the drum, parallel to the axis of the drum, to the delivery end of the drum, said vanes being directed so that their inner ends are advanced in the direction of rotation to form lifting pockets, and cross plates extending between said longitudinally extending vanes and extending obliquely with reference to the longitudinal direction so as to move the material longitudinally of the drum and said plates being of less height than said vanes so as to occupy only the peripheral portions of said pockets.

1,266,042. AUTOMOBILE-BED. JOHN B. OSLER, Kenesaw, Nebr. Filed Nov. 20, 1916. Serial No. 132,440. (Cl. 21—43.)



An automobile cushion including an upholstered covered rectangular box frame, supporting members for said frame including a pair of longitudinal boards hingedly connected to the box frame, the ends of the boards being beveled downward, and a triangular support hingedly mounted on each end of the frame, hook members pivotally mounted on the end supports, and catches on the ends of the longitudinal members engaged by the hook supports to retain the supports in an extended position when the cushion is in use, the supports being foldable beneath the frame to lie in a flat plane when the cushion is not in use.

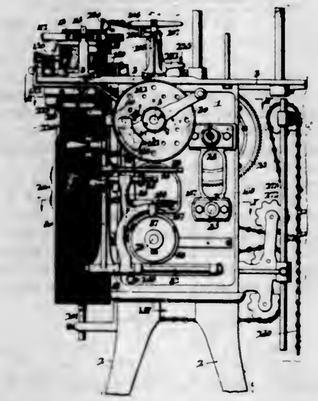
1,266,043. VEHICLE-SIGNAL DEVICE. PAUL PEBELIER, San Jose, Cal. Filed July 23, 1917. Serial No. 182,303. (Cl. 116—31.)



2. In a vehicle signal device, the combination of a metal stanchion support, a metal clasp attached to said stanchion support, adapted to be clamped to a windshield of an automobile; a quadrant attached to said stanchion support; notches in said quadrant; a metal stanchion turnably secured to the metal stanchion support and concentric with said quadrant; a bore through the lower part of the stanchion; a rod passing through said bore and extending a distance on both sides of said stanchion and solidly fastened therein; a signal fulcrumed at the outer end of said rod; means for manually operating said signal whereby the signal may be pointed to the right, left or upward, and means for holding said signal in said positions; a handle slidably secured to the inner end of said rod; a pin through said handle and rod, adapted to limit the sliding movement of the handle and to engage the notches in the quadrant; a tension spring, positioned between the handle and the stanchion, whereby the pin may be manually released from engagement with said notches and the stanchion turned through a predetermined arc and held in these positions by said pin and notches; an opening in the upper end of the stanchion, for fastening a lamp bracket thereto, substantially as set forth.

[Claim 1 not printed in the Gazette.]

1,266,044. CIRCULAR-KNITTING MACHINE. ALBERT M. PIGEON, Philadelphia, Pa., assignor to Pigeon Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 19, 1911. Serial No. 633,938. (Cl. 66—24.)



4. In a knitting machine, the combination of a needle cylinder having a plurality of spaced ribs forming needle slots; needle jacks mounted in said needle slots, said jacks having operating butts, and being provided with stitch cams for engaging said butts; needles located in the needle slots and having their lower portions bent outwardly and downwardly to overlie the upper portions of the jacks, and having their lower extremities bent inwardly to engage said jacks; and flexible means for engaging the needles above the jacks, whereby said needles retain the upper ends of the jacks in place in the needle slots.

39. In a knitting machine, the combination of a needle cylinder, means for operating the needle cylinder, needles carried thereby, means for operating said needles, and a pattern mechanism for controlling the operation of the needle cylinder and needles, including cams, a shaft for operating said cams, a ratchet wheel for operating said shaft, a pattern member for controlling the movements of said ratchet wheel, a second ratchet wheel for operating said pattern member, a vibrating member, and devices carried by said vibrating member for moving one of said ratchet wheels upon a movement of the vibrating member in one direction, and for moving the other ratchet wheel upon a movement of the vibrating member in the opposite direction.

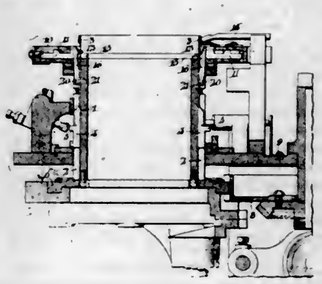
42. The combination in a knitting machine of spring beard needles having relatively wide hooks, means to lay the yarn against the shanks of the needles without sinking it between them, means to press the needle beards, a series of independently movable web-holders having upper and lower surfaces, and means to move the needles independently to cause them to advance to take the yarn, to recede toward the upper surface of the web holders to engage the yarn, and to recede beneath the level of the lower surface of the web holders to draw the taken yarn through a previous loop to form a knit stitch, whereby the degree of recession of the needles determines the amount of yarn drawn by the needles to form the knit loops.

44. In a knitting machine, the combination of a cam shaft, means to rotate and oscillate the needle cylinder, said means including an oscillated sector, a narrowing picker, means actuated during the forward movement of said sector to throw the narrowing picker into action; a widening picker, means to throw said widening picker into action, said means comprising a part operated by said sector upon its backward stroke.

49. In combination, a needle cylinder and knitting cams; means for oscillating one with relation to the other; a series of individually movable spring needles mounted in said cylinder; means for depressing the needle beards; means for laying the yarn against the needle shanks in either direction of oscillation without sinking it between them before closure of the beards; yarn supporting members arranged between the needles and having surfaces adapted to positively hold the yarn in proper relation to be passed by the beards of the needles before they are closed; means for effecting relative movement of the needles and yarn supporters to cause the latter to assume yarn supporting position before the closure of the needle beard and during the passage of the point thereof beyond the yarn, in proceeding toward the knitting point; means for effecting relative movement of the needles and yarn supporters in a radial direction at the region of the knitting point, to an extent sufficient to permit yarn to be snapped off from the supporter by the descent of the needles, while still remaining in operative position to engage beneath the yarn leading from the selvage loop; and means for effecting relative movement of the needles and yarn supporters to an extent sufficient to completely clear the needles at the region of the yarn feed.

[Claims 1 to 3, 5 to 38, 40, 41, 43, and 45 to 48 not printed in the Gazette.]

1,266,045. CIRCULAR-KNITTING MACHINE. ALBERT M. PIGEON, Philadelphia, Pa., assignor to Pigeon Machine Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 25, 1912. Serial No. 727,702. (Cl. 66—26.)



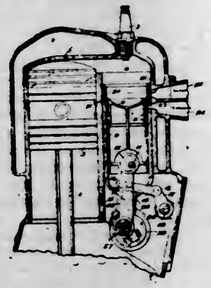
1. The combination in a knitting machine of spring beard needles, a needle cylinder provided with channels in which the needles slide; individual beard depressors disposed within the needle channels and constructed so as to rock therein; means for rocking the beard depressors in succession to close the needle beards, each beard depressor having its extent radial to the cylinder wholly inclosed within said needle channels, whereby said beard depressors may be moved lengthwise of the needle channels for removal or insertion without disturbing any of the other beard depressors or any of the parts of the machine.

7. In a knitting machine, the combination of a needle cylinder having a series of needle channels formed therein,

a series of spring beard needles mounted in said channels, a beard depressor in each channel, the inner face of said beard depressor having a high point on which said depressor may rock, means for engaging the upper ends of the beard depressors for rocking the same into engagement with the needles, and a coiled spring for engaging the lower ends of the beard depressors for rocking the same out of engagement with the needles, said beard depressors and said needle cylinder having registering grooves formed therein in which said coiled spring rests, the groove in the beard depressor being V-shaped, whereby said beard depressors may be withdrawn, and the lower end of each beard depressor being tapered, whereby the same may be readily inserted beneath the coiled spring.

[Claims 2 to 6 not printed in the Gazette.]

1,266,046. VARIABLE-CUT-OFF VALVE MECHANISM. FORD L. PRESCOTT, Elmira, N. Y. Filed July 24, 1917. Serial No. 182,551. (Cl. 123—75.)



1. In an internal combustion engine, a cylinder and its piston, a lateral explosion chamber having adjacent inlet and outlet ports for the cylinder, a sleeve valve interposed between said ports and the cylinder and having a port coördinate with said ports; a piston valve operatively fitting the sleeve valve for controlling flow through the valve port, a crank shaft connected to said valve and means for adjusting the piston valve independently of the sleeve valve.

3. In an internal combustion engine, a valve organization including a piston valve coacting with the usual piston of the motor to impart power from the combustion chamber to the crank shaft and a sleeve valve embracing about the piston valve, and means for operating said valves whereby the exhaust is opened at the lower limit of movement of the piston valve whereby the lower half of the downstroke of the piston valve is utilized to transmit power to the main shaft of the engine.

6. In an internal combustion engine a casing with a main piston cylinder and intake and outlet ports therefor, a valve organization comprising relatively adjustable, cooperative concentric piston and sleeve valve members controlling flow at said ports, and means for relatively adjusting said piston at will to vary the open periods of both the inlet and exhaust ports.

7. In an internal combustion engine a casing with a piston cylinder having a lateral combustion chamber with intake and outlet ports, a valve organization in said chamber comprising relatively adjustable, cooperative concentric piston and sleeve valve members controlling flow at said ports, means for relatively adjusting said members at will, and means for actuating said members independently of the adjusting means.

[Claims 2, 4, and 5 not printed in the Gazette.]

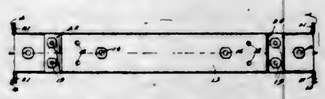
1,266,047. ICE-CREAM FREEZER. OLIVER F. PRIMROSE, Cincinnati, Ohio. Filed Mar. 14, 1916. Serial No. 84,050. (Cl. 259—30.)

In an ice cream freezer, the combination of a cylindrical outer holder provided in each end with a concentrically positioned opening through one of which openings it receives its charge and which opening has a removably attached lid, a cylindrical inner holder fitted to and rigidly secured at one of its ends within the opening in the other end of the outer holder and from which end it extends inwardly, the inner holder being open at this end to permit charging and provided with a detachably held lid for this open end, agitating blades extending lengthwise within this inner holder and transversely inclined against the inner side thereof so as to have scraping contact therewith, a rod which carries these blades and which is positioned within the axial center of this holder and



supported for rotation at one of its ends on the inner end of this holder and at its other end on the lid of this holder which lid is provided with an opening for the purpose through which opening said rod extends, a detachable bail keyed at one end to the projecting end of said rod and at its other end pivotally seated in the center of the lid of the outer holder, said lid being provided with a socket for the purpose and a handle on the bail whereby the freezer may be rolled back and forth on the side of the outer holder to agitate the contents of the holders and to cause the inner side of the inner holder to move with reference to the agitating blades which are held to the bail.

1,266,048. RAILWAY-TIE. JACK J. PRUETT, Duke, Mo., assignor of one-half to Sam'l Ryno, Duke, Mo. Filed Sept. 21, 1917. Serial No. 192,587. (Cl. 238—5.)



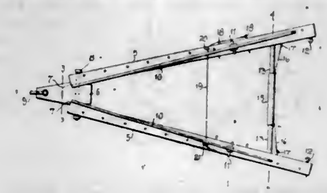
A railway tie including a channel member having a longitudinal series of openings, an inverted channel member engaged on the first channel member and having the side walls overlapping and slidably contacting with the side walls of the first channel member, said second channel member also having a longitudinal series of openings, vertical bolts disposed through the said openings, coil springs engaged on the bolts between the channel members, laterally and outwardly extending wings on the opposite ends of the side walls of the first channel member, and laterally and outwardly extending wings on the opposite ends of the side walls of the second channel and engaging slidably with the first wings and inwardly thereof.

1,266,049. HARROW. GEORGE W. REAVES, Little Rock, Ark. Filed Dec. 22, 1917. Serial No. 208,357. (Cl. 55—125.)

1. In a harrow, spaced harrow bars, a draft beam, means pivotally connecting the forward ends of the harrow bars to said beam, handles supported above the respective harrow bars, a flexible element attached to one of the harrow bars, and guides in the other harrow bar through which said flexible element extends, said flexible element being manually operable to move the harrow bars at their rear ends toward each other.

2. In a harrow, spaced harrow bars, means supporting said bars at their forward ends for movement toward

or from each other, a spring arranged between the bars adjacent their rear ends and urging the same apart, a sheath for said spring flexibly connected at its ends to



the respective harrow bars, and manually operable means connecting the bars to each other and whereby they may be moved toward each other against the action of said spring.

1,266,050. PILE-PROTECTOR. ALVA LEMAN REYNOLDS, Long Beach, Cal., assignor to Common Sense Pile Protector Company, Long Beach, Cal., a Corporation of California. Filed Mar. 20, 1915. Serial No. 15,989. (Cl. 20—100.)

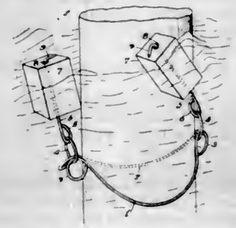


7. A pile protector comprising a wire ring having loops thereon, wire swing arms having loose connection with said loops respectively, and buoyant members sliding upon said wire arms respectively.

10. A pile protector comprising a flexible collar, and a plurality of buoyant rotatably mounted members loosely connected to the collar.

[Claims 1 to 6, 8, and 9 not printed in the Gazette.]

1,266,051. PILE CLEANER AND PROTECTOR. ALVA LEMAN REYNOLDS, Long Beach, Cal., assignor to Common Sense Pile Protector Company, Long Beach, Cal., a Corporation of California. Filed Sept. 8, 1915, Serial No. 49,645. Renewed Apr. 26, 1916. Serial No. 94,069. (Cl. 20—100.)

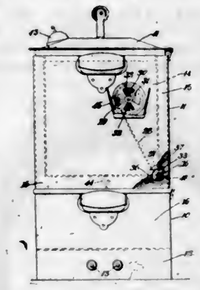


7. A pile protector comprising a ring formed of sections loosely jointed together and adapted to loosely encircle a pile; stems loosely connected to the ring and floats of angular cross-section rotatively mounted on the stems to pound their successive faces against the pile for the double purpose of breaking the excrescences from the pile and keeping the floats free from attacks of sea life.

11. A pile protector comprising a flexible collar, and a plurality of buoyant members loosely connected to the collar each of the members having a plurality of faces.

[Claims 1 to 6 and 8 to 10 not printed in the Gazette.]

1,266,052. STERILIZER. WILLIAM H. RIPLEY, Orange, N. J., assignor to The Prometheus Electric Company, a Corporation of New York. Filed Apr. 9, 1917. Serial No. 160,828. (Cl. 167—3.)

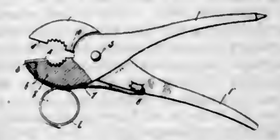


1. A sterilizer comprising a compartment to receive the articles to be treated, a water and steam compartment, a valve to permit steam to pass from said water and steam compartment into said first-named compartment, a second valve to permit steam to escape from said water and steam compartment, and actuating means interposed between and operatively connected to said valves to open one of said valves as the other of said valves is closed, and vice versa, substantially as specified.

2. A sterilizer comprising a compartment to receive the articles to be treated, a water and steam compartment surrounding said first-named compartment, a valve to permit steam to pass from said water and steam compartment into said first-named compartment adjacent the lower portion thereof, a second valve to permit steam to escape from said water and steam compartment adjacent the upper portion thereof, and means operatively connected to said valves to open one of said valves upon the closing of the other of said valves, and vice versa, substantially as specified.

3. A sterilizer comprising a compartment to receive the articles to be treated, a water and steam compartment, a valve to permit steam to pass from said water and steam compartment into said first-named compartment, said valve comprising a valve casing and a valve member removably positioned therein, a second valve to permit steam to escape from said water and steam compartment, and means connecting said valve member to said second valve to open the same as said first-named valve is closed, and vice versa, said means being detachably connected to said valve member whereby the latter may be removed from said valve casing, substantially as specified.

1,266,053. WIRE STRETCHING AND TWISTING TOOL. WILLIAM B. ROSS, El Modeno, Cal. Filed July 19, 1917. Serial No. 181,601. (Cl. 81—9.3.)

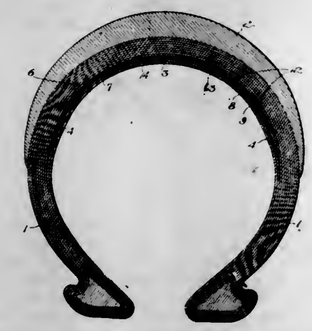


1. A wire tightening and twisting implement comprising a pair of lever handles pivotally connected at one end and one having a forwardly extending jaw with a bore

extending transversely therethrough from its inner face to its outer edge and adapted to receive one end of a wire to be tightened, an apertured lug carried by the other handle and opening longitudinally of said handle to receive the other end of the wire to be tightened whereby the movement of said handles toward each other will operate to stretch or tighten the wire, and wire retaining means to hold the two ends thereof in longitudinal alinement to provide for a direct pull being exerted on the wire.

[Claim 2 not printed in the Gazette.]

1,266,054. PROTECTIVE ARMOR FOR PNEUMATIC TIRES. JAMES V. ROYAL, Wollaston, Mass., assignor of one-half to John L. Layne, Boston, Mass. Filed Apr. 4, 1917. Serial No. 159,758. (Cl. 152—18.)



1. A pneumatic tire of the double tube type comprising an inner air tube, an outer casing, and a protecting armor disposed on the inner surface of the outer casing, the protecting armor comprising a plurality of relatively hard members and two sheets of supporting material, the said members being mounted between the two sheets in longitudinal overlapping rows, each row overlapping the next outer row, and the members being attached to each of the sheets.

2. A protective armor comprising a plurality of relatively hard members, two superposed sheets of flexible material for supporting the members, the members being disposed between the sheets in successive overlapping rows, each row overlapping the succeeding row in one direction, means for securing the members to the upper sheet at the edges directed in the said direction, and means for securing the members to the lower sheet at the edges directed in the opposite direction.

8. A device for armoring pneumatic tires and the like comprising a flat member having an upturned lip at one side and having a downturned lip at the opposite side.

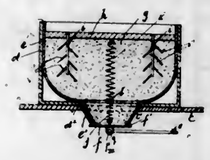
9. A device for armoring pneumatic tires and the like comprising a metallic disk having an upturned pointed lip at one side and having a downturned pointed lip at the opposite side.

[Claim 3 to 7 not printed in the Gazette.]

1,266,055. ATTACHMENT ON VEHICLES. ERNEST A. SACKERMAN, Hackensack, N. J. Filed Oct. 17, 1917. Serial No. 196,989. (Cl. 291—25.)

1. The combination with a vehicle, of means of distributing anti-skidding substances into the path of the wheels of said vehicle, said means comprising a box for said substances having a tiltable lid at its bottom, means for operating said lid from the driver's seat, and means for forcing said substances toward and through the bottom when the lid is open, said means including members for preventing the agglomeration of the contents within the said receptacle.

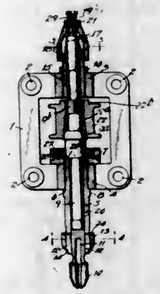
2. In a vehicle, means for distributing anti-skidding substances into the path of the wheels of said vehicle, said means comprising a receptacle for said substances having a tiltable lid at its bottom, spring actuated means for pressing said substances toward and through the



bottom when said lid is open, and means for manipulating said lid from the driver's seat.

[Claims 3 to 6 not printed in the Gazette.]

1,266,056. SPINDLE AND BEARING. DAVID B. SALSTROM, Chicago, Ill., assignor to E. Kopriwa Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 1, 1917. Serial No. 151,631. (Cl. 64—55.)



1. The combination of a bearing bushing, one end of said bushing being contractible, a spindle rotatably mounted in the bushing, a nut having a tapered portion arranged to contract the bushing into engagement with the spindle, and a screw carried by said nut in alinement with the spindle and bearing against the end of the spindle for limiting endwise movement of the spindle in one direction.

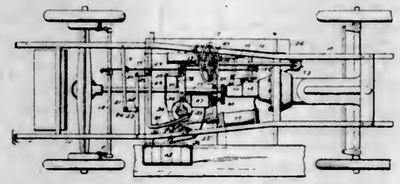
3. The combination of a bearing bushing, one end of which is contractible, a spindle mounted in said bushing, means for contracting the bushing into engagement with the spindle, said spindle having an annular shoulder, and means for holding said shoulder in contact with the end of the bushing.

6. The combination of a base, two alined bearings on the base, a spindle rotatably mounted in said bearings, means carried by the bearings for holding the spindle against lateral movement, means adjustable longitudinally of the spindle for holding it against endwise movement, and a pulley fixed on the spindle at a point between said bearings.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,266,057. ELECTRIC BRAKE DEVICE. ALSON C. SARGENT, Des Moines, Iowa. Filed Oct. 12, 1915. Serial No. 55,567. (Cl. 188—39.)

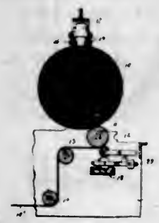
1. In a device of the class described, the combination of a vehicle having a movable member and a power shaft, with an electrically operated mechanism for controlling said movable member comprising an electro-magnet having an armature and a plurality of coils, means for operatively connecting said armature with said movable member, a generator operatively connected with the power shaft, a battery, a switch lever, a plurality of contact points adapted to be selectively in contact with said lever, means for selectively, electrically connecting the respective coils with the respective contact points, means for connecting said generator electrically with said switch lever, a common return wire connecting said coils with said battery, means for electrically connecting said generator with said common return wire, said device including means for electrically connecting the battery with the generator and with the switch lever, whereby when the generator is in operation at a high generated speed and the switch is closed, a circuit will be established from the generator through the switch in the electro-magnet, and when the switch is open a circuit will be established from



the generator through the battery, and when the power shaft is being operated and the switch is closed a circuit will be established from the battery through the switch in the electro-magnet, there being a shunt circuit connection at the same time including the generator, switch, battery and solenoid, whereby when the generator is operating at low speed insufficient to operate the solenoid, the battery will contribute to the current in the electro-magnet.

[Claims 2 and 3 not printed in the Gazette.]

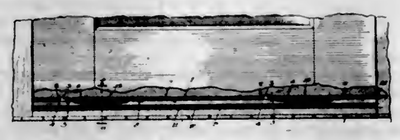
1,266,058. GUMMING APPARATUS FOR RIBBON-CUTTING MACHINES. HENRY D. SCHMIDT, Astoria, N. Y. Filed Aug. 28, 1917. Serial No. 188,585. (Cl. 91—14.)



1. In a ribbon cutting apparatus or the like, the combination with a cutter, of means for applying a layer of adhesive material to the cutting edge simultaneously with the cutting operation.

[Claims 2 to 9 not printed in the Gazette.]

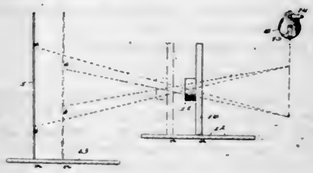
1,266,059. WEATHER-STRIP. AUGUST C. SCHNAKE, Centralia, Ill. Filed Apr. 20, 1916. Serial No. 92,416. (Cl. 20—68.)



1. A weather strip comprising a casing, an operating bar slidably supported in the casing, a spring connected at one end to said bar and at the other end to a fixed support, an inverted channel-bar, a member extending from the sides of the channel bar and over the spring for supporting the channel bar from the spring, the spring being free for movement between said member and channel bar, and a packing connected with the underside of the channel-bar.

2. A weather strip comprising a casing, guides secured to the casing, an operating bar slidable in said guides, a bow-spring, supports for the spring, one support connected to the slidable operating bar and the other to the fixed guide in which the bar slides, said supports and spring having correspondingly shaped interlocking engaging ends permitting detachment of the spring, a channel-bar within the casing, a pin suspending the channel-bar from the spring and effecting a free connection between the bar and spring, and a packing connected with the under side of the channel-bar.

1,266,060. PHOTOGRAPHIC APPARATUS. WILLIAM R. SCHWAB, Kansas City, Mo., assignor to The Cameragraph Company, Kansas City, Mo., a Corporation of Arizona. Filed Jan. 15, 1913. Serial No. 742,289. (Cl. 88—24.)

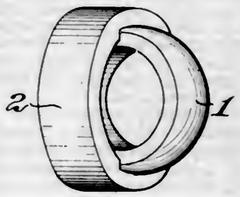


1. In photographic apparatus, an object support having a chart provided with diagrams for positioning an object, said diagrams being subdivided to indicate the amount of sensitized material required for the production of an object.

4. In photographic apparatus, an object-receiving chart embodying a series of diagrams of graduated sizes having a common center, and radially extending lines subdividing the diagrams symmetrically in one direction, and indicating the amount of photographic material required for reproduction of an object.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,266,061. BALL-JOINT. FRANK F. SCOVILLE, Schenectady, N. Y. Filed Aug. 13, 1917. Serial No. 185,844. (Cl. 285—91.)



1. The combination, in a ball joint, of a ball member having a spherical zone on its periphery; and an integral socket member, bored to receive the ball member, and having a longitudinal recess at one end of its bore, through which the ball member may be inserted in, and removed from, operative position in the socket member.

2. The combination, in a ball joint, of a ball member, divided, transversely of its axis, into a plurality of adjoining sections, and having a spherical zone on its periphery; and an integral socket member, bored to receive the ball member, and having a longitudinal recess at one end of its bore, through which the sections of the ball member may be successively inserted in, and removed from, operative position in the socket member.

3. The combination, in a ball joint, of a ball member having a spherical zone on its periphery; and an integral

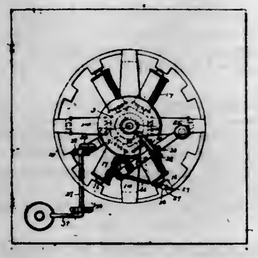
socket member, bored to receive the ball member, and having two diametrically opposite longitudinal recesses at one end of its bore, through which the ball member may be inserted in, and removed from, operative position in the socket member.

4. The combination, in a ball joint, of a ball member having a spherical zone on its periphery; an integral socket member, bored to receive the ball member, and having a longitudinal recess at one end of its bore, through which the ball member may be inserted in, and removed from, operative position in the socket member; and means for preventing movement of the ball member in a plane at a right angle to its bore.

5. The combination, with two elements which are to be connected with the capacity of relative movement, of a ball joint comprising a ball member connected, detachably, to one of said elements, and having a spherical zone on its periphery; and an integral socket member connected to the other of said elements, said socket member being bored to receive the ball member, and having a longitudinal recess at one end of its bore, through which the ball member may be inserted in, and removed from, operative position in the socket.

[Claim 6 not printed in the Gazette.]

1,266,062. ELECTRIC MOTOR FOR TALKING-MACHINES. HOWARD A. SELAH, Newark, N. J., assignor, by mesne assignments, to Eclipse Phonograph Corporation, a Corporation of Delaware. Filed Dec. 7, 1915. Serial No. 65,457. (Cl. 171—222.)



1. In a talking machine motor, the combination of a stationary field magnet and a rotating induction armature, with a circuit interrupter in circuit with said magnet, a brush carried by said armature adapted to bear upon said circuit interrupter, and centrifugal means carried by said armature adapted upon a predetermined rate of revolution thereof to separate said brush from said circuit interrupter and manually operated means for varying such point of separation.

2. In an electric talking machine motor, the combination of a stationary magnet and a rotating induction armature, a circuit interrupter, a centrifugal governor carried by said armature, a brush carried by said governor adapted to bear upon said circuit interrupter and to break contact therewith upon a predetermined rate of revolution of said armature, means for varying the point of such break, a source of electric supply, and a circuit including said magnets, circuit interrupter, brush and electric supply.

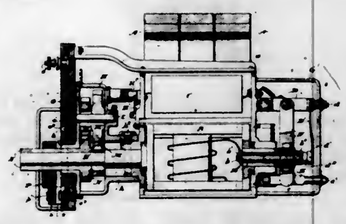
3. In a talking machine motor, the combination of a polygonal supporting block, having a sleeve bearing projecting downwardly and centrally therefrom, a circuit interrupter slidably mounted upon said sleeve bearing, a plurality of magnets projecting radially from the faces of said block, a mandrel mounted to rotate in said bearing, an induction armature mounted to rotate with said mandrel with the poles thereof in close proximity to the projecting cores of said magnets, a weighted spring pressed lever pivoted to said armature and adapted to swing away from its center of rotation at a predetermined rate of rotation thereof, a brush adapted to bear upon said circuit interrupter carried by said lever, means for manually shifting said circuit interrupter vertically to vary the point of separation of said brush from said circuit interrupter, and an electric circuit including said magnets, brush and circuit interrupter.

7. In a talking machine motor, the combination of a polygonal, centrally apertured supporting block having a sleeve bearing projecting centrally and downwardly therefrom, a cone-shaped circuit interrupter mounted upon said sleeve bearing and provided with a plurality of metallic faces upon its cone surface, a mandrel mounted to rotate in said bearing, an induction armature provided with a plurality of inwardly directed pole pieces, said armature being mounted to rotate with said mandrel with its poles in close proximity with the poles of said magnets, a weighted spring pressed lever pivoted upon said armature and adapted to swing radially away from its center of rotation at a predetermined rate of rotation thereof, a brush adapted to bear upon said circuit interrupter, said brush being adjustably mounted upon said lever, means for manually raising and lowering said circuit interrupter to vary the point at which said lever will swing said brush free from said circuit interrupter, and an electric circuit including said magnets, brush and circuit interrupter.

10. In a talking machine motor, the combination of a plurality of radially directed, centrally supported field magnets, a sliding circuit interrupter mounted to reciprocate in the axis of said magnets, an induction armature having a plurality of inwardly directed pole pieces adapted to rotate with said pole pieces in close proximity to the radial poles of said projecting magnets, a combined governor and brush mounted upon said armature said brush adapted to bear upon the surface of said circuit interrupter, said governor adapted to break said contact between said brush and circuit interrupter upon a predetermined rate of rotation of said armature, means for manually reciprocating said circuit interrupter to vary the point of such break, and an electric circuit including said magnets, brush and circuit interrupter.

[Claims 4 to 6, 8, and 9 not printed in the Gazette.]

1,266,063. MAGNETO. LUTHER J. SEVISON, Constantine, Mich., assignor to Fawn River Manufacturing Company, Constantine, Mich., a Corporation of Michigan. Filed Aug. 10, 1908. Serial No. 447,818. (Cl. 123—149.)



1. In an ignition apparatus, a magneto provided with an armature, a condenser continuously in circuit with said armature winding, a spark coil, a normally open circuit between the primary of the spark coil and the armature winding and condenser, and a circuit closer interposed in said circuit.

2. In an ignition apparatus, an alternating current magneto, a condenser continuously in circuit with the armature winding of said magneto, a spark coil, a normally open circuit between the primary of the spark coil and the armature and condenser, a circuit closer interposed in said circuit, and means actuated by the armature for intermittently closing said circuit.

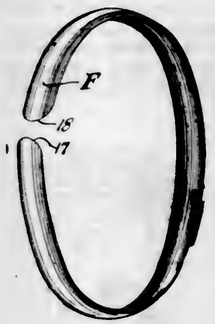
3. In an ignition apparatus, an alternating current magneto, a condenser continuously in circuit with the armature winding of said magneto, a spark coil having its primary in a normally open circuit with said condenser and armature winding, and a circuit closer in said circuit adapted to be intermittently actuated by said armature at low speed to permit the current to unload from the armature and condenser on to the primary at the highest potential of the armature.

4. In an ignition apparatus, an alternating current magneto, a condenser continuously in circuit with the armature winding of said magneto, a spark coil having its primary in a normally open circuit with said condenser and armature, and a circuit closer in said normally open circuit adapted to be intermittently actuated by the armature of the magneto, the time of actuating of said circuit closer being automatically varied according to the speed of rotation of said armature.

5. In an ignition apparatus, a magneto, a condenser continuously in circuit with the armature winding of said magneto, a spark coil having its primary in a normally open circuit with said condenser and armature, a circuit closer interposed in said circuit adapted to be intermittently actuated by said armature, and a plurality of ignition devices arranged in circuit with the secondary of the spark coil.

[Claims 6 to 14 not printed in the Gazette.]

1,266,064. PNEUMATIC TIRE. JAMES J. SEXTON, Columbus, Ohio. Filed Aug 31, 1914. Serial No. 859,380. (Cl. 152—18.)



1. In a pneumatic tire, the combination of an inner pneumatic tube, an outer casing, and a resilient lining of compressed fibrous material of substantially annular form and cross-sectionally curved interposed between said tube and casing, the surface of said lining calendered for constituting said surface an anti-friction surface for providing ready slippage between said lining and tube.

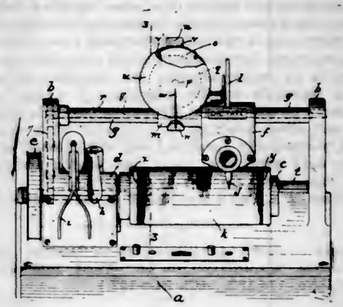
[Claim 2 not printed in the Gazette.]

1,266,065. CORRECTION DEVICE FOR TALKING-MACHINES. SAMUEL SHELLY, Philadelphia, Pa. Filed June 29, 1917. Serial No. 177,621. (Cl. 274—1.)

1. In a device of the character described, the combination with the record holder and the traveling sound box, of a rotatable indicator holder, and means to bodily move both the sound box and the indicator holder longitudinally of the record holder and to rotate the indicator holder synchronously therewith.

2. In a device of the character described, the combination with the record holder and the traveling sound box, of a traveling bearing, an indicator holder rotatable in said bearing, means to bodily move in unison both the sound box and said bearing, gearing on the axis of the indicator holder, and a rack engaging said gearing, whereby the indicator holder rotates as it bodily moves.

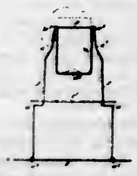
3. In a device of the character described, the combination with the record holder and the traveling sound box, of a rotatable circular indicator holder, means to bodily move the sound box and synchronously therewith to rotate the indicator holder, a circular indicator of comparatively rigid material, and a peripheral flange on the indicator adapted to engage the periphery of the circular indicator holder.



4. In a device of the character described, the combination with the record holder and the traveling sound box, of a rotatable circular indicator holder, means to bodily move the sound box and synchronously therewith to rotate the indicator holder, a pointer in coöperative relation with the indicator holder, a removable and replaceable indicator, and means adapting the indicator to be turned on its holder to synchronize the indicator and pointer with the record to compensate for variations in the longitudinal position of the record relatively to its holder.

[Claims 5 to 11 not printed in the Gazette.]

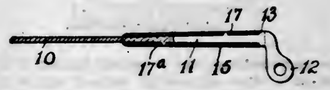
1,266,066. DRINKING-CUP HOLDER FOR INVERTED BOTTLES. JOHN A. SHERMAN, Worcester, Mass. Filed Aug. 1, 1916. Serial No. 112,596. (Cl. 248—20.)



4. In a holder of the kind described, a framework comprising uprights having elbows therein, a circular spring member attached to the lower ends of said uprights whereby said uprights below said elbows may be sprung outwardly to vary the size of said holder, a circular member attached to said uprights above said elbows to strengthen said frame and prevent said uprights from springing above said elbows, a frame connecting the upper ends of said uprights, and a support for a package of cups comprising frames depending from said top frame substantially as described.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,266,067. SPECTACLE-TEMPLE. HARRY F. SHINDEL, Glenside, Pa., assignor to T. A. Willson & Co., Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Feb. 8, 1917. Serial No. 147,284. (Cl. 88—52.)



1. A spectacle temple comprising a temple shaft, a separately formed temple pivot-piece having an angularly arranged shank portion and offset in substantial alinement with said shaft, and a straight offset-engaging

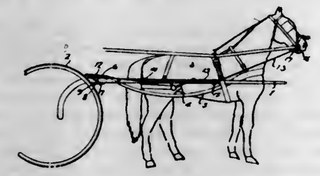
sleeve inclosing said shank and shaft and united therewith by jointly swaging the combined parts.

3. A spectacle temple comprising a temple shaft, a separately formed temple pivot-piece having a bent shank portion and offset arranged in substantial alinement with said shaft, and a bent-up sheet-metal sleeve with offset-engaging recess inclosing said shank and shaft and united therewith by jointly swaging the combined parts.

5. A spectacle temple comprising a temple shaft, a separately formed temple pivot-piece having a shank portion and offset arranged in alinement with said shaft, and a peripherally apertured and end-notched sleeve inclosing said shaft and shank and having aperture and notch engagement therewith respectively.

[Claims, 2, 4, and 6 not printed in the Gazette.]

1,266,068. ANIMAL-ARRESTER. SAMUEL SHIRLEY, Winnipeg, Manitoba, Canada. Filed June 11, 1917. Serial No. 174,122. (Cl. 24—127.)

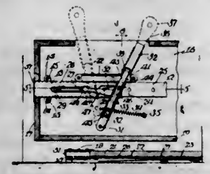


1. An animal arresting appliance for vehicles comprising a lever pivotally secured to a stationary part of the vehicle, means integral with the lever for limiting it in its forward and rear positions, a spring attached to the free end of the lever and a pulling strap connecting the spring with the head of the animal.

2. An animal arresting appliance for vehicles comprising a lever pivotally secured to the shaft of the vehicle, a crank associated with the lever and having the end thereof formed into a stop and adapted to engage with the shaft, the said crank and lever being disposed at an angle one to the other, a spring secured to the free end of the lever and a pulling strap extending between the spring and the head of the animal.

3. An animal arresting appliance for vehicles comprising a lever pivotally secured to the shaft of the vehicle and having an offset bend therein toward the shaft adapted to hold the lever in a fixed set position by engagement with the shaft, a crank associated with the lever and having the end thereof formed into a stop and adapted to engage with the shaft, the said crank and lever being disposed at an angle one to the other, a spring secured to the free end of the lever and a pulling strap extending between the spring and the head of the animal.

1,266,069. TICKET-DISPENSING MACHINE. NATHAN SHURE, Chicago, Ill. Filed Nov. 26, 1917. Serial No. 204,034. (Cl. 211—32.)



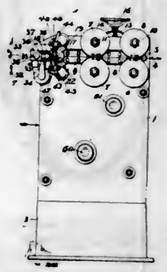
1. The combination with a casing having a discharge aperture, of a tape supporting channel registering with the aperture, said channel being longitudinally slotted, a guide flange formed along the edge of said slot and having its outer edge gradually diverging from the surface of the channel in a forward direction, a finger adapted to engage a tape lying in the channel to project the same forwardly through said aperture, a cross-arm on said finger positioned to ride upon said outer edge of the guide flange, and means accessible from the exterior of the casing for operating said finger.

3. The combination with a tape support, of a casing in which the support is mounted, said casing being provided with an aperture registering with the forward end of the support, a finger adapted to move a tape forwardly in said support and operating means for the finger comprising an oscillatory lever to which the finger is pivoted, a bearing in which the lever oscillates, a yield-stop member carried by the lever, a rigid stop mounted on the bearing in the path of movement of said member, said lever registering opposite a slot provided in the wall of the casing but terminating within the casing in a retracted position, and an operating handle for said lever shaped to operatively engage the same and simultaneously to move said yielding stop member beyond the extremity of said rigid stop.

8. As an article of manufacture, a metal tape supporting channel comprising a bottom wall, a longitudinal slot formed in said bottom wall, edged flanges projecting downwardly from said slot and gradually diverging from said bottom wall in a forward direction, and a tongue struck up obliquely from said bottom wall and projecting forwardly of its root in the wall.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,266,070. SPRING-COILING MACHINE. FRANK HENRY SLEEPER, Worcester, Mass., assignor to Sleeper & Hartley, Inc., Worcester, Mass., a Corporation of Massachusetts. Filed May 6, 1914. Serial No. 836,628. (Cl. 153—65.)



1. In a spring coiling machine, a framework, a wire feeding mechanism, a coiling arbor having its opposite ends adapted for coiling right and left hand springs, and a holder supporting said arbor and reversibly held in said framework, whereby either end of said arbor may be brought into operative position relative to the wire feeding mechanism.

4. In a spring coiling machine, a framework, a wire feeding mechanism, a coiling arbor having a tip provided with a curved surface tangential to the line of wire feed, and a coiling point comprising a plate having a straight side normal to the line of wire feed and extending transversely across the line of wire feed, whereby the wire is deflected around over the curved surface of said tip in either an upward or a downward direction.

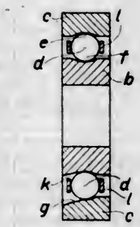
6. In a spring coiling machine, a wire feeding mechanism, a coiling arbor provided with a cutting edge, means for maintaining said arbor with its cutting edge either above or below the line of wire feed, a pair of swinging cutter heads one above and one below said arbor, means for simultaneously swinging said cutter heads, and cutting blades adjustably held in said heads.

10. In a machine of the class described, the combination with intermittent wire feeding devices provided with a plurality of different wire grooves, stationary wire guides provided with a corresponding plurality of wire grooves, a reversible tool holder, means to adjust said holder and its contained tools relatively to any one of the said wire grooves, a coiling point, means to adjust said point both laterally with relation to any one of said wire grooves, and radially to coöperate with the tool holder in its reversed positions, wire severing devices, means to adjust said severing devices to aline with any one of said plurality of wire grooves, means to adjust said severing devices to coöperate with the tool holder in its reversed positions, wire severing devices, means to adjust said severing devices to aline with any one of said plurality of wire grooves, means to adjust said severing devices to coöperate with the reversible tool holder and its contained tools in its reversed positions, and means to operate said severing devices while the wire feeding devices are stopped.

12. In a machine of the class described, an intermittent wire feeding mechanism, comprising, in combination, a rotating member, a crank adjustable upon said rotating member, a gear segment mounted for oscillation transversely to the axis of said rotating member, and having a radial groove therein, a block adapted to slide in said groove, means to engage said block and the adjustable crank member and thereby transform rotary motion into reciprocating motion, a gear meshing with the gear segment, wire feeding rolls, and a ratchet device interposed between said gear and said feed rolls, giving the latter rotation in one direction only.

[Claims 2, 3, 5, 7 to 9, and 11 not printed in the Gazette.]

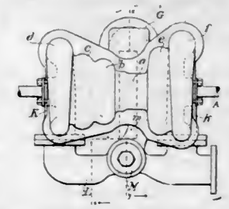
1,266,071. BALL-BEARING WITH A SINGLE ROW OF BALLS. CARL GUSTAF SÖDERLUND, Gottenborg, Sweden. Filed Dec. 11, 1914. Serial No. 876,608. (Cl. 64—59.)



A ball bearing, comprising in combination, an outer race ring having a groove formed in the innermost surface thereof, an inner race ring formed with a groove on the outermost surface thereof, a row of balls arranged between said surfaces and running in said grooves, and means for retaining said balls in position, said outer race ring being formed at the lowermost part thereof with a circumferentially extended opening which extends from the bottom of the groove outwardly and downwardly to the side wall of the ring, throughout the entire circumferential length of the opening, the inner ring being provided with an opening extending in axial direction from the bottom of the groove outwardly to the periphery of the side wall of the ring, said rings being relatively movable in assembling the bearing to bring said openings into coincidence.

1,266,072. COMPOUND CENTRIFUGAL PUMP. JOSEPH C. SOEMER, Newark, N. J. Filed June 19, 1915. Serial No. 35,015. (Cl. 103—43.)

In a compound centrifugal pump, the combination with two separated sets of pump casings, the larger portion of one set of casings being greater in diameter than the larger portion of the other set, of impellers revoluble within the said pump casings, an intake pipe located between the said sets of casings and divided lengthwise into passages, one of the said passages being connected with one set of casings and the other passage being connected with the other set of pump casings, a check valve arranged in one of the said passages to close the said intake passage leading to the pump having the said portion of larger diameter, each of the said pump casings having a discharge pipe, a manifold discharge pipe connecting the said discharge pipes from the casings, an intermediate conduit connecting the said manifold and



the passage controlled by the said check valve, and a hand-operated valve located at the junction of the said intermediate conduit and manifold whereby the water discharged from the pump casing having the said portion of lesser diameter may be directed into the casings having the said portion of larger diameter and its velocity increased.

1,266,073. PYROXYLIN COMPOSITION. FIN SPARRE, Wilmington, Del., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Sept. 3, 1914, Serial No. 859,972. Renewed Sept. 28, 1917. Serial No. 193,724. (Cl. 134—79.)

1. A solution containing a pyroxylin, which is at least fifty per cent. soluble in a mixture of equal parts of commercial ethyl alcohol and benzol, the pyroxylin being dissolved in a mixture of ethyl alcohol and benzol, together with a relatively small percentage of a more powerful solvent.

2. A solution containing a pyroxylin, which is at least fifty per cent. soluble in a mixture of equal parts of commercial ethyl alcohol and benzol, the pyroxylin being dissolved in a mixture of ethyl alcohol and benzol, together with between three and fifteen per cent. of a more powerful solvent.

3. A solution containing a pyroxylin, which is at least fifty per cent. soluble in a mixture of equal parts of commercial ethyl alcohol and benzol, the pyroxylin being dissolved in a mixture of ethyl alcohol and benzol, together with a relatively small percentage of amyl acetate.

4. A solution containing a pyroxylin, which is at least fifty per cent. soluble in a mixture of equal parts of commercial ethyl alcohol and benzol, the pyroxylin being dissolved in a mixture of ethyl alcohol and benzol, together with between three and fifteen per cent. of amyl acetate.

5. A composition containing pyroxylin and a solvent containing forty-five to sixty per cent. benzol, thirty to forty-five per cent. alcohol and three to fifteen per cent. commercial amyl acetate.

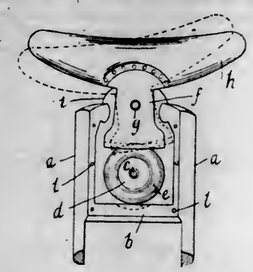
[Claims 6 to 12 not printed in the Gazette.]

1,266,074. CRUTCH. HENRY CHARLES SPARROW, Clapham Junction, London, England. Filed July 19, 1917. Serial No. 181,544. (Cl. 135—52.)

1. A crutch comprising an arm rest provided with a downward extension mounted on a pin working in a slot fixed in crutch frame free to oscillate and slide, a rotatable resilient member on which said extension rides permitting said arm rest and said rotatable member to roll on each other, said arm rest when bearing the weight of a user being resiliently supported by said member.

4. In a crutch, the combination of a frame secured between the upper ends of bifurcations and forming a housing into which extends an extension formed on an arm rest, said arm rest and its extension turnably mounted on a spindle which is free to slide in vertical slots formed in side plates, said plates secured to the

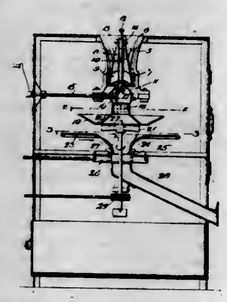
sides of crutch frame, and a roller having a spring or rubber tire and rotatably mounted in said frame which



engages the periphery of the arm rest extension substantially as and for the purpose specified.

[Claims 2 and 3 not printed in the Gazette.]

1,266,075. NUT SHELLING AND SEPARATING MACHINE. FANNIE S. SPITZ, Albuquerque, N. Mex. Filed Aug. 21, 1917. Serial No. 187,377. (Cl. 146—3.)



1. In a nut-shelling machine, the combination of means for removing the shells from the meats, said means being provided with a circular discharge opening at its lower end, superimposed over an annular trough for receiving the shells and the meats and provided with an annular discharge outlet, and means below the trough for separating the shells and chaff from the meats by a radial blast.

2. The structure recited in claim 1, a horizontal rotating disk being provided below the blast, this disk being provided with a central discharge opening for the meats.

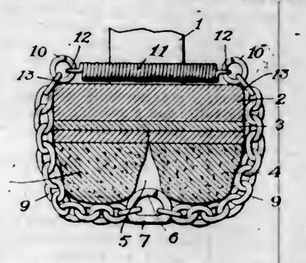
3. In a nut-shelling machine, the combination of means for removing the shells from the meats provided with an annular discharge outlet superimposed over an annular trough for receiving the shells and the meats and provided with an annular discharge outlet, and means below the trough for separating the shells and chaff from the meats by a radial blast, a horizontal rotating disk being provided below the blast, this disk being provided with a central discharge opening for the meats, the central discharge opening tapering downwardly and provided with ribs inclining in the direction of rotation of the disk to insure the directing of the meats into the central discharge opening.

4. In a nut-shelling machine, the combination with means for removing the shells from the nuts and discharging them through a circular opening at the lower end thereof, of an annular trough having inclined sides inclining toward an annular discharge opening, this trough being constructed so as to permit air to pass centrally down through it, a rotary fan arranged below the trough adapted to draw air down through the center of the trough and force it outwardly across the discharge opening of the trough, and means below for completing the separation of the nuts from the shells and chaff.

11. A separating machine having a feed-hopper in the form of an annular trough and provided with an annular discharge outlet, a separating disk revolvably mounted below said hopper, said disk being provided with a central discharge opening, the central discharge opening tapering downwardly and being provided with ribs inclining in the direction of the rotation of the disk to insure the directing of the contents of the disk into the central discharge opening, and means for directing a radial blast against the contents of the hopper as it drops upon the disk.

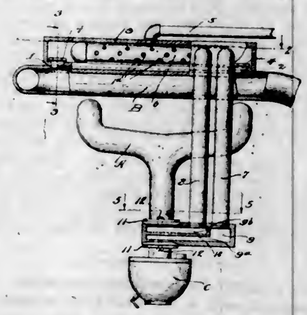
[Claims 5 to 10 not printed in the Gazette.]

1,266,076. ANTISLIPPING DEVICE FOR VEHICLE-WHEELS. WILLIAM M. STEELE, Worcester, Mass. Filed Feb. 8, 1915. Serial No. 6,839. (Cl. 152—2.)



Devices of the character described, comprising a plurality of traction members extending transversely of the tire, a plurality of independent unconnected coiled springs arranged peripherally of the tire on each side thereof, to which the ends of said traction members are attached, and a plurality of yieldable devices disposed transversely of the rim of said tire and connecting said oppositely disposed coiled springs at a plurality of points.

1,266,077. VAPORIZING ATTACHMENT FOR EXPLOSIVE-ENGINES. GEORGE STEINGRUBER, Hazlehurst, Miss., assignor, by direct and mesne assignments, of two-thirds to Minnie B. Steingruber, Hazlehurst, Miss., and one-third to Bolan G. Brumby, Marietta, Ga. Filed Mar. 25, 1916. Serial No. 86,747. (Cl. 257—241.)



3. In combination with the intake and exhaust manifolds of an explosive engine, a vaporizing and preheating attachment comprising a preheating chamber detachably positioned upon the exhaust manifold so as to be heated by the latter, fuel supply means connected with the intake manifold, a separator interposed between said fuel supply means and the intake manifold, said separator comprising a partition dividing the same into an inflow chamber communicating with the fuel supply means and an outflow chamber communicating with said intake manifold, a vaporizing pipe disposed in said preheating chamber, a branch pipe connecting one end of the vaporizing pipe with the inflow chamber of the separator, a second branch pipe connecting the other end of the vaporizing pipe with the outflow chamber of the separator, and coupling members intermediate the opposite ends of the preheating chamber and the exhaust manifold and establishing communication between the manifold and preheating chamber whereby the exhaust gases are adapted to circulate through the preheating chamber.

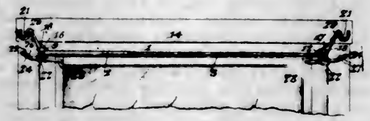
[Claims 1 and 2 not printed in the Gazette.]

1,266,078. SHADE AND CURTAIN HANGER. SOLOMON M. STEVENS, Sulphur, Okla. Filed Nov. 21, 1917. Serial No. 203,180. (Cl. 156—24.)



A device of the character described comprising, in combination with a support, a bar adapted to be disposed across the support and provided with securing means, a longitudinal margin of the bar being defined with an inwardly directed flange adapted to contact with the support, and a bracket member having a base portion snugly insertible between the bar and the support when in applied position, the inner face of the bar adjacent the flange being provided with a longitudinally directed groove, the base portion of the bracket being provided with a forwardly directed off-set seatable within said groove, the bracket being adjustable to different positions longitudinally of the bar when the bar and bracket are in applied position upon the support.

1,266,079. PORTIÈRE, SHADE, AND CURTAIN HOLDER. JAMES JULIUS STIFFEY, Conemaugh, Pa. Filed May 7, 1917. Serial No. 166,970. (Cl. 156—19.)



1. A shade and curtain holder provided with an extension clamping pole comprising two telescoping members, and brackets with hook portions for receiving a curtain pole, each bracket terminating in a bearing plate, the extension pole having a plurality of projecting studs at each end and each bracket having passages for the studs, with the studs longer than the thickness of the plate ends of the brackets, whereby the shade and curtain holder is secured in a window frame solely by the projecting studs and because of the elongation of the clamping pole.

2. A device of the class described comprising plate-like members for engaging a window frame, each plate-like member having a tubular guide at an angle to the plane of the plate-like member with each guide rising away from the other guide when in the installed position, means for securing the plate-like members to a window frame, and shade-roller holding devices each comprising a bar carried by and freely movable lengthwise through a respective guide at an angle to the bar carried by the other guide and each bar terminating at the end remote from the other bar in an angle extension having means for receiving a corresponding end of a shade roller, the angular relation of the bars to each other being such that the shade roller holding devices cramp in the guides when subjected to forces tending to move the bars away one from the other in a straight line.

1,266,080. SOLID ALCOHOL AND PROCESS OF PRODUCING SAME. ALEXANDER STROBL, New York, N. Y., assignor to S. Sternau & Company, Inc., a Corporation of New York. Filed Feb. 11, 1915. Serial No. 7,503. (Cl. 44—7.)

1. The process of producing solid alcohol, which consists in adding to the alcohol a small amount of stearic acid and dissolving the same therein, then adding sufficient of a solution of caustic soda to produce a neutral reaction, then adding a small amount of stearic acid to produce an acid reaction and leave a certain amount of free stearic acid in the mass.

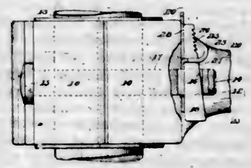
2. The process of producing solid alcohol which consists in heating alcohol to a temperature of between 140 and 160 degrees Fahrenheit, adding to 100 parts of the heated alcohol two or three parts of stearic acid, adding caustic soda sufficient to neutralize nearly all of the stearic acid, and allowing the mixture to cool.

3. A new article of manufacture which consists of alcohol, sodium stearate and stearic acid.

7. A new article of manufacture which consists of alcohol, metallic soap and a fatty acid.

[Claims 4 to 6 not printed in the Gazette.]

1,266,081. BOLT FASTENER OR LOCK. STEFAN SUSHKO, Allentown, Pa. Filed Nov. 7, 1917. Serial No. 200,729. (Cl. 85—7.)

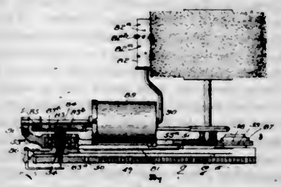


1. A locking means for bolts comprising a sheet metal plate having a bolt receiving opening therein and arranged with an angular cut portion forming a lip struck up and inwardly turned through the plate in V-shaped arrangement, the said lip having a longitudinal wedge receiving slot therethrough.

2. A locking means for bolts comprising a sheet metal plate having a bolt receiving opening therein and arranged with an angular cut portion forming a lip struck up and inwardly turned through the plate in V-shaped arrangement, the said lip having a longitudinal wedge receiving slot therethrough, a filler block for the space under the plate formed by up turning the said lip and a sliding wedge adapted for longitudinal movement through the said slot in contact with the free edge of the said lip.

[Claim 3 not printed in the Gazette.]

1,266,082. SHOE-BLACKING MACHINE. EDWARD ELLETT TALIAFERRO, Colorado Springs, Colo. Filed Feb. 16, 1914. Serial No. 818,995. (Cl. 15—61.)



1. In a shoe blacking machine, the combination with a foot rest, of a rotary brush carrier mounted on a vertical

axis below the foot rest, a plurality of brush carrying arms pivotally mounted on said carrier, brushes journaled in said arms, one of said brushes constituting a dauber, a blacking receptacle mounted on the dauber brush arm, a discharge duct for said receptacle extending into proximity to the brush, a piston in said receptacle, and means for intermittently advancing said piston, embodying, a driving gear for rotating the brush, and intermittently operating connections intermediate said driving gear and piston.

3. In a shoe blacking machine, the combination with a foot rest and a rotary brush carrier mounted on a vertical axis below the foot rest, of a plurality of brush carrying arms pivotally mounted on said carrier, brushes journaled in said arms, one of said brushes constituting a dauber, a blacking receptacle mounted on the dauber brush arm, a discharge duct for said receptacle, extending into proximity to the brush, a blacking distributer journaled on said discharge duct and lying in contact with the brush, a piston in said receptacle, and means for intermittently advancing said piston, embodying a driving gear for rotating the brush, and intermittently operating connections intermediate said driving gear and piston.

4. In a shoe blacking machine, the combination with a foot rest and a rotary brush carrier mounted on a vertical axis below said foot rest, of a plurality of brush carrying arms pivotally mounted on the carrier to swing toward and from the foot rest, rotary brushes journaled in said arms, one of said brushes constituting a dauber, a blacking supply duct mounted on the dauber brush arm and extending into proximity to said brush, means for distributing the blacking from said duct onto the brush, means for rotating the brush embodying an operating wheel having an axis coincident with the axis of the pivoted arm, and means for feeding blacking through said duct operated by the brush rotating wheel.

5. In a shoe blacking machine, the combination with a foot rest, of a rotary brush carrier, a brush carrying arm pivotally mounted on said carrier to swing toward and from the foot rest, a brush journaled in said arm, a blacking receptacle, a duct leading from said blacking receptacle into proximity to the brush, mechanism for intermittently and automatically discharging blacking from said receptacle, and means for rendering said mechanism inoperative during a portion of the operating period of the brush.

6. In a shoe blacking machine, the combination with a foot rest, of a rotary brush carrier, a brush carrying arm pivotally mounted on said carrier to swing toward and from the foot rest, a brush journaled in said arm, a blacking receptacle, a duct leading from said blacking receptacle into proximity to the brush, means for positively discharging blacking from said receptacle, timing mechanism embodying a fixed and a movable cam having inoperative and operative relative positions, connections between said discharging means and the cams for intermittently operating said discharging means, when the cams are in their operative relative positions, and means for moving said cams into their inoperative relative positions during a portion of the operating period of the brush.

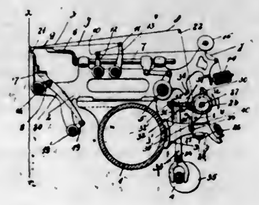
[Claim 2 not printed in the Gazette.]

1,266,083. EMBROIDERING-MACHINE. PAUL TITTES and WILHELM SCHÖNHERR, Plauen, Germany, assignors to Vogtländische Maschinen-Fabrik, Plauen, Germany. Filed Jan. 19, 1916. Serial No. 73,060. (Cl. 112—7.)

1. In a shuttle embroidering machine, a thread slackening and take-up device, comprising a positively and uniformly oscillated roller over which the thread is wound and means to relieve the said roller for a short interval to allow it to turn freely to furnish the amount of thread required by the linear displacement of the tambour frame.

2. In a shuttle embroidering machine, a thread slackening and take-up device consisting of a positively and uniformly oscillated roller over which the thread is wound, means to relieve the roller for a short interval and a thread tensioning device for constantly holding the thread on the said roller under tension.

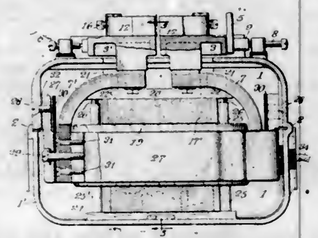
8. In a shuttle embroidering machine, a thread slackening and take-up device, consisting of a positively and uniformly oscillated roller, means for relieving said roller for a short interval to allow it to turn freely, a thread



tensioning device and a thread guide, said roller and guide having both a covering of soft material constituting a resistance for the thread.

[Claims 3 to 7 not printed in the Gazette.]

1,266,084. ELECTRIC WELDING-MACHINE. EDMUND J. VON HENKE, Lynn, Mass., assignor to Thomson Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed May 14, 1917. Serial No. 168,331. (Cl. 219—4.)



1. In a metal working apparatus, an incased transformer having a two-turn secondary embodying a pair of conductors the opposite ends of which respectively are secured to and in electrical connection with the casing.

8. In an electric metal working apparatus, a sectional casing for the transformer one section of which casing is provided with workholders mounted on its exterior and has mounted within it a secondary bar whose circuit is completed through the transformer casing, an automatic switch magnet and a section of transformer core provided with an auxiliary secondary coil for operating said switch magnet.

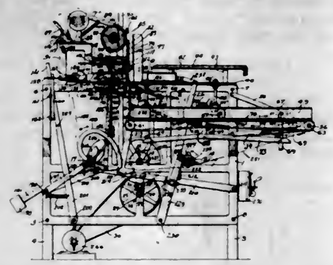
13. In an electric metal working apparatus, a sectional casing one section of which carries outside the workholding platens and within it the automatic and manual switches and secondary of the transformer, together with a section of the core, while the remaining section of the casing carries the balance of the core and the primary.

[Claims 2 to 7, 9 to 12, and 14 to 20 not printed in the Gazette.]

1,266,085. PACKAGE-WRAPPING MACHINE. ARTHUR F. WELLS, San Francisco, Cal., assignor to Adjustable Wrapping Machine Company, San Francisco, Cal., a Partnership consisting of Nathan Schiller and C. A. Petterson. Filed May 10, 1916. Serial No. 96,553. (Cl. 93—2.)

1. A package wrapping machine comprising a movable package carrier, means to push the package into said carrier, paper feed rolls, means to feed a strip of paper across the end of the package carrier so that when a package is pushed thereinto that the paper will be pushed along therewith, a longitudinally reciprocable inclined

paper receiving table, and means to fold the paper strip around the package.

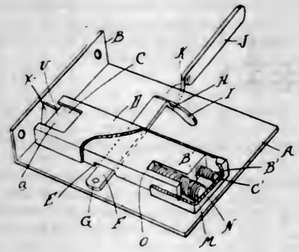


2. A package wrapping machine comprising a vertically movable package carrier, a paper supply and paper feed roll, means to feed a length of paper in front of the package carrier, means to push a package and a strip of paper into said package carrier at right angles to its line of movement, means to cut said paper strip into determinate lengths, an inclined laterally movable paper receiving table upon which the paper is delivered for the next parcel to be wrapped, and means to fold the paper over the ends of the parcel.

5. In a parcel wrapping machine, a feed table, a vertically movable parcel carrier, a plunger in the parcel carrier, means to hold said plunger normally in an intermediate position, a plunger to push the package against the plunger in the parcel carrier, a link and cam mechanism to operate the carrier, and a pair of vertically movable end plates on the carrier to fold the ends of wrapper across the parcel.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,266,086. LATCH. PETER J. WESOLOWSKI, Detroit, Mich. Filed Aug. 30, 1915. Serial No. 47,927. Renewed Mar. 21, 1918. Serial No. 223,863. (Cl. 70—42.)

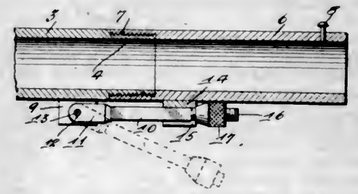


1. In a latch, the combination of a casing plate, a housing thereon, a latch bolt slidably arranged within said housing provided with a recess, a lever pivoted upon said plate and extending through the recessed portion of said latch bolt, a spring acting to project said latch bolt, the latter being provided with a housing, a spring arranged within said housing and engaging said lever, said spring acting normally to hold said lever in inoperative position, and a stop upon the casing against which said lever is held by said spring when in inoperative position.

2. In a latch, the combination of the casing, a latch bolt provided with a recess, a lever pivoted to said casing and extending through said recess, a stop on the casing engaged by the lever when in inoperative position, there being a housing in said latch, a spring arranged in said housing tending to project said latch bolt, the latter having a second housing communicating with the recess in the latch bolt, a member arranged in said second housing and engaging said lever, and a spring acting upon said member to normally hold said lever against said stop, for the purpose described.

3. In a latch, the combination with the casing and a keeper, of a bolt carried by the casing for engaging the keeper, said bolt being transversely recessed and having a longitudinal recess communicating with the transverse recess, a spring acting on the bolt to displace it toward the keeper, a pivoted lever extending through said transverse recess to withdraw the bolt from the keeper, said lever being limited in its movement, and a coiled spring disposed in said longitudinal recess of the bolt acting upon the lever to maintain it normally in its limiting position nearest adjacent the keeper.

1,266,087. GUN ATTACHMENT. RICHARD M. WILLIAMS, Shawnee, Okla. Filed July 2, 1917. Serial No. 178,146. (Cl. 42—79.)



1. In a gun attachment of the class described, the combination of a gun having a barrel, a removable end positioned upon the end of said barrel, lugs carried by said barrel and said removable end, a locking bar pivotally mounted upon a plurality of said lugs, said bar being adapted to be moved into engagement with the remaining lug, and a nut carried upon said locking bar and engaging said last mentioned lug for holding the locking bar in a set position whereby said removable end will be held against accidental displacement.

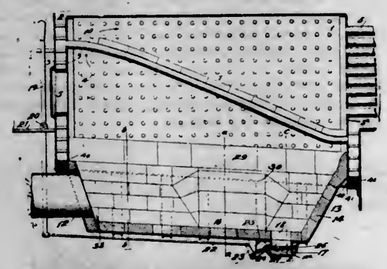
2. In a gun attachment of the class described, the combination of a gun having a barrel, a removable end positioned upon said barrel, said gun and said end having sights, a pair of lugs fixedly mounted upon said barrel, a lug fixedly mounted upon said removable end, said last mentioned lug having a rectangular notch, a locking bar pivotally mounted upon said first mentioned lugs, said locking bar having a rectangular body, an externally threaded neck extending from said body, said bar being adapted to be swung so as to pass into the notch of said last mentioned lug whereby said sights will be automatically alined with each other, and a nut carried upon said threaded neck and bearing upon said last mentioned lug for holding said locking bar against accidental displacement, thereby holding said removable end from accidental movement.

[Claims 3 to 7 not printed in the Gazette.]

1,266,088. FIRING-CHAMBER FOR POWDERED FUEL. WALTER D. WOOD, New York, N. Y., assignor to Fuel Savings Company, Allentown, Pa., a Corporation of Pennsylvania. Filed Mar. 23, 1914. Serial No. 826,642. (Cl. 110—28.)

1. In a furnace, a firing chamber for burning fine fuel, consisting in the combination with a fire box having side walls, of a depressed auxiliary chamber having all its sides sloping downwardly and inwardly toward the bottom and the bottom itself sloping toward one end, said bottom being provided in the lower end with an opening, through which the slag and other accumulations of the products of combustion may be removed, and said auxiliary chamber being provided with an opening in the wall thereof for the admission of the fuel to be burned, the entire sides and bottom of said auxiliary chamber being sheathed with a refractory material, and said combustion chamber and refractory material being shaped and arranged so as to leave an air space between the refractory material and

the side walls of the fire box where they come into contact with the mud-ring of said fire box, so as to prevent the joint at that point from becoming heated, said air space being in communication with the atmosphere so as to allow ingress and egress of the cooling air.



2. In a furnace, a firing chamber partly inclosed by the boiler wall, in combination with a mud-ring and a depressed auxiliary chamber sheathed with fire brick, a longitudinal row of removable fire brick along the upper edges of the auxiliary chamber and beside the boiler wall for the purpose of carrying the fire box lining up as far as possible and permitting stay bolt inspection, there being an air space below the said row of fire brick and between it and the mud-ring, together with a perforated plate below the air space.

1,266,089. VEHICLE-WHEEL. ROBERTO AMODIO, Rochester, N. Y., assignor, by direct and mesne assignments, to Airless Auto Wheel & Tire Company, Inc., Rochester, N. Y., a Corporation of New York. Filed Oct. 7, 1915. Serial No. 54,653. (Cl. 152—8.)



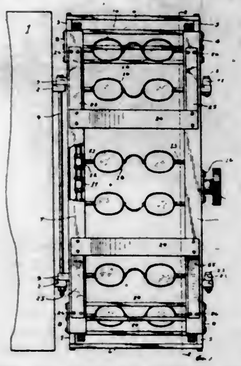
A vehicle wheel comprising a rim, plungers guided in the rim and having enlarged heads formed with channels along opposite sides, and links connecting said heads and arranged in said channels in pairs on opposite sides of the heads, each link being pivoted to one head and having a shifting fulcrum on another.

1,266,090. EYE-TESTING MACHINE. SAMUEL C. BARR, Chillicothe, Ohio. Filed Apr. 27, 1917. Serial No. 165,010. (Cl. 88—22.)

1. In an eyeglass frame testing machine, the combination with a fixed support, of a frame pivotally connected with said support, an endless eyeglass frame carrying chain rotatably mounted within said frame, a hingedly supported mirror movable in unison with said frame, and means for revolving said chain to selectively aline the chain carried eyeglass frames with said mirror.

3. In an eyeglass frame testing machine, the combination with a fixed support, of a frame pivotally connected with said support, an endless eyeglass frame carrying chain rotatably mounted within said frame, a hingedly supported mirror movable in unison with said frame, and means for revolving said chain to selectively aline the chain carrying eyeglass frames with said mirror and a face resting structure connected with said frame and resiliently movable toward the latter.

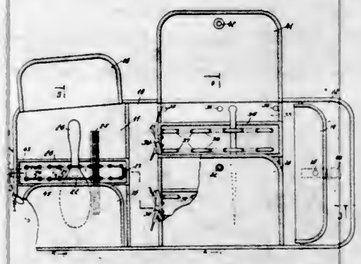
5. In an eyeglass testing machine, a mirror, a framework located in front of said mirror, a pair of endless chains carried by said framework, a plurality of lens frames supported between said chains, a channel guide piece for the front strand of each chain, and an upper



and lower resilient resting structure carried by said framework against which the face is placed, said resting structure permitting a yielding adjustment with respect to any of said frames.

[Claims 2 and 4 not printed in the Gazette.]

1,266,091. FOLDING CARRYING-CASE. DAVID BASCH, New York, N. Y., assignor to I. B. Kleinert Rubber Co., New York, N. Y., a Corporation of New York. Filed Oct. 26, 1916. Serial No. 127,752. (Cl. 150—34.)



1. A folding carrying case comprising a flexible back, members of similar material affixed thereto intermediate its length to form transverse pockets, a holding member affixed to one edge of said back, and means for detachably securing the opposite end thereof to the back near its other edge, said holding member when thus secured lying over and covering said pockets, a holding strip secured to said holding member and disposed in longitudinal relation to the back, a pair of rows of antifriction eyelets in said holding strip, and a flexible cord laced through said eyelets to form a plurality of pairs of longitudinal holding loops.

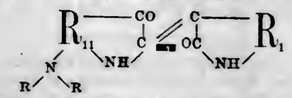
4. A folding carrying case comprising a flexible back, members of similar material affixed thereto to form transverse pockets, some of said pockets being intermediate the length of said back, a holding member affixed to one edge of said back opposite said intermediate pockets, and means for detachably securing the opposite end of said holding member to the back near its other edge, a pair of holding strips secured to said holding member and disposed in longitudinal relation to the back, a pair of rows of anti-friction eyelets in each of said holding strips, a flexible cord laced through the eyelets of each holding strip to form a plurality of pairs of longitudinal holding loops in each of said holding strips, a pair of

transversely folding overlapping flaps at the sides of the holding member, means for fastening the overlapping parts of said flaps together, means for fastening the ends of the back together, said back being provided at one of its ends with means for hanging the case.

[Claims 2 and 3 not printed in the Gazette.]

1,266,092. YELLOWISH-BROWN VAT DYES. WILHELM BAUER and ALFRED HERRE, Opladen, near Cologne, Germany, assignors to Synthetic Patents Co., Inc., New York, N. Y., a Corporation of New York. Filed Mar. 23, 1915. Serial No. 16,418. (Cl. 8—1.)

1. The new products being vat dyestuffs having most probably the following general formula:

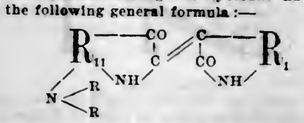


R includes oxygen and hydrogen; R_1 stands for a benzene nucleus which contains halogen; R_{11} for a benzene nucleus which may contain halogen and which contains in position 6 the group



which dyes are in a dry state dark crystals which a metallic luster soluble in hot concentrated sulfuric acid generally with a violet coloration; and which yield with hydrosulfite and caustic soda lye vats dyeing cotton yellowish-brown shades remarkable for their fastness to chlorin and to light, substantially as described.

2. The new products being vat dyestuffs having most probably the following general formula:—

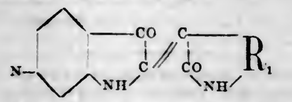


 being a group containing only one nitrogen atom wherein R stands for oxygen or hydrogen; P_1 stands for a benzene nucleus which contains halogen; R_{11} for a benzene nucleus which may contain halogen and which contains in position 6 the group



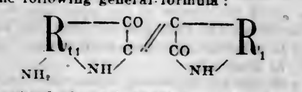
which dyes are in a dry state dark crystals with a metallic luster soluble in hot concentrated sulfuric acid generally with a violet coloration; and which yield with hydrosulfite and caustic soda lye vats dyeing cotton yellowish-brown shades remarkable for their fastness to chlorin and to light, substantially as described.

3. The new products being vat dyestuffs having most probably the following atomic group:



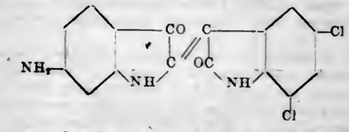
wherein R_1 stands for a benzene nucleus which contains halogen; which dyes are in a dry state dark crystals with a metallic luster soluble in hot concentrated sulfuric acid generally with a violet coloration; and which yield with hydrosulfite and caustic soda lye vats dyeing cotton yellowish-brown shades remarkable for their fastness to chlorin and to light, substantially as described.

4. The new products being vat dyestuffs having most probably the following general formula:



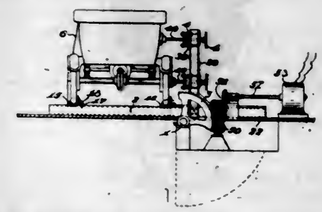
wherein R_1 stands for a benzene nucleus which contains halogen; R_{11} for a benzene nucleus which may contain halogen and which contains in position 6 the group—NH_2; which dyes are in a dry state dark crystals with a metallic luster soluble in hot concentrated sulfuric acid generally with a violet coloration; and which yield with hydrosulfite and caustic soda lye vats dyeing cotton yellowish-brown shades remarkable for their fastness to chlorin and to light, substantially as described.

5. The new product having most probably the formula:



being a vat, dye derivable from 5.7-dichloroisatin and 6-aminoindoxyl, which is in a dry state a dark brown crystalline powder with a metallic luster, insoluble in the usual organic solvents, soluble in concentrated sulfuric acid with a reddish-violet coloration; and dyeing cotton from the hydrosulfite vat in yellowish-brown shades fast to chlorin, washing and light, substantially as described.

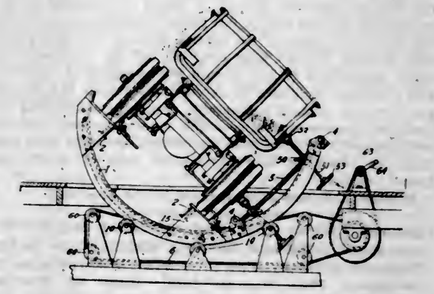
1,266,093. CAR-REPAIRING DEVICE. JACOB H. BECKMAN, Seattle, Wash. Filed June 4, 1917. Serial No. 172,838. (Cl. 254—89.)



2. An apparatus for upturning and holding automobiles in repairing, comprising two sets of supporting arms at substantially right angles, pivotal supports for said arms adjacent the angle of joining, means for clamping the automobile to those arms which normally are horizontal, and supporting means for the side of the automobile comprising threaded bars having bearing blocks adapted to engage the sides of the automobile, complemental threaded blocks receiving said bars and horizontal bars vertically adjustable on the vertical supporting arms, and means for adjusting the threaded blocks on the horizontal bars.

[Claims 1 and 3 not printed in the Gazette.]

1,266,094. AUTOMOBILE-TURNING DEVICE. JACOB H. BECKMAN, Seattle, Wash. Filed Aug. 27, 1917. Serial No. 188,526. (Cl. 214—1.)



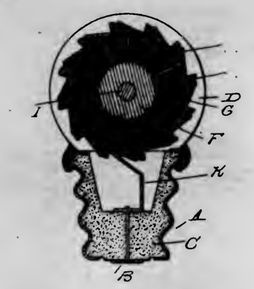
1. An automobile turning device comprising a frame for holding the automobile, said frame containing two arcuate

beams and bars connecting the same, located beneath the wheel lines of the automobile, wheel bearing plates adjustable upon said bars to fit the spacing of the wheels of automobiles, stationary supporting wheels for said arcuate frame beams, and means for turning the frame upon said wheels.

2. In a device of the character described, separated wheel trackway members, each consisting of two separated beams, wheel bearing plates adjustable along said beams and securing bolts extending downward between said beams.

3. In a device of the character described, separated longitudinal beams adapted to serve as wheel trackway members for the automobile, a wheel bearing plate adjustable along said beams, a wheel securing plate having an offset end adapted to engage over the wheel rim, a clamping bolt securing the clamping plate to the wheel bearing plate, and means for securing the wheel bearing plate upon said beams.

1,266,095. MULTIPLE FUSE. LOUIS B. BENNETT, Detroit, Mich., assignor to Florence May Eckman, Detroit, Mich. Filed Mar. 26, 1917. Serial No. 157,416. (Cl. 175—278.)



1. A multiple fuse, comprising a plug member having coöperating electrical contacts, a replaceable member detachably connected to said plug member and provided with a central contact, a series of peripheral contacts and radial fuses extending therebetween, and means for detachably connecting said replaceable unit to said plug, forming electrical connection between one of the plug contacts and the central contact of said replaceable member and a connection to the other of said plug contacts for successively engaging the peripheral contacts of the replaceable member in different positions of relative adjustment thereof.

4. A multiple fuse, comprising a plug member provided with socket-engaging contacts, a replaceable unit rotatively mounted on said plug on an axis transverse to the axis of the plug, said unit comprising a peripherally-notched, centrally-apertured insulator body, a contact in the central aperture thereof, a series of contacts in the peripheral notches and radial fuses therebetween, a clamping screw for securing the central contact of said replaceable member to said plug member and for forming electrical connection to one of said socket-engaging contacts, and a member arranged to successively engage the peripheral notches of said replaceable member constituting an electrical connection between the contacts in said notches and the other of said socket-engaging contacts and also yieldably retaining said replaceable member in its adjusted position.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,266,096. TONE-ARM FOR TALKING-MACHINES. CHARLIE J. BOUSFIELD, Bay City, Mich., assignor to The Delpheon Company, Bay City, Mich., a Corporation of Michigan. Filed May 22, 1917. Serial No. 170,206. (Cl. 274—24.)

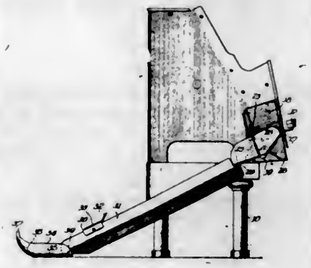
1. In a talking machine, a tone arm comprising reversely curved sections connected by means of a swivel joint, and an expansible helical spring interposed between the jointed ends of the sections to maintain a tension



thereon to hold them in the required adjusted position.

[Claim 2 not printed in the Gazette.]

1,266,097. COIN-DELIVERING MECHANISM. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Cashier Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 10, 1916. Serial No. 90,212. (Cl. 133—1.)



1. In a device of the class described, the combination of means for holding stacks of coins of different denominations, means for ejecting coins from said stacks, a hopper for collecting said coins as ejected, a cup mounted at the outlet from said hopper, said cup being mounted on a pivot, means for permitting the moving of said cup into either of a plurality of tilted positions and retaining the same in such positions, spring means tending to retain said cup in a horizontal position with freedom of movement into a tilted position, and a chute for receiving coins discharged from said cup when in one of said tilted positions, substantially as described.

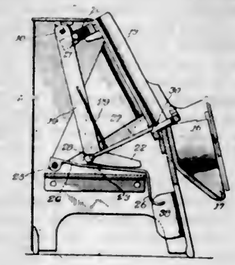
6. In coin handling apparatus, the combination of a chute, a receiving cup fixed at the discharge from said chute, said cup having an open top and being provided with shallow side walls and a relatively deep end wall, and a transverse rib or hump at the intersection of said bottom wall with the floor of said cup, substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,266,098. CHANGE-MAKER. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Cashier Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 10, 1916. Serial No. 90,213. (Cl. 133—5.)

1. In a coin-delivering device, the combination of means for supporting a plurality of stacks of coins of different denominations, a hopper disposed at the base of said stacks and having a restricted outlet opening, an ejector for each stack of coins, four finger levers and one thumb lever connected to said ejectors and side guides so disposed as to cause the hand of an operator to assume a position in which the fingers of the hand register with four of said levers and in such position that the palm of the hand will be beneath the outlet opening in said hopper, substantially as described.

6. In a device for delivering coins, the combination of a casing providing a plurality of adjacent holders for coins, ejectors for the coins, keys for operating the ejectors, a hopper for causing the ejected coins to be delivered at a central outlet, five keys being employed, a guide for each side of the palm of the hand of the operator, said guides being located at the sides of four of said keys whereby the hand of the operator with the palm upward is directed into such positions that the fingers are in proper position to engage said keys and to actuate the



same by an upward movement of the fingers, the fifth lever being located at one side of the guide and in such position as to be contacted by the thumb and actuated by a natural downward movement thereof, substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,266,099. COIN-DELIVERY CHUTE. EDWARD J. BRANDT, Watertown, Wis., assignor to Brandt Cashier Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 10, 1916. Serial No. 90,214. (Cl. 133—1.)

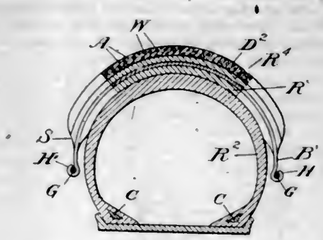
1. In coin handling mechanism, the combination of means for delivering coins in a substantially horizontal position, a plurality of narrow hoppers shaped to cause said coins to assume a vertical position, runways for conducting coins to a remote point by allowing the same to roll on edge, certain of said runways being of a width sufficient to accommodate two coins, the floor of said runways being stepped whereby coins entering said runways side by side are caused to roll at different elevations, substantially as described.

3. In a coin handling device, the combination of a plurality of runways mounted horizontally beneath a delivering mechanism, and a delivery receptacle at the termination of said runways, an end wall of said receptacle being inwardly inclined with relation to the floor of the receptacle, the wall being inclined in a direction from which the coins approach the wall whereby the coins are caused to lie flat on the floor of the receptacle, the floor being laterally inclined and open for the discharge of the coins at a right angle to the direction from which they are received, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,266,100. COMPOSITION OF MATTER TO RESIST WEAR AND ANTISKID DEVICE EMBODYING THE SAME. HAROLD P. BROWN, New York, N. Y. Filed Feb. 7, 1914. Serial No. 817,271. (Cl. 154—43.)

1. The combination of a hard material in a state of sub-division firmly adhering to an elastic matrix by result of chemical combination between the material and the matrix.



7. The combination of a hard material in a state of sub-division firmly adhering to an elastic matrix by an interposed plating.

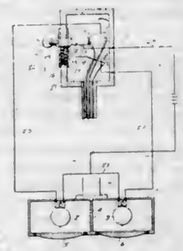
20. The combination of a hard material in a state of sub-division; plating applied to such material; an elastic matrix embracing such plated material and an elastic cushion applied to a portion of said matrix, and a reinforcement embedded in the resulting elastic structure.

22. An anti-skid device for tires or the like, comprising a base member, an elastic cushion applied to both sides of the base, an elastic matrix applied to the exterior of the cushion and hard plated material in a state of sub-division embedded in said matrix.

23. An element of anti-skid device, comprising a chain, an elastic cushion embracing such chain, an elastic matrix applied to portion of said cushion, a hard plated material in a state of sub-division embedded in such elastic matrix.

[Claims 2 to 6, 8 to 19, 21, and 24 not printed in the Gazette.]

1,266,101. SIGNAL DEVICE FOR AUTOMOBILES. WILLIAM J. BUNYAN, Cleveland, Ohio. Filed Oct. 12, 1917. Serial No. 196,206. (Cl. 200—27.)

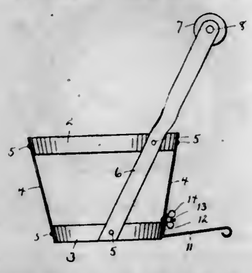


A switch comprising a casing having opposite terminals therein and a slot in the wall thereof, a pin slidable laterally in said slot and provided with a contact adapted to close with either terminal, a spring in the slot, pressing against the pin and holding the contact closed with one terminal, and a pair of plates mounted on the pin at opposite sides of said wall to cover the slot and confine the spring therein.

1,266,102. FLOWER-POT HOLDER AND CARRIER. EARNEST BUNZEL, Conshohocken, Pa. Filed Dec. 23, 1916. Serial No. 138,614. (Cl. 248—20.)

1. A flower pot holder and carrier comprising two concentric hoops of different size, connecting strips secured to said hoops for spacing them apart, a pair of oppositely disposed handle side rails secured to said hoops and projecting upwardly therefrom at an angle to the vertical center of the hoops, whereby said side rails extend beyond the outer circumference of the larger hoop and a handle mounted between the upper ends of the handle side rails as shown.

2. A flower pot holder and carrier comprising two concentric hoops of different size, connecting strips fixed to said hoops for spacing them apart, a pair of oppositely disposed handle side rails secured to each of said hoops and projecting upwardly therefrom at an angle to the



vertical center of the hoops, a handle fixed between the upper, outer ends of the handle side rails and an extending support carried by one of the connecting strips adjacent the lower hoop for the purpose specified.

1,266,103. TORPEDO-BOAT. EDWARD F. CHANDLER, Brooklyn, N. Y., assignor to Chandler Development Corporation, a Corporation of New York. Filed Dec. 9, 1915. Serial No. 65,977. (Cl. 114—18.)



1. In a torpedo boat a gyroscopically steered automobile torpedo detachably carried thereby, together with means for unlocking the gyroscope at the instant that the torpedo propelling means is started, the starting of the propelling means acting to detach the torpedo from the carrying means.

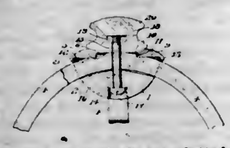
7. In a dirigible vessel an automobile self steering torpedo adapted to be automatically launched, by the operation of the propelling mechanism, a gyroscope adapted to control the steering of the torpedo, and means operable from a remote station for unlocking the gyroscope simultaneously with the starting of the propelling means.

10. The method of launching gyroscopically steered torpedoes from motor boats which consists in initially spinning the gyroscope, and simultaneously placing the steering gear under gyroscopic control, and starting the propelling means for freeing the torpedo from the said boat.

20. In combination with a boat, a gyroscopically steered automobile self launching torpedo suspended thereunder, means within the boat for placing the gyroscope in operation and subsequently effecting the launching of the torpedo simultaneously with the placing of the same under gyroscopic control.

[Claims 2 to 6, 8, 9, and 11 to 19 not printed in the Gazette.]

1,266,104. STRUCTURAL JOINT. JOHN P. CLARY VON CARLSBERG, Worcester, Mass. Filed Oct. 24, 1917. Serial No. 198,308. (Cl. 45—117.)

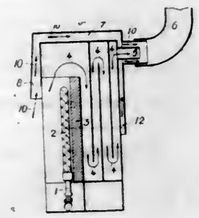


1. A structural joint including a slotted base member, a cap member interlocking therewith, joined members positioned in the slots of said base member and interlocking with the cap member to prevent separation of said joined members, and means to secure said members in interlocking relation.

4. A structural joint for stand legs comprising a base member provided with radial outwardly inclined slots and having lugs extending upwardly therefrom, legs having their end portions positioned within said slots and provided with lateral lugs coincident with the lugs of said base member, a cap member provided with a substantially central countersunk portion whose wall embraces all of said lugs, said cap member having an angular countersunk portion in one face thereof, a nut positioned in said angular countersunk portion, and a bolt extending through said base and cap members and engaging said nut to secure the base member and cap member together.

[Claims, 2, 3, and 5 not printed in the Gazette.]

1,266,105. GAS-STOVE. LEONIS JOHANNES FRANCISCUS CLEMENT, Rotterdam, Netherlands, assignor to R. S. Stokvis & Zonen Limited, Rotterdam, Netherlands. Filed Sept. 11, 1915. Serial No. 50,252. (Cl. 126—86.)



1. In a gas stove of the open front type, the combination with a burner, an exit duct communicating with a stove pipe or chimney, an exit for the products of combustion, leading into said exit duct, and an air passage surrounding said exit and discharging into said exit duct in the direction of the draft, said passage being arranged along one surface of the stove for the purpose of heating said passage and having an opening therein to permit the entrance of air.

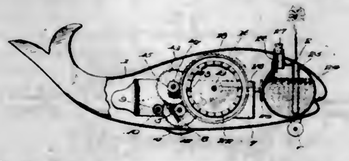
2. In a gas stove of the open-front type, the combination of a burner, an exit duct for the products of combustion adapted to be brought into communication with a stove pipe or chimney, an air duct surrounding the exit duct and terminating in advance thereof, and air passages discharging into said air duct, one of the said passages leading from the front of the stove near the upper part of the opening therein and extending across the top of the stove to said air duct, substantially as described.

3. In a gas stove of the open front type, the combination with a burner of an exit duct communicating with a stove pipe or chimney, an exit for the products of combustion leading to said exit duct, and air passages discharging into said exit duct in the direction of the draft, one of said passages leading from the front of the stove near the upper part of the opening therein and extending across the top of the stove to said exit duct.

1,266,106. TOY. CHARLES RAYMOND COUP, McKeesport, Pa. Filed Nov. 24, 1917. Serial No. 203,794. (Cl. 46—45.)

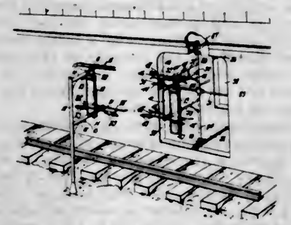
1. A wheeled toy comprising a hollow body having a filling opening and a discharge opening in its top near its front end, a reservoir within the body having flexible walls and having its top in communication with the said filling and discharge openings, a motor within the body in rear of said reservoir, and a plunger actuated by said motor and bearing upon the reservoir.

2. A wheeled toy comprising a hollow body having filling and discharge openings in its top near its front end, tubes depending within the body around said openings, a flexible reservoir secured around the said tubes, a closure for the upper end of the filling tube, a plunger bearing upon the rear side of the reservoir, and a motor



within the body for reciprocating said plunger, the discharge tube having its lower end disposed near the bottom of the reservoir.

1,266,107. MAIL-TRANSFERRING APPARATUS. GEORGE DEAN, Alpena, Mich. Filed Nov. 24, 1916. Serial No. 133,206. (Cl. 258—17.)



1. A mail transferring apparatus including a train device comprising a standard, upper and lower arms extending from the standard, an intermediate arm extending from the standard adjacent the upper arm, inner and outer rods extending from the lower arm, a rod carried by the intermediate arm for passing through a ring suspending a sack from a station device, and rods carried by the upper arm of the train device in superposed relation and positioned above the rod of the intermediate arm.

2. A mail transferring device including a train device comprising upper and lower arms and an intermediate arm, inner and outer rods carried by the lower arm of the train device, a rod carried by the intermediate arm for passing through a ring suspending a sack from a station device, and upper and lower rods carried by the upper arm of the train device.

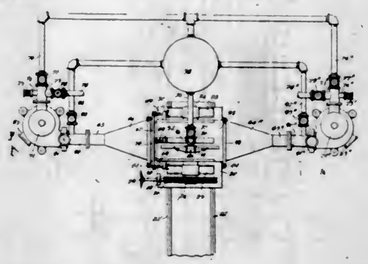
5. In a mail handling apparatus a train device comprising a standard, upper and lower arms extending from the standard, intermediate arm extending from the standard, means carried by the upper arms for suspending an article to be delivered, means carried by the intermediate arm for engaging an article to be collected, and means carried by the lower arm for engaging an article to be delivered and for engaging an article collected and preventing transverse movement of the article.

[Claims 3 and 4 not printed in the Gazette.]

1,266,108. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed Apr. 6, 1917. Serial No. 160,114. (Cl. 8—18.)

1. In a dyeing machine, in combination, a dyeing receptacle, a series of parallel foraminous plates spaced from each other within the dyeing receptacle, a chamber at each end of the dyeing receptacle and capable of abutment thereon, means for circulating a liquid through the two chambers and the foraminous plates, means for removing the dyeing receptacle from between the two chambers without moving said two chambers, means for revolving the dyeing chamber, and means for removing the foraminous plates from the dyeing chamber.

4. In a dyeing machine, in combination, a dyeing receptacle, a series of parallel foraminous plates comprising a series of cylindrical rods having divergent shaped openings between them and extended rod members within the dyeing receptacle, means for maintaining the plates at predetermined distances from each other, a chamber at each end of the dyeing receptacle and capable of abutment thereon, means for passing a liquid through the chambers and the foraminous plates, means for forcing air through the chambers and the foraminous plates, means for removing the liquid from the dyeing chamber after it has passed through a chamber and some of the foraminous plates, means for removing the dyeing receptacle from abutment with the chambers without moving the chambers and means for revolving the dyeing receptacle.



6. In a dyeing machine, in combination, a dyeing receptacle, a series of parallel foraminous plates comprising a series of parallel cylindrical bars having divergent shaped openings between them and extended rods within the dyeing receptacle, means for maintaining the plates at predetermined distances from each other, a chamber at each end of the dyeing receptacle and capable of abutment thereon, means for passing a liquid through the chambers and the foraminous plates, means for forcing air through the chambers and the foraminous plates, means for removing the liquid from the dyeing chamber after it has passed through a chamber and some of the foraminous plates, means for removing the dyeing receptacle from abutment with the chambers, means for revolving the dyeing receptacle, a smaller testing device, similar and exterior to the larger device, the two devices being so connected that fiber in the two devices will be treated equally by liquid and by air, and means for allowing the examination of the fiber in the testing device without interrupting the treatment of the fiber in the other device.

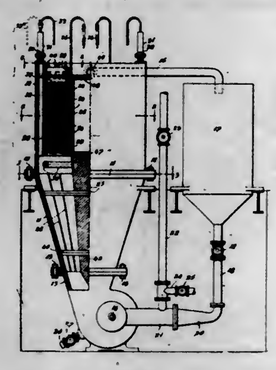
8. In a dyeing machine, in combination, a dyeing receptacle having a pyramidal shaped flange at each end, a series of parallel foraminous plates comprising a series of cylindrical rods having divergent shaped openings between them and extended rod members within the dyeing receptacle, means for maintaining the plates at predetermined distances from each other, a chamber at each end of the dyeing receptacle having a pyramidal shaped flange, means for obtaining and maintaining a tight jointure between the flanges of the receptacle and the chambers, means for passing a liquid through the chambers and the foraminous plates, means for forcing air through the chambers and the foraminous plates, means for removing the liquid from the dyeing chamber after it has passed through a chamber and some of the foraminous plates, means for removing the dyeing receptacle from engagement with the chambers without moving the chambers and means for revolving the dyeing receptacle.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,266,109. DYEING-MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed May 16, 1917. Serial No. 168,922. (Cl. 8—19.)

1. In a dyeing machine, in combination, a receptacle, a series of fiber chambers having imperforate sides within the receptacle, each chamber having a fixed foraminous

bottom and a foraminous top slidably movable within the chamber, means for moving the top with respect to the bottom and for retaining the top in any predetermined position, a liquid chamber below the fiber chambers, a second liquid chamber having upwardly divergent members below the first-mentioned liquid chamber, a pump connected to the second liquid chamber, capable of forcing a liquid upwardly through the two liquid chambers and the fiber chambers, means for returning the liquid to the pump after it has passed through the fiber chambers, and means for heating the liquid during its passage.



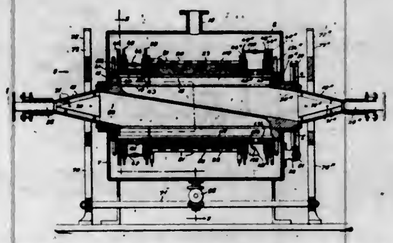
4. In a dyeing machine, in combination, a receptacle, a series of fiber chambers having imperforate sides within the receptacle, each chamber having a fixed foraminous bottom with upwardly divergent members and a movable formainous top having downwardly divergent members slidable within the fiber chamber, means for moving the top with respect to the bottom and retaining it in any desired position, a liquid chamber beneath the fiber chambers, means for passing a liquid continuously through the liquid chamber and the fiber chamber, and means for heating the liquid.

6. In a dyeing machine, in combination, a receptacle, a series of fiber chambers having imperforate sides within the receptacle, each receptacle having a fixed foraminous bottom and a movable foraminous top, means for moving the top with respect to the bottom and retaining it in any desired position, a second series of fiber chambers each having imperforate sides and a foraminous top and a foraminous bottom, a liquid chamber below the two series of fiber chambers, means for continuously passing a liquid into the liquid chamber and from thence through the two series of fiber chambers, means for heating the liquid and means for withdrawing from the device such liquid as has not passed through the two series of fiber chambers.

8. In a dyeing machine, in combination, a receptacle, a series of fiber chambers having imperforate sides within the receptacle, each chamber having a fixed foraminous bottom comprising a series of concentric rings with connecting members with upwardly extended elements, and a movable foraminous top comprising a series of concentric rings with connecting members with downwardly extended elements, a second series of fiber chambers each having imperforate sides, a foraminous bottom and a foraminous top, a liquid chamber, below the two series of fiber chambers, a second liquid chamber containing a series of upwardly divergent nested members, a pump connected with a second liquid chamber capable of forcing a liquid upwardly between the nested members of the second liquid chamber, the first liquid chamber and the two series of fiber chambers, means whereby the liquid after passage through the two series of fiber chambers will be returned to the pump, means for heating the liquid and means for determining the temperature of the liquid.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,266,110. FABRIC-TREATING DEVICE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed June 20, 1917. Serial No. 175,727. (Cl. 8—17.)



2. In a fiber treating machine, in combination, a foraminous cylinder capable of having a fabric wound thereon, an outwardly extended flange fixedly attached to each end of the cylinder, a plurality of series of annular members, means whereby the annular members of a series may be separated at any predetermined distance from each other to abut upon the flange and a fabric wound upon the cylinder closing the the openings in the cylinder between the flange and the fabric, and means for forcing liquids, steam and air through the openings in the cylinder and through the fabric rolled thereon.

5. In a fiber treating machine, in combination, a receptacle, an outer foraminous cylinder within the receptacle capable of having a fabric wound thereon, a second foraminous cylinder spaced within the first cylinder, outwardly extended flanges at each end of the cylinders, a plurality of series of annular members slidable over the outer face of the outer cylinder, means for separating the members of each series to abut upon the edge of a fabric rolled upon the outer cylinder closing all the openings in the outer cylinder except those around which the fabric is wound, means for maintaining the members in abutment against the fabric, means for revolving the cylinders and means for passing liquids, steam and air through the cylinders and the fabric during their revolution.

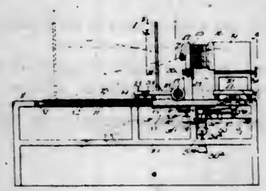
8. In a fiber treating machine, in combination, a foraminous cylinder comprising a series of spaced parallel members capable of having a fabric wound thereon, an outwardly extended flange fixedly attached to each end of said cylinder, a series of annular members slidable over said cylinder oppositely to each other and capable of closing a portion of the openings in the cylinder and means for maintaining the members in any predetermined position over the cylinder.

9. In a fiber treating machine, in combination, a receptacle, an outer foraminous cylinder comprising a series of spaced parallel members having outwardly extended projections within the receptacle, an inner foraminous cylinder spaced from the outer cylinder, tubular members connecting the openings in the inner cylinder with a supply source of liquids, steam and air, a series of slidable members over the outer face of the outer cylinder, slidably movable from each other to abut upon a fabric wound upon the cylinder closing all of the openings in the cylinder except those covered by the fabric, a flexible foraminous covering capable of close engagement with the exterior surface of the wound fabric, means for revolving the cylinders and the fabric and means for forcing liquids, steam and air through the device and the fabric during the revolution.

12. In a fiber treating machine, in combination, a receptacle, an outer foraminous cylinder comprising a series of spaced parallel members having outwardly extended projections within the receptacle, an inner foraminous cylinder spaced from the outer cylinder, tubular members connecting the openings in the inner cylinder with a supply source of liquids, steam and air, a series of slidable members over the outer face of the outer cylinder, slidably movable from each other to abut upon a fabric wound upon the cylinder closing all of the openings in the cylinder except those covered by the fabric, a flexible foraminous covering capable of close engagement with the exterior surface of the wound fabric, a testing device capable of containing fiber revoluble with the cylinders and connected with the space between the two foraminous cylinders, means for revolving the cylinders and the fabric and means for forcing liquids, steam and air through the device and the fabric during the revolution.

[Claims 1, 3, 4, 6, 7, 10, and 11 not printed in the Gazette.]

1,266,111. PHOTOGRAPH-ENLARGING APPARATUS. THOMAS ARTHUR EVANS, Chicago, and LYNN A. SALISBURY, Elgin, Ill. Filed May 23, 1914. Serial No. 840,448. (Cl. 88—24.)



1. A device of the character described embodying projecting apparatus comprising a lens, a negative holder and a screen disposed to receive rays projected from the negative holder, a cam and roller device for simultaneously changing the positions of the screen and negative holder relative to the lens, a connecting member between the screen and cam whereby motion of the screen is transmitted to the cam and roller device, and an adjusting device for compensating variations in lenses of specified focal length.

3. Photograph enlarging apparatus comprising a supporting frame, a projecting lens, a negative holder, a movable screen disposed to receive rays projected from the negative holder on the screen, and apparatus whereby the movement of the screen simultaneously controls the movement of the negative holder, said apparatus embodying a cam, a member connecting the cam and screen, and a slidable rod connecting the cam to the negative holder pivotally.

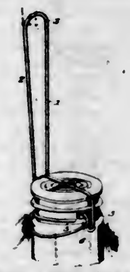
10. A device of the character described embodying a lens, a screen, a negative holder, said screen and holder being movable toward and away from the lens and adjustable relative to each other, means whereby one will be automatically and simultaneously moved toward and away from the lens by the movement of the other, and freely adjustable means whereby the extent of the movement of the screen and the said holder with respect to each other and relatively to the lens may be varied.

[Claims 2, 4 to 9, and 11 not printed in the Gazette.]

1,266,112. JAR-LIFTER. GUY W. FERDON, Cresskill, N. J. Filed Aug. 16, 1917. Serial No. 186,482. (Cl. 65—26.)

1. In a jar lifter, in combination, a vertically arranged handle consisting of two strands of wire, an elastic loop connecting said strands and forming the upper part of said handle, the lower ends of said strands forming the lower part of said handle being angularly inclined and approaching each other, offset portions extending forward from the lower end of said handle, and forming continuations of the said strands, said parts so extending forward being substantially parallel and horizontal, and forwardly extending curved clamping jaws forming continuations of said forwardly extending portions the clamping effect being referable to the loop.

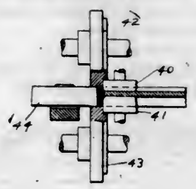
6. A jar lifter consisting of a single piece of elastic wire bent in two strands to form an upright spring handle, the lower parts of said handle being inclined to each other slightly and approaching each other closer than the width of a finger, the continuation of said strands forming parallel horizontal extensions and semicircular jar clamping jaws, adapted to clamp the neck of a jar under



pressure of said elastic handle and to be released by finger pressure within said handle.

[Claims 2 to 5 not printed in the Gazette.]

1,266,113. METHOD OF MAKING CASTING-PATTERNS. MARK E. FERNALD, Saugus, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Oct. 1, 1915. Serial No. 53,639. (Cl. 22—195.)



1. That improvement in the art of making patterns for casting the leaders used in automatic shoe machines which consists in forming a suitable blank having the shrinkage of a casting and the spring of a last measurements incorporated therein, attaching a strip of material to the edge of the blank to form a flange thereon, and imparting a draft to the flange, substantially as described.

2. That improvement in the art of making patterns for casting the leaders used in automatic shoe machines which consists in forming a blank having the shrinkage of a casting and the spring of a last measurements incorporated therein, building a flange on the blank by winding a strip of material around the edge of a blank, and imparting a draft to the flange, substantially as described.

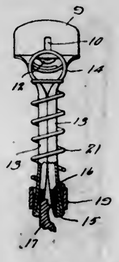
3. That improvement in the art of making casting patterns which consists in forming a suitable blank having the general shape of the desired casting, attaching paper thereto to shape the pattern to its finished form, and molding the paper to impart a draft to the pattern, substantially as described.

4. That improvement in the art of making patterns for casting the leaders used in automatic shoe machines which consists in mounting a sole on the bottom of a last, and projecting the edge of the sole upon a plane, substantially as described.

6. That improvement in the art of making patterns for casting the leaders used in automatic shoe machines, which consists in mounting a sole on the bottom of a last, projecting the edge of the sole upon a plane, enlarging the area within the projections by the shrinkage of the metal used in the casting to produce a blank, attaching a strip of material to the edge of the blank to form a flange thereon, and imparting a draft to the flange.

[Claim 5 not printed in the Gazette.]

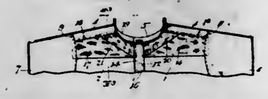
1,266,114. CORD-TERMINAL. ARTHUR E. FRANCIS, Cleveland, Ohio. Filed Aug. 17, 1917. Serial No. 186,790. (Cl. 173—269.)



1. A cord terminal comprising a sheet metal blank bent to form an arm adapted for attachment to the cord, and also to form a plurality of opposed longitudinally concave fingers projecting at an angle from said arm and a spring connection between the ends of the fingers and the arm, tending to spread the fingers, and a collar slidable on the fingers, to clamp a conductor therebetween.

2. A cord terminal comprising a sheet metal blank bent to form an arm adapted for attachment to the cord, a pair of opposed longitudinally concave fingers projecting at an angle from said arm and an arched spring connecting the inner ends of the fingers and the arm and tending to spread the fingers, a collar slidable along the fingers, to contract the same, and a spring coiled around the fingers, between said collar and the spring.

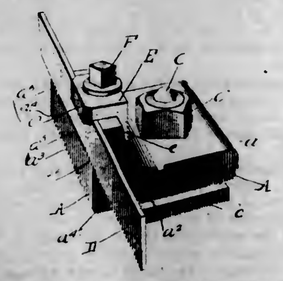
1,266,115. GARMENT. ANITA M. FUHR, Azusa, Cal. Filed Apr. 23, 1917. Serial No. 163,792. (Cl. 2—92.)



2. A garment comprising a back, fronts, a yoke stitched to the fronts and back, a facing strip stitched to one of the fronts, a bosom strip stitched to the other front, sleeves stitched to the yoke and back and fronts, and pieces underlying the upper ends of the fronts adjacent the yoke and fastened at their outer ends to the sleeves by the sleeve stitching and fastened at their inner ends by the stitchings of the facing and bosom strips respectively, the warp threads of said pieces extending transversely of the fronts.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,266,116. CUTTING-OFF TOOL. EDWARD F. G. GIBBS, Washington, D. C. Filed Nov. 16, 1914. Serial No. 872,442. (Cl. 82—36.)

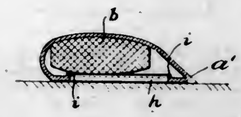


2. As an article of manufacture, a cutting-off tool base piece, comprising an angle iron, the horizontal wing of which is apertured for a king bolt, while its screw-threaded vertical wing is recessed horizontally, forming a shoulder on which a cutter blade is adapted to bear, the said shoulder being cut slightly deeper between bearing spots at each end.

4. A cutting-off tool comprising an angle iron base piece, the vertical wing of which is recessed horizontally, forming a shoulder on which a cutter blade is adapted to bear, the said shoulder having bearing spots thereon and slightly recessed between the latter at each end, a cutter blade adapted to bear on the said shoulder, a screw-pressed, inverted angle iron cutter clamp, the horizontal wing of which, having an overhanging lip, is adapted to bear on the said cutter blade, while its hanging vertical wing has side pressure against the vertical wing of the base piece, and means for holding the said tool to the tool seat of an engine lathe.

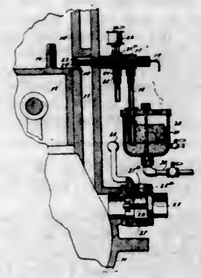
[Claims 1, 3, and 5 not printed in the Gazette.]

1,266,117. EMBROIDERING-MACHINE SHUTTLE. JOSEF CRANZ, Plauen, Germany, assignor to Vogtländische Maschinen-Fabrik, Plauen, Germany. Filed Sept. 16, 1914. Serial No. 862,051. (Cl. 112—23.)



An embroidering machine shuttle the bearing surface of which has an opening serving as dirt accumulating chamber and having sharp edges adapted to scrape up the dirt accumulating on the shuttle race and flanges inside the shuttle projecting around said opening and serving to support the bobbin at a greater distance away from the bearing surface than the thickness of the shuttle wall and to deepen the said chamber.

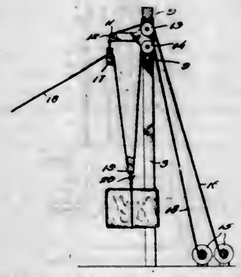
1,266,118. OIL-ENGINE. GEORGE GRAY, Stamford, Conn. Filed Mar. 23, 1916. Serial No. 86,070. (Cl. 123—73.)



1. An oil engine having means for maintaining a supply of oil below the inlet port and subject to atmospheric pressure, means for conducting the oil to the inlet port of the engine, and means for causing an air current to pass through the inlet port of the engine at the charging period in its cycle whereby a rarefication of pressure is effected at the inlet port and the pressure of the atmosphere forces into the port a quantity of oil dependent upon the extent of rarefication, and means for simultaneously drawing into the inlet port a body of heated air.

2. An oil engine having a working cylinder and piston and air compression means for communicating said air pressure to the inlet port of the cylinder at the charging period of the engine, an air supply nozzle leading from the atmosphere to the inlet port and a liquid fuel pipe lying in the air supply nozzle and terminating short of the mouth of the nozzle for the purposes specified.

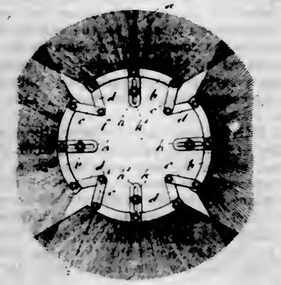
1,266,119. DERRICK. SIMON P. GRAY, Tuscaloosa, Ala. Filed July 5, 1917. Serial No. 178,697. (Cl. 212—75.)



1. A derrick comprising a frame having a bracket pivotally mounted thereon, arms carried by the bracket and supporting a pulley, the bracket also having pulleys mounted at its upper and lower end, a main line passing over the lower pulley, a drag line passing over the upper pulley and having running connection with said main line, and lifting means mounted on the main line between the lower pulley and the point of connection of the main line with the drag line, the said means providing a conveyer when the said main line is drawn taut.

2. A derrick comprising a frame having a bracket pivotally mounted thereon, the said bracket including a casing having arms extending laterally therefrom, trunnions arranged on the casing and pivotally received by the frame to permit horizontal swinging movement of the arms, a pulley mounted between the ends of the arms, the said casing having pulleys mounted on its interior, and a drag line and a main line passing over the said pulleys.

1,266,120. MUD-GUARD FOR VEHICLE-WHEELS. CHARLES GUISE, Malvern, and THOMAS JOSEPH SOUTHALL, Worcester, England. Filed Aug. 25, 1917. Serial No. 188,143. (Cl. 21—23.)



1. Sectional annular mud or splash guards for vehicle wheels, comprising a plurality of segments constituting a holder, bristles secured in said segments, links pivotally connecting the single segments, means for pivotally connecting and means for spacing said links, permitting an adjustment toward and from the center of said guard, and means for securing said guards to a wheel.

2. Sectional annular mud or splash guards for vehicle wheels comprising a plurality of segments constituting a holder for an annulus of flexible material having its edges partly overlapping at the periphery, links pivotally connecting the single segments, bolts for pivotally connecting, and tubular elements for distancing or spacing said links and permitting an adjustment of the segments toward and from the center of said guard, nuts on said bolts, and spring washers for retaining the segments in their relative positions pending the adjustment of said links, and means for securing the guard to a wheel.

3. Sectional annular mud or splash guards for vehicle wheels comprising a plurality of segments constituting a holder for an annulus of flexible material having its edges partly overlapping at the periphery, links pivotally connecting the single segment, bolts for pivotally connecting, and tubular elements for distancing or spacing said links and permitting an adjustment of the segments toward and from the center of said guard, nuts on said bolts, and spring washers for retaining the segments in their relative positions pending the adjustment of said links, slotted plates secured to said segments, threaded rods upon which plates are adapted to slide in radial direction, said rods being secured to the wheel flanges, and double sets of nuts and washers between which said plates are clamped for securing said guards to a wheel.

1,266,121. NON-REFILLABLE BOTTLE. WILLIAM HANDLER, Jerseyville, Ill. Filed Sept. 6, 1917. Serial No. 190,020. (Cl. 215—62.)



1. In a non-refillable bottle, the combination of a container having a neck, a cap fitted on and engaging the exterior of the neck and having a top discharge opening, a boss at the inner end of the discharge opening formed integral with the outer end of the cap, a valve cage supported by the neck and of smaller diameter than the cap so as to be spaced therefrom, a valve within the cage, and a guard supported upon the valve cage and interposed between said cage and the boss, said guard being separate from both the cage and the boss and having a central opening and passages leading therefrom to the periphery, the boss being closed at its center and communicating at its periphery with the space between it and the cap.

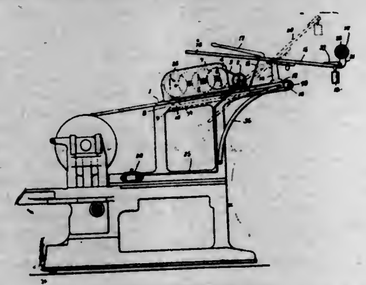
4. In a non-refillable bottle, the combination with a container having a neck, of a cap fitted to the neck, a band fixedly surrounding the neck and having resilient locking tongues, internal locking ribs on the cap and engaged by the tongues, movable means within the cap for preventing the introduction of liquid within the container, and lugs on the neck to coact with the tongues so as to hold the same against straightening.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,266,122. SHEET-CARRYING MACHINE. JAMES G. HARDIE, Canton, N. Y. Filed Nov. 12, 1915. Serial No. 61,001. (Cl. 271—8.)

1. In a sheet-carrying device the combination of a main feed-table, a power-rotated shaft journaled in said table, pulleys rigid upon said shaft, pulleys at the rear of the table, belts passing around said table and said pulleys, a sub-table pivotally mounted above said main feed-table adapted to be tilted forward to deposit upon the feeding tapes the front end of the sheets.

2. In a sheet-carrying device the combination of a main feed-table, a power-rotated shaft journaled in said table, pulleys rigid upon said shaft, pulleys at the rear of the table, belts passing around said table upon said pulleys, a shoe located between the upper and the lower flights of the belts with the upper surface of the shoe located in a plane above the plane of the upper surface of the table.



3. In a sheet-carrying device the combination of a main feed-table, a power-rotated shaft journaled in said table, pulleys rigid upon said shaft, pulleys at the rear of the table, belts passing around said table upon said pulleys, a member adapted to hold a supply of sheets, mounted with its upper surface above the upper surface of said belts and adapted to swing about a pivot to deposit the front ends of the sheets upon the belts.

1,266,123. TOP AND WIND-SHIELD CONNECTOR. JOHN H. HANSEN, Grand Rapids, Mich. Filed Jan. 2, 1917. Serial No. 140,284. (Cl. 21—148.)

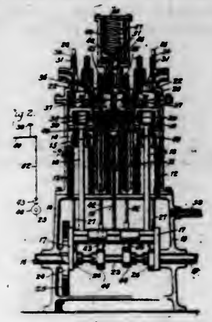


1. A connector adapted for connection to a motor vehicle top and wind shield comprised of a section of fabric and a spring clip substantially U-shaped in cross-section, said fabric at one edge being secured to the clip, and said clip extending substantially the full length of the wind shield, substantially as described.

2. A connector adapted for connection to a motor vehicle top and detachably connected to a wind shield comprised of a section of fabric of substantially the same length as the wind shield, and a spring metal clip substantially U-shaped in cross section and of the same length, said fabric at one edge entirely covering the clip, substantially as described.

3. A connector of the character described comprising a spring metal clip, U-shaped in cross section and of a length substantially equal to the length of a wind shield, and a relatively narrow strip of fabric of substantially the same length as the clip, said fabric being free at one edge and adjacent its other edge passing under and conforming to the clip and then around and over the same, the edge of the fabric passing beyond the clip and lying against the body of the fabric and secured thereto, substantially as described.

1,266,124. INTERNAL-COMBUSTION ENGINE. HARRY H. HOOD, Chicago, Ill., assignor to E. F. Herrmann. Filed July 28, 1915. Serial No. 42,271. (Cl. 123—59.)



1. In an internal combustion engine, the combination of a working cylinder, a piston operating in said cylinder, means for delivering air to the cylinder for compression therein, a compressor operated by the engine, means for supplying fuel to the compressor, a chamber for the fuel compressed by the compressor, and means for forcibly displacing the compressed charge of fuel in said chamber into the working cylinder.

4. In an internal combustion engine, the combination of a working cylinder, a pump cylinder, a piston operating in each of said cylinders, a cylindrical reservoir having a piston, means associated with said piston for automatically exerting pressure upon gaseous fuel compressed in said pump cylinder and admitted to said reservoir, valve mechanism for controlling the passage of compressed fuel from said pump into said reservoir and from said reservoir into the working cylinder, means for admitting air into said working cylinder, and suitable synchronizing connections between said pump, said working cylinder, and said valve mechanism whereby a charge of compressed fuel is admitted to said working cylinder once in every four strokes of said working cylinder.

8. In an internal combustion engine, the combination of a working cylinder, a piston operating in said cylinder, means for delivering air to the cylinder for compression therein, a compressor operated by the engine, means for supplying fuel to the compressor, a chamber for a charge of fuel compressed by the compressor, a plunger in said chamber, and a spring for operating the plunger to displace a charge compressed in the chamber into the working cylinder.

14. In an internal combustion engine, the combination of a plurality of working cylinders, a piston in each of said cylinders, means for delivering the air to the cylinders for compression therein, a compressor operated by the engine, means for supplying fuel to the compressor, a chamber for fuel compressed by the compressor, ducts from said chamber to the working cylinders, respectively, and means for forcibly displacing the compressed charge of fuel in said chamber alternately into the working cylinders.

[Claims 2, 3, 5 to 7, 9 to 13, and 15 to 17 not printed in the Gazette.]

1,266,125. FOLDING GAME-TABLE. FRANK JOHNSON and BURTON M. APPLEBEE, Brooklyn, N. Y. Filed May 5, 1917. Serial No. 166,705. (Cl. 46—12.)

1. In a table of the character set forth, a bed arranged to fold upon itself and to be unfolded in a plane, and a frame arranged to fold upon itself and to be unfolded and inclose said bed, the line of fold of said bed lying out of coincidence with the line of fold of said frame.

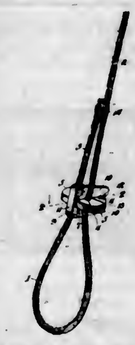


2. In a table of the character set forth, a bed arranged to fold upon itself and to be unfolded in a plane, a frame arranged to fold upon itself and to be unfolded and inclose said bed, the line of fold of said bed lying out of coincidence with the line of fold of said frame, and means carried by said bed and frame for separably joining said bed and frame.

3. In a table of the character set forth, a bed arranged to fold upon itself and to be unfolded in a plane, and a frame arranged to fold upon itself and to be unfolded and inclose said bed in such plane condition, and to be folded and inclose said bed when the latter is in the folded condition.

[Claims 4 to 16 not printed in the Gazette.]

1,266,126. BOLTLESS GUY-CLAMP. TOMLINSON FORT JOHNSON, Jr., Atlanta, Ga. Filed Feb. 6, 1918. Serial No. 215,659. (Cl. 24—136.)



8. A clamp for holding a loop in a wire cable comprising a flat metal clip provided with an opening at one side edge, and with a pair of spaced, serrated seats in communication with the opening, said seats being adapted to receive and engage the substantially parallel portions of the cable forming the loop, and a wedge member comprising a pair of spaced tapered wedges joined at their thicker ends by a head and adapted to receive the clip between the same and to pass between the portions of the cable to force them outwardly and into the said seats when the head of the wedge is driven into the opening in the clip.

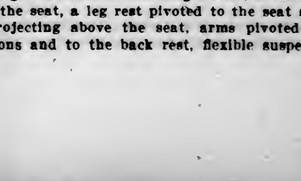
[Claims 1 to 7 not printed in the Gazette.]

1,266,127. TIRE. GEORGE LENNON KAVANAGH, Montreal, Quebec, Canada. Filed July 25, 1914. Serial No. 853,144. (Cl. 152—5.)

1. A tire of the character described, comprising a casing, a filling therein having an annular passage therein substantially diamond-shaped in cross-section with grooves extending from two vertical points of the diamond, and a resilient annular filler in said passage having ribs for engagement with said grooves.

2. A tire of the character described comprising a casing, a filling therein having an annular passage therein substantially diamond shape in cross section with grooves extending from two vertical points of the diamond, and a resilient filler in said passage, said filler comprising an annular member held vertically in said passage by engagement of its inner and outer peripheries with said grooves and lateral enlargements at each side of said member whose surfaces are partly plane and partly curved.

1,266,128. HANGER-ANCHOR. WALTER E. KELLY, Detroit, Mich. Filed July 26, 1916. Serial No. 111,447. (Cl. 72—105.)



1. An insert for concrete construction comprising a wedge-shaped shield having its base open externally of the wall and adapted to form a cavity in the concrete construction and having all its sides inclined from its base and toward each other, and an anchor rod extending through said shield and into the concrete, the ends of said rod being bent to assume a position substantially perpendicular to the direction of the portion of the rod passing through said shield, said ends protruding beyond the plane of the base of said shield forming integral attaching means whereby the anchor rod may be secured to a form to maintain the shield against displacement during the placing of the cement.

3. A shield for concrete construction comprising a shell to form a cavity in such construction and formed from a single sheet blank and having overlapping ends, said overlapping portions of said ends being provided with oppositely disposed bayonet slots with the inner ends of the bayonet slots in registry with each other when the shield is in its normal shape, said shield being adapted to be temporarily changed in shape whereby the overlapping portions of said ends of the shield are moved relatively to one another and the open ends of the slots are adapted to be brought in registry to permit the insertion of the anchor rod in said shield.

7. An insert for concrete construction comprising a wedge-shaped shield adapted to form a cavity in the concrete construction, and an anchor bar passing through said shield and extending at either side of the shield inwardly and obliquely into the cement, the outer extremities of the rod being bent to assume a position substantially perpendicular to the direction of the portion of the rod passing through said shield, said extremities being pointed and extending beyond the plane of the base of the shield whereby the insert may be securely maintained against displacement during the placing or pouring of the cement.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,266,129. RECLINING-SWING. THOMAS A. KILLMAN, Nashville, Tenn. Filed July 6, 1916. Serial No. 107,802. (Cl. 155—35.)

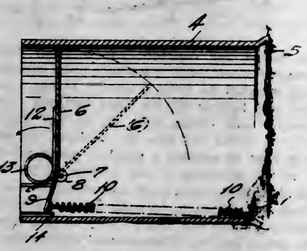
A swing construction including a seat, a back rest pivoted to the seat, a leg rest pivoted to the seat and at its sides projecting above the seat, arms pivoted to these projections and to the back rest, flexible suspension ele-

ments connected to front and rear portions of the arms, a foot rest pivoted to the lower end of the leg rest, and means swingingly connected to the free end of the foot rest and adjustably connected to the rear suspension element, whereby the back rest, seat, arms, leg rest and foot



rest will all automatically assume their proper positions and angles relative to each other for each and every position of an occupant of the swing whether sitting up or reclining and whereby such occupant by pressure against the foot rest to tilt it may cause oscillation of the swing in any relative position of the parts thereof.

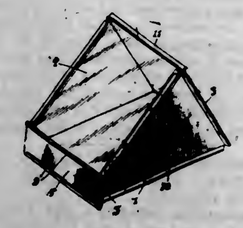
1,266,130. AIR-REGULATING ATTACHMENT. HENRY R. KIMBLER, Dallas, Tex. Filed Oct. 29, 1917. Serial No. 199,022. (Cl. 137—32.)



1. In an air regulating attachment for carbureters, a sleeve adapted to be mounted at the air inlet of a carbureter, a valve hinged in the sleeve to swing in opposite directions, a spring in the sleeve holding the valve in its normal position and acting to return said valve from one direction to its normal position, and a resilient stop in the sleeve impinged by the valve when the latter is returned to its normal position, said stop yielding to permit the valve to swing in the opposite direction.

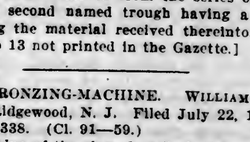
[Claims 2 to 4 not printed in the Gazette.]

1,266,131. PLANT FORCER AND PROTECTOR. JOSEPH A. KRANTZ, Canal Dover, Ohio, assignor to The Reeves Manufacturing Company, Canal Dover, Ohio, a Corporation of Ohio. Filed July 6, 1915. Serial No. 38,137. (Cl. 47—22.)



In a knock down plant forcer and protector, the combination of side members having inclined top edges, said side members provided with open hooked flanges, the bottom edges of said members provided with strengthening flanges, the inclined top edges of said side members provided with open grooves, back and front plates slidably connected to the hooked flanges of the side members, said back and front plates provided with strengthening flanges, a transparent cover slidably mounted in the open grooves formed in the inclined top edges of the said members, all arranged, substantially as specified.

1,266,132. OUTLET OR EXTRACTION PIPE OF FILTERS. JENS JAKOB LASSEN and VILHELM FREDERIK HJORT, London, England. Filed Mar. 12, 1917. Serial No. 154,346. (Cl. 210—16.)



1. The combination with an outlet conduit for a filter, of a perforated screen so disposed in relation to the conduit that the filtered liquid is first caused to pass up through a portion of the perforated screen at one side of the conduit and then to pass through another portion thereof into the conduit.

[Claims 2 to 5 not printed in the Gazette.]

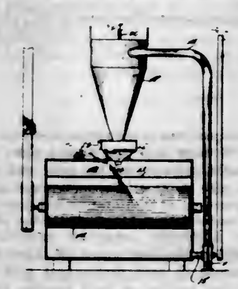
1,266,133. CONTINUOUS ROTARY PRESSURE-FILTER. JASPER A. MCCASKELL, Salt Lake City, Utah. Filed Apr. 18, 1917. Serial No. 162,887. (Cl. 210—13.)

1. In a filtering apparatus, the combination of a closed shell or casing adapted to form a pressure chamber; means for admitting the material to be treated to said chamber; a shaft extending through said chamber having a series of hollow filtering elements thereon adapted to rotate in the liquid contents of the casing, said filtering elements and shaft having connecting filtrate passages; means including fixed scrapers and troughs therefor extending transversely of said shaft, said troughs being within said closed chamber, and said scrapers adapted to remove solids deposited on the sides of the filtering elements; and a trough also within the casing extending substantially parallel with said shaft and connecting with the outer ends of the transverse troughs and adapted to receive the material removed from the series of filtering elements, said second named trough having a conveyer for discharging the material received thereinto.

[Claims 2 to 13 not printed in the Gazette.]

1,266,134. BRONZING-MACHINE. WILLIAM A. MCCLELLAND, Ridgewood, N. J. Filed July 22, 1914. Serial No. 852,338. (Cl. 91—59.)

1. In a machine of the class described, the combination of a casing in which may be placed a sheet to be coated with pulverulent material, blower and suction means, a relief chamber provided with an upper aspiration opening, restricted in size with respect to said chamber, said chamber having a permanently open discharge opening below said aspiration opening and leading to said casing, and means connected with said aspiration opening for producing, with the assistance of said aspiration opening, a vortex of said pulverulent material within said chamber, said means comprising a tapering air chamber connected with said blower means and at the lower end of which said aspiration opening is located, said suction means being connected with said casing for withdrawing the surplus pulverulent material therefrom.



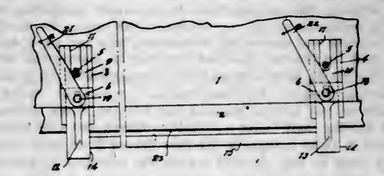
2. In a machine of the class described, the combination of a relief chamber provided with an upper aspiration opening, restricted in size with respect to said chamber, said chamber having a free and unobstructed, permanently open, discharge opening below said aspiration opening, means connected with said aspiration openings whereby, with the assistance of said openings there is produced a vortex of pulverulent material within said chamber, said means comprising a tapering air chamber, which at its lower end projects into said relief chamber, and in which lower end said aspiration opening is located, and which is provided with an upper air outlet opening, and means for withdrawing the said pulverulent material through said discharge opening and from said relief chamber, together with a supply receptacle provided with a screen subjected to the suction action of said withdrawing means and into which said discharge opening opens and delivers the said material directly.

3. In a machine of the class described, the combination of a relief chamber provided with an upper aspiration opening and a lower discharge opening, both restricted in size with respect to said chamber, and said discharge opening being free and unobstructed, a container for a supply of pulverulent material, to which said discharge opening leads, and means for sending a spiral column of pulverulent material through said aspiration opening and said discharge opening, whereby the material from said column is discharged into said container, the said means adapted also to withdraw pulverulent material from said container, and cause it to be transferred back to said relief chamber.

4. In a machine of the class described, the combination of a relief chamber having at its lower end a downwardly tapered portion with a glazed wall for purposes of observation, and provided with an upper aspiration opening and a lower discharge opening, both restricted in size with respect to said chamber, and said discharge opening being located at the contracted end of said tapered portion, and means for sending a spiral column of pulverulent material through said aspiration opening and said discharge opening.

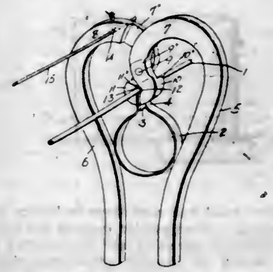
1,266,135. SAW-VISE. ARCHIBALD FINDLAY MCKENZIE, Whytewold, Manitoba, Canada. Filed May 17, 1917. Serial No. 169,291. (Cl. 76—78.)

In a saw vise a base plate provided with an upstanding cross strap, a sliding plate mounted on the top face of the base plate and passing beneath the strap, a substantially inverted V-shaped bracket extending from one end of the sliding plate, a pin carried by the base plate and strap and extending through the sliding plate, a lug on the pin



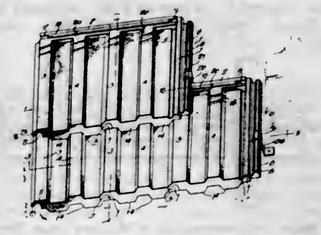
and operating within a circular opening provided in the sliding plate and a lever attached to the pin.

1,266,136. LINEMAN'S RING-PLIERS. JOHN MAYER, Hamilton, Ontario, Canada. Filed Dec. 29, 1917. Serial No. 209,524. (Cl. 81—15.)



A lineman's ring plier comprising two similar elements each substantially semicardioid in shape and having a handle at one end and a jaw at the other, a pivot securing the elements together between the handles and the jaws but being located above the jaws and the handles.

1,266,137. ROOFING-TILE. FRIEDRICH WILLIAM MELDE, Norfolk, Va., assignor to The Meldetile Corporation, Norfolk, Va. Filed June 26, 1916. Serial No. 106,029. (Cl. 108—10.)

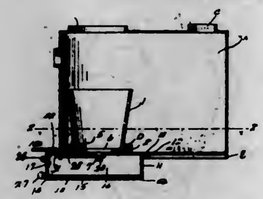


1. A roofing tile molded from plastic cement and having a substantially rectangular body formed on its upper face with wide longitudinally extending ribs, one of said ribs being arranged at one side edge of the tile and having formed in its bottom face a pair of spaced longitudinally extending grooves, the latter forming between them a rib having its bottom face formed with a drain groove, said tile having formed in its upper face adjacent its opposite side edge a pair of spaced longitudinal grooves which form a pair of spaced narrow longitudinally extending ribs adapted to enter the grooves in the bottom of the next adjacent tile, both of the last mentioned ribs having their upper faces disposed in a plane above that of the outer face of the tile.

2. In a roof the combination of a pair of molded cement roofing tiles, the lower end of the upper tile overlapping

the upper end of the lower one, said tiles being longitudinally corrugated, the lower tile having across its upper end between the corrugations, transversely extending ribs which merge into said corrugations, the upper tile having at its lower end depending transverse lugs arranged opposite said transverse ribs and forming in connection with the ribs of the next adjacent tile comparatively long snow collecting pockets, the longitudinal grooves or channels formed in the bottom face of the tiles by their corrugations having their lower extremities closed and also having formed in them transverse bridges spaced from such closed lower ends to rest on said transverse ribs and to provide snow collecting pockets between themselves and said closed ends.

1,266,138. ADJUSTABLE COMBINED WOOD AND COAL HEATER. DAVID QUINCY MINAR, Upland, Cal. Filed Feb. 25, 1915. Serial No. 10,630. (Cl. 126—58.)



A combination wood and coal stove including a bottom having an opening, a downwardly tapered fire-pot mounted upon the bottom of the stove and surrounding the said opening and having an interior grate-supporting flange at its lower end and also provided thereat with means for detachably securing the fire-pot to the stove, a grate of a size to fit the flange of the fire-pot and the opening in the bottom of the stove to enable it to be used in the fire-pot or in the opening of the bottom of the stove when the fire-pot is removed, said grate being also provided with a depending lug, an ash pit secured to the bottom of the stove and projecting in advance of the same, and a handle connected with the lug and extending over the top of the projecting portion of the ash pit.

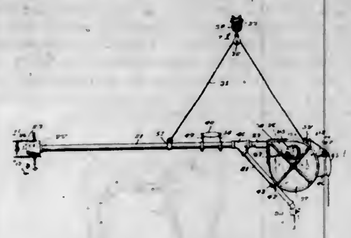
1,266,139. METAL RAILWAY-TIE. MILEDEN S. MONDAY, Caney, Okla. Filed Jan. 4, 1918. Serial No. 210,315. (Cl. 238—5.)



1. A metal tie, comprising a channel beam having opposed outwardly extending flanges disposed to form rail seats, and a rail securing member bolted to each flange at the ends of the rail seat thereof, said member comprising a depending portion to engage the inner face of a side wall of the channel beam, and an inner element to extend over the base flange of the rail and engage the web thereof.

2. A metal tie, comprising a channel beam having opposed outwardly extending flanges disposed to form rail seats, a resilient block within the channel beam to support the rail, braces secured to opposite vertical walls of the channel beam and in contact with opposite sides of the block, and a rail securing member bolted to each flange at the ends of the rail seat thereof and comprising a depending portion to engage the inner face of a side wall of the channel beam and a side of the block, and an inner element to extend over the base flange of the rail and engage the web thereof.

1,266,140. FLUE-CLEANER. ROBERT J. MONTGOMERY, Chicago, Ill. Filed Feb. 23, 1915. Serial No. 10,063. (Cl. 83—64.)



1. In a flue cleaner, the combination of a pipe, a smaller pipe extending through said first-named pipe, means for feeding fluid under pressure to the rear end portion of said first-named pipe about said second-named pipe, means for closing the rear end of said first-named pipe about said smaller pipe in rear of the point of admission of said fluid under pressure, a flexible connector extending loosely through said smaller pipe and closed off thereby from the fluid under pressure in said first-named pipe except at the open front end portion of said smaller pipe, and a cleaning device connected to the forward end portion of said flexible connector and adapted to be projected along a flue by the force of the fluid under pressure delivered through said first-named pipe to the flue in rear of the cleaning device.

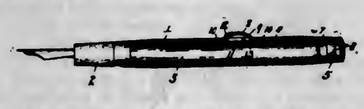
2. In a flue cleaner, the combination of a pipe, a tapering discharge nozzle of greater diameter than that of said pipe secured on the forward end of said pipe, a smaller pipe extending through said first-named pipe and into said nozzle, closure means for closing the rear end of said first-named pipe about said smaller pipe, means for feeding fluid under pressure to the rear end portion of said first-named pipe in front of said closure means, such fluid under pressure being free to move forward within said first-named pipe about said smaller pipe, a flexible connector extending loosely through said smaller pipe and closed off thereby from the fluid under pressure in said first-named pipe except at the open front end of said smaller pipe, said flexible connector being adapted to move freely through said smaller pipe, and a cleaning device connected to the forward end portion of said flexible connector and adapted to be projected along a flue by the force of fluid under pressure delivered through said first-named pipe to the flue in rear of said cleaning device.

3. In a flue cleaner, the combination of a pipe, a smaller pipe extending through said first-named pipe, a housing communicating with the rear end portion of said second-named pipe, said housing being completely closed except for its communication with said pipe, means for feeding fluid under pressure to the rear end portion of said first-named pipe about said second-named pipe, means for closing the rear end of said first-named pipe about said second-named pipe in rear of the point of admission of said fluid under pressure, a flexible connector extending loosely through said second pipe and closed off thereby from the fluid under pressure in said first-named pipe except at the open forward end portion of said smaller pipe, means located within said housing for drawing said flexible connector backward through said second-named pipe, and a cleaning device connected to the forward end portion of said flexible connector and adapted to be projected along a flue by the force of the fluid under pressure delivered through said first-named pipe to the flue in rear of said cleaning device.

4. In a flue cleaner, the combination of a cleaning device adapted to be projected along a flue by the force of fluid delivered to the flue in rear of said cleaning device, a flexible connector connected to said cleaning device and adapted to be projected into said flue with said cleaning device, a head operatively connected with said cleaning device, means for delivering fluid to a flue to be cleaned, and a conical spring carried by said fluid-delivery means against which said head is adapted to be brought for stopping the rearward movement of the flexible connector upon its withdrawal from the fluid.

5. In a flue-cleaner, the combination of a pipe, an engaging member fixed on the forward end of said pipe, a conical spring secured in said member, a rod having a head adapted to be brought into engagement with the forward end of said spring, a cleaning device revolubly mounted on the forward end of said rod, said cleaning device being adapted to be projected along a flue by the force of fluid delivered to said pipe in rear of the cleaning device, a flexible connector connected to said rod and adapted to be projected into said flue with said cleaning device, and means for retracting said flexible connector.

1,266,141. PRESSER-BAR CONTROL FOR FOUNTAIN-PENS. FRANK H. MOONEY, Toledo, Ohio, assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed Jan. 3, 1916. Serial No. 70,025. (Cl. 120—46.)



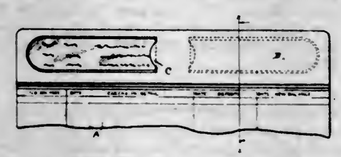
1. In a fountain pen, a reservoir presser bar, and an arcuate plunger carried by the pen barrel and slidable bodily and longitudinally in a plane lengthwise of the pen barrel to compress said bar.

5. In a fountain pen, a barrel, a reservoir presser-bar therein, a guide carried by the barrel, and a bar depressing member carried by the guide for longitudinal movements lengthwise thereof and of the barrel and at the same time into and out of the barrel.

11. In a fountain pen, a barrel, a reservoir presser bar, a guide fixed to the barrel, and a plunger having one end slidingly engaged with said guide and its other end movable into and out of the barrel to control the movements of the presser bar.

[Claims 2 to 4, 6 to 10, and 12 not printed in the Gazette.]

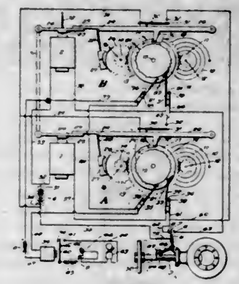
1,266,142. LEDGER-SHEET POCKET FOR SIGNATURE-CARDS. ALBERT F. MOTSCH, Oskaloosa, Iowa. Filed Oct. 21, 1916. Serial No. 126,994. (Cl. 281—43.)



A ledger sheet having at one edge thereof a pocket open at the end and formed by a portion bent upon itself and having a transparent portion to display the signature upon a card retained in said pocket.

1,266,143. SPRINKLER ELECTRIC SIGNAL SYSTEM. JAMES D. NELSON, Cincinnati, Ohio. Filed Apr. 19, 1917. Serial No. 163,168. (Cl. 177A—382.)

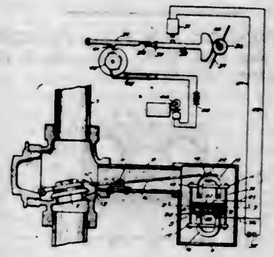
1. An electric signal system for supervising valves and other devices, consisting of a trouble signal transmitter, an O. K. signal transmitter, means adapted to release the transmitters, and means responsive to variations in condition of the device to be supervised, whereby said trouble signal transmitter will be released to transmit a trouble signal and whereby the O. K. signal transmitter will be released to transmit an O. K. signal upon cessation of operation of the trouble signal transmitter and upon restoration of the device to be supervised to its normal condition.



2. An electric signal system for the supervision of valves and other devices, consisting of a trouble signal transmitter, an O. K. signal transmitter, a single means for releasing both transmitters, and means under direct control of the device to be supervised, adapted to control said first mentioned means to release the O. K. signal transmitter upon cessation of operation of the trouble signal transmitter and upon restoration of the device to be supervised to its normal condition.

[Claims 3 and 4 not printed in the Gazette.]

1,266,144. ELECTRIC SIGNAL SYSTEM. JAMES D. NELSON, Cincinnati, Ohio. Filed May 5, 1917. Serial No. 166,588. (Cl. 177A—382.)



1. An electric signal system comprising a casing having its interior communicating with a fire extinguisher system to be supervised, a valve in said extinguisher system, a magnet located in the casing, means operatively connecting the magnet and the valve, and a signaling device located adjacent to the magnet and outside the walls of the casing, adapted to send a signal when the valve is operated to cause said magnet to exert its influence upon the signaling device.

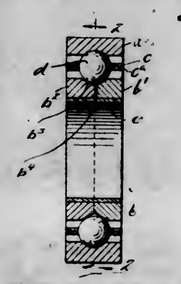
4. An electric signal system comprising a valve located in a fire extinguisher system to be supervised, a signal transmitter, a timing device adapted to control the operation of the transmitter, and a magnetic device located within the extinguisher system and operatively connected with the valve and the timing device, whereby said timing device will be controlled to operate the transmitter in response to a change from the normal condition of the valve for a predetermined time.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,266,145. BALL-BEARING. JOHN NEWMANN, New York, N. Y. Filed Apr. 19, 1917. Serial No. 163,115. (Cl. 64—59.)

1. A ball bearing comprising an outer shell having a groove circular in cross section on its inner circumference.

an annular cage having a number of perforations of circular cross section, a second annular cage having the same number of perforations of circular cross section, and split into two annular sections, a set of balls borne in the perforations of said two annular cages and in the groove of said outer shell, and means for joining the two sections of said cage together after the balls are assembled.

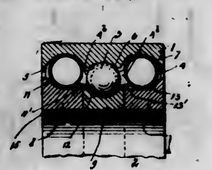


3. In a ball bearing, an outer shell, balls therein, and two cages for said balls fitting one within the other and one of which is composed of two separable parts.

7. In a ball bearing, the combination with balls, of two cages therefor, fitting within one another and which have perforations of circular cross section of which the perforations of one cage engage around one hemisphere of the balls and those of the other cage engage around the opposite hemisphere of the balls, one of said cages consisting of two annular sections and means for joining said annular sections together after the balls have been assembled therein.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,266,146. MULTIPLE-ROW BALL-BEARING. JOHN NEWMANN, New York, N. Y. Filed Aug. 2, 1917. Serial No. 184,046. (Cl. 64—59.)



1. A ball bearing comprising an outer ring having several races, a sectional inner ring, each section having a race, the end races being at their inner sides even with the deepest point thereof, and spacers between the balls, each spacer being adapted to embrace a part of a ball of each row.

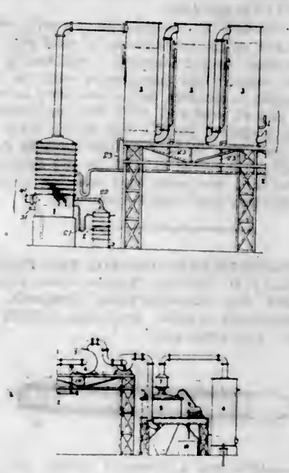
2. A spacer for a multiple ball bearing consisting of an oblong piece of metal having several cavities in it to engage a ball of each row and means thereon for joining adjacent spacers together.

5. In a ball bearing the combination with an inner and an outer ring, and several rows of balls therebetween, of spacers extending across the annular space between the rings and each adapted to engage a ball of each row and means on said spacers to join the several spacers into a unit.

7. In a triple ball bearing, the combination with three rows of balls, of an outer ring having three annular grooves of circular cross section of which the middle groove is arranged radially displaced toward the center of the ring relative to the end grooves, and an inner ring composed of three separate annular sections each having an annular groove of circular cross section being radially displaced toward the center of said ring relative to the end grooves.

[Claims 3, 4, and 6 not printed in the Gazette.]

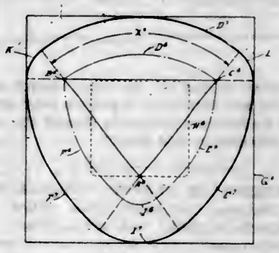
1,266,147. MANUFACTURE OF AMMONIA. ERNEST ORR, Creil, France. Filed Oct. 12, 1917. Serial No. 196,312. (Cl. 23—21.)



1. In the process of manufacturing ammonia, subjecting an ascending current of hot gas generated by carbonization of organic material to a partial cooling, thereby removing therefrom the heavy tar constituents and the ammonia liquors by condensation; separating out the ammonia liquors while above the temperature required for decomposition of the ammonium compounds therein and immediately subjecting the hot, separated ammonia liquors to the decomposing action of an alkaline substance in the absence of extraneously applied heat, thereby liberating ammonia, and discharging the decomposed liquors freed from ammonia at a temperature above that permitting the absorption of the ammonia.

[Claim 2 not printed in the Gazette.]

1,266,148. CAM FOR SQUARE-HOLE DRILLS. GERALD E. OTIS, Buffalo, N. Y., assignor to Angular Drill & Machine Corporation, New York, N. Y., a Corporation of New York. Filed Jan. 17, 1917. Serial No. 142,882. (Cl. 74—1.)

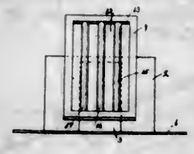


1. A cam for square hole drills having arcs described from the vertices of an isosceles triangle having an angle between the equal sides thereof greater than 60° and less than 90°.

3. A cam for square hole drills having major arcs described from the vertices of a triangle with greater radii than the length of the sides of said triangle and with minor arcs drawn from the vertices of said triangle and joining the ends of said major arcs.

[Claim 2 not printed in the Gazette.]

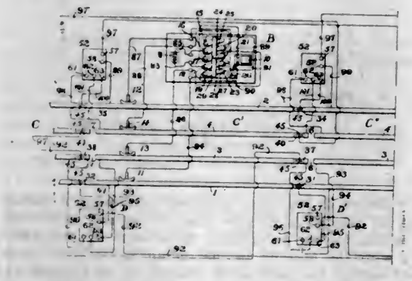
1,266,149. DISPLAY-STAND. ANSON W. PENNIMAN, Berkeley, Cal. Filed Oct. 26, 1917. Serial No. 198,578. (Cl. 211—24.)



1. In a display apparatus, an open receptacle, a block connected therewith, a reversible carrier supported by said block, a set of viscosity tubes in said reversible carrier, one of said tubes being removable through an opening in one end of the carrier.

2. A display apparatus comprising an open receptacle having a flat base, a block secured to the receptacle and the base, an open box pivotally connected with the block and adapted to be turned 360 degrees, a second box fitting the first one and carrying a set of viscosity tubes, each of said boxes having openings through which one of the tubes may be removed therefrom.

1,266,150. ELECTRIC SIGNALING SYSTEM FOR RAILWAY-TRAINS. NICHOLAS PIGNATARO, Hilton, N. J. Filed Jan. 16, 1914. Serial No. 812,385. (Cl. 246—26.)



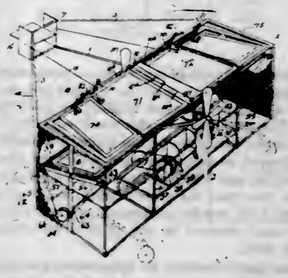
2. In an electric signaling system, in combination with the main rails and trains running upon said rails, sectional rails located between said main rails, said sectional rails being separated from each other so as to provide breaks at intervals, a source of electrical energy upon each train, an electric switch upon each train, in circuit with said main source of electrical energy, contact elements carried at intervals by said rails, contact-elements carried at corresponding intervals by said rail-sections, and sliding contact means carried by each train, circuit-wires leading from the respective switches to the respective contact-means, to bring the various members into electric circuit, electric bells and circuit-wires leading from the respective bells to the respective switches, contact-making and breaking means located at intervals at the sides of the rails, each contact-making and breaking device being in circuit with a contact-element of the various main rails and with those of the rail-sections, so that when the proper circuit is established by the contacting of the sliding contacts with the contact-elements in the main rails and the rail-sections, said contact-making and breaking means acts to bridge the gaps between the several sectional rails two blocks to the rear of a train and also acts to open the same circuit when the train has progressed two blocks forward.

5. In an electric signaling system, in combination with the main rails and trains running upon said rails, sectional rails located between said main rails, said sectional rails being separated from each other so as to provide breaks at intervals, said main rails and said rail-sections being provided at intervals with receiving-sockets, a source of electrical energy upon each train, an electric switch upon each train in circuit with said main source of electrical energy, contact elements movably disposed in the sockets of said main rails and rail-sections, contact-means carried by each train, circuit-wires leading from the respective switches to the respective contact-means to bring the various members into electric circuit, danger-signaling devices and circuit-wires leading from the respective signaling devices to the respective switches, contact-making and breaking means located at intervals at the sides of the rails, each contact-making and breaking device being in circuit with a contact-element of the various main rails and with those of the rail-sections, so that when the proper circuit is established by the contacting of the sliding contacts with the contact-elements in the main rails and the rail-sections, said contact-making and breaking means acts to bridge the gaps between the several sectional rails two blocks to the rear of a train and also acts to open the same circuit when the train has progressed two blocks forward.

9. In an electric signaling system, in combination with the main rails and trains running upon said rails, sectional rails located between said main rails, said sectional rails being separated from each other so as to provide breaks at intervals, said main rails and said rail-sections being provided at intervals with receiving sockets, a source of electrical energy upon each train, an electric switch upon each train in circuit with said main source of electrical energy, contact-elements movably disposed in the sockets of said main rails and rail-sections, contact-making shoes carried by each train, circuit-wires leading from the respective switches to the respective contact-making shoes, danger-signaling devices and circuit-wires leading from the respective signaling devices to the respective switches, contact-making and breaking means located at intervals at the sides of the rails, each contact-making and breaking device being in circuit with a contact-element of the various main rails and with those of the rail-sections, so that when the proper circuit is established by the contacting of the sliding contacts with the contact-elements in the main rails and the rail-sections, said contact-making and breaking means acts to bridge the gaps between the several sectional rails two blocks to the rear of a train and also acts to open the same circuit when the train has progressed two blocks forward.

[Claims 1, 3, 4, 6 to 8, and 10 not printed in the Gazette.]

1,266,151. AEROPLANE. NICOLAS POGOLSKI, Washington, D. C. Filed July 11, 1910. Serial No. 571,420. (Cl. 244—29.)



3. In an aeroplane, the combination with a supporting structure, a propeller, and a lifting plane adapted to vary its angle of attack, of a stabilizing plane paralled to the

axis of the propeller, said lifting and stabilizing planes being arranged in superposed relation, the latter directly above the other, and means for moving said lifting plane edgewise in the planes of attack whereby to maintain the position of the center of air pressure constant with relation to the position of the center of gravity of the aeroplane.

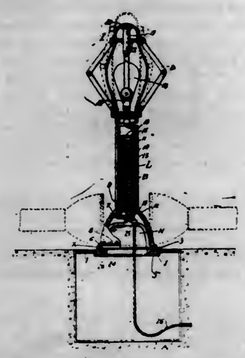
6. In an aeroplane, the combination with a supporting structure, of a lifting plane carried thereby, means for changing the angle of attack of said lifting plane during flight and with reference to the supporting structure, and means for moving said lifting plane back and forth edgewise in any of the planes to which said plane may be adjusted.

23. In an aeroplane, one or more planes having sections or vanes adapted to open under unequal air pressure on the two wings, and carrying a locking means actuated by the tilting of the said plane or planes, whereby the opened vane will be maintained in open position until the equilibrium is established, as and for the purpose set forth.

26. In an aeroplane, the combination with one or more planes having sections or vanes adapted to open under unequal air pressure on the two wings, of a standard carried by the frame of the plane, and a locking means for engaging said standard at different elevations, said locking means comprising, a bolt, means for retracting the same and holding it normally retracted, a tube containing a column of mercury or other liquid, arranged transversely to said section or vane, and having at its outer end an upstanding tube or portion, and means interposed between said tube whereby to receive said liquid column and cause it to bear through said means on the bolt, as and for the purpose set forth.

[Claims 1, 2, 4, 5, 7 to 22, 24, and 25 not printed in the Gazette.]

1,266,152. TILTABLE STREET-POST. CHARLES A. POOLE, Jersey City, N. J. Filed June 23, 1916. Serial No. 105,400. (Cl. 240—25.)



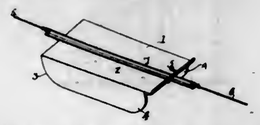
4. A device of the class described, a post, means for resiliently connecting the post to a road-bed or the like, comprising a piston arranged within the post having connection with a part fixed to the road-bed, a spring engaging the piston to force the piston upwardly away from the road-bed adapted to be compressed when the piston moves in one direction and adapted thereby to urge the piston in an opposite direction for maintaining the post in a vertical position, and means coöperating with the piston to brake movement thereof in one of said directions for the purpose set forth.

9. A street post likely to be knocked down by a passing vehicle or the like, means carried thereby likely to be injured by the falling of the post, a flexible globe for said last mentioned means, and a collapsible cage for said globe.

12. A street post likely to be knocked down by a passing vehicle or the like, a lamp at the upper end thereof, a cage for said lamp likely to injure the passing vehicle, and means whereby said cage is collapsible to avoid injury to the passing vehicle.

[Claims 1 to 3, 5 to 8, 10, and 11 not printed in the Gazette.]

1,266,153. SCRAPER. HOWELL D. PRATT, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 26, 1918. Serial No. 213,884. (Cl. 37—19.)

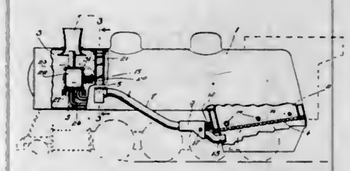


1. The combination of a scraper for removing granular material from a pile, consisting of a scoop section for engaging the material; runners forming the sides of the scoop and acting to guide the scoop as it passes through the material; and a top plate in advance of the scoop preventing the scraper digging into the pile to a greater depth than the scoop section.

3. The combination in a scraper, of top and side plates having a scoop section at one end; and a bar mounted on the top of the scraper and to which the hauling ropes are attached, the bar being so located as to cause the scraper to right itself when tension is put on the rope.

[Claim 2 not printed in the Gazette.]

1,266,154. TURBINE. FRANK C. PROHL, Milwaukee, Wis. Filed Mar. 30, 1917. Serial No. 158,505. (Cl. 253—56.)

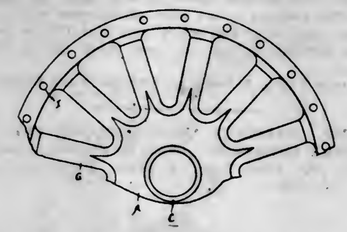


In a device of the class described comprising a casing having an opening in its side adjacent one end, a vertical pipe section having an opening in the side for communication with the opening in the casing, a two-part rotor in said casing, one part being adapted to be engaged by fluid passing through said pipe section, a valve in the pipe section to selectively direct said fluid through the pipe section or into the casing against one part of the rotor, and an inlet pipe into the casing adapted to direct fluid against the other part of the rotor, the inner wall of the casing adjacent the last mentioned part of the rotor having a passage way cut therein leading into the first mentioned opening to provide an outlet for fluid from the inlet pipe, whereby to actuate the rotor by fluid from different sources of supply.

1,266,155. METALLIC WHEEL. ALDEN L. PUTNAM, Detroit, Mich., assignor to Detroit Pressed Steel Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 23, 1915. Serial No. 46,919. (Cl. 21—69.)

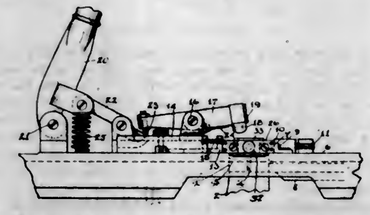
1. A twin wheel, comprising pairs of pressed sheet metal sections, the outer sections of each pair having hub portions of relatively heavy gage, and the inner members of the pairs being of lighter gage, and a connecting tie between said heavy gaged hub portions.

2. A twin wheel, composed of pressed sheet metal sections, the outer sections of each pair having hub portions of relatively heavy gage, and a connecting tie between said heavy gaged hub portions.



3. A twin wheel, comprising pairs of pressed sheet metal sections, the two inner sections having tubular rigidly connected hub portions, and means rigidly connecting the two outer sections extending through said tubular portions of the inner sections.

1,266,156. TYPOGRAPH-MACHINE. WILLIAM A. READE, Cleveland, Ohio, assignor to The Ludlow Typograph Company, Cleveland, Ohio, a Corporation of Maine. Filed June 19, 1915. Serial No. 35,070. (Cl. 199—47.)



1. In a typograph machine, the combination with a set of detached matrix bars each having an edge adapted to coöperate with a mold; of a member formed with an elongated opening adapted to receive a number of said bars and support the same in selected relation with both their mold-coöperative edges and the edges opposite thereto exposed, said bars being movable in said member transversely of such edges and in a line normal thereto.

2. In a typograph machine, the combination with a set of detached matrix bars each having an edge adapted to coöperate with a mold; of a member formed with an elongated opening adapted to receive a number of said bars in selected relation, said member having its sides formed to engage with the ends of said bars so as to support the latter with both their mold-coöperative edges and the edges opposite thereto exposed, said bars being movable in said member transversely of such edges and in a line normal thereto.

3. In a typograph machine, the combination with a set of detached matrix bars each having an edge adapted to coöperate with a mold; of a member formed with an elongated opening adapted to receive a number of said bars and support the same in selected relation with both their mold-coöperative edges and the edges opposite thereto exposed, such mold-coöperative edges of said bars lying below the corresponding face of said member when thus supported therein and said bars being movable in said member transversely of such edges.

19. In a typograph machine, the combination of a slug-casting mechanism including a mold formed with a casting slot; a set of detached matrix-bars each having an edge adapted to coöperate with a mold; a member formed with an elongated opening adapted to receive and support a number of said bars in selected relation, thereby forming a composite matrix apart from, but adapted to coöperate with, said mold; a stop block adapted to locate said member with such composite matrix properly alined with the slot in said mold; clamp means adapted to secure said member in such location; and means adapted to directly press upon the upper edges of the bars held in said member to clamp the same against said mold, said two last-named means being conjointly operable.

20. In a typograph machine, the combination of a slug-casting mechanism including a mold formed with a casting slot; a set of detached matrix-bars each having an edge adapted to coöperate with a mold; a member formed with an elongated opening adapted to receive and support a number of said bars in selected relation, thereby forming a composite matrix apart from, but adapted to coöperate with, said mold; a stop block adapted to engage one side of said member and thereby locate the same with such composite matrix properly alined with the slot in said mold; a movable presser-foot adapted to engage the other side of said member to clamp the same against said block; means adapted to directly press upon the bars held in said member to clamp the same against said mold, said means including a depressible bar disposed parallel with said member and oscillatory about a transverse axis so as to press uniformly on all said matrix-bars; and means adapted conjointly to operate said presser-foot and depressible bar.

[Claims 4 to 18 not printed in the Gazette.]

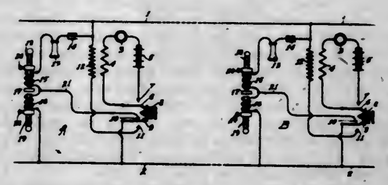
1,266,157. VEHICLE-LAMP. FRED R. REED, Detroit, Mich., assignor of one-half to Louis J. McKenney, Detroit, Mich. Filed Dec. 15, 1916. Serial No. 137,201. (Cl. 240—41.)



1. A reflector for a vehicle lamp having a parabolic casing and a lamp located substantially at the focus of said casing, said reflector being insertible within said casing and comprising a lower portion extending from the margin of the casing to a position in rear of the lamp, an upper portion connecting with the upper edge of said lower portion and forming an acute angle with the horizontal, and a reversely-inclined portion connecting with the forward and upper edge of said acute angle portion, said reversely inclined portion being in front of said acute angle portion and having its lower edge in substantially the horizontal plane of the lamp.

[Claims 2 and 3 not printed in the Gazette.]

1,266,158. RAILWAY-TRAIN-DESPATCHING CIRCUIT. WILLIAM REID, Chicago, Ill., assignor to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1914. Serial No. 860,600. (Cl. 179—28.)



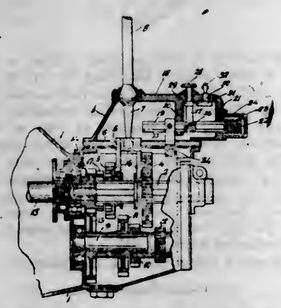
1. A telephone transmission system comprising a plurality of stations united by a common line circuit, each station having a local transmitter circuit including a battery and a primary winding of a induction coil, a secondary winding for said coil included in a normally open

bridge across said line circuit, an independent permanent bridge across said line circuit normally including a receiver and an adjustable impedance coil, and a second impedance coil, a shunt about said second impedance coil, a movable contact for increasing the impedance of the receiver bridge by removing said shunt from around said second impedance coil and for closing said normally open bridge across said line circuit.

2. A telephone transmission system comprising a plurality of stations united by a common line circuit, each station having a local transmitting circuit including the primary winding of an induction coil, a secondary winding for said coil included in an open bridge across said line circuit, an independent bridge across said line circuit including a pair of impedance coils and a receiver, a normally closed shunt circuit around one of said impedance coils, and a movable switch contact for opening said shunt circuit thereby increasing the impedance of the receiver bridge and for closing said normally open bridge in shunt of said receiver bridge.

3. A telephone system including a telephone line, a substation connected to said line, a secondary winding included in a normally open bridge across said line circuit, a receiver included in an independent normally closed bridge across said line circuit, a pair of adjustable impedance coils in said last bridge, a movable switch contact included in a normally closed circuit about one of said impedance coils and adapted to be included in the circuit of said secondary coil, and means for operating said switch contact to increase the impedance of the receiver bridge by placing said impedance coils in series, said switch contact also operable to close said normally open circuit including the secondary coil.

1,266,159. AUTOMOBILE-LOCKING DEVICE. LOUIS C. RITTMEYER, St. Bernard, Ohio. Filed Sept. 20, 1917. Serial No. 192,386. (Cl. 74—58.)



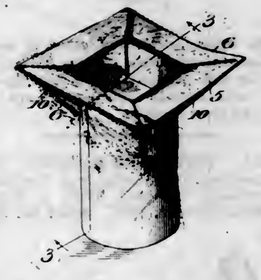
1. In a device of the character specified, the combination with the main shaft to the driving wheels and gearing rotating therewith, of a nonrotatable movable locking member, and means for shifting the same to engage the main shaft gearing to lock the shaft from rotation.

6. In a device of the character specified, the combination with the engine shaft, the main driving shaft and a countershaft and a change of speed transmission device, comprising countershaft gears in connection with the engine shaft and change of speed gears on the main driving shaft, with lever for shifting same, of a nonrotatable movable locking member and means for shifting same to engage a change of speed gear to lock the main shaft from rotation, with means in connection with the locking member to engage the shifting lever when in neutral position and to lock the same from movement.

9. In a lock for an automobile transmission mechanism comprising shiftable change of speed gears, with a lever for operating the same, a slidable nonrotatable rod, with segment gear thereon adapted to engage a change of speed gear, a rack and pinion for shifting said rod to bring said change of speed gear and segment gear into mesh, and a keylock to engage said shifting means to lock the segment gear in mesh, with means on the rod to engage the transmission operating lever when the same is in neutral position to lock said transmission lever in said position, said lever also acting as a stop for the locking rod to prevent shifting the same when not in neutral position.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,266,160. SANITARY SHAVING-BRUSH AND CONTAINER THEREFOR. HARRY B. RODGERS, Chambersburg, Pa. Filed June 15, 1915. Serial No. 34,274. (Cl. 45—136.)



1. A shaving mug including a holder comprising a hollow body provided in its wall with spaced kerfs, and a sheet of material designed to be inserted within the end of the holder and to have portions folded by the walls of the kerfs and its folded portions received within the kerfs.

2. A shaving mug including a hollow holder provided in its wall at one end with a plurality of kerfs, and a sheet of material having radial scores, the said sheet of material being designed to be disposed at the end of the said holder and depressed at its mid-portion, whereby the portions of the sheet adjacent and at opposite sides of the scores will be brought together within the said kerfs.

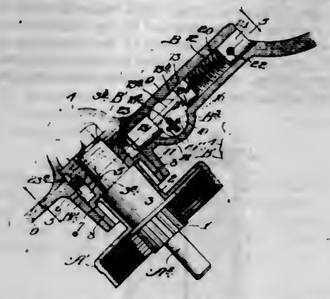
3. A shaving mug including a holder comprising a hollow body provided at intervals in its wall at one end with kerfs and between the kerfs being provided at its said end with lips projecting outwardly therefrom, and a sheet of material designed to be disposed upon the said end of the container and depressed within the container and to be folded by the walls of the kerfs and to have its folds received within the said kerfs.

4. A shaving mug including a holder comprising a hollow body provided at one end with spaced portions having their upper ends outturned to form lips, and a sheet of material designed to be disposed upon the said lips and to have its mid-portion depressed whereby the sheet will be folded by contact with the edges of the said upstanding portions.

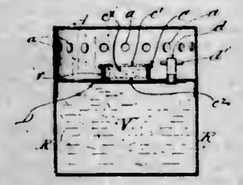
1,266,161. AUTOMOBILE-LOCK. MAURICE R. ROSEN and RUDOLPH E. FISCHEL, Chicago, Ill. Filed Oct. 1, 1917. Serial No. 194,168. (Cl. 70—129.)

1. The combination of a steering-shaft having its upper end provided with a reduced extension and a projecting threaded stud, a journal-collar mounted on said reduced extension and provided with a bolt-socket and with a circumferential groove, a nut securing said journal-collar to said shaft, a steering-wheel having a spider provided with a cap-shaped hub mounted on said journal-collar and housing said nut, a pin in said hub engaging said circumferential groove, and a lock mounted in said spider and equipped with a bolt adapted to engage said socket.

2. The combination of a steering-shaft, provided with a threaded extremity, a journal-collar fitted on said shaft, a nut securing said collar in position, a steering-wheel having a spider provided with a cap-shaped hub journaled on said journal-collar and housing said nut, means securing said hub rotatively on said journal-collar, a bolt-chamber and a lock-casing chamber formed integrally with said spider, a reciprocable bolt mounted in the bolt-chamber, a lock-casing mounted in the lock-casing chamber, and a key-actuated member mounted in said lock-casing and adapted to reciprocate said bolt.



1,266,162. PORTABLE HEATER. ALEXANDER ROSIN, Great Neck, N. Y. Filed Dec. 3, 1917. Serial No. 205,046. (Cl. 158—96.)



1. A portable heater of the character designated, comprising a reservoir adapted to contain a volatile oxidizable substance, and in conjunction therewith a catalytic cell adapted to contain catalytic material and to receive vapor from said reservoir and also to admit atmospheric oxygen to said catalytic material, together with a damper interposed between said cell and the said substance, and a removable cover inclosing the upper part of said reservoir and said catalytic cell and formed to admit air to the latter, and means within the cover for rotating said damper for the purpose described.

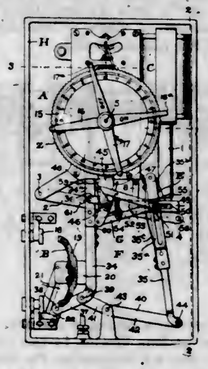
[Claim 2 not printed in the Gazette.]

1,266,163. TIME-SWITCH. WALTER S. RYAN, New York, N. Y. Filed June 25, 1914. Serial No. 847,195. (Cl. 161—27.)

1. A time switch comprising in combination with the main switch and clock thereof, a main switch propelling mechanism, a motor for actuating the propelling mechanism and also for winding the clock, and mechanism actuated by the clock for positioning the switch propelling mechanism, so that when the switch propelling mechanism is in one position, the switch can be closed by the motor, and so that when the switch propelling mechanism is in another position, the switch can be opened by the motor.

2. A time switch comprising in combination a main switch, propelling mechanism therefor, a motor for actuating the propelling mechanism, means for positioning the propelling mechanism so that in one position it can be actuated by the motor to close the switch and so that in another position it can be actuated by the motor to open the main switch, and a clock having means which coöperate with the positioning mechanism, whereby the switch propelling mechanism will be moved to its predetermined desired position by the clock.

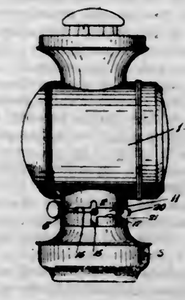
6. A time switch comprising a clock having a train of gears, a main switch, an electric engine for winding the clock, a primary control switch which is connected to a gear of the clock train, a secondary switch for causing a change in the amount of current supplied to the engine, a main switch operating mechanism arranged so that said main switch can be opened or closed through said mechanism by said solenoid, the opening and closing being dependent upon the position of the main switch operating mechanism, and mechanism operated by the clock for positioning the main switch operating mechanism whereby the operating mechanism is properly positioned so that the main switch can be opened or closed through said operating mechanism by said engine, the secondary switch being connected to the time switch operating mechanism so that, dependent upon the position of said mechanism, the current supplied to the engine can be changed.



7. A self-winding time switch having a main switch, incoming conductors and an electric engine for operating said main switch, the construction of the time switch being such that the flow of current through said incoming conductors is dependent upon the position of the main switch, said engine being connected in parallel with said main switch.

[Claims 3 to 5 not printed in the Gazette.]

1,266,164. LAMP. CHARLES RYDER, Covington, Ky., assignor to The Corcoran-Victor Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 30, 1917. Serial No. 183,390. (Cl. 240—50.)

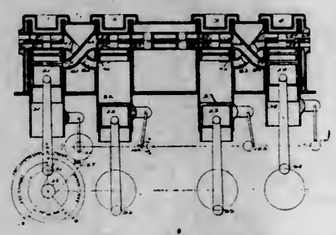


1. In a lamp, a lamp body, a font, adapted to fit into the lamp body, a sliding plate in the lamp body, means on the lamp body and the font for securing them together by a twisting movement, means on the font to engage the sliding plate with means to lock the plate to the lamp body, and releasable spring means on the plate to snap into place at the desired position to indicate the locking position of the plate and to hold the font in position secured to the lamp body.

5. In a lamp, a lamp body having an inturned lower edge, a font having mounting pins thereon, slanting notches in the inturned flange to engage the pins, whereby the body and font may be secured together by a twisting movement of the font, a plate supported in the inturned flange, means on the plate and the font to come into engagement, and a spring on the plate having a nose, slots in the body to releasably receive said nose, said slots positioned to retain the sliding plate when the font is in secured position and in position for removal, said plate having a screw extending through the body and slidable in a slot thereof, and a clamping nut on said screw to manually clamp the plate in desired position.

[Claims 2 to 4 not printed in the Gazette.]

1,266,165. ENGINE. EARL V. SALA, Toledo, Ohio, assignor to The E. V. Sala Patents Company, Toledo, Ohio, a Corporation of Ohio. Filed Apr. 12, 1915. Serial No. 20,770. (Cl. 123—52.)



2. The combination of a casing, a plurality of cylinders, and a plurality of pistons located in the cylinders, each cylinder having a port for controlling the passageways of the fuel and exhaust gases of said cylinder and sub-ports for controlling the passageways controlled by the first-named ports of the other cylinders.

4. In an engine, the combination of a plurality of pairs of movable cylinders, pistons located in the cylinders, the engine having passageways for exhaust and fuel gases, each cylinder having a port for alternately opening and closing the passageways leading to the other cylinder with which it is associated and a port for controlling the flow of gases into and out of the last named cylinder.

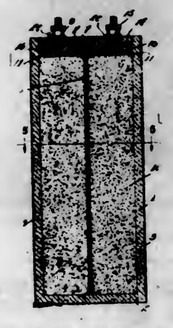
20. In an engine having a pair of elements each comprising a movable valve member, a piston and a shell, each shell having two passageways one for exhaust and the other for intake gases of each engine element, two passageways, each of the last named passageways connecting the first two named passageways with the explosion chamber of the shell of the other engine element, each valve member for opening and closing the ends of the second named pair of passageways, each valve member for opening the exhaust passageway of its associated engine element while the other valve member opens the explosion chamber of the engine element with which it is associated and for opening the intake passageway of the engine element with which it is associated while the other valve member closes the explosion chamber of the engine element with which it is associated.

24. In an engine the combination of a pair of pistons, a valve member associated with each piston, each valve member having a means for controlling the intake and exhaust gases, and means coacting with the first named means for controlling the intake and exhaust gases for each piston which are controlled by the member associated with the other piston.

[Claims 1, 3, 5 to 19, and 21 to 23 not printed in the Gazette.]

1,266,166. BATTERY-CELL. JOHN C. SANGERS, Cleveland, Ohio. Filed Oct. 15, 1917. Serial No. 196,600. (Cl. 204—38.)

1. In a battery cell of the character set forth, the combination of a carbon receptacle that is rectangular in cross-section and having an integral bottom, an anode within the receptacle comprising a plurality of zinc plates extending from a common axis into close proximity to the walls of the receptacle, said anode being incased within a porous envelop and surrounded by an electrolyte, and a sealing substance closing the end of the receptacle beyond the anode, the anode and receptacle being provided each with a connection, that of the anode extending through the sealing substance.

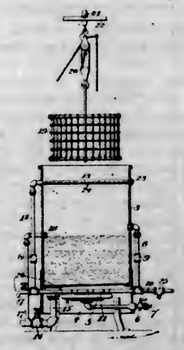


3. A battery cell of the character set forth comprising a carbon receptacle coated with a substance of higher conductivity than carbon, an anode within the receptacle and incased within a porous envelop and surrounded by an electrolyte, the anode having a terminal extending beyond the open end of the receptacle, a terminal carried by the receptacle, and a sealing substance closing the open end of the receptacle.

6. In a battery cell of the character set forth, the combination of a polygonal receptacle comprising a cathode, an anode consisting of a plurality of vertically disposed sheet zinc plates radiating from a common axis into close proximity to the corners of the receptacle thereby to properly position the anode within the receptacle, the anode being incased within a porous envelop and surrounded by an electrolyte, means sealing the end of the receptacle, and means for connecting a conductor to the anode.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

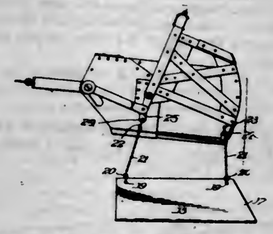
1,266,167. APPARATUS FOR WASHING AND COOKING. RUSSELL A. SEARS, Quincy, Mass. Filed Dec. 4, 1916. Serial No. 135,012. (Cl. 141—9.)



An apparatus of the character described comprising a vessel with an open top and having a main drain in its bottom as well as an overflow drain at a distance above its bottom, said vessel also having an annular spray pipe

arranged within its upper part at a distance from its rim, a supply pipe connected to said spray pipe, drain pipes connected to the aforesaid drains, a basket adapted to be lowered into said vessel, the distance between the overflow drain and the bottom of the vessel as well as the distance between said overflow drain and said spray pipe being at least equal to the depth of the basket, whereby the basket may be immersed in the water in the lower part of the vessel or suspended in the zone between the normal level of the water and the spray pipe.

1,266,168. SKIP ATTACHMENT FOR EXCAVATOR-BUCKETS. EMILE R. SHNABLE, Wilmette, Ill., assignor to Brown Hoisting Machinery Company, Cleveland, Ohio, a Corporation of Delaware. Filed Sept. 16, 1916. Serial No. 120,428. (Cl. 37—55.)

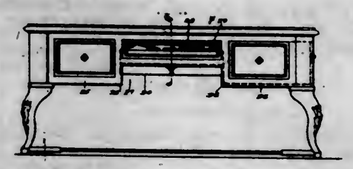


1. In an excavating machine of the class described, the combination with the excavator and its bucket, of an auxiliary receptacle adapted to be positioned between the excavator and the material to be removed and in the path of movement of the excavator bucket, whereby to receive charges of material incidental to the movement of the excavator bucket, and means for connecting said receptacle to said bucket for elevating and dumping the receptacle of its contents.

3. In a machine of the class described, the combination with an excavator and its bucket, of a skip attachment for the bucket, comprising an open sided receptacle adapted to be positioned between the excavator and the material to be removed and having its open side directed toward the path of the excavator bucket in its cutting movement, and suspensory devices for connecting the skip attachment with the excavator bucket to adapt the latter for hoisting the skip attachment and to dump the contents thereof.

[Claims 2 and 4 not printed in the Gazette.]

1,266,169. PHONOGRAPH-CABINET LIBRARY-TABLE. HARRY SISKIN, Los Angeles, Cal. Filed Sept. 27, 1917. Serial No. 193,519. (Cl. 45—52.)

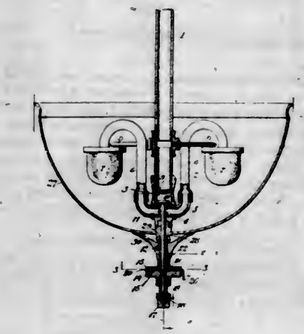


1. In a phonograph cabinet library table, a drawer comprising vertical sides, vertical ends, a partition connecting the sides intermediate of the ends and forming a horn chamber on one side of the partition and a phonograph chamber on the other side of the partition, a bottom for the horn chamber, a drop bottom for the phonograph chamber, and slides projecting outwardly from the sides on a level with the bottom of the horn chamber.

2. In a phonograph cabinet library table, a flat table top, rigid panels below the top and extending toward the center from the ends, a panel frame extending downwardly from the top between the inner ends of the panels, a sound screen fixed in the panel frame, and a slide-way extending from one end below the top; and a drawer comprising vertical sides, vertical ends, a partition connecting the sides intermediate of the ends and forming a horn chamber on one side of the partition and a phonograph chamber on the other side of the partition, a bottom for the horn chamber, a drop bottom for the phonograph chamber, and slides projecting outwardly from the sides on a level with the bottom of the horn chamber and adapted to fit in the slide-way of the table.

[Claim 3 not printed in the Gazette.]

1,266,170. VALVE FOR GAS-FIXTURES, &c. CHARLES A. SMITH, Buffalo, N. Y. Filed Mar. 13, 1916. Serial No. 83,698. (Cl. 137—4.)



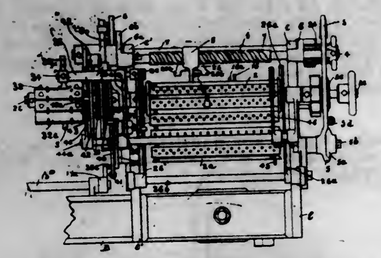
A valve comprising a body having an inlet, an outlet and an inwardly facing valve seat, a valve stopper movable toward and from said seat, an operating rod connected at its inner end with said stopper and provided between its ends with a neck or reduced portion forming a shoulder, a guide tube mounted on the valve body and receiving the central part of said rod, an operating head arranged on the outer end of said rod, a catch having an opening receiving said rod and movable transversely relatively thereto for engaging an edge of said opening with said shoulder and provided at its side with a shoulder and at one end with a fingerpiece, a support for said catch comprising upper and lower sections mounted on said rod between the guide tube and said operating head and having their opposing sides constructed to form a guideway for said catch, a spring mounted on said support between the sections thereof and engaging said catch for interlocking the same with said rod, and a spring surrounding said rod and bearing at its opposite ends against said support and said head and operating to hold said valve stopper yieldingly in its closed position.

1,266,171. CHANGE-BOX MECHANISM FOR LOOMS. EBER SMITH, Nelson, England, assignor to the Firm of Pickles Brothers, Limited, Brierfield, near Burnley, England. Filed Jan. 25, 1915. Serial No. 4,146. (Cl. 139—28.)

2. Change box mechanism for looms comprising a pattern barrel, a pattern surface carried thereby, a traveling detector member, shuttle box mechanism controlled by said detector member, pawls for operating said pattern barrel, a supplemental pattern surface, means actuated by said supplemental pattern surface for controlling said pawls, and means operated by said detector for actuating said supplemental pattern surface.

3. In change box mechanism for looms, a pattern barrel, a pattern surface carried by said pattern barrel, a screw, means for rotating the screw, a detector lever movable on said screw and arranged to contact with said pattern surface, vertical levers 26, 26ª, a lever 25 carried by said

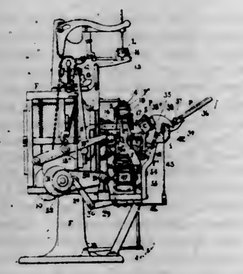
detector lever and having a bifurcated end for contact with said levers 26 and 26ª, and means whereby said lever 25 may cause said screw-rotating means to impart reverse motion to said screw.



4. Change box mechanism for looms comprising a primary pattern barrel, a pawl for rotating said barrel in one direction, a second pawl for rotating the barrel in the opposite direction, a supplementary pattern surface, a pattern barrel for the supplementary pattern surface, an oscillatory plate, means controlled by the supplementary pattern surface for oscillating said plate, and means actuated by the plate for selectively controlling said pawls.

[Claims 1 and 5 to 7 not printed in the Gazette.]

1,266,172. AUTOMATIC FEED MECHANISM FOR LABELING-MACHINES. HERMAN STAKE, Worcester, Mass. Filed Mar. 26, 1917. Serial No. 157,341. (Cl. 193—1.)



3. In mechanism for the purpose specified, a package holding means consisting of an approximately U-shaped furcated supporter having an attachable base and a pair of rigid uniformly projecting arms provided with seats at the outer ends of said projecting arms for sustaining the ends of a package, a swinging clamp-lever centrally fulcrumed upon said supporter and having its outer member adapted for endwise contact with the package, its inner member offset and furnished with a stud-roll, a tensioned spring connected for actuating said lever in one direction, and a central cam for moving said lever in opposition to said spring.

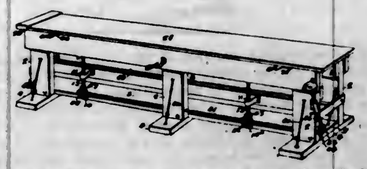
5. In mechanism for the purpose specified, the combination with the intermittently revoluble feed-supporter comprising a rotary-disk provided with package-holders and package-clamping devices thereon, and an inclined delivery chute; of a shifting segment having a package-carrying space movable alternately into alinement with the chute and into conjunction with the holder, a package gripping clamp upon said segment, a clamp-actuating device, and means for shifting said segment, for the purpose set forth.

10. In a mechanism of the class described, the combination with a revoluble series of radially disposed holders comprising pairs of uniformly outstanding arm members with engaging seats adapted for sustaining the ends of roll-packages disposed end to end in circumferential order to revolve in a vertical plane, means for depositing individual roll-packages in position, with their ends engaging said seats, upon the respective holders, an end-contacting clamp for securing and releasing the package thereon; means for imparting rotative movement to the series of holders, and means for operating said clamps.

11. In a mechanism for the purpose specified, in combination, a revoluble carrier plate having a series of projecting dual-armed holders thereon, adapted for supporting roll packages at their ends, with unobstructed space about the central part of the package, a supply chute having a groove in which the packages slide endwise, a pivotally supported tumbler having a recess adapted for receiving individual packages endwise from said chute and for depositing them lengthwise upon the ends of the dual-arms of the holder, means for oscillating said tumbler, and means for stopping the end of the chute during the oscillative movement.

[Claims 1, 2, 4, 6 to 9, and 12 not printed in the Gazette.]

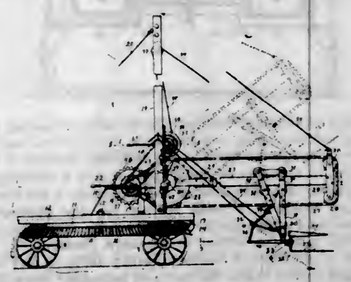
1,266,173. CARPENTER'S WORK-BENCH. THEODORE SWANSON, Lynn Center, Ill. Filed Dec. 6, 1916. Serial No. 135,430. (Cl. 144—286.)



1. In a work bench of the character described; the combination of a framing that includes a plurality of oppositely disposed uprights, a horizontal guide member on the upper ends of each of the said oppositely disposed uprights, means for supporting the board to be placed edgewise between the said guide members, the said means including relatively fixedly held guide members and a longitudinally disposed bar that forms a rest for the board to be planed, mechanism for clamping the board to be planed against the vertical guide members, the said mechanism including a clamping bar pivotally connected to the uprights at one side and adapted for being swung over and held clamped against the board during the operation of planing the uper edge thereof, and further means for effecting vertical adjustment of the bar upon which the board is supported.

[Claim 2 not printed in the Gazette.]

1,266,174. MANURE-LOADER. ROBERT J. F. TELTZROW, Beaver Dam, Wis. Filed Nov. 14, 1914. Serial No. 872,080. (Cl. 214—102.)



2. A manure loader, comprising a support including a derrick and a swingable boom, a carrier frame slidably mounted on the boom portion of the support, means for moving said frame on said boom, a tiltable lever mounted on the lower end of the frame, a toggle link connected to the rear end of the lever and to the frame, and material engaging means mounted on the forward end of the lever and movable to material engaging and discharging positions, said material engaging and discharging positions being permitted by the movement of the derrick and the boom.

[Claim 1 not printed in the Gazette.]

1,266,175. LIGHTNING-PROTECTOR. NIKOLA TESLA, New York, N. Y. Filed May 6, 1916. Serial No. 95,830. (Cl. 173—31.)



1. A lightning protector consisting of an elevated terminal, having its outer conducting boundaries arranged on surfaces of large radii of curvature in both dimensions, and a grounded conductor of small self-induction, as set forth.

2. A lightning protector composed of a metallic shell of large radius of curvature, and a grounded conductor of small self-induction, as described.

9. In apparatus for protection against atmospheric discharges a cupola-shaped metallic terminal of smooth outer surface, in combination with a grounded conductor of small self-induction and resistance, as described.

[Claims 3 to 8 not printed in the Gazette.]

1,266,176. CAR-TICKET CASE. WILLIAM R. THOMAS, Des Moines, Iowa. Filed Feb. 28, 1917. Serial No. 151,517. (Cl. 206—40.)



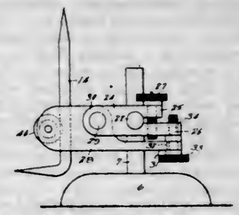
1. A car ticket case comprising a container having a longitudinal slot, a guide strip mounted on the container, ejecting means mounted in the slot, and supported by the said guide strip and adapted for engagement with one of the tickets in the case, a lip projecting into the container and spaced from the end of the said slot and engageable with the adjacent ticket in the case for preventing buckling of the ticket when the said ejecting means is drawn through the slot to normal position after ejecting one of the said tickets.

[Claim 2 not printed in the Gazette.]

1,266,177. SURFACE-GAGE. OSCAR TROMLITZ, Indianhead, Md. Filed Oct. 15, 1917. Serial No. 196,671. (Cl. 33—171.)

2. A gage comprising a standard, a clamp adjustable thereon, a bracket, an arm beside the bracket, a screw engaging the clamp, the arm and the bracket and adapted to fasten the clamp on the standard and secure the bracket to the clamp and forming a pivot for the arm, an adjusting screw between the bracket and the arm, to adjust the latter, and a pointer carried by the arm.

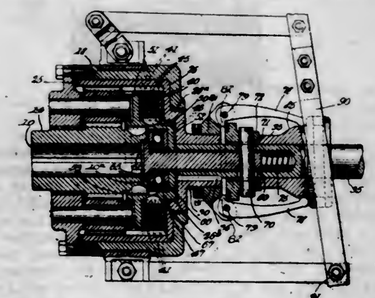
3. A gage comprising a standard, a clamp adjustable lengthwise thereon, a bracket fitting against one side of the clamp, a screw connecting opposite sides of the clamp and securing the bracket to the clamp, an arm pivoted on the screw at the side of the clamp opposite to the



bracket, an adjusting screw between the bracket and the arm, and a pointer carried by the outer end of the arm.

[Claim 1 not printed in the Gazette.]

1,266,178. CLUTCH MECHANISM. HENRY A. TUTTLE, Taunton, Mass. Original application filed Sept. 30, 1912, Serial No. 723,001. Divided and this application filed Feb. 21, 1916. Serial No. 79,546. (Cl. 192—10.)



1. A clutch for connecting a driving-shaft with a driven-shaft comprising a member fixed to the driven-shaft having an engaging wall, a set of clutch-plates, one end of the set being arranged adjacent said wall, an axially movable member slidably connected to the driving-shaft having an engaging wall arranged adjacent the other end of said set of clutch-plates, some of said plates being slidably connected with said fixed member, and others slidably connected with said axially movable member, an axially movable headed stem extended centrally through said movable member and said fixed member, to move said axially movable member, and means arranged to engage said stem and move it axially.

3. A clutch mechanism for connecting a driving-shaft and driven-shaft comprising a member having an engaging wall and extended into a sleeve fixed to the driven-shaft, a set of clutch-plates, one end of the set being arranged adjacent said wall, an axially movable member slidably connected to the driving-shaft having an engaging wall adjacent the other end of said set of clutch plates, some of said plates being slidably connected with said fixed member, and others slidably connected with said axially movable member and an axially movable headed stem extended centrally through said movable member and into a center hole in the sleeve-incased portion of the driven-shaft to move said axially movable member, and means to move said headed stem axially.

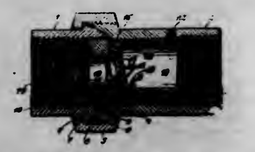
7. A clutch mechanism for connecting a driving-shaft and a driven-shaft comprising a driving-shaft having external longitudinal projections, a member fixed to the driven-shaft having an engaging wall, a set of clutch-plates, one end of the set being arranged adjacent said wall, an axially movable member having internal teeth for engagement with the externally toothed portion of the driving-shaft permitting axial movement thereof and having an engaging wall arranged adjacent the other end

of said set of clutch-plates, some of said plates being slidably connected with said fixed member and others slidably connected with said axially movable member, and means to move said movable member axially.

10. A clutch for connecting a driving-shaft with a driven-shaft, comprising a member fixed to the driven-shaft having an engaging wall, a set of clutch-plates, one end of the set being arranged adjacent said wall, an axially movable member slidably connected to the driving-shaft having an engaging wall arranged adjacent the other end of said set of clutch-plates, some of said plates being slidably connected with said fixed member, and others slidably connected with said axially movable member, and an axially movable headed stem arranged to move said movable element and a ball-bearing thrust element interposed between the head of said stem and said movable member.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,266,179. COMBINED PIPE-UNION AND CHECK-VALVE. WILLIAM J. TYLER, Westmont, N. J. Filed July 10, 1917. Serial No. 179,610. (Cl. 137—32.)



1. A combined pipe union and check valve including two coupling sleeves arranged end to end, means for binding said ends together, a plug secured in one of said sleeves to hold it in place so as to be mounted independently of the other sleeve, said plug having a passage and a valve seat therein, a valve movably supported on said plug and adapted to engage said valve seat, means provided by said first sleeve to limit the distance in which the plug can be inserted therein, the other of said sleeves having a portion for abutment by said plug to prevent its movement out of said first sleeve after the sleeves are joined together, substantially as described.

2. A combined pipe union and check valve including two coupling sleeves arranged end to end and secured together, a plug screwed into one of said sleeves to hold it in place and having a passage and a valve seat therein, a valve movably supported on said plug and designed to engage said valve seat, means provided by said first sleeve to limit the distance to which the plug can be screwed therein, the other of said sleeves having a portion for abutment by said plug to prevent movement out of said first section when the sleeves are joined together, substantialy as described.

1,266,180. ELECTRIC CONTROLLER. HERBERT S. VALENTINE, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed June 30, 1915. Serial No. 37,347. (Cl. 200—24.)

1. The combination of a supporting structure having a projection constituting a fulcrum; a contact finger of channel section mounted to rock on said fulcrum with its side portions engaging the sides of the fulcrum; a contact head on one end of said finger; an adjustable stop carried by the opposite end of the finger in position to engage said supporting structure; with a spring operative on the contact finger between the fulcrum and the stop.

4. The combination of a finger carrier; an elongated finger fulcrumed on said carrier; a threaded sleeve mounted in an opening of the finger and having a head non-rotatably engaged by a portion of said finger; a spring operative on the finger to resist its movement in one direction; with an adjusting screw mounted in the sleeve and abutting upon the carrier.

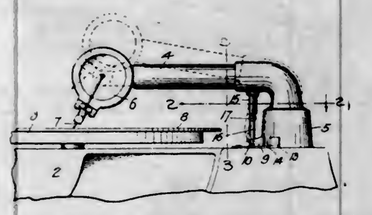
6. The combination of a finger carrier having a projection constituting a fulcrum; and a second projection terminating in a parallel sided portion; an elongated contact finger of channel section rockable on said fulcrum receiving said parallel sided portion between its flanges; with



a spring operative on said finger to normally hold it in a definite position; and a contact head for said finger on the side of the fulcrum opposite said spring.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,266,181. ATTACHMENT FOR PHONOGRAPHS. GEORGE W. VAN NORTWICK, Denver, Colo. Filed Aug. 20, 1917. Serial No. 187,159. (Cl. 274—23.)



1. The combination with the pivoted needle-carrying element of a phonograph, of an arm connected therewith, a relatively stationary appliance coöperating with said arm to obstruct the pivotal movement of the element, and a yielding member on the arm adapted to permit of its passing said obstructive appliance at a determinate point in a movement of said element to raise the needle, whereby to cause said appliance to obstruct the return movement of the same.

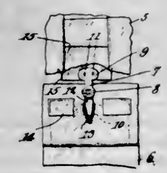
2. The combination with the pivoted needle-carrying element of a phonograph, of an arm connected therewith, a spring on said arm, adapted to yield in one direction, and an appliance coöperating with said arm to obstruct the pivotal movement of the element, after the spring has passed across the same during the stylus-lifting movement of the element.

3. The combination with the pivoted needle-carrying element of a phonograph, of an arm connected therewith, a spring on said arm, adapted to yield in one direction, and an appliance coöperating with said arm to obstruct the pivotal movement of the element after the spring has passed across the same during the stylus-lifting movement of the element, said appliance having means to permit of the return movement of the element to its original position.

4. The combination with the pivoted needle-carrying element of a phonograph, of an arm connected therewith, a spring on said arm, adapted to yield in one direction, and a rail coöperating with said arm to obstruct the pivotal movement of the element after the spring has passed across the same during the stylus-lifting movement of the element.

[Claims 5 to 9 not printed in the Gazette.]

1,266,182. SHIRT-SLEEVE. GEORGE A. VIDETTE, Chicago, Ill. Filed July 11, 1917. Serial No. 179,869. (Cl. 2—94.)



A shirt sleeve comprising separate upper and lower sections, fasteners carried by the lower section, said section having a pocket on the inside in which the fasteners seat and from which they project for detachable engagement with the upper section, and retaining tapes extending across the mouth of the pocket and the projecting portions of the fasteners.

1,266,183. DEVICE FOR SHARPENING SAFETY-RAZOR BLADES. HÉLIER ALEXANDRE VINCENT, Sydenham Hill, London, England, assignor, by mesne assignments, to Marie-Therese Elisabeth Salerni (*née* Couci), Sydenham Hill, England. Filed May 8, 1917. Serial No. 167,174. (Cl. 51—16.)



1. A razor sharpening device comprising a razor blade carrier, means for reciprocating said carrier, means automatically operated by such reciprocation for reversing the blade and provision for disposition of a strop to one side of the axis on which the blade rocks and a hone to the other side of the said axis.

2. A razor sharpening device comprising a razor blade carrier, relatively stationary members, means for reciprocating said carrier over said members to reverse the blade and press it on the whetting surface, the said stationary members being disposed to one side of the axis on which the blade rocks and provision for disposition of a strop to one side of the said axis and a hone to the other side.

3. A razor sharpening device comprising a box like frame, openings in opposite sides of said frame to receive respectively a strop and a hone, a blade carrier, means for reciprocating said carrier, and means automatically operated by such reciprocation for reversing the blade and pressing it on the whetting surface.

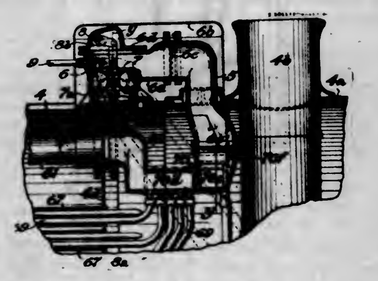
4. A razor sharpening device comprising a razor blade carrier, relatively stationary rail members, circular parts on the blade carrier working over said members, means to reciprocate the said carrier relatively to said members to reverse the blade and press it on the whetting surface, the said rail members being situated to one side of the axis on which the blade rocks, and provision for disposition of a strop to the other side of the said axis.

5. A razor sharpening device comprising a razor blade carrier, relatively stationary toothed racks, pinions engaging therewith and frictionally connected to the said razor carrier, means to reciprocate the said carrier relatively to said racks to reverse the blade and press it on the whetting surface the said racks being situated to one side of the axis on which the blade rocks, and provision for disposition of a strop to the other side of the said axis.

[Claims 6 to 15 not printed in the Gazette.]

1,266,184. LOCOMOTIVE-BOILER SUPERHEATER. HARRY S. VINCENT, Ridgewood, N. J. Filed June 12, 1917. Serial No. 174,174. (Cl. 122—462.)

1. The combination, with a locomotive boiler, of a superheater header located in the smoke box, and having a single delivery nozzle entirely inclosed therein; a throttle box supported, independently of the superheater header, on the exterior of the boiler shell; an angle pipe secured to, and supported by, the throttle box, said pipe passing through the smoke box and being connected, at its lower end, to the delivery nozzle of the superheater header; branch steam pipes leading, exterior to the boiler, from the throttle box to connections with the distribution valve chests of the engine; and a throttle valve seating in the throttle box and controlling communication therefrom to the branch steam pipes.



2. The combination, with a locomotive boiler, of a superheater header located in the smoke box, and having a single delivery nozzle entirely inclosed therein; a throttle box supported, independent of the superheater header, on the exterior of the boiler shell, and having a forwardly extending delivery nozzle; an angle pipe secured to, and supported by, the delivery nozzle, said pipe passing through the smoke box, and being connected, at its lower end, to the delivery nozzle of the superheater header; ball joint rings interposed between the angle pipe and the throttle box and superheater header; branch steam pipes leading, exterior to the boiler, from the throttle box to connections with the distribution valve chests of the engine; and a throttle valve seating in the throttle box and controlling communication therefrom to the branch steam pipes.

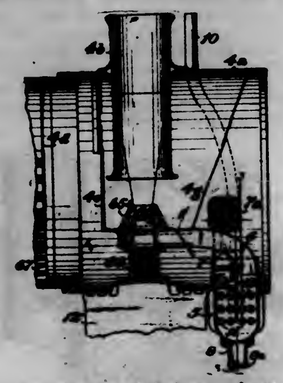
3. The combination, with a locomotive boiler, of a smoke box having inclined lateral openings; a superheater header located in the smoke box; a throttle box supported independently of the superheater header, on the exterior of the boiler shell; a pipe passing through the smoke box and connecting the superheated steam compartment of the header with the throttle box; branch steam pipes leading from the throttle box to connections with the distribution valve chests of the engine and extending longitudinally in the lateral openings of the smoke box; and cover plates fitted over said openings and secured detachably to the smoke box.

1,266,185. LOCOMOTIVE-FEED-WATER HEATER. HARRY S. VINCENT, Ridgewood, N. J. Filed July 25, 1917. Serial No. 182,613. (Cl. 122—425.)

1. The combination, with a locomotive boiler, of a heater casing, located exterior to, and below, the boiler and its accessories; means for passing feed water through said casing; means for diverting a portion of the waste gases from direct passage to the stack, through the heater casing; and means for effecting the application of the heat of such diverted gases to the feed water, in its traverse through the heater casing.

10. The combination, with a locomotive boiler; of a heater casing adapted to be supported exterior to the boiler, and comprising a main body portion; supply and delivery casings at the ends thereof; partitions dividing each of said casings into an outer compartment and a plurality of inner compartments; removable heads closing the outer compartments; openings establishing communication between different members of the inner compartments; a plurality of pipes secured at their ends in the end walls of the main body of the casing; plugs fixed in

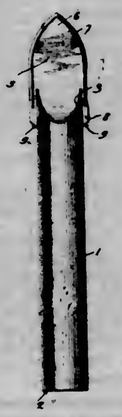
the partitions; a plurality of pipes, of smaller diameter, secured in said plugs and passing through the first specified pipes; means for traversing waste gases from the



boiler around the first specified pipes; and means for passing exhaust steam through the smaller diameter pipes.

[Claims 2 to 9 not printed in the Gazette.]

1,266,186. KNIFE. FREDRICK L. WARNKE, Coopersville, Mich. Filed Feb. 16, 1918. Serial No. 217,532. (Cl. 17—30.)



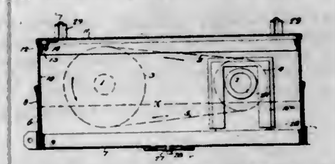
1. In a knife of the class described, the combination of a blade, said blade having cutting edges, said blade also having converging edges at its inner end, a hollow handle beveled from each side adjacent one end to form a wedge like construction, said handle having a slot extending into each side thereof from the outer end of its wedge like construction, said blade being slipped into said slots, whereby said handle will bear upon each side of the blade, while the converging edges of the blade will engage the inner portions of the handle adjacent the slots thereof, thus causing the blade to be held against accidental movement.

2. In a knife of the class described, the combination of a hollow handle, said handle being provided with inwardly beveled portions at one end thereof, thus forming a wedge like construction having an apex, said wedge like construction having inwardly extending slots projecting thereinto from the apex, a flat blade having cutting edges, said blade having a heel at its inner end, the inner edges of said heel converging, said blade being slipped into the slots, thus causing the handle to bear upon opposite sides of said blade, while said heel will engage the inner portion of the handle adjacent said slots, thus causing the blade to be held against accidental displacement.

4. In a knife of the class described, the combination of a blade having cutting edges, a hollow handle having slotted portions, said blade fitting within the slotted portions to be directly carried by said handle independent of secondary securing elements.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,266,187. CASING FOR DRIVE-CHAINS. CHARLES R. WEISS, Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 11, 1918. Serial No. 211,370. (Cl. 74—56.)

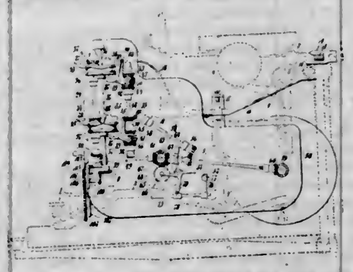


1. In a casing for a drive chain, or gearing, the combination of a lower section having side and end walls and recessed for the accommodation of the shafts; an upper section adapted to fit in the lower section and also recessed for the accommodation of the shafts, said upper section extending to a point below the line of the oil in the lower section.

6. The combination in a casing for a chain drive, of a lower section having side walls, end walls and a bottom, said lower section having a flared internal flange near its bottom; an upper section fitting in the lower section and extending into the space between the flange and the side and end walls of the lower section, the sides of the upper section being slotted for the accommodation of the two shafts, one of said slots being elongated to allow for adjustment; cover plates mounted on the shafts and adapted to close the slots, said cover plates being enlarged at the shafts and having grooves therein acting as oil traps; and a recess leading from each groove back to the interior of the casing so that any oil traveling on the shaft will be deflected back into the interior of the casing.

[Claims 2 to 5 not printed in the Gazette.]

1,266,188. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Jan. 20, 1912. Serial No. 672,350. Renewed Oct. 26, 1917. Serial No. 198,637. (Cl. 235—59.)



1. The combination with a plurality of computing heads, of individual controlling mechanism for governing the state of each computing head, governing mechanism for adjusting all of said controlling mechanisms, a bevel gear connected to said governing mechanism, a bevel gear meshing with said first mentioned bevel gear, a gear for driving said second-mentioned bevel gear, and a lever having a gear connected thereto and meshing with said last-mentioned gear for actuating said governing mechanism.

2. In a combined typewriting and computing machine, the combination with a traveling carriage to determine different computing zones or columns and a plurality of computing heads, each capable of existing in addition, subtraction or in neutral state, of a permutation device to control the states of said computing heads, said permutation device having a state controller, one for each computing head, said controllers bearing formations such that said controllers may act jointly to determine any state of activity of any head in combination with any of said states of any other head.

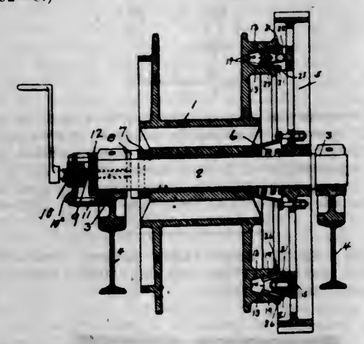
3. In a computing machine, the combination with a plurality of computing heads, each capable of existing in addition, subtraction or a neutral state, of a permutation device to control the states of said computing heads, said permutation device having a state controller for each computing head, and said permutation device including a part shiftable by a single stroke from one position to any other, to determine any state of activity of any head in combination with any of said states of any other head.

12. The combination with a typewriting mechanism including a traveling carriage, of computing mechanism including a plurality of computing heads, and controlling mechanism for selectively obtaining any combinations of states of said computing heads for any position of said carriage, said controlling mechanism including a controlling lever movable in a single plane from one position to any other and determining by its positions the various combinations of states of said computing heads in any computing zone as determined by said carriage.

13. In a computing machine, the combination with computing mechanism including a plurality of computing heads adapted to exist in different states, of a permutation device to control the states of said computing heads including a plurality of circular cam tracks one for each computing head, said cam tracks having formations arranged according to a definite plan and rotatable in unison to different positions and controlling by their positions different combinations of states of said computing heads.

[Claims 4 to 11 and 14 to 17 not printed in the Gazette.]

1,266,189. FRICTION-CLUTCH. LEWIS E. YOUNIE, Portland, Oreg. Filed Jan. 6, 1917. Serial No. 140,875. Renewed Dec. 12, 1917. Serial No. 206,857. (Cl. 192—8.)



1. In a friction clutch, the combination of a cone surface; segments having a friction surface corresponding to the cone surface and an actuating face back of the friction surface; wedge faces operating on the actuating faces to force the friction surfaces into engagement with the cone surface; and means for holding the faces in contact when the surfaces are disengaged.

4. In a friction clutch, the combination of a cone surface; segments having friction surfaces corresponding to the cone surface and actuating faces back of the friction surfaces; a carrier ring having wedge faces engaging the actuating faces to force the surfaces into engagement, the resistance to relative movement between the faces being less than the resistance to relative movement between the surfaces; and means for limiting the axial movement of the segments on the ring and for locking the segments against movement on the ring in a circumferential path.

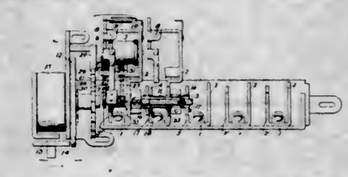
7. In a friction clutch, the combination of a cone surface; segments having friction surfaces corresponding to the cone surface and actuating faces back of the friction surfaces; a carrier ring having wedge faces engaging the actuating faces to force the surfaces into engagement, said actuating ring having spring sockets; springs arranged in the sockets and secured to the segments, said springs holding said faces in contact and tending to move the segments on the faces as the clutch is disengaged in a direction of movement opposite to the relative movement of the faces as the clutch is engaged.

9. In a friction clutch, the combination of opposing cone surfaces forming a friction groove; segments having opposing friction surfaces corresponding to the cone surfaces and actuating faces back of the friction surfaces; and a carrier ring having wedge faces operating on the actuating faces and extending between the segments to force the friction surfaces into engagement with the cone surfaces.

13. In a friction clutch, the combination of a first friction surface; segments having a second friction surface corresponding to the first friction surface and an actuating face back of the second friction surface; wedge faces operating on the actuating faces to force the friction surface into engagement; and means for holding the faces in contact when the surfaces are disengaged.

[Claims 2, 3, 5, 6, 8, and 10 to 12 not printed in the Gazette.]

1,266,190. CIRCUIT-CHANGING SWITCH. ARTHUR H. ADAMS, Sparkill, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 9, 1916. Serial No. 136,079. (Cl. 179—27.5.)



1. In a circuit changing switch, a plurality of contact springs, an operating member for bringing certain of said contact springs into engagement with each other, means for actuating said operating member, and an escapement mechanism for controlling said operating member actuated by said operating member.

2. In a circuit changing switch, a plurality of stationary contact springs and a plurality of movable contact springs, an operating member arranged to bring certain of said movable contacts into engagement with certain of said stationary contacts, means for moving said operating member, and an escapement mechanism for controlling the said operating member actuated by said operating member.

3. In a circuit changing switch, a plurality of contact springs, an operating member arranged to bring certain of said contact springs into engagement with each other, means for actuating said operating member, a shaft, a toothed wheel loosely mounted thereon, means for rotating said wheel, said wheel being arranged to control said operating member.

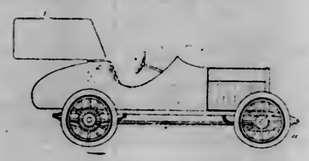
4. In a circuit changing switch, a plurality of contact springs, an operating member arranged to bring certain of said contact springs into engagement with each other, means for actuating said operating member, a shaft, a toothed wheel loosely mounted thereon, means for rotating said wheel, and means associated with said operating member for controlling the rotation of said wheel, said wheel being arranged to control said operating member.

5. In a circuit changing switch, a plurality of contact springs, an operating member arranged to bring certain of

said contact springs into engagement with each other, means for actuating said operating member, a shaft, a toothed wheel loosely mounted thereon, means for rotating said wheel, and escapement pawls connected to said operating member for controlling the rotation of said wheel, said wheel being arranged to control said operating member.

[Claim 6 not printed in the Gazette.]

1,266,191. BANKING-PLANE FOR AUTOMOBILES. FRANK W. ADSIT, Minneapolis, Minn. Filed Sept. 17, 1915. Serial No. 51,289. (Cl. 21—192.)

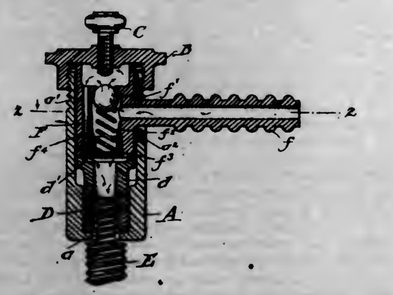


1. In banking planes for automobiles having a steering wheel and steering means controlling said wheel, the combination with the automobile of a vertically positioned plane hinged to said automobile and spaced from the steering wheel thereof, and means controlled by said steering means for turning said banking plane horizontally in a direction the reverse to that which said steering means turns said steering wheels.

2. In banking planes for automobiles the combination of a banking plane hinged thereon, and means connecting said banking plane with the steering mechanism of an automobile for turning said banking plane in a reverse direction from that which said steering mechanism turns the steering wheels of said automobile.

3. In banking planes for automobiles having a steering wheel near one end of said automobile, of a banking vertical plane hinged near the other end of said automobile, and means controlled by the steering mechanism of the automobile for turning said banking plane and said steering wheel in opposite directions.

1,266,192. PUMP CONNECTION. SIDNEY R. ANTHONY, New York, N. Y. Filed Nov. 27, 1916. Serial No. 133,639. (Cl. 137—28.)

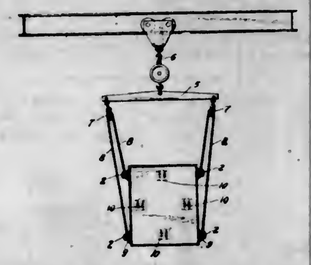


1. In a device of the class described, the combination of a tubular casing provided with an aperture through which a portion of a tire nipple may extend, a resilient annulus positioned within the casing and encircling said portion of the tire nipple, a member slidable longitudinally of the casing and provided with a passage through which compressed air may be fed into the casing, a valve for normally sealing said passage, a threaded cap for the casing which threaded cap when screwed upon the casing forces the slidable member longitudinally of the casing and compresses the resilient annulus to cause the same to grip the tire nipple and manually adjustable means cooperating with the threaded cap and operable to control the operations of said valve.

2. In a device of the class described, the combination of a tubular casing provided with an aperture through which a portion of a tire nipple may extend, a resilient annulus positioned within the casing and encircling said portion of the tire nipple, a member slidable longitudinally of the casing and provided with a passage through which compressed air may be fed into the casing, a valve for normally sealing said passage, a threaded cap for the casing which threaded cap when screwed upon the casing forces the slidable member longitudinally of the casing and compresses the resilient annulus to cause the same to grip the tire nipple and a thumb screw threaded through the threaded cap and operable to control the operations of said valve.

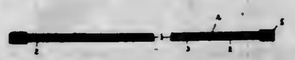
3. In a device of the class described, the combination of a tubular casing provided with an aperture through which a portion of a tire nipple may extend, a resilient annulus positioned within the casing and encircling said portion of the tire nipple, a member slidable longitudinally of the casing and provided with a passage through which compressed air may be fed into the casing, a valve for normally sealing said passage, a threaded cap for the casing, which threaded cap, when screwed upon the casing, forces the slidable member longitudinally of the casing and compresses the resilient annulus to cause the same to grip the tire nipple, and means associated with the threaded cap for unseating the valve to allow compressed air to flow through the passage to the tire nipple.

1,266,193. TILTING MECHANISM FOR CARS. CARL P. ASTROM, East Orange, N. J., assignor to M. H. Treadwell Company, a Corporation of New York. Filed Oct. 26, 1915. Serial No. 57,922. (Cl. 105—269.)



The combination with a body having a pair of horizontally separated trunnions on each side, of a suspended beam carrying at each end swiveled flexible member supports separated at a greater distance than the width of said body, and flexible members traveling over said supports and connected at their ends to said trunnions.

1,266,194. SIGN. JOHN JAMES BARKER, Cowansville, Quebec, Canada. Filed Dec. 15, 1917. Serial No. 207,366. (Cl. 40—135.)

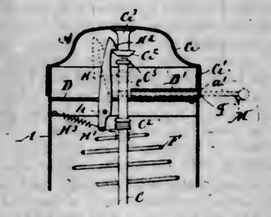


1. An out door pasteboard sign having printed matter thereon forming an announcement and a transparent weatherproof covering of a substance adapted to take form and enter and cap the pores on one side and further a weatherproof covering of a substance on the other side adapted to do likewise, the unprotected edges being closed from exposure to the weather by strips of metal folded over opposite edges and further folded over the other edges and over the aforesaid strips.

2. A sign, comprising a sheet of paper board material having on one side a printed design in contrasting colors,

a substance applied to the back adapted to cap and fill the pores or other interstices and spread therearound and therebetween and thereby form a waterproof coating flexible in its consistent state, a mill board backing forming a reinforcement and glued to said paper board, a metal binding strip joining said mill and paper boards at the edges, and a clear varnish covering the front of said bound boards and through which said design appears.

1,266,195. SOAP-POWDER DISPENSER. JOHN W. BECKMANN, New York, N. Y., assignor to Automatic Powdered Soap Dispenser Company, Inc., New York, N. Y., a Corporation of New York. Filed Feb. 9, 1917. Serial No. 147,579. (Cl. 221—66.)



1. In a device of the character set forth, a body, a bottom therefor having a valve-opening therein and an extension adjacent such opening and having a vertical slot, a guide in said body, a spring-actuated valve rod extending through such opening and guide, a valve on said rod arranged to control such opening by the axial movements of said rod, and an arm on the valve rod below the valve and bearing against the under side thereof, said arm extending radially and movable bodily with said rod and in said slot, cover-locking means, and cover-unlocking means controlled by said rod.

5. In a device of the character set forth, a body, a bottom therefor having a valve-opening therein, and an extension surrounding such opening and having a vertical slot, a bridge extending across the interior of said body, a spring-actuated valve rod extending through such opening and bridge, a valve on said rod below and controlling such opening, an arm on said rod below said valve and extending radially therefrom through such slot, a removable cover for said body, a spring-actuated dog pivotally mounted in said bridge, and a head on the interior of said cover arranged to be engaged by said dog.

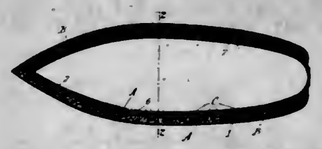
7. In a device of the character set forth, a body, a bottom therefor having a valve-opening therein, and an extension surrounding such opening and having a vertical slot, a bridge extending across the interior of said body, a spring-actuated valve rod extending through such opening and bridge, a valve on said rod below and controlling such opening, an arm on said rod below said valve and extending radially therefrom through such slot, a removable cover for said body, a spring-actuated dog pivotally mounted in said bridge, a head on the interior of said cover arranged to be engaged by said dog, and an annular flange on said cover inclosing the upper end of said body and having a notch in its edge, said body having a hole located to register with said notch to admit means for disengaging said dog and head, said rod having an orifice therein arranged to be located in alinement with said hole and notch.

[Claims 2 to 4, 6, and 8 to 10 not printed in the Gazette.]

1,266,196. PROTECTIVE ARMOR FOR SHIPS. FREDERIC W. BENTLEY, Chicago, Ill. Filed May 7, 1917. Serial No. 167,110. (Cl. 114—13.)

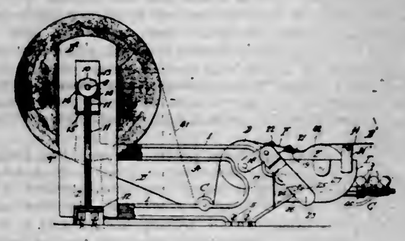
5. A protective armor for ships and the like, comprising a shell or casing and a body of cellular, friable and buoyant material in subdivided form contained therein, substantially as described.

12. A protective armor for ships and the like, consisting of a plurality of separate hollow shells or casings all of the sides of which are closed and which are air and water-tight, a body of cellular, friable, buoyant material contained therein, and means for detachably securing said shells or casings to the sides of a ship, substantially as described.



[Claims 1 to 4 and 6 to 11 not printed in the Gazette.]

1,266,197. SEALING-STRIP MACHINE. JOHN BERG, Chicago, Ill., assignor to Metal Specialties Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1914. Serial No. 859,418. (Cl. 91—14.5.)



1. In a machine of the character set forth, the combination of a frame, a paper-roll mounted therein, a feed-roll mounted at a distance in front of the paper-roll, a water-font mounted in front of said feed-roll, a moistening-roll therein, and means disposed between the upper portions of said feed-roll and moistening-roll adapted to change the arc of contact which exists between the gummed strip and moistening-roll when the strip is being served, said means being provided with a strip severing device.

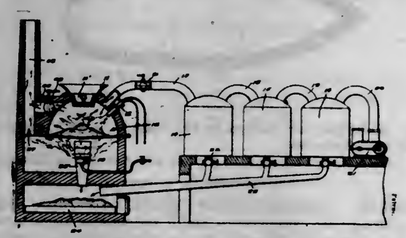
4. In a machine of the character set forth, the combination of a frame, a paper-roll mounted therein, a feed-roll mounted at a distance in front of the paper-roll, a water-font mounted in front of said feed-roll, a moistening-roll therein, and a strip guide and severing device disposed between the upper portions of said feed-roll and moistening-roll and adapted to bend the strip between said feed roll and moistening-roll and hold the strip in contact with the moistening-roll throughout a substantial arc of its surface during the operation of serving the strip, said device having a cutting edge disposed close to the moistening-roll.

9. In a sealing-strip machine, the combination of a frame, a paper-roll mounted therein, a feed-roll mounted at a distance in front of the paper-roll, a water-font demountably carried by the front end of the said frame, a moistening-roll journaled in said font, and a pivotally mounted, detachably-held swinging strip positioning and severing device projecting over the font and adapted to be swung away therefrom to permit removal of the font.

11. In a sealing-strip machine, the combination of a frame, a paper-roll mounted therein, a guide-roll mounted below and in front of the paper-roll, a concave shoe disposed below said guide-roll, a feed-roll mounted above and in front of said guide-roll, a water-font carried by the front end of said frame, a moistening-roll mounted therein, and a fixedly held strip positioning and severing device disposed betwen the upper portions of said feed-roll and moistening-roll and having a cutting edge disposed close to the moistening-roll and below the plane of the upper surface thereof.

[Claims 2, 3, 5 to 8, 10, 12, and 13 not printed in the Gazette.]

1,266,198. PROCESS OF MAKING A FERTILIZER. HENRY BLUMENBERG, Jr., Los Angeles, Cal., assignor of one-half to Frieda Blumenberg, New York, N. Y., and one-half to John J. Seeman, Los Angeles, Cal. Filed Jan. 22, 1917. Serial No. 143,798. (Cl. 71—9.)



1. A process of making a fertilizer, comprising mixing ground feldspar, sodium nitrate and acid sludge containing sulfuric acid, heating the mass to liberate nitric acid therefrom, further heating the mass to 800° to 1000° C. to fuse the same and produce aluminum, potassium, and sodium sulfates, and mixing the fused mass with calcium nitrate and soluble calcium phosphate to produce a fertilizer containing calcium sulfate, calcium nitrate, aluminum nitrate, potassium sodium sulfate, and soluble calcium phosphate.

3. A process of making a fertilizer, comprising mixing a mineral containing potassium, a nitrate of an alkali forming metal and acid sludge containing sulfuric acid, heating the mass to liberate nitric acid therefrom and collecting the same, further heating the mass to a temperature sufficient to fuse the same and to produce potassium sulfate, and treating calcium phosphate with said nitric acid and mixing the fused mass with the treated calcium phosphate.

4. A process of making a fertilizer, comprising mixing ground orthoclase, sodium nitrate, and acid sludge containing sulfuric acid, heating the mass to liberate nitric acid therefrom and collecting the same, further heating the mass to a temperature sufficient to fuse the same and produce aluminum, potassium, and sodium sulfates, mixing ground calcium carbonate with said mass, treating phosphate rock with the nitric acid collected, and mixing said mass with said treated phosphate rock to produce a fertilizer.

[Claim 2 not printed in the Gazette.]

1,266,199. FERTILIZER AND PROCESS OF MAKING THE SAME. HENRY BLUMENBERG, Jr., Los Angeles, Cal., assignor to Frieda Blumenberg, New York, N. Y. Filed July 16, 1917. Serial No. 180,801. (Cl. 71—9.)

2. A fertilizer consisting of a fused mass containing sodium nitrate and tri-calcium-phosphate.

[Claims 1 and 3 not printed in the Gazette.]

1,266,200. PLASTER COMPOSITION. HENRY BLUMENBERG, Jr., Los Angeles, Cal., assignor to Frieda Blumenberg, New York, N. Y. Filed Oct. 1, 1917. Serial No. 194,270. (Cl. 106—34.)

2. A plaster composition containing substantially equal parts of dead burnt gypsum and hemi-hydrated calcium sulfate.

[Claims 1 and 3 not printed in the Gazette.]

1,266,201. FOOD COMPOUND FOR MAKING CUSTARD. HENRY D. BODDINGTON, Los Angeles, Cal. Filed Oct. 26, 1917. Serial No. 198,694. (Cl. 99—11.)

3. A powdered food compound for making custard, consisting of six parts of casein, sixty parts of starch, thirty-five parts of powdered milk, and ten pounds of egg yolk.

[Claims 1 and 2 not printed in the Gazette.]

1,266,202. FOOD COMPOSITION FOR MAKING CAKES AND THE LIKE. HENRY D. BODDINGTON, Los Angeles, Cal. Filed Oct. 26, 1917. Serial No. 198,693. (Cl. 99—11.)

1. A food compound containing bicarbonate of soda, tartaric acid, cream of tartar, starch, egg yolk, and casein.

[Claim 2 not printed in the Gazette.]

1,266,203. METHOD OF TANNING HIDES. GIACOMO BOSIO and ANTONIO PERADOTTO, Turin, Italy. Filed Apr. 19, 1916. Serial No. 92,272. (Cl. 149—4.)

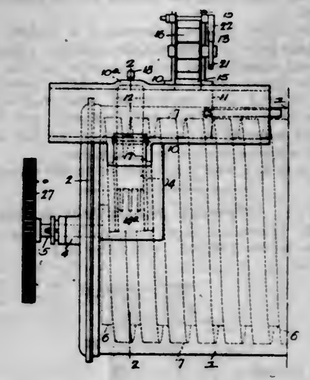
1. The method of tanning hides consisting in treating them in stationary vats containing tannic solutions, without addition of any other acting agent than tannin, at a concentration of 7 to 35% of extract of tannin according to the quality and thickness of the skins to be treated, the skins being immersed in the cold tannic solution the temperature of the bath together with the skins immersed therein being thereupon raised in a relatively short time to that of the animal during its life and maintained practically at said life temperature, without removing the skins until the completion of the tanning.

2. The method of tanning hides consisting in treating them in stationary vats containing tannic solutions, without addition of any other acting agent than tannin, at a concentration corresponding from 7 to 35% of extract of tannin according to the quality and thickness of the skins to be treated, the skins being secured on battens or frames and immersed in the cold solution of tannin, the temperature of the bath together with the immersed skins being raised gradually or progressively, in a relatively short time to that of the animal, whose skin is treated, during its life, and maintained at said life temperature for a period varying from 1 to 15 days, without removing the skins from the vats, means being provided for relative movement of the battens or frames and of the bath.

3. The method of tanning hides consisting in treating them in stationary vats containing tannic solutions, without addition of any other acting agent than the tannin, at a concentration corresponding from 7 to 35% of extract of tannin according to the quality and thickness of the skins to be treated, the tannic solution being constantly kept in movement and the skins being secured on fixed battens or frames and also being immersed in the cold tannic solution kept in movement, and the temperature raised gradually and quickly, that is to say, progressively and in a relatively short time, to the temperature of the live body heat of the animal whose skin is being treated and maintained practically at said live body temperature and without removing the skins from the vats for a period varying from 1 to 15 days, substantially as set forth.

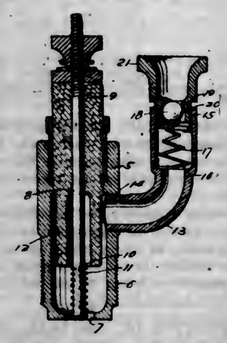
1,266,204. APPARATUS FOR COOKING CANNED VEGETABLES. JOSEPH BRAKELEY, Freehold, N. J. Filed Feb. 23, 1915. Serial No. 9,924. (Cl. 126—272.)

1. In a can cooking or sterilizing apparatus, the combination of a cylindrical casing forming a steam chamber, a plurality of T-ribs secured to the inner wall of said steam chamber longitudinally of the same, a helical trackway mounted on said T-ribs and supported thereby inwardly from said inner wall of the casing, a rotatable drum concentrically disposed with respect to said casing and the trackway carried thereby; the latter being arranged to receive cans at one end of the machine and to discharge them at the opposite end of the machine, means for effecting movement of the rotatable member, a pair of oppositely disposed ribs carried by said rotating member for engagement with the cans whereby the latter may be moved through the steam chamber around the helical trackway; said ribs being so spaced with reference to the cans occupying the trackway that the surface of the rotatable member between said ribs will not be completely covered by the cans, thereby permitting the cans to have rolling movement in the trackway after they are carried to the top of said rotatable member independent of that imparted by the ribs; thereby permitting the contents of the cans to change position with reference to the wall of the same, and valved means at each end of the casing providing for inlet of cans simultaneous with the discharge of the same.



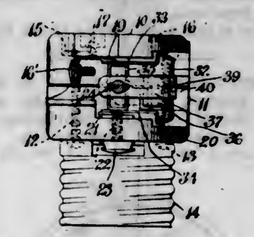
2. In a can cooking or sterilizing apparatus, the combination of a cylindrical casing forming a steam chamber, a helical track extending from end to end of the casing along which cans may be moved; said track being spaced from the wall of the casing, a rotatable cylinder concentrically disposed with respect to said track and delimiting the space for the passage of cans; said track being arranged to receive cans at one end of the casing and deliver them at the other end of the casing, a pair of oppositely disposed ribs carried by said rotating cylinder for engagement with the cans whereby they may be moved around the helical trackway; each end of said ribs being provided with slots or notches, valved means for effecting delivery to and discharge of cans from the steam chamber, and runways for the cans coöperating with said valved means and extending into the casing; said runways having slotted bottom plates registering with the notches or slots of said ribs.

1,266,205. SPARK-PLUG. JOHN O. BROCK, Wilmington, N. C. Filed Mar. 9, 1916. Serial No. 83,070. (Cl. 123—169.)



In a spark plug, a body having a guarded opening in one side for delivery of fuel, an insulator extending partially through the body, an electrode in the insulator projecting to a point near the end of the body, a coiled wire encircling the electrode at the lower end thereof, the lowermost convolution of the wire being in proximity to the wall of the body for conducting the current for producing a spark in the gap between the wire and said body.

1,266,206. ELECTRIC SWITCH. CHARLES W. BROCKETT, Brooklyn, N. Y., assignor to W. R. Ostrander & Company, New York, N. Y., a Corporation of New York. Filed June 26, 1916. Serial No. 105,814. (Cl. 173—351.)



2. In a switch of the character described, an operating spindle, a frame in which said spindle is mounted, said frame having side portions spaced relatively close together to form a pocket, a spring yoke having a back portion seated in the socket thus provided in the frame and spring contact arms at opposite ends of said back projecting to opposite sides of the spindle, a pin engaged between the spaced side portions of the frame and extending across the back portion of the spring yoke to thereby secure the same in the pocket aforesaid, a spreading cam on the spindle between the contact arms and contacts arranged to be engaged by the contact arms of the yoke.

7. In a switch of the character described, an insulating base having a slot, a supporting frame engageable in said slot, a compressible packing folded to engage the opposite faces of said frame and interposed in said slot between the frame and the walls of said slot and means holding said frame thus seated in said slot.

10. In a switch of the character described, an insulating base comprising upper and lower members provided with contiguous recesses forming a switch chamber, a frame having a back portion disposed between the adjoining faces of the base members and spaced end portions provided with bearings for a spindle, one of said bearing portions of the frame projecting into the switch chamber aforesaid, a spindle journaled in the bearings, a cam on the spindle within the switch chamber, a contact yoke within the switch chamber having a back portion supported by that portion of the frame within the switch chamber and spring arms disposed on opposite sides of the cam, means securing the back portion of the contact yoke relatively loosely to the supporting portion of the frame to thereby enable the yoke to adjust itself to the action of the cam and contacts on the upper and lower base members respectively disposed in position to be engaged by the contact arms of the yoke.

[Claims 1, 3 to 6, 8, and 9 not printed in the Gazette.]

1,266,207. OPHTHALMIC MOUNTING. LUCIAN W. BUGBEE, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 29, 1917. Serial No. 145,169. (Cl. 88—52.)



4. A spectacle temple, comprising a single piece of material having a reduced side and a larger ear hook, the material of the ear hook being grooved or slotted to increase its pliability and being subsequently rolled or swaged to blend the edges of the grooves or slots to present a smooth ear engaging face.

6. A temple for an ophthalmic mounting, comprising a side and an ear hook portion, the ear hook portion having a plurality of circumferential grooves formed therein

to increase its flexibility, the depth of the grooves adjacent the points of merger of the side and ear hook sections being less than the depths of the grooves intermediate the ear hooks, whereby maximum flexibility occurs at the intermediate portions and greater rigidity is presented at the point of merger of the two surfaces, substantially as illustrated.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,266,208. PUPILLOMETER. LUCIAN W. BUGBEE and EDGAR D. TILLYER, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 24, 1917. Serial No. 203,838. (Cl. 88—20.)



1. The combination with a pair of spectacles including lenses, of a series of graduations arranged in superimposed relation upon each lens, the lower of said graduations being divided into millimeters for measuring the distance from the nose to each pupil and the upper of said graduations being double that of the lower series and divided into half millimeters for measuring the distance from pupil to pupil.

3. A pupillometer including a lens having a longitudinal and transverse line thereon, graduations being disposed upon opposite sides of the lines and the graduations upon one side of the lines being double that of the other side.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,266,209. ELECTRICAL GROUND. THOMAS WILLIAM BYRNE, Boston, Mass. Filed Mar. 15, 1917. Serial No. 155,098. (Cl. 173—31.)



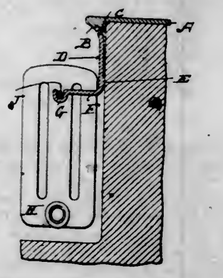
1. An electrical ground comprising metallic and non-metallic elements in direct mechanical contact, the metallic element being out of contact with the moisture of the earth.

5. An electrical ground comprising a carbon rod, a metallic connector secured at its lower end to the rod and covered at its middle portion with waterproof insulating material, waterproof material surrounding the lower portion of the connector and upper end of the carbon rod and extending above the lower margin of the insulating material on the middle of the connector, the upper end of the connector being adapted to have secured thereto the conductor for connecting the ground to the apparatus to be grounded.

6. An electrical ground comprising a carbon rod, a frusto-conical body of hygroscopic material mixed with a binder and surrounding and supported by the carbon rod with the upper end of the rod extending therefrom, a conductor covered with waterproof insulating material, connections between the rod and conductor, and insulating material covering the upper end of the rod and the connections between the rod and conductor.

[Claims 2 to 4, 7, and 8 not printed in the Gazette.]

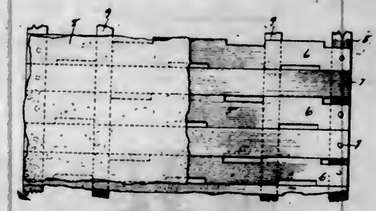
1,266,210. SUPPORT FOR STEAM-RADIATORS. HARRY E. CAMPBELL, New York, N. Y. Filed Apr. 6, 1917. Serial No. 160,263. (Cl. 248—30.)



4. A metal window sill, metal brackets secured to said sill and having inwardly extending arms, and means on said arms for suspending a radiator therefrom.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

1,266,211. LATH FOR WALL-PLASTER FOUNDATIONS. JOHN C. CAPEHART, Frankfort, Ky. Filed Apr. 23, 1917. Serial No. 163,853. (Cl. 20—13.)



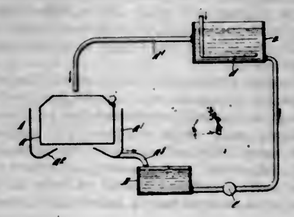
1. An article of manufacture, comprising a lath of ordinary standard dimensions having alternately in its opposite edges shallow recesses substantially the size of the cross section of the lath and spaced apart substantially twice their length.

2. A lathing section consisting of a series of laths as set forth in claim 1, each in juxtaposition to and alternating with one of a series of uncut laths, all of said laths being glued to and flexibly united by strips of tape so that said sections are capable of being rolled and unrolled.

1,266,212. PRODUCTION OF NEUTRAL AMMONIUM SULFATE. FELIX CAPRON, Gray's Inn Road, London, England. Filed Sept. 17, 1917. Serial No. 191,851. (Cl. 23—21.)

1. The process of obtaining neutral ammonium sulfate which consists in subjecting the already crystallized acidulated sulfate to a washing treatment by a practically saturated and substantially neutral solution of ammonium sulfate until the solution leaving the crystals shows no acidity.

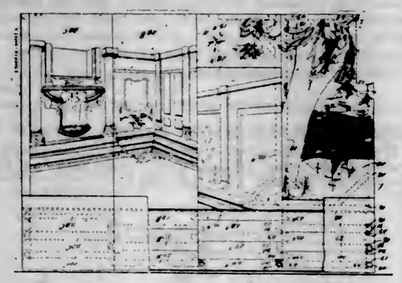
4. The process of obtaining neutral ammonium sulfate which consists in centrifuging the crystallized sulfate, supplying it during the centrifuging operation with a practically saturated and substantially neutral solution



of ammonium sulfate, re-neutralizing the acidulated solution leaving the said crystallized sulfate and returning it to the sulfate until the discharged solution is neutral.

[Claims 2 and 3 not printed in the Gazette.]

1,266,213. SCENIC MECHANISM. ALBERTA GALLATIN CHILDE, New York, N. Y. Filed Mar. 29, 1917. Serial No. 158,175. (Cl. 46—70.)



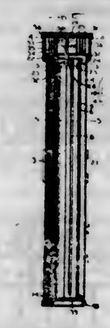
1. In a device of the character described, in combination, a series of scenic flats, each flat carrying a series of rollers, each roller carrying a curtain having a scenic effect thereon, said rollers being so situated with respect to each other as to cause abutment between the edges of adjacent curtains to produce continuity of the scene thereon, and means for maintaining the curtains in a withdrawn position.

2. In a device of the character described, in combination, a series of scenic flats, each flat carrying a series of rollers staggered with respect to the rollers on the adjacent flat, a curtain carrying a scenic effect upon each roller, means tending to retain the curtains in a rolled position around the rollers, means for unrolling the curtains, and means for maintaining the curtains in an unrolled condition.

4. In a device of the character described, in combination, a series of scenic flats, each flat carrying a series of rollers at its upper portion, said rollers being situated at varied distances from the flat and staggered with respect to the rollers on the adjacent flat, a curtain carrying a portion of a scenic effect upon each roller, spring means tending to maintain the curtain in a rolled condition around the rollers, a weighted member attached to each curtain, a recess within each weighted member, means whereby the weighted member prevents the curtain from being rolled completely around the roller, and means insertible within the recesses of the weighted members whereby the curtains may be retained in an unrolled condition.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,266,214. TELEPHONE-INDEX. FREDERICK W. COLBY, Boston, Mass. Filed Apr. 16, 1917. Serial No. 162,358. (Cl. 40—1.)



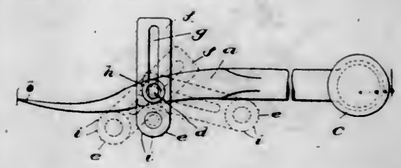
1. In a device of the class described, a cylindrical casing having a longitudinal slot, a spring-controlled spool rotatably secured in said casing, a flexible strip extending through said slot and adapted to be wound about said spool, and a complementary member having an internesting rib and groove engagement with said spool to secure the inner end portion of the strip to the spool.

3. In a device of the class described, a cylindrical casing, having a longitudinal slot, a flexible strip extending through said slot, a spring-controlled cylindrical spool rotatably secured in said casing and adapted to have the strip normally wound thereabout, a tube-like member slidably to fit within the cylindrical spool, said spool and member having a longitudinal rib and groove engagement and each having a longitudinal slot, said slots being on opposite sides of said engagement so that the inner end of the strip may extend through the spool and member slots and between the rib and groove whereby the strip is securely attached to the spool.

5. In a device of the class described, a cylindrical casing, a flexible strip, a rotatable spool adapted to have the strip normally wound thereabout, a disk rotatably supported in said casing, above said spool, means for preventing movement of said disk longitudinally of said casing toward said spool, a rotatable spring-controlled post having an integral portion bent demountably to engage said disk and be thereby supported and also having an integral head, and means on said spool to engage said head so that the spool may be thereby supported and may have its rotation governed by said spring-controlled post.

[Claims 2 and 4 not printed in the Gazette.]

1,266,215. BUSTER-BAR. JOHN T. CONEENY and WILFRED YOUNG, Somerville, Mass. Filed May 29, 1917. Serial No. 171,695. (Cl. 254—120.)



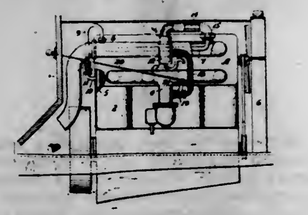
2. A tool of the character described comprising a bar having a thin prying end and a longitudinally curved and laterally flat face near said end, a fulcrum member round in cross section adjustable along said face, and connections between said bar and fulcrum member for retaining the latter in operative position and preventing it from rotating around the bar.

5. A tool of the character described comprising a bar having a prying end, said bar having projections from two of its sides, and a fulcrum member circular in cross

section and having slotted arms mounted on said projections and shiftable toward and from said prying end, the lower surface of the circular fulcrum member having projections to prevent slipping.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,266,216. GAS-SAVER AND CARBON-DECOMPOSER. FREDERICK T. CULLEN, Petaluma, Cal., assignor of one-half to John F. Cullen, Petaluma, Cal. Filed Jan. 8, 1917. Serial No. 141,069. (Cl. 123—25.)

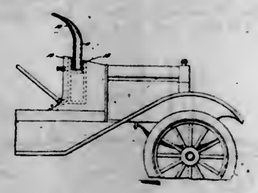


1. In a device of the type set forth, a pipe connected at one end to the engine water jacket and having a part extending through the exhaust manifold and therewithout, a jacket connected at one end to the exhaust manifold and surrounding the part of the pipe without the manifold, the other end of the pipe jacket being open to allow the exhaust gases from the manifold to escape therefrom, and means between said other end of the pipe and inlet manifold of the engine for conveying steam to said engine inlet manifold.

2. In a device of the type set forth, a pipe having one end connected to the engine water jacket and having an intermediate part extending through the exhaust manifold and its other end extending without the exhaust manifold, said first named end of the pipe being formed with a gooseneck between the engine water jacket and exhaust manifold, a jacket inclosing said last named pipe end, and means to conduct steam from the pipe to the engine inlet manifold.

[Claims 3 and 4 not printed in the Gazette.]

1,266,217. WIND-SHIELD. EDWARD F. CURRAN, North Bend, Nebr. Filed Mar. 17, 1916. Serial No. 84,936. (Cl. 21—148.)



1. A vertically reciprocable wind shield comprising an arcuate pane of glass, tubular edging therefor, means for yieldingly securing said glass in its uppermost position comprising a spring-controlled chuck engaging said tubular edging, said chuck comprising a pair of jaws having their inner ends conforming to the contour of said tubular edging and their outer ends tapering, a socket plate receiving said outer ends, and means whereby the tapered ends of said jaws may be moved relatively to said socket plate.

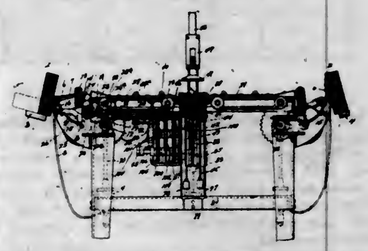
2. A wind shield vertically reciprocable adjacent the dashboard of an automobile comprising a vertically reciprocable pane of glass, an edging therefor, means for yieldingly securing said glass in position comprising a chuck engaging said edging, said chuck comprising a pair of jaws having their inner ends conforming to the contour of said edging and their outer ends tapering, a socket plate receiving said outer ends, and means whereby the tapered ends of said jaws may be moved relatively to said socket plate.

3. A vertically reciprocable wind shield comprising a pane of glass, an edging therefor, means for yieldingly securing said glass in position comprising a chuck engaging said edging, said chuck comprising a pair of jaws having their inner ends conforming to the contour of said edging and their outer ends tapering, a socket plate receiving said outer ends, and means whereby the tapered ends of said jaws may be moved relatively to said socket plate.

5. A wind shield vertically reciprocable adjacent the dashboard of an automobile comprising a pane of glass, an edging therefor, means for yieldingly securing said glass in position comprising a chuck engaging said edging, said chuck comprising a pair of jaws having their inner ends conforming to the contour of said edging and their outer ends tapering, a socket plate receiving said outer ends, a threaded bolt formed with a shank extending into said socket plate, said shank being formed with a transverse aperture, a plate terminally carried by said threaded bolt, lugs formed upon the said jaws and disposed in the aperture in said shank, a lock nut engaging the threaded portion of said bolt, and an expansion spring encircling said bolt and abutting the terminal plate thereof and said lock nut.

[Claim 4 not printed in the Gazette.]

1,266,218. FOLDING-MACHINE. OTIS C. CURRIE and WALTER A. GRUENBERG, Detroit, Mich., assignors to William O. Albig, Adrian, Mich. Filed Sept. 18, 1916. Serial No. 120,705. (Cl. 270—39.)



2. In a mechanism for interfolding sheets or envelops, a plate having an aperture substantially of the width of the sheet or envelop to be folded and substantially half the length thereof, means for delivering the sheets or envelops alternately to the aperture from opposite sides, a plunger for forcing the envelop into the aperture thereby folding a portion thereof to upright position, said upright portion providing a stop for the succeeding sheet, mechanism for folding the said upright portion of any sheet or envelop over the inserted portion of the succeeding envelop, the succeeding movement of the plunger completing the folding thereof, and folding a portion of the inserted sheet, a receiver for the folded envelops positioned beneath the aperture, and means for holding the stack of folded sheets or envelops during the time the plunger is out of engagement therewith.

4. In mechanism for interfolding sheets, envelops, and the like, a table having an aperture, means for supporting a stack of sheets or envelops on opposite sides of the aperture equidistantly spaced therefrom, a raceway for moving the sheet or envelop therein to the aperture, means for delivering the sheet or envelop from each stack alternately to the respective raceway, the aperture in the table being of a width substantially equal to that of the width of the sheet and substantially half the length thereof, a reciprocable plunger for forcing the sheet or envelop into the aperture thereby folding a portion thereof to upright position, the upright portion of each sheet providing a stop for the succeeding sheet, a receiver below the aperture into which the interfolded sheets are packed, mechanism for engaging over the upper end of the folded sheets to hold the same in the receiver during the time, the plunger is out of engagement therewith, a cutting device for severing the folded stack, mechanism for discharging the severed portion from the receiver, counting mechanism by means of which the severing and discharging mechanism is controlled, the counting mechanism being adapted to be set to allow operation of the severing mechanism after a pre-determined number of folding operations.

12. In a machine for folding sheets, envelops, or the like, a table or plate having an aperture less in length than the length of the sheet or envelop to be folded and substantially equal in width thereto, means for delivering a sheet or envelop alternately from opposite sides to the said aperture to position a portion of the sheet or envelop over the aperture, a plunger movable into the aperture forcing said portion of the sheet thereinto and folding the remaining portion thereof to upright position, the upright portion of one sheet providing a stop for the succeeding sheet from the opposite side, means for folding the upright portion of each sheet in sequence over the inserted sheet, a receiver into which the sheets are forced by movement of the plunger, and means within the receiver for holding the stack to form a bottom or support below the aperture against which the sheets may be folded.

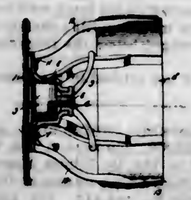
[Claim 1, 3, 5 to 11, and 13 to 19 not printed in the Gazette.]

1,266,219. GARMENT-SUPPORT. RICHARD S. CURTISS, Pasadena, Cal. Filed May 2, 1917. Serial No. 165,961. (Cl. 24—226.)



A garment support comprising a semi-circular back plate through which slotted fastening perforations are formed, a hook portion formed integral with the back plate and extending from the straight side thereof; said hook being of less width than the back plate and having a semi-circular end terminating at a point substantially half the width of the back plate and further formed with a central cut-away portion; and a protrusion occurring substantially beneath the semi-circular end of the hook portion.

1,266,220. PULLEY FOR AUTOMOBILES. CARL REUBEN DAHL, Murdock, Minn. Filed Apr. 20, 1917. Serial No. 163,488. (Cl. 74—106.)



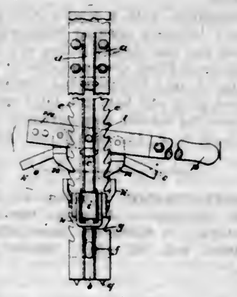
1. An attachment for automobiles comprising a pulley, and a nut engaging with the screw threaded spindle of the rear axle to hold the pulley to the wheel.

4. An attachment for automobiles comprising a pulley, a hub formed to embrace the projecting part of the hub of the rear wheel of an automobile, a nut for engaging with the spindle of the rear axle, and a belt-carrying part secured to said hub.

8. An attachment for automobiles comprising a member formed to engage the projecting part of the automobile wheel hub, means acting therewith to secure the attachment of said member to the automobile wheel, outwardly flaring spokes carried by said member adjacent its outermost edges, and an annulus secured to the free ends of said spokes.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,266,221. ELEVATING MEANS FOR HIDES. CHARLES EDWARD DAUBER, Sr., Johnsonburg, Pa. Filed Nov. 5, 1917. Serial No. 200,440. (Cl. 254—109.)



2. In combination a standard comprising four angle plates secured together and disposed around a central point in spaced relation and with their flanges directed outwardly, a lifting handle located in the spaces extending between the angle plates in one direction, teeth formed on four edges of the angle plates, the other four edges being plain, the toothed edges being parallel to and adjacent to the handle pawls carried by the handle engaging said teeth, a hanger supported from the handle at a point between the plates and carrying on its lower end an axle which supports a roller and a hook, substantially as described.

[Claim 1 not printed in the Gazette.]

1,266,222. DISPLAY DEVICE. GEORGE H. DAY and HARRY H. STILL, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Feb. 19, 1917. Serial No. 149,579. (Cl. 40—125.)



3. An advertising novelty in the form of a goggle shield, comprising an open frame, a display device mounted within the open frame and having connection with opposite sides of the frame whereby the connection serves both to retain the display device in position and causes the same to brace the opposite sides of the frame thus connected, thereby, and a screen-like backing secured to the frame and disposed beneath the display device for closing the frame and setting off the device thus displayed.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,266,223. TEMPLE. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Sept. 13, 1917. Serial No. 191,176. (Cl. 88—52.)



1. The combination with an enlarged ear hook member having a laterally opening slot formed therein, of a temple side having a head portion introduced laterally into the slot and interlocking with one wall of the slot, and means for securing the parts in interlocked engagement.

7. The combination with an ear hook and a temple side, of a laterally opening joint connecting said parts, and a ferrule forced over the joint to lock the parts against lateral separation.

10. The combination with a temple side and ear hook section having a laterally opening interlocking joint, of a ferrule having one end closely fitting one of said parts and the opposite end fitted over and closely engaging the other of said parts, said ferrule being compressed to bite into the inclosed part and hold the joint under compression while preventing lateral disengagement of the parts.

[Claims 2 to 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,266,224. TRIAL-FRAME. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Dec. 26, 1917. Serial No. 208,933. (Cl. 88—20.)



1. In a device of the character described, the combination with a main frame, of standards rising therefrom, blocks mounted on the standards, means for vertically shifting the blocks on the standards, horizontal slides carried by the blocks, lens cells secured to the slides, and means for adjusting the slides to vary the position of the lens cells.

5. A trial frame, including a frame bar and a support rising from the frame bar, a lens cell having a lateral extension overlying the frame bar, a block having cross guide ways, one of which receives the support on the frame, and the other of which receives the extension on the cell, means for adjusting the block along its support, and means for adjusting the extension with respect to the block whereby the cell may be positioned as desired with respect to the main frame.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

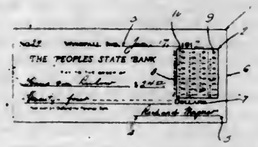
1,266,225. OPHTHALMIC MOUNTING. GEORGE H. DAY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Dec. 26, 1917. Serial No. 208,934. (Cl. 88—47.)



3. An ophthalmic mounting, including a split rim, plates connected with the ends of said rims, a second rim arranged over the first rim, screw members connecting said plates with the ends of the second rim, means detachably connecting the plates, and a nose bridge having its end portions supported by the plates, as and for the purpose set forth.

[Claims 1 and 2 not printed in the Gazette.]

1,266,226. CHECK. THOMAS MORRELL DAY, Windfall, Ind. Filed Jan. 26, 1917. Serial No. 144,695. (Cl. 11—13.)



A piece of commercial paper provided with lines of numerals, the numerals in each line running from 1 to 9, and provided with a separate legend for each line of numerals from 1 to 9, the legends being disposed parallel to the lines of numerals and closely adjacent thereto, the legends denoting the positions of the respective lines of numerals with regard to the decimal point, certain of the numerals in the lines, and certain of the letters in the corresponding legends being punched out to denote the value of the paper and to form disks, like numerals in the respective lines having different letters in the legends disposed closely adjacent thereto, and the disks which carry like numerals having different letters from the legends thereon.

1,266,227. COMBINED MATCH SAFE, WIND-SHIELD, AND STRIKER. MILLIE M. DEIBEL, Youngstown, Ohio. Filed Dec. 1, 1917. Serial No. 204,857. (Cl. 206—36.)



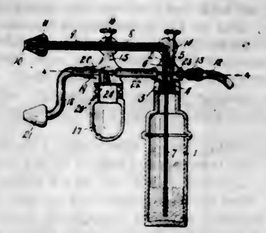
3. A combined match safe and windshield comprising, an elongated casing provided with registering outwardly pressed beads in its opposite walls diverging from end to end of the casing, a returned partition strip seated at its opposite edges in said beads and dividing the casing into inner and outer longitudinal compartments opening through the respective ends of the casing, caps on the opposite ends of the casing for independently closing the compartments, one side of the casing having an enlarged opening leading to the inner compartment and the other side of the casing having a relatively small opening, the large opening admitting the introduction of the end of a cigar into said inner compartment through one side of the casing and the smaller opening admitting the introduction of a match into the opposite side of the casing, said casing also having on its inner wall beneath the cigar receiving opening a match igniting surface and the smaller opening being arranged below the transverse plane of the larger opening.

[Claims 1 and 2 not printed in the Gazette.]

1,266,228. COMBINED ASPIRATING AND VAPORIZING INSTRUMENT. THOMAS A. DE VILBISS, Toledo, Ohio, assignor to The De Vilbiss Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed June 16, 1916. Serial No. 103,947. (Cl. 128—2.)

1. An appliance embodying a liquid vaporizing means and an aspirating means, both operated by fluid pressure and having a common source of fluid pressure supply.

7. An appliance having two nozzles with one mounted for swinging movements to permit it to be placed at either side of the other nozzle, and means operable by fluid pressure to simultaneously discharge matter from one nozzle and to create an inward suction action through the other.



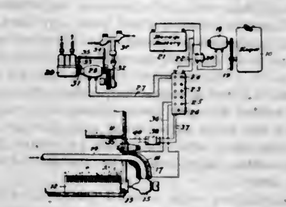
9. The combination with means having a discharge nozzle and operable to discharge liquid in vapor form therefrom, an aspirating means carried by said first means and having a nozzle which is swingingly adjustable to permit it to be placed at either side of the nozzle of said first means.

14. In an instrument of the class described, two receptacles, means connected to one of said receptacles and operated by fluid pressure to discharge liquid therefrom in vapor form, and means connected to the other of said receptacles and operated by fluid pressure to create a suction action therein, said vaporizing and suction means having a common source of fluid pressure supply and having respective nozzles disposed in adjacent relation.

20. In an instrument of the class described, means having a receptacle and operated by fluid pressure to discharge liquid in vapor form from said receptacle, said means having a fluid pressure supply passage, a member carried by said means, a receptacle removably carried by said member, means providing communication between said fluid pressure supply passage and the atmosphere and also with the interior of said last named receptacle to create a suction within the receptacle when fluid is discharged through said last means to the atmosphere, and an inlet in communication with said receptacle.

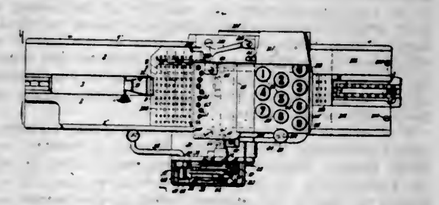
[Claims 2 to 6, 8, 10 to 13, 15 to 19, 21, and 22 not printed in the Gazette.]

1,266,229. ELECTRIC AUXILIARY SYSTEM FOR STEAM-AUTOMOBILES. ABNER DOBLE, Brookline, Mass., assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich., a Corporation of Delaware. Filed Apr. 10, 1912. Serial No. 689,862. (Cl. 158—31.)



A steam boiler for motor vehicles having a fuel burner, a fuel supply pipe for the burner extending through the boiler above the said burner and having a portion outside the boiler leading to the burner, an electric heating coil surrounding said portion of the pipe, and a spark plug associated with the burner adapted to ignite the fuel discharged therefrom.

1,266,230. MACHINE FOR PREPARING RECORD-CARDS. OLIVER L. DOSCH, Elizabeth, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Oct. 30, 1915. Serial No. 58,772. (Cl. 164—112.)



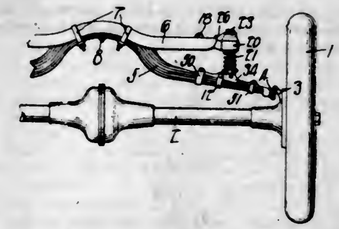
1. In a machine of the class described, work-supporting and feeding means, a plurality of movably mounted punch elements adapted to perforate the work, a plurality of printing type mounted to print upon the perforated work, a plurality of push-rods, connections between each push-rod and each of said type, respectively, and a single lever-connection between each push-rod and a corresponding one of said punch-elements.

8. In a machine of the class described, a series of vertically disposed punches adapted to perforate the work, a series of type-bars pivoted upon parallel horizontal axes to print upon the work being perforated, a series of actuating keys, and operative connections between each of said keys and its corresponding punch and type-bar.

15. In a machine of the class described, a work-support, a plurality of punching elements adapted to perforate the work, a plurality of marking elements adapted to mark the work being perforated, feeding means connected with said work-support, actuating means operatively connected with both sets of elements and with said feeding means for producing the independent operation of said punching elements each with a corresponding marking element and for effecting a feed of the work-support in conjunction with the punching and marking actions on the work, and means connected with the feeding mechanism for imparting to the work-support a feed-step independently of the punching and marking elements.

[Claims 2 to 7 and 9 to 14 not printed in the Gazette.]

1,266,231. SPRING AND FRAME SUPPORTER FOR MOTOR-VEHICLES. JOSEPH DOTTL, Detroit, Mich. Filed Apr. 18, 1917. Serial No. 162,884. (Cl. 267—19.)



1. A motor vehicle comprising an axle construction, a bolster extending longitudinally of and substantially above the axle construction, means for transmitting loads from said bolster to said axle construction, said means including a main spring centrally secured to the bolster and terminally connected to the axle construction, and means for transmitting loads from the ends of the bolster downwardly to the main spring, said means including resilient members connected at their upper ends to the corresponding end portion of the bolster, together with means for supporting the lower ends of the resilient members on the main spring and distributing the load for a consider-

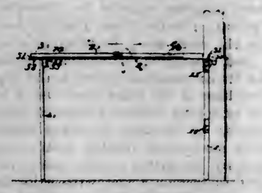
able distance along the length of said main spring, whereby sharp deflection points in the latter are avoided.

4. A vehicle comprising an axle construction, an arched spring extending longitudinally thereof, a bolster centrally secured to said spring, said spring being capable of transmitting from its point of connection with the bolster to its ends substantially all tendency of the bolster to move longitudinally of the spring, and means for transmitting loads from each end portion of the bolster to corresponding portions of the spring between the center and the ends thereof, said portions being of considerable length longitudinally of the spring, whereby sharp deflection points are avoided.

6. A vehicle comprising an axle construction, an arched spring extending longitudinally thereof, a bolster centrally secured rigidly to said spring, and coiled springs for transmitting stresses from the end portions of the bolster to points intermediate between the center and ends of said spring, caps for the lower ends of said coiled springs, and means extending substantially to the ends of the arched spring for holding the caps in proper relation thereto.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,266,232. TABLE. JOHN DOWNIE, Seattle, Wash. Filed Mar. 21, 1917. Serial No. 156,373. (Cl. 45—51.)



A folding table structure comprising a table top hinged to swing up and down, a supporting leg and a hinge connecting said leg with the swinging edge of the table top, said hinge having two leaves secured respectively to the upper surface of the table top and the other to the leg, two hinged sections interposed in series between said other sections and extending respectively over the edge of the table top and back under its lower surface, a handle bar secured to the under side of the table top and a locking finger carried by the leg and adapted to embrace said handle when the table is down.

1,266,233. PLATE-LIFTING CLAMP. ALBERT W. ECKERSON, Portland, Oreg. Filed July 12, 1917. Serial No. 180,170. (Cl. 57—9.)

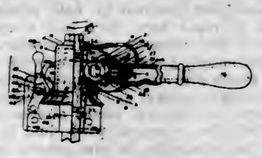


1. A lifting clamp of the character referred to, comprising an integral body having an open slot in its lower end and a guide slot in its upper end, clamping dogs pivotally connected to the side of said body at opposite sides of said open slot; a lifting member moving in the guide slot at the upper end of said body, and operating connections from said lifting member to said clamping dogs, whereby as said lifting member moves upwardly said clamping dogs are moved toward each other in the same plane substantially as described.

2. A plate lifting clamp comprising a body having an open slot in its lower end adapted to set over the edge of a plate, two pairs of clamping dogs pivoted to the opposite sides of said body at opposite sides of said slot, the clamping dogs on the same side of the body operating in the same plane toward each other, a lifting member movably connected with said body, and operating connections therefrom to said clamping dogs, whereby as said lifting member is moved upwardly said clamping dogs are simultaneously operated substantially as described.

3. A plate lifting clamp comprising a body having an open slot in its lower end adapted to set over the edge of a plate to be lifted and a slot in its upper end, a pair of clamping dogs pivotally connected to each side of said body with clamping portions adapted to be moved toward each other in register with said open slot, a pair of head plates mounted on opposite sides of the upper end of said body and connected through the slot therein, a lifting clevis connected to said head plates, and connecting links connecting the opposite ends of said head plates with the outer ends of said clamping dogs whereby as said lifting clevis and said head plates are lifted the clamping dogs at opposite sides of said body are moved toward each other at opposite sides of said open slot, substantially as described.

1,266,234. SHAFT-OPERATING MECHANISM. JOSEPH ECKERT and JOHN KIRBY, Jr., Dayton, Ohio, assignors to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 20, 1917. Serial No. 202,982. (Cl. 188—57.)



1. In a device of the character described, the combination of a shaft adapted to be rotated, a ratchet carried by the shaft and rotatable therewith, a member mounted upon the shaft and rotatable thereon independently thereof, an operating lever in pivotal connection with said member, and roller mechanism adapted to engage said ratchet whereby the shaft may be rotated.

4. The combination of a shaft having a ratchet thereabout, of a member mounted on said shaft and rotatable independently thereof, an operating lever pivotally mounted upon said member, and roller mechanism carried by said lever adapted to operatively connect said levers with said shaft whereby the same may be rotated.

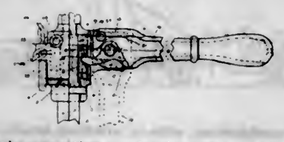
6. In combination with a shaft and a ratchet adapted to be rotated, a member mounted upon the shaft and rotatable independently thereof, an operating lever in pivotal connection with said member and having an elevated operative position and a depending normal position, roller mechanism carried by said lever arranged to engage said ratchet when the lever is elevated and thereby establish operative connection with the shaft to rotate the same, the said connection being broken by the downward movement of the lever.

13. In combination with a shaft provided with means for its rotation, a member mounted upon and rotatable independently of the shaft; said member having lateral extensions forming a support for an operating lever, an operating lever pivotally mounted upon said extensions and normally suspended upon its pivot, roller mechanism carried by said lever to engage said means and thereby establish operative connection whereby the shaft may be rotated, and a removable pin adapted to lock said roller mechanism in engagement with the shaft, whereby the same may be rotated in either direction.

15. In brake operating mechanism the combination of a shaft adapted to be rotated, means whereby the same may be rotated to set the brakes, a support for the upper end of said shaft, a ratchet fixed to said shaft, roller mechanism carried by said support adapted to automatically engage said ratchet to hold the shaft against retrograde movement, and means for releasing said roller mechanism from said ratchet.

[Claims 2, 3, 5, 7 to 12, 14, and 16 to 18 not printed in the Gazette.]

1,266,235. CAR-BRAKE-OPERATING MECHANISM. JOSEPH ECKERT and JOHN KIRBY, Jr., Dayton, Ohio, assignors to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 3, 1917. Serial No. 205,082. (Cl. 188—57.)



1. In brake operating mechanism, the combination of a shaft, a sleeve mounted on the shaft and adapted to be rotated independently thereof, a lower ratchet member fixed to and rotatable with the shaft within the sleeve and having ratchet teeth formed in its upper face, an upper ratchet member slidably mounted on the shaft having ratchet teeth formed in its lower face corresponding in form and adapted to co-act with the teeth of said lower member to rotate the brake shaft said member being rotatable in unison with the sleeve, an operating lever pivotally connected with the sleeve and adapted to rotate the same, and means pivotally mounted on said lever whereby the teeth of said upper ratchet member will be moved out of engagement with those of said lower ratchet member by the dropping of the operating lever to its normal position.

2. In brake operating mechanism a shaft, a fixed ratchet rotatable with the shaft, a ratchet member slidably mounted on the shaft and adapted to positively engage said fixed ratchet, a sleeve mounted on the shaft and rotatable independently thereof, an opening formed in the wall of the sleeve, an operating lever in pivotal connection with the sleeve, a shoulder formed in said ratchet member, a pivoted arm extending from the lever through said opening in the wall of the sleeve and co-acting with said shoulder to disengage the ratchets when the lever is in its normal position, and means whereby the ratchets may be locked in engagement when the lever is in its operative position.

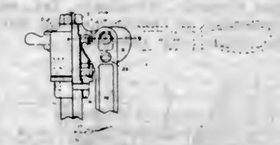
3. In brake operating mechanism, the combination with a shaft adapted to be rotated, of a lower ratchet member fixed to and rotatable with the shaft, an upper ratchet member slidably mounted on said shaft; said ratchet members having teeth of similar form cut therein cooperating to rotate the shaft, a sleeve member mounted on the shaft and rotatable thereon in unison with said upper ratchet member independently of the shaft, an operating lever connected with said sleeve member by a pivot bolt and adapted to be swung in and out of operative position thereon, and a lift lever also mounted on said pivot bolt and co-acting with a shoulder formed in said upper ratchet member to lift the same out of operative engagement through the downward movement of the operating lever.

4. In brake operating mechanism, the combination with a shaft adapted to be rotated, of a lower ratchet member fixed to and rotatable with the shaft, an upper ratchet member slidably mounted on said shaft; said ratchet members having teeth cut therein which coöperate to rotate the shaft, a shoulder formed on said upper ratchet member, a sleeve member mounted on the shaft and rotatable thereon in unison with said upper ratchet member independently of the shaft, an operating lever connected with said sleeve member by a pivot bolt and adapted to be swung in and out of operative position thereon, a lift lever also mounted on said pivot bolt and co-acting with said shoulder formed on said upper ratchet member to lift the same out of operative engagement through the downward movement of the operating lever, means for locking the said ratchet members in engagement whereby the shaft may be rotated in a reverse direction.

5. In brake operating mechanism, the combination of a shaft, a sleeve mounted on the shaft and adapted to be rotated independently thereof, a lower ratchet member fixed to and rotatable with the shaft within the sleeve and having ratchet teeth formed in its upper face, an upper ratchet member slidably mounted on the shaft having ratchet teeth formed in its lower face corresponding in form and adapted to co-act with the teeth of said lower member to rotate the brake shaft said member being rotatable in unison with the sleeve, an operating lever pivotally connected with the sleeve and adapted to rotate the same, and a rocking member mounted on said lever and having an upturned rounded end to engage a shoulder formed on said upper ratchet member whereby the teeth of the latter will be moved out of engagement with those of the lower ratchet member by the dropping of the operating lever to its normal position.

[Claim 6 not printed in the Gazette.]

1,266,236. BRAKE-ACTUATING MECHANISM. JOSEPH ECKERT and JOHN KIRBY, Jr., Dayton, Ohio, assignors to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Jan. 2, 1918. Serial No. 209,923. (Cl. 188—55.)



1. Brake operating mechanism comprising in part a shaft, a fixed ratchet thereon, an opposing ratchet member slidable on the shaft, a sleeve rotatively mounted on the shaft and restrained from vertical movement, in combination with means pivotally mounted on the sleeve adapted to be moved in and out of engagement with the opposing ratchet member, whereby the ratchets may be locked in operative engagement to rotate the shaft in an unwinding direction.

2. Brake operating mechanism comprising in part a shaft, a fixed ratchet thereon, an opposing ratchet member slidable on the shaft, a sleeve rotatively mounted on the shaft and restrained from vertical movement, in combination with means pivotally mounted on the sleeve adapted to be moved in and out of engagement with the top wall of the sleeve and the upper end of the slidable ratchet member; whereby the ratchets may be locked in operative engagement to rotate the shaft in an unwinding direction.

5. In brake operating mechanism, a shaft, a ratchet fixed thereon, an opposing ratchet slidable on the shaft and having a shoulder formed thereon, and a sleeve rotatively mounted on the shaft, in combination with an operating lever pivoted on the sleeve, and a projection on said lever in alinement therewith; said projection being adapted to enter the sleeve and engage said shoulder to lift and hold the opposing ratchet out of engagement with the fixed ratchet when the operating lever is in its normal position.

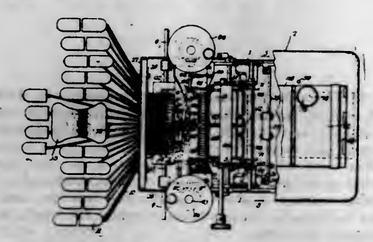
7. In brake operating mechanism, the combination of a shaft, a sleeve mounted on the shaft adapted to be rotated independently thereof, a pair of lugs extending laterally from said sleeve for supporting an operating lever, a ratchet fixed to and rotatable with the shaft within the sleeve, an opposing ratchet member slidable on the shaft within the sleeve; the same being adapted to co-act with said fixed ratchet to rotate the shaft and being rotatable in unison with the sleeve, a shoulder formed on said

opposing ratchet member, an operating lever pivotally connected with said sleeve adapted to rotate the shaft, and an arm carried by and extending from said lever between said lugs into said sleeve; said arm being adapted to engage said shoulder to lift and hold said opposing ratchet member out of engagement with said fixed ratchet when the operating lever is in its normal position.

9. In brake operating mechanism, the combination of a shaft, a sleeve mounted on the shaft adapted to be rotated independently thereof, a pair of lugs extending laterally from said sleeve for supporting an operating lever, a ratchet fixed to and rotatable with the shaft within the sleeve, an opposing ratchet member slidable on the shaft within the sleeve; the same being adapted to co-act with said fixed ratchet to rotate the shaft and being rotatable in unison with the sleeve, a shoulder formed on said opposing ratchet member, an operating lever pivotally connected with said sleeve adapted to rotate the shaft, an arm carried by and extending from said lever between said lugs into said sleeve; said arm being adapted to engage said shoulder to lift and hold said opposing ratchet member out of engagement with said fixed ratchet when the operating lever is in its normal position, and means carried by and inseparable from the sleeve adapted to be moved in and out of engagement with the opposing ratchet member; whereby the ratchets may be locked in operative engagement and the shaft thereby rotated in either direction.

[Claims 3, 4, 6, and 8 not printed in the Gazette.]

1,266,237. WRITING-MACHINE. ALBAH B. EDWARDS and FRANK A. FEIEREISEL, Chicago, Ill., assignors to Shortwriter Company, Wilmington, Del., and Chicago, Ill., a Corporation of Delaware. Filed Mar. 17, 1916. Serial No. 84,822. (Cl. 197—9.)



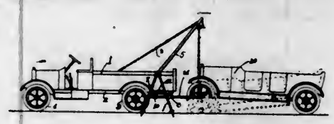
1. In a writing machine, the combination of a rotatable platen, a plurality of printing devices, a plurality of key-bars actuating said printing devices to coöperate with said platen, and means for rotating said platen including a ratchet wheel operatively connected thereto, a lever fulcrumed concentrically with said platen, a pawl connected to said lever and engaging said ratchet wheel, a universal bar in the path of movement of said key-bars, a bell-crank lever pivotally mounted above said universal bar, and links connecting the arms of said bell-crank lever to said universal bar and lever respectively, whereby said pawl is withdrawn as said printing devices are moved to printing position and advanced as said printing devices return to normal position.

4. In a writing machine, the combination of a rotatable platen, a plurality of printing devices, each bearing a plurality of printing characters, means for actuating said printing devices to coöperate with said platen, means for swinging said platen relatively to said printing devices, and means for rotating said platen including a lever fulcrumed concentrically with said platen, an intermittent driving connection between said lever and platen, and means actuated by said printing-device-actuating means for rotating said lever relatively to said platen.

10. In a writing machine, the combination of a rotatable platen, toothed means on said platen, means coöperating with said toothed means to grip the impression-receiving material, a plurality of type-bars, each bearing a plurality of type characters, means for actuating said type bars to coöperate with said platen, means for shifting said platen to coöperate with a group of type characters on said type bars normally out of register with said platen, and means for rotating said platen through a definite angular distance after said shifting means is actuated and for rotating said platen through twice said angular distance after an individual or group of said type bars is actuated simultaneously with said shifting means.

[Claims 2, 3, 5 to 9, and 11 to 14 not printed in the Gazette.]

1,266,238. WRECKING-TRUCK. JAMES EGAN, Chicago, Ill. Filed Apr. 18, 1917. Serial No. 162,971. (Cl. 214—86.)



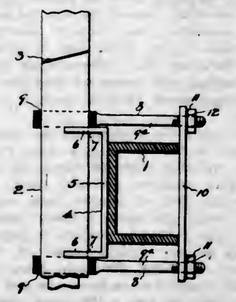
1. The combination with a wrecking truck, of slidable extensible supporting means mounted therebeneath, and mechanism mounted on the truck for elevating a vehicle upwardly for support upon said extended means.

5. The combination with a wrecking truck having an elevating means mounted thereon, of slidable supporting and towing means extensible from the truck into position to receive another vehicle supported thereon in towing position.

7. In a mechanism of the class described, the combination with a wrecking car, of a mechanism adapted to engage one end of a vehicle and support it raised off of the ground adjacent the rear of the wrecking car and a mechanism carried by the wrecking car adapted to be moved to engage the end of the vehicle adjacent the car to space the same from the end of the wrecking car.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,266,239. LAMP-MOUNTING ATTACHMENT FOR VEHICLES. LEWIS R. EWART, Cody, Wyo. Filed Aug. 2, 1917. Serial No. 184,019. (Cl. 240—57.)

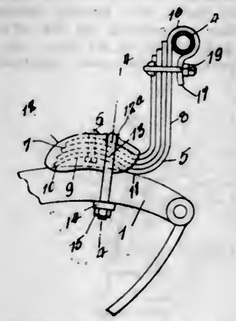


1. In a lamp mounting attachment for automobiles, a plurality of bolts having eyes for encircling the lamp-sleeve, a spacing-plate having angular ends adapted to contact with the said lamp-sleeve and a middle portion spaced therefrom, and nuts on the bolts adapted to be screwed up and clamp the several parts together.

[Claims 2 to 5 not printed in the Gazette.]

1,266,240. AUTOMOBILE-BUMPER. ROLLIN BELLE FAGEOL, New York, N. Y. Filed Dec. 14, 1912. Serial No. 736,669. (Cl. 213—39.)

1. A buffer for vehicles comprising a substantially L-shaped spring member formed of a plurality of laminations in frictional contact with each other, a buffer bar, means for adjustably connecting the buffer bar to one extremity of the spring member, and means for connecting the other extremity of the spring member to the vehicle under tension.

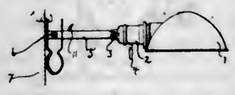


3. In combination with a vehicle, a bumper comprising a pair of elbow springs of laminated construction, each elbow spring being provided with one arm rigidly connected to the vehicle under tension, the other arm being rearwardly yieldable under the action of applied force, the movement of the respective laminations of the yieldable arm frictionally retarding each other when moved, and a horizontal cross-bar attached to and connecting the forward ends of said springs.

8. In combination with a vehicle, a bumper comprising a pair of springs of laminated construction, each formed to provide a long arm and a shorter arm, the shorter arm being adapted for attachment to the vehicle, and the laminations of the longer arm being in sliding frictional contact, whereby, upon the application of pressure to said arm, said laminations will move upon each other and exert a gradually increasing resistance in the yielding of said arm to the pressure applied thereto, and a horizontal bar attached to and connecting said yieldable arms.

[Claims 2, 4 to 7, and 9 to 18 not printed in the Gazette.]

1,266,241. ELECTRIC-LAMP FIXTURE. SIMON W. FARBER, Brooklyn, N. Y. Filed Apr. 3, 1917. Serial No. 159,595. (Cl. 240—53.)



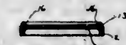
1. An electric lamp fixture having as a base two clamping members of like construction each clamping member being composed of a sheet of metal having a flat rear portion and an arcuate forward portion, each clamping member having two tongues stamped out of said flat rear portion at substantially right angles thereto, the slots formed by stamping out said tongues having an intermediate bridge-like portion formed in the center of each clamping member, said tongues being connected by a pintle, spring means for forcing said clamping members together and a standard adapted to support an incandescent lamp connected to said bridge-like portion.

[Claims 2 to 4 not printed in the Gazette.]

1,266,242. CASTING-PATTERN. MARK E. FERNALD, Saugus, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Oct. 1, 1915. Serial No. 53,638. (Cl. 22—164.)

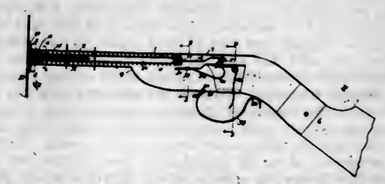
1. A pattern having a sole-shaped body portion, and a laminated flange attached thereto, substantially as described.

2. A pattern having a sole-shaped body portion, and a laminated flange attached thereto provided with a bevel upon its exterior face at the upper edge thereof, substantially as described.



3. A pattern having a sole-shaped body portion, and a flange attached thereto comprising a strip of material arranged in layers on the peripheral edge of the blank and having a draft therein and a bevel formed in the exterior face of the flange at the upper edge thereof, substantially as described.

1,266,243. TOY GUN. EDWARD J. FESER and MICHEAL L. PEOPLES, Philadelphia, Pa. Filed Oct. 23, 1917. Serial No. 198,009. (Cl. 124—12.)

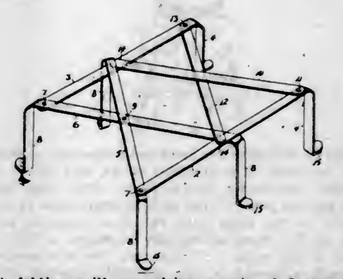


1. A gun including a casing; a plunger; means for automatically moving the plunger; an auxiliary housing within the casing and having a hole therein; a securing member connected to the plunger and located outside of said housing; a trigger mounted within said housing and having an extension provided with a shoulder adapted to be projected through the hole in the auxiliary housing; and a spring having a portion within said housing for moving said shoulder into holding engagement with said securing member, substantially as described.

12. A gun including a casing; an automatically movable member within the casing; and a projectile having a stem adapted to be freely inserted within said member and including a screen and a ring binding said screen and a portion of said stem together, substantially as described.

[Claims 2 to 11 not printed in the Gazette.]

1,266,244. GRILL. HENRY F. FORTMANN, San Francisco, Cal. Filed Dec. 4, 1917. Serial No. 205,325. (Cl. 126—30.)



1. A folding grill comprising a pair of flattened bars crossing each other and pivotally connected, said bars being bent at right angles at their outer ends to form supporting legs, a pair of bars pivotally attached one to each of said first named bars, the opposite end of each last named bar being bent at right angles also to form a supporting leg, and an arm pivotally attached to each of said last named bars, one on top of one bar and one beneath the other bar, said arms and all of said bars adapted to lie one on top of the other when folded in parallelism and to cross each other when extended to form a rigid support.

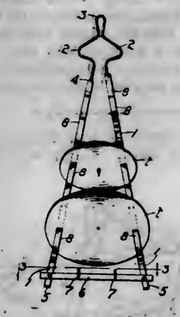
3. A folding grill comprising a pair of inverted, U-shaped, flattened bars pivotally connected at their center

portions, one being placed on top of the other, and the lowermost bar being sufficiently short to nest within the upper bar when they are folded in parallelism, a bar pivotally attached at one end to the topmost U-bar, said bar having its opposite end bent at right angles to form a supporting leg, said bar and leg being sufficiently long to swing outside of the topmost U-bar to lie on top thereof and parallel therewith, and a second bar pivotally attached at one end to the lowermost U-bar, the opposite end of said bar being bent at right angles to form a supporting leg, said bar and leg being sufficiently short to swing within the lowermost U-bar to permit it to nest therein and to lie parallel therewith.

4. A folding grill comprising a pair of inverted, U-shaped, flattened bars pivotally connected at their center portions, one being placed on top of the other, and the lowermost bar being sufficiently short to nest within the upper bar when they are folded in parallelism, a bar pivotally attached at one end to the topmost U-bar, said bar having its opposite end bent at right angles to form a supporting leg, said bar and leg being sufficiently long to swing outside of the topmost U-bar to lie on top thereof and parallel therewith, a second bar pivotally attached at one end to the lowermost U-bar, the opposite end of said bar being bent at right angles to form a supporting leg, said bar and leg being sufficiently short to swing within the lowermost U-bar to permit it to nest therein and to lie parallel therewith, a bar pivotally attached at one end to the innermost one-leg bar and adapted to be swung at right angles thereto or to lie parallel therewith, and a bar pivotally attached to the outermost one-leg bar adapted to be swung at right angles thereto or to lie parallel therewith.

[Claim 2 not printed in the Gazette.]

1,266,245. KITCHEN-RACK. CURT H. FUHRMANN, St. Louis, Mo. Filed Jan. 15, 1918. Serial No. 211,932. (Cl. 211—17.)

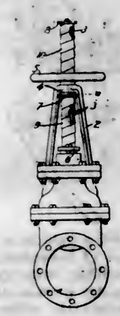


A rack of the character described comprising a triangular frame composed of strip sheet metal, said frame having upwardly converging side members with faces disposed in the general plane of the rack, lateral bends at the convergence of the sides with flat faces disposed at right angles to the faces of the side members, a twist being formed in the strip for connecting the side members to the bends aforesaid, a loop extension leading from the bends aforesaid, and series of resilient fingers carried by the side members and disposed in transverse alinement for supporting the articles deposited thereon.

1,266,246. GUARD FOR SCREWS AND RODS. WILLIAM B. FULTON, Middletown, Ohio. Filed Dec. 3, 1917. Serial No. 205,220. (Cl. 74—56.)

1. The combination of a rod provided with a pair of abutments subject to changes in distance apart, and a substantially cylindrical sleeve surrounding the rod between the abutments and formed of a helically wound resilient metallic ribbon with lapping contiguous edges, substantially as set forth.

2. The combination of a rod provided with a pair of abutments subject to changes in distance apart, means for turning one of said abutments relative to the other, a substantially cylindrical sleeve surrounding the rod between the abutments and formed of a helically wound resilient metallic ribbon with lapping contiguous edges, a two-part washer surrounding the rod between one of the abutments and the end of the sleeve, and means for preventing the turning of the washer, substantially as set forth.



3. The combination of a rod, an abutment rotatable relative thereto, a cap swiveled to the rod and adapted to take position at varying distances from the rotatable abutment, and a substantially cylindrical sleeve surrounding the rod between the abutment and cap and formed of a helically wound resilient metallic ribbon with lapping contiguous edges, substantially as set forth.

1,266,247. MILL. LOUIS E. GAISSER, Louisville, Ky. Filed May 25, 1916. Serial No. 99,845. (Cl. 83—8.)

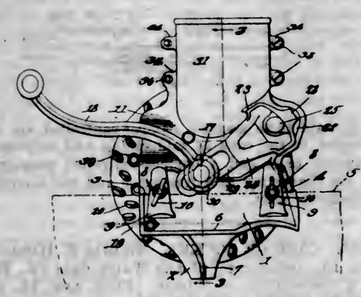


In a machine of the class described, a casing, a head secured thereto, a shaft journaled in the casing and extending through the head, the head having spaced openings formed with enlarged ends, the head having inwardly extending lugs between the ends of said openings, a bearing plate having a recess receiving one end of the shaft, said plate having diverging legs extending through said openings and provided with feet movable through said enlarged ends of the openings and seated against the inner side of the head, said feet being retained by the lugs away from said enlarged ends of the openings, the plate having an arm extending therefrom opposite to said legs, and a yieldable and detachable connection between the arm and head.

1,266,248. CORN-SHELLER. LOUIS E. GAISSER, Louisville, Ky., assignor to Alice R. Gaisser, Louisville, Ky. Filed Jan. 11, 1917. Serial No. 141,866. (Cl. 130—7.)

1. In a corn sheller a revoluble disk having an annular series of teeth on one face, each tooth having a straight free edge, parallel with the plane of rotation of the disk and tangentially disposed relative to the axis of the disk.

2. In a corn sheller the combination with a hopper, of a revoluble member projecting thereinto and having an annular series of teeth, each tooth having its advancing face substantially perpendicular to its plane of rotation and having a straight free edge tangential to the axis of rotation.



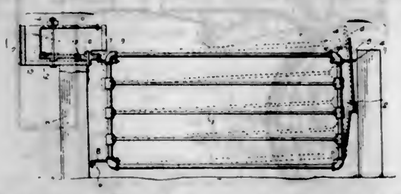
3. In a corn sheller the combination with a hopper, of a revoluble disk projecting thereinto, teeth extending from one face of the disk, each tooth having a straight free edge tangentially disposed relative to the axis of rotation, the outer end of said edge being in advance of the other end thereof whereby, during the rotation of the disk, each tooth is brought between the grains of an ear of corn in the hopper and substantially parallel with the longitudinal center of the cob, said teeth being subsequently inclined gradually to twist the engaged grains off of the ear.

1,266,249. TOOL-HOLDER. WILLIAM E. GINSBERG, Bridgeport, Conn. Filed Apr. 25, 1917. Serial No. 164,521. (Cl. 29—100.)



A lathe tool comprising a holder having a head, said head having a groove therein and an elongated slot, a cutter having a portion fitting in said groove, teeth on said portion and in the groove engaging with each other and a screw passing through the slot and engaging with the cutter.

1,266,250. GATE-OPERATING MECHANISM. GEORGE S. GRAVES, Dallas, S. D. Filed Sept. 25, 1917. Serial No. 193,140. (Cl. 39—57.)



1. The combination with a gate, of a lower hinge for the same, a pintle carried by the upper portion of the gate and located in advance of the pintle of the lower hinge, a rotary gear element having a bearing opening located in advance of the axes of the gear element and receiving and forming a bearing for the said upper pintle, an oscillatory gear element pivoted in rear of the rotary gear element and meshing with the same, and operating means connected with the oscillatory gear element for swinging the same on its pivot.

2. The combination with a gate, a lower hinge for the same, a pintle carried by the said upper portion of the gate and located in advance of the pintle of the lower hinge, a rotary gear element having a bearing opening located in advance of the axes of the rotary gear element and receiving and forming a bearing for the said upper pintle, and oscillatory gear element having a vertical pivot and located in rear of the rotary gear element and meshing with the same, an approximately L-shaped arm composed of vertical and horizontal portions, the vertical portion being secured to the oscillatory gear element at the back thereof and the horizontal portion being mounted on and extending in advance of the said pivot and operating means with the forwardly extending portion of the said arm.

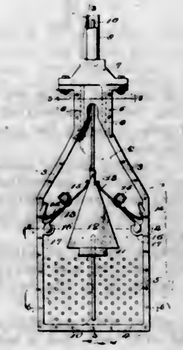
1,266,251. ATTACHING BRACE AND SUPPORT FOR MUD-GUARDS. WALTER R. GREEN, Chicago, Ill. Filed Aug. 13, 1917. Serial No. 185,928. (Cl. 208—140.)



3. In a device of the class described, oppositely disposed attaching members, braces pivoted thereto, each comprising diverging arms connected by an arched portion, and a stop member between the pivoted arms.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,266,252. PUMP. LOUIS HADFORD, Carmengay, Alberta, Canada. Filed May 9, 1917. Serial No. 167,490. (Cl. 103—73.)



1. In a pump, the combination of a casing, a plunger mounted to reciprocate therein, and lifters mounted upon the sides of the casing for swinging movement and bearing at their inner ends upon the sides of the plunger.

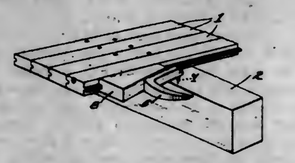
2. In a pump, the combination of a casing, an upwardly tapered plunger mounted to reciprocate therein, and lifters mounted at their outer ends for swinging movement upon the sides of the casing and having their inner ends bearing freely upon the sides of the plunger.

3. In a pump, the combination of a casing having an inlet at its lower end and an outlet at its upper end, an upwardly tapered plunger mounted to reciprocate within the casing between the inlet and the outlet, a lifter plate mounted upon the side of the casing for swinging move-

ment and having its free end bearing upon the tapered plunger, and a valve on the said lifter arranged to permit flow on the downward movement of the lifter but prevent flow on the upward movement of the same.

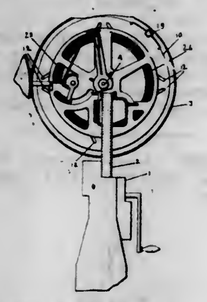
[Claims 4 and 5 not printed in the Gazette.]

1,266,253. FLOOR-SET. ERNEST HAKANSON, Stockbridge, Mich. Filed Aug. 21, 1916. Serial No. 116,066. (Cl. 254—11.)



In a floor set, a clamping bar having a straight body portion terminating at one end in a heel, a curved pointed toe formed at the opposite end of said straight body portion, means carried by said heel whereby said straight body portion may be fulcrumed to the topmost surface of the work, and a wedge for coöperation with the body portion of the clamping bar.

1,266,254. FILM-HOLDER. NIELS M. HANSEN, Toledo, Ohio, assignor to Paul F. Reichert, Toledo, Ohio. Filed Aug. 25, 1915. Serial No. 47,255. (Cl. 88—18.7.)



1. A reel for strip material, and a one-motion operable peripheral embracing means embodying interconnected simultaneously actuable elements for externally gripping strip material on the reel.

5. An adjustable gripping device embodying interconnected simultaneously operable embracing means, an embracing means guiding base, and a positive actuator shiftable relatively to the base for varying the adjustment of the embracing means.

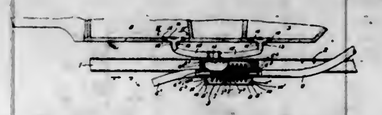
15. A reel in addition thereto, an adjustable embracing device for reel held material, and means coacting upon adjustment of the device as to the reel to lock the reel to the device.

26. A reel for a coil of strip material, said reel including a disk provided with slots, and a holding device for the strip material coil embodying peripheral engaging means for the coil, control elements for the means, and a pair of independently movable slotted engaging disks, said control elements coacting with the slots of the disks to effect adjustment of the means and lock the device in position as to the reel.

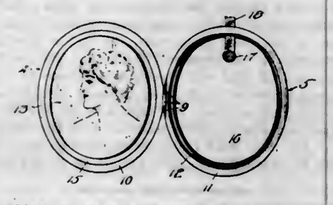
[Claims 2 to 4, 6 to 14, and 16 to 25 not printed in the Gazette.]

1,266,255. COMBINATION HEATER AND MUFFLER. JOHN HARRIS, Lakewood, Ohio. Filed Feb. 26, 1917. Serial No. 151,089. (Cl. 257—16.)

In automobile heaters and mufflers, the combination with the automobile body and engine and an exhaust pipe from the latter; of a casing supported upon said body, a baffle member disposed in said casing, an entirely free space being provided between the inner wall of the latter and the outer edge of said baffle member, said exhaust pipe intersecting the ends of said casing and being intersected by said baffle member, damper-controlled air openings formed in the ends of said casing and surrounding said exhaust pipe, and a damper-controlled passage for heated air connecting said free space and the interior of the automobile body.

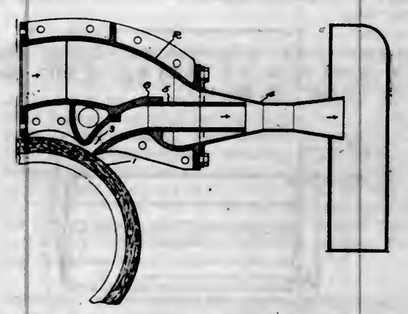


1,266,256. CASE OR LOCKET. THOMAS F. HATHAWAY, Elgin, Ill., assignor to Illinois Watch Case Co., Elgin, Ill., a Corporation of Illinois. Filed Aug. 13, 1917. Serial No. 185,901. (Cl. 63—19.)



In combination, a locket consisting of two covers hinged together, each having a rim turned toward the other to provide therewithin a compartment, there being an opening formed through the rim of one cover situated entirely to one side of the plane defined by the meeting edges of the cover rims, an object loosely positioned within the locket, and an attaching medium passed through the rim opening and secured to the object within the locket, the object being larger than the opening, whereby the medium attached to the object serves as a means of support for the locket, substantially as described.

1,266,257. SEPARATOR AND CONVEYER FOR PAPER-PULP MACHINERY AND OTHER PURPOSES. ANTON J. HAUG, Nashua, N. H., assignor to Improved Paper Machinery Company, Nashua, N. H., a Corporation of Maine. Filed Oct. 11, 1915. Serial No. 55,164. (Cl. 193—10.)



1. An apparatus for handling moistened, semi-solid material presenting a traveling surface adapted to receive and carry moistened material, and a separator and conveyer combined therewith for separating material from said surface and conveying the same to a suitable receptacle and comprising a materials conduit having an entrance end for the semi-solid material and a discharge end together with means for discharging fluid under pressure from a suitable external source into said materials conduit toward the discharge end to create a suction at the entrance end and discharge the materials by pressure behind them at the discharge end, said entrance end presenting to the materials-carrying surface an entrance mouth extending transversely the surface for substantially the full extent thereof and having an opposed stripper wall, the edge of which is in close proximity to said surface, said stripper wall being adapted to receive the layer of material as it is lifted from said surface and divert it toward the discharge end of the conduit, there being sufficient clearance between said entrance mouth and the material on the traveling surface to admit of the free entrance of air to said conduit between the material and the mouth to provide for directing against the materials received by the stripper wall a high velocity current of air to drive the same along said wall to the conduit, the entrance end of said conduit being of relatively less cross-sectional area than the discharge end thereof.

5. The combination with a traveling member adapted to carry upon its surface semi-solid material in sheet form, of a suction conduit for moving the material therefrom, said conduit having a mouth extending transversely said surface and said mouth having a stripper wall directed toward said surface and opposed to the direction of movement of the adjacent surface with a materials-receiving edge in close proximity to the surface to divert material therefrom and having an opposite edge located farther away from said materials-carrying surface than said materials-receiving edge.

[Claims 2 to 4 not printed in the Gazette.]

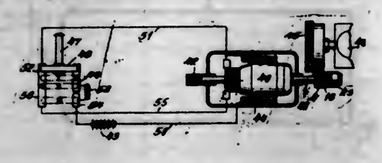
1,266,258. PROCESS FOR MANUFACTURING CALCIUM ARSENATE FOR INSECTICIDAL USE. JOHN K. HAYWOOD, Washington, D. C. Filed Mar. 30, 1918. Serial No. 225,780. (Cl. 167—6.) (Dedicated to the public.)

1. A process of manufacturing dicalcium ortho arsenate, suitable for certain insecticidal purposes when used alone and suitable for use as an insecticide on foliage when mixed with lime, by the action of lime stone (preferably finely powdered) on arsenic acid.

2. A process of manufacturing tricalcium ortho arsenate suitable for insecticidal purposes, by the action of lime stone (preferably finely powdered) on arsenic acid and subsequent treatment of the dicalcium ortho arsenate thus formed with a sufficient quantity of lime, to produce tricalcium ortho arsenate.

3. A process of manufacturing tricalcium ortho arsenate suitable for insecticidal purposes, by the action of lime stone (preferably finely powdered) on arsenic acid and subsequent treatment of the dicalcium ortho arsenate thus formed with a sufficient quantity of slaked lime, to produce tricalcium ortho arsenate.

1,266,259. GEARING. OTTO HEINS, New York, N. Y., and CHARLES M. WILD and JULIUS E. WILD, Springfield, Mass., assignors to Bosch Magneto Company, New York, N. Y., a Corporation of New York. Filed July 27, 1916. Serial No. 111,659. (Cl. 172—239.)

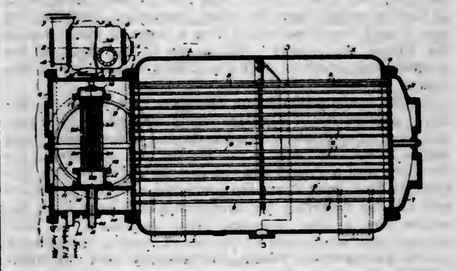


1. In disengageable gearing, a gear, a pinion-carrying member, a pinion mounted on the carrying member for rotative and axial movements independently thereof, a spring behind the pinion constructed and arranged to be stressed upon axial movement of the pinion on the carrying member, a coupling having a limited amount of rotative play and being arranged to drive the pinion in all of its axial positions on the carrying member, and means for engaging and disengaging the pinion and gear.

10. The combination with an internal combustion engine having a gear, a starting motor having a rotor normally out of its centered position, a pinion carried by the rotor for rotative and axial movements independently thereof, a spring behind the pinion constructed and arranged to be stressed upon axial movement of the pinion relatively to the rotor, and a coupling having a limited amount of rotative play and being arranged to drive the pinion in all of its axial positions relatively to the rotor, of a source of power supply for the motor, and power connections which first connect the source of power to the rotor to draw the rotor to its centered position and thereby connect the pinion and gear, and which then drive the pinion to bring the engine up to its starting speed.

[Claims 2 to 9 and 11 not printed in the Gazette.]

1,266,260. CONDENSER. RALPH E. HELLMER, Philadelphia, Pa., assignor to Southwark Foundry & Machine Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 27, 1915. Serial No. 68,843. (Cl. 257—31.)



1. The combination of a surface condenser having a body and a steam receiving casing mounted adjacent thereto; headers in said receiving casing; tubes connecting said headers; with means for delivering liquid to and discharging it from a heater comprised by said headers and tubes.

2. The combination of a tubular condenser; a steam receiving casing having an inlet and provided with a partition dividing it into two chambers, of which one communicates with certain of the condenser tubes and the second with others of said tubes; a header mounted on the partition; a series of tubes connected to said header; and a second header also connected to the tubes to provide a liquid heater mounted in the path of steam flowing from the inlet to certain of the tubes of the condenser; with means for supplying liquid to and delivering it from said heater.

[Claims 3 and 4 not printed in the Gazette.]

1,266,261. BITUMINOUS BINDER AND PROCESS OF MAKING SAME FROM COAL-TAR PITCH. GEORGE A. HENDERSON, St. Albans, W. Va. Original application filed Feb. 14, 1916, Serial No. 78,514. Divided and this application filed July 30, 1917. Serial No. 183,597. (Cl. 106—31.)

1. The process of producing a bituminous binder, which consists in mixing coal tar pitch with petroleum, and from 6% to 14% of sulfur, and then subjecting the mixture to sufficient heat, a sufficient length of time to drive off the petroleum.

2. A bituminous binder consisting of from 6% to 14% of sulfur, and from 86% to 94% of coal tar pitch.

1,266,262. ELEVATOR. FREDERIC V. PETTEL, Philadelphia, Pa., assignor to Link Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 26, 1912. Serial No. 722,510. (Cl. 214—11.)



1. The combination in an elevator, of a carrier; a plurality of two armed levers, one arm of each lever being of greater weight than the other; means for overbalancing one of said levers controlled from a common point; means for tilting the carrier; and means in the path of the overbalanced lever to shift the tilting means and to discharge the load.

5. The combination in an elevator, of a series of carriers; a plurality of selective levers carried by each carrier, each of said selective levers having a light-weight end and a heavy end; means for moving the carriers in an elevating and a return run; means for inverting the carriers as they pass from the elevating run to the return run and for reverting the carriers as they pass from the return run to the elevating run; abutments on each carrier, said heavy ends of the levers, during the upward run of the carriers, tending to normally hold the light-weight ends against the abutments; means operable during the movement of the carriers to trip the selective levers out of their normal position and to cause their heavy ends to rest against the abutments; and means, actuated by said end, for effecting the discharge of the carriers at predetermined positions, the said inverting and reverting movements of the carriers causing the levers to reset in their normal position.

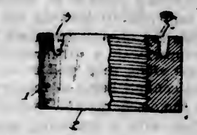
8. The combination of a series of carriers; means for moving the carriers; selective members on the carriers; a rotatable shaft mounted independently of the carriers; arms on the shaft; means for moving the shaft so as to bring one of the arms in the path of the selective members to actuate the same; and means, operable by the selectors, for discharging the loads of the carriers.

12. The combination in an elevator, of a series of carriers; means for moving the carriers; means for guiding the carriers; a series of tripping cams; a tripping lever for each cam; means connecting each of the cams with its tripping lever; tripping fingers carried by the carriers, each of said tripping fingers being arranged to actuate a certain tripping lever; a series of gage members, each of said gage members being movable into the path of and to actuate a specific tripping finger on each carrier; and means for moving any one of the gage members into the path of a tripping finger to project the same so as to come in contact, during the course of its travel, with a tripping lever to actuate the cam which is connected to the latter to discharge the carriers.

15. The combination in an elevator, of a series of landings; a carrying run and a return run extending past the landings; a cam at each landing; a series of connected carriers arranged to travel in the carrying and return runs; an arm on each carrier; means for directing the arms into the path of the cams to tilt the carriers; a series of selectors on each carrier; means for projecting any one of the selectors into operative position; and mechanism actuated by the projected selectors to operate the directing means for the arms of the carrier so that the carrier will tilt at a given landing and discharge its load, the selector being returned to its normal position as the carrier travels on the return run.

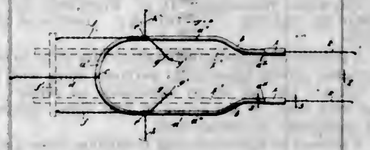
[Claims 2 to 4, 6, 7, 9 to 11, 13, and 14 not printed in the Gazette.]

1,266,263. LOCK-NUT. EDWARD R. HIBBARD, Oak Park, Ill., assignor to Grip Nut Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 5, 1914. Serial No. 875,611. (Cl. 151—21.)



A lock nut, comprising a blank having substantially parallel faces transverse to the bolt hole with the usual screw-threaded bolt hole formed therein, one face of the nut having substantially parallel grooves the full width of the nut arranged one on each side of the bolt hole, with the thinned walls of the bolt hole transversely to the grooves between the grooves and the hole slightly bent inward to shorten the diameter of the bolt hole in one direction and slightly ovalize the same.

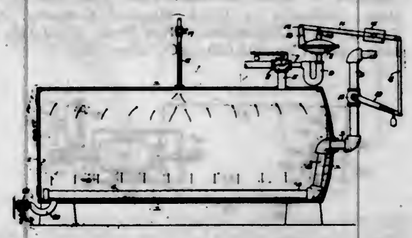
1,266,264. INTERCHANGEABLE DRAFT-HARNESS. WILLIAM W. HILEY, Fort Valley, Ga. Filed July 5, 1917. Serial No. 178,844. (Cl. 54—1.)



1. An interchangeable draft harness for attachment to either a wagon or a plow and including a substantially U-shaped harness-frame provided with means for attaching the same to the wagon; and shaft-holders mounted on the ends of the arms of said harness-frame and arranged to receive the ends of the wagon-shafts.

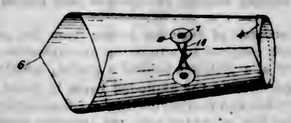
[Claims 2 and 3 not printed in the Gazette.]

1,266,265. YARN-STEAMER. WILLIAM HOFFMAN, Bloomsburg, Pa., assignor, by direct and mesne assignments, to The Magee Carpet Co., Bloomsburg, Pa., a Corporation of Pennsylvania. Filed Sept. 30, 1914. Serial No. 864,304. (Cl. 8—15.)



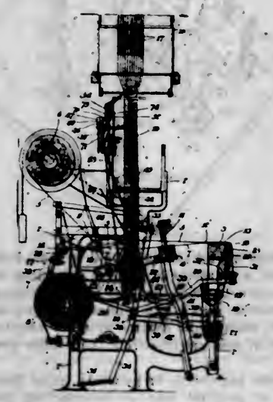
The combination in a steamer of a tank; a steam supply pipe connected to said tank; a valve in said pipe having an operating arm; a diaphragm casing; a conduit including a water sealed trap connecting said casing to the tank; a weighted lever actuated by the diaphragm of said casing; and means for connecting said lever to the valve operating arm of the steam pipe; with a bleeding conduit; and a valve in said conduit for regulating the amount of steam escaping therethrough.

1,266,266. SLEEVE-PROTECTOR. GEORGE FRANCIS HOGAN, Chicago, Ill. Filed Aug. 17, 1916. Serial No. 115,406. (Cl. 2—95.)



A sleeve protector including a body portion, side portions, and a flap on the body portion defined by a folding line, the side portions and flap having edges inclined with respect to the folding line, and the flap terminating short of the side edges of the side portions whereby when the protector is rolled into tubular form and the flap is bent back on the body portion, the side portions will overlap throughout the entire length of the protector and the ends of the flap will be spaced apart and the flap will lie snugly against the body portion, and a single fastening device located a substantial distance above the lower end of the protector.

1,266,267. TERRY-LOOM. HERMAN L. HOHLFELD, Philadelphia, Pa. Filed Apr. 14, 1917. Serial No. 161,950. (Cl. 139—65.)



1. In a terry loom, the combination of the frame thereof, supporting means for the warp threads, supporting means for the woven cloth, a movable lay, means operative to effect a relative movement between the lay and the fell of the cloth, a jacquard mechanism including a card-controlled lifting wire, and means controlled by said wire to vary the movement between the lay of the fell of the cloth at certain predetermined intervals for the production of the terry pile.

5. In a terry loom, the combination of the frame thereof, supporting means for the warp threads, supporting means for the woven cloth, a movable lay, means to move the lay toward and from the fell of the cloth, means operative to move the fell of the cloth toward the lay for the production of the terry pile when the lay is moved, the last named means including a hook adapted to be engaged with a part of the lay to operate the last named means by the lay when the hook is engaged therewith, a jacquard mechanism including a card-controlled lifting wire, and means controlled by said wire to engage said hook with said lay at certain predetermined intervals.

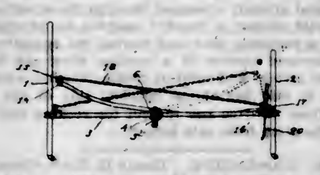
9. In a terry loom, the combination of the frame thereof, supporting means for the warp threads, supporting means for the woven cloth, a movable lay, means to move the lay toward and from the fell of the cloth, and means operative to move the fell of the cloth toward the lay for the production of the terry pile when the lay is moved, the last named means including a hook adapted to be engaged with a part of the lay to cause the last named means to be operated by the lay when said hook is engaged therewith.

10. In a terry loom, the combination of the frame thereof, supporting means for the warp threads, supporting means for the woven cloth, a movable lay, means to move the lay toward and from the fell of the cloth, means operated by the lay to move the fell of the cloth to a rearward position relatively to the path of movement of the lay at certain predetermined intervals for the production of the terry pile when the lay is moved, and means operative to hold the fell of the cloth in said rearward position during successive operations of the lay at certain intervals for the production of plain cloth.

12. In a terry loom, the combination of the frame thereof, supporting means for the warp threads, supporting means for the woven cloth, a movable lay, means to move the lay toward and from the fell of the cloth, means operated by the lay to move the fell of the cloth to a rearward position relatively to the path of movement of the lay at certain predetermined intervals for the production of the terry pile when the lay is moved, a pivoted arm having a notch therein, said arm being operative to cause its notch to engage a part of the last named means to hold the fell of the cloth in said rearward position during successive operations of the lay at certain intervals for the production of plain cloth, a jacquard mechanism including a card-controlled lifting wire, and means operated by said wire to move said arm to bring its notch into a position to engage said part of the last named means.

[Claims 2 to 4, 6 to 8, and 11 not printed in the Gazette.]

1,266,268. HOSPITAL-BED. EVERT HOLLOWELL, Kansas City, Kans. Filed Nov. 20, 1915. Serial No. 62,617. (Cl. 5—12.)



1. In a hospital bed the combination of a bedding receiving frame, a bar secured to the sides of said bedding receiving frame, a bar secured to the side rails of a bed, said first mentioned bar supported by said last mentioned bar, means to normally hold said bedding receiving frame in horizontal position, means whereby said bedding receiving frame can be tilted on said last mentioned bar and turned in a horizontal direction, and means to prevent said bedding receiving frame from tilting when turned out of alinement with the side rails of the bed.

2. In a hospital bed the combination of a bedding receiving frame, a bar secured to the side rails of a bed, a bar secured to the sides of the bedding receiving frame of said bed, means pivotally connecting said bars whereby said frame may be revolved in a horizontal position, said means adapted to allow said frame to be tilted between said rails and means to prevent said frame from being tilted when revolved out of alinement with said side rails.

3. In a hospital bed the combination of a bedding receiving frame, a bar secured to the side rails of a bed, a bar secured to the sides of the bedding receiving frame of said bed, means arranged on said bars whereby said frame may be revolved in a horizontal position, said means

adapted to allow said frame to be tilted between said rails, means to prevent said frame from being tilted below the rails of said bed, and means to prevent said frame from being tilted when revolved out of alinement with said side rails.

4. In a bed, the combination of a transverse bar connecting and secured to the side rails of a bed, a transverse bar secured to and spread across the bedding receiving frame of the bed, said last mentioned bar resting upon a washer on said first mentioned bar, and said bars pivotally connected by a bolt therethrough whereby said bedding receiving frame can be thrown out of horizontal alinement with the side rails and revolved horizontally.

5. In a hospital bed the combination of a bedding receiving frame, a rest bar secured to the sides of said bedding receiving frame, a supporting bar secured to the side rails of a bed, said rest bar supported by said supporting bar, and said rest bar and said supporting bar connected by a loosely fitting bolt whereby said bedding receiving frame is adapted to tilt and to revolve.

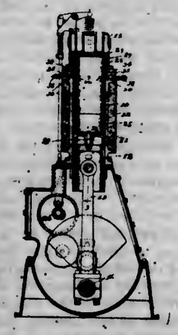
1,266,269. DOOR-HOLDER. JACOB P. HOLTZHOUSER, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 4, 1916. Serial No. 82,082. (Cl. 16—22.)



1. A device of the character described including a keeper adapted to be rigidly secured to the under face of a top door frame member and having a depending apertured portion, a bar having the under side of its free end notched and slidably arranged through the apertured portion of said keeper, a bracket adapted to be rigidly secured to a swinging door and having the opposite end of the bar secured thereto by a vertical pivot pin for both horizontal pivotal and vertical rocking motion, and means at the pivoted end of said bar for rocking the same.

2. A device of the character described including a keeper adapted to be rigidly secured to the under face of a top door frame member and having a depending apertured portion, a bar having the under side of its free end notched and slidably arranged through the apertured portion of said keeper, a bracket adapted to be rigidly secured to a swinging door and having the opposite end of the bar secured thereto by a vertical pivot pin for both horizontal pivotal and vertical rocking motion, and means attached to said bar at the opposite side of the pivotal support from the free end thereof for rocking said bar to release the same from said keeper.

1,266,270. GAS-ENGINE. HARRY H. HOOD, Chicago, Ill., assignor to Ernest F. Herrmann, Chicago, Ill. Filed Sept. 20, 1915. Serial No. 51,544. (Cl. 123—25.)



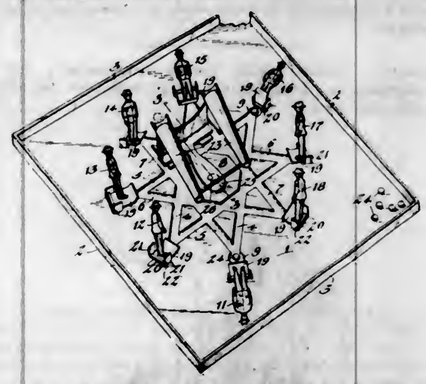
1. In an internal combustion engine, the combination of a combustion chamber, and means for supplying a film of cooling water progressively to a portion of the area of the inner surface of said combustion chamber during the explosion stroke, whereby the wall of said combustion chamber is reduced in temperature.

2. In a gas engine, the combination of a cylinder provided with a bearing surface therein, a piston element adapted to reciprocate in said cylinder, and means for preventing escape of high-pressure gases from said cylinder, including a pump for supplying water under pressure, means for actuating said pump during a period of high pressure, and means for conducting said water between the mutually sliding bearing surfaces of said piston and cylinder.

3. The process of deriving power from the explosion of gases, which consists in admitting an explosive mixture to the interior of a cylinder behind a piston, igniting the mixture and permitting the exploded gases to move the piston in the cylinder and in distributing a substantially continuous annular film of water over the interior surface of said cylinder behind said piston by the movement of said piston under the influence of said gases, gasifying said film of water principally by heat obtained from the wall of said cylinder whereby said wall is reduced in temperature, and exhausting said gases from the cylinder.

[Claims 4 to 20 not printed in the Gazette.]

1,266,271. PUZZLE OR GAME APPARATUS. EDWARD P. HUNT, Buffalo, N. Y. Filed Feb. 20, 1917. Serial No. 149,766. (Cl. 46—61.)



1. In a game apparatus or puzzle, a game-board having a central area, a plurality of grooves extending in different directions from said area, movable objects arranged in line with said grooves, and a gun mounted on the game-board and revolubic about said central area for shooting projectiles into any of said grooves from their inner toward their outer ends.

6. In a game apparatus or puzzle, a game board having a plurality of parallel sets of intersecting grooves arranged in the form of a star, pockets located at the points of said star, hinged platforms mounted on said board and extending over said pockets, each of said platforms being provided with an upturned front edge adapted to be struck by a projectile, figures representing soldiers secured to said platforms, and a revolubic gun mounted centrally of said star and having a downwardly-inclined barrel adapted to be brought in alinement with said grooves.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

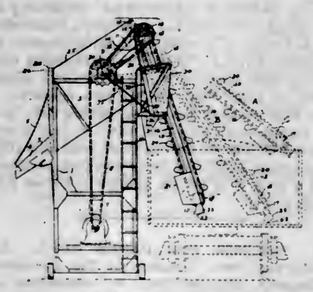
1,266,272. LUBRICATING APPARATUS. AMOS ELLMAKER JOHNSON, Northumberland, Pa., assignor of one-third to Edmund G. Van Alen and one-third to Samuel D. Burk, Northumberland, Pa. Filed Aug. 7, 1917. Serial No. 184,943. (Cl. 184—37.)

1. In a lubricating apparatus, the combination with a cylinder and means for conveying lubricant from one end thereof, of arms on said cylinder, threaded rods secured to said arms, a yoke connecting the rear ends of said rods, a plunger entering the cylinder, a screw entering the plunger and swiveled to said yoke, and an operating device attached to said screw.



2. Lubricating apparatus comprising a cylinder, and means for connecting a plurality of pipes with the discharge end thereof, of a plunger entering the other end of said cylinder, threaded rods secured to the cylinder, a yoke secured to said arms, a screw swiveled in said yoke and entering said plunger, means for operating said screw, a gland through which said plunger passes, and means adjustably connecting said gland with the threaded rods.

1,266,273. CAR-UNLOADING MACHINE. WILLIAM L. JOHNSTON, Lansing, Mich. Filed May 14, 1917. Serial No. 168,342. (Cl. 193—3.)



1. In a device of the character described, the combination with a frame, of a conveyer, a swinging link connecting the conveyer to said frame, means for driving the conveyer independently of the movement of said link, means engaging said link for adjusting the conveyer between a position surmounting the frame and a working position at one side of the frame, and upper and lower members for supporting the conveyer during its adjustment, respectively functioning while the conveyer is adjacent its raised and lowered positions.

[Claim 2 not printed in the Gazette.]

1,266,274. STIFFENING DEVICE FOR SOFT COLLARS. MICHAEL KAHNE, New York, N. Y. Filed Nov. 10, 1917. Serial No. 201,359. (Cl. 2—67.)

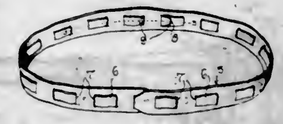
2. A soft fold collar, pockets on the underside thereof near and parallel with the inner edges of the collar open



at the top, combined with stiffening devices, each constructed of wire having a portion of separated and parallel parts of the wire adapted to fit tightly into said pockets, and a transverse curved portion adapted to fit under the fold of the collar, said transverse portions terminating in open loops adapted to be hooked together.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,266,275. DRIVE-BELT. ROBERT KELLEY, Bowie, Tex. Filed Oct. 6, 1917. Serial No. 195,087. (Cl. 74—63.)

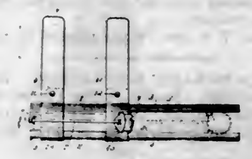


1. A driving belt consisting of a single length of flexible material having a relatively wide body portion adapted to be arranged in circular form, and narrow end portions, said body portion of the belt being provided with spaced slits through which the narrow end portions are adapted to be laced so that end portions of the belt will extend alternately upon the inner and outer faces of the belt body.

2. A driving belt consisting of a single length of flexible material having a relatively wide, intermediate portion provided with spaced slits therein, and narrow end portions each of substantially one half the length of the intermediate portion of the belt, said wider body portion being adapted for arrangement in circular form and the narrow end portions extending in relatively opposite directions and laced through the slits in said intermediate portion of the belt, the terminals of said narrow end portions of the belt lapping upon each other and being inserted through adjacent slits.

3. A driving belt consisting of a single length of flexible material having equi-distantly spaced transverse slits in the medial portion thereof, said medial portion of the material being adapted for arrangement in circular form and the end portions of the material for insertion through said slits to lie in close contact with said medial portion.

1,266,276. MARBLE-SHOOTER. GEORGE COLVIN KENNEDY, Waterloo, Iowa. Filed Jan. 5, 1915, Serial No. 661. Renewed Oct. 12, 1917. Serial No. 196,344. (Cl. 124—14.)



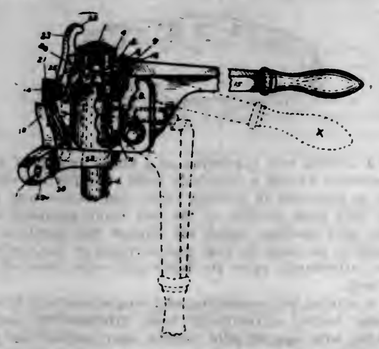
1. In a device of the character described, a tube having oppositely-located longitudinal openings to serve as finger-clearance spaces between upper and lower troughed parts, a flexible strip passed through said openings transversely, and yieldable resilient connections between opposite ends of said strip and the delivery end of said tube, opposite ends of the tube having parts projected outwardly integrally alined longitudinally to serve as sighting-means.

6. A device of the character described, comprising a plate rolled into tubular form with meeting longitudinal edges, spaced standards integrally extended outward from one of said edges nearer one end of the tube than the other, in longitudinal alinement on the same side, said tube having oppositely located longitudinal finger-clearance openings near its end opposite its delivery end, said tube having engaging means at its delivery end, a flexible strip located across the interior hollow of the tube with its end extending outwardly through said finger-clearance spaces and having engaging-means at each end, and like elastic bands connected between the engaging means on

the edges of said strip and the engaging means at the delivery end of the tube, said bands being under slight tension.

[Claims 2 to 5 not printed in the Gazette.]

1,266,277. SHAFT-OPERATING MECHANISM. JOHN KIRBY, Jr., Dayton, Ohio, assignor to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 31, 1917. Serial No. 189,108. (Cl. 74—54.)

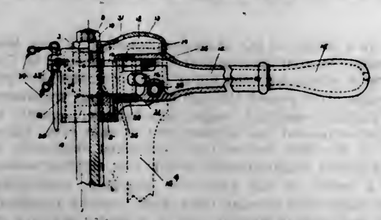


1. In winding mechanism of the character described, the combination of a shaft, a toothed wheel carried by and rotatable with the shaft, a sleeve loosely mounted on the shaft below said wheel, and an operating lever having pivotal connection with the sleeve, said lever being provided with means for separate engagement with said wheel and the body of said sleeve whereby the shaft may be rotated.

8. In brake mechanism, the combination of a shaft, a toothed wheel carried by and rotatable with the shaft, a sleeve loosely mounted on the shaft below said wheel, an operating lever having pivotal connection with the sleeve; said lever being provided with means for separate engagement with said wheel and the body of said sleeve whereby the shaft may be rotated, a bracket whose lower portion surrounds the shaft below said sleeve to retain the sleeve in position on the shaft, and mechanism carried by said bracket adapted to coöperate with the wheel carried by the shaft to hold the latter against reverse movement during the winding operation and thereafter until the said mechanism is released.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,266,278. CAR-BRAKE MECHANISM. JOHN KIRBY, Jr., Dayton, Ohio, assignor to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 15, 1917. Serial No. 202,142. (Cl. 188—57.)



1. In car brake mechanism, the combination of a shaft adapted to be rotated, a ratchet carried by the shaft and rotatable therewith, the member mounted upon the shaft and rotatable thereon independently thereof, an operating lever in pivotal connection with said member, and a vertically disposed spring actuated member pivotally mounted upon said operating lever adapted to engage said ratchet whereby the shaft may be rotated.

7. In car brake mechanism, the combination of a shaft, a circular member having ratchet teeth formed in its peripheral surface carried by and rotatable with said shaft, a second member carried by and rotatable independently of the shaft, an operating lever in pivotal connection with said second member being normally suspended upon its pivot and adapted to be swung to a horizontal position, and a vertically arranged spring actuated ratchet engaging member pivotally mounted upon said operating lever whereby in raising the same to a horizontal position operative connection between the shaft and said lever will be established, said connection being broken by the downward movement of the lever.

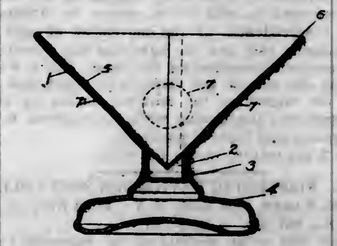
11. In car brake mechanism, the combination with a shaft provided with means for its rotation, a member mounted upon and rotatable independently of the shaft, an operating lever in pivotal connection with said member and normally suspended upon its pivot, vertically disposed spring actuated mechanism pivotally mounted upon said lever and adapted to swing into and out of engagement with said means and thereby establish operative connection whereby said shaft may be rotated, and a device for locking said mechanism in operative connection with the shaft whereby the latter may be rotated in either direction.

13. In car brake mechanism, the combination of a shaft provided with means for its rotation, a member mounted upon and rotable independently of the shaft; said member having lateral extensions forming a support for an operating lever, an operating lever pivotally mounted upon said extensions and normally suspended upon its pivot, and means whereby the operating lever is restrained from dropping of its own weight when the lever is in operative position.

17. A new article of manufacture comprising a chambered operating lever adapted to rotate a brake-shaft having a ratchet thereon, a ratchet engaging member mounted in the chamber having a branch arm extending therefrom, spring mechanism adapted to exert pressure against said branch arm to force said member into operative engagement with said ratchet, means for locking said member in operative engagement with said ratchet, and a spring device mounted in one of the walls of said operating lever adapted to retain said lever in an elevated position.

[Claims 2 to 6, 8 to 10, 12, and 14 to 16 not printed in the Gazette.]

1,266,279. HOLDER FOR PAPER CUPS. JOHN R. KLEIN, Dayton, Ohio, assignor to The Germless Paper Cup Company, Dayton, Ohio, a Corporation of Ohio. Filed Nov. 20, 1916. Serial No. 132,366. (Cl. 65—61.)



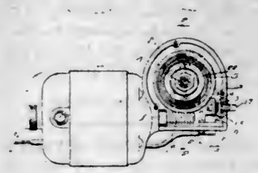
1. In a holder for paper cups, a main portion of fixed conical form having along its upper edge an inwardly directed annular flange arranged whereby, upon the holder being pressed upon a stack of nested cups conforming to the holder, the edge portion of the outermost cup will spring under the said flange and said flange will function to prevent the displacement of said cup from within the holder.

3. A holder for paper cups comprising a base having an upwardly extended tubular neck and a main portion of fixed conical form which has at its lower end and in

communication with its interior a cup-like portion which is fixed and secured in said neck and receives the drippings from the cup which may be arranged in said main portion.

[Claim 2 not printed in the Gazette.]

1,266,280. SPRING-WINDING ELECTRIC MOTOR. HENRY KOCOUREK, Jersey City, N. J., assignor to Julia B. Stewart, executrix of the will of John K. Stewart, deceased. Filed Feb. 3, 1917. Serial No. 146,539. (Cl. 185—40.)

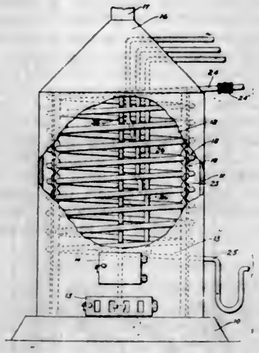


2. In a spring winding motor in combination with the electric circuit in which it is energized, the armature shaft; a speed-reducing train rotated thereby; a cam rotated by said train; a contact piece actuated by the cam for closing the circuit at a certain point in each revolution of the cam; a manually-operable circuit-breaker operating upon the same contact piece which the cam actuates.

4. In an electric winding motor in combination with the circuit in which it is energized, a rotary armature shaft, a winding train actuated by said shaft; circuit-making-and-breaking connections and circuit-controlling means in said train adapted to automatically open the circuit after a predetermined number of revolutions of the armature shaft, and a yielding frictional drive connection in the train at a point therein subsequent to the circuit-controlling means adapted to slip upon a predetermined resistance to rotation, to permit the motor to complete the number of revolutions for opening the circuit regardless of the resistance of the spring wound.

[Claims 1 and 3 not printed in the Gazette.]

1,266,281. APPARATUS FOR REFINING MINERAL OILS. CLEMENS E. LAPP, Los Angeles, Cal. Filed Nov. 5, 1917. Serial No. 200,257. (Cl. 196—14.)



2. In an apparatus for refining oil, a base, a cylindrical wall mounted upon the base, a helical pipe coil mounted vertically within the cylindrical wall; there being supporting columns to engage the convolutions of the coil and hold the convolutions regularly spaced apart, said supporting columns being made up of units fitting together end to end and having seats in their ends to receive the convolutions of the coil; means for securing the units together, and draw-off pipes leading upwardly from various parts of the coil.

[Claim 1 not printed in the Gazette.]

1,266,282. STONE-SPLITTING TOOL. THOMAS LARNEY, Vancouver, British Columbia, Canada. Filed Aug. 23, 1917. Serial No. 187,839. (Cl. 125—14.)



In a stone splitting device, the combination with a tapering wedge member, of a pair of semicylindrical feathers each having a longitudinal channel formed in the flattened face thereof, said channel widening toward both ends of the feather from an intermediate point near one end of the feather.

1,266,283. PENCIL ATTACHMENT FOR FOUNTAIN-PENS. JENS MARTINUS LARSEN, Brooklyn, N. Y. Filed June 13, 1917. Serial No. 174,449. (Cl. 120—84.)

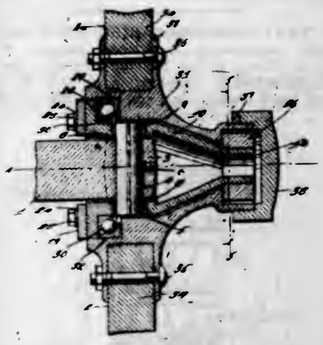


1. A fountain pen attachment comprising a spring collar having free ends, and a pencil member comprising a small diameter tubular lead holder rigidly united integrally with the central part of the collar and extending longitudinally therefrom in position to lie close along the pen, the lead holder projecting laterally only slightly beyond the lines of the collar.

5. The combination with a fountain pen, of a slidable support upon the pen cap bearing a small diameter tubular lead holder and a pocket clip in oppositely projecting relation, the pocket clip bracing the lead holder when the latter is projected for use.

[Claims 2 to 4 not printed in the Gazette.]

1,266,284. STEERING DEVICE. ROBERT M. LA SALLE, Miami, Ariz., assignor to William I. Tupman, Globe, Ariz. Filed May 11, 1916. Serial No. 96,915. (Cl. 21—142.)

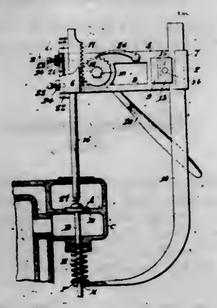


1. In a device of the class described, the combination of a hub-spindle, said hub-spindle provided with an annular flange, said flange provided with opposite beveled portions, and with a channel in the center of each of said beveled portions, a plate provided with a steering-rod connection, said plate provided with a notch registering with one of the beveled portions of the flange, said plate also provided with a channel in the center of the notch registering with the channel on said flange, means fastening

said plate and flange together, a hub-sleeve mounted upon said hub-spindle, and an axle with side ribs movably mounted in said hub-spindle.

2. In a device of the class described, the combination of a hub-spindle, said hub-spindle provided with an annular flange at one end, said flange provided with a rectangular opening, and at opposite sides of said opening are beveled portions, each beveled portion being provided with a central channel, a bifurcated plate provided with steering-rod connection engaging said annular flange of said hub-spindle, said plate provided at its inner end with a socket-portion and a channel, each registering with similar portions on said flange, means securing the plate and flange together, a hub-sleeve mounted upon said hub-spindle, and an axle with side ribs movably mounted in the hub-spindle, substantially as shown and described.

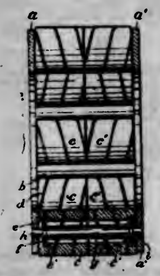
1,266,285. VALVE-SPRING COMPRESSOR. ANDREW B. LOCKHART, Redlands, Cal. Filed July 24, 1917. Serial No. 182,433. (Cl. 29—87.1.)



1. A tool of the character described comprising a plate-like frame formed with guide cleats at opposite ends, a substantially L-shaped arm slidably received in one of the cleats and having a forked terminal, a wedging fastener carrier by the frame and engageable with the arm to hold the same in adjusted position thereon, a toothed rack slidable in the other cleat and having a centering pin, a gear rotatably journaled on the frame and meshing with the toothed rack, and a handle for rotating the gear.

[Claims 2 and 3 not printed in the Gazette.]

1,266,286. ROLLER-BEARING WITH SECTIONAL ROLLS. CHARLES S. LOCKWOOD, Newark, N. J., assignor to Hyatt Roller Bearing Division, United Motors Corporation, a Corporation of New York. Filed Oct. 27, 1917. Serial No. 198,763. (Cl. 64—62.)



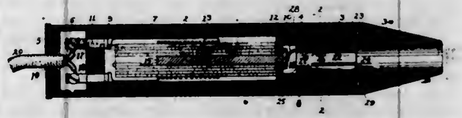
1. In a roller bearing, a tubular sectional roll divided transversely, and the sections formed respectively of strands wound spirally in opposite directions, and the sections provided with means independent of the cage to hold the two sections of the roll positively from movement away from one another.

3. In a roller-bearing, a tubular sectional roll divided transversely the sections being formed respectively with right and left-hand spiral grooves, the bore of the roll at opposite ends being recessed to form a shoulder in the bore, and a tie-bar in the bore having collars secured thereon in contact with the said shoulders to hold the two sections together.

4. In a roller-bearing, a tubular sectional roll divided transversely the sections being formed respectively with right and left-hand spiral grooves, and a tie-bar in the bore shouldered down at the ends to fit holes in the roll-cage and the ends grooved adjacent to the shoulders, collars fitted upon the ends adjacent to the shoulders and confining the sections upon the tie-bar, and the metal of the collars forced into the said grooves to lock the collars in place thereon.

[Claim 2 not printed in the Gazette.]

1,266,287. HIGH-FREQUENCY APPARATUS. ANTONIO LONGORIA, Cleveland, Ohio, assignor to The Rogers Electric Laboratories Company, Cleveland, Ohio, a Corporation. Filed Aug. 10, 1914. Serial No. 856,009. (Cl. 174—177.)



1. In a high-frequency apparatus, a tubular handle, a transformer having an end contact and a bushing removably seated opposite thereto within said handle, an electrode gripping sleeve removably seated within said bushing in contact relations with said end contact, and a nose portion for said handle to hold said bushing and sleeve in place, said nose portion of the handle having a central opening opposite the sleeve to receive an electrode.

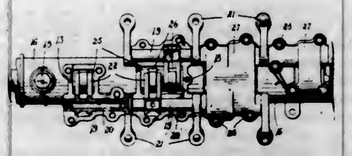
6. In a high-frequency apparatus, a tubular body, and an electrode clamping sleeve removably seated within one end of said body having a spring contact lip, in combination with a transformer removably seated within the opposite end of said body having an electrical contact engaged with said lip.

8. In a high-frequency apparatus, a handle member having a longitudinal bore, a transformer having a core connected with its secondary coil and a combined clamping sleeve and conductor for an electrode removably seated in said bore and in contact with said core.

14. In a high-frequency apparatus, a tubular handle having a removable nose portion provided with an axial bore, a non-conducting bushing and a split metal sleeve therein removably held in place by said nose portion, a transformer removably confined within said handle having an end conducting contact with said sleeve and means at the opposite end of said handle from said nose portion to confine said transformer within the handle.

[Claims 2 to 5, 7, and 9 to 13 not printed in the Gazette.]

1,266,288. HYDROCARBON-MOTOR. ALLEN LOOMIS, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 4, 1916. Serial No. 123,709. (Cl. 181—97.)



1. In a hydrocarbon motor, in combination, a casing, a cam shaft therein, a rock shaft mounted in a bearing in the casing, one end of said rock shaft being in the casing and the other end projecting therefrom, and an arm on each end of said rock shaft.

15. In a hydrocarbon motor, in combination, a casing, a cam shaft therein, rock shafts mounted in bearings in the casing, an inwardly extending rock arm at one end of each of said rock shafts, an outwardly extending rock arm at the other end of each of said rock shafts, and an outwardly extending rock arm on each of said rock shafts intermediate the ends thereof.

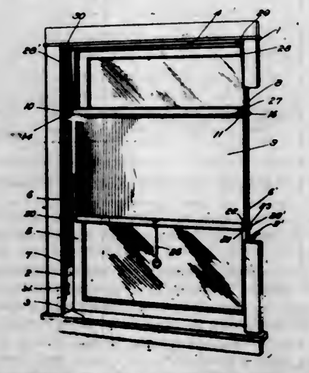
[Claims 2 to 14 not printed in the Gazette.]

1,266,289. KITCHEN ARTICLE. CARL C. P. LUND, Oakfield, Wis. Filed Mar. 11, 1918. Serial No. 221,820. (Cl. 146—15.)



A potato masher comprising a body formed of molded material, a shoe overlying the working end face of the masher, the marginal portion of the shoe being defined by a flange overlying the adjacent end portion of the body, said flange having inwardly directed knobs embedded within the body, the central portion of the shoe being provided with an inwardly directed headed knob also embedded within the body.

1,266,290. SHADE-ROLLER. ARTHUR E. LYBOLT, Kansas City, Mo. Filed Mar. 19, 1917. Serial No. 155,862. (Cl. 156—27.)

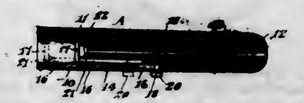


1. In a curtain roller, the combination with a vertical guide strip of a clutch member comprising a shank portion revolubly supporting one end of said roller and a head on the said shank having an aperture therein for receiving said guide strip, a spring mounted within the roller and attached to said shank to normally urge the shank head in binding relation with the guide strip, an arm extending laterally from said shank and means for actuating said arm for the purpose set forth.

2. In a curtain roller, the combination with a vertical guide strip, of a clutch member comprising an apertured head portion for slidably receiving said strip and having an extended shank portion for revolubly mounting one end of said roller, a spring mounted within the roller and attached to the clutch shank to actuate the roller and to normally retain the clutch head in functional position, a curtain wound on the roller having a cross bar at its free end, a clutch member mounted at the end of said bar having an apertured head slidable on and adapted to normally clutch said guide strip to prevent winding of the curtain on the roller, and means for individually releasing said roller and curtain clutches to effect vertical adjustment of the curtain or roller.

[Claims 3 and 4 not printed in the Gazette.]

1,266,291. CIGAR OR CIGARETTE HOLDER. HERBERT R. MCCLINTOCK, El Paso, Tex. Filed July 20, 1917. Serial No. 181,884. (Cl. 131—10.)

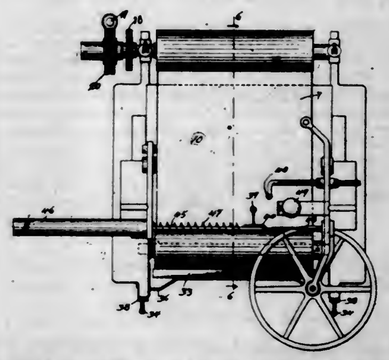


1. A holder or mouth piece of the character described comprising a stock having a socket opening through one end and also having a bore leading from said socket through the other end of the stock, said stock further having a communicating passage and slot, the passage being substantially parallel with the bore and opening into the socket, while the slot opens through one side of the stock, a rod slidable in the passage and having an outer end bent at right angles and extending into the socket, and a headed pin passed through the slot and having a threaded end detachably engaged in the inner end of the rod.

3. A holder or mouth piece of the character described, comprising a stock having a socket in one end and also having a bore leading from said socket through the other end of the stock, and an ejector rod slidably fitted within the stock and having an ejector prong projected into the socket, a valve on said rod to engage in the stock about the rod when in normal retracted position for preventing air leakage around the same.

[Claims 2 and 4 not printed in the Gazette.]

1,266,292. RECORDER. EDMUND B. MCCORMICK, Manhattan, Kans. Filed Jan. 8, 1917. Serial No. 141,352. (Cl. 234—1.) (Dedicated to the public.)

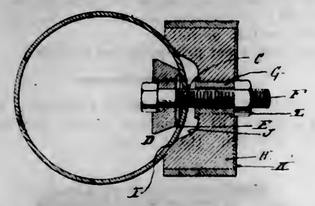


4. In a recorder, record paper supporting means, a stylus for coaction with record paper, stylus controlling

means comprising a cylinder, a slotted shaft projecting from said cylinder, a spiral spring surrounding said shaft and fixed at one end within said cylinder, a block connected to said spring supporting said stylus and sliding upon said slotted shaft and means holding said spring normally under tension and adapted to be actuated by a dynamometer to allow said spring to contract and move said marker.

[Claims 1 to 3 not printed in the Gazette.]

1,266,293. APPARATUS FOR SHAPING CONDUITS. WALTER E. MCCOY, New York, N. Y. Filed May 26, 1917. Serial No. 171,333. (Cl. 113—38.)



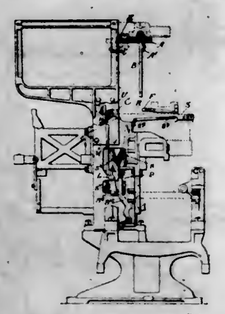
1. An apparatus for producing a projection upon a pipe, comprising two coöperating relatively movable dies, one of said dies being disposed within said pipe, and means extending through the other die and secured to said inner die for moving said dies into coöperation, and thereby forming a protuberance on said pipe wall corresponding in configuration to said dies.

4. An apparatus for producing upon the wall of a pipe an inwardly flanged projection having a central opening, comprising a die within said pipe, a threaded bolt of less diameter than said die secured in said die and passing through an opening in said pipe wall, a block having a matrix coöperating with said die and receiving said bolt, and a nut on said bolt outside of said block, whereby upon the rotation of said nut said die and matrix are drawn together to produce on said pipe wall a protuberance corresponding in configuration to said die and matrix.

5. An apparatus, as in claim 4, the said matrix having in its bottom an annular groove surrounding the opening therein, and the said die having on its face an annular projecting rib coöperating with said groove to produce a similar rib in the flange of said projection.

[Claims 2 and 3 not printed in the Gazette.]

1,266,294. TYPOGRAPHICAL MACHINE. JOHN R. MCRAE, Buffalo, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Mar. 12, 1918. Serial No. 221,914. (Cl. 199—36.)



1. In a typographical machine, the combination of the line transfer device, actuating means therefor, a manually operable latch at the front of the machine to hold the transfer device in inoperative position, and means located at the rear of the machine to shift the latch and free the transfer device.

3. In a typographical machine, the combination of the line transfer device S normally locked against action and adapted to be released automatically by one of the machine parts, a spring for operating the transfer device when released, a periodically operated cam to control the movement of said device under the influence of the spring but adapted to move out of operative relation to said device when locked, a manually operable latch to hold the transfer device in inoperative position, and means under the control of the operator for shifting the latch and freeing the transfer device and for controlling its movement under the influence of the spring when not under the control of the cam.

7. In a typographical machine, the combination of the spacer hook U formed with the depression U^1 and the latch C formed with the projection C^1.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,266,295. VAPORIZED-OIL BURNER. JOHN F. MACKAY, Bordentown, N. J. Filed Oct. 10, 1916. Serial No. 124,767. (Cl. 158—55.)



1. In an oil burner, the combination of a primary vaporizing chamber having an inlet for the vapor, a superheating chamber communicating with the primary chamber, a bow-shaped tube supported by said superheating chamber and having an outlet for the vapor, a tip supported at said outlet and having a constricted orifice, a mixing device for the gas and air loosely supported on the superheating chamber above said tip and having a conical portion and a tubular lower end provided with a valve, and a top supported above said mixing device for spreading the mixture outwardly at the ignition point.

[Claims 2 to 4 not printed in the Gazette.]

1,266,296. TOY. BERNARD B. MARK, Joplin, Mo. Filed Sept. 19, 1916. Serial No. 121,054. (Cl. 46—37.)



1. A toy balloon having a case of stretchable elastic material formed to have greater capacity for stretching in some portions than in others as the case is inflated to thus cause the shape taken by the case to be varied upon inflation.

2. A toy balloon comprising a case of stretchable elastic material formed to have greater thickness in some portions than in others and to consequently have the capacity for stretching in various portions varied.

7. A toy balloon comprising a case which is to be inflated to take a predetermined form, said case being of an elastic material and made thicker in portions to vary the elasticity throughout its entirety and to thus cause inflation to stretch the case to take the desired form, a tube extended into said case to have its inner end adjacent the side wall thereof and with the outer end passed through the case in a relation that fluid may be passed therethrough to inflate the case, a valve to prevent the escape of fluid through the tube, and a movable member connected with the case substantially at the attached end of the tube and projected from the case so that as the tube is moved by pressure exerted against the inner end thereof through the case the projecting member will have movement imparted thereto.

[Claims 3 to 6 not printed in the Gazette.]

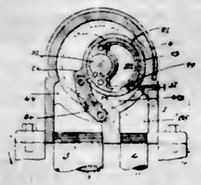
1,266,297. WINDOW-DISPLAY. ZACHARA T. MERRILL, Chicago, Ill. Filed July 16, 1917. Serial No. 180,764. (Cl. 46—40.)



1. In a device of the described class, the combination of a figure representing a person, a staff, a flag connected with said staff, said staff being connected with the hands of the figure represented, an electric motor, and a spring means for communicating an oscillatory movement from said motor to said flag staff, whereby the latter will be caused to oscillate toward the right and left, said spring being adapted to stop said shaft as it reaches the vertical.

[Claims 2 and 3 not printed in the Gazette.]

1,266,298. ROTARY ENGINE. FRED L. METCALF, Plainfield, N. J. Filed Feb. 9, 1918. Serial No. 216,149. (Cl. 121—94.)



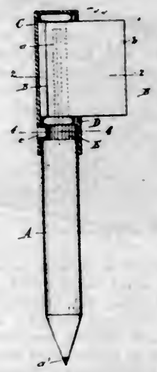
1. A rotary engine, comprising a cylinder having a motor fluid inlet and outlet, a rotor shaft, a rotor eccentrically supported on said shaft and comprising two concentric cylindrical shells, each shell having a port in its wall, the inner shell being in communication with said motor fluid inlet, and an abutment having one edge pivoted to said cylinder and its opposite edge pivoted to said outer shell.

5. A rotary engine, comprising a cylinder, a circumferential rib therein, a rotor shaft, two rotors on said shaft, each rotor comprising a hollow cylindrical cam and a sleeve on said cam, and two heads on each of said rotors, the adjacent heads of said rotors being seated on opposite sides of said rib.

[Claims 2 to 4 and 6 not printed in the Gazette.]

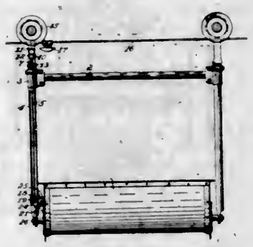
1,266,299. PENCIL. ROBERT C. MOORE, New York, N. Y. Filed July 7, 1917. Serial No. 179,116. (Cl. 120—84.)

7. In a device of the class described, a pencil, a housing mounted for rotation on one end of the pencil, a slot in the housing, a roll of paper positioned within the housing and secured to the pencil against relative rotation, the paper of the roll being adhesively retained along its edges but provided with scorings adjacent said edges to allow the intermediate portion of the paper to be torn from the roll, whereby relative rotation between the pencil and the housing projects the free end of the intermediate portion of the paper through the slot and into a position wherein it may be grasped and drawn therethrough, a ratchet formed on the pencil, and a coöperating pawl mounted on the housing for precluding retrograde movement of the paper, so that, when a portion of the paper is torn away, the remaining free edge is retained in a position adjacent the slot, ready for subsequent projection therethrough.



[Claims 1 to 6 not printed in the Gazette.]

1,266,300. LITTER-CARRIER. ROBERT P. MORRIS, Waterloo, Iowa. Filed Aug. 11, 1917. Serial No. 185,775. (Cl. 214—61.)

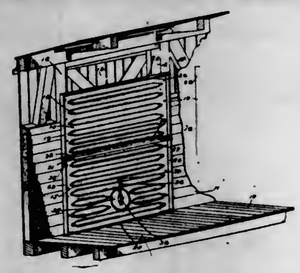


In combination, a supporting track, a tripping stop fixed thereon, a carriage movable along said track, a hanger depending from said carriage, a vessel tiltably supported on said hanger, engaging-means on said vessel, a plunger-rod movably mounted on said hanger, engaging-means movably connected to said plunger-rod and adapted to releasably engage said engaging-means on said vessel, a link mounted on said plunger-rod for horizontal rotation, and a rock-body pivotally connected to said link and adapted to be rocked in either of opposite directions vertically to disengage the engaging means on said plunger-rod from the engaging-means on said vessel.

1,266,301. SHEET-METAL GRAIN-DOOR. WALTER P. MURPHY, Chicago, Ill. Filed Feb. 4, 1915. Serial No. 6,144. (Cl. 189—46.)

1. The combination with the door frame of a railway car, of a temporary grain door structure comprising a plurality of sheet metal panels disconnected from each other and bodily removable from the car and arranged one

above the other and of a width to bear against the door frame on opposite sides thereof, and depending flanges providing a grain-tight joint between said panels, said panels being formed with horizontal corrugations terminating with the edges of said panels and extending outwardly into the door opening.

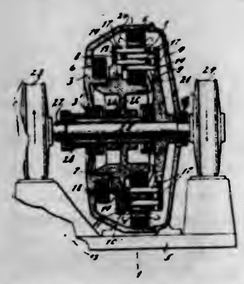


2. A grain door for a railway car comprising separable upper and lower sheet metal panels, means providing a grain-tight joint between said panels, the lower panel being formed with a discharge opening, a dish-shaped sheet metal valve for said opening, and means for loosely supporting said valve on the inside of the panel.

8. A grain car door having a discharge opening therein and a valve for said opening having a spherical surface covering said opening, means for supporting said valve on the inner side of the door so that it is free to adjust itself.

[Claims 3 to 7 not printed in the Gazette.]

1,266,302. DYNAMO-ELECTRIC MACHINE. ALFONS H. NEULAND, New York, N. Y. Filed Feb. 10, 1915. Serial No. 7,223. (Cl. 171—252.)



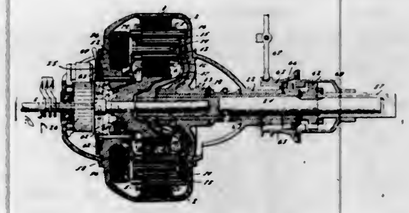
1. A dynamo-electric machine comprising a source of magnetic flux, a stator, two concentric motors mounted coaxially with the stator and rotatable in opposite directions, the three members being traversed by the magnetic flux and each rotor comprising a series of spaced magnetic conductors and the conductors of one series differing in number from those of the other series, whereby the conductors of the two series will radially aline at at least one point progressively as the two rotors are oppositely rotated and thereby form a revolving closed magnetic path for the flux having greater angular velocity than the relative angular velocity of the rotors, and an induced winding adapted to be traversed by the magnetic flux and arranged to have a potential generated therein as the magnetic path and flux revolve.

20. The combination of a dynamo-electric machine comprising an annular stator, means carried by the stator for producing a unidirectional magnetic field, two concentric rotors mounted co-axially with the stator and rotatable in opposite directions, the three members being traversed by the magnetic flux and each rotor comprising a series of spaced magnetic conductors and the conductors of one series differing in number from those of the other series, whereby the conductors of the two series will aline at at least one point progressively as the two rotors are oppositely rotated and thereby form a revolving closed magnetic path for the flux having a higher angular velocity than the relative velocity of the two rotors, a plurality of independent induced windings circumferentially arranged within the magnetic field and having respectively different numbers of pairs of oppositely wound pole windings arranged in succession within the angular distance from one point of full alinement of the magnetic conductors to the next successive point of full alinement, whereby a different frequency is generated in each induced winding as the closed magnetic path and flux are revolved; a condenser adapted to be connected in circuit with each induced winding and to be acted upon by the potential generated in said winding and to supply a magnetizing current to said winding and establish strong field poles, and means for independently connecting the several induced windings to an external circuit.

29. A dynamo-electric machine comprising a flux directing member, a rotor member coöperating therewith to produce a revolving flux path having higher angular velocity than that of the rotor, a source of unidirectional flux radially cutting the two members and distributed by the revolving flux path to produce a revolving unidirectional magnetic field, and an induced winding circumferentially disposed within the magnetic field and comprising a pair of oppositely wound pole windings.

[Claims 2 to 19 and 21 to 28 not printed in the Gazette.]

1,266,303. ELECTROMAGNETIC POWER-TRANSMITTING APPARATUS. ALFONS H. NEULAND, San Francisco, Cal. Original application filed Aug. 8, 1914, Serial No. 855,873. Divided and this application filed May 3, 1917. Serial No. 166,136. (Cl. 172—239.)



1. An electric power transmission device comprising, in combination with a driving and a driven shaft, a field element including two independently rotatable inductors cooperative by their relative rotation to produce a revolving flux path, means for locking one of the inductors against rotation and for securing the other inductor to one of the shafts, an armature secured to the other shaft, and a source of magnetizing flux cutting the armature and field element.

4. An electric power transmission device comprising an armature provided with a winding, a stator provided with a winding which is connected to the armature winding, a field element comprising two independently rotatable inductors in inductive relation to said armature and stator, means for producing a common magnetic flux traversing said armature, field element and stator, a driven shaft, means for locking one of said inductors against rotation, and means for connecting the other field member to the driven shaft.

7. An electric power transmission device comprising an armature provided with a winding, a commutator connected to said winding, stationary brushes engaging said commutator, a stator provided with a winding, conductors connecting the brushes with the stator windings, a field element comprising two independently rotatable inductors in inductive relation to said armature and stator, means for locking one of said inductors against rotation, and means for varying the number of turns in series in the stator winding.

8. An electric power transmission device comprising an armature provided with a winding, a commutator connected to said winding, stationary brushes engaging said commutator, a stator provided with a winding, conductors connecting the brushes with the stator windings, a field element comprising two independently rotatable inductors in inductive relation to said armature and stator, means for locking one of said inductors against rotation, means for varying the number of turns in series in the stator winding, and variable resistances in the conductors between the brushes and stator windings.

11. In an electric power transmission device, in combination with a driven armature, two independently rotatable field members inductively related to the armature, and means for locking either field member against rotation, the field members being so constructed that when the complementary field member is stationary the torque reaction between one field member and the armature is in one direction and that between the other field member and the armature is in the opposite direction.

[Claims 2, 3, 5, 6, 9, and 10 not printed in the Gazette.]

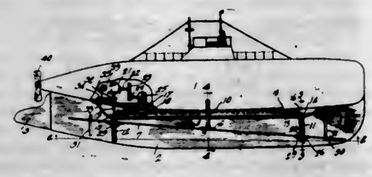
1,266,304. FOOT-GUARD. WILLIAM T. O'DONNELL, Great Falls, Mont. Filed Nov. 19, 1917. Serial No. 202,778. (Cl. 104—50.)



1. A device of the character described made of a single sheet of sheet metal and comprising a top, a vertical rear wall, rearwardly extending wings and bolts, which directly engage said rear wall and the rail of a railway track and act to thrust said wings toward said rail to thereby cause the free edge of the plate to be thrown upwardly into contact with the underside of the ball portion of an adjacent rail, said top being provided with a longitudinally extending groove for the passage of the flange of a car wheel.

2. A structure as recited in claim 1 wherein a filling block, that is triangular in cross section is disposed at the juncture of the top plate and a ball of the rail that is engaged by the bolts.

1,266,305. SUBMARINE. DOMENICO OTTAVIANI, Dayton, Ohio. Filed May 14, 1917. Serial No. 168,551. (Cl. 114—16.)



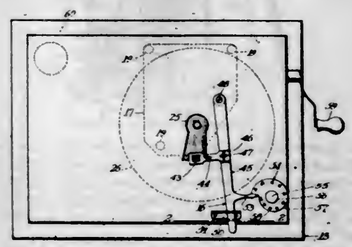
1. The combination with a vessel having a pendant keel, of oscillatory deflecting planes pivoted to the keel beneath the hull of the vessel, vertically disposed screw shafts mounted in the keel, cross arms screw threaded upon the shafts and engaged with the opposite ends of the oscillatory planes, and means for simultaneously driving said screw shafts to actuate said cross arms in opposite directions whereby said planes will be adjusted to different degrees of inclination.

2. The combination with a vessel having a pendant keel, of oscillatory deflector planes located upon opposite sides of the keel beneath the hull of the vessel and overhung thereby, rotary screw shafts mounted in the keel, means for simultaneously rotating the shafts, and cross arms actuated by the shafts and connected to said planes whereby the inclination of the planes is varied by the operation of said screw shafts.

4. The combination of a vessel having a pendant keel, parallel deflecting planes mounted for oscillatory movement upon opposite sides of said pendant keel and transverse tie members extending through openings in said pendant keel connecting said parallel planes one to the other for movement in unison.

[Claim 3 not printed in the Gazette.]

1,266,306. CENTRIFUGAL SPEED-REGULATOR FOR PHONOGRAPHS. ARCHIE E. PARNALL, Chicago, Ill., assignor to Frank W. Williams, Chicago, Ill. Filed Apr. 12, 1915. Serial No. 20,863. (Cl. 74—45.)

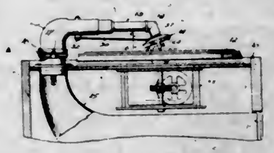


3. A phonograph comprising a movable speed controlling means accessible for manual operation and movable to a position to stop the phonograph, and an adjustable stop for said speed controlling means, said means having a projection thereon for engagement with said stop.

6. A phonograph comprising movable speed controlling means accessible for manual operation and movable to a position to stop the phonograph, and an adjustable stop for said speed controlling means, said stop comprising a flat member having a spiral edge for engagement with said speed controlling means, and a thumb piece for adjusting said stop.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,266,307. TALKING-MACHINE MECHANISM. ARCHIE E. PARNALL, Chicago, Ill., assignor to Frank W. Williams, Chicago, Ill. Filed Sept. 18, 1916. Serial No. 120,820. (Cl. 274—23.)

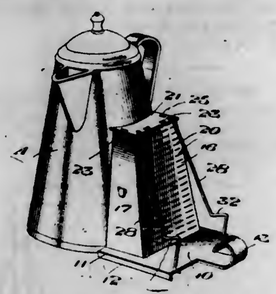


1. A talking machine comprising a tone arm mounted to swing about a vertical axis, a sound box mounted on said tone arm to swing about an axis, lying in a vertical plane through the axis of the tone arm from a position in which the needle will properly engage a laterally undulating groove record to a position in which it will properly engage a hill and dale groove record, said tone arm being extensible, and means whereby rotation of the sound box about its axis, will cause said tone arm to be extended.

2. A talking machine comprising a tone arm mounted to swing about a vertical axis, a sound box mounted on said tone arm to swing about an axis lying in a vertical plane through the axis of the tone arm from a position in which the needle will properly engage a laterally undulating groove record to a position in which it will properly

engage a hill and dale groove record, said tone arm being extensible, and means whereby rotation of the sound box about its axis will cause said tone arm to be extended, said means comprising a link pivotally connecting said tone arm and sound box.

1,266,308. BREAD-TOASTER. GEORGE C. PECK and HENRY B. SHIELDS, Schenectady, N. Y. Filed Apr. 13, 1917. Serial No. 161,810. (Cl. 53—5.)



1. A toaster adapted to fit against one side of a cooking utensil and over a single burner therewith, comprising a base, a hollow slitted body rising from the base open at its inner side and adapted to fit thereat against said utensil to collect heated air rising thereabout, and a toast rack arranged exteriorly of the body.

2. A toaster adapted to rest on a stove against a cooking utensil and over one side of a burner comprising a base provided with a hollow body with one side thereof substantially conforming to the wall of the cooking utensil and adapted to be fitted thereat against the utensil and over the single burner therewith.

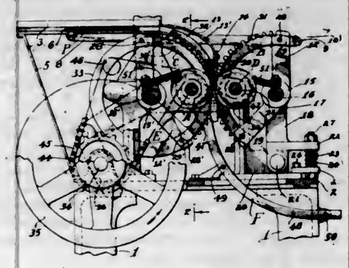
4. In a bread toaster adapted to be placed over a burner against one side of a cooking utensil, the combination of a base plate provided with a recess in its inner end, a body secured at its lower end to said base plate at the marginal edge of said recess therein, a top plate secured over the upper end of the body to close the same and provided with a recess in its rear edge, the toaster being adapted to be placed against a cooking utensil with the rear edges of the base and top plates receiving the adjacent wall of the utensil to close the open side of the body, and a bread support arranged in closely spaced relation from the opposite side of the body.

7. In a bread toaster, the combination of a base plate provided with downturned lateral edges forming reinforcing and supporting flanges, said base plate having its rear edge recessed, and provided at its forward edge with an outwardly extending upwardly rolled over tongue, a body plate bent substantially U-shaped and secured at one edge to the rear marginal edge portion of said base plate to provide a body open at its rear side, a top plate secured over the upper edge of said body plate to close the top of the body and provided with a rear concaved marginal edge, a wire bread support secured at its opposite ends to the base plate and to the top plate and arranged forwardly of the outer side of the body, the outer wall of said body plate being provided with openings therethrough directing heated gases from within the body to the bread on said wire support, and a baffle plate arranged within the body adapted to deflect the heated air rising through the body outwardly through said openings therein.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,266,309. MACHINE FOR INCISING PLUG-TOBACCO. JONATHAN PETERSON, Brooklyn, N. Y. Continuation of application Serial No. 130,822, filed Nov. 11, 1916. This application filed Sept. 28, 1917. Serial No. 193,689. (Cl. 131—14.)

1. In a machine for incising plug tobacco to provide a plug having a plurality of integrally united sections, the combination with a pair of rocking members having opposed convex clamping faces operative to clamp and release a plug therebetween, of cutting mechanism located adjacent said clamping members and constructed to incise the plug while such plug is clamped between the convex faces of said members.

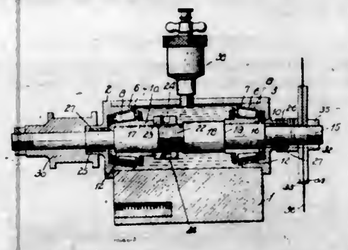


8. In a machine for incising plug tobacco, the combination with a pair of rocking, segmental clamping members geared together and adapted to clamp and release a plug therebetween, of gangs of rotary cutters located adjacent the clamping members and projecting through spaces in the latter and adapted to coöperate to cut incisions in opposite faces of the plug, and means for feeding plugs of tobacco to position between the clamping members to be gripped by the latter and operated upon by the cutters.

11. In a machine for incising plug tobacco, the combination with a yieldably mounted rocking segmental clamping member, a second rocking segmental clamping member cooperating with the first mentioned clamping member and adapted to clamp a plug of tobacco, a plurality of gangs of rotary cutters located adjacent the clamping members and adapted to incise opposite sides of the plug of tobacco held by the clamping members, and means for successively feeding the plugs to the clamping members.

[Claims 2 to 7, 9, 10, and 12 to 14 not printed in the Gazette.]

1,266,310. SUPPORT FOR LIGHT CUTTING-WHEELS. CARL A. PFANSTIEHL, Highland Park, Ill., assignor to Pfanstiehl Company, Inc., North Chicago, Ill., a Corporation of New York. Filed July 24, 1916. Serial No. 111,051. (Cl. 64—62.)



The combination with a rotary shaft, of a stationary three piece support therefor comprising a central tubular member and a pair of end members, each of said end members having a part abutting its end of the tubular member, an inwardly faced bearing cone secured in each of said end members, a pair of outwardly faced bearing cones secured on opposite ends of said rotary shaft, one of said cones having driving but sliding fit upon said shaft, a sleeve threaded upon the shaft between said cones and adapted to be forced against one of said cones to slide it upon the shaft, tapered rollers between the cups and cones, the structure being such that the shaft may be bodily removed for adjustment of the slidable cone thereon, and the whole replaced within the tubular support without altering the distance of adjustment of the bearing parts from one another other than such alteration as was made by the movement of the said slidable cone on the shaft.

1,266,311. FISH-BAIT. WILLIS E. PHINNEY, Coldwater, Mich. Filed May 17, 1917. Serial No. 169,278. (Cl. 43—30.)

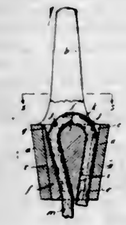


1. An artificial bait embodying a body having an inclined slot providing a resilient tongue, a diving plate fitted adjustably in said slot, and means carried by the body to engage the said tongue for clamping the plate between said tongue and opposite wall of the slot.

3. An artificial bait embodying a body, an adjustable diving plate carried by the body to be projected from the under surface thereof, and a fin projecting from the body along the edge of which said plate is projectable snugly.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,266,312. CABLE-CLAMP. WILLIAM W. POPE, Camas, Wash. Filed Aug. 7, 1916. Serial No. 113,675. (Cl. 24—126.)



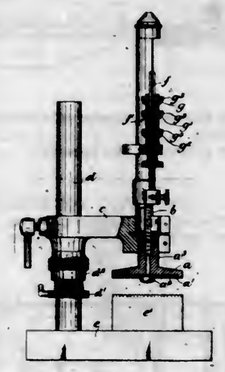
3. In a cable clamp, the combination of a tapering socket made with a longitudinal half-groove, a wedge made with a longitudinal bore and a peripheral longitudinal conforming half-groove, the inner end of the latter and of the bore being connected by an annular groove, one of said registering half-grooves being provided with a biting surface, and the related sides of the socket and wedge being made with engaging faces adapted to bring the half grooves of the socket into registration.

[Claims 1 and 2 not printed in the Gazette.]

1,266,313. INDICATOR FOR GAGING INSTRUMENTS. JOHN ALFRED PRESTWICH, Tottenham, London, England. Filed Aug. 26, 1914. Serial No. 858,617. (Cl. 33—147.)

1. An indicating instrument comprising a body, stationary and movable contact members provided on the body, a movable indicating medium influenced in its movement by the movable contact member, an adjustable supporting member mounted contiguous to the path of movement of the indicating medium, and independently adjustable pointers carried by the said supporting member and arranged for use in determining variations in position of the said indicating medium.

2. An indicating instrument comprising a body, a stationary contact member provided upon said body, a movable contact member mounted upon the body and being yieldably associated with the stationary member, a transparent indicating tube provided upon the body and having one end in communication with one side of the movable contact member, indicating liquid provided within the tube and adapted to have its level affected by movement of the movable contact member, a series of adjustable pointers mounted adjacent to the tube for coöperation with the indicating liquid to determine variations in the level of the latter, a rod for supporting said pointers, means for adjustably mounting said rod, sliding collars on said rod, one for each pointer, and means for adjustably sliding the said collars and pointers separately on said rod.



3. An indicating instrument comprising a body, a stationary contact member disposed on said body, an adjustable supporting member on said body, means for fixing the adjustable supporting member, and a liquid operated contact device for coacting with said contact member, said device including a container, said container being formed with an indicating tube of small bore, a fluid disposed in said container adapted to form a movable indicating medium, and a movable contact member adapted to influence the movement of the fluid in said container, said liquid operated contact device being as a whole threadedly connected to the adjustable supporting member and being adjustable longitudinally of the bore of the tube, on said adjustable supporting member, and independently of an adjustment of said supporting member relative to said body.

5. An indicating instrument comprising a body, a stationary contact member disposed on said body, a container mounted on said body, a diaphragm in said container, a contact member disposed on said diaphragm, a fluid disposed in said container adapted to form a movable indicating medium which is influenced in its movement by the movement of the contact member on the diaphragm, and nut and screw means for preliminarily adjusting the movable contact and container collectively in relation to the fixed contact member to set the instrument for predetermined measuring.

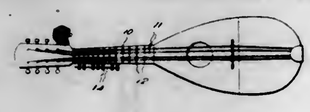
7. An indicating instrument comprising a body, a stationary contact member disposed on said body, an adjustable supporting member on said body, means for fixing the adjustable supporting member, a container mounted on said supporting member, said container being formed with an indicating tube of small bore, a fluid disposed in said container adapted to form a movable indicating medium, a movable contact member adapted to influence the movement of the fluid in said container, and independently adjustable pointers and scale carried by said supporting members and arranged for use in determining variations in position of the said indicating medium.

[Claims 4 and 6 not printed in the Gazette.]

1,266,314. STRINGED INSTRUMENT. WILLIAM JAMES QUEMORE, Camden, N. J. Filed Aug. 23, 1916. Serial No. 116,545. (Cl. 84—83.)

2. In a device of the character described; in combination a neck having strings thereon, a series of casings mounted on said neck at right angles thereto, slidable shanks in said casings, frpt fingers secured to the ends of said shanks and adapted to engage said strings, springs

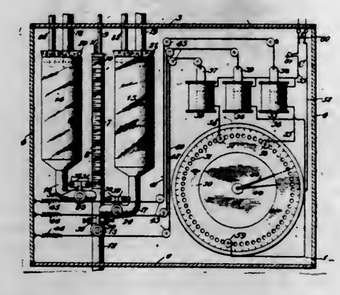
secured to said shanks to hold said fret fingers normally spaced from said strings, a series of keys hinged on said neck, and means connecting said shanks and said keys to



cause said fret fingers to engage said strings when said keys are depressed.

[Claim 1 not printed in the Gazette.]

1,266,315. AUTOMATIC CONTINUOUS LIQUID-TESTER. WALTER C. RADDANT, Santa Lucia, Cuba. Filed June 26, 1916. Serial No. 106,000. (Cl. 23—3.)



1. A liquid tester, including the combination of a liquid supply conduit, a mixing chamber, a plurality of reagent containers communicating with the mixing chamber, valves controlling such communication of the reagent containers with the mixing chamber, electro-magnets operatively connected with said valves, and time controlled mechanism interposed in the respective electrical circuits of said magnets for the purpose specified.

2. In a liquid testing device, the combination of a mixing tube, a pair of containers, means affording communication between said containers and said tube, controlling valves therefor, time controlled mechanism for actuating said valves, said time controlled mechanism being adjustable to vary the intervals of time between testing operations.

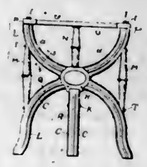
3. In a liquid testing device, the combination of a mixing tube, chemical reagent containers communicating therewith, controlling valves interposed between said containers and said tube, a plurality of electro-magnets operatively connected with said valves, and time controlled circuit closing means for energizing said electro-magnets at predetermined intervals for opening and closing said valves.

[Claim 4 not printed in the Gazette.]

1,266,316. PEDESTAL FOR CASKETS, TABLES, AND THE LIKE. JOSEPH A. RAYMOND, Chicago, Ill. Filed Feb. 23, 1917. Serial No. 150,475. (Cl. 45—117.)

1. A pedestal comprising a leg and support member consisting of duplicate parts formed up from a blank to obtain a body portion, walls integral with said body portion and flanges integral with said walls, and substantially parallel thereto, in combination with grooved strips, said duplicate parts secured together by said grooved strips positioned with said groove fitting on to said flanges, means to rotatably attach said leg member to said support member and means to latch said members in predetermined relative positions.

2. A pedestal comprising a leg and support member consisting of duplicate parts respectively formed up from a blank to obtain a body portion, walls integral with said body portion and flanges integral with said walls, and substantially parallel thereto, grooved strips positioned with said groove fitting on to said flanges and securing said duplicate parts together, and a latch member, in combination with a leg member, a pivot adapted to move longitudinally and arranged to attach said leg member to said leg and support member, and a spring adapted to yieldingly hold said pivot in a determined position with said leg member engaged with said latch member.



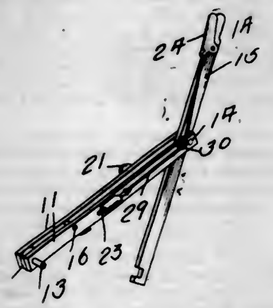
3. A pedestal comprising a leg and support member consisting of duplicate parts respectively formed up from a blank to obtain a body portion, walls integral with said body portion and flanges integral with said walls and substantially parallel thereto, grooved strips positioned on said flanges and securing said duplicate parts together, and a latch member, in combination with a leg member, means to attach said leg member to said leg and support member, said means arranged to permit relative longitudinal and rotatory movement of said members, and means to yieldingly hold said members in determined longitudinal relation, with said latch member in engagement to hold said members in a determined rotatory position.

5. A pedestal comprising a leg and support member consisting of duplicate parts respectively formed up from a blank to obtain a body portion, walls integral with said body portion and flanges integral with said walls and substantially parallel thereto, grooved strips positioned with the grooves thereof fitting on to the flanges and securing said duplicate parts together, and a latch member, in combination with additional members, said additional members, consisting of duplicate parts respectively formed up to obtain a body portion, walls integral with said body portion and flanges integral with said walls and substantially parallel thereto and grooved strips positioned with the grooves thereof fitting onto said flanges and securing said duplicate parts together, pivots, adapted to move longitudinally and arranged to attach said additional members, to said leg and support member, and springs adapted to yieldingly hold said pivots in determined positions with said additional members engaged with said latch member.

6. The process of making a pedestal which comprises the making of a blank, the forming up of said blank to obtain a member consisting of a body provided with walls having flanges thereon, of cutting a portion of said flanges therefrom to obtain a uniform depth thereto and of turning said flanges into planes substantially parallel with said walls, of making a sheet metal member having its sides turned into a plane parallel with the central portion thereof, with the edges of said sides in spaced relation to each other, and forcing said sheet metal member over the flanges of duplicates of said first named member, to join said members together, the making of additional blanks and forming side walls and flanges to said side walls and joining duplicates of said last named members by duplicates of said sheet metal members, of pivotally mounting said last named member to said first named member, to permit relative rotary and longitudinal movement of said members, and providing latching members engageable with said last named member when said members are in a determined position.

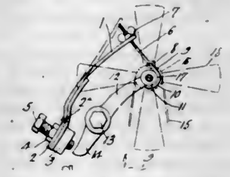
[Claim 4 not printed in the Gazette.]

1,266,317. LEVER MECHANISM FOR SULKY-PLOWS. JOHN F. REIMERS, Millard, Nebr. Filed Apr. 5, 1915. Serial No. 19,289. (Cl. 74—39.)



An operating lever for sulky plows, comprising a pair of spaced plates, a bar pivoted between the plates at an intermediate point of the former, a bolt extending between the plates, the said bar having a notch in one end thereof adapted to engage the bolt, a catch extending between the plates and having a cam face, the catch being in the path of movement of the bar so that upon the bar being swung into alinement with the plates, it will ride upon the cam face of the catch so as to move the same laterally and means for returning the catch to its initial position to lock the bar in alinement with the plates.

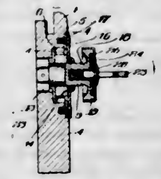
1,266,318. AUTOMOBILE-FAN-BELT TIGHTENER. WALTER M. REYNOLDS, Hattiesburg, Miss. Filed Aug. 31, 1917. Serial No. 189,194. (Cl. 64—5.)



1. A belt tightener embodying a leaf spring, a rod extending slidably therethrough, means carried by the rod for connection with a belt bracket, means upon the rod bearing against the spring for bringing it under tension, and means for supporting the spring.

[Claims 2 to 4 not printed in the Gazette.]

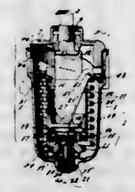
1,266,319. WINDING-KEY FOR PHOTOGRAPHIC-FILM CAMERAS. WILLIAM A. RIDDELL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 30, 1915. Serial No. 64,357. (Cl. 242—71.)



3. In a film winding key for cameras, the combination with a socket and a winding stem extending therethrough and provided with a cavity in its outer end face and with a diametrically extending channel forming handle attaching journals, of a yoke-shaped handle spanning the said outer end of the spindle and having flattened trunnions coöperating with the journals, a confining plate occupying the cavity in the spindle end and provided with ears engaging the flattened trunnions to hold the handle in a definite position, a cap also spanned by the handle and having openings to admit the trunnions and a single fastener extending axially into the spindle to secure the cap, plate and handle thereto.

[Claims 1 and 2 not printed in the Gazette.]

1,266,320. DOOR CLOSER AND CHECK. OSCAR C. RIXSON, New Rochelle, N. Y. Filed July 28, 1915. Serial No. 42,249. (Cl. 16—88.)



1. In a door closer and check, a casing, a spindle, a cylinder mounted for rotation therewith, a piston in said cylinder, resilient means for rotating said spindle and cylinder in one direction, and means for rotating said piston with said cylinder and for reciprocating it when said spindle is rotated.

2. In a door closer and check, a casing, a spindle, a cylinder mounted for rotation therewith, resilient means for rotating said spindle and cylinder in one direction, a piston in said cylinder, a cam track on said casing, and a member rotating with said spindle engaging said cam track for reciprocating said piston.

15. In a checking mechanism, a casing, a spindle in said casing, a cylinder in said casing parallel to said spindle, a piston in said cylinder, a member pivotally connected to said piston, and means for reciprocating said member upon rotation of said spindle.

17. In a door check, the combination of a casing, a cylinder therein and a piston in the cylinder, said cylinder and piston being non-rotatable with respect to each other, and means coöperating with the casing for reciprocating the piston upon the rotation thereof.

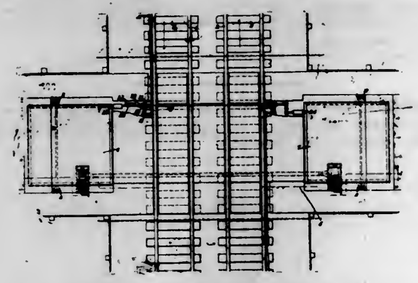
20. In a door closer and check, a casing, a spindle and cylinder mounted therein, a spring surrounding said cylinder, a clutch member secured to the upper portion of said spring, a pair of projections associated with said clutch member, a stop carried by said casing adapted to engage one of said projections in one position of said clutch member, a finger carried by said spindle adapted to engage the other of said projections, a second clutch member rotatably mounted in the lower end of said casing, said spring having its other end secured to said clutch member, two lugs on said clutch member, a stop on said casing adapted to engage with one of said lugs, and a projection carried by the cylinder adapted to engage with the other of said lugs whereby upon rotation of the spindle and cylinder in either direction said spring will be placed under tension.

[Claims 3 to 14, 16, 18, and 19 not printed in the Gazette.]

1,266,321. RAILWAY-GATE. HENRY RUINELLO, Jersey City, N. J. Filed June 14, 1917. Serial No. 174,646. (Cl. 269—6.)

2. A railway gate comprising a gate member, means engaging said gate member between the ends for pivotally supporting the same, means defining a pit, one end of said gate member extending into said pit, a weight connected to said last mentioned end, a sidewalk gate having a pivotal arm, a cable connecting said weight with said arm,

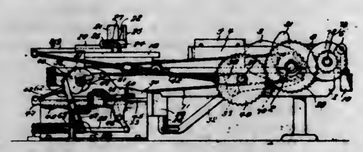
means for guiding said cable whereby when said gate member is moved to a vertical position said arm will be moved to a substantially horizontal position, a catch for holding said gate member normally in a substantially horizontal position, and means acting on said catch for releasing the same.



3. A railway gate comprising a pair of gate members adapted to normally lie flush on the road bed, on opposite sides of a railway, each of said gate members being provided with an extension at one end, a pit for each gate member for receiving said extension, a weight arranged on each of said extensions, means for pivotally supporting each of said gate members whereby when the gate members are released said weight will swing the gate members to a substantially vertical position, a cable connected to each of said gate members, a drum connected to said cables, a connecting cable secured to each of said drums, means adjacent each of said drums for rotating the same and winding the cables connected with said gate members, whereby when either of said last mentioned means is operated said drums will be rotated and both of said gate members will be moved against the action of said weights to a position substantially flush with the road-bed, and a catch for normally holding said gate members against movement.

[Claims 1 and 4 not printed in the Gazette.]

1,266,322. HORSESHOE-BLANK-FORMING MACHINE. GEORGE C. RUSSELL, Poughkeepsie, N. Y. Filed May 4, 1917. Serial No. 166,408. (Cl. 59—53.)



1. In a device of the character described, the combination with a forming means, of a receiving table, guides adapted to properly position a billet on said receiving table, a carrier adapted to receive a billet from said receiving table and to convey the same to a position for engagement by said forming means, a pusher plate adapted to engage a billet positioned on said receiving table by said guides and to move the same on to said carrier, and means for actuating said pusher plate, said carrier, and said forming means sequentially.

2. In a device of the character described, the combination with a receiving table, guides adapted to properly position the billet thereon, a vertically movable carrier, a horizontal pusher plate for pushing the billet from the table on to said carrier, and a horizontally movable forming means to which the carrier delivers the billet.

3. In a device of the character described, the combination with a receiving table, guides adapted to properly position the billet thereon, a carrier, a pusher plate for pushing the billet from the table on to said carrier, a billet rest for receiving the billet from the carrier, forming means receiving the billet from said rest, and means for actuating said parts.

4. In a device of the character described the combination with a receiving table, guides adapted to properly position the billet thereon, a carrier, a pusher plate for delivering the billet to the carrier from the table, a billet rest receiving the billet from the carrier, a pair of spaced rollers located in front of said billet rest, and a forming block for moving the billet from the rest and between the rollers.

5. In a device of the character described, the combination with a pair of rollers, of a forming block adapted to move therebetween, a carrier adapted to convey a billet to a position for engagement by said forming block and rollers, said forming block serving to move the billet out of the path of said carrier and to move the same beyond said rollers, a hopper into which the formed billets fall when moved beyond said rollers, delivering means at the bottom of said hopper for removing the formed billets therefrom one by one, a movable die block adapted to receive the formed billets delivered by said delivering means, a die adapted to flatten a formed billet on said die block, means for removing the flattened billet from the die block, and means for actuating said carrier, said forming block, said delivering means, said die, and said removing means sequentially.

1,266,323. FILM-PACK ADAPTER FOR CAMERAS. ALFRED A. RUTTAN and CHARLES E. HUTCHINGS, Rochester, N. Y., assignors to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 24, 1916. Serial No. 133,114. (Cl. 95—19.)



1. In a film pack adapter for cameras, the combination with a camera body provided with inturned spaced flanges at its rear forming a pocket, of an adapter carried in the pocket to be slidably withdrawn therefrom and comprising a two-part sheet metal shell, the rearward portion of which is composed of a plate having forwardly and thence outwardly turned flanges interlocking with those on the camera body.

2. In a film pack adapter for cameras, the combination with a camera body provided with inturned spaced flanges at its rear forming a pocket, of an adapter carried in the pocket to be slidably withdrawn therefrom and comprising two separable sheet metal parts, the rearmost of which parts is provided with outwardly turned flanges interlocking with those on the camera body.

3. In a film pack adapter for cameras, the combination with a camera body provided with inturned spaced flanges at its rear forming a pocket, of an adapter carried in the pocket to be slidably withdrawn therefrom and comprising two parts hinged together to form a containing shell for the film pack, the rearmost of said parts being provided with outwardly turned flanges interlocking with those on the camera body to hold the shell together and the adapter in place upon the camera body.

1,266,324. WASHER. WILLIAM F. SCHACHT, Huntington, Ind. Filed Apr. 24, 1915. Serial No. 23,611. (Cl. 137—4.)

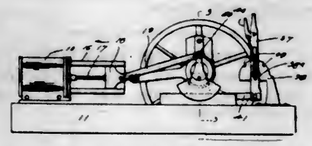
1. A rubber or composition washer having a metal reinforce embedded therein said reinforce consisting of a disk having a central hollow parti-globular raised boss forming a bushing for the fastening screw and provided with openings in its crown and side, substantially as described.

2. A rubber or composition washer having a pair of disk-like metal reinforce embedded therein, each reinforce having a boss projecting toward the adjacent outer end of the washer and adapted to form a bushing for the washer, substantially as described.



3. A metal reinforce for washers and the like consisting of a metal disk having a central hollow parti-globular raised boss provided with radial openings in its side and an axial opening, substantially as described.

1,266,325. ENGINE VALVE-GEAR. GEORGE H. SCHILLING and IGNATZ O. NEFF, Waterloo, Ill. Filed Sept. 7, 1917. Serial No. 190,177. (Cl. 121—97.)

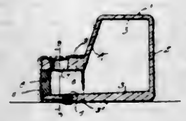


1. A valve gear for steam engines including a crank shaft, an eccentric secured thereto, a strap and arm associated with the eccentric, a guide pivotally supported upon the crank shaft, a valve operating block slidably mounted in the guide, confined between the latter and the eccentric and connected with the arm, and means for securing the guide in adjusted position.

5. A valve gear for steam engines including a crank shaft, an eccentric secured thereto, a strap and arm connected with the eccentric, a block pivotally connected with the arm, a circular lug formed on the block, a valve operating rod pivotally connected with the lug, a guide pivotally supported upon the crank shaft having a groove in one face, and a rib formed on the block slidably received in the groove in the guide.

[Claims 2 to 4 not printed in the Gazette.]

1,266,326. FOUNTAIN INK-BOTTLE. GEORGE SCHRODER, Berkeley, Cal. Filed Jan. 9, 1918. Serial No. 211,027. (Cl. 120—59.)

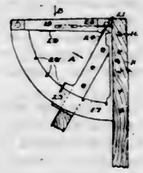


1. A fountain ink bottle comprising a substantially rectangular body having one side wall of increased thickness and inclined to form a support for the body when positioned upon its side, said body having an inclined top wall, a neck formed upon the top wall and side walls of the body and having openings in the side and end thereof, a cork for closing the end opening of the neck, and means adapted to be threaded upon the neck for closing the side opening therein.

[Claim 2 not printed in the Gazette.]

1,266,327. HINGE FOR SASHES. JULIUS J. SCHUBERT, St. Paul, Minn. Filed July 29, 1916. Serial No. 112,156. (Cl. 16—110.)

1. In window and frame construction the combination of a window and a frame, a pair of connecting hinges swinging said window to said frame comprising; a quadrant, a vertical extension at one end of said quadrant, a horizontal extension at the other end of said quadrant, a window member having two extensions therefrom parallel to the surface of said window, one of said members registering with notches in said quadrant, and the other of said members registering with the joint between said horizontal and said vertical extensions.



2. In window and frame construction the combination of a window and a frame, a pair of connecting hinges swinging said window to said frame comprising; a quadrant, a vertical extension at one end of said quadrant, a horizontal extension at the other end of said quadrant, a window member having two extensions therefrom parallel to the surface of said window, one of said members registering with notches in said quadrant, and the other of said members registering with the joint between said horizontal and said vertical extensions, and a spring for normally pressing said quadrant engaging extension firmly against said quadrant.

3. In window and frame construction the combination of a window frame and a window, a frame member mounted on the inner vertical portion of said frame, comprising a vertical strip, a quadrant extending from the lower end of said vertical strip outwardly and upwardly, a connecting strip between the upper end of said quadrant and the upper end of said vertical strip and extending in a plane parallel to and spaced from said quadrant and said vertical strip, a horizontal lip extending inwardly from the lower edge of said connecting strip, a corner registering lip carried by said window and a quadrant registering lip carried by said window.

1,266,328. DISK-HARROW ATTACHMENT. ANTHONY SCHULTE, Hartington, Nebr. Filed June 1, 1917. Serial No. 172,250. (Cl. 55—30.



1. In a disk harrow, the combination with the axle and the outer disk carried thereby, of an extension member attached to said axle, a spacing sleeve positioned over said extension member, a disk mounted on the outer end of said extension member, and means for securing said last named disk rigidly on the extension member and against said sleeve.

3. In a disk harrow, the combination with the squared axle and its outer reduced threaded end, and the outer disk carried by said axle of a lock washer positioned over the outer end of said squared axle against said outer disk, a non circular sleeve connected to said reduced threaded axle end, a non circular stud connected to the outer end of said non circular sleeve, a spacing member positioned over said non circular sleeve and noncircular stud, one end of said spacing member being provided with serrations adapted to engage said lock washer, an extra disk positioned over said noncircular stud, and means for retaining said disk in position on the noncircular stud.

[Claim 2 not printed in the Gazette.]

1,266,329. ELECTRO-OSMOTIC EXTRACTION OF WATER FROM ANIMAL, VEGETABLE, AND MINERAL SUBSTANCES. BOTHO SCHWERIN, Frankfort-on-the-Main, Germany, assignor to Gesellschaft für Elektro-Osmose M. B. H., Frankfort-on-the-Main, Germany, a Corporation. Filed Nov. 20, 1912, Serial No. 732,546. Renewed Oct. 24, 1917. Serial No. 198,259. (Cl. 204—1.)

1. The method herein described which consists in subjecting material in suspension to the action of an electric current while subject to preasure exerted by said material confined within a space the capacity of which remains constant, and maintaining the suspension free from disturbance.

2. The method herein described which consists in pressing material in suspension in a filter-chamber of constant volume, maintaining the suspension free from disturbance, causing a continuous electric current to pass through the mass confined in the chamber, and passing the liquid through filter-cloths and perforated electrodes fixed in the said chambers.

3. The method herein described which consists in pressing material in suspension in a filter-chamber of constant volume, maintaining the suspension free from disturbance, causing an electric current to pass through the mass confined in the chamber, allowing the liquid to flow off through filter-cloths and perforated electrodes fixed in the said chambers, and changing the direction of the electric current at intervals, for freeing the filtering devices.

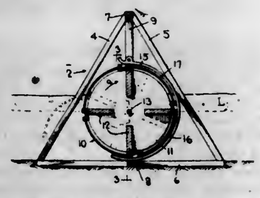
1,266,330. PROCESS FOR REMOVING LIQUID FROM STEATITE. BOTHO SCHWERIN, Frankfort-on-the-Main, Germany, assignor to Elektro-Osmose Aktiengesellschaft (Graf Schwerin Gesellschaft), Frankfort-on-the-Main, Germany, a Corporation. Filed Nov. 11, 1914, Serial No. 871,626. Renewed Oct. 24, 1917. Serial No. 198,260. (Cl. 204—1.)

1. In a process for removing water from steatite, finely subdividing the steatite in the presence of an electrolyte suitable for bringing the solid body into sol-condition and subjecting the steatite to the electro-osmotic treatment.

2. In a process for removing water from steatite, finely subdividing the steatite in the presence of an electrolyte suitable for bringing the solid body into sol-condition, and of a colloid body, and subjecting the steatite to the electro-osmotic treatment.

3. In a process for removing water from steatite subdividing the steatite in the presence of sodium silicate and subjecting the steatite to the electro-osmotic treatment.

1,266,331. FISH EXCLUDER OR GUARD. CONRAD SCHWINGER, Parker, S. D. Filed Apr. 16, 1917. Serial No. 162,407. (Cl. 61—5.)



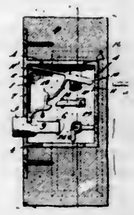
1. The combination of a supporting structure to fit transversely across a ditch to be guarded, a skeleton drum having an axle mounted to rotate in said structure and composed of solid circular end members, blades connecting said end members and extending from their peripheries inward, an arcuate reticulated vane hinged at one edge to each blade with its free edge lapping the next blade, semi-circular vane guide and closing devices carried by said structure in front of and in close proximity to said drum, being concentric therewith whereby the vanes at the front of the drum are held closed throughout half the circumference of the drum during the downward movement of the vanes on the forward turning of the drum, and which permit them to open after the drum passes the bottom of the ditch.

2. In a device of the class described, a skeleton drum adapted to be partially submerged in a stream, arcuate screens pivoted at one edge to the periphery thereof to open outwardly on the upward turning of the drum, means for holding said screens out of contact with the bottom of the stream, and means for rotating the drum against the current of the stream.

3. In a device of the class described, a skeleton drum, screens pivoted to the periphery thereof with their edges arranged in proximity when closed, and guides coöperating with the successive screens to close them and hold them closed during their descent, said guides being positioned to permit the screens to open upwardly and outwardly after passing the bottom of the stream.

4. In a device of the class described, a skeleton drum, arcuate screens pivoted at one edge to the periphery thereof, and semi-circular guides coöperable with the screens to successively swing the screens against the periphery of the drum during their descent.

1,266,332. SPRINGLESS DOOR-LOCK. JAMES A. SCROGGINS, Springfield, Mo., assignor of one-half to J. S. Losey, Springfield, Mo. Filed Sept. 5, 1917. Serial No. 189,877. (Cl. 70—51.)

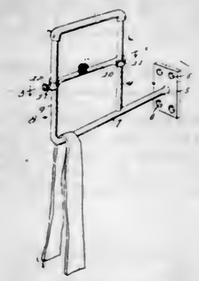


1. A door lock comprising a casing, a block consisting of a vertical and horizontal arm, means for pivoting the block to the casing at the junction of said arms, a web connecting the arms together, said web having a recess therein, a manually operated sliding member adapted to engage with said recess to hold the block in locking position, a bolt having a recess therein engaged by said vertical arm, and an operating means engaging with the horizontal arm.

2. The combination with the casing formed with the horizontal guideway, of the bolt block having the horizontal arm, the vertical arm, and the horizontally notched portion between the arms, and pivotally engaged with the casing at the junction of the arms, the keeper element mounted in said guideway for movement in and out of said notch, and the escutcheon plate having the handle, the vertically spaced openings above the handle, the thumb lever pivoted in one of said openings with one end in proximity to the handle and the other end engaged against said horizontal arm, and the release stud extending through the other opening and having the head in proximity to the handle and the shank engaged with said keeper element.

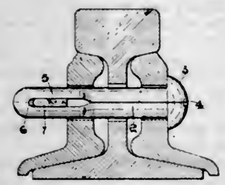
1,266,333. NECKTIE-HOLDER. GEORGE T. SHOLLEY, Lebanon, Pa. Filed July 30, 1917. Serial No. 183,581. (Cl. 211—17.)

A necktie holder comprising a base for attachment to a wall, an arm formed integral with and extending outwardly from the base, an open frame rising upwardly from the arm and formed integral therewith, the frame having upstanding side limbs, and a retaining bar provided with collar like ends, the latter loosely embracing the said side limbs of the frame so that the bar may be raised vertically to permit the removal of ties held in the bottom of the frame, the retaining bar being further provided with a handle secured to one of its collar like ends



outside the frame to permit the manual raising of the retaining bar.

1,266,334. KEY-BOLT. FREDERICK L. H. SIMS, Toronto, Ontario, Canada, assignor to The Diaphone Signal Company, Limited, Toronto, Canada. Filed Feb. 15, 1916. Serial No. 78,465. (Cl. 85—7.)



1. A substantially cylindrical bolt provided with a head and a stem, the portion of the stem remote from the head having a substantially flat sided slot formed longitudinally therein, said slotted portion being increased slightly in periphery to give a cross sectional area of metal therein substantially equal to that in the non-slotted portion of the stem.

3. A blank for a slotted key bolt comprising a half-round metal bar having its middle portion reduced in thickness and increased in width to maintain substantially the same cross section of metal in the portion of reduced thickness as in the other parts of the bar.

[Claims 2 and 4 not printed in the Gazette.]

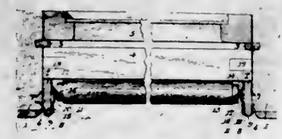
1,266,335. PROCESS OF COATING BY MEANS OF EMULSIONS. BUEL SMITH, Glens Falls, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 6, 1917. Serial No. 200,602. (Cl. 91—71.)

3. The process of separating the oil-phase from the water-phase of an emulsion which consists in bringing into contact with said emulsion a solid object heated to a temperature above 100° C.

[Claims 1 and 2 not printed in the Gazette.]

1,266,336. SHADE-ROLLER BRACKET. GEORGE HENRY SMITH, Bridgeport, Conn. Filed Dec. 12, 1917. Serial No. 206,769. (Cl. 156—24.)

1. A shade roller bracket adapted to frictionally embrace and be clamped to the bead of a window frame, formed of one piece of metal, comprising a flat base plate adapted to lie between the inner face of the bead and the window frame, a shade-roller-supporting head located at one side of said base plate and adapted to bear against the outer face of said bead, said head having means for engaging one of the spindles of a shade roller, and a spring neck connecting one side of said head with one side of said base plate, said neck holding the said head spaced from the said base plate a sufficient distance to allow the bracket to be slipped over said bead and retained thereon without the use of separate fastening devices.



2. A shade bracket adapted to frictionally embrace and be clamped to the bead of a window frame, formed of one piece of metal, comprising a flat base plate to lie between the inner face of the bead and the window frame, a spring neck extending from one side of the base plate and of materially less width than the latter, said neck being bent inwardly over and in spaced relation to the said base plate and curved to fit the edge of the bead, a head at the end of the neck and also spaced from the base plate and adapted to bear against the outer face of said bead, said head being larger than the neck but smaller than the base plate and provided with a bearing for a shade roller spindle, and spurs carried by the base plate and adapted to impinge in the face of the window frame, the entire length of the bracket not exceeding the width of the bead.

3. A shade bracket formed of one piece of metal, comprising a base plate adapted to be inserted between the inner bead and the face board of a window frame, a neck extending from one side of the base and returned upon itself and terminating in a head located in spaced relation to the base, said head being concaved on its face opposite the base and provided with a bearing for a shade roller spindle, a depression formed in the said neck adjacent to the head for strengthening the same, and spurs carried by the base and projecting outwardly from that face thereof remote from the enlarged head and adapted to impinge in the face of the window frame.

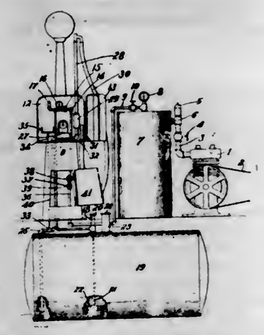
4. A shade bracket comprising a flat base plate having an integral spring neck extending from one side edge thereof and curved to lie in front of and in spaced relation to the base plate to embrace and clamp the inner bead of a window frame, said neck terminating in an enlarged head concaved in its inner face and provided with a bearing for its respective shade roller spindle, the said bead being clamped by the base plate, neck and the head, and retaining spurs provided on said bracket to maintain the latter in fixed position on the bead, the length of the bracket not exceeding the width of the bead.

5. In combination with a window casing, shade roller brackets each comprising a base inserted between the inner beads and the face boards of the casing, prongs carried by the said bases on their outer faces to engage the said face boards, bearing heads formed integrally with the bases in spaced relation thereto and adapted to lie against the inner opposed faces of the inner beads and to clamp the same in conjunction with the said bases, spring necks connecting the respective heads and bases and hugging the inner exposed edges of the beads, and bearings formed in the heads to receive their respective shade roller spindles, said heads having concavities to accommodate the ends of the spindles, and said beads forming the rear walls of said concavities whereby the said roller is mounted within the window frame between the said beads and is supported by the latter.

1,266,337. APPARATUS FOR SUPPLYING GASOLENE AND COMPRESSED AIR. HARRY F. SMOTHERS and EMANUEL E. NORQUIST, Kansas City, Mo. Filed Apr. 24, 1916. Serial No. 93,194. (Cl. 221—74.)

1. The combination with a compressed air tank and means for supplying the same with air under pressure, of a casing above and a gasolene tank below ground, a pipe leading from the air tank through the casing to the gasolene tank, a pipe running from the gasolene tank through the casing and terminating outside the same, a

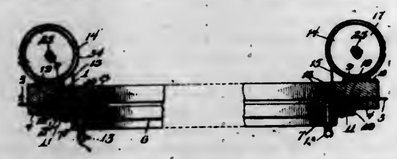
meter on said last-named pipe within the casing, a valve on said pipe, means within the casing for operating said valve, a hose for receiving gasolene from the pipe leading from the gasolene tank, and provided with a nozzle normally projecting into the casing, and a door normally controlling access to the casing and said valve operating means and when closed also preventing the removal of the nozzle from the casing.



2. The combination with a compressed air tank and means for supplying the same with air under pressure, of a casing above and a gasolene tank below ground, a pipe leading from the air tank through the casing to the gasolene tank, a pipe running from the gasolene tank to the casing and terminating outside the same, a meter and a filter on said last-named pipe within the casing, a valve on the same pipe below ground, means within the casing for operating the valve, a hose for receiving gasolene from the pipe leading from the gasolene tank, and provided with a nozzle normally projecting into the casing, and a door normally controlling access to the casing and said valve operating means and when closed also preventing the removal of the nozzle from the casing.

[Claims 3 to 5 not printed in the Gazette.]

1,266,338. BALLOON-VALVE. CHARLES FREDERICK SMYTH, New Haven, Conn., assignor to Connecticut Aircraft Company, New Haven, Conn., a Corporation of Connecticut. Filed May 15, 1917. Serial No. 168,764. (Cl. 244—3.)



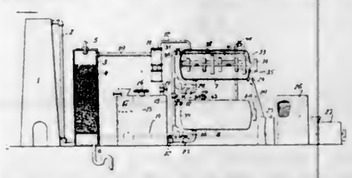
1. A balloon valve embodying a valve seat member, a valve member movable with relation thereto, and a series of valve closing devices operatively connected with the valve seat member and valve member at different points, and each including a spring actuated drum, a valve closing cable connected therewith, a rotary valve closing element for winding the drum actuating spring, and means for holding said element in adjusted position.

5. A balloon valve embodying a valve seat member, a valve member movable with relation thereto, and a plurality of valve closing devices arranged at different points about the valve, each including a rotary drum supported by one of said members, a cable connecting the same with the other member, a spring acting upon the drum to wind up the cable, a rotary element for winding up the spring to different degrees, and means for holding said rotary element in adjusted position.

8. A balloon valve embodying a valve seat member, a valve member movable with relation thereto, a series of valve closing devices, each including a drum and a casing therefor, cables connected with the drums, a spring within each casing and acting upon the drum, and means forming a component part of the casing for adjusting and regulating the tension of the spring from the exterior of said casing.

[Claims 2 to 4, 6, 7, and 9 not printed in the Gazette.]

1,266,339. PROCESS OF MAKING LIGHT PRECIPITATED CHALK. NOEL STATHAM, Hastings-upon-Hudson, N. Y., assignor to Industrial Chemical Company, New York, N. Y., a Corporation of New York. Filed July 25, 1917. Serial No. 182,599. (Cl. 23—13.)



1. The process of producing light precipitated chalk which comprises producing pure hydrated lime liquor having a density of between 25 and 35 degrees Twaddell, spraying such hydrated lime liquor through an atmosphere of gas rich in carbon-dioxid and under a pressure of about 60 to 80 pounds per square inch and in repeatedly projecting such lime liquor through such carbon-dioxid atmosphere to effect its conversion into finely divided chalk particles, filtering the converted liquor and drying the filtered chalk without substantial agitation and at temperatures between 110 and 120 degrees centigrade to promote its light condition.

6. The process of producing light precipitated chalk which comprises projecting hydrated lime liquor into contact with an atmosphere of gas containing carbon-dioxid and under a pressure of about 20 to 80 pounds per square inch, to effect its conversion into finely divided chalk particles, and filtering out and drying the produced chalk at temperatures above 100 degrees centigrade to promote its light condition.

7. The process of producing light precipitated chalk which comprises projecting hydrated lime liquor into contact with an atmosphere of gas containing carbon-dioxid and under super atmospheric pressure to effect its conversion into finely divided chalk particles, and filtering out and drying the produced chalk.

[Claims 2 to 5 not printed in the Gazette.]

1,266,340. EXPANSION-CONTROL DEVICE FOR ELASTIC VALVES. WILLIAM Y. STEWART, Denver, Colo. Filed Feb. 8, 1916. Serial No. 77,062. (Cl. 137—4.)

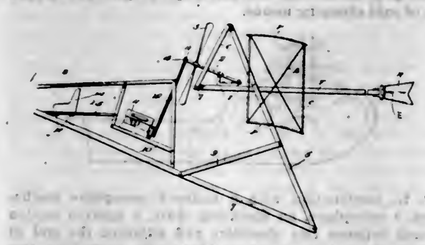


1. A cap for a Fuller-cock valve having corrugations in the walls thereof.

2. A cap for inclosing a portion of an elastic valve and preventing abnormal swelling thereof and having corrugations formed therein for permitting elastic action of the valve within the cap.

1,266,341. GRAVITY-STABILIZER FOR AEROPLANES. CHARLES E. STITZER, Denver, Colo. Filed Aug. 18, 1917. Serial No. 186,925. (Cl. 244—14.)

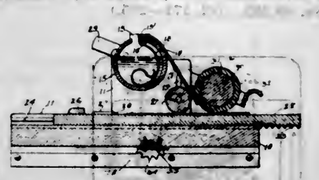
1. A gravity stabilizer for aeroplanes, including a frame having one end connected to the rudder support of the aeroplane and the remaining end arranged below and forward of the planes, said remaining end having the engine and operator's seat arranged thereon and positioned so as to have weight counter-balanced by the plane traction.



4. A gravity stabilizer for aeroplanes, including a substantially V-shaped frame having one extremity extending diagonally through and above said planes, said extremity being connected to the forward end of the rudder support of the aeroplane, the remaining extremity of the frame being arranged below and forward of said planes, the hull and motive means of the aeroplane being arranged upon the forward portion of the remaining extremity, and an operator's seat slidable longitudinally of the hull, said hull, motive means and operator's seat being so arranged as to have their combined weight counter-balanced by the plane traction.

[Claims 2 and 3 not printed in the Gazette.]

1,266,342. ENVELOP-SEALING MACHINE. JOHN STONE, Brooklyn, N. Y. Filed Sept. 21, 1917. Serial No. 192,576. (Cl. 120—6.)

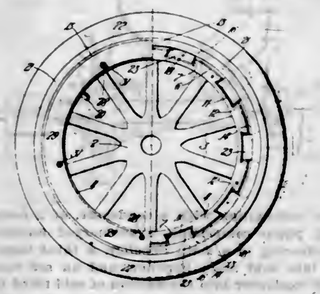


2. In a machine for sealing envelops, a structure comprising a stationary table, a sliding table adapted to be moved thereover, means hinged to the stationary table for raising the flap of an envelop when the sliding table is moved in a rearward direction, means for moistening the flap of the envelop, a roller co-acting with the sliding table to retain the body of the envelop in contact with the latter, means on the movable table for raising the roller when the table is moved to the forward extremity of its movement in order to release the body of the envelop and a sealing roller swingingly supported by the stationary table and co-acting with the moistening means and the sliding table to moisten the flap and seal the same to the body of the envelop.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,266,343. RESILIENT WHEEL. JOHN STUART, St. Kilda, Melbourne, Victoria, Australia. Filed Dec. 8, 1917. Serial No. 205,176. (Cl. 152—36.)

1. In a resilient wheel, the combination with a hub element including an inner rim, said inner rim having a plurality of radial cavities which are transversely tapered at their ends with the ends diverging inwardly with respect to the hub element, said cavities having their inner sides closed and their outer sides open; of a felly surrounding and spaced from the inner rim, said felly having cavities corresponding in arrangement to the first named cavities, the second named cavities being radially disposed and having their ends tapered and diverging outwardly with relation to the hub element, said second named cavities having both sides closed; a plurality of cushions having their opposite ends inclined inwardly from their opposite longitudinal edges, and adapted for insertion within the first and second named cavities; and means adapted for insertion through the open sides of the first named cavities to contact with said cushions and retain the same in place.



2. In a resilient wheel the combination of a hub element having an inner rim in which are a series of segmental cavities open on the outer side of the wheel and inclosed on the inner side thereof, a felly surrounding and spaced from the hub element said felly having cavities corresponding in arrangement to the cavities of the inner rim and having both sides closed, a series of segmental cushions accommodated by said cavities and extending between the inner rim and the felly, an inner circular side plate covering the space between the inner rim and the felly on one side of the wheel, an outer removable side plate covering said space on the outer side of the wheel and abutments protruding from said outer side plate and accommodated by the open side of the cavities in the inner rim.

6. In a resilient wheel the combination of a hub element having an inner rim in which are a series of segmental cavities, a felly surrounding and spaced from the hub element, said felly having cavities corresponding to the cavities of the inner rim, a series of circumferentially laminated cushions compressed into said cavities and extending between the inner rim and the felly, an inner circular side plate covering the space between the inner rim and the felly on one side of the wheel, an outer removable side plate covering said space on the outer side of the wheel, a metallic ring surrounding and attached to said inner rim, said metallic ring having narrow bridges opposite each of the cavities in the inner rim.

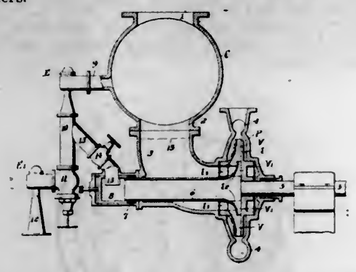
7. In a resilient wheel the combination of a hub element having an inner rim in which are a series of segmental cavities, a metallic ring surrounding and attached to said inner rim and having cavities corresponding with those in the inner rim, said cavities being open on the outer side of the wheel and closed on the inner side thereof by an inner wall, a felly surrounding the inner rim and spaced therefrom, said felly having cavities closed on both sides of the wheel, segmental cushions extending between the inner rim and the felly and accommodated by the cavities therein, an outer rim attached to the periphery of the felly, a tire carried by the outer rim, an inner side plate secured to the inner side of the inner rim and an outer side plate removably attached to the outer side of the wheel said outer side plate having abutments accommodated by the open side of the cavities of the inner rim and engaging the cushions therein.

[Claims 3 to 5 not printed in the Gazette.]

1,266,344. CONDENSATE AND AIR REMOVING APPARATUS. ROBERT SUCZEK, Philadelphia, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 30, 1916. Serial No. 139,985. (Cl. 230—14.)

4. The combination with a condenser, of pumping means for removing condensate comprising submerged auxiliary and main impellers, means for extracting air from said

condenser, and means for conducting the extracted air into said condensate between said auxiliary and main impellers.



8. The combination with a condenser, of a condensate-removing pump comprising a submerged auxiliary impeller delivering to a main impeller, a third impeller delivering into said main impeller, and an air connection from said condenser into the suction of said third impeller.

13. The combination with a condenser, of a centrifugal condensate-removing pump having an impeller, a condensate connection from said condenser to said impeller, another impeller whose suction inlet extends through and to the exterior of said condensate connection and an air connection from said condenser to the suction inlet of said other impeller.

[Claims 1 to 3, 5 to 7, 9 to 12, and 14 to 23 not printed in the Gazette.]

1,266,345. ANTISKID DEVICE FOR MOTOR-VEHICLES. LUTHER R. SWOPE, Hanover, Pa. Filed May 2, 1917. Serial No. 166,005. (Cl. 152—14.)

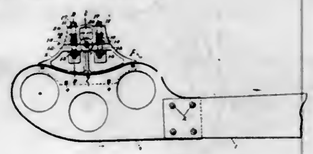


1. In a device of the class described, the combination with a rim-clamp and an S-shaped hook near one end thereof and a radial projection near the other end provided with an eye; of a chain adapted to extend transversely around the tire, a helical spring at one end of the chain extending through said eye and connected with the outer bend of said hook, and the other end of the chain being connected with the inner bend of said hook and adapted to pass between the shank of the hook and the clamp for the purpose set forth.

2. In a device of the class described, the combination with a rim-clamp and an S-shaped hook near one end thereof, and a radial projection near the other end provided with an eye, of a chain adapted to extend transversely around the tire and having one end connected with the outer bend of said hook, a resilient element arranged in the length of said chain, and a ring shaped link arranged at the other end of the chain for connection with the inner bend of said hook, and said link having a thin portion adapted to pass between the shank of the hook and the clamp for the purpose specified.

1,266,346. SEMAPHORE-BLADE GRIP. HERBERT B. TAYLOR, Westfield, N. J., assignor to Hall Switch & Signal Co., a Corporation of Maine. Filed Aug. 17, 1916. Serial No. 115,559. (Cl. 246—15.)

1. In combination with a railroad semaphore mechanism, a mechanism shaft, a semaphore, and a semaphore blade grip comprising two parts adapted to be clamped together to retain the semaphore upon said mechanism shaft, clamping means and means incorporated in the blade grip for forcing said parts apart upon the slackening of said clamping means.

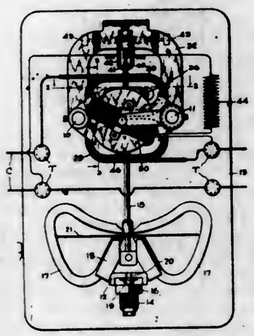


2. In combination with a railroad semaphore mechanism, a semaphore, an operating shaft, a squared section formed between two shoulders and adjacent the end of said shaft, and a semaphore blade grip comprising two parts adapted to be clamped together to retain the semaphore upon said shaft, clamping means and means incorporated in the blade grip for forcing said parts apart upon the slackening of said clamping means.

3. In combination with a railroad semaphore mechanism, a semaphore, an operating shaft deformed adjacent the end thereof to prevent rotation thereon, and a semaphore blade grip comprising two parts adapted to be clamped together to retain the semaphore upon said shaft, clamping means and means incorporated in the blade grip for forcing said parts apart upon the slackening of said clamping means.

[Claims 4 to 6 not printed in the Gazette.]

1,266,347. ELECTRIC METER. ELIHU THOMSON, Swampscott, Mass., assignor to General Electric Company, a Corporation of New York. Filed Apr. 6, 1916. Serial No. 89,285. (Cl. 171—265.)



1. A direct current electric motor meter comprising a rotatable shaft, two magnetic cores mounted on said shaft, a plurality of coils carried by each core, a commutator having a plurality of segments electrically connected to said coils so as to form two ring-wound armature windings in which the directions of current flow are relatively opposite, and a pair of oval field coils associated with each armature and arranged to produce magnetic fields of relatively opposite polarities.

5. A direct current electric motor meter comprising a rotatable shaft, two magnetic cores mounted on said shaft, a plurality of coils carried by each core, a commutator having a plurality of segments electrically connected to said coils so as to form two ring-wound armature windings in which the directions of current flow are relatively opposite, field coils associated with each armature winding and arranged to produce magnetic fields of relatively opposite polarities, and a magnetic member positioned near said armature windings and adapted to equalize the effects on the two armature windings of local magnetic disturbances.

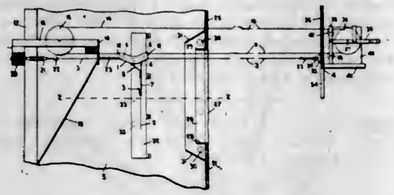
6. An electric motor meter comprising a rotatable shaft, two armatures mounted on said shaft, field coils associated with said armatures, a magnetic member positioned near said armatures and adapted to equalize the effects on the two armatures of local magnetic disturbances, and an initial energy coil mounted on said magnetic member.

9. A direct current electric motor meter comprising a rotatable shaft, two armature windings carried by said shaft and arranged so that the direction of current flow in one is relatively opposite to that in the other, field coils associated with each armature winding and arranged to produce magnetic fields of relatively opposite polarities, a magnetic member positioned in the path of the flux of such local magnetic disturbances as might affect one or the other of said armature windings and adapted to equalize the effects of such flux on said two armature windings, and an initial energy coil mounted on said magnetic member and adapted to produce a magnetic flux to which both of said armature windings are subjected.

13. A direct current electric motor meter comprising a rotatable shaft, two magnetic cores mounted on said shaft, a plurality of coils carried by each core, a commutator having a plurality of segments electrically connected to said coils so as to form two ring-wound armature windings in which the directions of current flow are relatively opposite, field coils associated with each armature winding and arranged to produce magnetic fields of relatively opposite polarities, a circular magnetic member operatively positioned near said armature windings for equalizing the effects on the two armature windings of local magnetic disturbances, and an initial energy coil mounted on said magnetic member, said magnetic member being adjustable about its center as an axis and also about a second axis.

[Claims 2 to 4, 7, 8, 10 to 12, and 14 not printed in the Gazette.]

1,266,348. TARGET APPARATUS. WILLIAM I. THOMPSON, Stoneham, Mass. Filed Mar. 12, 1917. Serial No. 154,080. (Cl. 124—15.)



1. In a target apparatus the combination of a firing station, a target station, a carrier adapted to have a target secured thereto and to carry the same between stations, an electric motor actuable upon the closing of a circuit to cause the carrier to travel from one station to another, and means operable automatically as the carrier nears a station to break the electric circuit and to change the circuit connections so that the carrier may alternately come to rest at a station and upon subsequent closing of the changed circuit may return the target to the other.

7. In a target apparatus the combination of a firing station, a target station, a carrier adapted to have a target secured thereto and to carry the same between stations, an electric motor actuable upon the closing of a circuit to cause the carrier to travel from one station to another, a plurality of switches in said circuit, plungers for actuating said switches, yieldable means for holding said plungers in tensioned elevated position, a movable cross-head for controlling the movement of said plungers, a reciprocable member automatically operable in timed relation to the travel of the carrier to depress or permit the elevation of said cross-head whereby as the carrier nears a station the circuit is automatically broken and the connections automatically changed by each movement of the cross-head.

[Claims 2 to 6 not printed in the Gazette.]

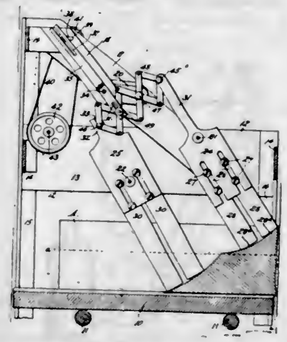
1,266,349. SPRING AND METHOD OF MANUFACTURING THE SAME. EDGAR WILLIAM TIMMIS, London, England. Filed Oct. 25, 1917. Serial No. 198,513. (Cl. 29—173.)



1. The method of making a coiled or helical spring consisting in axially twisting a number of bars, rods or tubes to produce a spiral arrangement of their fibers, then twisting said bars, rods or tubes together, welding the parts together into a homogeneous whole and coiling the same into the form of a spring.

2. A coiled spring composed of a compound bar, comprising a number or bundle of axially twisted smaller bars, rods, or tubes, twisted together and welded into a homogeneous whole.

1,266,350. STONE-SAWING MACHINE. GIUSEPPE L. TIMPANO, Northfield, Vt. Filed Dec. 11, 1916. Serial No. 136,260. (Cl. 125—18.)



4. A stone sawing machine comprising a pair of cutters adapted to the be vibrated in the same vertical plane and operated at different elevations, a lazy tongs connected at its ends to said cutters, said lazy tongs being pivoted at a point unequally distant from the ends on a fixed support to cause one of said cutters to swing at greater speed and through a larger arc than the other, and means for operating said lazy tongs to swing said cutters simultaneously in opposite directions.

[Claims 1 to 3 not printed in the Gazette.]

1,266,351. GREASE-CUP. ALFRED EUGENE TOOMEY, Edmore, N. D. Filed Feb. 20, 1918. Serial No. 218,283. (Cl. 184—92.)

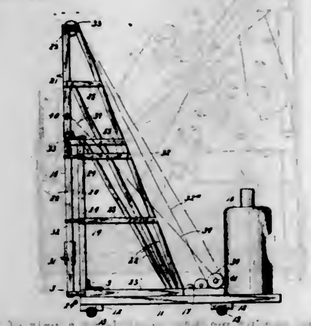
1. A grease cup comprising inner and outer sections of cylindrical form, the outer section having its outer end open and having a marginal outwardly extending flange at its open end, the inner section having its outer end closed and having at the said end an outwardly extending marginal flange provided with an underlying portion engaging beneath the flange of the outer section to rotatably connect the sections, said sections having side openings adapted to register when the sections are brought into a predetermined position with respect to each other to permit the cup to be filled, and means within the cup for expressing the contents thereof, said means compris-

ing a plunger, a rod at the axis of the cup and rotatably connected with the closed end of the inner section and having threaded engagement with the plunger.



2. A grease cup comprising inner and outer sections of cylindrical form, the outer section having its outer end open and having a marginal outwardly extending flange at the said open end, the inner section having its outer end closed and having at the said end an outwardly extending marginal flange provided with an underlying portion engaging beneath the flange of the outer section to rotatably connect the sections, said sections having side openings adapted to register when the sections are brought into a predetermined position with respect to each other to permit the cup to be filled.

1,266,352. PILE-DRIVER. John Torjesen, West New York, N. J. Filed Jan. 25, 1918. Serial No. 213,769. (Cl. 61—38.)



3. A pile driver comprising a base, a framework on the base, a vertically disposed horizontally swinging guide frame on said framework, a pile hammer operable in said guide frame, and removable locking pins holding said guide frame against horizontal swinging movement.

4. A pile driver comprising a base, a framework on the base, guide members mounted to swing on the base, and normally adapted to lie in the vertical plane of the framework, said guide members being movable horizontally to one side or the other of their normal position, said guide members being at all times vertically disposed, and means for locking said guide members against any horizontal swinging movement.

[Claims 1 and 2 not printed in the Gazette.]

1,266,353. FILM-FIRE EXTINGUISHER. Clyde A. Trantham, Kansas City, Mo. Filed June 6, 1917. Serial No. 173,193. (Cl. 88—17.)

2. In combination with a film container, a chamber adapted to hold fire extinguishing chemicals, a perforated partition between the film container and said chamber, and a fusible member to normally close said perforations.

3. In combination with a film container, a chamber adapted to hold fire extinguishing chemicals, and a fusible member normally closing communication between said chamber and the film container, substantially as described.



3. In combination with a film container, a chamber adapted to hold fire extinguishing chemicals, a perforated partition between the film container and said chamber, a fusible member to normally close said perforations, and a retaining device adapted to secure said fusible member in place and having perforations in line with the perforations in the partition.

4. In combination with a film container, a chamber adapted to hold fire extinguishing chemicals, and provided with an opening through which it may be supplied with such chemicals, a cap for closing said opening and provided with an air port, a valve to normally close said air port, and a fusible member between the chamber and the film container, which normally holds said valve in closed position.

1,266,354. VEGETABLE GLUE OR ADHESIVE. Raymond Welch Tunnell, Philadelphia, Pa. Filed Nov. 9, 1917. Serial No. 201,118. (Cl. 87—17.)

1. An adhesive formed of hydrolyzed starch and a zinc chlorid.

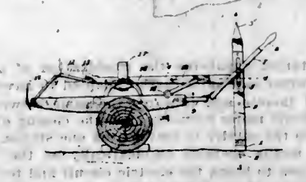
2. An adhesive formed of hydrolyzed starch, a zinc chlorid and an excess of caustic.

3. An adhesive formed of a mixture of starch, water, caustic, and zinc chlorid, there being an excess of caustic in the mixture.

4. The process of making adhesive from starch which consists in mixing starch, water and caustic to form a viscid mass, and adding a zinc chlorid to said viscid mass.

5. The process of making adhesive from starch compounds, which consists in treating the hydrolyzed starch or its derivative with a zinc chlorid.

1,266,355. WOOD-SAWING MACHINE. Theodore Urbanski, Holland, Ohio. Filed July 19, 1916. Serial No. 110,108. (Cl. 143—64.)



1. In a wood sawing machine, a standard, an arm, means for adjusting the arm vertically on the standard while holding the same in a horizontal plane, a lever having its pivotal point vertically adjustable on said standard, said arm and lever being adjustable independently of one another, and a saw operatively connected to said arm and lever.

3. In a sawing machine, an arm adapted to overlie a tree to be sawed, a pair of dogs pivoted at one end and adapted to engage a tree, a rod fixed to one of the dogs and extending toward the other, a second rod slidable through one of said dogs and extending toward the other, said rods overlapping at their inner ends, a coil spring encircling the overlapping portions, the rods being extended laterally at their inner ends to engage said spring, the slidably mounted rod being provided on its outer end with teeth and a pawl carried by one of the dogs to engage the teeth.

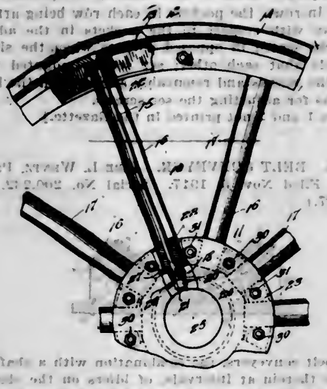
[Claims 2 and 4 not printed in the Gazette.]

1,266,356. SHIP'S LIGHT. Thomas Utley, West Derby, Liverpool, England. Filed Mar. 20, 1918. Serial No. 223,607. (Cl. 240—41.)



A ship's light comprising a frame, an annular glass holder having a beveled outer face, hinge lugs rigid with and extending from one side of said glass holder and pivoted on the frame, said glass holder having spaced radial webs for strengthening the holder, and retaining lugs rigid with and extending from the glass holder.

1,266,357. VEHICLE-WHEEL. Charles B. Van Horn, Philadelphia, Pa. Filed May 19, 1916. Serial No. 98,584. (Cl. 21—69.)



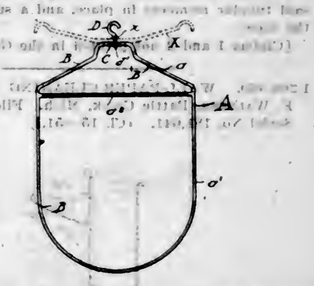
1. In a vehicle wheel a hub body comprising an inner spoke ring, spokes radiating therefrom, side plates having edges fitting around said spokes and edges abutting against each other, projecting annular ribs on said side plates forming a seat for the ring, and annular inwardly projecting ribs on said side plates bearing against the peripheries of the spokes at their inner ends.

2. In a vehicle wheel, the combination of a rim, an outer spoke ring seated therein, a hub comprising oppositely located side plates having concentric ribs on their inner faces, an inner spoke ring held between said ribs, and spokes connecting said outer and inner spoke rings and each comprising a tubular compression member, and a tension member extending centrally and longitudinally through said compression member and having a positive connection at its outer and inner ends respectively with the outer and inner spoke rings.

3. In a vehicle wheel, the combination of a rim, an outer spoke ring seated therein, a hub comprising oppositely located side plates having concentric ribs on their inner faces, an inner spoke ring held between said ribs, and spokes connecting said outer and inner spoke rings and each comprising a tubular compression member, a tension member extending centrally and longitudinally through said compression member and having a positive connection at its outer and inner ends respectively with the outer and inner spoke rings, the inner end portions of the compression members being clamped between a plurality of said ribs on the hub plates.

4. In a vehicle wheel, the combination of a rim, an outer spoke ring seated therein, a hub comprising oppositely located side plates having concentric ribs on their inner faces, an inner spoke ring held between said ribs, and spokes connecting said outer and inner spoke rings and each comprising a tubular compression member, a tension member extending centrally and longitudinally through said compression member and having a positive connection at its outer and inner ends respectively with the outer and inner spoke rings, the inner end portions of the compression members being clamped between a plurality of said ribs on the hub plates, and tubular inserts surrounding said tension members and located within the outer and inner end portions of the compression members.

1,266,358. GARMENT-SUPPORTING FORM AND PRESSER FOR WARDROBE-TRUNKS. Federico Videgaray, Mexico, Mexico. Filed Dec. 27, 1915. Serial No. 68,634. (Cl. 211—13.)



1. A device of the class described embodying a garment carrying member formed from wire rod, the ends of which are overlapped in a substantially half-lap, laterally stepped joint, a suspending member embodying a stem passing through alined apertures in said overlapped ends, said suspending member serving to lock the ends of the wire rod together and simultaneously form a support for said garment carrying member, while allowing of pivotal movement of the suspending means.

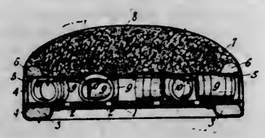
2. A device of the class described embodying a garment supporting member formed from wire rod, the ends of which are overlapped in a substantially half-lap, laterally stepped joint, a suspending member provided with a stem passing through alined apertures in said overlapped ends, and means on said stem for locking the ends of the wire rod together, while allowing of pivotal movement of the suspending means.

3. A device of the class described embodying a garment supporting member formed from wire rod, a garment distending member integral therewith and depending therefrom, and also formed from wire rod, and a suspending member for pivotally supporting the whole, the ends of the wire rod, from which the supporting member is formed, being overlapped in a substantially half-lap, laterally stepped joint and locked together by the suspending member.

4. A garment support and presser for wardrobe trunks embodying, in its entirety, a rigid, integral frame formed from a metallic strip, the upper portion of which frame is shaped to support a garment and the lower portion of

which serves to distend the same, the ends of the metallic strip being brought together in an over-lap, laterally stepped joint, in combination with a suspending member having a stem secured for rotation in alined apertures in the parts of the joint at the ends of the strip, for binding said ends together to form the rigid frame and simultaneously securing the suspending member thereto.

1,266,359. CUSHION. ALBERT E. VINING, Springfield, Mass. Filed Oct. 20, 1917. Serial No. 197,527. (Cl. 155—25.)

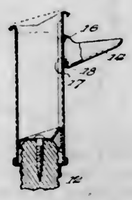


3. A cushion comprising a base having perforations, a rib below the base extending around the base, flexible side walls, a stay wire located at the top of the side walls extending around the cushion, tubular elastic rubber-like springs mounted on the base, stay cords extending from the springs to each other and to the stay wire, a cover over the springs, suitable stuffing above the cover, and an outer cover, substantially as shown.

4. A cushion comprising a suitable base, a multiplicity of short tubular sections of elastic rubber-like material mounted on the base, disposed adjacent each other, lying in various directions, suitable stay cords arranged to hold said tubular members in place, and a suitable cover over the same.

[Claims 1 and 2 not printed in the Gazette.]

1,266,360. WALL-PAPER-CLEANING DEVICE. JOHN F. WALTERS, Battle Creek, Mich. Filed July 19, 1917. Serial No. 181,641. (Cl. 15—51.)

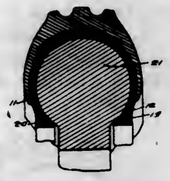


1. A device of the class described including a cleaner holding receptacle having an open top, said receptacle having its rear wall higher than the front wall and the upper edges of the end walls inclined, means connected with the receptacle whereby the same is adapted to be moved across a ceiling or the like, and a hinged cover adapted to be used as a shaving receiving trough when the device is in operation.

2. A device of the class described including a cleaner holding receptacle having an open top, said receptacle having its rear wall higher than the front wall, means connected with the receptacle whereby the same is adapted to be moved across a ceiling or the like, and a shaving receiving trough disposed adjacent the upper edge of the rear wall.

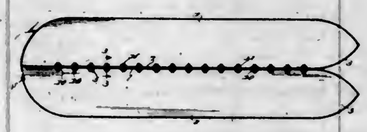
3. A device of the class described including a cleaner holding receptacle having an open top, said receptacle having its rear wall higher than the front wall, means connected with the receptacle whereby the same is adapted to be moved across the ceiling or the like, a hinged cover adapted to be used as a shaving receiving trough when the device is in operation, and coöperating locking means carried by the rear wall of the receptacle adapted to engage the cover to hold the same in position to receive the shavings.

1,266,361. TIRE. HERBERT N. WAYNE, Los Angeles, Cal. Filed Dec. 19, 1916. Serial No. 137,894. (Cl. 152—13.)



A tire casing, comprising a carcass formed with an inner lining constructed of rubber and diagonally arranged fabric cords composed of alternate strands of cotton and asbestos and forming a sheet, said fabric cords being embedded within rubber, the sides of said sheet being folded upon the central portion thereof so that the cords of said sides lie diagonally across the cords of said central portion, said folded sides forming a breaker strip, and a rubber tread vulcanized to said carcass.

1,266,362. DETACHABLE DUPLEX VESSEL. FRANK R. WELLS, Springfield, Ohio. Filed May 31, 1917. Serial No. 171,977. (Cl. 114—77.)



3. A device of the character described including a pair of complemental vessels, hexagonal shaped pockets formed on the adjacent sides of the vessels, the pockets being arranged in rows, the pockets in each row being arranged alternately with respect to the pockets in the adjacent row, blocks seated in opposed pockets when the sides of the vessels abut each other, set screws mounted in the sides of the vessels and removably anchored in the blocks, and means for adjusting the set screws.

[Claims 1 and 2 not printed in the Gazette.]

1,266,363. BELT CONVEYER. JERD L. WENTZ, Passaic, N. J. Filed Nov. 5, 1917. Serial No. 200,232. (Cl. 193—27.)



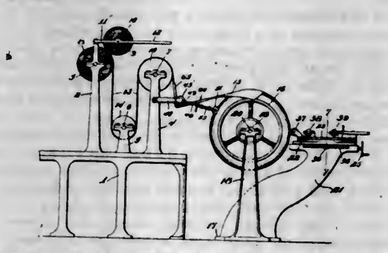
1. In belt conveyers, the combination with a shaft having bends therein at intervals, of idlers on the shaft between the bends thereof, an integral bracket of yielding material for supporting said shaft, a support to which an intermediate part of said bracket is attached, and means for supporting the opposite ends of the bracket in elevated position, whereby portions of the bracket between its middle part and its ends are unsupported.

[Claims 2 and 3 not printed in the Gazette.]

1,266,364. TIRE-BUILDING MACHINE. MARION B. WHEELER, New York, N. Y. Filed June 2, 1917. Serial No. 172,442. (Cl. 154—10.)

1. In a tire building machine, the combination of a rotary core, fabric supply rolls, and universally movable fabric guiding means between the core and rolls.

2. In a tire building machine, the combination of a rotary core, fabric feeding rolls, and a vertically and laterally movable channeled guiding element between the core and rolls.



11. In a tire building machine, the combination of a rotary core, fabric feeding rolls, a flexibly supported channeled guide composed of longitudinally divided sections arranged between the core and rolls, said guide sections being adjustable to vary the width of the guide for different widths of fabric, and means for guiding said guide with relation to the surface of the core.

20. In a tire building machine, the combination of a rotary core, fabric supplying rolls, vertically movable frame arms, a guide for the fabric composed of laterally adjustable sections, guide arms jointed to the frame arms for vertical and lateral movements, guide rollers carried by the guide arms and running in contact with the surface of the core, means for adjusting the guide arms and sections of the guide to vary the width of the guide and distance between the guide rollers, and a bending roller extending transversely of the guide and mounted upon the frame arms for movement in a direction transversely of the guide.

27. In a tire building machine, the combination of a forming core, fabric supplying rolls, a vertically movable frame, a rotatable and laterally shifting bending roll carried by said frame, a fabric guide composed of angularly related parts arranged for coöperation with said roll and disposed in the line of feed of the fabric between the supply rolls and core, arms universally joined to the vertically movable frame on opposite sides of the guide, and rollers carried by said arms and engaging the sides of the surface of the core for adjusting the arms and guide to conform to variations in the conformation of the surface of the core.

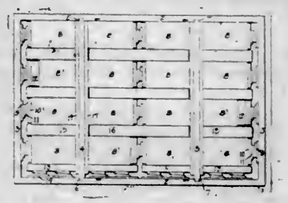
[Claims 3 to 10, 12 to 19, and 21 to 26 not printed in the Gazette.]

1,266,365. KEY-RING. CYRUS A. WHITTAKER, Freeburg, Ill. Filed Apr. 11, 1917. Serial No. 161,260. (Cl. 59—97.)



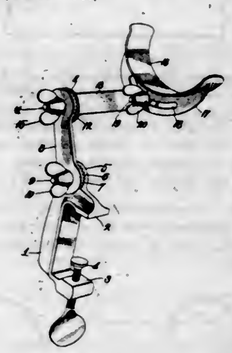
A key ring comprising a substantially U-shaped member having a socket formed in one free end, said free end being formed with an opening extending transversely through it into communication with the socket, a leaf spring attached to one side of said free end and provided with an inturned end adapted to project through said opening into the socket, a key chain having one end attached to the other free end of said member, and an eye pin attached to the other end of said key chain and provided transversely of its end with a notch adapted to receive the inturned end of the spring when the pin is inserted in the socket.

1,266,366. PRINTER'S CHASE. HALSEY W. WILSON, Minneapolis, Minn. Filed May 4, 1910. Serial No. 559,383. (Cl. 101—394.)



Means for laying out and locking-up type-page forms for printing comprising a book-chase consisting of a frame having parallel sides and parallel end members, and stiff bars rigidly tying one side of the frame to the opposite side and dividing the space embraced within the four outside members of the chase into divisions separated from each other by the cross bars so disposed that the heads of the type-pages will lie next to the cross bar separating one division from the other and permit the insertion of locking means at the feet of the type-pages, with some of the locking means inserted between the frame and feet of the type-pages and others between the adjacent feet of type-pages placed end to end, and additional locking means between the sides of the type-pages and side of the frame, to press the heads of two type-pages each toward the other and also press the several type-pages from one side of the frame toward the opposite side.

1,266,367. ADJUSTABLE SUPPORT OR REST. IRA H. WILSON, Fredonia, Kans. Filed May 8, 1915. Serial No. 26,722. (Cl. 45—50.)

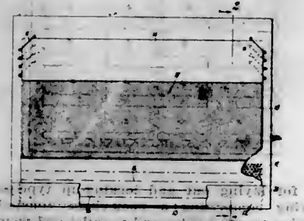


In a device of the character described, a clamping bracket for engagement with a cooling board, an arm pivotally adjustable on said bracket, an arm pivotally adjustable on the free end of the first-named arm, and a one-piece U-shaped rest provided with a vertically-depending rib fitting sidewise against the last-named arm, and provided with a slot substantially paralleling the curvature of the rest, a bolt extending through said slot and the said arm abutting said rib, and a clamping nut engaging said bolt.

1,266,368. BANK-CHECK PROTECTOR. WALTER W. WINTON, Scranton, Pa. Filed Oct. 20, 1917. Serial No. 197,624. (Cl. 11—13.)

1. A protector as characterized comprising a transfer sheet having prearranged severing sections disposed adjacent the lower edge of said sheet to be eliminated from said sheet for altering the operating position of said sheet; a folder constructed of relatively hard material having

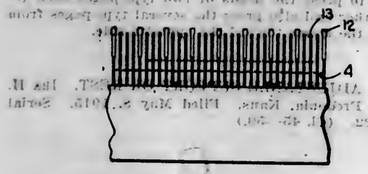
formed at one edge thereof a pocket for holding said transfer sheet, said folder having adjacent the corners of the opposite edge of said folder a series of inclined slits adapted to receive the upper corners of said transfer sheet



when the lower edge thereof rests in said pocket; and a coloring medium disposed on said sheet for imprinting on the back of a device superposed thereon for being imprinted thereupon.

[Claims 2 and 3 not printed in the Gazette.]

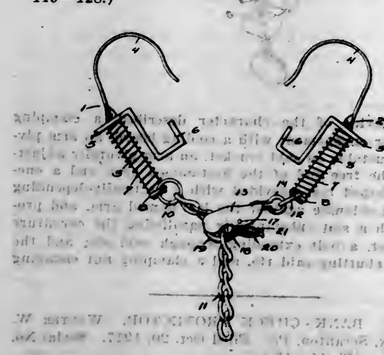
1,266,369. WARPER LEASING-INDICATING MEANS. FRED WOOD, Taunton, Mass., assignor to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Dec. 10, 1917. Serial No. 206,399. (Cl. 28—30.)



1. In a warper the combination of the leasing comb dents, and a set of warp end group indicators removably attachable to the said dents, whereby when the said indicators are attached to selected dents they indicate the division of the sheet of warps passing through the comb into groups of desired numbers of ends.

[Claim 2 not printed in the Gazette.]

1,266,370. COW-SHACKLE. GUY E. WYANT, Springfield, Ohio. Filed Oct. 4, 1917. Serial No. 194,729. (Cl. 119—128.)



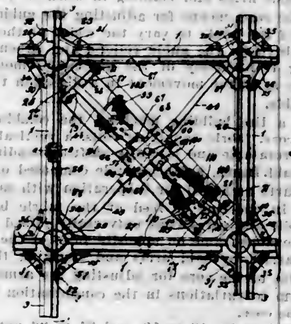
1. A cow shackle including a pair of clip portions each of which consists of two hook members slidably connected together and means to resiliently move one of said hook members toward the other so that the clip portions can be fitted to and will hold upon the hind legs of an animal, and means by which said clip portions are connected together.

2. A cow shackle including a pair of clip portions each of which consists of a large hook having a shank extending therefrom with a clamping member mounted slidably upon the shank and provided with a small hook facing toward the large hook, springs mounted around the shanks to resiliently force the small hooks toward the large hooks of the clips portions, and means connected with the shanks by which the clip portions may be drawn together.

3. A cow shackle including a pair of clip portions each of which consist of a large hook having a shank extending therefrom with a clamping member mounted slidably upon the shank and provided with a small hook facing toward the large hook, springs mounted around the shanks to resiliently force the small hook toward the large hook of the clip portions, a lock connected with the shank of one of said clip portions, and a chain connected at one of its ends with the shank of the remaining clip portion and adapted to have its free end passed through the lock to connect the two clip portions together.

[Claim 4 not printed in the Gazette.]

1,266,371. MOVABLE RAIL-CROSSING. HARVEY J. YAGER, Seattle, Wash. Filed Oct. 8, 1915. Serial No. 54,840. (Cl. 104—117.)



1. A device of the class described including a bearing plate provided with projecting lugs or flanges arranged in pairs, rails having their webs arranged between the members of the pairs of lugs or flanges, said rails being secured to the bearing plate, a connecting plate arranged beneath the bearing plate and secured to the same and the rails and a rotary frog member mounted on the bearing plate and adapted to coöperate with the rails to form a continuous tread and groove or flange way.

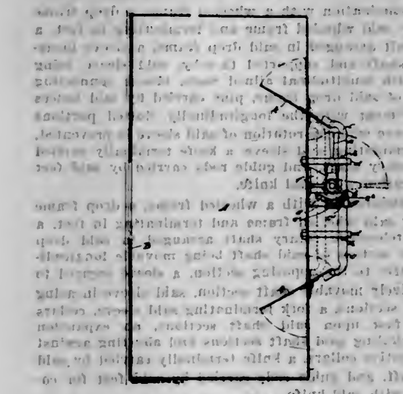
2. A device of the class described including bearing plates designed to be located at the four corners of a railroad crossing, intersecting rails connecting the bearing plates, connecting plates located beneath the bearing plates and secured to the same and the rails and longitudinal tie plates or bars extending beneath the rails and having overlapped terminal portions secured together and to the rails and rotary frog members mounted on the bearing plates and coöperating with the rails.

12. A device of the class described including rotary frog members designed to be arranged at the corners of a railroad crossing, a vertical pivot, oscillatory arms carried by the pivot and operatively connected with the frog members for rotating the same, upper and lower bearing plates receiving the said pivot and open supports secured to the upper bearing plate and receiving two of the said arms.

18. A device of the class described including an oscillatory arm, a rotary frog member operatively connected with and actuated by the arm, latch members for locking the oscillatory arm in each of its positions, and electro-magnets arranged to withdraw the latch members from their engaging position.

[Claims 3 to 11, 13 to 17, and 19 to 24 not printed in the Gazette.]

1,266,372. LIQUID-FUEL FURNACE. HAROLD EDGAR YARROW, Glasgow, Scotland. Filed Aug. 1, 1916. Serial No. 112,611. (Cl. 158—1.)



1. An apparatus of the class described, comprising an air box for application to the wall of an oil-burning furnace and containing a device for spraying oil into the furnace, a plurality of air doors controlling the admission of air to the air box, the said doors being pivoted to open automatically under the action of the external air pressure and to shut under the action of a back draft in the furnace, a cock for shutting off the supply of oil fuel to the spraying device, a hand lever adapted to open and close the cock, and means operated by the said lever to simultaneously close all the air doors of the air box when the said cock is shut.

[Claims 2 to 5 not printed in the Gazette.]

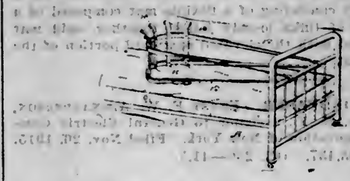
1,266,373. APPARATUS FOR TREATING AND FORMING WEIGHTED OR LOADED SHEET FABRICS. DANIEL YOUNG, Brooklyn, N. Y., assignor of fifty-one one-hundredths to Harry E. Mittenthal and Aubrey Mittenthal, New York, N. Y. Filed July 17, 1917. Serial No. 180,987. (Cl. 91—13.)



1. In a device of the class described, the combination with a fabric impregnating, loading, or coacting machine, in the passage through which the sheet or strip of fabric to be treated is taken from a feed-roll, passed through the machine, and is taken up upon a take-up or finish-roll; of means for removably revolubly supporting the feed and finish-rolls adjacent to one another at the feed end of the treating-machine; a combined feed and finish-roll shifting and weighing-device adapted to be brought into and out of connection with such feed and finish-rolls, by which such feed and finish-rolls may be removed from and reinserted in the treating-machine and the increase in weight of the fabric being treated on each passage through the machine may be determined by the difference in weight indicated on the weighing scale during the process of the roll shifting.

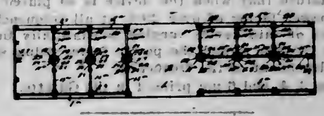
[Claims 2 to 6 not printed in the Gazette.]

1,266,374. BACK-REST. ELLEN ZIEGLER, Gregory, S. D. Filed Mar. 1, 1916. Serial No. 81,469. (Cl. 5—41.)



A back rest for bed use comprising a pair of spaced parallel flexible members provided on their ends with buckles, a plurality of spaced slats secured at their ends upon one of said members and secured intermediate their ends upon the other of said members, the upper ends of said slats being curved outwardly, the device being disposable upon a bed with said slats in a vertical position and said flexible members arranged horizontally, and a pair of vertically disposed straps slidably engaged about a portion of a bed and having their ends engaged by said buckles, pressure of a reclining body against the curved ends of said slats causing said straps to slide whereby said slats may incline to the same angle as the body.

1,266,375. STOCK-CAR. CHARLES D. ADAMS, Jacksonville, Fla. Filed June 28, 1917. Serial No. 177,446. (Cl. 119—11.)



4. In a stock car having a series of transversely disposed partitions secured within said car and comprising a series of posts, gates hingedly mounted on said posts and means mounted on the sides and ends of the car and the posts for engaging the free ends of the gates when said gates are extended transversely or longitudinally of the car.

[Claims 1 to 3 not printed in the Gazette.]

1,266,376. POTATO-DIGGER. FRANK F. ALEXANDER and LOUIS W. BRUUN, International Falls, Minn. Filed June 6, 1917. Serial No. 173,251. (Cl. 55—54.)



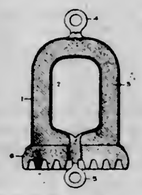
1. In a potato digger, a digging member consisting of an inclined plate having lengthwise disposed teeth extending forwardly and rearwardly thereof, in combination with a flexible mat connected with the rearward part of the digging member.

2. In a potato digger, the combination with suitable carrying means, of a digging member consisting of an inclined plate having lengthwise disposed teeth extending

forwardly and rearwardly thereof, some of the teeth being provided with upturned lugs at their rearward ends, a corrugated bar having upturned portions extending above and beyond the teeth having upturned lugs, said lugs lying in the path of said bar, and a mat composed of a plurality of connected metallic links, said mat being connected with the corrugated bar.

3. In a potato digger, the combination with a digging element supported in an inclined position and comprising a plate and a series of teeth connected therewith, of a cleaning device consisting of a flexible mat composed of a large number of links loosely joined together, said mat being connected with the elevated rearward portion of the digging element.

1,266,377. CONDENSER. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 26, 1915. Serial No. 63,437. (Cl. 250—41.)



1. A condenser having a dielectric composed in part at least of asbestos.

2. A condenser having a dielectric of asbestos.

5. Protective means for an electrical distribution system comprising a device having two conducting surfaces separated by a dielectric and adapted to be placed in shunt between conductors of the system, the dielectric being of such a nature that when the device is so placed it will have a power factor of over 20% at all frequencies, the impedance of said device varying substantially inversely with the frequency, and the power factor being substantially independent of the frequency.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,266,378. BEET-TOPPING MACHINE. KARL ALF JOAKIM ANDERSEN, Salem, Utah, assignor to Thomas A. Mulkern, Salt Lake City, Utah. Filed Mar. 8, 1917. Serial No. 153,443. (Cl. 55—107.)



1. In combination with a wheeled frame, a drop frame carried by said wheeled frame and terminating in feet, a rotary shaft arranged in said drop frame, a sleeve incasing said shaft and supported thereby, a fork terminating said sleeve, a knife terminally carried by said rotary shaft, and guide rods carried by said feet for coöperation with said knife.

2. In combination with a wheeled frame, a drop frame carried by said wheeled frame and terminating in feet, a rotary shaft arranged in said drop frame, a sleeve incasing said shaft and supported thereby, a fork terminating said sleeve, guide rolls carried by said fork, guide rods carried by said feet and bearing upon said rolls, a knife terminally carried by said rotary shaft above said guide rods, and a scraper for said knife.

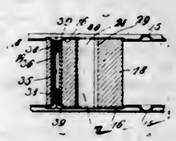
3. In combination with a wheeled frame, a drop frame carried by said wheeled frame and terminating in feet, a sectional telescopic rotary shaft arranged in said drop frame, a sleeve incasing said shaft and movable longitudinally thereover, a fork terminating said sleeve, guides connecting said feet and fork, a knife terminally carried by said rotary shaft above said guides, and a scraper for said knife.

5. In combination with a wheeled frame, a drop frame carried by said wheeled frame and terminating in feet, a rotary shaft arranged in said drop frame, a sleeve incasing said shaft and supported thereby, said sleeve being formed with longitudinal alined slots, braces connecting the sides of said drop frame, pins carried by said braces for engagement with the longitudinally slotted portions of said sleeve whereby rotation of said sleeve is prevented, a fork terminating said sleeve, a knife terminally carried by said rotary shaft, and guide rods carried by said feet for coöperation with said knife.

6. In combination with a wheeled frame, a drop frame carried by said wheeled frame and terminating in feet, a sectional telescopic rotary shaft arranged in said drop frame, one section of said shaft being movable longitudinally relative to the opposing section, a sleeve secured to said relatively movable shaft section, said sleeve incasing said shaft sections, a fork terminating said sleeve, collars arranged fast upon said shaft sections, an expansion spring encircling said shaft sections and abutting against their respective collars, a knife terminally carried by said rotary shaft, and guide rods carried by said feet for coöperation with said knife.

[Claim 4 not printed in the Gazette.]

1,266,379. MOVING-PICTURE-FILM REEL. RUDOLPH M. ANDERSON, New York, N. Y. Filed Mar. 23, 1917. Serial No. 157,049. (Cl. 242—77.)



1. In a reel, the combination with a pair of circular disks, a central annular raised seat formed in said disks, having a plurality of perforate arcuate depressions therein, of a solid core receivable in said seats, said core having a plurality of longitudinal passages therethrough, bolts having rigid heads formed at each end engageable with the perforate arcuate depressions in said disk seats, said rods passing through the passages in said core, and means combined with said arcuate depressions for maintaining said bolts against displacement.

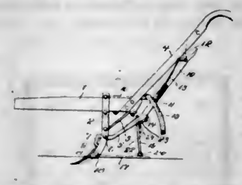
3. A reel comprising a pair of circular disks, a spacing core therebetween, a plurality of metallic tubes, screw-threaded interiorly at their ends, inserted in said core, said tubes being of lesser length than the core, and countersunk screws insertible through said disks engageable with said tubes, the heads of said screws being substantially level with the surface of said disks and operable from either side of the reel.

5. A reel comprising a pair of disks, a soft core centered between said disks, a plurality of uniformly spaced keyways in said core, a corresponding number of bolts passing through said disks and screw-threaded into said cores, and means for engaging said bolts beyond one of said disks.

[Claims 2 and 4 not printed in the Gazette.]

1,266,380. PLOW-POINT FASTENER. JOHN S. ANDRESS, Jr., Sneads Island, Fla. Filed Sept. 25, 1917. Serial No. 193,085. (Cl. 97—26.)

1. A plow point fastener comprising a lever arranged to be pivoted to a plow standard and having a downwardly extending clamping arm at its front end to bear against the front side of a plow point and thereby hold the point between the standard and said clamping arm, said clamping arm being provided with a rearwardly extending lug to enter the opening of the plow point, and means to secure the lever in adjusted position.



2. In combination with a plow stock including a beam and a standard, a lever pivotally mounted and extending forwardly through the standard, said lever having a downwardly extending clamping arm at its front end to clamp the plow point between the standard and said arm and a rearwardly extending lug at the lower end of said arm to enter the opening of the plow point, and a segment attached to the plow beam and against which the lever operates, the lever being provided with a dog to engage said segment to lock the lever in adjusted position.

[Claim 3 not printed in the Gazette.]

1,266,381. SELF-LUBRICATING BEARING. LEIGH S. BACHE, Middlesex borough, N. J., assignor to Bound Brook Oil-Less Bearing Company, a Corporation of New Jersey. Filed Apr. 13, 1916. Serial No. 90,899. (Cl. 64—24.)



6. A bearing bushing having circumferentially spaced lubricant-containing grooves partially encircling the bushing and extending through the wall thereof from its inner to its outer surface, and a series of perforations interposed between adjacent grooves and containing lubricant, said perforations extending through the wall of the bushing from the outer to the inner surface thereof.

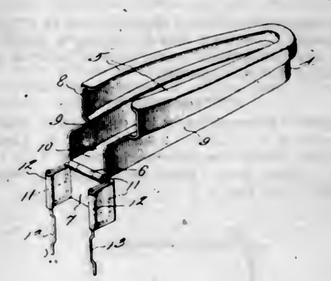
7. The hereindescribed method of making a self-lubricating bearing bushing which comprises forming a sleeve with grooves extending partially through the wall thereof, then forcing lubricant into said grooves, and finally removing material from the bushing to uncover said grooves, whereby the latter will extend entirely through the wall of the bushing.

[Claims 1 to 5 and 8 not printed in the Gazette.]

1,266,382. TOOTH-BRUSH CASE. HUGH A. BAILEY and GLENN M. BAILEY, Davenport, Iowa. Filed Dec. 1, 1917. Serial No. 204,890. (Cl. 206—151.)

1. A protective casing for the brush heads of tooth brushes comprising a member having an open top and one of its ends open, said top having an inturned flange, a plate hingedly secured to the lower wall at the open end of the casing, and flanges on the edges of the plate designed to frictionally engage with the sides of the casing to hold the plate closed on the casing.

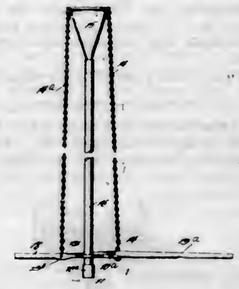
3. In combination with a tooth brush having depressions on the sides of its head, of a protective casing for the head of the said brush including a member having one of its ends open and having an open top, said top having an inturned continuous flange, the sides of the top below the said flange having a continuous groove, the groove portion of the sides terminating inward of the open end



of the casing, a closure plate for the open end hinged to the bottom of the casing and having its sides flanged to frictionally engage with the sides of the casing, and spring hooks projecting from the sides of the said plate and designed to engage in the referred to notches in the brush head.

[Claim 2 not printed in the Gazette.]

1,266,383. DOSER. WILLIAM H. BAKER, Cherokee, Okla. Filed Sept. 11, 1917. Serial No. 190,779. (Cl. 128—27.)

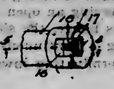


1. In a device of the character specified, a jaw spreader member to be inserted within the mouth of an animal, a lower-jaw clamping member movably connected therewith, a flexible tubular member to receive medicine and carried by said jaw spreader member, and flexible means connecting said tubular member with the jaw spreader and jaw clamping members.

2. In a device of the character specified, a jaw spreader member comprising a handle an enlarged intermediate portion having a central opening and an extension having an eye therein, a jaw clamping member pivotally connected with the jaw spreader member and having a handle and a curved jaw gripping arm adapted to act in conjunction with the enlargement of the jaw spreader member to complete the gripping action, a flexible tubing slidably held in the central opening of the jaw spreader member, a funnel means at one end of the tubing for filling same with a medicine, and means at its opposite end to prevent its withdrawal from the mouth portion of the jaw spreader, and flexible means connecting the upper portion of the tubing with the jaw spreader member.

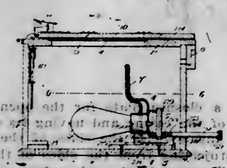
[Claim 3 not printed in the Gazette.]

1,266,384. ROTARY SPRINKLER. WYNDHAM E. BARKER, Fortuna, Cal. Filed June 26, 1917. Serial No. 177,016. (Cl. 137—37.)



The combination with a sprinkler arm of a closed end cap having an opening therein forming a nozzle oblique to its longitudinal axis, and a slotted, inverted U-shape plate fixed over said opening.

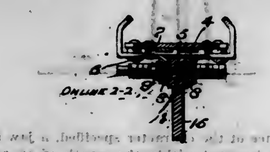
1,266,385. PHOTOGRAPHIC-PRINTING MACHINE. FREDERICK W. BARNES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 27, 1915. Serial No. 58,277. (Cl. 240—1.)



1. In a photographic printing machine, the combination with a light chamber having a printing aperture, of a lamp in the chamber, an adjustable support therefor comprising two carriages movable at right angles to each other on the wall of the chamber opposite the aperture in lateral directions relatively to the latter, the lamp being directly mounted on one carriage and the latter on the other carriage, and a common operating member controlling both carriages and accessible from the exterior of the chamber.

[Claims 2 and 3 not printed in the Gazette.]

1,266,386. COMBINED ROLLER AND ICE SKATE. CHARLES R. BARR, Philadelphia, Pa. Filed Mar. 30, 1917. Serial No. 158,489. (Cl. 46—50.)

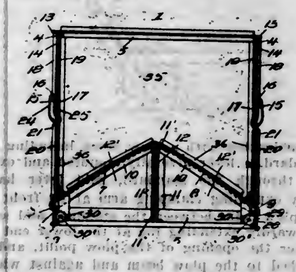


1. A convertible skate of the character described, comprising a base plate, a spring clip carried at each end of said base plate and comprising a body portion having depending side members, said body portion being of reduced thickness to provide for the resiliency of said side members, a tread having keys to seat between said members, and fastening devices passing through said keys and side members to draw said members into frictional engagement with said keys.

[Claim 2 not printed in the Gazette.]

1,266,387. RAILWAY-CAR. JOHN W. BASKERVILLE, Bayonne, N. J. Filed June 12, 1917. Serial No. 174,370. (Cl. 105—186.)

1. A self-dumping car including channeled side beams, upright end walls, pivotally mounted side doors having perforated flanges at their lower ends, sloping bottom walls provided at their outer edges with angularly bent portions providing inwardly extending flanges resting upon the upper flange of the channeled beams, said walls, flanges and channel flanges being provided with perforations to coincide with the first-named perforated flanges when the doors are closed, end latches upon the end walls to engage the end portions of the doors, and intermediate bolts upon the doors movable through the perforated flanges thereof and into engagement with the perforations in the sloping walls and side beams.



2. A self-dumping car including a side wall formed of a sill beam, an upper longitudinal bar, an intermediate longitudinal bar, uprights between said bars, sheet metal plates inserted between the bars and uprights and secured thereto and forming a closed wall above the longitudinal horizontal center of the car side, doors pivotally suspended from the lower bar and provided with angle metal uprights, bolts carried by said uprights to engage the sill, and bolts carried by the sill to engage and lock the doors.

3. A car having a side wall including a sill, a wall proper provided with openings, and pivoted doors for closing said openings, locking bolts slidably engaging the flanges of the sill to engage and lock the doors in closed position, said bolts being provided with gear teeth, a longitudinally extending shaft, gears upon said shaft to engage the gear teeth of the bars, and an operating device attached to the shaft.

1,266,388. DYNAMO-ELECTRIC MACHINE. SVEN R. BERGMAN, Nahant, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 13, 1916. Serial No. 97,426. (Cl. 171—228.)

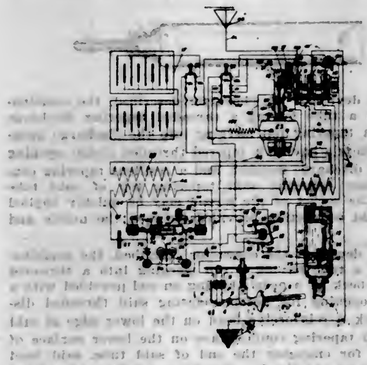


1. A direct current dynamo-electric machine comprising a field magnet having a plurality of distributed slots on its inner periphery, a distributed exciting winding and a distributed compensating winding carried in said slots, said exciting winding and said compensating winding each being composed of substantially uniform coils interleaved so that the two windings form mechanically a single two-layer lap winding, and a concentrated exciting winding associated with said field magnet and adapted to coöperate with said distributed exciting winding to produce the exciting field of said machine.

7. A direct current dynamo-electric machine having a field magnet comprising a magnetic frame, a plurality of magnetic pole pieces secured to said frame, each of said pole pieces having a plurality of distributed slots on its inner periphery, and commutating poles of magnetic material positioned between and spaced from said pole pieces and secured to said frame, the space between each end of each pole piece and the adjacent commutating pole forming a double slot coöperating with the slots of said pole pieces to form substantially uniformly distributed slots over the entire inner periphery of the field magnet.

[Claims 2 to 6 not printed in the Gazette.]

1,266,389. AUTOMATIC WIRELESS APPARATUS FOR PREVENTING COLLISIONS. HARRY D. BETZ, Kansas City, Mo. Filed Dec. 20, 1913. Serial No. 807,905. (Cl. 250—2.)



2. The combination with a throttle valve having a fulcrum lever, of a main battery circuit including a magnet, a pivotally mounted armature for said magnet having a fulcrum seat for the throttle valve lever, and a wireless receiving apparatus for breaking the main battery circuit whereby said magnet is deenergized to release its armature, for the purpose set forth.

11. The combination with means for influencing travel of a primary motor, of a main battery circuit including a magnet for controlling said means and including a secondary motor and its governor, a magnet and brushes included in the circuit, a flasher operable by the motor, means under control of the magnet for disconnecting the flasher from said motor, a shunt circuit including a resistance coil adapted for maintaining the battery circuit closed when the main circuit through the brushes is broken, and means for breaking the circuit through the brushes and making the circuit through the resistance coil.

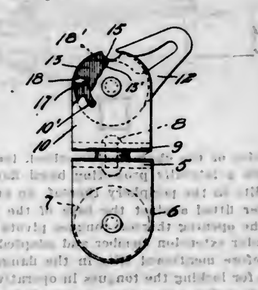
21. The combination with means for influencing the travel of a power driven vehicle or vessel, of a main electrical supply circuit; a second circuit including a magnet and an armature; a third circuit including a magnet for the armature; a fourth circuit including a polarized relay and a coherer adapted, under certain conditions, to produce energization of the third circuit; wireless receiving apparatus, including accessories, and adapted for energising the third circuit and thereby break said second circuit when said coherer is affected by the transmitter of a like apparatus; a decoherer; a fifth circuit for energising said decoherer, mechanism for automatically locking the armature to retain the second circuit open, and manually operable means for actuating a switch to close the decoherer circuit and release said armature.

22. The combination with a main electrical supply circuit, of a plurality of apparatus each mounted upon a collidable object and adapted to automatically prevent collisions, each apparatus comprising in part, wireless receiving instruments having a coherer, contact members for the coherer, a metallic case surrounding said coherer, means for disengaging said contact members from the coherer during the transmitting periods of the apparatus, and auxiliary circuits adapted to perform various functions relative to the actuation of the automatic stop apparatus.

24. A combination of apparatus constructed and arranged to automatically prevent collisions between any two or more power driven vehicles or vessels equipped therewith, comprising Hertzian wave instruments having control of the movements of vehicles or vessels so equipped, an antenna to ground circuit for said instruments, an automatic switching apparatus in said circuit, a tuning coil having primary and secondary coils, the primary coil for said antenna to ground circuit, a circuit for the secondary coil of said tuner, a coherer in said circuit, an additional or second circuit for said coherer, a relay in said additional or second circuit, a source of energy for the relay, a case for the coherer, conduits of insulated material or materials for said case, contact members in the coherer circuit, and means for automatically actuating such members, for the purpose set forth.

[Claims 1, 3 to 10, 12 to 20, and 23 not printed in the Gazette.]

1,266,390. SWIVEL-HOOK. JOHN E. BLANSETT, Teton, Idaho, assignor of one-fourth to Henry E. Bowles, Teton, Idaho. Filed Apr. 16, 1917, Serial No. 162,484. Renewed Mar. 8, 1918. Serial No. 221,324. (Cl. 24—231.)



A locked swivel hook comprising two slotted perforated blocks, the end wall of one block having oppositely disposed recesses formed therein, a pulley journaled in one block, a shaft mounted in the other block, one wall of the block carrying said shaft having a slot therein, a disk journaled on said shaft and having a recess in the periphery thereof, a lug projecting from the face of said disk and movable in said slot, a hook pivotally mounted on the shaft and having an elongated notch therein the entrance to which latter, when in registration with the recess in said block and disk, is adapted to receive a ring, as set forth.

1,266,391. LOCK FOR AUTOMOBILES. HAROLD HOBSON BONNEY, Louisville, Ill. Filed Sept. 28, 1917. Serial No. 193,795. (Cl. 70—132.)

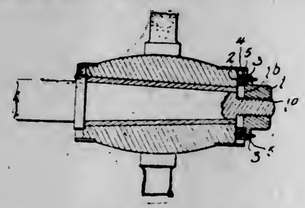


1. In a device of the class described, a body portion provided with means for engaging the main lever of a brake, said body portion including a tapering portion adapted to occupy the space between the main lever and the release lever of the brake and said body portion being provided with a downwardly extending member having an aperture therein, said downwardly extending member engaging the side of the main lever of the brake, and a lock provided

with a hasp passing through said aperture and inclosing the main lever of said brake.

2. As an article of manufacture, a lock of the type described comprising an integrally formed member provided with an offset portion at one end having an aperture therein to fit over the end of a brake lever, said member having a groove extending along one edge and adapted to engage a release lever, and said member being also provided with a plate portion offset in a direction at an angle with the offset portion first named for engagement with the sides of said levers, the offset portion having an aperture of a diameter greater than the cross section of the brake lever, and having a notch in one side for engagement with the mounting means of the release lever.

1,266,392. WAGON AND BUGGY TAP EXTENSION. ALLIE F. BOSWORTH, Munday, Tex. Filed Oct. 7, 1916. Serial No. 124,236. (Cl. 21—30.)



1. A device of the character described, including a tap formed with a laterally projecting basal flange having a series of slits in the periphery thereof, an annular extension member fitted against the base of the tap and surrounding the opening thereof, tongues pivotally connected to the annular extension member and adapted to be swung into the before mentioned slits in the flange of the tap, and means for locking the tongues in operative position.

2. A device of the character described, including a tap formed with a laterally projecting basal flange having a series of slits in the periphery thereof, an annular extension member fitted against the base of the tap and surrounding the opening thereof, tongues pivotally connected to the annular extension member and adapted to be swung into the before mentioned slits in the flange of the cap, and keys engaging the tongues for coöperation therewith to lock the extension member securely in position against the base of the tap.

1,266,393. ELECTRICAL AWAKENING DEVICE. HARRY F. BOWEN, Canon City, Colo. Filed Jan. 29, 1918. Serial No. 214,358. (Cl. 174—89.)



1. In a device of the class specified, an expansible ring having exposed electrical contacts at inner opposing portions thereof, the ring having an opening therethrough to form movable extremities, rod terminals located in the extremities of the ring and in part extending across the latter and having coöperating contact means to close an electric circuit, wires between the said rods and the opposing contacts in the ring, and electrical shocking apparatus connected to said wires.

2. In a device of the class specified, a yielding ring having an opening therethrough to form freely movable extremities, circuit-closing elements associated with the said ring extremities, exposed contacts at the inner opposite portions of the ring, and an electrical shocking apparatus connected to the contact devices and the circuit-closing elements.

[Claims 3 and 4 not printed in the Gazette.]

1,266,394. TUBE-INJECTOR. ERNEST J. BRENNESEN, New York, N. Y. Filed July 12, 1917. Serial No. 180,110. (Cl. 221—60.)



1. In a device of the character described, the combination with a tube having a threaded tapering discharge member, a tapering top merging into the discharge member, of a nozzle having a tapered threaded socket opening from said discharge member, and a resilient tapering contact surface engaging said tapering top of said tube whereby the socket of the nozzle may be quickly applied and a tight connection provided between the nozzle and the tube.

3. In a device of the character described, the combination with a tube having a top merging into a threaded discharge neck, of a nozzle having an end provided with a threaded opening for accommodating said threaded discharge neck, a reinforcing bead on the lower edge of said end, and a tapering contact face on the lower surface of said bead for engaging the end of said tube, said bead being cut away at the juncture thereof with said end for causing the contact surface to resiliently press said top.

[Claim 2 not printed in the Gazette.]

1,266,395. WASHBOARD. JOHN BROMMER, Brooklyn, N. Y. Filed Sept. 13, 1917. Serial No. 191,121. (Cl. 68—29.)

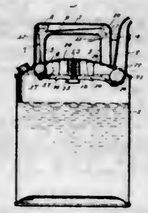


A washboard of the character described comprising a body formed of sheet metal and provided at the ends with integral turned-over beads, a pair of channel irons arranged on the sides of the body, each of said irons being provided with a notch near the upper end, a transverse end bar fitting against the upper end of said body and extending into said notches, and bolts extending through said beads and said side bars for locking the side bars to the body and clamping said end bar in position.

1,266,396. CAN. MERIC M. BROWN, Portland, Oreg. Filed Apr. 24, 1917. Serial No. 164,237. (Cl. 221—15.)

1. In combination with a can having its top provided with an outlet spout and a U-shaped handle disposed adjacent to the spout, one of the offset arms of the handle being hollow and communicating with the can and having an air port, a valve closing the opening between the can and the said arm of the handle, a second valve closing the opening between the spout and the cam, spring pressed levers having a loose connection therebetween pivotally secured in the can and supporting the valves, and means,

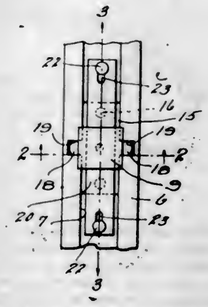
comprising mechanism arranged upon the handle and including an element disposed below the handle and an element connected with one of the valves whereby upon actuation to force the valve from its seat and also



whereby through the loose connection between the levers for the valves to cause the simultaneous unseating of the other valve.

[Claims 2 and 3 not printed in the Gazette.]

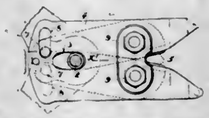
1,266,397. SASH-CORD HOLDER. PETER BRYANT, Cleveland, Ohio. Filed Feb. 12, 1918. Serial No. 216,720. (Cl. 16—16.)



1. A sash cord holder comprising a keeper located in the groove and having an outer cord engaging portion extending across the groove, a spring under the keeper, a follower behind the spring movable toward said portion to clamp the spring against a cord, and a screw extending through the stile from the exposed part thereof and bearing at its inner end against said follower to advance the same to clamping position.

2. A sash cord holder comprising a keeper in the groove of the sash, a follower within the keeper and adapted to clamp the cord against the same, a spring pressing against the follower and tending to retract the same from the keeper to release the cord, and means operable at the exposed surface of the sash stile to advance the follower against the cord.

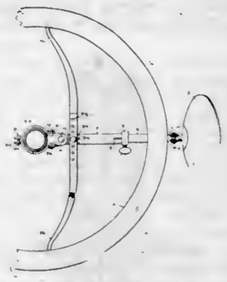
1,266,398. WIRE-CUTTER. GEORGE FREDERICK BULL and ERNEST WALTER STARKEY, Small Heath, Birmingham, England; said Starkey assignor to Charles H. Pugh, Limited, Small Heath, Birmingham, England. Filed June 12, 1917. Serial No. 174,351. (Cl. 30—17.)



1. A hand-operated, wire-cutting implement, comprising a pair of spaced side plates; a pair of co-acting cutting jaws pivoted intermediate their ends between said plates; and a pair of operating levers mounted at their front ends upon a common pivot and having lateral extensions upon their inner or opposed edges, said lateral extensions being situated rearward of said common pivot of said levers and being each pivoted, at a point rearward of said common pivot, to the tail end of the cutting jaw which is upon the opposite side of the implement to the respective lever.

2. In a wire-cutter, the combination of a pair of spaced side plates formed with a pair of registering longitudinal slots and also with a pair of transverse, arcuate slots located in rear of said longitudinal slots, the transverse slots in said plates extending one to one side and the other to the other side of the respective longitudinal slots therein; a pair of co-acting cutting blades pivoted intermediate their ends between said plates, with their pivots located in front and to opposite sides of said longitudinal slots; and a pair of operating levers mounted at their front ends on a common pivot which projects at opposite ends through said longitudinal slots and is arranged to travel toward the rear end thereof during the closing operation of said levers, the front end of each lever having a lateral extension which projects across the extension on the other lever and is provided with a stud attached to the rear end of the adjacent blade, each stud projecting through the adjacent transverse slot and arranged to travel in the same.

1,266,399. GLARE-SHIELD. WILLIAM H. BURTIS, Decorah, Iowa, assignor to Thomas F. Wallace, Minneapolis, Minn. Filed Apr. 13, 1916. Serial No. 90,925. (Cl. 21—148.)



1. The combination with the steering post of a vehicle, of a socket member, means to pivotally adjust the socket member upon the steering post, a shank, means to adjustably secure the shank in the socket member, a standard, a glare shield secured in one end of said standard, ears upon the outer end of said shank, ears upon the opposite end of said standard positioned between the ears of said shank, a bolt projected through both sets of ears, and a spring between the ears of said standard and surrounding said bolt for holding the ears of said standard in frictional yet movable contact with the ears of said shank for adjustably maintaining said standard upon said shank.

3. The combination with the steering post of a vehicle, of a glare shield, an adjustable support for the glare shield, means to movably secure the adjustable support to the steering post, transversely disposed levers upon said support for swinging the support and the shield laterally, and means to adjustably secure the levers to the support.

4. The combination with the steering post of a vehicle, of a glare shield, an adjustable support for said glare shield, means to movably secure the adjustable support to the steering post, levers for swinging said support and shield laterally, finger grips upon said levers, and means to adjustably secure the levers to the support.

[Claims 2 and 5 not printed in the Gazette.]

1,266,400. HOBBY-HORSE. ALVIN C. BUSBY, Ellensburg, Wash. Filed Jan. 26, 1918. Serial No. 213,962. (Cl. 208—42.)

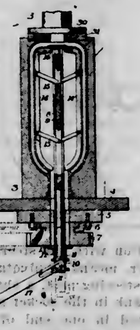
A hobby horse comprising a body portion, angled bars pivoted to the underside of the horse, and driving shaft

axle journaled between said angled bars, a rod pivoted to the crank portion of the axle at its lower end and its upper end fastened to the horse, a detachable head upon the horse, a sleeve fastened to the neck of the head and swiveled in an opening in the body of the horse, a steering head swiveled between the forward ends of the bars in which the driving axle is journaled, and means fastened to the steering head and having a longitudinal movement in



and rotating with said sleeve, adjustable bars pivoted at their lower ends to said angled bars and their other ends being upwardly turned and perforated and adjustably connected to the angled bars, a pedal crank shaft journaled in the adjustable bars, and sprocket and chain connections between the driving axle and said pedal shaft, the steering head having a shank portion, a block between the angled bars in which said shank portion is swiveled.

1,266,401. APPARATUS FOR MAKING VACUUM-BOTTLE BLANKS. CLARENCE P. BYRNES, Sewickley, Pa. Filed Mar. 18, 1912. Serial No. 684,525. (Cl. 49—29.)



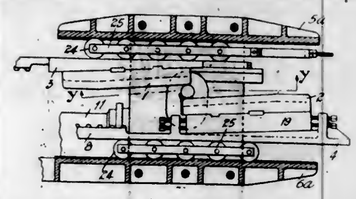
1. In apparatus for forming hollow wall receptacles, a blow-mold having both ends open and a mechanical expanding device movable through one end thereof and arranged to expand the wall of the inner blank into a spaced relation with the wall of the outer blank; substantially as described.

2. In apparatus for forming hollow wall receptacles, a blow-mold, a blow head cooperating with one end thereof, and a plunger having a mechanical expanding device arranged to reciprocate through the other end; substantially as described.

3. In apparatus for forming hollow wall receptacles, a blow-mold having openings at both ends, a blow head cooperating with one end thereof, and a plunger movable through the other end thereof and having a mechanical expanding device arranged to expand the wall of the inner blank to a spaced relation from the wall of the outer blank; substantially as described.

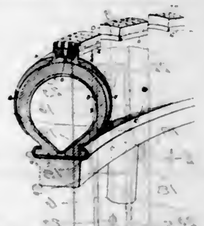
4. In a machine for forming vacuum bottle blanks, a pressing station, a blowing station having a separate blow-mold, means for transferring the blank from the pressing station into the blow-mold at the blowing station, said mold being open at both ends, and mechanical means at the blowing station for expanding the wall of the inner blank into spaced relation with the wall of the outer blank; substantially as described.

1,266,402. BALL-ROLLING MILL. FERDINAND E. CANDA, New York, N. Y. Filed June 25, 1915. Serial No. 36,201. (Cl. 80—20.)



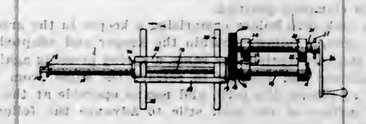
A rolling mill comprising in combination reciprocating die members, guides for said members, bearing rollers between one of said reciprocating members and its corresponding guide, a frame connecting said rollers, stop means for said frame, and means for communicating relative motion to said reciprocating member.

1,266,403. PNEUMATIC-TIRE CASING. ARTHUR CARTHEUSER, West Orange, N. J. Filed Aug. 30, 1917. Serial No. 188,972. (Cl. 152—33.)



The combination of a pneumatic tire; a rigid continuous annular metal casing for infolding the same, said casing being wider than said tire; a plurality of exposed traction shoes; a plurality of plates supporting said shoes, said plates engaging said casing in sliding relation thereto; and means for removably connecting said shoes and plates in service relation.

1,266,404. REEL SUPPORT AND TURNER. GEORGE J. CASS, Mexico, Mo. Filed June 4, 1917. Serial No. 172,821. (Cl. 242—96.)



1. In a reel support, the combination of a shaft adapted for insertion through a reel to support the same, a second shaft, reducing gearing connecting the two shafts, and a supporting handle adapted to be interchangeably positioned on the shafts for directly turning the reel and for turning the reel at a reduced speed through the gearing.

4. In a reel, the combination of a spindle, sleeve handles mounted on the opposite ends of said spindle, said spindle being adapted to receive thereon between the handle a reel, a collar on the spindle adjacent to one of said sleeves, a pinion on said collar, an engaging jaw carried by the pinion and adapted for interlocking engagement with the adjacent end of the reel, bracket arms outstanding from one side of said sleeves, a second sleeve mounted in the outer ends of said bracket arms, a counter-shaft journaled in said second sleeve, intermeshing gears on said spindle and said counter-shaft, said counter-shaft

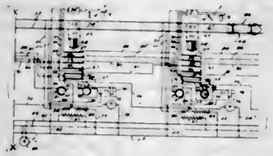
and said spindle having upon their outer ends angular shank portions, and a crank handle adapted to be interchangeably mounted on said angular portions to turn said engaging jaw and the reel directly through the spindle and indirectly through said intermeshing gears.

5. In a reel support, a spindle, blocks detachably mounted on the spindle and adapted for engagement in the opposite ends of a reel, a clutch member carried by the spindle and engaging one of said blocks, and means for turning said clutch member to rotate the reel.

6. In a reel support, the combination of a spindle adapted for insertion through a reel, centering blocks mounted on the spindle and adapted for engagement in the opposite ends of the reel, a clutch member adapted for interlocking engagement with one of said blocks, and means for turning said clutch member.

[Claims 2 and 3 not printed in the Gazette.]

1,266,405. RAILWAY SIGNAL AND TRAIN-STOP SYSTEM. JOHN B. CASSELMAN, Oakland, Cal. Filed June 29, 1914. Serial No. 847,806. (Cl. 246—31.)



2. A railway signal and train stop system comprising rails divided into blocks, signals for the respective blocks each having a semaphore arm and a tripper arm, relays in the respective track circuits of said blocks, a motor for actuating said arms, electric circuits controlling said motor to hold said arms in their clearance position, a plurality of sets of contacts, there being one set for each block controlled by the relay of the block, two of said contacts controlling the holding circuits for said arms to allow the semaphore to assume its stop position when said contacts are moved to open position, a circuit controlling said motor to hold the tripper arm in clearance position, and a back contact in each set of relay operated contacts, through which said last mentioned circuit passes, whereby the reënergizing of said relay allows said tripper arm to assume a stop position.

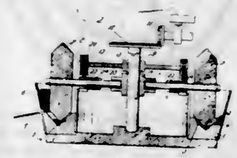
3. A railway signal and train stop system comprising track rails divided into blocks, a signal for each block having a semaphore arm and a tripper arm on said signal, a relay in the track circuit of each block, electrical means controlled by said relay for permitting said semaphore to move to its stop position when a train enters the block governed thereby, and a time controlled contact device for raising said tripper arm, a circuit actuating said time control device receiving energy through the relay of the signal in the rear of said signal so that a train at a reduced speed may enter the block from which it was normally barred by said tripper arm.

7. A railway signal and train stop system comprising track rails divided into blocks, signals for the respective blocks each signal having a semaphore arm and a tripper arm, normally energized relays in the respective track circuits of the block, a motor for actuating said arms, circuits to the respective motors, each circuit being carried through a normally closed contact controlled by the relay of its block, said circuit also including contacts controlled by the relays of a plurality of successive blocks back of the block governed by any one signal, said circuit controlling said motor to move said tripper arm to its clearance position when the block normally protected thereby is entered by a train moving against the current of travel.

12. An improvement in railway signals comprising track rails divided into blocks, signals for the respective blocks each provided with a semaphore arm, a pivoted lens segment, means for providing a lost motion connection between the semaphore arm and said lens segment, a tripper arm positively connected with said lens segment, electrical means for oscillating said lens segment, relays in the respective blocks controlling the circuits to the signal motors, and contact devices operated by the respective motors and also controlling the circuits.

[Claims 1, 4 to 6, and 8 to 11 not printed in the Gazette.]

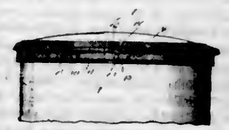
1,266,406. ORE CRUSHING AND AMALGAMATING MILL. DAVID W. CHURCH, San Diego, Cal., assignor, by mesne assignments, to Rudolph A. Dallugge, Los Angeles, Cal. Filed Nov. 22, 1916. Serial No. 132,789. (Cl. 83—45.)



1. An ore crushing, grinding and amalgamating mill comprising an annular trough adapted to contain a body of quicksilver and having an inclined inner wall, a shaft mounted to rotate on a vertical axis coaxial with said annular trough, and a roll mounted to revolve with said shaft and to have freedom of vertical movement, and supported to run only on the inclined inner wall of the trough, above the bottom of said trough and away from the outer wall thereof.

2. An ore crushing, grinding and amalgamating mill comprising an annular trough adapted to contain a body of quicksilver and having an inclined inner wall, a shaft mounted to rotate on a vertical axis coaxial with said annular trough and a plurality of rolls arranged around said axis and mounted to revolve with said shaft and to run only on the inclined inner wall of the trough above the bottom of said trough and away from the outer wall thereof, the mounting of said rolls providing for independent vertical movement thereof, but holding the rolls against said inner wall, in such manner that the radial stresses due to the several rolls are balanced with respect to the shaft and there is no resulting lateral pressure on the shaft.

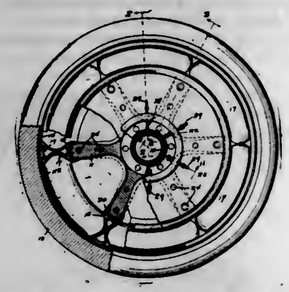
1,266,407. METHOD OF SEALING OIL-STORAGE TANKS. VICTOR CLIFFORD, Tulsa, Okla. Filed Feb. 27, 1917. Serial No. 151,303. (Cl. 220—121.)



1. In combination with a metallic storage tank for gaseous fluids, having a cornice receiving the metallic cover thereof and a plastic cement of fire-retarding, gas and acid resisting non-electric conducting material arranged between the cornice and the cover of the tank, of a binding element for retaining such plastic material on the tank, said binder surrounding the outer edge of the cover and the cornice of the tank and made up of a wire mesh, a sheet of asbestos associated with the mesh, and a coating of preservative electric conducting material, rod members passing through said binding, eyes on the ends of the rods and said eyes designed to receive the opposite ends of the rods, whereby said last mentioned ends may be bent upon themselves to effect in retaining the sheathing upon the tank.

[Claim 2 not printed in the Gazette.]

1,266,408. VEHICLE-WHEEL. HENRY B. COATS, Veedersburg, Ind. Filed Sept. 7, 1916. Serial No. 118,856. (Cl. 152—28.)

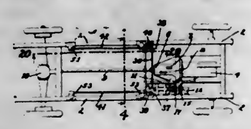


1. A vehicle wheel including a rim, a hub with spokes radiating therefrom but not extending to the rim, a pneumatic cushion filling the space between each pair of spokes and extending to the rim, and flexible means secured to the ends of the spokes for holding a portion of each cushion which extends beyond the spokes to the rim.

5. A vehicle wheel including a rim, a hub and spokes radiating therefrom but not extending to the rim, pneumatic cushions between each pair of spokes and extending beyond the ends of the spokes to the rim, and flexible means secured to the ends of the spokes and rim for holding in place the portion of each cushion extending beyond the ends of the spokes, and side plates secured to the spokes and extending to the ends thereof and having peripheral flanges overlapping the clenching means secured to the ends of the spokes.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,266,409. AUTOMATIC JACKING DEVICE FOR SELF-PROPELLED VEHICLES. MYER COHEN, Revere, Mass. Filed Apr. 19, 1916. Serial No. 92,293. (Cl. 254—86.)

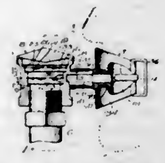


2. In combination with a self-propelled vehicle and the fly-wheel of the prime mover thereof, an automatic jacking device consisting of a rigid frame member provided with a slidable member, having a rotatable shaft provided with an extension adapted to slide within said frame member; a jacking-gear and reversing gear rotatably mounted on said sliding member and rigidly secured to said shaft of said slidable member; a reversing idler gear rotatably mounted on said slidable member and engaging with said reversing gear of same; a driving gear rotatably mounted in said frame member and rotatably operated by the sliding extension end of said sliding shaft; a transverse shaft rotatably mounted on the vehicle and provided with a driven gear adapted to engage with the driving-gear of said frame member for rotating said shaft, and bevel-gears secured thereto and adapted to rotate therewith; a plurality of vertical jack-housing-tubular-tapped-members adapted to be rigidly secured to the vehicle and provided with gear-housings and shaft-bearings; a plurality of vertical jacking-screws adapted to fit and operate within said tubular jack-housings and provided with central and vertical square-sectioned apertures and bottom swivel-rollers; longitudinal rotatable shafts rotatably mounted in said bearings of said jack-housings and provided with worm-gears rigidly secured thereto to rotate therewith and housed within said gear-housings of said jack-housing-members, and bevel-gears secured to the extreme ends thereof adapted to engage with the bevel-gears of said transverse shaft; worm-gear-wheels housed within said gear-housings of said jack-housing-members engaging with said worm-gears therein and provided with vertical downwardly projecting square-sectioned spindles rigidly secured thereto to rotate therewith and adapted to slidably fit the central square-sectioned apertures of said jacking-screws; and means coupled with said slidable member of said rigid frame member adapted to shift the same for engaging the gears thereof with said fly-wheel gear of said prime mover, at will, substantially as shown.

3. A jacking device comprising a rigid bracket member provided with a vertical tapped cylinder, a housing for gears and a shaft-bearing; a feed-screw-jacking-member adapted to fit and operate within said tapped cylinder of said bracket member, and provided with a central and vertical socket; a vertical socket spindle adapted to slidably operate within said socket of said feed-screw; a worm-wheel positioned within said gear-housing of said bracket member and rigidly secured to said socket spindle for rotating the same; a worm-gear housed within said gear-housing of said bracket member and adapted to engage with said worm-wheel for driving same; and a rotatable shaft supported in said shaft-bearing of said bracket member and secured to said worm-gear for operating same, substantially as shown.

[Claims 1 and 4 not printed in the Gazette.]

1,266,410. RESPIRATING APPLIANCE. PAUL A. R. CONRAD, Chicago, Ill., assignor to Life Saving Devices Company, Chicago, Ill., a Corporation of Delaware. Filed June 5, 1917. Serial No. 172,986. (Cl. 128—13.)



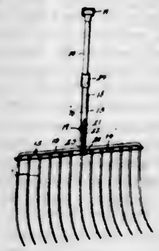
1. In a device of the class described, the combination with a hose, of a cylindrical chambered member having a vertical bore extending throughout its length, a sidewise projecting arm having a horizontal bore in communication with the aforesaid vertical bore, a horizontal circular valve seat within the casing at a point below the point of junction of the horizontal and vertical bores, another horizontal circular valve seat in the casing at a point above the aforesaid point of junction, and a third horizontal circular valve seat within the casing at a point above the last mentioned valve seat, the valve seats being of progressively increasing diameter from the first mentioned valve seat to the last mentioned valve seat, a disk valve located on each of said valve seats, there being a segmental notch in the upper portion of the casing at a point above the last mentioned valve seat and its valve, a cap having a downwardly depending flange adapted to seat onto the upper portion of the member, there being a segmental slots in said flange adapted to register with the slot of the member and a suitable mouth piece on the aforesaid sidewise projecting arm substantially as described.

3. In a device of the class described, the combination of a cylindrical chambered member having horizontal and vertical bores in communication with each other, a pair of horizontal valve seats within said member located, respectively, above and below the point of junction of the horizontal and vertical bores, a disk valve on each of said valve seats, there being an annular slot in the wall of the chambered member above each disk valve, and a limit device above each valve, each limit device comprising a wire suitably formed to present a series of downwardly projecting contact points and a series of wall engaging portions entered into the corresponding slot of the wall, substantially as described.

4. In a device of the class described, the combination with the hose, of a cylindrical chambered member having a vertical bore extending throughout its length, a sidewise projecting arm having a horizontal bore in communication with the vertical bore, a horizontal circular valve seat within the casing at a point below the point of junction of the horizontal and vertical bores, another horizontal circular valve seat in the casing at a point above the aforesaid point of junction, and a third horizontal circular valve seat within the casing at a point above the last mentioned valve seat, the valve seats being of progressively increasing diameter from the first mentioned valve seat to the last mentioned valve seat and a disk valve located on each of said valve seats, each disk valve being smaller in size than all of the valve seats above it to thereby permit the progressive insertion of the valves into position on their respective seats, substantially as described.

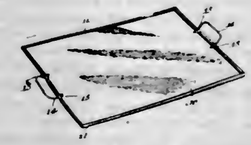
[Claim 2 not printed in the Gazette.]

1,266,411. ENSILAGE-FORK. LESLIE R. CORNWELL, Dallas, Iowa. Filed July 18, 1917. Serial No. 181,339. (Cl. 55—2.)



In a fork, the combination with a handle, tines thereon, said tines lying substantially in the same plane as the handle of a perforated bar mounted for movement along said tines, said tines passing through said perforations, a lever having one end pivotally connected to the handle of said fork adjacent the tines, a rod having one end pivotally connected with the opposite end of said lever, the opposite end of the rod being pivotally connected to the perforated bar intermediate the ends of the bar, a spring having one end secured to the fork handle and the opposite end secured to the lever for forcing said lever downward toward the free ends of the tines and a locking sleeve mounted for limited sliding movement along said handle and engageable with the free end of said bar for holding the bar against such movement.

1,266,412. OVEN-TRAY. FLORA G. CRANE, Sandpoint, Idaho. Filed Oct. 6, 1916. Serial No. 124,139. (Cl. 126—221.)



A tray comprising a flat sheet of metal having its edges bent upwardly to provide beads on its upper edges, a reinforcing wire threaded through said beads, said beads being cut away at spaced points on the ends of the tray so as to expose the reinforcing wire, the exposed portions of said wire being bulged, and a pair of handles each formed of a single piece of wire bent into U-shape and having its ends bent around the bulged portions whereby said handles are hinged to the wire.

1,266,413. PASTE-TUBE. ARMISTEAD C. CRUMP, New York, N. Y. Filed June 26, 1917. Serial No. 176,996. (Cl. 221—60.)



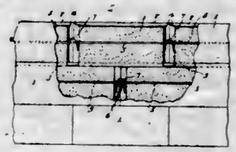
1. A tube of the class described comprising a resilient tubular body having a contracted neck terminating in a mouth, said neck and mouth being resilient and adapted to return to their original shape after being compressed.

3. A tube of the class described comprising a tubular body, clamping strips having longitudinal tongue and groove interlocking means for closing one end of the tube, and a clip engaging over the strips to hold the same together.

5. A tube of the class described including as a one-piece article a body, neck and mouth made of resilient, transparent material, the neck and mouth being compressible as well as the body.

[Claims 2 and 4 not printed in the Gazette.]

1,266,414. CONCRETE STRUCTURE AND BLOCK. CLIFFORD DALE, Wabash, Ind. Filed Sept. 28, 1917. Serial No. 193,794. (Cl. 72—40.)

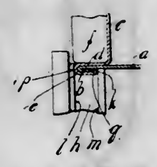


1. In a structure of the class described, a pair of blocks having vertical grooves in their opposing ends and also having reinforcing elements extending therethrough provided with bends which project into said grooves, and a substantially inverted V-shaped bonding element arranged in said grooves and with its arms engaging the said bends and the lower end of its arms engaging the bottoms of the grooves, said bonding elements connecting the reinforcing elements together and the upwardly converging arms thereof serving when said bonding element is forced downwardly to draw said reinforcing elements toward each other and thereby causing said reinforcing elements to draw the opposing ends of the blocks together.

2. In a structure of the class described, a pair of blocks having vertical grooves in their opposing ends and also having reinforcing elements extending therethrough provided with bends which project into said grooves, and a substantially inverted V-shaped bonding element arranged in said grooves and with its arms engaging the said bends and the lower end of its arms engaging the bottoms of the grooves, said bonding elements connecting the reinforcing elements together and the upwardly converging arms thereof serving when said bonding element is forced downwardly to draw said reinforcing elements toward

each other and thereby causing said reinforcing elements to draw the opposing ends of the blocks together, and a filling of mortar or the like in the said grooves and holding the said bonding elements in place.

1,266,415. BARREL-SEAM AND METHOD OF MAKING THE SAME. HENDERSON G. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Apr. 30, 1917. Serial No. 165,400. (Cl. 113—116.)



1. A barrel or the like comprising a body having a flanged portion bent backwardly flat against the body, and a head having a flanged portion bent backwardly around and flatly against the first-named flange, the flanged portion of the head having an end portion to abut in contiguous relation with and hook around the end of the first-named flanged portion and to abut with said body, all constructed and arranged so that said flanges are held against relative movement by the hooked end portion.

3. The method of seaming the head of a barrel or the like to its body which consists in providing both head and body with flanges, in bending both said flanges backwardly toward the body, in bending an end of the head flange around the end of the body flange and forcing it between the latter and the body so that the ends of the flanges overlap for a short distance, and in thereafter applying pressure to the head and body flanges until portions of each have been forced flat against and contiguous with the body with said end of the head flange held between body flange and the body.

6. The method of securing the head of a barrel or the like to its body, which consists in providing both head and body with flanges, in bending both flanges backwardly toward the body, in bending the end of the head flange around the end of the body flange and forcing it endwise between the latter and the body until the ends of the head and body flanges overlap for a short distance, in thereafter applying pressure both normally and endwise to the overlapped portions until both of the latter are forced into the same plane, flatly against and contiguous with the body, so that the end of the head flange is held between and in abutment with the body and body flange.

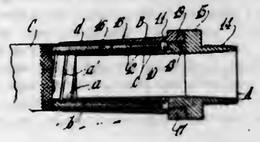
7. An article of manufacture, comprising, a member having a flanged portion bent backwardly against and contiguous with the member, a second member having a flanged portion bent backwardly around the first-named flange in contiguous relation therewith, the flanged portion of the second member having an end portion to abut in contiguous relation with and hook around the end of the first-named flanged portion and to abut with the first-named member, all constructed and arranged so that said flanged portions are held against relative movement by the hooked end portion.

[Claims 2, 4, 5, and 8 not printed in the Gazette.]

1,266,416. FITTING FOR FLEXIBLE HOSE. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed Mar. 12, 1917. Serial No. 154,290. (Cl. 285—86.)

1. A connection for internally metallic lined hose, comprising, an externally threaded nipple constructed and arranged to engage with the female thread of the loosely wound metallic lining of the hose to produce a distortion of the lining so that the nipple may be held to the hose by a binding action of the lining thereon.

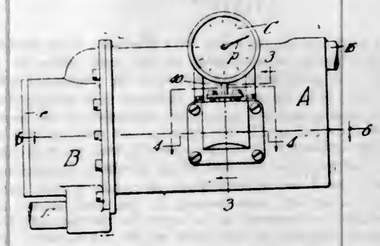
2. A connection for internally metallic lined hose, comprising, an externally threaded nipple having an opening therethrough substantially equal to that of the hose, the thread on the nipple extending entirely to one end thereof and arranged to screw into the loosely wound female thread formed by the convolutions of the lining and produce a distortion of the latter, whereby the nipple may be held to the hose by the binding action of the lining thereon.



7. In combination with a hose, a flexible spirally wound metallic internal lining therefor, successive convolutions of the lining being arranged to interlock for relative movement and to form a loosely wound female thread, and an externally threaded tapered nipple constructed and arranged to screw into the end of the hose and engage said female thread in the lining, the convolutions of said female thread arranged to be varied in pitch by the nipple and bulged outwardly thereby, whereby the lining exerts a spring action on the nipple and an expansive action on the hose to bind the two together.

[Claims 3 to 6 not printed in the Gazette.]

1,266,417. METER. JOHN B. DAVIS, Springfield, Mass., assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass., a Corporation of Massachusetts. Filed July 5, 1917. Serial No. 178,775. (Cl. 73—30.)



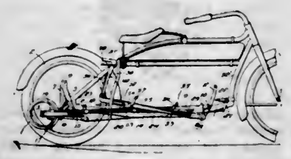
1. A meter, comprising, a casing formed with a cylinder, a piston reciprocable therein, automatic means entirely within the casing and controlled by movement of the piston to direct fluid to and from each end of the cylinder to reciprocate the piston, and means operable by movement of the latter to indicate at all times the quantities displaced from the cylinder.

2. A meter, comprising, a cylinder, a piston reciprocable therein, automatic means to direct fluid to and from each end of the cylinder, said means arranged to coöperate alternately to reciprocate the piston, an opening formed in the cylinder intermediate its ends, said piston being of sufficient length and having a sufficiently short stroke so that the opening is overlapped at all times by the piston, whereby fluid is prevented from entering the opening, and means engageable with the piston through said opening to indicate the quantities of fluid displaced from the cylinder.

[Claims 3 to 13 not printed in the Gazette.]

1,266,418. MOTOR-CYCLE SUPPORTING, BALANCING, AND BRAKING MEANS. DAVID DAWSON, Elmira, N. Y. Filed Apr. 7, 1917. Serial No. 160,441. (Cl. 208—75.)

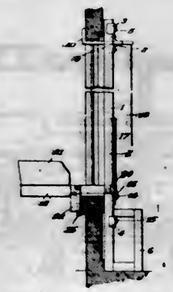
4. In a motor cycle, ground wheels arranged at opposite sides thereof, means permitting said wheels to be raised and lowered, means controlled from the driver's seat for raising and depressing said wheels, the last named means comprising a wheel raising and depressing lever, a guide for said lever having a notch therein for said lever, means carried by said lever for pressing the same out of engagement with said notch, connecting means between said wheel raising and depressing lever and said rock shaft, comprising a notched segment fast on said rock shaft, a latch carried by said lever, foot controlled means on said lever for withdrawing said latch from the segment with which it coöperates, a hand latch lever, and flexible connecting means between said hand latch lever and the latch.



7. In a motor cycle, ground wheels arranged at opposite sides thereof, means permitting said wheels to be raised and lowered, means controlled from the driver's seat for raising and depressing said wheels including a wheel raising and depressing lever, toggle arms connecting said wheels with the frame and controlled by said lever, ground wheel brake members moved automatically into and out of engagement with the respective ground wheels by the movements of said toggle arms, and scraping members actuated by said brake members and also movable automatically into and out of contact with the respective ground wheels.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

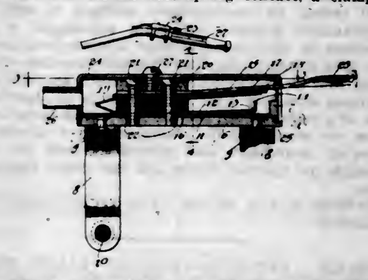
1,266,419. WINDOW-CLEANER'S BRACKET. WILLIAM H. DEAN, Chicago, Ill. Filed Jan. 12, 1916. Serial No. 71,735. (Cl. 20—87.)



In a device of the class described, a frame for arrangement vertically on the inner side of a window, a bracket carried by the frame to project out through the window, a rock shaft mounted in bearings on the frame, hooks on the rock shaft to engage on the outer side of the wall and a lever to turn said rock shaft to engage or disengage the hooks.

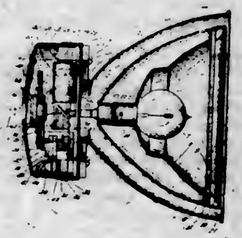
1,266,420. SWITCH. WILLIAM W. DEAN, Chicago, Ill., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 7, 1913. Serial No. 799,808. (Cl. 175—366.)

A switch for mounting upon the handle bars of a motor-cycle comprising an elongated base, a pair of clamping members secured to said base for securing the base in position upon the handle bar, a contact spring mounted upon and insulated from said base having its free end upturned to form a contact, an insulating spacing member mounted at the rear end of said spring, a second contact spring mounted upon said insulating spacing member and having its free end adapted to engage the contacts of said first contact spring, a spring arm also mounted upon said spacing member above said second spring and adapted to depress the free end of said spring for closing the contacts, an insulating strip between said spring arm and the movable spring contact, a clamping



member above the rear end of said spring arm, screws passing through said clamping member, through said spring arm springs and spacing member and adapted to engage in said base for securing the parts together, and a casing inclosing the parts of the switch having its sides embracing the sides of the base and secured in position by a screw passing therethrough and into said clamping plate, said spring arm having an operating handle projecting longitudinally beyond said casing.

1,266,421. SIGNALING DEVICE. WILLIAM W. DEAN, Chicago, Ill., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1914. Serial No. 839,418. (Cl. 177—7.)



1. In a device of the character described, the combination with a horn resonator, of a casing mounted within said resonator of smaller diameter than the resonator and leaving a sound chamber between the walls of the resonator and the casing, a lamp socket secured to the restricted end of said casing, a reflector for said lamp mounted within said casing, and an electromagnetically operated sound producing member at one end of said resonator.

3. The combination with a casing, of an electromagnetically operated sound producing member within said casing, a flaring resonator connected to said casing at its restricted end, a secondary casing within said resonator spaced apart from said resonator to leave a sound chamber, an electric lamp in said secondary casing, and a switch in said casing for controlling the circuit of said lamp and of the electromagnet of said sound producing member.

11. The combination with a casing, of electromagnetically operated horn parts mounted within said casing, a resonator, a lamp within said resonator, and circuit-controlling means for said horn parts and lamp mounted within said casing.

12. The combination with a casing, of electromagnetically operated horn parts mounted within said casing, a resonator, a lamp mounted within said resonator, and a switch in said casing which in one position closes the circuit through the lamp, in a second position closes the circuit through the electromagnet of the horn parts, and in a third position closes the circuit through the lamp and through the electromagnet of the horn parts.

18. The combination with a casing, of a diaphragm in said casing, an electromagnet mounted in said casing substantially parallel with said diaphragm, a switch mounted in said casing between said electromagnet and the back of the casing, and circuit connections extending from said electromagnet to said switch and circuit connections extending from said switch to the ignition system of a self-propelled vehicle, said switch being operable from the exterior of the casing only by a specially constructed instrument, and controlling both the circuit through the ignition system and the circuit through the horn.

[Claims 2, 4 to 10, and 13 to 17 not printed in the Gazette.]

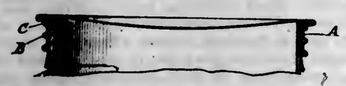
1,266,422. VAPOR-CONTROLLING VALVE FOR INTERNAL-COMBUSTION ENGINES. EDGAR A. DE MERS, Seattle, Wash. Filed May 22, 1917. Serial No. 170,135. (Cl. 137—5.)



1. The combination with the intake manifold of an internal combustion engine, of a valve connected therewith, said valve having a rotary plate interposed between two non-rotatable disk members, ports provided in said plate and disk members, and an annular casing member surrounding and connected to said plate and disk members so as to rotate the former and afford axial movements to the latter.

2. The combination with the intake manifold of an internal combustion engine, of a valve comprising a disk member secured to said manifold, a second disk member secured against rotation in axial alinement with the aforesaid disk, alined ports provided in said members and in eccentric relation to the axis thereof, a circular plate interposed between said disk members and provided with a port, a casing member surrounding said disk members and the plate and rotatably connected to the latter, and means for coupling said disk members to the casing member so that by rotating the casing member said plate is rotated to present the port thereof into or out of register with the ports of the disk members and respectively cause the latter to separate from or engage against said plate.

1,266,423. DEVICE FOR HOLDING STRAINERS OVER CREAM-SEPARATORS. CHARLES FREDERICK DENISE and CADET DENISE, Boyne Falls, Mich. Filed July 26, 1917. Serial No. 183,016. (Cl. 210—16.)



A device for holding strainers over cream separators, comprising, in combination with the neck of a receptacle having a circumferential flange at the top thereof, a split band having beadings along the marginal edges thereof and adapted to surround said neck, one of said beadings being adapted to hold a strainer against the under face of said flange, a central beading intermediate the marginal beadings, struck-up lugs intermediate the beadings, springs secured to said lugs and spanning the space intermediate the ends of the ring and held apart from each other by said central beading, as set forth.

1,266,424. ELECTRIC SWITCH. FRANK C. DE REAMER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 11, 1916. Serial No. 136,195. (Cl. 175—287.)

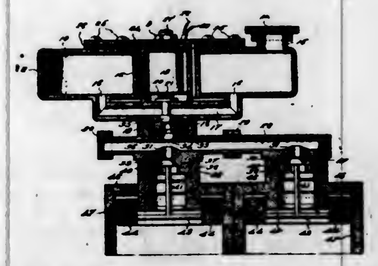


1. The combination with a casing having a slot in its wall, of a switch located therein comprising a frame, a push bar having an operating button which projects through said slot, and a depending plate which drops down between the sides of the frame, pins in the frame which hold the plate in position and upon which it slides, and a switch blade which is moved by the push bar and plate.

2. In a switch, the combination of a base, a frame supported thereon, a push bar having an operating button which slides longitudinally of the frame, a depending U-shaped plate which is fixed to the push bar and drops down alongside the frame, pins in the frame which hold the U-shaped plate and the push bar in position and serve as bearings upon which the plate moves, a switch blade which is moved by the push bar and plate, and coöperating contacts carried by said base.

[Claim 3 not printed in the Gazette.]

1,266,425. DEVICE FOR SUPPLYING WATER TO STORAGE BATTERIES. HOWARD I. DETRO, Interlaken, N. Y. Filed Oct. 13, 1917. Serial No. 196,493. (Cl. 137—68.)



1. In a device of the class described, a reservoir, an outlet therefor, a valve controlling the outlet, an electromagnet for operating the valve, a battery cell, and a float valve controlling the inlet of said cell, and a stem for the valve proportioned to permit the float to close the valve when said float reaches a pre-determined point, and independently of the movement of the valve first named, said inlet having connection with the outlet from the reservoir.

2. In a device of the class described, a reservoir, an outlet therefor, a valve controlling the outlet, a magnet for opening the valve, a plurality of battery cells, a duct communicating with each cell and with the reservoir outlet, a valve controlling the inlet of each cell, and means automatically controlled for operating the valve last named for cutting off communication with the cell prior to the closing of the valve first named.

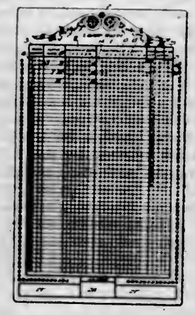
3. In a device of the class described, a reservoir inclosing a centrally located chamber and provided with outlets, a magnet within said chamber, a duct communicating with the outlets of the reservoir, said duct being provided with an outlet, a valve controlling said outlet, a stem for said valve located within the field of the magnet, a duct provided with a plurality of outlets, a plurality of battery cells each communicating with one of the outlets last named, a valve controlling each outlet last named, and means located within each cell for automatically operating the valves last named.

4. In a device of the class described, a plurality of battery cells, a duct member connected with each of said cells and adapted to admit fluid thereto, means for connecting said duct members with each other, a plurality of valves controlling outlets between the duct members and the cells, a reservoir provided with a plurality of outlets, a duct member connected with said outlets, an outlet for said duct into one of the ducts first named, a valve controlling the outlet last named, and magnetic means for controlling the valve.

5. In a device of the class described, a reservoir provided with a centrally located chamber, a duct connected with said chamber at a plurality of points, a plate extending across the upper portion of the reservoir and inclosing the aforesaid chamber, a magnet within said chamber and means for mounting said magnet below the plate, a common outlet for the duct, a valve controlling said outlet, a stem for the valve located within the field of the magnet, a plurality of battery cells, a float valve controlling the inlet for each cell, a duct member connecting the inlets of the cells and means connecting said duct member with the outlet from the duct first named.

[Claim 6 not printed in the Gazette.]

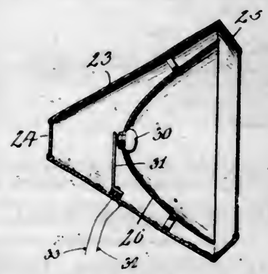
1,266,426. LAUNDRY-REGISTER. ANGELO DE TULLIO, Albuquerque, N. Mex. Filed July 9, 1917. Serial No. 179,602. (Cl. 116—48.)



The herein described laundry register comprising a plate or board having a room designating column, an articles designating columns, number designating columns, a month date column, and delivery and return date columns, said individual designating and said delivery and return date columns having openings, the said openings of the number designating columns being arranged in line with the names of the articles in the articles column, and said delivery and return date columns also having openings, said month date column having day indicating numbers opposite the openings of the delivery and return date columns, and plugs for insertion in any of said openings, the register being also provided with a series of openings for the reception of the plugs when the latter are not in use.

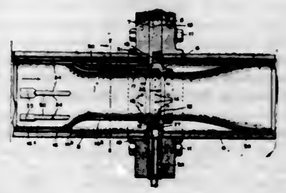
1,266,427. PORTABLE ELECTRIC LAMP. HARRY C. DOANE, Binghamton, N. Y. Filed Jan. 4, 1916. Serial No. 70,160. (Cl. 240—46.)

A lamp including a frusto-conical casing, a lens mounted in the small end thereof, a reflector arranged in the casing, the edge of the reflector of maximum diameter being spaced from the wall of the casing, the edge of the casing in advance of the edge of the reflector being



inturned, extended across the edge of the reflector and spaced therefrom, and a source of light arranged in the reflector.

1,266,428. FLOW-METER. AUSTIN R. DODGE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 22, 1916. Serial No. 105,283. (Cl. 73—167.)



1. In a metering apparatus, the combination with a conduit formed of a plurality of pipe sections, of a flow tube located therein through which fluid to be metered flows, said flow tube comprising a throat section, means forming an annular groove surrounding the throat section and openings which connect the groove to the throat, a flange which surrounds the throat section and is clamped between adjacent pipe sections, said flange having a radial passage which connects with the said groove and an annular recess, a flared end section, means forming a passage which connects the region adjacent the flared end section to said annular recess, a second radial passage in said flange which connects with said recess, and leading and trailing pipes connected to said radial passages.

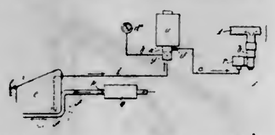
4. In a flow tube, the combination of a throat section having an annular groove in its inner surface, an annular flange surrounding the throat section and having a recess therein, flared end sections connected with the throat section, a series of pipes spaced around the flow tube and connecting the region adjacent one of the flared end sections to said recess, said flange having radial passages therein which connect with said annular groove and said recess.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,266,429. FUEL-SUPPLY SYSTEM FOR INTERNAL-COMBUSTION ENGINES. THEODORE LIVINUS REEP-MAKER D'ORVILLE, Twickenham, England. Filed July 24, 1917. Serial No. 182,594. (Cl. 158—36.)

1. An automatic fuel feeding system for internal combustion engines including in combination with the exhaust pipe and carbureter therefor, a gravity feed tank connected with the carbureter, a main fuel tank located below the level of the carbureter and in contact with the exhaust pipe, and a valved pipe line between said main tank and the gravity feed tank.

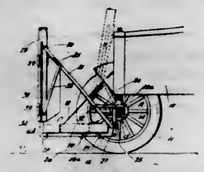
10. An automatic fuel feeding system for internal combustion engines including in combination with the carbureter, a gravity feed tank connected with the latter, a



storage tank connected with the gravity feed tank, and means supplied from the engine for applying heat to the storage tank.

[Claims 2 to 9 not printed in the Gazette.]

1,266,430. AUTOMOBILE-FENDER. TERENCE DOUGHERTY, Brooklyn, N. Y. Filed Feb. 21, 1918. Serial No. 218,573. (Cl. 105—255.)



1. The herein described fender for automobiles comprising in combination an upright mat, a relatively horizontal mat, means to support the latter mat free from the ground in normal position, means acting between the two mats serving to project the horizontal mat relatively forward and downward into contact with the ground when the upright mat is struck, and lugs carried by the horizontal mat to limit the forward movement of the horizontal mat.

4. In a fender of the character set forth, the combination of a supporting frame, an upright mat, a pair of bars pivoted to the frame and to the upper portion of the mat, and a pair of stays pivoted to the lower corners of the mat and slidably connected to the upper portions of the bars to normally prevent oscillation of the mat.

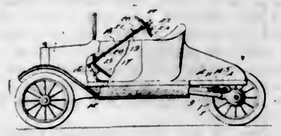
[Claims 2 and 3 not printed in the Gazette.]

1,266,431. MOTOR-VEHICLE. JAMES GRIEVE DUDLEY, Brooklyn, N. Y. Filed May 3, 1909. Serial No. 493,549. (Cl. 180—11.)



In a motor vehicle, the combination with a carriage including a load supporting body portion, a tractor wheel axle provided with tractor wheels and a fifth wheel constituting part of the steering mechanism of the vehicle, with one element of the fifth wheel construction connected to the body portion, of a propelling unit connected to the other element of the fifth wheel construction and including a frame engaging the axle to draw on the same and free to move vertically thereon thereby to provide for relative vertical articulation between the propelling unit and said body portion about said axis and also providing a rocking articulation about an axis extending longitudinally of the propelling unit and at right angles to the axle and coacting with the fifth wheel construction to complete the steering mechanism thereby providing articulation about a vertical axis perpendicular to the axle, said unit provided with a ground engaging wheel for supporting at least part of the weight of the power plant, a power plant carried by the unit, driving means connecting the power plant with one of the tractor wheels of the vehicle to propel the same and a resilient mounting for the power plant for cushioning the same from external shocks in all positions of the power plant relative to the body portion.

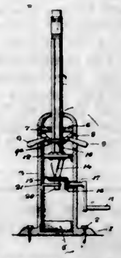
1,266,432. AUTOMOBILE-LOCKING DEVICE. JOHN E. DUGGAN, Berkeley, Cal. Filed Nov. 3, 1917. Serial No. 200,164. (Cl. 70—126.)



1. An automobile locking device embodying, in combination, a bolt adapted to be projected between adjacent spokes of one of the carrying wheels of the vehicle, guiding means for said bolt adapted to be fastened to the vehicle axle, a bell-crank lever, a support on which said lever is pivotally mounted, a link connecting one arm of said lever with said bolt, the other arm of said lever being formed with an eye, a bolt operating rod having an end portion thereof slidable through said eye and provided at the extremity thereof with a head, a bolt thrust spring surrounding said rod between the head thereof and said eye, a hand control rod extending along the steering column, guiding means for the last named rod carried by said steering column, a lever interposed between and connected with both of said rods, and means for locking the last named rod to the hand control wheel of the vehicle.

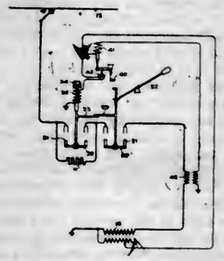
2. An automobile locking device embodying, in combination, a bolt adapted to be projected between adjacent spokes of one of the carrying wheels of the vehicle, guiding means for said bolt adapted to be fastened to the vehicle axle, a bell-crank lever, a support on which said lever is pivotally mounted, a link connecting one arm of said lever with said bolt, the other arm of said lever being formed with an eye, a bolt operating rod having an end portion thereof slidable through said eye and provided at the extremity thereof with a head, a bolt thrust spring surrounding said rod between the head thereof and said eye, a hand control rod extending along the steering column, guiding means for the last named rod carried by said steering column, a lever interposed between and connected with both of said rods, means for locking the last named rod to the hand control wheel of the vehicle, said locking means comprising a hasp having a hinged connection with the last named rod and adapted to engage one of the spokes of the hand control wheel, and a lock proper for fastening said hasp to said spoke of the hand control wheel.

1,266,433. PENCIL-SHARPENER. JOHN I. DURALIA, Punxsutawney, Pa. Filed July 5, 1916. Serial No. 107,705. (Cl. 120—96.)



A pencil sharpener comprising a vertical casing having an opening in the top, a guide ring within the casing and having an opening in axial alinement with the opening in the casing, a cutter arranged in axial alinement with the opening, a spider attached to the cutter and located below the same and having openings through which chips may pass, means for operating the spider, a second ring arranged in axial alinement with the opening and cutter and slidably receiving the pencil, and cam fingers pivotally supported by the casing and cutter and adapted to slidably receive the pencil and cam fingers pivotally supported by the casing and connected with the last mentioned ring.

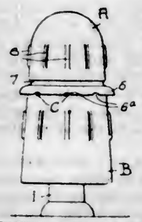
1,266,434. PROTECTION AGAINST EXCESSIVE VOLTAGES. HANS ENGEL, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed July 14, 1915. Serial No. 39,900. (Cl. 175—294.)



6. In combination, a source of supply, an electrical winding a protective resistance, a switching device adapted when in its closed position to complete a circuit through said source, said winding, and said protective resistance, and adapted when in its open position to interrupt said circuit, electro-magnetic means responsive to the voltage on said winding for rendering said resistance ineffective, means for maintaining said switching device in its closed position, and means responsive to an overload current in said winding to cause the opening of said switching device and the deenergization of said electro-magnetic means, said switching device and said electro-magnetic means being mechanically interlocked so that the resistance can be rendered ineffective only after the switching device is moved to its closed position and so that the switching device can be moved to its open position only after the resistance is rendered ineffective.

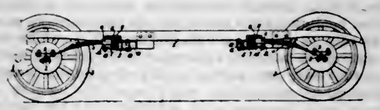
[Claims 1 to 5, 7, and 8 not printed in the Gazette.]

1,266,435. TELEPHONE-INSULATOR. ROY WILFRED ENGLISH, Victoria, British Columbia, Canada. Filed June 30, 1917. Serial No. 177,953. (Cl. 173—314.)



An insulator including a threaded stem, an insulating sleeve fitted upon the stem and formed with a dished upper end portion having wire receiving grooves therein, and a coöperating insulating cap screwed upon the stem and formed with a convex lower end adapted to fit within the dished upper end of the sleeve and coöperate therewith to clamp a line wire within one of the grooves, the lower end of the cap being provided with an annular depending lip which overhangs the upper end of the sleeve to engage the line wire as it enters and leaves the insulator, said lip having notches in the edges thereof for engagement with the wire.

1,266,436. SPRING SUSPENSION FOR AUTOMOBILES. CHARLES JOSEPH ESCALANTE, Merida, Mexico. Filed Aug. 8, 1917. Serial No. 185,123. (Cl. 269—9.)



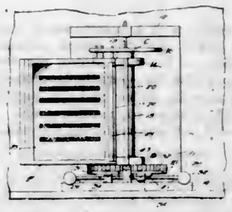
1. The combination of a vehicle frame, an axle, wheels on the axle, springs connected with the axle and pivotally connected with the frame, and a spring connected with the frame and having its free ends connected with the first-mentioned springs at a point between the pivots thereof and said axle.

3. The combination of a vehicle frame, an axle, wheels on the axle, quarter elliptic springs having their free ends connected with the axle, a coupling member to which the other end of each spring is fastened, a pivot between the coupling member and the vehicle frame, a link connected with each coupling member, and a horizontal yielding spring fastened on and disposed under the frame and connected with the links.

5. The combination of a vehicle frame, front and rear axles, wheels on the axles, vertically yielding quarter elliptic springs fastened to the axles and pivotally connected with the frame, horizontally yielding semi-elliptic springs disposed transversely to the frame, means for rigidly fastening the center of each semi-elliptic spring to the frame, and connecting means between the outer ends of the semi-elliptic springs and the first-mentioned springs at points adjacent the pivots thereof and between the latter and axles.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,266,437. LEAF-TURNER. GUY N. EVANS, Grinnell, Iowa. Filed Nov. 14, 1916. Serial No. 131,275. (Cl. 40—73.)



1. In a leaf turner, the combination of a base having a standard, a carriage rotatable on said base, a plurality of sheet holding frames oscillatable in said carriage, means on the base to engage said frames to shift the same when the carriage is partially rotated, said carriage having a toothed base portion, a plurality of pawls intermittently and alternatively engageable with said toothed base, and a plurality of oppositely arranged lever members to intermittently and alternatively actuate said pawl members.

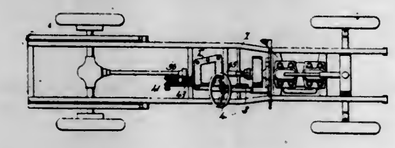
2. In a leaf turner, the combination of a base having a standard, a carriage rotatable on said base, a plurality of sheet holding frames oscillatable in said carriage, means on the base to engage said frames to shift the same when the carriage is partially rotated, a pair of lever members oppositely arranged and mounted on said base beneath said carriage, said carriage having a base portion provided with peripherally arranged sheets, an arm, a pair of pawl members carried by the free end thereof, said pawl members being adapted to engage the toothed periphery of said carriage base, a pair of levers, link members connecting said levers with said pawls, means to connect said levers with said arms to shift the same, said levers being adapted

for actuation whereby to intermittently actuate the pawl members to partially rotate said carriage and exhibit the opposite sides of sheet members carried in said frames.

3. In a leaf turner, the combination of a base having a standard, a carriage rotatable on said base, a plurality of sheet holding frames oscillatable in said carriage, means on the base to engage said frames to shift the same when the carriage is partially rotated, an arm pivotally mounted on said base and having a pair of pivotally mounted pawl members on the free end thereof, the base of said carriage being provided with peripheral ratchet teeth to be engaged by said pawls, a pair of levers, link members connecting said levers with said pawls, a pair of rod members connected with the free ends of said levers to actuate the same, and means to maintain said carriage in a position to which the same is shifted, said pawl members being actuatable by said levers to engage with said teeth and impart movement to said carriage.

4. In a leaf turner, the combination of a base having a standard, a carriage rotatable on said base, a plurality of sheet holding frames oscillatable in said carriage, means on the base to engage said frames to shift the same when the carriage is partially rotated, said carriage having a toothed base portion, a plurality of pawls intermittently and alternatively engageable with said toothed base, a plurality of oppositely arranged levers to intermittently and alternatively actuate said pawls, and a spring pressed pawl engageable with the toothed base portion to normally lock said carriage.

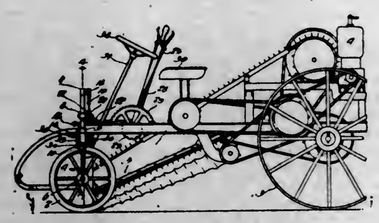
1,266,438. GEAR-SHIFTING DEVICE. OTTO J. FAJEN, Stover, Mo. Filed June 13, 1916. Serial No. 103,476. (Cl. 74—58.)



1. In combination with a transmission gear of automobiles, shifting slides for the gears, manually actuated slides independent of the gear slides, pivoted means carried by the gear slides for operatively connecting them to the manually operating slides, and electromagnetic means for operating said pivoted connecting means.

[Claims 2 and 3 not printed in the Gazette.]

1,266,439. FRONT CONSTRUCTION FOR BEET-HARVESTERS. JOSEPH D. FANGER, Toledo, Ohio, assignor to The Fanger Beet Harvester Co., Toledo, Ohio, a Corporation of Ohio. Filed Apr. 5, 1917. Serial No. 159,917. (Cl. 21—186.)



1. In a portable machine, the combination of a frame supported on wheels at its rear end and having upper and lower vertically alined bearings at its front corners, vertical standards upon which said bearings are slidable, said standards being free to turn in said bearings, front wheels rotatably mounted on the lower end of said standards, wheels through which said standards pass slidably but non-rotatably, said wheels being mounted between said upper and lower bearings, means for turning said second-named wheels to guide the machine, and means for moving the frame vertically in respect to said standards.

2. In a portable machine, the combination of a frame supported on wheels at its rear end and having upper and lower vertically alined bearings at its front corners, vertical standards upon which said bearings are slidable, said standards being free to turn in said bearings, front wheels rotatably mounted on the lower ends of said standards, wheels through which said standards pass slidably but non-rotatably, said wheels being mounted between said upper and lower bearings, means for turning said second-named wheels to guide the machine, means for moving the frame vertically in respect to said standards, said means including a pair of anchors swiveled on the upper ends of said standards, cables secured to said anchors, sheaves on the frame over which said cables pass, and a drum on said frame upon which said cables are wound.

3. In a portable machine, the combination of a frame mounted on wheels at its rear end and having at its front end a transverse bar projecting beyond the sides of the frame, bucket plates extending vertically and secured to the ends of said bar, upper and lower arms formed integrally with and projecting from said bracket plates beyond the ends of said bar, L-shaped arms depending one from each of said bracket plates, vertically alined bearings carried by the outer ends of the several arms and horizontal bearings carried by the inner portions of said L-shaped arms, vertical standards received slidably and rotatably in said vertically alined bearings, front wheels mounted on the lower ends of said standards, wheels slidably but non-rotatably received on said standards and positioned between the lowermost of said vertically alined bearings and those immediately above the same, a horizontal steering shaft rotatably mounted in said horizontal bearings and operatively connected with said second-mentioned wheels for turning the same, means for rotating said steering shaft, and means for adjusting the frame vertically in respect to said standards.

1,266,440. TAP-CONNECTOR FOR ELECTRIC CONDUCTORS. MORRIS F. FINKELSTEIN, New York, N. Y. Filed May 22, 1917. Serial No. 170,170. (Cl. 173—273.)



1. The combination of a main wire, a branch wire and a connector for uniting the wires, said connector including a body, a screw threaded therein and formed with a stud on its outer end, and a binding member extending around the main wire and body with its ends overlapping and having openings in its ends to engage the stud of the screw, whereby the turning of the latter in one direction loosens the band and in the other direction tightens the same.

2. The combination of a main wire, a branch wire and a connector uniting the wires, said connector including a tubular body, a clamp therein including a yielding member extending lengthwise of the said body and with which the branch wire is engaged, and a screw in the body bearing on the yielding member for jamming the same into contact with the branch wire.

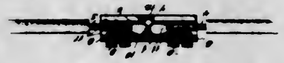
3. The combination of a main wire, a branch wire and a connector uniting the wires, said connector including a tubular body, a clamp therein including a yielding member extending lengthwise of the said body and with which the branch wire is engaged, and a screw in the body bearing on the yielding member for jamming the same into contact with the branch wire, said clamp having a member extending out of the body and lying between and in contact with the main wire and said body.

4. The combination of a main wire, a branch wire and a connector uniting the wires, said connector including a tubular body, a clamp therein including a yielding member with which the branch wire is engaged, and a screw in the body bearing on the yielding member for jamming the same into contact with the branch wire, said clamp having a member extending out of the body and lying between and in contact with the main wire and said body, the extremity of the said member being bent outwardly to engage the end of the body opposite from that into which the branch wire extends.

5. A connector of the class described comprising a tubular body, a clamp formed with a doubled extremity lying within the body and having a portion extending outside the body and longitudinally thereof, and a device adjustably mounted on the body and engaging the said doubled portion for clamping the same to a wire.

[Claims 6 and 7 not printed in the Gazette.]

1,266,441. ELECTRIC CONNECTOR. MORRIS F. FINKELSTEIN, New York, N. Y. Filed May 22, 1917. Serial No. 170,171. (Cl. 173—263.)



1. A connector comprising a tubular body, a device disposed in the body and composed of a strip of metal having its ends doubled backwardly to form at each end a pair of jaws opening outwardly, said jaws lying at the ends of the body, and means on the body for closing the jaws.

2. A connector comprising a tubular body having threaded openings, screws disposed in the openings, and a gripping device disposed in the body and composed of a strip of sheet metal having each end bent into a pair of jaws, the free ends of the jaws being at the open ends of the body and one jaw at each end being engaged by one of said screws, whereby the jaws can be engaged with the object to be gripped.

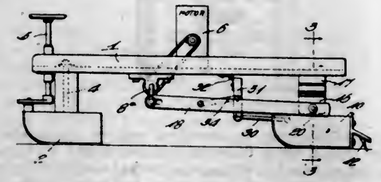
3. A connector comprising a tubular body having open ends and an opening in its wall at a point between the ends, a clamping device in the body and composed of a strip of metal having each end bent into a pair of jaws normally spaced apart, a projection on the said device at a point between the jaws for engaging in the opening of the body, and means on the body for moving the jaws of each pair toward each other.

4. In a connector, a clamping device formed of a strip having each end doubled backwardly into a pair of oppositely opening resilient jaws.

5. In a connector, a clamping device formed of a strip of sheet metal bent at each end into a pair of oppositely disposed U-shaped jaw members, and a connecting bar portion uniting corresponding members.

[Claim 6 not printed in the Gazette.]

1,266,442. MOTOR-SLEIGH. OLAI FLADELAND, Poplar, Mont. Filed May 23, 1917. Serial No. 170,402. (Cl. 180—4.)



1. A motor sleigh, comprising a vehicle body, a driving or power shaft mounted thereon, an oscillatory rear axle operatively connected to said power shaft, runners secured to opposite sides of said axle, connecting means between the axle and each of the runners for causing a parallel motion of the runners without shifting laterally, and rock-levers operatively connected to said power shaft and to said runners.

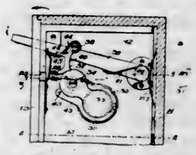
2. A motor sleigh, comprising a vehicle body, a driving or power shaft mounted thereon, an oscillatory rear axle operatively connected to said power shaft, and runners secured to opposite sides of said axle, and connecting means between the axle and each of the runners for causing a parallel motion of the runners without shifting laterally.

3. A motor sleigh, comprising a vehicle body, a driving or power shaft mounted thereon, a pivotally mounted rear axle, connecting-rods connecting the ends of the axle with cranks on said power shaft, runners pivotally secured to said axle, and means for maintaining a parallel motion of said runners.

4. A motor sleigh, comprising a vehicle body, a driving or power shaft mounted thereon, a pivotally mounted rear axle, connecting-rods connecting the ends of the axle with cranks on said power shaft, runners pivotally secured to said axle, rock-levers having link connections to said cranks and to the inner side of said runners, and means for maintaining a parallel motion of said runners.

5. A motor sleigh, comprising a vehicle body, a driving or power shaft mounted thereon, a pivotally mounted rear axle, connecting-rods connecting the ends of the axle with cranks on said power shaft, runners secured to said axle by link connections permitting a parallel motion thereof, and rock-levers having link connections to said connecting-rods and to the inner side of said runners.

1,266,443. PHOTOGRAPHIC-SHUTTER MECHANISM. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 25, 1915. Serial No. 57,666. (Cl. 95—31.)



1. In a photographic camera, the combination with an object illuminating means, an electric circuit including the same and a contact surface in said circuit, of a shutter and a shutter operating member also in the circuit and normally out of engagement with the contact the operative throw of which member brushes it across the contact and out of engagement therewith on the opposite side.

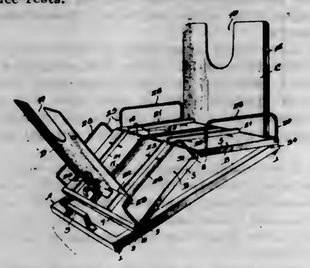
3. In a photographic camera, the combination with an object illuminating device, an electric circuit including the same, and a contact member in said circuit, of a shutter, a shutter operating lever, also in the circuit, a link pivoted to the lever and having a slip-off engagement with the shutter permitting it to release the latter and return idly, a projection on the lever arranged to engage the contact member during the actuation of the shutter and close the circuit and a spring normally operating to hold the link against the projection on the lever as a stop defining its shutter engaging position.

[Claims 2 and 4 not printed in the Gazette.]

1,266,444. FILING DEVICE. HENRY C. FOSBERG and DOUGLAS H. STRACHAN, Jamestown, N. Y., assignors to Art Metal Construction Company, Jamestown, N. Y., a Corporation of Massachusetts. Filed Apr. 24, 1917. Serial No. 164,156. (Cl. 129—16.)

1. A filing device comprising a bottom divided into a pair of sections having a hinge joint capable of breaking upwardly, an upright rising from each bottom section to support the contents of the filing device in normal and adjusted positions of said bottom, and propping means carried by the outer free end portion of one of the bottom

sections for engagement with the support on which the filing device rests.



5. A filing device comprising a base, a bottom hinged at one end to the base and divided into a pair of sections having a hinge joint capable of breaking upwardly to an adjusted position, a plurality of stop members on the base, and a device on one of the bottom sections for selective engagement with the stops to prop the bottom in an adjusted position.

7. A filing device comprising a bottom divided into a pair of sections having a hinged joint capable of breaking upwardly, a back rising from one of said bottom sections, a guideway on each bottom section, said guideways being in alinement in the normal position of the bottom sections, and a follower having a slide mounted on the guideway.

10. A filing device comprising a bottom, a back, a follower movable toward and away from the back, and a card guide, said card guide having a depending screw-threaded projection, the bottom having a slot disposed transversely of the guide and receiving the threaded projection, and a nut on the underside of the projection whereby the guide may be adjusted laterally on the bottom.

13. A filing device comprising a bottom, a back rising therefrom, a follower movable toward and away from the back, and an adjustable card stop consisting of a rod located at one side of the bottom and extending in the direction of movement of the follower, said rod having depending arms provided with lateral projections supported on the bottom, and clamping means engaging said projections to permit endwise adjustment thereof.

[Claims 2 to 4, 6, 8, 9, 11, 12, and 14 not printed in the Gazette.]

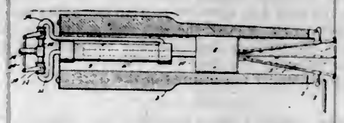
1,266,445. PIANO-STRINGS AND FRAME FOR SAME. EDWARD FOSTER, Montego Bay, Jamaica, British West Indies. Filed May 28, 1917. Serial No. 171,554. (Cl. 84—40.)



1. In combination, a frame, tape-like piano strings, a rack extending transversely of the strings and secured to the frame, bridges on the frame extending transversely of the strings, a bar pivotally connected to each string and engaging the rack whereby the tension of the string may be varied, a support for said bars carried by the rack, and means securing the bars to the support slidably whereby the strings are prevented from torsion and lateral movement on the bridges.

[Claim 2 not printed in the Gazette.]

1,266,446. DISPLAY OR ADVERTISING DEVICE. WILLIAM N. FOX, San Antonio, Tex. Filed Feb. 16, 1918. Serial No. 217,602. (Cl. 40—37.)



1. A device of the character stated comprising a body, arms pivoted at the mouth of the body, rods slidably mounted in the arms, and a sign carried by the rods and means for moving the rods through the arms.

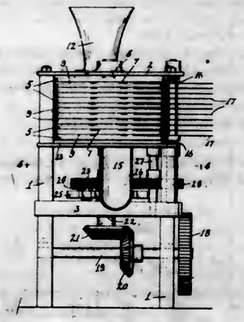
4. A device of the character stated comprising a body, rods slidably mounted at the end of the body, a sign carried by the rods, a block slidably mounted in the body and pivotally connected with the rods, a cylinder located in the body, a piston slidably mounted in the body and operatively connected with the block and means for introducing air under pressure at the opposite ends of the cylinder.

5. A device of the character stated, comprising a body, a sign within the body and collapsed therein, means for projecting the sign from the body, and means arranged at the mouth of the body for spreading the sign as it leaves the body.

8. A device of the character stated comprising a body, spreading means at the mouth of said body, rods slidably mounted in the spreading means, and a sign carried by the rods and means for moving the rods through the spreading means.

[Claims 2, 3, 6, and 7 not printed in the Gazette.]

1,266,447. PINEAPPLE-SLICER. GEORGE LAYTON FRASER, Honolulu, Hawaii, assignor to California Packing Corporation, San Francisco, Cal., a Corporation of New York. Filed Feb. 12, 1918. Serial No. 216,706. (Cl. 146—11.)



1. A machine for the described purpose, comprising a carrier with a series of peripheral spaces, and with fruit-receiving pockets traversing said spaces; a series of spaced knives adapted to enter said spaces and intersect the carrier pockets; means for feeding the fruit to successive pockets; delivery means for receiving the sliced fruit from successive pockets; and means for imparting a step by step revoluble movement to the carrier to cause it to come to rest under the feeding means and over the delivery means.

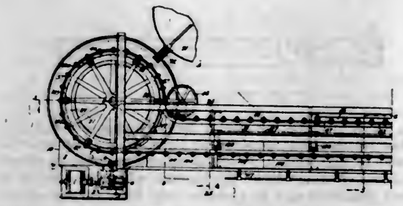
2. A machine for the described purpose, comprising a revoluble carrier with a series of peripheral spaces, and with fruit-receiving pockets traversing said spaces; a revoluble series of spaced knives adapted to enter said spaces and intersect the path of revolution of the pockets; means for rotating said knife series; means for feeding the fruit to successive pockets; delivery means for receiving the sliced fruit from successive pockets; and means for imparting a step by step revoluble movement to the carrier to cause it to come to rest under the feeding means and over the delivery means.

3. A machine for the described purpose, comprising a revoluble carrier with a series of peripheral spaces, and with fruit-receiving pockets traversing said spaces; a rotating series of spaced knives adapted to enter the carrier spaces and traverse the path of revolution of the carrier pockets; means for feeding the fruit to successive pockets; delivery means for receiving the sliced fruit from successive pockets; parallel shafts upon which the carrier and the knife series are respectively mounted; a power shaft, and a countershaft geared together; transmitting mechanism between the countershaft and the carrier shaft adapted to impart to the carrier shaft an intermittent movement to cause the carrier tot come to rest under the feeding means and over the delivery means; and a gear train between said countershaft and the knife series shaft.

1,266,448. PROCESS OF MAKING RICE BREAKFAST FOOD. HAZIME FUKUDA, Arminto, Wyo. Filed Aug. 17, 1917. Serial No. 186,815. (Cl. 99—10.)

A process for producing popped rice which consists in soaking a given quantity of rice seed in water for aproximately thirty-six hours until the rice seed has become thoroughly softened, then removing the rice seed from the water and subjecting the same to a suitable amount of heat until the moisture has been evaporated from the shell of the rice, and then placing the rice in a popper and subjecting the rice to a suitable amount of heat to cause the same to pop.

1,266,449. PROCESS OF AND APPARATUS FOR MAKING PULP BOTTLE-BODIES. WILLIAM H. FULCHER, Oakland, Cal., assignor to Fulcher Pulp Bottle Company, Oakland, Cal., a Corporation of California. Filed July 26, 1915. Serial No. 41,901. (Cl. 92—56.)

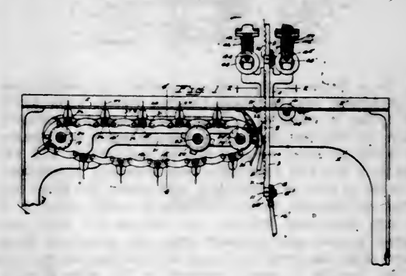


1. In combination, a tank for containing pulp, two endless series of mold sections, means for causing the sections of the two series to travel around predetermined paths, portions of the paths of the two series being located within a tank, the mold sections of one series being perforated to permit the water of the pulp, but not the solid pulp, to pass therethrough, means for pressing together the mold sections traveling in the parts of the paths within the tank, and means located outside the tank adjacent to the path of the other series for drying the pulp on the sections of said latter series.

55. The process of making pulp vessels which consists in dipping a core into a tank containing pulp, pressing the pulp in the tank on the core, raising the core from the tank with the pulp thereon, heating the pulp upon the core to dry the same, removing the dry pulp from the core, dipping the core into a tank containing molten paraffin, and repeating the operation with the same core.

[Claims 2 to 54 and 56 to 65 not printed in the Gazette.]

1,266,450. SLICING-MACHINE. WILLIAM H. GARLOCK and WILLIAM J. STUBBE, Seattle, Wash. Filed Oct. 1, 1917. Serial No. 194,112. (Cl. 146—12.)



1. In a slicing machine, cutter knives, a frame for said knives comprising side bars and top and bottom rails, said rails being provided with horizontal slots, knife-attaching heads having screw-threaded shanks extending through the respective frame rails, means for adjusting the vertical positions of the heads with respect to the upper frame rail, and nuts engageable with said shanks to secure the heads in both vertical and horizontal adjustments.

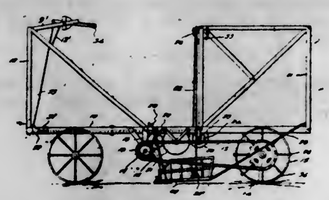
2. In a slicing machine, cutter knives, two knife-carrying frames disposed one in front of the other, each of said frames being formed of side bars and top and bottom rails, knife-engaging heads adjustably connected to the respective frame rails, said heads being arranged to extend rearwardly and forwardly, respectively, from the rails of the front and rear frames to present the cutting edges of the knives of both frames in the same vertical plane, guides for said frames, and means to reciprocate the frames simultaneously in opposite vertical directions.

3. In a slicing machine, the combination with slicing knives, vertically movable frames carrying said knives, means provided in said frames for regulating the relative lateral positions of the knives, of a table having an opening therein, a plate removably secured in the table opening, said plate being provided with slots extending from its front edge to accommodate said knives, and enable the plate being removed or attached to the machine without disturbing said knives.

4. In a slicing machine, the combination with slicing knives, vertically movable frames carrying said knives, means provided in said frames for regulating the relative lateral positions of the knives, of a table having an opening therein, a plate removably secured in the table opening, said plate being provided with slots extending from its front edge to accommodate said knives, and a series of rotary disks extending through slots of said plate and serving to guide and retain the slices produced by said knives in upright positions.

5. In a slicing machine, the combination with a table, cutting knives arranged for vertical movements, means to actuate said knives, and a conveyer to feed articles to be sliced to said knives, of presser devices provided in proximity to said knives for holding the articles down upon the table while being fed to said knives through the agency of said conveyer, said presser devices comprising a vertically movable horizontal bar, rings having apertures of greater diameter than said bar and through which the latter extend, and springs serving to yieldingly hold said bar in its lowermost position.

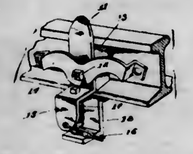
1,266,451. LOADER. HARRY GERNER, Hitterdal, Minn. Filed Nov. 15, 1916. Serial No. 131,508. (Cl. 214—80.)



1. In a device of the class described, in combination, a rectangular vehicle frame, traction wheels upon which said frame is mounted, a standard mounted thereupon, a pair of brackets disposed vertically upon said frame, one being mounted at one end of said frame and the other at a point in advance of said standard, a rectangular rack, a pair of front and rear rods, the front rod having an angular portion forming a pintle received in the last mentioned bracket, and having its lower end secured to one side of said rack, the rear rod being longer than the front rod and also having an angular portion forming a pintle received in the other bracket and disposed in alinement with the first named pintle, the last named rod being secured at its lower end to the rear side of the rack and near the corner thereof and at a lesser angle thereto with respect to the first rod, the points of the rods where they are attached to said rack being in the same plane, said last named rod being curved around one of said traction wheels and flexible means carried by said standard and secured to the inner side of said rack for raising and lowering the same swingingly by means of said rods, both of said rods being inclined downwardly and outwardly from the side of said frame to so position said rack as to enable it to scoop hay or the like.

[Claim 2 not printed in the Gazette.]

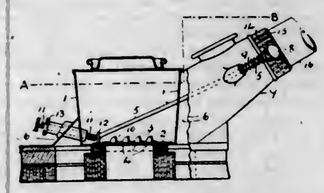
1,266,452. RAILROAD-SIGNAL. EVAN GIBSON, Foxhome, Minn. Filed Nov. 23, 1915. Serial No. 63,038. (Cl. 246—48.)



In a railway crossing signal, a signal blade capable of movement to danger and clear positions, a shaft, connections between said shaft and blade whereby the blade may be actuated by the rotation of the shaft, train controlled actuating devices at opposite sides of the crossing, each embodying a trip arm pivoted intermediate its ends for swinging movement, one end of said arm being disposed in the path of the train, the opposite end being offset, connections between the offset portions of each of said arms and said shaft, whereby the latter may be rotated to swing the signal blade to danger position by a train approaching the crossing from either direction, an L-shaped bracket secured beneath the offset end of each of the trip arms and springs connecting said brackets and offset portions, which provide a protecting housing for said springs.

1,266,453. BRONZING APPARATUS. FREDERICK GILBERT, Edgbaston, Birmingham, England. Filed Oct. 17, 1917. Serial No. 197,051. (Cl. 91—39.)

1. In a portable bronzing head having a container provided at its underside with outlets and a pad and also having a hood or cover in spaced surrounding relation to the said container and also provided at its underside with a pad, said hood providing a space which opens at the under side of the head and through which air may be drawn by suction, a cover plate slidably mounted over the outlet holes in the bottom of the container, having outlet holes which correspond to those in the container, and provided on its upper side with upstanding projections adjacent its respective outlet holes, the said cover plate being adapted to normally close the outlets in the container, and when moved forward to open the said outlets and, by means of said projections, to force the powder therethrough.

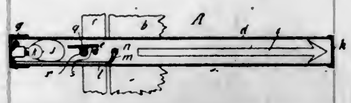


3. In a portable bronzing head having a cover plate slidably mounted over the outlet holes in the bottom of the container and provided with holes which correspond to those in the container and having attached thereto an operating rod arranged to protrude through the hood or cover which surrounds the container, an adjusting or set screw mounted in the hood and container and adapted to engage with a projection on the said cover plate for adjusting or controlling the movement of same.

4. In a portable bronzing head, in combination, a container having its bottom provided with outlet holes, and a cover plate slidably mounted upon said bottom and having outlet holes which correspond to those of the bottom, said cover plate being provided on its upper side with upstanding projections adjacent its respective outlet holes and being adapted to normally close the outlets in the container and when moved forward to open the said outlets and, by means of said projections, to force the powder therethrough.

[Claim 2 not printed in the Gazette.]

1,266,454. AUTOMOBILE TRAFFIC-SIGNAL. SAMUEL E. GILBERT, Portland, Oreg. Filed June 30, 1916. Serial No. 106,990. (Cl. 116—31.)

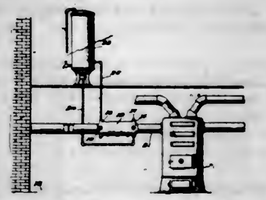


2. An auto signaling device comprising a pivoted tube having transparent openings at its ends, an illuminating element in said tube, a weighted shutter adapted to permit all of the openings to be illuminated when the tube is in certain positions and to exclude light from certain of the openings when the tube is in other positions, and controlling means for setting and locking the signal in any selected position.

[Claim 1 not printed in the Gazette.]

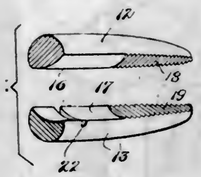
1,266,455. WATER-HEATING SYSTEM. AI C. GORDON, Glens Falls, N. Y. Filed Apr. 7, 1917. Serial No. 160,506. (Cl. 126—365.)

1. A water heater consisting of a tubular body having its ends constructed to fit within the sections of a smoke flue, circulating pipes extending diametrically across said body and in angular relation to each other and spaced apart, the walls of said pipes presented to the products flowing through the body being tapered whereby to deflect said products, a jacket surrounding said body and spaced therefrom and having its ends reduced and secured to the body, said jacket being provided with openings located co-axially with the circulating pipes, plugs normally closing said openings, inlets at one end of said jacket, and outlets at the opposite end thereof.



2. A water heater consisting of a tubular body having its ends constructed to fit within the smoke flue, the lower portion of said body being offset from the axis thereof and said offset portion being provided with a clean out opening in its under side, circulating pipes extending diametrically across said body and in angular relation to each other and spaced apart, the walls of said pipes presented to the products flowing through the body being tapered whereby to deflect said products, a jacket surrounding said body and spaced therefrom and having its ends reduced and secured to the body, said jacket being provided with openings located co-axially with the circulating pipes, plugs normally closing said openings, inlets at one end of said jacket, and outlets at the opposite end thereof.

1,266,456. SURGICAL-NEEDLE HOLDER. JAMES T. GREELEY, Nashua, N. H. Filed Apr. 16, 1917. Serial No. 162,315. (Cl. 128—44.)



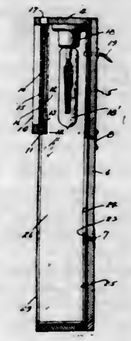
1. A surgical needle holder comprising a pair of jaws each having two gripping faces, one of which is curved to conform to a curved needle, while the other is substantially flat and conforms to a straight needle, the curved face of one jaw being convex and the curved face of the other jaw concave in cross section.

4. A surgical needle holder comprising a pair of jaws connected by a transverse pivot and having opposed curved gripping faces which are elongated lengthwise in a direction at right angles to said pivot, are relatively narrow and continuous or uninterrupted crosswise and have substantially parallel longitudinal edges which coincide when the jaws are closed, so that the closed jaws have a compact cross-sectional area adapting them to be inserted in incisions or cavities in a human body, the curved face of one jaw being transversely convex, and the curved face of the other jaw being transversely concave in cross section, whereby said faces are adapted to conform to a curved needle interposed between the jaws.

[Claims 2 and 3 not printed in the Gazette.]

1,266,457. DISPLAY-CABINET. BUTLER F. GREER, San Francisco, Cal. Filed May 17, 1916. Serial No. 98,193. (Cl. 40—130.)

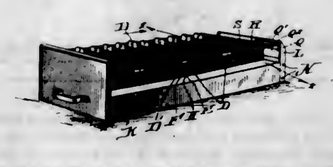
1. A cabinet of the character described comprising a body portion having a back wall, side walls and top and bottom walls, a relatively short front panel depending from said top wall, said panel having an opening therein, a transparent sign covering said opening, a normally opaque mirror covering the outer face of said sign and capable of being rendered transparent by light within the cabinet, mirrors attached to said side and back walls, a



source of light depending from the top wall back of said sign, and means for intermittently illuminating said source of light.

[Claims 2 and 3 not printed in the Gazette.]

1,266,458. SPACE-RETAINING DEVICE FOR CARD-INDEXES. SAMUEL G. HAGANS, Coatesville, Pa. Filed Jan. 3, 1918. Serial No. 210,178. (Cl. 129—16.)



1. A card index space retaining device comprising in combination with a cabinet, a rod supported therein, a sliding member upon said rod, a space retainer pivoted to said member, and means for supporting the retainer between the cards.

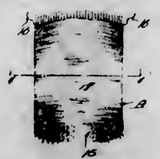
2. A card index space retaining device comprising in combination with a casing, a rod supported therein, sliding members made of pieces of metal bent to form cylindrical shell portions with integral lugs projecting therefrom, space retaining members pivoted between said lugs, and having their free ends terminating in spherical portions.

3. A card index space retaining device comprising in combination with a casing, a rod supported therein, sliding members made of pieces of metal bent to form cylindrical shell portions with integral lugs projecting therefrom, space retaining members pivoted between said lugs, and having their free ends terminating in spherical portions, and a second rod for supporting the retaining members when positioned between the cards.

4. A card index space retaining device comprising a casing one end being open, a cross-piece fastened to the open end and provided with apertures, rods passing through said apertures, means for holding the rods in place, sliding members mounted upon one of said rods, and a retaining device pivoted to said members.

5. A card index space retaining device comprising a cabinet open at one end, a cross-piece fastened to the side of the cabinet at the open end, and having apertures formed therein, rods passing through said apertures and mounted within the casing, said rods provided with circumferential grooves, a latch pivoted to the cross-piece and having a recessed edge adapted to engage said grooves of the rods.

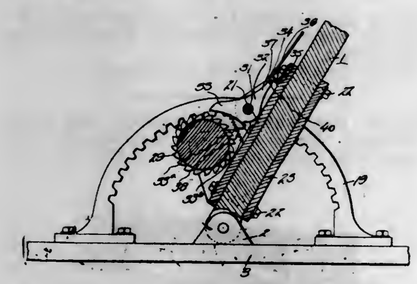
1,266,459. ART OF KNITTING TUBULAR ARTICLES. THEODORE HAHN, Milwaukee, Wis. Filed May 9, 1917. Serial No. 167,479. (Cl. 66—33.)



1. The herein described method of forming tubular knitted articles which consists in simultaneously knitting two flat objects, each having its opposite sides formed with stitches of different character, and simultaneously with the formation of the flat objects of knitting their corresponding edges together.

[Claims 2 and 3 not printed in the Gazette.]

1,266,460. TROLLEY-POLE. PEDER HAMMER, Chicago, Ill. Filed Jan. 13, 1917. Serial No. 142,268. (Cl. 191—95.)

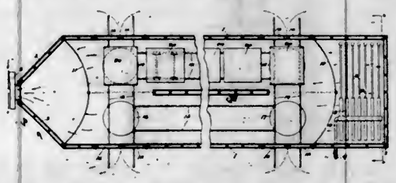


3. In trolley pole control means, a trolley pole pivotally mounted at its lower end and having a fork at its upper end, plates pivotally mounted on each arm of the fork on a common axis, each plate being provided with an upwardly directed bearing member adjacent its lower end and an outwardly directed finger at its upper end, and each arm of the fork having an arcuate slot to accommodate said finger, a trolley wheel rotatably mounted in said plates above the pivotal axis thereof, tension springs each having one end secured to the finger of each plate and the other end secured to the arm of the fork in advance of said finger, a relatively long trip arm secured to the bearing member of one of said plates so as to turn therewith, two spaced parallel racks mounted adjacent the lower end of said pole concentric with the pivotal axis thereof, a supporting plate detachably secured on the pole adjacent the lower end thereof, two pinions rotatably mounted in said plate and meshing with said racks, a ratchet wheel intermediate said pinion and rigidly secured thereto and having its teeth directed rearwardly and downwardly, a pawl rockably mounted in said plate and adapted to engage said ratchet, a catch carried by the plate and adapted to engage said pawl so as to normally hold the same out of engagement with the ratchet wheel, connections between said catch and trip arm for moving the catch into inoperative position so as to release the pawl when the trolley wheel is rocked forward, and means for normally rocking the trolley pole forward and upward about its pivotal axis.

[Claims 1 and 2 not printed in the Gazette.]

1,266,461. EVAPORATOR. ALBERT E. HAMMOND, Portland, Oreg. Filed May 21, 1917. Serial No. 169,956. (Cl. 34—46.)

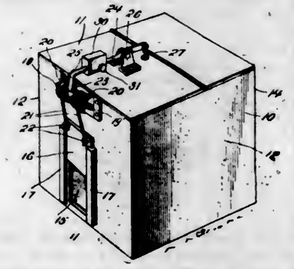
1. An evaporator of the character referred to comprising a housing of rectangular form provided at one end with means for admitting and heating air, and at its opposite end with means for causing a circulation of air through said housing, longitudinally-extending tracks in said housing, cross tracks extending through said housing near the opposite ends thereof, turn tables at the junctures of said longitudinal tracks with said cross tracks, whereby cars can be transferred from one track to the other, and air distributing and retarding means near the opposite ends of said housing.



2. An evaporator comprising a long rectangular housing provided at one end with means for admitting and heating air, and at its opposite end constructed with converging end walls, means operating at the converging ends of said end walls for causing a circulation of air through said housing, curved air distributing and retarding means near the opposite ends of said housing, and car tracks arranged in said housing between said air retarding and distributing means to receive cars of material to be dried, substantially as described.

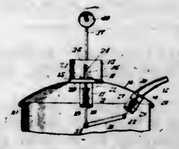
[Claims 3 and 4 not printed in the Gazette.]

1,266,462. AUTOMATIC BROODER. JAMES RICHARD HARGIS, Springfield, Mo. Filed June 15, 1917. Serial No. 174,986. (Cl. 119—22.)



A brooder comprising a receptacle provided with an opening, a slidable gravity closure therefor, a drum mounted for rotation above said sliding gravity closure, a flexible element having one end secured to the closure and its opposite end wound around said drum, a radially extending lug carried by said drum, a vertically moving bottom for said closure and a pivoted lever located in the path of said lug and connected to the bottom, whereby a downward movement of said bottom will release the lug and permit the rotation of the drum and the closing of the opening.

1,266,463. OIL-CAN CLOSURE. HARRY HERBERT, Chrome, N. J., assignor of one-half to Benjamin Lebovitz, Chrome, N. J. Filed Feb. 9, 1917. Serial No. 147,650. (Cl. 221—16.)



1. An oil can comprising a receptacle provided with an inlet and an outlet opening, valves for each of said openings, a ball pivoted to said receptacle and means including cam loops carried by said ball for automatically opening both of said valves upon tilting the can.

3. An oil can comprising a receptacle provided with inlet and outlet openings, valves for each of said openings, a cross arm carried by one of said valves, a ball pivoted to said receptacle and cam loops carried by said ball and engaging said cross arm for controlling said valves.

5. An oil can comprising a receptacle provided with an inlet and an outlet opening, valves for each of said openings, a pivoted link connecting said valves, a cross arm carried by one of said valves, a ball pivoted to said receptacle and cam loops formed on the inner ends of said ball and engaging said cross arm, whereby, the tilting of said can with respect to the ball will cause the automatic opening of both of said valves through the pivoted link connection.

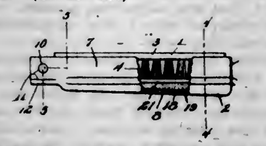
[Claims 2 and 4 not printed in the Gazette.]

1,266,464. VELOCIPEDE. MICHAEL P. HERRES, Peola, Wash. Filed June 27, 1917. Serial No. 177,331. (Cl. 208—42.)



A velocipede, including a body portion, a steering wheel supporting the forward end of said body, supporting posts depending from the rear of said body, an axle carried by said posts, traction wheels secured to the ends of said axle, cranks formed on the axle between said posts and wheels, pedal bars pivotally secured to said body and having vertically spaced openings provided therein, and connecting rods secured at one end to said cranks and at their opposite ends to said bars, the last mentioned ends of the connecting rods being vertically adjustable along the pedal bars to vary the stroke of the rods.

1,266,465. FOLDING TOOTH-BRUSH. ARTHUR H. HILL, New York, N. Y. Filed Aug. 18, 1917. Serial No. 186,895. (Cl. 15—39.)



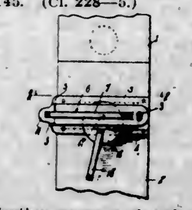
1. A tooth brush comprising a hollow handle formed to provide a bristle inclosing chamber, and a dentifrice reservoir at the bottom of said chamber and formed by the walls thereof and coinciding in length therewith, a bristle holder pivotally mounted for movement to open and closed positions and adapted when in closed position to be disposed so that the bristles extend into said bristle chamber, said holder being yieldingly mounted so that the bristles may be depressed into the dentifrice reservoir, and a sliding partition separating and controlling communication between the chambers and against which the bristles normally abut in the closed position of the holder.

3. A tooth brush comprising a hollow handle open at top and one end, said handle including a bottom wall, side walls and a rear end wall, the bottom wall having a forward spring tongue and a depressed portion in rear thereof, said depressed portion forming a dentifrice chamber coextensive in length with the body of the handle, a bristle holder comprising a back carrying bristles adapted to project into the handle when said holder is in closed position, said holder being provided at one end with a tang pivotally connected to the side walls of the handle above said spring tongue and having surfaces for coaction with the tang to permit depression of the bristles into the dentifrice chamber when the holder is closed and to hold said holder in folded and extended positions, and a sliding partition movable longitudinally of the handle and adapted to close communication between the bristles receiving chamber of the handle and the dentifrice chamber.

4. A toothbrush comprising a hollow handle open at top and one end, said handle including a bottom wall, side walls and a rear end wall, the bottom wall having a forward spring tongue and a depressed portion in rear thereof, said depressed portion forming a dentifrice chamber, and said side walls being provided with longitudinal grooves and the rear wall with a guide slot in line with said grooves, a sliding cover for the reservoir engaging said grooves and slot, and a bristle holder comprising a back carrying bristles and having a tang pivotally connected to the side walls of the handle above said spring tongue and having surfaces for coaction with the tongue to permit depression of the brush bristles when the sliding cover is removed and to hold the bristle holder in folded and extended positions.

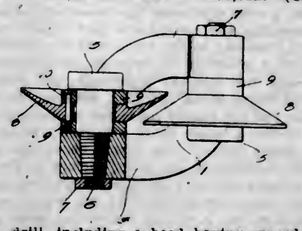
[Claim 2 not printed in the Gazette.]

1,266,466. LADDER-ADJUSTING MEANS. HARRY GUY HILL, White Salmon, Wash. Filed July 17, 1917. Serial No. 181,145. (Cl. 228—5.)



In ladder adjusting means, a clamping device comprising an inner clamping jaw provided at one end with an integral eye, a plate adapted to be secured to an extension piece slidable on a ladder rail so as to vary the effective length thereof, an outer rectangular or L-shaped clamping jaw having its outer arm extending in parallelism with said inner jaw and loosely secured at its outer end to said plate adjacent one end thereof, the inner arm of said outer jaw being inserted through said eye, and a wedge member rotatably mounted between said plate and the outer arm of the outer jaw for rocking said jaw upwardly away from the plate.

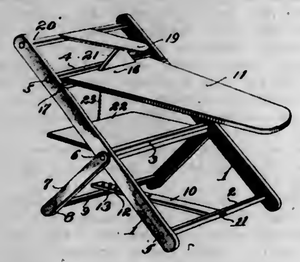
1,266,467. DRILL. WALTER J. HOLLAND, Berkeley, Cal. Filed June 29, 1917. Serial No. 177,712. (Cl. 255—71.)



1. A drill, including a head having spaced legs thereon, and disks having sloping backs carried by said legs, portions of the sloping surfaces of the disks overlapping and arranged adjacent each other.

[Claims 2 to 4 not printed in the Gazette.]

1,266,468. FOLDING IRONING-TABLE. WILLIAM H. HOLLAND, Bagdad, Fla. Filed Sept. 11, 1917. Serial No. 190,788. (Cl. 68—10.)



1. An ironing table including a frame embodying side bars and a plurality of cross bars rotatably mounted in the side bars, the reduced extremities of the intermediate cross bar projecting through the side bars, legs pivotally mounted on the reduced extremities, a cross bar rotatably mounted between the outer ends of the legs, a connecting bar carried by the lower cross bar and adjustably engageable with the cross bar of the legs for maintaining the frame in an extended form, an ironing board carried by the upper cross bar, and means adjustably mounted on the under surface of the board and engageable with the side bars of the frame for removably maintaining the board in an extended position.

2. An ironing table including a frame embodying side bars and cross bars the reduced ends of which are rotatably mounted in the side bars at uniformly spaced intervals while the reduced ends of the intermediate cross bar project through the side bars, legs pivotally mounted on the projecting reduced ends of the intermediate cross bar, another cross bar having the reduced ends rotatably mounted in the legs adjacent the outer ends thereof, a stud carried by the cross bar between the legs, a connecting rod having one end rigidly mounted in the lower cross bar in the frame and the opposite end provided with a plurality of openings for removable engagement with the stud to removably and adjustably maintain the frame in an extended position, an ironing board having one end rigidly connected to the upper cross bar in the frame, and a supporting rod pivotally mounted intermediate its ends on the under surface of the ironing board and adapted to be swung transversely thereof so that the projecting ends engage the upper surface of the side bars for maintaining the ironing board in an extended position.

3. An ironing table including a frame embodying side bars and cross bars the reduced ends of which are rotatably mounted in the side bars at uniformly spaced intervals while the reduced ends of the intermediate cross bar project through the side bars, legs pivotally mounted on the projecting reduced ends of the intermediate cross bar, another cross bar having the reduced ends rotatably mounted in the legs adjacent the outer ends thereof, a stud carried by the cross bar between the legs, a connecting rod having one end rigidly mounted in the lower cross bar in the frame and the opposite end provided with a plurality of openings for removable engagement with the stud to removably and adjustably maintain the frame in an extended position, an ironing board having one end rigidly connected to the upper cross bar in the frame, a bosom board swingingly mounted between the upper ends of the frame above the ironing board, means mounted on the under surface of the bosom board and coöperating with the upper surface of the ironing board at times for maintaining the bosom board in an extended position, a clothes supporting board carried by the intermediate cross bar in the frame, and flexible means connecting the outer end of the clothes supporting board with the inner end of the ironing board for supporting the clothes supporting board in an extended position.

1,266,469. SHIP AND BOAT CONSTRUCTION. RICHARD E. HORNBECK, Richmond, Cal. Filed June 4, 1917. Serial No. 172,819. (Cl. 114—77.)



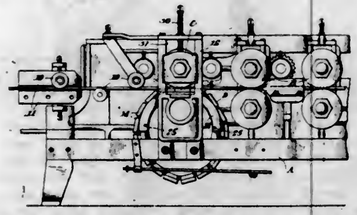
1. A ship or boat having a plurality of hulls placed side by side and spaced apart by means which securely bind said hulls to each other, and an apron located in the space between said hulls, and acting as a binding means for the same at a point below the water-line thereof; said apron having a movable portion which when depressed will cause the hulls to submerge, and which when elevated will cause the hulls to rise.

3. A ship or boat having a plurality of hulls spaced apart but connected securely; a fin extending horizontally in the space between said hulls below the water line thereof; and aprons hinged at both ends of said fin, for the purposes described.

5. A ship or boat comprising a plurality of connected hulls having a space between them, and a long horizontal fin fixed in the space between said hulls, and extending approximately one-half the length of said hulls below the water-line.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,266,470. MACHINE FOR FORMING TUBES. JAMES LUTHER HOSACK, Woodstock, Ontario, Canada, assignor to Standard Tube & Fence Co., Ltd., Woodstock, Ontario, Canada. Filed Sept. 10, 1917. Serial No. 190,526. (Cl. 153—32.)



1. In a tube forming machine, in combination, a pivoted forming roll, a support for the tube to be formed comprising a stationary support and a series of movable elongated flat dies in endless chain formation contacting with the tube under the roll, and means for moving the dies continuously to and from supporting position.

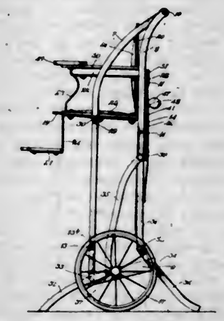
2. The device of claim 1 with the addition of guiding means for the dies.

3. In a tube forming machine, in combination, a forming roll, a plane surface opposite the same, an endless series of flat forming dies and means for moving said dies longitudinally with the tube over the plane surface.

4. In a tube forming machine, in combination, a forming roll, a plane surface opposite the same, an endless series of flat forming dies and means for moving said dies longitudinally with the tube over the plane surface, at least two of said dies being on the surface together, and forming thereon a continuous die surface which engages the tube.

1,266,471. PERAMBULATOR. GEORGE A. HOWARD and GEORGE L. SLATER, Buchanan, Mich., assignors of one-half to Frank S. Whitman, Buchanan, Mich; May D. Whitman administratrix of said Frank S. Whitman, deceased. Filed Apr. 9, 1914. Serial No. 830,645. (Cl. 155—12.)

1. A child's perambulator comprising a light skeleton vertically elongated frame, a pair of large perambulator wheels located substantially at the middle of the lower end of said frame, a handle at the upper end of said frame for the operation, movement and handling of the perambulator, a seat between the upper and lower ends of the frame, a prop member pivotally mounted on the lower end of said frame forward of the axis of said wheels, said prop member being pivoted intermediate its length and having a portion movable about said pivot from a position in which it extends downwardly and forwardly to act as a prop to a position in which it extends upwardly from said pivot, said member having an arm extending in a different direction from said pivot from the direction in which said prop portion extends, a second prop member pivotally mounted on the lower end of said frame rearward of the axis of said wheels, said second prop member being pivoted intermediate its length and having a portion movable about said pivot from a position in which it extends downwardly and rearwardly to act as a prop to a position in whitch it extends upwardly from said pivot, said second prop having an arm extending in a different direction from said pivot from the direction in which said prop portion extends, and means acting on said arms for moving said prop members from their first to their second positions, said means being operable from a position at the rear of the elongated frame.

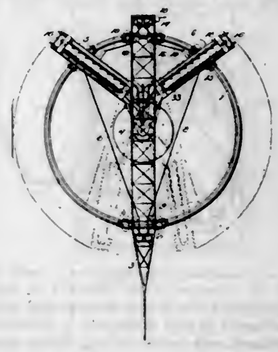


2. A child's perambulator comprising a light skeleton vertically elongated frame, a pair of large perambulator wheels at the lower end of said frame, a handle at the upper end of said frame for the operation, movement and handling of the perambulator, a seat between the upper and lower ends of the frame, a prop member pivotally mounted on the lower end of said frame forward of the axis of said wheels, said prop member being pivoted intermediate its length and having a portion movable about said pivot from a position in which it extends downwardly and forwardly to act as a prop to a position in which it extends upwardly from said pivot, said member having an arm extending in a different direction from said pivot from the direction in which said prop portion extends, a second prop member pivotally mounted on the lower end of said frame rearward of the axis of said wheels, said second prop member being pivoted intermediate its length and having a portion movable about said pivot from a position in which it extends downwardly and rearwardly to act as a prop to a position in which it extends upwardly from said pivot, said second prop having an arm extending in a different direction from said pivot from the direction in which said prop portion extends, and means acting on said arms for simultaneously moving said prop members from their first to their second positions, said means being operable from a position adjacent said first handle, and at the rear of the elongated frame.

3. A child's perambulator comprising a light vertically elongated frame, a handle near the upper end of the frame for operation, movement and handling of the perambulator, a movable seat, means for supporting said seat near the lower part of said frame, means for supporting said seat near the upper part of said frame when it is desired to use the device as a high-chair, a pair of large perambulator wheels at the lower end of the frame, two props movably mounted at the lower end of the frame, one having a portion for engaging a supporting surface in the rear of said wheels and the other having a portion for engaging a supporting surface in front of said wheels, and means for moving said props from supporting to non-supporting positions, said means being operable from a position at the upper end of the elongated frame.

[Claim 4 not printed in the Gazette.]

1,266,472. AIR-MOTOR. OLAF L. HOWE, Missoula, Mont. Filed Mar. 31, 1916. Serial No. 87,943. (Cl. 170—6.)

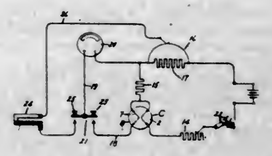


1. In an air motor, a track, a frame movable on said track, a rudder responsive to the direction of the wind and forming part of said frame, a plurality of vane carriers, means for maintaining said vane carriers in positions to resist the air force, and means for automatically moving said carriers to ineffective positions when the air velocity reaches a predetermined point.

5. In an air motor, an endless carrier comprising upper and lower flights of chains, a vertically disposed rod secured to said chains, a vane fulcrumed on said rod, a track, a roller on said vane normally out of contact with said track but adapted to engage the same to limit the swing of the vane.

[Claims 2 to 4 not printed in the Gazette.]

1,266,473. ELECTRICAL MEASURING APPARATUS AND THE METHOD OF OPERATING THE SAME. CHARLES A. HOXIE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed May 19, 1916. Serial No. 98,565. (Cl. 175—183.)



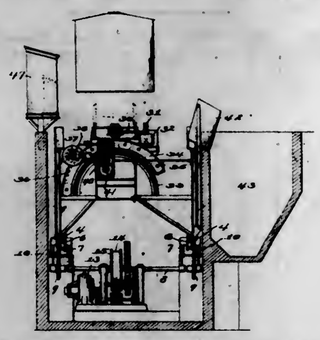
1. The combination of a gas-tight envelop, a filamentary heater therein, a thermo-couple in close thermal relation to but out of physical contact with said heating element, and a filling of gas within said envelop.

6. A device for standardizing a current comprising a source of current, a thermal element, circuit connections between said source and said element, means for varying the current furnished by said source to said element, means for furnishing an electromotive force varying with the temperature of said thermal element, means for furnishing

an opposing electromotive force varying at the same rate as the current through said thermal element, and means for balancing the opposing electromotive forces.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,266,474. CAR-UNLOADER. WILLIAM E. HUNT, Ottumwa, Iowa, assignor to Ottumwa Box Car Loader Co., Ottumwa, Iowa, a Corporation of Iowa. Filed Dec. 20, 1916. Serial No. 138,100. (Cl. 214—47.)



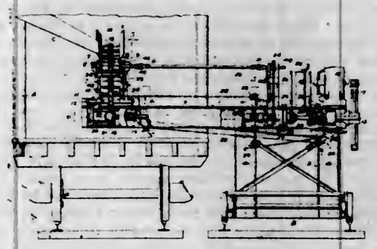
4. In a car unloader, in combination, a well having end extensions, an unloader frame mounted in the well for tilting movement in a longitudinal frame, end bumpers normally arranged in said extensions, a plurality of transversely arranged rails carried by said frame, said rails being of arched form and presenting their convex sides upward, a car-carrier having a longitudinally slotted top platform, a plurality of transverse bearers secured to said carrier and conformably fitting upon said rails for transverse movement along the peripheries thereof, a pair of bars operating in the slot of said platform for withdrawing said end bumpers from said well extensions upon said carrier or projecting said end bumpers from said carrier into said well extensions, a motor mounted upon said carrier, and gearing operatively connecting said motor and said bars.

5. In a car unloader, in combination, a frame tiltable in a longitudinal plane, a car carrier, a plurality of transversely arranged supporting means for said carrier mounted on said frame and transversely arranged parts carried by said carrier and having tractive engagement on said supporting means, said supporting means and transversely arranged parts being formed to coöperate in providing for a transverse movement of said carrier through an arched path of arched outline whose arc is disposed above its radial center.

[Claims 1 to 3 not printed in the Gazette.]

1,266,475. CAR-LOADER. WILLIAM E. HUNT, Ottumwa, Iowa, assignor to Ottumwa Box Car Loader Co., Ottumwa, Iowa, a Corporation of Iowa. Filed Jan. 26, 1917. Serial No. 144,725. (Cl. 193—19.)

1. In a car loader of the type set forth, the combination of an open ended hopper regularly curved from end to end thereof, a support for the hopper, the hopper being slidable in either direction of and substantially throughout its length relatively to said support and the latter co-acting with the hopper whereby to cause the path of its slidable movement to conform to the curved outline of the hopper, endless material engaging and moving means movable through the hopper, a continuously operating reversible shaft for effecting continuous movement of said means, the direction of movement of said means being dependent on the direction of rotation of said shaft, and gearing connecting said shaft and said hopper whereby to effect the aforesaid slidable movement of the hopper, the direction of such movement being dependent on the direction of rotation of said shaft and being the same as the direction of movement of said means, and a clutch for controlling the operation of said gearing whereby the hopper may be moved at will.



3. In a car loader of the type set forth the combination of a main frame movable laterally toward and from the car, a loading hopper mounted on one end of said main frame, material discharging means coöperating with said hopper, a chain wheel, a pair of sheaves carried by said main frame at opposite sides of said chain wheel, a single sheave carried by said main frame at a point remote from said pair of sheaves, a chain trained over said chain wheel and over said sheaves and having an end portion extending from said single sheave and an opposite end portion extending from one of said pair of sheaves, fixed devices independent of the main frame to which said end portions are respectively connected in crossed-relation, a continuously driven reversible main shaft carried by and disposed lengthwise of said main frame and serving to operate said material discharging means, said chain wheel being loosely mounted on said shaft, and means for clutching said chain wheel to said shaft for operation thereby.

6. In a car loader of the type set forth, in combination, a main frame, an open-ended hopper, a support for the hopper having an upright standard and a discal base rotatably mounted at an end of said main frame, the hopper being slidably fitted upon the upper end of the standard for movement in the direction of its length and having at one side thereof a rack which extends between its ends, a pinion carried by said support and engaging said rack, a continuously operable reversible main shaft disposed longitudinally of said main frame, an endless chain movable through the hopper and provided with regularly arranged material engaging arms, a sprocket arranged under said base for operating said chain and directly driven by said main shaft, longitudinally extensible flexible shafting for driving said pinion, gearing for driving said shifting from said main shaft to effect slidable movement of said hopper in the same direction as said chain, a clutch for controlling the operation of said gearing whereby said hopper may be moved at will, means connected to said standard for effecting turning movement of said support, gearing for operating said last-named means from said main shaft, and a clutch controlling said last-named gearing.

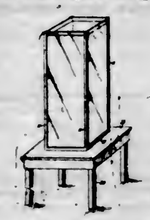
[Claims 2, 4, and 5 not printed in the Gazette.]

1,266,476. THEATRICAL APPARATUS. EBENEZER B. HURFORD, New York, N. Y. Filed Apr. 25, 1917. Serial No. 164,387. (Cl. 46—70.)

1. An apparatus as characterized comprising a water-holding container having transparent liquid-filled walls; means for producing at will an ebullition of the liquid contained in said walls; means for withdrawing liquid from said container; and means for introducing an object into said container at the bottom thereof.

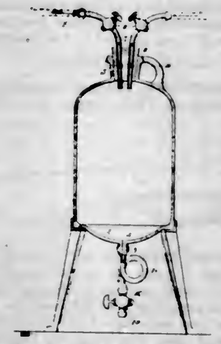
2. An apparatus as characterized comprising a water-holding container having liquid-filled walls; means for rendering the liquid in said walls temporarily opaque; and means for withdrawing the liquid from said container during the period of opacity of the liquid in said walls.

3. An apparatus as characterized comprising a water-holding receptacle having liquid-filled walls; means for rendering the liquid in said walls temporarily opaque; and means for withdrawing and replacing the liquid in



said receptacle during the period of opacity of the liquid in said walls.

1,266,477. BLOOD-DRAINER FOR EMBALMING. GEORGE H. HURST, Jr., Sumter, S. C. Filed Sept. 11, 1917. Serial No. 190,835. (Cl. 103—52.)



1. A portable blood-draining device, comprising a receptacle for containing a liquid and having openings at its top and bottom, a stopper closing the upper opening to hermetically seal the receptacle, a tube extending through the stopper and provided with a valve, and a conduit connected with the bottom opening and having a valve for controlling the outflow of liquid from the receptacle, whereby a vacuum is produced in the top of the receptacle to draw any blood from the corpse.

[Claims 2 and 3 not printed in the Gazette.]

1,266,478. METHOD OF PRODUCING SILICON-CARBID ARTICLES. OTIS HUTCHINS, Niagara Falls, N. Y., assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Mar. 3, 1917. Serial No. 152,242. (Cl. 204—62.)

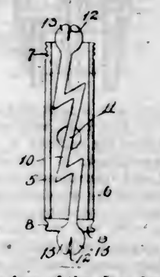
1. The method of making articles of dense silicon carbid, which consists in shaping said articles of a mixture containing silicon carbid and an organic binder of such a nature that upon heating a large residue of carbon remains to serve as a matrix surrounding each particle of the silicon carbid, baking the articles slowly in a neutral or reducing atmosphere to expel the volatile matter of the binder and convert it into a carbon matrix in which the particles of silicon carbid are embedded and held together, and finally heating the articles thus formed in an atmosphere of silicon and silica vapors to a temperature sufficient to convert the carbon into silicon carbid, thereby converting the carbon matrix *in situ* into silicon carbid and producing a homogeneous mass having a continuous structure.

3. The method of making articles of dense silicon carbid, which consists in shaping said articles of a mixture containing silicon carbid and a binder of coal-tar pitch, baking the articles slowly in a neutral or reducing atmosphere to expel the volatile matter of the binder and convert it into a carbon matrix in which the particles of silicon carbid are embedded and held together, and finally heating the articles thus formed in an atmosphere of silicon and silica vapors to a temperature sufficient to convert the carbon into silicon carbid, thereby converting the carbon matrix *in situ* into silicon carbid and producing a homogeneous mass having a continuous structure.

7. As a new article of manufacture, a molded form consisting of particles of silicon carbid and silicon embedded and held together by a matrix of carbon.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,266,479. FUSE. VICTOR G. JEXSEN, Chicago, Ill. Filed Sept. 18, 1916. Serial No. 120,841. (Cl. 175—273.)



1. In a cartridge fuse of the class described, interfitting insulating members, a zigzag fusing strip removably embedded in one of said members, and mounting means contacting the ends of said fusing strip and removably clamping the adjacent ends of said members together to permit replacement of said fusing strip after the same has been blown.

2. In an inclosed fuse of the class described, insulating means, a removably fusing strip passing therethrough and bent over the ends thereof, a ferrule, a convex spring therein, said ferrule adapted to be removably engaged over one end of said insulating means to permit said convex spring to contact one end of said fusing strip, a second ferrule, concentric ridges integrally formed therein, said second ferrule adapted to engage over the other end of said insulating means with said ridges contacting the other end of said fusing strip, and means on said ferrules for mounting the inclosed fuse.

4. A fuse comprising interfitting insulating members threaded at one end and shaped at their opposite ends to receive a cap thereon, a fuse strip between said members having the ends bent over the ends of said members, a cap threaded on the threaded end of the insulating members firmly clamping the end of the fuse in place, a cap on the opposite end of the members complementally formed to receive said end therein, and a tension member in the cap bearing on the end of the fuse.

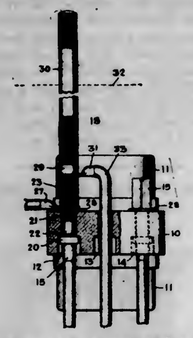
[Claim 3 not printed in the Gazette.]

1,266,480. TRANSFORMER. SVEND E. JOHANNESEN, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 11, 1915. Serial No. 66,280. (Cl. 175—361.)

1. The combination with a tank and a transformer submerged in a liquid in said tank, said tank being provided with an opening giving access to said transformer, of a connection board for terminals of said transformer, attached to a side of said transformer below the top thereof and directly accessible through said opening in said tank.

2. The combination with a tank and a transformer submerged in a liquid in said tank, said tank being provided with an opening at the top thereof giving access to said transformer, of a connection board, directly accessible through said opening in said tank, attached to a side of said transformer below the top thereof and having ter-

minals of the windings of said transformer exposed thereon, and a connecting member for making various connection with said terminals.



3. The combination with a tank and a transformer submerged in a liquid in said tank, said tank being provided with an opening above the surface of said liquid giving access to said transformer, of a connection board attached to a side of said transformer below the top thereof and having terminals of the windings of said transformer exposed thereon, and a connecting member for making various connections with said terminals, said connecting member extending substantially parallel with the vertical axis of said tank from said connection board to a position above the surface of said liquid accessible through said opening in said tank.

4. The combination with a tank, a transformer submerged in a liquid in said tank, and the line leads for one of the windings of said transformer, said tank being provided with an opening above the surface of said liquid giving access to said transformer, of a connection board for each of said line leads at which the terminals of said winding and the line leads are exposed, said connection boards being attached to sides of said transformer below the top thereof, and a connecting member for each of said connection boards for interconnecting said line leads and terminals in various arrangements, said connecting members extending substantially parallel with the vertical axis of said tank from the connection boards to positions above the surface of said liquid accessible through said opening in said tank.

5. A terminal board for electrical apparatus comprising an insulating body portion provided with two relatively thin, broad attaching extensions extending from opposite sides of said body portion, and a plurality of terminals carried by said body portion at one of said sides thereof, adapted to be attached to the apparatus leads.

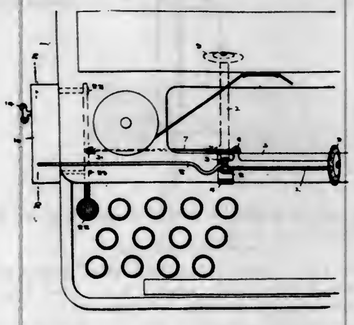
[Claim 6 not printed in the Gazette.]

1,266,481. AUTOMATIC ERASER FOR TYPEWRITERS. FRANK A. JOHNSON, University Place, Nebr. Filed Apr. 14, 1917. Serial No. 162,132. (Cl. 197—181.)

1. The combination with a typewriter, of an eraser, means for swinging the eraser from an inoperative to an operative position, and spring power means adapted to be released by said eraser when in an operative position.

3. The combination with a typewriter, of a supporting arm pivotally attached to the typewriter, a revoluble eraser carried by the outer end of said supporting arm, an actuating key pivotally supported by the typewriter, a flexible element connecting said supporting arm with the actuating key, whereby the eraser may be swung from an inoperative to an operative position upon the actuation of said key, and means for automatically revolving said eraser when swung to an operative position.

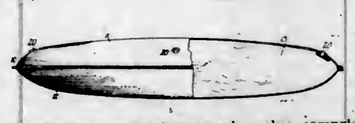
5. The combination with a typewriter, of a tubular supporting arm pivotally attached upon the typewriter, a flexible shaft disposed through and journaled within said supporting arm, an eraser fixed to the outer end of said flexible shaft, means for swinging said supporting arm and eraser from an inoperative to an operative position, and power means connected to said flexible shaft and adapted



to automatically operate to revolve the eraser when the eraser has been moved to an operative position.

[Claims 2, 4, and 6 not printed in the Gazette.]

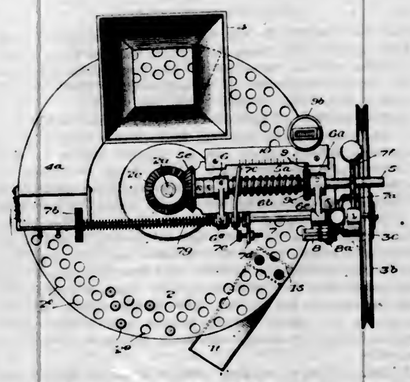
1,266,482. AIR-CUSHION. HARRIS KAMRASS, New York, N. Y. Filed July 23, 1917. Serial No. 182,185. (Cl. 5—13.)



1. An air cushion having an air valve comprising a flanged eyelet and a piece of flexible material doubled upon itself and its upper portion having an aperture that receives the eyelet and is secured between the lower flange of the latter and the covering of the cushion, the lower portion of the said piece overlying the inner end of the eyelet and constituting the valve proper, as shown and described.

[Claim 2 not printed in the Gazette.]

1,266,483. MACHINE FOR COUNTING BUTTONS. ALBERT F. KEFFLO, Muscatine, Iowa, assignor to Automatic Button Co., Muscatine, Iowa. Filed Jan. 10, 1918. Serial No. 211,167. (Cl. 133—8.)

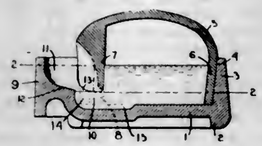


1. In a machine for counting buttons and the like, the combination of a rotatable disk having pockets, means for supplying buttons to the disk pockets, means for rotating the disk, a clutch for throwing said means into or out of effective operation, a spirally grooved member, gearing for rotating said member in unison with the disk, a latch member adapted to engage the spiral groove member, and means connected with said latch member whereby the clutch may be disengaged when the disk has made a predetermined number of revolutions.

10. The herein described machine for counting buttons, comprising a table having a discharge slot, a rotatable disk mounted on said table and having pockets adapted to register with said slot as the disk rotates, gearing for rotating said disk, a driving member, means for clutching or declutching the driving member from the disk operating gearing, a lever for operating said clutch, a spirally grooved member, gearing between said member and the disk driving gear, a longitudinally movable rod beside the member, a latch on said rod adapted to engage the member, adjustable tappets on said rod adapted to engage the clutch lever and cause it to disengage the clutch when the disk has made a determined number of revolutions, a spring for returning the rod to normal position, and an adjustable stop for limiting the inward movement of the rod, a scale adjacent the member for determining the number of revolutions made by the disk and means for normally holding the latch in engagement with the spirally grooved member.

[Claims 2 to 9 not printed in the Gazette.]

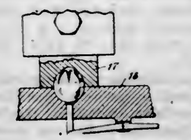
1,266,484. INKSTAND. FREDERICK A. KENNEDY, Danielson, Conn.; Cora M. S. Kennedy, executrix of said Frederick A. Kennedy, deceased, assignor to The General Eclipse Company, a Corporation of Connecticut. Filed Dec. 22, 1916. Serial No. 138,354. (Cl. 120—59.)



1. An ink stand comprising a base and a dome forming a barometric reservoir, the wall of the dome having a reentrant portion provided with an aperture leading to said reservoir, the base having an extension opposite said reentrant portion forming a safety chamber, the bottom of said safety chamber being recessed to form a dip chamber and presenting a ledge the inner margin of which lies substantially upon a level with the top of the aperture leading to the reservoir whereby the normal level of the ink in said dip chamber will be substantially upon a level with the inner margin of said ledge and a minimum amount of the surface of the ink exposed to the atmosphere.

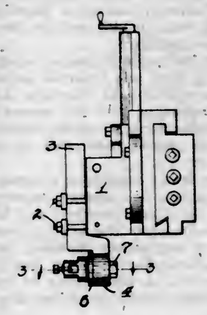
[Claims 2 to 4 not printed in the Gazette.]

1,266,485. PROCESS OF MAKING SHEET-METAL BALLS. FRANK L. KINGSTON, Cleveland, Ohio, assignor to The K.-D. Carburetor Company, Cleveland, Ohio, a Corporation of Ohio, (incorporated January 19, 1917.) Filed May 19, 1916. Serial No. 98,550. (Cl. 113—51.)



The method of making a one-piece hollow ball, comprising forming a star shaped blank with segmental lobes having arcuate edges each edge substantially equal in length to one quarter the circumference of the finished ball, cupping the body of the blank, and bending the lobes until their edges meet.

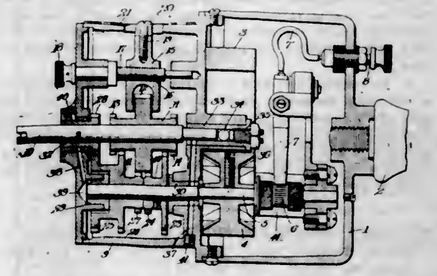
1,266,486. TOOL-HOLDER. ENGELBERTUS KLEINEGRIS, Chicago, Ill. Filed Feb. 1, 1917. Serial No. 145,935. (Cl. 90—52.)



1. A tool holder comprising a stationary head, outwardly projecting pins secured thereto, a rotatable head provided with a central stud and apertures arranged concentrically around the stud to receive said pins therein, a tool holder block pivoted to the rotatable head, said block and rotatable head being recessed, and a spring in said recess adapted normally to hold the block in the rotatable head.

2. A tool holder comprising a stationary head, a rotatable head, interfitting pins and recesses for relative adjustment of said heads, means rigidly securing the heads together, flanges integral with the rotatable head, a tool block pivoted between the flanges, and a fulling spring secured in a recess in the block and connected to the block at one end and to the rotatable head at its opposite end.

1,266,487. TACHOMETER. PETRUS VAN SANTEN KOLFF, Philadelphia, Pa., assignor, by mesne assignments, to The Electric Tachometer Corporation, a Corporation of Delaware. Filed May 2, 1916. Serial No. 94,929. (Cl. 175—183.)



1. A tachometer device comprising a generator, a main spindle adapted to be rotated by the shaft whose speed is to be measured, an armature shaft, variable speed-change gearing for driving the armature shaft from the main spindle, the gear ratios of said gearing being so chosen that for any position of the change gears a predetermined maximum speed of the spindle will correspond to one and the same predetermined speed of the armature shaft.

2. A tachometer device comprising a generator, a spindle adapted to be rotated by the shaft whose speed is to be measured, an armature shaft, variable speed change gearing for driving the armature shaft from the spindle and an electric measuring instrument attached to the generator.

2. A tachometer device comprising a generator, a spindle adapted to be rotated by the shaft whose speed is to be measured, an armature shaft, variable speed change gearing for driving the armature shaft from the spindle, and an electric indicator having a plurality of scales, said scales having range ratios equal to the speed ratios of the speed change gearing.

4. A tachometer device comprising a casing, a partition dividing the casing into two separate chambers, a generator mounted in one of said chambers and having its armature shaft extending into the second chamber, a main spindle mounted in said second chamber and variable speed-changing gearing connecting the main spindle and armature shaft.

5. A tachometer device comprising a casing, a partition dividing the casing into two separate chambers, a generator mounted in one of said chambers and having its armature shaft extending into the second chamber, a main spindle mounted in said second chamber, variable speed-changing gearing connecting the main spindle and armature shaft, and means on the exterior of the casing for indicating the position of the speed-changing gearing.

1,266,488. RAIL-FASTENER. MYO KOVACHICH, Pittsburgh, Pa. Filed Dec. 27, 1917. Serial No. 209,113. (Cl. 238—5.)



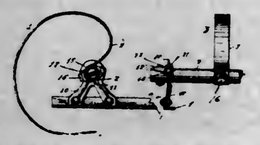
1. In combination a rail chair having a recess a tie supporting the chair and having a lip over-lapping the chair and manually operating means for locking the chair including a member adapted to engage the walls of said recess.

2. In combination a rail chair having a recess formed therein a tie supporting the chair and having a lip overlapping the same, a slidably mounted bar adapted to move into and out of engagement with the recess and a manually operated device for giving sliding movement to said bar.

3. In combination a rail chair having a recess formed therein a tie supporting the chair and having a lip overlapping the same, a slidably mounted bar adapted to move into and out of engagement with the recess, a manually operated device for giving sliding movement to said bar, and locking means for preventing operation of said device.

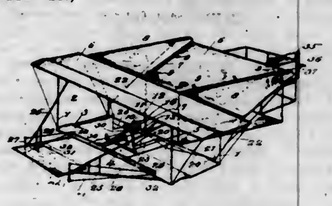
4. In combination with a tie having an overhanging lip a rail chair supported by the tie and engaged by said lip, said chair consisting of two plates having an interlocking engagement, an abutment member arranged between the plates and a screw passing through one plate and engaging said member for preventing movement thereof, the head of said screw being arranged under said lip.

1,266,489. SPRING-TOOTHED HARROW. JOSEPH J. KOVAR, Dodge Center, Minn. Filed July 16, 1915. Serial No. 40,227. (Cl. 55—33.)



A harrow having a curved tooth formed from a single piece of metal with a substantially diamond-shape point projecting forwardly and normally slightly upward, said tooth slightly straightening under pulling strains to thereby cause its point to assume an approximately horizontal position and move endwise through the ground, the lower face of the point being flat throughout its entire width and the upper face thereof being convex with its greatest thickness at the longitudinal center of tooth.

1,266,490. AEROPLANE. ALFRED KREMER, Mount Pleasant, Pa., assignor of one-half to Leo P. Keller, Mount Pleasant, Pa. Filed Sept. 11, 1917. Serial No. 190,799. (Cl. 244—29.)



1. An aeroplane comprising a transverse sustaining plane, a longitudinal sustaining plane arranged rearwardly of the transverse plane and disposed in the plane thereof, sub-planes arranged upon the opposite sides of the longitudinal plane in the rear of the transverse plane and adapted to be arranged in the plane of the transverse plane, means pivotally connecting the longitudinal edges of the sub-planes with the longitudinal edges of the longitudinal plane so that said sub-planes are adapted to be swung transversely of the longitudinal plane, a pivoted lever, a drum pivotally connected with the lever, a cable connected with the sub-planes and wound upon the drum to alternately swing the sub-planes downwardly, and means connecting the lever with the cable for simultaneously swinging the sub-planes downwardly.

3. An aeroplane comprising, a transverse sustaining plane, a longitudinal sustaining plane arranged rearwardly of the transverse plane, sub-planes arranged upon the opposite sides of the longitudinal sustaining plane and pivotally connected therewith to be swung transversely thereof, a pivoted lever, a drum pivotally connected with the lever, a cable connected with the sub-planes and wound upon the drum to alternately swing each sub-plane downwardly, and means whereby the sub-planes may be simultaneously swung downwardly by the movement of the pivoted lever.

4. An aeroplane comprising, a transverse sustaining plane, a longitudinal sustaining plane arranged rearwardly of the transverse plane, sub-planes arranged upon opposite sides of the longitudinal sustaining plane and pivotally connected therewith to be swung transversely thereof, a standard, a lever provided near its upper end with a universal connection with the standard, a drum pivotally connected with the lever near its upper end, a hand-wheel connected with the drum, a cable connected with the sub-planes and wound upon the drum to alternately swing each sub-plane downwardly, and means connecting the lower portion of the lever with said cable so that said lever may serve to simultaneously swing the sub-planes downwardly.

[Claims 2, 5, and 6 not printed in the Gazette.]

1,266,491. ROLL-FILM-DEVELOPING APPARATUS. ROBERT KROEDEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 22, 1917. Serial No. 203,305. (Cl. 95—90.5.)

1. In a film developing apparatus, the combination with an elongated tank, of a cover for the latter having a sliding engagement longitudinally of the tank and means on the cover for unrolling a film roll contained in the tank as the cover is closed.

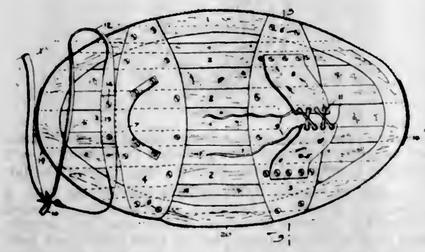
2. In a film developing apparatus, the combination with an elongated tank, of a cover having a sliding engagement with the tank longitudinally thereof and a roll film holder carried beneath the advance end of the cover.

3. In a film developing apparatus, the combination with an elongated tank, of a cover having a sliding engagement with the tank longitudinally thereof, a roll holding box carried beneath the advance end of the cover and



means on an end wall of the tank for fastening the free end of a film roll contained within the box.

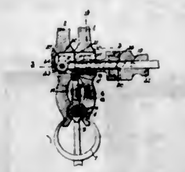
1,266,492. MUD-SHOE. THEODOR KURRELL, HEINRICH SCHNEIDER and JULIUS HELMS, San Francisco, Cal. Filed Aug. 16, 1917. Serial No. 186,639. (Cl. 36—36.)



2. A mud shoe comprising a frame, a sheet of flexible material underlying said frame and secured at its edges to the edges of said frame, means for securing the frame to the object to be supported by the shoe, and a piece of sheet metal secured to the frame and adapted to enter the ground to prevent the shoe slipping thereon.

[Claim 1 not printed in the Gazette.]

1,266,493. UNIVERSAL MICROMETER. PETER LACKNER, New Brunswick, N. J. Filed May 29, 1917. Serial No. 171,670. (Cl. 33—154.)



1. In a micrometer of the character described, a pair of pivotally mounted legs, adjustable mechanism for controlling the spreading of said legs, and means for maintaining said adjustable mechanism in a predetermined relationship to the pivotal point of said legs.

8. In a micrometer of the character described, a pair of legs hinged together, a spring for opening said legs, means including a bar for closing said legs, and means acting on the bar for maintaining the bar the same distance continually from the pivotal point of said hinge.

[Claims 2 to 7 not printed in the Gazette.]

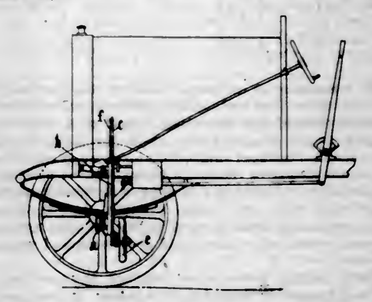
1,266,494. AMUSEMENT DEVICE. ARTHUR D. LAKIN, Latham, Ill. Filed July 17, 1917. Serial No. 181,115. (Cl. 124—15.)



4. In a device of the class described, a body portion, a plurality of pivotally mounted arms, means for retaining the arms in a lowered position, resilient means for throwing the arms upwardly when released, a target for controlling the position of the retaining means, and a resiliently mounted member adapted for release by one of the arms when the latter is thrown upwardly.

[Claims 1 to 3 not printed in the Gazette.]

1,266,495. SELF-PROPELLED VEHICLE. JESSE LANDON and FREDERICK WILLIAM MARTYN, Watford, England. Filed Mar. 22, 1916. Serial No. 85,762. (Cl. 180—1.)



1. In a self-propelled vehicle the combination of an axle, a guide upon said axle, a member slidable in said guide, a pair of wheels spaced apart and carried at the lower end of said member, means for depressing said member to raise the vehicle, a power shaft for driving one of said wheels, a chain drive connecting said power shaft with said wheel and means for automatically taking up the slack in the chain drive as the slidable member is moved into its raised position.

2. A vehicle turning device comprising: a vertically movable member mounted adjacent one end thereof, oppositely extending arms carried by the lower end of the vertically movable member and projecting laterally therefrom with relation to the longitudinal axis of the vehicle, wheels carried at the extremities of said arms in tandem relation to each other, means for lowering said vertically movable member to raise the corresponding end of the vehicle, and means for rotating one of said wheels to swing the vehicle about the other end as a pivot.

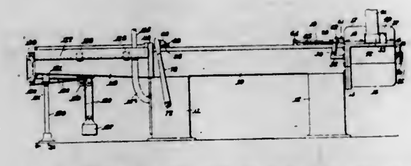
3. In a self-propelled vehicle the combination of an axle, a guide upon said axle, a member slidable in said guide, an antifriction wheel carried upon the lower end of said member, racks upon said member, bearings upon said guide, a transverse shaft carried by said bearings, pinions upon said shaft engaging with said racks, means

for driving said shaft, a chain drive for rotating said anti-friction wheel and means for automatically taking up the slack in said chain drive as the anti-friction wheel is moved into its upper position.

4. In a self-propelled vehicle the combination of an axle, a guide upon said axle, a member slidable in said guide, a pair of wheels spaced apart and carried upon the lower end of said member, racks upon said member, bearing upon said guide, a transverse shaft carried by said bearings, pinions upon said shaft engaging with said racks, means for driving said shaft, a reversible chain drive for rotating one of said wheels, and means for automatically taking up the slack in said chain drive as the slidable member is moved into its raised position.

5. A vehicle turning device comprising a guide mounted upon one axle of the vehicle, a member vertically movable in said guide, oppositely extending arms carried by the lower end of the vertically movable member and projecting laterally therefrom with relation to the longitudinal axis of the vehicle, wheels carried at the extremities of said arms in tandem relation to each other, a power-driven chain for rotating one of said wheels to swing the vehicle about the other end as a pivot and means for taking up the slack in said chain to compensate for the vertical movement of said vertically movable member.

1,266,496. KEY-SEAT BROACHING-MACHINE. FRANCIS J. LAPOINTE, New London, Conn. Filed Apr. 30, 1917. Serial No. 165,633. (Cl. 90—33.)



1. In a machine of the class described, the combination of a bed frame; a tool holder adapted to reciprocate lengthwise thereof and consisting in part of a non-revoluble screw; a nut on said screw; a tubular member locked to said nut in alinement therewith and through which said screw is adapted to be moved; a pulley secured to said tubular member; a sleeve surrounding said tubular member and provided with gear teeth; a pulley secured to said sleeve; an annular gear secured to said tubular member; a gearing interposed between said gear teeth and said annular gear.

6. In a machine of the class described, the combination of a bed frame; a tool holder adapted to reciprocate lengthwise thereof and consisting in part of nonrevoluble screw; a nut on said screw; a tubular member locked to said nut in alinement therewith and through which said screw is adapted to be moved; a pulley secured to said tubular member; a sleeve surrounding said tubular member and provided with gear teeth thereon; a pulley on said sleeve; a plate loosely mounted on said sleeve; a stud extending from the face thereof; a pinion thereon meshing with said gear teeth; a second pinion on said stud revoluble with the first mentioned pinion; an annular gear secured to said tubular member and with the teeth of which said second pinion meshes; and means for preventing the rotation of said plate.

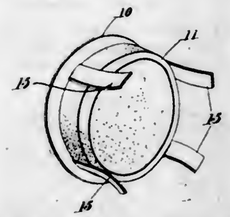
14. In a machine of the class described, the combination of a bed frame; a tool holder adapted to reciprocate lengthwise thereof and consisting in part of a non-revoluble screw; a revoluble tubular member having depressions at one end; a divided nut having projections positioned in said depressions; and means for locking together the parts of said nut.

20. In a machine of the class described, the combination of a bed frame provided with three alined bearings; a revoluble tubular member in two of said bearings, a tool holder adapted to reciprocate lengthwise of said frame and consisting in part of a non-revoluble screw fitting the bore of said tubular member; a bushing for the third bearing surrounding said screw; and a nut for said screw between said bushing and tubular member and adapted to be rotated by said tubular member.

26. In a machine of the class described, the combination of a bed frame having a horizontal extension provided with a vertical end plate having an opening therethrough; a tool holder adapted to reciprocate lengthwise of said frame and consisting in part of a nonrevoluble screw; means coacting with said screw for moving it endwise; a working tool secured to said tool holder and extending through said opening; and a support for the outer end of the extension of said bed frame having a flat vertical face alined with the outer face of said end plate and provided with a pair of T-shaped grooves.

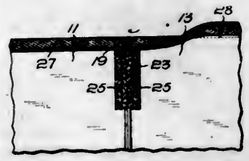
[Claims 2 to 5, 7 to 13, 15 to 19, 21 to 25, and 27 to 38 not printed in the Gazette.]

1,266,497. CHIMNEY-FLUE COVER. CHARLES A. LARSON, Lemont, Ill. Filed Mar. 21, 1916. Serial No. 85,682. (Cl. 126—319.)



A cover for flue openings comprising a plug of refractory material, a metallic disk arranged at one side of said plug, and having a greater diameter than that of the latter to project beyond the peripheral edge of the plug, a reinforcing element including a substantially U-shaped intermediate portion embedded in the plug, the parallel limbs of said element being bent at right angles and resting upon the outer side of the plug flush with the surface thereof, said right angularly disposed portions being disposed in contacting engagement with the disk and providing means whereby the disk can be riveted or otherwise effectively secured to the reinforcing element and plug, said right angularly disposed portions lying flush with the peripheral edge of the plug and terminating to provide a plurality of resilient fingers projecting beyond the side of the plug opposite that to which the metallic disk is secured, and adapted for holding the cover operatively positioned with respect to the flue opening.

1,266,498. QUARTERS FOR LOW SHOES. JOHN E. LEAVITT, Boston, Mass. Filed June 12, 1917. Serial No. 174,238. (Cl. 36—57.)



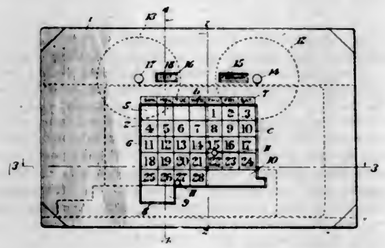
1. In a low shoe, the combination with quarters, of a back seam connecting the same, a tab projecting from one of said quarters transversely to said seam and overlying the other quarter adjacent the upper edge thereof, a binding tape at the upper edges of said quarters, and stitching securing said tape to said quarters and also securing said tab to the quarter which it overlies.

3. In a low shoe, the combination with quarters, of a back seam connecting the same, a strengthening member projecting from one of said quarters and overlying the other quarter adjacent the upper edge thereof, a cover strip extending along said seam and overlapping said quarters, lines of stitching securing said strip to said quarters, a binding tape at the upper edge of said quarters, stitching securing said tape to said quarters, a lining for said quarters, and stitching securing the same to the upper edges of said quarters; one of said lines of stitching, said tape stitching and said lining stitching all securing said strengthening member to the quarter which it overlies.

5. In a low shoe, the combination with quarters, of a tab projecting frrom one of said quarters to and upon the other quarter adjacent the upper edge thereof, a back seam connecting said quarters, and lines of stitching crossing said tab in different directions for securing the same to the quarter which it overlies.

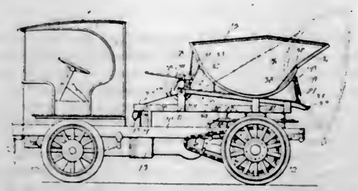
[Claims 2 and 4 not printed in the Gazette.]

1,266,499. CALENDAR. ALEXANDER LECKEY, Camden, N. J. Filed Sept. 1, 1916. Serial No. 118,105. (Cl. 40—109.)



A perpetual calendar comprising a frame having a chamber therein and an opening in its front face, said opening having an extesion at its lower edge adjacent one side thereof and a second extension in the opposite side, the bottom of the second extension being on a line with the bottom of the opening, a date carrying sheet slidably mounted in said chamber and visible through the opening, a button carried by said date sheet, a slide movably mounted in said chamber at the lower part thereof and having its upper edge stepped, and a button on said slide engaging the lower edge of the opening and adapted to enter the second extension for removing the end of said slide from the first extension.

1,266,500. DUMPING-HOPPER. ALBERT P. LEE, Chicago, Ill., assignor to Lee Loader & Body Co., Chicago, Ill. Filed Oct. 31, 1916. Serial No. 128,692. (Cl. 21—20.)



1. A device of the character described comprising a runway, a hopper adapted to roll on said runway from its charge carrying to its discharge position, said hopper having a wide, substantially flat, discharge edge running throughout substantially the entire width of the said hopper, and a pocket structure having a discharge mouth provided along the discharge edge of said hopper, said pocket structure having means whereby during the dumping operation a restricted opening is afforded to permit the material to be discharged in a steady stream along the discharge edge of said hopper.

3. A device of the character described comprising a runway, a hopper adapted to roll on said runway from its charge carrying to its discharge position, said hopper having a wide, substantially flat, discharge edge running throughout substantially the entire width of the said hopper, and a pocket structure having a discharge mouth provided along the discharge edge of said hopper, said pocket structure having means whereby during the dumping operation a restricted opening is afforded to permit the material to be discharged in a steady stream along the discharge edge of said hopper, said pocket structure having reservoir means whereby during the discharge operation the material may be temporarily held until completely discharged.

4. A structure of the character described comprising a framework, an auxiliary framework rotatably mounted upon said first aforesaid framework, an inclined runway upon said auxiliary framework, a rolling hopper adapted to roll upon said runway from a charge carrying to a discharge position, the rotatable mounting of said auxiliary framework permitting said hopper to discharge its contents in a plurality of different directions, means at the discharge end of said hopper for locking said hopper in its charge carrying position; means to control the speed of the discharge movement of the hopper, a turn table having coöperating parts held in sliding engagement interposed between said frameworks, means for holding said auxiliary framework in its central position relative to said first aforesaid framework, and means including a winding drum for restoring said hopper from its discharge to its charge carrying position.

5. A structure of the character described comprising a framework, an auxiliary framework rotatably mounted upon said first aforesaid framework, an inclined runway upon said auxiliary framework, a rolling hopper adapted to roll upon said runway from a charge carrying to a discharge position, the rotatable mounting of said auxiliary framework permitting said hopper to discharge its contents in a plurality of different directions, a turn table having coöperating parts held in sliding engagement interposed between said framework, means for holding said auxiliary framework in its central position relative to said first aforesaid framework, and means including a winding drum for restoring said hopper from its discharge to its charge carrying position.

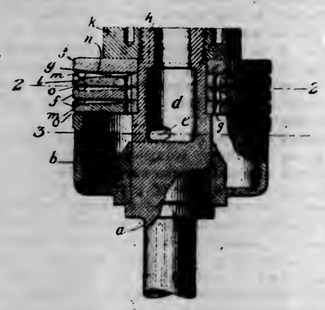
7. A structure of the character described comprising a framework, an auxiliary framework rotatably mounted upon said first aforesaid framework, an inclined runway upon said auxiliary framework, a rolling hopper adapted to roll upon said runway from a charge carrying to a discharge position, the rotatable mounting of said auxiliary framework permitting said hopper to discharge its contents in a plurality of different directions, means to control the speed of the discharge movement of the hopper, a turn table having coöperating parts held in sliding engagement interposed between said frameworks, means for holding said auxiliary framework in its central position relative to said first aforesaid framework, and means including a winding drum for restoring said hopper from its discharge to its charge carrying position.

[Claims 2 and 6 not printed in the Gazette.]

1,266,501. EMULSIFIER. MEREDITH LEITCH, Poughkeepsie, N. Y., assignor to The De Laval Separator Company, New York, N. Y., a Corporation of New Jersey. Filed June 14, 1915. Serial No. 34,061. (Cl. 99—2.)

1. A rotatable emulsifier provided with a sediment collecting chamber, means for introducing the mixture to be emulsified, and, one or more emulsifying elements having emulsifying discharge orifices, said emulsifying elements having inlet passages leading from said sediment chamber and having outwardly extending distributing passages terminating in the emulsifying discharge orifices.

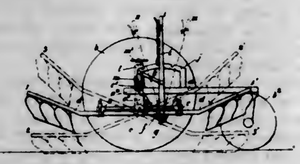
10. A rotatable emulsifier provided with a central receiving chamber, an annular sediment collecting chamber having supply passages near its upper end leading from the receiving chamber, and one or more emulsifying elements surrounding said receiving chamber and superposed upon said sediment collecting chamber, said elements having supply passages leading from said sediment collecting chamber near the upper end thereof, and having outwardly extending distributing passages terminating in emulsifying discharge orifices.



16. A rotatable emulsifier comprising a shaft having in one end a central receiving chamber provided with outwardly opening discharge passages, an annular sediment collecting chamber mounted upon said shaft and communicating with said discharge passages, and one or more emulsifying elements mounted upon said shaft and arranged to receive the mixture to be emulsified from said sediment collecting chamber.

[Claims 2 to 9 and 11 to 15 not printed in the Gazette.]

1,266,502. MOTOR-PLOW. MAURICE LOUIS LETROTEUR, Paris, France. Filed Dec. 1, 1917. Serial No. 204,876. (Cl. 97—50.)



1. A motor plow comprising a main frame for carrying the motor mounted on wheels and adapted to travel either forward or backward, a frame located beneath and articulated to the main frame to swing vertically in either direction, a double swing plow carried by said frame to swing therewith, and a manipulating lever connected to said frame articulated to effect its swinging movements whereby the driver can cause the plow to take up the positions required for tilling both when traveling forward or backward.

2. A motor plow comprising a main frame for carrying the motor mounted on two main wheels and one guiding wheel and adapted to travel either forward or backward, a double swing plow suspended from said frame by means of an articulated swinging frame, and a manipulating lever connected to said frame whereby the driver can cause the plow to take up the positions required for tilling both when traveling forward or backward.

3. A motor plow comprising a main frame for carrying the motor mounted on wheels and adapted to travel either forward or backward, a double swing plow suspended from said frame by means of an articulated swinging frame, means for vertically adjusting the axis of articulation of said swinging frame relatively to said main frame, and a manipulating lever connected to said frame whereby the driver can cause the plow to take up the positions required for tilling both when traveling forward or backward.

[Claims 4 to 7 not printed in the Gazette.]

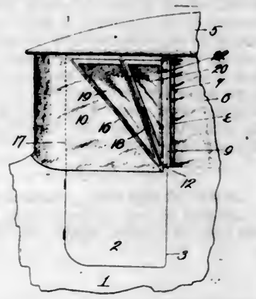
1,266,503. CAP OR HEADWEAR. JACOB H. LIEDERMAN, St. Louis, Mo. Filed Sept. 19, 1917. Serial No. 192,111. (Cl. 2—106.)



1. As a new article of manufacture, a cap or the like including a body-portion and a vizor, the vizor comprising a transparent section hingedly fastened to the body-portion and a non-transparent flexible flap also fastened to the body-portion and adapted to normally rest upon and cover the transparent section, the transparent section and covering flap being movable together into an approximately upright position relatively to the body-portion and the flap being further adapted to be separately turned up to expose the transparent section and the transparent section being then adapted when brought down in front of the eyes to provide a shield and window for the eyes.

[Claim 2 not printed in the Gazette.]

1,266,504. MOTOR-CAR CURTAIN. ELDON E. LLOYD and JOHN Z. CURNUTT, Maryville, Mo. Filed Mar. 17, 1916. Serial No. 84,848. (Cl. 21—62.)



1. The combination with a motor car having a top and a hinged door, of a curtain comprising a member extending from a fixed part of the car body to the top of the car and a door member over and adapted to swing with the door; said members being detachably secured together adjacent the free edge of the door when closed, and the door member at its opening edge, having a permanent stiffening bar pivotally engaged with the door at the upper free corner thereof and capable of swinging only in a single plane which, when the door is closed, coincides with the rear edge of the first-named curtain member.

2. The combination with a motor car having a top and a hinged door, of a curtain comprising a member extending from a fixed part of the car body to the top of the car, and a door member over and adapted to swing with the door; said members being detachably secured together adjacent the free edge of the door when closed, and the door member at its opening edge having a permanent stiffening bar pivotally engaged with the door at the upper free corner thereof and capable of swinging only in a single plane which, when the door is closed, coincides with the rear edge of the first-named curtain member, said door member having a window in the part above a diagonal line extending from a point near the pivotal point of the curtain to the top of the car at a point vertically above the hinged edge of the door.

4. The combination with a motor car having a top and a hinged door, of a curtain closing the space above the door and adapted for swinging therewith; said curtain having a permanent stiffening bar at its free edge pivoted at its lower end to the door to swing with the curtain from a vertical position to a diagonal line extending from the upper free corner of the door to the top vertically above the hinged edge of the door.

6. The combination in a motor car having a top, of a hinged door provided at the upper corner of its free edge with a socket having a throat and upwardly and downwardly flaring mouths, and a curtain extending between the side of the car and the top thereof and adapted to swing with the door; said curtain at its free or opening edge having a stiffening bar terminating at its lower end in an arm engaging said socket and adapted to pivot therein to permit the portion of the curtain above a diagonal line extending from the pivotal point of the bar to the top at a point vertically above the hinged edge of the door to fold and overlap the portion of said curtain below said fold line.

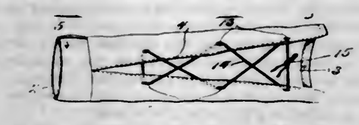
[Claims 3 and 5 not printed in the Gazette.]

1,266,505. COMBINATION HAIR AND HAT PIN. EDWARD LONG, Burke, Idaho. Filed June 6, 1917. Serial No. 173,202. (Cl. 132—25.)



A pin of the character set forth comprising a hollow body portion having a plurality of spaced pairs of transversely alined openings and a locking member for said pin body, said locking member being constructed of a plurality of intertwisted strands of material of different lengths, the extremities of each strand presenting resilient prong members so positioned with respect to the locking member as to facilitate their ejection through the respective openings of the pin body upon movement of the locking member in one direction.

1,266,506. SLEEVE-PROTECTOR. JOEL HENRY LOUDER, Elgin, Ill. Filed June 17, 1916. Serial No. 104,262. (Cl. 2—95.)



1. The hereindescribed sleeve-protector, the same comprising a cuff or band, and a sleeve-portion connected therewith and forming a sleeve-receiving guard, said guard having formed in its upper side an opening extending from the cuff or band to the rear end of the guard, one edge of the opening being inclined or diverged with respect to its companion, and both edges having eyelets, and an elastic lacing in the eyelets and connected beyond the same at its ends.

2. The hereindescribed blank for a sleeve-protector, the same consisting of a substantially triangular body-portion adapted to be folded in tubular form by bringing the opposite corners of the base of the triangle together for the purpose of producing a sleeve-receiving guard having an angular opening in its upper side, and further consisting in an oblong extension formed integral with the base of the triangular body-portion and extending at one side beyond the same, said extension being foldable longitudinally to produce a cuff thicker than the sleeve-receiving guard.

1,266,507. DEVICE FOR APPLYING ANTISLIPPING-CHAINS TO PNEUMATIC TIRES. EDMUND B. LUDWIG, Kansas City, Mo. Filed May 26, 1916. Serial No. 100,126. (Cl. 152—14.)



A device for applying anti-skid chains to a wheel for motor vehicles, comprising a bowed spring plate, having inwardly curved projections of the spring plate adjacent the ends of said plate, clips supporting the ends of the chain and lever extensions, extending from said clips beyond the ends of said bowed spring plate, for attaching and removing the spring plates from the wheel.

1,266,508. PARACHUTE. HERMAN LUDTKE, Morris, Ill. Filed Nov. 24, 1917. Serial No. 203,702. (Cl. 244—21.)



2. A parachute comprising a parachute body, a suspending member, suspension cords connected with the frame elements of the parachute body and with said suspending member, a guide ring having openings for the passage of the suspending cords, whereby said ring is slidably mounted on said cords, a filling tube carried by said ring and normally projecting into the collapsed parachute body, a suspending rope terminally connected with the suspending member and guide ring and arranged to form a bight or loop, and a sling suspending member including a pulley block hung in the bight of said rope.

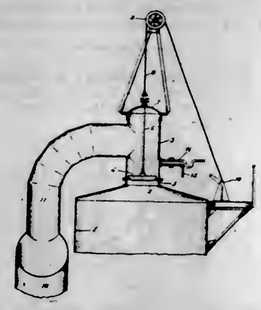
[Claim 1 not printed in the Gazette.]

1,266,509. WATER-SEALED VALVE. ARTHUR G. MCKEE, Cleveland, Ohio. Filed Dec. 15, 1915. Serial No. 67,041. Renewed Feb. 13, 1918. Serial No. 216,943. (Cl. 137—4.)

1. In a valve structure, the combination of a valve and seat therefor; means for operating said valve; and means for forming a water seal for said valve when closed, said water being completely discharged to destroy the seal when the valve is opened.

2. In a valve structure, the combination of a valve and seat therefor, said valve being adapted to close the opening formed by said seat by contact; means for forming a water seal for such valve when closed; and means for

permitting the water from such seal to be discharged, said seal being destroyed when the valve is out of contact with its seat.



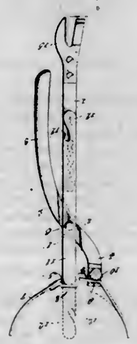
6. In a valve structure, the combination of a valve and seat therefor; of a water seal connected with a controllable water supply and provided with means from which the water from such seal may be visibly discharged; said valve forming the bottom of said seal.

8. In a valve structure, the combination of a gas duct; a vertically operating valve with a horizontal seat therefor controlling the flow of gas through said duct; a water-supply pipe communicating with the interior of said duct and above said valve and a water outlet in said duct and located above said valve; said duct, valve and valve seat forming the walls of a water seal and arranged so that the valve seat, when the valve is open, forms an outlet for the water of such seal.

11. The method of manipulating an apparatus including a valve and valve seat, which consists in covering the adjacent parts of the valve and seat when closed, with water to form a seal; supplying additional water; permitting a visible discharge of water from such seal; and then destroying such seal by opening the valve and completely discharging the water from said seal.

[Claims 3 to 5, 7, 9, and 10 not printed in the Gazette.]

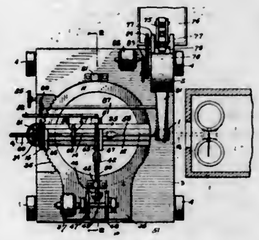
1,266,510. TOOL. NORMAN A. MCMEEKIN, Woodsville, N. H. Filed Mar. 14, 1916. Serial No. 84,156. (Cl. 65—26.)



4. A tool comprising a straight handle and a curved handle pivoted together in crossed relation, jaws formed on the handles by extending the straight handle and reversibly curving the curved handle beyond the point of pivot, a flexible band having one end rigidly secured to one of said jaws, the free end looped and adapted to pass through an aperture formed in the second of said jaws, a toothed pawl pivoted in said aperture adapted to co-act with teeth formed in the roof of said aperture to grip said flexible band against movement when the handles are gripped and moved toward each other, in order to contract the said band around a pail cover, or the like, and a bar pivoted at the point of pivot normally lying adjacent one face of the straight handle so as not to project beyond the jaw, said bar adapted to be swung on the pivot to project beyond said jaws to exert leverage upon the pail cover.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,266,511. GLASS-POT-FILLING MACHINE. ALEXANDER G. MAXWELL, Springdale, Pa., assignor of one-half to Joseph Heidenkamp, Pittsburgh, Pa. Filed June 11, 1917. Serial No. 174,063. (Cl. 214—25.)



1. In a glass pot filling machine, the combination of a frame arranged to swing about both a horizontal and a vertical axis, a ladle mounted to reciprocate on said frame, power mechanism for reciprocating said ladle on said frame to introduce the same into and withdraw the same from a furnace, and means for automatically arresting the reciprocating movement of said ladle in both directions.

3. In a portable glass pot filling machine, the combination of a portable truck, a frame mounted on said truck and tiltable about a substantially horizontal axis, a second frame mounted to rotate on the first frame, a reciprocable carriage on the second frame, mechanism on said second frame for reciprocating said carriage, and a ladle carried by said carriage.

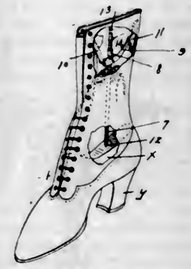
7. A portable glass pot filling machine having a frame pivoted to swing about a horizontal axis, means for adjusting the position of the frame so that it will remain in the position to which it is moved, a second frame rotatably mounted on the first, means for turning the second frame on the first, a reciprocable carriage mounted on the second frame, a filling ladle carried by said carriage, power operated friction driving disks carried by said second frame, a transmission mechanism arranged to frictionally engage either of said disks and connected so as to reciprocate the carriage, means for controlling the transmission mechanism so that the carriage may be reciprocated in either direction, mechanism for automatically stopping the carriage when it has reached the limit of its movement, and elevating and conveying means for supplying glass making material to the ladle.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,266,512. TOP-TREE FOR SHOES. JAMES N. MAYHEW, Minneapolis, Minn., assignor to James N. Mayhew Company, Inc., of Minneapolis, Minn., a Corporation of Minnesota. Filed Jan. 2, 1918. Serial No. 209,926. (Cl. 12—130.)

2. A top tree for shoes comprising an adjustable supporting head, and an equalizing lever fulcrumed on said head and having at one end a pivoted arm, said arm and the other end of the equalizing lever having means for attaching the same to the top of a shoe.

9. A top tree for shoes comprising a revoluble post, a supporting head having screw-threaded engagement with the post, and an equalizing lever intermediately fulcrumed



on the supporting head and having means for attaching the same to the top of a shoe.

[Claims 1 and 3 to 8 not printed in the Gazette.]

1,266,513. EYEGLASS-MOUNT. CONRAD MEYER, New York, N. Y. Filed June 5, 1917. Serial No. 172,894. (Cl. 88—47.)



1. In an eye glass mount of the character described, the combination with a lens having a pair of slots therein extending to the edge, of a guard provided with a flange extending its full length overlapping said lens and with end sections overlapping said slots, said guard having a post and an aperture adjacent each side of said post, and fastening means for clamping said guard to said lens, said fastening means comprising a pair of metallic strips having one end fitting into said slots and the opposite end extending through said apertures, said opposite ends being positioned against the outer surface of said guard.

2. In an eye glass mount of the character described, a guard provided with a post, means extending into a lens, and formed with resilient ends gripping part of said lens, said means acting on said guard for pressing the guard against the edge of the lens and a rubber member arranged between said guard beneath said post and said lens.

3. An eye glass mount, comprising a guard, and a plurality of fastening means having one end extending through and overlapping the guard and the opposite end interlocking with a lens.

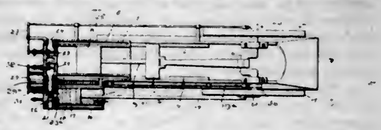
4. In a device of the character described, the combination with a lens having a plurality of slots arranged at an angle to each other, of a guard, and fastening means extending through the guard and snugly fitting said slots.

9. In an eye glass mount of the character described, the combination with an eye glass having a pair of spaced converging slots, a guard of sufficient length to extend slightly beyond each of said slots, a rubber member arranged in said guard and adapted to engage the edge of said lens, and a securing member formed with ends bent upon themselves fitting in each of said slots for gripping the lens, said securing means interlocking with said guard in such a manner as to slightly press said resilient means whereby the guard is connected with the lens and is maintained continually under tension.

[Claims 5 to 8 and 10 to 17 not printed in the Gazette.]

1,266,514. EXPLOSIVE-ENGINE. LOUIS H. MEYER, Lake Park, Iowa. Filed Nov. 23, 1916. Serial No. 133,006. (Cl. 123—70.)

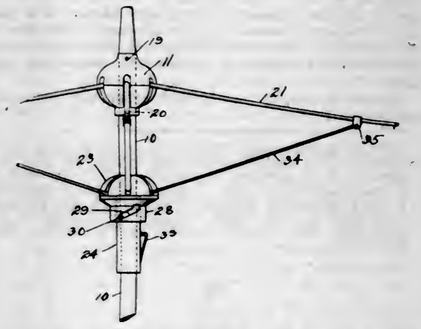
1. In an explosive engine, an engine cylinder, a compressor cylinder, pistons reciprocably mounted in said cylinders, said cylinders having a passage therein connecting them, valves for controlling the passage of gaseous fuel through said passage, angularly disposed rocker arms



engaging said valves, and a push rod engaging the converging terminals of the rocker arms simultaneously actuating said valves.

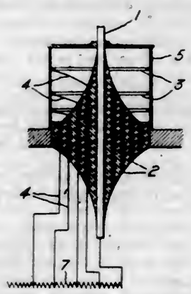
[Claim 2 not printed in the Gazette.]

1,266,515. UMBRELLA-FRAME. FRANK J. MONAHAN, Providence, R. I. Filed May 1, 1916. Serial No. 94,538. (Cl. 135—31.)



An umbrella frame comprising a staff, a thimble fixed to the staff and provided with a plurality of internal spherical recesses and narrow slots leading from said recesses to the periphery of the thimble, a set of ribs each having an enlarged head formed of the middle zone of a sphere of substantially the diameter of the recesses, so as to rotatably engage said recesses, each head being flattened on two opposite sides whereby it may pass through its slot into its recess to swing therein, a runner, and stretcher members connecting said runner with said ribs.

1,266,516. HIGH-POTENTIAL INSULATOR. SADAJI MOMOTA, Tokyo, Japan, assignor to General Electric Company, a Corporation of New York. Filed June 14, 1916. Serial No. 103,628. (Cl. 173—311.)



3. The combination with a conductor and an insulating bushing of the condenser type surrounding the same, said

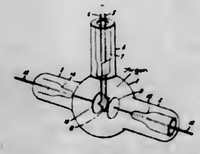
bushing being provided with the usual condenser plates and being provided with insulating material beyond the ends of said plates forming an external surface of said bushing, of a ring of conducting material adjacent said surface of said bushing and surrounding the conductor, and a conductor connecting said ring to a condenser plate of a different potential than the natural potential of said surface adjacent said ring.

6. The combination with a conductor and an insulating bushing surrounding the same, of conducting material concentrated adjacent a portion of the surface of said bushing, a conducting plate of greater capacity than said conducting material, said conducting plate being embedded in said bushing and so located with reference to said conductor as to have impressed upon it a potential of a different value than the natural potential of the surface of said bushing adjacent said conducting material, and a conductor connecting said conducting plate and said conducting material.

11. The combination with a conductor and a bushing surrounding the same, of means for reducing the creepage along the surface of said bushing by limiting the distribution of electric pressure, which means consists of a plurality of metallic pieces arranged adjacent the surface of said bushing, a source of predetermined electric pressures, and conductors connecting said metallic pieces and said source.

[Claims 1, 2, 4, 5, 7 to 10, 12, and 13 not printed in the Gazette.]

1,266,517. **RECTIFIER.** GEORGE STANLEY MEIKLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Original application filed Oct. 9, 1914, Serial No. 865,836. Divided and this application filed Jan. 15, 1916. Serial No. 72,328. (Cl. 250—27.)



1. A rectifier comprising the combination of a sealed envelop, a refractory cathode operable at a temperature of at least about 2000° C., an anode having a heat-dissipating capacity great enough to be operable below the temperature at which appreciable electron emission occurs, and a filling of argon having at the operating temperature of the device a pressure materially above one millimeter of mercury.

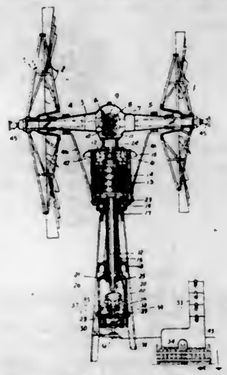
4. A rectifier comprising the combination of a sealed envelop, a tungsten cathode, means for heating said cathode to incandescence, a tungsten anode or materially greater heat-dissipating capacity than said cathode, and a quantity of argon gas within said envelop, at a pressure permitting a discharge having a voltage drop of a few volts with the cathode at incandescence.

[Claims 2 and 3 not printed in the Gazette.]

1,266,518. **WIND-POWER MOTOR.** MARION ALVIN MULRONY, Randwick, near Sydney, New South Wales, Australia. Filed Sept. 3, 1915. Serial No. 48,828. (Cl. 170—39.)

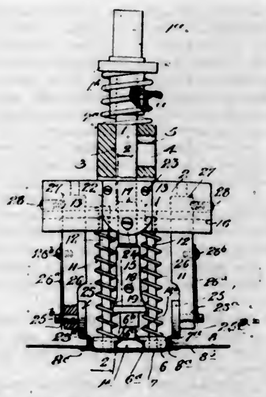
1. In a wind motor, a head having two shafts, a differential connecting the two shafts, a wheel on each shaft, said wheels constructed to rotate at different speeds, and a driven shaft receiving power from said wheels and driven through said differential at a speed substantially a mean between the speed of the said wind wheels.

4. In a wind motor, a rotatable head having wheels constructed to rotate at different speeds in the same direction, a shaft driven by said wheels, a differential between the wheels and shaft to compensate for the difference in speed between the wheels whereby the said shaft is driven at a speed approximating a mean between the speed of the different wheels, and a driving connection between the differential and said shaft arranged to oppose the gyrostatic precession of said rotary head.



[Claims 2 and 3 not printed in the Gazette.]

1,266,519. **TOOL FOR CAPPING CANS.** ISIDOR NEWMAN, New York, N. Y. Filed Apr. 27, 1917. Serial No. 164,838. (Cl. 113—25.)



1. A tool of the class described comprising a plunger to rotate within a cap, a roll coöperative with the plunger within the cap, a spindle movable separately from the roll and plunger to force the roll laterally within and against the cap to spin the latter, a roller to operate on a lateral flange of the cap, and means to direct the roller against said flange while the roll operates against and within the cap.

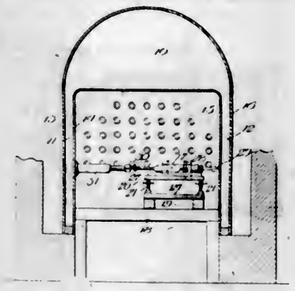
3. A tool of the class described comprising a spindle, a laterally movable roll, a plunger receiving the roll permitting its lateral movement, a body carrying said roll and plunger and movable relatively to the spindle, means coöperative between the spindle and roll for moving the roll laterally, a roller carried by the body adjacent to the roll and plunger, and means to rotate the body with the spindle, whereby the roll may operate within the cap to spin it, and the roller may bend a flange of the cap between the roller and the plunger when the tool rotates.

11. A tool of the class described comprising a spindle, a body rotative with and movable longitudinally along the spindle, a plunger having a stem guided by the spindle, a guide movably carried by the body and provided with a bore, a roll having a stem slidable in the bore, means to limit longitudinal movement of the stem in the bore, the plunger having a recess coöperative with the roll to permit lateral movement of the roll and to move the roll with the plunger, a spring coöperative between the plunger and the body for normally moving the plunger and the roll outwardly, and means coöperative between the spindle and the guide carrying the roll for moving the latter laterally.

14. A tool of the class described comprising a spindle having a bore, a body rotative with and movable longitudinally along the spindle, a plunger having a stem guided in the bore of the spindle, said plunger having rods on opposite sides of the spindle and guided by said body, springs interposed between the body and the plunger, guides pivotally carried by the body and spaced from the spindle, said guides having bores, rolls having stems slidable in said bores, means to limit longitudinal movement of the stems in the bores, the plunger having recesses coöperative with said rolls and their spindles permitting lateral movement of the rolls, projections carried by said body and located on opposite sides of the spindle, and rollers rotatively carried by the projections and spaced from said rolls at an angle thereto for operation on a cap flange while the rolls operate within the cap.

[Claims 2, 4 to 10, 12, and 13 not printed in the Gazette.]

1,266,520. **TOOL-MOUNTING.** ANDREW NILSON, Chicago, Ill., assignor to Nilson Bros., Chicago, Ill., a Corporation of Illinois. Filed Jan. 15, 1917. Serial No. 142,422. (Cl. 77—6.)



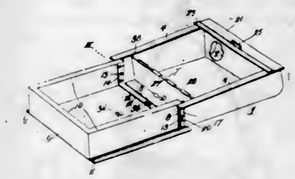
1. In a structure of the character described the combination with an operating tool and its framework, of a support for said tool framework upon which said tool framework is adapted for motion to and fro, a guide upon said support, and means carried by said tool framework symmmetrically arranged with respect to the axis of said operating tool adapted interchangeably to engage said guide whereby said tool and framework may be accurately alined to operate in opposite directions.

7. In a structure of the character described the combination with an operating tool and its framework, said tool and its framework being adapted for operation upon work in opposite directions, of a support for said tool framework on which said tool framework is adapted for motion to and from both in a given direction and in the reverse direction, and guide means interposed between said framework and said support whereby said tool and framework are accurately alined to operate in opposite directions.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,266,521. **CONVERTIBLE BODY FOR MOTOR-CARS.** EMANUEL E. NORQUIST, Kansas City, Mo. Filed Nov. 25, 1916. Serial No. 133,821. (Cl. 21—7.)

1. A convertible body for motor cars, comprising a front member having a vertical cross-partition near its front end, a rear member fitting in and pivoted to the front member for adjustment to form an extension or a top therefor and to be held when arranged as a top, in a downwardly and rearwardly inclined position by the first member, and a hinged cover for the front end of the front member, adapted to overlie the forward end of the rear member when the latter is arranged as a top for the front member.



3. A convertible body for motor cars, comprising a front member open at its upperside and rear end and provided with a transverse recess formed by stepping down the rear end of the bottom of the member, a rear member fitting in and pivoted to the front member and adapted to bear along the front edge of its bottom in and against the recessed portion of the front member, and provided with outwardly-projecting flanges to bear against the underside of the sidewalls of the front member when the bottom of said rear member is engaged with said recess of the front member, said flanges being also adapted to rest upon the upper edges of the sidewalls of the front member, when the rear member is swung pivotally over and upon the front member to form a top therefor.

5. A convertible body for motor cars, comprising a front member, a rear member fitting in and pivoted to the front member for adjustment to form an extension or top therefor, the rear member having outwardly-projecting flanges to engage the underside of the front member or the upper side thereof accordingly as said rear member is arranged as an extension or top for the front member, and a part pivoted at its ends to the front member near the upper margin thereof, and adapted to extend downward to form a partition for the body or to extend horizontally rearward and rest on the upper edge of the rear member to constitute a seat.

7. A convertible body for motor cars, comprising a front member, a rear member fitting in and pivoted to the front member for adjustment to form an extension or a top therefor, the rear member having outwardly-projecting flanges to engage the under side of the front member or the upper side thereof accordingly as said rear member is arranged as an extension or top for the front member, and plates fitting against the side walls of the body and each having a plurality of bolts extending through the overlapping walls of the members to secure them against pivotal movement; said plates being arched over the pivots of the members to prevent outward movement of said pivots.

[Claims 2, 4, and 6 not printed in the Gazette.]

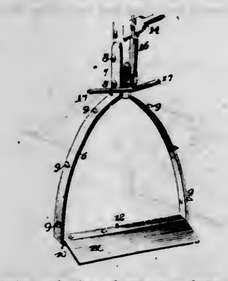
1,266,522. **STREET-CLEANING UTENSIL.** RICHARD OLDHAM, Jacksonville, Fla. Filed June 16, 1916, Serial No. 103,989. Renewed Oct. 15, 1917. Serial No. 196,734. (Cl. 83—26.)

1. A device of the character described comprising a frame having a rigid handle lying in the same plane as the plane of the frame, and means carried by the handle for drawing a bag taut with respect to both the frame and the handle.

2. A device of the character described comprising a bag frame having a rigid handle lying in the same plane as the plane of the frame, and means carried by the handle for releasably securing a bag to said frame.

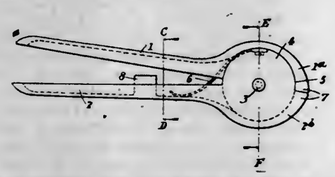
3. A device of the character described comprising a substantially stirrup-shaped frame having an extension, bag fastening means arranged upon the sides of said

frame, a lip carried by the base of the frame and having a rear extension serving as an additional bag engaging means, and means carried by said extension for drawing the bag taut relatively to said frame.



4. A device of the character described comprising a bag frame having an extension, a spring controlled lever fulcrumed to said extension, and a slidable cross arm connected to said lever adapted to coöperate with the frame for holding the bag.

1,266,523. IMPLEMENT OR DEVICE FOR USE IN GARDENING OPERATIONS. JOHN PHILLIPS OLDROYD, Ealing, England. Filed Sept. 28, 1917. Serial No. 193,713. (Cl. 55—148.)



1. A gardening tool comprising a pair of relatively narrow, elongated, pivotally connected jaws, trough-shaped in transverse section and meeting at their opposed side edges, together with guide means for preventing relative lateral twisting of said jaws during use.

2. A gardening tool comprising a pair of relatively narrow, elongated jaws merging into enlarged head ends forming a hand hold, and means for pivoting said head ends together.

3. A gardening tool comprising a pair of narrow, elongated jaws merging into enlarged interfitting head ends forming a hand hold, and means for pivoting said head ends together, the latter having coöperating bearing surfaces curved on a radius coaxial with said pivotal joint.

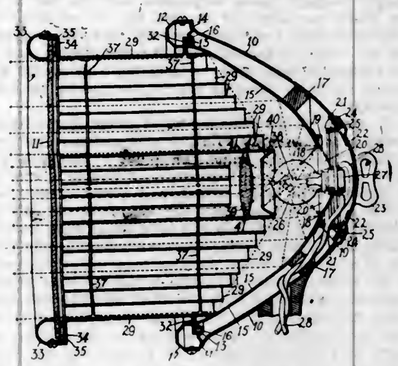
4. A gardening tool comprising a pair of relatively narrow, elongated, trough-shaped jaws with meeting side edges and pivotal connection, together with a stud carried by one jaw and shaped to the inner contour of the other jaw to insure the registry of said jaws when closed.

6. A gardening tool having a soil entering member comprising a pair of elongated, trough-shaped jaws with meeting side edges and pivoted ends, means for insuring the registry of said jaws in closed position, a pivotal connection at one end thereof, and spring means tending to maintain said jaws open.

[Claim 5 not printed in the Gazette.]

1,266,524. AUTOMOBILE-LAMP. OTHO M. OTTE, Jamestown, N. Y. Filed July 17, 1917. Serial No. 180,995. (Cl. 240—48.4.)

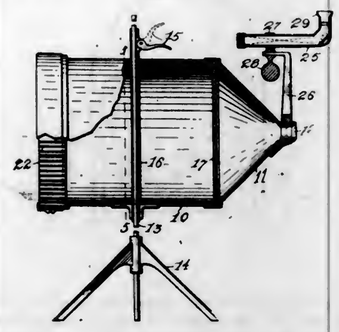
1. In combination with an automobile lamp, a tubular screen casing, and vision intercepting means borne by the screen casing and including a series of spaced planes extending in a plane parallel to the plane of the roadway, said planes being of varying lengths and having the outer ends thereof arranged in a plane oblique to the



roadway and inclined downwardly and inwardly from the front and top of the screen toward the rear and bottom thereof so as to overhang the roadway.

[Claims 2 to 6 not printed in the Gazette.]

1,266,525. PORTABLE FOCUSING DARK ROOM. OTHO M. OTTE, Jamestown, N. Y. Filed Oct. 18, 1917. Serial No. 197,354. (Cl. 88—1.)



1. A device for determining the center of the field of light of an automobile headlight and the like, comprising a receptacle, a light intercepting screen in one end of said receptacle which admits only parallel light rays, and means in said receptacle for indicating the centering of said parallel light rays.

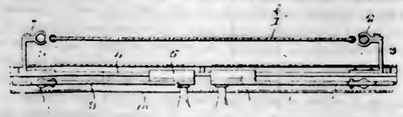
6. A device of the class described comprising an adjustably supported cylinder, a multiple tubular light screen in one end of said cylinder which admits only the parallel rays of a light shaft to the interior of said cylinder, a peep hole in the other end of said cylinder, a ground glass partition in said cylinder between said peep hole and screen, a darkened central portion in said ground glass and lines crossed at the center to divide the interior of said cylinder into quarter sections both in said darkened center and the ground glass outer portion in said partition to center said shaft of light within said cylinder.

11. A device of the class described comprising an adjustable dark room having means for indicating the centering of a shaft of light, an arm rotatively mounted exteriorly and radially of said dark room, a test tube pivotally mounted on said arm, a weight to hold said test tube in vertical position on said arm in relation to said dark room, and a level on said test tube to level said dark room.

12. A device of the class described comprising an adjustable dark room having means for indicating the centering of a shaft of light, and a gage on said dark room to measure the height of said dark room in relation to said shaft of light.

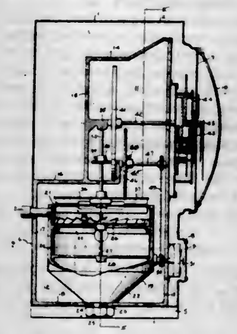
[Claims 2 to 5, 7 to 10, and 13 to 16 not printed in the Gazette.]

1,266,526. DIRECTION-INDICATING APPARATUS FOR VEHICLES. RYLAND H. PARKER, O'Neill, Nebr. Filed Oct. 1, 1915. Serial No. 53,630. (Cl. 116—31.)



A device of the character described comprising in combination with the windshield frame of a motor vehicle, a horizontally disposed casing arranged transversely of the windshield and provided in its front face with slots in end to end alinement, a guide rod secured within and extending longitudinally of said casing, angular brackets secured to said guide rod and extending through the rear wall of said casing for engagement with said windshield frame, blocks within said casing and slidable on said rod, a handle on each block extending through one of said slots, and an arm secured upon each block and adapted to be extended beyond the adjacent end of the casing when the associated block is moved.

1,266,527. GAS-METER. HARRY C. QUICK, Oakland, Cal. Filed Mar. 30, 1916. Serial No. 87,863. (Cl. 73—37.)



1. In a meter, a gas-tight gas chamber, a rotor journaled inside the walls of said gas chamber, means for conducting gas through said chamber to rotate said rotor, a magnet mounted within said chamber to rotate with said rotor, a magnetically responsive element and a disk journaled outside said chamber adapted to be rotated by said magnet when said magnet and rotor are rotated, a shaft journaled in said meter, a friction wheel secured on said shaft and engaging said disk for rotating said shaft, a register and means whereby said register is operated by said shaft.

2. In a meter, a gas-tight gas chamber, a rotor journaled inside the walls of said gas chamber, means for conducting gas through said chamber to rotate said rotor, a magnet mounted within said chamber on the rotor shaft, a magnetically responsive element and a disk journaled outside said chamber and adapted to be rotated by said magnet when said magnet and rotor are rotated, a shaft journaled in said meter, a friction wheel, secured on said shaft, and engaging said disk for rotating said shaft, a register and means whereby said register is driven by said shaft.

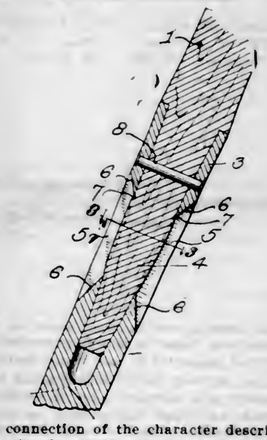
3. In a meter, a gas-tight gas chamber, a rotor journaled inside the walls of said gas chamber, means for conducting gas through said chamber to rotate said rotor, a magnet mounted within said chamber to rotate with said rotor, a shaft journaled outside said chamber, a magnetically responsive element on said shaft adapted to be rotated by said magnet when said magnet is rotated to rotate said shaft, a register shaft, a disk on said register shaft, a friction wheel adjustably mounted on the aforesaid shaft for engaging said disk at different distances from the disk center for driving said disk and register shaft at different speeds, and a register driven by said register shaft.

1,266,528. AUTOMOBILE-BODY BRACE. ALBERT LEE MARCUM, Louisville, Ky., assignor to Dow Wire & Iron Works, Louisville, Ky., a Corporation of Kentucky. Filed Oct. 3, 1917. Serial No. 194,616. (Cl. 21—55.)



A brace of the character described for automobiles including a transverse bracing member disposed under the running boards of an automobile, a transverse bracing member provided with depressions to receive the longitudinal chassis frame members of an automobile, to tie said chassis frame members together against relative lateral movement, the last mentioned transverse member being arranged under and in close lateral engagement with the longitudinal chassis frame members of an automobile, a connecting or tying rod of U-shaped formation having its shorter end passed through the said longitudinal chassis frame bracing member and its longer end passed through the said transverse running board bracing member and including means for drawing the said two transverse bracing members snugly and tightly into position, the whole arranged in such manner that the said transverse bracing member for the chassis frame prevents casual shifting of the running board transverse bracing member, substantially as described and for the purposes set forth.

1,266,529. METHOD OF ATTACHING HANDLE-SHAFTS TO GOLF-CLUBS OR LIKE ARTICLES. GEORGE W. MATTERN, Dayton, Ohio, assignor to The Crawford, McGregor and Canby Company, Dayton, Ohio, a Corporation of Ohio. Filed Dec. 26, 1917. Serial No. 208,975. (Cl. 46—4.)



1. In a connection of the character described, a socket member having longitudinally disposed slots therein, and

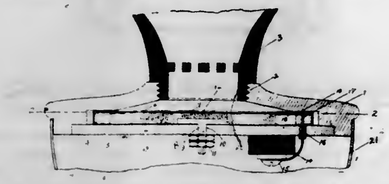
a handle shaft inserted within the socket, portions of which are radially expanded into said slots.

2. In a connection of the character described, a tapered socket member having longitudinally disposed slots therein, a correspondingly tapered handle shaft forcibly thrust into said socket whereby the unconfined areas of the handle shaft within the limits of the slots will expand thereinto beyond the normal interior outline of the socket.

3. In a connection of the character described, a longitudinally recessed socket member and handle shaft having longitudinally disposed ribs or beads interlocking with the recesses of the socket member, substantially as specified.

[Claims 4 to 8 not printed in the Gazette.]

1,266,530. TELEPHONE-TRANSMITTER. JOHN Z. MILLER, Erie, Pa. Filed Apr. 18, 1917. Serial No. 162,850. (Cl. 179—124.)



1. In a telephone transmitter, the combination of a diaphragm ring; a diaphragm mounted on the ring; and a flexible band extending around the ring and over the edge of the diaphragm sealing the space between the diaphragm and ring.

2. In a telephone transmitter, the combination of a diaphragm ring; a plate on which the diaphragm ring is mounted; a diaphragm mounted on the ring; and a flexible band extending around the ring and over the edge of the diaphragm and between the ring and the plate, sealing the space between the diaphragm and ring and between the ring and the plate.

7. In a telephone transmitter, the combination of a ring; a diaphragm mounted on the ring; a plate on which the ring is mounted; an electrode mounted on the plate; a granular material between the electrode and the diaphragm; a felt washer surrounding the granular material; and an insulating disk arranged on the plate and extending between the ring and the plate and between the electrode and the plate, said disk being clamped in place by the electrode.

[Claims 3 to 6 not printed in the Gazette.]

1,266,531. ROAD SHAPING AND FINISHING MACHINE. MELVIN MITCHELL, Peoria, Ill. Filed July 10, 1913. Serial No. 778,269. (Cl. 37—7.)



1. In a road shaping and finishing machine, in combination, a supporting frame, a scraping member, a vertically arranged rod connected to said frame, means for pivotally connecting the rear end of said scraping member on said rod whereby said member may be swung on said rod and its rear end raised and lowered on said rod for changing the inclination of said scraping member, its rear end being loosely slidable on said rod, so that it is free to float vertically over inequalities in the ground, means for moving said scraping member out and in relative to said frame, means for raising and lowering said scraping member on said rod and means for supporting and raising and lowering the forward portion of said scraping member.

2. In a road shaping and finishing machine, in combination, a supporting frame, a pair of scraping members, said members pivotally supported at their rear ends at points adjacent each other, and capable of being swung outwardly, diverging from their pivotal points, a pair of scraping blades supported at the rear of said members, said blades diverging from each other rearwardly and outwardly adapted to smooth the crown of the road after the action of said scraping members, and a roller traveling in the rear of said blades for compressing the crown of the road, said roller supporting the rear end of the frame.

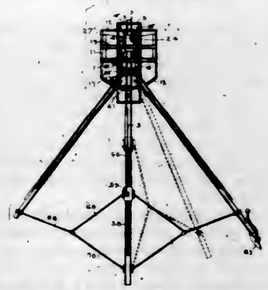
9. In combination, a frame, a roller supporting said frame, a reach bar disposed centrally of said frame, and extending forwardly therefrom a suitable distance, said frame being adapted to be swung relative to said reach bar, means for swinging said frame and with it said roller, a pair of scraping members pivotally supported at their rear ends, and means for swinging said members out or in.

10. In a mechanism of the character described, and in combination, a main frame, a roller supporting said main frame, a supplemental frame including a reach bar, pivotally connected to said main frame, said main frame having a rack in the form of an arc of a circle, a pinion on said supplemental frame meshing with said rack, means for operating said pinion to change the relative position of said main and supplemental frames and thereby steer the machine, cutting and scraping members connected to said supplemental frame and reach bar, and means for adjusting said cutting and scraping members relative to said supplemental frame and reach bar.

13. In combination in a road shaping and finishing machine, a frame, a vertically extending supporting member secured thereto, a scraping member pivotally and movably mounted on said supporting member, means for raising and lowering said scraping member on said supporting member, a crane pivotally mounted on said frame and extending substantially parallel to said scraping member, said crane having connections with the forward portion of said scraping member for raising and lowering the same, whereby the scraping member may be adjusted to its proper depth at any inclination.

[Claims 3 to 8, 11, 12, 14, and 15 not printed in the Gazette.]

1,266,532. ROAD SHAPING AND FINISHING MACHINE. MELVIN MITCHELL, Peoria, Ill. Filed Jan. 2, 1914. Serial No. 809,820. (Cl. 37—7.)



1. In a road shaping and finishing machine, in combination, a supporting frame, a pair of scraping members, said members pivotally supported at their rear ends at points adjacent each other, and capable of being swung outwardly, diverging from their pivotal points, an additional scraping member supported at the rear of said members and at an angle relative to said frame, said additional scraping member being pivotally connected to one of said first mentioned scraping members, means connected to the free end of said additional scraping member for raising and lowering the same, and a roller traveling in the rear of said additional scraping member for compressing the crown of the road.

2. In combination, a frame, a roller supporting said frame, a reach bar associated with said frame and positioned centrally thereof and extending forwardly therefrom a suitable distance, vertically arranged supports, scraping members having a pivotal connection at or near one end with said supports, a member slidable on said reach bar, link connections between said slidable member, said reach bar and said scraping members, said link connections each including a link pivotally connected to said slidable member, a link pivotally connected to said reach bar in front of said sliding member and a link pivotally connected to said scraping member so as to move both vertically and horizontally relative thereto, and means for moving said sliding member on said reach bar and thereby swing said scraping members out and in, as desired.

6. In a mechanism of the character described and in combination, a frame including a reach bar movable in relation thereto, cutting and scraping members pivotally connected to said frame at their rear ends, said reach bar having a rack provided on its forward portion, a sliding member mounted to move on said reach bar, link connections between said sliding member, said reach bar and the free end portions of said cutting members, said sliding member including spaced plates on opposite sides of said reach bar having rollers journaled therebetween, adapted to engage said reach bar, a shaft journaled between said spaced plates, a gear on said shaft meshing with said rack on said reach bar, means for operating said gear whereby said cutting and scraping members will be adjusted at different angular positions relative to said frame, means on the outer ends of said cutting and scraping members for cutting and cleaning ditches at the sides of the road, means for raising and lowering the rear ends of said cutting and scraping members, whereby the depth to which said ditch cutting members cut, may be adjusted.

7. In a mechanism of the character described, and in combination, a frame, cutting and scraping members pivotally and slidably connected at their rear ends to said frame, means for moving the outer ends of said cutting and scraping members to various positions relative to said frame, means for raising and lowering the rear ends of said cutting and scraping members, said means including a rack member, a gear meshing with said rack member, means for operating said gear, means for locking said parts in position, said locking means being releasable so that said cutting and scraping members may float or may be locked to gage the depth of the cut.

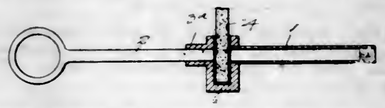
8. In a mechanism of the character described and in combination, a main frame, a roller supporting said frame, an inner frame having an elongated reach bar movable longitudinally relative thereto, a rack being provided on the rear portion of said reach bar, a casing pivotally mounted in said main frame and connected to said inner frame, said reach bar extending through said casing, an operating shaft having a pinion shaft positioned within said casing in engagement with the rack on the reach bar so as to move said reach bar longitudinally relative to said inner frame, means for moving said main frame and said inner frame relative to each other about the pivotal point provided by the connection of said casing with said main frame.

[Claims 3 to 5. 9, and 10 not printed in the Gazette.]

1,266,533. TOY GUN. HEINRICH BECK, Schenectady, N. Y. Filed Nov. 5, 1917. Serial No. 200,400. (Cl. 124—8.)

1. A toy gun comprising a barrel, a loose plunger for the same, a support for a supply of substantially flat ammunition material, and means for shaping projectiles from the material and for forcing them successively into the barrel, whereby the advance projectile is expelled by the air compressed by the succeeding one.

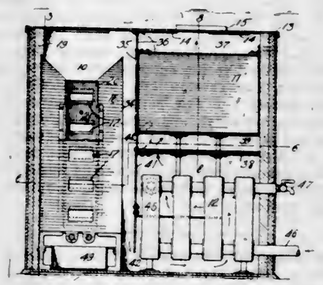
5. A toy gun of the character described, comprising in combination with its barrel, ejector and ammunition supply, a holder for said supply, means for cutting a missile from said supply, mechanically operated coupling



means for operatively connecting said barrel, ejector and ammunition supply, means for securing the gun to a support, and means for operating the gun to allow its discharge in all directions, substantially as described.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,266,534. COMBINED COOKING-STOVE AND HOT-WATER HEATER. FRANK B. HOWELL, Buffalo, N. Y., assignor to American Radiator Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 14, 1914, Serial No. 872,122. Renewed Aug. 9, 1917. Serial No. 185,393. (Cl. 126—5.)



1. In a combined stove and water heater, the combination with a fuel receptacle, of an oven and a water heater arranged at one side of said fuel receptacle and separated therefrom by an upright flue, and means for directing the draft from said upright flue over or under said oven, or to said water heater, substantially as specified.

2. In a combined stove and water heater, the combination with a fuel receptacle, of an oven, and a water heater arranged beneath said oven, and both separated from said fuel receptacle by an upright flue, and means for directing the draft from said upright flue over or under said oven, or to said water heater, substantially as specified.

3. In a combined stove and water heater, the combination with a fuel receptacle, of an oven arranged at one side of said fuel receptacle, a compartment below said oven, a water heater in said compartment, said oven and said compartment being separated from said fuel receptacle by an upright flue, and means for severally directing the draft from said upright flue over or under said oven, or into said compartment, substantially as specified.

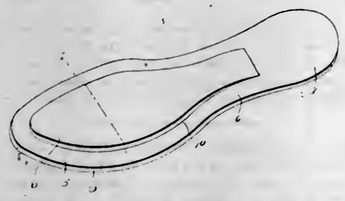
4. In a combined stove and water heater, the combination with a fuel receptacle, of an oven, arranged at one side of said fuel receptacle, a compartment below said oven, a water heater in said compartment, said oven and said compartment being separated from said fuel receptacle by an upright flue, horizontal flues extending from said upright flue above and below said oven, and valve means for directing the draft from said upright flue to said horizontal flues, and into said compartment, substantially as specified.

10. In a stove, the combination with a fuel receptacle having draft inlets on one side and draft outlets at the opposite side, of an upright main flue arranged on the outlet side of said fuel receptacle and communicating on one side with said draft outlet, an oven and a water

heater arranged on the opposite side of said flue, and means for directing the draft from said main flue to said oven or to said water heater, substantially as specified.

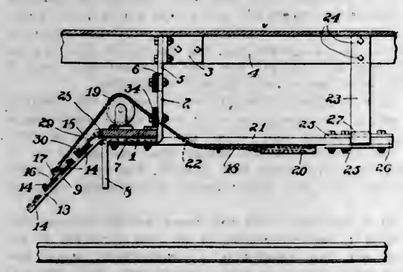
[Claims 5 to 9 and 11 not printed in the Gazette.]

1,266,535. BOOT AND SHOE. FRED E. JONES, Brockton, Mass., assignor to John F. Donnelly, Brockton, Mass. Filed Dec. 23, 1916. Serial No. 138,617. (Cl. 36—22.)



In a welt shoe, the combination with a shoe upper of an innersole and welt, said innersole having a rib to which said upper and welt are secured, and an outer sole secured to said welt, said outer sole having a raised or elevated portion centrally disposed upon the inner face of its forepart only, said raised or elevated portion having an edge parallel to the outer edge of the forepart of said outersole, and substantially perpendicular to the outer face thereof, the rear portion of said elevated or raised portion extending approximately throughout the length of the shank and being beveled gradually at its rear end down to the inner face of the sole, said raised or elevated portion projecting into and filling up the space within the rib on said insole which would otherwise be occupied by a shoe filler.

1,266,536. FENDER. FRANCIS R. MCCALLIN, Long Island City, N. Y. Filed Mar. 13, 1918. Serial No. 222,087. (Cl. 105—33.)



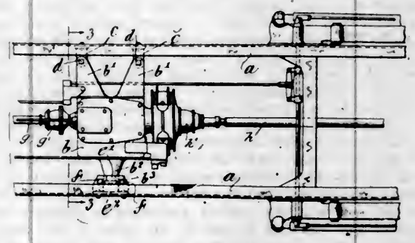
1. A fender comprising two uprights, a foundation board supported by the same, rear hangers adapted to be secured to the sills of a car and supporting bars connecting said rear hangers with said foundation board, a life guard pivotally mounted to said foundation board, adapted to normally be held in an angular position and to move inwardly to a vertical position on impact, tension members for absorbing the shock of impact on said life guards, and the lower portion of said uprights limiting the inward movement of said life guard.

6. A fender for cars comprising in part a foundation board, means for supporting said foundation board, a life guard secured to said foundation board and normally occupying an angular position but adapted to be forced inwardly to an upright position in case of impact, means for limiting the rearward movement of said life guard, means for providing a tension on said life guard to take up the shock caused by impact, projections on said life guard and spring means fastened to said foundation board contacting with said projections on said life guard to normally retain the life guard in its angular position, the spring means being adapted to be removed from contact with the projections on said life guard by swinging the said life guard inwardly and then raising said spring means to thereby permit the lifting of said life guard above its normal position when desired.

7. A fender comprising in part a foundation board and means for supporting the same, a life guard pivotally secured thereto, tension means connected to said life guard to allow said life guard to swing inwardly under impact, means for limiting the inward movement of said life guard and means for limiting the upward movement of said life guard.

[Claims 2 to 5 not printed in the Gazette.]

1,266,537. SUPPORT FOR MOTOR TRANSMISSION-CASINGS. ALFRED F. MASURY, New York, N. Y., assignor to International Motor Company, New York, N. Y., a Corporation of Delaware. Filed June 21, 1917. Serial No. 176,044. (Cl. 180—64.)



1. In a motor vehicle, in combination with the side frame members, a transmission casing extending transversely of the frame members and provided with means to support it flexibly and directly on the side frame members at three points independently of the engine support and front and rear transmission shafts flexibly supported on said casing.

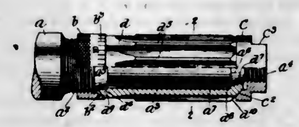
2. In a motor vehicle, in combination with the side frame members, a transmission casing extending transversely of the frame members, two spaced flanges carried at one side of the casing, and a trunnion carried at the other side of the casing for connection with the respective frame members.

3. In a motor vehicle, in combination with the side frame members, a transmission casing extending transversely of the frame members, two spaced flanges cast integral with one side of the casing, a trunnion cast integral with the other side thereof and a bearing to receive the trunnion for universal support therein.

4. In a motor vehicle, in combination with the side frame members, a transmission casing extending transversely of the frame members, two spaced flanges cast integral with one side of the casing, brackets on one of the side frame members, bolts to secure said flanges to the brackets, a trunnion cast integral with the other side of the casing, a bearing bracket for the trunnion having a detachable cap carried on the second frame member, and a flange on the end of the trunnion engaged by the bearing to hold the trunnion against axial movement while permitting universal movement.

1,266,538. EXPANSION SHELL-REAMER AND ARBOR THEREFOR. ANDREW ALEXANDER, New York, N. Y. Filed Feb. 3, 1917. Serial No. 146,395. (Cl. 77—7.)

1. The combination with an arbor having a reduced end portion consisting of a central cylindrical portion, and larger and smaller portions connected with the central portion by similarly beveled portions, of a sectional reamer mounted on said arbor and each section of which is provided at its ends with internal beveled portions which adjustably engage the beveled portions of the arbor, means for preventing rotation of the reamer sections relative to the arbor, each section of the reamer being also provided at its ends with exterior beveled portions, and securing members mounted on the larger and smaller portions of the arbor and provided with internal beveled faces which adjustably engage the external beveled portions of the reamer sections for regulating the expansion of the separate sections of said reamer.



3. A device of the class described, comprising an arbor one end of which is provided with reduced portions consisting of a central cylindrical portion of the same diameter throughout its length, and larger and smaller threaded portions connected with the central portion by similarly beveled portions in combination with a sectional expansion reamer adapted to be mounted on the reduced central portion of the arbor and the ends of the bore of which are provided with beveled portions which correspond with and operate in connection with the beveled portions of the arbor, said reamer being composed of a plurality of independent similar sections, the central reduced portion of the arbor being provided with a plurality of longitudinal ribs which are adapted to operate in connection with correspondingly formed recesses in the separate sections of said reamer to prevent rotation of the sections relative to the arbor, a threaded sleeve mounted on the larger threaded portion of the arbor and adapted to govern the expansion of the reamer, and a lock nut mounted on the smaller threaded portion of the arbor, said nut being adapted to force the reamer in the direction of said sleeve to expand the separate sections thereof to the extent limited by said sleeve.

[Claims 2 and 4 not printed in the Gazette.]

1,266,539. ADJUSTABLE WINDOW-SHADE BRACKET. FRANK M. DEFOE, Orange, N. J. Filed Sept. 5, 1917. Serial No. 189,796. (Cl. 156—23.)



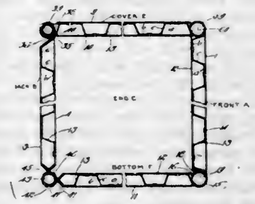
An adjustable window shade bracket comprising a plurality of rods arranged in spaced pairs, the rods of each pair having their inner ends in sliding overlapping engagement with one another, a rod supporting plate slidably and adjustably mounted over the overlapped ends of the rods, means for securing the plates to the rods and to a window frame, clamping plates slidably and adjustably mounted on the rods adjacent the outer ends thereof, means for securing the clamping plates to the rods and a support, and window shade roller supporting members secured to the outer ends of each pair of rods, as and for the purpose specified.

1,266,540. [WITHDRAWN.]

1,266,541. [WITHDRAWN.]

REISSUES.

14,471. FOLDING BOX OR SHIPPING-CASE. WILLIAM H. DOBLE, Quincy, and CARL M. WHEATON, deceased, Newton, Mass., by Grace H. Wheaton, administratrix, Newton, Mass.; said Doble and said Carl M. Wheaton assignors, by direct and mesne assignments, of three-fourths to said William H. Doble and one-fourth to Pneumatic Scale Corporation Limited, Quincy, Mass., a Corporation of Maine. Filed Feb. 23, 1918. Serial No. 218,907. Original No. 941,013, dated Nov. 23, 1909, Serial No. 448,642, filed Aug. 15, 1908. (Cl. 220—17.)



1. A knock down metallic box comprising a cover, bottom, front, back and two end walls, one of the end walls and the bottom being hinged to adjacent edges of the front wall, the other end wall and the cover being hinged to adjacent edges of the back wall, one edge of the bottom having a draw-hinge connection with the back wall, said draw-hinge connection consisting of a plurality of knuckles formed with longitudinal slits therein which project from one of said last two members, the other of said two members having a portion thereof formed as a pintle with a slotted neck which has a slidable connection with said knuckles when said two members are in the same plane with each other and the neck of the pintle is in alinement with the said slits, said knuckles and pintle interlocking by engagement of the knuckles with the slots of the neck to prevent disengagement when said two members are turned at an angle to each other.

2. A knock down metallic box comprising a cover, bottom, front, back and two end walls, one of the end walls and the bottom being hinged to adjacent edges of the front wall, the other end wall and the cover being hinged to adjacent edges of the back wall, one edge of the bottom having a draw hinge connection with the back wall, one of said last two members having slotted knuckles which project therefrom and the other of said two members having a portion thereof formed as a pintle which has a slidable connection with said knuckles thereby forming the draw hinge connection, other edges of said end walls being formed with curled spring lips and other edges of the top, bottom, front and back being formed with curled rolls with which said spring lips engage when the box is set up forming a locking connection of all the parts.

3. A knock down metallic box having six walls, combined in sets of three each, one wall of one set having its edge formed with slotted hinge knuckles, the other set of members having one edge of one wall terminating in a slotted neck and a curled roll forming a pintle which is adapted to engage with the slotted knuckles of the other set, whereby the two sets may be hinged together, the contiguous edges which are free when the box is in a knock down position being formed some with curled lips and the others with curled rolls which interlock with the curled lips when the box is set up.

4. A knock down metallic box having a cover, bottom, two ends and two sides all pivotally connected together and adapted to be spread out in single layer when in the koncked down position and opened out, the edges which are free when in the knocked down position being adapted when the box is set up, to interlock with each other, the

six members being divided into two sets of three each, one set having on the edge of one of its members a series of hinge knuckles with longitudinal slits therein, the other set having on the edge of one of its members a slotted neck and a curled roll forming a hinge pin which is adapted to be engaged with the slotted knuckles of the other set by a sliding movement when the two sets are spread out and which will lock the two sets together when the said two members are turned at an angle to each other.

5. In a knock down box formed of metallic plates, a wall plate having one of its edges formed with a curled roll with a series of slots, another wall plate having one of its edges formed with a series of curled tongues which are adapted to engage with the slots in the roll of said first plate and form a hinge connection therewith, the other edge of said second plate being formed with curled lips, the contiguous edges of the other wall plates which are to be connected with said second plate being formed with curled rolls with which said curled lips are adapted to be engaged when the box is set up.

6. A knock down box having double walls composed of sheet metal plates spaced apart from each other, and a corrugated strengthening plate of sheet metal between the inner and outer plates composing said walls, said corrugated plate having its corrugations contacting alternately with said inner and outer walls and secured thereto in the lines of contact.

7. A knock down box having double walls composed of sheet metal plates spaced apart from each other, and a corrugated strengthening plate of sheet metal between the inner and outer plates composing said walls, said corrugated plate having its corrugations formed with flat surfaces contacting alternately with said inner and outer walls and secured thereto in the planes of contact.

8. A knock down box having double walls consisting of inner and outer sheet metal plates parallel with and spaced apart from each other and interposed truss plates each having flat faces which are in parallel planes and having strut-portions connecting said flat faces, the faces in the two planes respectively contacting with the said inner and outer plates and being rigidly and permanently secured to the respective plates with which they contact.

9. A knock down box having double walls each composed of sheet metal plates spaced apart from each other, and corrugated strengthening plates of sheet metal between said two plates, said corrugated plates each having flattened surfaces which contact alternately with said inner and outer wall plates and are rigidly and permanently secured to the respective wall plates with which they contact and having strut portions which connect said contacting faces of the corrugated plates.

10. A knock down box having double walls each composed of inner and outer sheet metal plates spaced apart from each other and strengthening plates of sheet metal between said inner and outer plates, said strengthening plates each having flattened surfaces in two different planes which respectively contact with said inner and outer plates and are rigidly and permanently secured to the respective wall plates with which they contact and have strut portions which extend across the space between the wall plates and connect together said flattened inner and outer contacting surfaces, the strut portions which are adjacent each other being at an obtuse angle to the contacting faces of said strengthening plates.

11. A knock down box having double walls throughout formed of inner and outer plates with an air space between them and having corrugated strengthening plates between the inner and outer wall plates, the said plates being formed with eyelets integral therewith which secure the wall plates and strengthening plates together.

12. A knock down box having double walls throughout formed of inner and outer plates with an air space between them and having corrugated strengthening plates between the inner and outer wall plates, the said plates being formed with eyelets integral therewith which secure the wall plates and strengthening plates together, said eyelets being formed by swaging the outer plate through the corrugated plate and swaging the corrugated plate through the inner plate.

13. A knock down box having double walls composed of sheet metal plates with a space between the inner and outer plates and corrugated metallic plates between the inner and outer plates riveted thereto, said corrugated plates being formed to contact alternately with the inner plate and the outer plate.

14. A knock down box having one of two adjacent members formed with a curled lip with a series of slots therein, the other of said two adjacent members having one edge formed with a series of curled tongues which are adapted to engage with the slots in the said first member by a turning movement and form a hinge connection therewith and lock the two members together when one is turned up at an angle to the other and which are separable only by turning them into the same plane with each other.

15. In a knock down box one wall thereof having one edge formed with a series of projecting tubular knuckles with longitudinal slots therein, and an adjoining wall having one edge formed with a projecting neck portion adapted to be passed through the slots in said knuckles lengthwise of the slots and terminating in a roll forming a pintle adapted to loosely fit in said knuckles, said neck being formed with slots with which the edges of the knuckles are adapted to engage to permit the member with which the pintle portion is connected to turn with relation to the other member.

16. A knock down box having a front, back, bottom, two ends and a cover, one of said members having a separable draw-hinge connection with one of the others so constructed that said two members may be connected together or separated from each other only when in the same plane with each other and which interlock to prevent separation when turned at an angle to each other.

17. A knock down box having a front, back, bottom, two ends and a cover, each of said six members having a double wall formed by an inner and an outer plate with an air space between them, means for uniting together the inner and outer plates of each double wall, the front and bottom having on their contiguous edges curled knuckles which break joints and inter-engage with each other and a hinge pivot connecting them, the back and cover having a hinge connection with each other similar to the hinge connection of the front and bottom, the front having on one edge an incurled roll with a series of slots, and one of the ends having on one edge a series of outwardly curled tongues which are adapted to engage with said slotted roll and form a hinge connection therewith, the back and the other end having a slotted roll and tongue connection similar to that of the front and first end, a draw-hinge connection between the back and the bottom, whereby the back and bottom may be hinged together or separated from each other when in the knocked down position, the two ends having on those edges which are free in the knocked down position outwardly curled lips, and the cover, back, bottom and front having on those free edges which, when the box is set up, are contiguous to the curled lips of the ends, inwardly curled rolls with which the curled lips are adapted to be engaged when the box is set up.

18. A knock down box having a front, back, bottom, two ends and a cover, the front and bottom having on their contiguous edges curled knuckles which break joints and interengage with each other and a hinge pivot connecting them, the back and cover having a hinge connection with each other similar to the hinge connection of the front and bottom, the front having on one edge an incurled roll with a series of slots, and one of the ends having on one edge a series of outwardly curled tongues which are adapted to engage with said slotted roll and form a hinge connection therewith, the back and the other end having a slotted roll and tongue connection similar to that of the front and first end, a draw-hinge connection between the back and the bottom, whereby the back and bottom may be hinged together or separated from each other when in the knocked down position, the two ends having on those edges which are free in the knocked down position outwardly curled lips, and the cover, back, bottom and front having on those free edges which, when the box is set up, are contiguous to the curled lips of the ends, inwardly curled rolls with which the curled lips are adapted to be engaged when the box is set up.

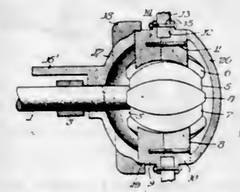
19. A knock down box having double walls with an air space between the walls, means for uniting together the inner and outer walls of each of the six members which form the top, bottom, ends and sides of the box, the top, end and one side being pivotally connected together forming one set, the bottom, end and the other side being pivotally connected together and forming a second set, each set being adapted to be laid out in a flat position and one set having a draw-hinge connection with the other set, the inner and outer plates which form one of the walls of one set having projecting flanges which are shaped to form a series of slotted eyes, and the inner and outer plates of one of the walls of the other set having flanges which are adapted to form a neck terminating in a roll whereby the two sets may be hinged together by sliding the said roll of one member laterally into the eyes of the other member when the neck is in alinement with the opening between the lids of the eyes, and the two sets may then be locked together by turning the two hinged members at an angle to each other.

14,472. DRIVING AND STEERING DEVICE FOR MOTOR-VEHICLES. THOMAS SPACIE, De Kalb, Ill. Filed Jan. 28, 1918. Serial No. 214,210. Original No. 1,188,854, dated June 27, 1916, Serial No. 799,594, filed Nov. 6, 1913. (Cl. 74—103.)

1. In mechanism of the class described, the combination of driving and driven members, inter-engaging lugs carried by said members, said lugs being generally ellipsoidal in outline, substantially as described.

2. In a device of the class described, the combination of a spherical driving member having surface lugs, a driven member having a spherical recess provided with inwardly projecting, generally ellipsoidal lugs, the lugs on the driving and driven members being so shaped that in their relative movement the edges of the lugs roll on each other, substantially as described.

3. In a device of the class described, the combination of a spherical driving member and a driven member having a spherical recess provided with inwardly projecting, generally ellipsoidal lugs, the parts being arranged to permit oscillation on a fixed axis transverse to the driving member, the lugs being so shaped that all thereof are in driving engagement in all positions of oscillation of the driven member, substantially as described.

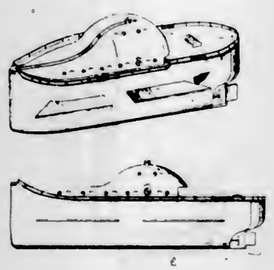


4. In a device of the class described, the combination of a shaft having a spherical portion, a wheel having a portion adapted to fit over said spherical portion, said interfitting portions being provided with substantially ellipsoidal lugs, the edges of the lugs on one member engaging with the edges of the lugs on the coöperating member, and means permitting oscillation of the wheel on an axis transverse to the shaft, said inter-engaging lugs being so curved that the edges roll on each other during rotation of the wheel when in a position other than at right angles to the shaft, substantially as described.

5. In a device of the class described, the combination of a shaft having substantially a sphere thereon, said sphere being grooved peripherally to provide lugs the edges of which correspond in curvature to that of the sphere, the driven member fitting over said sphere and being adapted to oscillate thereon and provided with lugs, the edges of which are curved on a radius corresponding substantially to the radius of oscillation of the driven member relative to the driving member whereby the edges of said lugs are in contact in all positions of angularity of the driven member, substantially as described.

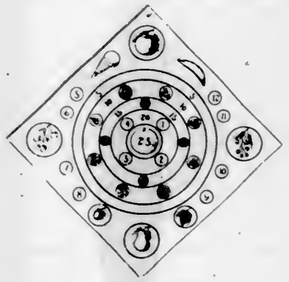
DESIGNS.

52,033. BOAT-HULL. ALEXANDER B. BIENKOWSKI, Wilmington, Del. Filed Mar. 2, 1918. Serial No. 220,065. Term of patent 14 years.



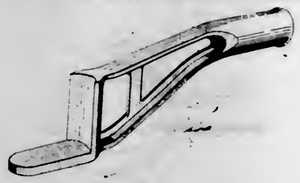
The ornamental design for a boat hull, as shown.

52,034. GAME-BOARD. ROBERT BROCKLEBANK, Toronto, Ontario, Canada. Filed Oct. 19, 1917. Serial No. 197,509. Term of patent 7 years.



The ornamental design for a game board, as shown.

52,035. BRACKET FOR AUTOMOBILE-BUMPERS. PEARL P. CRABILL and JAMES TURNER, Springfield, Ohio, assignors to The Central Brass & Fixture Company, Springfield, Ohio, a Corporation of Ohio. Filed Oct. 23, 1915. Serial No. 57,620. Term of patent 7 years.



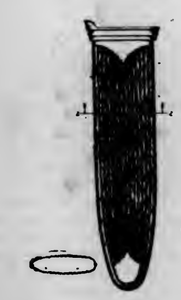
The ornamental design for a bracket for automobile bumpers, as shown.

52,036. HAIR-PIN. SAMUEL E. CREECH and PERRY BLAND, Sullivan, Ill. Filed June 26, 1917. Serial No. 177,141. Term of patent 14 years.



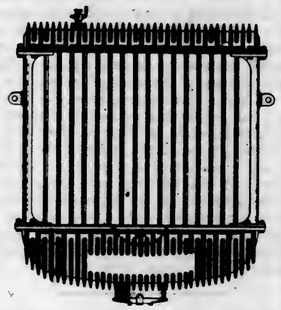
The ornamental design for a hair pin as shown.

52,037. SCABBARD. GEORGE E. CURTISS, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Mar. 9, 1918. Serial No. 221,548. Term of patent 14 years.



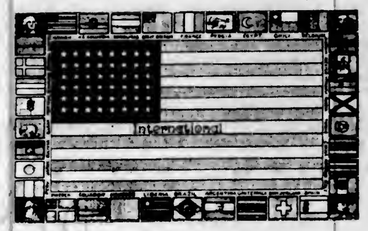
The ornamental design for a scabbard as shown.

52,038. AUTOMOBILE-RADIATOR. ROBERT DE SCHAUM, Chicago, Ill., assignor of one-half to Chicago Pneumatic Tool Company, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 23, 1918. Serial No. 213,420. Term of patent 14 years.



The ornamental design for an automobile radiator, as shown.

52,039. FLAG. JOHN S. DUFF, Philadelphia, Pa. Filed June 9, 1917. Serial No. 173,889. Term of patent 7 years.



The ornamental design for a flag, as shown.

52,040. OVERFLOW AND WASTE FIXTURE. HENRY F. GOETZ, Waterbury, Conn., assignor to Waterbury M'f'g Co., Waterbury, Conn., a Corporation. Filed Jan. 19, 1918. Serial No. 212,847. Term of patent 14 years.



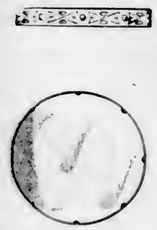
The ornamental design for an overflow and waste fixture, as shown.

52,041. ROUGE-CONTAINER. WILLIAM G. KENDALL, Newark, N. J. Filed Mar. 14, 1918. Serial No. 222,492. Term of patent 3½ years.



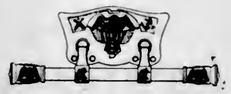
The ornamental design for a rouge container as shown.

52,042. ROUGE-CONTAINER. WILLIAM G. KENDALL, Newark, N. J. Filed Mar. 14, 1918. Serial No. 222,493. Term of patent 3½ years.



The ornamental design for a rouge container as shown.

52,043. BURIAL-CASKET HANDLE. EDWARD STANLEY KLEIN, Meriden, Conn. Filed Mar. 15, 1918. Serial No. 222,742. Term of patent 7 years.



The ornamental design for a burial casket handle, as shown.

52,044. LAMP-STAND. FREDERICK K. MAERZ, Cleveland, Ohio, assignor to The Scott-Ullman Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 26, 1917. Serial No. 157,570. Term of patent 3½ years.



The ornamental design for a lamp stand as shown.

52,045. COMBINED KNIFE AND FORK. THOMAS T. MATHIESON, Madrone, Cal. Filed Mar. 22, 1918. Serial No. 224,078. Term of patent 7 years.



The ornamental design for a combined knife and fork, as shown.

52,046. EMBLEM. WALTER ROTHENBERG, Brooklyn, N. Y., assignor to Henry Hyman & Co. Inc., New York, N. Y., a Corporation of New York. Filed Feb. 18, 1918. Serial No. 218,000. Term of patent 7 years.



The ornamental design for an emblem, as shown.

52,047. FINGER-RING OR SIMILAR ARTICLE OF JEWELRY. CHARLES H. SPENCER, Chicago, Ill. Filed Mar. 15, 1918. Serial No. 222,753. Term of patent 7 years.



The ornamental design for a finger ring or similar article of jewelry, as shown.

52,048. TOY. ESTHER H. SWETLAND, North Tonawanda, N. Y. Filed Feb. 21, 1918. Serial No. 218,582. Term of patent 7 years.



The ornamental design for a toy as shown.

TRADE-MARKS

PUBLISHED MAY 14, 1918.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 83,970. (CLASS 37. PAPER AND STATIONERY.) S. S. KRESGE CO., Detroit, Mich. Filed Jan. 20, 1915.



Particular description of goods.—Envelops; Paper Napkins; Shelf-Paper; Propeller, Slate, Graphite, Colored, and Indelible Pencils; Rubber Erasers; Wax and Chalk Crayons; Score-Pads; Paper Lunch Sets and Paper Doilies.
Claims use since Jan. 1, 1914.

Ser. No. 87,459. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CHIEF TRACTOR M'F'G CO., Detroit, Mich. Filed June 21, 1915.

CHIEF

Particular description of goods.—Farm-Tractors, Internal-Combustion Engines, and Their Parts.
Claims use since Apr. 26, 1915.

Ser. No. 94,394. (CLASS 39. CLOTHING.) ROYAL WORCESTER CORSET CO., Worcester, Mass. Filed Apr. 13, 1916.

Royalband

Particular description of goods.—Corsets.
Claims use since Mar. 1, 1916.

Ser. No. 100,376. (CLASS 37. PAPER AND STATIONERY.) WEST VIRGINIA PULP & PAPER CO., New York, N. Y. Filed Jan. 5, 1917.



Particular description of goods.—Coated Book and Magazine Paper.
Claims use since 1906.

Ser. No. 101,670. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) WRIGHTSVILLE HARDWARE COMPANY, Wrightsville, Pa. Filed Feb. 24, 1917.



Particular description of goods.—Coffee-Mills.
Claims use since July, 1904.

Ser. No. 101,927. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) Dr. WILLIAM LEVI HUGHES, Minor, Ky. Filed Mar. 6, 1917.

"ALHOMEC"

Particular description of goods.—A Sedative, Aphrodisiac, Anaphrodisiac, Alterative, Tonic, Stimulant, Antispasmodic, Antiperiodic, Carminative, Diaphoretic, Sudorific, Diuretic, Expectorant, Antiseptic, Antiparasitic, Antacid, Digestive, Febrifugal, Biochemic, Antipsoric, and Antizymotic Preparations; Tonic Preparations for the Nerves and Heart; a Uterine Tonic; an Anodyne; an Emmenagogue; Preparations for the Treatment of Sycosis, Rheumatism, Catarrh, Syphilis, Tuberculosis, and Diseases of the Liver and Blood; and Laxative, Cholagogue, Hydragogue, Drastic, and Saline Cathartic Preparations; Medicines to Remove Offending Substances from the Intestinal Canal and to Act as Liver Stimulants.
Claims use since July 4, 1904.

Ser. No. 102,102. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ROBINS & HERBERT, Lakewood, Ohio. Filed Mar. 12, 1917.

Buffalo Bill

Particular description of goods.—Dolls.
Claims use since Mar. 5, 1917.

Ser. No. 102,244. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CUDAHY BROTHERS COMPANY, Cudahy, Wis. Filed Mar. 19, 1917.

Jack Sprat

Particular description of goods.—Bacon and Ham.
Claims use since Jan. 2, 1910.

Ser. No. 102,588. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MATTIE C. BARBOUR, Lexington, Ky. Filed Mar. 30, 1917.

B.C.M.

Particular description of goods.—A Liquid for the Removal of Discolorations from Leather, Paper, Textile, and other Fabrics.
Claims use since the 20th day of March, 1917.

Ser. No. 103,569. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ROWE-FAWCETT COMPANY, New Albany, Ind. Filed May 5, 1917.

Baby Bunting

Particular description of goods.—Rolled Oats, Coffee, Macaroni, Spaghetti, and Noodles, Peanut-Butter, Catsup, Corn-Syrup, White Table-Syrup, Canned Tomatoes, Beans, Peas, Canned Mixed Vegetables for Soup-Stock, Spices, and Flavoring Extracts for Foods.
Claims use since about Feb. 1, 1913.

Ser. No. 104,628. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed June 22, 1917.

OPALIN

Particular description of goods.—Coal-Tar Colors.
Claims use since the 1st day of December, 1906.

Ser. No. 104,960. (CLASS 38. PRINTS AND PUBLICATIONS.) INDEPENDENT ADVERTISING PUBL'S, INC., New York, N. Y. Filed July 10, 1917.

Independent Advertising



Particular description of goods.—A Magazine Published Monthly.
Claims use since Jan. 1, 1917.

Ser. No. 105,002. (CLASS 46. FOODS AND INGREDIENTS.) MACAULEY FIBN MILLING CO., Rochester, N. Y. Filed July 12, 1917. Under ten-year proviso.

PRIDE OF DAKOTA

Particular description of goods.—Wheat-Flour.
Claims use since July 1, 1892.

Ser. No. 105,007. (CLASS 25. LOCKS AND SAFES.) THE RAM ENGINEERING COMPANY, Columbus, Ohio. Filed July 12, 1917.

RAM



Particular description of goods.—Locks—Namely, Switch-Locks in Connection with Automobiles.
Claims use since about Feb. 1, 1917.

Ser. No. 105,062. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) JOHN D. LA CROIX, Vincennes, Ind. Filed July 16, 1917.

ABC

Particular description of goods.—A Washing-Powder and Cleanser.
Claims use since June 7, 1917.

Ser. No. 105,501. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE NATIONAL PAINT & VARNISH COMPANY, Cleveland, Ohio. Filed Aug. 6, 1917.

National

Particular description of goods.—Interior Paints, Exterior Paints, Roofing-Paints, Structural-Iron Paints, Household Paints, Floor-Coating Paints, Enamels in the Nature of Paint, and Painters' Materials Known as First-Coaters, Undercoaters, and Wall-Sealers.
Claims use since about the year 1896.

Ser. No. 105,987. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEORGE WILLIAM HEAN, Sydney, New South Wales, Australia. Filed Aug. 31, 1917.



Particular description of goods.—Medicinal Preparations for Human Use for the Relief of Coughs and Colds.
Claims use since Mar. 12, 1917.

Ser. No. 106,107. (CLASS 39. CLOTHING.) CONVERSE RUBBER SHOE COMPANY, Malden, Mass. Filed Sept. 7, 1917.

WEAR-RITE

Particular description of goods.—Rubber Shoes.
Claims use since Aug. 1, 1917.

Ser. No. 106,807. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) C. L. CENTLIVRE BREWING CO., Fort Wayne, Ind. Filed Oct. 17, 1917.

That's It

Particular description of goods.—A Non-Alcoholic Maltless Beverage Sold as a Soft Drink.
Claims use since July 28, 1917.

Ser. No. 106,865. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) NATIONAL ALUMINUM WORKS, Elmira, N. Y. Filed Oct. 19, 1917.

MILLION DOLLAR



No claim is made to the representation of a coffee-pot and a cup and saucer apart from the mark shown in the drawing.
Particular description of goods.—Coffee-Pots.
Claims use since Aug. 17, 1917.

Ser. No. 107,084. (CLASS 43. THREAD AND YARN.) THE AMERICAN THREAD COMPANY, Jersey City, N. J. Filed Nov. 1, 1917.

ANGORINA

Particular description of goods.—Cotton Thread and Cotton Yarn.
Claims use since about the 26th day of July, 1917.

Ser. No. 107,213. (CLASS 17. TOBACCO PRODUCTS.) CAPEVERDIAN TRADING CO., East Wareham, Mass. Filed Nov. 7, 1917.



Particular description of goods.—Tobacco Used in Smoking and Chewing and as Snuff.
Claims use since Oct. 29, 1917.

Ser. No. 107,391. (CLASS 39. CLOTHING.) GOLDSTEIN & KRES, Baltimore, Md. Filed Nov. 15, 1917.

Justrite

Particular description of goods.—Blouses and Middy-Suits for Women and Girls.
Claims use since January, 1911.

Ser. No. 107,465. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE G. H. HAMMOND COMPANY, Chicago, Ill. Filed Nov. 19, 1917.

Sylvan

Particular description of goods.—Canned Pineapples, Apricots, Plums, Peaches, Pears, Peas, and Canned Salmon.
Claims use since Oct. 13, 1917.

Ser. No. 107,466. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE G. H. HAMMOND COMPANY. Chicago, Ill. Filed Nov. 19, 1917.

South Shore

Particular description of goods.—Canned Corn, Peas, Tomatoes, Pears, Peaches, and Cherries.
Claims use since Sept. 25, 1917.

Ser. No. 107,867. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) FIRST NATIONAL EXHIBITORS CIRCUIT, INC., New York, N. Y. Filed Dec. 10, 1917.



Particular description of goods.—Motion-Picture Films.
Claims use since Oct. 20, 1917.

Ser. No. 107,887. (CLASS 38. PRINTS AND PUBLICATIONS.) W. P. TANNER-GROSS & COMPANY, INC., New York, N. Y. Filed Dec. 10, 1917.



Particular description of goods.—Publications Issued Weekly.
Claims use since Aug. 1, 1917.

Ser. No. 107,977. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA FRUIT EXCHANGE, Sacramento, Cal. Filed Dec. 15, 1917.

SUN SWEET

Particular description of goods.—Fresh Grapes.
Claims use since Aug. 1, 1916.

Ser. No. 108,047. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) FRANCESCO CIRELLI, Philadelphia, Pa. Filed Dec. 19, 1917.



Particular description of goods.—Phonographs.
Claims use since Feb. 1, 1917.

Ser. No. 108,072. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OREGON HENDRICKS, Chicago, Ill. Filed Dec. 20, 1917.



Particular description of goods.—Medicinal Liniments for External Application in the Treatment of Inflammations Due to Colds.
Claims use since June 1, 1917.

Ser. No. 108,095. (CLASS 2. RECEPTACLES.) THE DAISY CUP COMPANY, INC., New York, N. Y. Filed Dec. 22, 1917.



Particular description of goods.—Paper or Paper-Pulp Cups, Bowls, and Dishes.
Claims use since June 1, 1917.

Ser. No. 108,118. (CLASS 39. CLOTHING.) CHIPMAN KNITTING MILLS, Easton, Pa. Filed Dec. 24, 1917.



The vertical lines which appear in the background of the drawing indicate shading and not color. The picture shown in the drawing is fanciful.
Particular description of goods.—Hosiery.
Claims use since Sept. 26, 1917.

Ser. No. 108,159. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE MOREY MERCANTILE COMPANY, Denver, Colo. Filed Dec. 26, 1917.

Solitaire

Particular description of goods.—Cereal Breakfast Food; Popcorn; Citron-Peel; Lemon-Peels, and Orange-Peels.
Claims use since about Oct. 1, 1916.

Ser. No. 108,264. (CLASS 15. OILS AND GREASES.) SALVATORE SAVARESE, Brooklyn, N. Y. Filed Jan. 2, 1918.



Particular description of goods.—Candles.
Claims use since Oct. 29, 1917.

Ser. No. 108,296. (CLASS 39. CLOTHING.) DAISY WHITEHEAD K'T'G CO., New York, N. Y. Filed Jan. 4, 1918.



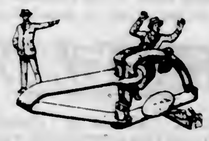
The picture shown in the drawing is fanciful.
Particular description of goods.—Ladies' Hosiery.
Claims use since Feb. 1, 1915.

Ser. No. 108,304. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE MILKOLATE COMPANY, Cleveland, Ohio. Filed Jan. 4, 1918.

MILKOLATE

Particular description of goods.—A Food Beverage Containing a Special Preparation of Milk.
Claims use since and including September, 1917.

Ser. No. 108,409. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) STANDARD HIDE & FUR CO., New Orleans, La. Filed Jan. 10, 1918.



Particular description of goods.—Hides, Raw Furs, Wool, and Crude Rubber.
Claims use since Dec. 11, 1917.

Ser. No. 108,680. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) CHICAGO TUBE AND IRON COMPANY, Chicago, Ill. Filed Jan. 29, 1918.

CHI-TI-CO

Particular description of goods.—Boiler-Tubes and Copper Ferrules Especially Adapted for Use in Connection with Boiler-Tubes.
Claims use since May 1, 1917.

Ser. No. 108,689. (CLASS 17. TOBACCO PRODUCTS.) VALENTINE J. SCHULTHEIS, New York, N. Y. Filed Jan. 29, 1918.

GOLD SEAL

Particular description of goods.—Cigarettes.
Claims use since Jan. 1, 1918.

Ser. No. 108,708. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE COLORADO MILLING & ELEVATOR CO., Denver, Colo. Filed Jan. 31, 1918.



No claim being made to the exclusive use of the representation of the bag except in association with the mark as a whole.

Particular description of goods.—Wheat-Flour.

Claims use since Sept. 18, 1917.

Ser. No. 108,803. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GOLDINE MANUFACTURING COMPANY, Youngstown, Ohio Filed Feb. 4, 1918.

GOLDINE

Particular description of goods.—A Tonic and Medicine Adapted for Internal Use in the Treatment of Anemia, Biliousness, Bronchial Coughs, Coughs, Cramping; Dizziness, (Vertigo;) Drowsiness, Dyspepsia, Epilepsy, Female Troubles, Gall Troubles, Headaches, Hysteria, Nervous Troubles, Indigestion, Jaundice, Liver Trouble, Malarial Diseases, Menstrual Disorders, Neuralgia, Neuritis, Ovarian Troubles, Sciatica, Skin Troubles, Womb Diseases.

Claims use since Oct. 12, 1915.

Ser. No. 108,819. (CLASS 39. CLOTHING.) HERMAN BASCH & CO., INC., Brooklyn, N. Y. Filed Feb. 5, 1918.

Peltone

Particular description of goods.—Fur Coats for Outer Wear, Fur Caps, Fur Muffs, Fur Neck-Pieces, Fur Gloves.

Claims use since Jan. 1, 1918.

Ser. No 108,990. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) HENRI GUTMANN SILKS CORPORATION, New York, N. Y. Filed Feb. 14, 1918.



Particular description of goods.—Silk Piece Goods.

Claims use since the 15th day of January, 1918.

Ser. No. 108,991. (CLASS 39. CLOTHING.) HENRI GUTMANN SILKS CORPORATION, New York, N. Y. Filed Feb. 14, 1918.



Particular description of goods.—Silk Piece Goods.

Claims use since the 15th day of January, 1918.

Ser. No. 109,135. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JNO. F. PEARSON, Montgomery, Ala. Filed Feb. 20, 1918.



Particular description of goods.—Bean-Meal and Cut-Pod Feed for Use as a Stock and Poultry Feed.

Claims use since Feb. 15, 1917.

Ser. No. 109,227. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JOHN F. LENNON, Providence, R. I. Filed Feb. 26, 1918.

LITTLE BEAUTY

Particular description of goods.—Wheat-Flour.

Claims use since Nov. 4, 1884.

Ser. No. 109,230. (CLASS 27. HOROLOGICAL INSTRUMENTS.) SHAPLEIGH HARDWARE COMPANY, St. Louis, Mo. Filed Feb. 26, 1918.

GOOD NIGHT

Particular description of goods.—Clocks and Watches.

Claims use since Feb. 7, 1918.

Ser. No. 109,275. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) GEORGE J. KERATSO, San Francisco, Cal. Filed Feb. 28, 1918.

BEE VENO

Particular description of goods.—Syrups Made of Prunes for Beverages.

Claims use since Feb. 12, 1918.

Ser. No. 109,324. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) MICHAEL P. KADISCH, New York, N. Y. Filed Mar. 2, 1918.



Particular description of goods.—Phonographs and Parts Thereof.

Claims use since Feb. 8, 1918.

Ser. No. 109,349. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE ANTHRACITE BEER COMPANY, Scranton, Pa. Filed Mar. 4, 1918.

CAM-U-FLAGE

Particular description of goods.—A Non-Alcoholic Maltless Cereal Beverage.

Claims use since Dec. 15, 1917.

Ser. No. 109,362. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) GOLDWYN PICTURES CORPORATION, New York, N. Y. Filed Mar. 4, 1918.



Particular description of goods.—Moving-Picture Films.

Claims use since Sept. 9, 1917.

Ser. No. 109,407. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE AMERICAN METAL COMPANY, LIMITED, New York, N. Y. Filed Mar. 7, 1918.

POLAR

Particular description of goods.—Zinc-Oxid Paint-Pigment.

Claims use since November, 1917.

Ser. No. 109,411. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ASA BRUNSON, Pine Bluff, Ark. Filed Mar. 7, 1918.

BRUN-TONE

Particular description of goods.—Medicine to be Taken Internally as a Preparation for the Treatment of Catarrh, Indigestion or Dyspepsia, Biliousness, Costiveness, Rheumatism, Kidney and Bladder Troubles, Piles, Scrofula, and So-Called Blood Diseases, Chills, Fevers, Ague, Nervousness, Male and Female Weakness, Female Complaints.

Claims use since Feb. 1, 1918.

Ser. No. 109,440. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CHARLES FLEMING, Ardmore, Okla. Filed Mar. 8, 1918.



Particular description of goods.—An Herb Tonic for Kidney Trouble.

Claims use since Aug. 29, 1917.

Ser. No. 109,442. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) E. A. STEVENSON & COMPANY, Wilmington, Del., and New York, N. Y. Filed Mar. 8, 1918.

Spredit

Particular description of goods.—Nut-Butter or Nut-Margarin.

Claims use since about Jan. 26, 1918.

Ser. No. 109,478. (CLASS 17. TOBACCO PRODUCTS.) NATRONA TOBACCO CO., Philadelphia, Pa. Filed Mar. 9, 1918.

Oh, Boy

Particular description of goods.—Cigars, Cigarettes, and Manufactured Tobacco.
Claims use since December, 1917.

Ser. No. 109,488. (CLASS 15. OILS AND GREASES.) BLIVEN & CARRINGTON, INC., New York, N. Y. Filed Mar. 11, 1918. Under ten-year proviso.

J. J. G. BORLIDO — OLEOVELOCIFERO — MARCA REGISTRADA

Particular description of goods.—Lubricating-Oils.
Claims use since July 1, 1886.

Ser. No. 109,494. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE CONRAD RUBBER CO., Cleveland, Ohio. Filed Mar. 11, 1918.

BLUE RIBBON

Particular description of goods.—Pneumatic Inner Tubes for Automobile Tires.
Claims use since the 1st of October, 1916.

Ser. No. 109,524. (CLASS 39. CLOTHING.) THE KREEGER STORE, INCORPORATED, New Orleans, La. Filed Mar. 12, 1918.

Super-Form

Particular description of goods.—Corsets.
Claims use since Sept. 20, 1917.

Ser. No. 109,533. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ALBERT DICKINSON COMPANY, Chicago, Ill. Filed Mar. 13, 1918.

STAG

Particular description of goods.—Mixed Feed Consisting of Whole or Ground Grain and other Feeding-Stuff Material Suitable for Live Stock, and a Mixed Feed Consisting of Whole or Ground Grain, Grain Products, Seeds, and other Feeding Stuff Suitable for Poultry.
Claims use since Oct. 19, 1915.

Ser. No. 109,545. (CLASS 39. CLOTHING.) WEBER & HEILBRONER, New York, N. Y. Filed Mar. 13, 1918.

Splasher

Particular description of goods.—Rain-Coats.
Claims use since the 25th day of January, 1918.

Ser. No. 109,561. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) S. GLEMBY, INC., New York, N. Y. Filed Mar. 14, 1918.

LOLA

Particular description of goods.—Hair-Nets.
Claims use since Aug. 24, 1917.

Ser. No. 109,576. (CLASS 39. CLOTHING.) A. E. LITTLE COMPANY, Lynn, Mass. Filed Mar. 15, 1918.

RITE

The trade-mark consisting of the symbol "℞" followed by the suffix "ite."
Particular description of goods.—Leggings of Cloth or Leather.
Claims use since Jan. 20, 1918.

Ser. No. 109,583. (CLASS 39. CLOTHING.) BALTIMORE BARGAIN HOUSE, Baltimore, Md. Filed Mar. 16, 1918.

GIBRALTAR

Particular description of goods.—Overalls and Coats.
Claims use since Feb. 15, 1918.

Ser. No. 109,614. (CLASS 5. ADHESIVES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

"TITANIC"

Particular description of goods.—Belt-Cement.
Claims use since Feb. 8, 1912.

Ser. No. 109,615. (CLASS 5. ADHESIVES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

ALPHA

Particular description of goods.—Waterproof Cement for Leather Goods, Belting, and Similar Articles.
Claims use since May 20, 1906.

Ser. No. 109,616. (CLASS 5. ADHESIVES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

"MOHEGAN"

Particular description of goods.—Waterproof Cement for Leather Goods, Belting, and Similar Articles.
Claims use since Mar. 4, 1906.

Ser. No. 109,617. (CLASS 5. ADHESIVES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

"ULCO"

Particular description of goods.—Cement for Leather Goods and Belting.
Claims use since Apr. 10, 1915.

Ser. No. 109,623. (CLASS 20. LINOLEUM AND OILED CLOTH.) THE CONGOLEUM COMPANY, Philadelphia, Pa. Filed Mar. 18, 1918.

Super-Wear

Particular description of goods.—Prepared Floor-Coverings of the Oiled-Cloth Type.
Claims use since Oct. 18, 1917.

Ser. No. 109,693. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE GRADY MFG. CO., Long Island City, N. Y. Filed Mar. 21, 1918.

GRADA

Particular description of goods.—A Tile and Porcelain Cleanser.
Claims use since September, 1917.

Ser. No. 109,730. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) WILLIAM E. TANNER, Lewiston, Me. Filed Mar. 22, 1918.

HIGHLAND

Particular description of goods.—Ginger-Ale.
Claims use since May 25, 1910.

Ser. No. 109,737. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BESSIE L. BARBER, Los Angeles, Cal. Filed Mar. 23, 1918.



Said trade-mark consisting of a picture of myself.
Particular description of goods.—A Lotion for Removing Skin Blemishes.
Claims use since Jan. 11, 1918.

Ser. No. 109,763. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HELMER E. ERRICKSON, Chicago, Ill. Filed Mar. 25, 1918.

Carbomax

Particular description of goods.—A Powder for the Relief of Excessive Perspiration.
Claims use since Mar. 1, 1917.

Ser. No. 109,772. (CLASS 37. PAPER AND STATIONERY.) MARY E. MYERS, Rochester, N. Y. Filed Mar. 25, 1918.

REMARCO

Particular description of goods.—Writing, Printing, and Wrapping Paper.
Claims use since Feb. 25, 1918.

Ser. No. 109,795. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) MARCELINO BARRET DE NAZARIS, New York, N. Y. Filed Mar. 26, 1918.

BARCROCO

Particular description of goods.—Board Games.
Claims use since on or about Mar. 9, 1918.

Ser. No. 109,800. (CLASS 38. PRINTS AND PUBLICATIONS.) INTERNATIONAL TEXTBOOK COMPANY, Scranton, Pa. Filed Mar. 26, 1918.

Ambition

Particular description of goods.—A Monthly Periodical.
Claims use since the month of June, 1906.

Ser. No. 109,811. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) NATIONAL WATER MAIN CLEANING CO., New York, N. Y. Filed Mar. 26, 1918.

NATIONAL

Particular description of goods.—Machines for Cleaning Water-Mains and Boiler-Tubes.
Claims use since Mar. 5, 1918.

Ser. No. 109,837. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Mar. 28, 1918.

Betsy Ross

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 27, 1918.

Ser. No. 109,860. (CLASS 39. CLOTHING.) ARTHUR M. WEBB, New York, N. Y. Filed Mar. 28, 1918.

Webtex

Comprising the word "Webtex."
Particular description of goods.—Knitted Underwear and Bathing-Suits in One and Two Piece Garments, Jerseys, Sweaters, and Hosiery.
Claims use since Mar. 9, 1918.

Ser. No. 109,861. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) NIGHTINGALE MFG. CO., Chicago, Ill. Filed Mar. 25, 1918.



Particular description of goods.—Phonographs.
Claims use since Nov. 1, 1916.

Ser. No. 109,862. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) BONNEY VISE & TOOL WORKS, INC., Philadelphia and Allentown, Pa., and New York, N. Y. Filed Mar. 29, 1918. Under ten-year proviso.

CHAMPION

Particular description of goods.—Vises.
Claims use since about 1887.

Ser. No. 109,908. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BREWSTER, GORDON & CO., Rochester, N. Y. Filed Apr. 2, 1918. Under ten-year proviso.

TONIC

Particular description of goods.—Tea.
Claims use since May 15, 1893.

Ser. No. 109,909. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BREWSTER, GORDON & CO., Rochester, N. Y. Filed Apr. 2, 1918. Under ten-year proviso.

TOPAN

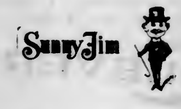
Particular description of goods.—Tea.
Claims use since Mar. 15, 1893.

Ser. No. 109,912. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BISCEGLIA BROS., San Jose, Cal. Filed Apr. 2, 1918.

UVAS

Particular description of goods.—Canned Peaches, Canned Apricots, Canned Pears, Canned Peas, Canned Tomatoes with Purée, and Canned String-Beans.
Claims use since July 1, 1903.

Ser. No. 109,914. (CLASS 39. CLOTHING.) DAISY WHITEHEAD KNITTING CO., New York, N. Y. Filed Apr. 2, 1918.



Particular description of goods.—Hosiery.
Claims use since Feb. 1, 1917.

Ser. No. 109,919. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) INDERRIEDEN CANNING CO., Chicago, Ill. Filed Apr. 2, 1918.

Nimrod

Particular description of goods.—Canned Peas and Canned Corn.
Claims use since Feb. 26, 1918.

Ser. No. 109,920. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) INDERRIEDEN CANNING CO., Chicago, Ill. Filed Apr. 2, 1918.

I want U

Particular description of goods.—Canned Peas and Canned Corn.
Claims use since Feb. 20, 1918.

Ser. No. 109,923. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE MIHALOVITCH CO., Cincinnati, Ohio. Filed Apr. 2, 1918.

CORDOLA

Particular description of goods.—A Non-Intoxicating Artificially Flavored and Colored Blackberry Beverage Containing One-Half of One Per Cent. Alcohol, Sold as a Soft Drink.
Claims use since Mar. 1, 1918.

Ser. No. 109,924. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) BENJAMIN F. MICHAEL, Laceyville, Pa. Filed Apr. 2, 1918.

BELLATONE

Particular description of goods.—A Medicinal Preparation for Relief of Sour Stomach, Gas Formation, Pain After Eating, Nausea, and Distress.
Claims use since Oct. 17, 1917.

Ser. No. 109,945. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LUNDBORG COMPANY, New York, N. Y. Filed Apr. 3, 1918.

PIXIE

Particular description of goods.—Perfumery in Liquid Form.
Claims use since July, 1917.

Ser. No. 109,947. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LUNDBORG COMPANY, New York, N. Y. Filed Apr. 3, 1918.

SAKURA

Particular description of goods.—Perfumery in Liquid Form and in Powder Form.
Claims use since the year 1910.

Ser. No. 109,948. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LUNDBORG COMPANY, New York, N. Y. Filed Apr. 3, 1918.

CHER AMI

Particular description of goods.—Perfumery in Liquid Form.
Claims use since November, 1916.

Ser. No. 109,954. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) WAUSAU MANUFACTURING CO., Wausau, Wis. Filed Apr. 3, 1918.

IVRIPIC

Particular description of goods.—Toothpicks.
Claims use since Mar. 20, 1918.

Ser. No. 109,965. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BIG FOUR CANNING COMPANY, Stanley and Eau Claire, Wis. Filed Apr. 4, 1918.



The picture being that of Abraham Lincoln, deceased.
Particular description of goods.—Canned Peas.
Claims use since June 24, 1913.

Ser. No. 109,970. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COHN FLOUR & FEED CO., Baton Rouge, La. Filed Apr. 4, 1918.



Particular description of goods.—Wheat-Flour.
Claims use since March, 1913.

Ser. No. 109,976. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FISHER FLOURING MILLS COMPANY, Seattle, Wash. Filed Apr. 4, 1918.



Particular description of goods.—Wheat-Flour.
Claims use since Oct. 27, 1917.

Ser. No. 109,989. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) SAMSTAG & HILDER BROS., New York, N. Y. Filed Apr. 4, 1918.

EARL

Particular description of goods.—Snap-Fasteners.
Claims use since Mar. 27, 1918.

Ser. No. 110,048. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) I. FLEISCHER & SONS, Cincinnati, Ohio. Filed Apr. 8, 1918.

CLEVER

Particular description of goods.—Dress-Fasteners.
Claims use since June 1, 1914.

Ser. No. 110,069. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GENERAL CHEMICAL COMPANY, New York, N. Y. Filed Apr. 9, 1918.

LAZAL

Particular description of goods.—Agricultural Insecticides.
Claims use since Mar. 1, 1918.

Ser. No. 110,117. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) B. HELLER & COMPANY, Chicago, Ill. Filed Apr. 11, 1918.

CONTENTO

Particular description of goods.—An Insecticide.
Claims use since Jan. 2, 1918.

Ser. No. 110,121. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) KELLOW & BROWN NOVELTY COMPANY, Los Angeles, Cal. Filed Apr. 11, 1918.



Particular description of goods.—Dolls.
Claims use since Aug. 1, 1918.

Ser. No. 110,128. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PELOSO BROS., New York, N. Y. Filed Apr. 11, 1918.

TORRONNA

Particular description of goods.—Candy.
Claims use since Nov. 1, 1917.

Ser. No. 110,138. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WEST DISINFECTING COMPANY, New York, N. Y. Filed Apr. 11, 1918.

COOTICIDE

The trade-mark "Cooticide."
Particular description of goods.—Preparations for the Treatment of Pediculosis of the Head or Body.
Claims use since the 2d day of April, 1918.

Ser. No. 110,218. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) WILLIAM PENN HOTEL COMPANY, Pittsburgh, PA. Filed Apr. 15, 1918.

WILPENTEL

Particular description of goods.—Whisky.
Claims use since Mar. 1, 1917.

TRADE-MARK REGISTRATIONS GRANTED

MAY 14, 1918.

121,573. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. AMERICAN OPTICAL COMPANY, Southbridge, Mass.
Filed November 24, 1917. Serial No. 107,582. PUBLISHED FEBRUARY 12, 1918.

121,574. PRINTING-INKS AND DRY COLORS. AULT PRINTING INK COMPANY, Brooklyn, N. Y., and Newark, N. J.
Filed November 13, 1917. Serial No. 107,345. PUBLISHED FEBRUARY 12, 1918.

121,575. THRESHING-MACHINES. THE AULTMAN & TAYLOR MACHINERY CO., Mansfield, Ohio.
Filed November 26, 1917. Serial No. 107,602. PUBLISHED JANUARY 15, 1918.

121,576. STEAM AND INTERNAL-COMBUSTION ENGINES. THE AULTMAN & TAYLOR MACHINERY CO., Mansfield, Ohio.
Filed November 26, 1917. Serial No. 107,603. PUBLISHED FEBRUARY 19, 1918.

121,577. CARBON-ELIMINATORS FOR INTERNAL-COMBUSTION ENGINES. THE AUTOMATIC CARBON ELIMINATOR CO., INC., New York, N. Y.
Filed November 19, 1917. Serial No. 107,457. PUBLISHED JANUARY 1, 1918.

121,578. POWER TRANSMISSION ATTACHMENTS FOR MOTOR-VEHICLES ADAPTED TO ENABLE A MOTOR-VEHICLE TO ACTUATE EXTRANEOUS MACHINERY. AUTOPOWER COMPANY, Detroit, Mich.
Filed September 18, 1916. Serial No. 98,038. PUBLISHED FEBRUARY 26, 1918.

121,579. PHARMACEUTICAL PREPARATION FOR SHAMPOO AND HAIR-CLEANSER. ADRIEN JULES AYLIES, Boston, Mass.
Filed December 19, 1917. Serial No. 108,046. PUBLISHED FEBRUARY 26, 1918.

121,580. GAME-BOARDS AND PIECES ADAPTED TO BE USED THEREWITH. JOHN W. BAKER, Stamford, Conn.
Filed October 1, 1917. Serial No. 106,529. PUBLISHED FEBRUARY 26, 1918.

121,581. CERTAIN NAMED PAPER AND STATIONERY. J. C. BLAIR COMPANY, Huntingdon, Pa.
Filed November 13, 1917. Serial No. 107,352. PUBLISHED FEBRUARY 26, 1918.

121,582. ARTIFICIAL AND IMITATION LEATHER. TITUS BLATTER & CO., New York, N. Y.
Filed December 15, 1917. Serial No. 107,994. PUBLISHED FEBRUARY 19, 1918.

121,583. CERTAIN NAMED PRINTS AND PUBLICATIONS. GARDENSIDE BOOKSHOP, Boston, Mass.
Filed October 3, 1917. Serial No. 106,575. PUBLISHED FEBRUARY 19, 1918.

121,584. SPARK-PLUGS. HARRY F. BROWNELL, Sioux Falls, S. D., assignor to The Green Dragon Company, Sioux Falls, S. D., a Corporation of South Dakota.
Filed July 13, 1917. Serial No. 105,012. PUBLISHED FEBRUARY 19, 1918.

121,585. CERTAIN NAMED ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. THE BRYANT ELECTRIC COMPANY, Bridgeport, Conn.
Filed March 10, 1917. Serial No. 102,021. PUBLISHED FEBRUARY 19, 1918.

121,586. CERTAIN NAMED ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. THE BRYANT ELECTRIC COMPANY, Bridgeport, Conn.
Filed March 10, 1917. Serial No. 102,020. PUBLISHED FEBRUARY 19, 1918.

121,587. FINISH AND POLISH FOR FLOORS AND OTHER WOODWORK. BUTCHER POLISH COMPANY, Boston, Mass.
Filed December 13, 1917. Serial No. 107,928. PUBLISHED FEBRUARY 12, 1918.

121,588. FINISH AND POLISH FOR FLOORS AND OTHER WOODWORK. BUTCHER POLISH COMPANY, Boston, Mass.
Filed December 13, 1917. Serial No. 107,929. PUBLISHED FEBRUARY 12, 1918.

121,589. FINISH AND POLISH FOR FLOORS AND OTHER WOODWORK. BUTCHER POLISH COMPANY, Boston, Mass.
Filed December 13, 1917. Serial No. 107,930. PUBLISHED FEBRUARY 12, 1918.

121,590. SPARK-PLUGS. THE CHARLES H. BUETTNER COMPANY, Cincinnati, Ohio.
Filed January 10, 1918. Serial No. 108,397. PUBLISHED FEBRUARY 19, 1918.

121,591. LUBRICANTS CONSISTING OF OILS AND GREASES. AUGUSTUS CRANE BUZBY, Philadelphia, Pa.
Filed January 5, 1917. Serial No. 100,367. PUBLISHED FEBRUARY 20, 1917.

121,592. DRIED RAISINS AND DRIED FRUITS. CALIFORNIA ASSOCIATED RAISIN CO., Fresno, Cal.
Filed October 6, 1917. Serial No. 106,629. PUBLISHED FEBRUARY 19, 1918.

121,593. DRIED APRICOTS AND PRUNES. CALIFORNIA PRUNE AND APRICOT GROWERS, INC., San Jose, Cal.
Filed December 13, 1917. Serial No. 107,936. PUBLISHED FEBRUARY 5, 1918.

121,594. CANNED SALMON. CASCADE PACKING COMPANY, Anacortes, Wash.
Filed March 20, 1917. Serial No. 102,280. PUBLISHED FEBRUARY 26, 1918.

121,595. CASEMENT-SASH ADJUSTERS. THE CASEMENT HARDWARE CO., Chicago, Ill.
Filed September 7, 1917. Serial No. 106,108. PUBLISHED FEBRUARY 19, 1918.

121,596. ORANGES, LEMONS, AND GRAPE-FRUIT. COBB AND DOFFLEMYER, Exeter, Cal.
Filed October 8, 1917. Serial No. 106,660. PUBLISHED FEBRUARY 26, 1918.

121,597. WHEAT-FLOUR. H. C. COLE MILLING CO., Chester, Ill.
Filed October 25, 1917. Serial No. 106,937. PUBLISHED JANUARY 1, 1918.

121,598. HIGH-SPEED TOOL-STEEL IN INGOT FORM. CONTINUOUS REACTION COMPANY LIMITED, London, England.
Filed June 27, 1917. Serial No. 104,713. PUBLISHED FEBRUARY 19, 1918.

121,599. TRADE AND CREDIT PUBLICATIONS ISSUED MONTHLY AND SEMI-ANNUALLY. THE CREDIT CLEARING HOUSE, New York, N. Y.
Filed September 28, 1917. Serial No. 106,474. PUBLISHED JANUARY 22, 1918.

121,600. FRUIT SYRUPS, FLAVORS, AND COLORS FOR USE IN MAKING SOFT DRINKS AND NON-ALCOHOLIC BEVERAGES. CRESCENT CITY CARBONATE COMPANY, New Orleans, La.
Filed October 11, 1917. Serial No. 106,712. PUBLISHED DECEMBER 18, 1917.

121,601. SPECIALLY-PREPARED TEXTILE MATERIAL FOR CLEANING AND POLISHING AUTOMOBILE WINDOWS AND WIND-SHIELDS. DAVIS CHEMICAL MANUFACTURING CO., INC., Boston, Mass.
Filed March 29, 1917. Serial No. 102,555. PUBLISHED FEBRUARY 19, 1918.

121,602. LUBRICATING-OILS. DETROIT SOLUBLE OIL Co., Detroit, Mich.
Filed April 25, 1917. Serial No. 103,287. PUBLISHED SEPTEMBER 4, 1917.

121,603. YARNS AND THREADS MADE OF COTTON, SILK, JUTE, FLAX, LINEN, WOOL, AND RAMIE. DEXTER YARN COMPANY, Pawtucket, R. I.
Filed November 26, 1917. Serial No. 107,616. PUBLISHED FEBRUARY 26, 1918.

121,604. MEDICATED DENTAL CREAM. CALYPTO COMPANY, Springfield, Mass.
Filed January 9, 1918. Serial No. 108,373. PUBLISHED FEBRUARY 26, 1918.

121,605. WRITING-TABLETS AND PRINTING AND WRITING PAPER. EASTERN TABLET COMPANY, Albany, N. Y.
Filed December 10, 1917. Serial No. 107,863. PUBLISHED FEBRUARY 26, 1918.

121,606. PHOTOGRAPHIC PAPER. EASTMAN KODAK COMPANY, Rochester, N. Y.
Filed December 14, 1917. Serial No. 107,957. PUBLISHED FEBRUARY 26, 1918.

121,607. RUBBER SUCTION-HOSE AND RUBBER DIAPHRAGMS. EDSON MANUFACTURING CO., Boston, Mass.
Filed November 19, 1917. Serial No. 107,463. PUBLISHED FEBRUARY 26, 1918.

121,608. FRUIT AND VEGETABLE CRATES. ELBERTA CRATE COMPANY, Bainbridge, Ga.
Filed August 28, 1917. Serial No. 105,914. PUBLISHED FEBRUARY 26, 1918.

121,609. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF. ENDERES INCORPORATED, Albert Lea, Minn.
Filed October 27, 1917. Serial No. 106,988. PUBLISHED FEBRUARY 12, 1918.

121,610. METAL-WORKING MACHINES — NAMELY, LATHES. FLATHER & COMPANY, (INC.,) Nashua, N. H.
Filed October 30, 1917. Serial No. 107,024. PUBLISHED FEBRUARY 19, 1918.

121,611. PAINT-SURFACER. FLOOD & CONKLIN CO., Newark, N. J.
Filed December 8, 1917. Serial No. 107,832. PUBLISHED FEBRUARY 12, 1918.

121,612. PREPARATION FOR THE TREATMENT OF CERTAIN NAMED DISEASES. FT. WAYNE DRUG COMPANY, Fort Wayne, Ind.
Filed November 23, 1917. Serial No. 107,550. PUBLISHED FEBRUARY 26, 1918.

121,613. STEEL RODS AND BARS, COLD-ROLLED SHEET AND STRIP STEEL, AND STEEL WIRE. PETER A. FRASSE & CO., INC., New York, N. Y.
Filed August 10, 1916. Serial No. 97,248. PUBLISHED DECEMBER 4, 1917.

121,614. SPRING-WATER. JOHN GRAF COMPANY, Milwaukee, Wis.
Filed December 7, 1917. Serial No. 107,810. PUBLISHED JANUARY 29, 1918.

121,615. GALVANIZED AND BLACK SHEETS, TIN-PLATE, AND CORRUGATED-METAL SHEETS, WALTER F. HALL, Philadelphia, Pa.
Filed October 13, 1917. Serial No. 106,753. PUBLISHED FEBRUARY 26, 1918.

121,616. LINIMENT FOR THE TREATMENT OF CERTAIN NAMED AILMENTS. JACOB HAMBURGER, Fairmont, W. Va.
Filed August 10, 1917. Serial No. 105,571. PUBLISHED FEBRUARY 12, 1918.

121,617. CANNED SALMON. E. H. HAMLIN CO., Seattle, Wash.
Filed December 8, 1917. Serial No. 107,842. PUBLISHED FEBRUARY 26, 1918.

121,618. WHEAT-FLOUR. FRED H. HARTMAN, Ottumwa, Iowa.
Filed January 2, 1918. Serial No. 108,250. PUBLISHED FEBRUARY 26, 1918.

121,619. LEATHER. HIRTH-KRAUSE COMPANY, Rockford, Mich.
Filed January 12, 1918. Serial No. 108,428. PUBLISHED FEBRUARY 26, 1918.

121,620. CHEESE. J. S. HOFFMAN COMPANY, Chicago, Ill.
Filed January 9, 1918. Serial No. 108,381. PUBLISHED FEBRUARY 26, 1918.

121,621. MONTHLY MAGAZINE. HOLSTEIN-FRIESIAN WORLD, INC., Syracuse, N. Y.
Filed December 1, 1917. Serial No. 107,707. PUBLISHED FEBRUARY 19, 1918.

121,622. TOOL-HOLDERS AND PARTS THEREOF, ALL BEING PARTS OF MACHINERY. JOHN TIMOTHY D'ARCY HUTTON, Liverpool, England.
Filed January 9, 1918. Serial No. 108,376. PUBLISHED FEBRUARY 12, 1918.

121,623. MOTION-PICTURE FILMS. THE THOS. H. INCE CORPORATION, Los Angeles, Cal.
Filed September 17, 1917. Serial No. 106,281. PUBLISHED FEBRUARY 12, 1918.

121,624. MOUSE AND RAT TRAPS. IRON CAT CO., Sioux City, Iowa.
Filed December 29, 1917. Serial No. 108,215. PUBLISHED FEBRUARY 26, 1918.

121,625. PREPARATION FOR ALLEVIATION OF AFFECTIONS OF THE THROAT AND BRONCHIAL TUBES. CHARLES J. JEROME, Chicago, Ill.
Filed July 26, 1917. Serial No. 105,297. PUBLISHED FEBRUARY 26, 1918.

121,626. BREAD AND CAKE. FRED JOHNSON, De Ridder, La.
Filed January 8, 1918. Serial No. 108,358. PUBLISHED FEBRUARY 26, 1918.

121,627. MEDICINAL SPRING-WATER. RUSSELL T. JOY, Brooklyn, N. Y.
Filed January 25, 1918. Serial No. 108,634. PUBLISHED FEBRUARY 26, 1918.

121,628. COMPOSITION OF MATTER FOR REMOVING SUPERFLUOUS HAIR. ROSE LAIRD KINGSTONE, New York, N. Y.
Filed May 10, 1917. Serial No. 103,698. PUBLISHED SEPTEMBER 18, 1917.

121,629. MATTRESSES. KNOXVILLE EXCELSIOR & MATTRESS CO., Knoxville, Tenn.
Filed April 6, 1917. Serial No. 102,777. PUBLISHED FEBRUARY 26, 1918.

121,630. CERTAIN NAMED FOODS. LAKE WINOLA PRODUCTS COMPANY, Scranton, Pa.
Filed September 11, 1916. Serial No. 97,912. PUBLISHED FEBRUARY 19, 1918.

121,631. COTTON-CHOPPERS AND COTTON-CULTIVATORS. LANHAM COTTON CULTIVATOR COMPANY, Rome, Ga.
Filed November 21, 1917. Serial No. 107,506. PUBLISHED FEBRUARY 12, 1918.

121,632. TONIC BITTERS TO BE USED AS A TONIC AND APPETIZER. LASH'S BITTERS CO., New York, N. Y.
Filed November 12, 1917. Serial No. 107,320. PUBLISHED JANUARY 29, 1918.

121,633. CERTAIN NAMED ARTICLES MADE OF INDIA-RUBBER. THE LEYLAND & BIRMINGHAM RUBBER CO., LTD., Leyland, England.
Filed July 14, 1917. Serial No. 105,043. PUBLISHED FEBRUARY 26, 1918.

121,634. MINING MACHINERY, ROCK-DRILLS, HAMMER-DRILLS, AND DRILL-SHARPENERS. THE J. GEO. LEYNER ENGINEERING WORKS COMPANY, Littleton, Colo.
Filed October 15, 1917. Serial No. 106,775. PUBLISHED DECEMBER 4, 1917.

121,635. MOTION-PICTURE FILMS. MAJESTIC MOTION PICTURE COMPANY, New York, N. Y.
Filed August 25, 1917. Serial No. 105,872. PUBLISHED FEBRUARY 26, 1918.

121,636. TIRE-VULCANIZERS AND TIRE-VULCANIZING OUTFITS. THE MARVEL ACCESSORIES MANUFACTURING COMPANY, Cleveland, Ohio.
Filed June 10, 1916. Serial No. 95,787. PUBLISHED JANUARY 23, 1917.

121,637. STOCK FEED. EDGAR-MORGAN COMPANY, Memphis, Tenn.
Filed December 31, 1917. Serial No. 108,227. PUBLISHED FEBRUARY 12, 1918.

121,638. PUSH-PINS AND THUMB-TACKS. MOORE PUSH PIN COMPANY, Philadelphia, Pa.
Filed July 20, 1917. Serial No. 105,153. PUBLISHED FEBRUARY 26, 1918.

121,639. FRAMED PICTURES, ART-CALENDARS, NOVELTY-CALENDARS, AND PICTURES. MUELLER BROTHERS ART AND MANUFACTURING COMPANY, Chicago, Ill.
Filed May 22, 1916. Serial No. 95,342. PUBLISHED FEBRUARY 26, 1918.

121,640. ELECTRIC BATTERIES. NATIONAL CARBON COMPANY, INC., Cleveland, Ohio.
Filed December 28, 1917. Serial No. 108,209. PUBLISHED FEBRUARY 26, 1918.

121,641. INTERIOR PAINTS. THE NATIONAL PAINT & VARNISH COMPANY, Cleveland, Ohio.
Filed July 19, 1917. Serial No. 105,132. PUBLISHED FEBRUARY 26, 1918.

121,642. CERTAIN NAMED METALS AND METAL CASTINGS AND FORGINGS. THE NATIONAL SUPPLY COMPANY, Toledo, Ohio.
Filed July 31, 1917. Serial No. 105,381. PUBLISHED JANUARY 15, 1918.

121,643. MOLASSES, SORGHUMS, CANE AND MAPLE SYRUPS, AND COMPOUNDS THEREOF. NEW ORLEANS COFFEE CO. LTD., New Orleans, La.
Filed November 28, 1917. Serial No. 107,653. PUBLISHED FEBRUARY 26, 1918.

121,644. CERTAIN NAMED ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES. NEW YORK GAS & ELECTRIC APPLIANCE CO., New York, N. Y.
Filed June 26, 1917. Serial No. 104,706. PUBLISHED FEBRUARY 26, 1918.

121,645. WHEAT-FLOUR. NORTH MANCHESTER MILLING CO., North Manchester, Ind.
Filed October 20, 1917. Serial No. 106,884. PUBLISHED JANUARY 1, 1918.

121,646. TONIC DIGESTIVE TABLETS. ORIENTAL DRUG CO. INC., New York, N. Y.
Filed December 21, 1917. Serial No. 108,087. PUBLISHED FEBRUARY 26, 1918.

121,647. GASOLENE. ORIENTAL OIL COMPANY, Dallas, Tex.
Filed November 27, 1917. Serial No. 107,635. PUBLISHED FEBRUARY 12, 1918.

121,648. CANDY. PACKAGE CONFECTIONERY CO., Boston, Mass.
Filed August 30, 1915. Serial No. 88,892. PUBLISHED NOVEMBER 13, 1917.

121,649. AUTOMATIC MACHINE-SCREW-CUTTING OIL. WILLARD PARKER, Philadelphia, Pa.
Filed February 8, 1917. Serial No. 101,239. PUBLISHED FEBRUARY 12, 1918.

121,650. LINSEED-OIL SUBSTITUTE. PENNSYLVANIA LINSEED PRODUCTS COMPANY, Pittsburgh, Pa.
Filed November 10, 1917. Serial No. 107,288. PUBLISHED FEBRUARY 26, 1918.

121,651. RAISINS AND DRIED PEACHES. PHOENIX PACKING CO., San Francisco, Cal.
Filed July 25, 1917. Serial No. 105,271. PUBLISHED OCTOBER 2, 1917.

121,652. MECHANICAL STARTERS FOR AUTOMOBILES. CHARLES N. PUCKETT, Los Angeles, Cal., assignor to Edna Todd Puckett and F. M. Berger, doing business under the firm-name of Master Starter Mfg. Company, Los Angeles, Cal.
Filed September 4, 1917. Serial No. 106,633. PUBLISHED FEBRUARY 26, 1918.

121,653. CERTAIN NAMED NON-ALCOHOLIC BEVERAGES. RAINIER PRODUCTS COMPANY, Seattle, Wash.
Filed January 2, 1918. Serial No. 108,257. PUBLISHED FEBRUARY 12, 1918.

121,654. CERTAIN NAMED DENTAL, MEDICAL, AND SURGICAL APPLIANCES. JOSEPH A. RAINVILLE, Lewiston, Me.
Filed August 27, 1917. Serial No. 105,905. PUBLISHED FEBRUARY 26, 1918.

121,655. RECEIPTING-REGISTERS. THE RECEIPTING REGISTER CO., Cincinnati, Ohio.
Filed December 26, 1917. Serial No. 108,161. PUBLISHED FEBRUARY 12, 1918.

121,656. POLISH FOR PIANOS, WOODWORK, FURNITURE, AUTOMOBILES, AND OTHER VEHICLES. THE REICHERT CHEMICAL & MFG. CO., Granton, Wis.
Filed October 18, 1917. Serial No 106,845. PUBLISHED FEBRUARY 26, 1918.

121,657. CANNED CORN-SYRUP WITH CANE FLAVOR, APPLE-BUTTER, PEACHES, APRICOTS, BLACKBERRIES, AND CANDY. RIDENOUR-BAKER GROCERY CO., Kansas City, Mo.
Filed July 11, 1917. Serial No. 104,992. PUBLISHED FEBRUARY 26, 1918.

121,658. NEWSPAPERS PUBLISHED WEEKLY. RIVERSIDE REVIEW COMPANY, INC., New York, N. Y.
Filed December 21, 1917. Serial No. 108,086. PUBLISHED FEBRUARY 19, 1918.

121,659. TRANSMISSION-OIL, LUBRICATING-GREASES, MOTOR-OIL, AND GASOLENE. WM. C. ROBINSON & SON CO., Baltimore, Md.
Filed December 22, 1917. Serial No. 108,107. PUBLISHED FEBRUARY 26, 1918.

121,660. SOAP. SAVANNAH SOAP CO., Savannah, Ga.
Filed January 19, 1918. Serial No. 108,552. PUBLISHED FEBRUARY 26, 1918.

121,661. PACIFIERS. JULIUS SCHMID, INCORPORATED, New York, N. Y.
Filed April 13, 1917. Serial No. 102,963. PUBLISHED FEBRUARY 26, 1918.

121,662. SURGEONS' RUBBER GLOVES. JULIUS SCHMID, INCORPORATED, New York, N. Y.
Filed March 22, 1917. Serial No. 102,356. PUBLISHED FEBRUARY 26, 1918.

121,663. CUBAN SHEEPSWOOL SPONGES. SCHROEDER & TREMAYNE, St. Louis, Mo.
Filed January 2, 1918. Serial No. 108,259. PUBLISHED FEBRUARY 26, 1918.

121,664. BALL-BEARINGS. STEFAN SCHNEIDER, Chicago, Ill.
Filed September 22, 1917. Serial No. 106,398. PUBLISHED JANUARY 22, 1918.

121,665. AUTOMOBILE-TRUCKS. CHARLES ALBERT SMITH, Windsor, Ontario, Canada.
Filed August 4, 1917. Serial No. 105,476. PUBLISHED FEBRUARY 19, 1918.

121,666. CERTAIN NAMED FOODS. SMITH & HORTON CO. LIMITED, Warren, Pa.
Filed May 27, 1916. Serial No. 95,482. PUBLISHED JULY 3, 1917.

121,667. COTTON THREAD. SUMMIT THREAD COMPANY, East Hampton, Conn.
Filed January 7, 1918. Serial No. 108,345. PUBLISHED FEBRUARY 26, 1918.

121,668. VARNISHES, DRIERS, JAPANS; DRY, PASTE, AND READY-MIXED PAINTS, AND ENAMELS. THE TOWER VARNISH & DRYER COMPANY, Dayton, Ohio.
Filed December 23, 1915. Serial No. 91,737. PUBLISHED FEBRUARY 19, 1918.

121,669. MOUNTINGS FOR EYEGLASS-LENSES. UHLEMANN OPTICAL CO., Chicago, Ill.
Filed May 16, 1917. Serial No. 103,875. PUBLISHED NOVEMBER 6, 1917.

121,670. BRIGHT-FINISHED STEEL. UNION DRAWN STEEL COMPANY, Beaver Falls, Pa.
Filed December 31, 1917. Serial No. 108,237. PUBLISHED FEBRUARY 12, 1918.

121,671. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. UNION TWIST DRILL CO., Athol, Mass.
Filed October 31, 1917. Serial No. 107,077. PUBLISHED DECEMBER 18, 1917.

121,672. CERTAIN NAMED MEASURING AND SCIENTIFIC APPLIANCES. UNION TWIST DRILL CO., Athol, Mass.
Filed October 31, 1917. Serial No. 107,076. PUBLISHED FEBRUARY 19, 1918.

121,673. EYEGLASS-FRAMES. UNITED OPTICAL COMPANY, Webster, Mass.
Filed November 15, 1917. Serial No. 107,402. PUBLISHED FEBRUARY 12, 1918.

121,674. FOLDING BEDS AND COTS. UNITED STATES CABINET BED CO., New York, N. Y.
Filed December 11, 1917. Serial No. 107,901. PUBLISHED FEBRUARY 19, 1918.

121,675. CANNED TUNA-FISH. C. E. VAN LANDINGHAM CO., Los Angeles, Cal.
Filed August 8, 1917. Serial No. 105,550. PUBLISHED FEBRUARY 26, 1918.

121,676. DRIED FRUITS. ARTHUR VAN SICLEN, New York, N. Y.
Filed January 6, 1917. Serial No. 100,408. PUBLISHED FEBRUARY 26, 1918.

121,677. BREAD. WARD BAKING COMPANY, New York, N. Y.
Filed January 17, 1918. Serial No. 108,514. PUBLISHED FEBRUARY 26, 1918.

121,678. BREAD. WARD BAKING COMPANY, New York, N. Y.
Filed January 17, 1918. Serial No. 108,515. PUBLISHED FEBRUARY 26, 1918.

121,679. CERTAIN NAMED FOODS. WESTERN GROCER COMPANY, Oskaloosa, Iowa.
Filed October 8, 1917. Serial No. 106,683. PUBLISHED FEBRUARY 26, 1918.

121,680. CANNED EVAPORATED GOAT-MILK. WIDEMANN GOAT MILK CO., King City and San Francisco, Cal.
Filed November 27, 1917. Serial No. 107,641. PUBLISHED FEBRUARY 26, 1918.

121,681. STORAGE BATTERIES. WILLARD STORAGE BATTERY COMPANY, Cleveland, Ohio.
Filed September 10, 1917. Serial No. 106,169. PUBLISHED FEBRUARY 26, 1918.

121,682. TOILET SOAP. YARDLEY & CO., LIMITED, London, England.
Filed October 12, 1917. Serial No. 106,748. PUBLISHED FEBRUARY 5, 1918.

121,683. POCKET-STOVES USING CHARCOAL AS A FUEL. THE TAPLEY SPECIALTY CO., New York, N. Y., assignor to Taplex Corporation, a Domestic Corporation.
Filed December 7, 1917. Serial No. 107,819. PUBLISHED FEBRUARY 19, 1918.

121,684. BROOMS. WINDSOR BROOM CO., Hamburg, Pa.
Filed November 19, 1917. Serial No. 107,487. PUBLISHED FEBRUARY 19, 1918.

121,685. COFFEE SUBSTITUTE. AUGUSTUS F. WEPPNER, Buffalo, N. Y.
Filed February 9, 1917. Serial No. 101,280. PUBLISHED OCTOBER 30, 1917.

121,686. SHEET-MUSIC. SAMUEL SIEGEL, Brooklyn, N. Y.
Filed January 12, 1917. Serial No. 100,564. PUBLISHED FEBRUARY 19, 1918.

121,687. CERTAIN NAMED HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES. CHICAGO TUBE AND IRON COMPANY, Chicago, Ill.
Filed July 18, 1917. Serial No. 105,091. PUBLISHED FEBRUARY 19, 1918.

121,688. DRIED FRUITS. ARTHUR VAN SICLEN, New York, N. Y.
Filed January 6, 1917. Serial No. 100,409. PUBLISHED FEBRUARY 26, 1918.

121,689. AXLES FOR CARS, (RAILROAD ROLLING-STOCK.) CHARLES E. WILLARD, Chicago, Ill.
Filed April 5, 1915. Serial No. 85,725. PUBLISHED FEBRUARY 19, 1918.

TRADE-MARK REGISTRATIONS CANCELED.

22,038. A REMEDY FOR DISEASES OF THE LIVER, KIDNEYS, AND STOMACH. ARON KLEIN, Hamilton, Ohio.
Registered November 22, 1892. Canceled May 1, 1918.

108,209. OLEOMARGARIN. JOHN F. JELKE COMPANY, Chicago, Ill.
Registered January 18, 1916. Canceled April 27, 1918.

104,605. REFINED PETROLEUM. DILSIZIAN BROS., New York, N. Y.
Registered June 8, 1915. Canceled May 1, 1918.

105,779. HACKSAWS. BAY STATE SAW & TOOL MFG. CO., Boston, Mass.
Registered August 17, 1915. Canceled May 1, 1918.

DECISIONS
OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

OPINION OF THE SOLICITOR OF THE DEPARTMENT OF THE INTERIOR.

IN RE OATHS IN ALIEN ENEMY COUNTRIES.

OATHS—IN ENEMY COUNTRIES—POWER TO ADMINISTER AND PROVE AUTHORITY.

Held that the Spanish diplomatic and consular officers in charge of the interests of the United States in enemy countries are not vested with power to administer oaths or to prove the authority of officials of the enemy countries under section 4892, Revised Statutes.

DEPARTMENT OF THE INTERIOR,
OFFICE OF THE SOLICITOR,
Washington, D. C., March 29, 1918.

The honorable the Secretary of the Interior.

MY DEAR MR. SECRETARY: I have considered the question submitted by the Commissioner of Patents, in his attached letter to you of February 23, 1918, whether an oath of an applicant for patent who is an enemy or ally of an enemy, taken in an enemy country before a Spanish diplomatic or consular officer, or as to which oath the authority of the person before whom it was taken was certified to by such an officer, can be regarded as a sufficient compliance with the provisions of section 4892, Revised Statutes.

Said section 4892, Revised Statutes, provides:

The applicant shall make oath that he does verily believe himself to be the original and first inventor or discoverer of the art, machine, manufacture, composition, or improvement for which he solicits a patent; that he does not know and does not believe that the same was ever before known or used; and shall state of what country he is a citizen. Such oath may be made before any person within the United States authorized by law to administer oaths, or, when the applicant resides in a foreign country, before any minister, chargé d'affaires, consul, or commercial agent holding commission under the Government of the United States, or before any notary public, judge, or magistrate having an official seal and authorized to administer oaths in the foreign country in which the applicant may be, whose authority shall be proved by certificate of a diplomatic or consular officer of the United States.

Section 10 (*a*) of the "Trading with the Enemy Act" of October 6, 1917, provides:

An enemy, or ally of enemy, may file and prosecute in the United States an application for Letters Patent, or for registration of trade-mark, print, label, or copyright, and may pay any fees therefor in accordance with and as required by the provisions of existing law and fees for attorneys or agents for filing and prosecuting such applications. Any such enemy, or ally of enemy, who is unable during war, or within six months thereafter, on account of conditions arising out of war, to file any such application, or to pay any official fee, or to take any action required by law within the period prescribed by law, may be granted an extension of nine months beyond the expiration of said period, provided the nation of which the said applicant is a citizen, subject, or corporation shall extend substantially similar privileges to citizens and corporations of the United States.

Upon the suspension of diplomatic relations between the United States and the German Empire, preliminary to the existing state of war between those powers, and again upon the declaration by the United States of a state of war with the Austro-Hungarian Empire, the diplomatic and consular interests of the United States within the countries of those powers, respectively, were placed by the United States in the charge of the diplomatic and consular officers of the Kingdom of Spain accredited to those countries, who accepted and are now acting under such delegation of this nation's diplomatic and consular functions within those warring countries. In my opinion this cannot be considered to have vested in those Spanish officials powers other than of a strictly diplomatic or consular character. In this instance the power in question is not one necessarily a part of the diplomatic or consular function and in the absence of special legislation to that effect (sec. 4892, Rev. Stats.) would not be one of the ordinary functions of the office. I do not believe that an officer of another Government, merely out of comity and for the time being performing the duties of an officer of the United States, can be considered as possessing, under this section, notarial powers in patent matters, as conferred on certain officers "holding a commission under the Government of the United States."

The proviso in the last sentence of said section 10 (*a*) of said "Trading with the Enemy Act" is, in my opinion, applicable only to the granting of an extension of nine months following the period of six months after the expiration of war and is not attached as a condition to the privilege extended to enemies and enemy aliens by the first sentence of said section. So construed said proviso has no bearing upon the question under consideration.

In my opinion, therefore, such patent applications as are referred to by the Commissioner of Patents in his letter fall within the scope of the privilege accorded by said section 10 (*a*) of the "Trading with the Enemy Act," (such privilege is not conditioned upon the reciprocal extension of similar privileges to citizens and corporations of the United States,) but the oath accompanying such applications by enemies and enemy allies cannot be considered to comply with the provisions of section 4892, Revised Statutes, if taken before the Spanish diplomatic or consular officer accredited to such country and in charge, during the war, of the diplomatic and consular interests of the United States therein.

Cordially yours,
CHARLES D. MAHAFFIE,
Solicitor.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

IN RE CARVALHO.

Decided April 1, 1918.

1. ABANDONMENT OF APPLICATION—APPEAL FROM THE DECISION OF COMMISSIONER—JURISDICTION OF COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

Where the Commissioner of Patents decides that the showing made is not sufficient to establish that the delay in the prosecution of an application was unavoidable within the meaning of section 4894, Revised Statutes, *Held* that his action is not reviewable on appeal to the Court of Appeals of the District of Columbia.

2. JURISDICTION—COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

The jurisdiction of the Court of Appeals of the District of Columbia to entertain appeals from the decision of the Commissioner of Patents embraces but two classes of cases: first, where an application for a patent or the reissue of a patent has been twice rejected by the Primary Examiner, then by the Examiners-in-Chief, and afterward by the Commissioner, and second, where the commissioner in an interference has awarded priority to one of the parties.

3. SAME—SAME.

As C.'s application was not twice rejected by the Primary Examiner nor passed upon by the Examiners-in-Chief, *Held* that its rejection was not one of those contemplated by section 4909.

Mr. E. Clarkson Seward for the appellant.

Mr. T. A. Hostetler for the Commissioner of Patents.

SMYTH, *C. J.*:

More than two years after his application for a patent had been abandoned under section 4894, Revised Statutes, Carvalho applied to the Commissioner of Patents to reinstate the application. This the Commissioner refused to do because the applicant failed to satisfy him in the language of the section just referred to that "the delay was unavoidable." Carvalho appeals. Our jurisdiction is questioned. The statutes bearing upon the subject are as follows:

SEC. 4909. Every applicant for a patent or for the reissue of a patent, any of the claims of which have been twice rejected, and every party to an interference, may appeal from the decision of the Primary Examiner, or of the Examiner in Charge of Interferences in such case, to the Board of Examiners-in-Chief; having once paid the fee for such appeal.

SEC. 4910. If such a party is dissatisfied with the decision of the Examiners-in-Chief, he may, on payment of the fee prescribed, appeal to the Commissioner in person.

SEC. 4911. If such party, except a party to an interference, is dissatisfied with the decision of the Commissioner, he may appeal to the Supreme Court of the District of Columbia sitting *in banc*. (Rev. Stats.)

The last section was superseded by the following:

SEC. 9. That the determination of appeals from the decision of the Commissioner of Patents now vested in the general term of the Supreme Court of the District of Columbia, in pursuance of the provisions of section seven hundred and eighty of the Revised Statutes of the United States, relating to the District of Columbia, shall hereafter be and the same is hereby vested in the court of appeals created by this act; and in addition, any party aggrieved by a decision of the Commissioner of Patents in any interference case may appeal therefrom to said court of appeals. (27 Stat. L., 436.)

In an interference the power of the Commissioner is limited by section 4904, Revised Statutes, to the question of priority of invention. Therefore, our jurisdiction embraces but two classes of cases: first, where an application for a patent or the reissue of a patent has been twice rejected by the Primary Examiner, then by the Board of Examiners-in-Chief, and afterward by the Commissioner; and, second, where the Commissioner in an interference has awarded priority to one of the parties. It was so held by this court after a careful examination of the matter in *Cosper* v. *Gold* (34 App. D. C., 194, 197–8; 151 O. G., 194) and *in re Fullagar*, (32 App. D. C., 222; 138 O. G., 259.) The appeal before us falls within neither class. True, the action of the Commissioner may in effect result in Carvalho's failure to get a patent, for it is possible that if he filed a new application, which he would have a right to do, he would encounter the bar of public use. This, however, is not a necessary result of the rule we announce, because in most cases a new application would save the applicant's rights. If it would not in any case, the result would be due to the applicant's dilatoriness, not to the law. However that may be, Carvalho's application for a patent was not twice rejected by the Primary Examiner, nor was it ever passed upon by the Board of Examiners-in-Chief. Its rejection therefore is not one of those contemplated by section 4909.

For these reasons we are without jurisdiction to review the decision of the Commissioner. In reaching this conclusion we do not forget that this court announced a different doctrine in Selden's case, (36 App. D. C., 428,) *Moore* v. *Heany*, (34 App. D. C., 31, 39; 149 O. G., 831,) and in Mattullath's case, (38 App. D. C., 497; 179 O. G., 853.) This doctrine, however, is not only inconsistent with the rulings in the Cosper and Fullagar cases, but also with the quoted statutes, and is therefore disapproved. The appeal is dismissed.

Dismissed.

U. S. Circuit Court of Appeals—Eighth Circuit.

CORONA CHEMICAL CO. *v.* LATIMER CHEMICAL CO.

Decided February 11, 1918.

248 FED. REP., 493.

1. PATENTS—GRANTING OF PATENTS—PRESUMPTION.

The granting of a patent creates the presumption of patentable invention.

2. SAME—INFRINGEMENT—DISMISSAL—VALIDITY OF PATENT.

A patent for an improved acid arsenate of lead in the form of a fine powder cannot on motion to dismiss a bill for infringement be declared invalid for want of invention on the ground that the prior art as disclosed by the patent showed nothing new was produced except a difference in degree of fineness of the powder, for in so recondite a science as chemistry a difference in degree may produce revolutionary results, and hence the validity of the patent should be determined by trial on the merits.

APPEAL from the District Court of the United States for the District of Colorado; Robert E. Lewis, Judge.

Bill by the Corona Chemical Company against the Latimer Chemical Company. Motion to dismiss the bill was sustained (240 Fed., 423), and complainant appeals. Reversed, with directions.

Mr. Russell Wiles (*Mr. W. H. Swenarton* and *Messrs. Dyrenforth, Lee, Chritton & Wiles* on the brief) for the appellant.

Mr. Walter W. Boughton for the appellee.

Before CARLAND, Circuit Judge, and AMIDON and MUNGER, District Judges.

AMIDON, *Dis. J.*:

This is a suit in equity by the Corona Chemical Company, as plaintiff, against the Latimer Chemical Company, as defendant, charging infringement of Hall Patent No. 1,064,639. The patent is for acid arsenate of lead in the form of fine powder, whereas the substance in the prior art had been in the form of paste. The patentee claims for his arsenate a distinct improvement in its adaptation for use as an insecticide. Defendant moved under the equity rules to dismiss the bill. The patent was attached to the bill. The court read it and the prior art as therein described, and ruled that plaintiff's invention produced nothing but a difference in degree of fineness of the powder, and dismissed the bill on the ground that this did not involve patentable invention.

(1, 2) There is nothing either in the patent or the bill to support the broad conclusion at which the court arrived. It is true that the patent disclosed that the powder of the patentee was finer than prior powders of the same substance, and to that extent the powder shows a difference in degree; but it was an unwarranted inference to say that the difference in degree did not produce a difference in the function of the substance when applied as an insecticide in the spraying of fruit-trees. That was an inference upon which the plaintiff was entitled to a trial upon the merits. The granting of a patent creates a presumption of patentable invention. In so recondite a science as chemistry a difference in degree may produce revolutionary results. (*Mineral Separation Co.* v. *Hyde*, 242 U. S., 261; 37 Sup. Ct., 82; 61 L. Ed., 286, 234, O. G., 1311.) It would be an exceptional case which would justify striking down a patent in such a field on demurrer to the bill. We express no opinion as to plaintiff's patent, but simply hold that he is entitled to a trial.

The case is reversed, with directions to the trial court to overrule the motion to dismiss, and permit the defendant to answer, and then proceed with the trial of the case.

ADJUDICATED PATENTS.

(U. S. D. C. R. I.) The Osburn patent, No. 652,806, for a flexible electrical conduit, construed and *Held* not infringed. *Robinson* v. *Tubular Woven Fabric Co.*, 248 Fed. Rep., 526.

(U. S. D. C. Pa.) The Thalhofer patent, No. 672,655, for a watch-barrel, *Held* valid, but not infringed. *Hills* v. *Hamilton Watch Co.*, 248 Fed. Rep., 499.

(U. S. D. C. N. Y.) The Lay patent, No. 946,234, for a metal-case broom, *Held* void for lack of invention. *Joseph Lay Co.* v. *American Brush & Broom Co.*, 248 Fed. Rep., 513.

(U. S. C. C. A. Pa.) The Clarke patent, No. 1,035,819, for an improvement in union-suits, *Held* valid and infringed. *Globe Knitting Works* v. *Segal*, 248 Fed. Rep., 495.

Changes in Classification.

(ORDER NO. 2,384.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 3, 1918.

The following change in the classification of inventions is hereby directed, to take effect immediately:

In class 225, Dispensing Beverages, (Division XL111,) abolish subclass—

Beer apparatus—
Driving-tools—
44. Guards.

The patents formerly contained in this subclass have been placed for the most part in class 16, Builders' Hardware, subclass 177, Escutcheon-collars.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER NO. 2,383.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., April 2, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 105, Railway Rolling-Stock, (Division XXXIV,) abolish subclasses—

60. Sanding devices—
176. Chain feed,
263. Fluid-pressure,
177. Oscillatory feed,
Reciprocatory feed—
178. Horizontal,
179. Vertical,
180. Rotary feed.

The patents formerly contained in these subclasses have been placed in class 291, Track-Sanders, hereinafter established.

Establish, in Division XXXIV, class 291, Track-Sanders, with the following subclasses and definitions, the patents contained in this class having been taken for the most part from the subclasses hereinbefore abolished in class 105, Railway Rolling-Stock:

291.—TRACK-SANDERS.

1. **Miscellaneous.**
2. **Wheel-slip control.**
3. **Fluid-delivery—**
4. Smoke and cinder,
5. **Reversing—**
6. Movable trap-valve,
7. Gravity conversion—
8. By-pass,
9. Horizontal trap-axis,
10. Vertical trap-axis,
11. Sand-traps,
12. Blast-nozzle cleaners,
13. Air-ports and screens.
14. **Brake-handle control.**
15. **Brake-system control.**
16. **Hand-valve control.**
17. **Alarms.**

291.—TRACK-SANDERS.

18. **Jet in hopper.**
19. **Heaters—**
20. Electric,
21. Steam.
22. **Power-actuated—**
23. Electric,
24. Fluid.
25. **Sand-feeders—**
26. Reversing,
27. Chain,
28. Oscillatory—
29. Cup,
30. Hopper,
31. Spout cut-off,
32. Rotary,
33. Screw,

291.—TRACK-SANDERS.

Sand-feeders—
34. Longitudinal slide,
35. Pivoted slide,
36. Vertical plunger—
37. Helical guide.
38. **Sand-hoppers—**
39. Wheel-guard,
40. Dome.
41. **Sand-delivery pipe—**
42. Cleaners—
43. Fluid,
44. Flexible,
45. Telescopic,
46. Nozzles—
47. Pivoted.
48. **Sand-screens.**

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER No. 2,393.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 11, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 75, Metallurgy, (Division III,) abolish subclass—

187. **Fluxes.**

The patents formerly contained in this subclass have been placed in class 148, Metal Treatment, subclass 23, Solid metal, Compositions, Fluxing, hereinafter established.

In same class establish subclass—

Solution and precipitation—

198. Pickling.

The patents contained in this subclass have been taken from class 148, Annealing and Tempering, subclass 42, Pickling and swilling, hereinafter abolished.

In class 148, Annealing and Tempering, (Division III,) change the title to read:

148.—METAL TREATMENT,

abolish the existing subclasses, and establish in lieu thereof the following subclasses and definitions:

148.—METAL TREATMENT.
1. **Miscellaneous.**
2. **Casting, working, and heat treatment.**
3. **Casting and heat treatment.**
4. **Solid metal—**
5. Removing metal coating from scrap,
6. Coating—
7. With heat,
8. Cleaning,
9. Cutting by heat,
10. Electrical,
11. Non-ferrous,

148.—METAL TREATMENT.
Solid metal—
12. Working and heat treatment,
13. Heat treatment—
14. With special compositions—
15. Fused,
16. Gaseous—
17. Carbonaceous,
18. Liquid,
19. Carbonaceous,
20. With fluid—
21. Liquid,

148.—METAL TREATMENT.
Solid metal—
22. Compositions—
23. Fluxing—
24. Metallic,
25. Oleaginous,
26. Inorganic,
27. Heat-treating—
28. Liquid—
29. Oleaginous,
30. Carbonaceous.
31. **Stock—**
32. Non-ferrous.

J. T. NEWTON,
Commissioner.

Supplemental List for Honor Roll of Employees Who Have Entered Military or Naval Service to Date.

Previously listed on Honor Roll..... 1,420

DEPARTMENT OF THE INTERIOR,
Washington, D. C., May 17, 1918.

Reported by Bureaus since April 23, date of second supplemental list:

Office of the Secretary	2
General Land Office	14
Office of Indian Affairs, (including Field Service)	4
Pension Office	2
Patent Office	8
Bureau of Education	2
Geological Survey	8
Reclamation Service	29
Bureau of Mines	23
Alaskan Engineering Commission	4
St. Elizabeths Hospital	5
Total	1,521
*Deductions	3
Grand total	1,518

OFFICE OF THE SECRETARY (2).

Matthews, Raymond J. — Rudy, Corban H.

GENERAL LAND OFFICE (14).

Baker, Talmage. — Gilbert, Alex. H., Jr.
Calvin, Elmer D. — Hamilton, Edwin C.
Chappell, Franklin. — Lummis, Doran W.
Clement, Donald E. — Pedersen, Carl M.
Conlon, James. — Shaw, Kenneth A.
Cooper, James H. — Thomas, Roger D.
Ferris, Harry A. — Whelan, John A.

OFFICE OF INDIAN AFFAIRS (4).

Cade, Clarence D. — Paul, John.
Dice, Irven R. — Peck, Dr. James H.

PENSION OFFICE (2).

Bain, Garvin C. — Koester, Karl.

PATENT OFFICE (8).

Bicksler, Aubrey B. — Hahn, Arthur M.
Ford, George A. — Helstermann, Will F.
Geddes, James W. — McNelly, Elwood W.
Goodin, Albert B. — Stack, Charles F.

BUREAU OF EDUCATION (2).

Elliott, George H. — Judge, John J., Jr.

GEOLOGICAL SURVEY (8).

Bryan, Kirk. — McNeely, Lester R.
Ellisor, Marvin. — Nessler, Charles W. H.
Gott, Louis H. — Nevitt, John.
Lauterhahn, Otto. — Pendleton, Thomas P.

RECLAMATION SERVICE (29).

Attrill, Harry A. — Landry, Fred.
Bittner, Henry L. — Masterman, O. E.
Bosch, John J. — Murphy, Edward R.
Brown, Robert Q. — Palmer, Donald A.
Catt, Homer D. — Peacock, Merrill A.
Cordell, Forrest. — Richeson, E. D.
Davis, Guy Oliver. — Sheldon, A. G.
Donnelly, Clyde. — Shuman, David H.
Fogle, Victor D. — Stipek, Frank J.
Fox, Richard. — Thacker, Charles.
Fruit, Floyd J. — Tripp, Perry W.
Green, William M. — Waddell, Howard F.
Hackett, Lee. — Wilkins, T. M.
Kidd, Richard. — Williams, Nat J.
Krober, Joseph L.

BUREAU OF MINES (23).

Bahlke, William H. — McClelland, John M.
Benton, Arthur F. — Overstreet, John B.
Collette, William R. — Pease, Robert N.
Denny, Edward H. — Ryerson, Lloyd H.
Funsten, Stanard R. — Smith, John E.
Gorman, Algernon D. — Spofford, C. B., Jr.
Harper, Walter J. — Stone, Sam P.
Hayden, Frederick L. — Webber, Robert A.
Heffner, Oden C. — Wilson, Ray.
Katz, Sidney H. — Wilson, Robert E.
Kellogg, E. H. — Yoe, John H.
Larson, Alfred T.

ALASKAN ENGINEERING COMMISSION (4).

Compton, G. W. — Williams, C. E.
Hanson, Jack. — Williams, W. E.

ST. ELIZABETHS HOSPITAL (5).

Chapman, Ross McC. — Roland, Walter G.
Harris, Edward C. — Sweeney, Frank.
Kurtz, Joseph.

*Two Survey employees reported this week as having resigned their commissions; one Alaskan Engineering Commission man listed twice, owing to variation in spelling of name.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

Vol. 250—No. 3. TUESDAY, MAY 21, 1918. Price—$5 per year.
[PUBLISHED JUNE 19, 1918.]

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Issue of May 21, 1918.

Patents	806—No.	1,266,542 to	1,267,349, inclusive.
Designs	3—No.	52,049 to	52,051, inclusive.
Trade-Marks	51—No.	121,690 to	121,740, inclusive.
Labels	22—No.	20,612 to	20,633, inclusive.
Prints	3—No.	4,889 to	4,891, inclusive.
Reissues	4—No.	14,473 to	14,476, inclusive.
Total	891		

Changes in Classification.

(ORDER No. 2,395.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 18, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 105, Railway Rolling-Stock, (Division XXXIV,) abolish subclass—

Cars—
Passenger—
5. Baskets.

The patents formerly contained in this subclass have been placed for the most part in class 224, Package and Article Carriers, subclass 29.5, Vehicle, Railway-car, hereinafter established.

In class 224, Package and Article Carriers, (Division XL,) establish the following subclass and definition, the patents contained in this subclass having been taken for the most part from class 105, Railway Rolling-Stock, subclass 5, Cars, Passenger, Baskets, hereinbefore abolished:

Vehicle—
29.5. Railway-car.

29.5. VEHICLE, RAILWAY-CAR. Patents for various types of package or article carrying racks, baskets, etc., used on railway-cars.

J. T. NEWTON,
Commissioner.

Disclaimers.

1,150,905.—*Henry D. Taylor*, Rochester, N. Y. ENVELOP-OPENING MACHINE. Patent dated August 24, 1915. Disclaimer filed May 29, 1918, by *The Bircher Company, Inc.*, assignee by mesne assignments.

Enters this disclaimer—

"To that part of the claims of said specification which is in the following words, to wit:

"12. In an envelop opening machine, the combination with a guide, of feeding and deflecting mechanism which acts on the envelops to move them laterally toward the guide and also along the latter, said mechanism pinching the outside wrappers to cause them to bulge on their contents, means permitting the bulged portion to spread out at a certain point in the travel of the envelop free from the contents, and a cutting mechanism for operating on the edge of the envelop after it has been thus spread or flattened.

"19. A machine for opening envelops comprising a cutting mechanism, mechanism for feeding the envelops to the cutting mechanism and for bulging the envelops along one of their edges on their contents and means for causing portions of the bulged portions to be presented to the cutting mechanism free from the contents of the envelops."

1,205,097.—*Jacob London*, Tunnelton, Pa. MINING-MACHINE AND TRUCK. Patent dated November 14, 1916. Disclaimer filed June 3, 1918, by *The Jeffrey Manufacturing Company*, assignee by mesne assignments.

Enters this disclaimer—

"To that part of the claims in the said specification which is in the following words, the same being the words in the claim therein numbered 7, to wit:

"In a mining machine truck, truck wheels, a lower frame carried thereon, a machine guiding frame swiveled on said lower frame, a mining machine supported by said wheels and movable longitudinally of said guiding frame, and means for driving said wheels from said machine in one position of the latter."

14,237. (Reissue.)—*Gustaf David Sundstrand*, Rockford, Ill. ADDING AND LISTING MACHINE. Patent dated December 26, 1916. Disclaimer filed June 7, 1918, by *Rockford Milling Machine Company*, assignee.

Enters this disclaimer—

"To claims 12 and 14 of said Reissue Patent No. 14,237."

Correction of Drawings.

RULE 72. * * * * *

The drawing may be withdrawn only for such corrections as cannot be made by the Office; but a drawing cannot be withdrawn unless a photographic copy has been filed and accepted by the Examiner as a part of the application. Permissible changes in the construction shown in may be made only by the Office and after an approved photographic copy has been filed. Substitute drawings will not be admitted in any case unless required by the Office.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business May 17, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 17	Apr. 25	171
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Feb. 12	Mar. 1	271
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 20	Apr. 5	169
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Mar. 20	May 2	170
167	5. Bookbinding; Harvesters; Jewelry; Music	Feb. 25	Mar. 25	229
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Nov. 21	Feb. 19	391
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Jan. 18	Mar. 5	374
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 2	Apr. 17	314
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current: Pumps; Marine Propulsion.	Nov. 15	Apr. 22	432
235	10. Carriages and Wagons; Motor Vehicles	Jan. 23	Apr. 4	615
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Feb. 4	Apr. 17	228
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Jan. 31	Mar. 21	672
329	13. Ammunition and Explosive Chargo Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Jan. 17	Apr. 8	511
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Feb. 19	Apr. 8	170
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Apr. 16	Apr. 20	229
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Jan. 7	Jan. 12	543
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Mar. 15	Apr. 15	120
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 12	Mar. 16	351
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Jan. 21	Feb. 28	413
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	Apr. 6	Apr. 18	199
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 17	Mar. 29	223
249	22. Aeronautics; Firearms; Ordnance	Feb. 12	Apr. 3	283
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Feb. 26	Apr. 2	311
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	Apr. 8	Apr. 5	189
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	Mar. 28	Apr. 6	174
105	26. Electricity, Generation; Motive Power	Nov. 17	Mar. 25	510
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Feb. 25	Apr. 4	290
225	28. Internal-Combustion Engines	Jan. 4	Mar. 25	435
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 8	Mar. 1	430
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Feb. 9	Apr. 25	390
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Feb. 16	Mar. 4	220
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Nov. 12	Apr. 16	669
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Mar. 18	Apr. 11	201
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	Apr. 27	May 2	73
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Dec. 29	Jan. 26	526
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Mar. 29	Apr. 19	521
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Nov. 30	Jan. 10	685
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	Apr. 29	May 2	122
220	39. Water Distribution; Multiple Valves	Jan. 22	Mar. 11	378
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Feb. 24	Mar. 16	461
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Feb. 20	Feb. 23	328
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling.	Dec. 4	Jan. 7	658
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Feb. 1	Apr. 2	242
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Mar. 27	Apr. 3	177
379	45. Clutches; Lubrication; Motors; Railway Brakes	Jan. 29	Feb. 14	359

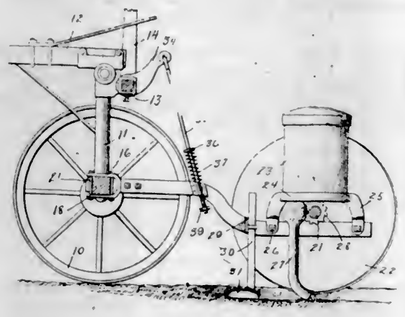
Oldest new case, Nov. 12; oldest amended, Jan. 7.
Total number of applications awaiting action 15,427

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:	Apr. 11	May 3	646
	Trade-Marks	Mar. 15	Mar. 20	501
	Designs	May 6	May 8	44
	Labels and Prints			

PATENTS

GRANTED MAY 21, 1918.

1,266,542. CULTIVATOR ATTACHMENT. BERT R. ALAM, Winnebago, Nebr. Filed Mar. 15, 1917. Serial No. 155,055. (Cl. 111—63.)

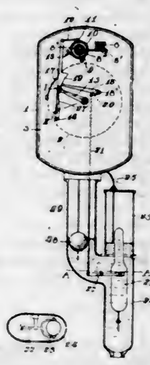


1. In a lister cultivator having an arched axle, the combination of a seed planting attachment including a frame, formed of spaced bars, a shaft, means for supporting the shaft for rotation between the members of the arched axle, means for securing the said frame bars to said shaft, whereby the frame bars may be oscillated vertically to raise the attachment from the ground, cultivator disks journaled on said frame, a sub soil plow mounted on the frame, and means operable by rotation of said cultivator disks for depositing seed in the soil formed by said sub soil plow.

2. In a lister cultivator having an arched axle formed with a pair of spaced vertical members, the combination of a seed planting attachment including a frame formed of spaced bars, a shaft rectangular in cross section having reduced cylindrical terminals, a pair of clamps, one embraced about each vertical member of the axle, whereby the shaft is mounted for rotation, means connecting the adjacent terminals of said frame bars to said shaft whereby the frame may be raised vertically, manually operable means mounted on the cultivator for raising said frame, cultivator disks mounted for rotation on the frame, and a sub soil plow mounted on the frame, and means operable by rotation of said cultivator disks for depositing seed in the furrow formed by said plow.

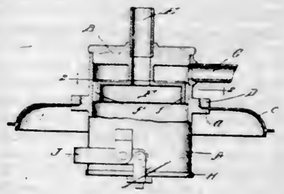
1,266,543. APPARATUS FOR MEASURING THE WEIGHT OF FLUID QUANTITIES. OSCAR ANDERSON, Råsunda, Sweden. Filed May 9, 1917. Serial No. 167,575. (Cl. 73—45.)

An apparatus for measuring the weight of fluid quantities, comprising a device for measuring determined quantities of fluid, a register in said device, an adjustable gearing actuating said register, a rocking fluid measuring vessel operating said gearing, locking means retaining said rocking vessel in certain positions, a float located in the measured fluid and adapted to release said locking means at a certain level of the fluid, a densimeter immerged in the measured fluid, and movable connections between said densimeter and said gearing adapted to adjust the latter



to positions corresponding to the positions of the densimeter in the fluid.

1,266,544. MILKING-MACHINE. CARL OSCAR ANDERSON, Lancaster, Pa. Filed Dec. 15, 1916. Serial No. 137,259. (Cl. 31—98.)



1. In a milking machine, a vacuum chamber having in the upper portion thereof a milk inlet and a cover having an air outlet port and carrying a disk separated from the cover so as to provide an annular space in communication with said milk inlet; said disk having a pendant annular flange slightly separated from the inner wall of the vacuum chamber so as to leave a narrow passage therebetween, whereby the milk entering said annular space is spread out over the surface of said disk and caused to flow downwardly in a thin sheet through said passage.

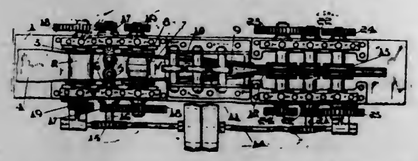
2. In a milking machine, a vacuum chamber having in the upper portion thereof a milk inlet and a cover having an air inlet port therethrough and carrying a disk separated from the cover so as to provide an annular space between the cover and disk in communication with said milk inlet; said disk having a depending annular marginal flange with projections thereon so as to provide narrow passages between said marginal flange and the inner wall

of the vacuum chamber, whereby the milk entering said annular space is spread out over the surface of said disk and caused to flow downwardly in thin separate sheets or columns through said passage.

3. In a milking machine, a vacuum chamber having a top or cover provided with a depending centrally-disposed tubular portion, an inverted cup-like member supported by said tubular portion within and separated from said chamber, so as to provide an annular space between said member and said top, a milk inlet opening into said annular space, and an air outlet in communication with said tubular portion for connection with a suction tube; said cup-like member having a depending marginal annular flange slightly separated from the inner wall of said chamber so as to provide a milk passage between said flange and said wall.

4. In a milking machine, a vacuum chamber provided at its upper end with a cover having a centrally disposed air outlet for connection with a suction tube, a disk suspended from said cover by means of a tubular connection with said outlet; said disk having an annular marginal flange surrounding said outlet and slightly separated from the inner wall of said chamber so as to provide an annular discharge space around said flange, a vacuum chamber below and an annular milk inlet space above said disk, a milk inlet communicating with said annular inlet space, and a valved milk outlet at the bottom of said chamber, together with means for supporting said chamber over a suitable receptacle for the milk.

1,266,545. APPARATUS FOR SHAPING METAL CHANNEL-BARS. JOHN WILLIAM ANDERSON, Hamilton, Ontario, Canada. Filed July 12, 1917. Serial No. 180,157. (Cl. 153—32.)

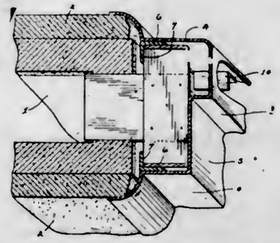


1. In metal shaping apparatus, the combination of a pair of driven rolls adapted to turn up the edges of a metal strip at right angles; two pairs of rolls journaled at right angles to the first mentioned rolls and adapted to inwardly curve the said upturned edges; a following pair of driven rolls journaled parallel to the first pair and adapted to slightly bend up the sides of the strip along two lines one at each side of the center; a die following the last mentioned rolls having sides whose faces are shaped to engage the sides of the strip and to gradually increase the bends at the lines aforesaid to right angles as the strip passes through the die; and anti-friction rolls engaging the center part or bottom of the strip as it passes through the dies to hold it down in the die and prevent deformation.

2. In metal shaping apparatus, the combination of a pair of driven rolls adapted to turn up the edges of a metal strip at right angles; two pairs of rolls journaled at right angles to the first mentioned rolls and adapted to inwardly curve the said upturned edges; a following pair of driven rolls journaled parallel to the first pair and adapted to slightly bend up the sides of the strip along two lines one at each side of the center; a die following the last mentioned rolls having sides whose faces are shaped to engage the sides of the strip and to gradually increase the bends at the lines aforesaid to right angles as the strip passes through the die; anti-friction rolls engaging the center part or bottom of the strip as it passes through the dies to hold it down in the die and prevent deformation; and one or more pairs of finishing rolls, each pair comprising a channel shaped roll fitting the outside of the finished metal strip and a roll adapted to pass between the inturned edges of the strip and engage its bottom.

3. In metal shaping apparatus, the combination of a pair of driven rolls adapted to turn up the edges of a metal strip at right angles; two pairs of rolls journaled at right angles to the first mentioned rolls and adapted to inwardly curve the said upturned edges; a following pair of driven rolls journaled parallel to the first pair and adapted to slightly bend up the sides of the strip along two lines one at each side of the center; a die following the last mentioned rolls having sides whose faces are shaped to engage the sides of the strip and to gradually increase the bends at the lines aforesaid to right angles as the strip passes through the die; anti-friction rolls engaging the center part or bottom of the strip as it passes through the dies to hold it down in the die and prevent deformation; two pairs of driven finishing rolls and an intermediate pair of idler finishing rolls, each pair comprising a channel shaped roll fitting the outside of the finished metal strip and a roll adapted to pass between the inturned edges of the strip and engage its bottom.

1,266,546. DOOR AND WINDOW STRUCTURE. OSCAR LEONARD BAXTER, Columbus, Ohio, assignor to The Solar Metal Products Company, Columbus, Ohio, a Corporation of New York. Filed Feb. 26, 1917. Serial No. 150,923. (Cl. 189—46.)



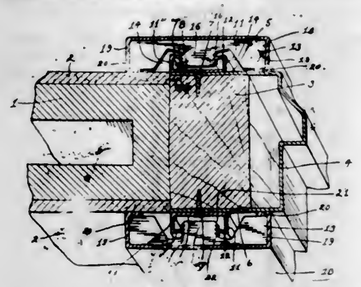
1. In a casing of the class described, the combination with a jamb, of a pair of longitudinally extending ribs provided on the inside of said jamb, a vertically movable anchor for said jamb comprising a transversely extending cross piece and a forwardly projecting tongue, said cross piece being disposed to the rear of said ribs and having the ends thereof provided with angularly projecting ears, the latter being adapted to be disposed to engage said ribs in order to retain said tongue in a horizontal position, and said ears being of a lesser width than said cross piece to permit said anchor to be oscillated to a substantially vertical position within said jamb irrespectively of its vertical position therein.

2. In a casing of the class described, the combination with a jamb, of a pair of longitudinally extending ribs provided upon the inside of said jamb, a vertically movable anchor formed with a transversely extending cross piece disposed to the rear of said ribs and a forwardly projecting tongue portion, said cross piece terminating in upwardly projecting reduced extremities having the vertical edges thereof adapted to be disposed in engagement with said ribs to retain said tongue in a substantially horizontal position, the said extremities being of a substantially lesser width than said cross piece to permit of the oscillation of said anchor irrespectively of the vertical positions of the latter.

[Claims 3 to 5 not printed in the Gazette.]

1,266,547. DOOR OR WINDOW CASING. OSCAR LEONARD BAXTER, Columbus, Ohio, assignor to The Solar Metal Products Company, Columbus, Ohio, a Corporation of New York. Filed Feb. 26, 1917. Serial No. 150,924. (Cl. 189—46.)

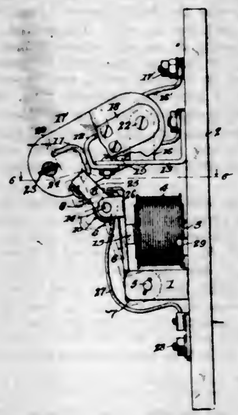
1. A casing of the character described comprising a jamb, a channel element extending longitudinally of said jamb and securely fastened at its opposite ends only, a trim, inturned lips on the legs of said element, L-shaped flanges on the edges of said trim, and a fastener provided with downturned ends and a toothed tongue, said ends fitting in the space formed by said L-shaped flanges and said toothed tongue engaging said lips.



4. A casing of the class described, comprising a jamb, a channel element extending longitudinally of said jamb, inturned resilient lips formed upon said channel element, a trim structure, end flanges formed with said structure for spacing the face of the latter from said jamb, a plate positioned within said structure, and a tongue formed with said plate and having a plurality of notched edges, said edges being adapted for engagement with said lips to secure the trim structure in place.

[Claims 2 and 3 not printed in the Gazette.]

1,266,548. ELECTRIC SWITCH. HARRY L. BRADLEY, Milwaukee, Wis. Filed May 22, 1916. Serial No. 99,066. (Cl. 175—281.)



1. In an electric switch the combination of a movable member carrying a contact, a contact engaged by a contact on said member when said member is actuated in one direction, movable means for breaking the arc between said contacts, and a stop operated by said means limiting the movement of said contact carrying member in the opposite direction.

3. In an electric switch the combination of a movable member carrying a contact, a contact engaged by a contact on said member when said member is actuated in one direction, a movable chute or cell surrounding said contacts, and a stop operated by said chute and limiting the movement of said contact carrying member in the opposite direction.

7. In an electric switch the combination of a movable member carrying a contact, a contact engaged by a contact on said member when said member is actuated in one direction, movable means for magnetically breaking the arc between said contacts, a stop operated by said means limiting the movement of said contact carrying member in the opposite direction, and means for preventing the accidental removal of said means for magnetically breaking the arc between said contacts from its operative position.

[Claims 2 and 4 to 6 not printed in the Gazette.]

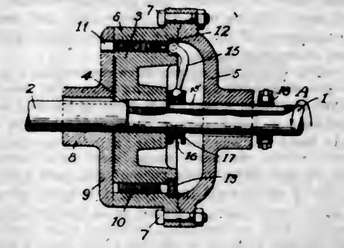
1,266,549. WIRE-FABRIC BED-BOTTOM. RICHARD BRADSHAW, Montreal, Quebec, Canada. Filed May 20, 1916. Serial No. 98,743. (Cl. 5—62.)



1. In combination, a stretcher frame having fabric-supporting members of metal, a finely intermeshed wire fabric having opposed margins reinforced with metal strips and interfolded therewith, and means integrally uniting the fabric, its marginal reinforcement, and the stretcher frame with each other, consisting of electrically formed welds extending continuously from stretcher frame to reinforcing strip and through the interposed fabric.

2. In a woven wire fabric bed bottom, the combination with a stretcher frame having metal fabric supporting bars, of a woven wire fabric having its opposed margins interfolded with and bound by a metal binding, and means permanently uniting the fabric to said supporting bars, comprising spot welds formed to extend through the binding and interposed fabric and joining said parts integrally with the surfaces of the respective supporting bars.

1,266,550. CLUTCH. ELBERT H. CARROLL, Worcester, Mass., assignor to Morgan Construction Company, Worcester, Mass., a Corporation of Massachusetts. Filed Sept. 9, 1915. Serial No. 49,820. (Cl. 192—14.)



1. In a mechanism of the character described, a driving member and a driven member, a clutching device attached to one of said members, said device presenting opposing frictional clutching surfaces, means associated with the other of said members in position for operative engagement with each of said clutching surfaces, and means for selectively operating said device to render either of said clutching surfaces operative.

5. In a mechanism of the class described, a driving member and a driven member, a clutching device attached to said driven member and presenting inner and outer frictional clutching surfaces, one of which is adapted for engagement with said driving member, and a member providing a surface for engagement by the other clutching surface of said clutching device.

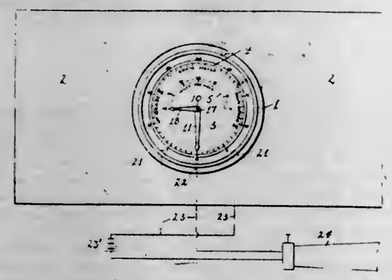
8. In a mechanism of the class described, a driving member and a driven member, one of said members providing an annular space, a spiral band attached to the other member and disposed within said space, and means, attached to said band and movable into frictional contact with said driving member, for expanding or contracting said band into frictional engagement with the

outer or the inner surface of said space, depending upon the direction of rotation of said driving member.

10. In a mechanism of the class described, a driving member and a driven member, and a spiral band attached to said driven member and presenting inner and outer frictional clutching surfaces for engagement respectively with corresponding surfaces on said driving member.

[Claims 2 to 4, 6, 7, and 9 not printed in the Gazette.]

1,266,551. SAFETY DEVICE FOR AUTOMOBILES. WILLIAM E. CARSTENSEN, Quarries, Cal. Filed July 9, 1917. Serial No. 179,391. (Cl. 33—215.)



1. A safety device for automobiles, comprising an indicator for grade-percentage; means for operating said indicator; an indicator for a speed rate, bearing a definite predetermined relation of safety to the grade percentage; and means operated by the grade indicator operating means for simultaneously operating the speed-indicator.

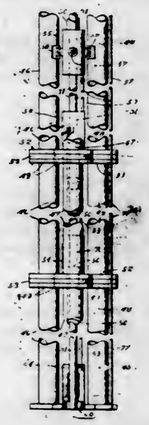
2. A safety device for automobiles comprising a pendulous weight suspended for swinging movement developed by changes of grade; a face plate having a grade scale and a speed-scale bearing a definite predetermined relation of safety to the grade-scale; a hand operated by the swinging movement of the weight, and playing over the grade scale to indicate the grade percentage; and a second hand playing over the speed-scale and operated by the movement of the weight simultaneously with the operation of the first hand.

4. A safety device for automobiles comprising a pendulous weight suspended for swinging movement developed by changes of grade; a rock-shaft from which said weight is suspended; a hand; connections between said rock-shaft and hand to move the latter; a face-plate having a scale over which the hand plays, said scale indicating opposing up and down grade percentages, said face-plate having also a speed-scale indicating a relation of safety to the grade percentage; a second hand playing over the speed-scale; and connections between said rock-shaft and the second hand to move the latter only when the first hand moves over the down grade portion of its scale, said last named connections bearing a predetermined proportional movement relation to the first named connections.

7. A safety device for automobiles comprising a pendulous weight suspended by a stem for swinging movement developed by changes of grade, said stem having a hinge joint adapting the weight for a second swinging movement developed by the travel of the machine on a curve; a rock-shaft to which the stem of the weight is secured; a face-plate having a grade-scale and a speed-scale bearing a definite predetermined relation of safety to the grade-scale; a hand operated by the rock-shaft on the first named swinging movement of the weight, said hand playing over the grade-scale; a second hand playing over the speed-scale and operated by the rock-shaft on said movement of the weight; an electric alarm circuit including said weight as one pole of a switch; and a second pole, adjustably mounted, of said switch adapted for make and break contact with the weight under the centrifugal movement thereof.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,266,552. ROTARY DEEP-WELL PUMP. MATTHEW T. CHAPMAN, Aurora, Ill., assignor to The American Well Works, Aurora, Ill., a Corporation of Illinois. Filed Oct. 6, 1916. Serial No. 124,141. (Cl. 253—198.)



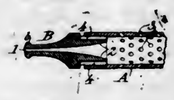
5. In a vertical centrifugal pump, the combination of a plurality of discharge pipes for the discharge of liquid pumped, a shaft extending down between said pipes, bearings for the shaft mounted between the discharge pipes and supported by connections joining said pipes, other pipes surrounding the shaft supported by said bearings, other bearings for said shaft supported by said last-named pipes, means for adjusting said last-named bearings laterally relative to said first-named pipes, and means for delivering oil to said second-named pipes.

8. In a pump of the type described for pumping fluid, the combination of a pump shaft, one or more runners carried thereby, a sectional discharge pipe, bearings for the pump shaft supported from the members by which the separate sections of said discharge pipe are connected together, and means for adjusting said bearings relative to said discharge pipe for bringing said shaft into alinement.

10. In a deep well pump, the combination of a plurality of pipes arranged side by side, a plate to which said pipes are connected by screw-threads at their ends, collars mounted by means of screw-threads upon the opposite ends of said pipes, a second plate secured to said collars, a shaft revolubly mounted in said plates, a pump casing communicating with the lower ends of said pipes, and means actuated by the rotation of said shaft for forcing water upward through said pipes.

[Claims 1 to 4, 6, 7, 9, and 11 to 15 not printed in the Gazette.]

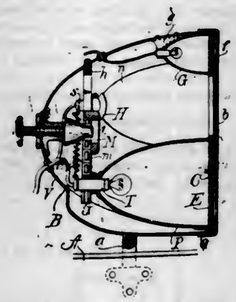
1,266,553. CIGAR-PROTECTOR. VAHAN CHEREKJIAN, West Hoboken, N. J. Filed Nov. 30, 1917. Serial No. 204,793. (Cl. 131—51.)



1. The combination of a hollow tubular cap for enveloping a cigar, a cigar holder adapted to enter the cap and longitudinal grooves, spaced apart circumferentially in the body of the cigar holder, serving as air passages leading to the space within the cap.

2. A cigar holder with its outer end screw-threaded to engage a hollow tubular cap, a hollow cap having radial perforations diagonally disposed through the body of the cap, said cap enveloping the cigar and engaging the cigar holder and longitudinal grooves in the cigar holder, spaced apart, serving as air passages leading to the space within the cap.

1,266,554. COMPOSITION-LIGHT LAMP. JAMES H. COLEMAN and WILLIAM W. DUNNELL, Jr., Colorado Springs, Colo. Filed Aug. 13, 1917. Serial No. 185,985. (Cl. 240—1.)



1. In a composition light lamp, the combination with a supporting casing, of a plurality of adjustable reflectors supported upon the casing, means for adjusting the said reflectors in inclined directions with respect to their axes, transparent colored plates comprising the complementary colors of white light, means for supporting the said plates before the said reflectors, and lamps arranged within the said reflectors.

5. In a composition light lamp, the combination with a supporting casing, of reflectors arranged within the casing, each reflector having its front edge pivotally connected with the said casing, transparent colored plates each plate being one of the complementary colors of white light, means for supporting the said plates in the paths of the light from the said reflectors, each reflector having a member projecting from the rear thereof, a multiple plunger guide arranged within the said supporting casing, the said guide having radiating guiding slots for the plungers, the said rearwardly-projecting members on the reflectors passing through the said guiding slots, plungers operating in the said slots and arranged in contact with the said members projecting from the reflectors, means for forcing the plungers outwardly whereby the said projecting members are moved from each other, and springs connecting the said projecting members whereby they may be moved toward each other thereby adjusting the reflectors in directions inclined to their axes.

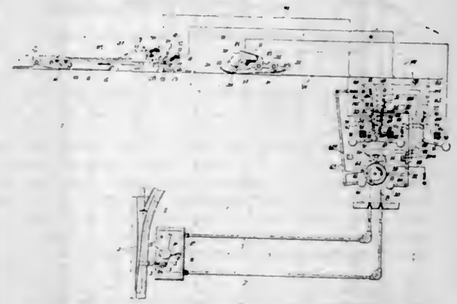
[Claims 2 to 4 not printed in the Gazette.]

1,266,555. APPARATUS AND METHOD FOR OPERATING SWITCHES. ROY VINSON COLLINS, New York, N. Y. Filed May 13, 1913. Serial No. 767,244. (Cl. 104—155.)

3. In a switch operating mechanism, means to control the position of a switch by the condition of the motor current in an approaching car, comprising an electrical device for operating said switch, means to initiate a circuit adapted to operate said device, means to provide a separate maintaining circuit for said device, and means to break said maintaining circuit when a car has passed said switch.

10. In a switch operating mechanism, a switch, electrical means to operate said switch comprising a first contactor, an initial circuit, and a separate maintaining and motor operating circuit, and means to break said maintaining and operating circuit comprising a second contactor.

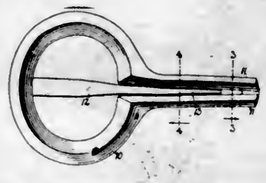
17. In a switch operating mechanism, a switch, electrical means to operate said switch, means to close and open circuits to operate said electrical means only in one of two selective directions comprising means to open a separate maintaining and operating circuit and means controlled by said electrical means to determine the direction of current through said electrical means.



20. In a switch operating mechanism, a switch, means to operate said switch comprising a motor, two contact bars, means to move selectively either of said contact bars whereby the movement of the other contact bar is prevented and the position of the moved contact bar is maintained, means controlled by the position of the motor to determine the direction of current and the duration, if any, of said current through said motor, and separate means to return the moved contact bar to inoperative position.

[Claims 1, 2, 4 to 9, 11 to 16, 18, and 19 not printed in the Gazette.]

1,266,556. JEWS'-HARP. EDWARD O. COOK, Winchendon, Mass. Filed July 7, 1917. Serial No. 179,193. (Cl. 84—13.)



2. A jews'-harp including a frame presenting outwardly extending arms, a vibratory tongue secured at one end to the frame and extending between said arms, and means connecting the arms to maintain a given relation therebetween and to prevent their relative movement against the said tongue, said means including an integral web connecting the arms at their extremities.

[Claim 1 and 3 not printed in the Gazette.]

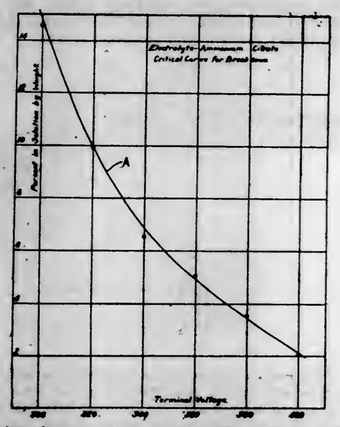
1,266,557. FILM-FORMING ELECTROLYTE. JOHN COULSON, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1916. Serial No. 95,112. (Cl. 175—315.)

1. An electrolyte comprising an aqueous solution of less than 10% concentration and containing citric acid radicals and ammonium radicals.

2. An electrolyte comprising an aqueous solution of not materially over 2% concentration and containing citric acid radicals and ammonium radicals.

11. An electrolyte containing citric acid radicals and ammonium radicals, the concentration of the solution being substantially expressed by the equation $P=3310\times 2.72(-0.8v)$, where P equals the percentage concentration of the electrolyte and v equals the voltage under which the electrolyte is to be used.

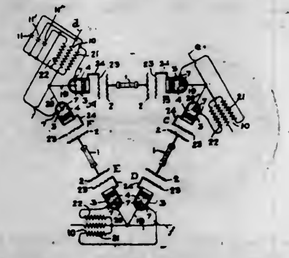
12. The method of adapting a film-forming electrolytic cell to resist various terminal voltages which comprises



decreasing the content of solute in the electrolyte thereof with an increase of applied voltage and vice versa.

[Claims 3 to 10 and 13 not printed in the Gazette.]

1,266,558. PROTECTIVE DEVICE. ELMER E. F. CREIGHTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 17, 1915, Serial No. 8,731. Renewed Oct. 13, 1917. Serial No. 196,551. (Cl. 175—30.)



1. In combination with an electric conductor, a normally inoperative power shunting circuit connected to said conductor, a cartridge in said circuit containing explosive material, means for exploding said cartridge upon the occurrence of predetermined conditions on said conductor, and means for rendering said power shunting circuit operative in response to the explosion of said cartridge.

2. In combination with an electric conductor, a normally open power shunting circuit connected to said conductor, a cartridge in said circuit containing explosive material, means for igniting the explosive material in said cartridge in response to a fault occurring on said conductor, and means whereby said power shunting circuit is closed by the explosion of said cartridge and the fault on said conductor thereby removed.

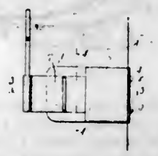
3. In combination with an electric conductor, a normally open current shunting path connected to said conductor, an explosion cartridge included in said path, means for exploding said cartridge in response to conditions of short circuit on said conductor, and means for closing said current shunting path in response to the explosion of said cartridge.

4. A protective device for a transmission line comprising a normally open circuit connected to each conductor of said transmission line each circuit arranged when closed to shunt the power from its conductor, an explosion cartridge in circuit operative to close its normally open circuit when exploded, and means responsive to a short circuit on any conductor for causing the explosion of the cartridge corresponding to the faulty conductor whereby the short circuit on said conductor is removed without affecting the other conductors.

5. In combination with an electric conductor, a normally open current shunting path connected to said conductor, a cartridge included in said path, explosive material in said cartridge forming when ignited highly conductive gases, means for igniting said explosive material to explode said cartridge in response to conditions of short circuit on said conductor, and means coöperating with said highly conductive gases for closing said current shunting path.

[Claims 6 to 32 not printed in the Gazette.]

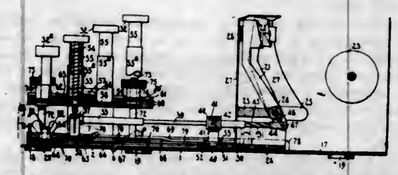
1,266,559. SHADE-ROLLER AND CURTAIN BRACKET. CHARLES DAVIS and BYRAN OGRAM, Warren, Ohio. Filed Sept. 20, 1917. Serial No. 192,372. (Cl. 156—24.)



1. In a window shade roller and curtain bracket the combination of a plate having a housing formed thereon, the said housing including a plate having its edges folded upon themselves to provide spacing blocks, means for attaching the spacing blocks to the said plates, a flange formed on the base plate for supporting the latter, and a pair of independently adjustable supporting plates received in the said housing and having means to support a shade roller and curtain pole.

2. In a window shade and curtain bracket the combination of a base plate having a housing mounted on one end thereof, the said end also being provided with the flange, the fastening elements attached to said flange to support the said plate and housing, a retaining plate longitudinally adjustable in the said housing, a second retaining plate also mounted in the housing and adapted to be independently adjusted or simultaneously adjusted with the said first mentioned plate, a hook carried by the said first mentioned plate to support the second, and a supporting arm carried by the second mentioned plate and adjustable when the said plate is adjusted.

1,266,560. TYPE-WRITING MACHINE. PHILIPPE DE CLAMECY, Charlestown, Mass., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Sept. 24, 1915. Serial No. 52,884. (Cl. 197—22.)



1. In a portable keyboard machine of the character specified, a keyboard, and means which enable said keyboard to be contracted or expanded at will.

30. In a machine of the character specified, a main frame which supports the working parts of the machine, said frame comprising sections movable relatively to one another and adapted to inclose the machine, one of said

sections constituting a cover when closed and a copy holder when open.

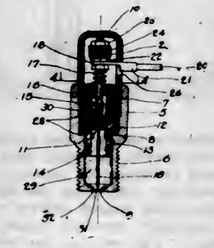
37. In a machine of the character specified provided with a keyboard, the combination of the main frame which supports the working parts of the machine, said frame having a hinged section which extends beneath the keyboard when the machine is in use, and means which enable the keyboard to be shifted independently of said hinged section to a position within the frame and which enable the said hinged section to be moved to an inclosing position.

40. In a typewriting machine, the combination of a printing instrumentality, a threaded member, a key for turning said member, and means controlled by the turning action of said threaded member for moving said printing instrumentality to printing position.

77. In a typewriting machine, the combination of type carriers; a keyboard therefor; a platen; and means which enable the machine to be contracted into a smaller space than that which it occupies when in use, said means comprising means which enable the type carriers and platen to be adjusted bodily relatively to each other into and out of coöperative relation and enable the keyboard to be shifted bodily into and out of operative position.

[Claims 2 to 29, 31 to 36, 38, 39, 41 to 76, and 78 to 120 not printed in the Gazette.]

1,266,561. SPARK-PLUG. PAUL C. DEPEW, Chicago, Ill. Filed June 9, 1915. Serial No. 33,006. (Cl. 123—169.)



1. A spark plug, comprising a tube; a conductor slidably mounted in the bore of said tube; a valve fixed to said conductor; a member fixed in said tube and encircling said conductor adjacent said valve, said member having a valve seat, the walls of said seat diverging downwardly; and yielding means tending to hold said valve against said seat, said valve arranged to open by an excess external pressure.

2. A spark plug comprising a casing; said casing having a passageway therethrough; an insulation bushing surrounding the outer end of said passageway; a member mounted in said bushing, said member having a downwardly diverging valve seat on its lower end; a conductor passing through said bushing, said member and said passageway, the lower end of said conductor being adjacent to the walls of said casing; a valve fixed to said conductor below said valve seat; yielding means tending to force the conductor upwardly and to hold the valve against the seat; and means for connecting an electric conductor to the upper end of said conductor.

5. A spark plug comprising a tube, a conductor slidably mounted in the bore of said tube, a valve fixed to said conductor, a member fixed in said tube and encircling said conductor adjacent said valve, said member having a valve seat, the walls of said valve seat diverging downwardly, and yielding means tending to hold said valve against said seat, the lower end of the bore of said tube being materially restricted, the inner surface of the said restricted lower end being formed to converge downwardly to the end opening, said valve arranged to open by an excess external pressure.

[Claims 3 and 4 not printed in the Gazette.]

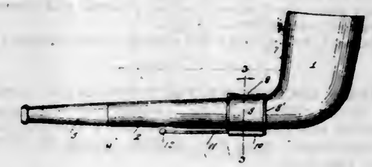
1,266,562. KNIFE-SHIELD AND GAGE. PAUL C. DEPEW, Chicago, Ill. Filed May 17, 1916. Serial No. 98,016. (Cl. 30—20.)



1. The combination of a knife, a shield, and a gage; the blade of the knife having a depression in the edge thereof adjacent the handle; the shield and the gage being integral, the shield portion being bent around the said blade adjacent the said handle, a portion of the shield being bent into said depression, the depression thus formed being adapted to receive the curved surfaces of the fingers of the user; and the gage extending outwardly from said shield parallel, but spaced from said blade; the inner surfaces of said shield portion fitting snugly against the adjacent surfaces of said blade.

2. The combination of a knife, and a shield member, the edge of the blade of the knife having a depression therein adjacent the handle of the knife, the shield member being bent around the said blade adjacent the said handle and into said depression, the depression thus formed being adapted to receive the curved surfaces of the fingers of the user, the adjacent surfaces of the member and the blade fitting tightly together, and a gage member fixed to said shield member and passing outwardly therefrom away from said handle and parallel with said blade but spaced therefrom.

1,266,563. SMOKER'S PIPE. WILLIAM P. DUNHAM, New York, N. Y. Filed Apr. 26, 1917. Serial No. 164,600. (Cl. 131—12.)



1. As a new article of manufacture, a smoker's pipe comprising a bowl and shank portion joined thereto, the latter having both the usual smoke passage and a cleaning passage leading upwardly to enter the smoke passage adjacent its opening into the bowl, said cleaning passage being directed so that a match stick entered therethrough will act to loosen the dottle and thrust it into the bowl.

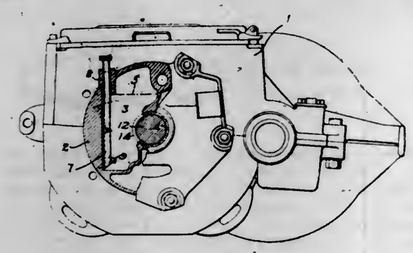
8. In a pipe, a bowl, a shank joined thereto and having the usual smoke passage, said shank also having a recess on the lower side thereof adjacent the bowl and a cleaning passage connecting said recess with the interior of the bowl at the point where entered by the smoke passage so that a match stick entered through the recess into the cleaning passage will loosen the dottle and thrust it upwardly into the bowl and forwardly away from the smoke passage, and a sleeve slidably fitted upon said shank and provided with an opening adapted to register with said recess.

[Claims 2 to 7 not printed in the Gazette.]

1,266,564. LUBRICATING DEVICE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 27, 1915. Serial No. 58,167. (Cl. 64—24.)

1. In a lubricating device, the combination with a housing having a tube adapted to receive an oil-level measuring device, a waste-containing chamber, and a separate cover for each, of a bearing member associated with said hous-

ing and disposed adjacent to said waste-containing chamber.



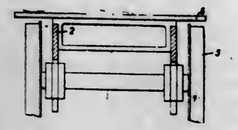
3. In a lubricating device, the combination with a member containing a waste chamber having an opening and a cover therefor, of an oiling and sounding passage extending through the member to a point adjacent the bottom of the chamber, and a separate cover for said passage.

7. The combination with a bearing housing having a waste-containing chamber, and a cover for said chamber, of a tube for admitting oil to said chamber, and a separate cover for said tube, said tube being adapted to receive a device for measuring the level of oil in said chamber.

9. In a lubricating device, the combination with a member having a chamber adapted to contain waste, said chamber being provided with an opening through which waste may be introduced and removed, of a cover for said opening, an oiling and sounding passage leading into said waste chamber, and a removable cap fitting the inlet end of said passage, the arrangement being such that by removing said cap, oil may be supplied to said passage and chamber and the depth of oil in the chamber may be determined without removing the cover of the chamber and exposing the waste in said chamber to dirt.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,266,565. LOCOMOTIVE FRICTION-PLATE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1915. Serial No. 59,824. (Cl. 105—115).



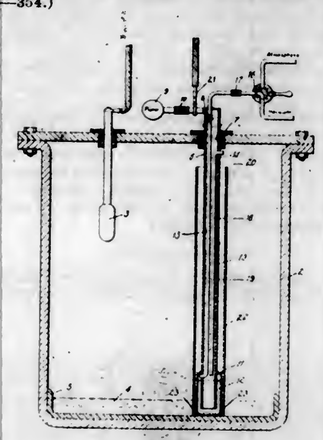
1. In a locomotive, the combination with a body portion, a truck and a pivotal bearing between said truck and said body portion, of bearings radially disposed relative to said pivotal bearing and each embodying a friction plate mounted on said body portion, a friction plate resiliently mounted on said truck and coöperating with said first-mentioned friction plate and a link pivotally connecting said resiliently mounted friction plate to said truck.

2. In a locomotive, the combination with a body portion and a truck, of a friction bearing embodying a friction plate resiliently mounted on said truck, a link pivotally connecting said friction plate to said truck, a second friction plate coöperating with the first-mentioned friction plate, and a bracket member supporting said second friction plate on the body portion of the locomotive.

3. In a locomotive, the combination with a body portion, a truck and a pivotal bearing between said truck and said body portion, of bearings radially disposed relative to said pivotal bearing and embodying friction plates mounted on the truck and on the body portion of the locomotive and means comprising a pivoted member for restraining one of said plates from movement in a horizontal direction relative to its supporting member.

[Claims 4 to 14 not printed in the Gazette.]

1,266,566. BAROMETRIC VALVE. EARL E. EBY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 6, 1915. Serial No. 38,118. (Cl. 175—354.)



1. The combination with a closed container, of a pump external thereto, a tube connecting said pump with the interior of said container for transferring fluid therebetween, a valve for controlling the flow through said tube, said valve being located entirely within said container, and pneumatic operating means for said valve located external to the container, the body of fluid operating medium for said valve being independent of the fluid body transferred between said pump and the interior of said container.

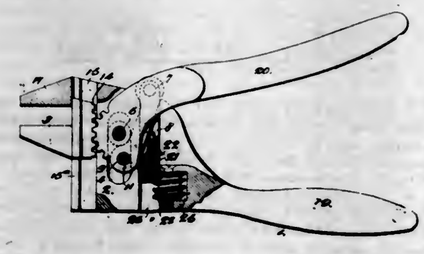
4. The combination with a vapor converter including a closed container provided with an electrode at the bottom thereof, of an exhaust tube projecting thereinto and provided with a valve entirely within said container, said valve extending into contact with said electrode and being provided with operating means, and connections from an electric circuit to said exhaust tube, whereby said tube and valve operate to supply current to said electrode.

9. The combination with a closed container, of a pump external thereto, a tube connecting said pump with the interior of said container, a valve for controlling the flow through said tube, said valve being located entirely within said container and comprising an outer tube having an open lower end terminating in a pool of sealing liquid and an inner tube having an open lower end terminating above the lower end of said outer tube, and pneumatic operating means for said valve located external to the container for varying the pressure on the surface of said pool exterior to said outer tube in order to adjust the surface thereof within said outer tube to points above and below the lower end of said inner tube.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,266,567. PLIERS. CHARLES S. EDWARDS, Prineville, Oreg. Filed June 18, 1917. Serial No. 175,422. (Cl. 81—46.)

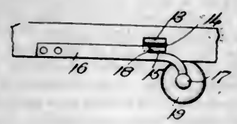
1. In an implement of the character described, a body having a relatively fixed jaw and handle, a moving jaw slidably mounted on the said body for coöperating with the relatively fixed jaw, said slidable jaw including a rack face, a lever having a rack sector for engaging the rack face of the movable jaw, a pivotal connection for the lever mounted and having vertical movement on the body, a bearing member shiftably mounted on the said body, a link connection that joins the said bearing and the lever, and means mounted on the body for sliding the bearing whereby to adjust the pivotal connection for the lever.



5. In an implement of the character described, a body having a relatively fixed jaw and handle, a movable jaw slidably mounted on the body for coöperating with the relatively fixedly held jaw, and lever and rack mechanism for effecting movement of the sliding jaw, said mechanism including an adjustable fulcrum and means for adjusting the said fulcrum to provide for the very slightest as well as wide adjustments of the movable jaw.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,266,568. THEFT-ALARM. GLADYS M. EDWARDS, Douglas, Ariz. Filed Jan. 22, 1917. Serial No. 143,716. (Cl. 116—44.)

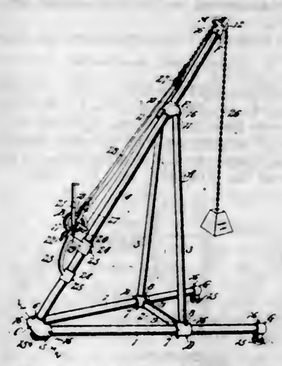


In a theft alarm the sides of a receptacle closure, one side of the closure being formed with a notch, the other side of the closure having an apertured wall, a spring detent carried by the last-named side of the closure and projecting through said apertured wall, said detent having an arrow head one portion of which is arranged to engage a wall of the said notch to hold the sides of the closure in closed position, a bell secured to the other side of the closure adjacent the notch, and a bell clapper including a flexible stem having a shoulder for engagement by the other portion of the head of the detent when the receptacle is closed, said head being arranged to flex the clapper stem and slide from said shoulder when the sides of the closure are moved away from each other.

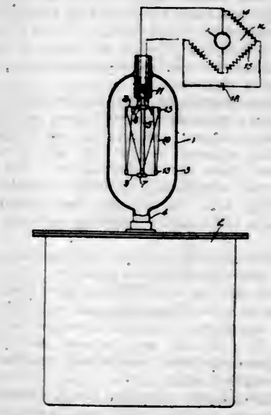
1,266,569. PORTABLE CRANE. ROBERT N. EGGLESTON, St. Louis, Mo., assignor to Pull-U-Out Sales Co., St. Louis, Mo., a Corporation of Missouri. Filed Mar. 2, 1916. Serial No. 81,712. (Cl. 189—11.)

1. A portable knock-down crane, comprising a base, a standard on the base, and an inclined jib, formed from pieces of metal tubing and casting detachably connected together, the casting at the upper end of the standard being provided with an open-ended sleeve or tubular portion through which the jib passes.

2. A portable knock-down crane, comprising a base, a standard on said base and an inclined jib, the standard being formed from two pieces of pipe or metal tubing and a casting that joins the upper ends of said pieces of pipe or tubing together, said casting having an open-ended sleeve through which the jib passes and also abutments that bear against the upper ends of the standard members.



1,266,570. MEASURING DEVICE. SIDNEY W. FARNSWORTH, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 3, 1916. Serial No. 107,282. (Cl. 219—63.)



1. The combination with an insulating stem, and supports mounted on the said stem, of a plurality of filament loops arranged adjacent said stem, and insulating means for securing the said loops to the said supports to preclude conduction of the heat generated by the filament loop to the stem.

3. The combination with an insulating supporting stem, of filament loops disposed around the said stem, and non-heat-conducting means for securing the ends of the said loops to the supporting stem.

5. The combination with an insulating supporting stem, of filament loops disposed around the said stem, and fibrous means for securing the ends of the said loops to the supporting stem.

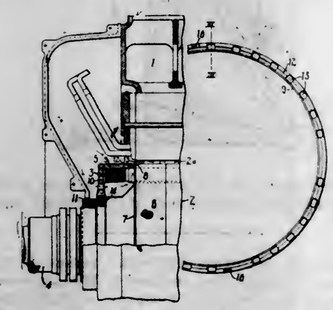
8. The combination with a supporting stem, of a filament, and silk loops for so supporting the said filament on the said stem that the heat generated by the filament will not be transmitted to the stem by conduction.

9. In a vacuum gage, the combination with a non-conducting casing and a stem therein, of a filament, and non-

conducting means for so supporting the said filament on the said stem that the heat generated by the said filament will not be transmitted to the said casing and stem by conduction.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,266,571. COIL RETAINING AND VENTILATING MEANS. ALLAN BERTRAM FIELD, Westcliff-on-Sea, England, and ERIC FORNANDER, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 5, 1914. Serial No. 816,857. (Cl. 171—252.)



1. In a dynamo-electric machine, the combination with relatively rotatable magnetizable members, one of which is provided with coils having overhanging end-portions, of a peripheral member for supporting said end-portions and provided with ventilating passages arranged to discharge into the air gap between said relatively rotatable members and longitudinally thereof.

2. In a dynamo-electric machine, the combination with a stator core and a magnetizable rotor core provided with coils having overhanging end-portions, of a peripheral member disposed adjacent to the air gap between the stator and rotor cores for supporting said end-portions and provided with ventilating openings arranged to discharge outwardly into the air gap and longitudinally thereof to induce additional ventilating currents through said air gap.

3. In a dynamo-electric machine, the combination with relatively rotatable magnetizable members, one of which is provided with coils having overhanging end-portions, of a peripheral member for supporting said end-portions and provided with ventilating passages arranged to discharge longitudinally into the air gap between said relatively rotatable members to induce additional ventilating currents through said air gap.

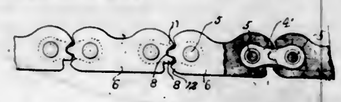
5. In a dynamo-electric machine, the combination with a magnetizable core provided with coils having overhanging end-portions, and a shaft therefor having a shoulder located adjacent to one end of the core, said end having a relatively narrow outermost portion of smaller diameter and a contiguous section inclined to meet the core surface, of a retaining ring for said end-portions provided with a relatively thin flange adapted to engage said outermost portion of the core, said ring having in the flange and in the adjacent edge a plurality of spaced ventilating passages disposed adjacent and approximately parallel to said inclined section of the core, an apertured radial plate engaging said shoulder on the shaft for supporting the outer edge of said ring, and adjustable means for rigidly positioning said plate.

[Claims 4 and 6 not printed in the Gazette.]

1,266,572. SPROCKET-CHAIN. MILAN H. FISHER, Chicago, Ill., assignor to Donaldson & Fisher Company, Chicago, Ill., a Corporation of Arizona. Filed May 25, 1914. Serial No. 840,663. (Cl. 74—32.)

1. A sprocket chain composed of block links and side links, the adjacent ends of the latter being so formed as to engage each other throughout the normal movement of the parts.

2. In a sprocket chain and in combination with the block links thereof, side links connecting the block links having intermeshing teeth formed upon the ends thereof, the teeth upon adjacent ends of adjoining side links intermeshing to maintain said links at equal angles to the intermediate block links.



3. In a sprocket chain and in combination with the block links thereof, side links connecting the block links, adjacent ends of the side links having intermeshing projections whereby the angles formed by adjacent side links with the intermediate block links are maintained equal.

4. In a sprocket chain and in combination with the block links thereof, pairs of side links connecting said block links and having angular motion only with reference thereto, adjacent ends of successive links having a tooth and a pair of shoulders respectively, said tooth projecting between and engaging said shoulders to maintain the respective links at the same angle with the intermediate block links.

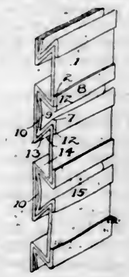
1,266,573. SHOTGUN. GEORGE FLEMING, Princeton, Tex. Filed Jan. 18, 1917. Serial No. 143,124. (Cl. 42—84.)



1. In a shot gun, a stock, a barrel mounted thereon, a plate mounted on said stock and having its forward end turned up substantially at right angles to provide a closure member for the inner end of the barrel, a source of electrical energy mounted in said stock, one side of said source of electrical energy being connected to said plate, and a trigger mounted in the stock and operative through the plate, said trigger being provided at its upper end with an angularly disposed contact member adapted to extend through the forward up-turned end of the plate when the trigger is moved into operative position, said trigger being electrically connected to the other side of said source of electrical energy.

[Claims 2 and 3 not printed in the Gazette.]

1,266,574. LATH-BOARD. SILAS M. FORD, St. Paul, Minn. Filed Aug. 21, 1916. Serial No. 116,146. (Cl. 20—13.)



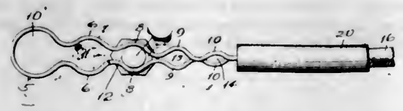
1. In a lath board, the combination of a sheet of material formed into dove-tailed corrugations having alternate faces on either side thereof, and a strip of material positioned adjacent to the inner surface of each of said faces, and below the plane of the opposite surfaces of said lath board, thereby forming air spaces between said strips and the inner faces of said corrugated sheet.

3. In a lath board, the combination of a sheet of material formed into substantially dove-tailed shaped corrugations, a strip of fibrous water proof material positioned within the depressions formed by said corrugations, and having sufficient resiliency to maintain itself entirely within said depressions and below the outer surface of the finished lath board.

5. In a lath board the combination of a sheet of material formed into dove-tailed shaped corrugations, and spacing strips positioned on and running longitudinally of the faces formed in said sheet to space said faces from the wall to which said insulating board is applied, said spacing strips each having a fold or V-shaped section, one of the arms of the V-shaped section being positioned within the depression of the corrugations and the other arm lying along the exterior of the lath-like faces.

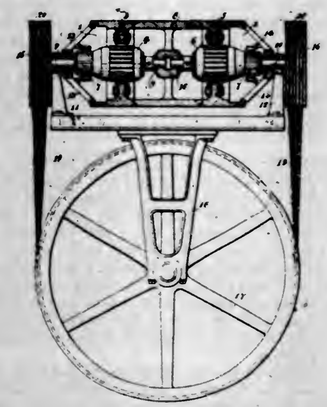
[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,266,575. TERMINAL CONNECTION. RICHARD H. FRANK, Malta, Mont. Filed May 24, 1917. Serial No. 170,734. (Cl. 173—269.)



A device for connection with terminals of different diameters, comprising a section of resilient wire bent upon itself for providing a curved end portion adapted for the reception of the largest terminal with which the device is adapted to coact, and sides which converge away from the curved end portion, said sides being provided with a plurality of transverse pairs of turns which provide recesses of different diameters; a main wire; and means for connecting the free ends of the resilient wire with the main wire.

1,266,576. ELECTRIC ELEVATOR SYSTEM. ETHELBERT M. FRASER, Yonkers, N. Y., assignor to General Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 28, 1914. Serial No. 834,971. (Cl. 187—20.)



1. In an electric elevator system, the combination of two electric machines, each having an inner and an outer rotor providing electrically and magnetically coöperating field and armature, the outer rotors being coupled together and the inner rotors being connected together by a flexible connector whereby they will rotate in directions the reverse of each other.

8. In an electric elevator system, the combination with a car, of a counterweight, two electric machines having rotatable field structures and rotatable armatures, said field structures being mechanically rigidly and magnetically connected together, a pulley driven by each of said armatures, an idler pulley, and a flexible connector connected at one end to said car and passing over one of the pulleys driven by one of said armatures thence to said idler pulley and engaging the same and thence in the opposite direction over the pulley driven by the other of said armatures and connected at its other end to said counterweight.

[Claims 2 to 7 not printed in the Gazette.]

1,266,577. COMPOSITION FOR USE IN DYEING. JOHN W. FRIES, Winston-Salem, N. C. Filed June 16, 1915. Serial No. 34,415. (Cl. 8—6.)

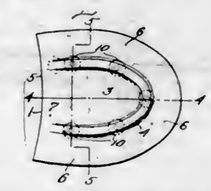
1. As an article of manufacture, a dye composition in dried and powdered condition and comprising a vegetable dye extract and ammoniacal hydrated cupric oxid.

2. As an article of manufacture, a dye composition in dried and powdered condition containing an extract of logwood and an ammoniacal hydrated metallic oxid.

5. The herein described method of preparing a dye for dyeing cotton goods, which consists in treating a mixture comprising a non-alkaline metallic salt and an alkaline salt with aqua ammonia in sufficient quantity to form an ammoniacal hydrated solution of an oxid of the non-alkaline metal and prevent a precipitate being formed, mixing with the fluid compound so formed a vegetable dye extract to form a relatively thick pasty compound, and finally drying the same.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,266,578. RUBBER LIFT FOR BOOTS AND SHOES. THOMAS A. GAMBINO, Boston, Mass., assignor to United Lace & Braid Manufacturing Company, a Corporation of Rhode Island. Filed Nov. 24, 1917. Serial No. 203,653. (Cl. 36—35.)



1. A rubber lift for boots and shoes made concavo-convex with the middle portion thereof thinner than the marginal portion and having an integral boss upon its top side to seat against the shoe heel when the lift is applied thereto.

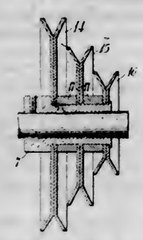
7. A rubber lift for boots and shoes made with a convex tread side and a concaved top side, the middle portion of said lift being of less thickness than its marginal portion and said marginal portion being inwardly beveled; an integral ridge projecting above the top side of the lift inside of said beveled marginal portion to seat against the shoe heel, the thickness of the lift through said ridge being less than the thickness through the lift near its edge, and nail receiving means embedded in the lift immediately below said ridge.

[Claims 2 to 6 not printed in the Gazette.]

1,266,579. PULLEY. GEORGE H. GARCELON, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 9, 1913. Serial No. 778,090. (Cl. 64—17.)

1. A pulley comprising a hub member of uniform diameter and a plurality of wheels mounted thereon in

spaced relation, each embodying oppositely disposed cup-shaped disks.



2. A pulley comprising a hub member of uniform diameter and a plurality of wheels mounted thereon in spaced relation, each embodying oppositely disposed disks of pressed material.

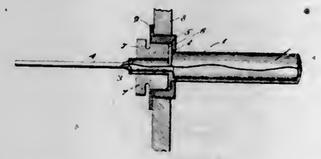
3. A pulley comprising a hub member of uniform diameter and a plurality of wheels of different diameters mounted thereon, each embodying oppositely disposed pressed disks.

10. A pulley comprising a hub member, a plurality of wheels, each embodying oppositely disposed cup-shaped disks mounted thereon, and bushings for separating said wheels.

11. The combination with a cylindrical hub member having a reduced portion and a shoulder, of a plurality of wheel members on said reduced portion, each of said wheel members comprising two oppositely-disposed cup-shaped pressed disks, a plurality of bushings for spacing said wheel members from each other, and an upturned flange integral with said reduced portion for rigidly clamping said wheel members in position.

[Claims 4 to 9 and 12 not printed in the Gazette.

1,266,580. BULB FOR TEMPERATURE-INDICATING INSTRUMENTS. PHILO M. GELATT, La Crosse, Wis. Filed Oct. 1, 1917. Serial No. 194,151. (Cl. 73—52.)

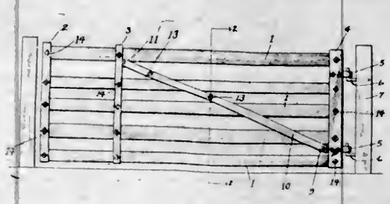


1. A bulb fitting for temperature and pressure indicating instruments comprising a bulb, a nipple extending from the unsealed end thereof, a bearing flange on the latter end, a supporting bushing through which the nipple extends and against an end face of which the bearing flange contacts, and a jam nut in screwthreaded engagement with the bushing adapted to force the flange to seat, the nipple protruding beyond the jam nut.

2. A bulb fitting for temperature and pressure indicating instruments comprising a bulb, having an annular flange at the unsealed end thereof, a nipple extending from the unsealed end thereof, a bushing adapted to be inserted in an opening of a supporting wall and provided near one end with a bearing face for receiving the nipple flange, a slender tube extending from the nipple and a jam nut through which the nipple protrudes adapted to force the flange of the bulb against the bearing face of the bushing.

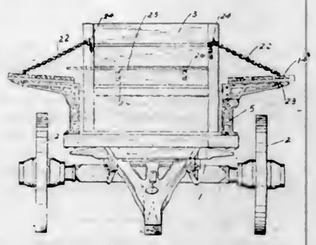
1,266,581. GATE CONSTRUCTION. GEORGE W. GOSS and CHARLES E. GOSS, Baltimore, Ohio. Filed Oct. 28, 1915. Serial No. 58,483. (Cl. 39—80.)

A farm gate comprising upstanding supports, cross pieces pivotally attached to each of said supports, a strap forming a part of the gate hinge secured to one of said supports, a plurality of diagonal braces pivoted at their lower ends to said strap, a substantially U shaped clip rigidly secured to the upper ends of each of said braces and



provided with spaced teeth, and clamping means passing through said braces for retaining the teeth of said clips in frictional engagement with the side edges of juxtaposed upstanding supports, substantially as described.

1,266,582. CONVERTIBLE WAGON-BED. GEORGE W. GOSS and CHARLES E. GOSS, Baltimore, Ohio. Filed June 13, 1917. Serial No. 174,601. (Cl. 21—74.)



1. A convertible wagon bed comprising a bed body, short side boards forming a portion of said bed body, brackets rigidly secured to said short side boards, auxiliary side boards, auxiliary brackets on said auxiliary side boards, a substantially horizontal heel portion on each of one set of said brackets, a substantially horizontal and a substantially vertical heel portion on the coöperating end and the outside face of each of the other set of brackets, and means for mounting said sets of brackets together so that either of the horizontal or the vertical heel portions of the one set coöperates with the horizontal heel portion of the other set.

2. A convertible wagon bed comprising a bed body, short side boards forming a portion of said bed, brackets rigidly secured to said short side boards, auxiliary side boards, auxiliary brackets on said auxiliary side boards, a tongue on each of one set of brackets and a pair of sockets disposed at an angle to each other in each of the other set of brackets, said tongue fitting said sockets, a heel portion on one and a pair of heel portions on the other of said brackets located outwardly beyond said tongue and sockets to be in engagement with each other, and means for connecting said two sets of brackets together in either an upright or outward position.

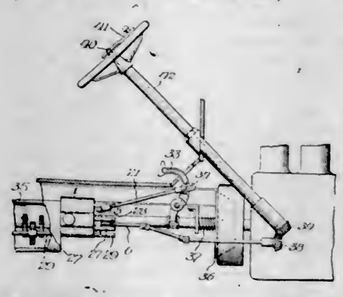
3. A convertible wagon bed comprising a bed body, short side boards and end boards forming a portion of said bed, auxiliary side boards, means for securing said two sets of side boards together in either an upright or outward position, and a bolt slidably carried by one of said end boards upon which said auxiliary side boards may rest temporarily while changing said auxiliary boards from one position to another, said bolt being slidable to project beyond either side of the wagon bed.

1,266,583. FASTENER. FLORIS GOUBEAT, Paris, France. Filed June 25, 1917. Serial No. 176,917. (Cl. 24—224.)



A fastener, comprising coöperating, disk-like male and female members; the male member being provided with an upstanding stud having an enlarged upper end; and the female member being provided with a socket for the reception of said stud having a diameter less than that of the enlarged end of the stud, and being also provided with a tapered channel which leads radially into said socket from the periphery of said female member and along which said stud is adapted to travel to effect such reception, said channel having spring sides which are formed integral with the female member and the distance between the inner portions of which is less than the diameter of said enlarged stud end, so that the latter will spread said portions apart during its entrance into said socket.

1,266,584. GEAR-SHIFTING MECHANISM. EDWARD E. GRAY, Plano, Ill., assignor to Gray Pneumatic Gear Shift Company, a Corporation of Illinois. Filed Mar. 21, 1914. Serial No. 826,163. (Cl. 74—58.)



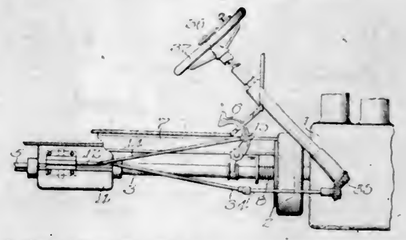
2. Gear shifting mechanism comprising a longitudinally movable member, shiftable gears, rods for moving the shiftable gears from and to neutral position, to and from operative positions, and means adapted to form connections between said movable member and the rods for first moving any one of the rods to return its gear to neutral position and by the continued movement of the member in the same direction to place any gear in operative position.

4. In gear shifting mechanism, the combination with shiftable gears, of rods connected thereto for shifting the gears, a longitudinally movable plunger, a spring-pressed dog in connection therewith adapted to engage any one of the shiftable rods, an operating member having a portion adapted to directly engage the plunger at a predetermined time, and a releasable connection between the operating member and the plunger whereby the plunger is first moved in one direction and the continued movement of the operating member in the same direction severs the releasable connection and the operating member engages the plunger directly to move it in the opposite direction.

6. In gear shifting mechanism, the combination with a longitudinally movable plunger having a circular toothed portion and a shouldered portion, of gear shifting rods, each having a shouldered portion adapted to be engaged by the plunger shoulder for movement therewith in one direction, means in connection with the plunger to engage any one of the rods for movement in the other direction, an operating member having a portion adapted to engage the shoulder of the plunger for moving it in one direction, a releasable connection between the operating member and the plunger comprising a toothed sector in engagement with the circular toothed portion of the plunger, and means to rotate the plunger for adjusting the connection between it and any one of the rods having longitudinal movement of the plunger.

[Claims 1, 3, 5, and 7 to 10 not printed in the Gazette.]

1,266,585. GEAR-SHIFTING MECHANISM. EDWARD E. GRAY, Plano, Ill., assignor to Gray Pneumatic Gear-Shift Company, a Corporation of Illinois. Filed Nov. 21, 1914. Serial No. 873,271. (Cl. 74—58.)



2. Gear shifting mechanism comprising shiftable gears, rods for shifting the gears, a member for selectively engaging and moving the rods, a longitudinal movable member, and an intermediate movable member carrying a pinion for connecting the other two members and for engaging one of the members whereby the movement of one of the members in a single direction will first move the other member in the opposite direction and will then engage the other member and move it in the same direction.

4. Gear shifting mechanism comprising shiftable gears and rods for moving the gears, a member for selecting and engaging any one of the gear shifting rods, a shaft movable parallel with the member, an intermediate movable member having a pinion engaging both the shaft and the selecting member, and having a stem to engage the selecting member in one direction of movement, a fixed latch for engaging the intermediate movable member adapted to be released from such engagement by the backward movement of the selecting member whereby the movement of the shaft in the forward direction will first move the selecting member backwardly to release the latch and will then cause the intermediate member to be moved forward so that the stem engages the selecting member, whereupon the shaft, the intermediate member and the selecting member will be moved forward carrying with them a previously selected gear shifting rod.

6. Gear shifting mechanism comprising shiftable gears, of a means comprising rods for moving them, an operating and selecting member for the rods, a shaft movable parallel with the operating member, means for connecting the member and the shaft to move the member first in one direction and then in the other by the movement of the shaft in one direction, some of the rods being provided with recesses corresponding to the different positions of the gears, and spring pressed holders to engage in the recesses for holding the rods releasably in any selected position.

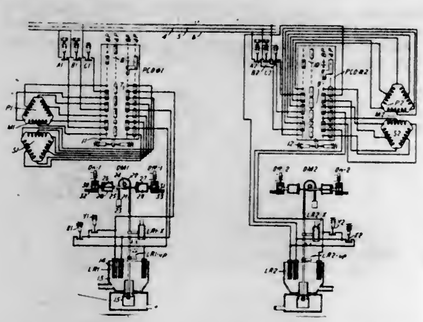
[Claims 1, 3, 5, and 7 to 13 not printed in the Gazette.]

1,266,586. SYSTEM OF CONTROL. ARTHUR J. HALL, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 4, 1916. Serial No. 82,176. (Cl. 172—179.)

1. In a system of control, the combination with a supply circuit, a plurality of driving motors adapted to receive energy therefrom, and means for arranging the connections of said motors for different concurrent ranges of operating speeds, of means for initially effecting operation of certain of said motors prior to the remaining motors.

3. In a system of control, the combination with a supply circuit, a plurality of driving motors adapted to receive

energy therefrom, and means for arranging the connections of said motors for different concurrent ranges of operating speeds, of means for initially employing one-half of the motors prior to the remaining half thereof, whereby substantially only one-half of the available driving energy is initially utilized.

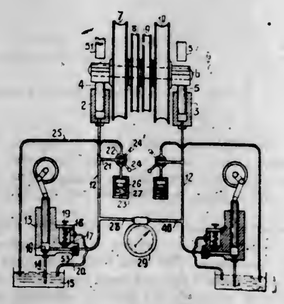


6. In a system of control, the combination with a supply circuit, a plurality of polyphase induction motors adapted to drive a common load and to receive energy from said supply circuit, and switching means for arranging the connections of said motors for different concurrent ranges of operating speeds, of controllable electrically-governed means for controlling the operation of said switching means and for causing the switching means of one motor to effect initial accelerating operation thereof prior to the operation of the other motor.

8. In a system of control, the combination with a supply circuit, a plurality of polyphase induction motors adapted to drive a common load and to receive energy from said supply circuit, and switching means for arranging the connections of said motor for different concurrent ranges of operating speeds, of electrical means for controlling the operation of said means and comprising a master controller adapted to occupy a plurality of operating positions and having a plurality of conducting segments for respectively governing the operation of said motors, said segments being arranged to effect the successive initial accelerating operation of the motors.

[Claims 2, 4, 5, 7, and 9 to 12 not printed in the Gazette.]

1,266,587. CRANE WITH HYDRAULIC WEIGHING DEVICE. CHARLES ALFRED HANSER and CORNELIS MARINUS VAN DER KLOOSTER, Rotterdam, Netherlands. Filed May 24, 1917. Serial No. 170,797. (Cl. 265—47.)

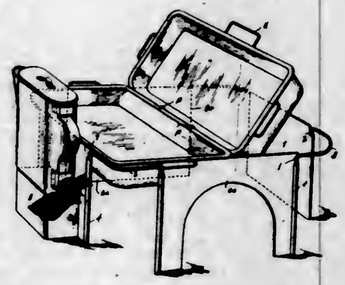


1. A crane having hydraulically operating weighing means and including a pulley shaft, a cylinder disposed adjacent one end of said shaft, a plunger within said cylinder and connected to said shaft, a hydraulic connection whereby to impart movement to said plunger, a cylinder disposed adjacent the opposite end of said shaft, a plunger within said cylinder and connected to said shaft, a hydraulic connection whereby to impart movement to said last mentioned plunger, said last mentioned hydraulic connection being separate from said first mentioned hydraulic connection, and means for controlling the amount of movement of the pulley shaft, substantially as and for the purpose set forth.

2. A crane having hydraulically operating weighing means and including a pulley shaft, a cylinder disposed adjacent one end of said shaft, a plunger within said cylinder and connected with said shaft, a hydraulic connection whereby to impart movement to said plunger, a cylinder disposed adjacent the opposite end of said shaft, a plunger within said cylinder and connected to said shaft, a hydraulic connection whereby to impart movement to said last mentioned plunger, said last mentioned hydraulic connection being separate from said first mentioned hydraulic connection, liquid withdrawing means fitted to each of said hydraulic connections, said liquid withdrawing means including a cylinder, a plunger within said cylinder, a spring supporting said plunger, and a connection with said cylinder above said plunger for allowing escape of liquid from said cylinder, substantially as and for the purpose set forth.

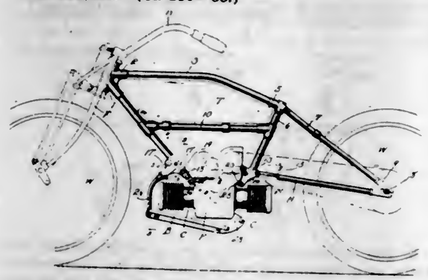
3. A crane having hydraulically operating weighing means and including a pulley shaft, a cylinder disposed adjacent one end of said shaft, a plunger within said cylinder and connected to said shaft, a hydraulic connection whereby to impart movement to said plunger, a cylinder disposed adjacent the opposite end of said shaft, a plunger within said cylinder and connected to said shaft, a hydraulic connection whereby to impart movement to said last mentioned plunger, said last mentioned hydraulic connection being separate from said first mentioned hydraulic connection, and a manometer connected with said hydraulic connection, said manometer fitted with a dial and a pointer, and having a pair of springs, said springs being each connected with one hydraulic connection, one of said springs being connected with said pointer and the other of said springs with said dial, substantially as and for the purpose set forth.

1,266,588. CAMP-COOKER. FRANK HANSON, Dallas, Tex. Filed June 6, 1917. Serial No. 173,221. (Cl. 126—30.)



In a camp cooker, the combination with a plurality of support standards, side plates arranged in connection with the support standards to form an inclosure the said plates extending from the top end of the supports to the ground, one side plate arranged in a supported position between two standards and having its lower edge spaced away from the ground to permit heat from the interior of the inclosure to pass under the last named plate, and a pot or pan supporting rack comprising a vertical housing with an open side disposed beneath the last named plate.

1,266,589. MOTOR-CYCLE FRAME. WILLIAM S. HARLEY, Milwaukee, Wis., assignor to Harley-Davidson Motor Co., Milwaukee, Wis. Filed Sept. 19, 1917. Serial No. 192,114. (Cl. 180—33.)



1. A vehicle of the class described comprising in combination, a cycle frame including a head bar and seat-mast, their lower ends being spaced apart and provided with attaching means, an engine casing disposed between said ends and having attaching means coöperating with the first mentioned attaching means, and a pair of opposed engine cylinders extending in opposite directions from said casing beneath the ends of said head bar and seat-mast, said cylinders being positioned longitudinally of the frame.

2. A vehicle of the class described comprising in combination, a cycle frame including a head bar and seat-mast, their lower ends being spaced apart to form a pair of engine hanger elements, a right-angular attaching member secured adjacent the intersection of its arms to one of said hanger elements, an engine disposed between said hanger elements and secured to one of the same and one arm of the right-angular attaching member, a bracket extending from the other arm of said member, and a foot support secured to the bracket and the engine.

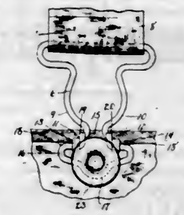
3. A vehicle of the class described comprising in combination, a cycle frame including a head bar and seat-mast, their lower ends being spaced apart to form a pair of engine hanger elements, a right-angular attaching member secured adjacent the intersection of its arms to one of said hanger elements, an engine disposed between said hanger elements and secured to one of the same and one arm of the right-angular attaching member, an inverted T-shaped bracket having its shank secured to the other arm of said member, and a pair of foot supports, one being secured to each arm of said inverted T-shaped bracket and to the engine.

4. The combination with a vehicle frame of the class described comprising a reach bar, a seat mast secured at the rear end of the bar, a head bar fixed at the forward end of the reach bar, said seat mast and head bar being inclined inwardly toward each other to dispose their free ends adjacent each other, a power plant disposed between the free ends of the head bar and seat mast, means for attaching said power plant to said free ends, an inverted, T-shaped hanger bracket, means for securing the shank of said bracket to the head bar adjacent its free end, ears on the power plant, and supports suspended on each side of the power plant from the arms of said T-shaped hanger bracket and said ears.

5. A vehicle of the class described comprising a cycle frame including a downwardly extending bar, an inverted T-shaped bracket, means for securing the shank of the bracket to said bar, the arms of said bracket being disposed transversely of the frame, and a pair of foot supports, one being attached to each arm of the bracket.

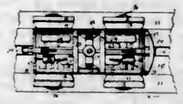
1,266,590. OVERALLS-SUSPENDERS LOOP. HENRY A. HARTSHORN, West Haven, Conn., assignor to The American Buckle Co., West Haven, Conn., a Corporation. Filed Jan. 12, 1918. Serial No. 211,485. (Cl. 24—224.)

1. A loop for overalls suspenders comprising a loop member formed with a contracted throat the ends of the member below the throat formed with transversely arranged eyes, combined with a button-engaging member wider than the lower end of the loop member the end portions of which are turned inward through the said eyes and terminating in stops.



2. A loop for overalls suspenders comprising a loop-member the ends of which are provided with eyes, combined with a button-engaging member the ends of which are turned inward through the said eyes and turned upward into the path of the sides of the loop-member.

1,266,591. CAR TRUCK, TRACK, AND STEERING MECHANISM. GEORGE E. HASTY, Wichita, Kans. Filed Aug. 16, 1917. Serial No. 186,544. (Cl. 105—137.)



1. A road-bed for street cars comprising a concrete base having two parallel tracks channeled therein for car truck wheel travel, the outer wall of each channel track being vertical while the inner wall thereof is inclined to the base of said channel; and a car truck having paired wheels rotatable on axles, one wheel of a pair being positioned within one channel wheel track and the other wheel being positioned in the adjacent wheel channel track, each wheel comprising two sectional elements, one section having a rubber tired face adapted to ride on the base of a said channel track, the other section having a beveled tire faced with a composition, said bevel being of less angular degree than the bevel of the inclined portion of the channeled track and for the purposes as specified.

2. A truck for street cars comprising a framework mounted on axles supported by car wheels, each wheel comprising two sectional elements, one element having a rubber tired periphery, the other element having a beveled tire periphery faced with a composition.

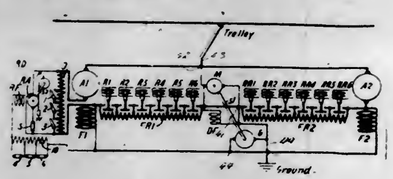
4. A steering arm hinged to the framework of a street car and projecting in front thereof, said arm terminating in a compound non-frictional wheel-guide comprising a frame having two rim portions at right angles to each other, each rim portion being separated from a central core portion by a ball race to permit of the revolution of such rim portion under conditions as specified.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,266,592. SYSTEM OF CONTROL. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 4, 1916. Serial No. 82,094. (Cl. 172—179.)

1. In a system of control, the combination with a main dynamo-electric machine having an armature and a field winding, of a motor-type relay device having its magnetic circuit saturated to substantially the same degree as the magnetic circuit of the main machine during a predetermined operating period, and means governed by said relay device for varying the main-machine circuit-resistance,

whereby a substantially constant rate of change of main-machine speed is obtained.



3. In a system of control, the combination with a main dynamo-electric machine having an armature and a field winding, of a motor-type relay device having its magnetic circuit saturated to a predetermined greater degree than the magnetic circuits of the main machine during a predetermined operating period, and means governed by said relay device for varying the main-machine circuit connections.

6. In a system of control, the combination with a main dynamo-electric machine having an armature and a field winding and adapted for regenerative operation, of a motor-type relay device, means for saturating the magnetic circuit thereof to a predetermined greater degree than, and to substantially the same degree as, the magnetic circuit of the main machine during a certain initial and the subsequent portions of the regenerative period, respectively, and means governed by said relay device for varying the main-machine circuit-resistance, whereby the initial rate of main-machine deceleration is less than the subsequent rate.

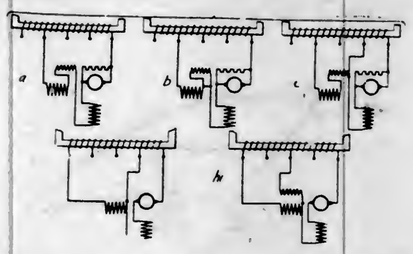
9. In a system of control, the combination with a main dynamo-electric machine having an armature and a field winding and adapted for regenerative operation, of a motor-type relay device having an armature and a field winding respectively energized in accordance with the currents traversing the main armature and the main field winding, respectively, and means for saturating the magnetic circuit of said relay device to a predetermined greater degree than, and to substantially the same degree as, the magnetic circuit of the main machine during a certain initial and the subsequent portions of the regenerative period, respectively, and means governed by said relay device for varying the main-machine circuit-resistance, whereby the initial rate of main machine deceleration is less than the subsequent rate.

17. In a system of control, the combination with a dynamo-electric machine having an armature and a field winding, of a motor-type relay device having its armature and field-winding circuits respectively energized in accordance with the currents traversing the main armature and field winding, means governed by said relay device for automatically effecting changes in the main machine connections, and means for varying the resistances of said relay-device circuits to vary the rate of said changes, whereby the rate of acceleration or deceleration of the main machine may be varied.

[Claims 2, 4, 5, 7, 8, 10 to 16, and 18 to 20 not printed in the Gazette.]

1,266,593. CONTROL SYSTEM FOR ALTERNATING-CURRENT COMMUTATOR-MOTORS. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 13, 1916. Serial No. 83,778. (Cl. 172—276.)

1. The combination with a source of alternating currents, of a dynamo-electric machine of the compensated, commutator type, an inductive device, means for initially connecting said machine to said source for operation as a repulsion motor, with said inductive device in series relation with the cross-field winding thereof, means for subsequently operating said motor as a doubly-fed motor, with said inductive device in series with the cross-field winding thereof, and means for finally inserting said inductive device in the intermediate tap of said double-feed connection.

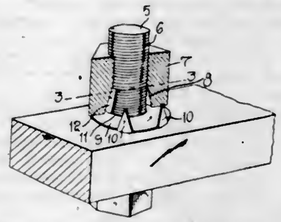


3. The combination with a source of alternating currents, of a dynamo-electric machine of the compensated, commutator type, an inductive device, means for connecting said machine to said source for doubly-fed operation, with said inductive device in series relation with the cross-field winding of said motor, and means for subsequently connecting said inductive device in the intermediate tap between said motor and said source.

4. The combination with a source of alternating currents, of a dynamo-electric machine of the compensated, commutator type, an inductive winding, means for initially connecting said inductive winding in series relation with the cross-field winding of said machine, and means for subsequently connecting said inductive winding in a lead carrying the difference between the armature and cross-field currents of said machine.

[Claims 2 and 5 not printed in the Gazette.]

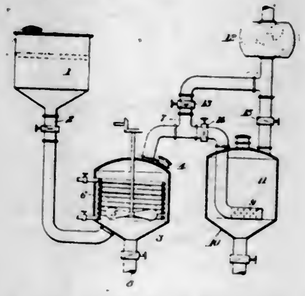
1,266,594. NUT-LOCK. ELMER E. HICKERSON, McComb, Ohio. Filed Apr. 11, 1917. Serial No. 161,305. (Cl. 151—3.)



The herein described nut lock including in combination with a bolt, a nut having a threaded bore for engagement upon the bolt shank, said bore having a flared unthreaded portion at one end, a washer plate for engagement upon the said bolt provided with a bolt receiving opening and a tapering lug projecting laterally upon the edge of said opening, said lug being transversely curved on a radius less than the radius of said opening whereby, when the nut is threaded home upon the bolt and the flared end of the nut bore bears upon the convex face of said lug the latter will be forced inwardly toward the bolt threads and flattened to cause the longitudinal edges of the lug to bite into the threads on the bolt, said washer plate being further provided upon its perimeter with a plurality of spaced bendable portions adapted to be angularly bent into engagement with the faces of the nut.

1,266,595. PROCESS OF MAKING CARBON DIOXID AND SOLID SODIUM SULFITE. HENRY HOWARD, Brookline, Mass., assignor to General Chemical Company, a Corporation of New York. Original application filed Mar. 6, 1913, Serial No. 752,281. Divided and this application filed Nov. 22, 1915. Serial No. 62,700. (Cl. 23—13.)

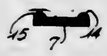
1. The process of producing carbon dioxid, comprising effecting a reaction between a soluble carbonate and a soluble bisulfite, thereby forming a normal sulfite and carbon dioxid, purifying the carbon dioxid from sulfur dioxid by causing the carbon dioxid to bubble through undecomposed carbonate maintained in mechanical suspension in a liquid, said liquid in insufficient proportion for the solution of the carbonate, and collecting the substantially pure carbon dioxid.



2. The process of producing carbon dioxid, comprising effecting a reaction between sodium carbonate and dissolved sodium bisulfite, thereby forming normal sodium sulfite and carbon dioxid, purifying the carbon dioxid from sulfur dioxid by causing the carbon dioxid to bubble through sodium carbonate maintained in mechanical suspension in the liquid, said liquid in insufficient proportion for the solution of the carbonate, and collecting the substantially pure carbon dioxid.

3. In a process of producing carbon dioxid by a reaction between sodium carbonate and dissolved sodium bisulfite, the step which consists in introducing the bisulfite solution beneath the surface of a column of liquid carrying sodium carbonate mechanically suspended therein, said liquid in insufficient proportion for the solution of the carbonate.

1,266,596. GARMENT-SUSPENDER. LILLIAN GRACE HOWORTH, Wanganui, New Zealand. Filed Jan. 5, 1917. Serial No. 140,685. (Cl. 24—193.)



1. A hose supporting clasp comprising a ring supported in vertical position, a second ring having a diametrically disposed bar formed thereon, said second ring being shorter than the stationary ring and longer in the direction at right angles thereto, and a flexible tape looped around said cross bar and supporting said second ring vertically and in overlapped depending relation to the first ring, whereby said second ring and the overlapped portion thereof may be passed through said first ring to coöperate with the latter to form a clasp.

[Claim 2 not printed in the Gazette.]

1,266,597. RAIL-JOINT. EDWARD W. JANSEN, New York, N. Y., and JOHN WATTMANN, Treptow, near Berlin, Germany, assignors to Atlantic Welding Corporation, New York, N. Y., a Corporation of New York. Filed May 15, 1917. Serial No. 168,650. (Cl. 239—4.)

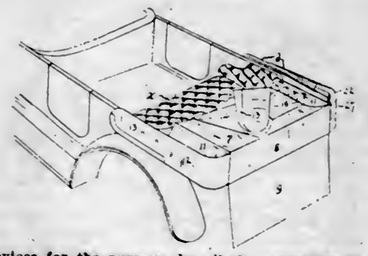
1. A rail joint of high conductivity comprising a pair of rail ends separated by but in close contact with a shim of good conductivity metal, said shim being in a state of compression, and means constituting part of the joint for holding said ends and shim in fixed position.

2. A rail joint of high conductivity comprising a pair of rail ends separated by but in close contact with a shim of good conductivity metal, said shim being in a state of compression, and a pair of plates on opposite sides of the rail ends and attached thereto for holding them together.



3. A rail joint of high conductivity comprising a pair of rail ends, a metal shim between said ends, and a pair of plates, one on each side of the rail ends, each plate being welded to each rail end and the rail ends being in a state of mutual compression.

1,266,598. DUST-HOOD FOR VEHICLE-TOPS. VERNON W. JENSEN, Council Bluffs, Iowa. Filed Aug. 29, 1917. Serial No. 188,854. (Cl. 21—62.)



Devices for the purpose described, comprising, in combination with the front bow of a collapsible vehicle top, a hood consisting of connected, flexible sections with wings and adapted to be folded with its sections disposed outwardly of its wings and having one of its sections mounted upon the front bow of said vehicle top, resilient means for normally maintaining the folded hood adjacent to the top rearwardly of said front bow, said hood being adapted to move with the front bow and to be unfolded when the top is collapsed to dispose its sections in engagement with the vehicle top and to dispose its wings in engagement with said bow.

1,266,599. CARTRIDGE-FUSE. ALFRED E. JOHNSON, Denver, Colo. Filed Dec. 20, 1915. Serial No. 67,763. (Cl. 175—273.)



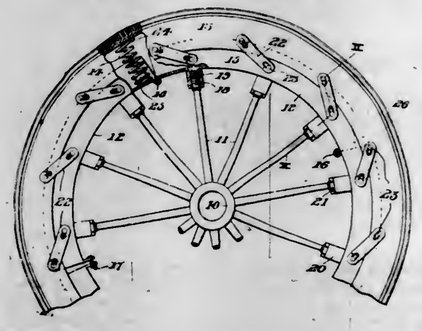
1. A cartridge fuse comprising a casing, a partition located within said casing and provided with an opening, metallic perforated caps detachably applied to the opposite extremities of said casing, a spiral spring also located in the casing and having one extremity connected with one of said caps, a fuse having one end formed frustum-shaped adapted to be inserted through the perforated cap adjacent said spring to enter the large end of the spring and provided with an end portion adapted to engage the opposite end of the spring which is also formed frustum-shaped, whereby a close contact is formed, the said fuse extending through the opening in the partition and the perforation in the other cap, and means mounted upon the last named cap and around which the other end of the fuse is adapted to be wound.

5. A fuse comprising a casing, an open partition located in the latter and dividing it into two compartments, metallic caps provided with openings and detachably applied to the opposite extremities of said casing, a spring located

in one of said compartments and secured to one of said caps, a fuse attached to said spring and having an enlarged portion adjacent said connection, said fuse extending through both compartments, the opening in the other cap and beyond the latter, whereby the spring may be distended until it engages the partition and said enlarged portion of the fuse projects slightly into the other compartment, and means mounted exteriorly upon the last named cap to which the fuse is also adapted to be attached for holding the spring and fuse in their operative positions.

[Claims 2 to 4 not printed in the Gazette.]

1,266,600. AUTOMOBILE-WHEEL. STANLY KASPRZYCKI, South Holland, Ill., assignor of one-fourth to Boleslaw Stankiewicz and one-fourth to Albert Wantor, Adena, Ohio. Filed Aug. 20, 1917. Serial No. 187,112. (Cl. 152—38.)



1. A wheel comprising a hub and spokes carried thereby, a felly arranged in hinged sections, threaded sleeve connections between the felly sections and spokes, a tire section arranged outwardly of the felly, resilient members between the tire section and felly and connecting links pivoted between the tire section and felly.

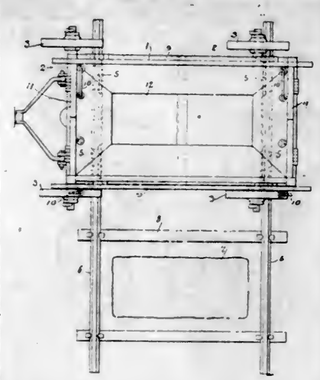
2. A wheel having a hub, and spokes carried by the hub having threaded outer ends, a felly composed of a plurality of hinged sections, threaded studs upon the said felly sections arranged abutting the said spoke ends when the device is assembled, threaded connecting sleeves upon the said studs and spoke ends, lock nuts for the said sleeves carried by the said spokes and an annular tire member resiliently mounted upon the said felly.

1,266,601. CEMETERY-CAR. JOHN M. KINCADE, Springfield, Mass. Filed Nov. 2, 1917. Serial No. 199,830. (Cl. 105—14.)

1. In a cemetery car, the combination with pairs of axles at right angles to each other, of track wheels carried by one pair of axles, road wheels carried by the other pair of axles, said road wheels extending to points lower than said track wheels, and a car body under which said axles are mounted, said body having a dumping bottom, pivoted sides and a pivoted top.

3. In a cemetery car, the combination, with a car having road wheels and track wheels, the road wheels extending to points lower than said track wheels, of a body mounted on said wheels and having a dumping bottom, with means, such as a ratchet for dumping said bottom, of rails, adapted to be placed beside an open grave, on which said track wheels may run so as to permit movement of the car body over the open grave.

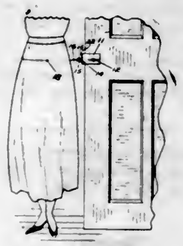
6. In a cemetery car, the combination, with a car having track wheels, and a body supported by said wheels, said body having sides with pivoted portions which may be separately turned downward, and a pivoted top which may be held upright by a hook, of rails, on which said car wheels may run so as to carry the car body adjacent a grave site, whereby dirt taken from a grave may be thrown



over a downwardly turned side of the car body into the car.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,266,602. SKIRT-GAGE. KATHERINE KNOBR, Norwalk, Conn. Filed Aug. 30, 1917. Serial No. 188,936. (Cl. 33—9.)



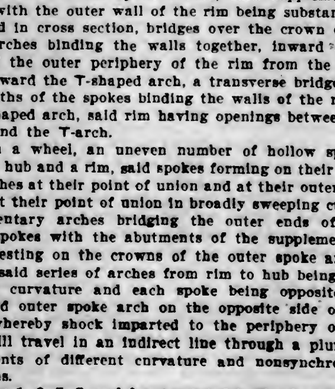
1. A skirt gage comprising a clamp, a chalk holder pivoted thereto, and means for securing the chalk holder in either vertical or horizontal adjustment relatively to the clamp.

3. A skirt gage comprising a clamp having a base, and arms adapted to engage the edge of a door or table, a thumb screw in one of the arms for adjustably securing the clamp in place and spaced apart pins projecting from the face thereof, and a chalk holder pivotally secured to the clamp and having a hole spaced away from the pivotal point and adapted to be engaged by either of the pins.

[Claim 2 not printed in the Gazette.]

1,266,603. WHEEL. ALFONSO MARIA LEONI, Dayton, Ohio, assignor to The Dayton Steel Foundry Company, Dayton, Ohio, a Corporation of Ohio. Filed Mar. 31, 1917. Serial No. 158,793. (Cl. 21—69.)

2. In a wheel, an uneven number of hollow spokes with flaring outer ends forming spoke arches where they adjoin each other, a hollow rim, the inner wall of which is formed by said spoke arches, an outer wall of said rim supported by supplementary arches bridging the outer ends of the spokes with their abutments resting on the crowns of the spoke arches, side walls of the rim and a bridge across the end of each spoke joining said side walls and each of said supplementary arches to the side walls, said bridge thereby becoming a portion of the outer periphery of the rim.



4 In a wheel, hollow spokes with flaring outer ends forming spoke arches where they adjoin each other, a hollow rim, the inner wall of which is formed by said spoke arches, an outer wall of said rim supported by supplementary arches bridging the outer ends of the spokes with their abutments resting on the crowns of the spoke arches, side walls of the rim, a bridge across the end of each spoke joining said side walls and each of said supplementary arches to the side walls, said bridge thereby becoming a portion of the outer periphery of the rim, a second transverse bridge forming another portion of the outer periphery of the rim located over the crown of each spoke arch, at which point said second bridge joins the wall of the rim together, said rim having a pair of openings between each of said bridges divided by the vertical wall of each supplementary arch.

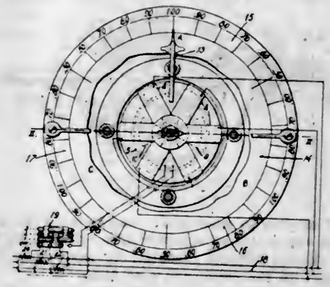
6. In a wheel, hollow spokes forming by their flaring outer ends spoke arches constituting the inner wall of a rim, side walls of said rim, supplementary arches bridging the open ends of the spokes with their abutments resting on the crown of the spoke arches, said supplementary arches with the outer wall of the rim being substantially T-shaped in cross section, bridges over the crown of the spoke arches binding the walls together, said rim having openings on each side of said T-shaped arches.

8. In a wheel, hollow spokes forming by their flaring outer ends spoke arches constituting the inner wall of a rim, side walls of said rim, supplementary arches bridging the open ends of the spokes with their abutments resting on the crown of the spoke arches, said supplementary arches with the outer wall of the rim being substantially T-shaped in cross section, bridges over the crown of the spoke arches binding the walls together, inward extensions of the outer periphery of the rim from the outer walls toward the T-shaped arch, a transverse bridge over the mouths of the spokes binding the walls of the rim to the T-shaped arch, said rim having openings between the bridge and the T-arch.

10. In a wheel, an uneven number of hollow spokes, a hollow hub and a rim, said spokes forming on their inner ends arches at their point of union and at their outer ends arches at their point of union in broadly sweeping curves, supplementary arches bridging the outer ends of said hollow spokes with the abutments of the supplementary arches resting on the crowns of the outer spoke arches, each of said series of arches from rim to hub being of a different curvature and each spoke being opposite the inner and outer spoke arch on the opposite side of the wheel, whereby shock imparted to the periphery of the wheel will travel in an indirect line through a plurality of elements of different curvature and nonsynchronous vibrations.

[Claims 1, 3, 5, 7, and 9 not printed in the Gazette.]

1,266,604. ELECTRICAL MEASURING INSTRUMENT. PAUL MACGAHAN, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1915. Serial No. 24,707. (Cl. 172—245.)



1. In a phase-measuring instrument for a polyphase electric circuit, the combination with a polyphase power-factor meter having a single current winding, a plurality of potential windings, an armature and an indicator, of a scale divided into a plurality of equal zones, and means for connecting the current winding to the various phases of the electric circuit in order that the indicator of the instrument may coöperate only with that zone of the scale which corresponds to the phase in which the current winding is connected.

2. In a power-factor meter for a polyphase electric circuit, the combination with a plurality of potential windings, a single current winding and a rotatable member, of a scale having a plurality of similar markings thereon disposed uniformly around the scale, and means for connecting the current winding to different phases of the electric circuit, whereby different parts of the scale, in cooperation with the rotatable member, indicate in which phase the current winding is connected and the power factor of that phase.

3. A power-factor meter for a polyphase electric circuit comprising current and voltage windings, a movable armature, a pointer operatively connected to the armature and a scale the markings of which are divided into as many equal zones as there are phases in the electric circuit, each of the said zones having divisions provided with like markings.

4. A power-factor meter for a polyphase electric circuit comprising a scale divided into as many uniformly marked equal zones as there are phases of the electric circuit, and a single pointer adapted to coöperate with the zone corresponding to the phase the power factor of which is to be determined.

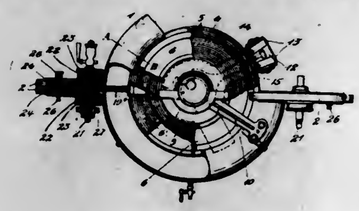
8. A power-factor meter for a three-phase electric circuit comprising current and voltage windings, a pointer and a scale, the markings of which are uniform and divided into three zones corresponding to the phases of the electric circuit.

[Claims 5 to 7 not printed in the Gazette.]

1,266,605. ROTARY ENGINE. EDUARDO JOSE MARIA MADERO, Buenos Aires, Argentina. Filed Jan. 26, 1917. Serial No. 144,684. (Cl. 121—51.)

1. In a rotary engine, an annular piston-cylinder comprising two semi-circular bodies having transversely arranged dished plates on their ends forming valve chambers, a fly-wheel mounted concentrically to the cylinder and forming a section of the periphery of the latter, a piston mounted on the periphery of the fly-wheel within said cylinder, and adjustable tightening plates covering the sides of the wheel.

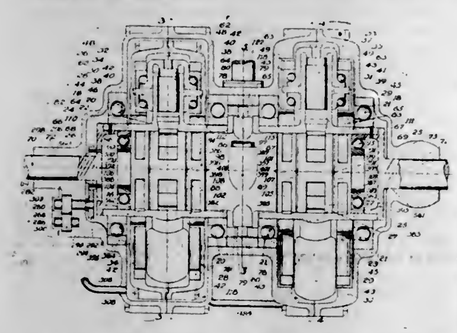
7. In a rotary engine, an annular piston-cylinder comprising two semi-circular bodies having transverse circular dished plates forming valve chambers, a fly wheel forming a section of the periphery of the cylinder, a piston mounted on the periphery of the wheel within the cylinder, obturating disks mounted in said chambers having a plu-



rality of grooves in their sides concentric to the axes of the disks, and plates on opposite sides of the disks having grooves formed therein eccentric to said axes and co-operating with the grooves in said disks.

[Claims 2 to 6, 8, and 9 not printed in the Gazette.]

1,266,606. VARIABLE-SPEED GEAR. CHARLES MATTHEWS MANLY, New York, N. Y. Filed Nov. 2, 1909, Serial No. 525,925. Renewed Oct. 2, 1917. Serial No. 194,417. (Cl. 138—22.)



1. In a variable speed gear, the combination of a pump, a motor, and a valve element through which fluid may pass from the said pump to the said motor, said valve element being fixed relatively to the said pump and motor as regards rotation but freely movable radially.

16. In a variable speed gear, the combination of a pump comprising cylinders radiating from a common center about which they rotate, a motor comprising cylinders radiating from a common center about which they rotate, and a valve element extending from the said common center of the pump cylinders to the said common center of the motor cylinders.

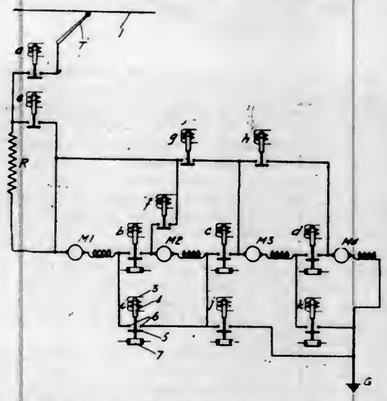
26. In a variable speed gear, the combination of a rotary radial cylinder pump with means for varying its capacity, a rotary radial cylinder motor with means for varying its capacity and a stationary valve element extending from the center of radiation of the pump cylinders to the center of radiation of the motor cylinders.

30. In a variable speed gear, the combination with a motor, of a multiple cylinder pump embodying a valve chamber and a valve element, said valve element comprising main ingress and egress ports for the passage of fluid to and from the pump respectively, balance ports formed in the surface of said valve element and cross connected to said main ingress and egress ports, and leakage guard grooves adjacent said main ports and said balance ports, said leakage guard grooves being so arranged that the area of the surface of the said valve element over which fluid pressure may leak from the main ports is substantially equal to the area of the surface of the said valve element over which fluid pressure may leak from the balance ports.

50. In a pump or motor embodying a rotary multiple cylinder element formed of cast iron, the combination with steel cross heads slidably mounted on the exterior surface of said cylinders, of hardened steel cross head pins formed integral with said cross heads, rollers journaled by balls on the said cross head pins and co-acting with a hardened steel ring, mounted on a relatively fixed but eccentrically adjustable crank element, to cause the said cross heads to slide on the said cylinders when the rollers roll on the said steel ring as the said cylinder element is rotated.

[Claims 2 to 15, 17 to 25, 27 to 29, 31 to 49, and 51 to 65 not printed in the Gazette.]

1,266,607. CONTROL SYSTEM. PAUL L. MARDIS, Altoona, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1915. Serial No. 25,496. (Cl. 172—179.)



1. The method of controlling four electric motors which consists in connecting said motors in series relation, disconnecting two of the motors from circuit, connecting the motors in series-parallel groups, connecting two of the motors in series-circuit and in parallel relation to a single motor, and connecting the motors in full-parallel relation, while maintaining a unidirectional flow of current during the changes.

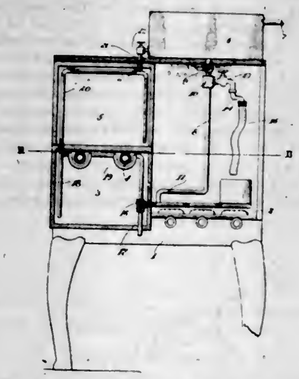
3. In a system of control, the combination with a plurality of motors, of means comprising control apparatus and circuit connections for connecting the motors in series, in series-parallel and in parallel relation, and means for disconnecting each of said motors from circuit during the acceleration from series to parallel relation and for maintaining at least two of said motors in circuit throughout the changes.

4. The method of changing four electric motors from series-parallel relation to full-parallel relation, which consists in first cutting-out one of the said motors, leaving one motor in parallel with the two which are in series, then reconnecting the motor which is cut-out in parallel with the remaining motors, then cutting-out one of the two motors in series, and finally connecting the last motor cut-out in parallel with the others, while maintaining a unidirectional flow of current through the respective motors.

6. In a system of control, the combination with a plurality of electric motors, of control apparatus comprising contact members and circuit connections for changing the motors from series-parallel relation to full-parallel relation, said contact members and connections being adapted to successively disconnect the motors, one after another, from circuit, and to maintain a unidirectional flow of current through the active motors during the circuit changes.

[Claims 2, 5, and 7 to 10 not printed in the Gazette.]

1,266,608. WATER-HEATER FOR GAS-RANGES. SARKIS MELEDONIAN, Detroit, Mich. Filed June 25, 1917. Serial No. 176,718. (Cl. 126—53.)

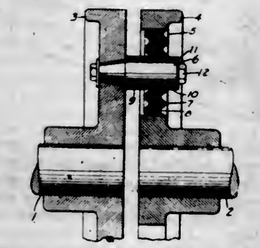


1. The combination with a gas range having burners and compartments, of a reservoir above said range provided with a water inlet connection, a down pipe from said reservoir, a faucet carried thereby, a series of articulated horizontal coils above the burners of said range and communicating with said down pipe, a three-way valve in communication with said series of coils and provided with a drain, communicating coils in the compartments of said range connected with said three-way valve and said reservoir, a valve interposed between the last mentioned coils and said reservoir, and a filling pipe carried by said faucet.

3. The combination with a range having burners and compartments with burners in one of said compartments, of a reservoir on top of said range adapted to receive water, a down pipe from said reservoir, a shut-off valve carried by said down pipe, a faucet carried by said down pipe, a swiveled filling pipe carried by said faucet, a series of articulated horizontal coils above the burners of said range and in communication with said down pipe, a three-way valve in communication with said series of coils and provided with a drain, coils in the compartments of said range in communication with said three-way valve and said reservoir with said coils lining side and top walls of said compartments and portions of said coils in parallelism with the burners in one of said compartments, and a valve interposed between the coils of said compartments and said reservoir.

[Claim 2 not printed in the Gazette.]

1,266,609. FLEXIBLE SHAFT-COUPLING. CHESTER B. MILLS, East McKeesport, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed July 5, 1917. Serial No. 178,555. (Cl. 64—13.)



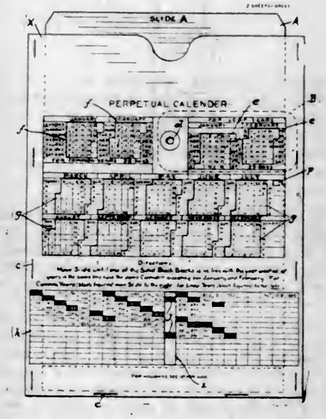
1. A shaft coupling comprising shaft-carried members, one of which is provided with openings and the other of which is provided with projecting portions located in said openings, and compressible metallic bushings located in said openings and surrounding said projecting portions.

3. A bushing for flexible couplings comprising a plurality of inherently resilient metallic plates.

4. A bushing for flexible couplings comprising a plurality of annular metallic plates respectively having portions thereof located within the plane of the next adjacent plate.

[Claims 2 and 5 not printed in the Gazette.]

1,266,610. PERPETUAL CALENDAR. FRANK X. MOERK, Philadelphia, Pa. Filed Apr. 13, 1917. Serial No. 161,698. (Cl. 40—109.)



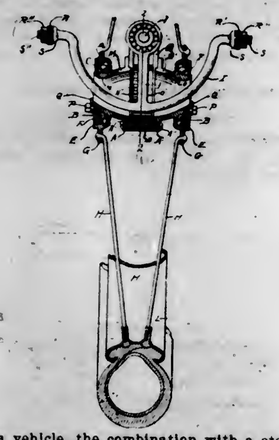
1. A calendar comprising a card having two pairs of perforations, one pair corresponding to the months of January and February of common years and the other pair corresponding to the months of January and February of leap years, and ten perforations corresponding to the remaining months of any year, and a slidable sheet provided with numerals indicative of days of months and alining with said perforations and arranged, when the slidable sheet is moved into different positions, to exhibit, in the several perforations, different combinations of numerals corresponding to the calendars of different common and leap years.

5. A calendar comprising a card having ten perforations arranged to form five rows of two each and corresponding to ten months of the year and four perforations alining respectively with four of said rows, two of said four perforations corresponding to the months of January and February of common years and the other two of said four perforations corresponding to the months of January and February of leap years, and a slidable card having five series of numerals alining with said five rows of spaces and adapted to be moved into different positions to exhibit in the several perforations, different combinations of numerals corresponding to the calendars of different common and leap years.

8. A calendar comprising a card having perforations corresponding to months, and a sheet provided with numerals indicative of days of months and arranged to slide relatively to said card, the distance between adjacent perforations measured in the direction of said sliding movement being substantially less than the width of any of said spaces measured in the same direction, the day numerals being so arranged that certain of such numerals register with a plurality of such adjacent perforations in different positions of said sheet.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,266,611. STEERING-HEAD HUB FOR TWO-WHEELED AUTOVEHICLES. WILLIAM GEORGE MOORE, Miami, Fla. Filed Dec. 21, 1915. Serial No. 67,979. (Cl. 208—114.)



1. In a vehicle, the combination with a steering wheel, of a frame member carrying alined upper and lower steering head bearings, and a steering fork journaled in said upper bearing and connected to the axle of said wheel, said axle having a rearward extension journaled to said lower bearing.

3. In a vehicle, a steering wheel having an axle having axial and lateral openings and provided with external bearings for the hub of the wheel and having lateral extensions forming the support for steering head bearings within the wheel and located at a distance from the axis of the wheel and an arcuate support adapted to be connected at opposite ends to a frame member, said support passing through said axial opening and having a rearwardly extending arm passing through said lateral opening and journaled in said steering head bearing.

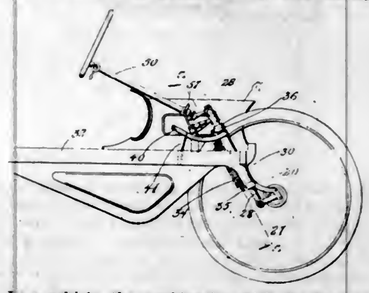
7. In a steering mechanism for two-wheeled vehicles, a frame member carrying a bearing at its upper end, a steering fork journaled at its upper end in said bearing and provided with a yoke member having arms extending upon opposite sides of said bearing, a steering post extending rearwardly from said fork and at an angle thereto, a yoke member secured to the lower end of said post and a ring swiveled to the arms of said yoke members, the pivotal connections of one yoke being perpendicular to the other to thereby form a connection permitting a swiveling movement in planes at right angles to each other between the steering post and the steering fork.

9. In a steering mechanism, for two-wheeled vehicles, a frame member carrying a bearing at its upper end, a steering fork journaled at its upper end in said bearing, a steering post extending rearwardly from said fork and at an angle thereto, a yoke member extending from the lower end of said post with its arms upon opposite sides of said bearing, a yoke extending upwardly from said steering fork upon opposite sides of said bearing and in a plane perpendicular to said steering post yoke, and a ring-member swiveled to the arms of said yokes to form a steering connection permitting a swiveling movement in planes at right angles to each other between said post and said steering fork.

[Claims 2, 4 to 6, 8, and 10 not printed in the Gazette.]

1,266,612. STEERING-HEAD HUB FOR TWO-WHEELED AUTOVEHICLES. WILLIAM G. MOORE, Indianapolis, Ind. Continuation of application Serial No. 150,098, filed Feb. 21, 1917. This application filed Dec. 28, 1917. Serial No. 209,378. (Cl. 208—114.)

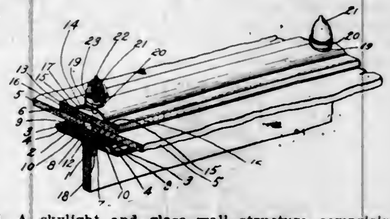
1. In a vehicle, the combination with the frame of the vehicle body, of sleeve members secured at the forward end thereof, a yoke frame slidably mounted in said sleeves and carrying an upper steering-head bearing, springs connecting said yoke frame and said sleeves, a steering fork having an upwardly extending post journaled in said bearing, a wheel having a tubular axle formed of oppositely arranged separable parts provided with axial and lateral openings, means for securing said parts together and to said forks, an extension projecting rearwardly from said axle in alinement with said lateral opening and carrying a lower steering-head bearing, and a curved bearing yoke or trunnion yoke passing through said axial opening and secured to the lower ends of said yoke frame, said trunnion yoke having a central rearwardly extending arm passing through said lateral opening and carrying a bearing support journaled in said lower steering-head bearing.



2. In a vehicle, the combination with the frame of the vehicle body, of sleeve members secured at the forward end thereof, a yoke frame slidably mounted therein and provided with an upwardly extending tubular part carrying the upper steering-head bearing, a steering wheel fork having an upwardly extending post journaled in the bearing in said tubular part, an arm or bracket extending rearwardly from said tubular part and carrying a steering-post bearing, a yoke member pivoted at its ends to the arms of said steering fork, and carrying a bearing centrally thereof, a steering post having its lower end journaled in said steering post bearing, and a link member carrying a pivot pin at its lower end journaled in the bearing in said yoke member and its upper end pivotally connected to said steering post.

[Claims 3 to 7 not printed in the Gazette.]

1,266,613. SKYLIGHT AND GLASS-WALL STRUCTURE. PERCY L. MOSES, Brookline, Mass., and HAROLD C. GREENE, deceased, Cohoes, N. Y., by Harvey S. Greene, administrator, Waterford, N. Y.; said Moses and said administrator assignors to Asbestos Protected Metal Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Sept. 4, 1917. Serial No. 189,680. (Cl. 189—78.)



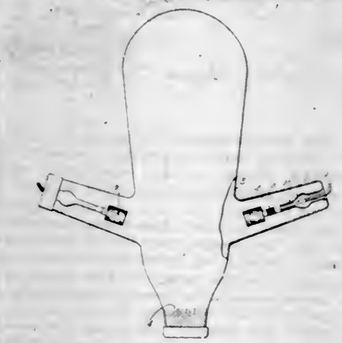
1. A skylight and glass wall structure comprising a supporting member, resilient cushions for adjoining panes of glass provided with laterally extending grooves, and detachable spacers adapted to fit in the said grooves and to hold the said resilient cushions in position on the said supporting member.

2. A skylight and glass wall structure comprising a supporting member, independent resilient cushions sustained by said supporting member and separated from each other, detachable spacers separate from said supporting member and extended transversely of said resilient members and engaged with the latter to prevent movement of the resilient members away from each other, and intermediate spacers separate from the supporting member and interposed between said resilient members to prevent movement of said members toward each other.

3. A skylight and glass wall structure comprising a supporting member, individual cushions sustained thereby for supporting adjacent glass panes thereon, and spacing means detachable from said cushions and supporting member for maintaining the said cushions in fixed relation to one another.

4. A skylight and glass wall structure comprising a supporting member, individual cushions sustained thereby for supporting adjacent glass panes thereon, spacing means detachable from said cushions and supporting member for maintaining the said cushions in fixed relation to one another, a sealing member supported by the said glass panes, a cap member supported by the sealing member, and retaining means extending through said cap member and coöperating with the detachable cushion-spacing means to maintain the latter in fixed relation to the supporting member.

1,266,614. SEAL. HAROLD A. NEWCOMB, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 6, 1915. Serial No. 811. (Cl. 176—50.)



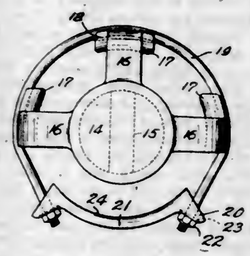
1. A seal between glass and metal provided with a layer of material at the junction point composed, in part, of the glass and, in part, of the metal and having a coefficient of expansion intermediate that of the glass and that of the metal.

7. The method of welding two dissimilar substances of relatively high melting point together which comprises applying a fluxing material of relatively low melting point to one of said substances, said fluxing material having the property, when heated, of gradually uniting with material from each of said substances to form a compound, the melting point of said compound gradually rising in accordance with the amount of said substances incorporated therewith, placing the two substances in contact and heating the zone of contact for a considerable period of time, whereby a layer of said compound of relatively high melting point is formed and caused to unite intimately with each of said substances, forming a vacuum-tight joint therebetween of great mechanical strength.

8. The method of welding a glass to another substance which comprises applying a flux between said glass and said substance having the property, when heated, of uniting with the glass and the other substance to form an intermediate layer of which the color is an index of the extent of said reaction, applying a heat source to a portion of the weld and moving said heat source to the other portions of the weld at a rate determined by the rate of progress of the zone of intermediate substance of the desired color.

[Claims 2 to 6 not printed in the Gazette.]

1,266,615. INSULATOR-CLAMP. DAVID S. NICOL, Montreal, Quebec, Canada, assignor to The Shawinigan Water & Power Company, Montreal, Quebec, Canada. Filed July 23, 1917. Serial No. 182,267. (Cl. 178—313.)

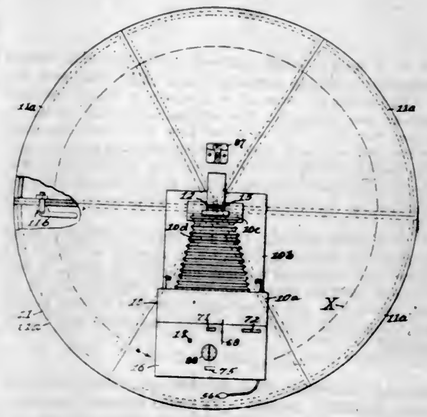


1. A device of the character described, comprising a spider having a plurality of contractible arms, a plate at the extremity of each arm formed for engagement with an insulator, and externally grooved, a clamping bolt engaging said plate grooves, and a clamping plate connecting the ends of the bolt and engaging in the insulator groove.

2. A device of the character described, comprising a body having a diametric rib for engagement in the conductor slot of an insulator, arched arms radiating from said body, plates at the extremities of said arms engageable in the circumferential groove of an insulator, a clamping member engageable in the circumferential groove of an insulator, and a bolt secured between the ends of said member embracing said plates.

3. In a device of the character described, a circular body, a diametrically disposed depending rib thereon, a series of downwardly arched arms radiating from said body, one in line with the rib, curved plates at the extremities of said arms having grooves in the external surfaces thereof, a bar curved similarly to said plates having jaws at the ends thereof, a bolt lying in the grooves of said plates and at its ends between the jaws of said bar, and nuts securing said bolt.

1,266,616. PANORAMIC CAMERA. STEPHEN EUGENE ODELL, Bellingham, Wash. Filed Apr. 11, 1917. Serial No. 161,168. (Cl. 95—15.)



1. The combination with a camera provided with a lens and rollers having a film thereon; of a pivot arranged directly beneath the optical center of said lens for connecting said camera with a table, a spring operated motor, a film feeding roller between said film holding rollers, means

for connecting the motor with one of said film holding rollers and with said film feeding roller, and means actuated directly from said motor for swinging said camera on its pivot.

4. The combination with a camera provided with a lens and rollers having a film thereon; of a pivot arranged directly beneath the optical center of said lens for connecting said camera with a table, a spring motor, motor actuated means for feeding said film, a traverse wheel resting on said table, and means for operatively connecting said motor and wheel independent of said film feeding means, to swing said camera on its pivot.

5. The combination with a camera provided with a lens and film holding rollers having a film thereon; of a pivot arranged directly beneath the optical center of said lens for connecting said camera with a table, a spring motor, means directly connected to the motor for swinging said camera on its pivot, a film feeding roller engaging the film between said holding rollers, and means directly connecting said motor with said film feeding roller.

7. In a panoramic camera, a diaphragm provided with a slot of greater width at one end than at the other to increase the volume of light at the wider end, and a tube carrying said diaphragm for mounting the same on the barrel of a lens.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,266,617. COMBINED LAWN-TRIMMER AND SOD-CUTTER. WARREN J. PARSONS, Huntington, W. Va. Filed Sept. 17, 1917. Serial No. 191,827. (Cl. 97—28.)



1. In a lawn trimmer and sod cutter, brackets having outwardly extending portions constituting shoulders for the application of pressure, a member to which the said brackets are connected for manipulating the cutter, a journal carried by the said brackets, a cutter comprising a blade and weighted plates connected together, the said blade extending beyond the edges of the plates, and means for mounting the cutter and plates on the journal whereby the same is transversely movable with relation to the journal.

2. In a lawn trimmer and sod cutter, brackets having shoulders for receiving pressure, a member to which the brackets are connected for manipulating the cutter, a cutter blade, circular plates constituting weights secured at each side of the said cutter and a journal carried by the said brackets on which the plates and blade are loosely mounted.

1,266,618. BINDER FOR ROADS, &c., AND PROCESS OF MAKING SAME. EDWARD ALFRED PATERSON, Thoroid, Canada. Filed Jan. 5, 1916. Serial No. 70,481. (Cl. 134—1.)

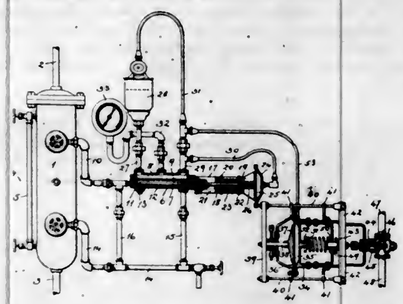
1. A petrescent binder for agglomerates of petrean character, containing a silicate of an alkali metal, free silicic acid, and a constituent gradually removable by weathering.

2. A binder for stony agglomerates consisting of a soluble sodium silicate, calcium chlorid, freed silicic acid, and a constituent gradually removable by weathering.

4. The method herein described of producing a petrescent binder for agglomerates of a petrean character, which consists in treating a solution of an alkali metal silicate having a high silica content with a soluble haloid salt of an alkaline earth metal and, with an acid capable of combining with alkali metal base of such silicate to form a salt which in solution is harmless to organic substances, and thus forming an insoluble silicate and freeing a portion of the silica content of the silicate.

[Claims 3 and 5 not printed in the Gazette.]

1,266,619. FEED-WATER REGULATOR. GEORGE F. PATTERSON, Baltimore, Md. Filed May 4, 1917. Serial No. 166,285. (Cl. 236—14.)

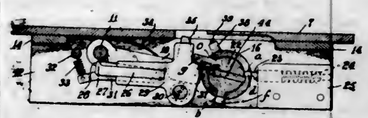


1. In a feed water regulator for boilers the combination with a pressure generator having a pressure chamber and another chamber in heat transferring relation with the pressure chamber and said other chamber having connections from both the water and steam spaces of a boiler, of a valve to control the steam connection to said latter chamber; means controlled by the pressure in the pressure chamber for operating said valve; valve means for controlling the passage of feed water to the boiler and means operated by pressure generated in said pressure chamber for actuating said valve means.

5. In a water feed regulator for boilers the combination with a water column, of a pressure generator having two chambers; connections between the upper and lower portions of the water column and one of the pressure generator chambers; a valve movable in said latter chamber to cut off communication through the connection from the upper portion of the water column; a casing having a chamber with a diaphragm therein said diaphragm being connected to the valve; means for conveying the pressure in the other chamber of the generator to one side of the diaphragm in the casing chamber; means for controlling the passage of water to the boiler and connection between said latter means and the said other chamber of the pressure generator.

[Claims 2 to 4 not printed in the Gazette.]

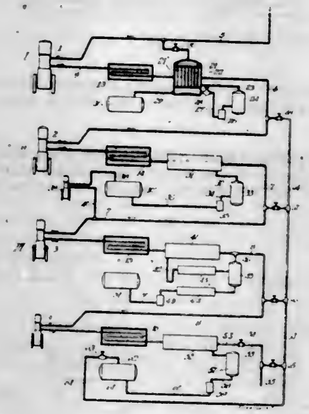
1,266,620. WATCHMAN'S CLOCK. CHARLES MAURICE PEABODY, South Orange, N. J. Filed Aug. 15, 1917. Serial No. 186,266. (Cl. 234—39.)



1. In a watchman's clock a key-actuated mechanism comprising in combination a record carrier and marking mechanism, one of which is movable with respect to the other, said marking mechanism comprising means for marking upon the record, including one or more impression members, means for locking said impression members, and a key having at least two sets of wards one set of wards being arranged to unlock and actuate one or more of said impression members, the other set of wards being arranged to return said impression members to locked position.

[Claims 2 to 4 not printed in the Gazette.]

1,266,621. GAS PROCESS. FRANKLIN PIERCE PETERSON, Tulsa, Okla., assignor to Consolidated Liquid Gas Company, Chicago, Ill., a Corporation of Arizona. Filed Jan. 5, 1914, Serial No. 810,332. Renewed Jan. 26, 1918. Serial No. 214,035. (Cl. 183—115.)



1. The process of separating from crude gas its liquefiable constituents by liquefying constituents of the gas in the inverse order of their volatility, collecting the product of each stage of liquefaction separately and subjecting the separate products to predetermined and varying temperature and pressure conditions to allow the escape from each thereof of gases only liquefiable at a higher stage.

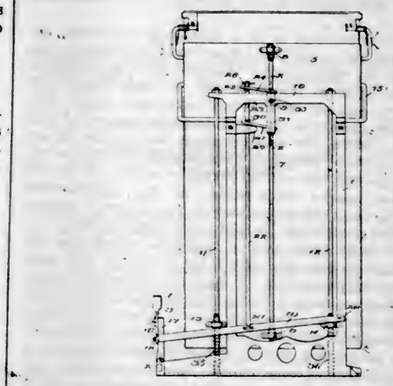
6. The method of producing a liquefied illuminating gas from natural gas, which consists in passing the gas through a compressor, then through a cooler, draining off the liquefied product, passing said liquefied product back through the cooler and allowing its most volatile ingredients to expand under pressure through the cooler, whereby the compressed gas is cooled and the liquefied product is rendered safe for handling.

9. The method of removing liquefiable constituents from crude gas which consists in liquefying said gas in stages, removing the liquefied product of one stage into a container, permitting the escape from the container under definite pressure of gases evolved from or contained in the liquid in the container, into the unliquefied gas for another stage of the treatment.

[Claims 2 to 5, 7, 8, 10, and 11 not printed in the Gazette.]

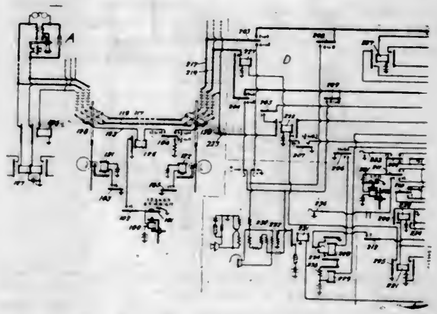
1,266,622. COPY-HOLDER. REUBEN A. PUNNETT, Rochester, N. Y., assignor, by mesne assignments, to Lineatime Manufacturing Company, Inc., Rochester, N. Y. Filed Feb. 10, 1913. Serial No. 747,262. (Cl. 120—29.)

1. In a copyholder, the combination with a support, a vertically disposed copy-plate and a guide fixed to one of said parts and slidably engaging the other, of means for elevating the copy-plate with a step by step movement, means for releasing said first mentioned means to permit the copyholder to descend, and a friction brake mounted on the other of said first mentioned parts and acting against the guide to check the descent of the copy-plate comprising a bowed spring plate disposed against a relatively flat surface and a securing and adjusting screw extending through the plate.



[Claim 2 not printed in the Gazette.]

1,266,623. TELEPHONE SIGNALING SYSTEM. RALPH L. QUASS, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed July 1, 1916. Serial No. 107,012. (Cl. 179—27.)



1. In a telephone system, the combination with a calling line and a called line and a connecting circuit uniting the same, of a source of ringing current, a cyclic switch adapted in one of its operative stages to apply ringing current to said connecting circuit to ring said called line, and adapted at a later stage to disestablish the connection of said connecting circuit with said calling line, means for causing said switch to move through its connection disestablishing stage to reapply ringing current, and switching mechanism for actuating said means and at the same time preventing said switch from disestablishing the connection as it moves to its current reapplying position.

2. In a telephone system, the combination with a telephone line and a cord circuit for making connection therewith, of a cyclic switch adapted in one of its operative stages to establish the talking condition of said circuit, other circuits established in other operative stages of said switch, means for moving said switch out of its talking stage through said other stages and back into its talking

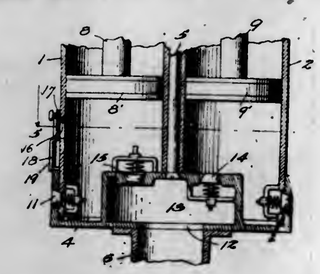
stage again, means for preventing said switch from establishing certain of said other circuits as it passes through the corresponding stages, and a signal device associated with said telephone line and made operative by the cyclic switch as said switch moves through said intermediate stages.

15. The combination with a telephone connecting circuit, of operator's telephone apparatus, a telephone switch controlling the connection of the same with said connecting circuit, a called telephone line, a connection switch operated to connect said circuit with said called line, means made operative by the coincident closure of said connection switch and said telephone switch for operating said telephone switch to disconnect the telephone apparatus from the connecting circuit, a source of ringing current, and means made active in the disconnecting operation of said telephone switch for applying ringing current from said source to said connecting circuit.

16. The combination with a telephone connecting circuit having a connection switch for extending the same to a called telephone line, of operator's telephone apparatus, a telephone switch controlling the connection of the same with said connecting circuit, a source of ringing current, a switch controlling the connection of said source with said connecting circuit, and means made operative by the coincident closure of said connection switch and said telephone switch for operating said telephone switch to disconnect the telephone apparatus from the circuit and for operating said ringing switch to connect said source of ringing current with said circuit.

[Claims 3 to 14 not printed in the Gazette.]

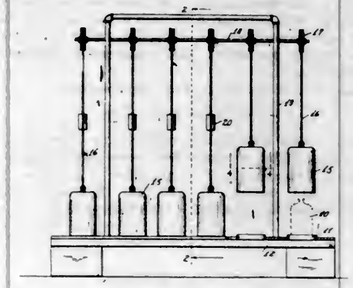
1,266,624. RESPIRATOR. HUBERT H. RAMSAY, Tylertown, Miss. Filed Apr. 28, 1917. Serial No. 165,300. (Cl. 128—13.)



In respirators, the portable structure herein shown and described, consisting of twin injector and ejector cylinders, pistons therefor operated manually by the same movement so that the ascent of one piston is synchronous with the ascent of the other; an inlet valve for atmospheric air in the injetcor cylinder; an outlet valve in the base of the same cylinder; an outlet valve in the ejector cylinder; an inlet valve at the base of the same cylinder; a port in the same cylinder, controlled by a slide valve, manually operated, whereby said cylinder temporarily ceases its function as an ejector, while said port is open; a common air chamber uniting both cylinders at their respective bases, and the mouth piece, whereby the atmospheric air is injected into the lungs of the subject, and the vitiated air withdrawn therefrom, for the purposes herein fully shown and described.

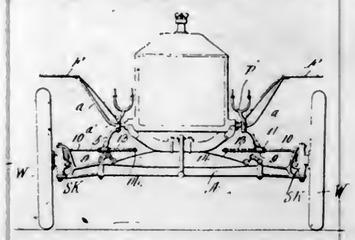
1,266,625. GLASS-TEMPERING DEVICE. JOHN RAU, Indianapolis, Ind. Filed Nov. 13, 1914. Serial No. 871,901. (Cl. 49—45.)

A device for tempering large glassware including a table, a rigid frame extending upward therefrom, a rod mounted on said frame above said table, independent pulleys on said rod, a cable on each pulley, a hood on one end of each cable and adapted to be lowered upon said table and co-



operate therewith for inclosing the glassware, and a counterbalancing weight on the other end of each cable.

1,266,626. DIRIGIBLE HEADLIGHT FOR AUTOMOBILES. EARL H. REINHART, Shell Lake, Wis. Filed July 17, 1917. Serial No. 181,136. (Cl. 240—62.)



1. In a dirigible headlight for automobiles, the combination with a vehicle having steering wheels, a connection between said wheels to cause them to turn in unison, a rotatably mounted lamp post, an arm fixed at one end to said post, a rod loosely connected at one end with said wheel connection, a member mounted for sliding movement on said rod, a coiled spring on said rod to yieldably retain said member against movement in one direction, and a coupling pivotally engaged with said member and swiveled to said arm.

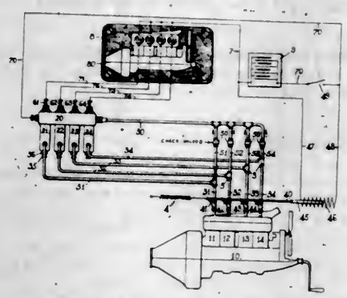
[Claims 2 to 4 not printed in the Gazette.]

1,266,627. PRESSURE-INDICATOR FOR INTERNAL-COMBUSTION ENGINES. JAMES D. RENNE, Omaha, Nebr. Filed Dec. 17, 1917. Serial No. 207,642. (Cl. 123—198.)

1. Indicating mechanism for multi-cylinder internal-combustion engines, comprising a movable member for each engine-cylinder exposed at one side to fluid-pressure from the respective cylinder, a common conducting means for directing fluid-pressure from a plurality of the engine-cylinders to the sides of said movable members opposite the side first named, and means for indicating movement of said members resulting from differences of pressure upon said opposite sides thereof.

4. Comparative-pressure indicating means for multi-cylinder internal-combustion engines, comprising a movable indicator-controlling member for each engine-cylinder, conduits for directing upon one side of each of said members fluid-pressure from the respective engine-cylinders, conduits for directing upon the opposite sides of said members fluid-pressure from each of the engine-cylinders, and valves in the latter conduits for preventing return-flow therethrough toward the engine-cylinders.

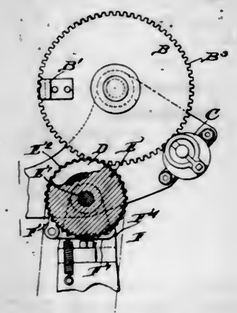
7. The combination with an internal-combustion engine having a plurality of cylinders, of an indicator-cylinder for each engine-cylinder, said indicator-cylinders communicating at one end with a common chamber, conduits connecting the engine-cylinders with the respective indicator-cylinders at the ends thereof opposite said common chamber, valved branches from said conduits all com-



municating with said common chamber, pistons movably disposed in said indicator-cylinders and exposed at one end to fluid-pressure from said common chamber and at the other end to fluid-pressure from the respective engine-cylinders only, electrical indicator-circuits controlled by the respective pistons, and electrically controlled shut-off cocks in the conduits.

[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,266,628. CLOTH-MARKING DEVICE. CHARLES G. RICHARDSON, Springfield, Vt. Filed Sept. 8, 1913. Serial No. 788,535. (Cl. 101—228.)



1. A cloth-marking machine embracing in its construction a revolving gear, a cloth-marking die secured to one side of said gear, a cylindrical platen wheel mounted opposite the edge of the traveling cloth and in the same plane with the said die, said platen wheel having a hard exterior surface yieldingly mounted upon its central driving shaft, said revolving gear and the said platen wheel being positively interconnected by gearing proportioned to cause the marking surface of the die and the exterior surface of the platen wheel to move positively on opposite sides of the cloth at the same surface speed, and means whereby the cloth is fed with its edge portion between said die and said platen so as to travel at the same surface speed as the die and the platen, substantially as described.

4. In a cloth marking machine the combination of a revolving die, a coöperating rotary platen wheel having a hard cylindrical surface mounted to yield in a radial direction under the pressure of the revolving die, an interconnecting gearing for causing the platen wheel and the revolving die to rotate at the same surface speed, the gear teeth of said gearing having a slightly irregular ratio whereby a different portion of the peripheral surface of the platen wheel is brought into contact with the revolving die on successive revolutions, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,266,629. BUCKLE. JOSEPH F. RIOUX, Edgewood, R. I. Filed July 4, 1917. Serial No. 178,522. (Cl. 24—74.)

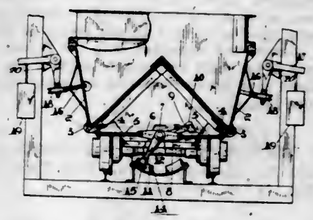


1. In a belt buckle, a body, a substantially rigidly formed T-shaped member having its cross-bar pivoted to the body so as to clamp one end of the belt between the body and one side edge of the cross bar, a substantially L-shaped clamping member pivoted to the T-shaped member adjacent the free end of the stem of the latter to clamp the opposite end of the belt between the stem of the T-shaped member and the foot of said L-shaped member, and means to latch the free end of the stem of the L-shaped member to the opposite side of the cross-bar of the T-shaped member.

5. In a buckle, a body, a member pivoted to the body to clamp one end of the belt thereto, and a second member superposed on and operatively connected to the first member so as to be borne by the latter to clamp the other end of the belt to the first member, said members lying in close relation to and approximately parallel to the body so as to hold the belt ends flat and all of the parts closely related.

[Claims 2 to 4 not printed in the Gazette.]

1,266,630. AUTOMATIC-DUMPING TRANSPORT SYSTEM. WILLIAM ROSS and WALTER F. J. COSSER, South Porcupine, Ontario, Canada. Filed June 4, 1917. Serial No. 172,693. (Cl. 214—63.)



1. A dump car provided with a door hinged at the top and tending normally to hang open; releasable retaining means for said door in combination with a track on which said car runs; and means located adjacent the track at the dumping position adapted to be engaged by the said door when closed to hold the door against outward pressure.

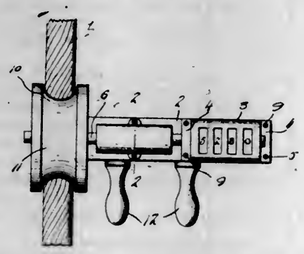
4. A dump car provided with a door hinged at the top and tending normally to hang open; releasable retaining means for said door in combination with a track on which said car runs; and yielding means located adjacent the track at the dumping position adapted to be engaged by the said door when closed to hold the door against outward pressure while release takes place and to return an open door to the closed position.

8. A dump car provided with a hinged door; a rail on said door formed as a laterally extended double inclined plane; releasable retaining means for said door in combination with a track on which said car runs; a bell crank lever; a wheel journaled on one arm of the bell crank lever with which the rail is adapted to engage; a weight on the other arm of the bell crank lever; and a stop limiting the movement of the wheel toward the car.

10. A dump car provided with a door at one side hinged at its upper edge; a pivoted latch adapted to engage the lower edge of the door and swinging in a vertical plane transversely of the car; a shaft pivoted beneath the car; an arm connected thereto; a link pivotally connected to said arm and to the latch between its pivot and its end; a stop limiting the downward movement of the arm and link at a point where the pivot between the arm and link lies just below an imaginary line joining the center of the pivot between the link and the latch and the center of the shaft; and an arm adapted to rock the shaft; an anti-friction roller journaled on the shaft in combination with a track on which the car runs; and means adjacent the track with which said roller may engage to rock the arm and release the latch, said arm being adapted to be swung back clear of said engaging means without moving said shaft.

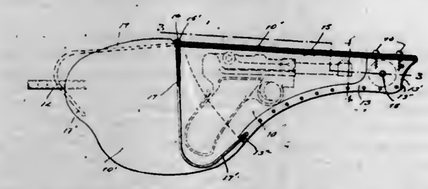
[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

1,266,631. WELL-DEPTH REGISTER. DON G. ROY, Tulsa, Okla. Filed May 24, 1916. Serial No. 99,592. (Cl. 33—134.)



A depth measuring device, including a rectangular elongated frame, a plurality of handles arranged at one side of the frame whereby the frame may be steadied, a rotatable shaft detachably mounted longitudinally on the frame, a cable engaging pulley on the shaft at one extremity thereof, and a check register having a casing provided with a sight opening secured to the frame at the other extremity thereof and connected with the remaining and adjacent end of the shaft whereby the units of the register will be moved into registration with the sight opening as the pulley is rotated.

1,266,632. EXTENSION-STOCK FOR PISTOLS. GUSTAV ADOLF SACHS, Eugene, Oreg. Filed June 15, 1917. Serial No. 174,823. (Cl. 42—72.)

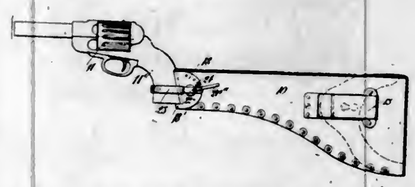


1. A stock provided at its front end with a seat for the handle of a pistol, and with a transverse opening adjacent to said seat, a bow-shaped connecting member whose ends are adjacent to said opening and whose bent portion extends forwardly and is adapted to embrace the pistol handle, a threaded pivot pin extending through said opening and through both ends of the connecting member, a nut screwing on one end of said pin and projecting into one end of the said opening, and a ferrule fitted on the said pin at the other end of the opening, said nut and ferrule having outwardly flaring surfaces to engage the inner walls of said opening.

3. A pistol holster provided with a brace along its top, a stiffener extending from the forward end of said brace along the front of the holster and along a portion of its bottom, a butt member pivoted to the rear end of said brace and provided with a forwardly extending free end adapted to engage the rear end of the stiffener, and means for securing a pistol exteriorly to the front of the holster.

[Claims 2 and 4 not printed in the Gazette.]

1,266,633. EXTENSION-STOCK FOR PISTOLS. GUSTAV ADOLF SACHS, Eugene, Oreg. Filed Sept. 25, 1917. Serial No. 193,178. (Cl. 42—72.)

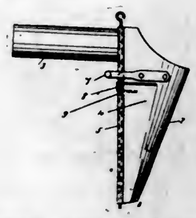


1. A longitudinally-stiffened pistol holster provided with a flap at one end and with a transverse elastic butt member secured permanently along the joint of said flap with the body of the holster, and means for securing a pistol to the other end of the holster exteriorly whereby the holster may be used as an extension stock.

5. An extension stock for pistols, provided with a seat for the pistol handle, an eccentric journaled in said stock adjacent to said seat, and a holder arranged to engage the pistol handle and operated by said eccentric to tighten or loosen its hold on said handle.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,266,634. TRANSPLANTER. ANTON SCHAEFER, Spring Grove, Ill. Filed Mar. 23, 1918. Serial No. 224,195. (Cl. 111—4.)



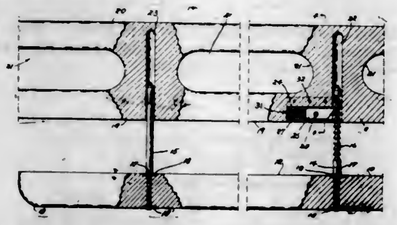
1. A transplanter, comprising a conical plant holder having a pivoted section, a handle secured to the main portion of the plant holder and arranged at substantially a right angle to its axis, a finger piece which projects laterally from the pivoted section, and a spring which normally holds the pivoted section in a closed position.

2. A transplanter, comprising a conical plant holder having a pivoted section, a handle secured to the main portion of the plant holder and arranged at substantially a right angle to its axis, a finger piece which projects laterally from the pivoted section, and a spring coiled upon the pivot pin of the pivoted section with its end portions bearing against the respective holder sections and operating normally to hold the tool in its closed position.

1,266,635. NEWSPAPER-FILE. HARRY ELLWOOD SLOAN and GUSTAVE ADOLPHE WIEDEMANN, Philadelphia, Pa. Filed Aug. 30, 1917. Serial No. 188,966. (Cl. 129—4.)

1. A device of the character stated embracing a pair of bars capable of movement toward or away from one another and means for interlocking the bars in adjusted position, at least one of said bars being provided with a multiplicity of spaced openings to provide hand grips.

2. A device as described in claim 1 characterized by the bar provided with said hand grips being appreciably wider than the other bar.



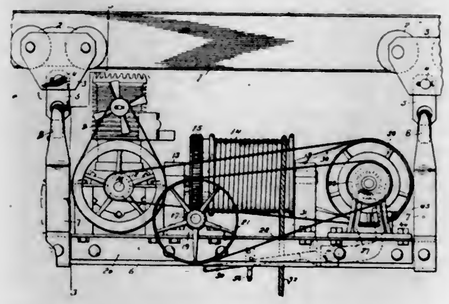
3. A device of the character stated embracing a pair of bars one of which is provided with a central, serrated lock-pin having guide pins upon opposite sides thereof and of which the other bar is provided with a multiplicity of spaced openings to provide hand grips, is apertured to receive said pins and is provided with a spring-pressed detent for coöperatively engaging with said lock-pin.

5. A device of the character stated embracing a bar having a transverse opening therein to accommodate a lock-pin there being a mortised portion in said bar in communication with said opening, a spring-pressed detent slidable in said mortised portion, a U-shaped keeper, having slots in its side walls, fitted to said bar and a stud for said detent the ends of which work through the keeper slots.

6. In a device of the character stated, the combination of a pair of bars capable of movement toward or away from one another of which one is provided with a multiplicity of spaced openings to provide hand grips there being a central lock-pin aperture and guide-pin apertures between certain of said openings, a spring-pressed detent located in said bar for normally extending into the said central opening and of which the other bar is provided with a central serrated lock-pin and a series of guide pins for engaging the openings in the other bar.

[Claim 4 not printed in the Gazette.]

1,266,636. TRAVELING HOIST. HOWARD V. SNIVELY, Kansas City, Mo. Filed July 12, 1915. Serial No. 39,458. (Cl. 254—168.)



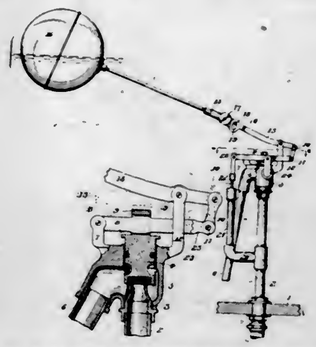
1. In a traveling hoist, a hoisting drum, means including clutch mechanism for rotating said drum, a cable secured to the drum and adapted to be wound thereupon, a lever having means for actuating said clutch mechanism, a second lever adapted to engage the first lever so as to actuate the clutch mechanism to stop the drum, means manually operable from below for oscillating the first named lever, and means secured to said cable for swinging the second lever into operative engagement with the first lever.

2. In a traveling hoist, a hoisting drum, means including clutch mechanism for rotating said drum, a cable secured to and adapted to be wound on the drum, a lever having means for actuating said clutch mechanism and provided with two arms extending laterally in opposite directions from the pivot point of the lever, two ropes respectively secured to said arms and depending from and operable manually from below, a second lever adapted to engage and swing the first named lever, and means carried by said cable for swinging the second named lever into engagement with the first named lever.

3. In a hoist, a hoisting drum, a cable attached thereto and adapted to be wound thereon, a rotary driving shaft, two driving members constantly rotatable in opposite directions, a clutch mechanism in driving engagement with the driving shaft and movable from a neutral position into driving engagement with either of said driving members, manually operated means for forcing the clutch mechanism to and from the neutral position and into and out of driving connection with said driving members, an operating device carried by the cable, and means operable by said device for shifting said manually operated means to the neutral position.

4. In a hoist, a hoisting drum, a cable attached thereto and adapted to be wound thereon, a rotary driving shaft, two driving members constantly rotatable in opposite directions, a clutch mechanism in driving engagement with the driving shaft, and movable from a neutral position into driving engagement with either of said driving members, a manually operated lever for forcing the clutch mechanism to and from the neutral position and into and out of driving connection with said driving members, an operating device carried by the cable, and a lever adapted to be engaged and swung by said device and so connected with the first named lever as to swing the latter to the neutral position when the second named lever has been moved by said device to a pre-determined position.

1,266,637. TANK INLET-VALVE. CHARLES W. SNYDER, Altoona, Pa. Filed Apr. 13, 1917. Serial No. 161,804. (Cl. 137—104.)



2. In an apparatus for governing the inlet valves of closet cisterns in combination, an inlet valve, a float for governing the movements of said valve, mechanism intermediate said float and said valve for transmitting the motion of the float to the valve, said mechanism comprising an adjustable bi-partite float-carrying-member, a pin on said member, a lever secured to the valve casing, a pivot at the outer end of said lever to which said float carrying member is connected, said lever having a slot at its outer end in which said pin is working, and constituting a lost motion connection, a plunger subject to the pressure of the water on the inlet side of said valve, and connections between the said plunger and said mechanism, said connections being so arranged, that the closing of the valve is completed by the water pressure alone before and independently of the final movement of the float, substantially as described.

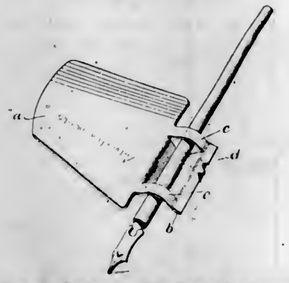
[Claim 1 not printed in the Gazette.]

1,266,638. SUCTION CARPET-SWEEPER. JAMES M. SPANGLER, Canton, Ohio, assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio, a Corporation of Ohio. Filed Jan. 15, 1914. Serial No. 812,175. (Cl. 15—60.)



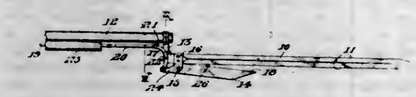
In a suction carpet sweeper of the class described, the combination of a combined frame and brush casing, the ends of the brush casing extended beyond the ends of the frame, traveling wheels rotatably mounted upon and adapted to support the frame, a brush located within the brush casing, said brush being adapted to be rotated by the rotation of the traveling wheels, the bearings of said brush being slidably mounted in the end plates of the brush casing, and springs connected to the bearings and to the brush casing, said springs adapted to normally press the brush bearings toward the traveling wheels.

1,266,639. DEVICE TO ATTACH TO A PENHOLDER TO ASSIST IN THE PRACTICE OF PENMANSHIP. HARRY WARREN SWAN, Everett, Wash. Filed Apr. 17, 1916. Serial No. 91,726. (Cl. 420—102.)



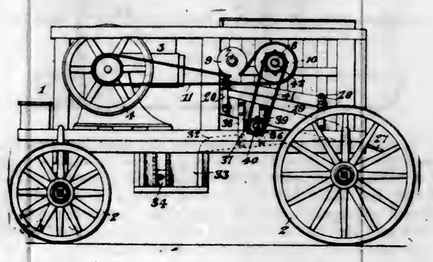
A hand and finger positioning attachment for pen holders consisting of a yieldable flat plate tapered in the direction of one end and having a narrowed extension from its opposite end, the narrowed extension having means for attachment to the stem of a pen holder with the plate projecting laterally therefrom in position to be held in the palm of the hand of the writer.

1,266,640. WIRE-CUTTING BAYONET. CASEY SZAFRANSKI, South Chicago, Ill. Filed Feb. 11, 1918. Serial No. 216,554. (Cl. 42—90.)



A device of the class described comprising in combination with a gun barrel having a bayonet mounted thereon and arranged with a flat shank adjacent the barrel, plates secured to said shank, a shearing blade pivoted to the said plates with a cutting edge arranged adjacent to and adapted for coöperating with the said bayonet during the cutting operation, a curved rocker arm pivoted to said shank operatively connected to the adjacent heel portion of the blade, a tubular guide and an operating rod linked to the said arm and extending through the said guide.

1,266,641. SEED-EXTRACTING MACHINE. BURL N. TRAUTMAN, Conesville, Iowa. Filed Nov. 22, 1916. Serial No. 132,865. (Cl. 130—19.)



1. In a seed extracting machine of the character described, a movable riddle inclined in one direction, and having a screening body, fingers passed upwardly through said body, and means disposed against the underside of the body to form a support therefor, and also carrying the fingers.

2. In a seed extracting machine of the character described, a movable riddle inclined in one direction, and having a screening body, fingers passed upwardly through said body, and means disposed against the underside of the body to form a support therefor, and also carrying the fingers, the fingers being bent in the direction of the inclination of said riddle.

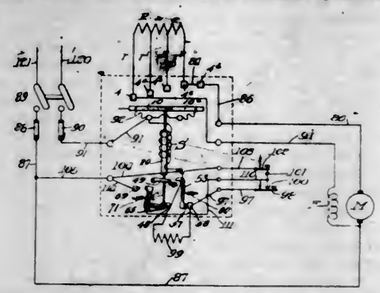
3. In a seed extracting machine, a movable riddle, inclined in one direction and having a screening body, fingers passed upwardly through said body, and strips carrying the fingers and disposed against the underside of the body for supporting the same.

4. In a machine of the character described, a riddle provided with an inclined screen having sides extended above the same, and a series of chains spaced from each other crosswise of the screen and having their ends fixed to the sides above the screen with the major portions of said chains resting loosely upon the upper surface of said screen, and means for reciprocating the screen in a longitudinal direction to impart up and down movement to the chains away from and against the screen.

5. In a machine of the character described, a riddle provided with an inclined screen having sides extended above the same, and a series of chains spaced from each other crosswise of the screen and having their ends fixed to the sides above the screen with the major portions of said chains resting loosely upon the upper surface of said screen, and means for reciprocating the screen in a longitudinal direction to impart up and down movement to the chains away from and against the screen, the chains being of a length greater than the width of said screen for the loose hanging of the chains between the sides of the latter.

1,266,642. AUTOMATIC MOTOR-STARTER. HERMON L. VAN VALKENBURG, Milwaukee, Wis., assignor to Industrial Controller Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 21, 1916. Serial No. 115,953. (Cl. 172—288.)

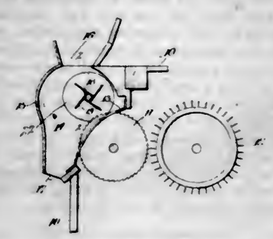
1. In an automatic starter, a starting resistance, a movable element for short circuiting said resistance, a control circuit, and an electromagnetic coil in said control circuit for operating said movable element, said control circuit having two parallel branches, one of said branches being closable by the closure of a normally open control switch, and the other branch having a normally closed holding switch held open by the movable short circuiting element when the latter is in non-running position, the



holding switch being a self closing switch and being detached from said short-circuiting element.

[Claims 2 to 4 not printed in the Gazette.]

1,266,643. COTTON-GIN. SAMUEL J. WAKEFIELD, Abbeville, S. C. Filed Jan. 25, 1917. Serial No. 144,437. (Cl. 13—9.)



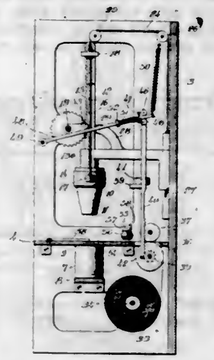
1. In a cotton gin adapted to operate upon previously ungimned cotton the combination with a saw cylinder, of ribs through which the saws project, a roll box in front of said ribs to receive the cotton to be ginned, a rotary impeller in said roll box adapted to turn the roll of cotton therein with substantial uniformity throughout its length bringing successive peripheral portions of the cotton roll in contact with the projecting portions of the saws and means for positively rotating said saw cylinder and impeller at different speeds the driving connections being such as to rotate the impeller at a speed less than the speed of the saws but greater than the speed at which a normal roll of cotton would be rotated by the engagement of the saws.

7. In a cotton gin adapted to operate upon previously ungimned cotton the combination with a saw cylinder, of ribs through which the saws project, a roll box in front of said ribs to receive the cotton to be ginned, an impeller in said roll box for positively engaging and rotating throughout its length a roll of cotton therein at a peripheral speed greater than that which would be given to a normal roll of cotton by the engagement of the moving saw teeth and for compressing that portion of the roll being engaged by the saws.

[Claims 2 to 6 not printed in the Gazette.]

1,266,644. MACHINE FOR MAKING PAPER CUPS. SAMUEL D. WASHBURN, Dorchester, Mass. Filed Mar. 15, 1911. Serial No. 614,581. (Cl. 93—60.)

2. A machine for forming cups from paper comprising a hollow cylindrical edged die, a pair of concentrically-arranged plunger dies adapted to fit respectively within and over said hollow die, means for supporting a flat paper blank between the said hollow die and the said pair of plunger dies when the dies are in open position, means for giving relative movement to said dies first to cause the inner plunger die and hollow die to coöperate to shape the paper blank into cup form and next to cause the outer plunger die to coöperate with the hollow die to turn the edge of the cup over, and means for feeding the blank into position between the dies.



4. A machine for forming cups from paper comprising a hollow cylindrical edged die, a pair of concentrically-arranged plunger dies adapted to fit respectively within and over said hollow die, means for supporting a flat paper blank between the said hollow die and the said pair of plunger dies when the dies are in open position, means for giving relative movement to said dies first to cause the inner plunger die and hollow die to coöperate to shape the paper blank into cup form and next to cause the outer plunger die to coöperate with the hollow die to turn the edge of the cup over, an actuator, connections between said dies and said actuator whereby upon the actuation of the said actuator the coöperative movements of the several dies are secured to form the cup, and mechanism acting thereupon to release the dies to permit them to return to open position.

11. A machine for forming cups from paper comprising a hollow cylindrical edged die, a pair of concentrically-arranged plunger dies adapted to fit respectively within and over said hollow die, the outer plunger die having an interior bevel at its lower edge, means for supporting a flat paper blank between the said hollow die and the said pair of plunger dies when the dies are in open position, and means for giving relative movement to said dies first to cause the inner plunger die and hollow die to coöperate to shape the paper blank into cup form and next to cause the outer plunger die to coöperate with the hollow die to turn the edge of the cup over.

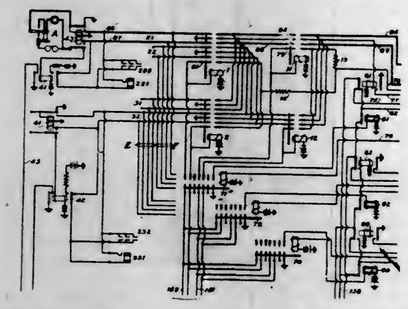
14. A machine for forming cups from paper comprising a hollow cylindrical edged die, a pair of concentrically-arranged plunger dies adapted to fit respectively within and over said hollow die, means for giving relative movement to said dies first to cause the inner plunger die and hollow die to coöperate to shape the paper blank into cup form and next to cause the outer plunger die to coöperate with the hollow die to turn the edge of the cup over, a bed plate to support a flat paper blank between the said hollow die and the said pair of plunger dies when the dies are in open position, an aperture to permit the passage of the dies, and positioning means to position a circular blank concentrically with said aperture.

[Claims 1, 3, 5 to 10, 12, and 13 not printed in the Gazette.]

1,266,645. TELEPHONE-EXCHANGE SYSTEM. HARRY G. WEBSTER, Chicago, Ill., assignor, by mesne assignments, to James R. Garfield, trustee, Cleveland, Ohio. Filed May 29, 1914. Serial No. 841,796. (Cl. 179—27.)

1. A telephone exchange system comprising a plurality of calling lines divided into sub-groups, a trunk line for said plurality terminating in a connecting plug at an op-

erator's position, a group of relays for said trunk line said relays corresponding individually to the sub-groups of lines, a group of relays for said trunk line said relays corresponding individually to corresponding lines in each sub-group, means for energising a relay of each of said groups to connect any calling line with said trunk line, a spring jack for said connecting plug, and means to maintain a locking circuit for an energized pair of said relays while said plug is resting in said spring jack.



2. A telephone exchange system comprising a plurality of calling lines divided into sub-groups, a trunk line for said plurality terminating in a connecting plug at an operator's position, a group of relays for said trunk line said relays corresponding individually to the sub-groups of lines, a group of relays for said trunk line said relays corresponding individually to corresponding lines in each sub-group, means for energizing a relay of each of said groups to connect any calling line with said trunk line, a spring jack for said connecting plug, and releasing means for an energized pair of said relays placed under control of an associated calling line following the connection and subsequent disconnection of said plug with said spring jack.

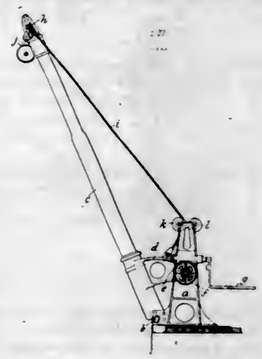
3. A telephone exchange system comprising a plurality of calling lines divided into sub-groups, a trunk line for said plurality terminating in a connecting plug at an operator's position, a group of relays for said trunk line said relays corresponding individually to the sub-groups of lines, a group of relays for said trunk line said relays corresponding individually to corresponding lines in each sub-group, means for energizing a relay of each of said groups to connect any calling line with said trunk line, a spring jack for said connecting plug, and a supervisory signal associated with said plug responsive to control by an associated calling line while said plug is resting in said spring jack.

37. A telephone call distributing system comprising a plurality of lines arranged in groups, a plurality of operators' positions, a plurality of trunks terminating at each position, selecting means for associating calling lines of each group with trunks at each position, circuits for starting such selecting means in operation extending from a plurality of groups of lines to each position, operator controlled means at each operator's position, and a device common to the position, for disabling all of the starting circuits extending to such position, rendered operable by such operator controlled means.

38. A telephone call distributing system comprising a plurality of lines arranged in groups, a plurality of operators' positions, a plurality of trunks terminating at each position, selecting means for associating calling lines of each group with trunks at each position, circuits for starting such selecting means in operation extending from a plurality of groups of lines to each position, a call signal individual to each trunk adapted to be displayed when a calling line is connected to such trunk, and a device rendered operable during the display of such signal for temporarily disabling all of the starting circuits extending to the position at which such trunk terminates.

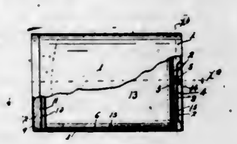
[Claims 4 to 36 not printed in the Gazette.]

1,266,646. CRANE. AXEL WELIN, London, England. Filed July 26, 1915. Serial No. 41,904. (Cl. 212—8.)



In combination, a crane arm capable of being luffed about a horizontal pivot and having a guide at its head, a frame comprising a vertical column mounted contiguous to said pivot, actuating mechanism mounted in said frame intermediate its ends, a connecting member connected to said davit at one end and movable inwardly and outwardly by said actuating mechanism, twin pulleys mounted at the head of said frame in contiguity to each other and having peripheral grooves in the same plane so located as to form a rope-channel, a rope passing over the guide at the head of the crane, through said rope-channel and connected to said movable connecting member intermediate its ends, whereby said rope is caused to swing from one pulley to the other and to bend in opposite directions to provide evenly adjusted compensating pulls on said rope in two directions during the movement of said connecting member in one direction.

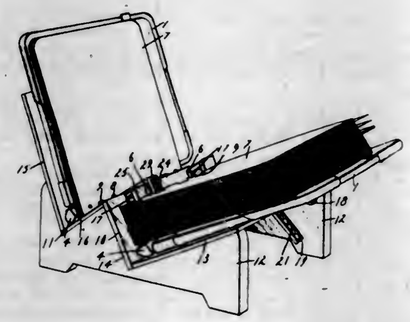
1,266,647. TRICK-CASE. VICTOR GOTTFRED WICKBERG, Kenyon, Minn. Filed May 1, 1916. Serial No. 94,524. (Cl. 46—41.)



The combination with a case having a main drawer and a compartment in the head of said main drawer, of a supplemental drawer mounted for movement within the case and main drawer and having a headed stud on its inner end, the head of the supplemental drawer extending into said compartment, a pair of laterally spaced guide plates in the inner end of the case and having a pair of alined holes through which said headed stud projects when the supplemental drawer is closed, and a bifurcated lock plate mounted between said guide plates for movement to and from a straddled position on the lock stud when the same is inserted through said two holes in the guide plates.

1,266,648. BINDER DEVICE. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Original application filed Nov. 26, 1915, Serial No. 63,566. Divided and this application filed Oct. 1, 1917. Serial No. 194,163. (Cl. 129—1.)

1. In a device of the class described, the combination of a pair of holders each comprising side and end members disposed with their end members adjacent, said end members having alined binding strip openings therein, said side members being adjustably mounted so that they may be adjusted to substantially horizontal positions or into position to coact with said end members, alined guide members on said end members, one of said guide members being removably mounted and provided with indicia, a post holder having pockets provided with indicia corresponding to the indicia of said removable guide member, separably associated binder members comprising covers, clamping members pivotally connected to said covers, said clamping members having opposed post sockets in their inner sides, binding strips extending between said binder members, binding posts of different lengths adapted to be removably engaged in said sockets or arranged in said holder, and sheets provided with a plurality of uniformly spaced notches open at their binding edges and a plurality of holes adjacent their binding edges uniformly spaced with each other and with said notches, so that there are registering notches alined with said openings in said end members and registering notches adapted to be engaged with said guide members, and registering holes, when said sheets are arranged in an alined body or in a laterally offset relation upon the binder members arranged in said holders.



9. In a device of the class described, the combination of a binder comprising separably associated binder members, and a pair of holders each comprising side and end members, the side members being mounted so that they may be adjusted to substantially horizontal positions or to an inwardly inclined relation coacting with said end members and the binder members supported thereon in either position.

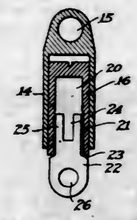
10. In a device of the class described, the combination of a pair of holders each comprising side and end members, one of said holders being provided with sheet body gaging indicia, a holder for posts of different lengths provided with indicia corresponding to the indicia of said holder, separably associated binder members, and binder posts of different lengths adapted to be removably engaged with said binder members.

13. In a device of the class described, the combination with loose sheets and binding means therefor comprising posts of different lengths, a support adapted to receive said sheets and binding means, said support being provided with gaging indicia for the sheets indicating posts suitable therefor, and a holder for posts of different lengths, provided with indicia corresponding to the indicia of said support.

14. In a device of the class described, the combination with loose sheets and binding means therefor comprising posts of different lengths, and a support adapted to receive said sheets and binding means, said support being provided with gaging indicia for the sheets indicating posts suitable therefor.

[Claims 2 to 8, 11, 12, 15, and 16 not printed in the Gazette.]

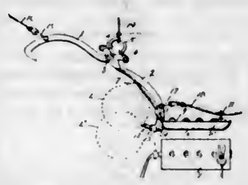
1,266,649. RETARDER FOR PHOTOGRAPHIC SHUTTERS. ANDREW WOLLENSAK, Rochester, N. Y., assignor to Wollensak Optical Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 9, 1916. Serial No. 113,912. (Cl. 74—69.)



2. A retarding dash pot for photographic shutters comprising a piston having an internally threaded bore and a plate piston rod having a slotted end fitted in said bore, said rod also having shoulders on opposite sides for limiting the inward movement of the plate.

[Claim 1 not printed in the Gazette.]

1,266,650. LOGGING GRAPPLE OR TONGS. ARTHUR J. ZIPP, Central Lake, Mich. Filed Oct. 30, 1917. Serial No. 199,256. (Cl. 57—9.)



1. In a structure of the class described, the combination with a pair of pivoted logging tongs, of a sliding support therefor comprising a pair of runners, a spreader link connecting said runners, upwardly extending arms pivotally secured to said runners for supporting the pivot of said tongs, means for connecting a cable to the upper end of said tongs, means for connecting a cable to the lower end of each of said tongs, and a spring pressed log engaging finger secured to and projecting beyond the prong of the rear tong.

2. In a structure of the class described, the combination with a pair of pivoted logging tongs, of a sliding support therefor comprising a pair of runners, a spreader link connecting said runners, upwardly extending arms secured to said runners for supporting the pivot of said tongs, means for connecting a cable to the upper end of said tongs, means for connecting a cable to the lower end of each of said tongs, and a spring pressed log engaging finger secured to and projecting beyond the prong of the rear tong.

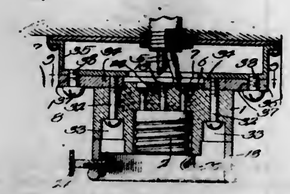
6. In a structure of the class described, the combination with a pair of pivoted logging tongs, of a sliding support therefor comprising a pair of runners, upwardly extending arms on which said tongs are mounted secured to said runners, means for connecting a cable to the lower end of each of said tongs.

[Claims 3 to 5 and 7 to 11 not printed in the Gazette.]

1,266,651. LIGHTING SOCKET AND HOLDER. HERMAN H. ASHINGER, South Bend, Ind., assignor to George Cutter Company, South Bend, Ind., a Corporation of Indiana. Filed Aug. 1, 1917. Serial No. 183,904. (Cl. 240—115.)

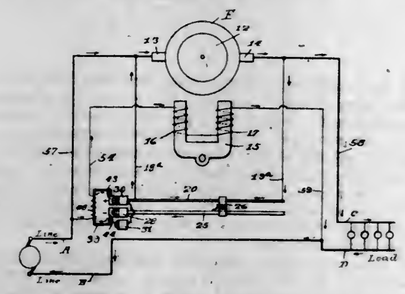
1. A lighting socket having a block of insulating material, lamp-engaging terminals housed within said block,

binding posts connected to said terminals and having means at the bottom of the block for attachment to the supply conductors, said block being vertically apertured to permit the supply conductors to pass down through the block to the lower end of the binding posts, a plate fastened to the top of said block and projecting beyond the edge of the block, and means on the projecting portion of said plate for attaching the same to a supporting object.



2. A combined lighting socket and reflector holder consisting of a block of insulating material having terminals for the lamp housed therein, binding posts having heads at the bottom of the block, said block being vertically apertured to permit the supply conductors to pass down through to the lower end of the binding posts, a reflector-holding ring having independent fastening means for securing it to the block, and means independent of the binding posts and independent of the means which fasten the reflector-holding ring to the block, for supporting said block.

1,266,652. ELECTRICITY-METER. JACOB W. BARD, Springfield, Ill., assignor to Sangamo Electric Company, Springfield, Ill., a Corporation of Illinois. Filed June 7, 1915. Serial No. 32,656. (Cl. 171—34.)



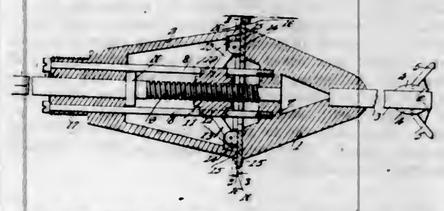
1. An electricity meter, comprising a suitable casing having a mercury chamber, an armature adapted to rotate therein, means coacting with a load current flowing through the meter to rotate said armature, means for supplying an auxiliary current, and means adjustable to direct more or less of said auxiliary current through the mercury chamber in either direction.

3. An electricity meter, comprising a suitable casing having a mercury chamber, an armature adapted to rotate therein, means coacting with a load current flowing through the meter to rotate said armature, means for supplying an auxiliary current, means having connections adjustable to direct said auxiliary current through the mercury chamber in opposition to the load current and means for varying the armature-rotating effect of said auxiliary current without changing the direction in which it flows through the mercury chamber.

22. An electricity meter, comprising a suitable casing having a mercury chamber, an armature adapted to rotate therein, means coacting with a load current flowing through the meter to rotate said armature, a thermo-couple for generating an auxiliary current, means for connecting the terminals of said thermo-couple with opposite sides of the mercury chamber, comprising a high resistance bar, a conducting member connected intermediately with said resistance bar and with one of the terminals of the thermo-couple, the end portions of said resistance bar being connected with opposite sides of the mercury chamber, a conductor connected with the other terminal of said thermo-couple, and an adjustable connection movable upon said resistance bar and conductor from one side to the other of the juncture of said conducting member with said resistance bar.

[Claims 2 and 4 to 21 not printed in the Gazette.]

1,266,653. EXPANSION-PLUG. WALTER S. BARLOW, Marysville, Tex. Filed June 27, 1917. Serial No. 177,290. (Cl. 57—9.)



1. In an expansion plug, a casing comprising conical members arranged base to base, an expanding member comprising sections slidably mounted between the conical members, and screw operated means for sliding said sections.

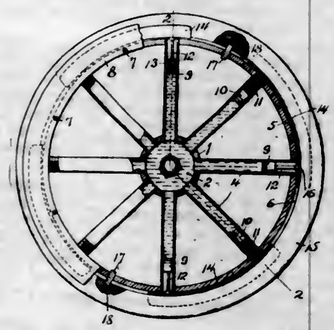
4. In an expansion plug, a casing, a threaded rod turning in the casing, a nut traveling on the rod, plates in the casing and sliding transversely thereof, and links connecting the plates to the traveling nut.

5. An expansion plug, comprising a sectional casing, means for securing the sections of the casing together, overlapping plates slidably mounted between the sections, and means for sliding the plates.

7. An expansion plug, comprising a casing composed of sections, means for binding the sections together, plates sliding between the sections, a threaded rod revolubly within the casing, a nut traveling on the rod, and means connecting the plates to the nut to reciprocate the plates to expand and contract the plug.

[Claims 2, 3, 6, and 8 not printed in the Gazette.]

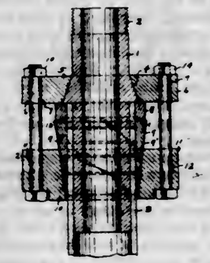
1,266,654. VEHICLE-WHEEL. JAMES C. BEALE and JAMES HAYES, Kansas City, Kans. Filed Mar. 29, 1917. Serial No. 158,395. (Cl. 152—29.)



1. In a vehicle wheel, a hub having a chamber, tubular spokes mounted on said hub and communicating interiorly with said chamber, a rim mounted on said spokes, pistons respectively slidable in said spokes, a tire encircling said rim and movable inwardly and outwardly relatively thereto, a liquid filling said chamber and said spokes to the inner ends of said pistons, a coil spring in one spoke and bearing against the outer end of the adjacent piston, a radial member in another one of said spokes bearing against the outer end of the adjacent piston, and means movably inwardly and outwardly with said tire for forcing said spring and said radial member inwardly.

[Claims 2 to 4 not printed in the Gazette.]

1,266,655. HOSE-CLAMP. CLARENCE D. BENNETT, Goose Creek, Tex. Filed Nov. 20, 1917. Serial No. 202,924. (285—85.)



1. In a device of the character described, the combination with a nipple of a hose fitted over one end of said nipple, a clamp member fitted over said hose, flexible slips spiraled in form, interposed between the clamp member and hose, whereby the hose is securely clamped on the nipple.

2. In a device of the character described, the combination with a nipple of a hose, fitted over the nipple end, a clamp member surrounding said hose, a plurality of flexible spiraled wedge shaped slips interposed between the clamp member and hose, a ring carried by the nipple and means connecting said ring and clamp member through which the latter may be adjusted toward and from the former.

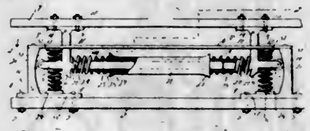
3. In a device of the character described, the combination with a nipple of a hose, one end of which is fitted over the nipple and a ring surrounding the free end of the hose, a plurality of flexible wedge shaped slips surrounding the hose and supported by said ring, a clamp member fitted over said slips and means for securing said clamp member in position on said slips.

4. In a device of the character described, the combination with a nipple, of a hose fitted over the nipple and a clamp member fitted over the hose, a plurality of flexible spiraled wedge shaped slips interposed between the clamp member and hose and adjusting means connecting the clamp member to the nipple and whereby said clamp member may be adjusted relative to said slips.

5. In a device of the character described, the combination with a nipple having an annular shoulder, of a hose fitted over one end of the nipple, a ring fitted over the nipple and resting against one side of said shoulder, a ring fitted around the hose end and resting against the opposite side of said shoulder, flexible wedge shaped spiraled slips, fitted around the hose and supported upon said last mentioned ring, a clamp member fitted around and clamping said slips and means connecting the first mentioned ring and clamp member.

1,266,656. VEHICLE SUSPENSION AND SHOCK-ABSORBER. FLETCHER O. BOSWELL, Philadelphia, Pa. Filed June 28, 1917. Serial No. 177,445. (Cl. 267—43.)

1. In a device of the character stated a strut beam, arcuate track members secured to said beam, reach rods attached to the upper ends of said track members, a body supporting bar, hangers secured thereto, swinging members pivoted to said hangers, outwardly projecting arms carried by said swinging members, rollers journaled in said arms and engaging the arcuate track members, inwardly projecting lugs formed with said swinging members, means for normally forcing said swinging members away from each other to hold the rollers in contact with the arcuate track members, and resilient means acting upon the outwardly projecting arms of the swinging members for normally holding them in a certain position.



3. A vehicle suspension and shock absorber comprising arcuate tracks, body supporting means, thrust members pivoted to said body supporting means and coacting with the arcuate tracks and a resilient telescoping element coacting with the thrust members for normally forcing them outward.

[Claims 2 and 4 not printed in the Gazette.]

1,266,657. PROCESS FOR THE MANUFACTURE OF ALCOHOL FROM GRAIN IN OPEN VATS WITH THE EMPLOYMENT OF SACCHARIFYING MUCORS. HENRI BOULARD, Paris, France. Filed Dec. 7, 1916. Serial No. 135,639. (Cl. 195—20.)

1. The process of making alcohol consisting in saccharifying liquid must with robust mucors and after the mucor filaments have attained a vigorous growth fermenting the resulting saccharine bodies with pure yeast thereby completing the conversion of the starch of the must into alcohol before harmful bacteria develop to hinder the action of the mucors and yeast.

2. The process of making alcohol consisting in providing from liquid must two portions differing in volume, sowing the portion of smaller volume with robust, saccharifying mucors and when the mucor filaments have developed therein introducing the same into the larger portion of must to therein develop and saccharify the starch of the second portion of must, and shortly after saccharification starts introducing pure yeast to ferment the saccharine matter as developed from the starch thereby increasing the velocity of saccharification and fermentation in the second portion and avoiding growth of bacteria harmful to the formation of alcohol.

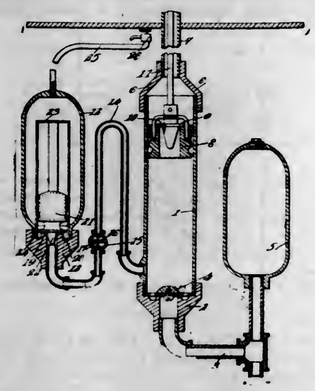
3. The process of making alcohol, consisting in providing from liquid must two portions having volumes of about 1 to 5, sowing the smaller portion with mucor Boulard No. 5 and when the mucor filaments have developed introducing the same into the larger of said portions to therein develop and saccharify the starch, shortly after saccharification starts introducing pure yeast to ferment the saccharine matter as developed from the starch thereby increasing the velocity of saccharification and fermentation in the second portion and avoiding growth of bacteria harmful to the formation of alcohol.

1,266,658. DRAIN STORAGE-PUMP. CARL F. BRANDENBERGER, Fort Madison, Iowa. Filed June 29, 1917. Serial No. 177,839. (Cl. 103—61.)

1. The combination with a pump having a piston for raising the liquid, and a check valve below the piston, of a drain storage chamber connected to the pump between said piston and valve, means for providing a restricted flow of liquid from the pump to said chamber and a free flow in the reverse direction, said chamber having an air vent, a valve controlling the flow of air through said chamber by way of the vent, and a float within said chamber controlling the last mentioned valve to open and close it when the float is raised and lowered, respectively.

4. The combination with a pump including a barrel, a piston working therein, and a check valve for supporting the liquid in the barrel, of a chamber at one side of the barrel, a pipe connected to the lower end of said chamber and to the barrel between the piston and valve, said pipe

having an upstanding loop between said chamber and valve providing a trap, a check valve in one vertical portion of said loop between the bend thereof and said chamber for restricting the flow of liquid from the valve to the



chamber, said chamber having an upper air vent, a valve for stopping the flow of air from said vent through said pipe, and a float within said chamber for opening the latter valve when the float is raised.

[Claims 2 and 3 not printed in the Gazette.]

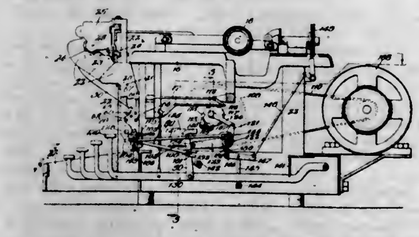
1,266,659. ILLUMINATING TOOTH-CLAMP. SAMUEL F. BRANNAN, Denver, Colo. Filed Aug. 16, 1915. Serial No. 45,800. (Cl. 32—20.)



1. A tooth clamp equipped with an incandescent electric lamp on one side, electric conductors connected with the lamp, the opposite side of the clamp having a support for conductors.

2. A dental appliance comprising a tooth clamp formed of flexible material adapted to engage opposite sides of a tooth of the patient, and an electric lamp detachably secured to the tooth clamp at one side thereof whereby the patient can close his mouth without removing the clamp from the tooth.

1,266,660. CALCULATING-MACHINE. JOHN BRICKEN, Chicago, Ill., assignor to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 24, 1914, Serial No. 826,833. Renewed Oct. 6, 1916. Serial No. 124,204. (Cl. 235—62.)



1. In a calculating machine, the combination of a source of power, a totalizer, an automatic total printing device adapted to print *seriatim* the total in said totalizer, means coöperating with said totalizer to determine the number printed by said total printing device, and means to render said source of power inoperative on said total printing device upon the completion of the printing of said total.

2. In a calculating machine the combination of: a set of totalizer gears; a set of feelers adapted to coöperate *seriatim* with said gears; and means associated with said gears determining a differential motion of said feelers.

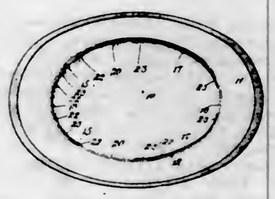
3. In an automatic total printing device; a totalizer; printing mechanism; automatic means to operate the same; and a set of feelers adapted to coöperate with said totalizer in all of its decimal places *seriatim* and thereby initiate the automatic operation of said printing device as determined by a particular one of said feelers.

4. In a calculating machine the combination of: a set of totalizer gears; a set of feelers adapted to coöperate with said totalizer gears *seriatim;* a set of digit keys; a set of latches associated with said digit keys; and means to automatically operate any of said latches upon displacement of the same.

5. In a calculating machine the combination of a set of displaceable elements which may be displaced to represent a number: a set of feelers adapted to coöperate with said displaceable elements *seriatim;* a set of digit keys; and means operating said digit keys *seriatim* in a sequence determined by the position of said displaceable elements.

[Claims 6 to 20 not printed in the Gazette.]

1,266,661. PRESSURE-RELIEVING AND VENTILATING ATTACHMENT FOR HATS. THOMAS L. BURNS, Oakland, Cal. Filed Mar. 30, 1916. Serial No. 87,826. (Cl. 2—32.)



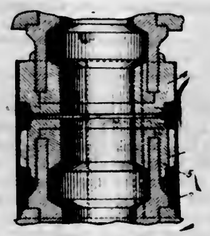
An attachment of the character described comprising a plurality of pads adapted to be secured at intervals within a hat at its head contacting zone, each pad being formed from a strip of relatively stiff material bent inwardly at its end portions against the inner face of said strip, and a filler section of a thickness corresponding to the thickness of the end portions secured to the inner face of said strip between said end portions and abutting the edges of the latter to present smooth outer and inner sides to the pad.

1,266,662. COMBINED NUT-LOCK AND SWAB-HOLDER. WILLIAM M. CADY, Edgewood Park, Pa., assignor to the Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 24, 1916. Serial No. 93,148. (Cl. 286—1.)

1. A swab holder for compressors comprising two overlapping cylindrical members inclosing the gland nuts, one member being sprung over the other in positioning the members.

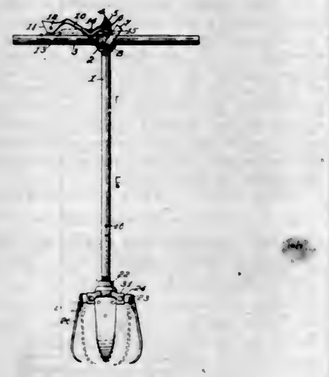
2. A combined nut lock and swab holder for compressors comprising a cylindrical member partially encircling the gland nuts and having a flanged portion adapted to engage the spanner wrench projections of the gland nuts and another cylindrical member opposing and overlapping the first member to entirely inclose the gland nuts.

3. A combined nut lock and swab holder for compressors comprising a cylindrical member partially encircling the gland nuts and having a flanged portion adapted to engage the spanner wrench projections of the gland nuts, another cylindrical member overlapping the first member, and projections on the first member for preventing rotative movement of the second member.



4. A swab holder for compressors comprising cylindrical members adapted to partially encircle the gland nuts of the compressor one member being adapted to overlap the other member and having outwardly flared portions at the edges to serve as finger grips in opening up said member.

1,266,663. POST-HOLE DIGGER. ANTHONY L. CIHAK, Waterloo, Iowa. Filed Sept. 17, 1917. Serial No. 191,794. (Cl. 255—65.)

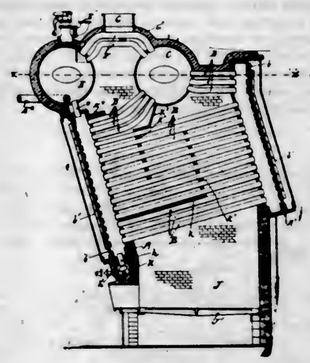


1. A post-hole digger, comprising a supporting-body, a plurality of excavating-blades hinged thereto, an operating rod movably connected to said blades, yieldable resilient means connected to said rod, an operating lever connected movably to said rod, locking-means for said lever to hold it in one position releasably, and locking-means for said rod to hold it in one position when the lever is released.

[Claims 2 and 3 not printed in the Gazette.]

1,266,664. STEAM-GENERATOR. LAWRENCE E. CONNELLY, Cleveland, Ohio. Filed Oct. 15, 1917. Serial No. 196,650. (Cl. 122—303.)

1. In a steam generator of the class described a pair of box-like headers, one of which is placed at a higher elevation than the other, a series of inclined water tubes connecting said headers, a transverse steam liberating drum above said inclined tube, a series of steam and water conveying tubes connecting the upper portion of the higher of said headers with said drum, and a series of down-flow water tubes connecting the lower portion of said drum with the upper portion of the lower header, another transverse steam and feed-water receiving drum over the lower header, means to connect the said steam and feed-water receiving drum with said lower header, and a series of steam conveying tubes connecting the upper portions of



said steam liberating drum and said steam and feed-water receiving drum, substantially as set forth.

[Claim 2 not printed in the Gazette.]

1,266,665. SAFETY DEVICE FOR COMBUSTIBLE-LIQUID CONTAINERS. WILLIAM I. DAVIS, Little Rock, Ark. Filed Feb. 23, 1916. Serial No. 80,002. (Cl. 220—121.)



1. A protective device of the class described, comprising a cylinder, shells within said cylinder arranged end to end, screens in said shells respectively each formed of a resilient mass of metallic wool, said shells being placed end to end and having the confronting ends thereof cut on a bias, screens closing the confronting ends of said shells and removable therefrom, reticulated disks closing the other ends of said shells and removable therefrom, and rings in said cylinder holding said shells end to end and coöperating with the confronting ends of said shells to prevent relative turning movement of the shells within the cylinder.

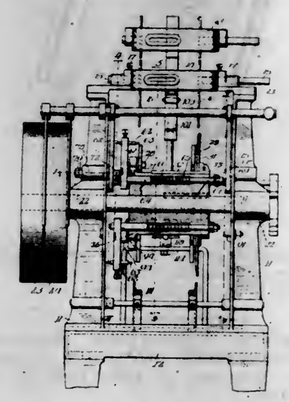
[Claim 2 not printed in the Gazette.]

1,266,666. CAN-HANDLING MACHINE. LAURENCE F. DILLON, Melrose Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 12, 1915. Serial No. 33,704. (Cl. 83—92.)

1. A can handling machine comprising, in combination, members forming horizontal open-sided and invertible pockets, can holding members adapted to enter the open end of cans resting in said pockets with their open ends disposed toward one side of said machine, and a member for receiving cans held by said holding means.

5. A can handling machine comprising, in combination, an invertible pocket, a can holding member movable in a direction parallel with the axis of the pocket toward said pocket and into the open end of a can resting in proper position therein, and yielding means for moving said member.

10. A can handling machine comprising, in combination, invertible pocket providing members, a can entering and holding device positioned adjacent each pocket and movable with said pocket forming members, said device being carried on a spring held stem normally retaining said device in inoperative position, spring pressed means for pushing said device against the action of the spring in said stem into the open end of a can properly arranged in said pocket, and means for retaining said device in position through a predetermined travel of said pocket.

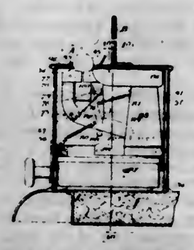


13. The combination of a can carrier rotary on a horizontal axis and having peripherally arranged can pockets, a can chute leading to the upper side of said carrier in which chute the cans descend by gravity one resting on another, a can stop arranged in opposition to those sides of the pockets along which the cans descend into the pockets so as to control the cans successively when they enter the pockets, and means for moving said stop against the can being seated and thereafter out of the path of the succeeding cans in the chute.

17. In a can sorting mechanism for can testing machines, in combination: a revoluble series of open-sided can pockets adapted to receive cans lying on their sides; can supporting means for said pockets each adapted to enter an opening in the end of a can and support the same when its pocket is inverted; devices for holding said can supporting means in such supporting position; and means for releasing said can supporting means when the pocket is in predetermined position for the discharge of a can therefrom.

[Claims 2 to 4, 6 to 9, 11, 12, and 14 to 16 not printed in the Gazette.]

1,266,667. LIQUID COOLING AND DISPENSING APPARATUS. CHARLES DOERING, JR., and HENRY H. DOERING, Chicago, Ill. Filed Feb. 7, 1916. Serial No. 76,632. (Cl. 194—70.)



1. In an apparatus of the class described, coin-controlled locking means, comprising a pair of spring-controlled pivoted levers adapted to oscillate toward and from each other, said levers being provided with heads having correlated coin-receiving slots of varying dimensions so that insertion of a predetermined coin will cause the head-portions of said levers to oscillate away from each other, in combination with a reciprocating member with which one of said levers normally engages.

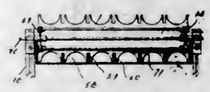
6. In an apparatus of the class described, a casing provided with a coin-receiving opening, a member reciprocatingly mounted in said casing, a pair of levers disposed intermediate of said member and said opening and pivoted so as to oscillate toward and away from each other, one of said levers being normally arranged in locking engagement with said member, the upper ends of said levers being provided with heads having correlated coin-receiving slots adapted to register with the opening in said casing, and a coin-controlling member operatively connected with said reciprocating member so as to pass intermediate of the lever heads and the coin-opening of the casing.

8. In an apparatus of the class described, a receptacle having a coin-receiving opening, a plunger slidably mounted in the receptacle pivotally mounted in the receptacle intermediate of the opening and said plunger, a pair of spring-controlled levers whereby the plunger is normally locked against outward movement, said levers being provided with series of correlated slots of different dimensions adapted to receive coins of varying dimensions whereby the levers are moved out of locking engagement with the plunger, and means whereby the composite slot of said levers to receive the coin is determined.

10. In an apparatus of the class described, a receptacle provided with a coin-receiving opening, a plunger reciprocatingly mounted in said receptacle, a lever pivotally mounted in the receptacle and normally locking said plunger against outward movement, said lever being adapted to be moved out of locking engagement with the plunger through the insertion of a predetermined coin, and a multiple-slotted member rotatably mounted in the receptacle beneath the coin-receiving slot whereby the requisite coin for moving the lever out of locking engagement with the plunger is determined.

[Claims 2 to 5, 7, and 9 not printed in the Gazette.]

1,266,668. FEEDER FOR FRUIT-SLICING MACHINES. GEORGE W. DREW, Oakland, Cal. Filed Nov. 15, 1916. Serial No. 131,574. (Cl. 193—1.)



1. A machine for positioning pieces of fruit, comprising a movable fruit supporting member, and vanes having notches along their outer edges, said notches being adapted to coöperate with said member to form openings through which said fruit may pass when properly positioned.

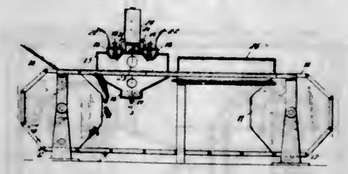
5. A machine for turning semi-pherical pieces of fruit flat side downward, comprising a feed conveyer, a movable fruit supporting surface positioned under the tail end of said conveyer, a plurality of division walls above said surface, vanes positioned above said surface and movable in a direction opposite the direction of travel of the fruit, and having semi-circular notches to allow said pieces to pass the vanes when positioned flat side down on said supporting surface.

7. A machine for turning substantially semi-spherical pieces of fruit flat side down, comprising a feed conveyer, a movable supporting member, a plurality of division walls forming runways for said pieces, vanes having semi-circular notches, said notches being adapted to coöperate with the surface of said member to form openings through which said pieces may pass when positioned flat side downwardly.

15. A machine for turning pieces of fruit comprising a belt conveyer, movable vanes positioned above said conveyer having notches adapted to coöperate with the surface of said belt to form openings through which said pieces may pass when turned in a given direction, and parallel division walls for directing said pieces toward said openings.

[Claims 2 to 4, 6, and 8 to 14 not printed in the Gazette.]

1,266,669. COATING-MACHINE. FELIX EBERHART, Newark, N. J., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Oct. 7, 1912. Serial No. 724,232. (Cl. 91—44.)



3. In a machine for lacquering sheet metal articles of various sizes and irregularly distributed, in combination: an endless conveyer consisting of flat and shelf like members, each member comprising links, pivots connecting said links and a flat section of open mesh wire connected with the said pivots, one limb of said conveyer when extended, forming a flat support; means for supporting and actuating said endless conveyer; a coating chamber inclosing the article-supporting limb of said conveyer; a chute for feeding sheet metal articles to the said limb of the conveyer in advance of said coating chamber; means within said chamber for applying lacquer in the form of a spray to sheet metal articles; means at the lower part of said chamber for collecting the excess lacquer; means for withdrawing fumes from the said chamber; and a drying oven inclosing the said supporting limb of the conveyer.

4. In a machine of the character described, in combination: an endless conveyer comprising a plurality of links pivotally connected together and covered by an open mesh wire whereby the conveyer is adapted to support articles of various sizes and irregularly distributed and arranged thereon; and means for applying a coating of liquid material to the articles while the same are on the conveyer; and a receptacle for excess coating arranged under the carrying limb of open mesh wire of said conveyer; substantially as specified.

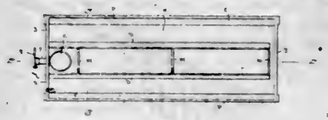
9. A machine for coating can ends, comprising a spraying station; a drying or baking station; and a surplus spray collecting receptacle; a conveyer member composed of relatively thin material forming an open mesh structure; means for placing on its surface in disarranged order can ends to be coated, said conveyer being movable past said spraying station, said collecting receptacle and through said drying or baking oven; means for projecting a spray of coating material onto can ends on said conveyer and onto the exposed parts of said conveyer and into said receptacle; and means for heating said baking oven to a temperature sufficient to harden and bake the sprayed coating on said can ends and on said conveyer during their passage therethrough.

[Claims 1, 2, 5 to 8, 10, and 11 not printed in the Gazette.]

1,266,670. WHEY-CHANNEL FOR CHEESE-VATS. THEOBALD G. FISHER, Omro, Wis. Filed Jan. 22, 1918. Serial No. 213,181. (Cl. 31—22.)

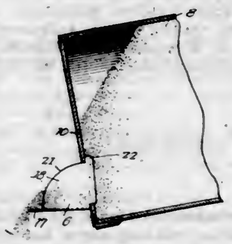
1. The combination with a cheese vat having a strainer positioned therein at one end and provided with a discharge pipe extending through the end of the vat, of a whey channel adapted to be positioned centrally and longitudinally within the vat so as to straddle said strainer.

2. A whey channel for cheese vats comprising a pair of spaced side walls, an end wall connecting said side walls at one end, and braces secured to said side walls for holding them in spaced relation to each other.



3. A whey channel for cheese vats comprising a pair of downwardly diverging side walls, an end wall connecting said side walls, and inverted U-shaped braces secured to said side walls to hold them in spaced relation to each other.

1,266,671. POURING-SPOUT AND CONTAINER. BEN K. FORD, Oak Park, Ill., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed Apr. 10, 1915. Serial No. 20,369. (Cl. 221—11.)



1. A hinged pouring spout for containers having wing members formed with extensions to the rear of the line of hinging and with hinge notches to engage directly with the edge of an opening of a container, said wing members being arcuate to maintain said notches in engagement with such edge.

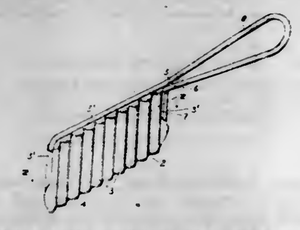
2. A hinged pouring spout for containers consisting of a central member which forms the bottom of the spout and is adapted to serve as a closure for the container, and two wing members which form the sides of the spout, said wing members being formed with hinge notches contiguous to the central member adapted to engage directly with the edge of an opening of the container and said wing members being arcuate to hold the hinge notches in engagement with such edge, and having extensions to the rear of said notches, a lip to engage on the outside of the container when the spout is closed and stops to engage within the container to limit the opening of the spout.

3. The combination of a container having an opening into which extends a tongue 13 forming a hinge notch at each side of said tongue, and a spout having wing members formed with extensions to the rear of the line of hinging and with hinge notches to engage directly in the notches of said opening, said wing members being arcuate and said spout having means for limiting its opening and closing.

1,266,672. GARNISHING-TOOL. JOHN C. FORSTER, Pittsburgh, Pa. Filed Dec. 9, 1916. Serial No. 135,988. (Cl. 146—7.)

1. A slicing knife consisting of an approximately straight thin sheet metal blade transversely fluted from end to end with the flutes extending from one longitudinal edge to the other, and a handle projecting in line with said blade and beyond an upper corner thereof and provided with a stiffening member extending the entire length of said blade and at its outer end bent so as to lie within the extreme outer flute of said blade, said handle also being

provided with an angular member lying within the inner flute of said blade.



2. A slicing knife consisting of a sheet metal blade transversely corrugated to form a longitudinally fluted cutting edge, and a handle projecting in line with said blade beyond an upper corner thereof and at right angles to the corrugations of the blade; said handle being provided with blade securing portions standing at right angles to the major axis of the handle and secured within the extreme outer corrugations of the blade.

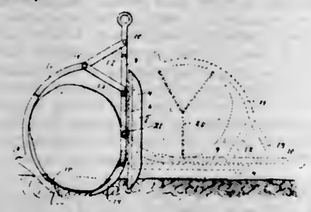
1,266,673. PAPER-MAKING MACHINE. JOHN GALIPEAU, Montreal, Quebec, Canada, assignor of one-half to John H. Garth, Montreal, Quebec, Canada. Filed May 12, 1917. Serial No. 168,322. (Cl. 92—51.)



1. In a paper-making machine of the type described the combination with a traveling screen and a suction box acting upon the screen and having its suction connection at one end; of means combined with the suction connection whereby the box is reciprocated across the direction of travel of the screen.

[Claims 2 to 8 not printed in the Gazette.]

1,266,674. STONE-PULLER. EDWIN GAUTHIER, Mattoon, Wis. Filed Aug. 29, 1917. Serial No. 188,753. (Cl. 254—132.)



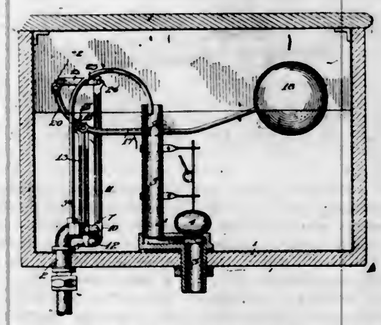
1. In a stone puller, the combination of a carriage, a lifting member fixedly carried thereby and provided with outwardly projecting spaced apart ends for engaging the rock, a clamping and lifting member pivotally secured to the forward portion of the carriage and coöperating with said lifting member to lift the rock from its bed onto the body of the carriage, and means at the forward end of the carriage for applying power thereto.

5. In a stone puller, the combination of a carriage including runners, lifting members mounted on the carriage and having outwardly extending ends projecting from the rear end thereof, supports extending upwardly from the carriage, a curved clamping and lifting member pivotally secured to said supports at their upper portions and coöperating with said lifting members on the carriage, said clamping and lifting member having a toothed end and a projection for facilitating driving into the soil, and a draw bar at the forward end of the sled for applying power thereto.

7. In a stone puller, the combination of a carriage, lifting members mounted on the carriage and having outwardly extending ends projecting from the rear of said carriage, a curved clamping and lifting member pivotally secured to said carriage and coöperating with the lifting members on the carriage, said clamping and lifting member having a projection for facilitating driving into the soil, and means for applying power to the front end of the carriage.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,266,675. REFILLING VALVE MECHANISM FOR FLUSH-TANKS. EDWIN P. GAYLORD, Rochester, N. Y. Filed Mar. 2, 1916. Serial No. 81,603. (Cl. 137—104.)



2. The combination with a tank, of a valve having a slotted end portion and governing the supply to said tank, a comparatively long controlling lever pivoted at a point in close proximity to the valve and having an operating surface in engagement with said slotted portion of the valve, a stationary support having a socket at its upper end, a float lever having a slotted portion within which the controlling lever moves and a pivot or bearing member adapted to removably engage said socket, the float lever embodying a comparatively long arm carrying a float member and a comparatively short arm on the opposite side of its pivot, and a connecting member pivoted to said short arm and provided with means adapted to removably engage a socket in the outer end of said controlling lever.

5. The combination with a tank, of a valve governing the supply to the tank, a comparatively long controlling lever extending generally in an upward direction and operatively associated with the valve, an upstanding stationary support, a float lever removably pivoted on said support and embodying a comparatively long arm having a slotted portion straddling the controlling lever and a comparatively short arm on the opposite side of its pivot, and a link connecting said short arm with the outer end of said controlling lever and removable from one of the levers.

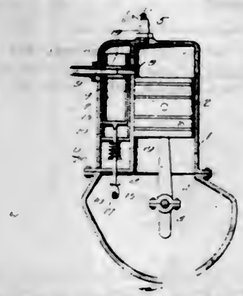
6. The combination with a tank, of a valve governing the supply to the tank, a comparatively long controlling lever extending generally in a vertical direction and operatively associated with the valve, a support extending upwardly above the valve and terminating below the top of the controlling lever, a float lever pivoted upon said support embodying a comparatively long float carrying arm on one side of the support and a comparatively short arm on the opposite side of said support and a link connecting the short arm of said float lever with said controlling lever at a point above the top of the support.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,266,676. INTERNAL-COMBUSTION ENGINE. HOWARD D. GIRVAN, Beaver Falls, Pa. Filed June 5, 1917. Serial No. 172,899. (Cl. 123—188.)

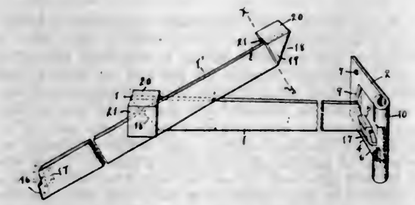
In an internal combustion engine, a cylinder having a valve chamber adjacent thereto and provided with diametrically opposite ports communicating with the cylinder and

with a source of fuel supply, a fixed sleeve in the chamber and having ports registering with the ports of the chamber, a valve of cylindrical form mounted to reciprocate within the sleeve and having a transverse port for placing the ports of the sleeve in communication with each other,



the inner ends of the valve and the sleeve being closed, and the valve having a stem extending through the closed end of the sleeve, said valve being adapted to be moved in one direction by a cam, and a spring arranged between the stem and the closed end of the sleeve for moving the valve in the opposite direction.

1,266,677. ADJUSTABLE CLOSET-ROD. DAVID D. GOOD, Philadelphia, Pa. Filed Sept. 8, 1914. Serial No. 860,652. (Cl. 211—16.)



1. In an adjustable closet rod the combination of supporting plates, supporting lugs thereon; consisting of a horizontal base a sloping face a horizontal catch; and flat rods with inclined rectilinear tangs engageable by the said lugs and catches substantially as described.

4. In an adjustable closet rod the combination of two flat rods, their rectilinear hooks each adapted to engage the opposite rod when brought to the horizontal, inclined rectilinear supporting tangs engageable by supporting lugs and horizontal catches adapted to secure them in place when the two rods are brought together in a horizontal position as herein described.

[Claims 2 and 3 not printed in the Gazette.]

1,266,678. ILLUMINATING DEVICE FOR VEHICLES. CARL FREDERICH GROMANN, New York, N. Y. Filed May 26, 1916. Serial No. 99,961. (Cl. 240—37.)

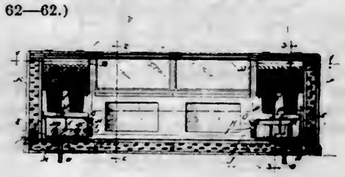


2. In a device of the character described the combination of a casing, an oil lamp in the casing, an electric bulb in the casing, a selenium cell in the casing, a shade for the selenium cell positioned to screen it from the light of the electric bulb, an electromagnet operated by said selenium cell and a switch operated by the electromagnet to light the said bulb.

3. In a device of the character described the combination of a casing, an oil lamp in the casing, an electric bulb in the casing, a selenium cell in the casing, a shade for the selenium cell positioned to screen it from the light of the electric bulb, an electric magnet operated by by said selenium cell, a switch operated by the electromagnet to light the bulb, a source of electric current for the electric bulb and an electric bell in circuit with said source of electric current and said switch.

[Claim 1 not printed in the Gazette.]

1,266,679. REFRIGERATOR. GUSTAV J. GRUENDLER, St. Louis, Mo. Filed Nov. 3, 1916. Serial No. 129,853. (Cl. 62—62.)



1. A refrigerator comprising a casing, a container for ice and salt having an opening through which brine may drain, a brine tank, a trough, a drip-pan adapted to catch the brine from said container and discharge it into said trough, an inlet pipe having its lower end connected to said tank and its upper end adapted to receive the brine from said trough, an overflow pipe for said tank, and baffles in said tank between said overflow pipe and said inlet pipe.

2. A refrigerator comprising a casing, a container for ice and salt having an opening through which brine may drain, a brine tank, a trough, a drip-pan adapted to catch the brine from said container and discharge it into said trough, an overflow pipe for said trough, an inlet pipe having its lower end connected to said tank and its upper end adapted to receive the brine discharged from said overflow pipe of said trough, a sealed overflow pipe for said tank, and vertical baffle plates in said tank between said overflow pipe and said inlet pipe.

1,266,680. BELT-BUCKLE. CYRUS M. HALL, Houston, Tex. Filed Mar. 27, 1915. Serial No. 17,497. (Cl. 24—79.)



The combination with a belt, of an oblong metallic shell rectangular in cross section, the sides of said shell being provided with oppositely disposed thickened portions, forming bosses, a partition extending from end to end thereof, forming slots on opposite sides of the partition, for the reception of the belt ends, one end of said belt being inserted into one of the slots, a set screw threaded through the thickened portion of the wall of the shell and engaging with said end and permanently securing it in the shell, the other end of the belt passing loosely through the other slot, a set screw having an enlarged head, forming a disk threaded through the thickened portion of the other wall of said shell and whose inner end engages against the belt end to secure it against detachment from the slot.

1,266,681. FLAG-HOLDER. ROBERT HARVIE, Toronto, Ontario, Canada. Filed June 4, 1917. Serial No. 172,574. (Cl. 248—37.)

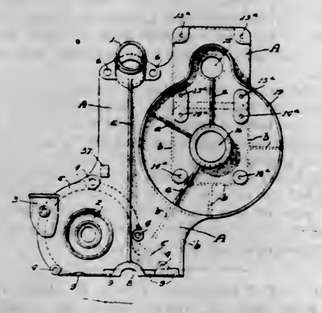
In a flag holder, a plate having a rounded upper end and narrowing in width to a comparatively narrow lower end

and being crimped longitudinally adjacent to said upper end, said lower end being turned at right angles, flaps projecting outwardly from the side edges of said plate and folding inwardly, a plate fitting against the aforesaid plate and held in engagement therewith by said flaps, said plate



being crimped correspondingly to the first mentioned plate, openings formed by the registering slots of each of said plates, flags secured in said openings, bolts and nuts securing together said plates and a strap for suspending the whole.

1,266,682. STARTING AND LIGHTING SYSTEM. JOHN O. HEINZE, Springfield, Ohio, assignor to The John O. Heinze Company, Springfield, Ohio, a Corporation of Ohio. Filed Mar. 1, 1916. Serial No. 81,398. (Cl. 123—195.)



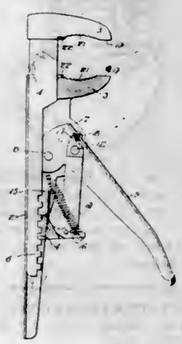
1. In a system of the character described, the combination with an automobile engine and its crank shaft, of a main support, said support being provided with points of attachment corresponding to established points of attachment in relation to said engine and its crank shaft, starting devices located on said support comprising gears, and a housing for said gears integrally formed with said support.

2. In a system of the character described, the combination with an automobile engine and its crank shaft, of a main support, said support being provided with points of attachment corresponding to established points of attachment in relation to said engine and its crank shaft, starting devices located on said support comprising gears, a housing for said gears integrally formed with said support, and an integrally formed timing gear housing on said support.

3. In a system of the character described, the combination with an automobile engine and its crank shaft, of a main support, said support being provided with points of attachment corresponding to established points of attachment in relation to said engine and its crank shaft, starting devices located on said support comprising gears, a housing for said gears integrally formed with said support, a second integrally formed housing on said support for timing gears, and an integrally formed oil receptacle on said support.

4. In a system of the character described, the combination, with an automobile engine and its crank shaft, of a support provided with points of attachment corresponding to originally established points of attachment on said engine for a gear cover and water coupling, a starting motor, a generator and a fan located on said bracket, driving devices for the crank shaft, generator and fan also on said bracket, and a timer housing and water coupling also formed on said support.

1,266,683. TOOL. WILLIAM F. HOMRIGHAUSEN, San Leandro, Cal., assignor of one-half to A. S. Weaver, San Leandro, Cal. Filed June 19, 1917. Serial No. 175,588. (Cl. 81—85.)



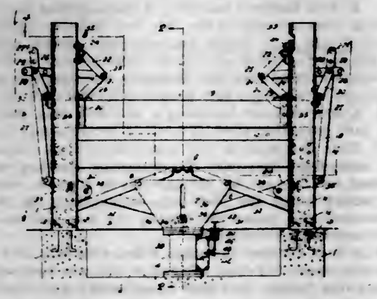
1. A tool of the class described, comprising a handle having a U-form section, a jaw secured to both sides of said handle and spaced from the bottom wall thereof to provide an aperture between the jaw and the walls of said handle, a notched shank slidably arranged within said handle and projecting through said aperture, a jaw on said shank coöperating with said first jaw, a grip lever of U-form section, the side walls thereof extending within the side walls of said handle and pivoted thereto, a dog pivoted to said grip lever at one end and adapted to engage the notches in said shank with the other end, whereby movement of said grip lever toward said handle moves said shank to close the jaws, and a coiled tension spring for retaining the dog in operative engagement with said notches and for moving said slidable shank to open said jaws.

2. A tool of the class described, comprising a handle, a jaw on said handle, a notched shank slidable in said handle, a jaw on said shank opposed to said first named jaw, a grip lever pivoted to said handle, a dog pivoted to said grip lever and adapted to engage in the notches on said shank whereby a closing movement of said grip lever toward said handle moves said shank to close said jaws, and a coiled tension spring for retaining the dog in operative engagement with said notches and coincidentally effecting an opening movement of said grip lever and a movement of said shank to separate said jaws.

1,266,684. POWER-PRESS. ROBERT A. HORNE, Birmingham, Ala. Filed Nov. 13, 1917. Serial No. 201,814. (Cl. 78—41.)

1. A press comprising a frame, a bed member mounted in the frame, a movable presser member guided in the frame, toggles for imparting motion to the presser member, power multiplying levers adapted to operate the toggles to move the presser member, and a common power cylinder for operating said leverage mechanism.

2. A power press of the character described comprising a frame work of vertical structural members, a horizontal bed member cross connected to the upright members, a base to which the upright members are anchored, a presser member guided by said upright members, toggles connecting the presser member to the upright members, a power element, power multiplying transmission levers between said element and toggles to open and close the latter and operate the presser member, and supports for said connections.



3. A power press of the character described comprising a frame work of vertical structural members, a horizontal bed member cross connected to the upright members, a base to which the upright members are anchored, a presser member guided by said upright members, toggles connecting the presser member to the upright members, means to vary the point of connection of the toggles to said upright members, a power element, power multiplying lever forming transmission connections between said element and toggles to open and close the latter and operate the presser member, and supports for said connections.

4. A press comprising a frame, a bed member mounted in the frame, a movable presser member guided in the frame, toggles for imparting motion to the presser member, a power multiplying leverage mechanism adapted to operate the toggles to move the presser member, a common power cylinder for operating said leverage mechanism, and means to vary the length of stroke of the leverage mechanism to increase its power and modify the toggle movement.

5. A press comprising a frame, a bed member mounted in the frame, a movable presser member guided in the frame, toggles for imparting motion to the presser member, a power multiplying leverage mechanism adapted to operate the toggles to move the presser member, a common power cylinder for operating said leverage mechanism, means to vary the length of stroke of the leverage mechanism to increase its power, and means to shift the position of the toggles relatively to said bed member.

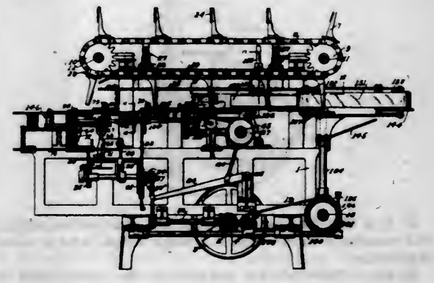
[Claims 6 to 12 not printed in the Gazette.]

1,266,685. SHIPPING AND MARKETING CONTAINER. JOHN M. HOTHERSALL, Brooklyn, N. Y., assignor to American Can Company, New York, N. Y., a Corporation of New Jersey. Filed June 22, 1914. Serial No. 846,415. (Cl. 220—76.)



A container comprising a body member formed with a bead around its open end; and a cover member formed with an inner outwardly acting vertical friction wall of slightly greater diameter than the inner diameter of said bead and adapted to engage the inner side of said bead, and with an outer inwardly acting friction wall extending below the said inner friction wall, said outer friction wall being normally inclined downwardly and inwardly from the vertical when it is free and being adapted to engage the outer side of the said bead of the body and be thereby forced outwardly to substantially vertical position, while the bead is at the same time pressed inwardly, this action taking place in advance of the engagement of the bead by the inner friction wall of the cover, and said outer friction wall having strong inward pressure on the exterior of the vessel below its bead, to make a tight and secure closure without being interlocked with the container body.

1,266,686. WRAPPING AND SEALING MACHINE. HARRY L. JOHNSON, Battle Creek, Mich., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Filed Sept. 22, 1916. Serial No. 121,578. (Cl. 93—2.)



1. In a structure of the class described, the combination of a sealing conveyer, a wrapper feed means, means for wrapping a wrapper about the sides of an article, rotary folders disposed at the sides of the way and provided with pairs of fingers adapted to successively fold the bottom and rear end flaps, plates between which the articles are carried adapted to fold the front end flaps, said plates being disposed so that that the top end flaps project over the same, reciprocating folder members adapted to fold the top end flaps downwardly at the outside of said plates, means for heating said top end flaps while they are separated from the article by said plates, and means for pressing said heated flaps upon the other end flaps.

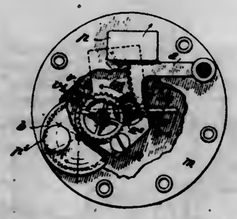
4. In a structure of the class described, the combination of a sealing conveyer comprising a conveyer way and coacting propelling flights, a feed conveyer disposed transversely to and in a plane below said sealing conveyer, a vertically reciprocating feed plunger disposed at the side of said feed conveyer to deliver to said sealing conveyer, a shifting plunger for transferring the articles from said feed conveyer to said feed plunger, means for delivering a wrapper between said sealing conveyer and said feed plunger disposed so that it is engaged by the article to be wrapped on the delivery stroke of said feed plunger, means for controlling the delivery of wrappers including said shifting plunger and a coacting member actuated by the articles delivered by the feed conveyer, a reciprocating wrapping member disposed when in initial position in a spaced relation to the end of said sealing conveyer and so that the article is carried between it and the end of the conveyer way and the wrapper wrapped over the top and against the sides of the article, and means for actuating said wrapping member wrapping one side of the wrapper partially across the bottom of the article, said wrapping member being provided with a pusher disposed in a spaced relation to the edge of the wrapping member to engage the article and push it partially upon the conveyer way wrapping the other side of the wrapper partially across the bottom thereof.

6. In a structure of the class described, the combination of a conveyer comprising a conveyer way, means for wrapping a wrapper about an article forming a side fold in said wrapper and delivering the article and wrapper upon said way with the fold spacing the article from said way, means for heating a portion of said conveyer way, means for moving the article and wrapper along said way, means for folding the front, rear and bottom end flaps of said wrapper, means for folding the top end flaps of said wrapper downwardly, means for heating said

top end flaps, means for spacing said top end flaps from said folded end flaps while being heated, and means for pressing the heated end flaps against the folded end flaps, in the order named.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,266,687. WEIGHT-OPERATED MECHANICAL TIME-FUSE. ARTHUR JUNGHANS, Schramberg, Germany. Filed Feb. 4, 1914, Serial No. 816,598. Renewed Mar. 21, 1918. Serial No. 223,800¼. (Cl. 102—36.)



1. In a time-fuse for projectiles, the combination of ignition means, a clock-work, a driving weight and a mixed escapement.

2. In a time-fuse for projectiles, the combination of ignition means, a clock-work, a compensated centrifugal driving weight, and a mixed escapement.

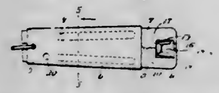
1,266,688. ARM-SLING. JOHN C. KASSNER, Manitowoc, Wis. Filed Feb. 23, 1918. Serial No. 218,828. (Cl. 128—52.)



1. A sling of the class described comprising a sheet of material having a head opening in its intermediate part, said intermediate part being adapted to rest upon the user's shoulders, said sheet including a back engaging portion, a front portion, an arm support carried by the front portion, and means for detachably connecting the edges of said front and back engaging portions below the arm pits of the wearer.

[Claim 2 not printed in the Gazette.]

1,266,689. POCKET DOOR-LOCK. GEORGE KINGHORN, Rockyhill, Conn. Filed June 11, 1917. Serial No. 173,932. (Cl. 16—8.)



1. A door fastener including a case, locking bars projecting from one end of the case and movable lengthwise therein, interengaging locking members on the meeting edges of the locking bars, and means upon the case and locking bars and independent of said locking members to cause the bars to be separated by reason of their lengthwise movement.

2. A door fastener including a case, locking bars projecting from one end of the case and movable lengthwise therein, said bars having interengaging locking members to prevent endwise movement one independently of the other, and means upon the case and locking bars to actuate the latter and including guideways angularly arranged with respect to each other on one part to receive actuating pins from the opposite part.

3. A door fastener including a case, locking bars projecting from one end of the case and movable lengthwise therein, said bars having interengaging locking members on the meeting edges thereof, and locking pins projecting from the locking bars into angularly arranged grooves in said case to move the bars toward and from each other.

4. A door fastener including a flat, thin case, flat locking bars projecting from one end of the case and located with their flat faces in the same plane, dogs located on the ends of the bars, each dog projecting over and resting against the face of the bar opposite to that on which it is located when the dogs are substantially in lateral alinement, and means for locking the bars against relative lengthwise movement.

5. A door fastener including a flat, thin case, flat locking bars projecting from one end of the case and movable lengthwise therein, said bars being located with their flat faces in the same plane, dogs projecting from opposite faces of the bars, each dog being undercut to overlie, rest against, and receive the end of the bar opposite to the one on which it is located when the dogs are substantially in lateral alinement, and means for locking the bars against relative endwise movement.

[Claims 6 to 8 not printed in the Gazette.[

1,266,690. ADJUSTABLE WINDOW-GRATING. MARYA KOSTUDOWICZ, Chicago, Ill. Filed Dec. 1, 1916. Serial No. 134,415. (Cl. 20—71.)

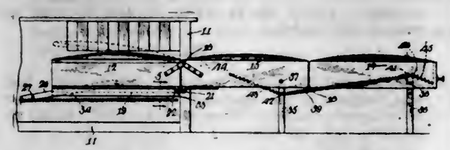


A device of the type described, including a resiliently cushioned and incased member or guard depressible within its inclosing casing, and equipped at its lower corners with blocks having sockets, a resiliently cushioned latch-bar having projecting therefrom bolts adapted to enter or engage said sockets, when the guard is elevated, said latch-bar also having means for the disengagement of its bolts from said sockets, said guard having in its end-members spaced notches also adapted to be engaged by said bolts when said guard is adjusted at different elevations.

1,266,691. CHAIR. MAX KRAUSE, Chicago, Ill. Filed Feb. 17, 1917. Serial No. 149,170. (Cl. 5—48.)

1. In an article of furniture the combination with a frame, of a back, a seat hinged to the back, a foot piece hinged to the seat and foldable under the same, tracks in the frame, and supports for the back and seat positioned to travel on said tracks.

2. In an article of furniture the combination with a frame, of a back, a seat hinged to the back, a foot piece hinged to the seat and foldable under the same, a projection on the back, and a stud on the foot piece interengaged with the projection whereby the back is normally held at an angle to the seat and foot piece.

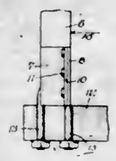


4. In an article of furniture the combination with a frame, of a back, a seat hinged to the back, a foot piece hinged to the seat and foldable under the same, tracks in the frame, supports for the back and seat positioned to travel on said tracks, supporting legs pivoted at opposite sides of said seat, similar legs pivoted at the opposite sides of said foot piece, resilient elements positioned to extend said legs downwardly when the seat and foot piece are alined, and resilient members positioned to aline the legs respectively with the seat and foot piece when the latter is folded under the seat.

6. In an article of furniture the combination of a seat, a foot piece hinged to the foot piece to fold thereunder, a leg pivoted at the side of the seat, a leg pivoted at the corresponding side of the foot piece, a strong tension spring secured at one end to one of said legs below its pivot and to the other leg above its pivot, a relatively weak tension spring fastened at one end to the seat and at the other end to the seat leg to oppose said strong spring, and a similar weak tension spring fastened at one end to the foot piece and at the other end to the foot piece leg to oppose said strong spring.

[Claims 3 and 5 not printed in the Gazette.[

1,266,692. WAGON-STAKE. ALEXANDER F. KUHNEN, Dixon, Ill., assignor to American Wagon Company, Chicago, Ill., a Corporation of Illinois. Filed May 7, 1917. Serial No. 166,929. (Cl. 21—54.)



1. As a new article of manufacture, a wagon stake comprising a wooden rod and a two part metal sleeve on the lower end of said rod, rivets joining together the parts of said sleeve and serving to clamp them onto the stake, and a plurality of downwardly depending threaded pins integrally formed with the sections of said sleeve, whereby the rod and sleeve are rigidly joined together and constitute a unitary wooden wagon stake with suitable attaching means on its lower end, substantially as described.

2. As a new article of manufacture, a unitary wagon stake comprising a wooden rod and a metal sleeve on the lower end thereof, said metal sleeve comprising a U-shaped section and a flat plate riveted together on their edge portions and serving to rigidly clamp the rod between them, and suitable attaching means on said sleeve for rigid attachment to a wagon body, substantially as described.

3. As a new article of manufacture, a unitary wagon stake comprising a wooden rod and a metal sleeve on the lower end thereof, means for clamping said sleeve rigidly onto the rod, and means for rigidly connecting the sleeve to the wagon bed, substantially as described.

4. As a new article of manufacture, a unitary wagon stake comprising a wooden rod and a metal sleeve on the lower end thereof, and suitable attaching means on said sleeve for attachment to a wagon bed, the sleeve being rigidly mounted on the rod and being non-removable therefrom without destruction of the parts, substantially as described.

1,266,693. [WITHDRAWN.]

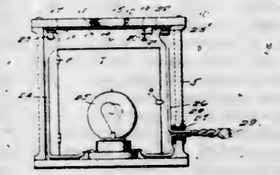
1,266,694. PICTURE-FRAME LEG. CARL H. LIEBER, Indianapolis, Ind., assignor to The H. Lieber Company, Indianapolis, Ind., a Corporation of Indiana. Filed May 1, 1916. Serial No. 94,574. (Cl. 40—116.)



1. As an article of manufacture, an individual comparatively thin picture-frame leg, designed for use in pairs by independent attachment to the rear faces of side bars of picture frames, each leg comprising a substantially horizontal base member, and an upwardly-extending brace member of material greater upward extent than the width of the lower member of the picture frame to which the leg is to be attached, said brace member having a forward face designed for application to the rear face of the side bar of the picture frame and formed to receive a fastening member capable of entering such side bar, and the base member having an upper face formed to receive and support the lower bar of the picture frame, and having a portion formed to upwardly overlap the lower edge of said lower bar.

[Claim 2 not printed in the Gazette.]

1,266,695. EGG-TESTER. CHARLES C. MCCORMICK, Aurora, Mo. Filed Mar. 12, 1917. Serial No. 154,344. (Cl. 99—6.)



The combination with a casing provided with an egg receiving opening; of a relatively narrow strip of resilient sheet metal arranged within the casing and having one end thereof secured to the casing, said strip being provided between its ends with a laterally enlarged portion disposed near and beneath the egg receiving opening and projecting laterally beyond the same for spanning the wall thereof to function as a light obstructing means, said laterally enlarged portion being provided with an opening having communication with said egg receiving opening; a stationary contact secured to the casing and arranged near the opposite end of the strip to contact therewith; an electric lamp arranged within the casing; and a circuit connecting the strip, stationary contact, and electric lamp.

1,266,696. HOLLOW BODY. EWING MCGRUER, Jr., Braeside, Clynder, Scotland. Filed Mar. 25, 1916. Serial No. 86,576. (Cl. 144—309.)

1. A hollow wooden body having the grain of the wood extending longitudinally thereof, consisting of a plurality of boards bent and fitted one within the other, the natural grain rings of one board lying right-hand, and the natural grain rings of the adjacent board lying left-hand.

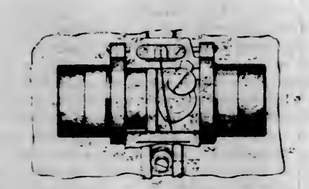
6. The process of forming a hollow body, which consists in producing a quarter-sawed board having the end grain extending at an angle of substantially 45 degrees



to the sides of the board, bending the same to cause the edges to abut, and securing the abutting edges.

[Claims 2 to 5 and 7 to 10 not printed in the Gazette.]

1,266,697. MILKING-MACHINE. ARTHUR C. MACARTNEY, Chicago, Ill., assignor to Pine Tree Milking Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 14, 1917. Serial No. 154,658. (Cl. 31—101.)



1. A pulsator having a reciprocating piston with passages therein for conducting the motive fluid by which the piston is reciprocated, a reversing valve mounted upon and traveling with said piston for controlling the flow of motive fluid through said passages, said valve being movable relatively to said piston, and a non-movable shoe, the valve having an arm extending from it and traveling along said shoe and traveling beyond the end of it to become released therefrom.

3. A pulsator having a reciprocating piston provided with passages for conducting the motive fluid by which the piston is reciprocated, a reversing valve rotatably mounted upon said piston for controlling the flow of motive fluid through said passages, a stationary shoe, the valve having a portion sliding upon the shoe and moving beyond the end of it, and a normally rectilinear spring extending crosswise of the line of travel of the piston, the valve being actuated solely by the spring and the spring being strained solely by the valve as the latter travels with the piston.

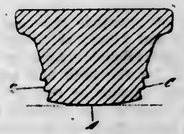
9. A pulsator having a pulsator valve and a piston for actuating it, a cylinder wherein the piston reciprocates, said piston having ducts for the motive air within said piston, a valve seat formed upon said piston at the mouths of said ducts, a reversing valve sliding upon said seat, a holder wherein said valve is loosely fitted, a pivot pin screwing into the piston and serving as a pivot for the holder, the reversing valve being notched to engage said pin to prevent the dislocation of said reversing valve in its holder, a spring for actuating the holder, and means for alternately holding and releasing said holder.

12. A pulsator having a base with passages therein for the pulsatory air, said base having a valve seat, a pulsator valve coöperating with said seat, a piston for actuating said pulsator valve, and a casing wherein said piston reciprocates, said casing being demountably mounted upon said base whereby, when the casing is removed, the wearing surface of the valve seat is exposed for inspection.

17. A pulsator having a base with passages therein for the pulsatory air, a pulsator valve, means for actuating said valve, and a valve port plate resting upon said base and having ports registering with the said passages in the base, said plate being removable whereby it may be replaced when worn, and the pulsator valve being freely movable toward and from said plate and supported by said plate.

[Claims 2, 4 to 8, 10, 11, 13 to 16, and 18 to 21 not printed in the Gazette.]

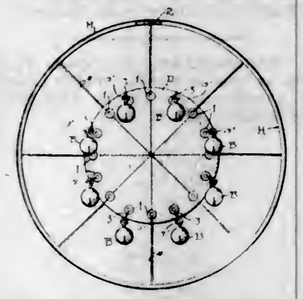
1,266,698. TIRE. COLIN MACBETH, Birmingham, England, assignor to The Dunlop Rubber Company, Limited, Westminster, England. Filed Sept. 17, 1917. Serial No. 191,836. (Cl. 152—14.)



1. A tire comprising a tread, inwardly directed edges or angular corners at each side of the tread to prevent skidding and a series of portions at each side of the tread, of similar shape and formation to said inwardly directed edges or angular corners, which portions as the tire wears, successively present the same relative shape to the road surface to form anti-skidding edges for the tread during the life of the tire.

[Claims 2 to 4 not printed in the Gazette.]

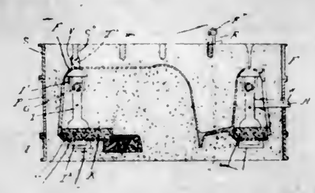
1,266,699. HOOP. MARY A. MEEKER, Winchester, Mass. Filed Apr. 23, 1917. Serial No. 164,034. (Cl. 46—38.)



1. A device of the character described comprising a hoop provided with circumferentially spaced openings, a disk positioned within the hoop and having its marginal portion provided with circumferentially spaced openings, a member threaded through the openings of the hoop and certain of the openings of the disk for maintaining the disk in applied position within the hoop, the openings of the hoop being substantially in radial alinement with the openings in the disk through which the flexible member is threaded, each pair of strands of the members coacting with an opening in the disk being disposed through a single opening in the hoop, the portions of the member intermediate the openings of the hoop overlying the periphery of the hoop and extending circumferentially thereof substantially in continuity and affording a tread member, rings disposed through the remaining openings of the disk bridging the periphery thereof, a second series of rings loosely directed through the first named rings, and bells loosely engaged with said last named rings.

2. A device of the character described comprising a hoop, a disk positioned within the hoop and supported thereby, said disk being provided in its marginal portion with circumferentially disposed openings, rings disposed through said openings and bridging the periphery of the disk, a second series of rings loosely engaged with the first named rings, and bells loosely engaged with the last named rings.

1,266,700. MOLD FOR HOLLOW CASTINGS AND METHOD OF FORMING THE SAME. WILLIAM L. MESSELDER and ADOLPH F. RADKA, Detroit, Mich., assignors to Detroit Stove Works, Detroit, Mich., a Corporation of Michigan. Filed July 23, 1917. Serial No. 182,171. (Cl. 22—190.)



1. The method of forming molds for hollow castings, comprising the molding of a core section of green-sand, placing a complementary baked core section on top of said green-sand section, reversing, and removing from the core box and inserting in the cavity of the mold while supported on the baked section.

2. A core for hollow castings, comprising a baked base section, a green-sand section supported on and complementary to said base section, and rigid reinforcements embedded in the green-sand section for carrying stresses therethrough.

3. A core for hollow castings, comprising a baked base section, a green-sand section supported upon and complementary to said baked base section, and vertical posts or stands embedded in said green-sand section resting upon said baked section and carrying stresses therefrom upward to the top of the core.

6. A mold for casting hollow articles, comprising a drag section and a cope section forming portions of the mold cavity therein, a core having a baked base portion and a complementary green-sand portion supported thereon, a post embedded in the green-sand portion and supported on the baked section, a chill at the upper end of said post forming a portion of the molding face, anchors in the drag and cope sections, and chaplets between said anchors and the core for carrying stresses thereinto and through said posts.

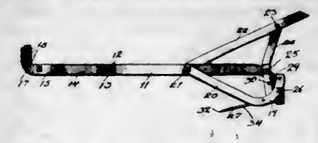
7. A mold for hollow castings, comprising a drag section, a cheek section and a cope section having formed therein complementary portions of the mold cavity, the drag and cope sections having anchors embedded therein and a core having a baked base section, a green-sand section supported upon and complementary thereto, a post embedded in said green-sand section, a vent pipe embedded in the green-sand section positioned by said post, a chill at the upper end of said post forming a portion of the molding face, chaplets for supporting the core upon the anchors in the drag section, and chaplets between said chill and anchor in the cope section for resisting the flotation stress exerted upon the core.

[Claims 4 and 5 not printed in the Gazette.]

1,266,701. HARVESTING-PLOW. JAMES E. METHVIN, Eufaula, Ala., assignor of one-third to Francis M. Gay, Eufaula, Ala., one-sixth to Hugh A. Gay, Georgetown, Ga., and one-sixth to Lee Omar Gay, Fort Gaines, Ga. Filed Nov. 3, 1917. Serial No. 200,110. (Cl. 55—9.)

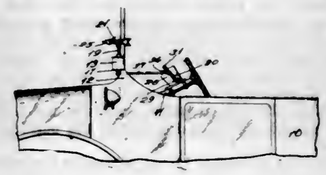
1. A plow of the character described comprising a frame having forward draft attaching means including spaced side bars provided with down-turned rear ends, adjusting bars bolted at their forward ends to the frame bars intermediate the ends of the latter and having their rear ends down-turned at the sides of the down-turned rear ends of said side bars, said side bars and said adjusting bars having alined openings, bolts extending through said openings, and a transversely extending plow blade having upright side shanks apertured to receive the said bolts whereby to adjustably connect the blade with the frame.

2. A plow of the class described comprising a horizontally disposed substantially rectangular frame having forward draft attaching means, and including parallel side bars provided with down-turned rear ends, adjusting bars having down-turned portions at one end, means to connect the adjusting bars with their curvature paralleling and reversely disposed with respect to the rear curved



portions of the frame and side bars, a plow blade extending below and transversely of the rear portion of the main frame, a U-shaped shank to the cross bar of which the plow blade is secured, and means for adjustably connecting the extensions of said shank to the curved portions of the frame side bars, and the said adjusting bars, for the purpose described.

1,266,702. SIGNAL APPARATUS FOR AUTOMOBILES. BERL W. MILLER, Boise, Idaho, assignor of one-half to John D. Heinen, Boise, Idaho. Filed Aug. 14, 1916. Serial No. 114,774. (Cl. 177—339.)



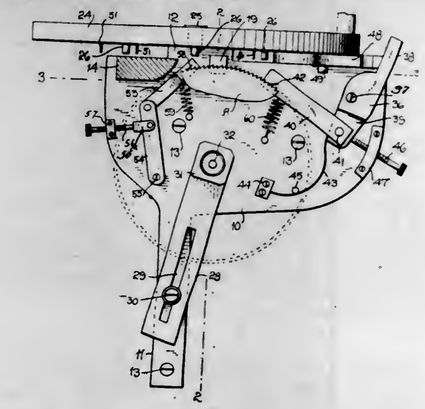
In a signal apparatus for an automobile, a pair of movable visual signal devices including electric lamps adapted to be arranged upon opposite sides of an automobile, a casing adapted to be arranged in convenient reach of the operator of the automobile, a stub shaft extending transversely of the casing to turn therein, a manually operated crank arranged upon the outside of the casing and rigidly connected with the stub shaft to turn it, means to hold the crank in adjustment at a desired position with relation to the casing, a swinging crank arranged within the casing and rigidly secured to the stub shaft and provided with contact means, spaced stationary contacts arranged within the casing with the crank disposed between them whereby the contact means may be alternately swung into contact with said stationary contacts, circuits serving to connect the lamps and the stationary contacts and the contact means, and mechanical means connecting the manually operated crank with the signal devices to shift the same.

1,266,703. MEANS FOR SETTING CIRCULAR SAWS. JAMES F. MORRISEY, Morgantown, N. C. Filed July 9, 1917. Serial No. 179,537. (Cl. 76—67.)

1. Means for setting circular saws including an anvil, a reciprocatably mounted hammer, a saw support permitting rotary movement of the saw with its edge across the face of the anvil, and means for reciprocating the hammer, means engaging the teeth of the saw and actuated by said means for reciprocating the hammer, feeding the saw step by step across the anvil and being actuated when the hammer is raised.

5. Means for setting saws including a table, an anvil mounted thereon, a saw supporting spindle mounted upon the table and rotatably supporting the saw with its margin disposed on the anvil, a wheel having a plurality of projecting studs, a lug on the hammer with which said studs successively engage to lift the hammer, a spring

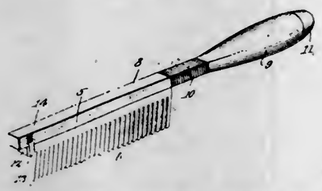
urging the hammer downward against the anvil, a reciprocating pawl for engaging the teeth of the saw, and means actuated by said wheel for reciprocating the pawl to thereby feed the saw step by step, and means for adjusting the length of movement of said pawl.



12. Means for setting circular saws including a table having an anvil, a hammer reciprocatably mounted above the anvil, and a saw support having a head formed with an annular upwardly extending flange, the inner face of said flange being convergent downward, a pin extending upward through said head above the flange, and a centering bushing slidingly mounted upon the pin and downwardly tapered, and a spring urging the bushing toward the head.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

1,266,704. COMB. MOSES F. MULLINS, Nashville, Tenn. Filed Mar. 11, 1916. Serial No. 83,635. (Cl. 132—3.)

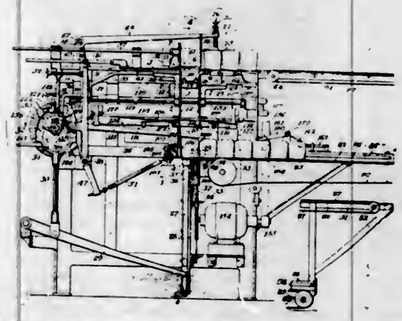


The combination of a heating bar having a plane surface on one side and provided with a handle at one end, and a comb of heat-conducting material connected to the plane side of the heating bar adjacent to the handle end, the back of the comb being also plane and adapted to be placed in contact with the plane surface of the bar, and means for positively clamping the comb in such position.

1,266,705. WRAPPING-MACHINE. PETER F. MURPHY, Milwaukee, Wis. Filed Aug. 4, 1913. Serial No. 782,778. (Cl. 93—2.)

1. In a wrapping machine the combination of opposing parallel side folders and guides, a reciprocating plunger movable between said folders and guides, and end folders pivoted between and transversely to said side folders and guides, normally projecting at their inner ends into the path of the article to be wrapped and adapted as the article is thrust by the plunger between them and the side folders and guides to simultaneously form two triangular infolds with an overlying end fold of the wrapper on each end of the article, the side folders and guides extending at the ends beyond the pivots of the end folders.

5. In a wrapping machine the combination with folding mechanism comprising a reciprocating plunger, of feeding mechanism comprising an endless traveling belt movable on the upper side, which is located approximately in the plane of the plunger in its initial position toward and transversely to the path of the plunger, and longitudinal guides located above and adjacent to each side of the belt and converging toward the path of the plunger, said guides being adjustable toward and from each other at their converging ends.



7. In a wrapping machine the combination of feeding and discharging conveyers and mechanism for completely wrapping an article, said mechanism including a vertically reciprocating plunger and said conveyers being arranged at the same side of said mechanism, one in a lower plane than the other and transversely to the path of the plunger at the limits of its movement and movable respectively toward and from the path of the plunger, the discharge conveyer receiving the completely wrapped articles from said mechanism, and gates at the ends of the conveyers nearest the path of travel of the plunger.

16. In a wrapping machine the combination of opposing parallel side folders, one of which is adjustable toward and from the other, a reciprocating plunger movable between them, and end folders pivoted between and transversely to the side folders and on opposite sides of the path of the plunger and each provided with a detachable folding plate, whereby the end folders may be provided with plates for wrapping articles of different sizes, the side folders extending at the ends beyond the pivots of the end folders.

42. In a wrapping machine the combination of means for folding a quadrangular wrapper lengthwise over the top and sides of a package, means for simultaneously laying end folds with underlying inturned triangular corner folds in the wrapper over the ends of the package from top to bottom, means for folding the edges of the end and inturned corner folds inwardly on the bottom of the package, and means for folding the edges of the side folds inwardly one over the other and both of them over the edges of the inturned end folds on the bottom of the package.

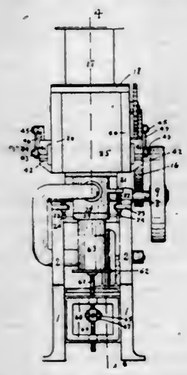
[Claims 2 to 4, 6, 8 to 15, and 17 to 41 not printed in the Gazette.]

1,266,706. CAN-FILLING MACHINE. FRANK H. NICKLE, Detroit, Mich. Filed Feb. 5, 1913. Serial No. 746,263. (Cl. 226—18.)

1. A filling machine comprising a movable container holder, resilient means tending to force the container holder to the limit of its movement in one direction, means for moving said holder against the action of the resilient means to cause said holder to tremble, and other means for moving the holder to the limit of its movement in another direction.

2. In a filling machine, a container holder, resilient means for raising and supporting the holder, means for moving said holder against the action of said resilient means to cause the holder to tremble, other means for lowering the holder.

3. In a filling machine, the combination of a case having a discharge opening, a hopper supported thereon, a measuring chamber movable within the case below the hopper, a spout connected to the case at the discharge opening, an arm pivotally mounted within the case, and a weight on said arm adapted to ride on the measuring chamber while it is being filled from the hopper and to descend into said chamber when over the discharge opening.

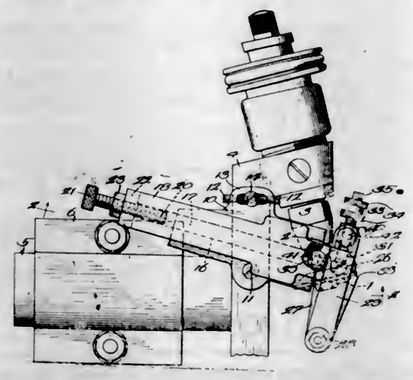


4. In a filling machine, the combination of a movable case having a discharge opening, a hopper supported on the case, a measuring chamber movable within the case below the hopper, an arm mounted on the frame and a weight thereon, said arm being actuated by the movement of the chamber to discharge material therefrom.

5. In a filling machine, the combination of a casing having a discharge opening, a hopper supported on the casing, a measuring chamber movable within the casing below the hopper, an arm pivotally mounted on the casing and a weight thereon, said arm being actuated by the movement of the chamber to discharge material therefrom.

[Claims 6 to 14 not printed in the Gazette.]

1,266,707. WHEEL-DRESSING DEVICE. CARL G. OLSON, Chicago, Ill., assignor to Illinois Tool Works, Chicago, Ill., a Corporation of Illinois. Filed Oct. 26, 1917. Serial No. 198,562. (Cl. 125—6.)

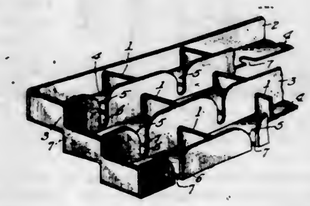


1. Mechanism for dressing the wheels of grinding machines, having a dressing tool, an arm carrying the dressing tool, a support whereto the arm is pivoted so as to swing the tool approximately in a plane passing through the axis of the grinding wheel, and when the parts are in acting position, the entire grinding wheel occupying a position between the point of the dressing tool and the pivotal axis, extended, of the arm whereon it is carried.

10. An attachment for machine tools, designed to dress the tool in said machine, comprising a base designed to be supported upon and angularly adjustable with respect to the machine tool, a slide mounted upon said base, a stop for limiting the travel of said slide, a reversing arm pivoted to the slide, a second arm pivoted to the free end of the reversing arm, and a dressing-tool carried at the free end of the second arm.

[Claims 2 to 9, 11, and 12 not printed in the Gazette.]

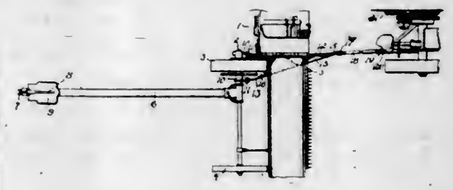
1,266,708. DISTRIBUTING-RACK. CHESTER I. OZANNE, Kenosha, Wis. Filed Oct. 2, 1915. Serial No. 53,679. (Cl. 211—37.)



A distributing rack including a plurality of trays whose floors are on ascending levels from the front to the rear of the structure, the dividing walls between the trays being provided respectively with vertical slots extending from the top of the walls downward to a point below the tray floor next to the rear and communicating respectively with slots formed in the rearwardly disposed adjacent tray floors.

1,266,709. [WITHDRAWN.]

1,266,710. TRACTOR-HITCH FOR HARVESTING-MACHINES. CHARLES PEARSON, Chicago, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Jan. 12, 1916. Serial No. 71,635. (Cl. 56—33.)



1. In combination, a harvesting machine having a main wheel journaled thereon, a platform disposed in front of said main wheel, and a rigid draft connection connected to said harvesting machine on opposite sides of said main wheel and extending forwardly beneath said platform.

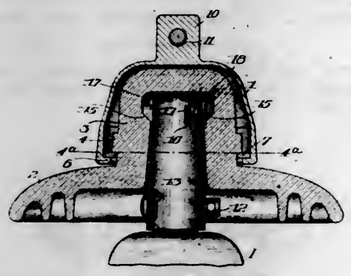
4. In combination, a harvesting machine having an axle and a main wheel journaled thereon, a platform disposed in front of said main wheel, and a plurality of transversely braced, spaced draft members pivotally connected to said axle at points on opposite sides of said main wheel disposed beneath said platform and extending to a point substantially in front of said main wheel.

7. In combination, a harvesting machine having a main wheel journaled thereon, a platform disposed in front of said main wheel, and a plurality of rigidly connected draft members pivotally connected to said harvesting machine at points on opposite sides of said main wheel

having their front ends substantially in front of the same and having a depressed portion disposed beneath said platform.

[Claims 2, 3, 5, 6, and 8 not printed in the Gazette.]

1,266,711. STRAIN-INSULATOR. BENTLEY A. PLIMPTON, Victor, N. Y. Filed Jan. 25, 1917. Serial No. 144,347. (Cl. 173—366.)



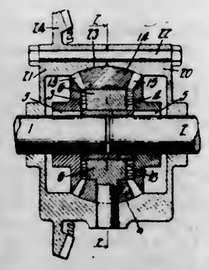
5. The combination with an insulating portion having a locking shoulder extending partially therearound, of a cap secured upon the insulating portion and carrying a locking member in the form of a split ring, one end of which engages a recess in the cap while the opposite end is freely movable to permit the locking member to be threaded upon the insulating portion by initially placing the free end of the locking member beneath said shoulder and turning the cap until the entire locking member is disposed beneath the shoulder.

6. The combination with a hollow insulating portion having a locking shoulder therewithin, of a hollow connecting member arranged within the insulating portion and having a plurality of openings, a plurality of locking devices movable within said openings and having engagement with the aforesaid locking shoulder, retaining means engaging the locking devices to prevent their withdrawal from the locking shoulder, and a cementitious filling medium within the connecting member engaging the retaining means and preventing withdrawal of the latter.

7. The combination with an insulating portion having a locking shoulder extending partially therearound, of a cap secured upon the insulating portion and carrying a movable locking member adapted to be brought into locking relation with the shoulder by turning the cap on the insulating portion.

[Claims 1 to 4 not printed in the Gazette.]

1,266,712. DIFFERENTIAL CONSTRUCTION. EDGAR U. G. REAGAN, San Antonio, Tex. Filed Dec. 6, 1915. Serial No. 65,170. (Cl. 74—34.)



1. A differential comprising a driving means, two driven members, a force distributing member interposed between the driving means and the driven members, said driving means including a seat and said force distributing member floating in respect to the seat.

14. A differential construction comprising two alined driven shafts, bevel gears carried by the shafts, said gears facing each other, a rotatable driving means between the gears, said driving means including spaced seats having opposed bearing surfaces in the shape of portions of the surface of a frustum of a cone, said seats being pivoted to swing about radii of the driving member, a bevel pinion floating between said bearing surfaces and having its teeth meshing with those of the gears, whereby when the resistance to rotation offered by one of the gears becomes appreciably less than that offered by the other the pinion is wedged between the seats and the latter are rotated about their axes to grip the pinion and prevent rotation of the gear to which the least resistance is offered relative to the gear to which the greatest resistance is offered.

20. A differential construction comprising driving means, two driven shafts having parallel axes, gears on the shafts, a rotatable force distributing member through which driving force for the gears is transmitted, said driving means including a pair of spaced seats having opposed bearing surfaces forming parts of the same surface of revolution, said force distributing member floating in said seat, whereby when the resistance offered by one of the driven gears becomes appreciably less than that offered by the other, the force distributing member is forced laterally toward the gear having the least resistance and wedged between the seats to cause an extra amount of force to be transmitted to the gear having the greatest resistance.

26. In a differential gear, a planetary gear carrier comprising a casing having chambers formed therein, a floating gear mounted to rotate within each chamber without the use of a shaft, an axle section driving gear arranged within the casing and engaging said floating gears, and means to rotate the casing.

28. In a differential gear, a planetary gear carrier comprising a rotatable element, gears mounted to rotate in bearings in said rotatable element with the faces of their teeth engaging the surfaces of said bearings, an axle section driving gear with which the teeth of said gears engage, and means to rotate said rotatable element.

[Claims 2 to 13, 15 to 19, 21 to 25, and 27 not printed in the Gazette.]

1,266,713. CLEANING COMPOUND. CLINTON G. REED, Pittsburgh, Pa. Filed July 28, 1915. Serial No. 42,383. (Cl. 87—5.)

1. The compound consisting of hydrofluoric acid, barium sulfate, ammonium sulfate, ammonium fluorid, viscous organic material, and water.

3. The compound consisting of hydrofluoric acid, barium sulfate, ammonium sulfate, ammonium fluorid, molasses, an abrasive, and water.

5. The compound consisting of 10 per cent. hydrofluoric acid, 15 to 25 per cent. barium sulfate, 6 per cent. ammonium sulfate, 15 per cent. ammonium fluorid, 21 per cent. viscous organic material, and 15 to 25 per cent. water.

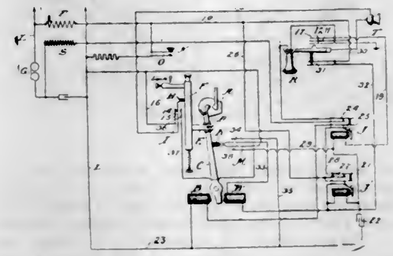
6. The compound consisting of hydrofluoric acid, barium sulfate, ammonium salts, viscous organic material, and water.

7. The compound consisting of hydrofluoric acid, barium sulfate, ammonium salts, viscous organic material, an abrasive, and water.

[Claims 2 and 4 not printed in the Gazette.]

1,266,714. TELEPHONE METERING SYSTEM. CHARLES V. RICHEY, Washington, D. C., assignor to Phone-Call Recorder Company, a Corporation of Delaware. Filed July 11, 1914, Serial No. 850,486. Renewed Oct. 2, 1917. Serial No. 194,415. (Cl. 179—13.)

1. In a telephone exchange system having a central office containing line terminals and connective apparatus therefor, with operator's listening and ringing means, a substation equipment comprising the following instrumentalities: a ringer and condenser, a receiver and a switch hook adapted to connect the receiver to line, a transmitter adapted to be energized with current supplied from the central station, means for disabling the transmitter circuit at the will of the subscriber, means for enabling transmitter use in emergency calls at the will of the operator at the central station, and means responsive to a normal call by ringing current to prevent operation of said enabling device when the call is answered.

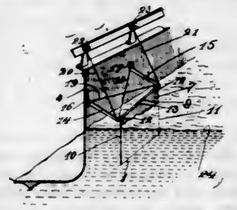


2. In a telephone exchange system having a central office containing line terminals and connective apparatus therefor, with operator's listening and ringing means, a substation equipment comprising the following instrumentalities: a ringer and condenser, a receiver and a switch hook adapted to connect the receiver to line, a transmitter adapted to be energized with current supplied from the central station, means for disabling the transmitter circuit at the will of the subscriber, means for enabling transmitter use in emergency calls at the will of the operator at the central station, a call meter, means operable with said enabling means to actuate the call meter, and means responsive to a normal call by ringing current to prevent operation of said enabling device when the call is answered.

3. In a telephone exchange system having a central office containing line terminals and connective apparatus therefor, with operator's listening and ringing means, a substation equipment comprising the following instrumentalities: a ringer and condenser, a receiver and a switch hook adapted to connect the receiver to line, a transmitter adapted to be energized with current supplied from the central station, means for disabling the transmitter circuit at the will of the subscriber, means for enabling transmitter use in emergency calls at the will of the operator at the central station, a call meter, means operable by said enabling means to actuate said call meter for each outgoing call, and a relay responsive to incoming call current at the substation, adapted to disable said enabling means as long as said call current is being received.

4. In a telephone exchange system having a central office containing line terminals and connective apparatus therefor, with operator's listening and ringing means, a substation equipment comprising the following instrumentalities: a ringer and condenser, a receiver and a switch hook adapted to connect the receiver to line, a transmitter adapted to be energized with current supplied from the central station, means for disabling the transmitter circuit at the will of the subscriber, means for enabling transmitter use in emergency calls at the will of the operator at the central station, a call meter, means operable by said enabling means to actuate said call meter for each outgoing call, and a pair of controlling relays adapted to cut off ringing current from the substation receiver, and also to disable the enabling device and prevent operation of the meter if the call is answered while the ringing current is still being received.

1,266,715. TORPEDO-SHIELD. SAMUEL DAVIS ROBINS, Stamford, Conn. Filed July 14, 1917. Serial No. 180,635. (Cl. 114—240.)



2. The combination, with a ship, of a plate supported by said ship and hanging into the sea for the purpose of preventing torpedoes from striking said ship, said plate being mounted to swing upon an axis whose projection upon the plane of the sea is parallel to the keel of the ship, the forward end of said axis being lower than its after end.

8. The combination of a sea-going vessel, arms journaled thereupon and overhanging the sea, the after one of said arms being located slightly higher than the other, an axis supported by said arms at their outer extremities and inclined at a suitable angle with the waterline, the forward end of said axis being lower than the after end thereof, a protecting plate of suitable dimensions supported by said axis and hanging into the sea, hoisting and adjusting mechanism connected with said plate and controllable from said ship for raising and lowering said plates independently of each other.

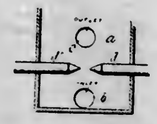
[Claims 1, 3 to 7, and 9 not printed in the Gazette.]

1,266,716. FLY-SCREEN. FRED ROLLAND, Long Island City, N. Y., assignor of one-fourth to Henry Schuerhoff, Corona, N. Y., and one-fourth to Frank Lockner, New York, N. Y. Filed Aug. 18, 1916. Serial No. 115,589. (Cl. 156—39.)



In an article of the class described, in combination with a window casing, a tubular housing fixed to the outer side and above the opening thereof said housing having a narrow slot at the bottom and inner side, a shaft within said housing with its ends fixed to the ends of the housing, a roller rotatably mounted upon said shaft, a spring connecting said shaft and said roller, a strip of netting passing through the slot and having an edge fastened to the roller, guide strips at each side of the window casing with which the lateral edges of the netting are adapted to engage, means for preventing longitudinal movement of the roller and means for locking the netting in predetermined positions with refernce to the window casing.

1,266,717. PROCESS OF PRODUCING OXIDS OF NITROGEN AND APPARATUS THEREFOR. CARLO ROSSI, Legnano, Italy. Filed Oct. 22, 1913. Serial No. 796,600. (Cl. 204—31.)



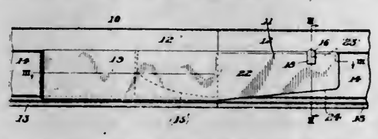
1. The process of producing oxids of nitrogen which comprises oxidizing nitrogen in a suitable furnace in the presence of electrodes composed substantially entirely of metallic material which by the action of the electric arc develops particles of material having a tendency to prevent decomposition of the nitrogen oxids.

6. The process of producing oxids of nitrogen which comprises subjecting a gaseous mixture comprising nitrogen and oxygen to the action of an electric arc between electrodes composed of an alloy of aluminum with barium.

12. Apparatus for producing nitrogen oxids, comprising the combination, with a suitable furnace structure, of electrodes composed of material comprising a metal whose oxid can exist at furnace temperatures and is without destructive action on nitrogen oxids at or below furnace temperatures, the electrodes being free of any metal whose oxid tends to decompose nitrogen oxids.

[Claims 2 to 5 and 7 to 11 not printed in the Gazette.]

1,266,718. RAIL-JOINT. GIOSUÈ ROSSI, Morrisdale, Pa. Filed Oct. 1, 1917. Serial No. 194,167. (Cl. 239—8.)



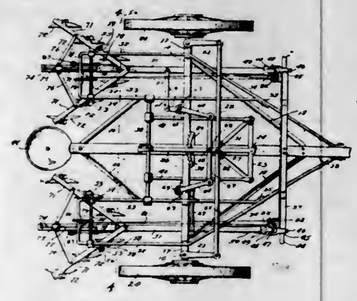
1. A detachable connection for rails comprising in combination with ends of companion rails one of the same having a web extension, the other rail having a recess in the free end thereof adapted for the reception of the said extension, opposite plates carried by the end of the recessed rail adapted for engagement at opposite sides with the web having the extension when the rails are assembled and detachable interengaging means between the said plates and the adjacent rail.

2. A rail joint comprising in combination with the end portions of rails adapted for position in longitudinal alinement, one of the said rails having the web thereof projecting forwardly of the rails, a transverse bolt carried at the point of merging of the web and tread portions of said extension-carried rail, the other rail having its end provided with coöperating means associated with the said extension and bolt.

3. A rail joint comprising in combination with the end portions of rails adapted for position in longitudinal alinement, one of the said rails having the web thereof projecting forwardly of the rails, a transverse bolt carried at the point of merging of the web and tread portions of said extension-carried rail, the other rail having its end provided with a receiving recess for the said extension and further having an enlarged web portion at its free recessed end, parallel plates carried by the said enlarged web portion provided with notches in their upper edges adapted for receiving the said bolt when the rails are arranged in their assembled position.

4. A device of the class described comprising rails having complementally formed end portions, one of said rails having a transverse socket through the merging point of its head and web, and a two-part bolt secured within the said socket having opposite depending lugs, the said bolt with its lugs adapted for coöperating with the adjacently positioned portion of the companion rail when the device is assembled.

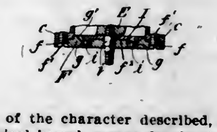
1,266,719. AGRICULTURAL IMPLEMENT. JOHN J. RUNCK, Republican City, Nebr. Filed Sept. 18, 1916. Serial No. 120,739. (Cl. 97—35.)



1. In an agricultural implement of the character described, an elevated wheeled frame, hangers forwardly of and depending from the frame, drag beams arranged between the wheels of the frame, flexible couplings connecting the forward ends of the beams with the hangers for vertical and horizontal movement of said beams, a pair of arms pivoted at their forward ends to each beam, a guide on each beam between the arms, a slide movably supported on the guide, links pivotally connecting the arms to the slides, throw levers pivotally mounted on the frame at opposite sides of its longitudinal center, guide pulleys in the frame and on the beams, flexible connections trained over the guide pulleys and engaged with the sleeves and said throw levers, and means on the frame and connected with the beams for laterally adjusting said beams.

[Claims 2 and 3 not printed in Gazette.]

1,266,720. MACARONI AND SPAGHETTI MACHINE. VITO GIORGIO SANGIORGIO, Meriden, Conn. Filed Aug. 2, 1917. Serial No. 184,049. (Cl. 107—14.)



In a machine of the character described, the combination of a cylindrical barrel, means for forcing dough longitudinally therethrough, a face-plate at the forward end of the barrel providing on its inner face with a recess and having a plurality of counter-sunk apertures extending through the face-plate, a filler member, a portion of which is shaped to seat in the recess in the inner face of said plate with the inner side of the filler member substantially flush with the inner side of the plate, and a plurality of projections on the filler member extending forwardly into the centers of the apertures of the face-plate to form each aperture into a centrally cored passage, whereby the dough is forced into the countersinks, circulates thereabout, and is forced through the passages to issue therefrom in tubular form.

1,266,721. ALTAR-BREAD SOFTENER. PETER P. SAURUSAITIS, Waterbury, Conn. Filed June 25, 1917. Serial No. 176,798. (Cl. 45—71.)

1. A device of the character described, comprising a casing having a center compartment and a water chamber about the same, U-shaped frames, a plurality of trays slidably supported on the frames for removable mounting within the compartment, and a cover for the casing.

2. The combination with a casing having a compartment and water chamber, of a rack for detachable mounting within the compartment, comprising a pair of frames, each having vertically disposed limbs, and a plurality of



plate like sections loosely engaged at their corners with the limbs of the frames.

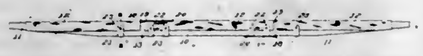
1,266,722. GARTER. LILY S. SCHRAM, Chicago, Ill. Filed July 14, 1916. Serial No. 109,286. (Cl. 241—1.)



1. A garter comprising a supporting strap formed with an endless loop, a stocking clasp member having a transverse eye through which extends the loop of the strap, a snap fastener member secured to the bottom of said loop, and a plurality of co-acting snap fastener members secured to said loop in alinement with each other, all of said snap fastener members being located on the inside face of the loop.

[Claim 2 not printed in the Gazette.]

1,266,723. STRETCHER. PAUL SHAPAC, Tabasco, Colo. Filed Sept. 5, 1917. Serial No. 189,770. (Cl. 21—80.)



1. An ambulance stretcher including side rails, each formed of three sections, the end sections opposing each other being hinged to opposite sides of the middle sections and adapted to swing in opposite directions to lie substantially parallel and adjacent to the middle sections, means carried by the faces of the rail sections opposite the hinge connections for locking the sections in their operative arrangement, the said means including a pair of plates having registering barrel portions and swinging hooks carried by the middle sections adapted to have their ends received in said barrel portions.

2. An ambulance stretcher including side rails, each formed of three sections, the end sections opposing each other being hinged to opposite sides of the middle sections and adapted to swing in opposite directions to lie substantially parallel and adjacent to the middle sections, means carried by the faces of the rail sections opposite the hinge connections for locking the sections in their operative arrangement, the said means including plates having registering barrel portions and spring hooks swingingly carried by the side rails wedgingly received in said registering barrel portions.

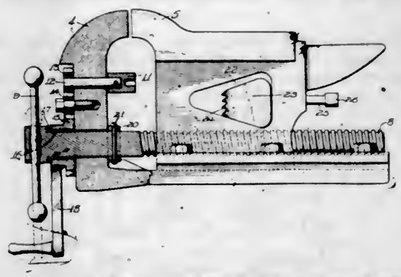
3. A stretcher including side rails formed of foldable sections, a fabric covering for each section and transverse braces arranged between the sides of said sections having strap-shaped ends secured to the inner and outer sides of said rails to reinforce the sections and secure the fabric to the side rails.

4. A stretcher including side rails formed of foldable sections and transverse braces extending between said side rails to hold the same in spaced parallel rigid position, the ends of certain of said braces being bifurcated.

5. A stretcher including side rails formed of foldable sections and transverse braces extending between said side rails to hold the same in spaced parallel rigid position, certain of said braces being relatively wide and having bifurcated ends.

[Claim 6 not printed in the Gazette.]

1,226,724. COMBINATION VISE AND DRILL. CARL E. SHIELDS, Rock Island, Ill. Filed Sept. 17, 1917. Serial No. 191,695. (Cl. 29—32.)



1. A combined implement consisting of a vise having a stationary and a movable jaw, a threaded rod adapted by its rotation to adjust the movable jaw with respect to the stationary jaw, a drill rotatably mounted in the stationary jaw, an operating handle for said drill mounted on said threaded rod, and a sleeve mounted between said operating handle and rod to prevent said rod jamming against said handle.

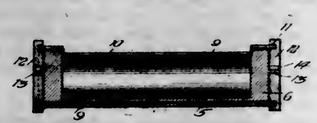
2. A combination implement comprising a vise having stationary and movable jaws, a threaded rod passing through said jaws for adjusting one with respect to the other, a drill rotatably mounted in said stationary jaw, an operating handle loosely mounted on said rod, a chain of step-up gears between said operating handle and said drill, and a sleeve mounted between said operating handle and rod to prevent said rod jamming against said handle.

3. A combination implement comprising a vise having stationary and movable jaws, a threaded rod passing through said jaws for adjusting one with respect to the other, an operating handle for rotating said rod, a drill rotatably mounted in said stationary jaw, a second independently operating handle loosely mounted on said rod, a chain of step-up gears between said second handle and said drill, and a sleeve mounted between said second handle and rod to prevent said rod jamming against said handle.

1,266,725. DEVICE FOR WRAPPING OR FORMING CIGARETTES. RAY M. SKEELS, Buffalo, N. Y. Filed June 13, 1914, Serial No. 844,998. Renewed Dec. 1, 1917. Serial No. 204,886. (Cl. 131—5.)

1. A cigarette former comprising an inner tube having end walls and being open from end to end along one side, an outer tube within which the inner tube is rotatably positioned, said outer tube provided on one side with an opening substantially of the same dimensions as the

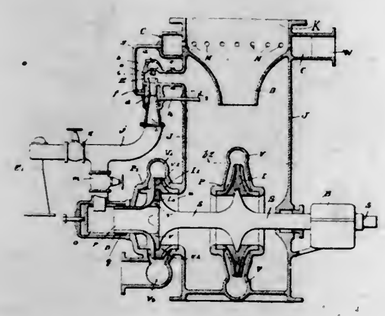
opening of the inner tube, buttons suitably secured to the end walls of the inner tube, whereby the latter may be rotated relatively to the outer tube, the ends of said outer tube projecting beyond the ends of the inner tube, and being housed in annular channels formed in the inner



faces of said buttons, and a forming band composed of suitable material and adapted to co-act with the forming device in compressing a portion of tobacco and rolling a paper around the same within the inner tube, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,266,726. CONDENSATE AND AIR REMOVING APPARATUS. ROBERT SUCZEK, Philadelphia, Pa., assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed May 7, 1917. Serial No. 167,061. (Cl. 230—14.)



1. The combination with a jet condenser, of a plurality of pumps each directly removing water therefrom, one of said pumps being a wet air pump for removing air and water from said condenser.

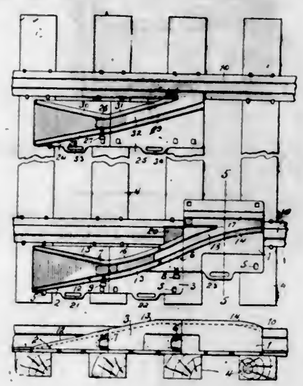
6. The combination with a condenser, of a plurality of pumps each removing water therefrom, one of said pumps being a centrifugal pump, an ejector for removing air from said condenser, said centrifugal pump comprising a plurality of coöperating impeller structures, one of said structures removing water from said condenser, and another of said structures receiving air from said ejector.

10. The combination with a jet condenser comprising a distributer for injection water and means forming a guide passage below the same, of an ejector for removing air from said condenser, a cooling jacket for said ejector, means for delivering cooling water from said distributer into said jacket, and a connection from said jacket delivering the cooling water into said condenser below said guide passage forming means.

[Claims 2 to 5, 7 to 9, and 11 to 17 not printed in the Gazette.]

1,266,727. RERAILING-FROG. CHARLES B. SULLIVAN, Rosedale, Kans. Filed Oct. 20, 1917. Serial No. 197,715. (Cl. 104—168.)

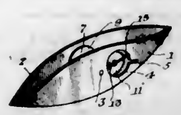
1. A rerailing frog having a portion adapted to overlap a rail, the underside of said portion having a longitudinal groove adapted to receive the rail, the walls of the groove being adapted to embrace the sides of the rail, whereby the rail and the frog are held from relative lateral movement, the frog being movable vertically into and out of engagement with the rail, provided on its upper side with a wheel supporting flange having an inclined entrance portion, and having an exit portion which is substantially in alinement with the ball of the rail when the frog is in operative position.



3. A rerailing frog having a portion adapted to overlap the top of a rail, the under side of said portion having a groove adapted to receive the rail, the frog being movable vertically into and out of engagement with the rail, the upper side of the frog having a wheel supporting flange, the entrance portion of which is inclined and the exit portion of which is in substantial alinement with the ball of the rail, the frog having on its upper surface a guard adapted to engage the flange of a wheel, the guard forming with said flange a groove adapted to receive the flange of the wheel, the flange and guard forming between them a groove for receiving the flange of the wheel, the entrance end of the groove being inclined and flaring, and the exit portion of the groove being parallel with and at the inner side of the ball of the rail, when the frog is in operative position, the exit portion of the groove extending clear across the portion of the frog which overlaps the rail.

[Claim 2 not printed in the Gazette.]

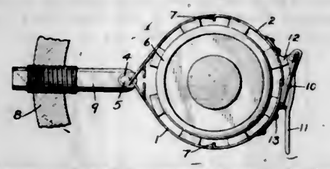
1,266,728. TATTING-SHUTTLE. WILLIAM T. THORP, Hillsboro, Ill. Filed May 15, 1917. Serial No. 168,823. (Cl. 66—10.)



A tatting shuttle including bowed side pieces, a pin centralling connecting the said sides, a straight plate having its opposite ends secured to one of the sides upon the inner face thereof and provided with an opening through which the pin passes, a bobbin including a barrel having oppositely disposed flanges, the said barrel receiving the connecting pin of the sides and extending through the referred to opening in the plate, a toothed wheel upon the said extending end of the barrel, a second toothed wheel journaled upon the plate and meshing with the first mentioned toothed wheel, one of the side plates having a round opening disposed opposite the said second mentioned toothed wheel which is of a greater area than the diameter of the said second mentioned wheel, said plate being further provided with a slot communicating with the opening, an operating handle for the second toothed wheel, including a head which is pivotally secured to the said second toothed wheel, and a spring handle designed

when the same is brought to operative position to be arranged at a right angle with respect to the toothed wheel and when brought to inoperative position to be passed through the referred to slot in the side and turned out of alinement with the slot to resiliently contact with the inner face of the side provided with the opening and slot, as and for the purpose set forth.

1,266,729. COMBINED SWAB-HOLDER AND NUT-LOCK. WALTER V. TURNER, Wilkinsburg, Pa., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Nov. 18, 1916. Serial No. 132,236. (Cl. 286—13.)



1. In a combined swab protector and nut lock, the combination with a casing inclosing the nuts, of a member for supporting the casing in position.

2. In a combined swab protector and nut lock for fluid compressors, the combination with hinged casing sections inclosing the stuffing box nuts of the compressor, of means secured to the compressor for holding the casing sections in position.

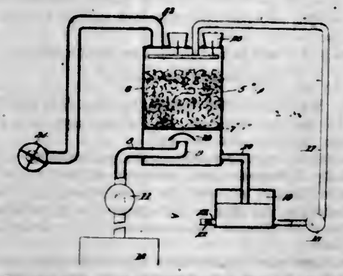
3. The combination with stuffing box nuts, of a compressor having a wall at the rear of the nuts, of hinged casing sections inclosing the nuts and a stud carried by said rear wall of the compressor for supporting the casing sections in position.

1,266,730. PROCESS OF CONCENTRATING PHOSPHATIC MATERIAL. HYLEMAN ALISON WEBSTER, Columbia, Tenn. Filed June 4, 1917. Serial No. 172,778. (Cl. 71—7.)

1. The process of concentrating the phosphatic material contained in low grade phosphatic limestones which consists in heating said limestones until a substantial portion of the carbon dioxid present has been driven off; finely dividing the burnt rock thus obtained; and suspending the finely divided mass in a moving fluid to carry away the lighter phosphorus free particles and to permit the heavier phosphatic particles to settle, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,266,731. PROCESS AND APPARATUS FOR UTILIZING SULFUROUS GASES WITH TREATMENT OF METALLIFEROUS MATERIALS. GEORGE C. WESTBY, Ludwig, Nev., assignor to Western Process Company, a Corporation of Maine. Filed Apr. 10, 1917. Serial No. 160,933. (Cl. 75—18.)

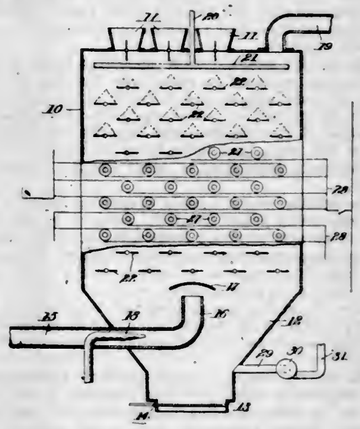


1. In the process for utilizing sulfurous gases for the treatment of metalliferous ores, consisting in first removing fine particles from the ore, then charging the ore to a closed tower, then subjecting the ore to the action of sulfurous gases while simultaneously spraying the top of the ore column with a non-alkaline liquor in such quantity as not to fill the interspaces of the ore and prevent the passage of the gases, thus leaching the soluble values from the ore and abstracting the sulfurous constituents from the gases.

2. In the process for utilizing sulfurous gases for the treatment of metalliferous ores, consisting in first removing fine particles from the ore, then charging the ore to a plurality of closed towers, then subjecting the ore to the action of the sulfurous gases by passing the gases through the series of ore columns, simultaneously spraying the top of each column with a non-alkaline liquor thereby leaching the soluble values from the ore and abstracting the sulfurous constituents from the gases.

3. In apparatus for subjecting ore to the action of sulfurous gases, a plurality of towers, filter bottoms in each of said towers for supporting the ore therein, gas inlets in said towers below the filter bottoms, water distributers near the top of the towers, means for supplying water to any one of the distributers at will, means for supplying gas to any one of the distributers at will, and means for forcing the gas and liquid successively through the towers and for discharging them.

1,266,732. PROCESS AND APPARATUS FOR SULFATIZING METALLIFEROUS ORES. GEORGE C. WESTBY, Ludwig, Nev., assignor to Western Process Company, a Corporation of Maine. Filed Apr. 10, 1917. Serial No. 160,934. (Cl. 75—18.)



1. In a process for sulfatizing metalliferous fines, arranging said fines in series of low heaps in relatively staggered relation within an inclosed chamber, passing a gaseous sulfatizing reagent and steam upwardly through said heaps and over their surfaces and simultaneously wetting and leaching the fines in said heaps with an aqueous liquid, and vibrating said heaps, thereby exposing fresh surfaces to the action of the reagents.

3. In a tower for treating ore fines simultaneously with liquid and a sulfatizing gas, a plurality of spaced transverse supports, each comprising a pair of fixed, spaced, parallel members and a vibrating member between and spaced from them, and means for operating said vibrating members.

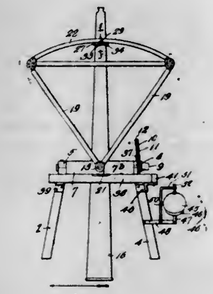
5. In a process for sulfatizing metalliferous fines consisting in arranging said fines in a series of low heaps in relatively staggered relation within an inclosed tower, passing a gaseous sulfatizing reagent together with steam through and around said heaps and successively through the closed ore chambers, vibrating said heaps and simul-

taneously wetting and leaching said fines during said vibration by means of the aqueous liquor formed.

8. An apparatus as specified in claim 2, wherein the transverse supports are divided into parallel operative zones and their agitating members operated in said zones successively from the bottom upwardly.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,266,733. SIGHTING MEANS FOR AEROPLANES. LEONARD U. WETHERALL, Chicago, Ill. Filed May 2, 1917. Serial No. 165,951. (Cl. 33—46.)



1. In sighting means, a main supporting frame, a sighting telescope supported by the frame for free swinging movement longitudinally and laterally of the frame, and means for indicating the extent to which the telescope is swung in either direction.

3. In sighting means, a main supporting frame, a sighting telescope mounted in said frame for free swinging movement longitudinally and laterally of the same so as to have its inclination varied, means for indicating the inclination of the telescope both laterally and longitudinally of the frame, and independent means for securing the telescope in adjustment in either direction laterally of the frame.

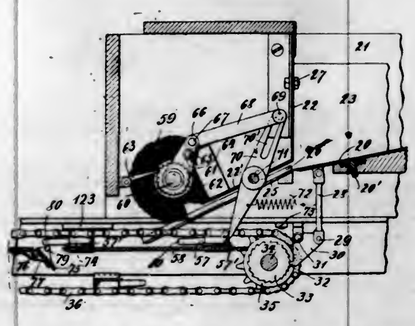
6. In sighting means, a main supporting frame, a telescope supporting frame pivotally mounted in the main frame on an axis extending longitudinally of the same, a telescope supporting block pivotally mounted in the telescope supporting frame on an axis extending transversely of the same, a sighting telescope secured in said block so as to have its inclination adjusted both longitudinally and laterally of the main supporting frame in either direction, and means for indicating the inclination of the telescope.

9. In sighting means, a main supporting frame, a telescope supporting frame pivotally mounted in the main frame on an axis extending longitudinally of the same, segmental frames secured to each lateral face of said telescope supporting frame and extending upward therefrom, each of said segmental frames being provided at its upper end with an arcuate graduated beam, a block pivotally mounted in the telescope supporting frame on an axis extending transversely of the main frame, a sighting telescope carried by said block, indicator needles carried by the telescope and movable over said graduated beams, means carried by the telescope and engaging with said graduated beams for securing the telescope in adjustment longitudinally of the main frame, and means for indicating the inclination of the telescope laterally of said main frame in either direction.

11. In sighting means, a main supporting frame, bearing blocks secured at each end thereof, a telescope supporting frame provided at each end with a trunnion fitting into said bearing blocks, one of said trunnions being extended, segmental frames secured to the lateral faces of the telescope supporting frame each provided with a graduated beam at its upper end, a block pivotally mounted in said telescope supporting frame on an axis extending transversely of the same, a sighting telescope carried by said block, indicator needles carried by the telescope and movable over said beams, an arcuate indicating beam secured to one of said bearing blocks concentric with the extended trunnion and graduated to indicate the inclination of the telescope in either direction laterally of the frame, means for securing the telescope in adjustment longitudinally of the frame, and independent means for securing the telescope in adjustment transversely of said main supporting frame.

[Claims 2, 4, 5, 7, 8, and 10 not printed in the Gazette.]

1,266,734. CONVEYING OR SUPPLYING MECHANISM. GEORGE WHITE, Jersey City, N. J., assignor to Panayiotis Panoulias, Jersey City, N. J. Filed July 19, 1913. Serial No. 779,985. (Cl. 193—1.)



1. The combination of a box having an inclined bottom, a feed board at the lower end of said bottom, means for controlling the passage of articles from said box to the feed board and mechanism for vibrating said bottom.

9. In a feed mechanism, a table, a feed board for guiding articles to said table, rotary brushes arranged adjacent to said feed board to engage the articles thereon, propelling means, movable relatively to the table, to engage the articles thereon and feed them lengthwise of the table, and means, operated by the movement of the said propelling means, for actuating said brushes.

10. In a feed mechanism, a table, a feed board for guiding articles to said table, means for forming in conjunction with said feed board, a series of passages lying side by side, and propelling bars, extending transversely over the table and movable lengthwise thereof to feed the articles on said table, said bars being provided with notches corresponding to the position of said passages and adapted to aline and space the articles transversely.

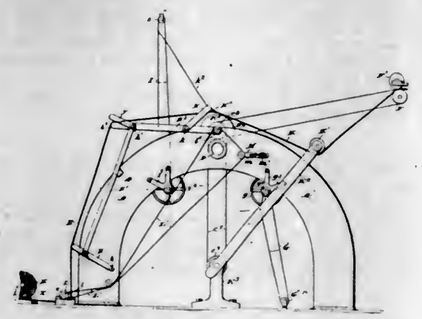
12. In a feed mechanism, a table, a feed board for guiding articles to said table, longitudinal partitions extending upwardly from said feed board and forming in conjunction therewith, a series of passages lying side by said, U-shaped members adapted to be slipped over said partitions to reduce the width of said passages, and means for feeding the articles.

[Claims 2 to 8 and 11 not printed in the Gazette.]

1,266,735. MACHINE FOR HEATING COATED FABRIC. JOHN F. WHITE, Chicago, Ill. Filed Apr. 17, 1916. Serial No. 91,677. (Cl. 34—48.)

1. In a fabric heating machine, the combination with a substantially U-shaped drum member, of heaters at opposite ends thereof, an exit port comprising a tubular member entering the drum, and means for permitting a larger volume of exhaust from one side of the drum than from the other.

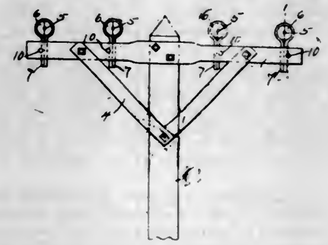
2. In a fabric heating machine, the combination with a drum member, of a heater therefor, an exhaust leading from the drum, and regulated inlet extension for the exhaust located within the drum and provided with means for permitting a greater volume of exhaust at a point of the drum than the other.



3. In a fabric heating machine, the combination with a drum having heating means, of an exhaust pipe member entering the drum and communicating with the exhaust and having a V-shaped longitudinally arranged exhaust aperture, and means for varying the area of the said exhaust aperture.

[Claims 4 to 25 not printed in the Gazette.]

1,266,736. SUPPORT FOR TELEGRAPH LINE-WIRES AND THE LIKE. JAMES F. WILSON, Wichita Falls, Tex. Filed July 31, 1917. Serial No. 183,672. (Cl. 173—314.)

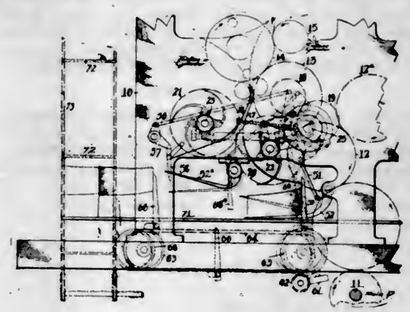


1. A support for telegraph line wires and the like comprising a cross-bar having vertical openings and horizontal openings intercepting said openings, clamps secured in said openings, flanged insulation in two parts carried by said clamps and clamped on the line wires by said clamps, and means in said horizontal openings for locking said clamps against vertical movement.

2. A support for telegraph line wires and the like comprising a cross-bar having vertical openings therethrough, line engaging members, each consisting of a block of insulation in two parts for receiving a wire and having faces meeting in a vertical plane, a clamp bent about the parts of said insulation and having arms sprung together and inserted in one of said openings and clamping said insulation on the wire, and a key for locking the clamp in its opening.

3. A support for telegraph line wires and the like comprising a cross-bar having vertical openings therethrough and horizontal openings therethrough intercepting said vertical openings, line engaging members, each consisting of an insulation block in two parts, a clamp bent about said insulation and having arms sprung together, forcing said insulation on a wire and inserted through one of said vertical openings, one of said arms having a recess in the outside, and a wedge-shaped key for locking said clamp in said opening inserted through one of said horizontal openings, engaging the recess in said arm.

1,266,737. PULSATING-FAN DELIVERY. HENRY A. WISE WOOD, New York, and JOHN A. ISBELL, Middletown, N. Y., assignors, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Aug. 5, 1912, Serial No. 713,303. Renewed Oct. 11, 1917. Serial No. 196,088. (Cl. 93—93.)



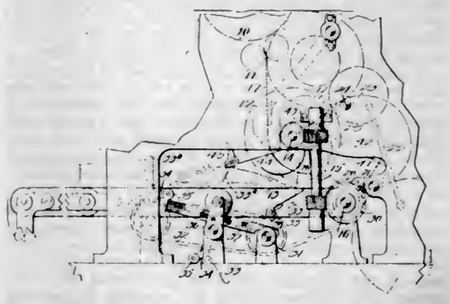
2. In a device of the character described, the combination of a pair of oppositely rotatable pulsating fan deliveries having blades, means for projecting the blades of one fan and retracting those of the other, a set of lowering arms under each of said fans, and means for raising each lowering arm when the blades of the fan above are projected and lowering it when they are being retracted.

4. In a device of the character described, the combination of a pair of rotatable pulsating fan deliveries having blades, means for alternately operating them, a set of lowering arms under each of said fans, one of said lowering arms being located in a lower plane than the other, and a carrier below said lowering arms having means for receiving a pile of sheets from said lowering arms.

10. In a delivery for folded sheets the combination of a set of guides, a pair of rotary members located on opposite sides of said guides having blades adapted to extend between said guides and arranged to receive and support sheets while between the guides, and means for rotating said rotary members to bring the blades into position for the sheets to slide off.

[Claims 1, 3, 5 to 9, and 11 to 26 not printed in the Gazette.]

1,266,738. BUNDLING DELIVERY FOR FOLDERS. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Oct. 1, 1912, Serial No. 723,284. Renewed Oct. 11, 1917. Serial No. 196,089. (Cl. 93—93.)



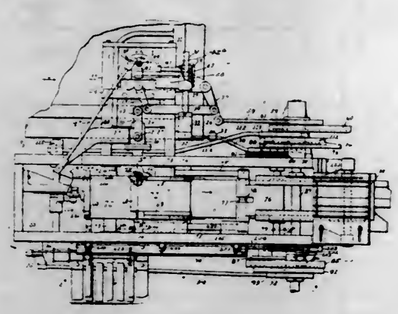
1. The combination with an endless conveyer and means for delivering sheets or the like thereon, of a stop

for the rear ends of said sheets, means for continuously advancing said stop in the direction in which the conveyer operates and for then retracting it, and means for moving the sheets forward on the conveyer to form a bundle while the stop is retracted.

4. The combination with a conveyer for receiving sheets or the like in successive longitudinal positions on said conveyer, of means for periodically advancing a number of sheets along the conveyer to form a bundle thereof, and a movable stop for advancing the sheets on the conveyer before said bundling means acts.

[Claims 2, 3, and 5 to 17 not printed in the Gazette.]

1,266,739. MULTIPLE-STEREOTYPE-PLATE-CASTING MACHINE. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 20, 1910, Serial No. 584,488. Renewed Oct. 12, 1917. Serial No. 196,345. (Cl. 22—2.)



1. As an article of manufacture, a stereotype plate casting mold having a vertical mold space for forming a plate, and a vertically disposed pouring slot or mouth communicating with the vertical mold space substantially throughout the extent of the height thereof, and provided with an enlarged space at the base thereof for holding a quantity of metal.

18. In a stereotype plate casting apparatus, the combination with a movable mold having a flat mold space, of means for casting a plate therein in vertical position, means for turning the mold, and means for ejecting the matrix in a horizontal position.

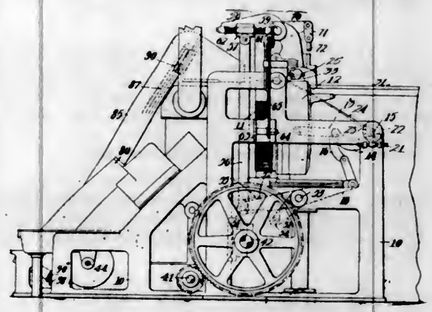
21. In a machine of the character described, the combination with a pair of mold elements, each having a plurality of sides, one of said mold elements being adapted to receive matrices on its different sides, means for bringing said mold elements together to form a mold for casting a printing plate betwen them and for separating the mold elements thereafter, and means for then turning the mold element having the matrices thereon to bring another matrix into position opposite the other mold element.

45. In a casting machine, the combination of a pair of mold elements, means for moving one of said mold elements toward and from the other, the said movable mold element being rotatable on an axis, a gear on said rotatable element, a rack adapted to mesh with said gear, means for moving said rack back with the mold element during part of its motion away from the other mold element and for then arresting the motion of the rack to cause the mold element to be rotated through a part of a revolution, and for thereafter moving the rack along with the movable mold element to prevent the further rotation thereof up to the end of the stroke, means for withdrawing the rack from mesh with the gear during the return stroke and stationary guides for engaging the movable mold element to prevent its rotation while the rack moves along with it.

54. In a machine of the character described, the combination of a melting pot having a nozzle, a pair of mold elements, means movable transversely to the surface of the nozzle for bringing the casting boxes together in front of the nozzle, means for moving the nozzle up to the mold elements in position to discharge metal between them, and means for moving one of the mold elements away from the other in a direction transverse to the direction of motion of the nozzle.

[Claims 2 to 17, 19, 20, 22 to 44, 46 to 53, 55, and 56 not printed in the Gazette.]

1,266,740. MOLD FOR STEREOTYPING AND MEANS FOR SUPPLYING METAL THERETO. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Sept. 16, 1913, Serial No. 790,071. Renewed Oct. 12, 1917. Serial No. 196,346. (Cl. 22—2.)



1. The combination with a movable mold section and means for moving it, of a pump for supplying metal to the mold having a piston, means for operating the piston, a cam operated by said mold section moving means, and positive means operated by said cam for rendering said pump inoperative independently of the operation of the piston.

2. The combination with a movable mold section and a toggle for operating it, of a shaft fixed to and oscillatable with said toggle, a pump cylinder, means for controlling the operativeness of said pump cylinder to deliver metal, and means operated by said shaft for operating the first named means.

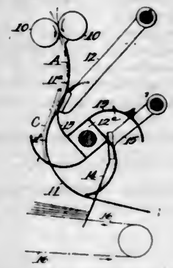
3. The combination with a movable mold section, of a lever for operating it, a shaft fixed to said lever about the axis of which the lever turns with the shaft, a cam on the shaft, a pump for supplying metal to the mold, and means operated by said cam for rendering said pump inoperative when the mold section and lever are moved from casting position.

4. The combination with a movable mold section and a lever for operating it, of a shaft, means operated by said shaft for operating said lever, a cam fixed with respect to said lever and adapted to be turned when the lever is turned to move the mold section, a pump having a piston, means for operating the piston, a cylinder for the piston having a port, a valve for said cylinder arranged to open and close the port, and means operated by said cam for controlling the position of said valve.

6. The combination of a main shaft, a cam shaft connected therewith and operated thereby, a pump, a cam on said shaft, connections from the cam to the pump for operating the pump, a mold in position to be supplied by metal from said pump, said mold having a movable element, a toggle lever for operating said movable element, and a system of levers operated by said shaft for operating said toggle lever.

[Claim 5 not printed in the Gazette.]

1,266,741. METHOD OF DELIVERING FOLDED SHEETS. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed June 16, 1913, Serial No. 773,918. Divided and this application filed Dec. 3, 1917. Serial No. 205,136. (Cl. 271—80.)

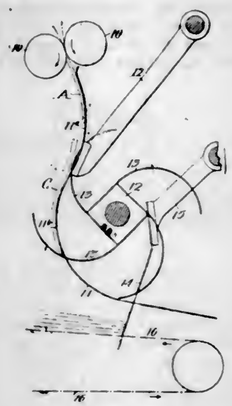


1. The method of delivering folded sheets from a folding mechanism which consists in causing the sheets to traverse an S shaped path between the folding mechanism and the point of delivery to prevent their assuming a flat condition and cause them to resist the tendency to buckle in the direction of their movement.

4. The method of delivering folded sheets, which consists in moving them forward folded edge foremost, curving the forward end of the sheets transversely, retarding the motion of the sheets while in such curved condition and simultaneously curving the forward end in a reverse direction, then carrying them forward along the latter curve and delivering them.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,266,742. APPARATUS FOR DELIVERING FOLDED SHEETS. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed June 16, 1913, Serial No. 773,918. Renewed Dec. 10, 1917. Serial No. 206,544. (Cl. 271—80.)



1. In an apparatus for delivering folded sheets, the combination of a pair of folding rolls effective to deliver folded sheets at an inclination, a substantially vertical curved paper guide having a concave surface facing the edges of the sheets thus delivered and effective to curve said sheets and a convex curve in position to reverse the inclination of their line of travel, and a rotary fan to receive the sheets from said curved guide.

2. In a device for delivering folded sheets, the combination with folding rolls, of a guide having a concave curve in position for receiving the ends of the sheets from the rolls and curving them, and a convex curve below the same and continuous therewith, a rotary fan having blades movable forwardly along the convex curve for receiving the ends of the sheets and keeping them in contact with said convex curve, and a stationary stop located at the bottom of said guide for receiving the ends of the sheets as they are dropped from the blades, the blades being located to withdraw past the guide before the sheets engage the stop.

[Claims 3 to 8 not printed in the Gazette.]

1,266,743. CRANK-CASE OIL-GAGE. ALBERT P. WORTHINGTON and RAYMOND C. AUSTIN, Los Angeles, Cal.; said Austin assignor to said Worthington. Filed Feb. 27, 1914. Serial No. 821,568. (Cl. 73—82.)



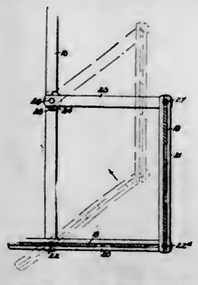
4. A liquid level gage comprising a vertical receptacle adapted to be placed on virtually the same level as a liquid reservoir and to be connected at its lower end with the reservoir so as to allow the liquid in the reservoir to enter the receptacle; a float adapted to move vertically in the receptacle with the change of liquid levels therein; means on the float for minimizing the friction between the float and the receptacle during said vertical movement; a sinuous tube extending upwardly from the top of the receptacle; a transparent tubular tip secured to the upper end of the tube; an indicating member made of a comparatively frictionless material and slidably fitting the tubular tip and being adapted to move longitudinally therein; and a single, flexible wire connected at one end with the float and extending from the top thereof longitudinally through the tube into the tubular tip and being at its other end connected with the indicating member so that the indicating member will move simultaneously with the float and thus indicate the liquid level in the receptacle, the wire having sufficient strength to support the indicating member during its movements in the tubular tip and also being of such a small diameter as to cause minimization of the friction between the wire and the tube during the wire's longitudinal movements in the tube.

[Claims 1 to 3 not printed in the Gazette.]

1,266,744. SWING. JOHN STANISLAUS WORZALLA, Stevens Point, Wis. Filed Jan. 10, 1917. Serial No. 141,590. (Cl. 155—35.)

1. In a swing, hangers, means mounting the hangers for swinging movement, a seat between the hangers and pivoted near the front end thereof to swing to a position at either side of the hangers or a position between the

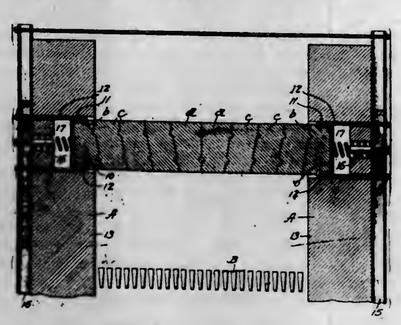
hangers and in the plane thereof, a back pivoted at its lower end to the rear end of the said seat, arms pivoted at the front ends thereof to the hangers at the inner faces of the latter above the seat pivots, the said arms being adapted to swing to either side of the hangers or to an intermediate position in the plane of the hangers, the rear ends of said arms being pivoted to the upper end of the said back, said back being swingable with the seat and arms to either side of the hangers or to a position in the plane of the hangers, stops on the hangers at the inner surfaces thereof beneath the pivots of the arms, and plates interposed between the outer faces of the arms and the hangers and swingable with the arms with the adjacent pivots of the arms as axes, the said plates presenting ends projecting beyond the upper and lower surfaces of the arms when the seat is in position for use, the said projecting ends presenting edges either of which is engageable with the fixed stops on the hangers to sustain the seat at either side of the hangers.



4. In a swing, a support, hangers mounted to swing on the support, a seat between the hangers and pivoted near the front end thereto, side arms above the seat and pivoted near the front ends to the hangers, a back pivotally connected at its lower end with the seat and at its upper end with the side arms, said seat, arms and back being swingable from one side of the hangers to the other, and co-acting stop elements on the hangers and side arms engageable with each other when the arms are disposed at either side of the hangers.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,266,745. NON-COLLAPSIBLE FLAT ARCH FOR FURNACES. OTTO WUNDRACK, Maywood, Ill. Filed Nov. 28, 1917. Serial No. 204,362. (Cl. 110—99.)



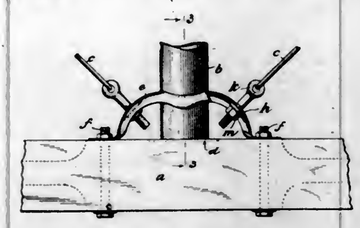
1. Arches for furnaces comprising springer-tiles, arch-tiles and key-tiles, and yieldable metal abutments engaged by said springer-tiles; said tiles being provided with longitudinal grooves in one longitudinal side, and longitudinal tongues in the opposite longitudinal side which the tongue and groove of the contacting side of the next tile are adapted to engage.

2. An arch for furnaces comprising a transverse series of tile that includes springer-tiles, arch-tiles and key-tiles the contacting longitudinal sides of each of which is, except at the center of the span, inclined downward toward the transverse center of the furnace and have longitudinal tongues projecting from one side that engage corresponding grooves in the engaging side of the next tile, and yieldable metallic abutments by which said springer-tiles are supported.

3. Arches for furnaces comprising springer-tiles, arch-tiles and key-tiles, side-walls, abutment members in which said springer-tiles are seated consisting of rolled metal beams supported by said walls, and resilient yielding devices that press said abutment members toward the center of the arch.

[Claims 4 to 8 not printed in the Gazette.]

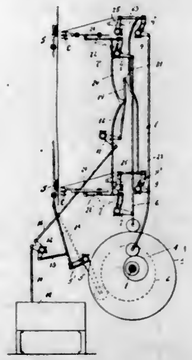
1,266,746. AEROPLANE. LEWIS G. YOUNG, New York, N. Y. Filed Oct. 2, 1917. Serial No. 194,307. (Cl. 244—31.)



6. The combination in an aeroplane wing, of a wing-spar, a strut fitting secured to the wing-spar, arched longitudinally, concavo-convex in transverse section, and provided with a central aperture, a strut seated in the central aperture and bearing against the wing-spar, and guy wires secured to the fitting, the fitting being provided with slots for connection with the guy wires, each of said guy wires having at its end an eye-bolt passed through the fitting and receiving a nut on the inner side thereof.

[Claims 1 to 5 not printed in the Gazette.]

1,266,747. AUTOMATIC EMBROIDERING-MACHINE. ROBERT ZAHN, Plauen, Germany; Alfred Rietzsch administrator of said Robert Zahn, deceased. Filed June 1, 1912. Serial No. 701,016. (Cl. 112—7.)



1. In an embroidering machine, embroidering implements, perforating implements, a single shaft rotating continuously in one direction whereby the said implements are operated, means including said shaft for imparting to the different parts of the embroidering implements in idle or ineffective motion without stopping the rotation of said shaft and means including said shaft for imparting an idle or ineffective motion to said perforating implements without stopping the rotation of said shaft.

2. In a jacquard embroidering machine, a stitching mechanism comprising stitching needles, shuttles and take-ups, a jacquard apparatus, a single shaft adapted to rotate continuously in one direction and to operate said stitching needles, shuttles and take-ups and a single jacquard controlled means for simultaneously rendering ineffective the different parts of the stitching mechanism without stopping the rotation of the shaft.

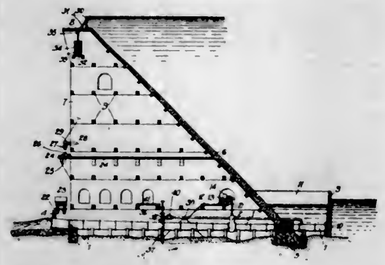
3. In a jacquard embrodering machine, a stitching mechanism including stitching needles, shuttles and take-ups, a jacquard apparatus, a single shaft adapted to rotate continuously in one direction and having a series of cams for actuating the said several parts of the stitching mechanism and a single means actuated from the said jacquard apparatus for simultaneously rendering ineffective the said several parts of the stitching mechanism without stopping the rotation of said shaft.

4. In a jacquard embroidering machine, a stitching mechanism including stitching needles, shuttles and take-ups, a jacquard apparatus, a single shaft adapted to rotate continuously in one direction, a series of cams thereon for actuating the said several parts of the mechanism and a single means actuated from the said jacquard apparatus for simultaneously rendering ineffective the said several parts of the stitching mechanism without stopping the rotation of said cams.

9. In a jacquard embroidering machine, a stitching mechanism, including needles, shuttles and thread take-ups, a single continuously rotating shaft, link motion connections between said shaft and each of the implements of said stitching mechanism, and a single jacquard controlled means for simultaneously adjusting all said link motion connections from operative position into an idle or ineffective motion position without stopping said shaft.

[Claims 5 to 8 not printed in the Gazette.]

1,266,748. DAM CONSTRUCTION. WALTER H. ZIMMERMAN, Chicago, Ill. Filed Jan. 6, 1913. Serial No. 740,364. (Cl. 61—24.)



1. In a dam construction, the combination of a main retaining wall for the water to be stored, an auxiliary retaining wall above the main retaining wall, a second auxiliary retaining wall below the main retaining wall, and a large diameter pipe or pipes extending from one auxiliary retaining wall to the other through the main retaining wall to conduct the water from above the upper retaining wall below the lower retaining wall.

2. In a dam construction, the combination of a main retaining wall for the water to be stored, an auxiliary retaining wall above the main retaining wall, a second auxiliary retaining wall below the main retaining wall, a large diameter pipe or pipes extending from one auxiliary retaining wall to the other through the main retaining wall to conduct the water from above the upper retaining wall below the lower retaining wall, and a gate valve in each of said pipes.

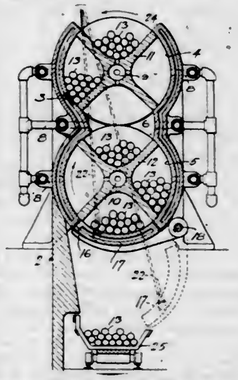
1,266,749. ARTIFICIAL TREE. JAMES A. ABBOTT, Leavenworth, Wash. Filed Oct. 29, 1917. Serial No. 199,115. (Cl. 41—15.)



1. In a decorative device, a post formed of a plurality of tubular sections, in end to end relation, means pivotally connecting the sections to permit the same to be folded one upon another and tubular members extending transversely through each section to receive the trimmed ends of branches.

[Claims 2 to 4 not printed in the Gazette.]

1,266,750. ANNEALING-FURNACE. JAMES D. ADAMS, North Belle Vernon, Pa. Filed May 26, 1917. Serial No. 171,143. (Cl. 263—7.)



4. An annealing furnace comprising a circular heating chamber, a rotary frame mounted therein having a plurality of compartments, said heating chamber having a discharge opening, a counterweighted door closing said opening, and means operated by the rotation of said frame for opening said door.

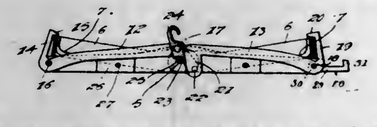
5. An annealing furnace comprising a circular heating chamber, a rotary frame mounted therein having a plurality of compartments, said heating chamber having a discharge opening, a counterweighted swinging door normally closing said opening, a mutilated gear on said rotary frame, a pinion connected to said door adapted to be engaged by said mutilated gear.

6. An annealing furnace comprising upper and lower communicating circular heating chambers, shafts in said chambers, frames mounted on said shafts having a plurality of compartments intermeshing gears on said shafts, the lower heating chamber having a discharge opening, a counterweighted swinging door normally closing said opening, a mutilated gear on the shaft of said lower chamber, and a pinion connected to said door adapted to be engaged by said mutilated gear.

7. An annealing furnace comprising upper and lower communicating circular heating chambers, rotary frames in said chambers having a plurality of compartments, said furnace having charging and discharging openings.

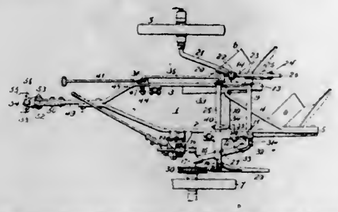
[Claims 1 to 3 not printed in the Gazette.]

1,266,751. TRAP. JAMES H. ALEXANDER, Conquest, Kans. Filed Feb. 18, 1916. Serial No. 79,145. (Cl. 43—23.)



A trap comprising a frame formed of a pair of parallel bars, said bars being spaced and provided centrally with centrally with outwardly offset portions, a transverse pivot bolt extending centrally through said bars and at right angles thereto, jaws pivoted to said pivot bolt, springs surrounding said pivot bolt on each side of said parallel bars and engaging said jaws to normally force said jaws toward each other, levers pivoted between the parallel bars of the frame at their opposite ends, the outer ends of said levers being provided with hooks for engaging the jaws, to hold the same against the tension of the springs, a link mounted above the transverse pivot bolt and between the outwardly offset portions of the parallel bars and pivotally connecting the inner ends of the levers, and a bait hook formed on the upper portion of the link as for the purpose specified.

1,266,752. PLOW STRUCTURE. RUDOLPH JOSEPH ALTGELT, South Bend, Ind., assignor to Oliver Chilled Plow Works, South Bend, Ind. Filed Sept. 29, 1917. Serial No. 193,968. (Cl. 97—55.)



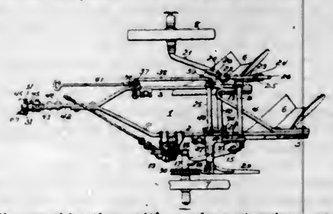
1. The combination with a plow structure and means for connecting the forward end of said plow structure with draft means, of crank axles mounted on the plow structure, carrying wheels on said crank axles, a gear carried by one of said wheels, a rack mounted on the plow structure, a spring-pressed cam device connected with said rack and operating normally to hold the same out of mesh with the gear and also operating to press the same toward the gear during the operation of raising the plow structure, and means for manually operating said spring-pressed cam device.

3. The combination with a plow structure, means for pivotally connecting the forward end of the same to draft means, crank axles mounted on the plow structure, carrying wheels on said crank axles, and a gear connected with one of said wheels, of a shaft mounted on the plow structure, a segmental rack secured to said shaft, a spring-pressed cam device connected with said shaft and acting as latch means normally holding the segmental rack elevated, means for operating said cam device to lower the rack into mesh with the gear and permit it to press the rack toward the gear, said segmental rack having a shallow notch and a beveled face near its free end for disengaging said rack from the gear and resetting the cam device to cause it to return said rack to elevated position.

[Claim 2 not printed in the Gazette.]

1,266,753. PLOW STRUCTURE. RUDOLPH JOSEPH ALTGELT, South Bend, Ind., assignor to Oliver Chilled Plow Works, South Bend, Ind. Filed Sept. 29, 1917. Serial No. 193,969. (Cl. 97—36.)

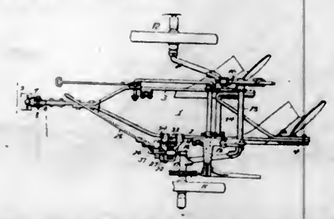
1. The combination with a plow structure, means for connecting the same with a draft means, crank axles mounted on the plow structure, wheels on said crank axles, and means for raising the plow structure, of an arm independent of the raising means secured to one of said crank axles, a bar pivoted at one end to said arm, and a link pivoted at one end to said bar and at the other end to a part on the plow structure independent of the raising means, whereby when the plow structure has been raised by the raising means, the connection of the link to the bar will pass beyond a line passing through the connection of the link to the plow structure and the pivotal connection of the bar to the arm on the crank axle and lock the plow structure in raised position.



3. The combination with a plow structure, means for connecting the forward end of the same to draft means, crank axles mounted on the plow structure, brackets affording bearings for said axles, and wheels on said axles, of an arm on one of said axles, links pivoted to one of said brackets, a bar pivoted at one end to said arm, a pivot pin connecting the other end of said bar to the links and projecting laterally beyond the same, means for raising the plow structure and causing the pivotal connection of the bar to the links to move beyond a line passing through the pivotal connection of the links to the bracket and the pivotal connection of the bar to the arm on the crank axle to lock the plow structure in raised position, a shaft on the plow structure having an arm disposed under the projecting end of said pivot pin when the plow structure is in raised position, means for holding said shaft in normal position, and means for turning said shaft to raise the arm thereon for raising the links to release the plow structure and permit it to descend.

[Claim 2 not printed in the Gazette.]

1,266,754. PLOW STRUCTURE. RUDOLPH JOSEPH ALTGELT, South Bend, Ind., assignor to Oliver Chilled Plow Works, South Bend, Ind. Filed Sept. 29, 1917. Serial No. 193,970. (Cl. 97—36.)

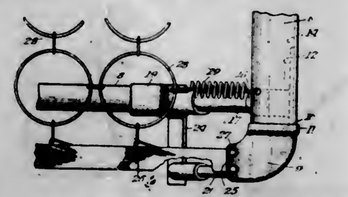


1. The combination with a plow structure, wheels therefor, and an axle mounted on the plow structure, of a bracket secured to the plow structure, a double ratchet bar vertically movable through said bracket and adapted to coöperate with said axle, a hand lever pivoted to said bracket, pivoted spring actuated dogs hung on said lever for coöperation with said double ratchet bar to move the same in one direction when the hand lever is swung back and forth, means for disengaging said dogs from the ratchet bar, and a spring for moving said bar in the reverse direction.

3. The combination with a bracket adapted to be secured to a plow structure, of a double ratchet bar movable through said bracket and adapted to engage a part to raise the plow structure, a hand lever pivoted to said bracket, spring-actuated dogs hung on said hand lever and engaging the ratchet bar for moving said bar in one direction when the hand lever is moved back and forth, a spring for moving said bar in the other direction, a pivoted shifting link between said dogs, said link having a laterally projecting part, a spring-sustained trigger pivoted to the hand lever, and means for moving said trigger into engagement with the lateral projection on the shifting link to engage the dogs from the ratchet bar.

[Claim 2 not printed in the Gazette.]

1,266,755. CORNER-BRACKET FOR BED-BOTTOMS. WILLIAM B. ANDERSON, Chicago, Ill., assignor to Haggard and Marcusson Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 20, 1917. Serial No. 143,439. (Cl. 5—63.)



1. In a bed bottom frame the combination with a side rail and an end rail, of a corner bracket, for joining the rails together, comprising a top member having a part for connection with the end rail, and an outwardly projecting part, to which to connect the marginal border of the spring fabric to be connected to the frame, and a part for connection with an end rail thereof; a bottom bracket member, having a part for connection with the side rail and a part projecting outwardly into substantially the vertical plane with the border-connecting part of the upper member, and means, in the vertical plane of the side rail and other means in the vertical plane of the border connecting-member, to connect the two bracket members together.

2. A corner bracket for a bed bottom frame comprising two separable members, each having a part for connecting the side and end rails of a frame and an outwardly projecting part, one for the selvage border of the wire fabric and the other for support upon the side rail of a bed and two substantially parallel members for connecting said bracket members together.

3. In combination with a bed frame having an angular end rail and a tubular side rail, of a two part bracket, for joining the rails one above the other, one part having a tubular socket for engagement with the side rail and an angularly disposed socket to receive a connecting tube, the other part having a flange to overlie the abutting end of the angular end rail and a socket angularly disposed to receive the connecting tube whereby to connect the rails together with the end rail above the side rail.

1,266,756. [WITHDRAWN.]

1,266,757. ATTACHMENT FOR EYEGLASS-MOUNTINGS. LEW ARNTZ, Des Moines, Iowa. Filed Dec. 20, 1917. Serial No. 208,192. (Cl. 88—50.)



2. A mounting comprising the combination of a bridge having at its ends substantially horizontal extensions, posts mounted in said extensions for limiting rotary movement, said posts and said extensions having means whereby they may be locked at their different limits of movement, laterally extending pins on said posts, guards each comprising a finger piece lever, a sleeve on said finger piece lever having a central bore for receiving one of said posts, and a slot opening into said bore for permitting the passage of one of said pins, the parts being so arranged that at one limit of movement of the post one of said sleeves may be mounted on the post with the pin on said post registering with the slot in the sleeve while in another position of said post the sleeve cannot be moved to such position that the slot therein will register with said last named pin.

[Claims 1 and 3 not printed in the Gazette.]

1,266,758. SANITARY SPUTUM-CUP. LENA B. ASHBY, Homer, Ky. Filed Oct. 16, 1917. Serial No. 196,956. (Cl. 4—38.)

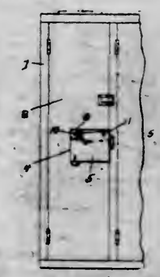


1. A sputum cup including a receptacle open at its top, a close-fitting cover for the top of the receptacle, and a removable collapsible lining within the receptacle, said receptacle having openings therein at diametrically opposite points and below its upper edge through which the fingers of the user may be inserted and the upper portion of the lining collapsed so that said upper portion may be grasped upon its outer surface and removed from the receptacle.

2. A sputum cup including a receptacle having a removable collapsible lining fitting snugly therein, said receptacle having finger receiving openings in diametrically opposite points for the reception of the fingers of the user to collapse the upper portion of the lining without touching the interior thereof, a movable cover for the receptacle, a removable lining for the cover, means for holding the lining in the cover, said cover having a finger opening for permitting the removal of the lining.

3. A sputum cup including a receptacle, a removable collapsible lining for the receptacle, the receptacle having finger receiving openings for facilitating the collapse and removal of the lining without touching the interior of the lining, and a movable cover having a removable lining, and means for holding the lining therein.

1,266,759. ATTACHMENT FOR THE CHECK-CHUTES OF CHECK-OPERATED LOCKS. PERCIVAL H. ATKINSON, Burns, Oreg. Filed Sept. 27, 1916. Serial No. 122,458. (Cl. 194—1.)



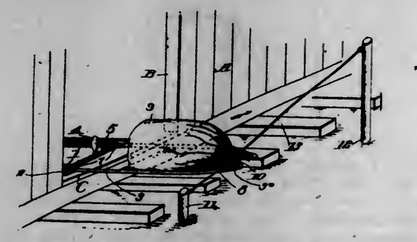
1. The combination with the check chute of a check operated lock, of a casing having check slots therein registering with the entrance to said check chute, a disk

mounted for rotation within said casing and having crossed check slots therein, and means for causing one of said crossed check slots to register with the slots in said casing.

3. The combination with the check chute of a check operated lock, of a casing having a graduated face plate provided with an arcuate slot, said casing having check slots therein registering with the entrance of the check chute, a disk mounted to turn in said casing and having crossed check slots therein adapted to be brought one at a time into registration with the check slots in said casing, a ring adjustably connected with said disk and having an arm extending through the arcuate slot in said face plate, and an indicating hand on said arm.

[Claims 2 and 4 not printed in the Gazette.]

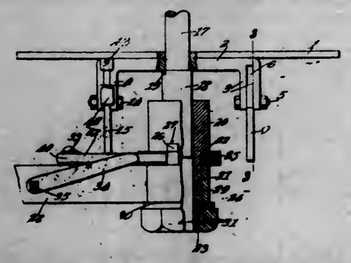
1,266,760. MAIL-BAG-DELIVERING MEANS. NAPOLEON J. AUCLAIR, Portland, Oreg. Filed Feb. 8, 1918. Serial No. 216,086. (Cl. 258—9.)



1. In mail bag delivering means, two spaced parallel guide members, a frame slidable in said members and having its movement in either direction positively limited, a supporting plate carried by said frame, said supporting plate conforming in contour to the interior contour of the frame, said frame being provided at the center of its outer end with an inwardly directed substantially V-shaped member adapted to permit a hook carried by a mail bag supported by the plate to project beneath the frame so as to be engaged by a member for removing the bag from the plate.

2. In mail bag delivering means, two spaced parallel guide members, a frame slidable therein, said frame having its outer end portion rounded and provided at the center thereof with an inwardly directed substantially V-shaped member, and a supporting plate carried by the frame and conforming in contour to the interior contour of said frame.

1,266,761. AUTOMOBILE-CRANK. CLARENCE A. BAILEY and LOUIS C. SOILEAU, Rayne, La. Filed Nov. 10, 1917. Serial No. 201,343. (Cl. 123—185.)

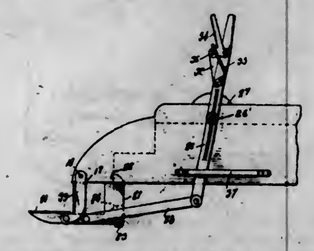


1. In a device of the class described, a support; an engine shaft journaled thereon; a ratchet wheel carried by the shaft; a handle journaled on the shaft; a pawl mounted on the handle and coacting with the ratchet wheel; a striker extended into the path of the pawl and constituting means for detaching the pawl from the ratchet wheel in case of a back-fire; means for mounting the striker for swinging movement; and means for limiting the swinging movement of the striker in one direction.

2. A device constructed in accordance with claim 1, in combination with automatically acting means for holding the pawl out of engagement with the ratchet wheel, after the pawl has been disengaged from the wheel by the striker.

[Claims 3 and 4 not printed in the Gazette.]

1,266,762. COLLAPSIBLE STEP. NOAH J. BECKNER, North Yakima, Wash., assignor to Safety Patent Co., Yakima, Wash., a Corporation of Washington. Filed Nov. 8, 1917. Serial No. 200,964. (Cl. 105—86.)



1. In combination with fixed steps, a movable tread, means for supporting the same for movement from a position in front of the fixed steps to a position therebeneath, and means extending rearwardly from the movable step adapted, when said step is in lowered position to engage the under side of one of the fixed steps to prevent downward movement of the movable step under weight imposed thereupon.

3. In combination with fixed steps, a movable step, means for mounting the same for oscillation from a position forwardly of the step to a raised position beneath the step, notched rear extensions of the movable steps adapted, when the tread is lowered to engage the juncture of one of the risers and tread of the stationary step to prevent downward movement of the movable tread when weight is imposed thereupon.

5. In combination with fixed steps, a movable tread, links depending from the fixed steps to support the tread for movement from a position in front of the fixed steps to a position therebeneath, a rear extension of said tread, a pair of lugs formed on said extension, a link connected at one end to said extension, a lever pivotally mounted on the fixed steps and having one end connected to the other end of said link, and a clip mounted on said link engageable by one of the lugs to prevent the tread from tipping up from a horizontal position, the other link engaging the lug to prevent the tread from falling from a horizontal position.

[Claims 2 and 4 not printed in the Gazette.]

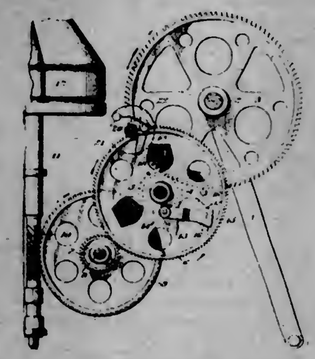
1,266,763. SPEED-INDICATOR. SAMUEL LESLIE BENNETT, Bellows Falls, Vt., assignor to The Vermont Farm Machine Company, Bellows Falls, Vt., a Corporation of Vermont. Filed Oct. 6, 1917. Serial No. 195,068. (Cl. 116—65.)

1. A speed indicator, comprising a rotating member, a centrifugal arm eccentrically pivoted on said member, and an audible alarm having its actuating mechanism extending into the path of movement of the centrifugal arm and adapted to be acted upon by said arm when the speed of the rotating member is below normal so as to sound the alarm and to be free of such action when the speed attained is at or above normal.

2. A speed indicator, comprising a rotating member, a centrifugally arm pivotally mounted on said member and having a gravitating motion between stops on said member, and an audible alarm having its sounding mechanism interposed in the path of movement of the centrifugal arm and adapted to be acted upon by said arm when the speed of the rotating member is below normal and to be free of such action when the speed attained is at or above normal.

3. A speed indicator, comprising a rotating member, a centrifugal arm pivotally mounted on said member, stops on said member to limit the pivotal movement of said arm, and an audible alarm having its sounding mechanism interposed in the path of movement of the centrifugal arm and adapted to be acted upon by said arm when the speed of the rotating member is below normal and to be free of such action when the speed attained is at or above normal.

4. A speed indicator, comprising a rotary member, an arm pivotally mounted on said member and having a restricted path of movement thereon, and an audible alarm provided with a lever projecting into the path of movement of said pivoted arm and adapted to be engaged by said arm when the rotation of the rotary member is less than normal and to be free of engagement therewith when the speed of the rotary member is at or above normal.



1,266,764. PROJECTILE-ROTATOR. BENJAMIN L. BLAIR, Indianapolis, Ind. Filed Apr. 13, 1917. Serial No. 161,792. (Cl. 89—6.)

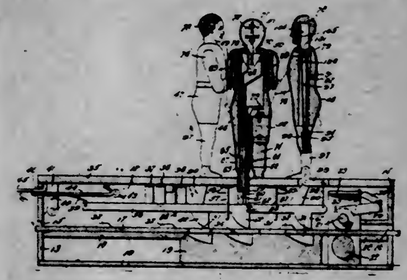


2. A nozzle for air guns having a diverging shell and a plurality of partitions which extend from the shell and meet at the axis of the shell, said partitions being curved to twist the air currents passing between them to the projectile.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,266,765. TOY. JOSEPH T. BOUFFORD, Linwood, Mass. Filed Sept. 19, 1916. Serial No. 121,079. (Cl. 46—40.)

1. A toy comprising a platform, figures upon said platform having movable arms, heads and legs, actuating bars pivotally connected with the platform and yieldably held in a set position, draw rods connecting the free ends of said actuating bars with the movable arms, heads, and legs of said figures, a record for controlling movement of said bars, a movably mounted locking strip, and means to draw the locking strip into engagement with the actuating bars for releasably holding the bars against movement in one direction and out of engagement with said record.



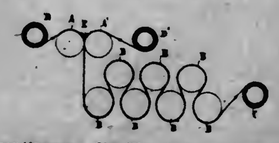
2. A toy comprising a platform, figures movably connected with said platform and having movable elements, actuating means for said figures including actuating bars pivotally connected with said platform, a record for controlling movement of the actuating bars engaged thereby, a locking strip pivotally connected with the platform, and a lever connected with the locking strip to move the strip into engagement with the actuating bars to releasably hold the actuating bars out of engagement with said record.

3. A toy comprising a housing, a cover for said housing, figures upon said cover having arms movable at the shoulders and elbows, wires pivoted at the shoulders and connected with the forearms, and means for swinging the arms from the shoulders including pins pivotally mounting the arms at the shoulders and actuating bars pivotally connected with said cover and connected with the pivot pins, and means for controlling movement of said bars.

4. A toy comprising a platform, figures upon said platform having pivotally mounted heads, and movable arms and legs, eye carrying blocks slidably mounted in the heads, rods carried by the bodies of the figures and engaging the blocks whereby movement of the heads will change the relation between the eyes and the eye sockets in the head, actuating bars carried by said platform, wires leading from the actuating bars to the heads, arms and legs, and means for controlling the movement of said actuating bars.

5. A toy comprising a housing, a cover for said housing, movable figures connected with said cover, actuating means for said figures connected with said cover, means for releasably locking said actuating means against movement including a locking strip pivotally mounted and an actuating lever pivotally connected with the cover and connected with the strip to move the strip into and out of operative engagement with the actuating means, said lever serving as a latch for engaging said housing to hold the cover in a closed position when the locking strip is in operative position, and controlling means for the actuating means in said housing.

1,266,766. COMPOSITE CELLULOSE FILM. JACQUES EDWIN BRANDENBERGER, Thaon-les-Vosges, France, assignor to Société Dite: La Cellophane, Paris, France. Filed May 26, 1914. Serial No. 841,150. (Cl. 154—46.)

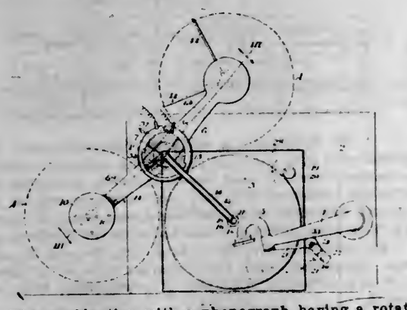


1. A continuous, film-like body of indefinite length, which comprises continuous, outer and inner, solid nitrocellulose films, and a continuous layer of plastic material intermediate of, and solidified between, said nitro-cellulose

films; one of said nitro-cellulose films having a continuous backing strip pasted thereto.

2. A continuous, film-like body which comprises a plastic substance solidified between two continuous, solid films of cellulose, said plastic substance having small particles of solid material incorporated therein.

1,266,767. AUTOMATIC RECORD-SHIFTING MECHANISM FOR PHONOGRAHS. EDGAR E. BROSIUS, Pittsburgh, Pa. Filed Mar. 20, 1917. Serial No. 156,029. (Cl. 274—10.)



1. The combination with a phonograph having a rotating disk record carrier, of a holder for unplayed records, another holder for played records, a member mounted to move in a circular path above said carrier and holders, and means carried by said member for engaging and lifting the records, and automatic means for controlling the engagement and disengagement of said means with and from the record, substantially as described.

4. Record-shifting mechanism for phonographs, comprising a shifting magnet, a movable carrier for said magnet, and means for energizing and deënergizing said magnet at the proper times to pick up and release the records, substantially as described.

6. The combination with a phonograph having a rotating disk record carrier, of a holder for unplayed records, another holder for played records, a shifting member mounted to move in a circular path above said carrier, a record-shifting magnet mounted on said member, and another magnet also mounted on the member and arranged to lift the first named magnet, together with means for automatically controlling the circuits of said magnets, substantially as described.

17. A composition phonograph record having a portion of magnetic material adapted to coöperate with a record shifting magnet, substantially as described.

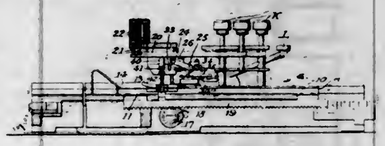
20. The combination with a phonograph, of disk records therefor having magnetic portions, a magnet arranged to attract said records and hold them while being moved into and out of playing position, an energizing circuit for said magnet, means for moving said magnet to transfer the records, and means for controlling the circuits of said magnets, together with stylus shifting mechanism forming a part of such means; substantially as described.

[Claims 2, 3, 5, 7 to 16, 18, and 19 not printed in the Gazette.]

1,266,768. VERIFYING-PUNCH. GEORGE B. BUCK, New York, N. Y., assignor to The Tabulating Machine Company, Washington, D. C., a Corporation of New Jersey. Filed July 25, 1916. Serial No. 111,204. (Cl. 73—51.)

1. In a machine of the class described, in combination, a support for a punch card; a series of keys; a series of pins for registering with the holes in said card; operative connections between each of said keys and one of said pins; and means for indicating the failure of any pin, when actuated by a key, to register with a hole in said card.

4. In a machine of the class described, in combination with a card carrier to receive a punched card and advance the same; a plurality of keys; mechanism operated thereby and adapted to coöperate with the card; a means for advancing the card carrier; and means operable when the key operated mechanism registers with a hole in the card, to permit the advance of the card carrier, said means being inoperable to permit the advance of the card carrier upon the non-registration of the key actuated mechanism and the hole in the card.

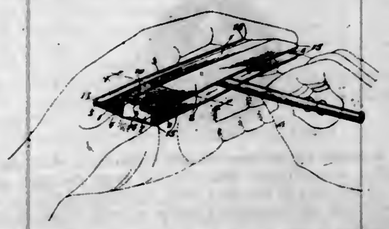


7. In a machine of the class described, in combination with a card carrier adapted to received a punched record card, and having provisions to advance the same; means to control the advance of the card carrier; a plurality of keys; key-operated mechanism in coöperative relation to the punch card; and means associated therewith to prevent the effective operation of the controlling mechanism upon the non-registration of the key-actuated mechanism and the hole in the record card, whereby the card carrier is not advanced when such non-registration occurs.

10. In a machine of the class described, in combination, a card carrier adapted to receive a punched record card; a driving means therefor; an escapement to control the movement of the card carrier; a series of verifying pins disposed adjacent the record card; a series of operating keys; a series of levers, each of said levers depressing one of the verifying pins upon the depression of a key; means for varying the fulcrum of the said levers when the depressed pin contacts with the card, said fulcrum maintaining its position when the verifying pin passes through a hole in the card; and means operable to release the escapement when the fulcrum remains fixed, said means being inoperable to release the escapement when the fulcrum of the lever varies.

[Claims 2, 3, 5, 6, 8, 9, and 11 not printed in the Gazette.]

1,266,769. PENCIL-SHARPENER. GEORGE BULLOCK, Grand Junction, Colo. Filed May 25, 1917. Serial No. 170,819. (Cl. 120—89.)



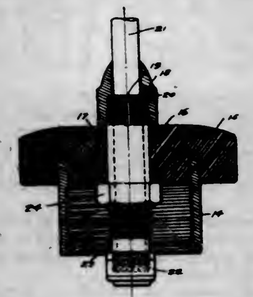
1. A pencil sharpener, comprising a single integral section of sheet metal having two parallel series of abrading dentils or serrations on one side thereof integral with a smooth surface between said series, said section being folded along said smooth surface to provide two converging walls having the abrading dentils or serrations on their inner surfaces, and having the smooth surface aforesaid forming a smooth connection between said walls at their converging edges constituting an abutment for the point of the lead and limiting movement of the pencil toward the converging edges of said walls while the pencil is being sharpened; and means for supporting a pencil between said walls parallel and out of contact with said dentils or serrations when the sharpener is idle.

10. A device of the character described, comprising two parallel walls for guiding the pencil to be sharpened, two converging integrally united walls in connection with said parallel walls, and abrading teeth or serrations on the inner surfaces of said converging walls.

12. A device of the character described, comprising two parallel walls capable of spreading movement, means limiting the spreading movement of said walls, two converging integrally united walls in connection with said parallel walls, a series of abrading teeth or serrations for the wood on the inner surface of each of said converging walls, a series of finer serrations for the lead on the inner surfaces of said converging walls near their line of convergence, and a smooth abutment surface for the point of the lead on the inner surface of the converging portion of said converging walls.

[Claims 2 to 9 and 11 not printed in the Gazette.]

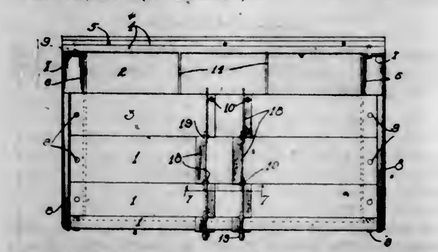
1,266,770. FLAGSTAFF-HOLDER FOR AUTOMOBILES AND THE LIKE. IRWIN G. BURTON, Los Angeles, Cal. Filed Apr. 3, 1917. Serial No. 159,434. (Cl. 248—37.)



1. In a flag mounting, the combination with a radiator cap having a central opening formed through it, of a tubular sleeve adapted to extend through said opening and to receive the end of a flagstaff, means whereby said staff may be detachably secured within the sleeve, locking means for securing the sleeve within the opening through the cap, and means whereby the opening through the radiator cap may be closed in a sightly manner when the staff is removed.

2. In a flag mounting, the combination with a radiator cap having a central opening through it, of a split tubular sleeve adapted to extend through said opening and receive the end of a flagstaff, a jam nut to clamp the sleeve upon the staff, and a clamping nut acting in combination with the jam nut to hold the sleeve in position in the cap.

1,266,771. COLLAPSIBLE REEL-BARREL. THOMAS W. CORRELL, Chicago, Ill. Filed Mar. 6, 1917. Serial No. 152,628. (Cl. 206—52.)



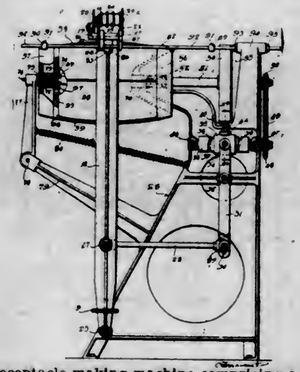
1. In a collapsible barrel of the class described, a flexible body portion, means having openings therein removably secured thereto for closing the ends thereof to form a rigid construction, locking members forming a part of said means adapted to close said openings and lock the barrel, and rotatable means journaled in said means to form a reel adapted to have materials wound thereon for shipment.

6. In a collapsible barrel of the class described, flexibly connected interfitting staves, the end staves of which are spaced from one another to form a side opening for the barrel, door staves flexibly connected with one of the end staves to form a side door for closing said side opening, barrel heads removably secured to said interfitting staves having openings therein registering with said side opening, end locking members on said barrel heads to close said end openings and engage over the ends of said side door to completely close the barrel, rotatable means within the barrel journaled in said barrel heads to permit materials to be wound thereon when said locking members and door are open, and linked members removably engaged around said interfitting staves and said door staves when the barrel is closed to reinforce the same and afford a means for tilting and turning the barrel when it is rolled.

9. In a collapsible barrel of the class described, a flexible body portion having an opening therein, a flexible door for closing said opening, end members for closing the ends of said body portion each having an opening therein registering with the opening in said body portion to permit said flexible door to open and close, and means for closing the openings in said end members and engaging the ends of said door to lock the same in closed position.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,266,772. RECEPTACLE-MAKING MACHINE. ERNEST J. CROCKETT, Los Angeles, Cal., assignor, by mesne assignments, of one-half to A. M. Young and one-half to G. Johnson Rittenhouse, Los Angeles, Cal. Filed Apr. 5, 1915. Serial No. 19,112. Renewed Jan. 29, 1918. Serial No. 214,417. (Cl. 93—80.)



1. A receptacle making machine comprising a collapsible core-body, having longitudinally curved segments, means operating in an arc to wrap a strip of material around said core, and means to cause said wrapping means to operate in a curve corresponding to the curve of the segments.

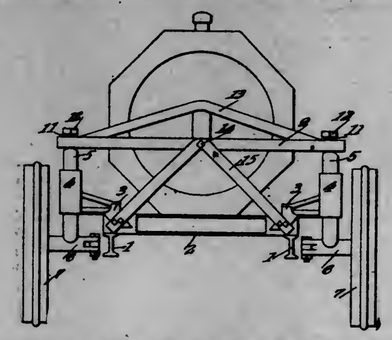
5. A receptacle making machine comprising a shaft, hubs on the shaft, arms pivoted to the hubs, segments pivoted to the arms so as to be collapsible, and a detachable head at one end of the segments and spaced apart from said end to accommodate the head of the receptacle between said ends and the head.

[Claims 2 to 4 and 6 to 15 not printed in the Gazette.]

1,266,773. EQUALIZER FOR TRACTORS. WILHELM G. DANIELSEN, Independence, Mo. Filed Apr. 27, 1917. Serial No. 164,990. (Cl. 21—5.)

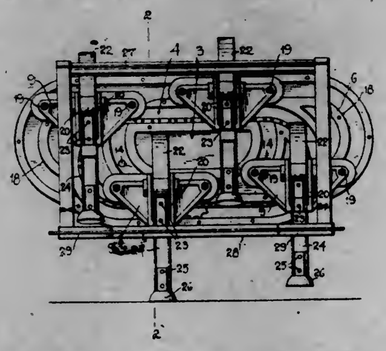
The combination with a vehicle frame and a standard secured at the ends thereof and converging upwardly to

a point above the center of the end of the frame, of a beam fulcrumed between its ends upon the upper end of the standard and extending laterally beyond the frame, brackets secured upon the sides of the frame close to the ends of the standard, vertical guides carried by the brackets and close to and above the sides of the frame, stems slidably mounted within the guides and supporting



the ends of the beam, spindles movable with the stems and extending laterally upon the lower ends thereof, said spindles being arranged above the bottom of the frame, supporting wheels engaging the spindles, and means on the stems and coöperating with the ends of the beam for holding the stems against downward displacement relative to the beam.

1,266,774. TRACTOR. CHARLES P. DELO, Shippensville, Pa. Filed Mar. 21, 1917. Serial No. 156,893. (Cl. 180—8.)



1. A device of the character described including an endless member, a driving member operatively engaged therewith, legs engaged with said endless member, and means coacting with said legs for moving the same laterally relative to the endless member when in inoperative position.

2. A device of the character described including an endless member, a driving member operatively engaged therewith, legs engaged with said endless member, means coacting with said legs for moving the same laterally relatively to the endless member when in inoperative position, and means coacting with said legs for holding the same against lateral movement when in operative position.

3. A device of the character described comprising an endless member, a driving member operatively engaged therewith, a plate connected to the endless member, rollers carried by said plate, a separate endless trackway for each of the rollers whereby said plate is held against axial movement, and a ground engaging member carried by the plate.

4. A device of the character described comprising an endless member, a driving member operatively engaged therewith, a plate connected to the endless member, rollers carried by said plate, a separate trackway for each of the rollers whereby said plate is held against axial movement, a ground engaging member carried by the plate, and outstanding flanges carried by the plate between which the member is adapted to seat for holding said leg against movement.

5. A device of the character described comprising an endless member, a driving member operatively engaged therewith, a plate connected to the endless member, rollers carried by said plate, a separate endless trackway for each of the rollers whereby said plate is held against axial movement, a ground engaging member carried by the plate, and means for imparting lateral movement to the member relative to the endless member when the same is in inoperative position.

[Claims 6 to 9 not printed in the Gazette.]

1,266,775. METHOD OF SEPARATING NICKEL FROM NICKEL-COPPER ALLOYS. JOSEPH DHAVERNAS, New Brunswick, N. J., assignor to United States Nickel Company, New Brunswick, N. J., a Corporation of New Jersey. Filed July 13, 1916. Serial No. 108,992. (Cl. 75—18.)

1. The improvement in methods of extracting nickel from copper-nickel matte, containing sulfur, which consists in roasting the matte to remove part of the sulfur, then reducing the resulting oxids to metallic form, then treating the metallic nickel-copper with an acid adapted to attack and dissolve the nickel, substantially as described.

2. The improvement in the method of extracting nickel from copper-nickel matte which consists in partly oxidising the matte, partly reducing the resulting oxid, and dissolving out the nickel.

3. The improvement in methods of extracting nickel from copper-nickel matte containing sulfur which consists in roasting the matte to reduce the sulfur content, then reducing the resulting product, then treating the product with an acid thereby dissolving the nickel, and then adding metallic nickel to the solution for the purpose of precipitating any copper dissolved therein, substantially as described.

4. The improvement in processes of the kind described which consists in treating non-oxidised nickel-copper matte with an acid adapted to dissolve the nickel, then treating the solution with metallic nickel thereby precipitating any small percentages of copper in the solution, then drawing off the nickel salts and treating them to produce metallic nickel, substantially as described.

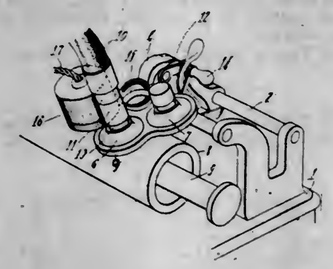
5. The improvement in methods of extracting nickel from copper-nickel matte which consists in partly oxidising the matte by roasting, partly reducing the resulting matte, treating the resulting product with an acid adapted to dissolve the nickel, then treating the solution with metallic nickel, thereby precipitating any small percentages of copper in the solution, then drawing off the nickel salts, and producing metallic nickel therefrom.

1,266,776. LINOTYPE-CLAMP. LOUIS H. DIETZEL, Hartford, Conn. Filed Dec. 22, 1916. Serial No. 138,472. (Cl. 24—263.)



A linotype slug holder, comprising a connecting strip having one side beveled toward its longitudinal edges, a pair of relatively movable members in the form of plates having their longitudinal edges bent toward each other to embrace the strip and to engage the beveled portions of the strip, a spring connecting said members, and lateral extensions formed upon the remote ends of said members to engage linotype slugs therebetween.

1,266,777. PHONOGRAPH. NELSON C. DURAND, Newark, N. J., assignor to New Jersey Patent Company, West Orange, N. J., a Corporation of New Jersey. Filed Sept. 25, 1914. Serial No. 863,440. (Cl. 179—100.1.)



1. The combination of sound boxes having constricted openings and a mounting for one of said sound boxes permitting movement thereof relatively to the other to place said openings into or out of register with each other, substantially as described.

4. The combination of a plurality of sound boxes, one of which is adapted to cause the operation of the other, and means comprising a ball and socket joint for mounting one of said sound boxes for universal movement to permit movement of said sound box into and out of operative relation with respect to the other sound box, substantially as described.

10. The combination of a frame and a plurality of sound boxes mounted thereon and relatively movable into engagement with each other, one of said sound boxes being biased to move into engagement with the other in certain positions, substantially as described.

[Claims 2, 3, 5 to 9, and 11 to 18 not printed in the Gazette.]

1,266,778. PROCESS OF MAKING SCREENS FOR PROJECTION. THOMAS A. EDISON, Llewellyn Park, West Orange, N. J., assignor to Thomas A. Edison, Incorporated, West Orange, N. J., a Corporation of New Jersey. Filed June 24, 1912. Serial No. 705,648. (Cl. 91—68.)

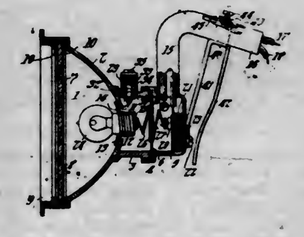
1. The process of making screens for projection purposes, which consists in heating oilcloth until the oilcloth surface becomes soft and somewhat sticky, applying powdered material containing a metal to the softened and sticky surface, and rubbing the said material into the surface, substantially as described.

2. The process of making screens for projection purposes, which consists in heating oilcloth until the oilcloth coating becomes soft and somewhat sticky, applying powdered material containing a metal thereto, rubbing the powdered material into the surface, permitting the product to cool, applying a thin coating of drying oil to the metallic surface, and permitting the final coating to dry, substantially as described.

7. The process of making screens for projection purposes, which consist in applying heat to a fabric having adhering thereto a coating capable of being rendered soft and somewhat sticky when heated, applying powdered material containing a metal to the soft and sticky surface of the heated coating, rubbing the powdered material into the surface, permitting the product to cool, applying a thin coating of drying oil containing linseed oil to the metallic surface, and permitting the final coating to dry, substantially as described.

[Claims 3 to 6, 8, and 9 not printed in the Gazette.]

1,266,779. ELECTRIC SAFETY-LANTERN. THOMAS A. EDISON, Llewellyn Park, West Orange, N. J., assignor to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Filed Oct. 16, 1914. Serial No. 866,943. (Cl. 240—17.5.)



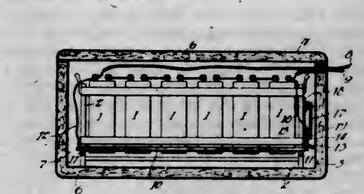
3. In an electric safety lantern, an incandescent lamp, and an electric circuit including said lamp, a contact and a flexible diaphragm movable with respect to said contact to effect the making and breaking of the circuit, said diaphragm normally tending to assume circuit breaking position, being provided on one side thereof with resilient means unattached to the lamp but engaging one terminal thereof in all positions of the diaphragm, and being provided on its other side with resilient means adapted to engage and disengage said contact, substantially as described.

4. In an electric safety lantern, a fluid tight casing comprising a reflector and a hollow chamber communicating therewith, one wall of said chamber comprising a flexible member, an incandescent lamp disposed within said reflector, and an electric circuit including said lamp, said flexible member being movable under variations in fluid pressure in said casing to effect the making and breaking of said circuit, substantially as described.

6. In an electric safety lantern, a fluid tight casing one wall of which comprises a flexible diaphragm, an incandescent lamp mounted in said casing, an electric circuit including said lamp and controlled by said diaphragm, said diaphragm normally tending to assume circuit breaking position but being movable by fluid pressure in said casing to circuit closing position, and a resilient member secured to said diaphragm and unattached to but engaging one terminal of said lamp when the diaphragm is in either of said positions, substantially as described.

[Claims 1, 2, and 5 not printed in the Gazette.]

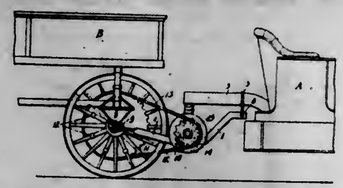
1,266,780. STORAGE BATTERY. THOMAS A. EDISON, Llewellyn Park, West Orange, N. J., assignor to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Filed Jan. 20, 1917. Serial No. 143,465. (Cl. 204—29.)



3. In a device of the class described, a storage battery, electrical means for heating the electrolyte of said battery adapted to be supplied with current from the battery, and a device controlled by variations in temperature for controlling the supply of such current to said means, substantially as described.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,266,781. TRACTION ATTACHMENT FOR MOTOR-VEHICLES. STERLING OWEN EDMONDS, Eagleville, Tenn. Filed Dec. 18, 1917. Serial No. 207,719. (Cl. 180—11.)



1. A combined supporting and coupling structure for connecting a towing vehicle with a vehicle to be towed, comprising a sling member having an axle receiving portion and axle binding yoke associated with said portion adapted to bind an axle thereon, said yoke being horizontally adjustable relatively to said axle receiving portion.

3. A combined supporting and coupling structure for connecting a towing vehicle with a vehicle to be towed comprising a pair of sling members having upwardly inclined ends and intermediate horizontal portions, adapted to receive the ends of an axle, yokes associated with said intermediate portions and coacting therewith in confining an axle, said sling members adapted to be connected with the rear and front respectively of the towing and towed vehicle, and means for adjusting the yokes longitudinally of the horizontal portions, comprising means on the yokes engaging the horizontal portions, whereby said yokes may be clamped thereto.

5. In combination with an automobile having its driving wheels removed but having a driving axle, and a vehicle to be towed by said automobile having traction wheels, of a combined supporting and coupling structure connecting the automobile with the vehicle to be towed, comprising a pair of sling members having inclined ends, the front ends being pivotally connected to the frame of the automobile forward of the driving axle, the rear ends being connected to the axle of the towed vehicle, said sling members also having intermediate horizontal axle receiving portions providing a fulcrum point, adjustable axle binding yokes associated with said intermediate portions adapted to confine the driving axle of the automobile, said axle having a sprocket wheel mounted thereon, a sprocket wheel mounted on the traction wheel of the vehicle to be towed, and a chain drive connecting said sprockets.

7. A combined supporting and coupling structure for connecting a towing vehicle with a vehicle to be towed, comprising a sling member having an axle receiving portion and an axle binding yoke associated with said portion adapted to bind an axle thereon, said yoke and said axle being longitudinally adjustable relative to said axle receiving portion whereby the space betwen the towing vehicle and the towed vehicle may be increased or decreased at will.

8. A combined supporting and coupling structure for connecting a towing vehicle with a vehicle to be towed comprising a sling member having an axle receiving portion and an axle binding yoke associated with said portion adapted to bind an axle thereon, a chain drive connecting said axle with the traction wheels of the vehicle to be towed, said axle yoke adapted to be adjusted horizontally of said axle receiving portion whereby the chain drive may be adjusted.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,266,782. PROCESS OF HYDROGENATION. CARLETON ELLIS, Montclair, N. J. Filed Nov. 23, 1914. Serial No. 873,507. (Cl. 23—28.)

1. A catalytic material comprising a catalytically active finely divided metal extended by precipitated non-abrasive silica.

5. A catalyst comprising an intimate mixture of finely divided nickel and non-abrasive precipitated silica.

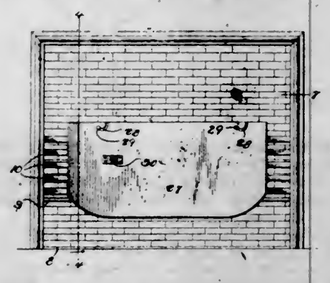
9. A process which comprises subjecting a material to be hydrogenated, and hydrogen, to the action of a catalytic body comprising nickel and silica, both in a non-abrasive condition, and being associated with other metal containing material having catalytic properties.

10. A process which comprises subjecting a material to be hydrogenated, and hydrogen, to the action of a catalytic body comprising nickel and silica, both in a non-abrasive condition, and being associated with a metal of the palladium group.

11. A process which comprises subjecting a material capable of reacting with hydrogen, to the action of hydrogen in the presence of a catalyzer comprising colloidal silica and nickel.

[Claims 2 to 4, 6 to 8, and 12 not printed in the Gazette.]

1,266,783. HEATER. CLAY W. EVATTS, Columbia, S. C. Filed Mar. 24, 1916. Serial No. 86,477. (Cl. 126—336.)



1. In combination with a grate, a plate having side and front flanges, said side flanges resting on the top edge of the grate, vertically extending members secured at their upper ends to said plate and having their lower ends interlocking with the grate bars, lugs on said front flange, and a vertically depending plate having curved slots therein for engaging with the said lugs to hold the plate in position in front of the grate.

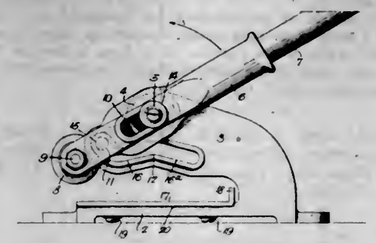
2. In combination with a grate having a series of grate bars arranged in a horizontal plane and a series of grate bars arranged in a vertical plane both series extending in the same direction, a plate resting upon the top bar of the grate, vertically extending members secured by their upper ends to said plate and arranged upon the outside of said grate bars which are arranged in a vertical plane, the lower ends of said members being bent horizontally inwardly and then vertically downward, the said horizontal portions of said members adapted to rest upon one of said last named grate bars and said vertical portions of said members adapted to pass between a pair of the horizontal bars arranged in a horizontal plane.

1,266,784. SHEARS. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's M'f'g. Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 28, 1917. Serial No. 183,288. (Cl. 164—60.)

1. The combination in a base, of a support carrying an overhanging bearing and having an irregular cam slot therein; a lever pivoted to the bearing and having a pin adapted to travel in the cam slot; and a rotating blade mounted on the lever and adapted to coact with the base as it is guided by the cam slot to cut material mounted on the base.

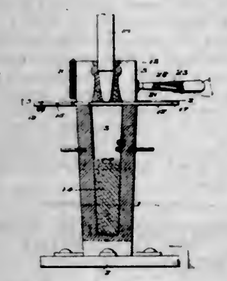
4. The combination of a base; a bed plate thereon; an overhanging support projecting upward from the base; a pin on the support; a lever having a slot therein, the pin on the support extending through the slot; a cam slot in the support having two reversed inclined portions and an abrupt portion at one end; a rotating blade mounted on

the lower end of the lever, the cam slot being such that when the lever is turned the blade will be first moved toward the base and will travel parallel with the upper face of the base.



[Claims 2 and 3 not printed in the Gazette.]

1,266,785. PROCESS FOR MAKING GLASS BOTTLES AND SIMILAR ARTICLES. CHARLES K. FINKBEINER, Laurens, S. C., assignor, by direct and mesne assignments, to Parti-Colored Glass Bottle Company, Washington, D. C., a Corporation of Delaware. Filed Apr. 19, 1916. Serial No. 92,178. (Cl. 49—82.)



1. The method of making bottles of glass of several kinds which consists in placing in a preliminary mold separated masses of glass of several kinds, and passing a plunger into said separated masses in succession until they fuse together or blend, and afterward blowing.

4. The method of forming an object of glass which consists in placing hot glass in segregated portions in a preliminary mold, then pressing an object thereinto and thereby bringing said portions into close contact until adhesion ensues while in the mold, and then while still hot withdrawing said adhering portions and completing the act of forming said object.

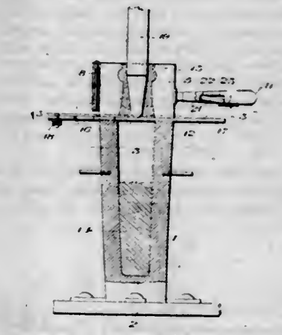
5. The method of forming a hollow glass object which consists in placing hot glass of different qualities in segregated portions in a preliminary mold to partially fill said mold, completely filling said mold by passing into the mold and into the masses of glass, a hollow forming device, whereby the masses of glass are fused or welded together, and the complete mass given the shape of the inside of the mold, then withdrawing the object and completing its formation by blowing.

6. The method of making a party-colored glass bottle which consists in placing in a parison mold a mass of hot glass of one color, placing in said mold, with said mass of glass, a hot mass of glass of another color, thrusting a plunger through the two masses of glass forming a cavity therein, and exerting pressure on the plastic glass until the two masses are fused or welded together and the parison completed, then blowing to complete the bottle.

7. The method of making a colored-neck bottle which consists in placing in the bottom of a parison mold enough hot glass to make the body of a bottle, inserting a support between the body mold and the neck-mold, placing upon said support enough hot glass, of a different color, to make the neck, thrusting a plunger through the latter portion, withdrawing the support, continuing the thrust through the body portion of glass until the two weld or fuse together, withdrawing the parison, and finishing the bottle in a blow mold.

[Claims 2 and 3 not printed in the Gazette.]

1,266,786. APPARATUS FOR MANUFACTURING GLASS BOTTLES AND SIMILAR ARTICLES. CHARLES K. FINKBEINER, Laurens, S. C., assignor, by direct and mesne assignments, to Parti-Colored Glass Bottle Company, Washington, D. C., a Corporation of Delaware. Filed Apr. 19, 1916. Serial No. 92,179. (Cl. 49—66.)



1. In a bottle making machine, in combination, a blank mold, a separable neck mold, ways therein and a side movable in said ways, said slide being provided with an opening as large as the opening into the blank mold.

3. In a bottle making machine, in combination, a blank mold, a neck mold, ways between said neck mold and said blank mold and a slide arranged in said ways, said slide being provided with an opening as large as the channel between said ways and adapted to form a part of said channel in one position of the slide, and also with a solid part adapted to close said channel in another position of said slide.

8. In a bottle making machine, in combination, a blank mold, a hinged neck mold therefor, ways in said neck mold, and a sectional slide in said ways, the sections of said slide being hinged to move with the hinged sections of the neck mold.

11. A machine for making glass bottles and analogous receptacles including a blank mold, a neck mold, and a slidable closure arranged to permit two different kinds of glass to be successively operated on, and a plunger, said closure being provided with an opening for the passage of the plunger.

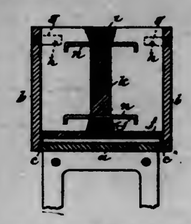
17. A machine for making glass bottles and analogous receptacles including a blank mold and a neck mold composed of hinged sections provided with handles, a slidable closure imperforate at one end and provided with an opening at the other, carried by the neck mold, and composed of hinged sections provided with openings, and pivoted arms mounted on the handles and arranged to engage the said recesses or openings, and catches mounted on the handles, for retaining the arms in an elevated position, out of engagement with the sections of the slidable closure.

[Claims 2, 4 to 7, 9, 10, and 12 to 16 not printed in the Gazette.]

1,266,787. DEVICE FOR MOLDING BLOCKS. ANDREW B. FOANS, New York, N. Y. Filed Aug. 31, 1917. Serial No. 189,101. (Cl. 25—121.)

2. A device for forming concrete blocks comprising a mold having bottom, side and end walls swingingly connected to the bottom, a sectional core arranged to divide the mold into compartments, said core including top and

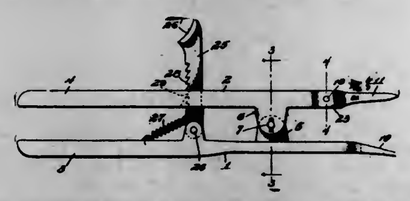
bottom recessed tie rod receiving sections, and an intermediate tapered section.



5. A device for forming concrete blocks comprising a mold having a bottom, side and end walls swingingly connected to the bottom, a sectional core arranged to divide the mold into two compartments one being angular, said core being in two parts including top and bottom recessed tie rod receiving sections, intermediate sections adapted to slide endwise and at right angles relative to each other.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,266,788. VALVE AND VALVE-SPRING REMOVER. CHARLES L. GANNAWAY, Chattanooga, Tenn. Filed Jan. 29, 1918. Serial No. 214,354. (Cl. 29—87.1.)

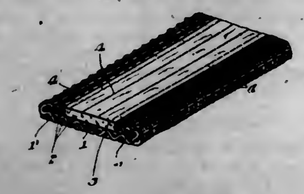


1. A tool of the character described comprising a pair of superposed pivoted levers having forked ends forming superposed pairs of jaws, the upper lever of the pair being longitudinally bifurcated to form spring arms carrying the jaws thereof, and means adjustably connecting said arms for moving the jaws thereof toward or from each other.

5. A tool of the character described comprising a pair of superposed pivoted levers having forked forward ends forming superposed pairs of jaws, the upper lever being longitudinally slotted to provide spring arms carrying the jaws thereof, the rear wall of the slot forming a locking tooth, means adjustably connecting the spring arms of the upper jaw, and a spring actuated locking element pivoted to the lower lever and extending upwardly through said slot in the upper lever and provided with locking teeth to engage said locking tooth of the upper lever.

[Claims 2 to 4 not printed in the Gazette.]

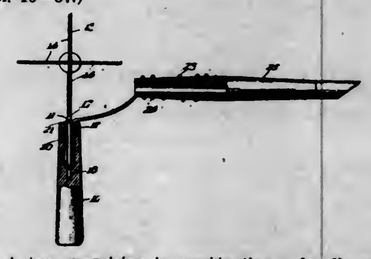
1,266,789. LAMINATED FABRIC. LUDWELL H. GILMER, Philadelphia, Pa., assignor to L. H. Gilmer Co., Philadelphia, Pa., a Corporation of New Jersey. Filed Nov. 20, 1917. Serial No. 202,911. (Cl. 154—52.)



1. An article of manufacture for frictional use comprising a strip of webbing having its parallel edges turned over on and secured in contact with its body in laminated relation so as to form a channel between said edges and a frictional material secured in said channel between said edges.

2. An article of manufacture for frictional use comprising a strip of webbing having its parallel edges turned over and sewed to its body so as to form a channel between said edges, and a strip of sheet cork sewed to said body in said channel.

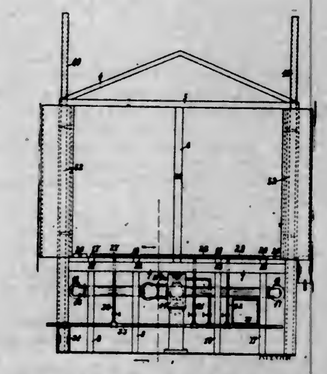
1,266,790. TOY. ANTOINE L. GIRARD, Sterling Junction, Mass., assignor of one-half to David A. Upham, Worcester, Mass. Filed June 12, 1917. Serial No. 174,284. (Cl. 46—37.)



1. A toy comprising in combination a handle, spring supporting arms, a wind wheel journaled in said arms, a right angularly arranged supporting arm, a coil spring terminal carried by the last mentioned arm, a tangentially arranged blow pipe having one end engaged in said spring terminal and a whistle carried by said pipe.

2. A toy comprising a wind wheel, supporting means for said wheel, a blow pipe, means for supporting said blow pipe, a handle and interlocking means formed on the wheel supporting means and the pipe supporting means and engageable with said handle, whereby the parts are held in a central position.

1,266,791. LUMBER-CURING KILN. LINCOLN GOODE, Pittsburg, Cal. Filed July 30, 1917. Serial No. 183,466. (Cl. 34—46.)

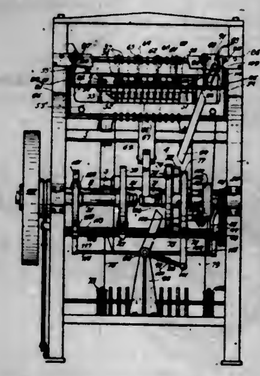


1. A lumber kiln comprising a building having inlet and outlet ventilating openings near the lower portion thereof, car tracks extending into the building and adapted to receive the cars with piles of lumber thereon, a fan, having pipes for circulating the air in said building, means to regulate the flow of air from said pipes as may be required at different points in the building, and spray pipes for increasing the humidity of the air in the building.

[Claim 2 not printed in the Gazette.]

1,266,792. [WITHDRAWN.]

1,266,793. BOOK-SEWING MACHINE. JOHN GRIBBINGEN, Los Angeles, Cal. Filed Aug. 17, 1915. Serial No. 45,994. (Cl. 112—41.)



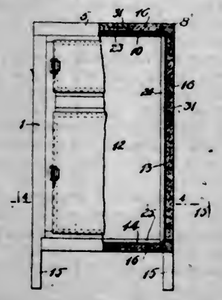
1. In a book sewing machine, a plurality of needles, a shaft, a plate on said shaft, a clamp table for the book sections operable on said plate and inclined to the horizontal to bring the edges of the sections within the operating plane of and at an angle to the needles, a clamp head on said plate and adjustable relatively to said clamp table, means to operate said clamp relatively to said plate, means to operate said needles, and means to move periodically said plate on said shaft.

5. In a book sewing machine, a stitch forming mechanism for signatures, a clamp table supporting the signatures, a clamp head coöperating with said clamp table, means to hold said clamp table in position for a predetermined pressure whereby to enable said table to move relatively to said holding means, and means to operate said clamp table automatically relatively to said clamp head.

10. In a book sewing machine, a plurality of punches and needles, a clamp table to support the signatures in line with the travel of and at an angle to said punches and needles, means to provide a lock thread for the loops formed by said needles comprising a race, operable over the edges of the signatures, a thread passing through said race, a shuttle operable in said race to catch and draw the thread through all of the needle loops, means to operate said shuttle, and means to operate said punches and needles.

[Claims 2 to 4, 6 to 9, and 11 to 14 not printed in the Gazette.]

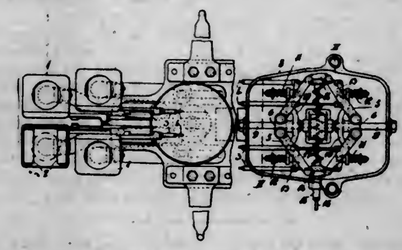
1,266,794. REFRIGERATOR CONSTRUCTION. HERBERT JUBB GWYER, New York, N. Y. Filed Apr. 28, 1916. Serial No. 94,110. (Cl. 45—71.)



1. In a refrigerator construction, a frame forming the main skeleton of said refrigerator and comprising integral supporting members suitably connected, said members having therein inner and outer longitudinal grooves in each of two adjacent sides, a sanitary lining member projecting into and held by the walls of a plurality of said inner grooves, and a panel member of different material projecting into and held by the walls of a plurality of said outer grooves, said lining and panel member being held against displacement by those parts of the frame engaging the same, said members being inserted in said grooves before the frame members are completely assembled, and a beveled corner portion between the inner lining receiving grooves on certain of said frame members, and a metal covering for said beveled corner portion, the edges of said metal covering extending into said inner grooves to hold said metal covering in place.

2. In a refrigerator construction, a frame forming the main skeleton of said refrigerator comprising integral supporting members suitably connected, said members having therein inner and outer longitudinal grooves in each of two adjacent sides; a sanitary lining member retained entirely by said inner groove and a heat insulating panel member of different material retained by said outer groove, said lining and panel member being retained in the respective grooves of said integral members independent of any other holding means, said lining member being inserted in said inner groove before said frame members are completely assembled, and a beveled corner portion between said inner lining receiving grooves, a metal covering for said corner, the edges of said metal covering being held in the same groove as said inner lining member.

1,266,795. MILKING-MACHINE. CARL JACOB JOHAN HÄGG, Stockholm, Sweden. Filed Mar. 25, 1918. Serial No. 224,588. (Cl. 31—96.)



1. A milking machine comprising movable pressure plates for working the teats, means for actuating said plates comprising flexible members, flexible pipes incasing said members, said pipes and members being connected at one of their ends to said plates and capable of reciprocating movement in opposite directions, balances connecting the opposite ends of said pipes and members, a link square having two link points capable of rectilinear movement, said balances being yieldingly mounted on said link square, and means for actuating said link square to impart reciprocating movements in opposite directions to said balances.

2. A milking machine comprising movable pressure plates, flexible means for actuating said pressure plates, reciprocating flexible means controlling the last means and movable at right angles thereto, and means operatively connecting the last means to the first means for reciprocating the latter.

4. A milking machine comprising movable pressure plates, flexible members connected to said pressure plates, a pair of projections mounted for reciprocating rectilinear movements in opposite directions, said members being connected to said projections, and means for actuating said projections whereby said members will be reciprocated in opposite directions.

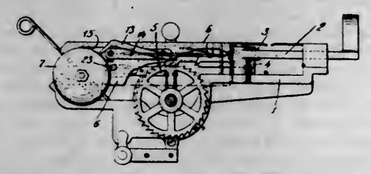
5. A milking machine comprising movable pressure plates, a link square biased to a predetermined position, flexible members connecting said link square with said plates, means interposed between said link square and

said flexible members to permit automatic adjustment of said members with relation to said link square, and means for actuating said link square against its bias.

6. A milking machine comprising movable pressure plates, a pair of projections mounted for reciprocating rectilinear movement, a link square for actuating said projections in opposite directions, flexible members connecting said projections with said plates, and means for actuating said link square whereby said flexible members will be reciprocated in opposite directions.

[Claim 3 not printed in the Gazette.]

1,266,796. LINE-SPACE FOLIO ATTACHMENT FOR TYPE-WRITERS. JOHN J. HAGGERTY and ERNEST D. VAN WIE, Albany, N. Y. Filed Mar. 9, 1916. Serial No. 83,032. (Cl. 197—187.)

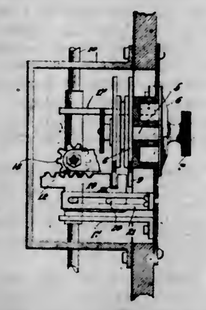


1. An attachment for typewriters having a reciprocating member for effecting the rotation of the platen and the return of the carriage after each line of writing, said attachment comprising a signal, a ratchet for periodically operating said signal upon continued rotation of the ratchet in one direction, a pawl for actuating the ratchet wheel, said pawl being connected to said reciprocating member to advance the ratchet wheel a predetermined amount upon each reciprocation of said member.

2. An attachment for connection to the carriages of typewriters comprising a bell, a ratchet wheel, means operated by the ratchet wheel for sounding the bell successively at uniform intervals upon the continued rotation of the ratchet in one direction, and means for operating the ratchet wheel comprising a pawl for connection to the line space plunger of the typewriting machine and arranged to operate the ratchet through the space of one tooth upon each reciprocation of the plunger.

[Claims 3 and 4 not printed in the Gazette.]

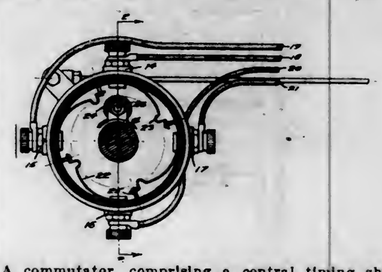
1,266,797. VALVE-LOCK. GEORGE HALINKA, Detroit, Mich. Filed Oct. 8, 1917. Serial No. 195,298. (Cl. 137—7.)



1. The combination with an automobile dash, and a fuel supply pipe in proximity thereto and provided with a valve having a stem, of a face plate on said dash, a casing carried by said dash and coöperating with said face plate in inclosing the valve of said fuel pipe, a pinion on the stem of said valve, a rack engaging said pinion, a permutation lock carried by said face plate and having disks adapted to hold said rack against movement, and manually actuated means in said casing operable through said face plate adapted for rotating said valve stem to open and close said valve when said rack is released by said lock.

[Claim 2 not printed in the Gazette.]

1,266,798. COMMUTATOR. WILLIAM I. HALLOCK, Los Angeles, Cal. Filed Apr. 3, 1917. Serial No. 159,444. (Cl. 123—167.)



1. A commutator, comprising a central timing shaft, an arm secured thereto, a contact roller rotatably mounted at the end of said arm and adapted to move in a circular path of travel with the arm, resilient contact members disposed at intervals along the path of travel of said arm and adapted to be successively engaged by the contact roller, and means whereby the contact members may be adjusted in relation to the path of travel of the periphery of the roller.

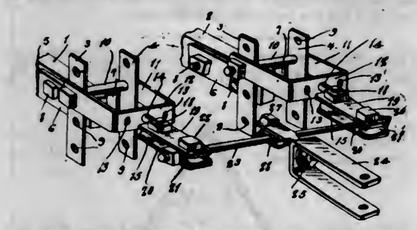
2. A commutator, comprising a central timing shaft, an arm secured thereto, a contact roller rotatably mounted at the end of said arm and adapted to move in a circular path of travel with the arm, resilient contact members disposed at intervals along the path of travel of said arm and adapted to be successively engaged by the contact roller, means whereby the contact members may be adjusted in relation to the path of travel of the periphery of the roller, and an anti-friction bearing upon which the roller is adapted to be mounted.

3. A commutator, comprising a case formed with a circular central bore, an insulating ring positioned within said bore, binding posts extending through the ring and the wall of the case at intervals around the circumference thereof, a series of resilient contact members, one of which is secured at one end by each of said binding posts, a contact point at the opposite end of each of said contact members, a roller adapted to describe a concentric circular path of travel within the case and adapted to successively strike the contact points, and adjustable means for regulating the position of the contact points in relation to the path of travel of the roller.

4. A commutator, comprising a case formed with a circular central bore, an insulating ring positioned within said bore, binding posts extending through the ring and the wall of the case at intervals around the circumference thereof, a series of resilient contact members, one of which is secured at one end by each of said binding posts, a contact point at the opposite end of each of said contact members, a roller adapted to describe a concentric circular path of travel within the case and adapted to successively strike the contact points, means whereby the contact points may be adjusted to or from the roller, and an anti-friction bearing upon which said roller is mounted.

5. A commutator comprising a case formed with a circular central bore, an insulating ring positioned within said bore, binding posts extending through the ring and the wall of the case at intervals around the circumference thereof, contact members attached to the inner ends of the binding posts and consisting of strips of spring metal adapted to swing inwardly from the insulating ring and bent at their free ends to form inwardly extending rounded contact points, and adjusting screws inserted through the free ends of the contact members and screwseated through the case to adjust the contact points to and from the insulating ring, and a roller adapted to describe a concentric circular path of travel within the case and successively strike the contact points.

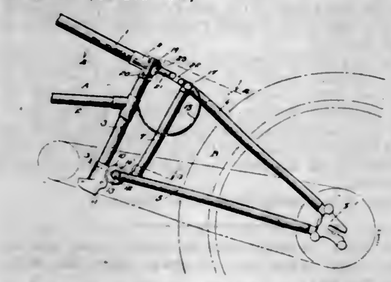
1,266,799. HITCH FOR TWO-WAY PLOWS. WILLIAM E. L. HARBOUR, Eaton, Colo. Filed Nov. 16, 1917. Serial No. 202,315. (Cl. 97—4.)



4. In a hitch for two way plows, the combination with a pair of plow beams, of a support attached to the forward end of each beam, a strap pivotally connected to each support for vertical adjustment with respect to the support, a rod guide connected to each strap for lateral adjustment with relation thereto, a rod carried by said guide and extending between the beams, said guides supporting said rod to permit longitudinal movement of the rod transversely to the beams and limited transverse movement of the rod longitudinally of the direction of travel of the beams, and a clevis carried by said rod.

[Claims 1 to 3 not printed in the Gazette.]

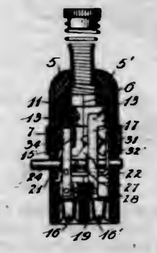
1,266,800. SPRING-FRAME FOR MOTOR-CYCLES AND LIKE VEHICLES. WILLIAM S. HARLEY, Milwaukee, Wis., assignor to Harley-Davidson Motor Company, Milwaukee, Wis. Filed Dec. 3, 1917. Serial No. 205,206. (Cl. 208—94.)



1. In a vehicle of the class described, the combination with a main section having a hollow reach bar, a wheel carrying section hinged to the main section adjacent the bottom thereof and a plunger at the upper end of said wheel carrying section slidable in said hollow reach bar, of a coil spring surrounding the plunger and disposed within the hollow reach bar, said spring retarding the movement of the wheel carrying section in one direction relative to the main section, and a leaf spring having one end connected with the main section and the other end with the other section to retard movement of the latter section in the other direction.

2. In a vehicle of the class described, the combination with a main section including a seat mast, and a wheel carrying section hinged to the first section adjacent its lower end, said section including a substantially vertically disposed strut, of attaching flanges extending laterally in opposite directions from opposite sides of the seat mast adjacent its upper end, arms extending laterally in opposite directions from the upper end portion of said strut, and a leaf spring disposed on each side of the sections, one end of each spring being secured to the adjacent attaching flange, the other ends being attached to said arms.

1,266,801. SWITCH-CONTAINING PLUG-CONNECTOR. GEORGE H. HART, West Hartford, Conn. Filed June 20, 1916. Serial No. 104,719. (Cl. 173—361.)



1. A connection plug comprising two separable elongated members of insulating material constituting an elongated plug body whose cross-section, transverse to its longest axis, is elongated, two binding posts and sockets and means for electrically connecting said sockets to said binding posts respectively, and a clamp surrounding the longest axis of said plug and holding the two members thereof in fixed relation to one another, and support engaging means carried by said clamp.

2. A connection plug comprising an elongated base whose cross-section, transverse to its longest axis, is elongated, said base being separable into two parts along a plane passing through the shorter axis of said elongated cross-section, a binding post, socket and means for electrically connecting the same together, all carried by one of said two parts, a binding post, socket and means adapted to include a snap-acting switch for making and breaking an electrical connection between said last named binding post and its socket, all carried by the other of said two parts, and means for holding said two parts together in fixed relation to one another.

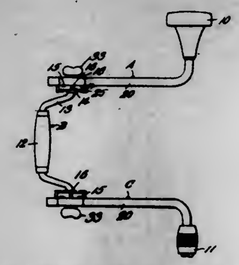
3. A connection plug comprising an elongated base whose cross-section, transverse to its longest axis, is elongated, said base being separable into two parts along a plane passing through the shorter axis of said elongated cross-section, a binding post and a socket and means for electrically connecting the same together, all carried by one of said two parts, a binding post, socket and means adapted to include a snap-acting switch for making and breaking an electrical connection between said last named binding post and its socket, all carried by the other part, and an adjustable clamp surrounding the longest axis of said base, said clamp holding said parts in fixed relation to one another, and support engaging means carried by said clamp.

1,266,802. EXTENSION-SWEEP BIT-BRACE. CLARENCE D. HEDDEN, Corral, Idaho. Filed Oct. 2, 1917. Serial No. 194,380. (Cl. 145—66.)

1. In a bit brace comprising relatively upper and lower arms, a handle member having crank portions at its ends terminating in disks, clamp members slidably mounted on the arms and adapted to engage the disks at opposite points and secure the handle member in an adjusted position, and operating means for the clamp members mounted on the arms.

5. A bit brace comprising an upper lever and a lower lever each provided with a longitudinal and substantially dovetailed slot, keeper members each mounted to slide longitudinally in a slot of one of said levers, an actuating member connected thereto for operating said keeper member, manipulative members each pivotally connected to one of said levers and secured to said actuating member and being provided with a pivotal portion extending beyond said actuating member, and an intermediate member hav-

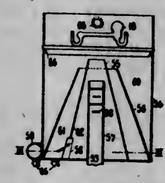
ing each end provided with a notched disk having a central bore therein for receiving said pivotal portion, each of said disks being connected to one of said levers by means of said manipulative member and said keeper mem-



ber, said keeper member being movable by means of said manipulative member and actuating member for causing said keeper member to engage selected notches of said disk.

[Claims 2 to 4 not printed in the Gazette.]

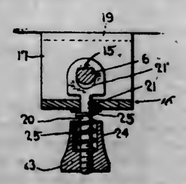
1,266,803. TREATMENT OF WATER AND OTHER LIQUIDS BY ULTRA-VIOLET RAYS. VICTOR HENRI, ANDRÉ HELBRONNER, and MAX VON RECKLINGHAUSEN, Paris, France, assignors, by mesne assignments, to The R. U. V. Company, Inc., a Corporation of New York. Filed Oct. 31, 1910, Serial No. 589,995. Renewed Aug. 13, 1917. Serial No. 186,052. (Cl. 210—1.)



1. The method of sterilizing liquids by the action thereon of ultra violet rays, which consists in causing a body of liquid to pass through a receptacle in the field of such rays and under the direct sterilizing influence of the same, and carrying the said liquid, in the form of a rapidly moving film, in the immediate vicinity of the source of the rays while passing from one portion of the receptacle to another.

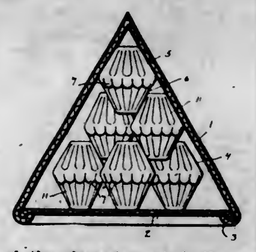
[Claims 2 to 8 not printed in the Gazette.]

1,266,804. SASH-LOCK. WILLIAM M. HERRINGTON, Telluride, Colo. Filed Apr. 23, 1917. Serial No. 164,038. (Cl. 16—118.)



In a sash lock, the combination of a rod, means for mounting it on a window frame, means for connecting said rod with one sash and a spring pressed gripping member for connecting it with the other sash and adapted to be positioned to engage said rod to lock the two sashes in adjusted position relatively to each other, said member being in the form of an inverted U-shaped keeper including legs with laterally extending apertured attaching feet, an eye bolt extending through the cross bar of said keeper with its eye housed in the keeper between the legs thereof, said legs having registering apertures therein alined with the eye of said bolt and through which said rod is designed to extend, the eye of said bolt being larger than the rod to provide for the lateral movement of said eye relatively to said rod and having a rectilinear outer wall, a hollow nut threaded on said bolt outside said keeper, and a coiled spring on said bolt bearing at one end on the keeper and at its other end on said nut whereby the eye of said bolt is held in yielding engagement with said rod, said rod having notches with flat or rectilinear inner walls for interlocking engagement with the rectilinear wall of the eye of said bolt to hold the parts against rattling.

1,266,805. EGG-SHIPPING CRATE. EDWARD W. HITCHCOCK, Walden, Colo. Filed Mar. 21, 1917. Serial No. 156,318. (Cl. 217—29.)



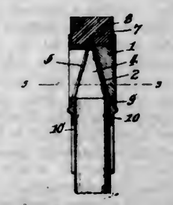
1. A device of the character set forth comprising a conical shaped crate, and a plurality of double conical shaped egg cells arranged within the crate.

5. An egg cell comprising upper and lower substantially frusto-conical shaped sections constructed from corrugated material, springs secured to the apexes of the sections for supporting the ends of an egg, fingers formed upon the upper and lower sections, the fingers of the upper section adapted to engage the wall of the lower section, some of the fingers of the lower section adapted to be bent inwardly to engage the sides of the egg, and the other fingers of the lower section extending upwardly and engaging the inner wall of the upper section for cooperating with the fingers of the upper section when connecting the sections together.

6. An egg cell comprising upper and lower conical shaped sections, means for connecting the sections together, end walls closing the apexes of the sections, and having apertures therein, arcuate shaped springs located within the conical shaped sections and having their ends bent to form loops, and wires disposed through the loops and walls of the sections for supporting the springs in the sections.

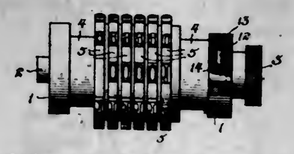
[Claims 2 to 4 not printed in the Gazette.]

1,266,806. PENCIL-SHARPENER. JOSEF HOELLER, Albia, Iowa. Filed Apr. 22, 1916. Serial No. 92,918. (Cl. 120—93.)



A pencil sharpener, comprising a solid body of cylindrical form having an axial conical bore, and having a longitudinal slot in a side terminating a distance from each end of the body, said slot being radial and leading into the conical bore and having a wall cut away to provide a cutting edge, the wall of the conical bore having a portion adjacent the longitudinal slot hollowed out to give prominence to the cutting edge.

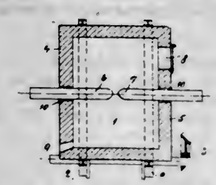
1,266,807. RESETTING DEVICE. HENRY E. HUBBARD, Oak Park, Ill. Filed Nov. 13, 1916. Serial No. 130,980. (Cl. 101—85.)



1. In a device of the character described, the combination of a rotatable shaft, a plurality of number disks revolubly mounted thereon, radially movable zero members in said disks, means on the shaft and said members for effecting operative engagement thereof, and means for rotating the shaft after one or more of the disks have been advanced to restore all the disks to initial position.

[Claims 2 to 4 not printed in the Gazette.]

1,266,808. METHOD OF CONVERTING ZINC POWDER INTO LIQUID ZINC. SVEN HULDT, Stockholm, Sweden, assignor to Norsk Elektrisk Metalindustri Aktieselskap, Sarpsborg, Norway. Filed Apr. 3, 1917. Serial No. 159,509. (Cl. 204—63.)

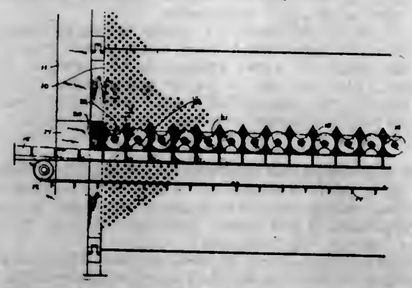


1. The method of converting zinc powder into liquid zinc, consisting in heating the zinc powder to the melting temperature of the zinc, and subjecting the powder to a rubbing operation.

2. The method of converting zinc powder into liquid zinc, consisting in heating the zinc powder to the melting temperature of the zinc by means of an electric arc, and simultaneously subjecting the powder to a rubbing operation.

3. The method of converting zinc powder into liquid zinc, consisting in introducing the powder in an electric furnace, heating the powder to the melting temperature of the zinc, and rotating the furnace so as to subject the powder to a rubbing operation.

1,266,809. MACHINE FOR FILLING MATCH-BOXES. WARREN B. HUTCHINSON, Newark, N. J. Filed Oct. 5, 1916. Serial No. 123,813. (Cl. 144—61.)



1. A machine of the kind described comprising a series of rotatable pockets arranged in parallel relation and in an essentially horizontal row, guides projecting above and arranged between the pockets, said guides being curved to fit against the sides of the pockets and to effect a closure of the latter when they are turned, and means for passing open box trays beneath the pockets.

5. A machine of the kind described comprising a series of parallel guiding devices tapering at their upper edges, spaced apart, and having opposite concave portions, and rotatable open match receiving pockets turning in the concave portions of the guiding devices whereby the guiding devices serve as closures for the pockets as the latter are rotated.

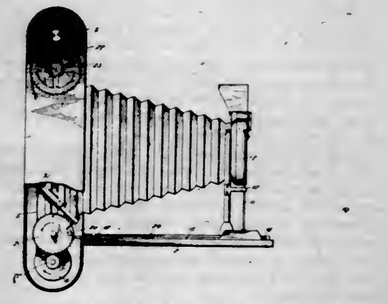
7. A machine of the kind described comprising a series of tilting pockets arranged side by side, and guide partitions between the pockets, the partition and one end portion of the pockets being cut away to provide clearance for match heads.

10. In a machine of the kind described the delivery elements comprising a series of rotatable members arranged side by side and provided with longitudinal pockets, said elements being reduced between their end portions, and guide partitions between the rotatable members, said partitions having abutments therein which project into the reduced portion of said rotatable members.

15. A machine of the kind described comprising a plurality of alining match containing compartments, the fronts and backs of the compartments being arranged so that matches in one compartment will have the heads lying in the opposite direction to those in the adjacent compartment, means for passing match trays below the compartments, and means between the compartments and the tray carrying means for delivering matches from the compartments to the trays.

[Claims 2 to 4, 6, 8, 9, and 11 to 14 not printed in the Gazette.]

1,266,810. CAMERA. JOHN LUDVIG JOHNSON, Seattle, Wash. Filed Dec. 10, 1917. Serial No. 206,429. (Cl. 95—31.)



1. In a camera, the combination with the film reels and the shutter operating mechanism, of a spring for operating the reels and normally operated to move the film in one direction, means for restraining the operation of the said means, means controlled by the tripping of the shutter for releasing the restraining means, means in connection with the restraining means for checking the operation of the spring when a predetermined amount of film has been moved, means for cushioning the operation of the checking means, said last named means comprising a piston cylinder, a piston movable therein and having a check valve for permitting the piston to move freely outward and for checking the movement of the piston inward, a spring normally moving the piston outward, and means in connection with one of the reels for moving the said piston inwardly.

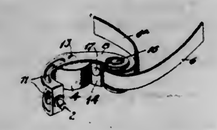
2. In a camera, the combination with the film reels and the shutter operating mechanism, of a spring for operating the reels and normally operated to move the film in one direction, means for restraining the operation of the said means, means controlled by the tripping of the shutter for releasing the restraining means, means in connection with the restraining means for checking the operation of the spring when a predetermined amount of film has been

moved, and means for cushioning the operation of the checking means.

3. In a camera, normally operative means for moving the film, means for restraining the operation of the film moving means, a shutter means controlled by the tripping of the shutter for releasing the restraining means, means for checking the operation of the film moving means when a predetermined amount of film has been moved, and means for cushioning the operation of the checking means, said last named means comprising a dashpot for engagement by the moving means at predetermined intervals.

4. In a camera, normally operative means for moving the film, means for restraining the operation of the film moving means, a shutter means controlled by the tripping of the shutter for releasing the restraining means, and means for checking the operation of the film moving means when a predetermined amount of film has been moved.

1,266,811. BREAKER-ARM FOR IGNITERS. JOSEPH EDWARD JOHNSON, Meriden, Conn., assignor to Connecticut Telephone & Electric Company, Inc., Meriden, Conn., a Corporation of Connecticut. Filed Jan. 20, 1917. Serial No. 143,456. (Cl. 123—166.)



1. Interrupter mechanism for high speed igniters comprising, a breaker-arm of generally arched formation arranged to be pivotally supported at its inner end and provided with a contact bearing portion at its outer end, said arched breaker arm having a longitudinally extending slot therein disposed between the edges of the arm and extending to a point short of the contact bearing end thereof to lighten the arm and to provide a truss-like structure at the outer end thereof.

3. A breaker arm for high speed igniters comprising, a pair of spaced rigidly connected curved sheet metal plates, a pivotal bearing at its inner end, said bearing serving to space said plates, a contact carrier at the outer end also operating to space said plates, a lug formed integrally with one plate and bent angularly into the space between the plates, a contact spring rigidly secured to said lug and operating to carry current and to swing said arm in one direction.

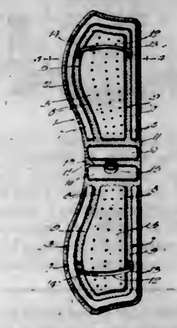
4. A breaker arm for high speed igniters comprising a pair of spaced rigidly connected curved sheet metal plates, a pivotal bearing at one end serving to space said plates, a contact carrier at the other end also serving to space said plates, an intermediate anti-friction roller bearing substantially midway of the length of said plates, that part of each plate between said roller bearing and the contact carrier being perforated along the median line.

[Claim 2 not printed in the Gazette.]

1,266,812. PAD FOR HORSE-COLLARS. JOSEPH O. JOHNSON, Coalinga, Cal. Filed Feb. 12, 1917. Serial No. 148,100. (Cl. 54—67.)

1. A pad for horse collars comprising flexible inner and outer coverings, and a padding material inserted therebetween, said padding material consisting of tufted and untufted material, the untufted material, normally spacing the tufted material from the inner covering.

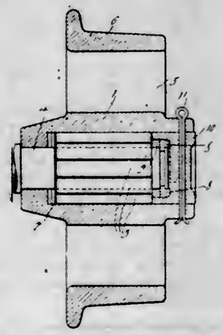
4. A pad for horse collars comprising a flexible covering having padded side sections, each of the side sections being formed of a central padded and internally tufted portion, and a rolled padded outer edge portion separated from the central portion by closely spaced rows of stitches extending around the central portion adjacent said edge portion and connecting the sides of the covering, and a collar fastening strap positioned transversely across the outer face of each of the side sections and secured at its



ends to the flat stitched portions of each section, said strap being formed of an elastic section and a non-elastic section so that the strap may be easily and securely engaged with the collar.

[Claims 2 and 3 not printed in the Gazette.]

1,266,813. CAR-WHEEL. ANDREW W. JUDY, Centerville, Iowa, assignor of one-third to George M. Burnett and one-third to David A. Lee, Centerville, Iowa. Filed Mar. 9, 1918. Serial No. 221,494. (Cl. 105—67.)



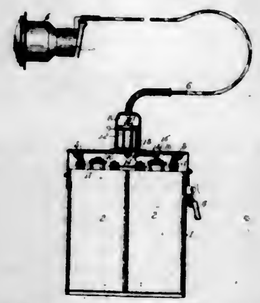
1. A car wheel, including a spindle having an annular groove at its outer end, a wheel rotatable on the spindle, a collar adapted to be seated in the groove, and means insertible in the wheel to lock the collar in the groove and lock the wheel on the spindle.

2. A car wheel, including a spindle having an annular groove at its outer end, a wheel having a hub rotatable on the spindle, a collar adapted to be seated in the groove, a plug insertible in the hub and engaging the collar to retain the same in the groove and lock the wheel on the hub, and means for locking the plug in place.

1,266,814. CURRENT-SUPPLYING APPARATUS. HEINRICH H. MENO KAMMERHOFF, Orange, N. J., assignor to Edison Storage Battery Company, West Orange, N. J., a Corporation of New Jersey. Filed Dec. 13, 1913. Serial No. 806,389. (Cl. 204—53.)

2. In an apparatus of the class described, the combination with a closed casing, of a cell within said casing, a conductor exterior to said casing electrically connected to said cell, and locking means within said casing for maintaining said conductor electrically connected to said cell, said locking means being inaccessible from the outside of the closed casing, substantially as described.

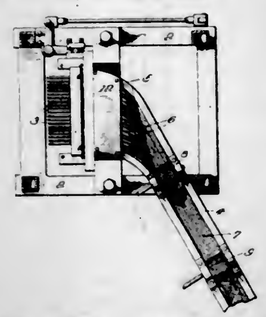
6. In apparatus of the class described, the combination with a cell-casing-cover, of an electrical conductor having a socket attached thereto removably engaging said cover, and locking means comprising an element associated with said socket and adapted to extend through said cover and a coacting element carried by the cover adapted to engage the element carried by the socket to lock the same in place, substantially as described.



9. A casing adapted to contain a source of electric current, a cover for said casing having means for locking the same in casing-closing position, a pair of plates supported from said cover, insulated from the cover and from each other and adapted to be brought into locking engagement with the source, a pair of connections exterior of the cover for engagement with a pair of conductors, connecting means between said connections and said plates, and a latch mounted on said cover and adapted to lock said pair of conductors to the casing, substantially as described.

[Claims 1, 3 to 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,266,815. FEED-BOX FOR MATCH-MAKING MACHINES. HARRY KELLEY, Wilmington, Del. Filed Apr. 14, 1917. Serial No. 162,052. (Cl. 144—50.)



1. A feed trough for a match making machine having a curved delivery end provided with separating fingers projecting to different distances opposite to the direction of feed.

3. In a match making machine, the combination with a cutting mechanism, of a feed trough having a curved delivery end, and a series of separating fingers conforming to the curvature of said trough, said fingers terminating on a line at an angle to the line of feed.

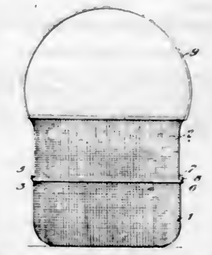
6. A feed trough for a match making machine having a curved delivery end provided with separating fingers of different lengths projecting to different distances opposite to the direction of feed.

10. In a match making machine, the combination with a cutting mechanism, of a feed trough for feeding strips of veneer in position to be operated on by said cutting mechanism, and means disposed in said trough for separating said strips of veneer when in stepped relation with one another.

15. A feed trough for a match making machine, comprising a body portion having a curved delivery end, a series of curved separating fingers disposed in said delivery end forming spaced guide grooves, and a plate mounted over the delivery end of said trough having ribs extending into the guide grooves thereof.

[Claims 2, 4, 5, 7 to 9, 11 to 14, and 16 to 20 not printed in the Gazette.]

1,266,816. COOKING UTENSIL. CLARENCE R. KINNIE, Wolfville, Nova Scotia, Canada. Filed Sept. 15, 1916. Serial No. 120,390. (Cl. 53—1.)



2. A cooking utensil comprising a pair of receptacles of wire mesh one of which is made sufficiently small at the bottom to be received within the open top of the other, the last mentioned receptacle having a flange for the support of the receptacle received therein, a hinged connection between said receptacles at one side thereof so that the upper receptacle may be swung back to give access to the lower receptacle, and means to secure the upper receptacle down against the flange of the lower receptacle.

[Claim 1 not printed in the Gazette.]

1,266,817. WIRE-LINE PUMPING OUTFIT FOR OIL-WELLS. JOHN R. KIRLEY, Marietta, and HENRY B. WALKER, Lancaster, Ohio. Filed Jan. 7, 1916. Serial No. 70,863. (Cl. 103—61.)



1. The combination with a wire line pumping outfit, of a telescopic frangible joint, each member of which has terminal abutment with the other, and a series of clamping rivets uniting them.

2. The combination with a wire line pumping outfit, of a cylindrical telescopic joint, each member of which has terminal abutment with the other, and a series of frangible rivets uniting them, the rivets being adapted to be sheared under known strains.

3. The combination with a wire line pumping outfit, of a cylindrical telescopic joint located therein and formed of male and female members, each having terminal abutment with the other, the female member having a slot ex-

tending longitudinally the length of its bore, and one or more frangible clamping rivets for clamping the female member upon the male member, said rivets adapted to shear under a predetermined load.

4. The combination of a line of well tubing carrying a pumping barrel at the bottom, a wire pumping line carrying a pump at the bottom working within the pumping barrel, and a telescopic frangible compression joint between the wire and pump adapted to yield under a predetermined heavy strain.

5. The combination of a line of well tubing having a pumping barrel at the bottom, a wire pumping line carrying a pump operating within said barrel, and a telescopic joint between the pumping line and pump formed of male and female members, each having terminal abutment with the other, and compression rivets transversely uniting the members adapted to shear under a load less than the weight of the tubing.

[Claims 6 to 8 not printed in the Gazette.]

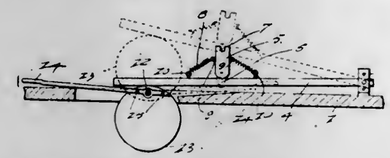
1,266,818. SHADE-HOLDER. JOHN KIRSCHBAUM, Waterbury, Conn., assignor to Waterbury Mfg. Co., Waterbury, Conn., a Corporation. Filed Aug. 20, 1917. Serial No. 187,038. (Cl. 240—115.)



1. The combination with a shade-holder having a socket-receiving opening, of a yielding, socket-grip pivotally mounted upon the upper face of the said shade-holder at a point to one side of the said socket-receiving opening thereof, and means for engaging with the said grip when the same is swung into its socket-holding position at which time it is placed under tension for drawing the shade-holder and socket together.

[Claims 2 to 8 not printed in the Gazette.]

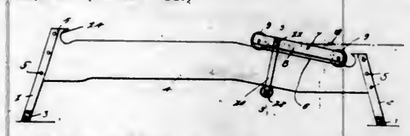
1,266,819. ROLLER-TRUCK TIRE-SAVER. HARRY C. KISSINGER, Polk, Wis. Filed Apr. 18, 1917. Serial No. 162,978. (Cl. 254—89.)



1. A device of the character set forth comprising a pair of relatively spaced members, means for pivotally and adjustably connecting the members to the flooring of a building, blocks secured to the members and having grooves therein to receive and support the truss rod and rear axle of an automobile, coiled springs connected to the members and blocks for supoprting said blocks in a vertical position, and means for elevating the free ends of said members to elevate the automobile.

2. A device of the character set forth comprising a flooring having a pair of relatively spaced elongated slots, brackets secured to the floor and in line with said slots, a pair of relatively spaced members pivoted to said brackets and having their free ends disposed over the slots, a shaft journaled in the flooring and extending through the slots, eccentric wheels secured to said shaft and engaging the free ends of said members, blocks connected to the relatively spaced members and having grooves therein to receive the axles of an automobile, coil springs secured to said blocks and to the relatively spaced members to support said blocks in a vertical position and to permit slight movement thereof, and means rotating the shaft to cause the eccentric wheels to elevate the relatively spaced members.

1,266,820. ROLLER-TRUCK TIRE-SAVER. HARRY C. KISSINGER, Polk, Wis. Filed Apr. 18, 1917. Serial No. 162,979. (Cl. 254—88.)



A device of the character set forth, comprising a pair of supporting members, and one of said members being of a greater height than the other, an elongated member secured to the supporting members and supported thereby in an inclined position, said elongated member having notches at each end and an inclined portion adjacent one notch, and a truck mounted on the elongated member and adapted to be normally positioned on the inclined portion of said elongated member and to be engaged by an automobile and moved forwardly to engage in the notch adjacent the highest supporting member to raise and hold the automobile in an elevated position.

1,266,821. WELL CASING AND TOOL FISHING DEVICE. EDWARD A. KLIEWER, Fairview, Okla. Filed Feb. 21, 1918. Serial No. 218,486. (Cl. 57—9.)



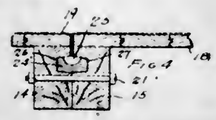
1. A well casing and tool fishing device having an inner set of contracting tool gripping jaws, and an outer set of expanding casing gripping jaws surrounding said tool gripping jaws, said sets of jaws having means for simultaneously expanding the outer set and contracting the inner set when the latter set porperly surrounds the tool in the casing.

2. A structure as specified in claim 1, said expanding and contracting means comprising coacting wedge faces on said inner and outer jaws.

4. A well casing and tool fishing device having an inner set of contracting tool gripping jaws, and an outer set of expanding casing gripping jaws surrounding said tool gripping jaws, said sets of jaws having coacting wedge faces for simultaneously expanding the outer set and contracting the inner set when the latter set properly surrounds the tool in the casing, arms rising from the jaws of both sets, an upper head to which the arms of the outer set are attached at their upper ends, a lower head to which the upper ends of the arms of the inner set are attached, a tubular cable guide depending from said upper head and passing slidably through said lower head, and a suspending device rising from said lower head and sliding through said upper head.

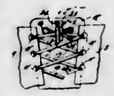
[Claim 3 not printed in the Gazette.]

1,266,822. PORTABLE HOUSE. FREDERICK KNACK, Hoquiam, Wash. Filed Oct. 30, 1916. Serial No. 128,510. (Cl. 20—1.)



The combination with a pair of roof sections each having a complementarily grooved rafter forming a channel between the adjoining edges of the rafters and canvas coverings on the sections extending to the grooves of the rafters, of a tongue disposed in said channel and formed with a gutter groove in its upper face midway between the rafters, and means for clamping the sections and rafters together.

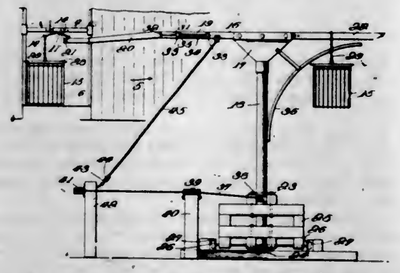
1,266,823. SHOE-LACE FASTENER. FRANK J. KOHLHAAS, Calumet, Mich. Filed Dec. 1, 1917. Serial No. 204,973. (Cl. 24—140.)



1. A fastener for compressible material comprising an elongated clasp member having upwardly projecting means at one end and provided with a transverse cut-out portion in said projecting means midway in said member to form a depression, and an elongated movable clip member hinged to one end of said clasp member having a bifurcated free end provided with resilient flanges to yieldingly and frictionally engage with said upwardly projecting means on said clasp member to lock said members, said flanges having transverse cut-out portions formed midway between the ends to coact with said depression to form an opening between said members whereby the compressible material is held when said members are in locking engagement.

[Claims 2 and 3 not printed in the Gazette.]

1,266,824. MAIL-BAG-DELIVERING APPARATUS. JOSEPH L. KOST, Galveston, Tex., assignor of one-half to James H. Shively, Galveston, Tex. Filed Aug. 31, 1917. Serial No. 189,138. (Cl. 258—9.)



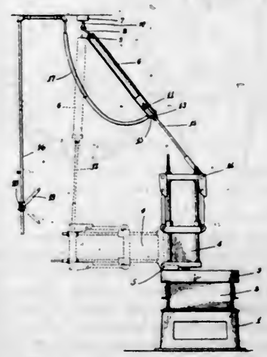
1. In a device of the class described, a station receiving and delivering member comprising a support, spaced horizontal rails carried by said support, said rails being inclined downwardly and converging to a point at one end, whereby they are capable of entering the loop of a bag, and said rails being cut off at points equidistant from the support at the other end.

2. In a device of the class described, a station receiving and delivering member comprising a rotatable support, spaced horizontal rails carried by said support, said rails being inclined downwardly and converging to a point at one end, whereby they are capable of entering the loop of a bag, shock absorbers mounted on said rails, and said rails being cut off at points equidistant from the support at the other end.

7. In a device of the class described, a station receiving and delivering member comprising a rotatable support, receiving and delivery means carried by said support, a laterally movable carrier for said support, and means actuated by the impact of delivery to said receiving means for moving said truck.

[Claims 3 to 6 not printed in the Gazette.]

1,266,825. CASTING-MACHINE. JOHN KRALUND, Brooklyn, N. Y., assignor to Doehler Die Casting Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 19, 1918. Serial No. 223,265. (Cl. 22—91.)



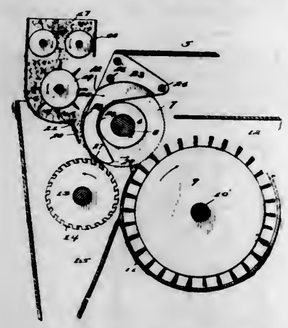
1. In a casting machine, the combination of a stationary member, a die pivoted thereto, and adapted to have a die-casting formed therein when in vertical position upon said stationary member, and means for swinging said die from said position to a horizontal position and vice-versa, comprising a fluid pressure cylinder open at its upper end, means pivotally supporting the upper end of said cylinder from an overhead support, a piston in said cylinder, a rod extending from said piston through the lower end of said cylinder and pivotally secured to said die, and means for supplying fluid under pressure, as desired, within said cylinder below said piston, said cylinder being so positioned as to cross a line joining the pivotal supports of said cylinder and said die in swinging both to its vertical and horizontal positions.

2. In a casting machine, the combination of a stationary member, a member pivoted thereto, adapted to be swung from the vertical position to a forwardly-directed position, and means for swinging said pivoted member from either position to the other, comprising a fluid pressure cylinder, having one end pivotally supported from a fixed support, a piston in said cylinder, a rod extending from said piston through the opposite end of said cylinder and pivotally secured to said pivoted member, and means for supplying fluid under pressure, as desired, within said cylinder on one side of said piston, said cylinder being so mounted that movement of said piston under fluid pressure, in the same direction, swings said pivoted member from either extreme position to a median position, past which it is carried by momentum.

3. In a casting machine, the combination of a stationary member, a member pivoted thereto, adapted to be swung from the vertical position to a forwardly-directed position, and means for swinging said pivoted member from either

position to the other, comprising a fluid pressure cylinder, having a piston therein and piston rod extending through one end of the cylinder, said cylinder and piston with its rod comprising coacting elements, one of said elements having one end pivotally supported from a fixed support, and the other of said elements having its opposite end pivotally secured to said pivoted member, and means for supplying fluid under pressure, as desired, within said cylinder, said elements and fluid supply means being so arranged that admission of fluid to said cylinder will swing said cylinder and pivoted member away from either extreme position toward the other.

1,266,826. COTTON-GIN. SMITH F. KRUPP, Atlanta, Ga. Filed Sept. 12, 1916. Serial No. 119,697. (Cl. 13—9.)



2. In a cotton gin, the combination with toothed devices for taking locks of cotton from cotton in bulk, and a doffer, of means between the devices having free ends in the direction of rotation of the devices, said means being provided with working faces having intermediate parts slightly projected outside the teeth of portions of the devices and over which the locks held by said devices have movement and the fibers thereby protected against injury or breakage while the locks are moved toward their point of removal from said devices.

3. In a cotton gin, the combination with saws, of a plurality of ribs between the saws, and a doffer, each rib having one end secured and the opposite end free, the ribs having working faces having intermediate portions slightly projected outside the circumferences of the saws over which the cotton locks have movement to protect them against injury or breakage.

5. In a cotton gin, a plurality of saws, a doffer, and means alternately disposed with relation to the saws and having intermediate outward projections beyond a portion of the circumferences of the saws and also provided with free extremities and over which the fibers of the locks of cotton carried by the saws have movement to guard the said fibers against injury or breakage.

11. In a cotton gin, the combination of saws, a doffer, a plurality of ribs between the saws, each rib having recesses on opposite sides for adjacent saws, each rib also having one end secured and the opposite end free in the direction of movement of the saws, the ribs having portions projected slightly outside the circumferences of the saws and also extended laterally, the cotton locks taken up by the saws moving over the said portions of the ribs extending outside the circumferences of the saws to protect the cotton fibers against injury or breakage.

[Claims 1, 4, and 6 to 10 not printed in the Gazette.]

1,266,827. MILK-PAIL HOLDER. JOSEPH A. LACLAIR, Owendale, Mich. Filed Aug. 14, 1917. Serial No. 186,187. (Cl. 31—14.)

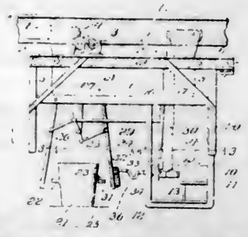
1. A milk pail holder comprising a handle, a clamping member at one end of the handle, an adjusting screw carried by the clamping member, a lever pivotally secured to the handle, a clamping member carried by the lever and arranged in spaced parallel relation with the clamping member of the handle, and a locking means carried by the handle and coöperating with the lever for holding the lever in engagement with the handle for urging the clamping members in the direction of each other.



2. A milk pail holder comprising a handle having an arcuate body, each end of the body curved upwardly, the terminal of the upwardly curved body inclined downwardly and outwardly, a locking ring slidably mounted adjacent the outer end of the handle, spaced ears formed integrally with the handle at the upwardly curved portion, a lever, ears formed integrally with the lever and located between the ears of the handle and pivotally secured thereto, a clamping member carried by the lever, adjusting screws arranged in the clamping members of the handle and lever respectively, said clamping members of the handle and lever respectively adapted to be engaged on the wall of a milk pail at diametrically opposite points to facilitate the supporting of the milk pail upon the knees of the user.

3. A milk pail holder comprising a handle formed of a single strip of material having an arcuate body, a depending clamping member, an adjusting screw arranged transversely through the clamping member, a lever pivotally secured to the handle adjacent the clamping member, a clamping member carried by the lever arranged in spaced parallel relation with the clamping member of the handle, an adjusting screw arranged transversely through the clamping member of the lever and coöperating with the adjusting screw of the handle to facilitate the removably securing of the same to a pail, and a locking ring carried by the handle coöperating with the free end of the lever for normally holding the clamping members in engagement with the pail.

1,266,828. CONVEYING MECHANISM. HENRY M. LANE, Detroit, Mich. Filed Sept. 22, 1917. Serial No. 192,755. (Cl. 22—82.)



1. A ladle crane comprising a ladle, means for detachably supporting the ladle, means for tilting the ladle, and an operator's cage carried by the crane in fixed relation to the ladle.

3. A ladle crane comprising a ladle, ladle-supporting means, an operator's cage carried by the crane in fixed relation to the ladle supporting means, means for elevating the ladle supporting means and cage, traversing means, and means for tilting the ladle.

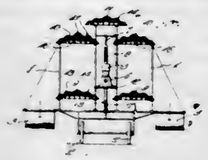
6. A ladle crane comprising a ladle, ladle supporting means, elevating and traversing means, an operator's cage carried by the crane in fixed relation to the ladle-supporting means and means for independently controlling the elevating and traversing means.

9. A ladle crane comprising a trolley frame, a ladle frame, means for elevating the ladle frame in the trolley frame, ladle supporting means carried by the ladle frame, means for tilting the ladle, and an operator's cage within said ladle frame and in fixed relation with said ladle supporting means.

12. A foundry appliance comprising a ladle and a frame, elevating and traversing means therefor, an operator's cage within the frame, pivoted arms for engaging the ladle, and an operating lever pivoted in the cage and connected to the pivoted arms.

[Claims 2, 4, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,266,829. AEROPLANE. WILLIAM EDWARD LANE, Washington, D. C. Filed July 7, 1917. Serial No. 179,217. (Cl. 244—12.)

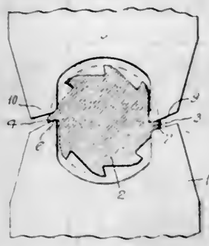


1. In an aeroplane, the combination of a pair of parallel lower planes spaced apart horizontally and elongated longitudinally of the line of flight, a pair of upper parallel planes also spaced apart horizontally and elongated longitudinally of the line of flight, the upper planes being parallel with the lower planes, a fifth plane parallel with said upper planes and extending longitudinally above the space between them, and a propeller at the front end of said planes, the area in which said propeller rotates being substantially equal to the area within which the front ends of the planes are located, whereby said propeller will effectively drive the air rearwardly beneath said planes.

4. A structure as specified in claim 1, all of said planes being concavo-convex in transverse section with their concave faces disposed downwardly, and each of said planes being bulged upwardly on longitudinal lines to form parallel channels whose ends merge into the lower surfaces of the planes, and a lining of fibrous material secured to the lower surface of each plane and extending throughout the area thereof.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,266,830. DIE FOR RE-FORMING REAMERS. HARLEY H. LA VERCOMBE, Detroit, Mich. Filed Apr. 25, 1917. Serial No. 164,347. (Cl. 76—90.)



1. Means for reforming reamers, fluted tools and the like, comprising a bed die and a punch die correspondingly recessed to clear an inserted tool and provided with gripping facets on the margins of the recesses that conform substantially to the opposite sides of the cutting flute or rib of the tool between the root and cutting edge thereof, the pairs of opposing facets on one side of the recess being dressed reversely to the pair on the opposite side.

2. Means for reforming reamers, fluted tools and the like comprising a bed die having a gripping facet that is the obverse of one flank of the rib of a tool and a punch die having a gripping facet opposing the bed die facet and dressed obversely to the other side or flank of the rib of the tool.

1,266,831. WELL-BORING ROD. MAHLON E. LAYNE, Houston, Tex. Filed Feb. 5, 1917. Serial No. 146,581. (Cl. 255—28.)



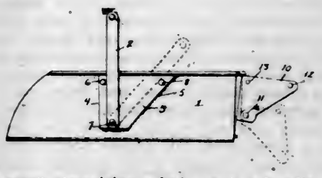
A tubular rotary well boring rod provided in the interior thereof at intervals intermediate its ends with one or more stiffening portions adapted to distribute torsional stresses.

1,266,832. DETACHABLE-HANDLE CONSTRUCTION. JOHN M. LEE, Spencer, Iowa. Filed Dec. 4, 1917. Serial No. 205,466. (Cl. 30—9.)



In a device of the class described, the combination of a handle having at one end a portion with a beveled shoulder, said portion having a projecting pin and having spaced therefrom a projecting pin having spaced from said portion, opposite laterally, extending flanges, an instrument or tool member having a shank provided with a hole to receive said first pin and with an elongated slot to receive said second pin, a resilient locking plate having an elongated slot to receive said second pin, and a recess to receive the head of said first pin and having one edge adapted to be under the edge of said beveled shoulder when said last described slot and said recess receive said pins.

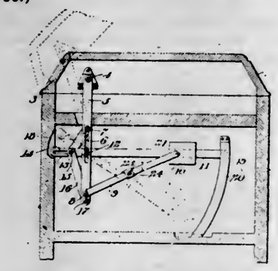
1,266,833. GRAIN-SCOOP. ISAAC LINDBERG, Bowbells, N. D. Filed Apr. 12, 1917. Serial No. 161,596. (Cl. 65—36.)



2. A scoop comprising a body part, a handle connected therewith, a pair of angle irons secured to the rear wall of the body part, a tilting handle consisting of a pair of plates pivoted to said angle irons, a rod connecting said plates together, said angle irons and plates being provided with alined openings, and a removable rod adapted to pass through said openings for normally retaining the tilting handle in rigid connection to the scoop.

[Claim 1 not printed in the Gazette.]

1,266,834. BALANCED HINGED TOP FOR CABINETS AND OTHER RECEPTACLES. THOMAS C. LINN, Jr., Salisbury, N. C., and JOHN P. BUTT, Jr., Gettysburg, Pa. Filed Apr. 18, 1917. Serial No. 162,901. (Cl. 217—60.)



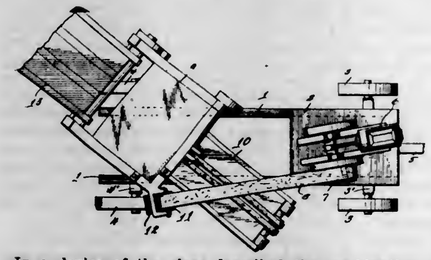
9. In combination, a hinged top, a lifting rod pivoted intermediate its ends and connected with said top, a balance arm, and means connecting said rod and arm.

10. In combination, a hinged top, a lifting rod, a pivoted weighted arm, and means connecting said rod and arm on opposite sides of the pivot of said arm.

14. The combination with a hinged top, of a lifting rod pivoted thereto and hanging therefrom, a fixed pivot with which said rod has a slotted connection, an arm arranged crosswise of the lifting rod and pivoted nearer one end than the other and provided with a longitudinal slot in its shorter end, a link pivoted to the lifting rod pivot, a link pivoted to the lower end of the lifting rod, means connecting said links in the slotted end of the arm, a sliding weight on the longer end of the arm, and a link connecting said weight and lifting rod.

[Claims 1 to 8 and 11 to 13 not printed in the Gazette.]

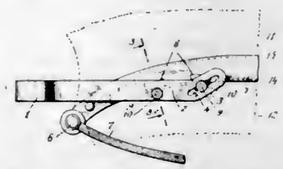
1,266,835. BROOM-CORN SEEDER AND ENGINE. WILLIAM H. LYNCH, Clayton, N. Mex. Filed Apr. 6, 1916. Serial No. 89,398. (Cl. 130—30.)



In a device of the class described the combination of elevated spaced side beams, an engine mounted adjacent one end of said beams and extending diagonally across said beams, a broom corn seeder carried adjacent the opposite end of said beams to the end upon which said engine is supported, said broom corn seeder extending diagonally across said beams, means connecting said engine to said broom corn seeder, said engine being carried at a considerable distance from said broom corn seeder, whereby sufficient space is provided for the operator to stand between said engine, the broom corn seeder and beams in a plane below said engine, broom corn seeder and beams, whereby because of the diagonal arrangement of said engine and broom corn seeder free access may be had thereto.

1,266,836. SUPPORTING DEVICE FOR AUTOMOBILE-BUFFERS. GEORGE ALBERT LYON, Philadelphia, Pa. Continuation in part of application Serial No. 90,604, filed Apr. 12, 1916. This application filed Dec. 7, 1916. Serial No. 135,524. (Cl. 293—55.)

1. In automobile buffers, a buffer having an impact receiving portion and connected rearwardly extending flat spring strip supporting members each formed with securing apertures, and wedging self-alining retainer hooks having shanks to extend through said securing apertures and each having a resilient alining hook end adapted to be locked around the same flange of the coöperating side frame member of the automobile and engage the flange adjacent its middle portion, there being wedging clamping surfaces formed on said retainer hooks to engage the edge of the flange and to wedge the alining ends of the hooks into holding alining engagement with the flange and insure contact between the shanks and the outer edge of the flange, bearing plates engaging the frame members and having holes through which pass the shanks of said hooks and having bushings extending along said shanks to maintain alinement therewith and nuts on said shanks to securely hold the buffer in adjusted position.

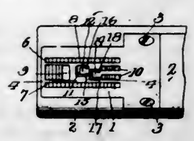


2. In automobile buffers, a buffer having supporting members each formed with apertures and wedging self-alining retainer members having shanks to coöperate with said apertures each having an alining end to extend around a flange of the side frame members of the automobile and coöperate with the opposite side of the flange, there being wedging clamping surfaces formed on said retainer members to wedge the alining end of the member into holding alining coöperation with the flange and means coöperating with said shanks to securely hold the buffer in adjusted position.

30. In attaching devices adapted for use in attaching an automobile buffer or the like to automobile frame members having projecting flanges, a hook bolt retainer having a hooked portion adapted to extend around one of the flanges of said frame members and having a hook end adapted to coöperate with an inner side of said frame member considerably away from the flange edge, a bearing member adapted to extend around the outer side of said frame flange and the outer side of said frame member opposite to said flange edge and having an alining aperture through which said retainer extends, a nut coöperating with the threaded end of said retainer and adapted to clamp the bearing member and a supporting member to the coöperating frame member.

[Claims 3 to 29 and 31 to 39 not printed in the Gazette.]

1,266,837. THROAT-PLATE FOR SEWING-MACHINES. CHESTER MCNEIL, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,885. (Cl. 112—29.)

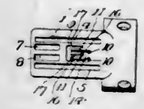


1. A throat plate having a feed slot and needle openings, said needle openings being staggered relative to each other in the direction of the line of feed, said throat plate having a stitch tongue extending into each needle opening, said stitch tongue in the rear needle opening having a portion thereof directly in rear of a portion of the stitch tongue in the front needle opening, the center line of the stitch tongue in the rear needle opening being at one side of the center line of the stitch tongue in the front needle opening, whereby the threads of the front stitching mechanism will be covered in part only by the threads of the rear stitching mechanism.

4. The combination of a throat plate having spaced feed slots, a feed dog coöperating with the throat plate, one of said elements having needle openings therein, a stitch tongue projecting into each needle opening, said needle openings being staggered relative to each other in the direction of the line of feed, whereby pairs of needles entering the respective needle openings may be disposed so that one needle of each pair is located in a line parallel with the line of feed and passing between the other pair of needles.

[Claims 2 and 3 not printed in the Gazette.]

1,266,838. THROAT-PLATE FOR SEWING-MACHINES. CHESTER MCNEIL, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,886. (Cl. 112—29.)



1. A throat plate having an opening adapted to receive two pairs of needles, one of which is arranged in rear of the other and offset relative thereto, said throat plate having stitch tongues extending into said opening, the stitch tongue for the front pair of needles being extended to a point in rear of the rear pair of needles, said stitch tongue for the front pair of needles having a portion thereof in common with the stitch tongue of the rear pair of needles.

2. A plate having an opening adapted to receive two pairs of needles, one of which is arranged in rear of the other and off-set relative thereto, said plate having stitch tongues extending into said opening, one of said stitch tongues having a thread slot for one of the needles of one pair and the other stitch tongue having a thread slot for one of the needles of the other pair.

3. The combination of a plate having a needle opening therein, pairs of needles arranged one in rear of the other and staggered relative to each other, three fingers carried by said plate and projecting into said needle opening, the central finger extending between the needles of each pair, the other fingers extending respectively between one pair of needles and outside of the other pair of needles, and all of said fingers terminating in rear of the rear pair of needles.

1,266,839. GEAR-CUTTING MACHINE. MAX MAAG, Zurich, Switzerland. Filed Aug. 30, 1916. Serial No. 117,705. (Cl. 90—55.)



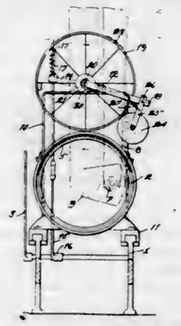
1. In a gear-cutting machine, the combination with a constantly moved ram, of a tool holder hinged to said ram and means adapted to swing said holder backward between succeeding cutting operations each lasting several tool strokes and keep the holder in this position until a cutting operation is restarted, substantially as described.

3. In a gear cutting machine, means to reciprocate the cutting tool, means to impart a backward movement to the tool during each stroke of the latter in one direction, and means to increase the extent of backward movement of the tool at a predetermined number of strokes of the latter, whereby the tool is moved out of cutting position.

9. In a gear cutting machine, the combination with a ram, of a tool holder hinged to said ram, a cam-disk shaft adapted to constantly move said ram, mechanism operatively connected to said holder having the tendency to swing said holder in a forward direction, a member adapted to move said mechanism in a backward direction, a spring acting upon said member, a shaft adapted to be oscillated by said cam disk shaft, a cam-disk fixed to the oscillatory shaft, a lever loosely mounted on the latter and adapted to move said member against the action of its spring for the purpose of swinging the tool holder in a backward direction, a pawl on said lever adapted to engage said cam disk, a control drum driven by said cam-disk shaft, a rod resting on said control drum, a member connected to said pawl and working together with the rod, which is adapted to control the engagement of the pawl with the cam disk by effecting a movement of the member connected to the pawl, a collar fixed to the last mentioned rod and a locking mechanism adapted to work together with said lever for the purpose of keeping the member acted upon by a spring in the shifted position until a cutting operation is restarted, said collar being adapted to effect the release of the lever by acting upon the locking mechanism, substantially as described.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,266,840. BARREL-STAVE-NUMBERING APPARATUS. HENRY F. MARTEN, HENRY GRAHN, and JULIUS C. ANDRESEN, San Francisco, Cal. Filed Nov. 20, 1917. Serial No. 202,917. (Cl. 144—35.)



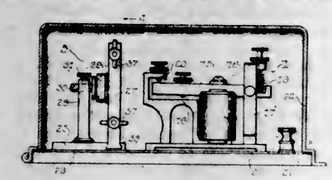
6. A barrel stave marking apparatus comprising means for rotating a barrel, an eccentrically pivoted frame positioned adjacent the barrel, a shaft supporting said frame, a marking roller rotatably mounted in one end of said frame on an axis parallel with the axis of rotation of the barrel and provided with marking characters on its peripheral edge, an inking roller rotatably mounted in the other end of said frame to overbalance the weight of the marking roller to maintain the same normally raised from contact with the positioned barrel, means for maintaining said inking roller in frictional contact with the marking characters of said marking roller, an arm extended from said shaft, a lever, and a yieldable connection between said lever and arm for forcing said marking roller into contact with the barrel on the operation of said lever.

[Claims 1 to 5 not printed in the Gazette.]

1,266,841. TELEGRAPHIC RECEIVER. EDWIN WELLINGTON MAYFIELD, Chicago, Ill.; Goudy Mayfield administrator of said Edwin Wellington Mayfield, deceased. Filed May 29, 1916. Serial No. 100,456. (Cl. 178—99.)

1. In combination a telegraph sounder, a microphonic device, a casing inclosing said sounder and said device, a telephone receiver operatively connected to said microphonic device and means for rendering said telephone re-

celver particularly responsive to certain ones only of the sounds emanating from said telegraphic sounder.

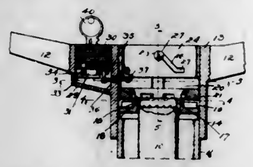


2. In combination a telegraphic circuit having means therein to make and break the current, a telephone receiver isolated from but influenced by the make and break in said telegraphic circuit and means for rendering said telephone receiver responsive in greater degree to the make than to the break in said telegraphic circuit.

4. In combination a base, a standard, a microphone electrode secured to said standard, a pair of standards adjustable relative to each other secured to said base, a thin sheet of metal secured to said standard, said sheet of metal being connected to the coöperating electrode of said microphonic device, a telegraph sounder supported adjacent said sheet of metal and adapted to vibrate said sheet of metal through the air only and a substantially sound proof shell inclosing said sounder and said sheet of metal.

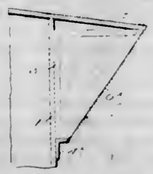
[Claims 3 and 5 not printed in the Gazette.]

1,266,842. AUTOMOBILE-STEERING-WHEEL LOCK. CLAUDE E. MENTZER, Des Moines, Iowa. Filed May 26, 1917. Serial No. 171,315. (Cl. 70—129.)



In a device of the class described, the combination of two members, one of said members being capable of movement with relation to the other, a lock element on one of said members, a coacting lock element slidably mounted on the other of said members, a tumbler lock mounted adjacent to said last described locking element including a key cylinder or plug, a laterally extending arm on said plug, a rotary member, means for operatively connecting said rotary member and said second described lock member whereby rotation of the rotary member imparts movement to the said second locking member, a collar mounted on said plug, a pin extending away from said collar, a link pivoted on said pin, said link being operatively connected with said rotary member, said pin being arranged in the path of said arm.

1,266,843. MEANS FOR SEALING STORAGE-TANKS. GEORGE WHITMAN MERRILL, Tulsa, Okla. Filed Mar. 24, 1917. Serial No. 157,132. (Cl. 220—125.)

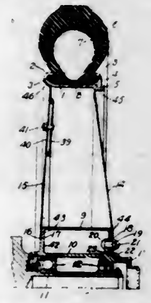


1. The combination with a metal storage tank having side walls, of a backing of L-shaped cross section disposed exteriorly of the tank walls near the top thereof, auxiliary means for supporting said backing, a roof extending beyond the edge of said backing, a plastic sealing compound of substantially triangular shape in cross section, disposed in the angle of said L-shaped backing and having a portion contacting with the under side of the roof and another portion contacting with the backing supporting means.

2. The combination with a metal storage tank having side walls, of a backing of L-shaped cross section disposed exteriorly of the tank walls near the top thereof, auxiliary means for supporting said backing, a roof extending beyond the edge of said backing, a plastic sealing compound of substantially triangular shape in cross section, disposed in the angle of said L-shaped backing and having a portion contacting with the under side of the roof and another portion contacting with the backing supporting means, and conducting members extending from said backing supporting member to the roof for holding said backing material in place and for providing an electrical conductor from the walls to the roof, exteriorly of said plastic compound.

3. The combination with a storage tank having metallic walls, of a backing of L-shaped cross section secured to said walls near the tops thereof, metal brackets at the bottom of said backing for supporting the latter, said brackets being secured below the walls, a roof extending beyond the edge of said L-shaped backing, plastic sealing material disposed in the angle of said L-shaped backing member and extending beyond the outer edge thereof, said plastic material engaging the under side of the roof at its upper end and engaging the supporting brackets at its lower end, and a wire netting secured to the end of the roof beyond the junction of the roof with said sealing compound at its upper end and being secured to the brackets at its lower end, said netting being arranged to bear on said plastic compound for holding the latter in position and also affording an electrical connection between the walls of the tank and the roof thereof.

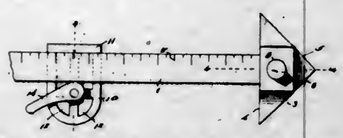
1,266,844. METHOD OF MAKING WHEELS. WILLIAM J. P. MOORE, New York, N. Y. Filed Jan. 3, 1916. Serial No. 69,825. (Cl. 29—174.)



1. The herein described method of making wheels, which consists of heating a pair of annular disks throughout their entire material and welding the same to an outer circular member and an inner central member so that said disks will be placed under tension in cooling.

[Claim 2 not printed in the Gazette.]

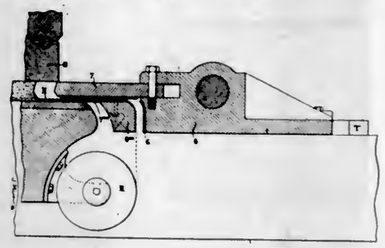
1,266,845. COMMON RULE. FREDRICK C. MORIN, Kress, Va. Filed May 1, 1917. Serial No. 165,732. (Cl. 33—27.)



A device as described, including a head hollowed out to form a recess, a scale bar having one end secured in

said recess, a spur formed on said head, an alongated plate slidable along said bar, and provided with an upturned end engaging one edge thereof, a locking member pivoted on said plate and engaging the opposite edge of the bar to clamp the latter against said upturned end and a spur carried by said plate.

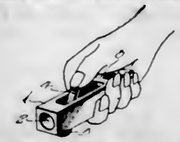
1,266,846. APPARATUS FOR THE MANUFACTURE OF CONTINUOUS REINFORCED STRIPS OF ASPHALT. JUAN MUGICA, San Sebastian, Spain. Filed Sept. 13, 1916. Serial No. 119,837. (Cl. 25—11.)



1. In a machine for the manufacture of reinforced slabs from granular or plastic material, a feed device for advancing the material comprising a plunger, a passage in the plunger for the lengthwise movement of the reinforcing material therethrough, a holder for the plunger having a gripping surface for the reinforcing material, a reciprocating member slidable relatively to the plunger and having a gripping surface for the reinforcing material corresponding to the gripping surface on the plunger holder, and means whereby the gripping surfaces cooperate to grip the material during the forward movement of the plunger.

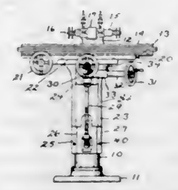
2. In a machine for the manufacture of reinforced slabs from granular or plastic material, a feed device comprising a plunger, consisting of upper and lower members spaced sufficiently apart to form a passage for the reinforcing material through the plunger, the lower member being movable relatively to the upper member, each of the members of the plunger having separate gripping members secured thereto and forminig a continuation of the passage for the reinforcing material at the inner end of the plunger, a stock holder for the reinforcing material adjacent the passage in the plunger, and means whereby the gripping members coöperate to grip the reinforcing material during the forward thrust of the plunger and relax the grip during the backward movement thereof.

1,266,847. TOY. FRANK MULIC, Lyndora, Pa., assignor of one-half to John H. Ott, Lyndora, Pa. Filed Jan. 10, 1918. Serial No. 211,210. (Cl. 124—12.)



A toy of the type described comprising an elongated block having a longitudinal bore opening through its front end, two opposite sides of said block each having a longitudinal slot opening into said bore, said slots being of less width than the diameter of said bore, a combined hammer and trigger in the form of a flat bar passing through the front ends of said slots and across said bore, the ends of said bar being increased in width to form heads for preventing removal of said bar until it is turned to position its flat sides parallel with the sides of the slots, said heads being spaced from said block, and a coiled spring in said bore in rear of said bar, one end of said spring abutting said bar and the other end thereof being disposed against the inner end of said bore, said spring being greater in diameter than the width of said slots to prevent loss therethrough.

1,266,848. GRINDING-MACHINE. OSCAR WERNER NILSON, Middletown, and FRANK ALOISIOUS BRASSILL, Hartford, Conn., assignors to Middlesex Machine Works, Middletown, Conn., a Copartnership composed of Oscar W. Nilson, Middletown, Conn., and Frank A. Brassill, Hartford, Conn. Filed Mar. 6, 1917. Serial No. 152,709. (Cl. 51—7.)

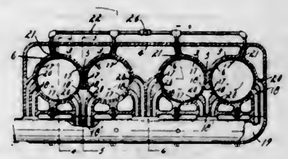


1. A grinding machine comprising a cylindrical supporting column extending upwardly from a base, a spindle supporting head on the upper end of the said column, a pair of trunnions on the said column in spaced relation, bearings engaged with the said trunnions, and a bed-plate structure supported by the said bearings, the said trunnions being in the form of reduced portions of the said column, and the said bearings being in the form of split-bearings, fitting in the said reduced portions.

2. A grinding machine comprising a supporting column, a bed-plate structure supported from the said column, the means of support for the said structure from the said column comprising a pair of bearings in spaced relation, and the said column being reduced to provide a pair of bearing recesses to fit and to operatively receive the said bearings.

3. In a grinding machine, a column having a base at the lower end and means for receiving a head at the upper end, the body portion of the said column being of cylindrical form and having a pair of annular recesses in the periphery in spaced relation suitably to receive bearing structures for supporting a bed-plate structure and each of the said annular recesses comprising a pair of radial end wall surfaces suitable for serving as thrust bearings and a cylindrical bearing portion connecting the said end wall surfaces.

1,266,849. INTERNAL-COMBUSTION ENGINE. ERNEST R. OLSEN, Muskegon, Mich., assignor to George William Olsen, Muskegon, Mich. Filed Aug. 20, 1917. Serial No. 187,196. (Cl. 123—25.)



1. In an internal combustion engine, the combination of a plurality of internally shouldered cylinders each provided with pairs of alternating intake ports and exhaust ports and a steam inlet port lying in the same plane, rotatable internal valve members shouldered to coact with the shoulders of said cylinders and disposed to project from the inner ends thereof and provided with worm teeth on their projecting ends, said valve members being provided with three uniformly spaced valve ports lying in the plane of said cylinder ports and adapted to be brought into register therewith as the valve members rotate, the pairs of cylinder intake and exhaust ports being spaced

uniformly with said valve ports, the steam ports of the cylinders being positioned so that one of the valve member ports registers therewith during each intake stroke, steam delivery connections to said steam inlet ports, pistons reciprocating in said valve members, a crank shaft, a worm shaft provided with worms coacting with the worm gears of said valve members, and driving connections between said worm and crank shafts.

2. In an internal combustion engine, the combination of a plurality of cylinders each provided with pairs of alternating intake ports and exhaust ports and a steam inlet port lying in the same plane, rotatable internal valve members disposed to project from the inner ends thereof and provided with worm teeth on their projecting ends, said valve members being provided with three uniformly spaced valve ports lying in the plane of said cylinder ports and adapted to be brought into register therewith as the valve members rotate, the pairs of cylinder intake and exhaust ports being spaced uniformly with said valve ports, the steam ports of the cylinders being positioned so that one of the valve member ports registers therewith during each intake stroke, steam delivery connections to said steam inlet ports, pistons reciprocating in said valve members, a crank shaft, a worm shaft provided with worms coacting with the worm gears of said valve members, and driving connections between said worm and crank shafts.

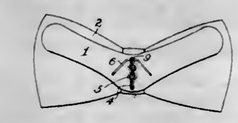
17. In an internal combustion engine, the combination of a cylinder faced on one side to receive a manifold and provided with two pairs of alternating inlet and exhaust ports and with two pairs of substantially straight inlet and exhaust passages for said ports disposed side by side and opening in said face, said pairs of passages having a heat transmitting wall in common, a rotatable internal valve member provided with three ports lying in the plane of said cylinder ports and spaced so that two of them coact simultaneously with said inlet or said exhaust ports, a piston reciprocating in said valve member, a crank shaft, and driving connections between said valve member and crank shaft.

19. In an internal combustion engine, the combination of a cylinder provided with two pairs of alternating inlet and exhaust ports lying in the same plane, and a sleeve valve rotatably mounted on said cylinder and provided with three ports, each coacting, during two succeeding cycles, with the respective pairs of cylinder ports and being functionally inactive during the third cycle.

21. In an internal combustion engine, the combination of a cylinder faced on said side to receive a manifold and provided with two pairs of alternating inlet and exhaust ports and with two pairs of direct inlet and exhaust passages for said ports opening in said face, and a rotatable internal valve member provided with three ports lying in the plane of said cylinder ports and spaced so that two of them coact simultaneously with said inlet or said exhaust ports.

[Claims 3 to 16, 18, and 20 not printed in the Gazette.]

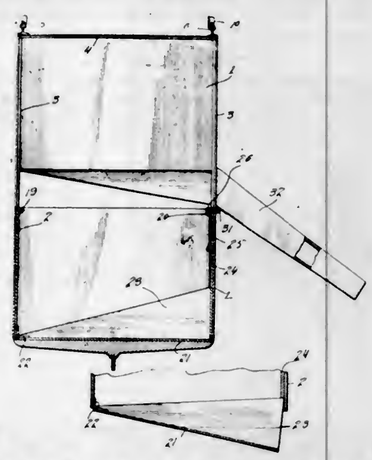
1,266,850. ADJUSTABLE NECKTIE-FASTENER. RASMUS PEDERSEN, Parkersburg, Iowa. Filed Oct. 25, 1917. Serial No. 198,362. (Cl. 24—57.)



1. A buttoning device for a neckwear-shield consisting of a resilient rod medially bent to provide a pair of jaws having a plurality of crimps with contacting apices to adjustably receive a collar-button, the medial part of the rod being inverted to pass under the jaws, and the extremities of the rod members being divergently bent and brought into the same plane as the medial inverted part of the rod.

[Claims 2 to 4 not printed in the Gazette.]

1,266,851. LOADING AND UNLOADING DEVICE. JOSEPH J. PEELING, Brooklyn, N. Y. Filed Jan. 22, 1916. Serial No. 73,712. (Cl. 214—119.)

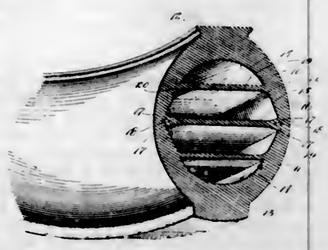


1. A loading and unloading device comprising a plurality of rectangularly shaped receptacles placed in a side-abutting relation, a frame carried above the positioning of said containers and provided with members acting to guide said containers as the same are raised and lowered in a vertical path, a track carried by the supporting structure, a car mounted on said track, means carried by the car to selectively raise and lower said containers, said containers having the bottoms thereof hinged to permit swinging movement to an inclined relation to discharge the contents of the containers, and means for releasably holding said bottoms against swinging movement to the inclined position.

5. A loading and unloading device comprising a plurality of receptacles placed in abutting relation, a frame carried above said receptacles, means for guiding said receptacles vertically upon said frame, a track carried above the top of said frame, a car mounted upon said track, lifting cables secured to said receptacles, winding drums carried by said car, said cables wound upon said drums, a bottom hinged to each receptacle, a cable secured to said bottom and wound upon one of said drums, a pawl and ratchet mechanism carried by one of said drums for permitting said drums to be released and allowing said bottom to swing to an open position, and means for limiting the swinging movement of said bottom.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,266,852. VEHICLE-TIRE. JOHN W. PEPPLE, San Antonio, Tex. Filed Aug. 5, 1916. Serial No. 113,250. (Cl. 152—1.)



A tire of the class described comprising a body formed of an inverted and an erect arch joined foot to foot, the

side walls of the arches being connected by a transverse elastic web at the common spring line of the arches, said connecting web having its lateral edges bifurcated longitudinally, said furcations being divergent and connected to the side walls at spaced points to provide lateral pockets, said furcations lying approximately at right angles to the surfaces of the side walls at their points of connection thereto.

1,266,853. LUNCH-BOX HEATER. LUTHER PETERSON, Payette, Idaho. Filed Apr. 4, 1917. Serial No. 159,751. (Cl. 126—261.)



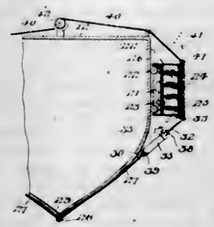
1. The combination with a lunch box, a heater casing detachably connected thereto, a tray slidably engaged with the heater casing and adapted to contain a heating element, and single means for locking the tray in place and locking the heater casing in engagement with the lunch box.

2. The combination with a lunch box and a heater casing having sliding engagement with one wall of the lunch box, of a tray slidably engaged with the heater casing and having an end member disposed on the exterior of the heater casing, and a button mounted on the end of the heater casing and rotatable into engagement with the lunch box and the projecting end of the tray to lock them both in place.

4. A lunch box and a heater casing, one provided with laterally projecting flanges and the other with flange receiving grooves whereby the lunch box and heater casing may be slidably and detachably engaged with each other, means limiting the relative sliding movement of the casing and lunch box in one direction, a tray slidable into the heater casing and adapted to support a heating element, and a button pivotally mounted upon the front wall of the heater casing and when turned in one position engaging over the tray and over the front wall of the lunch box to thereby prevent sliding movement of the lunch box relative to the heater casing to thereby prevent detachment of the lunch box from the heater casing.

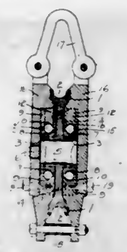
[Claim 3 not printed in the Gazette.]

1,266,854. SHIP-PROTECTOR. JOHN D. PILTZ, Toledo, Ohio. Filed Oct. 8, 1917. Serial No. 195,361. (Cl. 114—240.)



A protector for hulls comprising an encircling float, rollers carried by the float adapted for engaging a hull upon which the device is mounted, a mattress arranged outwardly of the float, resilient connections between the mattress and float, flexible top and bottom members connecting the mattress and float and projectingly arranged adjacent the said springs, a drum mounted upon the deck of the hull, cables attached to said drum and to said mattress, and separate cables having their lower ends attached to the hull adjacent the keel and their upper ends resiliently connected to the lower edge of the mattress.

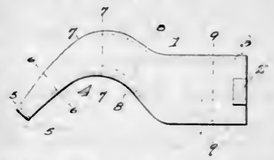
1,266,855. BALL-BEARING BLOCK. EDWARD PRATT, Chehalis, Wash., assignor of one-third to Charles Lentz and one-third to O. J. Albers, Chehalis, Wash. Filed July 28, 1915. Serial No. 42,283. (Cl. 254—192.)



1. In a ball bearing block in combination, a clevis, a pair of side plates pivotally connected to said clevis, said side plates having inwardly opening cylindrical recesses therein, rings seated within said recesses, said rings having internal grooves therein, a sheave mounted between said blocks and having a hub projecting within said rings, said hub having a pair of external grooves complemental to said internal grooves in said rings, and balls within said grooves forming a bearing for said sheave within said rings.

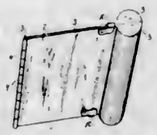
[Claims 2 to 4 not printed in the Gazette.]

1,266,856. NOZZLE. HUBERT H. RAMSAY, Tylertown, Miss. Filed Dec. 24, 1917. Serial No. 208,692. (Cl. 128—28.)



As a new article of manufacture, the nozzle substantially as herein shown and described consisting of a structure of different diameter at the upper from the lower end, having a central curvature to meet the contour of the tongue and roof of the mouth and a tapering end for injecting pure air into, and withdrawing vitiated air from the lungs, for the purposes herein fully set forth.

1,266,857. FOLDING POCKET GAME-BOARD. ADOLPH C. RECKER, Oakville, Conn., assignor to Waterbury Mfg. Co., Waterbury, Conn., a Corporation. Filed Dec. 28, 1917. Serial No. 209,230. (Cl. 46—64.)



3. In a folding pocket game-board, the combination with two complementary leaves having their inner edges hinged

together and their corresponding opposite edges formed with semi-circular checker-containers, of cup-like flanged checkers adapted to be nested for storage in the said checker-containers.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,266,858. CUTTING OR WELDING BLOWPIPE. JOHN R. REYBURN, Fairfield, Conn., assignor to Pratt & Cady Company, Incorporated, Hartford, Conn., a Corporation of New York. Filed Dec. 29, 1915. Serial No. 69,137. (Cl. 158—27.4.)

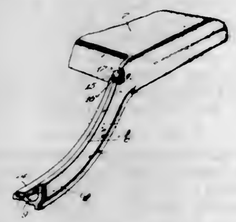


1. A cutting or welding blowpipe comprising a tubular stem and a connected head extending at an oblique angle to said stem, and regulating valves to regulate the supply of oxygen and heating gas to said head, a tip normally coöperating with said head and having a central shut off valve seat, a threaded securing collar securing said tip to said head and engaging a projecting flange on said tip, a reduced area metallic junction surface between said head and the end of said tip to form a tight joint therewith, a projecting protecting ledge around the junction surface of said tip, a gas passage communicating with said tip for the admission of oxygen, a shut-off valve mounted in a recess in said head to control said gas passage and formed with an inclined actuating socket, an actuator rod having a bent end in said socket and a connected projecting thumb piece to actuate said shut-off valve.

6. A cutting or welding blowpipe comprising a head member, a replaceable tip forming another member removably coöperating with said head member, a reduced area metallic junction surface formed on one of said members to be forced into tight contact with the junction surface on the other member, said tip having a projecting protecting ledge adjacent its junction surface and being formed with a nozzle passage for heating or cutting jets.

[Claims 2 to 5 not printed in the Gazette.]

1,266,859. TYPE-BAR REST. ALVAH C. ROEBUCK, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Nov. 7, 1914. Serial No. 870,774. (Cl. 197—42.)



1. In a typewriting machine, a single piece frame plate extending over the top of the machine from front to rear and formed at the front with an integral type bar rest curved downwardly at the center and with an upwardly opening groove in the curved portion, and a non-resilient pad secured in the groove.

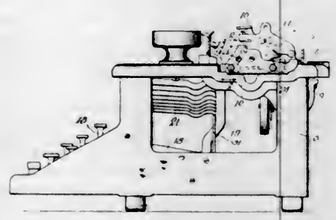
2. A type bar rest curved downwardly at the center with an upwardly opening longitudinal recess in the curved portion and grooves in the bottom thereof for containing adhesive material, and an anti-rebound cushion disposed in the recess and held in place by adhesive material.

6. In a front strike typewriting machine, a type bar rest consisting of a top plate formed with a concavely curved portion at the top of the plate, non-resilient material secured to the top of the curved portion, an ooze leather strip secured to the non-resilient material and over-lapping it at the ends, and means for securing the over-lapping ends of the ooze leather to the curved portion of the frame.

9. In a type bar rest, the combination with a frame element, having recesses at the sides, of an anti-rebound cushion supported thereby with the ends thereof disposed in the recesses, and a fastening device comprising a bolt with a broad flat head adapted to be inserted through the end of the cushion and through the frame, the head substantially filling the recess and covering the end of the cushion, and means to bind the bolt and cushion in place.

[Claims 3 to 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,266,860. SHIPPING-SUPPORT. ALVAH C. ROEBUCK, Woodstock, Ill., assignor to Woodstock Typewriter Company, Woodstock, Ill., a Corporation of Illinois. Filed Feb. 20, 1915. Serial No. 9,506. (Cl. 197—193.)



1. In a typewriter, a movable carriage and an escapement rack pivoted therein, escapement mechanism to engage the rack, and shipping plates attached to the ends of the carriage and provided with engaging means to hold the carriage against movement and the rack raised from connection with the escapement mechanism.

2. In a typewriter, a movable carriage and an escapement rack pivoted therein, escapement mechanism engaging the rack for moving the carriage, and means including type-bars for operating the mechanism; plates attachable to the ends of the carriage with engaging means for holding it against movement and the rack raised from the escapement mechanism; and means for preventing movement of the typebars.

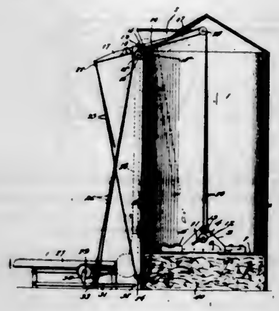
3. In a typewriter, a movable carriage, escapement means for moving the carriage including type bars, a pivoted escapement rack disengageable from the escapement means, means for holding the carriage against movement and the rack out of engagement with said escapement means, a support for the type-bars having a perforation at each end, and a bail with flattened portions adjacent the ends to limit the extent of insertion of the ends of the bail, the bail engaging the typebars for holding them against actuation.

4. The combination of a typewriter having a shiftable carriage with ways upon which the carriage is transversely movable, a shipping support for the carriage consisting of plates, one of which is attachable at each end of the carriage, having projections insertible in the ways thereof and other projections to engage the carriage to hold it against shifting movement.

5. A shipping support for the carriage of a typewriter consisting of a plate attachable to the carriage at one end with projections to engage in the ways upon which the carriage is movable, and with other projections to engage and support the carriage from shifting movement.

[Claims 6 to 8 not printed in the Gazette.]

1,266,861. PACKING MEANS FOR SILOS. CHARLES S. SAYRE, Albion, Wis. Filed Feb. 5, 1917. Serial No. 146,798. (Cl. 100—57.)



1. In a device of the class described, the combination of a packing member, said packing member consisting of side plates, a cross beam secured to said side plates, packing arms adjustably mounted upon said cross beam, whereby the packing arms may be adjusted to permit the packing member to be used in silos of various sizes, and means for reciprocating said packing member.

2. In a device of the class described, the combination of a packing member, said packing member comprising a pair of side plates, a cross beam fixedly secured to said side plates projecting therebeyond, sector shaped packing arms provided with longitudinally extending slots, said arms bearing upon the lower surface of said beam, bolts passing through said beam and said slots for retaining said packing arm in an adjusted set position, and means for reciprocating said packing member.

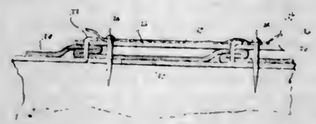
3. In a device of the class described, the combination of a packing member, said packing member consisting of a cross beam, means for supporting said cross beam, packing arms adjustably mounted upon said cross beam, whereby the packing arms may be adjusted to permit the packing member to be used in silos of various sizes and means for reciprocating said packing member.

4. In a device of the class described, the combination of a packing member, means for reciprocating said packing member, said packing member having packing arms adjustably mounted thereon, whereby the arms may be moved to fit the packing member to be used in silos of various sizes.

5. In a device of the class described, the combination of a centering beam, means for supporting said centering beam upon a silo, pulleys carried by said beam, pulleys carried upon said means, a packing member, a cable adjustably connected to said packing member and passing around said pulleys, and means for intermittently drawing upon said cable, thus reciprocating said packing member.

[Claims 6 and 7 not printed in the Gazette.]

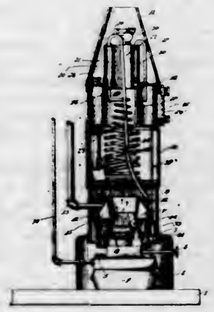
1,266,862. UPHOLSTERY-FASTENING MEANS. PAUL E. SCHELL and HERBERT W. SCHLUTER, Detroit, Mich. Filed Sept. 18, 1916. Serial No. 120,701. (Cl. 155—48.)



2. Upholstery fastening means comprising a trimmer plate, prongs struck from said plate and providing openings, upholstery having plaited portions thereof held by said prongs, a fastener retained on the upholstery by said prongs, a binder on said fastener, and fastening means for said binder extending through said fastener, said upholstery, and the openings of said trimmer plate.

[Claim 1 not printed in the Gazette.]

1,266,863. ALCOHOL-GAS STOVE. GEORGE SCHLEUSSELBURG, Detroit, Mich., assignor to himself, Robert F. Hartenstein, and J. Chas. Eichhorn, trustees. Filed Apr. 12, 1917. Serial No. 161,544. (Cl. 48—102.)



1. In a vapor generator, a burner, a main tank surrounding said burner adapted to contain fuel to be vaporized by heat from the said burner, said main tank having a vapor outlet, a feed tank adapted to contain fuel, coils subjected to the heat of said burner in communication with said feed tank to vaporize fuel received from said tank, and means for conducting vaporized fuel from said coils to said main tank.

2. In a vapor generator, a burner, a main tank adapted to contain fuel to be vaporized by heat from said burner, said main tank having a vapor outlet, a feed tank adapted to contain fuel, coils subjected to the heat of said burner and in communication with said feed tank to vaporize fuel received from said tank, means for conducting vaporized fuel from said feed tank to said main tank, and means adapted to regulate the flow of fuel from said feed tank to said main tank.

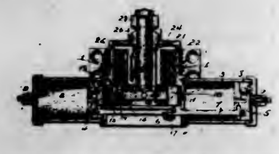
3. In a vapor generator, a burner, a main tank adapted to contain fuel to be vaporized by heat from said burner, said main tank having a vapor outlet, a feed tank adapted to contain fuel, a gas tank, coils subjected to the heat of said burner and in communication with said feed tank to vaporize fuel received from said tank and conduct vaporized fuel to said vapor tank, and means for conducting vaporized fuel from said vapor tank to said main tank.

4. In a vapor generator, a burner, a main tank adapted to contain fuel to be vaporized by heat from said burner, said main tank having a vapor outlet, a feed tank adapted to contain fuel, coils subjected to the heat of said burner and adapted to receive fuel from said feed tank, a vapor tank adapted to receive vaporized fuel from said coils and supply the vaporized fuel to said main tank, means adapted for conducting fuel from said feed tank to said main tank, and means for regulating the flow of fuel from said feed tank to said main tank.

5. In a vapor generator, a feed tank adapted to contain fuel, coils in communication with said feed tank adapted for vaporizing the fuel, means for heating said coils, a vapor tank adapted to receive vaporized fuel from said coils, said gas tank having a gas outlet, and means establishing communication between said vapor and feed tanks adapted for conducting condensate within said vapor tank to said feed tank.

[Claims 6 to 9 not printed in the Gazette.]

1,266,864. DOOR CHECK AND CLOSER. JOHN C. SCHMIDT, Chicago, Ill. Filed Sept. 7, 1917. Serial No. 190,231. (Cl. 16—87.)



1. In a door check and closer, the combination with a spring-actuated member, of a friction device connected therewith, and pneumatic means for controlling the application and release of said friction device.

3. In a door check and closer, the combination with a spring-actuated member, of a friction device connected therewith, operating means for said friction device, and pneumatic means connected with said operating means for retarding the movement of the latter to effect the application of the friction device during the initial "closing" movement of the mechanism.

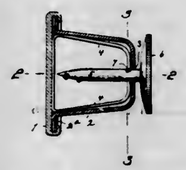
8. In a door check and closer, the combination with a casing, and a spring-actuated member, of a split friction ring coöperable with the wall of said casing and connected with said spring-actuated member, operating means for expanding said ring, and pneumatic means connected with said operating means for controlling the expansion and contraction of said friction ring.

9. In a door check and closer, the combination with a casing and a spring-actuated member, of a split friction ring coöperable with the wall of the casing and connected with said spring-actuated member, blocks secured to the adjacent ends of the split portion of the friction ring, a short shaft mounted between said blocks, a roller carried by said shaft to engage said blocks, a lever secured to said shaft, and pneumatic means connected with said lever for controlling the expansion and contraction of the friction ring.

10. In a door check and closer, the combination with a split casing, a spring-actuated member, and a friction brake member coöperable with the wall of the casing, of means for tightening the casing on said friction brake member, and means for controlling the operation of said brake member.

[Claims 2 and 4 to 7 not printed in the Gazette.]

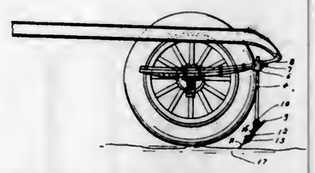
1,266,865. NECKTIE-FASTENER. ARNOLD SCHROETTER, New York, N. Y. Filed June 7, 1917. Serial No. 173,277. (Cl. 24—49.)



In a necktie fastener, a female member comprising a flat elongated casing that tapers toward the top, said top being centrally perforated, and a spring housed within said casing, combined with a headed pin adapted to be projected through said perforated top and having a groove adapted to be engaged by said spring.

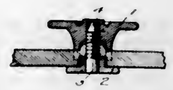
1,266,866. PNEUMATIC-TIRE FENDER. FRANCIS SCOGNAMILLO, New York, N. Y. Filed Nov. 9, 1917. Serial No. 201,064. (Cl. 208—151.)

A pneumatic-tire fender, of the class described and for the purpose set forth, comprising a rod bent in right angle on one end, the upright longer portion of said rod having suitable clamps and attached to the foremost forward part of the elliptic springs of a vehicle or automobile, and the angle portion of same being advanced in front of the forward pneumatic tire wheels and carrying



a swivel plate having a detachable flexible strip, which is continually kept in contact to the ground by means of a spring.

1,266,867. BUTTON. JOHN A. SEBENIUS, Shelton, Wash. Filed Nov. 8, 1917. Serial No. 200,904. (Cl. 24—105.)



A button of the character specified, comprising inner and outer sections, the outer section having an axial internally threaded opening and the inner section having an axial threaded pin for engaging the opening and pointed at its end to be passed through the material to which the button is to be connected, the first named section having a concave recess encircling the opening at the face adjacent to the other section and said other section having teeth adapted to extend into the recess and to push a portion of the garment therein, the first named section having teeth outside of the teeth of the last named section, the teeth of the first named section having an inclined face in the direction toward which the section is turned when connecting the sections.

1,266,868. RAZOR-BLADE. THOMAS C. SHEEHAN, Upper Montclair, N. J., assignor to Durham Duplex Razor Company, New York, N. Y., a Corporation of New York. Filed Oct. 4, 1917. Serial No. 194,761. (Cl. 30—12.)



1. A razor blade comprising two sections each having a cutting outer edge and an inner edge and each provided with an undercut projection snugly fitting a corresponding recess in the inner edge of the other section.

2. A razor blade comprising two sections each having a hard cutting outer edge and a soft inner edge and each provided with an undercut projection snugly fitting a corresponding recess in the inner edge of the other section.

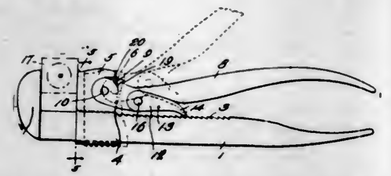
3. A razor blade comprising two sections each having a cutting outer edge and an inner edge and each provided with an undercut projection snugly fitting a corresponding recess in the inner edge of the other section substantially on the median line of the blade.

4. A razor blade comprising two sections each having a cutting outer edge and an inner edge and each provided with a dovetailed projection snugly fitting a corresponding recess in the inner edge of the other section.

5. A razor blade comprising two sections each having a cutting outer edge and an inner edge and each provided with an undercut projection transversely engaging a corresponding recess in the inner edge of the other section.

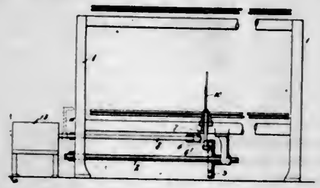
[Claim 6 not printed in the Gazette.]

1,266,869. WRENCH. WILLIAM SHEPHERDSON, Sandpoint, Idaho. Filed Nov. 15, 1917. Serial No. 202,192. (Cl. 81—89.)



In a wrench, a handle provided at one end with a fixed gripping jaw, a movable gripping jaw slidable on said handle, the handle being provided in its inner face with an intermediate rack portion, a movable handle pivotally secured at its inner end to said slidable jaw, and a pawl pivotally secured at its inner end to said movable handle intermediate the ends thereof and adapted to engage the teeth of the rack so as to force the movable jaw toward the fixed jaw when the movable handle is depressed, said pawl and the movable handle being provided with coöperating shoulders acting to positively limit movement of the movable handle toward the handle of the fixed jaw so as to bring the axes of the pawl and the movable handle into alinement with each other and with the free end of the pawl when said movable handle is moved into its extreme depressed position, the pawl and movable handle thus coöperating with the movable jaw to form a lock for positively preventing movement of said movable jaw away from the fixed jaw.

1,266,870. DRIVING MECHANISM FOR PIERCING IMPLEMENTS IN EMBROIDERING-MACHINES. GOTTWALT SIEBER, Plauen, Germany, assignor to Vogtländische Maschinen-Fabrik, Plauen, Germany. Filed June 8, 1914. Serial No. 843,698. (Cl. 112—7.)



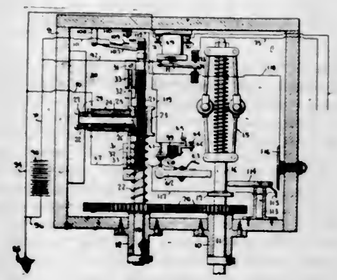
1. In a jacquard embroidering machine, a jacquard apparatus, piercing implements, driven means for operating said implements direct and located midway between the end walls of said machine, a shaft directly controlled from said jacquard and means operated from said shaft to adjust the depth of penetration of said implements during the operation of said driven means.

2. In a jacquard embroidering machine, a jacquard apparatus, piercing implements, a driven cam arranged midway between the end walls to said machine, adjustable means operated from said cam, and serving for the adjustment of the depth of penetration of said implements, and a shaft directly controlled from said jacquard and operating said adjustable means.

3. In a jacquard embroidering machine, a jacquard apparatus, piercing implements, driven means for operating said implements and located midway between the end walls of said machine, a shaft directly controlled from said jacquard and means operated from said shaft and including a link for the adjustment of the depth of penetration of said implements during the operation of said driven means.

4. In a jacquard embroidering machine, a jacquard apparatus, piercing implements, a driven cam located midway between the end walls of said machine, adjustable means operated positively from said cam for operating said implements, a shaft controlled from said jacquard and means operated from said shaft and including a link for the adjustment of said adjustable means, during the operation of said driven cam.

1,266,871. AUTOMATIC MOVING-VEHICLE CONTROL. PAUL JOHN SIMMEN, Buffalo, N. Y. Original application filed Apr. 14, 1908, Serial No. 427,080. Divided and this application filed May 5, 1915. Serial No. 26,087. (Cl. 246—58.)



2. A system of speed control for a vehicle moving along a trackway, comprising means on the vehicle for controlling the propulsion devices thereof, means on the vehicle for establishing safety and danger conditions and actuating the controlling means when danger conditions exist, trackside mechanism coöperating with the vehicle carried means for intermittently causing the latter to establish danger conditions, and means automatically operated by the vehicle carried means for causing the same to actuate the controlling means whenever a predetermined speed is exceeded, whether the trackside mechanism indicates danger or not.

4. A system of speed control for vehicles, comprising traffic controlling means, means for actuating the traffic controlling means, including an electric circuit, mechanism including wayside means for controlling the circuit, a governor operating in accordance with the speed of the vehicle, and a controller for said circuit, comprising contact elements, one of which moves with said governor into and out of contact with the other element accordingly as the speed of the vehicle reaches or drops below a predetermined rate, and has a wiping contact with said element during variations in speed above said rate.

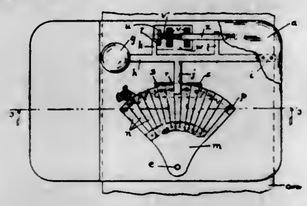
5. A system of speed control for a locomotive moving along a trackway, comprising cab-carried controlling means, wayside means intermittently controlling the cab-carried means, and a means for automatically controlling the speed of the locomotive from the cab-carried means whenever the speed reaches a maximum independently of danger conditions.

12. In apparatus of the character described, the combination with a vehicle, of traffic controlling means, an electrically operated controller for the traffic controlling means, an electric circuit including the controller, wayside means for controlling the circuit, a device moving in accordance with the speed of the vehicle, also controlling the circuit, and a circuit including the controller, said circuit being independent of control by the wayside mechanism, but being controlled by the device which operates in accordance with the speed of the vehicle.

15. In apparatus of the character described, the combination with a vehicle and traffic controlling means, of means for causing an operation of the traffic controlling means whenever the vehicle is moving in one direction and a predetermined speed thereof is reached, and means for controlling the operation of the traffic controlling means when the vehicle is moving in a different direction and a different predetermined speed is reached.

[Claims 1, 3, 6 to 11, 13, 14, and 16 to 20 not printed in the Gazette.]

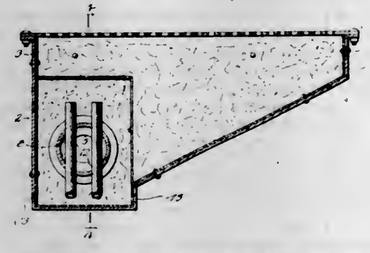
1,266,872. CHECK-PROTECTOR. ERWIN W. SIPPEL, Seattle, Wash. Filed Nov. 2, 1916. Serial No. 129,212. (Cl. 197—6.4.)



1. In a device of the character specified, a dial bearing the characters to be imprinted, a pivoted type-sector having radial resilient, independently depressible type-bars bearing type-characters corresponding with those on said dial, a pointer for said dial fixed on the pivot shaft of said type-sector, the casing being adapted to permit the insertion of a paper under the type-sector, means for depressing one of said type-bars, the parts being so arranged that the type-bar bearing the type-character corresponding with that pointed to on the dial will be positioned for being depressed by said feed means, a resiliently mounted shaft, a feed wheel mounted thereon, an arm on said depressing means underlying said resiliently mounted shaft, means operated by the type bar depressing means for progressively rotating said resiliently mounted shaft, and means operating to lift the latter and therewith said feed wheel when said pointer is pointed to a certain character on said dial.

[Claims 2 and 3 not printed in the Gazette.]

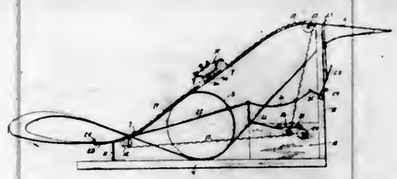
1,266,873. AUTOMOBILE-HEATER. EUGENE F. SMITH, Ashtabula, Ohio. Filed May 9, 1917. Serial No. 167,462. (Cl. 257—136.)



1. In a heater for engine-driven vehicles, a hollow casing formed of two relatively long and narrow intersection portions arranged at right angles with respect to each other, one of said portions of the casing including an apertured register plate through which it is in open communication with the interior of the vehicle, said portion and its registering plate extending transversely of the vehicle and through the greater portion of the width of the latter, the other portion of said casing having air inlet openings therein, and a tubular element extending through said other portion of said casing and adapted to be connected to the exhaust outlet of the vehicle-engine.

2. In a heater for engine-driven vehicles, a unitary structure comprising a hollow casing formed of two relatively long and narrow intersection portions arranged at right angles with respect to each other, one of said portions of the casing projecting laterally of the other of said portions and extending from one side to and beyond the other side of the other of said portions, this laterally projecting portion including an apertured register plate in open communication with the interior of the vehicle, said other portion of the casing having air inlet openings, and a pipe extending through said other portion of the casing and adapted to be connected with the exhaust pipe of the vehicle-engine.

1,266,874. TOY. REVERDY P. SMITH, New Haven, Conn. Filed Sept. 13, 1917. Serial No. 191,204. (Cl. 104—111.)

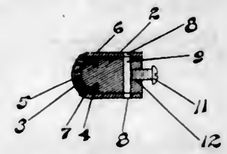


1. A toy comprising an inclined track having reversely inclined surfaces, a car adapted to run upon the said track, a chain adapted to draw the car up the primary incline, mechanism for driving the chain, and means operated by the car for starting and stopping the operating mechanism.

3. A toy comprising a track having reverse inclines, a car adapted to run upon said track, said car provided with a downwardly projecting gripping pin, and a tripping plate, a motor including a sprocket wheel, idlers at the bottom and top of the upward incline, an endless chain passing around the sprocket wheel and idlers, and over the upper surface of the upward incline, a starting lever projecting upward through the track at the bottom of the incline, a stopping lever projecting upward through the track at the top of the incline, the tripping plate adapted to actuate the starting and stopping levers, and connections between the starting and stopping levers and the motor for starting and stopping the same.

[Claim 2 not printed in the Gazette.]

1,266,875. CLOCK-HAMMER. WILLIAM J. SMITH, Waterbury, Conn., assignor to Waterbury Clock Co., Waterbury, Conn., a Corporation. Filed Aug. 30. 1917. Serial No. 188,927. (Cl. 116—33.)

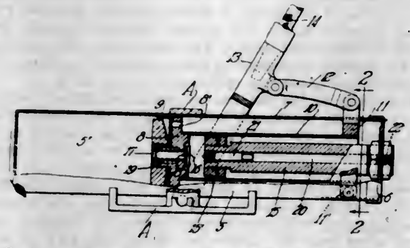


1. In a cushioned clock-hammer, the combination with a tubular hammer-casing, of a core adapted to be inserted thereinto and formed at its outer end with a retaining-head having an annular undercut groove at its base, and a cushion wrapped around the said head and having its edges entered into the said groove and held in place therein by the inner wall of the outer end of the casing, whereby the said cushion is positively held in place.

2. In a cushioned clock-hammer, the combination with a tubular hammer-casing, of a core conforming in external diameter to the internal diameter of the said casing and formed at its outer end with a retaining-head, the base of which has an annular undercut groove, and a disk-shaped cushion wrapped around the said head by which it is given a curved form and having its edges entered into the said groove in which they are positively held in place by the side walls of the outer end of the said casing, the inner portions of the said casing and plug being formed with alined transverse holes for the reception of a hammer-wire which is engaged by a set-screw mounted in the inner end of the plug in line therewith.

1,266,876. PUMP. JOHN G. SPEAR and GRAHAM B. SPEAR, Springfield, Mass. Filed July 16, 1917. Serial No. 180,783. (Cl. 230—27.)

1. A compound pump, comprising, a stationary low pressure cylinder, a high pressure cylinder therein, a low pressure piston on the latter to support one end thereof, a stationary high pressure piston, stationary guiding means adjacent the latter, means on the other end of the high pressure cylinder having a rolling engagement with said guiding means, and a pivoted lever connected intermediate its ends to said high pressure cylinder at a point offset from its axis and arranged to reciprocate said high pressure cylinder and low pressure piston.

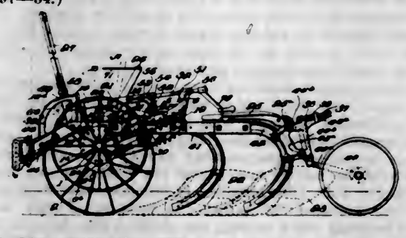


2. A compound pump, comprising, a stationary low pressure cylinder, a high pressure cylinder therein, a low pressure piston on the latter to support one end thereof, a stationary high pressure piston, stationary guiding means adjacent the latter, means on the other end of the high pressure cylinder having a rolling engagement with said guiding means, and means connected to the high pressure cylinder at a point offset from its axis to reciprocate said high pressure cylinder and low pressure piston.

3. A pump, comprising, a cylindrical casing having a closed end, means to support the casing intermediate its ends, a piston reciprocable in the casing between said end and a point intermediate its ends, a cylinder fixed at one end to the piston and movable therewith in spaced concentrical relation within said casing, means to support the other end of said cylinder with a rolling engagement with the interior walls thereof, a hollow piston rod fixed to the other end of the casing, and extending into said cylinder, a piston on said rod, means to admit fluid between said end and movable piston, means to permit fluid compressed by the latter to enter said cylinder between the pistons, and a valve controlling the communication between said cylinder and hollow piston rod to permit fluid compressed in the former to enter the latter, a slot in said casing, a part on said cylinder supporting means to ride in said slot to guide the cylinder, and a lever pivoted to said supporting means and connected intermediate its ends to reciprocate said part, said casing being characterized in that it serves as a low pressure cylinder and a casing to contain and conceal the high pressure cylinder.

[Claims 4 and 5 not printed in the Gazette.]

1,266,877. GANG-PLOW. WILLIAM N. SPRINGER, Peoria, Ill., assignor to Oliver Chilled Plow Works, South Bend, Ind. Filed July 25, 1916. Serial No. 111,212. (Cl. 97—54.)



1. The combination with a plow frame, a wheel, and a crank axle mounted on said plow frame and having a part of its crank entering the hub of said wheel, of a gear carried by the wheel, a pivoted rack mounted on the frame in advance of the mounting of the crank axle, and means for moving said rack into mesh with said gear rearwardly thereof.

3. The combination with a plow frame, crank axles and wheels having mountings on the cranks of said axles, of gears carried by said wheels, racks pivotally mounted on the frame in advance of the crank axle mountings and movable into mesh with said gears rearwardly of their axes.

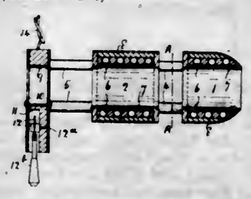
[Claims 2, 4, and 5 not printed in the Gazette.]

1,266,878. DISH-MOP. HELEN E. STROBHART, Chicago, Ill. Refiling of application Serial No. 789,590, filed Sept. 13, 1913. This application filed Sept. 8, 1915, Serial No. 49,619. Renewed Oct. 20, 1917. Serial No. 197,737. (Cl. 141—10.)



A mop of the character described including a mop head of soft readily bendable material so as to be readily thrown back over its handle out of its normal operative position, a handle having a groove for the reception of said mop head, the mop head end of said handle being solid and imperforate and provided with an enlargement and with a groove below the point at which the mop head is secured to the handle, a bag and a spring ring secured therein around the mouth thereof adapted to be passed over the said enlargement on the end of the handle to be received in the last mentioned groove and to be enveloped within the said mop head, the said spring ring being provided with interlocking loops for ready manipulation thereof and removal from the said handle when the mop head is thrown back over the handle out of its normal operative position.

1,266,879. ELECTRICAL HEATING APPARATUS FOR PERMANENTLY WAVING HAIR. EUGÈNE FRANÇOIS SUTER, London, England. Filed Aug. 6, 1917. Serial No. 184,765. (Cl. 219—21.)

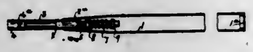


1. In electrical heating apparatus adapted for use in permanently waving hair, a plurality of independent tubular heaters arranged along a common axis so as to be heat insulated from each other, and in combination with a switch whereby one of such heaters may be put into and out of operation independently.

2. An electrical heating apparatus adapted for use in permanently waving hair, comprising a plurality of independent tubular heaters and a tubular switch spaced apart and arranged co-axially by means of struts and having electrical connections arranged so that one of said heaters may be independently put into and out of operation.

3. An electrical heating apparatus adapted for use in permanently waving hair comprising two independent tubular heaters and a tubular switch spaced apart and arranged coaxially by hollow struts, electrical connections forming a main circuit adapted for connection to a source of current and also a sub-circuit controlled by said switch so that one of said heaters can be independently put into or out of operation as required.

1,266,880. HAIR CURLER OR ROLLER. EUGÈNE FRANÇOIS SUTER, London, England. Filed Aug. 6, 1917. Serial No. 184,766. (Cl. 132—20.)

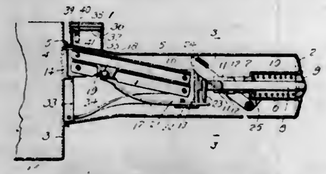


2. A hair curler or roller adapted for use in permanently waving hair, comprising a sleeve that is furnished with internal ratchet teeth, and comprises a reduced neck portion with a tapered tubular extension that is sealed at its outer end, said sleeve being mounted loose on a spindle in combination with a spring controlled detent arranged so as to engage said ratchet teeth, and a boss or extension on said spindle that projects beyond, and forms an abutment for said sleeve.

3. A hair curler or roller adapted for use in permanently waving hair, comprising a sleeve with a reduced neck portion formed by a narrow end tube that is furnished with an odd number of ratchet teeth and carries a tapered tubular extension, closed at its outer end and arranged so as to inclose said ratchet teeth, said sleeve being mounted loose on said spindle in operable combination with a spring controlled double acting detent so as to turn in one direction only, a boss or projection on said spindle that extends beyond and forms an abutment for the said neck of said sleeve, and a lateral inclined slot formed in said boss substantially as hereinbefore described.

[Claim 1 not printed in the Gazette.]

1,266,881. SCOOP. DAVID O. TAYLOR, West Point, Miss. Filed June 1, 1917. Serial No. 172,187. (Cl. 265—67.)



1. A scoop of the character specified comprising a scoop and a handle, the handle being tubular and having one end open, and the scoop having inner and outer flanges between which the handle may engage to seal the open end of the handle, a stem having guided movement axially of the handle toward and from the scoop, a spring normally pressing the stem in a direction away from the scoop, bars pivotally connecting the stem and the scroop for permitting the scoop to swing downardly with respect to the stem, means in connection with the stem for guiding the sccop and holding it horizontal, a spring normally pressing the scoop upward, means for moving the stem toward the scoop to release the flanges from the handle, and indicating mechanism controlled by the downward movement of the scoop for indicating the weight in the scoop, latch mechanism for holding the flanges in engagement with the handle and released by the means for moving the stem toward the scoop.

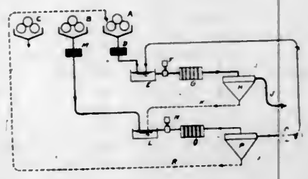
2. A scoop of the character specified comprising a scoop and a handle, the handle being tubular and having one end open, and the scoop having inner and outer flanges between which the handle may engage to seal the open end of the handle, a stem having guided movement axially of the handle toward and from the scoop, a spring normally pressing the stem in a direction away from the scoop, bars pivotally connecting the stem and the scoop for permitting the scoop to swing downwardly with respect to the stem, means in connection with the stem for guiding the scoop and holding it horizontal, a spring normally pressing the scoop upward, means for moving the stem toward the scoop to release the flanges from the handle, and indicating mechanism controlled by the downward movement of the scoop for indicating the weight in the scoop.

4. A scoop of the characer specified comprising a scoop and a handle, the handle being tubular and having one end open, and the scoop having inner and outer flanges between which the handle may engage to seal the open end of the handle, weighing mechanism controlled by the downward movement of the scoop with respect to the handle, spring mechanism normally holding the handle in engagement with the flanges, means for pressing the scoop away from the handle to permit it to move downward with respect to the handle.

6. A scoop of the character specified comprising a scoop and a handle, the scoop having a flange for engagement by the handle to seal the space between the scoop and the handle, spring mechanism for holding the scoop tightly to the handle, weighing mechanism controlled by the relative movement of the scoop and handle, and means for releasing the scoop from the handle.

[Claims 3 and 5 not printed in the Gazette.]

1,266,882. PROCESS OF MANUFACTURING CANE-SUGAR. NEHEMIAH MORTIMER THOMAS, Pymble, near Sydney, New South Wales, and CUTHBERT GEORGE PETREE, Bundaberg, Queensland, Australia. Filed Jan. 14, 1918. Serial No. 211,703. (Cl. 127—17.)



1. In a process for extracting sugar cane juice by successively crushing and macerating sugar cane, defecating the extracted products, and returning the defecation mud to the milling circuit, producing a specially prepared defecation mud for the said purpose by first mixing thin juice with mud obtained from defecation of richer juice and defecating the mixture whereby a mud is produced the liquid element of which is lower in sugar content than is the liquid element in the macerated megass with which such mud is incorporated and crushed.

6. The herein described improvement in the extraction of sugar cane juice, which consists in crushing the cane in a plurality of stages with intermediate maceration of the megass, defecating the rich juice obtained in the early stage or stages of the crushing, passing the clarified rich juice to the factory and mixing the rich mud therefrom with raw thin juice obtained in the late stage or stages of the crushing, defecating the mixture of rich mud and raw thin juice, passing the clarified thin juice to the evaporating plant and distributing the mud therefrom upon the megass at a point in the milling circuit where the liquid element of the mud is less rich in sugar than is the liquid content of the macerated megass which enters the rolls at the stage of crushing following next after the said distribution of mud upon the megass.

[Claims 2 to 5 not printed in the Gazette.]

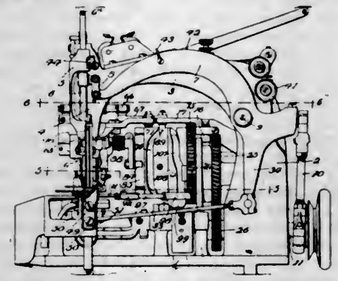
1,266,883. FELLER ATTACHMENT. FRANK THOMPSON, Shawnee, Okla., assignor to John W. Walker, Shawnee, Okla. Filed Nov. 30, 1917. Serial No. 204,751. (Cl. 112—35.)



1. In a sewing machine attachment, a support provided with a slot in one end; a feller carrier having a rib received in the slot; a feller on the feller carrier; and a clamping device mounted on the rib and coacting with the under surface of the support.

[Claim 2 not printed in the Gazette.]

1,266,884. SEWING AND EDGING MACHINE. REUBEN B. THOMPSON, Coboes, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 18, 1914. Serial No. 819,409. (Cl. 112—24.)



1. A sewing machine for forming an edging on a fabric comprising stitch forming mechanism including spaced needles, a thread guiding device movable in front of the needles for forming a loop in an edging thread to be entered by said needles, a thread finger located in the rear of said needles around which the edging thread is drawn, a second thread guiding device, and means for moving said last named thread guiding device for forming a loop in a scallop reinforcing thread and positioning the same for the entrance of one of said needles only.

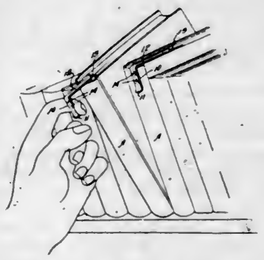
2. A sewing machine or forming an edging on a fabric comprising stitch forming mechanism including spaced needles, a tape guide located in advance of the needles for guiding a tape between the needles, a fabric guide for guiding a body fabric to one of the needles only, thread guiding devices movable above and below the tape guide in front of the needles, a thread holding finger located in rear of the needles and coöperating with said thread guiding device for positioning the edging thread for the entrance fo both needles into said loop, a second thread guiding device, and means for moving the same so as to position a loop of scallop reinforcing thread for the entrance of one of the needles only.

3. A sewing machine for forming an edging on a fabric comprising spaced needles, means for vibrating said needles laterally, means for feeding a fabric to one of said needles whereby stitches are formed around the edge of the fabric, a tape guide in front of said needles for guiding a tape between the needles, thread guiding devices movable above and below the tape guide respectively for forming loops in an edging thread and for presenting these loops to the over-edge stitches of the needles at certain intervals, and a stitch finger located in rear of the needles around which said edging threads are drawn, means independent of the thread guiding devices for raising the said stitch finger for permitting the free feed of the fabric and the formed edging.

8. A sewing machine for forming an edging on a fabric, comprising spaced needles, means for feeding a fabric so that its edge is engaged by one of said needles, devices for forming loops in edging threads and presenting the same to said needles, a thread carrying device for forming reinforcing scallop loops aud presenting the same to the needle at a distance from the edge of the fabric, means for operating said thread carrying device and give to said device a thread drawing movement for pulling slack to form the scallops.

[Claims 4 to 7 and 9 to 11 not printed in the Gazette.]

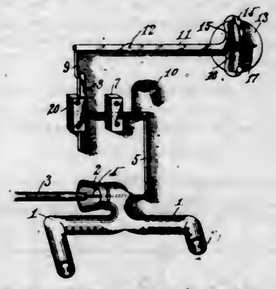
1,266,885. COMBINED BOOK PULL AND MARKER. RENSSELAER H. TOLL, Berkeley, Cal. Filed May 29, 1917. Serial No. 171,731. (Cl. 281—42.)



1. A combined book pull and marker comprising a single length of strip metal bent near one end at substantially a right angle to the transverse plane of the strip to provide a finger receiving lug, and bent in a like manner near its opposite end and twisted thereat into a plane at right angles to the transverse plane of said lug to provide a blade for insertion between the leaves of a book to anchor the device therein.

2. A combined book pull and marker comprising a flat metal strip adapted to lie along the upper edge of a book with one end projecting over the back thereof, the strip having on its other end a depending blade adapted to lie between the leaves of the book and limit the sliding of the strip over the back thereof, the strip also having a depending finger engaging lug on said first end adapted to be drawn outwardly from the back by the fingers for withdrawing the book from a shelf.

1,266,886. AUTOMATIC OVEN-HEAT REGULATOR. WALTER EBER TURNER, Piqua, Ohio, assignor to The Favorite Stove & Range Co., Piqua, Ohio. Filed July 16, 1917. Serial No. 180,792. (Cl. 236—5.)



1. In a device of the character specified, a fuel inlet member, a needle valve coöperating therewith adapted to control the admission of fuel to a burner, a thermostatic element connected to said valve, a supporting member for said thermostatic element, a cam adapted to vary the position of the supporting member of the thermostatic element, a lever adapted to move said cam, and a temperature indicator associated with said lever and by means of which the extent of movement of the lever is determined.

2. In a device of the character specified, a fuel inlet member, a needle valve coöperating therewith adapted to control the admission of fuel to a burner, a thermostatic element connected to said valve, a shiftable support for said thermostatic element, a movable wedge-like member engaging said shiftable support and adapted to change the normal position of the needle valve with reference to the fuel inlet, a spring exerting a force on said shiftable support counter to that of the wedge-like member, and means for actuating said wedge-like member in opposite directions.

3. An automatic fuel regulating device comprising in combination with a valve controlling the admission of fuel to a burner, a thermostatic bar having one end directly connected to said valve, a shiftable supporting member for said thermostatic bar and to which the other end thereof is directly connected, and means including as an element a lever for moving said supporting member in adjusting the position of the thermostatic bar relative to the valve.

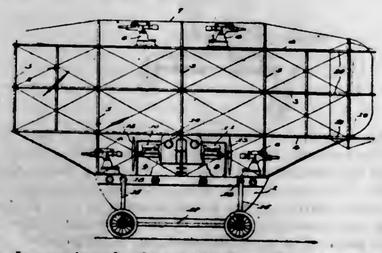
1,266,887. CONDUIT-CAP FOR ELECTRIC INSTALLATION. WHEELER H. VIBBER, New London, Conn., assignor of one-half to The Gillette-Vibber Co., New London, Conn., a Corporation. Filed Nov. 28, 1916. Serial No. 133,860. (Cl. 247—12.)



1. In a conduit-cap for electric installation, the combination with a domical cover the wall of which is formed with threaded openings for the reception of retaining-screws, of a frame-piece adapted to fit within the said cover and formed in its lower face with recesses for the reception of the projecting inner ends of the said screws, the bottom walls of the said recesses being inclined to form bearings for the threads of the screws which act flatwise through the said inclined walls to crowd the frame-piece inward to its bearing within the cover.

2. In a conduit-cap for electric installation, the combination with a domical cover, of a frame-piece adapted to be fitted within the open lower face of the said cover and formed near its inner edge with a threaded opening for the reception of the end of a conduit-pipe, and also formed adjacent to the said opening and in its edge with a guide-notch to facilitate the cutting away of the metal of the frame-piece between said notch and opening to permit the cap to be applied to a pipe after the wires have been run through the same and connected.

1,266,888. FLYING-MACHINE. PAUL ROBERT WAGNER, New York, N. Y. Filed Feb. 21, 1917. Serial No. 150,103. (Cl. 244—14.)



1. In an aircraft, the combination of a supporting surface, balancing means, controlling means, and a wheel base embodying front and rear axles, a plurality of wheels on each axle, links connecting said axles, supporting arms connecting said axles with the frame of the craft, a rock shaft to which one set of supporting arms are fixedly connected, and manually controlled means for oscillating said rock shaft.

2. An air-craft comprising a plurality of superposed supporting surfaces having their greatest dimensions in the line of flight, a boat suspended below said supporting surfaces, struts connecting said supporting surfaces, extensions of said struts above the upper supporting surface, and wireless antennæ attached to the upper extremities of said extensions; wheels carried on downwardly extending members attached to the sides of said boat, a tractor air screw toward the bow of said boat, a propeller air screw toward the stern of said boat, and a plurality of motors directly connected to said air screws located in a housing between said air screws.

3. An air-craft comprising a plurality of superposed supporting surfaces having their greatest dimension in the line of flight, said surfaces being pointed or narrow toward the front and rear, a boat suspended below said supporting surfaces, struts connecting said supporting surfaces, extensions of said struts above the upper supporting surface, and wireless antennæ attached to the upper extremities of said extensions; wheels carried on downwardly extending members attached to shafts extending across said boat above the waterline, means for rotating said shafts, a tractor air screw toward the bow of said boat, a propeller air screw toward the stern of said boat, and a plurality of motors directly connected to said air screws located in a housing between said air screws.

4. An air-craft comprising a plurality of superposed supporting surfaces having their greatest dimension in the line of flight, said surfaces being pointed toward the front and rear; struts connecting said supporting surfaces; extensions of said struts above the upper supporting surface and wireless antennæ attached to the upper extremities of said extensions; a boat suspended below said supporting surfaces; a tractor air screw toward the bow of said boat, a propeller air screw toward the stern of said boat, a plurality of motors directly connected to said air screws located in a housing erected upon the deck of said boat between said air screws; and a combined conning tower and operating room located upon said motor housing.

1,266,889. WHEEL FOR STEAM-TURBINES. HENRY H. WAIT, Chicago, Ill. Filed May 1, 1916. Serial No. 94,680. (Cl. 253—77.)



1. A turbine wheel having a laterally projecting flange, an external band, blades intermediate the periphery of said wheel and said band, and a single radial bolt extending through each of said blades, said flange and band and securing them together.

5. A turbine wheel having a laterally projecting flange, buckets arranged upon the periphery of the wheel, a band surrounding the buckets, and a series of bolts extending through the flange, buckets and band, the bolts being cut away upon one side and located closely adjacent to the plane of the contiguous face of the wheel.

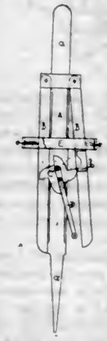
9. A turbine wheel comprising a disk of plate metal cut away upon one side thereof to form an annular groove and an overlying flange, a chamfer upon the other face thereof, a series of buckets surrounding the periphery of the wheel, a bolt passing through the body of each said bucket and through said flange and band and securing the same together.

12. A turbine wheel comprising a circular disk, a series of concavo-convex buckets arranged about the periphery

of the disk, a rivet for securing each bucket to the disk spaced farther from the front surface of said bucket than from the rear surface thereof.

[Claims 2 to 4, 6 to 8, 10, and 11 not printed in the Gazette.]

1,266,890. PATTERN-VIBRATOR FOR MOLDERS. HUGH L. WALKER, Guelph, Ontario, Canada. Filed Dec. 31, 1917. Serial No. 209,787. (Cl. 22—185.)

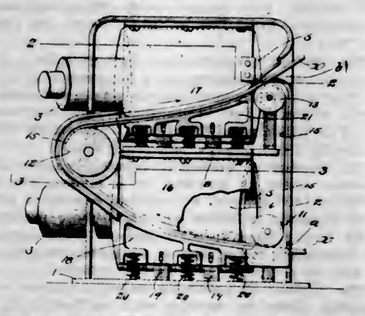


1. A pattern vibrator for molders, comprising in combination a central stem formed into a handle at its upper end and tapered to a point at its lower end, provided with one or more hinged vibrator arms, ratchet wheels for operating same; said vibrator arms being adapted to forcibly strike the central stem thus vibrating the same and consequently the pattern into which it is inserted, substantially as hereinbefore described.

2. In combination with the central stem and hinged vibrator arms of a pattern vibrator; one or more ratchet wheels operated by means of a crank handle the teeth of said ratchet wheels being adapted to alternately press out and release said vibrator arms, substantially as hereinbefore described.

3. In combination with a pattern vibrator composed of a central stem and one or more vibrator arms, ratchet wheels for operating same, said ratchet wheels being mounted on the central stem of the vibrator; spiral springs bearing on and forcibly compressing the vibrator arms for the purpose of driving them forcibly against the central stem of the vibrator when released by the passing of the teeth of the said ratchet wheels, substantially as hereinbefore described.

1,266,891. MACHINE FOR ROUNDING THE EDGES OF LEATHER BELTS AND THE LIKE. CHARLES F. WALLERSTEDT, St. Louis, Mo. Filed May 18, 1917. Serial No. 169,441. (Cl. 51—5.)



1. In a machine of the character described, the combination of a grinding wheel and a support for guiding and presenting the material to be operated upon to the action of said wheel approximately lengthwise of, and at varying angles to the axis of rotation of said wheel, the variation in the angle of such presentation changing as the material advances along said wheel.

2. In a machine of the character described, the combination of a pair of grinding wheels arranged at angles relative to each other, and a support for the material to be operated upon, said support presenting the material to the action of said wheels at varying angles relative to their axis of rotation and at different points along their length.

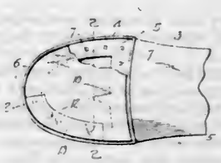
3. In a machine of the character described, the combination of two pairs of grinding wheels arranged at opposite angles relative to each other and designed to successively act upon opposite sides of the material, supports for the material to be operated upon whereby the edges of said material are successively presented at different angles, and at different points along the length of said pairs of wheels respectively, the wheels of each pair jointly acting upon one face of the material as it passes therealong.

4. In a machine of the character described, the combination of a grinding wheel and a support for presenting one face of the material to be operated upon to said wheel, said support guiding said material along said wheel so that the angle of operation of the wheel upon the material being operated upon is changed as the material progresses along the grinding wheel until finally the grinding wheel finishes its action upon the material on a different face or edge thereof.

5. In a machine of the character described, the combination of a pair of angularly disposed grinding wheels, a support for the material to be operated upon by said wheels, and a yielding member coöperating with said support for holding said material to the action of the wheels.

[Claim 6 not printed in the Gazette.]

1,266,892. SHOE-HEEL. WALTER H. WEBB, Denver, Colo. Filed Mar. 29, 1917. Serial No. 158,441. (Cl. 36—59.)



1. A shoe-heel composed of a shell having an inturned flange for fastening it to the sole of a shoe, a filling removably fitted in said shell and having a marginal recess which together with the corresponding portion of the shell, provides a socket, and a plug removably fitted in said socket.

[Claims 2 and 3 not printed in the Gazette.]

1,266,893. SAFETY POCKET-LOCK. DAVID WEISSMAN, Brooklyn, and LEISER REISER, New York, N. Y. Filed Jan. 16, 1917. Serial No. 142,617. (Cl. 24—211.)

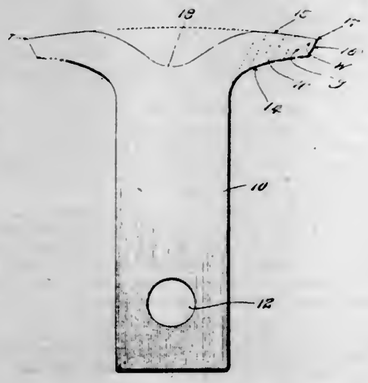


2. A safety pocket lock, comprising two independent parts adapted to be secured to the opposite walls of the

pocket of a garment, one of said parts being provided with a convex portion extending substantially the entire length of said part and provided with a locking member, and the other part being provided with a longitudinally disposed concave portion adapted to engage the convex portion of the other part for preventing relative movement of the parts, and a locking member provided on the concave portion adapted to coöperate with the locking member of the convex portion for closing said pocket.

[Claim 1 not printed in the Gazette.]

1,266,894. HAMMER FOR ROTARY MILLS. MILTON F. WILLIAMS, St. Louis, Mo., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo., a Corporation of Missouri. Filed June 25, 1917. Serial No. 176,758. (Cl. 83—11.)

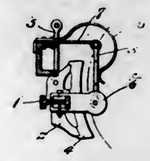


1. In a rotary mill, a hammer comprising a flat shank portion equipped adjacent one extremity for pivotal mounting, and carrying at its other extremity similar oppositely extending working points projecting a substantial distance in advance of the margins of the shank and terminating in outer margins disposed substantially upon the arc of the mill's cage, and said working points having inner margins and front margins extending from said inner margins to the outer margins and forming working edges at their lines of junction with the outer margins on the effective radius of the hammer.

2. In a rotary mill, a hammer formed of a flat bar which is bilaterally symmetrical and equipped for suspension on its longitudinal axis adjacent one extremity, the other extremity of the bar being formed into oppositely projecting working points having their outer margins extending beyond the front and rear margins of the shank and disposed substantially on the arc of the mill's concave, said working points being formed also with inner margins and front margins extending from the same to the outer margins and terminating at their outermost extremities in working edges extending in the direction of the bar's thickness.

3. In a rotary mill, a hammer formed of a flat bar equipped adjacent one extremity on its longitudinal axis for suspension on an operating shaft, and formed at its other extremity into similar oppositely directed working points extending outwardly a substantial distance in advance of the front and rear margins of the bar, the outer margins of which working points form the terminal edge of the hammer and throughout the portions thereof which extend beyond the front and rear margins of the shank portion are disposed substantially in a common arc described on a radius from the axis of the operating shaft, both the outer and inner margins of the working points terminating at front margins which form working edges at their junctions with the outer margins.

1,266,895. RELEASE MECHANISM FOR BRAKE-BEAMS. CHARLES HAINES WILLIAMS, Chicago, Ill., assignor to Chicago Railway Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 20, 1917. Serial No. 187,105. (Cl. 188—70.)



1. In a truck, a brake beam disposed for coöperation with the wheels, a hanger having oscillatory connection with a truck portion and with the brake beam to afford support for the latter upon the former, and to permit operative movement of the brake beam, and a spring mounted on a truck portion and having effective coöperation with the hanger at a point between its connection to the truck and the beam to oppose movement of the brake beam for application of the brakes.

3. In a truck, the combination of a brake beam disposed for coöperation with the wheels, hangers connected to the beam and to truck portions to support the former for oscillatory movement, and a spring carried by a truck portion and having coöperation with the hanger to exert leverage upon the brake beam through the hanger.

5. In a truck, the combination of a brake beam disposed for coöperation with the wheels, a hanger having operative connection with the beam to provide a support therefor, said hanger being supported on a truck portion for both oscillatory and bodily movement relative thereto, and a spring having coöperation with the hanger to oppose oscillatory movement thereof, said spring being disposed to accommodate the bodily movement of the hanger.

6. In a truck, the combination of a brake beam disposed for coöperation with the wheels, a hanger having oscillatory connection with the beam, a spring coöperating with the hanger to oppose movement of the beam, and means whereby the hanger is connected to a truck portion to support the beam, said means being adjustable to permit variation of the point of support of the hanger relative to the spring.

10. In a truck, the combination of a beam movably mounted on the truck for coöperation with the wheels, a hanger mounted on a truck portion and having connection with the beam to form a third or fourth point support for guidance of the beam in oscillatory movement thereof, and a spring coöperating with said hanger at a point spaced apart from the beam for the purpose described.

[Claims 2, 4, and 7 to 9 not printed in the Gazette.]

1,266,896. ANTHRACENE DYES AND PROCESS OF MAKING THEM. HUGO WOLFF and FILIP KAČER, Mannheim, Germany, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany, a Corporation. Filed Dec. 4, 1913. Serial No. 804,731. (Cl. 8—1.)

1. The process of producing coloring matters of the anthracene series by treating, at a temperature of at least about 140° C., with a compound capable of extracting the elements of water, an intermediate product obtainable from a 1-acetyl-amino-anthraquinone by treatment with an acid chlorid.

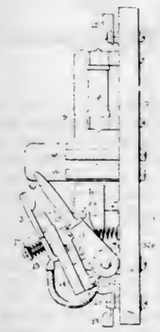
2. The process of producing coloring matters of the anthracene series by treating, at a temperature of at least about 140° C., with a compound capable of extracting the elements of water, an intermediate product obtainable from a plurality of acetylated amino-anthraquinone compounds containing a 1-acetyl-amino-anthraquinone body by treatment with an acid chlorid.

3. The process of producing coloring matters of the anthracene series, by treating with sulfuric acid, at a temperature of at least about 140° C., the product obtainable by boiling 1-acetyl-amino-anthraquinone with phosphorus oxychlorid, washing the product with water and drying it.

4. The new vat coloring matter obtainable by extracting the elements of water from the intermediate products obtainable from a 1-acetyl-amino-anthraquinone body and an acid chlorid, which new vat coloring matters consist, when dry, of from yellow-brown to red powders which are insoluble in water and in dilute alkalis, which yield from red-brown to red solutions in concentrated sulfuric acid and brown solutions in boiling glacial acetic acid and nitrobenzene, which give rise with alkaline hydrosulfite to form yellow-red to red-brown vats which dye cotton from reddish brown to yellowish brown shades, which shades upon treatment with a neutral solution of sodium hydrosulfite remain unchanged.

5. The new vat coloring matter obtainable by extracting the elements of water from the intermediate products obtainable from 1-acetyl-amino-anthraquinone and phosphorus oxychlorid, which new vat coloring matter consists when dry of a red powder which is insoluble in water and in dilute alkalis, which yields a red-brown solution in concentrated sulfuric acid and a brown solution in boiling glacial acetic acid or nitrobenzene, and which yields a red-brown vat with alkaline hydrosulfite solution and dyes cotton reddish brown shades, which shades, on treatment with neutral sodium hydrosulfite solution, remain unchanged.

1,266,897. CIRCUIT-CONTROLLER. PAUL H. ZIMMER, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1916. Serial No. 89,809. (Cl. 200—2.)



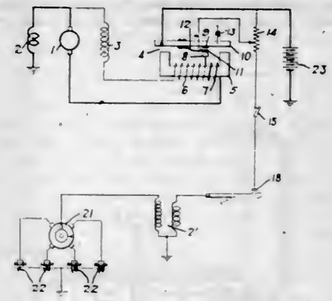
1. In a motor controller, in combination, a plurality of coöperating contacts and operating means therefor providing for engagement of one of said contacts, with other of said contacts successively for starting and running connections, said means including a member movable from an extreme position to another extreme position for starting connections and back to an intermediate position for running connections.

2. In a motor controller, in combination, a plurality of coöperating contacts, operating means therefor providing for engagement of one of said contacts with other of said contacts successively for starting and running connections said means including a member movable from an extreme position to another extreme position for starting connections and back to an intermediate position for running connections and electromagnetic means associated with said operating means to retain said contacts in running relation.

12. In a circuit controller, in combination, a plurality of stationary contacts, a coöperating contact member, supporting means for said member providing for pivotal and rectilinear movement thereof, means associated with said supporting means to necessitate rectilinear and pivotal movements of said member progressively for engagement with one of said contacts, and means to restrain a part of said supporting means for return rectilinear movement of said member to engage another of said contacts, said member being biased for said return rectilinear movement, and also biased for return pivotal movement for direct disengagement of both said contacts.

[Claims 3 to 11, 13, and 14 not printed in the Gazette.]

1,266,898. ELECTRICAL SYSTEM. CARROLL R. ALDEN, Detroit, Mich., assignor to Westinghouse Electric and Manuacturing Company, a Corporation of Pennsylvania. Filed Feb. 4, 1916. Serial No. 76,162. (Cl. 123—148.)



1. In an electrical system, the combination with an ignition circuit comprising a resistor and a generator, of means for simultaneously closing and also simultaneously opening the circuit of said generator and a shunt circuit for said resistor.

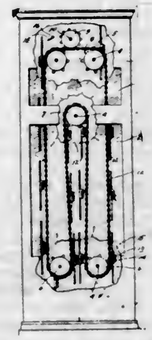
2. In an electrical system, the combination with an ignition circuit comprising a resistor and a generator, of means operable at a predetermined voltage of said generator for simultaneously closing the circuit of said generator and a shunt circuit for said resistor.

3. In an electrical system, the combination with an ignition circuit comprising a resistor and a generator, of a cutout for simultaneously closing or opening the circuit of said generator and a shunt circuit for said resistor.

4. In an electrical system, the combination with an ignition circuit comprising a generator, a battery and a ballast resistor between said generator and battery, of a cutout for controlling the circuit of said generator, said cutout having an auxiliary contact member for controlling a shunt circuit for said resistor.

5. In an electrical system, the combination with an ignition circuit comprising a ballast resistor and a generator, of a cutout having a plurality of contact members for controlling the main circuit of said generator and for completing a shunt circuit for a portion of said resistor.

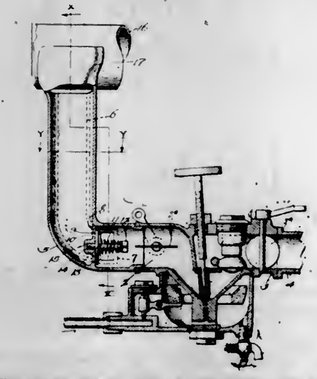
1,266,899. DISPLAY DEVICE. JOHN E. ALEXANDER, Covington, Va. Filed Jan. 12, 1916. Serial No. 71,740. (Cl. 211—21.)



In a display device, the combination with a pair of spaced endless traveling chains, plates extending between

and pivotally carried by said chains and having slots adjacent the ends thereof, and resilient trips engageable in and adapted to contact certain ends of said slots during the course of a revolution of the chain whereby to cause a pivotal movement of said plates and reverse the positions thereof.

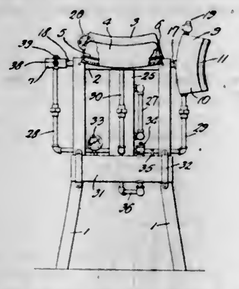
1,266,900. MEANS TO SUPPLY HEATED AIR TO CARBURETERS. VERNE P. ALEXANDER, Chicago, Ill., assignor to William G. Wilmot, Chicago, Ill. Filed Sept. 21, 1916. Serial No. 121,363. (Cl. 137—32.)



3. The combination with a carbureter of an internal combustion engine provided with a manually operable intake valve and the exhaust pipe of said engine, of a normally closed passage extending from said exhaust pipe to said carbureter, and a spring held valve in said passage adapted to be moved from its seat by the suction of the engine and of an open passage alongside the normally closed passage and also extending from the exhaust pipe to the carbureter to constantly conduct heated air thereto while the engine is running.

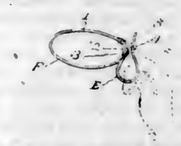
[Claims 1 and 2 not printed in the Gazette.]

1,266,901. VULCANIZER. NEWTON M. ANDERSON, Worthington, Ind., assignor of one-half to William T. Jean, Worthington, Ind. Filed Apr. 10, 1916. Serial No. 90,180. (Cl. 18—18.)



A device of the class described comprising a rectangular frame; legs depending from the frame at the corners thereof; a connection located within the contour of the frame; pipes radiating from the connection and cooperating with the connection to form a cross having rectangularly disposed arms, the pipes being supported by the side portions of the frame, intermediate the legs; molds carried by the outer ends of the pipes and located exteriorly of the frame; a boiler disposed within the contour of the frame; a conduit leading from the boiler to the connection and constituting a support for the boiler; and return pipes leading from the molds to the boiler.

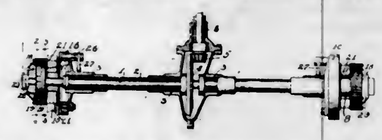
1,266,902. TIE-WIRE FOR CEMENT-SACKS. NORVAL ASKELAND, Orland, Cal. Filed Mar. 21, 1918. Serial No. 223,787. (Cl. 24—30.5.)



3. A tie for sacks, including a wire strand having a loop at one extremity thereof, an intermediate portion of the wire being doubled upon itself to provide an eye which is insertible through the loop, the other extremity of the wire being bent to provide a finger receiving loop and inserted through the eye to prevent the eye from pulling through the first mentioned loop, the said free end of the wire being provided with a pair of crimps which are normally positioned on each side of the eye to prevent accidental disengagement of the end of the wire from the eye.

[Claims 1 and 2 not printed in the Gazette.]

1,266,903. POSITIVE RELEASING-CLUTCH. GEORGE D. BAILEY and FRANK E. RICE, Detroit, Mich., assignors, by mesne assignments, to Bailey Non-Stall Differential Corporation, Chicago, Ill., a Corporation of New York. Filed May 4, 1914. Serial No. 836,073. (Cl. 192—22.)



1. In a device of the class described, an axle, a wheel journaled thereon, a clutch mechanism having a relative rotative movement with respect to said axle, adapted to effect driving connection between the axle and the wheel when the axle tends to rotate at a greater speed than the wheel, and means movable relative to said clutch mechanism positively disengaging the clutch mechanism when a reverse rotation of the axle takes place.

3. In a device of the class described the combination with the wheel and its axle, of mechanism transmitting a drive from the axle to the wheel but permitting the wheel to rotate faster than the axle, of means movable relative to said mechanism rigidly secured upon the axle and acting positively to disengage certain parts of said mechanism with rotation of the axle in one direction and permit engagement of other parts and to cause a reverse procedure of operations to take place with a reverse direction of rotation of the axle.

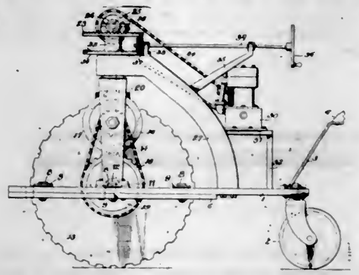
5. In a device of the class described, an axle, a member rigidly secured thereon, a cam on said member having a relative rotative movement with respect thereto adapted to be driven thereby, a ratchet ring mounted around said cam, rollers mounted in said cam adapted to interact with said ratchet ring to transmit a drive between said cam member and a said ratchet ring, and mechanism associated with said member to move said rollers into position out of use with a certain direction of rotation of the axle.

[Claims 2 and 4 not printed in the Gazette.]

1,266,904. TRACTOR. MELVN E. BAKER, Robert, Nebr. Filed Apr. 3, 1917. Serial No. 159,517. (Cl. 180—26.)

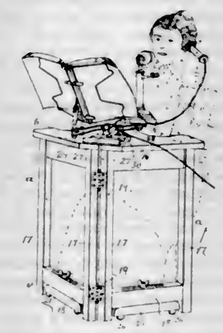
In a tractor the combination of a platform, a frame rising from said platform, a turn table, an arch rising from the turn table and provided at its upper end with a sleeve extending through and rotatably fitting through the upper end of said frame, a shaft journaled in said sleeve and extending through both ends thereof, a traction wheel carried by and within the arch, gearing connecting said shaft with the traction wheel, a gear wheel on the upper end of said shaft, a bearing on the upper

end of said frame at one side thereof, a shaft mounted in said bearing, means acting on the outer end of said shaft to rotate the same, a pinion on the inner end of said shaft meshing with the upper side of said gear wheel, a rack on said sleeve below said wheel, a pinion meshing



with said rack, means for rotating said pinion, and a roller mounted on the frame and bearing against the under side of said gear wheel in the vertical plane of the pinion meshing with the upper side thereof to support said gear wheel out of contact with the pinion below it.

1,266,905. TABLE OR STAND FOR TELEPHONES, &c. CHARLES H. BARTLETT, Boston, Mass. Filed July 13, 1916. Serial No. 109,163. (Cl. 45—93.)



1. An adjustable table comprising, in combination, two base units arranged end to end, vertical hinges connecting the meeting ends of the two units and permitting each unit to swing horizontally, the meeting ends and hinges being adapted to permit the units to stand in alinement with each other and form a straight oblong base, and to stand at different angles and form an angular base having either a reëntrant rear formation conforming to a salient wall corner, or a salient rear formation conforming to a reëntrant wall corner, and top-forming means secured to said base units and adjustable relatively to each other with said units.

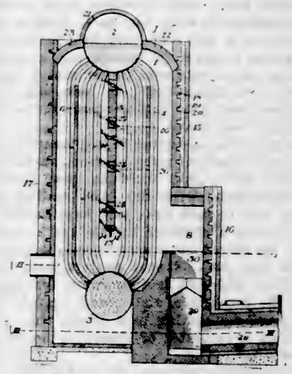
4. An adjustable table comprising, in combination, two base units arranged end to end, vertical hinges connecting the meeting ends of the two units and permitting each unit to swing horizontally, whereby the units may be adjusted to stand either at different angles, or in alinement with each other, and form either a substantially straight oblong base, or an angular base, conforming to salient and reëntrant wall corners, top-forming means secured to said base units and adjustable relatively to each other with said units, and feet movably connected with said units and adapted to be projected laterally therefrom to brace the table when said units are substantially in alinement with each other.

8. An adjustable table comprising, in combination, two base units arranged end to end, vertical hinges connecting the meeting ends of the two units and permitting each unit to swing horizontally, and stand either at different angles, or in alinement with each other, and thus form either an angular base conforming to salient and reentrant wall corners, or a straight oblong base, a top composed of two independent top units, each attached to one of said base units, said top units collectively forming a substantially straight oblong top when the base units are angularly adjusted, and a clamp composed of a top member bearing on the upper sides of adjacent ends of the top units, a bottom member bearing on the lower sides of said ends, and adjustable connections between said members, said top member forming a tray.

10. A corner table comprising a top of approximately triangular form, two of the edge portions of said top being substantially at right angles with each other, and forming a salient edge adapted to enter a reëntrant wall corner, and another portion extending obliquely between the outer ends of said salient edge, and top-supporting means including legs arranged in substantially triangular formation and spaced apart to permit the entrance of the legs of the user into the space covered by the top, the said oblique edge being recessed to receive and engage a portion of a salient wall corner.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

1,266,906. VERTICAL WATER-TUBE BOILER. JOHN E. BELL, New York, N. Y. Filed July 21, 1915. Serial No. 41,089. (Cl. 122—392.)

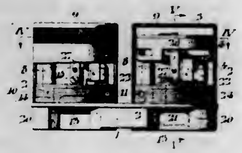


1. A vertical water tube boiler, consisting of a transverse steam and water drum and a transverse mud drum, rows of water tubes connecting said drums, a central baffle extending from the steam and water drum to a point above the mud drum, and a second baffle in front of the first baffle supported on the mud drum and held in position by the tubes in one of the rows of tubes in front of the central baffle; substantially as described.

3. A vertical water tube boiler, consisting of a single transverse steam and water drum, a single transverse mud drum, two sets of water tubes connecting the steam and water drum to the mud drum, each set comprising a plurality of rows of tubes, a central baffle between the two sets of tubes extending from the steam and water drum to a point above the mud drum, a support for the lower end of said baffle, a front baffle supported on the mud drum and held in position by the tubes in the second row of the front set, said baffle extending from the mud drum to a point adjacent to the steam and water drum, and a second baffle supported on the mud drum and held in position by the tubes forming next to the last row of tubes in the back set, said baffle extending to a point adjacent to the steam and water drum in order to provide two up passes and two down passes for the gases; substantially as described.

[Claim 2 not printed in the Gazette.]

1,266,907. TIMING DEVICE FOR PIGEONS. JAMES H. BELL, Philadelphia, Pa. Filed Apr. 11, 1913. Serial No. 760,353. (Cl. 161—18.)



1. A timing device including in combination a supporting base, time piece mounted thereon, an inclosing case for said time piece, said inclosing case having screw-threaded engagement with the base, and sealing means for locking said case to said base.

2. A timing device including in combination a supporting base, a time piece mounted thereon, an inclosing case for said time piece, said inclosing case having screw-threaded engagement with the base, sealing means for locking said case to said base, said base having a recess, a receiver having a chamber therein for a counter-mark adapted to be moved into said recess, and means located within the case for locking said receiver in closed position.

3. A timing device including in combination a supporting base, a time piece mounted thereon, an inclosing case for said time piece, said inclosing case having screw-threaded engagement with the base, sealing means for locking said case to said base, said base having a recess, a receiver having a chamber therein for a counter-mark adapted to be moved into said recess, and a lever located within said case and adapted to lock said receiver in closed position, said lever having means for engaging and controlling the time piece.

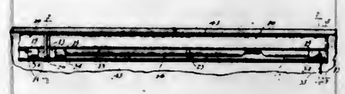
4. A timing device including in combination a supporting base, a time piece mounted thereon, an inclosing case for said time piece, said inclosing case having screw-threaded engagement with the base, sealing means for locking said case to said base, said base having a recess, a receiver having a chamber therein for a counter-mark adapted to be moved into said recess, a lever located within said case and adapted to lock said receiver in closed position, said lever having means for engaging and controlling the time piece, and means located within said case for engaging a moving part of the time piece when said time piece is oscillated or otherwise moved for speeding the time piece.

8. A timing device including in combination a supporting base, having a recess formed in one face thereof, and a threaded projection on the other face, a steel case formed in one piece and having a threaded engagement with said projection, a receiver adapted to fit said recess and having a chamber which is closed by seating the receiver in said recess, said receiver having a stem projecting through the base into the case, a disk carried by the upper end of said stem, a timepiece located within the case, a lever located within the case, a spring for moving said lever for holding one end thereof against said disk, and moving said end underneath the disk for locking the receiver, in the recess, said lever having a stop finger, carried thereby adapted to engage the balance wheel of the timepiece, for stopping the timepiece when the receiver is released, and a spring for moving said receiver from the recess, when released.

[Claims 5 to 7 not printed in the Gazette.]

1,266,908. SHOW-CASE-LIGHTING DEVICE. REUBEN B. BENJAMIN, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 15, 1915. Serial No. 61,646. (Cl. 240—6.)

1. In a device of the class described a channel member, means for supporting an electric lamp within said channel, said means including an insulating base adjacent one end of said channel, a second channel member, means for supporting an electric lamp therein, said means including an insulating base adjacent one end of said channel, and common means for mechanically connecting said channels together end to end forming a unitary structure and for electrically connecting the circuits of said lamps, said common means including a member extending through both said bases.



4. In a device of the character described, two channel reflector members arranged end to end, four insulating bases, one at each end of each member, conducting means carried by each member extending between the insulating bases, and a member of conducting material extending through two adjacent bases, one in each member, for connecting said members together and electrically connecting said conducting means.

8. In a device of the class described, two sheet metal channel members arranged end to end, four insulating bases, one secured at each end of each member, four lamp sockets, one detachably secured to each base, conducting means electrically connecting the sockets of each channel member, and common means for mechanically connecting together two adjacent bases, one in each channel, to form a unitary structure, and for electrically connecting two of said sockets, one in each channel.

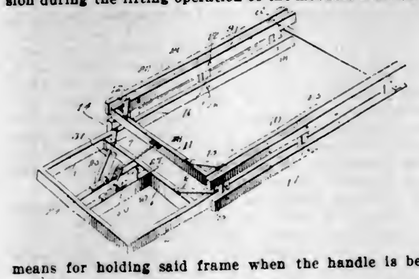
11. In a device of the character described, a channel reflector member, two insulating bases, one adjacent each end of said channel, two lamp receptacles, one supported by each base, each receptacle comprising center and side contacts for the lamp, two conductors extending along said channel member for electrically connecting the contacts of one receptacle with the contacts of the other, a second channel member, two insulating bases, one adjacent each end of said second channel member, two lamp receptacles, one supported by each base, each receptacle comprising center and side contacts for engaging the lamp, two conductors extending along said channel member for electrically connecting the contacts of one receptacle with the contacts of the other, and common means for mechanically connecting said channel members together end to end to form a unitary structure and for electrically connecting the conductors of one channel with the conductors of the other.

12. In a device of the class described, an elongated channel reflector member, an insulating base secured in fixed position with respect thereto, and a lamp receptacle having a quickly detachable connection with said insulating base, and provided with side and center contacts, and positioned to hold the lamp with its axis substantially parallel to the axis of the elongated channel member, said quickly detachable connection being constructed so that the lamp with its socket may be moved outwardly from the channel member by a swinging movement with respect to said insulating base.

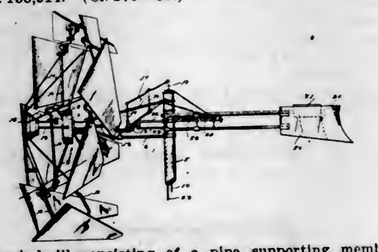
[Claims 2, 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,266,909. AUTOMOBILE JACK AND REST. WILLIAM W. BONER, Estacada, Oreg. Filed Aug. 3, 1915. Serial No. 43,500. (Cl. 254—91.)

In a jack of the character described, a stationary base frame, a movable lifting frame disposed thereover and pivotally connected to the same, a crank on said base frame, a pitman connecting said crank and the movable frame, a lever for operating said crank, a lateral extension on said lever, a detachable lever operating handle engageable at times with the free end of the lever or the extension during the lifting operation of the movable frame, and means for holding said frame when the handle is being shifted.

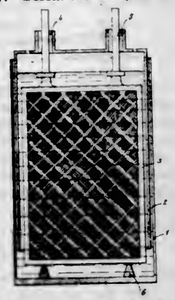


1,266,910. WINDMILL. LAMBERT OSBORN BOURKE, Headingly, Manitoba, Canada. Filed Mar. 19, 1917. Serial No. 155,914. (Cl. 170—59.)



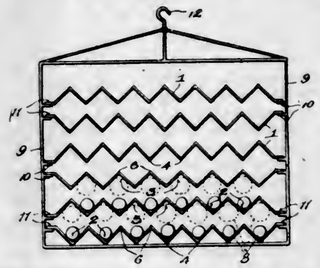
A windmill consisting of a pipe supporting member, braces from said pipe to support a head, a head consisting of a hub and spokes, said spokes carrying a band, said band carrying fans and being bent inwardly at the width of each fan, an axle extending back through and from said hub, said axle being bent to form a crank, front end of said axle carrying an end member which has spokes radiating from it and connected to front sides of said fans, a pumping means between the crank forming part of said axle and a shaft extending down said pipe, the inner end of said axle being swivelly connected to side rods which extend back past said pipe, a spring connecting ends of said rods to said pipe, a pair of tail members and a weight member extending back, a cable controlling means attached to said side rods and extending down said pipe.

1,266,911. VAT FOR ACCUMULATORS, BATTERIES, OR THE LIKE. GEORGES BOUTON, Paris, France, assignor to Etablissements De Dion Bouton, Societe Anonyme, Puteaux, France, a Corporation of France. Filed Dec. 10, 1917. Serial No. 206,515. (Cl. 204—29.)



A storage battery comprising a vat, a cover therefor, and plates mounted on the cover and located within the vat, a cover having depending sides extending, with clearance, into the vat and forming a housing for the plates.

1,266,912. CRULLER-COOKING. FREDERICK L. BRADBURY, Bridgeport, Conn., assignor to The F. L. Bradbury Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 7, 1917. Serial No. 200,842. (Cl. 53—7.)

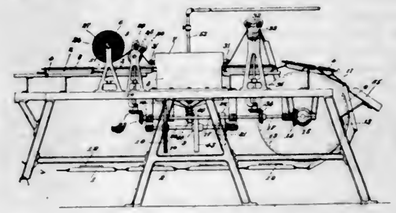


1. In a cruller cooker, an open frame having opposing supporting guides, and a plurality of trays supported on said guides, each tray comprising a corrugated body forming upright and inverted V-shaped grooves, the apices of the upright grooves having spaced series of openings and the apices of the inverted grooves having openings staggered relative to the spaced series of openings, the inverted grooves of one tray opposing the upright grooves of the next lower tray to compose therewith chambers for the crullers, and said trays being in such proximity to each other as to prevent the passage of a cruller from one chamber to the adjacent chamber.

2. In a cruller cooker, a containing frame having spaced opposing supporting guides, a plurality of trays removably supported on said guides, each tray comprising a series of upright and inverted substantially V-shaped portions, the trays being alternately disposed to oppose the V-shaped portions of one tray to the corresponding portions of an adjacent tray whereby elongated composite cruller cooking chambers are formed.

[Claims 3 and 4 not printed in the Gazette.]

1,266,913. MACHINE FOR COVERING PIES. ALFRED H. BRAECKLEIN, Baltimore, Md. Filed Oct. 9, 1916. Serial No. 124,748. (Cl. 216—25.)



1. In a machine for covering pies, each pie being presented in a plate, means for feeding paper, means for cutting a blank from the paper to cover the top of the pie and plate and placing the blank on top of the pie with its edges extending beyond the pie, means for rendering the edge portions of the blank adhesive, means for supporting the pie and plate, and pressing means adapted to engage the edge portions of the blank beyond the pie and press them against the plate, the pressing means being formed to leave the center of the blank free so that it does not press against the pie.

2. In a machine for covering pies, each pie being in a suitable plate with an uncovered projecting rim, means for feeding the pies step by step in a predetermined path, means for feeding a paper web of a width exceeding that of the pie plates over the path of the pies, a die alined with the path of the web and of the pies with a blade for cutting blanks to fit the rims of the plates, pressing

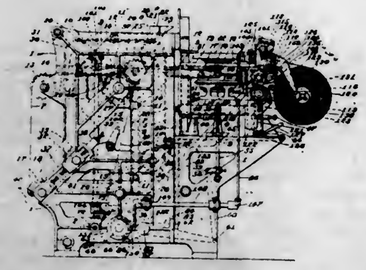
means for pressing the edge of each blank against the rim of the corresponding plate, a support in alinement with the die to engage the rim of the plate, means for pressing the blade against the support as each pie comes in registration with the cutting means forming a blank which is superimposed upon the pie and plate and at the same time pressing the blank against the rim of the plate, and means for rendering the edge of the blank adhesive.

3. In a machine for covering pies, the pies being each in a suitable plate, a die with a blade adapted to cut a blank to cover the top of the pie and plate, a pressing member concentric with the die, said pressing member having a circular zone of contact and being adapted to leave the center of the blank free, a support, means for moving the parts relatively to increase and decrease the distance between the blade and pressing member and the support, means for feeding paper to the die, and means for feeding pies into registration with the die and causing each pie to dwell in alinement with the die during one stroke of the mechanism whereby a blank is cut by the action of the die on the support and pressed against the plate by the relative action of the support and pressing surface.

4. In a machine for covering pies, the pies being each in a suitable plate with a projecting rim, a die with a blade adapted to cut a blank of the shape and slightly larger than the rim of the plate, a pressing member concentric with the die, a support, means for moving the parts relatively to increase and decrease the distance between the blade and pressing member and the support, means for feeding paper to the die, and means for feeding pies into registration with the die and causing each pie to dwell in alinement with the die during one stroke of the mechanism whereby a blank is cut by the action of the die on the support and pressed against the edge of the plate by the relative action of the support and pressing surface, the paper being coated with an adhesive, and means being provided to heat the edge of the blank so that it sticks to the rim of the plate against which it is pressed.

5. In a machine for covering pies, the pies being presented each in a plate, means for cutting a blank to cover the top of each pie and plate, means for rendering the edge portion of each blank adhesive, means for pressing the edge portions of the blanks against the plates causing them to adhere, the pressing means being formed with a circular zone of contact and being adapted to leave the center of the blank free to avoid pressing the blank against the top of the pie, and means for feeding each pie and plate to said cutting and pressing means and causing each pie to dwell in operative relation to the said cutting and pressing means during the operation of said means and then to move out of the machine.

1,266,914. MACHINE FOR COVERING PIES. ALFRED H. BRAECKLEIN, Baltimore, Md. Filed June 19, 1917. Serial No. 175,583. (Cl. 93—7.)



1. In a machine for wrapping pies, pasting, creasing and folding means arranged successively in axial alinement, and means for moving a pie in the direction of its axis through and in operative relation with each of said means successively.

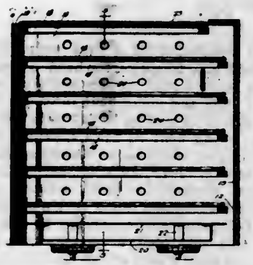
4. In a machine for wrapping pies, pasting and folding mechanism to fit the circumference of the pies arranged in alinement, carriers for the pies, a carrier arm and a guide link for each carrier, the pasting and folding mechanism being slotted to admit the carrier arms, an endless chain a portion of which is parallel to the direction of alinement of the pasting and folding mechanism, the carrier arms being connected to said chain, a second chain a portion of which is parallel to the portion of the first chain referred to, the guide links being connected to said chain to control the position of the carriers.

8. Means for folding the creased skirt of a pie wrapper consisting of a series of separately mounted, brushes arranged about a hollow figure corresponding to the periphery of the pie, and means for moving the brushes inward radially.

9. In a machine for wrapping pies, means for supplying paper blanks, means for moving the pies through the machine holding them during the entire traverse in upright position and bringing them into contact with the blanks so that the paper is spread over the top of the pie, circularly arranged means for turning the edges of the blanks downward about the edges of the pie, circularly arranged and inwardly traversing means for folding said edges under the pie, and means for fastening them in folded position.

[Claims 2, 3, 5 to 7, and 10 to 13 not printed in the Gazette.]

1,266,915. DESICCATOR. JAMES W. BROOKS, Chicago, Ill. Filed June 25, 1917. Serial No. 176,777. (Cl. 34—39.)



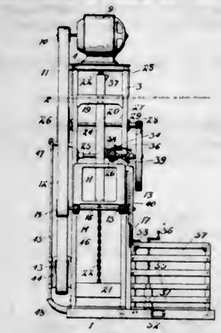
1. A desiccator comprising a compartment, open at its bottom, means for creating a current of air therethrough, a textile cover for controlling the quantity of air passing through said compartment, reticulated trays, spaced means in said compartment for the reception and support of said trays, and opposite rows of ports disposed between the respective tray supports whereby fresh air is adapted to be drawn therethrough into said compartment above each tray by the current of air circulating therein.

6. A desiccator comprising a substantially rectangular shaped compartment open at its bottom, a plurality of reticulated trays removably disposed therein, a source of heat adjacent the bottom of said compartment, a reticulated cover for the top of said compartment, a baffle structure above said heat source, means for supplying fresh air to said compartment intermediate the trays, and means for regulating the quantity of drying medium passing through said compartment consisting of a piece of fabric removably disposed upon said cover and capable of being moved about thereon.

[Claims 2 to 5 not printed in the Gazette.]

1,266,916. SAWING-MACHINE. SAMUEL BUMPUS, La Fayette, Ky. Filed Oct. 14, 1914. Serial No. 866,660. (Cl. 143—47.)

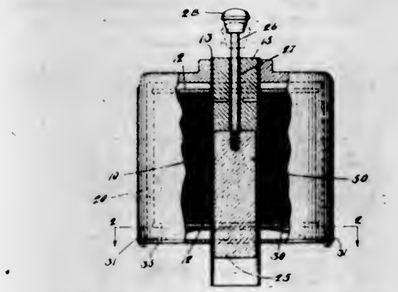
2. In an ice cutting machine, a vertically movable cutting tool, a work platform in the path of said tool for feeding work thereto, a guide fence extending upwardly from the rear of said platform and toward the tool in the direction of the feed, and a stationary shield or guard for said tool mutually holding and held by said guide



fence to form a rigid structure, together with a feed roller mounted in said platform and operating means therefor mounted on the rear side of said guide fence.

[Claims 1 and 3 not printed in the Gazette.]

1,266,917. ALTERNATING-CURRENT SOLENOID. GEORGE A. BURNHAM, Saugus, Mass., assignor to Sears B. Condit, Jr., Brookline, Mass. Filed Sept. 28, 1916. Serial No. 122,776. (Cl. 175—338.)



1. An alternating current solenoid comprising a winding and support therefor, yielding means interposed between said winding and support permitting a movement of said winding relative to said support, a top core-piece rigidly connected with said winding, a relatively-movable core-piece arranged within the winding and adapted for engagement with the top core-piece, said winding and top core-piece and the relatively-movable core-piece all adapted to vibrate substantially in unison when an alternating current flows through the winding of sufficient value to hold the relatively movable core-piece in engagement with the top core-piece.

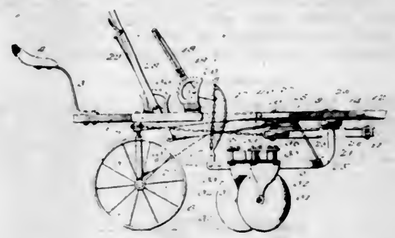
3. An alternating current solenoid comprising a shell having a center hole in its top wall, a winding arranged in the shell, a tube to which said winding is fixed, the ends of which extend beyond the ends of the winding, the upper end of said tube extending through the center hole of the shell, a top core-piece arranged within and fixed to the upper end-portion of the tube, a relatively-movable core-piece arranged in said tube below the top core-piece having a headed stem which extends through the hole in the top core-piece, and a supporting-spring connected with the shell adapted to support the winding.

4. An alternating current solenoid comprising an iron shell having a guide-hole in its top-wall, a winding arranged in said shell, a tube to which said winding is secured, the upper end of which is arranged in and guided by the hole in said shell, a top core-piece arranged in the upper end-portion of said tube and secured thereto, a relatively-movable core-piece arranged within the tube, said core-piece being movable into and out of engagement with the top core-piece, a spring adapted to yieldingly support the winding having a circular portion intermediate its length which encircles the tube and serves as a guide for the lower end thereof, the winding, tube and core-pieces being adapted to vibrate substantially in unison when an alternating current flows through the winding of a voltage sufficient to cause the relatively-movable core-piece to be held in engagement with the top core-piece.

6. An alternating current solenoid comprising a support, a coil relatively movable with respect to said support and a core relatively movable with respect to said coil, whereby said core and coil are adapted for simultaneous vibration under the influence of an alternating current.

[Claims 2, 5, and 7 to 11 not printed in the Gazette.]

1,266,918. WHEEL-HOE. CHARLES H. CLARK, Easton, Me. Filed Sept. 25, 1917. Serial No. 193,146. (Cl. 97—35.)



1. The combination of a main frame comprising a pole and a cross bar secured thereto, a slide supported on the under side of said cross bar near the end thereof and provided with longitudinally projecting trunnions at its ends, a cultivator frame consisting of side bars having upturned front ends pivotally engaged on said trunnions, means supported on the main frame for raising and lowering the rear end of the cultivator frame, and means on the main frame connected with the cultivator frame for shifting the cultivator frame laterally of the main frame.

2. The combination of a main frame comprising a cross bar and a pole, cultivator frames having their front ends slidably supported upon the under side of said cross bar at opposite sides of the pole, angle levers pivotally mounted upon the pole in rear of said cross bar and each having one arm projecting forwardly and another arm projecting laterally, operating levers supported by the pole in rear of the angle levers, links each connecting and operating the lever with the laterally projecting arm of one of the angle levers, and links each connecting the forwardly projecting arm of one of said levers with the front end of a cultivator frame.

[Claims 3 to 6 not printed in the Gazette.]

1,266,919. WIND-SHIELD CLEANER. WILLIAM H. CLIFFORD, San Francisco, Cal. Filed Feb. 2, 1917. Serial No. 146,064. (Cl. 15—59.)

1. In a wind shield cleaner, a pair of spaced pendent arms, means to pivotally connect said arms at their upper ends to the wind shield, a horizontal wiper holder pivotally connecting the lower ends of the arms and formed with an inclined, downwardly opening seat, and a wiper secured in said seat.

3. In a wind shield cleaner, vertically swinging cleaning devices operable on opposite sides of the wind-shield, a sliding lock element including spaced locking members arranged on opposite sides of the wind-shield and simultaneously engageable with said devices respectively, and means to mount said lock element on the top edge of the wind-shield.

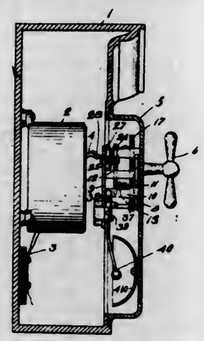
6. An elongated body adapted to be mounted on a wind shield frame, spaced U-shaped members straddling the body and pivotally connected thereto at their bases carrying a cleaner on each side of the shield, a slide member movable on the body, and a pair of locking rods carried by the slide member on opposite sides of the body and provided with outturned ends for engaging with the arms of the U-members to hold the same against movement.



8. In a windshield cleaner, a pair of spaced pendent arms, means to pivotally connect said arms at their upper ends to the windshield, a horizontal cleaning device, the lower end of each arm being connected to a respective end of the cleaning device to cause the latter to swing in parallelism to thereby enable both arms and cleaning device to lie parallel to and adjacent the top of the windshield.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,266,920. SIGNAL-BOX HAVING LOCAL ALARM. FREDERICK W. COLE, Newton Highlands, Mass., assignor to Gamewell Fire Alarm Telegraph Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1915. Serial No. 22,288. (Cl. 177A—373.)



1. A signal-box comprising a signaling-mechanism, a local-alarm mechanism, a combined locking device for the local-alarm device and releasing-device for the signaling-mechanism, and means for manually placing the local-alarm mechanism in condition for operation, adapted to operate said combined locking and releasing-devices to release both mechanisms.

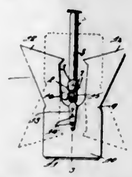
7. A signal-box comprising a signaling-mechanism equipped with a box-pull, a local-alarm mechanism having an operating-handle, and means arranged for actuation by said handle to simultaneously release the local-alarm mechanism and to operate the box-pull.

17. A signal-box comprising a signaling mechanism, a local alarm mechanism having an actuating spring, a winding device for said spring, and a common controlling member for both mechanisms, adapted for operation by [illegible] when the spring has been operated by the winding device and by the winding device at the end of its winding movement in case said spring fails.

31. In a signal-box, a spring actuated local-alarm mechanism comprising a drum, a winding member connected with the drum, a spring arranged on the drum and attached at one end thereto, a gear to which the other end of said spring is attached, said gear being arranged to drive the alarm elements and having internal recesses, a disk member interposed between said gear and drum having recesses in its edge and having arcuate slots, pins arranged respectively on the drum and gear which enter said slots, and a detent member interposed between the gear and the disk member for alternately locking said members.

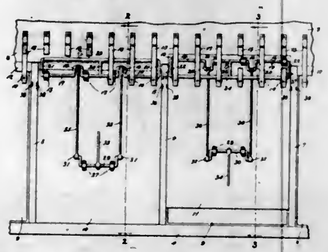
[Claims 2 to 6, 8 to 16, and 18 to 30 not printed in the Gazette.]

1,266,921. COMBINATION GARDEN-TOOL. THOMAS CREMERS, Albany, Minn. Filed Jan. 5, 1917. Serial No. 140,785. (Cl. 55—40.)



As a new article of manufacture, a blade of the class described struck from a single sheet of metal so that one portion thereof will form a substantially square body portion provided with a beveled cutting edge, triangular shaped blades divergingly extending from said body portion, the outer edges of said blades diverging from each other, the cutting edges of said blades converging toward each other so as to form points opposite each other, the inner edges of said blades running substantially parallel with each other whereby said blades substantially conform to the usual shape of a mold-board upon a plow.

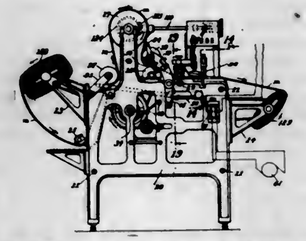
1,266,922. DOOR-HANGER. ROBERT G. CRISWELL, Granite Falls, Wash. Filed July 23, 1917. Serial No. 182,368. (Cl. 20—23.)



1. A door hanger of the class described which includes a plurality of suspension brackets; a grooved roller rotatably mounted on each of said suspension brackets; a crank shaft; means for rotatably mounting said crank shaft in a horizontal position on the surface of the upper end portion of a door with its axis parallel with the vertical plane of said door; a trolley rod rigidly associated with said crank shaft and disposed parallel therewith and spaced therefrom; a hand lever pivotally secured to the surface of said door; and means associated with said hand lever and said crank shaft whereby rotative movements may be communicated to said crank shaft in response to swinging movements of said hand lever.

2. The combination with a plurality of contiguous doorways of a building, of a door for each of said doorways; a contiguous series of suspension brackets fastened to the surface of the wall of said building in spaced positions on a horizontal line above the lintels of said doorways; a grooved roller rotatably mounted on each of said suspension brackets in a position to rotate in a vertical plane that is parallel with and spaced from the plane of said doors; a separate crank shaft rotatably mounted in suitable bearings secured to the surface of the upper end portion of each of said doors and horizontally disposed with its axis parallel with the plane of said doors; a separate trolley rod rigidly associated with each of said crank shafts and disposed with its axis parallel with and spaced from the axis of said crank shaft to adapt it to be swingingly moved to engage and disengage adjacent ones of said grooved rollers in response to rotative movements of said crank shaft; and manually operative means associated with each of said crank shafts and adapted to communicate rotative movements thereto, whereby each of said doors independently may be lifted from its closed position in its doorway and be suspended by its trolley rod and said grooved rollers thus to adapt it to be movable past other closed doors.

1,266,923. CLOTH-MEASURING MACHINE. NATHAN DAVIS, Boston, Mass. Filed June 25, 1917. Serial No. 176,663. (Cl. 33—130.)

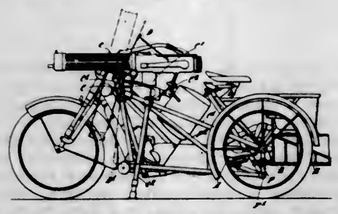


1. A machine of the character described, comprising means for feeding cloth therethrough in open form, means for operating said means for feeding said cloth, means for measuring and registering the cloth fed through the machine, means for automatically stopping the machine when the supply of material is reaching the end of the run, and means for automatically cutting out the register member when the material engaging member thereof becomes disengaged from the material feeding through the machine.

31. In a machine of the character described, the combination of a register and an automatic cut-out therefor, comprising a rigid guide-member; a spring actuated tripping member slidably set in said guide-member and provided with supporting rollers spaced apart from each other and adapted to be normally supported by the material fed through the machine; a shifting clutch-member; and means coupling said clutch-member with said tripping member adapted to uncouple said clutch-member when said tripping-member is not supported as aforesaid.

[Claims 2 to 30 not printed in the Gazette.]

1,266,924. GUN-CARRIAGE. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors to Vickers Limited, Westminster, England. Filed Sept. 28, 1915. Serial No. 53,155. (Cl. 89—40.)

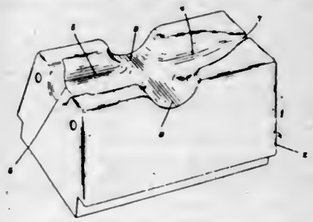


1. The combination with a motor cycle, controlled by a driver, of a side car comprising an upwardly inclined triangulated framework, an axle forming part of said triangulated framework, a road wheel carried by said axle, means for connecting the side car to the motor cycle, a gunner's seat on said framework arranged contiguous to the side car axle, a gun supporting member connected to the apex of said upwardly inclined triangulated framework and arranged in front of and at a convenient height above the gunner's seat, and a gun pivotally supported on said gun supporting member with its muzzle pointing in the direction of movement of the side car for the purposes set forth.

4. A cycle side car serving as a gun mounting, having a frame for carrying ammunition boxes and means for retaining said boxes in position on the frame comprising a transverse member, arms pivoted to said frame carrying said transverse member, and a catch for holding said transverse member in its operative position.

[Claims 2 and 3 not printed in the Gazette.]

1,266,925. DIE FOR FORGING PROJECTILES AND THE LIKE. JOEL DICKINSON, Newark, N. J. Filed July 14, 1917. Serial No. 180,500. (Cl. 78—80.)

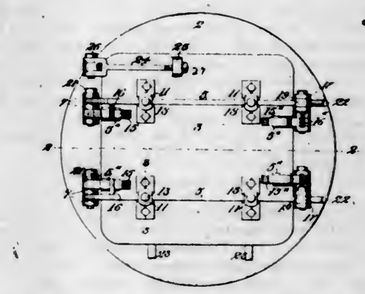


1. Forging dies of the character described, having in their coöperating faces intersecting grooves either of which is adapted to receive the work, whereby said dies provide a plurality of pairs of working surfaces between which the work can be placed.

2. Forging dies of the character described, having in their coöperating faces each a longitudinal groove or recess and a transverse groove or recess, said grooves or recesses intersecting at substantially the center of the die face.

[Claims 3 to 9 not printed in the Gazette.]

1,266,926. SECURING MEANS FOR DIGESTER AND RETORT DOORS. PATRICK F. DUNDON, San Francisco, Cal. Filed Oct. 31, 1916. Serial No. 128,800. (Cl. 220—124.)



6. In a retort, a door frame, a door hinged for closing thereon, means for locking the door closed, and safety locking means movable to operative position by said first means and operable for holding the door in a partially opened position when said door is released by said first means.

7. In a retort, a door frame, a door hinged for closing thereon, means for locking the door closed, and safety locking means for holding the door from blowing completely open when released by said first means, said

safety locking means movable independently of the first means but engageable thereby for movement therewith to an operative position on closing and locking of the door.

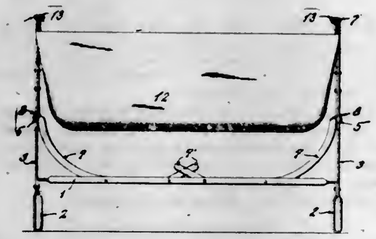
8. In a retort, a door frame, a door hinged for closing thereon, pivoted means on opposite sides of the door for locking the same closed, safety locking means operable for holding the door in a partially opened position when released by said first means, and means carried by the pivoted means for moving the safety locking means to operative position.

9. In a retort, a door frame, a door therefor, hinge knuckles on the frame, door locking means carried by the door for supporting the latter from the knuckles, a hinge pin connecting the means to the knuckles, and a safety catch also connected to the hinge knuckles by the hinge pin for engaging the door to hold the latter from blowing open when released by said first means.

10. In a retort, a door frame, a door therefor, hinge knuckles on the frame, means carried by the door for supporting the latter from the knuckles, a hinge pin connecting the means to the knuckles, a safety catch also connected to the hinge knuckles by the hinge pin for engaging the door, and means between the safety catch and said first means for effecting movement of the catch to operative position on closing movement of the door.

[Claims 1 to 5 not printed in the Gazette.]

1,266,927. FOLDABLE BED OR CRADLE. JOHN A. EBERLE, St. Louis, Mo. Filed July 21, 1917. Serial No. 182,016. (Cl. 5—56.)



2. A cradle comprising a supporting frame having a pair of inclined legs at each end, the legs of each pair being pivotally connected together at their upper ends, links connecting the legs of each pair, longitudinal members connecting the legs of one pair to the legs of the other pair, the pivots at the upper ends of said legs being extended toward each other, and a bed supported on the extended portions of said pivots, said bed being provided with a yieldable top marginal frame adapted to receive said extended portions of the pivots, and the end members of said top marginal frame being movable toward each other to disconnect the bed from the pivots.

[Claims 1 and 3 not printed in the Gazette.]

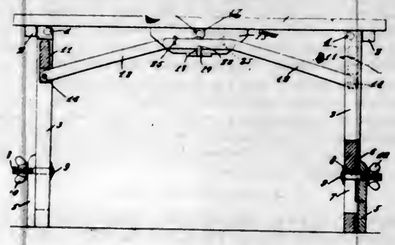
1,266,928. OPEN-HEARTH STEEL PROCESS. CHARLES H. ELLIOTT and ELMER T. MCCLEARY, Youngstown, Ohio, assignors to The Youngstown Sheet & Tube Company, Youngstown, Ohio, a Corporation of Ohio. Filed July 20, 1917. Serial No. 181,887. (Cl. 75—27.)

1. In the manufacture of open hearth steel, the steps consisting of testing the bath composition at near the end of the heat and adding silicon in conjunction therewith to retain the carbon of the bath during the testing period.

2. In the manufacture of open hearth steel, the steps consisting of adding silicon to the bath in the open hearth furnace near the end of the heat, and then recarburizing the metal, the silicon serving to hold the carbon in the bath.

[Claims 3 to 5 not printed in the Gazette.]

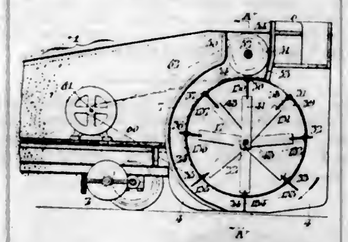
1,266,929. TABLE AND DESK. WILLIAM S. ENIS, Booneville, Miss. Filed Jan. 17, 1918. Serial No. 212,269. (Cl. 45—11.)



1. A table comprising a top; legs pivoted to the top; braces having seats in their inner ends; means for pivotally connecting the outer ends of the braces with the legs; a retainer secured to the top and disposed between the inner ends of the braces, the retainer having a transverse recess; a transverse keeper carried by the retainer and extended beneath the inner ends of the braces, the keeper coöperating with the seats of the braces; and a single helical spring in the recess of the retainer, the spring terminating in oppositely extended arms provided with fingers engaged across the upper edges of the braces, to hold the seats in engagement with the keeper.

2. A table comprising a top; legs pivoted to the top; braces having seats at their inner ends; means for pivotally connecting the outer ends of the braces with the legs; a retainer secured to the top and disposed between the inner ends of the braces, the retainer having a transverse recess in its upper edge and being provided in its lower edge with a transverse notch; a transverse keeper seated in the notch and extended beneath the inner ends of the braces, the keeper coöperating with the seats of the braces, and including a projecting wing; a securing device uniting the wing with the retainer; and a single helical spring in the recess, the spring terminating in oppositely extended arms having transverse fingers overhanging the inner ends of the braces to hold the seats engaged with the keeper.

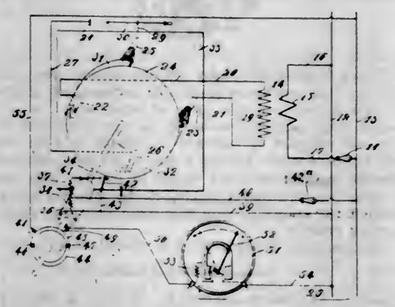
1,266,930. DEVICE FOR REMOVING SNOW. HENRY S. FARQUHAR, Wayne, Pa. Filed Sept. 13, 1915. Serial No. 50,345. (Cl. 37—29.)



In a snow-remover, the combination, with a vehicle; of a projecting scoop having a curved back and substantially vertical sides, a rotatable drum having its periphery arranged to form, in conjunction with the back and sides of the scoop, an ascending inclosed channel, the periphery of the drum being provided with transverse slots; stub-bearings for said drum; a bearing rod mounted upon said stub-bearings at points within the drum, and extending axially across the drum in a direction parallel to, but substantially lower, than the axis of the stub-bearings; a plurality of pushing devices radially movable within the slots of the drum; carriers for said pushing devices, having elongated openings of a diameter sufficient to afford true rotative engagement with said bearing rod,

while permitting play in a radial direction; a transferring conduit having an opening communicating with the upper extremity of the ascending channel, but having a wall, at the far side of said opening, arranged in close proximity to the periphery of the drum; and means for rotating said drum.

1,266,931. POLARITY-INDICATING MECHANISM FOR X-RAY APPARATUS. CHARLES FAYER, New York, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed May 18, 1916. Serial No. 98,435. (Cl. 175—364.)

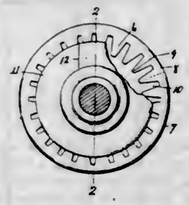


1. In an apparatus of the character described the combination of alternating current mains, a step-up transformer connected with said mains and thereby energized, a rectifying switch connected with said transformer and energized thereby for delivering high potential discharges of unitary but uncertain direction, a synchronous motor connected with said alternating current mains and energized thereby for actuating said rectifying switch, means for indicating the direction of said high potential discharges, and mechanism controllable at the will of the operator for momentarily retarding the speed of said synchronous motor relatively to the frequency of the phasal changes in said alternating current mains.

2. In an apparatus of the character described the combination of a pair of alternating current mains, a primary circuit bridged across said mains and adapted to be energized thereby, a secondary circuit inductively coupled to said primary circuit and energized thereby for producing high potential current discharges, rectifying mechanism connected with said secondary circuit in order to rectify said discharges, a synchronous motor, said motor being connected with said rectifying mechanism in order to actuate the latter, a commutator driven by said motor and connected with said alternating current mains by a circuit bridged across said mains independently of said primary circuit, for selectively diverting from said alternating mains currents of unitary direction, an indicator electrically connected to said commutator in order to indicate the direction of said currents, and means controllable at the will of the operator for momentarily retarding the action of the motor as related to the time of the current phase in the alternating current mains.

3. In an apparatus of the character described the combination of a pair of alternating current mains, a transformer connected with said mains and energized thereby for producing high potential discharges, a rectifying switch connected to said transformer and coacting therewith to render the discharges of unitary but uncertain direction, a synchronous motor connected with said alternating current mains and energized thereby, a revoluble shaft connected with said motor and with said rectifying switch for enabling said rectifying switch to be driven, a commutator carried by said revoluble shaft, a circuit bridged across said alternating current mains independently of the connection of said motor to said mains, said circuit being connected with said commutator and controllable thereby for selectively diverting currents of unitary but uncertain direction from said mains, an indicator for disclosing the direction of flow of said currents, and means controllable at the will of the operator for momentarily retarding the speed of said motor relatively to the frequency of the phasal changes in said alternating current mains.

1,266,932. BURNISHING-WHEEL. SAMUEL B. FREDERICK, Detroit, Mich. Filed Feb. 4, 1918. Serial No. 215,376. (Cl. 51—1.)



In a burnishing band holder, the combination of a burnishing wheel, a leather band having its edges notched to form tongues, said tongues turned down at right angles to the burnishing surface of said band, retaining plates cut through at one point and having their edges turned in to form a rim and means for pressing said retaining plates against said tongues.

1,266,933. CABLE-CLAMP. GEORGE STAFFORD GARDNER, Columbus, Ohio, assignor to John Randolph Fletcher, Dayton, Ohio. Filed Oct. 5, 1915. Serial No. 54,268. (Cl. 24—135.)

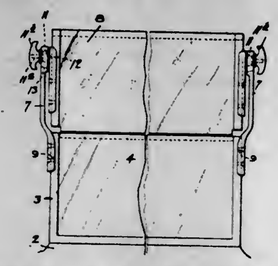


4. In a clamp, a pair of members each provided with an oblong hole and a round hole, the round hole of one member being in alinement with the oblong hole of the other member, and bolts passing through the alined holes and provided with portions fitting the oblong holes and passing in opposite directions therethrough.

5. In a device of the character described, a pair of cable strands converging from an attaching point, clamping members for clamping said strands together in parallelism, one of said members having an oblong hole the other having a round hole, a track bolt having an oblong portion fitting in said oblong hole and passing through said round hole, a nut for said bolt, and a device on said converging portion of said strand interposed between the attaching point and clamping members for directing the strand into parallelism to be clamped and for taking up the slack between the clamping members and the attaching point.

[Claims 1 to 3 not printed in the Gazette.]

1,266,934. VEHICLE-SHIELD. HENRY G. GODLEY, Pittsburgh, Pa. Filed Dec. 27, 1916. Serial No. 139,078. (Cl. 21—148.)



1. A shield structure for vehicles comprising an upper vision section and a lower section, a fixed supporting frame for the sections, journals on the upper section, and stationary bearings formed in the frame for the reception of said journals adapted to support the upper section in alinement with the lower section, said upper section movable in said bearings to an overlapping position with the lower section.

2. A shield structure for vehicles comprising upper and lower vision sections, a fixed supporting frame, pivotal trunnions on the upper section, a fixed bearing for the trunnions in the frame having a seat adapted to support the upper section in alinement with the lower section, and having a seat adapted to support the upper section in overlapping parallel position with the other, and means for locking the sections in position.

3. A shield structure for vehicles comprising an upper vision section and a lower section, a fixed frame for the support of the lower section, stationary brackets secured to the frame for the support of the upper section, pivots on said section, said brackets forming bearings having seats adapted to receive the pivots to support the section in swinging relation with the other, and having a seat communicating with said first seat for supporting the section in overlapping parallel relation with the lower section and means for locking the pivots in the seats.

4. A shield structure for vehicles comprising upper and lower vision sections, a fixed frame for the support of the lower section, yieldable brackets fixed to the frame for the support of the upper section, conical pivots on said section, bearings formed in said brackets having conical seats adapted to receive the pivots to support said section in alinement with the lower section, and having conical seats communicating with said first seats whereby the pivots may be moved to engage said last seats for the support of the section in lowered parallel relation to said lower section, and a locking nut engaging the pivot and bracket for securing the section in position.

5. A shield structure for vehicles comprising an upper vision section and a lower section, a stationary frame for the support of the sections, longitudinally-yieldable pivots on the upper section, stationary bearings in the frame having seats for the reception of the pivots to support the section in alinement with the other section, and having communicating like seats adapted to support the section in lowered parallel position with said lower section, and means for locking the pivots in the seats to secure the section against pivotal movement.

1,266,935. LOCKING DEVICE FOR STEERING-WHEELS. MAX F. GRIMM, San Antonio, Tex. Filed July 30, 1917. Serial No. 183,574. (Cl. 70—129.)

1. A steering wheel lock comprising a pair of pivotally connected jaws adapted to embrace a steering column, one jaw having an upstanding hook with a downwardly extending bill adapted to engage over an arm of the steering wheel, and means for detachably locking the jaws to the steering column to hold the jaws from circumferential and upward movement upon the steering column.

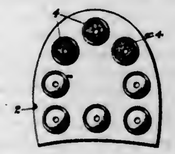
2. In a locking device for steering wheels, the combination of a link having in one end a longitudinal slot opening near its inner extremity through one edge of the link and adapted to receive an arm of the steering wheel through the opening and into the slot, and a clamping element on the lower end of the link adapted to engage a steering column and hold the arm in the upper end of the slot.



3. In a locking device for steering wheels, the combination of a link having an opening in one end and adapted to be hooked over an arm of a steering wheel, a pair of hinged strap members mounted on the lower end of the link and adapted to embrace a steering column, one of said strap members having a slot in its free end and the opposite member having a staple in its free end adapted to enter the slot, and a locking device adapted to engage through the staple to hold the strap members about the steering column.

[Claims 4 and 5 not printed in the Gazette.]

1,266,936. RUBBER ARTICLE. SAMUEL J. HARRIS and ALLAN A. HARRIS, Randolph, Mass. Filed Oct. 31, 1917. Serial No. 199,405. (Cl. 36—59.)

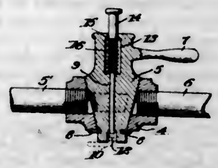


1. A rubber article having a wear-receiving face, a friction plug embedded in said article and having a portion thereof exposed at said face, and a rubber jacket of substantial thickness for said plug bonded both to said plug and also to the body of said article.

8. That improvement in the process of manufacturing rubber articles provided with friction inserts, which consists in interposing a rubber jacket of substantial thickness between said insert and the body of the article of such a composition that it will bond both to the article and to the insert more securely than the insert and article would bond to each other.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

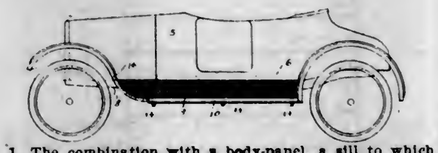
1,266,937. SAFETY ATTACHMENT FOR VALVES. CHARLES J. HASELWANDER, Williamsport, Pa. Filed Aug. 30, 1916. Serial No. 117,717. (Cl. 137—7.)



1. In a valve structure, a casing, a plug turnably mounted therein, said plug extending below the casing and having a recess below the casing, a lock rod turnably and slidably mounted in the plug, a head on said rod, said plug having a cavity through which said rod passes, an expansion spring surrounding the rod and disposed within the cavity and engaging an end wall at the cavity and said head, said lock rod having an angle portion disposed in said recess of the plug below the casing, said portion being provided with a dent, and said casing being provided with a projection to extend into said dent, and said lock rod through depression and turning movement being adapted to overlap the portion of the plug below the casing.

2. In a valve structure, a casing, a plug turnably mounted therein, said plug extending below the casing and having a recess below the casing, a lock rod slidably and turnably mounted in the plug, said lock rod having an angle portion disposed in said recess of the plug below the casing, said portion being provided with a dent, and said casing being provided with a projection to extend into said dent.

1,266,938. TRUSSED FRAME FOR VEHICLES. ROBERT H. HASSLER, Indianapolis, Ind. Filed Nov. 6, 1916. Serial No. 129,860. (Cl. 21—7.)



1. The combination with a body-panel, a sill to which the panel is fastened, and a frame member supporting the sill, of a running-board below the body-panel, diagonal strut-hangers from the frame to the running-board, a longitudinally curved and vertically straight splash-plate connecting the running-board with the sill, and rigid connecting means between the upper edge of the splash-plate and the frame-member.

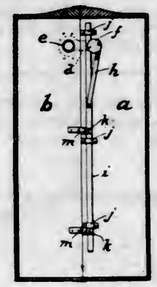
2. The combination with a body-panel, a sill to which the panel is fastened, and a frame member supporting the sill, of a running-board below the body-panel, strut-hangers from the frame to the running-board, a longitudinally curved and vertically straight splash-plate connecting the running-board with the sill, an end of said splash-plate being rigidly fastened to said frame member, and other portions of the splash-plate being connected with the said frame member by rigid connecting means.

3. The combination with a curved body panel having a door opening, a sill curved to conform with the curvature of the panel to which sill the panel is fastened, and a frame-member under and supporting the sill, of a running-board below the body-panel, diagonal strut-hangers from the frame to the running-board, and a vertical splash-plate from the running-board to the sill curved longitudinally with the body-panel.

4. The combination with a curved panel having a door opening, a sill curved to conform with the curvature of the panel to which sill the panel is fastened, and a frame member under and supporting the sill, of a running board below the body panel having its inner edge curved with the body panel, strut-hangers fastened to the frame and supporting the running-board to which they are fastened, a vertical splash-plate from the running-board to the sill curved longitudinally with the body-panel, and flanges at the top and bottom of the splash-plate substantially at right angles to the latter, through which the plate is fastened to the sill and running-board.

1,266,939. TRUNK-LOCK. EUGENE W. HAWLEY, Philadelphia, Pa. Filed Nov. 15, 1916. Serial No. 131,389. (Cl. 70—27.)

1. In a trunk, the combination with the two hinged sections thereof, of a main locking device pivoted to one section, a bar slidable on the same trunk section longitudinally of the trunk, connections between the main locking device and the bar to convert a turning movement of the former into a longitudinal movement of the latter, fixed locking members on the other trunk section each comprising a relatively long and narrow socket and complementary locking members secured to the bar each comprising a flat and relatively thin projection adapted to engage the corresponding socket, the locking members of each complementary pair having an inclined edge adapted to engage one end of the corresponding socket to draw the two sections toward each other, the side walls of each projection being beveled adjacent its end and the side walls of the socket flaring outward adjacent its mouth to draw the two sections into exact alinement.

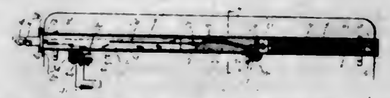


2. In a trunk, the combination with the two hinged sections thereof, of a main locking device pivoted to one section, a bar slidable on the same trunk section longitudinally of the trunk, connections between the main locking device and the bar to convert a turning movement of the former into a longitudinal movement of the latter, two fixed locking members on the other trunk section, two complementary locking members on the bar, and guides for the bar on the first trunk section, two adjacent guides being spaced apart a shorter distance than, and located between, two adjacent movable locking members and thus acting as stops one to arrest the movement of the bar in one direction and the other to arrest the movement of the bar in the other direction.

3. In a trunk, the combination with the two hinged sections thereof, of a main locking device pivoted to one section, a crank arm and a stop secured to and turning with the main locking device, a bar slidable on the same trunk section longitudinally of the trunk, a connecting rod pivoted both to the bar and to the crank arm, fixed locking members on the second trunk section, complementary locking members secured to the bar, guides for the bar on the first trunk section, and a stop on the connecting rod, the first stop adapted to contact with the connecting rod and thereby limit the movement of the bar in one direction and the second stop adapted to contact with the bar and limit its movement in the opposite direction.

[Claim 4 not printed in the Gazette.]

1,266,940. AUTOMOBILE-SIGNAL. WILLIAM HEFFNER, Benton Harbor, Mich. Filed Apr. 5, 1917. Serial No. 159,966. (Cl. 116—21.)



1. In a device of the character described, the combination of a casing adapted to be attached to a vehicle, a plug slidable within said casing, a rigid stem extending outwardly from said plug, a spring disposed between said plug and the inner end of said casing to normally hold said plug and stem within the casing, a leaf spring secured at one end to said plug and extending parallel with said stem, said leaf spring normally retained under tension by contact with the wall of said casing, a flag strip secured to said leaf spring and stem whereby when said plug is moved outwardly from the casing the flag strip will be

distended, and operating means secured to said plug and disposed externally of the casing to project said signal member into operative position.

2. In a device of the character described, a tubular casing to be disposed on a vehicle having one of its ends open, a plug slidable within said casing, signaling means carried by a stem extending outwardly from said plug, a spring disposed between said plug and the inner end of said casing to normally hold said plug and stem within the casing, a tubular cushioning member disposed between the wall of said tube and said spring whereby to prevent any rattling of the spring and operating means extending outwardly from said casing whereby the signal may be projected into operative position.

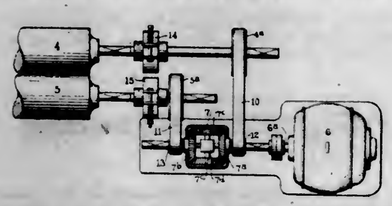
1,266,941. ELECTRICAL HEATING APPLIANCE. CEDRIC E. HELLER, Milwaukee, Wis. Filed Oct. 26, 1917. Serial No. 198,621. (Cl. 219—19.)



1. An electrical heating element comprising, in combination, a pan-shaped container, a transverse member secured to the bottom of the container, and having its ends down-turned and bifurcated to engage a supporting rod, a support secured centrally to said transverse member and to the side of the container, said support extending laterally from the container and then being down-turned to engage a supporting pipe, heating coils disposed in said container, electrical connections carried by the down-turned portion of said supporting member and connected with said heating coils, and means in said electrical connections for varying the heat generated by the coils in the container, substantially as described.

2. An electrical heating element comprising a pan-shaped container, heating coils disposed in said container, a transverse member secured to the bottom side thereof and directed laterally and downwardly to engage a supporting bar, a brace member secured to the transverse member and to the side of the container, said brace member being provided at its outer end with a control switch, a source of electrical supply connected with said switch, and an electrical connection between the heating coils and said switch.

1,266,942. WINDING MECHANISM. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed May 31, 1916. Serial No. 100,803. (Cl. 242—55.)



1. A winding mechanism including supporting rollers for a winding mandrel, said rollers being subjected at all times to a load substantially proportional to the amount of material on the mandrel and driving means for said rollers including means rendering the latter sensitive to variations in the load thereon for automatic and inversely proportional variations in their speeds.

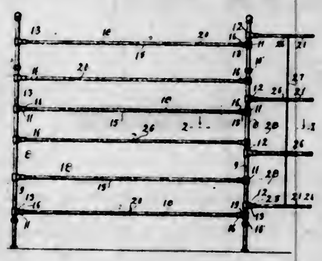
2. In a winding mechanism, the combination with rollers to support a winding mandrel, of means to drive said rollers at different speeds for initial operation of the mandrel and to increase the speed of one of said rollers and decrease the speed of the other of said rollers automatically thereafter.

3. In a winding mechanism, in combination, supporting rollers for a winding mandrel and driving connections therefor including a differential gear to vary the speed ratio of said rollers automatically.

8. In a winding mechanism, in combination, rollers for supporting a winding mandrel, means for driving said rollers differentially and separately adjustable brakes for said rollers.

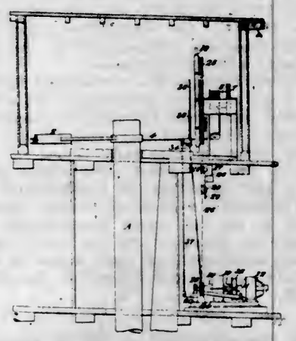
[Claims 4 to 7 not printed in the Gazette.]

1,266,943. MATTRESS AND PILLOW RACK. PAUL J. HETTWER, Milwaukee, Wis. Filed Nov. 16, 1914. Serial No. 872,277. (Cl. 211—14.)



A pillow rack, comprising corner posts adapted to rest upon the floor and provided with corner brackets, arms provided with end portions which have removable tongue and socket connections with the corner brackets, slats connected to and extending between the arms, and vertically extending rods connected to some of the slats and dividing the space between the arms into a plurality of spaces for independently holding pillows in vertical position.

1,266,944. STEERING-GEAR. WILLIAM R. HEWITT, San Francisco, Cal. Filed June 13, 1917. Serial No. 174,478. (Cl. 114—146.)

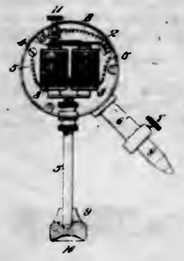


1. In combination with the steering wheel of a vessel, continuously actuated driving means, reversible and shiftable driven means operated by said driving means, a vertical lever pivoted at its base in front of the steering wheel and in a position adjacent the center of the latter, means connected to the lever and to said driven means for shifting the latter to neutral and reverse positions, means actuated by the driven means to operate the steering wheel, means to lock the driven means against movement in neutral position, means connected to the locking means and operable from a point adjacent the lever to effect locking of the driven means and therethrough the steering wheel, and means also operable from a point adjacent the lever for enabling manual control of the steering wheel during operation of the driving means and with the driven means locked.

2. In combination with the steering wheel of a vessel, continuously actuated driving means, reversible and shiftable driven means operated by said driving means, means for shifting said driven means to neutral and reverse positions, means to lock said driven means in neutral position, means to operate the steering wheel from said driven means, and means to enable manual operation of the steering wheel with said driven means in locked position and during operation of the driving means.

3. In combination with the steering wheel of a vessel, continuously actuated driving means, a belt connected to the wheel and said driving means for operating the former from the latter, means to normally tension the belt to cause same to drive the wheel, and means operable at will and from a position adjacent the steering wheel whereby to enable release of said tensioning means so as to allow slippage of the wheel and manual turning of the latter independent of the driving means.

1,266,945. METHOD OF PERCUSSION AND APPARATUS THEREFOR. JOHN P. HICKEY, San Francisco, Cal., assignor of one-fourth to Frederick W. Clausen, San Francisco, Cal. Filed Aug. 13, 1917. Serial No. 185,878. (Cl. 128—16.)



1. A percussion instrument comprising a handle, a head member on the handle, an electric vibrator within the head connected with a source of current supply, a staff on the head through which the vibrations and sound of the vibrator are adapted to be transmitted, a pencil holder on the head, and means for securing a pencil therein.

4. The herein described method for determining the size and location of internal organs and growths and the like, which consists in setting in motion an automatically and continuously actuated sound producing means and then in moving said means during continuous sounding thereof in contact with the affected area so as to enable the size of the organ or location of the growth to be determined by the variations of sound emanating from said means.

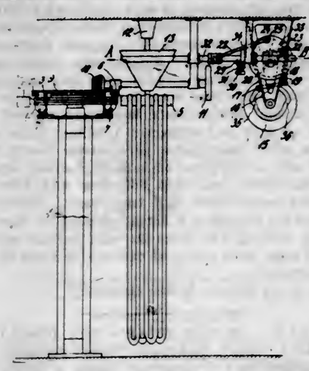
[Claims 2 and 3 not printed in the Gazette.]

1,266,946. DRYING APPARATUS. ALBERT HIRTH, Stuttgart-Cannstatt, Germany. Filed June 24, 1915. Serial No. 36,108. (Cl. 34—12.)

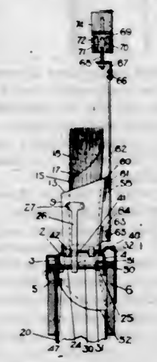
1. In an apparatus for suspending and drying strands of material, the combination of a plurality of arms; means for feeding strands to the arms; and means for presenting said feeding means back and forth several times to alternate sides of each arm.

2. In an apparatus for suspending and drying strands of material, the combination of a plurality of arms; means for feeding strands to the arms; and means for presenting said feeding means to alternate sides of each arm and displacing it lengthwise of such arm.

[Claims 3 to 7 not printed in the Gazette.]



1,266,947. AUTOMATIC CARRIER FOR FEEDING BROOM MACHINERY. IRA J. HOLLENSBE, Greensburg, Ind., assignor, by direct and mesne assignments, to The United Broom Company, Kokomo, Ind., a Corporation of Maine. Filed Dec. 9, 1915. Serial No. 65,912. (Cl. 214—59.)



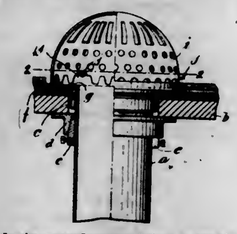
1. Combined in an automatic carrier, a plurality of hoppers adapted to simultaneously convey separate charges of different materials; and automatic members comprising a spring-catch and cam release adapted to cause, at a determinate place in the conveying travel of said carrier, the common discharge of said hopper charges thereof.

3. Combined in an automatic carrier, a frame adapted to support said carrier; a flanged hollow base having holes; a plurality of open-bottomed hopper-holders, secured in said base holes and to said frame; a plurality of open-bottomed hoppers fitted within said hopper-holders and opening downwardly commonly through the respective mouths thereof; a floor-trap hinged to the respective end hoppers, adapted to keep same closed commonly and to hold closed a superimposed filler-trap hinged to the intermediate hopper; a spring-catch secured to one of said hopper-holders adapted to lock closed said floor-trap; a cam shaft secured to the last-named hopper-holder having a crank and provided with a cam adapted to release said spring-catch; a release-plane secured at a fixed point interrupting the travel of said carrier, adapted by actuation of said crank to release said floor-trap; floor trap time-slides fixed at points interrupting said carrier

travel adjacent to said release-plane, adapted to slidably support thereon said floor-trap and to drop same for emptying the end hoppers of said carrier at a determinate point in said travel; a filler-trap time-slide secured at a point in said travel intermediate to said floor-trap time-slides, adapted to slidably support said filler-trap subsequent to said dropping of said floor-trap and to subsequently drop said filler-trap for the discharge of the contents of said intermediate hopper subsequent to said discharge of said end hoppers; a helical trap-closer secured at a point interrupting said carrier travel after the points of said securement of said time-slides, adapted to lift and latchedly close said floor-trap and filler-trap as said carrier passes over said trap-closer; swivel-rolls on said frame for engaging a track adapted to support said carrier in transit, and links on said carrier adapted to articulate same with adjacent carriers to form an endless circuit thereof.

[Claim 2 not printed in the Gazette.]

1,266,948. GRAVEL-GUARD FOR ROOF-DRAINS. CHARLES L. HOLT, Lawrence, Mass., assignor to Holt Roof Connection Co., Lawrence, Mass., a Corporation of Massachusetts. Filed July 17, 1916. Serial No. 109,649. (Cl. 108—30.)



1. A roof-drain-guard comprising a strainer cup adapted to be inverted over the roof outlet and having a series of notches leading from its rim to provide drain passages therethrough at the roof surface, and a ring adapted to rest on the roof and having a circular series of upwardly extending projections disposed at a distance from the rim and opposite the notches therein.

5. In combination with a roof, a drain-pipe extending therethrough and terminating approximately flush with the roof surface, a flat ring resting on the roof and encircling said pipe, a series of projections on said ring extending entirely about its inner periphery and spaced apart to provide drain passages therebetween, a cup-shaped strainer inverted over said pipe and having its rim resting on said ring beyond said projections at a substantial distance therefrom, and provided with drain passages in its rim-portion opposite said projections.

6. In combination with a roof having a drain-pipe terminating at the roof surface, a cup-shaped strainer inverted over said pipe and having openings in its rim to provide drain passages at the roof surface, and a circular series of gravel-intercepting plates each arranged at a distance from said rim and opposite one of the said openings therein.

7. In combination with a roof having a drain pipe terminating at the roof surface, a cup-shaped-strainer inverted over said pipe and having openings therein to provide drain passages at the roof surface, and a plurality of gravel intercepting plates disposed at intervals about said pipe and at a substantial distance within the rim of said strainer.

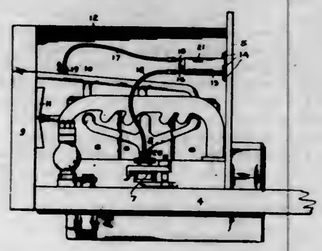
[Claims 2 to 4 not printed in the Gazette.]

1,266,949. PROCESS OF MAKING PHONOGRAPH-NEEDLES. ROSCOE C. JOHNSTON, St. Louis Park, Minn., assignor of one-half to Emil Nelson, Minneapolis, Minn. Filed May 5, 1917. Serial No. 166,644. (Cl. 274—38.)

1. Steps in the process of preparing a non-metallic, reproducing, phonograph needle, which steps consist in treating the needle with a siccative oil, and drying the needle after such treatment.

2. The hereindescribed process of preparing a bone-reproducing phonograph needle, which consists in treating the needle with a weak alkaline solution, and then treating the needle with a siccative oil.

1,266,950. CARBON-REMOVING-SOLUTION HOLDER. EDWARD F. JONES, Indianapolis, Ind. Filed Dec. 20, 1915, Serial No. 67,882. Renewed Mar. 21, 1918. Serial No. 223,868. (Cl. 123—25.)



In combination with an internal combustion engine having a circulatory system, a receptacle for containing a decarbonizing solution, said receptacle having a top opening for the introduction of a carbon-remover, a hinged door to close said opening, a distributer-plate extending obliquely under the opening within the receptacle, means for supplying water from the circulatory system of the engine to the receptacle, and means for discharging the contents of the receptacle into the manifold of the engine.

1,266,951. PROCESS OF FILET-CROCHETING. AUDREE PAULENE KELLER, Toledo, Ohio. Filed Mar. 26, 1917. Serial No. 157,337. (Cl. 66—4.)



4. As a new article of manufacture, a crocheted fabric body having a background portion formed of a thread of one color and a design portion formed of a thread of another color, and wherein the background thread is continuous throughout the entire area of the crocheted body, and is covered in by the design thread and invisible in the area where the design appears, and the design thread is continuous throughout the portion of the area of the crocheted body that is included within the outer limits of the design, and is covered in by the background thread and invisible wherever any portions of the background of the body appear within the outer limits of the design.

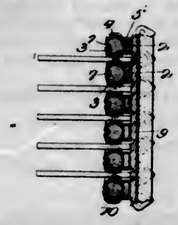
[Claims 1 to 3 and 5 not printed in the Gazette.]

1,266,952. MATCH-CARRIER. ALEXANDER KELLEY, Wilmington, Del., assignor to Climax Machine Co., Wilmington, Del., a Corporation of Delaware. Filed July 13, 1917. Serial No. 180,403. (Cl. 144—65.)

3. In a match machine, a match carrier comprising a plurality of resilient jaws having grooves on their outer faces whereby splints may be received between and held by the opposed faces of adjacent jaws, and means engaging the edges of the jaws between the splints whereby to hold said edges together.

5. In a match machine, a match carrier comprising a plurality of carrier bars, resilient jaws mounted on said bars and projecting therefrom toward the splint forming

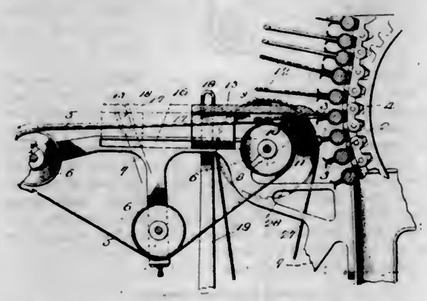
mechanism of the match machine, the jaws being expanded above the carrier bars whereby the opposed faces of adjacent jaws may engage and hold splints forced between them, and means above the respective carrier bars housed



within the jaws on said bars and engaging the edges of said jaws to constitute a fulcrum for the jaws and prevent spreading of the edges thereof.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,266,953. DELIVERY MECHANISM FOR MATCH-MACHINES. ALEXANDER KELLEY, Wilmington, Del., assignor to Climax Machine Co., Wilmington, Del., a Corporation of Delaware. Filed July 24, 1917. Serial No. 182,593. (Cl. 144—62.)



1. In a match machine, the combination with a match conveyer, of a constantly operating withdrawing roller disposed adjacent the conveyer and in the path of the matches therein, and a coöperating member movable to and from the conveyer across the roller to release the matches from the conveyer and press them against the withdrawing roller.

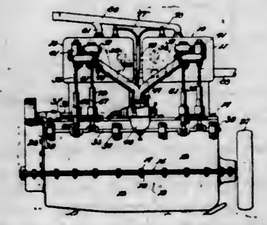
4. In a match machine, the combination of a match conveyer, a block movable toward and from the conveyer, fingers projecting from said block to enter the conveyer and release the matches therefrom, and a gripping roller disposed adjacent the conveyer to clamp the matches against said block.

8. In a match machine, the combination with a match conveyer, of a withdrawing member disposed across the path of matches in the conveyer, and a gripping member movable toward and from the conveyer over said withdrawing member and adapted to clamp the matches against said member whereby the matches will be positively withdrawn from the conveyer.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,266,954. INTERNAL-COMBUSTION ENGINE. SHIRLEY C. KIAK, Windsor, Ill. Filed Nov. 21, 1916. Serial No. 132,661. (Cl. 123—70.)

In an internal combustion engine, a precompression cylinder and firing cylinder cast *en bloc*, a common water jacketing completely inclosing the cylinder heads, an inlet duct leading through the water jacketing of the precompression cylinder adjacent its head, an exhaust duct leading through the water jacketing from the firing cylinder in spaced relation to its head, a valve chamber formed exteriorly of the water jacketing, a ported web dividing the valve chamber, a duct leading from the upper portion of the precompression cylinder through the water jacketing to the chamber at one side of the web, a duct leading from the chamber at the opposite side of the web through the water jacketing to the firing cylinder at a point substantially diametrically opposite the exhaust



duct leading therefrom, an inlet conduit communicating with the first duct of the precompression chamber, a valve in the conduit having a stem projecting through the wall of the conduit, a valve in the chamber having a stem projecting through the wall of the chamber, pistons in the cylinders, a crank shaft having operative connection with the pistons, and means driven from the crank shaft controlling the opening and closing of the valves through engagement with their stems.

1,266,955. WATERPROOF COMPOSITION FOR COATING PAPER. BRUNO KNIFFLER, Winchester, Mass., assignor to Vera Chemical Company, Stoneham, Mass., a Corporation. Filed Nov. 22, 1913. Serial No. 802,519. (Cl. 134—15.)

1. A wax mixture emulsion containing paraffin wax, ammonium stearate, and water.

3. A wax mixture emulsion containing paraffin wax, an ammonia soap, and water in quantity sufficient to produce a viscous mass with the quantity of ammonia soap used.

[Claim 2 not printed in the Gazette.]

1,266,956. PROCESS OF MAKING WATERPROOF COMPOSITION FOR COATING PAPER. BRUNO KNIFFLER, Winchester, Mass. assignor to Vera Chemical Company, Stoneham, Mass., a Corporation. Filed Nov. 22, 1913. Serial No. 802,520. (Cl. 134—22.)

1. The process herein described of making a waterproof composition for paper consisting in saponifying a fatty acid by a volatile alkali, and emulsifying an unsaponifiable wax with the soap thus produced, forming an aqueous emulsion, and subsequently diluting the emulsion with water.

3. The method of emulsifying a waxy mixture which consists in adding ammonia to a fatty acid to form an ammonium soap in the presence of paraffin wax, heating the mixture, and utilizing a sufficient quantity of water to form with the mixture a viscous mass.

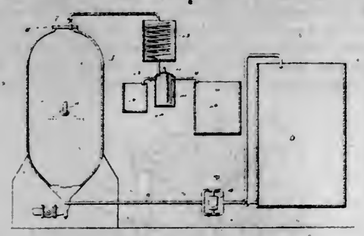
[Claims 2 and 4 not printed in the Gazette.]

1,266,957. MANUFACTURE OF WOOD-PULP. OTTO KRESS and SIDNEY D. WELLS, Madison, Wis. Filed Dec. 10, 1915. Serial No. 66,212. (Cl. 92—7.) (Dedicated to the public.)

1. A process of pulping wood consisting of impregnating wood with an alkaline cooking liquor under pressure at a temperature of substantially 185 degrees F. and before cooking, the reduction of the pressure, the withdrawal of excess cooking liquor and the cooking of the impregnated wood.

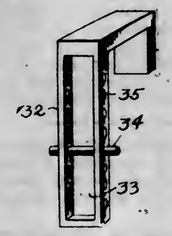
4. A process consisting of impregnating wood with an alkaline cooking liquor under pressure and at a temperature of substantially 185 degrees F. and before cooking, the reduction of the pressure, the withdrawal of excess alkaline cooking liquor, cooling and then skimming of

rosin soap therefrom, cooking the wood by contact with steam, and the collection of foaming rosin soap and distilled turpentine and other volatile oils through digestion of the wood as described.



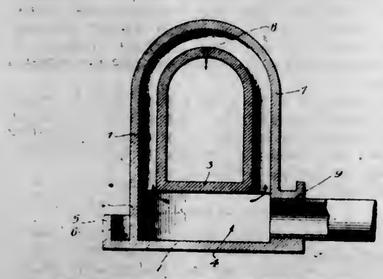
[Claims 2 and 3 not printed in the Gazette.]

1,266,958. AUTOMOBILE-JACK. HISATARO KIRIYAMA, Elmonte, Cal. Filed Apr. 5, 1917. Serial No. 159,985. (Cl. 254—133.)



A bar for use with lifting means, comprising two legs angularly disposed, and one of which has a longitudinal slot to engage the hub of a vehicle wheel, and the other is formed to engage the lifting means, of a pin extending transversely of said slot, and means for adjusting the pin toward and from the clamping leg engaging the lifting means.

1,266,959. OIL-BURNER. ALBERT J. KLUNK, Los Angeles, Cal., assignor to Inez M. Walcott, Los Angeles, Cal. Filed July 5, 1917. Serial No. 178,816. (Cl. 158—66.)

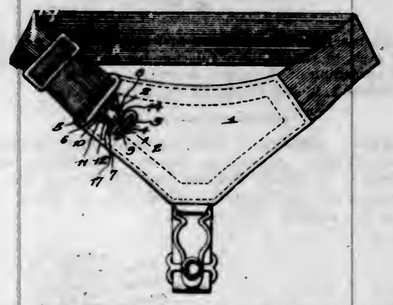


1. An oil burner formed of a single casting comprising a flat base member, an annular upright wall formed integral with the member and being spaced from the periphery threof, a flat top wall formed integral with the annular wall, said walls and the base member forming a gasifying chamber, said annular wall having a fuel intake formed therethrough, a hollow arch having its ends formed integral with the upper wall, communicated with the chamber provided by said walls and the base member, and having a burner opening on its under side located over the upper wall and another annular wall formed on the periphery of the base member and surrounding the first named wall to provide an annular space for the reception of a priming fuel.

2. A burner comprising an annular gasifying chamber having a fuel intake at its side and being flat on its upper and lower faces, an annular priming cup surrounding the chamber, and an inverted U-pipe having its ends secured to and communicating with the chamber, said pipe having a burner opening in the under face of its curved portion.

[Claims 3 and 4 not printed in the Gazette.]

1,266,960. GARMENT-CLASP. FRANK L. LANGHAMMER, Bridgeport, Conn. Filed June 19, 1917. Serial No. 175,623. (Cl. 24—230.)



1. In a garment clasp, a male part having a securing eye and a body portion provided with a pair of diverging slots for forming side base portions and an intermediate head, said head being raised and the side base portions being depressed from the plane of the body, the free outer end of the body remaining in the plane of the body, and a female part also having a securing eye and a pair of spaced arms extending laterally therefrom, said arms having inwardly directed terminal fingers opposing one another and adapted to straddle the smaller end of the head for being slidably engaged beneath the latter.

[Claims 2 to 10 not printed in the Gazette.]

1,266,961. BUTTON. FRANK L. LA POINT, Kitchener, Ontario, Canada, assignor to Herbert O. McDowell and Harry N. Lincoln, trading under the firm-name of International Supply Co., Kitchener, Ontario, Canada. Filed Oct. 20, 1917. Serial No. 197,613. (Cl. 24—94.)



1. A non-plastic button having an under-cut circular recess cut in its under side in combination with a short tube having one end expanded into said recess and its other end split longitudinally at a plurality of points around its circumference.

[Claim 2 not printed in the Gazette.]

1,266,962. TICKET AND HAT CLIP. JAMES M. LAWLOR, Topeka, Kans. Filed Oct. 16, 1916. Serial No. 125,772. (Cl 24—252.)

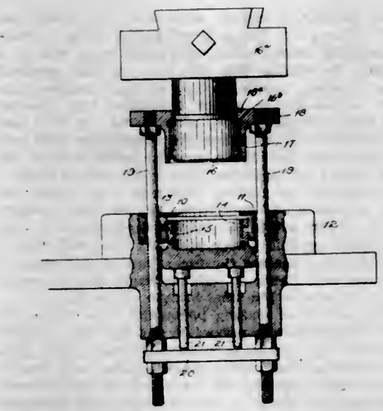
1. The combination of a sheet metal annular housing formed integrally along its outer rim with an inwardly turned crimp, along its inner rim with an inwardly turned flange for supporting a spring, and at its lower side with downwardly extending parallel spaced-apart wings, and said wings being formed with means for attachment to a surface; a clamping member pivoted to and between said wings and formed at its upper end with an operating button within and projecting out of said housing, at its lower end with a lip, and between the lip and the pivot with an arch or bump, said lip being adapted to form a clamping means opposed to said surface; and a compressing spring bearing between said spring seat and



said button; the inner rim of the button being adapted to bear outwardly against the crimped outer rim of the housing to limit the outward travel of the button under pressure of the spring.

[Claim 2 not printed in the Gazette.]

1,266,963. APPARATUS FOR MAKING PROJECTILE-BANDS AND THE LIKE. ALEXANDER W. LIMONT, Bridgeport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Nov. 5, 1915. Serial No. 59,840. (Cl. 78—1.)



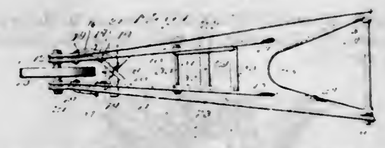
1. In apparatus for making projectile bands, the combination of a mandrel, a die member adapted to surround the mandrel, a sleeve within the die member adapted to support the blank from beneath, the outer surface of said sleeve adapted to move in contact with the inner surface of the die member, a second sleeve for exerting downward pressure on the blank to size the same while it is supported on the first sleeve between the mandrel and die member, the outer surface of said second sleeve also working in contact with the inner face of the die member, and means for actuating said first sleeve to eject the band from the die member; substantially as described.

9. Apparatus for making projectile bands, comprising a drawing die, a punch to coöperate with said die in drawing a washer into a cylindrical band having parallel inner and outer surfaces and flat edges, and means coöperating with the punch and die to press the roughly formed band to the required size; substantially as described.

12. In apparatus for making projectile bands, the combination of means for drawing a flat washer into a ring whose inner and outer surfaces are parallel to each other, and means coöperating with said first means for pressing the ring to the required size; substantially as described.

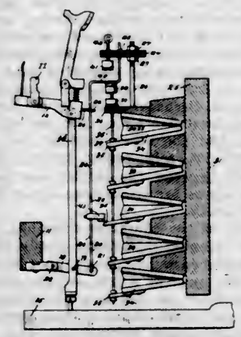
[Claims 2 to 8, 10, and 11 not printed in the Gazette.]

1,266,964. HAND WHEEL-CULTIVATOR. EDWARD LOPOUR, Marshalltown, Iowa. Filed Aug. 11, 1917. Serial No. 185,703. (Cl. 97—41.)



The combination with a manually guided apparatus including an axle, bearing wheel, and rearwardly extending handles swinging upon said axle and rigidly coupled in spaced relation, said handles supporting cultivator devices of coacting bars movably coupled at one end relatively to the handles and diverging and extending rearwardly of the handles, a rigid member connecting said bars at their rear ends and maintaining them constantly spaced from the vertical lines of the handles to permit the handles to be moved vertically without interfering with the bars, and a harness device connected to the rigid connecting member adjacent to the diverging bars and adapted to be disposed around the person of the operator while guiding the apparatus.

1,266,965. PNEUMATIC HAMMER-ACTION. FRANK G. LYNDE, Newark, N. J., assignor to Lauter Company, Newark, N. J., a Corporation of New Jersey. Filed Dec. 20, 1917. Serial No. 208,056. (Cl. 84—233.)



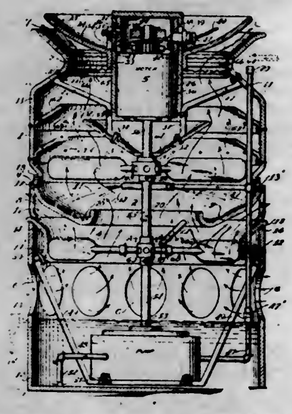
1. In a player piano, a combination of a hammer action including a wippen, a relatively short link pivotally supported at one end below the wippen, a lifting rod pivoted directly to the opposite end of the link, a sticker having its upper portion attached to the wippen and having its lower portion pivoted to the link at a point substantially equi-distant from the pivotal support of the link and from the pivotal connection of the lifting rod therewith, the axes of relative movement between the link and its support, between the link and the sticker and between the link and the lifting rod being parallel to each other, and a pneumatic for raising said lifting rod.

2. In a player piano, the combination of a hammer action including a sticker and a lever pivoted at one end with the lower end of the sticker engaging the same in advance of its pivoted end, an actuating pneumatic having a movable side positioned above the lever, a plunger guided for vertical movement and actuated by said movable side and a lifting rod having a portion positioned in the path of the movable plunger and pivoted to said lever in advance of the sticker.

3. In a player piano, the combination of a hammer action including a sticker and a lever connected to the sticker to lift the same, an actuating pneumatic having a movable side, lifting means actuated by said movable side, means pivoted to the lever so as to move therewith and disposed in the path of movement of said lifting means and means for guiding said pivoted means.

[Claims 4 to 7 not printed in the Gazette.]

1,266,966. HUMIDIFYING-FAN. WILLARD M. MCEWEN, Chicago, Ill. Filed Mar. 14, 1917. Serial No. 154,700. (Cl. 261—30.)



1. A device of the character described, having an air passage, and comprising a casing disposed uprightly and containing a pair of fans positioned one above the other in spaced relation in said passage, and means for driving said fans, said casing being aperfured near the bottom for admitting air from the room and near the top and intermediately for discharging air to the room, one of said fans being located between the medial and lowermost apertures and the other between the medial and uppermost apertures, said casing having an inwardly projecting guide between the medial aperture and the upper fan, and means for discharging spray into the passage above said guide.

8. In a device of the character described, a combined guide and frame member comprising a body part of annular shape including outwardly turned and divergently inclined flanges, the upper of which projects somewhat over and beyond the lower for resting on a corresponding annular support, said upper flange having upstanding arms or brackets spaced apart peripherally and adapted to serve as supports as for another frame member.

11. In a device of the character described, a knockdown member comprising a plurality of co-rotary parts disposed in vertical axial alinement, said parts being formed at mutually contiguous axial points to register and nest together vertically in non-turning relation to each other.

12. In a device of the character described, a knockdown member comprising a plurality of co-rotary parts disposed in vertical axial alinement, said parts being formed at mutually contiguous axial points to register and nest together vertically in non-turning relation to each other, said parts including a motor and a pump spaced apart, the former above the latter, and air propelling means disposed between said motor and pump.

20. In a device of the character described, an annular casing member comprising a stationary part and a relatively movable part held in variable spaced relation to said stationary part and formed and arranged to provide an air discharge aperture or nozzle between said parts, said stationary part having inwardly projecting support or mounting means whereon said movable parts of the casing is adjustably slidable toward and away from said stationary part for adjusting said nozzle, and means adapted for manual control for locking the movable part to maintain its adjustment.

[Claims 2 to 7, 9, 10, 13 to 19, and 21 to 25 not printed in the Gazette.]

1,266,967. METHOD OF MAKING PNEUMATIC TIRES. NELSON W. MCLEOD, St. Louis, Mo. Filed June 19, 1916. Serial No. 104,601. (Cl. 154—14.)



1. The method of making pneumatic tires which comprises forming a tire lining, treating said lining to render it impermeable when resting against the inner wall of an unfinished pneumatic tire structure having separable edges at its inner margin, forcing the impermeable lining against the inner face of the unfinished tire structure having separable edges at its inner margin by fluid pressure, subjecting the unfinished tire structure to fluid pressure, vulcanizing the rubber, and thereafter opening said lining adjacent the separable edges of the tire structure.

6. The method of making pneumatic tires which consists in arranging an impermeable annular tube, comprising a tire lining, within an unfinished annular tire skeleton, introducing fluid under pressure into said tube to force said lining against the inner face of said skeleton, vulcanizing said lining to said skeleton, and thereafter opening said tube at the inner margin of the tire.

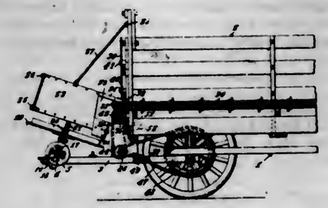
7. The method of making pneumatic tires which consists in arranging an impermeable annular tube, comprising a tire lining, within an unfinished annular tire skeleton, introducing fluid under pressure into said tube to force said lining against the inner face of said skeleton, vulcanizing said lining to said skeleton, and thereafter removing the portion of said annular tube located at the inner margin of the tire structure.

10. The method of making pneumatic tires which comprises placing lining strips at the inner margins of an unfinished tire having separable inner edges, introducing fluid under pressure into an annular lining tube and arranged within said tire, so as to firmly force said tube against the inner face of the unfinished tire and against said lining strips, at the same time subjecting the unfinished tire to the pressure of the fluid, vulcanizing the rubber of the tire and its lining elements to integrally unite said parts, and removing the inner marginal portion of the lining tube from the remainder of the structure.

11. The method of making pneumatic tires which comprises forming an unfinished tire and an annular rubber tube to produce a lining for said unfinished tire, introducing fluid under pressure into said tube, and at the same time venting air from the interior of the tire, subjecting the unfinished tire to the pressure of the fluid in the tube and vulcanizing the rubber of the tire and tube so as to integrally unite them.

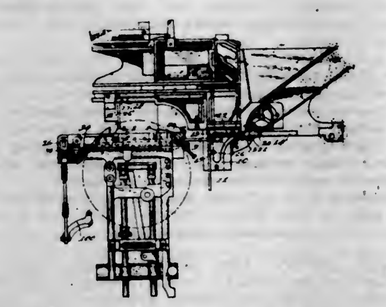
[Claims 2 to 5, 8, 9, and 12 not printed in the Gazette.]

1,266,968. STRAW-SPREADER. FRANK C. MARSS, Jr., Dwight, Nebr. Filed Apr. 30, 1917. Serial No. 165,537. (Cl. 275—3.)



A straw spreader, comprising a rack and running gear therefor, means for delivering straw from the rack, a spreader for receiving the delivered straw, a split hoop pivotally secured to the rack, a drum suspended from the hoop and overhanging the spreader, said drum provided with a cut away portion to form a straw receiving port, an arcuate strip below the cut away portion and extending below the drum, means for adjusting the drum, and means for actuating the spreader.

1,266,969. LINOTYPE-MACHINE. GEORGE E. MARLATT, Pasadena, Cal. Filed Oct. 6, 1914, Serial No. 865,399. Renewed Mar. 21, 1918. Serial No. 223,862. (Cl. 199—13.)



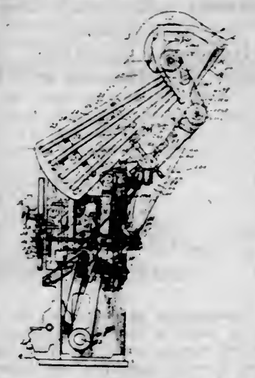
1. In a line casting machine, the combination with the assembler slide, the assembler scale index, the line delivery finger and the movable casting jaw, of a setting rod attached to said jaw for limiting the movement of said slide, means normally depending therefrom and movable axially therewith for releasing and operating said finger, and means for simultaneously moving the said index with said finger, in the establishment of the length of a line of matrices.

4. In a line casting machine, the combination with the casting jaws, the line stop, the assembler and delivery slides, and the assembler scale, of means for connecting the movable jaw with said stop, means for effecting and limiting the movement of said assembler slide and delivery slide finger thereby, and means for indicating the length of the line of matrices thus established on said assembler scale.

8. In a line casting machine, the combination with the casting jaws, the assembler and delivery slides, and the vise closing screw nut, of means for inter-connecting said jaws and said slides for the simultaneous establishment of the length of a line of matrices in each of said elements, and means on the left hand casting jaw coacting with means on said vise closing screw nut for locking said jaw in contact with the right hand jaw in a blank slug casting operation.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,266,970. TYPOGRAPHICAL MACHINE. GEORGE E. MARLATT, Pasadena, Cal. Filed Feb. 2, 1916. Serial No. 76,848. (Cl. 199—15.)



1. A typographical machine having a plurality of matrix magazines, common supporting frames therefor at opposite sides of the machine, openings being formed in one of said supporting frames to permit the insertion and removal of said magazines, means insertible in said frames and attached to said magazines for rendering the magazines slidable relative to the frames, and means for raising and lowering said magazines for selective use, including a yieldable element in engagement with and for supporting said magazines.

9. A multiple magazine typographical machine having means for rendering two of said magazines simultaneously operative, including in combination with the primary delivery means connected with one of said magazines, a single matrix-distributing system capable of connection with all of said magazines, of a channel entrance member movable into and from operative relation with said magazines, an intermediate channel member connecting said distributing means with said channel entrance means and movable relative thereto, and auxiliary delivery means connected with another of said magazines and with said intermediate channel member, said delivery and entrance means being capable of operation respectively for selectively releasing the matrices from and distributing the same to the proper magazines.

23. A typographical machine having a plurality of matrix magazines and primary and auxiliary delivery and entrance means connected with two of the magazines, the primary elements being stationary and connected with one of the magazines, and the auxiliary elements being movably connected with the other of said magazines and arranged for simultaneous operation.

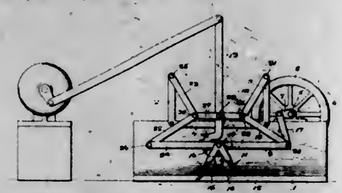
28. A typographical machine having a plurality of matrix magazines, distributing means therefor, primary matrix delivery means, and relatively movable auxiliary delivery means for rendering two of the magazines simultaneously operative including key rods for releasing the matrices, means for interrupting the movement of said distributing means during the movement of the magazines and for permitting the continuous operation thereof when the key rods of said auxiliary delivery means are moved to operative position relative to one of the magazines.

32. In a typographical machine, the combination of multiple matrix magazines selectively movable therein, a primary entrance channel movable therewith, a relatively stationary entrance channel intermediate of the primary entrance channel and the magazines, means for permitting the continued distribution of the matrices to their proper magazines subsequent to the movement of said magazine to operative position, distributing means for advancing the matrices to the entrance means, and means for automatically interrupting the movement of said distributing means during the movement of the

magazines and said primary entrance channels relative to the intermediate channels.

[Claims 2 to 8, 10 to 22, 24 to 27, and 29 to 31 not printed in the Gazette.]

1,266,971. TRANSMISSION MECHANISM. NORBERTO MARTINEZ, Cotulla, Tex. Filed July 9, 1917. Serial No. 179,478. (Cl. 74—5.)



1. In power transmission mechanism of the class described, a rocking beam, a lever, and toggle links at opposite ends of the rocking beam, said toggle links being connected to the lever for operation simultaneously in reverse directions thereby, one link of each toggle being pivotally connected to one end of the rocking beam and the other link of each toggle being pivotally mounted at a fixed point.

[Claim 2 not printed in the Gazette.]

1,266,972. MEASURING INSTRUMENT. ERNST A. MAUKE, Lancaster, Pa. Filed Aug. 16, 1917. Serial No. 186,545. (Cl. 33—148.)

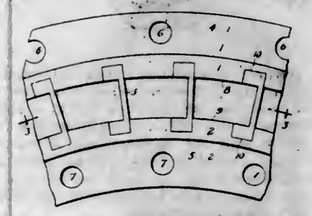


1. A measuring instrument including a pair of arms pivotally connected for relative movement, one of said arms having a series of segmental rack teeth, a screw mounted in the other arm engaging the rack teeth to rotate the arm relatively to automatically retain the same in locked position, a graduated element mounted for rotation on one of the arms and movable relative thereto and to the other arm and means operable by rotation of the screw for rotating said graduated element to indicate the distance between the arms.

2. A measuring instrument including a pair of arms pivotally connected for relative movement, a segmental series of rack teeth formed on one arm, a screw mounted in the other arm engaging the teeth whereby the arms may be moved relatively and automatically locked in adjusted position, a disk mounted in one arm for rotation and having a plurality of graduations, and a train of gearing operable by rotation of the screw to rotate the disk and to multiply rotation thereof whereby the distance between the ends of the arms may be indicated.

3. A measuring instrument including a pair of relatively movable arms, a circular enlargement formed on one arm having one side face recessed, and centrally apertured, a graduated disk seated in said recess and having a central pin entering the aperture and passing through the other arm to connect said arms together, a pinion on the projecting end of the pin, a series of teeth formed on the enlargement, the said other arm having an opening, a screw mounted in the opening to engage the rack whereby to move the arms relatively, a pinion rotatable with the screw, a train of gearing connecting said pinion with the first mentioned means, and a gage plate having a central opening mounted over the screw and one side face concaved to engage the edge of the disk and bearing an index for coaction with the graduations of the disk.

1,266,973. NOZZLE CONSTRUCTION FOR ELASTIC-FLUID TURBINES. JOHN F. METTEN, Philadelphia, Pa. Filed Mar. 23, 1917. Serial No. 156,835. (Cl. 253—78.)



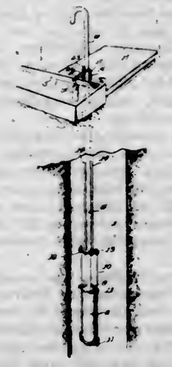
1. A steam turbine nozzle comprising two concentric rings with opposed oblique straight edged channels formed therein and straight edged blades in said channels.

5. A steam turbine nozzle comprising two rings spaced apart annularly, each ring having a flange directed away from the other ring in a plane transverse to their common axis by which flange the ring may be attached to a suitable supporting member, said rings having opposed oblique channels formed therein, and straight edged blades in said channels.

8. A steam turbine nozzle comprising two rings spaced apart annularly with opposed oblique straight channels formed therein and outer circumferential channels with their bottom portions intersecting the bottom portions of said oblique channels, and straight edged blades having their edges lying in said oblique channels and having the portions thereof projecting into the circumferential channels riveted over to secure the parts together.

[Claims 2 to 4, 6, 7, and 9 to 11 not printed in the Gazette.]

1,266,974. PUMP. AMOS MITCHELL, Kirksville, Mo., assignor of one-fourth to Thomas B. Kennedy and one-fourth to James H. Munden, Kirksville, Mo. Filed Nov. 8, 1915, Serial No. 60,327. Renewed Feb. 21, 1918. Serial No. 218,593. (Cl. 103—5.)

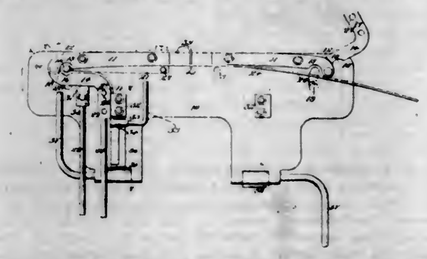


1. A pump comprising a fixed discharge pipe, a piston at the lower end of the discharge pipe, a cylinder slidable upon the discharge pipe and piston, end-pieces fitted to the extremities of the cylinder, the lower end piece having

an opening which is controlled by means of an upwardly opening valve, rods connecting the end pieces and having their upper ends extended, a cross piece connecting the extended ends of the rods, and other rods connected to the cross piece and transmitting movement to the cylinder.

2. In a pump an operating member mounted for reciprocation, a platform mounted for tilting movement and operatively connected to the operating member, a swingingly mounted lever arm, a link connecting one end portion of the platform with an intermediate portion of the lever, a liquid receiving receptacle, a drain pipe opening through the bottom of the receptacle and provided near the bottom with an opening in its side, a pipe telescopically fitting in the drain pipe and provided with an opening adapted in one position to register with the opening in the drain pipe, and operative connection between the second pipe and the lever.

1,266,975. MACHINE FOR MAKING AUTOMOBILE-BUMPERS. DAVID G. MORGAN, San Francisco, Cal. Filed June 20, 1917. Serial No. 175,841. (Cl. 153—4.)



1. A machine for forming spring metal automobile bumpers of the type characterized by bent ends forming an eye, said machine comprising a post, means for bending the heated bumper bar around said post leaving the end projecting at right angles to the body portion, said means comprising a die having pivotally connected jaws, one of said jaws being movable and the other stationary, means for manipulating the movable jaw, means for retaining said jaws in closed position, said movable jaw having a right angularly disposed outer end, and a block against which said end presses the bumper bar whereby to retain the bar in place to permit it to be twisted.

5. A machine whereby a straight headed bar may be formed at each end with an eye and the end portions bent back upon the body portion and projected laterally at right angles thereto and formed with a twisted and bowed terminus comprising a base plate, a set of bending dies at each end comprising a movable post and a stationary forming jaw and a movable jaw pivotally connected to the latter, said movable jaw having a handle by which it may be swung around the post compressing the bar into place, an eccentric lever for forcing the movable jaw home and retaining it in such position for subsequent operations, and a gage plate mounted on the base plate adapted to enter an opening in the bar for centering it in relation to the bending dies.

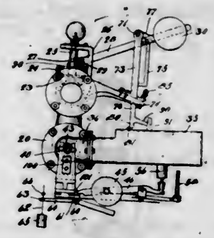
7. In a metal working machine, a rigid forming jaw, a movable forming jaw pivoted in relation thereto and between which jaws a metal blank may be bent, an arcuately movable pin adapted to be forced toward the fixed jaw and therebetween by the swinging movement of the pivoted jaw and along a path of travel substantially concentric with the axis thereof, thereby causing an eye to be formed by the metal blank at the point at which it is bent.

9. In a metal working machine, a fixed jaw having a forming face against which a metal blank is to be pressed, a movable forming jaw pivoted at one end to one end of the fixed jaw whereby said blank may be bent upon itself as the movable jaw swings toward the fixed jaw, detachably pivoted means whereby the double portions of the blank may be held apart from each other and caused to conform to the faces of the two jaws as they are forced together and whereby the pressure exerted by the movable jaw will be uniformly distributed to the portions of the blank against the forming faces of both jaws.

11. In a metal working machine, a pair of forming jaws pivoted in relation to each other between which a metal blank may be bent, a freely moving impression block interposed between said jaws whereby the pressure exerted to draw the jaws together will act to force the metal blank outwardly against the adjacent forming faces of the jaws, and an accurately swinging pin whereby an eye may be formed at the bend of the blank and between the jaws.

[Claims 2 to 4, 6, 8, 10, and 12 not printed in the Gazette.]

1,266,976. VACUUM-BREAKER. HARRY E. MORTON, Boston, Mass. Filed May 10, 1916. Serial No. 96,613. (Cl. 137—103.)



1. A vacuum-breaker adapted for association with a jet-condenser, comprising a hollow supporting frame having an opening through its engaging-portion by which communication with the vacuum-space is established, a conical bearing surrounding said opening, said frame having a hollow extension, an air-inlet valve arranged on said extension, a hollow receptacle pivotally connected with said frame which is closed to the atmosphere and has an opening arranged opposite the opening in the frame, and a conical end-portion which rotarily engages the conical bearing, whereby open communication with the vacuum-space is established, and the receptacle is adapted to receive condensing-water which rises in the condenser and to move downwardly by the weight of the condensing-water, and means controlled by said receptacle upon a downward movement thereof to control the operation of the air-inlet valve.

2. A vacuum-breaker adapted to be arranged between a jet-condenser and the exhaust steam pipe of an engine, consisting of a hollow frame having an opening by which communication with the vacuum space is established, a hollow receptacle pivotally connected with said frame which is closed to the atmosphere, and has an opening communicating with the interior of said frame, to establish open communication with the vacuum space to receive condensing-water which rises in the condenser and to move downwardly by the weight of the condensing-water, said frame having a hollow extension with an opening communicating with the exhaust steam pipe, and an air-inlet valve arranged on said extension.

3. A vacuum-breaker adapted for association with a jet-condenser, comprising a hollow receptacle closed to the atmosphere, and in open communication with the vacuum space and adapted to be moved downward by the weight of the condensing-water which rises in the condenser and which enters it, counterbalancing means for holding said receptacle, when empty, in elevated position, which is adapted to be overcome by the weight of the condensing-water and which is arranged to restore said receptacle to elevated position when the condensing-water escapes, and an air inlet valve controlled by said receptacle upon a downward movement thereof.

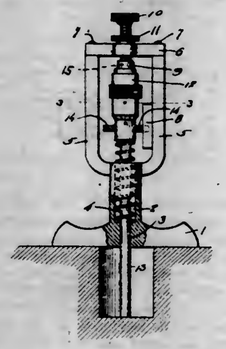
6. A vacuum-breaker adapted for association with a jet-condenser, comprising a hollow receptacle closed to the atmosphere, and in open communication with the

vacuum-space, and rotarily seated to move downward by the weight of the condensing-water which rises in the condenser, counterbalancing means for holding said receptacle in elevated position, and means for lifting said counterbalancing means to permit downward movement of the receptacle.

7. A vacuum-breaker adapted for association with a jet-condenser, comprising a hollow receptacle closed to the atmosphere, and in open communication with the vacuum-space, and rotarily seated to move downward by the weight of the condensing-water which rises in the condenser, counterbalancing means for holding said receptacle in elevated position, a pivoted lever arranged for engaging the counterweight to lift it and permit downward movement of the receptacle, and means to move said lever on its pivot.

[Claims 4, 5, and 8 to 15 not printed in the Gazette.]

1,266,977. MICROMETER DEPTH-GAGE. FRANK A. NELIS, Piqua, Ohio. Filed Dec. 4, 1917. Serial No. 205,390. (Cl. 33—167.)

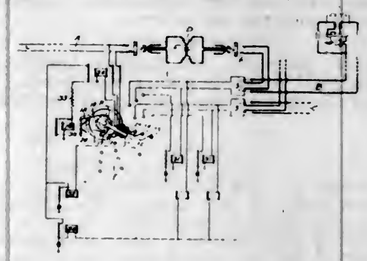


In combination with a micrometer an attachment for converting an inside micrometer into a depth measuring instrument, comprising a base, a channeled shaft extending upwardly from the base, a spring mounted in the aforesaid shaft, arms extending upwardly from the shaft, a bar releasably secured to the upper ends of the arms, an adjustable micrometer engaging member mounted on the aforesaid bar, a locking member for securing the micrometer engaging member in adjusted position, a stem secured to the micrometer and extended through the channeled portions of the base and upright shaft, and means for preventing the micrometer from turning while adjusting measurements, substantially as set forth.

1,266,978. TELEPHONE-EXCHANGE SYSTEM. ROY E. NOBLE, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 6, 1916. Serial No. 129,731. (Cl. 179—27.)

1. A telephone exchange system comprising a plurality of telephone lines normally terminating at a switchboard, a trunk circuit extending from this switchboard to a second switchboard, means at the first switchboard for completing connection between any of the telephone lines and the trunk circuit, a line finding switch at the first switchboard, a manually controlled switch in each telephone line adapted, when actuated, to connect the lines with terminals of the finder switch, apparatus responsive to the removal of the receiver from the switch-hook at a calling station to start and continue the operation of the line finding switch until the calling line is found, and apparatus responsive to the finding of the calling line for stopping the switch and for connecting the trunk circuit to the calling line.

2. A telephone exchange system comprising a plurality of telephone lines normally terminating at a switchboard, a trunk circuit extending from this switchboard to a second switchboard, means at the first switchboard for completing connection between any of the telephone lines and the trunk circuit, a step-by-step line finding switch at the first switchboard, a manually controlled key in each telephone line adapted, when actuated, to connect the line with terminals of the line finding switch, apparatus responsive to the removal of the receiver from the switchhook at a station on one of the lines to start and continue the operation of the line finding switch until the calling line is found, and apparatus responsive to the finding of the calling line for connecting the trunk circuit thereto.

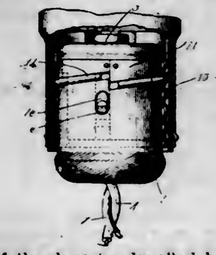


3. A telephone exchange system comprising a plurality of telephone lines normally terminating at a switchboard, a trunk circuit extending from this switchboard to a second switchboard, means at the first switchboard for completing connection between any of the telephone lines and the trunk circuit, a step-by-step line finding switch at the first board, a manually controlled key in each telephone line adapted, when actuated, to connect the line with terminals of the line finding switch, apparatus responsive to the removal of the receiver from the switchhook at a station on one of the lines to start and continue the operation of the switch until the calling line is found, apparatus responsive to the finding of the calling line to stop the switch and connect the trunk circuit to the calling line, and apparatus actuated upon the starting of the switch serving when the receiver at the calling line is restored to the switchhook to again start the switch and continue the operation thereof until the normal position is reached.

4. A telephone exchange system comprising a plurality of telephone lines normally terminating at a switchboard, a trunk circuit extending from this switchboard to a second switchboard, operator controlled means at the first switchboard for completing connection between any of the telephone lines and the trunk circuit, an automatic switching device associated with the first switchboard and normally disconnected from the telephone lines, operator controlled switching devices adapted when actuated to connect the automatic switching device with the telephone lines, and means operating upon the removal of the receiver from the switchhook at a calling station to cause the automatic switching device to connect the calling telephone line with the trunk circuit.

5. A telephone exchange system comprising a plurality of telephone lines normally terminating at a switchboard, a trunk circuit extending from this switchboard to a second switchboard, operator controlled means at the first switchboard for completing connection between any of the telephone lines and the trunk circuit, automatic switching mechanism associated with the first switchboard and normally disconnected from the telephone lines, operator controlled switching devices adapted when actuated to connect the telephone lines with the automatic switching mechanism, and a relay responsive to the removal of the receiver from the switchbook at a calling station to render the switching mechanism effective for establishing connection between the calling telephone line and the trunk circuit.

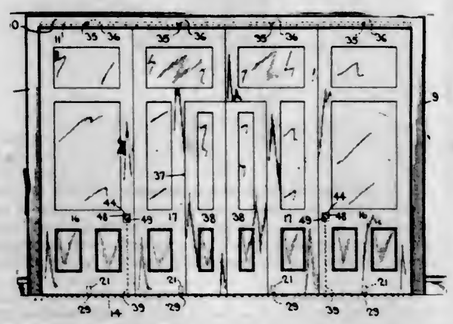
1,266,979. PLUG. GEORGE W. NORGATE, Chicago, Ill., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed June 26, 1914. Serial No. 847,385. (Cl. 173—360.)



4. A plug of the character described having two relatively movable members, one of said members protruding when the plug is in position with respect to a socket, a spring contact, and means controlled by the relative movement of said members to enlarge or reduce said spring contact to increase its diameter for engagement with the screw threads of a socket or to decrease its diameter sufficiently to allow it to be withdrawn from said socket without rotation to thereby cause it to engage or disengage from the screw threaded portion of a socket, said means permitting a disconnection of the plug from the socket when a pull is exerted against the protruding member of said plug, by causing a relative movement between said protruding member and said spring contact.

[Claims 1 to 3 not printed in the Gazette.]

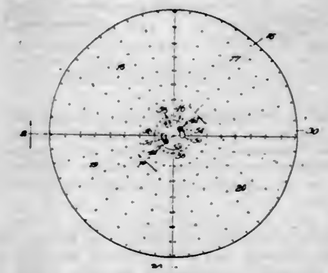
1,266,980. FOLDING PARTITION. JOHN R. NORTON, Olean, N. Y., assignor to The J. G. Wilson Corporation, Norfolk, Va., a Corporation of Virginia. Filed Oct. 23, 1916. Serial No. 127,200. (Cl. 20—20.)



1. In a structure of the character set forth, the combination with upper and lower guides, of a collapsible partition operating between the guides and comprising separate members foldable away from each other, each member consisting of hingedly connected sections, the sections at the free ends of the members being pivotally and slidably mounted on the guides and arranged to be placed edge to edge in meeting relation, a doorway formed partly in each of the two meeting sections of the members and of less extent than the same, and a holding device carried by one of the sections of each member and disposed adjacent to the hinged connection between the sections of such member and at one side of the doorway for holding the sections against pivotal movement.

2. In a structure of the character set forth, the combination with upper and lower guides, of a collapsible partition operating between the guides and comprising separate members foldable away from each other, each member consisting of hingedly connected sections, the sections at the free ends of the members being pivotally and slidably mounted at their upper and lower ends on the guides and arranged to be placed edge to edge in meeting relation, a doorway formed partly in each of the two meeting sections of the members, said doorway having its upright sides between the pivotal mountings of said sections and of less width and height than the same, and holding devices carried by the sections next to those having the doorway, said devices engaging the guides for holding the sections against pivotal movement.

1,266,981. DEMOUNTABLE TABLE-TOP. ELISIUS J. OLESEN, Chicago, Ill. Filed Feb. 21, 1917. Serial No. 150,023. (Cl. 45—31.)



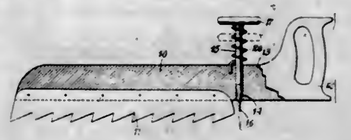
1. In a device of the class described, a table top section comprising an angular block 22, radiating side members 24, intermediate radiating reinforcing members 26, an outside border member 28 passing across the outer ends of said radiating members and secured thereto, and a cover sheet 30 of very thin material suitably attached to the tops of the previously named parts.

2. A securing device for fastening a plurality of table top sections together comprising two parallel plates, lugs projecting upward from one of said plates toward the other adapted to engage table top sections, and detachable securing devices passing through the second plate into two or more of said lugs.

6. A demountable table top comprising a plurality of table sections meeting at a common central point, a locking plate on one side of the table top provided with extending lugs, one of which enters a hole provided for the purpose in an adjacent one of the sections of the table top, a second plate upon the opposite side of the table top and opposite to the first plate, and securing devices passing through the second plate into two or more of the lugs in the first plate, the respective surfaces of the table top sections being recessed to receive the plates so as to provide smooth, parallel surfaces at the top and bottom of the finished table top.

[Claims 3 to 5 not printed in the Gazette.]

1,266,982. COMBINATION ICE SAW AND PICK. WINFIELD SCOTT PALMER, Glenburn, Pa. Filed Dec. 14, 1917. Serial No. 207,118. (Cl. 7—13.)

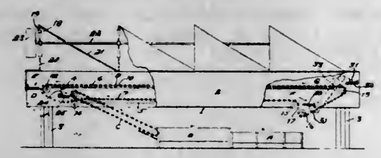


1. A combination ice saw and pick comprising a blade-holding back element having a toothed blade mounted therein and having a grip portion rearwardly thereof a distance, a reciprocable pick device carried by the back in alinement with the plane of the saw and outwardly of one end thereof, and means to support the pick in raised position at times.

4. In a device of the character described, a pick holder having a vertical passage therethrough, a vertically slidable pick element therein, means thereon to guide the pick centrally of a kerf in an ice block, and a handle on the holder located above the lower side of the holder.

[Claims 2 and 3 not printed in the Gazette.]

1,266,983. DRYING APPARATUS FOR FRUIT. GEORGE D. PARKER, Riverside, Cal. Filed Oct. 23, 1917. Serial No. 198,005. (Cl. 34—12.)



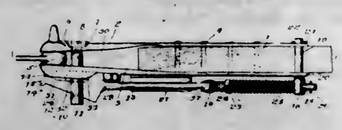
1. A drier comprising a housing, means for feeding fruit to be dried thereto, an endless movable means within said housing for supporting and conveying the fruit therein alternately and in opposite directions from one end to the opposite end of said housing in successively higher horizontal planes, and means for drying the fruit as it is conveyed through said housing.

2. A drier, comprising a housing, an endless conveyer within said housing and divided into a plurality of horizontally disposed longitudinally movable flights extending longitudinally thereof and arranged one above the other, means for feeding fruit to be dried onto the upper surface of one end of the lowermost flight, means for transferring the fruit from the upper surface of the opposite end of the lowermost flight onto the upper surface of the corresponding end of a corresponding flight immediately above the same, means for removing the fruit from the upper surface of the opposite end of said last mentioned flight, and means for drying the fruit as conveyed.

3. A drier comprising a housing, an endless conveyer divided into a plurality of horizontally disposed superimposed flights extending longitudinally within said housing, succeeding flights of said conveyer commencing at the lowermost traveling in opposite directions, means for feeding fruit to be dried onto the upper surface of the lowermost flight, means for transferring the fruit from the upper surface of the lower flight onto the upper surface of a corresponding flight immediately above the same, means for drying the fruit as conveyed, and means for rotating the fruit as conveyed and dried.

[Claims 4 to 10 not printed in the Gazette.]

1,266,984. PITMAN CONNECTION FOR MOWERS. CHARLES PEARSON, Chicago, Ill., assignor to International Harvester Company of New Jersey, a Corporation of New Jersey. Filed Dec. 1, 1916. Serial No. 134,463. (Cl. 74—17.)



1. In a pitman connection, a pitman having jaws, means for clamping said jaws including a fixed controlling member, toggle mechanism operatively connected to said pitman and said controlling member, and means preventing the breaking of said connection between the toggle mechanism and controlling member when the toggle is broken and the jaws are spread.

16. In a pitman connection, a pitman having resilient jaws, a slotted controlling member carried by said jaws, a toggle mechanism having one end slidably connected to said pitman and provided at its other end with a wedge extending into the slot of said controlling member and having a bearing surface on one of said jaws, and means carried by the pitman for moving said wedge longitudinally to cause said jaws to be clamped.

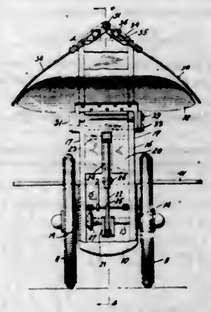
[Claims 2 to 15 and 17 to 22 not printed in the Gazette.]

1,266,985. RAIL-BRACE. BENJAMIN F. PHILLIPS, Cairo, W. Va. Filed Feb. 20, 1918. Serial No. 218,299. (Cl. 238—5.)



A rail brace comprising a bar provided at its upper portion and in the vicinity of its ends with recesses adapted to receive the base flanges of track rails, the said bar being provided at its upper portion and at the edges of the said recesses with inclined surfaces, blocks resting upon the inclined surfaces and adapted to bear at their ends against the webs of the rails, means for securing the blocks upon the inclined surfaces and plates mounted upon the upper surfaces of the blocks and adapted to bear against the rails at the under sides of the heads of the rails.

1,266,986. FLYING-MACHINE. JOSEPH PRHATKA, New York, N. Y. Filed Mar. 30, 1918. Serial No. 225,686. (Cl. 244—11.)



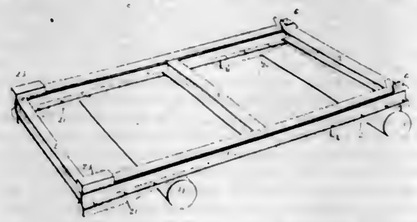
1. In a flying machine, the combination with a car, of a frame rising therefrom, a head reciprocably mounted in said frame, a pair of wings pivoted to said frame and operatively connected with said head, and a pair of wings pivoted to said head and operatively connected with said frame.

5. In a flying machine, the combination with a car, of a frame rising therefrom, a head reciprocably mounted in said frame, a pair of wings pivoted to said frame provided with arms having longitudinal slots, lugs on said head seated in said slots, a pair of wings pivoted to said head provided with arms having longitudinal slots, and lugs fastened to said frame and seated in the slots of said last-named arms, the pivots of one pair of said wings being disposed in parallel relation to the longitudinal axis of the car and the pivots of the other pair of wings at right angles to said first-named pivots.

[Claims 2 to 4 not printed in the Gazette.]

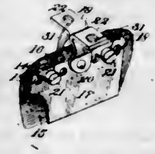
1,266,987. AUTOMATIC JACK. FREDERICK C. PREIFERT and FERDINAND SCHULZ, Beaver Crossing, Nebr. Filed Mar. 28, 1917. Serial No. 158,006. (Cl. 254—88.)

In an automobile jack, a pair of parallelly arranged free bearing rollers adapted to rest on and roll along the ground, a lifter frame comprising longitudinal beams connected by transverse beams to form a rigid structure, wedge blocks secured beneath the longitudinal beams at the respective ends thereof, one of said bearing rollers adapted to lie in coöperative relation with the wedge blocks at one end of the frame and the other bearing roller adapted to lie in coöperative relation to the wedge blocks at the other end of the frame, a cross bar secured beneath the front end of the frame adjacent to the incline of the front wedge blocks to form a stop for engagement



with the front bearing roller, and angle plates secured at the rear ends of the front wedge blocks also forming stops for engagement with the front bearing roller, and abutments on the upper side of the frame adapted to be engaged by the front axle of the vehicle to project the frame forwardly and cause said wedge blocks to be rolled up onto the bearing rollers and thereby elevate the frame.

1,266,988. AMPLIFYING-RECEIVER. EDWIN S. PRIDHAM and PETER L. JENSEN, Napa, Cal., assignors to Commercial Wireless & Development Co., San Francisco, Cal., a Corporation of Arizona. Filed July 3, 1916. Serial No. 107,443. (Cl. 179—114.)



1. In an amplifying receiver for telephony, a magnet having a narrow air-gap and a transversely movable coil disposed in said air-gap and carrying telephonic currents and comprising a large number of annular turns of wire spread over a large area and forming a wide flat surface of such thinness as to require an external support.

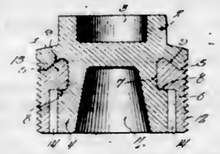
3. In an amplifying receiver for telephony, a magnetic field and a conducting coil for telephonic currents disposed therein and rigidly attached to the diaphragm of the receiver, said coil comprising a large number of annular turns of fine wire having the portion disposed in the field spread over a flat surface and the opposite portion bunched to form a support for the coil.

5. In an amplifying receiver for telephony, a magnetic field, a conducting coil for the telephonic currents disposed in said field and comprising a number of annular turns of fine wire having the portion disposed in the field spread over a wide flat surface and the opposite portion bunched to form a support for the coil, and bracket-shaped clips for attaching said coil rigidly to the diaphragm of the receiver.

9. In an amplifying receiver for telephony, the combination with a sound box and its diaphragm, of a magnetic field, a vibrating coil disposed in said field, rigid fastening means for connecting said coil to the diaphragm, means for connecting said coil with an operating circuit, comprising thin metallic strips secured at their inner ends to the diaphragm by said coil fastening means and extending outwardly along the surface of the diaphragm to a point near the periphery thereof, and stationary means for receiving the outer ends of said strips.

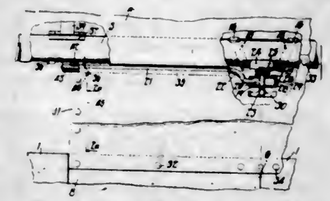
[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,266,989. COMPOSITE METAL PLUG. ORTON L. PRIME, Milwaukee, Wis. Filed July 19, 1917. Serial No. 181,649. (Cl. 137—13.)



A composite metal plug comprising a cylindrical shell having a head portion of greater diameter than its body portion and provided with a continuous annular groove between the head and the body portion, the circumferential base of each groove being of less diameter than the shell body, the groove thus forming a pocket, longitudinal grooves formed in the surface of the aforesaid body portion of the shell and extending throughout its length and terminating at the circumferential groove, and a metallic casing jacket fitted to the shell body, annular and longitudinal grooves to form a casing of approximately the same diameter as that of the shell head.

1,266,990. CURTAIN FOR MOTOR-VEHICLES. KARL F. RANGER, Detroit, and LOUIS M. SPENCER, Highland Park, Mich. Filed Nov. 2, 1916. Serial No. 129,063. (Cl. 21—62.)



1. In combination with a bow of a motor vehicle top, a curtain arm, a side curtain supported by said arm, and means for supporting said arm for pivotal movement about a substantially vertical axis, said means comprising a member arranged to engage the bow, and means entirely external to the bow for holding the member in engagement therewith.

2. In combination with a motor vehicle having a top, a side curtain structure pivoted to swing in respect to said top, said structure including a curtain supporting arm pivotally supported at one end, and detachable means carried by the top for normally holding the free end of the arm, said detachable means including a pair of members arranged to exert pressure on the top, and resilient means tending to urge said members into pressure exerting relation to the top.

3. In combination with a motor vehicle having a collapsible top, a side curtain structure pivoted to swing in respect to said top, said structure including a curtain supporting arm pivotally supported at one end, and detachable means carried by the top and constructed and arranged to normally resiliently support the free end of the arm to prevent movement in all directions.

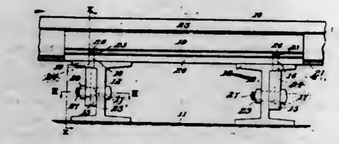
5. In combination with a bow of a collapsible top of a motor vehicle, a curtain supporting arm swingable in and out in respect to said bow, means for supporting the arm on the bow, said means comprising a bow receiving clamp including a spring pressed jaw.

14. In combination with a motor vehicle having a collapsible top including a longitudinally extending bow, a curtain arm, a side curtain supported by said arm, and means for supporting said arm for pivotal movements about a substantially vertical axis, said means including two members, one arranged to exert pressure on the top side of the bow at points spaced longitudinally thereof

and the other arranged to exert pressure on the lower side of the bow at a point disposed longitudinally between the above mentioned points, and a resilient member tending to force the two members into pressure exerting relation to the bow.

[Claims 4, 6 to 13, 15, and 16 not printed in the Gazette.]

1,266,991. RAIL TIE AND FASTENER. STEFAN REVAY, Johnstown, Pa. Filed Jan. 9, 1918. Serial No. 211,028. (Cl. 238—4.)



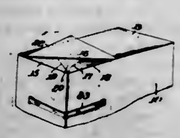
1. A device of the class described comprising a railway tie of I-beam formation having vertical perforations through the top thereof, fish plates adapted for engaging railway rails mounted upon the tie provided with marginal sockets, and complementally formed locking members secured to the web of said tie having hooks projecting through the said perforations and seated within the said sockets when the device is operatively assembled.

2. In combination with a railway rail, a supporting I-beam positioned transversely beneath said rail and having perforations through the top of the beam adjacent the opposite sides of the bottom of the rail, locking members having complementally formed plate portions detachably secured to the web of said beam and provided with inwardly extending hooks projecting through the said perforations and retainingly overlying the base flanges of said rail.

3. In combination with a railway rail, a supporting I-beam positioned transversely beneath said rail and having perforations through the top of the beam adjacent the opposite sides of the bottom of the rail, locking members having complementally formed plate portions detachably secured to the web of said beam and provided with inwardly extending hooks projecting through the said perforations and retainingly overlying the base flanges of said rail, fish plates oppositely positioned against the tread portion and upon the base flanges of said rail and having marginal sockets adjacent said perforations and adapted to receive the said hooks when the device is assembled.

4. A device of the class described comprising supporting I-beams having spaced perforations through the top thereof, a railway rail transversely mounted upon the top of the beam with its opposite sides arranged inwardly of the outer portions of such perforations, angular fish plates engaging the opposite sides of the rail having marginal sockets positioned above such perforations, locking plates provided with shoulders positioned in complemental arrangement upon the web of the beam, hooks carried by said shoulders projecting through said perforations and seated within the said sockets, and retaining bolts detachably secured through the said beam and plates when the device is assembled.

1,266,992. CEREAL-BOX. FREDERICK W. RICE, East Seattle, Wash. Filed Oct. 23, 1916, Serial No. 127,187. Renewed Mar. 21, 1918. Serial No. 223,870. (Cl. 229—7.)



1. A box of the character described provided with overlapping closure flaps at one end thereof, one of said flaps being formed with a notch opening through one end edge of the said flap and the other of said flaps overlying the said extremity of said first mentioned flap and having the outer side portion thereof cut away to extend between the sides of the said notch and provide a discharge opening for the box, a third closure flap carried by the box and arranged to overlie said first mentioned flaps with a portion of the said last mentioned flap free to provide a sealing flap for the said opening, and an elastic retaining element connected at its extremities to adjacent side walls of the box and arranged with its intermediate portion disposed for engagement over the said sealing flap for holding the said flap closed.

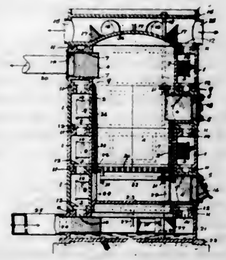
2. A box of the character described provided at one end thereof with overlying closure flaps, one of said flaps having a substantially V-shaped notch formed in one extremity thereof and the other of said flaps being arranged to overlie said first mentioned flap and having the outer side portion thereof cut away along angularly disposed lines at the said notch to extend between the sides thereof and provide a substantially triangular shaped discharge opening for the box having one corner thereof arranged at one corner of the box, a third closure flap carried by the box and arranged to overlie said first mentioned flaps to be secured thereto throughout the major portion of its area, the said last mentioned flap being provided with a diagonal fold line coinciding with the inner edge of said opening and defining a sealing flap movable to close said opening, and a retaining element connected to the box and arranged for engagement over the said sealing flap for holding the sealing flap closed.

1,266,993. FOLDING BOARD. DALLAS ROMANS, Chicago, Ill. Filed May 3, 1915. Serial No. 25,337. (Cl. 68—1.)



A folding board comprising two hingedly connected members, each member having on the under side thereof a guide equi-distant from the hinges, a flat plate slidably mounted in said guides and having one end curved upwardly, a catch for engaging the plate member in its retracted position, rubber feet for each of the hinged members, said feet adapted to space the members when in folded position, and a suitable latch for locking and holding the hinged members in closed position with all of the metal parts folded on the interior.

1,266,994. HOT-AIR FURNACE. HENRIETTA J. ROSCOE, Toledo, Ohio. Filed Dec. 5, 1914. Serial No. 875,666. (Cl. 126—99.)



1. A furnace consisting of detachable one-piece duplicate unit sections assemblable one above the other each of said sections having outer and inner walls which serve to form an inner chamber and an outer chamber independent of each other, both chambers being open at the top and bottom, webs connecting the inner and outer walls across the outer chamber each of said sections having a door frame forming a passageway whereby a door or smoke pipe may be located therein according to the position in which the section is used, a suitable base, a cover, said base and cover registering with the unit sections placed therebetween, and means for holding the parts assembled in independent angular relation to each other.

2. A furnace consisting of a composite structure formed of interchangeable duplicate units independently assembled, each unit comprising a continuous inner wall, a continuous outer wall, suitable integral webs or ribs joining them, transverse walls spanning the inter-space between the walls to form a passageway leading through both the inner and outer walls without communicating from within the inner wall to the inter-space between the inner and outer walls, a suitable base, a cover having air outlets, and means for releasably holding the units assembled in independent interchangeable relation to each other whereby the openings of the duplicate units separately serve different and independent purposes.

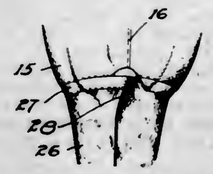
3. A furnace consisting of interchangeable duplicate units comprising continuous inner and outer walls forming inner and outer chambers, a passageway leading from the interior to the exterior independently of the outer chamber, and suitable retaining means such as tongues and grooves formed in the meeting edges of each of the units whereby when such units are assembled the corresponding chambers of adjacent units are held in alinement with each other and the several passageways are adapted to serve different purposes.

4. An article of manufacture comprising a furnace section having inner and outer walls forming an open ended outer chamber between the walls and an open ended inner chamber within the inner wall the walls being pierced by a passageway leading from the inside to the outside without opening into the space between them, interlocking joining edges formed on the ends of the sections adapted to retain the respective chambers of one section, opening into the corresponding chambers of a contiguous section with the passageways placed in any desired angular relation with respect to each other to independently serve radically different purposes, and suitable closures for the passageways, whereby assembled duplicate sections may be placed between a suitable registering supporting base and a cover to form a releasably held composite structure.

5. A furnace consisting of a suitable base inclosing an air inlet chamber, an air passage connected therewith adapted to supply air from outside the furnace to said chamber, interchangeable duplicate units assembled thereon, a cover for the assembled units inclosing an air delivery chamber, means for releasably holding the parts together, air openings formed in the base and cover, air passages formed in each of the units registering with each other and connecting with the openings, an interiorly formed fuel chamber in the several units, and suitable passageways in each unit leading independently from said chamber to the exterior whereby each of the interchangeable units may be used for entirely different purposes according to the location in which it is placed.

[Claims 6 to 9 not printed in the Gazette.]

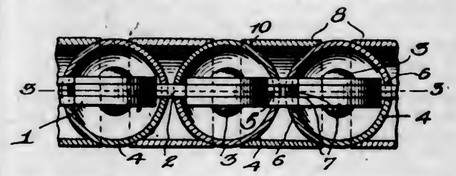
1,266,995. UNDERGARMENT. GEORGE E. RUTLEDGE, Chicago, Ill., assignor to Vassar Swiss Underwear Company, Chicago, Ill., a Corporation. Filed Mar. 13, 1915. Serial No. 14,206. (Cl. 2—144.)



2. A union undergarment comprising an upper shirt portion and a lower drawers portions composed of woven material, elastic extensions for the legs of said drawers portion, inelastic bands uniting said legs and said elastic extensions, each of said extensions having a comparatively short slit in its upper portion and one end of each band extending across the slit in the extension and secured to the upper edge of the band on the other side of the slit.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,266,996. FLEXIBLE CHAIN. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Voluntary Trust Association of Copartnership having as trustees J. W. Towne, F. B. Towne, E. S. Towne, J. M. Towne, and F. W. Wilson. Filed July 17, 1917. Serial No. 181,062. (Cl. 59—78.)



1. A chain comprising a plurality of flat links pivotally connected and each link comprising a central bar part and terminal eyes, complemental hemi-spherical shells inclosing the pivotally connected eyes of adjacent links and cut-away at their meeting edges to form slots for receiving and permitting limited movement of the link bars, and a tubular socket member surrounding the bar part of each link and receiving and engaging the adjacent shells in its opposite ends.

2. A chain comprising a plurality of flat links pivotally connected and each link comprising a central bar part and terminal eyes, complemental hemi-spherical shells inclosing the pivotally connected eyes of adjacent links and cut-away at their meeting edges to form slots for receiving and permitting limited movement of the link bars, and a socket member inclosing each link bar and comprising a strip of resilient metal rolled into tubular form with its edges free to expand and contract, said socket members receiving a complete shell in each end and engaging the same under tension.

3. A chain comprising a plurality of pivotally connected links, a ball housing for each pivotal joint, and a sleeve interposed between adjacent ball housings for inclosing the bar part of the link.

4. A chain comprising a plurality of pivotally connected links, a ball housing for each pivotal joint having opposing slots in which the bar parts of the links operate and which define the flexure of said joint, and socket members arranged between adjacent ball housings and receiving the latter.

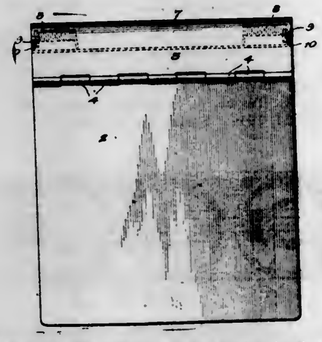
5. A chain comprising a plurality of pivotally connected links, a ball housing for each pivotal joint composed of hemi-spherical parts each formed with spaced cut-outs in its edge to provide with the cut-outs in the companion part spaced slots for receiving the bar parts of the links, and housings for the bar parts interposed between adjacent ball housings.

[Claim 6 not printed in the Gazette.]

1,266,997. LOOSE-LEAF BINDER. JOHN SCHADE, Holyoke, Mass., assignor to National Blank Book Company, Holyoke, Mass., a Voluntary Trust Association of Copartnership having as trustees J. W. Towne, F. B. Towne, E. S. Towne, J. M. Towne, and F. W. Wilson. Filed July 17, 1917. Serial No. 181,063. (Cl. 129—37.)

1. In a loose leaf binder, a base section having its rear edge portion turned upwardly and thence outwardly and rolled into scroll form, the free edge of the rolled part being spaced from the remaining portion, a clamping section having one edge portion also rolled into scroll form about the scroll part of the base section for relative rotation and having its free edge spaced from the base section

and formed with spaced recesses, the end edges of the inner and outer scroll sections having registering notches, and a coiled spring arranged in each end of the scroll hinge thus formed and having its inner terminal bearing against the base section opposite a respective recess and its outer terminal passing outwardly through the registering end notches.

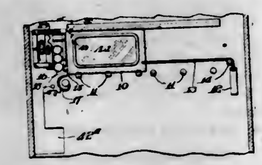


5. In a loose leaf binder, a base section having an edge rolled into scroll form, a clamping section having an edge rolled about the scroll part of the base section, and a coiled spring arranged within the inner scroll part for closing the sections and having one terminal passing outwardly beneath the free edges of the scroll parts for engagement by the outer part to limit the opening movement of the sections.

7. In a loose leaf binder, a base section having its rear edge portion turned upwardly and thence outwardly and rolled into scroll form, the free edge of the rolled part being spaced from the remaining portion, a clamping section having one edge portion also rolled into scroll form about the scroll part of the base section for relative rotation and having its free edge spaced from the base section, the end edges of the inner and outer scroll sections having registering notches, and a coiled spring arranged in each end of the scroll hinge thus formed and having its inner terminal bearing against the base section and its outer terminal passing outwardly through the registering end notches.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,266,998. VENDING-MACHINE. FREDERICK G. SCHENKEL, Wilmington, Del.; Rose Schenkel administratrix of said Frederick G. Schenkel, deceased. Filed Feb. 18, 1916. Serial No. 79,007. (Cl. 194—65.)



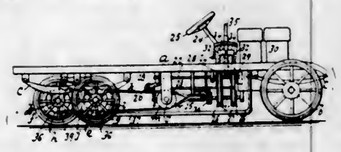
1. In combination with a container, a movable closure therefor, a detent for the closure, means for actuating the detent including a manually operated lever, adapted to communicate movement from the lever through a coin or coins to the detent, and means forming a guide-way for the coin or coins, said guide-way forming means including a movable member controlled by the closure and adapted to release the coin after the actuation of the detent.

2. In combination with a container, a movable closure therefor, a detent for the closure, means for actuating the detent including a manually operated lever, adapted to communicate movement from lever through a coin or coins to the detent, and means forming a guide-way for the coin or coins, said guide-way forming means including a movable member controlled by the closure and adapted to release the coin after the actuation of the detent.

3. The combination of a container, a slidably movable door therefor, door actuator, a latch for restraining said actuator, a lever for actuating the latch, means providing a guide-way for a predetermined arrangement of coins to establish operative relationship between lever and latch, said guide-way means including a member forming part of the guide-way operated to release the coin when the door is moved.

4. The combination of a container, a door therefor, door actuating means, a latch for said door, latch actuating means comprising a coin actuating lever and means forming a coin guide-way to the latch, said guide-way-forming means including a movable member controlled by the door for releasing the coins.

1,266,999. MOTOR-VEHICLE. EDWARD G. SCHLEICHER, Stamford, Conn. Filed Jan. 3, 1917. Serial No. 140,352. (Cl. 180—18.)



1. In a motor vehicle the combination with a pair of rear axles, of a pair of wheels mounted on each of the axles one pair being in advance and out of alinement with the other pair; belts connected to each of the axles for actuating the wheels, a pair of front wheels, means for steering the latter wheels, and tensioning devices including levers each having a number of idler rollers each pair of which is independently operated by the steering means for engagement with the belts.

3. In a motor vehicle the combination with a pair of rear axles, of a pair of wheels mounted on each of the axles one pair being in advance and out of alinement with the other pair; a pair of belts connected to each of the axles one being opposite the other for actuating the wheels, a pair of front wheels, means for steering the latter wheels, tensioning devices including a pair of levers each carrying a pair of idler rollers connected to the steering means for engagement with the belts, and means operated by the steering means for moving one or the other of the tensioning devices out of action to slacken the belts on one side of the vehicle.

5. In a motor vehicle the combination with a pair of rear axles, of a pair of wheels mounted on each of the axles one pair being in advance and out of alinement with the other pair; a pair of belts connected to each of the axles one being opposite the other for actuating the wheels, a pair of front wheels, means for steering the latter wheels, tensioning devices including a roller coacting with each belt, and a pair of rods operated by the steering means for moving either pair of the rollers out of action to slacken the belts on one side of the vehicle.

[Claims 2 and 4 not printed in the Gazette.]

1,267,000. OPHTHALMIC MOUNTING. ELMER L. SCHUMACHER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 30, 1917. Serial No. 204,597. (Cl. 88—47.)

4. An attachment for ophthalmic mountings comprising a supplemental composition rim member interiorly grooved to fit the mounting and split at one side, and a resilient or spring connecting device drawing the ends of the attachment toward each other to retain the device in position on a frame.

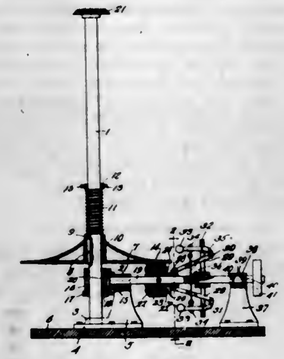
6. The combination with an ophthalmic mounting including a lens having a fitting projecting therefrom, of a supplemental frame encircling the lens, said frame being split and having its termini abutting the fitting, and a fastening device for the supplemental frame spanning the



fitting and directly securing the termini of the supplemental frame to each other.

[Claims 1 to 3, 5, 7, and 8 not printed in the Gazette.]

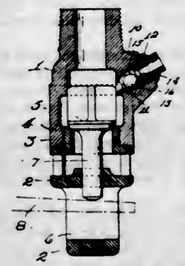
1,267,001. TRANSMISSION MECHANISM. JOHN SEEMANN, Gladbrook, Iowa. Filed Oct. 19, 1917. Serial No. 197,472. (Cl. 7—97.)



1. In transmission means, a drive disk, a transmission shaft, a friction drive wheel feathered on said shaft and movable across the face of the disk, a fly-wheel secured on the transmission shaft, control levers pivoted intermediate their ends on the fly-wheel, and connections between said levers and drive wheel for moving the drive wheel toward the center of the disk in accordance with any increase in the speed of rotation of the same and away from the center of the disk in accordance with any decrease in the speed of rotation thereof so as to maintain the transmission shaft at a constant speed of rotation.

[Claim 2 not printed in the Gazette.]

1,267,002. CYLINDER-COCK. IRWIN A. SEIDENS, Reading, Pa. Filed Oct. 1, 1917. Serial No. 194,203. (Cl. 121—147.)



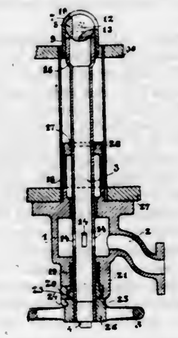
1. A cylinder cock comprising a casing provided with a manually operable valve, and a supplemental valve in the wall of the casing, said supplemental valve having two valve seats and a single ball valve, said ball valve being actuated in one direction by pressure from within the cylinder and in the opposite direction by suction within the cylinder and adapted to assume neutral position automatically.

2. In a cylinder cock, a casing having a valve seat, a manually operable normally closed valve, a supplemental valve in the wall of the casing, said valve having two valve seats and a single ball valve, said ball valve being adapted to automatically assume neutral position between the two valve seats in the absence of pressure from either direction.

3. In a cylinder cock, a casing, a closure therefor, a valve seat on the closure member, a manually operable valve adapted to normally engage said valve seat, said casing having an opening in its wall, a valve seat formed in said opening, a plug in said opening, a valve seat on the plug and a ball valve adapted to automatically assume a central position between the two valve seats in the absence of pressure from either direction.

4. In a device of the character described, a two-part casing comprising a body portion and a closure therefor, said closure member having a valve seat thereon, a normally closed, manually operable valve adapted to engage said seat, said body portion having an opening in its side, a valve seat formed in said opening, a hollow plug in said opening, a valve seat formed on the plug and a ball valve adapted to rest normally in the opening between the two valve seats and to be actuated in one direction by pressure from within the cylinder and in the opposite direction by suction within the cylinder.

1,267,003. BOILER-CLEANER. ALBERT SKOGLUND and JOHAN BORE, Gottenborg, Sweden. Filed Dec. 11, 1916. Serial No. 136,211. (Cl. 137—97.)



1. A boiler cleaner comprising a steam supply pipe, a steam tube communicating with the supply pipe and mounted for rotation, means for positively rotating the said tube, a steam nozzle carried by the steam tube for rotation therewith and mounted for angular adjustment with relation to the axis of the latter, and means for securing the nozzle in adjusted position.

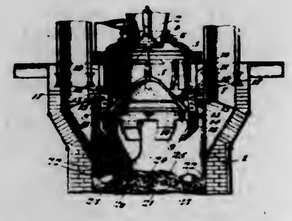
2. A boiler cleaner comprising a steam supply pipe, a steam tube communicating with the supply pipe and mounted for rotation, means for rotating the said tube, a steam nozzle carried by the steam tube for rotation therewith and mounted for angular adjustment with relation to the axis of the latter, the said nozzle having a main delivery channel adapted to be adjusted angularly by turning the nozzle, means for securing the nozzle in adjusted position, and means operable by said nozzle for delivering a jet laterally from the nozzle in fixed angular relation to the axis of the steam tube irrespective of adjustment of the nozzle.

3. A boiler cleaner comprising a steam supply pipe, a steam tube communicating with the supply pipe and mounted for rotation, means for rotating the said tube, the said tube having a spheroidal socket at its outlet end and a lateral secondary delivery opening adjacent thereto,

a spheroidal steam nozzle fitting adjustably in the said socket and having a diametrical delivery channel which is flaring outwardly in one direction and narrow in a direction at right angles thereto so as to produce a fan-like jet and the outlet end of which is contracted medially and wider at the sides, the nozzle being provided further with a secondary delivery slot which is disposed so as to be in communication with the interior of the steam tube and the said secondary delivery opening at all times irrespective of angular adjustment of the nozzle, and means for securing the nozzle in adjusted position.

[Claims 4 to 6 not printed in the Gazette.]

1,267,004. BLAST-FURNACE. EDWIN E. SLICK, Westmont borough, Pa. Filed June 29, 1914. Serial No. 847,835. (Cl. 214—36.)



1. In a blast furnace charging apparatus adapted to operate on substantially the entire charge, a bell and hopper, a stationary distributer extending downwardly below said hopper, provided with a plurality of fingers, the lower portions of which extend inwardly toward each other.

2. A blast furnace charging apparatus adapted to operate on substantially the entire charge, a bell and hopper, a stationary distributer extending below the hopper and surrounding said bell, the upper portion of the distributer being substantially vertical and adapted to contact with the material of the charge and the lower portion provided with a plurality of fingers, the lower ends of which are inclined inwardly toward each other.

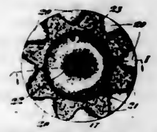
5. Blast furnace charging apparatus adapted to operate on substantially the entire charge, comprising a charging hopper, a hopper extension, a charging bell, arranged to direct the charged materials toward the furnace wall and a series of depending deflectors secured to the hopper extension to extend below the charging bell around the periphery thereof and arranged to engage and deflect portions of the charged materials toward the center of the furnace, the central portion between the fingers being unobstructed.

8. Blast furnace charging apparatus having means to direct the charge downwardly and outwardly substantially in the form of a cone; and distributing means allowing spaced portions of the charge to freely pass, to form an outer circle of heaps, and deflecting other portions inwardly to form an inner ring of heaps; whereby the finer and coarser particles are arranged in different areas.

10. A blast furnace charging apparatus comprising a charging bell and hopper adapted to receive and deliver an entire charge, a stationary distributer extending below said hopper and adapted to surround the lower portion of the bell when the same is lowered, the upper portion of the distributer being continuous and provided with a plurality of fingers spaced apart and extending below said upper portion, the upper parts of the fingers being substantially upright and the lower portions thereof inclining inwardly toward the center of the furnace, whereby portions of the charge are discharged toward the furnace wall, other portions toward the center and other portions intermediate thereof, forming a plurality of columns separated by the coarser materials to facilitate the smelting thereof

[Claims 3, 4, 6, 7, and 9 not printed in the Gazette.]

1,267,005. BLAST-FURNACE OPERATION. EDWIN E. SLICK, Westmont borough, Pa. Filed Apr. 16, 1915. Serial No. 21,660. (Cl. 214—152.)

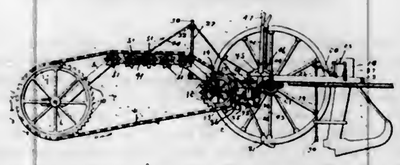


1. The method of operating blast furnaces which consists in charging the materials into the top portion thereof, causing a portion of the material to be discharged in a plurality of streams toward the side walls of the furnace and other portions to be discharged in a plurality of streams toward the center of the furnace, thereby forming a plurality of columns separated by the coarser materials, whereby the stock settles and smelts uniformly.

3. The method of operating a blast furnace which consists in charging the stock into the upper part thereof, causing a plurality of portions of the same to be discharged toward the side walls of the furnace, another plurality of portions of the same to be discharged toward the center of the furnace and other portions to be discharged more directly downward, thereby forming a plurality of columns in the stock, separated by irregular and predetermined lines of cleavage, whereby the gases pass upwardly through all portions of the charge and the charge smelts and settles uniformly in all portions of the furnace.

[Claim 2 not printed in the Gazette.]

1,267,006. CHECK-ROW ATTACHMENT FOR CORN-PLANTERS. FRANK B. SNAVELY and ALBERT J. ULVESTAD, Lake City, Iowa. Filed Apr. 13, 1917. Serial No. 161,805. (Cl. 111—19.)



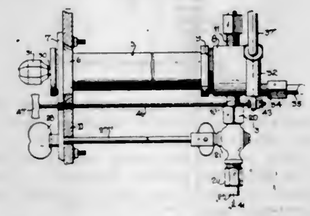
1. A check row attachment for corn planters adapted to attachment to the main frame of a corn planter, comprising a pair of similar angle bars spaced apart, a sprocket wheel mounted between the angle bars at the rear end of said frame adapted to move in contact with the ground, a smaller sprocket wheel similarly mounted at the forward end of the angle bars, a traction belt in engagement with both sprocket wheels inclosed by said angle bars, a fender frame supporting said angle bars and pivoted at the forward end to the main frame, means connected with the smaller sprocket wheel for dropping corn at predetermined intervals.

3. In a check row attachment for corn planters provided with a main frame, a tractive belt frame, a shaft mounted therein, a transmission shaft driven by the tractive belt mounted at one end of said frame, a fender mounted on said tractive belt frame and pivoted to the main frame in advance of the tractive belt frame, an actuating wheel mounted on the transmission shaft, and means connected with the actuating wheel for dropping corn at predetermined intervals.

5. In a check row attachment for the main frame of a corn planter, an actuating wheel, means connected with the ground for driving said wheel, a fender attached to said driving means and to the main frame, a rocker shaft, means connected with said rocker shaft and said actuating wheel for driving said shaft and for dropping corn at predetermined intervals, a second rocker shaft, crank arms mounted on the extremities of said shaft, pressure bars mounted at the extremities of said crank arms for marking the position of the hills and means connected with said first rocker shaft for driving said second rocker shaft.

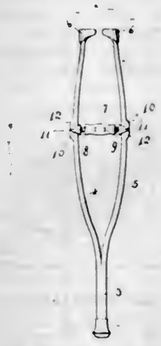
[Claims 2, 4, and 6 not printed in the Gazette.]

1,267,007. PRIMING DEVICE FOR GASOLENE-ENGINES. PAUL STAMPKA, Nampa, Idaho, assignor of one-tenth to Ogden Dutcher, one-twentieth to William P. O'Connor, and one-twentieth to Ausfrid L. Anderson, Nampa, Idaho. Filed Nov. 14, 1917. Serial No. 201,968. (Cl. 123—180.)



In a priming apparatus for internal combustion engines, a pump including a cylinder and piston operating therein, said cylinder having a head on one end, a connection between said cylinder head and a pressure receiving tank, a manually operable valve connected to said head to open communication either between the cylinder and a source of fuel supply or between the cylinder and the atmosphere, said cylinder head being additionally provided with a passage, a supply connection leading from the pressure tank to said passage, a valve normally closing communication between said supply connection and the passage, a conduit connecting said passage to the several engine cylinders, and manually operable means connected to the valve to open the same and release a priming charge into said conduit.

1,267,008. CRUTCH. JOSEPH A. STANSBURY, Los Angeles, Cal. Filed Oct. 3, 1917. Serial No. 194,492. (Cl. 135—51.)



2. In a crutch having a leg end and two bars extending upwardly from the leg end, an adjustable handle disposed between the two upwardly extending bars for clamping the bars toward the arm.

3. In a crutch having a leg end and two bars extending upwardly from the leg end terminating in clamping members fitting around the arm above the hand in which the crutch is used, a handle disposed between the two bars a suitable distance below the clamping members so as to form adjusting means for the clamping members.

4. In a crutch having a leg end and two bars extending upwardly from the leg end terminating in clamping members fitting around the arm above the hand in which the crutch is used, one bolt connected to each of the bars one of the bolts having right hand threads while the other has left hand threads, and a handle turnably mounted on the bolts having left and right hand threads inside fitting on the threads of the bolts forming the adjusting means for the clamping members on the bars of the crutch.

[Claim 1 not printed in the Gazette.]

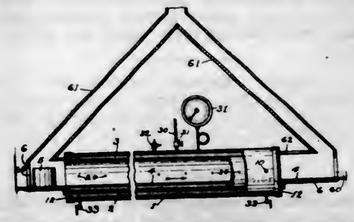
1,267,009. LAMP-REMOVER. LOUIS J. STEARN, Cleveland, Ohio. Filed July 5, 1917. Serial No. 178,832. (Cl. 240—101.)



1. In a globe remover, a staff, a hollow rotatable member mounted in said staff and extending through the same, a clamp comprising a pair of jaws secured together at one end and being capable of moving toward and away from each other at their free ends, a lever pivoted on said staff and having one end capable of moving toward and away from the same, a link secured at one end to said lever end and having its opposite end extended into said hollow member and secured to the connected end of said clamp jaws, and means for rocking said lever.

[Claims 2 to 5 not printed in the Gazette.]

1,267,010. EXHAUST-BOX. ANDREW W. SWANSON, Bellingham, Wash., assignor to Swanson Exhaust Box Company, Seattle, Wash., a Corporation of Washington. Filed Sept. 26, 1917. Serial No. 193,382. (Cl. 126—272.)



1. A device of the character described comprising a steam jacketed passageway, means for conducting cans therethrough and means for successively subjecting the individual cans to the action of jets of live steam substantially throughout the length of their passage through said passageway.

2. A device for exhausting traveling cans comprising a chamber open to the atmosphere, a steam jacket for said chamber, means for maintaining steam under pressure in said jacket, means for conducting cans through said chamber and means for introducing live steam into said chamber during the passage of the cans therethrough.

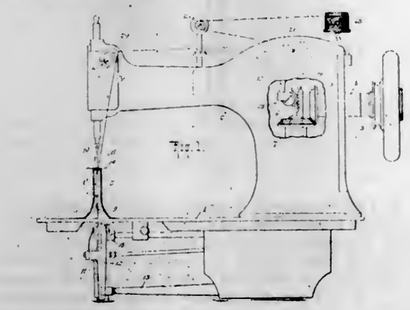
4. A device for exhausting traveling cans comprising an open ended tube, a jacket about said tube, means for supplying steam under pressure to the jacket, and a can conveyer traveling in the tube, said tube having openings in its walls which establish communication between the interior of the tube and the jacket, said openings being of such restricted area that pressure may be maintained in the jacket.

5. An exhaust box device for cans comprising two nested tubes connected at their ends to form a steam jacket between them, the inner tube having steam discharging apertures in its walls connecting with said jacketing space and means for passing the cans through said inner tube.

8. A can exhausting device comprising a steam jacketed tube having steam discharging holes in its walls, and a can-conveying belt passing through said tube.

[Claims 3, 6, 7, and 9 to 11 not printed in the Gazette.]

1,267,011. TAKE-UP FOR SEWING-MACHINES. WILLIAM H. TERWILLIGER, Amsterdam, N. Y., assignor to Frederick Klein, trustee. Filed May 29, 1915. Serial No. 31,144. (Cl. 112—26.)



In a sewing machine of the character described, the combination of a fixed member, a tension device supported by said member, a sheave supported by said member having its axis perpendicular to the axis of said tension device, a vibrating arm for taking up slack in the needle thread and sheaves carried by said arm, the thread being carried over said sheaves and tension device to the needle.

1,267,012. METHOD OF AND APPARATUS FOR MAKING SULFURIC ACID. LUDWIG A. THIELE, Columbus, Ohio. Filed Feb. 12, 1917. Serial No. 148,020. (Cl. 23—1.)

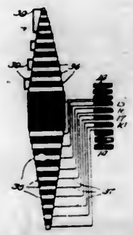


1. The method of making sulfuric acid which consists in introducing the gases from which the acid is made into an acid chamber by a plurality of conduits and at a different rate of flow from each conduit.

10. A sulfuric acid plant comprising a Glover tower, an acid chamber, a plurality of pipe connections between said tower and said chamber and entering said chamber tangentially, said connections being of different sectional areas and different lengths, the smallest pipe being of the greatest length and the largest of the shortest length, and a plurality of outlet conduits concentrically arranged in the bottom of the chamber on a diameter approximately half the diameter of the chamber.

[Claims 2 to 9 not printed in the Gazette.]

1,267,013. TRANSFORMER. CHESTER H. THORDARSON, Chicago, Ill. Filed Sept. 27, 1915. Serial No. 52,775. (Cl. 175—356.)



1. An adjustable self-balancing transformer comprising a core, primary and secondary windings thereon, tap-off conductors connected to one or more of the intermediate coils of one of the windings, said conductors being tubular, some of which are inclosed by others and separated by insulating tubes and interconnecting means to bridge across said conductors.

2. An adjustable self-balancing transformer comprising a core, primary and secondary windings thereon, tap-off conductors connected to one or more of the intermediate coils of one of the windings, said conductors being tubular, some of which are inclosed by others and separated by insulating tubes and interconnecting means to bridge across said conductors, the larger conductors being shorter than the contained smaller conductors and the insulating tubes being arranged to expose the ends of the conductors.

3. A series of take-off conductors for self-balancing transformers and the like, some of which are tubular and surround the others, insulating tubes separating said conductors and arranged at their ends to expose the ends of the conductors, said conductors and tubes being progressively longer from the larger, central inclosing conductor and tube to the outer ends of the device, and connecting means to bridge across the ends of said conductors.

1,267,014. LENS. EDGAR D. TILLYER, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 29, 1916. Serial No. 134,130. (Cl. 88—54.)



3. A two part optical lens, in which one of the parts has a roughened surface for engagement with the other part, and an interposed filler cement of the same refractive index as the roughened part for securing the parts in engagement.

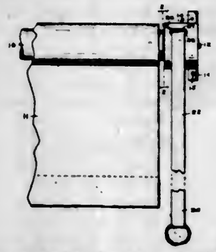
[Claims 1, 2, and 4 not printed in the Gazette.]

1,267,015. LICENSE-TAG. ROBERT F. TIMMONS, Coshocton, Ohio. Filed Apr. 14, 1917. Serial No. 162,155. (Cl. 40—63.)



A license tag comprising a main plate, a supplemental plate designed for disposal against the face of the main plate, and means upon the main plate for supporting the supplemental plate against downward movement and for holding the same against lateral movement, the said plates having openings designed to register when the plates are assembled whereby to provide means for the passage of an element for attaching the tag to a vehicle and also for holding the supplemental plate against upward displacement.

1,267,016. WINDOW-SHADE FIXTURE. THOMAS J. UNDERWOOD, Kokomo, Ind. Filed Oct. 22, 1917. Serial No. 197,782. (Cl. 156—34.)



1. A window shade fixture comprising a roller, a spindle arranged in the end of said roller, lugs rotating with said spindle, a roller supporting bracket provided with an inclined slot adapted to receive the end of said spindle, a pivoted lever carried by said bracket, an ear on said lever adapted to engage the lugs on the spindle with the spindle resting in the depressed end of the slot, and means for moving the spindle into the elevated end of the slot and for moving the ear out of the path of travel of said lugs.

2. A window shade fixture comprising a roller for the window shade, a spindle arranged in the end of said roller, a disk carried by said spindle, lugs on said disk, a roller supporting bracket provided with an inclined slot adapted to receive the end of the spindle, a pivoted lever carried by said bracket, and an ear on said lever, said ear adapted to be moved into and out of operative relation of said lugs when the spindle is moved into the raised end of the slot.

1,267,017. PACKAGE FOR CINEMATOGRAPH-FILMS. JAMES WARRY VICKERS, London, England. Filed Aug. 24, 1916. Serial No. 116,662. (Cl. 242—76.)

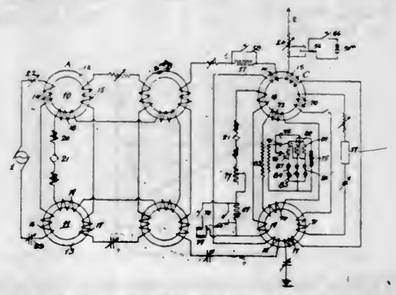


5. In a box package for a cinematograph film the combination of a bottom that has a central aperture, a tubular pillar rising from the bottom with the axis of its bore concentric with the said aperture, walls connected to the bottom slotted to provide egress for the film and weaker in their substance on either side of and immediately adjacent the slot and faced with non-abrasive light-tight material at the slot, and a top that is a counterpart of the bottom constructed so that its walls slip over the walls of the bottom and its pillar telescopically engaged with the pillar of the bottom.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,267,018. TRANSMITTING APPARATUS FOR WIRELESS TELEGRAPHY AND TELEPHONY. GEORG VON ARCO and ALEXANDER MEISSNER, Berlin, Germany, assignors to Gesellschaft für Drahtlose Telegraphie M. B. H., Berlin, Germany. Filed Mar. 6, 1914. Serial No. 822,901. (Cl. 250—17.)

1. In a radio transmission station having an alternating current generator, a plurality of frequency changers for step by step increasing the generator frequency, an antenna supplied with high frequency energy by said changers and key controlled means operative in the antenna for de-tuning it relatively to the frequency impressed upon it by said changers, and a resistance in one of said changer circuits having a second key controlled means in shunt, whereby for producing a signal the antenna is brought into resonance with the frequency produced in same and the resistance is short circuited, while for interrupting the signal the resistance is first thrown into circuit and then the antenna de-tuned.

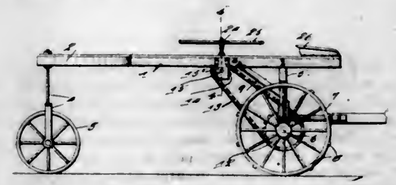


5. In a radio transmission station, the combination of stationary frequency changers having alternating current coils and auxiliary magnetizing coils, and an antenna suitably connected with said changers, said magnetizing coils having two windings and separate energizing circuits therefor, one of said windings adapted to cause a permanent magnetization of suitable degree, the other winding having means for producing signals in circuit with it for controlling the high frequency energy transmitted to said antenna through said alternating current coils.

12. In a radio transmission station having a primary alternating current generator, a plurality of sets of frequency changers for step by step increasing the generator frequency, said changers having primary and secondary windings and auxiliary magnetizing coils, an antenna to which the high frequency energy is supplied by said changers and which is connected to the secondary windings of the last changer set, the auxiliary magnetizing coils of said last set consisting of two windings with separate circuits, one of said circuits effecting the permanent saturation of the changer coils, a microphone system connected to the other circuit and means between said microphone system and the auxiliary magnetizing winding of said circuit for separating the direct current from the alternating current and a current transformer located between said microphone system and the auxiliary magnetizing windings of said circuit.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

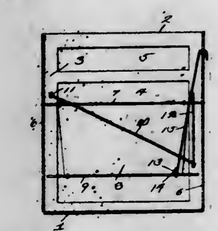
1,267,019. BROOM-CORN TABLER. MARTIN LUTHER WADE, Marlow, Okla. Filed May 26, 1917. Serial No. 171,256. (Cl. 56—135.)



A broom corn tabler of the class described comprising a table, wheels supporting said table, an axle carried by said wheels, a sprocket wheel carried by said axle, a shaft carried by said table, a sprocket carried by said shaft, a chain for driving said sprockets, journal blocks carried by the sides of said table and receiving the ends of said shaft, said table provided with side rails, an inverted substan-

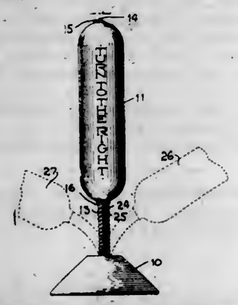
tially U-shaped bracket secured to the under face of said table and abutting at one end against said side rails, said bracket provided with a vertically extending journal extending through said table, a vertical finger-carrying shaft extending through said journal, said bracket provided with a depending end having a journal portion thereon for receiving said first mentioned shaft, and means carried by said shafts for rotating said finger-carrying shaft, as said first mentioned shaft is operated.

1,267,020. POULTRY TRAP-NEST. ROBERT N. WALTERS, Avalon, Wis. Filed Oct. 4, 1916. Serial No. 123,701. (Cl. 119—49.)



A nest of the class described comprising a box, a doorway formed in the front of said box, a door pivotally supported by the front for partially closing said doorway and having its pivot extending parallel with said front to permit of the door swinging toward and away therefrom, a hooked rod pivotally supported at one end of said box and adapted to engage the free end of said door for holding the same in its open position, a bar pivotally supported by said front and engaged with the upper end of the door when the same is open and adapted to swing downwardly with the door when moving to closing position and to extend diagonally of the door to hold the same closed, a guide for said bar carried by said box, and a rod carried by the free end of said door and adapted to contact said front to limit the ontward movement of the door.

1,267,021. SILENT POLICEMAN. JOHN A. WATTS, Milford, Pa. Filed Aug. 18, 1917. Serial No. 186,984. (Cl. 189—23.)

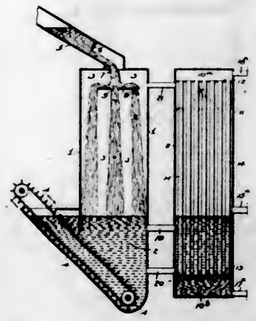


1. In a construction of the class described, a base having a relatively large bottom and having upwardly and inwardly extending sides terminating in a relatively large opening in the top thereof, substantially above the plane of the bottom of the base, an indicating device, and flexible means for mounting said device upon said base, said means being secured to said base substantially in the plane of the bottom and extending freely through the opening in the top of said base and normally out of contact with said top, the sides protecting the lower portion of the flexible means.

2. In a construction of the class described, a base having substantially the form of a truncated cone and having an opening in the top thereof, a signal device, and a flexible support for mounting said device upon said base, said support being secured substantially in the plane of the bottom of said base and extending through the opening in the top thereof, said opening being large with respect to said support.

[Claims 3 to 6 not printed in the Gazette.]

1,267,022. SLAG-HEATED STEAM-GENERATOR. UTLEY WEDGE, Ardmore, Pa., assignor, by mesne assignments, to Furnace Patent Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 16, 1914, Serial No. 851,332. Renewed Apr. 27, 1916. Serial No. 94,054. (Cl. 122—28.)



1. The combination, in a slag heated steam generator, of a water container, means for discharging a stream of molten slag into the same, and a plate interposed in the path of said stream, said plate being located above the level of the water in the container, and presenting a flat upper surface of such width as to cause the initial stream of slag on striking said face to spread laterally and form a plurality of separated streams before it drops from the plate into the water.

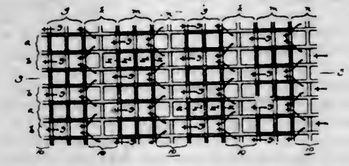
2. The combination, in a slag heated steam generator, of a water container, means for discharging a stream of molten slag into the same, and a plate interposed in the path of said stream, said plate being located above the level of the water in the container and having a central opening therein through which part of the initial stream of slag can pass downwardly into the water, the plate being of such width as to cause lateral spreading of the remainder of the initial stream into a plurality of separated streams before it drops into the water.

3. The combination, in a slag heated steam generator, of a water container, means for discharging molten slag into the water for the purpose of generating steam therefrom, and a secondary steam generator having therein a body of water separate from the slag heated water, and means for causing said slag heated water to impart its heat to said separate water body.

4. The combination, in a slag heated steam generator, of a water container, means for discharging molten slag into the water for the purpose of generating steam therefrom, a secondary steam generator having therein a body of water separate from the slag heated water, and means for carrying the steam generated from the slag heated water first through the steam arising from said separate body of water and then through the water itself.

5. The combination, in a slag heated steam generator, of a water container, means for discharging molten slag into the water for the purpose of generating steam therefrom, a secondary steam generator having therein separated water chambers each with steam space above the water, means for supplying one of these water chambers with heated water derived from the slag steam generator, means for connecting the steam chamber of the slag steam generator with the steam space above said water body, means for supplying the other water chamber of the secondary steam generator with a body of water separate from the slag heated water, and means for causing the slag heated water in said secondary steam generator to heat saaid separate body of water therein.

1,267,023. DUST-COLLECTOR. UTLEY WEDGE, Ardmore, Pa., assignor to the Process Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 14, 1916. Serial No. 120,179. (Cl. 183—79.)



1. In a device for separating dust from dust laden gases, the combination of members having passages therethrough for the falling dust particles, said members being so disposed as to form between them flow passages for the gas above and transverse to said dust passages.

5. In a device for separating dust from dust laden gases, the combination of members having passages therethrough for the falling dust particles, said members being so disposed in superposed courses as to form gas passages communicating with said dust passages, the latter, after the falling dust particles have entered them, shielding said particles from the gas during their further fall.

10. In a device for separating dust from dust laden gases, the combination of members having passages therethrough for the falling dust particles, said members being disposed in superposed courses and the members of each course being in staggered relation to one another and to the members of adjoining courses so as to form deflecting gas passages communicating with the dust passages of members of lower courses.

20. In a device for separating dust from dust laden gases, the combination of members having passages therethrough for the falling dust particles, said members being disposed in superposed courses with gas passages between the members of each course, the dust passages of members of adjoining courses communicating with each other, and said passages having therein inclined partitions for directing the dust from an upper to a lower member, the inclined partitions of the members of one course discharging onto the inclined partitions of the members of a course below.

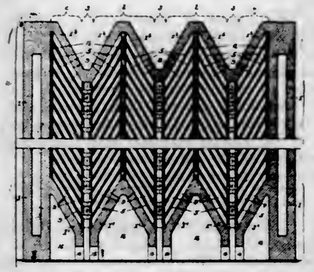
25. In a device for separating dust from dust laden gases, the combination of members so disposed as to form between them flow passages for the gases, said members having passages therethrough for falling dust particles, which passages are transverse to the flow passages and are closed at the sides against the flow passages but open thereto at the top.

[Claims 2 to 4, 6 to 9, 11 to 19, 21 to 24, and 26 to 31 not printed in the Gazette.]

1,267,024. DEVICE FOR SEPARATING MATTER FROM A FLUID CONTAINING THE SAME. UTLEY WEDGE, Ardmore, Pa., assignor to The Process Engineering Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 26, 1916. Serial No. 127,821. (Cl. 183—110.)

1. The combination, in an apparatus for separating, by gravity, matter from fluid carrying the same, of a receiver and a discharge chute disposed side by side, said receiver presenting a surface at such an angle to the horizontal that matter deposited thereon will slide therefrom by gravity into the adjoining chute, the sides of the latter having therein openings for the passage of matter from the receiver into the chute, and said openings being vertically contracted as compared with the flow passages of the receiver with which they communicate.

3. The combination, in apparatus for separating, by gravity, matter from fluid carrying the same, of alternating receivers and discharge chutes, said receivers being composed of members presenting receiving surfaces inclined at such an angle to the horizontal as to cause matter deposited thereon to slide therefrom, by gravity, and said chutes being composed of members having closed ends and vertically contracted side openings through which matter can be delivered from corresponding receiving members to inclosed passages in the chute members.



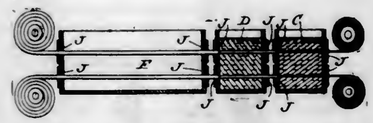
5. The combination, in apparatus for separating, by gravity, matter from fluid carrying the same, of receivers and discharge chutes disposed side by side, said receivers being composed of members disposed in superposed and vertically separated courses with intervening flow passages, and each inclined at such an angle in respect to the horizontal as to cause matter deposited thereupon to slide therefrom, by gravity, said members having, at the lower ends, toes projecting from the inclined surface and said discharge chute having members with vertical passages therethrough, end walls upon which said projecting toes are supported and side walls recessed for the passage of matter from the receiving members into said vertical passage.

7. The within described receiving member for apparatus for separating, by gravity, matter from fluid carrying the same, said member having a receiving surface inclined at such an angle in respect to the horizontal as to cause deposited matter to slide therefrom, by gravity, and having at each edge a toe projecting forwardly from the lower portion of the receiving surface.

9. The within described chute forming member for apparatus for separating, by gravity, matter from fluid carrying the same, said member having a vertical passage therethrough, walls at the ends of said passage and walls at the sides thereof, both of said side walls being recessed at the bottom to permit flow of matter from the outside of the member into the vertical passage thereof.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,267,025. METHOD OF PRODUCING A REINFORCED RESILIENT MATERIAL AND THE ARTICLE OF MANUFACTURE PRODUCED THEREBY. EMIL WEINHEIM, New York, N. Y. Filed Feb. 16, 1916. Serial No. 78,624. (Cl. 91—68.)



1. A method of reinforcing resilient material, which consists in weaving on intermixing threads coated with a homogeneous resilient material to form a fabric, then applying to the fabric on one or more of its surfaces a further body of resilient material.

3. A method of reinforcing resilient material, which consists in weaving or intermixing threads coated with a homogeneous resilient material and in an amount sufficient

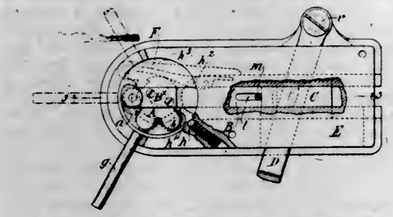
when such threads are woven or intermixed, to prevent the contact of threads or movement of one thread over another, then applying to the fabric on one or more of its surfaces, a further body of resilient material.

4. As a new article of manufacture, a fabric consisting of interlaced threads, each thread separately covered with a material which after drying is resilient and homogeneous and a coating of corresponding resilient and homogeneous material applied to the surface or surfaces of such fabric.

6. As a new article of manufacture, a fabric having each thread separately enveloped in a coating of a material which is homogeneous and resilient after drying, and said coated threads interwoven to lie in juxtaposition but not cemented to each other, and such fabric impregnated with a corresponding material which coats and consolidates the fabric into a fabric which has approximately the resiliency of the coating material with approximately the tensile strength of the interwoven threads.

[Claims 2 and 5 not printed in the Gazette.]

1,267,026. CLIP-LOADING MACHINE. JOSEPH H. WESSON, Springfield, Mass., assignor to Smith & Wesson, Springfield, Mass., a Voluntary Association. Filed May 24, 1917. Serial No. 170,583. (Cl. 86—47.)

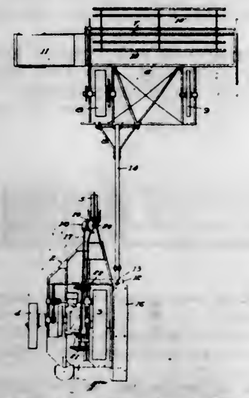


1. A clip loader comprising an oscillatable holder for the clip and means for pushing successive cartridges by a sidewise movement into the sockets of the clip.

16. A clip loader comprising a holder for a flat resilient clip having lateral sockets with contracted entrances, and means for assembling cartridges in said sockets adapted to force them sidewise into said sockets through their contracted entrances.

[Claims 2 to 15 not printed in the Gazette.]

1,267,027. TRACTOR-COUPLING DEVICE. CHARLES E. WHITE, Ruleton, Kans., assignor to Bull Tractor Company, Minneapolis, Minn., a Corporation. Filed July 31, 1916. Serial No. 112,394. (Cl. 56—33.)

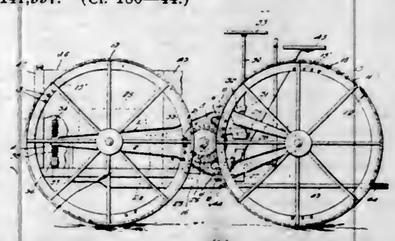


1. The combination, with a tractor having a suitable frame and forward and rear wheels, of a pole pivotally connected to said frame between said forward and rear wheels to swing horizontally and having its forward end extending beyond the front end of the tractor with an agricultural implement secured to the forward end of said pole, the point of connection between the pole and tractor being sufficiently back of the front of the tractor that the resistance offered by the tractor is greater than that offered by the agricultural implement in turning and guiding the implement by the tractor through said pole.

3. The combination, with a tractor having a suitable frame, a rear traction wheel and a forwardly arranged guide wheel pivotally supported upon said frame substantially in line with said traction wheel, of a pole pivotally connected to said frame between said steering and traction wheels to swing horizontally and having its forward end extending beyond the front end of the tractor, and an agricultural implement secured to the forward end of said pole, the point of connection between the pole and tractor being sufficiently back of the front of the tractor that the resistance offered by the tractor is greater than that offered by the agricultural implement in turning and guiding the implement by the tractor through said pole.

[Claim 2 not printed in the Gazette.]

1,267,028. TRACTOR. GEORGE ALBERT WHITTEMORE, Ludington, Mich. Filed Jan. 12, 1917. Serial No. 141,997. (Cl. 180—44.)



1. In a four wheel drive tractor, a frame including side bars having certain of their ends forked and enlarged to provide bearings, divergent arms pivotally engaged with the forked ends of the said side bars, segmental gears on said divergent arms, a steering column, a pinion on said steering column meshing with said segmental gears, a casing supported upon the bearings of the side arms, and power transmitting means in said casing, said power transmitting means being connected to the tractor wheels and to the prime mover of the tractor.

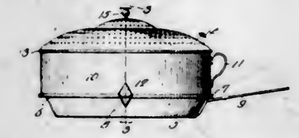
2. In a four wheel drive tractor, a frame including side bars having certain of their ends forked and enlarged to provide bearings, certain others of the ends of said side bars being bent inwardly and provided with bearing openings, divergent arms pivotally engaged with the forked ends of said side bars, segmental gears on said divergent arms, a steering column, a pinion on said steering column meshing with said segmental gears, a casing supported upon the bearings of the side arms, a prime mover, means engaged with the bearings of the inturned ends of said side bars for resiliently supporting said prime mover, and power transmitting means in said casing, said transmission means being connected to the tractor wheels and to the prime mover.

3. In a four wheel drive tractor, the combination with a frame including side bars having bearings formed in certain of the ends thereof and other arms pivotally engaged with said side arms at points in proximity of said bearings, a prime mover mounted on the frame, a longitudinally disposed driving shaft connected to said prime mover, a casing engaged and supported within the bearings of said side arms, a transversely disposed driven shaft mounted within said casing and intergeared with the driving shaft, and adjustable means arranged on said driven shaft and engaged with the wheels of the tractor for imparting driving motion thereto.

4. In a four wheel drive tractor, the combination with a wheeled frame including side bars having certain of their ends forked and enlarged to provide bearing openings, other arms pivotally engaged with said side arms at points in proximity of said forked ends, means engaged with said other arm to permit steering of the same, a prime mover mounted on the frame, a longitudinally disposed driven shaft connected to said prime mover, a casing mounted within the bearings of the side arms, a transversely disposed shaft arranged within said casing and intergeared with said driving shaft, a plurality of adjustable sprocket wheels arranged upon the opposite ends of said transversely disposed shaft, and circumferentially disposed gear teeth mounted upon the wheels of the tractor and engaged with said sprocket wheels whereby to permit the transmission of driving power thereto.

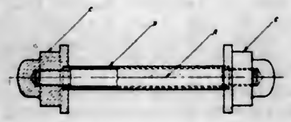
5. In a four wheel drive tractor, the combination with a wheeled frame including side bars having bearings formed in certain of the ends thereof, other bars pivotally engaged with said side bars, of segmental gears arranged upon said other bars, steering means engaged with said segmental gears, resilient supporting means arranged upon the side bars, a prime mover on said resilient supporting means, a longitudinally disposed driven shaft connected to said prime mover, a casing mounted within the bearings of the side arms, a transversely disposed driven shaft arranged in said casing and intergeared with the driving shaft, a plurality of adjustable sprocket wheels mounted upon the opposite ends of said driven shaft, circumferentially disposed gear teeth arranged upon the wheels of the tractor adjacent the rim portion thereof and adapted to be engaged with said sprocket wheels whereby to permit the transmission of driving power thereto, and a pulley mounted upon the free extremity of said driving shaft, as and for the purpose set forth.

1,267,029. FRYING-PAN. ANNA P. WILLIAMS, Scranton, Pa. Filed Apr. 12, 1916. Serial No. 90,722. (Cl. 53—7.)



A cooking utensil, comprising in combination, a pan structure having a pouring lip and a vertical marginal flange forming an internal seat, a wall member formed to rest on said internal seat, a projection on the wall member shaped to fit into said pouring spout to lock the pan and wall member against relative movement, and a removable cover for the wall member, said projection also serving as a closure for the pouring spout.

1,267,030. SLEEVE-BOLT. RICHARD WILLIAMS, Cleveland, Ohio. Filed Apr. 16, 1917. Serial No. 162,535. (Cl. 85—1.5.)

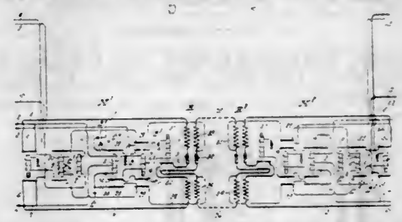


1. The combination with an iron bolt having a threaded portion, of a sleeve surrounding and inclosing the shank of the bolt, a cap nut engaging the threads for inclosing the same and having a counterbored portion closely embracing the exterior of the sleeve.

2. The combination with an iron bolt having a threaded portion, of a sleeve surrounding and inclosing the shank of the bolt, a cap nut engaging the threads for inclosing the same and having a counterbored portion closely embracing the exterior of the sleeve and having a shoulder within the counterbore to abut the end of the sleeve, said cap nut comprising an integral member having a washer-like portion, an angular portion, and an extension closure.

[Claim 3 not printed in the Gazette.]

1,267,031. TELEPHONE TRUNK-CIRCUITS. BERNARD D. WILLIS, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 23, 1916. Serial No. 116,486. (Cl. 179—16.)



1. The combination with a relay having two windings, of separate circuits for said windings having a common conductor, and a battery for operating said relay in one of said circuits outside the common conductor.

2. The combination with a relay provided with two windings, of separate circuits for said windings having a common earth return, and a battery in one of said circuits only, the other circuit constituting a path for the flow of earth currents unopposed by artificial sources of potential.

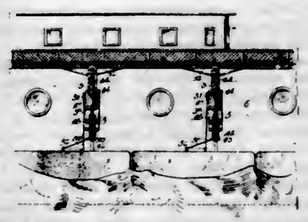
3. The combination with a trunk line connecting two exchanges, of a relay provided with two windings in one exchange, a battery in the other exchange for operating said relay, and ground return circuits for the said relay windings including, respectively, one conductor of said trunk line and said battery, and the other conductor of said trunk line exclusive of said battery.

4. The combination with a two conductor trunk line, of a relay continuously wound in the same direction and connected in bridge of said conductors at one end, a connection from the middle point of said relay to ground, connections from the other end of said conductors to ground, and a battery in series with one of said last ground connections.

5. In combination, a relay comprising a continuous winding in one direction grounded at its middle point, line conductors connected at one end, respectively, to opposite ends of said winding, a battery, and means for connecting said line conductors to ground at the other end and for including said battery in series with one of said conductors.

[Claims 6 to 20 not printed in the Gazette.]

1,267,032. TORPEDO-GUARD. BERTIE GRAY WILLIS, Avoca, N. C. Filed Dec. 5, 1917. Serial No. 205,535. (Cl. 114—240.)



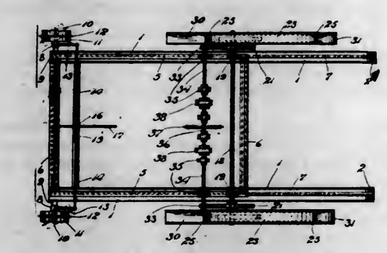
1. A torpedo guard, comprising in combination with a vessel, a plurality of guard plates supported at the sides of the vessel in parallelism with the major axis, and being

arranged *en échelon* at the bow and stern to conform to the contour of the vessel, and mechanism for adjusting each guard plate to remain in parallelism with said major axis regardless of the angularity of the support and contour of the vessel.

18. In a device as described, the combination of a boom head having a sheave, a rudder stock pendently supported by the head, a guard plate carried by the rudder stock, a collar on the rudder stock, a ball bearing on the rudder stock engaging the head, a compression spring between the collar and the ball bearing, and a lifting cable secured to the guard plate and passing over the sheave.

[Claims 2 to 17 not printed in the Gazette.]

1,267,033. WALKING-MACHINE. CARL F. WILSON, Bay City, Mich. Filed July 1, 1916. Serial No. 107,159. (Cl. 180—8.)



1. A traveling frame, comprising main and auxiliary supports adapted to be intermittently lifted and moved forward, a segment mounted upon one of the supports and adapted to have a rotary movement imparted thereto, and upper and lower racks mounted upon the remaining support and adapted to be alternately engaged by the segment gear.

2. A traveling frame, comprising main and auxiliary runners adapted to be alternately lifted and moved forward, upper and lower racks mounted upon the auxiliary runner and having pivotal connection therewith, and a segment gear rotatably mounted upon the main runner and adapted to engage the racks in alternation.

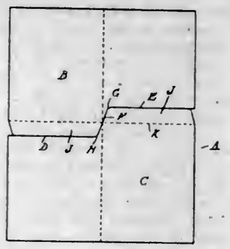
3. In a device of the character described, a frame including spaced apart main runners, a shaft on the frame, a segmental gear loosely mounted at each end of the shaft, an auxiliary runner located at each end of the shaft, a housing connected to and above each auxiliary runner in which the segmental gears are located, upper and lower racks in each housing for engagement by said segmental gears, and means to drive the gears, substantially as described.

4. In a device of the character described, a frame including spaced apart main runners, a shaft on the frame, a segmental gear loosely mounted at each end of the shaft, an auxiliary runner located at each end of the shaft, a housing pivotally connected to and above each auxiliary runner in which the segmental gears are located, upper and lower racks in each housing for engagement by said segmental gears, and means to drive the gears either separately or in unison, substantially as described.

5. In a supporting frame for dredges or the like, spaced apart main supporting runners having a comparatively wide under surface, a reinforcing beam extending from the rear end of each runner part of the length of said runner, brackets on the beams, a longitudinal beam carried by said brackets, and cross beams interposed between the longitudinal beams, said forward cross beams being located a distance back of the front ends of the runners whereby a dredge or the like mounted on the frame is held from over-balancing toward the front by the forward extensions to the runners in front of the forward cross beams, substantially as described.

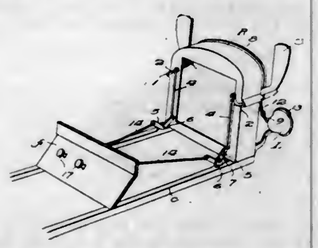
[Claims 6 and 7 not printed in the Gazette.]

1,267,034. LETTER-HEAD. WILLIAM N. WINFIELD, Detroit, Mich. Filed Nov. 20, 1916. Serial No. 132,307. (Cl. 11—19.)



A letter-head, comprising a double width blank which is arranged to fold sidewise and having on one side advertising matter and a heading arranged near the top of one half above the advertising matter so as to be associated therewith in the unfolded position of the blank, the upper part of the other half of the blank being cut away to also disclose the heading at the top of the sheet in the folded position of the blank, the part of the blank above which the heading is disclosed in the folded position forming a letter writing space and the advertising matter being concealed in the folded position of the blank.

1,267,035. DIRECTION-INDICATOR. HERBERT A. WRIGHT and CHARLES W. KENNEDY, Clarence, Mo. Filed Sept. 24, 1917. Serial No. 192,969. (Cl. 116—31.)



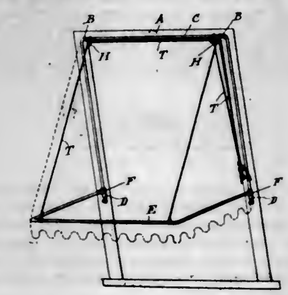
3. A direction indicator, including in combination with a vehicle and the headlights thereof, semaphore arms pivotally mounted upon the opposite sides of the forward end of the vehicle, a curved shield arranged adjacent and in spaced relation to the top of the forward end of the vehicle, pivotal arms mounted adjacent the semaphore arms and having portions thereof transparent and adapted to be swung over the vehicle headlights at times, and manual means arranged in the vehicle for independently operating the opposite pairs of arms.

5. A direction indicator, including, in combination with a vehicle and the headlights thereof, arms pivotally mounted upon the sides of said headlights and carrying transparent lenses in certain of the ends thereof, curved shields carried by the headlights for concealing said arms when the same are arranged in non-signaling positions, and manually operable means arranged in the vehicle and connected to the arms for independently moving the same.

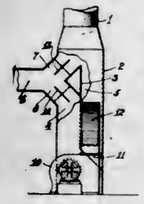
[Claims 1, 2, and 4 not printed in the Gazette.]

1,267,036. QUICK-SHIFTING AWNING-FRAME. FRANK T. ABBOTT, Newton Falls, N. Y. Filed Aug. 1, 1917. Serial No. 183,953. (Cl. 156—42.)

An awning frame, comprising a bail shaped member, hooks for attachment to the frame of a window opening in which said bail-shaped member is loosely held, the ends of said member having apertured screws therethrough and adapted to engage the frame of the window, collars adjustably mounted upon the member, and a second bail-shaped member pivoted to said collars.



1,267,037. DRAFT-CONTROLLING INSTALLATION FOR BOILER-FURNACES. ROBERT AGAR, Shortlands, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Sept. 1, 1914. Serial No. 859,594. (Cl. 110—162.)



In combination, a chimney stack having an inlet flue substantially above its base portion, a partition within the stack opposite the said inlet flue, said partition extending to a point substantially below the latter so as to divide the stack into compartments and forming with the stack two ducts, one of said ducts connecting said inlet flue with the stack above the partition and the other connecting said inlet flue with one of said compartments, dampers controlling said ducts, and a fan at the base of the stack below the inlet flue and supported independently of the stack and operative to force the flow of gas downward from the inlet flue through the compartment connected with said inlet flue and upward through the other compartment.

1,267,038. LOOSE-LEAF BINDER. WALTER CARL AKANS, Birmingham, Ala., assignor of one-half to J. A. Ryan, Birmingham, Ala. Filed Aug. 11, 1916. Serial No. 114,430. (Cl. 129—13.)



2. In a loose leaf binder, a back plate carrying studs, binding plates having diagonal elongated slots in which said studs work, oppositely threaded members on said binding plates, and a reversely threaded screw engaging said members and disposed transversely of the plates, substantially as described.

3. In combination, a back bone, a narrower and shorter metallic backing plate secured thereto, binding plates mounted on the backing plate, a slot and pin connection between said binding members and backing plate, the slots being diagonally disposed and the binding plates being movable both transversely and longitudinally of the back bone, alining threaded members near the center of said binding plates, and a transverse reversely threaded screw engaging said members, substantially as described.

4. In a loose leaf binder, a metallic backing plate, binder plates adjustable angularly thereon and movable to positions with their outer side edges contracted between or expanded beyond the side edges of the backing plate, a pin and diagonal slot connection between the backing plates and binding plates, and a transverse reversely threaded screw for moving the plates relatively, substantially as described.

5. A loose leaf binder comprising, in combination, two binding members formed of plates having a flange surrounding their ends and outer edges, there being reversely inclined diagonal slots in the bases of said plates, a metallic backing plate wider than the combined width of the binding plates and carrying rivet pins which pass through said slots and adjustably secure the binding plates to the backing plate, said slots being elongated to permit the binding plates to spread and bring their side flanges substantially beyond the side edges of the backing plate, and a back bone to which the backing plate is attached, substantially as described.

6. In a loose leaf binder, two adjustable binding plates having upturned flanges at their outer side edges, telescoping posts carried by said flanges, a back on which said plates are adjustable, pins connecting the binding plates to the back, there being in the plates elongated diagonal slots in which said pins work, and screw means to relatively adjust said binding plates.

[Claims 1 and 7 not printed in the Gazette.]

1,267,039. DENTAL IMPLEMENT. CLAUD O. AKIN, Princeton, Ky. Filed Mar. 31, 1917. Serial No. 158,935. (Cl. 15—39.)



1. A dental implement including a sleeve, and a strip extending longitudinally of the sleeve and connected therewith and folded to provide folds extending from the sleeve.

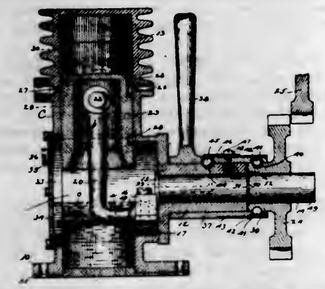
2. A dental implement comprising a head, a carrier extending from the head, a sleeve fitting upon the head and removable therefrom, and a strip extending longitudinally of the head and connected therewith and folded to provide folds extending from the sleeve.

1,267,040. FLUID-PUMP. CHARLES A. ANDERSON, Chicago, Ill., assignor of twenty-two and five-tenths one-hundredths to Earl L. Cook and twenty-two and five-tenths one-hundredths to John Algot Olson, Chicago, Ill. Filed Oct. 6, 1915. Serial No. 54,294. (Cl. 230—34.)

1. In a fluid pump, the combination of a cylinder, a piston, a crank shaft, connections therebetween for effecting reciprocation and oscillation of the piston, inlet and outlet ports for said cylinder, air passageways in said piston for coöperating with the ports to regulate the flow of the fluid, a crank case below said piston, fluid passageways serving to transfer compressed air from the crank case to the cylinder after preliminary compression in the crank case, a fluid vent in said crank case, and a piston channel connecting with the vent to open the crank case to the outside on a predetermined outward movement of the piston.

2. In a fluid pump, the combination of a cylinder, a crank shaft at right angles therewith, a piston within the cylinder, a wrist pin on the piston at right angles with the crank shaft when the piston is at the ends of its longitudinal reciprocation in the cylinder, a crank arm on said crank shaft, and an L-shaped connecting rod pivoted at one end on said wrist pin and pivoted

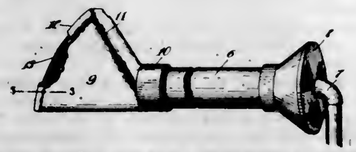
at its other end to the crank arm, said connecting rod effecting combined longitudinal reciprocation and rotary oscillation of said piston when the crank shaft is turned.



3. In a fluid pump, the combination of a cylinder, a piston, a crank shaft, a connection between said piston and crank shaft adapted upon rotation of the crank shaft to effect combined longitudinal reciprocation and rotary oscillation of said piston, air inlet and outlet ports for said cylinder and air passageways cut in said piston for coöperating with said ports to control the inflow and out-flow of air, a closed crank case whereby air will be compressed in said case during in-stroke of the piston, means connecting said crank case with the cylinder at the end of the in-stroke of the piston whereby air compressed in the crank case may flow into the cylinder, the air in said crank case being expanded during out-stroke of the piston, an atmosphere vent hole for said crank case, said vent hole being closed during the greater part of the movement of said piston, and a channel cut in said piston for coöperating with said vent hole after a period of outward movement of said piston to connect the crank case with atmosphere.

4. In a fluid pump, the combination of a cylinder, a piston within said cylinder and a crank shaft at right angles to said piston, said cylinder having an inlet at one side and an outlet at the other side and said piston having channels cut in its face to coöperate with said inlet and outlet, a crank arm on said crank shaft, and a connection between said piston and crank arm adapted upon rotation of said crank shaft to effect combined reciprocation and oscillation of said piston during which movement said piston channels coöperate with the inlet and outlet to control the flow to and from said cylinder.

1,267,041. GAS-BURNER. JACOB ANSPACH, Cleveland, Ohio. Filed Feb. 5, 1918. Serial No. 215,476. (Cl. 158—116.)



A gas burner comprising a mixing tube and a head at the front end thereof, said head having flattened converging sides terminating in a narrow segmental mouth substantially parallel to the axis of the tube and directed at an angle thereto and at one side only of said axis, whereby the flame may be projected at different angles in the plane of said axis, by turning the burner on said axis.

1,267,042. COMFORTER. EMMA C. ARNOLD, Mount Clemens, Mich. Filed Dec. 7, 1917. Serial No. 206,049. (Cl. 5—3.)

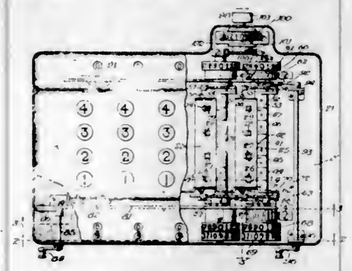
1. A blanket of the class described comprising a pair of sections, said sections including covering thereon, the ends of said sections abutting, the covering of one section being gathered and stitched together at a distance from the abutting end of the section, thus forming a flap extending toward the end of the section, the covering of the remaining section being stitched at the end of the section, thus forming a flap projecting beyond the end of the last mentioned section, said last mentioned flap fitting upon



the top of the first mentioned section, and under the first mentioned flap, thus allowing the first mentioned flap to fit upon the top of the last mentioned flap, and means for releasably retaining said flaps and the body of the first mentioned section together, whereby air currents will be prevented from passing through the abutting ends of said sections.

[Claim 2 not printed in the Gazette.]

1,267,043. CALCULATING APPLIANCE. PERRY B. ARRINGTON, Chicago, Ill. Filed Aug. 14, 1916. Serial No. 114,728. (Cl. 235—73.)



1. In a calculating-appliance of the character described, the combination of a plurality of number-wheels of different denominations, and means to operate each of said wheels, including a row of keys of different values and a shaft disposed longitudinally of the row and adapted to be actuated by said keys, the axes of said shaft and the corresponding number-wheel being coincident, the key of highest value of the row turning said shaft not more than a half revolution, substantially as described.

3. In a calculating appliance of the character described, the combination of a plurality of number wheels of different denominations, and means to operate said wheels, including a row of keys of different values for each of said number wheels, a shaft disposed longitudinally of each of said rows and actuated by said keys, and a plurality of arms arranged in stepped relation with which said keys coöperate, said shaft being coincident with the axis of the corresponding number wheel, substantially as described.

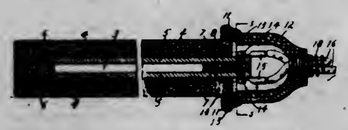
6. In a calculating appliance of the character described, the combination of a plurality of number wheels of different denominations, and means to operate said wheels, including a row of keys of different values for each of said number wheels, a shaft disposed longitudinally of each of said rows of keys on which the corresponding number wheel is mounted, a sleeve on each of said shafts, a plurality of arms on said sleeve in stepped relation and with which said keys coöperate, and a pawl and ratchet drive connection between said sleeve and shaft, substantially as described.

10. In a calculating appliance of the character described, the combination of a shaft, a number wheel actuated by said shaft, the axes of said shaft and wheel being coincident, a row of not more than five keys of different values, and means whereby said keys when actuated turn said shaft and number wheel amounts proportional to their values, the key of highest value turning the shaft not more than a half revolution, substantially as described.

12. In a calculating appliance of the character described, the combination of a plurality of rows of value keys, the rows being of different denominations, and the keys of each row being of different values, a shaft for, parallel to, and actuated by the keys of each row, and an item number wheel and a total number wheel for each of said shafts and concentric therewith, substantially as described.

[Claims 2, 4, 5, 7 to 9, 11, and 13 not printed in the Gazette.]

1,267,044. ELECTRIC WATER-PURIFIER. EDWARD M. BARNES, Hastings, Mich., assignor to American Utilities Company, St. Joseph, Mich. Filed June 30, 1917. Serial No. 177,956. (Cl. 204—25.)



1. In a structure of the class described, the combination of a cylindrical body member of insulating material having a central longitudinal slot therein and opposed internal longitudinal electrode receiving grooves in the side walls of said slot and recesses at the lower ends of said grooves and openings through the upper end of said body alined with said grooves, electrodes having laterally projecting lugs at their upper ends disposed in said grooves and their upper ends projecting through said openings and their said lugs resting on the upper end of said body, an internally shouldered cap having a conductor opening in the top thereof threaded upon said body with its shoulder engaging said lugs, said electrodes being provided with binding screws, and a conductor protector secured in said conductor opening of said cap.

6. In a structure of the class described, the combination of a longitudinally slotted body member of insulating material, the walls of the slot having electrode grooves therein, electrodes arranged in said grooves with their faces projecting therefrom and their upper ends projecting from the slot at the upper end of the body and being movable therefrom, means for retaining said electrodes engaging their projecting ends and means for securing the terminals of electric conductors to the projecting ends of said electrodes.

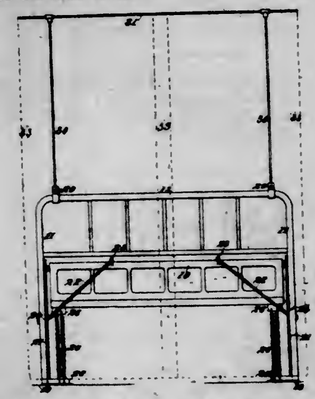
[Claims 2 to 5 not printed in the Gazette.]

1,267,045. FOLDING BED. JOHN C. BEACH, San Francisco, Cal., assignor to Lachman Wall Bed Company, San Francisco, Cal., a Corporation of California. Filed Jan. 26, 1916. Serial No. 74,357. (Cl. 5—54.)

1. In a folding-bed, the combination of a stationary head-frame, a movable main frame, suspension links pivotally connected between said frames for supporting the front end of the main frame in extended position, guide members between the frames for maintaining the main frame in proper spaced relation with the head-frame and counterbalancing springs connected between the main frame and the head-frame adapted to be placed under substantially the same tension at each extremity of movement of the main frame.

10. In a folding bed, the combination of a stationary head-frame, a movable main frame, vertical tracks on the head-frame, rollers carried by the main frame and operating against said tracks, swinging suspension links pivotally connected between the head-frame and the front end of the main frame, whereby to provide fulcrum supports for the latter movable downwardly when the bed is folded and upwardly when the bed is unfolded, and counterbalancing springs operable to appreciably assist both the folding and unfolding movements of the main frame.

11. In a folding bed, the combination of a stationary head frame, a movable main frame, vertical tracks on the head frame, rigid suspension links pivoted at one end to the front end of the main frame and at the opposite end to the head frame above and in alinement with the tracks, counterbalancing springs operable to assist to an appreciable degree both the folding and unfolding movements of the main frame, and rollers operable on the vertical tracks and journaled on the front end of the main frame in advance of the pivotal connection between the suspension links and the head frame.

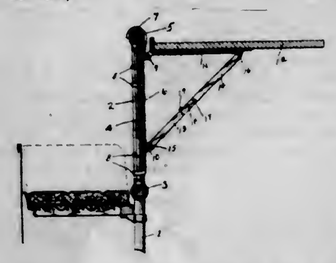


12. In a folding bed, the combination of a stationary head frame, a movable main frame, vertical track and roller connections between said frames, swinging suspension links between said frames upon which the main frame is supported and forming fulcrum supports therefor movable downwardly when the bed is folded and upwardly when the bed is unfolded, means for counterbalancing the main frame in extended position, and means for assisting in the unfolding movement of the main frame.

13. In a folding bed, a head frame provided with a vertical track, a main frame, a roller secured to the latter for operating on the track, suspension links pivotally connecting the main frame to the head frame, spring means connected at one end to the main frame adjacent the roller and at its opposite end to the head frame intermediate the ends of the path of travel of the roller, and other spring means secured at one end to the main frame at a point, when the latter is horizontally disposed, below the point of securement of the first spring means to the main frame and at its opposite end to the lower portion of head frame.

[Claims 2 to 9 not printed in the Gazette.]

1,267,046. WRITING-DESK. DAVID M. BEAIRD, Columbus, Ohio. Filed Oct. 28, 1914. Serial No. 869,119. (Cl. 45—82.)

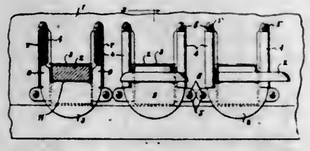


1. A writing desk attachment for a bed comprising spaced hanger members each provided with means at its

top for attachment to the upper portion of the foot piece of a bed, a pair of rearwardly projecting ears spaced along opposite edges of the upper portion of each of said hangers, a pair of rearwardly projecting ears spaced along opposite edges of the lower portion of each of said hangers, the ears of each pair being spaced from each other to receive the rods forming a portion of the foot of the bed between them, an outwardly extending bracket arm pivoted to the upper end of each hanger, a table element attached to said arms, and a collapsible brace member operatively connected between each hanger and its respective bracket arm.

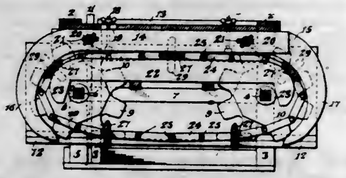
[Claim 2 not printed in the Gazette.]

1,267,047. MOUSE-GUARD FOR PIANOS. SILAS D. BELL, Childress, Tex., assignor to J. H. Mowery, Childress county, Tex. Filed May 13, 1916. Serial No. 97,249. (Cl. 84—24.)



In a device of the character described, two hollow standards arranged respectively at an edge of a pedal slot, means for securing the standards to the front board of the piano, a plate sliding in said standards and having its upper edge resting under a pedal, and springs arranged in the standards and forming means for suspending the plate from the front board of the piano and between the standards.

1,267,048. PROPELLER. LEE PERKINS BIGGERS, Palmersville, Tenn., assignor of one-twelfth to James M. Palmer, one-twelfth to Ben. J. Byars, one-twelfth to Charles N. Killgore, one-twelfth to Luther C. Brann, one-twelfth to Chester H. Rawls, one-twelfth to Walter G. McWherter, one-twelfth to Walter L. Lafon, one-twelfth to William M. Pentecost, one-twelfth to Luco L. Olds, and one-twelfth to J. M. Buckley. Filed Dec. 5, 1916. Serial No. 135,220. (Cl. 170—138.)

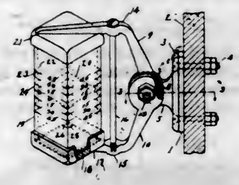


1. A propeller for vessels, comprising an endless series of blades or paddles, endless sprocket chains carrying the blades or paddles, spaced sprocket wheels carrying the chains and providing means whereby power may be applied to drive the propellers, arms at the ends of the propeller blades belond the chains, guide strips for the arms engaging them along the lower runs of the chains, guides in the path of the propeller blades or paddles between the chains and under-riding and supporting the upper run of the blades, and other guides over-riding and engaging the upper run of the blades, and provided with an extension dropping downwardly in the path of the blades where entering and leaving the lower run thereof whereby the blades are feathered in their course and each blade is caused to turn progressively on its longitudinal axis during successive circuits of the propeller.

2. A propeller for vessels, comprising an endless series of blades or paddles, and means for causing the feathering of the paddles, including guide members engaging the paddles on entering and leaving the water, the guide members engaging the paddles on leaving the water being in the path of the lower portion of each paddle to turn the latter to present that edge forwardly which is opposite from the edge entering the water.

[Claims 3 and 4 not printed in the Gazette.]

1,267,049. INCLINATION-INDICATOR. ORLANDO J. BOOS, Los Angeles, Cal. Filed Dec. 11, 1917. Serial No. 206,685. (Cl. 33—206.)



1. An inclination indicator for aeroplanes and the like, comprising a glass receptacle square in plan and having vertical flat sides and partly filled with mercury, and means for mounting the receptacle on a level in the aeroplane or the like with two diagonally opposite corners longitudinally of the machine and the other two transversely; said receptacle having graduations at the corners upon the front faces reading up and down from the normal level of the upper face of the mercury.

4. An inclination indicator for aeroplanes and the like, comprising a hollow glass square in cross section, a cup fitting the lower end of the glass, a gasket in the cup between the edge of the glass and the bottom, an inverted cup fitting the upper end of the glass, mercury partly filling the glass; said glass having graduations upon its face reading up and down from the normal level of the mercury; and means for mounting the glass upon an aeroplane or the like so as to be adjusted to the normal level of the machine.

[Claims 2 and 3 not printed in the Gazette.]

1,267,050. TOY VEHICLE. LEO A. BRIOEL, Cheviot, Ohio, assignor to Aman and Sandmann, Cincinnati, Ohio. Filed Sept. 29, 1914. Serial No. 864,173. (Cl. 21—191.)



1. A toy vehicle comprising a bed having a rear axle and wheels mounted thereon and a longitudinal recess to receive a seat post, a forward rotatably mounted truck provided with an axle and wheels mounted thereon, a steering post with handle bars to rotatably guide said truck relatively to said bed, and a seat post provided with a seat and projections to engage the bed to limit the movement of the seat post, said seat post being rotatably mounted relatively to said bed and having an erect operative position in rear of the handle bars and a reclining inoperative position with the seat post resting in said recess and the seat resting at the base of the steering post, leaving the main portion of the bed available as standing room.

4. A toy vehicle comprising a bed of sheet metal having a substantially plane upper face, a longitudinal depression to receive an adjustable seat post, and a downwardly projecting margin to increase the rigidity of the bed, and to serve as a means to attach a rear axle and seat post to said bed.

5. A toy vehicle comprising a bed having a substantially plane upper face, a longitudinal depression therein

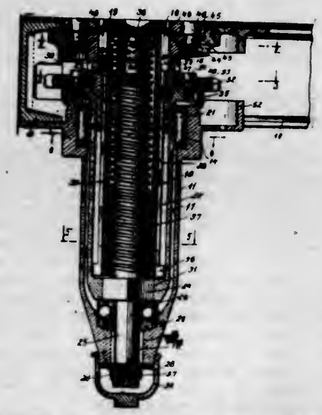
to receive an adjustable seat post, a rear axle attached to said bed and having wheels mounted thereon, a forward truck rotatably mounted relatively to said bed and having an axle and wheels mounted thereon, upwardly projecting handle bars to guide said truck relatively to said bed, a seat post provided with a seat rotatably mounted upon said bed and adjustable from a substantially horizontal to a substantially vertical position relatively to said bed.

6. A toy vehicle comprising a bed mounted upon wheels supported upon forward and rear axles, an upwardly projecting handle bar to rotatably guide said forward axle relatively to said bed, a seat post provided with a seat mounted upon a rotatably supported cross-arm having projections to engage the bed, and adjustable thereon to an upwardly projecting operative position in which said projections engage the bed, and a reclining inoperative position leaving the main portion of the bed available as standing room.

7. A toy vehicle comprising a bed of sheet metal having a substantially plane upper face, and a downwardly projecting margin reinforced at the sides by folding the metal upon itself to provide for attaching a rear axle and a seat-post thereto by means of through bolts passing through and carried by said reinforced depending margins.

[Claims 2 and 3 not printed in the Gazette.]

1,267,051. JACK. WILLARD C. BRINTON, New York, N. Y. Filed Aug. 26, 1916. Serial No. 117,031. (Cl. 254—103.)



3. A hoisting jack adapted to be mounted flush with a floor or deck, comprising a relatively stationary cup-shaped supporting housing affixed at the floor, a thrust bearing near the bottom of the housing, a thimble rotatably mounted on said thrust bearing within said cup-shaped housing and adapted to have power applied to it at the top, a screw-threaded spindle extending through said housing and said thimble and secured to said thimble, a hollow cylindrical hoisting quill flush with the floor when retracted and mounted to slide within said thimble and screwed onto said spindle, and means for preventing the rotation of the hoisting quill whereby the said quill is elevated by the rotation of the thimble and the spindle.

4. A hoisting jack adapted to be mounted flush with a floor or deck, comprising a relatively stationary cup-shaped supporting housing affixed at the floor and having a vertical guide bearing at its lower end and an annular frictionless thrust bearing near its lower end above the guide bearing, a thimble rotatably mounted on said thrust bearing within said housing, a screw-threaded spindle extending vertically through said thimble and secured thereto and supported at its lower end in said guide bearing, a hoisting member mounted to slide vertically within said thimble and screwed onto said spindle above the point of connection thereof with the thimble, a relatively stationary guide bushing at the top of the thimble, keys set in said bushing for preventing the rotation of the hoisting member, and a sprocket wheel secured near the upper edge of the thimble whereby the rotation of the sprocket wheel and the consequent turning of the thimble and a spindle serves to elevate the hoisting member, the top of said member being flush with the floor in its retracted position.

8. A jack for a truck platform comprising a housing having a cup-shaped body and a spaced integral ring at the top, a screw-threaded spindle rotatively mounted within the housing, a thrust bearing for preventing longitudinal movement of the spindle relative to the housing, a thimble affixed to the spindle near its lower end and extending slightly above the cup-shaped body of the thimble, a sprocket wheel secured to the thimble at the top, a hollow cylindrical quill surrounding the spindle and having an internally threaded portion coöperating with the spindle, a stationary threaded portion coöperating with the spindle, a stationary bushing secured to the ring member of the housing and extending between the thimble and the quill, keys mounted in the bushing for holding the quill against rotation and a cap for closing the upper end of the quill over the top of the spindle, whereby the quill may be raised and lowered by actuating the sprocket wheel.

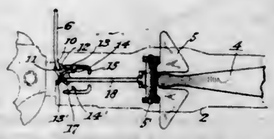
[Claims 1, 2, and 5 to 7 not printed in the Gazette.]

1,267,052. BOTTLE-CAP REMOVER. WILLIAM H. BURNETT, Mound City, Mo. Filed Dec. 3, 1914. Serial No. 875,256. (Cl. 65—46.)



In a device of the class described having a bottle cap removing section, said section being provided with an opening to receive the bottle cap, said opening being provided with a plurality of spurs formed integral with said section, on its inner surface, extending at an angle to the plane of said cap removing section adapted to engage the cap, and provide independent lateral movement of the device in the action of removing the cap, a resilient supporting hook member having a resilient supporting arm formed therewith, adapted to suspend the device on a garment, said spurs, by reason of their being formed at an angle to the plane of said cap removing section, being adapted to prevent the accidental disengagement of the hook from the garment.

1,267,053. RADIAL-DRAFT GEAR. FRANK R. CAMPBELL, Cleveland, Ohio, assignor to The National Malleable Castings Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 16, 1915. Serial No. 50,935. (Cl. 213—42.)



1. In a radial draft gear provided with a coupler, a horizontally swinging draft member pivotally mounted on a car, a guiding member mounted on a car truck, an intermediate member forming a connection with the draft member and the guiding member, a lever mounted on the draft member connected to the intermediate member, and an actuating rod, said lever having alternative fulcrums,

whereby when the actuating rod is actuated in either direction the lever will rotate about one of said fulcrums to disconnect the intermediate member from the guiding member and permit the coupler to swing in the direction of the push or pull applied to the actuating rod.

4. In a radial draft gear provided with a coupler, a horizontally-swinging draft member pivotally mounted on a car, a guiding member mounted on a car truck, an intermediate member forming a connection with the draft member and the guiding member, a lever mounted on the draft member, connected to the intermediate member, and adapted to be actuated transversely in either direction, an actuating member engaging said lever, and a stop shoulder depending from the draft member adapted to limit the movement of the lever, said actuating member being adapted to be moved transversely of the car to actuate said lever to disconnect the intermediate member from the guiding member, and to move the draft member radially after the lever is brought into bearing against said stop member.

[Claims 2 and 3 not printed in the Gazette.]

1,267,054. MEASURING DEVICE. AUGUSTO CARBONI, San Francisco, Cal. Filed Apr. 5, 1916. Serial No. 89,003. (Cl. 33—2.)

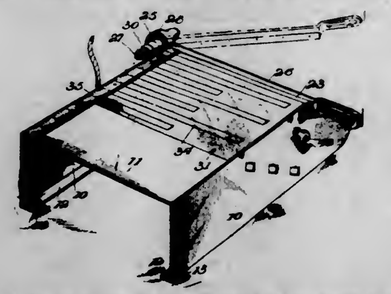


1. A measuring device comprising a body band, shoulder bands connected thereto and laterally adjustable by sliding thereon, said shoulder bands adapted to have their free ends brought together over the shoulder and clamps thereon for adjustably securing said ends.

3. A measuring device comprising a body band, laterally slidable clamping sleeves mounted thereon, shoulder bands having one end secured to one of said sleeves and their free ends running upward from said sleeves and clamping means adjustably connecting them together in pairs over the shoulder.

[Claim 2 not printed in the Gazette.]

1,267,055. TRIMMER FOR PHOTOGRAPHIC PRINTS. ROBERT M. CATHCART, Ballston, Va. Filed May 22, 1917. Serial No. 170,210. (Cl. 240—2.)



1. A device of the character described including a body providing a lamp chamber, a transparent cutting table arranged at the upper side of the body, cutting means carried by the body at one extremity thereof, and a shutter carried by the body for cutting off a portion of the light rays from a lamp within the said chamber at a point adjacent the inner side of the said cutting means.

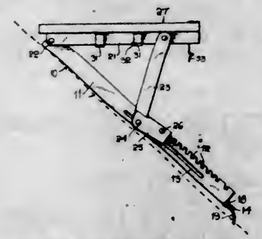
3. A device of the character described including a body providing a lamp chamber, a transparent cutting table arranged at the upper side of the body, cutting means carried by the body adjacent one extremity thereof, a reflector arranged within the body below the said table, and a second reflector mounted in advance of the said cutting means, the said reflectors being respectively adapted to direct the rays from a lamp within the said chamber toward the cutting table and against the outer side of the said cutting means.

10. A device of the character described including a body providing a lamp chamber, cutting means carried by the body adjacent one extremity thereof, and means for directing the rays from a lamp within the said chamber toward the outer side of the said cutting means.

12. A device of the character described including a body providing a lamp chamber, cutting means carried by the body, and means carried by the body for directing the rays within the said chamber toward opposite sides of said cutting means.

[Claims 2, 4 to 9, 11, and 13 to 17 not printed in the Gazette.]

1,267,056. FOLDABLE ROOF-BRACKET. EDWARD H. CHAPPUIS, Marysville, Cal. Filed July 14, 1917. Serial No. 180,650. (Cl. 20—86.)



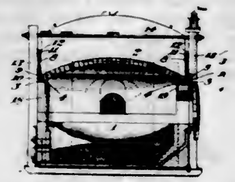
1. A roof bracket comprising a laterally contractible and expansible base structure including roof engaging bars, cross links each pivoted at one end to said roof engaging bars and having sliding engagement at its other end to the corresponding roof engaging bar, and platform supporting bars pivoted to the roof engaging bars for movement into and out of parallel relation thereto, a platform engageable with but detachable from the platform supporting bars and formed in two sections foldable upon each other and when folded being adapted to inclose the contracted base structure, the sections being provided with hand holes to provide means for carrying the sections, and a latch attached to one of said sections and engaged through one of the hand holes of the other section to hold the sections in closed relation.

2. A roof bracket comprising a base structure composed of a pair of longitudinally extending roof-engaging bars, crossed tie bars pivoted each at one end to the longitudinally extending bars, the opposite ends of the tie bars being longitudinally slotted and having sliding pivotal connection with the like ends of the longitudinal bars, and platform supporting bars pivoted to the first named bars and adjustable to different angles with relation thereto.

9. A roof bracket comprising laterally disposed supporting bars operatively connected to each other for movement toward or from each other, platform supporting bars pivoted to the like ends of the first named bars for movement into or out of parallel relation thereto in a plane at right angles to the plane of movement of the first named bars, means for holding the platform supporting bars in adjusted relations, and a platform in two sections having means for detachably engaging the platform supporting bars and holding them in laterally spaced relation, said sections being provided with stop hinges extending entirely across the sections, the confronting ends of the hinges being angularly bent whereby to space the sections from each other when they are folded into parallel relation to thereby permit the said supporting bars to be carried by said sections.

[Claims 3 to 8 not printed in the Gazette.]

1,267,057. WATER-COOLED SKEWBACK. EDGAR W. CLARKE, Westmont borough, Pa. Filed Nov. 7, 1916. Serial No. 129,979. (Cl. 122—6.)

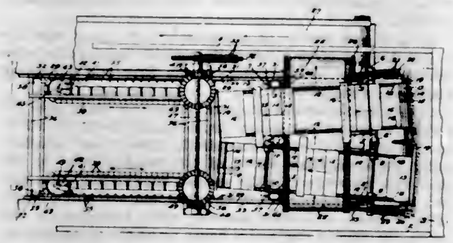


1. A furnace skewback comprising a plurality of sections, each provided with a number of connected cooling conduits therein, flexible pipe connections extending from one section to the adjacent section and a flat horizontal bearing surface and a bolt hole connected therewith within the lines of said skewback, a bolt mounted in said hole with its head or nut contiguous to said bearing surface and its body projecting outwardly through said hole, said bolt being adjustably mounted on the inner side of the furnace frame-work.

2. A furnace skewback of approximately triangular or trapezoidal section provided with cooling conduits therein, a flat horizontal bearing surface and a bolt hole connected therewith within the lines of said skewback, a bolt mounted in said hole with its head or nut contiguous to said bearing surface and its body projecting outwardly through said hole, said bolt being adjustably mounted on the inner side of the furnace frame-work, and flexible pipes connecting the conduits of one section with those of the adjacent section.

3. A furnace skewback provided with a plurality of conduits therein, cooling fluid connections to said conduits, a flat horizontal bearing surface and a bolt hole connected therewith within the lines of said skewback, a bolt mounted in said hole with its head or nut contiguous to said bearing surface and its body projecting outwardly through said hole, said bolt being adjustably mounted on the inner side of the furnace frame-work, the inner surface of said skewback being sloping and adapted to directly receive the furnace arch bricks.

1,267,058. EXCAVATING-MACHINE. J. PAUL CLARKSON, St. Paul, Minn. Filed Oct. 30, 1917. Serial No. 199,236. (Cl. 37—24.)



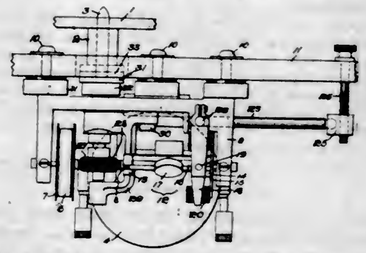
1. An excavating machine comprising a frame, excavators operating in intersecting planes to form gaps between said excavators and the walls of the ditch, and shields interposed between said walls and said excavators, for the purpose specified.

3. An excavating machine comprising a frame, excavating belts operating in intersecting planes therein and diverging from the rear to the front, shafts for said belts provided at the forward portion thereof, the abutting ends of said shafts having a swivel connection between them and shields interposed in the gaps between said belts and the side walls of the ditch.

6. An excavating machine comprising a frame, excavators mounted to operate therein in vertical intersecting planes, shields provided upon opposite sides of said excavators, endless belts operating in said shields in contact with the side walls of the ditch and in the rear of said excavators, and means for raising and lowering said excavators and said shields and belts.

[Claims 2, 4, 5, and 7 to 11 not printed in the Gazette.]

1,267,059. PHONOGRAPH. OTTO B. COLE, Boston, Mass., assignor to Arion Manufacturing Company, Boston, Mass., a Corporation of Maine. Filed Apr. 14, 1916. Serial No. 91,209. (Cl. 74—7.)

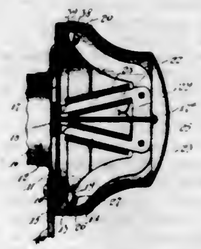


1. In a sound reproducing machine, a case having an opening therethrough, motor mechanism in the case including a driving spindle projecting through said opening, a collar on said spindle, a turntable having a hub to receive said spindle of a size to pass through the opening and rest on the collar and coöperating frictional driving surfaces on the hub and collar.

2. In a phonograph, in combination, a bracket, bearings in said bracket, a spindle mounted in said bearings and arranged to drive the record holder, a driving shaft and coöperating gearing on said driving shaft and spindle, said bracket being mounted for swinging movement to move said spindle to and from said shaft whereby to adjust said gearing.

[Claim 3 not printed in the Gazette.]

1,267,060. ELECTRIC HORN. WILLIAM W. DEAN, Chicago, Ill., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 15, 1913. Serial No. 795,350. (Cl. 177—7.)



1. In an electric horn, the combination with a casing, of a diaphragm associated with said casing, a clamping ring secured to said diaphragm and mounted within said casing, a pair of bridge pieces extending across the ring and having their opposite ends resting upon and secured to said ring, and an electromagnet secured at its base between said bridge pieces and having its pole pieces in close proximity to the diaphragm, said diaphragm comprising the armature of said electromagnet.

4. In an electric horn, the combination with a casing, of a diaphragm within said casing, a clamping ring in said casing for said diaphragm, a magnet having a core formed of a plurality of thin sheet metal punchings forming laminations, bridge members mounted on said ring extending across the diaphragm and clamping said laminations at their rear end between said bridge members to form a

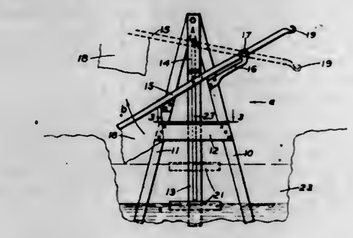
solid core, said core having its pole pieces in close proximity to the diaphragm, the diaphragm comprising the armature of the magnet.

7. In an electric horn, the combination with a casing, of a diaphragm associated therewith, a clamping ring in said casing secured to said diaphragm, a magnet having a core formed of a plurality of thin sheet metal punchings forming laminations, bridge members mounted on said ring extending across the diaphragm and clamping said laminations at their rear end between them to form a solid core, said core having its pole pieces in close proximity to the diaphragm.

8. In an electric horn, the combination with a casing, of a diaphragm associated with said casing, a clamping ring secured to said diaphragm, an electromagnet having its pole pieces formed of a plurality of triangularly shaped punchings, and a pair of bridge pieces secured to said clamping ring and clamping said punchings at their base between the same, said pole pieces at the apex of the triangle being in proximity to the diaphragm.

[Claims 2, 3, 5, 6, and 9 not printed in the Gazette.]

1,267,061. WATER-LEVEL INDICATOR FOR IRRIGATION-DITCHES AND THE LIKE. CAMIEL DE MEYER, Blythe, Cal. Filed Aug. 29, 1917. Serial No. 188,838. (Cl. 116—15.)



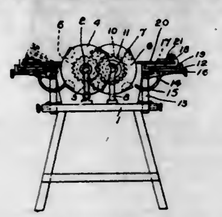
1. A portable indicator for irrigation ditches, comprising supporting posts connected at their upper ends, horizontal frame members mounted upon the supporting posts midway of their ends, brace posts connected at their upper ends to the upper ends of the supporting posts, a line connecting the brace posts being crosswise of a line connecting the supporting posts, a bracket extending outwardly from a supporting post near its upper end, a semaphore arm pivotally mounted upon the bracket, a signal carried by one end of the semaphore arm, a float and a connection between the float and the semaphore arm so that as the water rises in the ditch the float will go up and raise the signal.

2. A portable indicator, comprising a suitable pedestal adapted to be mounted vertically in an irrigation ditch, a bracket mounted upon the pedestal, a semaphore arm mounted upon the bracket, a signal carried by the semaphore arm, a guide block mounted upon the pedestal, a connecting rod extending through the guide block and connected to the semaphore arm, and a float connected to the connecting rod so that as the water rises in the ditch the float will go up, thereby raising the signal.

1,267,062. SAW-FILING MACHINE. HARRY ARISTIDE DESPAROIS, Montreal, Quebec, Canada, assignor of one-half to Ewart Saunders Field, Montreal, Quebec, Canada. Filed Sept. 27, 1916, Serial No. 122,464. Renewed Apr. 20, 1918. Serial No. 229,869. (Cl. 76—42.)

1. A saw filing machine comprising a frame and standards on said frame; a shaft suitably supported on said frame; an adjustable support mounted on said frame; a slidable plate mounted on said adjustable support, said plate being adapted to carry a saw; a wheel mounted on said shaft; means provided on said shaft to file said saw; means to automatically slide said saw; and means to rotate said shaft substantially as described.

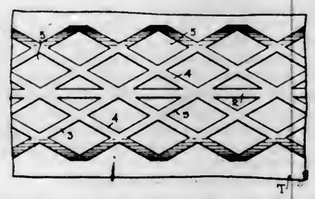
3. A saw filing machine comprising a frame and standards supporting said frame; a shaft suitably supported on said frame; a wheel mounted on said shaft; frames pivotally secured on the periphery of said wheel, provided with a flat upper portion, one end of which is of a loop shape and the other being provided with a pin, said frames being provided with a downwardly projecting flap at its outer end and a plurality of notches in said flap;



a file, one end of which engages said loop on said frame, the other end being provided with a slot to receive said pin on said frame said file being adapted to engage the teeth of a saw; means engaging said notches in said flap to reduce the pitch of said frame; a rod secured at one end to said wheel; means to automatically slide said saw; and means to rotate said shaft substantially as described.

[Claim 2 not printed in the Gazette.]

1,267,063. INNER TUBE. CECIL H. DUCKETT and CHARLES J. FITZPATRICK, Washington, D. C. Filed Sept. 15, 1917. Serial No. 191,600. (Cl. 152—13.)



1. As a new article of manufacture, an inner tube for an inflatable tire provided at its tread with connected protuberances for holding said tread when the tube is inflated in substantially the same state as when the tube is deflated.

7. As a new article of manufacture, an inner tube for a tire having circumferentially spaced outstanding ribs carried by the tread portion of the tube and extending diagonally thereacross.

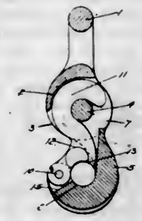
12. As a new article of manufacture, an inner tube for a tire having an annularly disposed outstanding continuous rib disposed circumferentially thereof at substantially the transverse center of the tread portion of the tube and circumferentially spaced outstanding ribs carried by the tread portion of the tube and extending diagonally thereof, said diagonal ribs being arranged in two series, the ribs of one series being reversely directed relative to the ribs of the second series, each rib of one series intersecting a plurality of ribs of the second series.

[Claims 2 to 6 and 8 to 11 not printed in the Gazette.]

1,267,064. HOOK. CLAYTON T. EAID, Portland, Oreg., assignor of one-third to Joseph L. Atkins, Portland, Oreg. Filed May 8, 1916. Serial No. 96,056. (Cl. 24—242.)

7. In a hook, the combination, with a hook-proper, another member, and a pivot pin uniting the two, of a keeper pivoted to the free end of the hook-proper and having itself a free end adapted to make engagement and disengagement with said pin, and means upon said member to compel said engagement or to permit said disengagement at will said means being normally operative by

alining tension between said hook and member to compel said engagement.

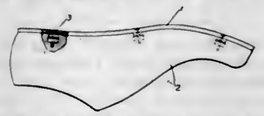


9. In a hook, the combination with a hook-proper, a keeper pivoted to the free end thereof, and a lock member, of means upon the keeper defining with said hook-proper a circular aperture for effecting free sliding engagement with a cable or the like, and lugs upon opposite sides of said keeper adjacent to said circular aperture.

10. The combination with a hook-proper and a pivot pin, of a movable keeper having a pivotal connection with said pin and making engagement with the free end of the hook-proper, and another member connected with the pivot pin and controlling movement of the keeper.

[Claims 1 to 6, 8, and 11 not printed in the Gazette.]

1,267,065. SOLE-NAIL RETAINER. MARK E. FERNALD, Saugus, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Apr. 19, 1915, Serial No. 22,312. Renewed Oct. 6, 1917. Serial No. 195,204. (Cl. 12—140.)



1. A sole nail retainer comprising a disk provided with a slit extending, from a point adjacent the center of the disk, in one direction to the peripheral edge of the disk.

10. A last having a socket formed in its bottom, having, in combination, a holder having a flat bottom arranged to rest upon the bottom of the socket in the last, a vertical peripheral wall arranged to engage the vertical wall of the socket, and a central opening arranged to loosely embrace the shank of a nail; a disk arranged to grip the shank of the nail mounted within the peripheral wall of the holder; and a plate provided with an expansible disk arranged to rest loosely on the vertical peripheral wall of the holder when contracted and to penetrate the wood of the last and lock the holder and the first disk within the socket when expanded, substantially as described.

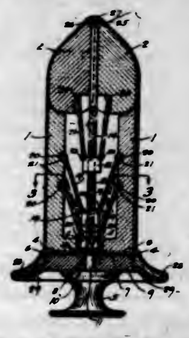
12. A cover plate for a socket in a last comprising a plate constructed and arranged to fit into the socket, and an expansible disk constructed to loosely fit the socket when contracted and to penetrate the wood of the last when expanded, substantially as described.

[Claims 2 to 9, 11, and 13 to 19 not printed in the Gazette.]

1,267,066. ADJUSTABLE RECTAL DILATOR. THEODORE J. FLACK, St. Louis, Mo. Filed Oct. 20, 1917. Serial No. 197,578. (Cl. 128—28.)

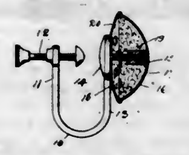
1. An adjustable rectal dilator, having expanding and contracting parallel body-sections expanding and contracting head-sections, an operating handle for controlling said body and head sections simultaneously from the exterior of the instrument, and a flexible casing which is arranged to inclose said body and head sections and to seal the same hermetically against the entrance thereto of deleterious matter.

2. An adjustable rectal dilator, having expanding body-sections arranged to move radially, expanding head-sections arranged to move radially at their inner ends, an operating shaft extending axially of the instrument and having screw-threads, nuts mounted upon the screw-



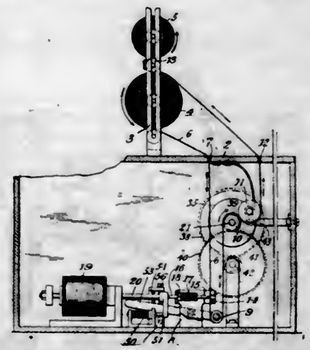
threaded portion of said shaft, toggle-arms pivotally connecting said sections to said nuts, the said shaft being held against longitudinal movement, an operating handle fixed on one end of said shaft, and a flexible casing which envelops the entire instrument except the said operating handle.

1,267,067. EAR ATTACHMENT. ANDREW B. FLAGG, North Attleboro, Mass., assignor to Merit Manufacturing Co., Attleboro, Mass., a Firm comprising Andrew B. Flagg and William F. Mowry. Filed May 31, 1917. Serial No. 171,860. (Cl. 63—14.)



In an ear attachment, an ear wire, means for releasably connecting said wire to the ear lobe, an ornamental receptacle made in two parts and adapted to carry a perfumed medium, the walls of said receptacle being perforated, means for securely connecting said parts together, and means for connecting said receptacle to said member.

1,267,068. RECORDER FOR TELEGRAPHIC MESSAGES. REID G. FORD, Brooklyn, N. Y., assignor of one-tenth to William J. Barkley, Boston, Mass. Filed Jan. 21, 1916. Serial No. 73,303. (Cl. 178—17.)



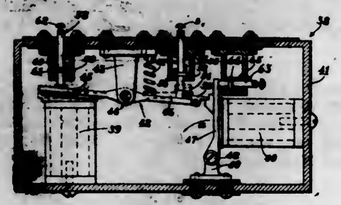
1. In a device for recording telegraphic messages a circuit containing a sending instrument, a recording tape

and a tape impressing means, a secondary circuit controlled by the closing of the first circuit containing electromagnetic means for actuating the tape impressing device, a supplementary circuit adapted to be connected with the first-named circuit, and means operated by the tape for utilizing the supplementary circuit and thereby effecting the operation of the sending instrument when the tape ceases to feed normally.

2. In a device for recording telegraphic messages, a circuit containing a sending instrument, a recording tape and a tape-impressing member; a secondary circuit, controlled by the closing of the first circuit, containing electro-magnetic means for actuating the tape-impressing device, an open supplementary circuit adapted to be connected with the first-named circuit, and means operated by the tape for closing the supplementary circuit and thereby short-circuiting the sending instrument, when the tape ceases to feed normally.

[Claims 3 to 10 not printed in the Gazette.]

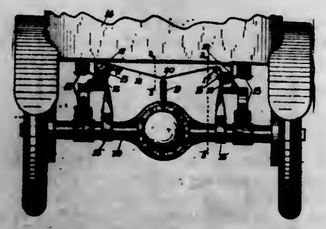
1,267,069. ELECTRICALLY-CONTROLLED TEMPERATURE-REGULATOR. HENRY W. GROM, Los Angeles, and FRED D. TERRY, Pasadena, Cal. Filed June 14, 1917. Serial No. 174,769. (Cl. 175—281.)



1. In an electrical apparatus of the class wherein a heating element is adapted to be energized by a primary electric circuit and will affect a thermostat which actuates a two-way switch controlling first and second secondary circuits and indirectly controlling the primary circuit, the combination with said circuits, of a first secondary circuit magnet, a second secondary circuit magnet, a main switch arm actuated by the first secondary circuit magnet to break the primary circuit, spring means in opposition thereto to normally establish said circuit, a lock switch plate pivotally disposed adjacent the second magnet and normally held thereagainst by the end of the main switch, whereby the first secondary circuit will be completed, means whereby completion of said first secondary circuit will break the primary circuit and establish the second secondary circuit, and means whereby completion of the second secondary circuit will allow the primary and first secondary circuits to be reëstablished.

[Claim 2 not printed in the Gazette.]

1,267,070. VEHICLE-SPRING SNUBBER. SPENCER F. HALL, Racine, Wis. Filed Apr. 2, 1917. Serial No. 159,235. (Cl. 21—105.)



1. A snubber for vehicles, comprising a flexible connection between an axle and the body at each side of the body, said flexible connections being connected together to permit a variation in length of one to be compensated by the other, but limiting the expansion of the springs when reaching a predetermined aggregate length.

2. A snubber for vehicles, comprising a frame and an axle forming two members movable with relation to each other to a greater degree on one side of the vehicle than on the other and with springs interposed between them, a non-extensible flexible strap with its ends secured to one member on opposite sides of the vehicle and its intermediate portion having sliding connection with the other member on the opposite side of the vehicle and positively limiting the aggregate expansion of the springs.

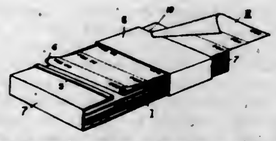
3. In a vehicle having an axle, a frame, and springs connecting the axle and frame, a snubber for the springs consisting of a non-extensible strap with its ends secured to the respective ends of the axle and its intermediate portion slidably connected with the frame on opposite sides of the vehicle serving to positively limit the expansion of the springs.

4. In a vehicle having an axle, a frame, and springs connecting the axle and frame, a snubber for the springs consisting of a non-extensible strap with its ends secured to the respective ends of the axle and its intermediate portion slidably connected with the frame on opposite sides of the vehicle, and means engaging the strap between its points of engagement with the frame for giving tension thereto, said strap positively limiting the expansion of the vehicle springs.

5. In a vehicle having an axle, a frame, and springs connecting the axle and frame, a snubber for the springs consisting of a strap with its ends secured to the respective ends of the axle and its intermediate portion slidably connected with the frame on opposite sides of the vehicle, and a spring engaging the strap between its points of engagement with the frame for giving tension thereto.

[Claims 6 to 8 not printed in the Gazette.]

1,267,071. COUPON OR TICKET HOLDER. LAWRENCE P. HARDY, South Bend, Ind. Filed Oct. 1, 1915. Serial No. 53,619. (Cl. 211—37.)



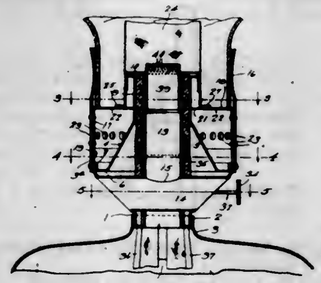
1. A holder for coupons or tickets in strip form including a receiving member of box-like form having top, bottom, and end walls and having fully open sides and formed with a delivery opening in its top, and a retaining band having telescopic relation to the receiving member with closed walls overlying the open sides of the receiving member and of sufficient length to act to retain the strip in the holder.

3. A ticket holder comprising a receiving member constructed of a single strip of material bent to form an open sided rectangular member, the terminals of the strip being arranged on the upper side of the member and disposed in spaced relation to provide an outlet, and an open ended rectangular band adapted to slidably embrace the receiving member, the closed sides of the band overlying the open sides of the member, said closed sides being of sufficient length to act as a retainer for the contents of the receiving member.

[Claim 2 not printed in the Gazette.]

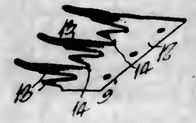
1,267,072. LAMP-BURNER. FLOYD O. HINES and WELLINGTON MILLS, Milan, Ohio; said Mills assignor to said Hines. Filed Nov. 20, 1917. Serial No. 202,985. (Cl. 67—38.)

The combination in a lamp-burner, of a base having a flared lower part and a cylindrical upper part, mantle and globe supports detachably mounted on said upper part, a horizontal air tube extending across the said lower part, an outer wick tube fitting and supported within said upper part, a central draft tube mounted upon the air tube and



communicating therewith, said wick tube and draft tubes projecting upwardly through the mantle support and into a mantle mounted thereon.

1,267,073. THISTLE-PULLING MACHINE. HERMAN FRED HOEHNE, Kaukauna, Wis. Filed Sept. 24, 1917. Serial No. 192,965. (Cl. 55—66.)



A comb for application to the rotating reel of a weed pulling machine, said comb having teeth decreasing in width toward their outer ends and having alternate teeth of less length than the intervening teeth to permit the weeds to move toward the bases of the teeth before they are wedged between the same, whereby bending of the teeth is prevented.

1,267,074. BROOM. HARRY G. HOMAN, Chicago, Ill. Filed June 20, 1913. Serial No. 774,735. (Cl. 15—20.)



1. A broom comprising a flexible portion, a frame therefor consisting of an open bottom casing and a separate closing portion, both of said portions provided with holes, the ends of the open bottom casing being oppositely inclined, the closing portion having bent parts which overlap the inclined ends of the open bottom casing, said overlapping portions being inclined similar to the said inclined ends to assist in holding the two portions together at their ends.

2. A broom comprising a flexible portion, a frame therefor consisting of an open bottom casing and a separate closing portion, both of said portions provided with holes, the ends of the open bottom casing being inclined, said open bottom casing provided on each side with separated lugs, two handle pieces engaging the open bottom casing between said lugs and provided with projections which engage the closing piece, said handle pieces acting to bind the open bottom casing and the closing piece together and a handle connected with said handle pieces.

3. A broom comprising a flexible portion, a frame therefor consisting of an open bottom casing, a closing piece for closing said open bottom and a removable handle connected with said frame piece, said handle provided with pieces which project along the sides of said frame, the open bottom casing of said frame provided at each side with two projections between which said handle pieces are received, said projections locating the position of the handle and preventing lateral movement thereof.

[Claims 4 to 6 not printed in the Gazette.]

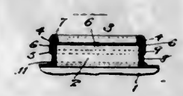
1,267,075. MICROMETER-CALIPERS. HENRY S. HUBBELL, Ashburnham, Mass., assignor to T. R. Almond Manufacturing Company, Ashburnham, Mass., a Corporation of New York. Filed Sept. 2, 1916. Serial No. 118,247. (Cl. 33—164.)



1. In a micrometer caliper, in combination with a threaded spindle, a barrel having an interior thread at its outer end coöperating with the spindle thread, said end being longitudinally slotted to constitute fingers and said fingers being sprung inwardly to form an opening of a smaller diameter than that of the spindle before said spindle is threaded into the barrel.

[Claims 2 and 3 not printed in the Gazette.]

1,267,076. CLOSURE FOR RECEPTACLES. HARRY L. HUDSON, Brooklyn, N. Y. Filed Oct. 12, 1915. Serial No. 55,423. (Cl. 220—80.)



1. A receptacle comprising a tubular member having an outwardly extended upper edge, a cap fitted to cover the tubular member, said cap having a depending flange provided with one or more upwardly directed spring tongues pressed inwardly therefrom arranged to snap inwardly under the outwardly extended upper edge of said tubular member for locking the cap against removal and means having walls parallel with and adapted to slide on the tubular member and within the flange of the cap to engage the tongue or tongues and force them outwardly to allow the cap to be removed from the member.

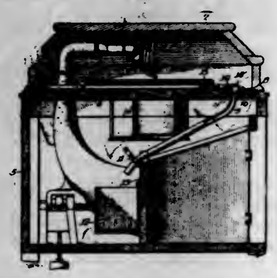
[Claims 2 and 3 not printed in the Gazette.]

1,267,077. USED-NEEDLE RECEIVER FOR TALKING-MACHINES. ALBERT A. HUSSEY, Chicago, Ill. Filed July 5, 1917. Serial No. 178,659. (Cl. 45—52.)

1. In a talking machine, the combination with a cabinet having a top wall formed with a socket in its upper side, of a used needle receiver comprising a box located within the cabinet below said top wall, a tube at its upper end extending through and secured in the bottom wall of said socket and at its lower end overhanging said box, and a removable funnel seated in said socket and registering at its lower end with the upper end of said tube.

3. In a talking machine, the combination with a cabinet having a top wall formed with a socket in its upper side having a centrally apertured bottom wall, of a lining disk for said bottom wall formed with an aperture registering with the aperture of the latter, a depending delivery

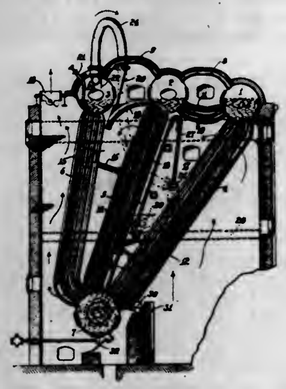
tube for used needles extending through said apertures and formed at its upper end with an annular supporting lip or flange overlying and resting on said lining disk, a box located in said cabinet beneath the lower or dis-



charge end of said tube, and a removable block fitting and filling said socket and formed with a tunnel-shaped passage registering with the upper end of said tube.

[Claim 2 not printed in the Gazette.]

1,267,078. STEAM-BOILER. DAVID S. JACOBUS, Jersey City, N. J., assignor to The Babcock and Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Original application filed Apr. 10, 1916, Serial No. 90,059. Divided and this application filed Oct. 9, 1916. Serial No. 124,518. (Cl. 122—302.)

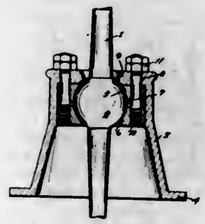


1. A steam boiler of the class described, comprising at least three upper transverse drums connected by banks of tubes to a lower water chamber, the rear upper drum being set at a higher level than the front upper drum, a main steam offtake leading from said rear drum, baffles for giving the gases serial up and down passes over the banks of tubes, with an up pass in the middle bank and a down pass in the rear bank, a special baffle extending rearwardly from the middle upper drum and arranged to direct the gases leaving the upper part of the middle bank into the rear bank to protect the rear drum from excessive heating, and an offtake for the gases in the rear of the rear bank of water tubes.

[Claims 2 to 5 not printed in the Gazette.]

1,267,079. LEVER-MOUNTING. GEORGE C. JENSEN, Oakland, Cal. Original application filed Mar. 31, 1917. Divided and this application filed Sept. 10, 1917. Serial No. 190,427. (Cl. 74—39.)

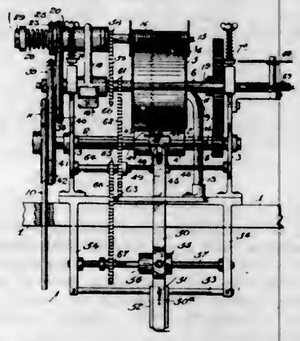
1. In combination with a lever, a tubular support providing a fulcrum for said lever and within which the same is removably positioned by insertion upwardly from the lower end thereof, and means integral with said support for overlying the fulcrum point of said lever for



preventing the removal of the lever through the upper open end of said support.

[Claims 2 to 5 not printed in the Gazette.]

1,267,080. STRIP-WINDING MACHINE. OSCAR I. JUDELSHON, Brooklyn, N. Y. Filed Oct. 31, 1916. Serial No. 128,672. (Cl. 242—55.)



1. In a winding machine the combination of a spindle, a guide for a strip to be wound on the spindle, means to support the guide, means operated by the spindle to move the guide back and forth relatively to the spindle in accordance with the rotation thereof, frictional means for rotating the spindle, and a roll opposing the rotation of the spindle and coöperative with the goods being wound to retard rotation of the spindle as the goods thereon increase in diameter.

4. In a winding machine the combination of a spindle, a movable arm rotatively supporting the spindle, a driving wheel for the spindle, frictional devices between said wheel and spindle for rotating the latter by the former, a guide to direct a strip to be wound on the spindle, a gear connected with the spindle, and means operatively connected with said guide and actuated by said gear for moving said guide back and forth relatively to the spindle in accordance with the rotation of the latter through said frictional devices.

6. The combination of an arm, a wheel having a sleeve journaled in the arm, a spindle journaled in said sleeve, frictional means between the wheel and spindle for rotating the latter within said sleeve, a guide to direct a strip to be wound, and mechanism operatively connected with said guide and spindle for moving the guide back and forth by and in accordance with the rotation of the spindle through said frictional means.

8. The combination of a spindle, a pair of ironing rolls, a guide to direct a strip between said rolls, a block supporting said guide, means movably supporting said block, an arm operatively connected with said block, means pivotally supporting said arm, a cam operatively connected with said arm, and gearing connecting said cam with said spindle whereby the guide will be reciprocated by and in accordance with the rotation of the spindle to direct the strip between the rolls to the spindle.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,267,081. PROCESS FOR PRODUCING ALCOHOL FROM BURNT OR ROASTED STARCH-BEARING MATERIALS, &c. BORIS KAZMANN, Battle Creek, Mich., assignor to Kellogg Laboratories, Incorporated, a Corporation of Michigan. Filed Mar. 31, 1917, Serial No. 158,963. Renewed Mar. 7, 1918. Serial No. 221,093. (Cl. 195—6.)

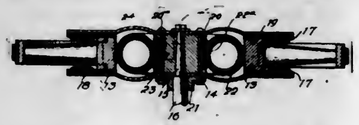
6. A process of producing alcohol from roasted or burnt starch-bearing material which consists in extracting the soluble contents of the roasted or burnt material with hot water, cooling the insoluble residue, adding a diastase thereto, and permitting the diastatic action to occur, separating the solid residue from the saccharine liquids, sterilizing the latter, inverting the dextrins thereof, into fermentable sugars with sulfuric acid, cooling the mass, fermenting the same with yeast and distilling out the alcohol.

8. A process of producing alcohol from roasted or burnt starch-bearing material which consists in subjecting the roasted or burnt material to dry distillation, air cooling the same, washing the product to extract the soluble contents therefrom, cooling the insoluble residue, subjecting the same to diastatic action, separating the saccharine liquids from the solid residue, sterilizing the saccharine liquids with heat, inverting the remaining dextrins thereof, into fermentable sugars by the use of acid, cooling the mass, adding yeast to produce fermentation and distilling out the alcohol.

9. A process of producing alcohol from roasted or burnt starch-bearing material which consists in reheating and air cooling the material, converting the starches into saccahine matter, fermenting the same and separating the alcohol from the residue.

[Claims 1 to 5, 7, and 10 not printed in the Gazette.]

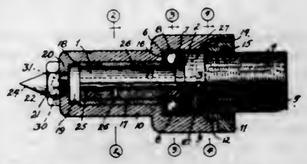
1,267,082. VEHICLE-WHEEL. JAMES FINLEY KEMP, Manila, Philippine Islands. Filed Nov. 23, 1917. Serial No. 203,581. (Cl. 152—42.)



1. A vehicle wheel of the character described, comprising a central rigid hub, a felly, a hub ring around, and spaced from the main hub and connected to said felly to support the latter, an inflatable tube mounted around the central hub and in the space between the same and said hub ring and resiliently supporting the latter in use, and means to guide the hub ring in its movement relative to the main hub, including outer side plates secured at their central portions to the main hub, and inner side plates secured at their inner portions to the said hub ring, said inner and outer side plates extending outwardly beyond the hub ring in the normal position of the parts, said inner side plates having radial depressed portions forming grooves adjacent to the outer side plates, and propelling blocks pivotally connected to the outer side plates and projecting into the grooves of the inner side plates and shiftable on their pivots wherein to automatically seat in flatwise relation against portions of the inner side plates irrespective of angular displacement of the hub ring under pressure.

2. A vehicle wheel of the character described, comprising a central rigid hub, a felly, a hub ring around, and spaced from the main hub and connected to said felly to support the latter, an inflatable tube mounted around the central hub and in the space between the same and said hub ring and resiliently supporting the latter in use, and means to guide the hub ring in its movement relative to the main hub, including outer side plates secured at their central portions to the main hub, and inner side plates secured at their inner portions to the said hub ring, said inner and outer side plates extending outwardly beyond the hub ring in the normal position of the parts, said inner side plates having series of radial depressed portions forming series of grooves adjacent the outer side plates, anti-friction members disposed in certain of said grooves to engage the inner faces of the outer side plates, anti-friction members disposed in the other of said grooves, and pivoted propelling blocks carried by the outer side plates and projecting within the latter grooves of the inner side plates to engage the anti-friction members therein and thus connect the inner and outer side plates for simultaneous rotation.

1,267,083. LATHE ATTACHMENT. FRANK P. KITTREDGE, Milo, Me. Filed Jan. 30, 1917. Serial No. 145,363. (Cl. 142—53.)



The combination of a spindle, a lubricant-containing shell rotatable upon the spindle and having a threaded aperture in its forward end, an anti-friction bearing contained in the shell and interposed between the same and the spindle, and a combined spur and closure plug; said spur and plug having a threaded portion movable in said threaded aperture and also having a lubricant passage communicating with the shell interior and arranged to be exposed when the combined spur and plug is screwed outwardly, and closed when said spur and plug is screwed inwardly.

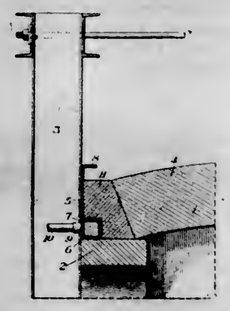
1,267,084. BUILDING STRUCTURE. LUTHER L. KNOX, Avalon, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Nov. 4, 1913. Serial No. 799,138. (Cl. 189—2.)



A knock-down building structure of the character described, comprising a skeleton frame having top and bottom longitudinal members, each top member having a donwnwardly projecting flange and an inwardly projecting flange, each of the bottom members having an upwardly extending flange, a roof formed of metal sheets bent or sprung into arch form which extend over both of the top longitudinal members, said sheets having clips on their inner surfaces which are sprung into engagement with the

inwardly projecting flanges of the top members and are held in position against said flanges by the spring of the sheets, and a sheet metal sheathing having upwardly and downwardly extending clips attached to the inner side, the upper clips engaging the downwardly projecting flanges of the upper members, while the lower clips engage the upwardly extending flanges of the lower members, the arrangement being such that the sheathing and the roof sheets are held in position by the longitudinal members and the clips, substantially as described.

1,267,085. WATER-COOLED SKEWBACK FOR FURNACES. LUTHER L. KNOX, Bellevue, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed July 17, 1916. Serial No. 109,651. (Cl. 122—6.)



1. A water-cooled skew-back member comprising a sheet metal member, having a portion thereof bent upon itself to form a hollow longitudinal extending water circulating chamber, the free edge of the bent portion being welded to the body portion of the sheet at the junction of the body portion of the sheet and the bent portion, said sheet extending beyond the water circulating chamber to form a support for the refractory portion of the skew-back, substantially as described.

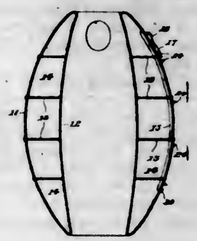
2. A skew back member formed of sheet metal having a water circulating chamber and an upwardly extending portion which forms a support for the refractory portion of the skew back above the water circulating chamber, said water circulating chamber being formed by bending the sheet laterally and downwardly, then laterally and then upwardly, the free edge of the upwardly bent portion being secured to the body of the sheet, the upwardly bent portion lying in approximately the same plane as the upwardly extending portion; substantially as described.

3. A water-cooled skew-back member for furnaces, comprising a sheet metal member having a portion thereof bent upon itself to form a hollow longitudinally extending water circulating chamber, the free edge of the bent portion being secured to the body portion of the sheet, and said bent portion extending into and forming a support for the refractory portion of the skew-back, said plate having its upper edge portion bent to form a reinforcement; substantially as described.

1,267,086. LIFE-SAVING SUIT. WILLIAM KOSTIW, Buffalo, N. Y., assignor of one-half to Harry Kudlak, Buffalo, N. Y. Filed Nov. 3, 1917. Serial No. 200,079. (Cl. 9—20.)

1. A life saving suit provided with a plurality of encircling compartments, an air conduit communicating with all of said compartments, outlet valves for the compartments within the conduit normally held in closed position, and manually operated normally closed valves between the compartments and said conduit.

3. A life preserving device comprising a union suit having outer and inner walls forming an air space therebetween, spaced partitions between the said outer and inner walls forming compartments, a conduit carried by the outer wall having openings communicating with the respective compartments, an inflating valve at one end of the conduit, a closure plug at the other end of the conduit, a valve member for each compartment arranged within the conduit having an outlet opening registering with the inlet opening of the adjacent compartment and



also having openings through the opposite ends thereof, a normally closed spring pressed valve for said outlet of each valve member projecting outwardly of the outer wall of the suit, a transverse partition within each valve member provided with an opening therethrough, and a spring pressed valve for each valve member normally closing the opening through said partition.

[Claim 2 not printed in the Gazette.]

1,267,087. SAFETY-SHUTTER. CECIL J. LANCASTER, Richmond, Va. Filed Aug. 24, 1917. Serial No. 187,990. (Cl. 189—60.)



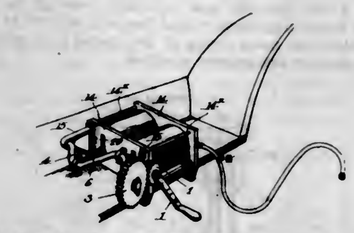
1. In a shutter, a shutter frame, upper and lower pluralities of slats mounted in guides of said frame and having link connections whereby said slats may be tilted on uniform angles and collapsed upwardly and downwardly, means for bringing together and separating said upper and lower pluralities of slats, a sliding member, the meeting slats of the upper and lower pluralities having projections, said sliding member having hooks to engage said projections for locking the upper and lower pluralities of slats together.

2. In a shutter, a shutter frame, upper pluralities of slats mounted in guides of said frame and having link connections whereby said slats may be tilted on uniform angles and collapsed upwardly and downwardly, means for bringing together and separating said upper and lower pluralities of slats, a sliding member, the meeting slats of the upper and lower pluralities having projections, said sliding member having hooks to engage said projections for locking the upper and lower pluralities of slats together, said sliding member adapted to be rotated and having means connected to said slats for tilting them on uniform angles.

17. In a safety shutter, a frame, upper and lower series of coupled shutter slats in guides of said frame, a reciprocating and revoluble device having elements, adapted when the device is reciprocated, to engage the adjacent end slats of the series to lock them together.

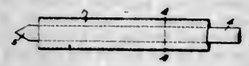
[Claims 3 to 16, 18, and 19 not printed in the Gazette.]

1,267,088. AUTOMOBILE-TIRE PUMP. MAJOR A. LANE, Paola, Kans. Filed Mar. 8, 1917. Serial No. 153,470. (Cl. 230—27.)



An air pump for inflating tires of automobiles comprising in combination a frame consisting of transverse end pieces and longitudinal tie rods, cylinders mounted horizontally between the end pieces, arms on the end pieces and transversely spaced therefrom, set screws in said arms for clamping the pump to a running board as a support, a crank shaft mounted in brackets upon one of the end pieces, pistons in the cylinders operatively connected with the crank shaft through slots in the end pieces, a gear wheel on the crank shaft, a driving pinion pivoted on the end of an end piece in operative engagement with said gear wheel and a hand crank for manually operating the pinion to drive the pump.

1,267,089. WARP-THREAD-HOLDING DEVICE. CHARLES D. LANNING, Boston, Mass., assignor to American Warp Drawing Machine Company, a Corporation of Maine. Filed Apr. 17, 1912. Serial No. 691,276. (Cl. 139—94.)



1. The combination with a warp of a stiffened holder adhesively secured transversely the threads of the warp.

2. The combination with a warp of a holder adhesively secured transversely the threads to maintain them in parallel relation, and means for stiffening said holder.

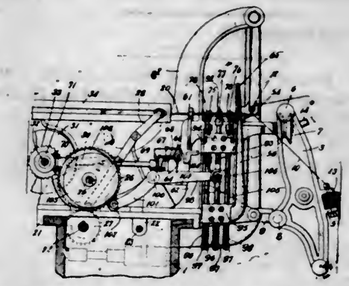
4. The combination with a warp of a tubular thread holder adhesively applied transversely the threads, the tubular member being adapted to receive a rigid stiffening rod.

[Claims 3 and 5 to 7 not printed in the Gazette.]

1,267,090. WARP-LEASING MACHINE. CHARLES D. LANNING, Boston, Mass., assignor to American Warp Drawing Machine Company, a Corporation of Maine. Filed Apr. 27, 1914. Serial No. 834,630. (Cl. 139—94.)

1. A machine for acting upon warp threads having a pair of flexible lease members, means to support a set of threads to be leased, means to engage successive threads of one set and move them each in a direction lengthwise the thread, thereby to locate them in succession between the lease members, and means to deflect or bend the lease members to reverse the relation thereof to successive threads.

6. In a warp leasing machine, a thread-drawing device to draw the threads each in the direction of its length, a carrier therefor, a warp support, means to cause relative traversing movement between the carrier and the warp support, a plurality of lease members, and means on the carrier for vibrating the lease members.

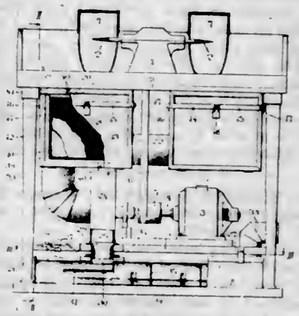


10. In a warp leasing machine, a thread-drawing needle, a carrier therefor, a warp support, means to cause relative traversing movement between the carrier and the warp support, a pair of flexible lease members, means on the carrier for vibrating the lease members comprising independent holding and guiding devices for the lease members, and means for reversely reciprocating the same to move them across the path of the thread-drawing needle following a threading movement thereof.

16. A warp leasing machine having means for holding a warp, a thread-placing device, a carriage therefor, carriage traversing mechanism, devices for giving the thread-placing device intermittent reciprocatory movement to engage and position successive threads, a plurality of flexible lease members extending transversely the warp and between the same and the thread placing device and between which members the threads are placed, the carriage being traversed past the machine and the lease members, and means for shifting the relation of the lease members between successive actions of the thread-placing device.

[Claims 2 to 5, 7 to 9, 11 to 15, and 17 to 35 not printed in the Gazette.]

1,267,091. DUST-COLLECTOR FOR POLISHING-MACHINES. WILLIAM H. LEIMAN and GEORGE W. LEIMAN, Newark, N. J. Filed May 17, 1917. Serial No. 169,322. (Cl. 183—70.)



1. In a machine of the character described, two suction hoods, two dust collecting cabinets, one for each hood, and a common exhaust fan, passageways leading from the suction hoods to their respective cabinets, a passageway leading from one cabinet to the other, and a passageway leading from one cabinet only to the exhaust fan.

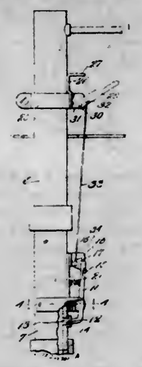
4. In a machine of the character described, two suction hoods, two dust collecting cabinets, one for each hood and

communicating with each other, a horizontally arranged fine dust collecting tank, and an exhaust fan communicating directly with one only of said cabinets and with the fine dust collecting tank for drawing the air through the suction hoods and cabinets and forcing it through the said tank.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,092. [WITHDRAWN.]

1,267,093. DRAIN-VALVE FOR WELL-PIPES. WILLIAM NOAL LINDSEY, Claude, Tex. Filed June 22, 1917. Serial No. 176,396. (Cl. 103—60.)



1. The combination with a pipe, of a valve in said pipe, a spring tending normally to hold said valve in seating position, a bell-crank lever, a finger on said lever engaged with said valve, an operating lever, and a connection between said lever and said bell-crank lever whereby operations of said lever will force said valve against the tension of said spring.

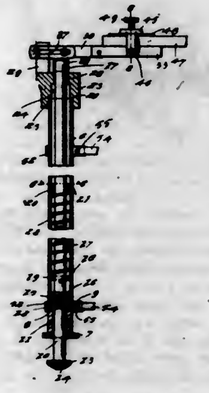
2. The combination with a pipe, a bearing member on said pipe, the said pipe being provided with an opening, a valve stem pivoted in said bearing member, a head on said valve stem adapted to seat over said opening, a spring for normally holding said stem in valve closing position, a bell-crank lever, a finger on said lever engaged with said stem, an operating lever, and a connection between said operating lever and said bell-crank lever for moving said valve stem against the tension of said spring.

3. The combination with a pipe having an opening therein, a bearing member carried by said pipe, a valve stem pivoted in said bearing member, a head carried by one end of said stem for seating over said opening, an arm on said pipe, a bell-crank lever pivoted upon said arm, a finger on one of the arms of said bell-crank lever disposed in the path of travel of said valve stem, a spring tending normally to force said stem in valve closing position, a lever pivoted to said pipe, and a link connecting said lever with the opposite arm of said bell-crank lever.

1,267,094. ROCKING-CHAIR FAN. HAROLD M. LOVELL, Somerville, Mass. Filed Apr. 13, 1917. Serial No. 161,783. (Cl. 230—7.)

1. A fan operating means comprising a tube or sleeve; brackets removably secured to the tube or sleeve for securing the same to a rocking chair, a bearing head rotatably mounted on one end of the tube, a bar reciprocally mounted through the bearing head and sleeve, an operating member loosely mounted in the lower end of the sleeve, means for loosely connecting the operating member with the reciprocatory bar, a supporting arm pivotally secured to the bearing head, a link pivotally secured to the supporting arm and rigidly secured to the upper end of the reciprocatory bar, and a fan supporting means hingedly and pivotally secured to the outer end of the arm, as and for the purpose specified.

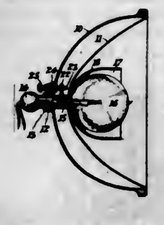
2. A fan operating means comprising a tube or sleeve, an operating member reciprocally mounted in the lower end of the sleeve, a wear plate having a convex surface formed on the outer end of the operating member, a reciprocatory bar mounted in said tube or sleeve, a spring connecting the inner end of the bar with the inner end of the operating member, a bearing head rotatably mounted on the upper end of the sleeve and surrounding said bar, means carried by the tube and engaging the bearing head and holding the same against rotary movement with relation thereto, a projection carried by the head, an arm pivotally secured to the projection, a link pivotally secured to the arm and rigidly secured to the upper edge of the bar, a supporting member hingedly secured to the outer end of the arm, a yoke carried by the supporting member, a fan carrying arm adjustably secured to the yoke and supporting member, and brackets secured to the tube to facilitate the securing of the device to a rocking chair, as and for the purpose specified.



3. A fan operating means comprising a tube having its lower end reduced in the interior thereof, to provide a substantially horizontal shoulder, an operating member slidably arranged in the tube and having its inner end flanged to engage the shoulder for preventing the removal of the operating member therefrom, the outer end of said operating member provided with a convex surface to constitute a wear plate, a spring secured to the inner flanged end of said member, a reciprocatory bar slidably arranged in the tube and having its inner end flanged and secured to the free end of the spring for forming a resilient connection between the operating member and bar, a head rotatably mounted on the upper end of the tube, means for holding the head against rotation with relation to the tube, a vertical projection formed on the head, an arm pivotally secured to the projection, a link rigidly secured to the bar and pivotally secured to the arm, a supporting member pivotally secured to the free end of the arm, a yoke carried by the supporting member, a fan adjustably carried by the yoke and supporting member, a spring surrounding said operating bar, means for holding the spring against longitudinal sliding movement on the bar, said spring adapted to be compressed on the inward movement of the operating member and upon release of pressure by the operating member, the spring will force the reciprocatory bar downwardly in the tube, and brackets secured to the tube for securing the same to a rocking chair, as and for the purpose specified.

1,267,095. VEHICLE-LAMP. CHARLES MCKEEVER, Jersey City, N. J. Filed Nov. 24, 1917. Serial No. 203,651. (Cl. 240—48.6.)

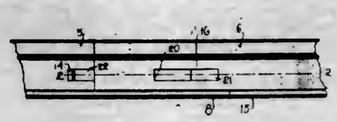
1. In a vehicle lamp, a light bulb, a socket therefor, a reflector, a cup member extending entirely around the lamp bulb, and a resilient reflector device coacting between the lamp bulb, the cup, and the said reflector for yieldingly maintaining the cup member in position relatively to the lamp bulb and reflector.



3. In a vehicle lamp, a casing, a reflector therein, a light bulb, a light bulb socket adjustable to position, a cup surrounding the light bulb, and a resilient reflector device coacting between the light bulb and the reflector to maintain the cup in position relatively to the light bulb and reflector.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,267,096. RAIL-JOINT. STEVE MARTENKA, Stevens Point, Wis. Filed Feb. 23, 1918. Serial No. 218,806. (Cl. 239—8.)



1. In a rail joint, abutting rail sections having longitudinally interfitting webs, and a key bar adapted to be driven longitudinally between the opposed side faces of the rail webs, one of the rail webs having a shoulder formed thereon, and said key being provided with a shoulder to coact with the shoulder on said web to prevent the reverse longitudinal movement of the key.

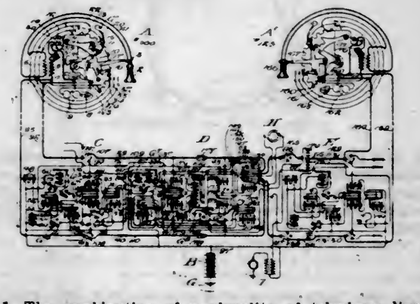
2. In a rail joint, abutting rail sections having longitudinally interfitting webs, the rail webs upon their opposed side faces being each provided with a groove, and a key bar adapted to be driven longitudinally between the opposed faces of the rail webs and frictionally engaging in said grooves to lock the rail sections together against relative vertical or longitudinal movement.

5. In a rail joint, abutting rail sections having male and female web portions for interfitting engagement, the female web of one rail section being provided with an opening in one of its walls and a longitudinal groove in its inner face extending from one end of said opening, the male web of the other rail section being provided with a longitudinal groove in its opposed face, and a key bar adapted to be driven longitudinally through said opening and frictionally engaged in said grooves, said male web being provided with a shoulder at one end of the groove therein and the key bar having a shoulder to coact with the shoulder on said web whereby the key is retained in its effective position.

6. In a rail joint, abutting rail sections having male and female web portions for interfitting engagement, the female web of one rail section being provided with an opening in one of its walls and a longitudinal groove in its inner face extending from one end of said opening, the male web of the other rail section being provided with a longitudinal groove in its opposed face, and a key bar adapted to be driven longitudinally through said opening and frictionally engaged in said grooves, said male web being provided with an obliquely inclined surface at one end of the groove therein against which one end of the key is adapted to ride whereby the key is forced into frictional engagement with the wall of the female web, and said male web being provided at the opposite end of the groove therein with a shoulder, said key also having a shoulder formed therein to coact with the shoulder on said web whereby the key is retained in its effective position.

[Claims 3 and 4 not printed in the Gazette.]

1,267,097. AUTOMATIC TELEPHONE SYSTEM AND APPARATUS. TALBOT G. MARTIN, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co., a Corporation of Illinois. Filed Mar. 26, 1907, Serial No. 364,699. Renewed Jan. 28, 1918. Serial No. 214,253. (Cl. 179—18.)



1. The combination of a plurality of telephone lines, subscribers' telephones on said lines, means by which a calling subscriber automatically selects the first idle one of said lines, and means under the control of the called subscriber for supplying talking current to the calling and called telephone lines.

2. In a telephone system, the combination of a plurality of telephone lines, subscribers' telephones on said lines, means by which a calling subscriber automatically selects the first idle one of said telephone lines, and means under the control of the called subscriber for supplying talking current to the calling telephone line.

5. In a telephone system, the combination of a plurality of telephone lines running to the same substation, telephone sets on said lines, an automatic switch provided with means for extending connection from a calling telephone line to any one of said telephone lines, automatic means for operating said switch to select the first idle one of said lines, and a common battery, said switch provided with a relay controlled by one of said telephone lines for controlling the flow of talking current from said battery to the calling telephone line.

42. In a telephone system, a calling line, a switch associated with said line, one group of lines terminating in said switch, a second group of lines terminating in said switch, operable moving switching equipment individual to each of said lines, means responsive to numerical operations for establishing connection with any one of the lines in the first group, and automatic means responsive to non-numerical operations to establish connection with lines in the second group, said automatic means controlled by said operable moving switching equipment.

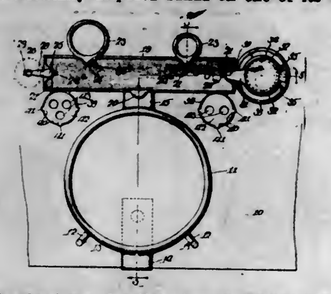
75. In a telephone system, a plurality of groups of lines, fixed terminals of said lines arranged in a single horizontal group, an automatic switch having a movable terminal cooperating with said fixed terminals, means for operating said switch to cause the movable terminal thereof to pass by all the fixed terminals corresponding to one of said groups of lines, and means for then automatically operating said switch to cause the said movable terminal to select a fixed terminal corresponding to an idle line in another one of said groups of lines.

[Claims 3, 4, 6 to 41, and 43 to 74 not printed in the Gazette.]

1,267,098. SAFETY SERVICE-HOLDER. LUDVIG MATTSON, Evanston, Ill. Filed Dec. 12, 1917. Serial No. 206,742. (Cl. 65—54.)

2. In a safety service holder, the combination with a ring and a box connected together and located at one of

their surfaces in substantially the same plane, of means to detachably secure said ring to a support, the said box having a plurality of vertical sockets in its walls and one or more horizontally disposed bands on one of its walls,

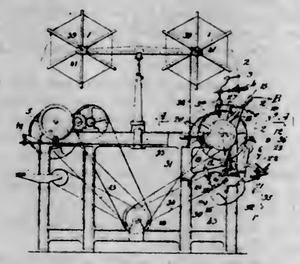


the said ring having a plurality of upwardly and inwardly extended projections, retaining members for service articles each having a stem adapted to fit in one of said sockets, and disks or plates removably located in said bands.

[Claim 1 not printed in the Gazette.]

1,267,099. METHOD FOR WINDING SILK ON SPOOLS AND MACHINE FOR CARRYING OUT THIS METHOD. CELESTINO MAZZUCCHELLI, Como, Italy. Filed Dec. 15, 1913. Serial No. 806,816. (Cl. 242—18.)

1. A thread winding machine comprising a thread feeding drum, and a thread holding device on the drum for drawing the thread around the latter at the beginning of the unreeling operation.



2. In a thread winding machine, a feeding drum, a thread holding member thereon comprising a bolt arranged to be projected through the periphery of the drum, and a spring for normally holding the bolt retracted.

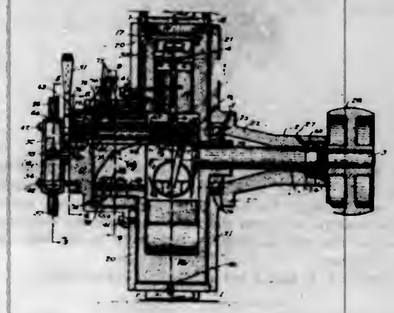
3. In a thread winding machine, a feeding drum, a thread holding device comprising a lever pivoted on the inner periphery of the drum, a bolt on the lever adapted to be projected through the periphery and a spring acting on the lever to withdraw said bolt.

5. The method of winding silk fiber which comprises directing the fiber from the supply reel downward to a driving drum capable of swinging out of operative position and simultaneously bending the fiber toward a vertical, said fiber passing around said drum and crossing the downwardly directed portion, thereafter directing the fiber to a spool frictionally driven by the contact of said drum with the fiber wound upon the spool, the fiber being fed to the spool substantially at the nip between the drum and spool.

[Claim 4 not printed in the Gazette.]

1,267,100. ROTARY ENGINE. FRANK W. MEYER, East St. Louis, Ill. Filed Sept. 8, 1917. Serial No. 190,340. (Cl. 121—64.)

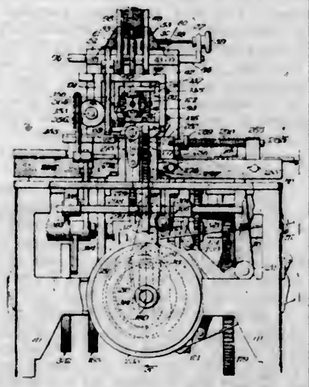
2. In a rotary engine, the combination of a rotary cylinder-containing member having a plurality of cylinders, pistons, and piston-rods therein and a collar in fixed connection therewith and projecting from one side thereof, there being a steam-passage through the said collar and the wall of each of the said cylinders, a collar encircling the said first-mentioned collar and adapted to act as a valve in connection with the rotation of said fly-wheel and its attached collar, means for admitting steam to the said



valve-collar and exhausting therefrom, there being grooves with abutments within the said collar, and bores leading from the grooves on one side of abutments to those on the other, said grooves receiving steam from said valve collar and delivering it into said bores for balancing the valve or steam chest by preventing a binding action at that point.

[Claims 1 and 3 not printed in the Gazette.]

1,267,101. BOX-MAKING MACHINE. MICHAEL J. MILMOE, Chicago, Ill., assignor to W. C. Ritchie & Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 9, 1915. Serial No. 1,274. (Cl. 93—40.)



1. In a machine of the character described, the combination of a die, a plunger adapted to force a pasteboard blank through the die and bent over its edge portions, means to operate said plunger, a form, a carrier adapted to receive the bent blank after its passage through the die and convey it into proximity to the form, means to actuate said carrier, means to transfer the bent blank from the carrier to the form, and means to cover the bent blank with finishing material while on the form, substantially as described.

7. In a machine of the character described, the combination of a die, means to force a pasteboard blank through the die to bend over its marginal portions, a form, means to transport the bent blank from the die to the form, and means to cover the bent blank with finishing material while on the form, substantially as described.

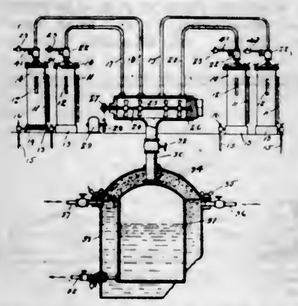
24. In a machine of the character described, the combination of means to feed boxes with their sides covered with a finishing material projecting beyond an edge of the box, and a stationary folder shaped to bend the finishing material over the edge of the box and against the head of the latter during the travel of the box, substantially as described.

47. In a machine of the character described, the combination of a pivoted bender adapted to bend the marginal portion of a pasteboard blank, means extended into the path of travel of the blank and operatively associated with said bender, and means to move the blank facewise against and past said extended means, thereby rocking the bender on its pivot to effect the bending operation, substantially as described.

64. In a machine of the character described, the combination of main stationary benders adapted to bend marginal portions of a flat box blank into positions substantially at right-angles to the main body of the blank, supplemental pivoted benders adapted to bend such portions into acute angle relation to said main-body, and a plunger adapted to carry the blank past both sets of benders to cause the bending operations, such supplemental benders having extensions projecting into the path of travel of the blank and adapted to effect the rocking of such pivoted members, substantially as described.

[Claims 2 to 6, 8 to 23, 25 to 46, and 48 to 63 not printed in the Gazette.]

1,267,102. CHEMICAL-MIXING APPARATUS. JOHN R. MILSON, Watertown, Mass., assignor of one-half to John J. Burns, Boston, Mass. Filed Nov. 13, 1916. Serial No. 130,982. (Cl. 23—3.)



1. A chemical mixing apparatus comprising a plurality of chemical containers, a mixing chamber with which all of said containers are connected, means for heating each of said containers for the purpose of distilling off its contents, and automatic valves for controlling the flow from the containers into said mixing chamber.

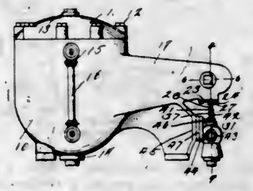
3. A chemical mixing apparatus comprising a plurality of chemical containers, a mixing chamber with which all of said containers are connected, means for heating each of said containers for the purpose of distilling off its contents, automatic valves for controlling the flow from the containers into said mixing chamber, and means for automatically locking said valves in open position.

4. A chemical mixing apparatus comprising a plurality of chemical containers, a mixing chamber with which all of said containers are connected, means for heating each of said containers for the purpose of distilling off its contents, automatic valves for controlling the flow from the containers into said mixing chamber, and a condensing reservoir connected with the mixer to receive gases discharged from said mixer.

5. A chemical mixing apparatus comprising a plurality of chemical containers, a mixing chamber with which all of said containers are connected, means for heating each of said containers for the purpose of distilling off its contents, automatic valves for controlling the flow from the containers into said mixing chamber, and means for agitating the gases within said mixing chamber.

[Claim 2 not printed in the Gazette.]

1,267,103. WATER-REGULATOR. WILLIAM H. MINEKIME, Water Valley, N. Y. Filed July 31, 1916. Serial No. 112,407. (Cl. 137—101.)



1. In a water regulator, a casing, a float in said casing, an arm connected to the float and pivoted in the casing, said casing being provided with an opening vertically disposed with relation to the arm, a cover plate for said opening provided with an eccentric stuffing box, means to secure said plate on said casing over the opening with the stuffing box in the path of movement of the arm, said means being arranged to secure the plate in either of two positions, a valve stem passing through the stuffing box and shiftable therewith, and a valve connected to and controlled by said stem.

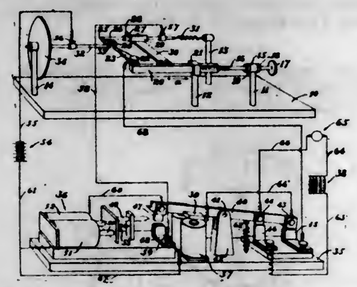
2. In a water regulator, a casing, a float in said casing, an arm connected to the float and pivoted in the casing, said casing being provided with an opening vertically disposed with relation to the arm, a cover plate for said opening provided with an eccentric stuffing box, means to secure said plate on said casing over the opening with the stuffing box in the path of movement of the arm, said means being arranged to secure the plate in either of two positions, a valve stem passing through the stuffing box and shiftable therewith, a valve connected to and controlled by said stem, and means to vary the length of said stem.

3. In a water regulator, a float casing having a hollow arm extending therefrom and provided with an opening in its under side, a float in said casing, an arm connected to the float and pivoted in the hollow arm of said casing for permitting vertical movement of the float, a cover plate adjustably mounted on the hollow arm and having an eccentric stuffing box extended within the opening in said hollow arm and adapted to be positioned at various points therein, valve mechanism arranged below the hollow arm, and a valve rod for controlling said valve mechanism adjustably connected with the arm of the float and working through the stuffing box.

1,267,104. HEAT-CONTROLLING DEVICE. HENRY A. MOORE, Burbank, and ALBERT H. BRUNNER, Los Angeles, Cal. Filed Dec. 6, 1916. Serial No. 135,884. (Cl. 175—281.)

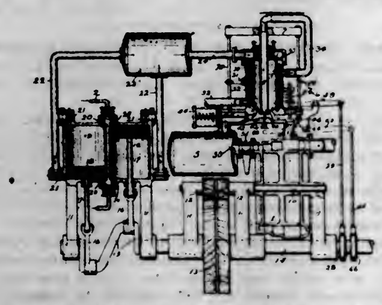
1. An electric switch, comprising a base, a rocker arm pivotally mounted upon said base for vertical movement, contact members mounted upon one end of said arm and adapted to be included within an electric circuit, contact members mounted upon the other end of said arm and adapted to be included within a second electric circuit, separate switches included within each of said circuits, an electro-magnet included within the second-named circuit whereby its energization will separate the contact members of said circuit and connect the contact members of the first-named circuit, a catch adapted to engage the rocker arm in a manner to hold said contact members in position, and an electro-magnet included within said first-named circuit whereby the closing of the switch in said circuit will release said catch and the rocker arm, and positively acting means for breaking the contact of said contact members of the first-named circuit and reëstablish-

ing the contact of the contact members of the second-named circuit.



2. An electric switch comprising a base, a pair of electric magnets positioned thereupon, a rocker-arm pivotally mounted above one of said magnets and adapted to be influenced thereby, a pair of fixed contacts mounted upon the base and adjacent one end of said rocker-arm, a pair of contact members mounted upon one end of said arm and adapted to simultaneously engage said fixed contact members, a primary electric circuit including one of said fixed contact members and one of the movable ones, a secondary circuit including the magnet controlling said rocker-arm and the other of said fixed and movable contact members, an individual switch included within said secondary circuit, a movable contact member mounted upon the opposite end of said rocker-arm, a fixed contact member mounted upon the base and adapted to be engaged by said last-named movable member, a second secondary electric circuit including said last-named fixed and movable contact members and the other electric magnet, an individual switch included within said second-named secondary circuit, and interlocking members controlled by the first and second electric magnets, whereby the closing of the individual switch in the first-named secondary circuit will cause its circuit and the primary circuit to be broken and the secondary circuit closed and locked, and whereby the closing of the individual switch in the second secondary circuit will cause said circuit to be broken and the primary and first secondary circuits to be reëstablished.

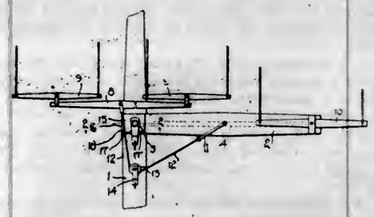
1,267,105. INTERNAL-COMBUSTION DEVICE FOR USE WITH TURBINE-ENGINES. PAUL C. MULLIGAN, Seattle, Wash., assignor, by direct and mesne assignments, to Internal Combustion Steam Engine Co., Seattle, Wash., a Corporation of Washington. Filed Jan. 26, 1918. Serial No. 213,996. (Cl. 60—4.)



1. In an internal combustion prime mover, in combination, a combustion chamber, means for supplying charges to and for igniting them in said chamber, means for intermittently supplying water to the discharge from said chamber, and means for thermostatically controlling the volume of said water discharge.

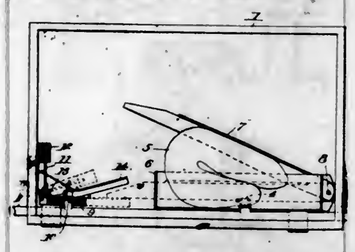
[Claims 2 to 8 not printed in the Gazette.]

1,267,106. DRAFT-EQUALIZER. KNUT LARSEN NESTEGARD, Knapen, Alberta, Canada. Filed Mar. 28, 1917. Serial No. 158,029. (Cl. 21—76.)



In a draft equalizer, the combination with a draft tongue or pole, of an equalizer bar pivotally mounted at one of its ends upon the tongue and extending entirely upon one side thereof, a swingletree on the free end of said bar, a doubletree disposed in advance of the pivoted end of the bar, whiffletrees on the ends of said doubletree disposed upon relatively opposite sides of the tongue, a flexible element centrally connected to the equalizer bar and to said doubletree, a pulley mounted upon the tongue rearwardly of the equalizer bar around which said flexible element extends, a metal cap plate on the pivoted end of the equalizer bar having angularly disposed flanges engaged upon the end edge and the rear longitudinal edge of said bar, said latter flange being formed with an upstanding lug having an opening therein through which said flexible element is disposed.

1,267,107. SAFETY DEVICE FOR GAS-PIPES. PETER D. NIKAS, Washington, D. C. Filed Apr. 18, 1917. Serial No. 163,011. (Cl. 67—115.)



1. In a safety device for gas pipes, a receptacle having a cover hinged thereto at one end, mounted on a pipe, said pipe being provided with a tip having a bag adapted to become inflated by the gas entering said pipe, a spring valve located in said pipe, a support mounted on said pipe, a weighted lever mounted on said support, a trigger mounted on said support, flexible connections between said weighted lever and trigger, said trigger being in the path of the hinged cover of the receptacle substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,267,108. THERMAL GAS-VALVE. WILLIAM C. NORTON, Salem, Mass. Filed Mar. 26, 1914. Serial No. 827,461. (Cl. 137—92.)

A thermal gas valve including a casing having ports, a rotatable main valve having corresponding ports and extended beyond the casing, an end cap closing the end of the main valve, and projecting beyond the inner surface of such main valve to form a shoulder, means for securing the cap in adjusted relation to the main valve, a nipple having threaded connection with the cap, a fusible disk closing one end of the nipple, a valve rod having threaded connection with the disk and extended into the main casing, a supplemental valve having threaded connection with the rod remote from the disk, and a spring housed within the supplemental valve and end cap, and bearing between the nipple and supplemental valve, the



normal position of the supplemental valve bearing against the shoulder of the end cap.

1,267,109. MAIL-BAG-CATCHING DEVICE. BARTLEY O'LAUGHLIN, Coral, Mich. Filed May 11, 1915. Serial No. 27,395. (Cl. 258—20.)



1. In a mail bag catcher, a resiliently supported frame, a pair of lids hingedly secured to said frame, resilient means connecting said lids for receiving a mail sack whereby when a mail sack is placed thereon, said lids will be moved to a closed position to prevent the accidental removal of said mail sack.

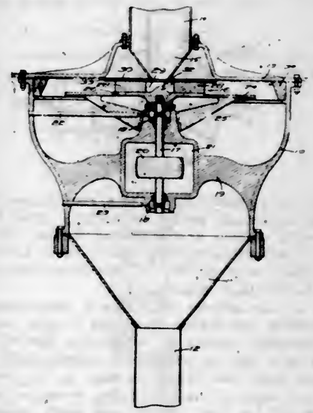
3. In a mail sack engaging device, a frame resiliently supported, including a pair of longitudinal members, the longitudinal members of said frame being disposed in a higher plane than the remainder thereof, bars carried by said frame, lids hingedly secured to said bars, means connecting said lids for normally retaining the same in engagement with the longitudinal portions of said frame and providing means for the receiving of a mail sack whereby the sack by its weight moves said lids to a closed position and prevents the accidental removal of the sack therefrom.

4. In a device for catching mail sacks, a frame, means for receiving a mail sack on said frame, supporting standards, springs connecting said frame to said supporting standards and means independently of the securing means on certain of said supporting standards for the reception of said springs to prevent the lateral displacement thereof.

[Claim 2 not printed in the Gazette.]

1,267,110. APPARATUS FOR TREATING NUTS. SIDNEY H. PARSONS and ROBERT F. HERON, Los Angeles, Cal., assignors of one-third to Ellery P. Vernon, Los Angeles, Cal. Filed July 22, 1916. Serial No. 110,799. 146—3.)

1. An apparatus for treating oil nuts, comprising a casing having a feed hopper at the top and an outlet at the bottom, a top cover for said casing, a rotary member within the upper part of said casing, means for rotating the same in a horizontal plane, said rotary member comprising a nut receiving chamber having a nut distributer and radial discharge passages horizontally disposed and affording an uninterrupted path to the nuts, a horizontal air plate forming the top wall of said passages and extending beyond the outer periphery of said rotary member and adjacent to the cover of said casing, a ring shaped stationary guide plate in horizontal alinement with the bottom wall of said passages and a ring shaped breaker wall spaced from said guide plate against which the nuts are thrown, said plate comprising a series of tooth shaped members having tangentially disposed surfaces inclining away from the vertical whereby the nuts thrown against said breaker wall from the rotary member will strike the same at substantially right angles to its normal face and be deflected downwardly toward the lower part of said casing.



2. An apparatus for treating oil nuts comprising a casing, a top cover therefor, a feed hopper mounted on said cover, an outlet at the bottom of said casing, a rotary member within said casing, means for rotating the same in a horizontal plane, said rotary member comprising a nut receiving chamber communicating with said feed hopper and radial discharge passages affording an uninterrupted path to the nuts, a nut distributing member in said chamber, a stationary guide plate in horizontal alinement with the bottom of said passages, a breaker wall spaced from said guide plate against which the nuts are thrown, said plate comprising a series of tooth-shaped members having curved surfaces inclining away from the vertical, said faces constituting transverse sections of hollow cylinders whose axes are arranged in a circle concentric with the center of rotation of said rotary member.

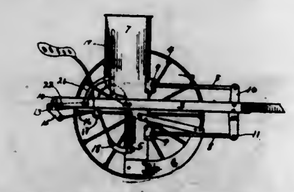
3. An apparatus for treating nuts comprising a casing, a feed hopper at the top and an outlet at the bottom thereof, a rotary member within the upper part of said casing, means for rotating the same in a horizontal plane, said rotary member being provided with a series of radial discharge passages horizontally disposed and affording an uninterrupted path to the nuts and a ring shaped breaker wall spaced from said rotary member against which the nuts are thrown, said wall comprising a series of tooth-shaped members having curved surfaces inclining from the vertical and so designed that the nuts thrown from the periphery of the rotary member strike the breaker wall at substantially right angles to its normal face and deflect the same downwardly toward the lower part of said casing.

6. An apparatus for treating oil nuts, comprising a rotary member, means for rotating said member, means for feeding nuts to said member, means for guiding the nuts in a straight path, and a breaker plate spaced from said member, said breaker plate having curved surfaces inclined from the vertical in a downward and outward direction, whereby the nuts thrown thereat will be deflected downwardly therefrom and out of the path of the nuts successively thrown from said rotary member.

7. An apparatus for treating oil nuts comprising a rotary member, means for rotating the same, means for feeding nuts to said member, means for guiding the nuts in a straight path, a breaker plate spaced from said member against which said nuts are thrown, said breaker plate having a curved face inclined to the path in which the nuts are projected whereby the nuts thrown thereat will be deflected out of the path of the succeeding nuts.

[Claims 4 and 5 not printed in the Gazette.]

1,267,111. CORN-PLANTER-FRAME CONSTRUCTION. ERNEST W. PAULSON, Otoe, Iowa. Original application filed Sept. 29, 1916. Serial No. 122,924. Divided and this application filed July 6, 1917. Serial No. 179,031. (Cl. 111—59.)



1. In a corn-planter including a main-frame and a seed planting mechanism having an upright chute and a furrow-opening member at the bottom thereof, the combination of a pair of superposed substantially U-shaped rods having their webs pivoted to the chute and their ends pivoted to the main frame.

2. In a corn-planter including a main-frame and a seed planting mechanism including a seed chute and a furrow-opening member at the bottom thereof, the combination of a pair of superposed substantially U-shaped rods, and upper and lower bearings on the front of the chute, the webs of the rods being journaled within the bearings and the ends of the rods being pivoted to the main-frame.

4. In a multiple row corn-planter the combination with a main-frame and a plurality of seed planting mechanisms each including a chute and a furrow-opening member at the bottom thereof, of a pair of substantially U-shaped rods for the support of the planting mechanisms, upper and lower bearings on the front sides of the chutes the webs of the rods being journaled in the bearings and the ends of the rods being pivoted to the main-frame and means for simultaneously raising and lowering the planting mechanisms including a transverse rock-shaft mounted on the main-frame, crank arms carried thereby, flexible links connecting the crank-arms with the lower portions of the chutes, and direction pulleys on the main frame over which the flexible links pass.

[Claim 3 not printed in the Gazette.]

1,267,112. DEMOUNTABLE RIM. LOUIS H. PERLMAN, New York, N. Y. Filed Jan. 10, 1917. Serial No. 141,636. (Cl. 152—21.)

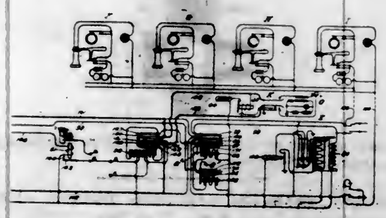


1. A cross-cut demountable rim having an undercut slot adapted to receive a portion of a rim manipulating tool, the undercut of the slot being adapted to be engaged by a portion of the tool, and the slot having an enlargement at one place of a size adapted to permit the passage of that portion of the tool designed to engage the undercut portion of the slot.

[Claims 2 to 5 not printed in the Gazette.]

1,267,113. PARTY-LINE TELEPHONE SYSTEM. WINFRED T. POWELL, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 27, 1916. Serial No. 94,019. (Cl. 179—17.)

1. In a telephone system, a line, a plurality of subscribers' stations on said line, means for selectively signaling the subscribers on said line, said means comprising a plurality of ringing current generators of different character, a group of relays for each generator for controlling the application of ringing current to said line, a trunk line leading to a manual switchboard, a battery for operating and talking purposes, means whereby a relay of said group connects a terminal of said battery to a conductor of said first line, a calling line, another relay, said other relay responsive to said battery connection whereby when the calling line signals for a station on said first line, the service of which has been discontinued, the calling line is connected to the manual switchboard over said trunk line.



2. In a telephone system, a line, a plurality of subscribers' stations on said line, means for selectively signaling the subscribers on said line, said means comprising a plurality of ringing current generators of different character, a group of relays for each generator for controlling the application of ringing current to said line, a trunk line leading to a manual switchboard, a battery for operating and talking purposes, means whereby a relay of said group connects a terminal of said battery to a conductor of said first line, a calling line, another relay, said other relay responsive to said battery connection whereby when the calling line signals for a station on said first line, the service of which has been discontinued, the calling line is connected to the manual switchboard over said trunk line, and a signal for said trunk line controlled over said connection.

3. In a telephone system, a line, a plurality of subscribers' stations on said line, means for selectively signaling the subscribers on said line, said means comprising a plurality of ringing current generators of different character, a group of relays for each generator for controlling the application of ringing current to said line, a trunk line leading to a manual switchboard, a battery for operating and talking purposes, means whereby a relay of said group connects a terminal of said battery to a conductor of said first line after said signaling operation, a calling line, another relay, said other relay responsive to said battery connection whereby when the calling line signals for a station on said first line, the service of which has been discontinued, the calling line is connected to the manual switchboard over said trunk line.

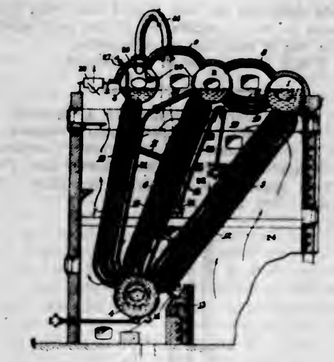
23. In a telephone system, a line, a pair of talking conductors for said line, a plurality of stations connected to said line, a terminal for said line in the exchange or central office, a ringing current generator for signaling one of said stations, a calling line, a manual switchboard, a battery for operating purposes, a relay for connecting a pole of said battery to a talking conductor of said line and means responsive to said battery connection whereby when the calling line signals for a station on said first line, the service of which has been discontinued, the calling line is connected to the manual switchboard, a signal at said switchboard, and means for operating said signal.

[Claims 4 to 22 not printed in the Gazette.]

1,267,114. STEAM-BOILER. ARTHUR D. PRATT, New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 8, 1917. Serial No. 147,302. (Cl. 122—302.)

1. A steam boiler of the class described comprising at least three upper transverse drums connected by banks of tubes to a lower water chamber, baffles for directing the gases over and among the tubes of said banks, some of the tubes of the rear bank being connected to the middle upper drum, and a baffle supported upon the upper portions of said last-named tubes to protect the rear upper drum from excessive heating.

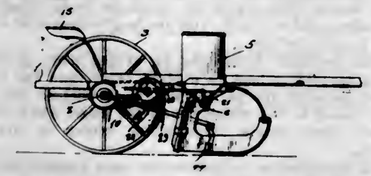
3. A steam boiler of the class described comprising at least three upper transverse drums connected by banks of tubes to a lower water chamber, baffles for directing the gases over and among the tubes of said banks with an uppass in the middle bank, some of the tubes of the rear bank being connected to the middle upper drum, and a baffle supported upon the upper portions of said last-named tubes to protect the rear upper drum from excessive heating.



5. A steam boiler of the class described comprising at least three upper transverse drums connected by banks of tubes to a lower water chamber, baffles for directing the gases over and among the tubes of said banks, steam circulators connecting the upper drums, water circulators between the front and middle upper drums, a feed water inlet leading into the rear upper drum, the front row of tubes of the rear bank being connected to the middle upper drum, and a baffle supported upon the upper portions of said last-named tubes to protect the rear upper drum from excessive heating.

[Claims 2 and 4 not printed in the Gazette.]

1,267,115. PLANTER. JOHN G. PREDA, Hurley, Wis. Filed Aug. 16, 1916. Serial No. 115,226. (Cl. 111—30.)



1. In a corn planter structure, the combination, of a supporting frame, a seed dispensing mechanism carried by said supporting frame, an axle carried by said frame, a shaft rotatably supported by said frame, means operatively connecting said shaft and said axle, a marker bar pivotally connected to said axle and extending forwardly therefrom, a gouging shovel carried by the forward end of said marker bar, a disk mounted upon said second named shaft, a pin carried by said disk and adapted for engaging said marker bar during the rotation of said disk for pivotally moving the marker bar into a marking position.

2. In a corn planter structure, the combination, of a supporting frame, a seed dispensing mechanism carried by said supporting frame, an axle carried by said frame, a shaft rotatably supported by said frame, means operatively connecting said shaft and said axle, a marker bar pivotally connected to said axle and extending forwardly therefrom, a gouging shovel carried by the forward end of said marker bar, a disk mounted upon said second named shaft, a pin carried by said disk and adapted for engaging said marker bar during the rotation of said disk for pivotally moving the marker bar into a marking position, and means for guiding the vertical or pivotal movement of said marker bar, and a spring attached to said marker bar for returning said marker bar to an inoperative position after it has been forced downwardly by said pin during the rotation of said disk.

1,267,116. FENCE-POST. CARL W. RIGEL, Evansville, Ind. Filed Aug. 14, 1916. Serial No. 114,823. (Cl. 256—54.)

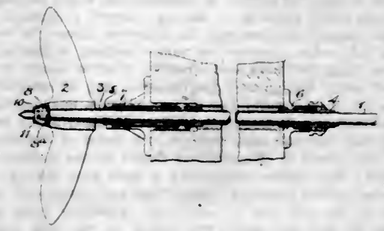


1. A hollow supporting post having a filler, fastening means mounted by the filler, said post having an opening through which the fastening means extends, a plate overlapping the interior of the post and extending into said opening, said plate having a slot through which the fastening means extends and said plate serving to protect the filler.

4. A post having a fastening means comprising a cylinder, a disk movable in the cylinder, a fastening member mounted in the disk, a retainer through which the fastening member passes, said retainer having an elongated slot where the member passes therethrough, the free end of the fastening member being in the form of a hook, said hook extending into the slot, and a spring surrounding said member engaging the disk and said keeper member.

[Claims 2 and 3 not printed in the Gazette.]

1,267,117. MARINE PROPELLER. EUGENE A. RIOTTE, Douglaston, N. Y., assignor to Standard Motor Construction Company, Jersey City, N. J., a Corporation of New Jersey. Filed Sept. 14, 1916. Serial No. 120,007. (Cl. 115—34.)



1. In a device of the character described, a propeller shaft including a core of steel having a tapered end, a jacket of relatively soft and relatively non-corrosive material of substantially uniform thickness permanently united to said core to completely cover the same throughout a substantial portion of its length including said tapered end to form a seat for the propeller hub.

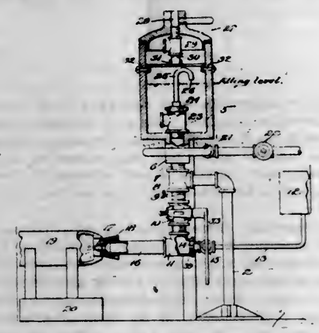
6. A propeller shaft including a core of ferrous material having a tapered outer end and a screw threaded tip, a jacket of relatively soft and relatively non-corrosive

metal of substantially uniform thickness substantially covering said core throughout a substantial portion of its length including said tapered portion to form at said tapered portion a seat for a propeller hub, and a bushing of non-corrosive and relatively harder material than said jacket surrounding and rigidly united to said jacket forward of said tapered portion.

12. The combination in a propeller shaft of a ferrous core comprising a propeller hub receiving portion having a key-way therein, a bearing portion, an intermediate connecting portion, a jointless relatively non corrosive metal covering integrally united to and entirely surrounding said shaft, with the exception of a key-way portion, from a point at or near the end of shaft, to a point forward of the bearing portion, a propeller comprising a hub of substantially similar material to said covering, wear resisting bearing sleeves mounted on said covering at the bearing portion of said shaft, means to secure said propeller in position against longitudinal displacement, and means to protect said shaft end from corrosion.

[Claims 2 to 5, 7 to 11, and 13 to 15 not printed in the Gazette.]

1,267,118. SPRAYING APPARATUS. MICHAEL J. ROCHE, Cambridge, Mass. Filed Aug. 19, 1916. Serial No. 115,885. (Cl. 184—56.)



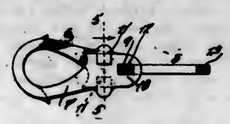
1. In a spraying apparatus, in combination, a reservoir for a liquid, a chamber, a conduit connecting the former with the latter, a valve in said conduit, a pipe connecting with said chamber whereby air under pressure may be introduced thereto, a supply of air under pressure, a discharge conduit associated with said chamber, and means whereby air from said pipe may be passed through said conduit and discharged downwardly on to the liquid in said reservoir.

8. In a spraying device, in combination, a pot having a relatively small opening at the top thereof, a chamber, a conduit between the pot and the chamber, means for supplying air under pressure in said chamber, a discharge member connected with said chamber whereby liquor from the pot which has entered the chamber may be conducted by the air to the work, and means whereby upon closure of a portion of said discharge member a supply of air may be directed through said conduit to a point of discharge above the liquor in the pot, and thence to the outside of said pot; said means comprising a bent pipe having its discharge orifice directed toward the top surface of the liquid in the pot and a bent pipe extending from the interior of the pot above the liquor to the said small opening at the top.

[Claims 2 to 7 not printed in the Gazette.]

1,267,119. CHAIN-FASTENING. SAMUEL ROSENBERG, New York, N. Y., assignor to National Chain Company, College Point, N. Y., a Corporation of New York. Filed Dec. 20, 1917. Serial No. 208,020. (Cl. 24—242.)

1. A chain-fastener or coupling, consisting of a plurality of pivotally connected hook-members, said hook-members being provided with alining square openings, and a link reversibly engaging said hook-members and passing



through said openings, one end of said link being squared to correspond to the configuration of the said openings, the opposite end of said link being rounded.

[Claims 2 to 5 not printed in the Gazette.]

1,267,120. ELECTRODE. FERDINAND A. RUDOLF, New York, N. Y., assignor to Nichols Copper Company, New York, N. Y., a Corporation of New York. Continuation in part of application Serial No. 65,008, filed Dec. 4, 1915. This application filed Aug. 15, 1916. Serial No. 114,945. (Cl. 204—1.)



1. In combination, a longitudinally arched electrode and means engaging therewith in proximity to the lateral top edges thereof from which the electrode freely hangs for suspending said electrode with its longitudinal axis at an angle to the vertical.

2. An electrode comprising an arched plate provided with a supporting hook in a plane other than the longitudinal plane of the plate which is parallel to the tangential plane at the center line of the plate, which longitudinal plane passes through the center of gravity thereof.

5. In combination, an electrolytic tank adapted to hold electrolyte and having ledges on opposite walls to support electrodes, and electrodes having laterally extending lugs adapted to rest upon said ledges, there being depressions in the top edges of the ledges between neighboring electrodes.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,267,121. ARTIFICIAL LIMB. MAX SAKOWSKI, Massillon, Ohio. Filed Dec. 26, 1917. Serial No. 208,821. (Cl. 3—12.)



1. In combination with an artificial arm having a wrist portion, a hand carried thereby having fingers hingedly arranged upon the hand with passages through the hand extending into the fingers and terminating in slots through the wrist portion of the arm, sliding blocks upon said wrist, operating connections between the said blocks and fingers within said passages, spring retainers for the said blocks, releasing means for said retainers, resilient returning bands for the said fingers, and free end portions for the fingers operatively connected to the hand within the passages therethrough whereby the fingers are inwardly foldable toward the palm of the hand upon moving the said blocks toward the hand.

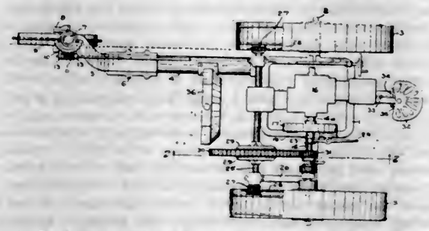
3. In combination with an artificial arm having a wrist portion, a hand carried thereby having fingers hingedly arranged upon the hand with passages through the hand extending into the fingers and terminating in slots through the wrist portion of the arm, sliding blocks upon said wrist, operating connections between said blocks and said fingers within said passages, spring retainers for said blocks, releasing means for said retainers, and resilient returning means for said fingers.

4. In combination with an artificial arm having a wrist portion and a hand portion, finger members hingedly carried by said hand portion, end members hingedly carried by said finger members, rods hingedly connected to said finger members and extending to a point adjacent said wrist portion, forwardly slidable means at said wrist portion and connected to said rods for swinging said finger members toward the palm of the hand portion, means for retaining said finger member swinging means in its forward position, resilient means connected to the back of the hand portion and to the end members to normally maintain the finger members and the end members in substantially straightened position, and means connected to the hand portion and to the end members to cause the latter to swing toward the palm of the hand portion when the finger members are swung toward the palm of the hand portion.

6. In combination with an artificial arm, having a hand portion, finger members hingedly carried by said hand portion, end members hingedly carried by said finger members, means for swinging said finger members toward the palm of the hand portion, and means connected to the hand portion extending through the finger members and connected to the end members to cause said end members to swing independently of the finger members toward the palm of the hand portion when the finger members are swung toward the palm of the hand portion.

[Claims 2 and 5 not printed in the Gazette.]

1,267,122. TRACTOR. RALPH B. HARTSOUGH, Minneapolis, Minn. Original application filed June 21, 1915, Serial No. 35,191. Divided and this application filed May 10, 1917. Serial No. 167,703. (Cl. 180—27.)



1. In a three wheeled tractor, a truck frame comprising a body casting provided at one side with a forwardly projecting, separately formed but rigidly secured tubular arm, and a separately formed bearing bracket secured to the front end of said arm, in combination with axially alined laterally spaced rear traction wheels supporting the rear body portion of said frame, a guide wheel bracket pivoted to said bearing bracket, a guide wheel journaled to said wheel bracket and alined with one of said traction wheels, a motor carried on the body of said frame, and transmission mechanism connecting said motor to said traction wheels.

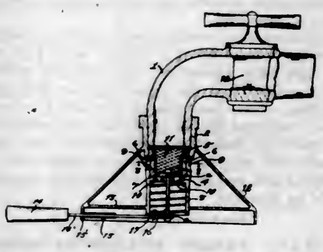
2. In a three wheeled tractor, a truck frame comprising a body casting provided at one side with a forwardly projecting arm and a bearing bracket secured to the front end of said arm, said bearing bracket being adjustable longitudinally of said arm, in combination with axially alined laterally spaced rear traction wheels supporting the rear body portion of said frame, a guide wheel bracket pivoted to said bearing bracket, a guide wheel journaled to said wheel bracket and alined with one of said traction wheels, a motor carried on the body of said frame, and transmission mechanism connecting said motor to said traction wheels.

3. In a three wheeled tractor, a truck frame comprising a body casting provided at one side with a forwardly projecting arm and a bearing bracket secured to the front end of said arm, in combination with axially alined laterally spaced rear traction wheels supporting the rear body portion of said frame, a guide wheel bracket pivoted to said bearing bracket, a guide wheel journaled to said wheel bracket and alined with one of said traction wheels, a motor carried on the body of said frame, transmission mechanism connecting said motor to said traction wheels, and a radiator for said motor supported from the intermediate portion of said arm and projected inward from one side thereof.

4. In a three wheeled tractor, a truck frame having a forwardly projecting arm in combination with laterally spaced rear traction wheels carrying the rear portion of said frame, a bearing head secured to the front end of said arm with freedom for rotary adjustment on the axis thereof, a wheel bracket pivoted to said bearing bracket, and a guide wheel journaled to said wheel bracket, said guide wheel being capable of horizontal oscillatory movements and adapted to be set at different angles in respect to a vertical, the latter adjustment being accomplished by the above noted rotary adjustments of said bearing bracket.

5. In a three wheeled tractor, the combination with a truck frame having a forwardly projecting arm, of laterally spaced rear traction wheels carrying the rear portion of said frame, a relatively small front guide wheel, means connecting said guide wheel to said arm with freedom for horizontal oscillatory steering movements and for transverse angular adjustments to set the same in different positions in respect to a vertical, and connections for imparting horizontal oscillatory movements to said guide wheel, and which connections are operative in all of the angular adjustments of said guide wheel.

1,267,123. ATTACHMENT FOR WATER-SUPPLY PIPES. RUDOLF F. SCHOTT, San Francisco, Cal., assignor to John L. Koster, San Francisco, Cal. Filed June 27, 1917. Serial No. 177,220. (Cl. 137—83.)

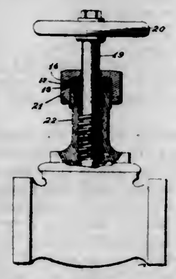


1. In a device of the class described, the combination with a cylindrical open ended barrel, a diaphragm extending transversely of said barrel and dividing the same into two compartments, a cup shaped plug valve rotatably mounted within said upper compartment and provided in its side and bottom walls with suitable outlet ports, said upper compartment provided in its side wall and in said diaphragm with outlet ports adapted for registering with the respective coöperating ports of said valve, a sprinkler head surrounding said barrel above

the lower end thereof and communicating with the outlet ports in the side wall of said upper chamber, an operating post extending centrally of the lower chamber and secured at its upper end to said valve, an operating handle movable within a guide slot formed in said sprinkler head wall and connected to said post, said handle capable of movement to operate said valve to position the ports thereof in register with their respective coöperating ports of said upper chamber.

2. In a device of the class described, the combination with a cylindrical open ended barrel, a diaphragm extending transversely of said barrel and dividing the same into two compartments, a cup shaped plug valve rotatably mounted within said upper compartment and provided in its side and bottom walls with suitable outlet ports, said upper compartment provided in its side wall and in said diaphragm with outlet ports adapted for registering with the respective coöperating ports of said valve, a sprinkler head surrounding said barrel above the lower end thereof, and communicating with the outlet ports in the side wall of said upper chamber, and means coöperating with said valve and capable of movement to operate the same to position the ports thereof in register with their respective coöperating ports of said upper chamber.

1,267,124. PACKING-RING. ZENO SCHULTES, New Brunswick, N. J. Filed Jan. 2, 1917. Serial No. 140,130. (Cl. 286—1.)

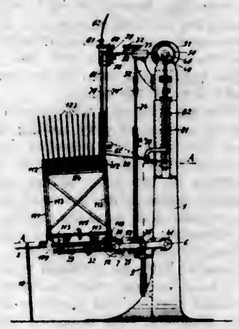


1. A packing ring comprising a hollow, annular, soft metal casing consisting of a bottom wall, side walls extending upwardly therefrom, and annular portions extending inwardly from the upper edges of said side walls, and a filling within said casing consisting of compressible material spaced from said inwardly extending annular portions, and non-metallic material of less compressibility than said compressible material positioned between said compressible material and said annular portions, substantially as specified.

2. A packing ring comprising a hollow, annular, soft metal casing consisting of a bottom wall, side walls extending upwardly therefrom, and annular portions extending inwardly from the upper edges of said side walls, and a filling within said casing consisting of compressible fibrous material spaced from said inwardly extending annular portions, and fibrous material of less compressibility than said compressible material positioned between said compressible material and said annular portions, substantially as specified.

1,267,125. BASKET-MAKING MACHINE. CARL SCHWEDLER, Berlin-Neukölln, Germany, assignor of one-half to Friedrich Voigt, Nordhausen, am Harz, Germany. Filed Feb. 20, 1917. Serial No. 149,921. (Cl. 139—2.)

1. A basket making machine, comprising a structure for carrying the uprights for the basket, means for moving said structure in a path corresponding to the circumferential shape of the basket, a head of substantially cylindrical shape, a vertical feeding tube mounted eccentrically within said head, means for reciprocating said head, and means for oscillating the latter in substantially a horizontal plane and synchronously with said reciprocatory movement and in timed relation thereto, whereby said feeding tube is carried around successive uprights in a sinuous line.



6. A basket making machine, comprising, in combination, a structure for carrying the uprights for the basket, a feeding head disposed above said structure, means for advancing said structure so that the uprights carried thereon pass successively below said feeding head, means for altering the vertical position of said structure in timed relation to the advance of the latter, said feeding head comprising a part adapted to revolve about a vertical axis, a mounting for said revoluble part and adapted to swing to alternate sides in a substantially horizontal plane, a yielding coupling between said part and said mounting, and a feeding tube mounted eccentrically in said revoluble part; means for imparting a reciprocatory movement to said feeding head in timed relation to the advance of said structure and in a direction crossing the plane in which the uprights are advanced below said feeding head, means for imparting an alternate swinging movement to said swingable mounting carrying said feeding tube, means for automatically stopping the advance of said structure when a corner upright is standing below said feeding head, means for causing said structure to perform a quarter-turn about the respective corner upright, means for automatically restarting the advance of said structure on conclusion of said quarter-turn, and means whereby said revoluble part of said feeding head is enabled to perform an independent full circular movement around a corner upright while the advance of said structure is interrupted.

9. A basket making machine, comprising, in combination, a structure for carrying the uprights for the basket, a feeding head disposed above said structure, means for advancing said structure so that each upright is caused to pass below said feeding head, means for altering the vertical position of said structure in timed relation to the advance of the latter, said feeding head comprising a part adapted to revolve about a vertical axis, a mounting for said revoluble part and adapted to swing to alternate sides in a substantially horizontal plane, a yielding coupling between said part and said mounting, and a feeding tube adjustably mounted eccentrically in said revoluble part, means for imparting a reciprocatory movement to said feeding head in timed relation to the advance of said structure and in a direction crossing the plane of movement of the uprights while passing below said feeding head, means for imparting an alternate swinging movement to said swingable mounting during the reciprocation of said feeding head, means for automatically stopping the advance of said structure when a corner upright is standing below said feeding head, means for causing said structure to perform a quarter-turn about the respective corner upright, means for automatically restarting the advance of said structure on conclusion of said quarter-turn, means whereby said revoluble part of said feeding head is enabled to perform a full circular movement around a corner upright, a pair of stays for the uprights and adapted to alternately engage successive uprights from alternate sides while the uprights are passing below said feeding head, and means for causing said stays to alternately engage successive uprights, said means acting in timed relation to the reciprocatory and oscillatory movements of said swingable mounting and so that each upright is being stayed from the side opposite to the relative position of said feeding tube.

[Claims 2 to 5, 7, 8, and 10 to 18 not printed in the Gazette.]

1,267,126. KNIT FABRIC HAVING THICKENED WALES. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed Aug. 1, 1916. Serial No. 112,592. (Cl. 66—4.)



1. A knit fabric formed of a body-yarn having therein two spaced needle wales only connected by an additional thickening yarn free from engagement with one or more intervening wales and alternately interknit with the body-yarn in one and in another of said spaced wales, whereby to form a thickened longitudinal mark, an intervening wale of the body fabric being projected in a ridge on the face side of the fabric.

[Claims 2 to 6 not printed in the Gazette.]

1,267,127. FABRIC HAVING THICKENED MOCK SEAMS. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed Aug. 1, 1916. Serial No. 112,593. (Cl. 66—4.)



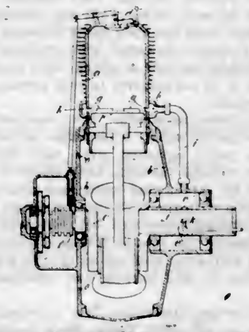
1. A tubular seamless stocking of fabric having normal courses and wales of a body-yarn and spliced areas formed of said body-yarn reinforced by a splicing-yarn, certain wales thereof only having therein additional courses of an additional yarn continuous from additional course to additional course and from spliced to unspliced areas.

7. The art of knitting stockings having a mock seam characterized by an intermitted thickened wale or wales comprising knitting a body-yarn in normal courses and wales on a series of needles, forming of an additional continuous yarn a course of loops in one or more selected wales only by operating the needles of said wales to knit after laying upon them said additional yarn, thereafter knitting the body-yarn normally in all of the wales, repeating said operations for a predetermined number of courses, and thereafter causing two or more successive normal courses to be formed in all the wales during a relation of said selective needles and additional yarn inoperative to cause the additional yarn to be formed into knit loops.

[Claims 2 to 6 not printed in the Gazette.]

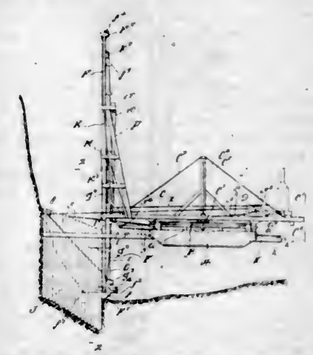
1,267,128. FOUR-CYCLE EXPLOSION-ENGINE. LOUIS LAZARE AUGUSTE SEGUIN, Paris, France, assignor to Société des Moteurs Gnome, Paris, France. Filed July 1, 1913. Serial No. 776,779. (Cl. 123—44.)

1. A rotary internal combustion engine including in combination, a rotary casing, a plurality of radially arranged cylinders carried thereby, a piston for each cylinder, an exhaust valve for each cylinder located at the outer end thereof, an intake port located adjacent the inner end of the stroke of the piston and adapted to be uncovered by said piston, and means for operating said exhaust valve, said operating means being constructed and timed so that said valve is opened allowing the burnt gases to escape and is held open during the first part of the intake stroke whereby fresh air will enter the cylinder so that when the intake port is uncovered by the piston the fuel gases will enter and form with the fresh air a proper mixture for exploding.



2. In a four cycle explosion motor, a cylinder, a piston working in said cylinder, the cylinder having in its wall openings which are uncovered by the piston at the end of its inward stroke, a chamber in which is formed a carbureted mixture sufficiently rich to be uninflammable, means for forming in said chamber the said carbureted mixture, means for leading to the cylinder openings the said carbureted mixture, an exhaust valve on the cylinder opening into the atmosphere, means for opening said exhaust valve before the end of the working stroke of the piston and closing the same during the next suction stroke before the piston uncovers the cylinder openings, and means for firing the explosive charge in the cylinder, substantially as described and for the purpose set forth.

1,267,129. APPARATUS FOR DRIVING PILES. ROBERT H. F. SEWALL, New Orleans, La. Filed May 19, 1917. Serial No. 169,672. (Cl. 61—13.)



1. In pile driving apparatus, the combination with a pair of barges spaced apart, frame work mounted on said barges, and a pile driver carried by said frame work and adapted to drive line piling in line with the open space between said barges, of a pair of stringers mounted between said barges and adapted to straddle the line of piling, with means for moving the barges longitudinally relative to said stringers, substantially as described.

2. In pile driving apparatus, the combination with a pair of barges spaced apart, frame work mounted on said barges, and a pile driver carried by said frame work and adapted to drive line piling in line with the open space between said barges, of a pair of stringers mounted between said barges and adapted to straddle the line of piling, a hauling line connected to said stringers, and means carried by said frame work for hauling on said hauling line, substantially as described.

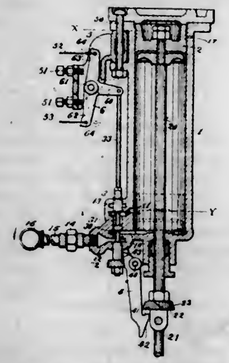
3. In pile driving apparatus, the combination with a pair of barges spaced apart, a turntable mounted on said barges, frame work mounted over said turntable and adapted to be rotated through 180° thereon, and a pile driver carried by said frame work and adapted to drive line piling in line with the open space between said barges, of a pair of stringers mounted between said barges and adapted to straddle the line of piling, with means for moving the barges in or out relative to said stringers, substantially as described.

4. In pile driving apparatus, the combination with a pair of barges spaced apart, a turntable mounted on said barges, frame work mounted over said turntable and adapted to be rotated through 180° thereon, and a pile driver carried by said frame work and adapted to drive line piling in line with the open space between said barges, of a pair of stringers mounted between said barges and adapted to straddle the line of piling, a hauling line connected to said stringers, and means carried by said frame work for hauling on said hauling line, substantially as described.

5. In pile driving apparatus, the combination with a pair of barges spaced apart, frame work mounted on said barges, and a pile driver carried by said frame work and adapted to drive line piling in line with the open space between said barges, of a pair of stringers mounted between said barges and adapted to straddle the line of piling, a guide frame for the piles being driven slidably mounted on said stringers, and means for moving the barges longitudinally relative to said stringers, substantially as described.

[Claims 6 to 22 not printed in the Gazette.]

1,267,130. POWER LIFTING MECHANISM FOR SAW-TRIMMERS. ISAAC L. SKEITH and WILLIAM B. BURROWS, Vancouver, British Columbia, Canada, assignors to Sumner Iron Works, Everett, Wash. Filed Aug. 18, 1910. Serial No. 577,855. (Cl. 143—41.)



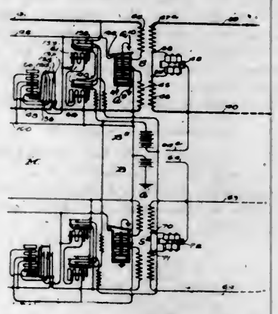
1. A lifting mechanism for trimmer saws, comprising a series of cylinders and pistons therein, each connected with its individual saw, a valve carried by each cylinder and adapted to control the piston therein, a series of levers and connections theeefrom, each to its particular cylinder valve, each of said levers having a transverse slot, a master lever, and a rod carried by said master lever and adapted to lie in said slots of the individual levers, whereby the individual levers may be operated separately and a series of said individual levers may be operated simultaneously by the master lever.

10. In a lifting mechanism for trimmer saws, a separate cylinder and piston therein for each saw, each cylinder having a valve seat formed thereon, a valve seating upon said seat, and a valve-controlling member carried by the cylinder, said valve-controlling member being automatically adjustable to conform to the lead of a transmission member throughout a wide angular range.

15. A lifting mechanism for trimmer saws comprising a cylinder, a piston therein, a piston rod, a connection from the exterior end of said rod to the saw frame to lift it, a dog engaging member or catch carried by the outer part of the piston rod, a dog pivoted to the cylinder and adapted to swing under said catch member by gravity, and means for releasing said dog from the catch actuated by the valve which controls the supply of actuative fluid to the cylinder.

[Claims 2 to 9, 11 to 14, and 16 to 18 not printed in the Gazette.]

1,267,131. AUTOMATIC OR SEMI-AUTOMATIC TELEPHONE SYSTEM. ARTHUR BESSEY SMITH, Evanston, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 25, 1914. Serial No. 827,063. (Cl. 179—27.)



1. In a telephone system, a plurality of subscribers' lines, means including a trunk line and automatic switches for extending a connection between two of said lines, means including a second trunk line for extending a second connection between two of said subscribers' lines, and a phantom signaling circuit superimposed on said trunk lines.

2. In a telephone system, a plurality of subscribers' lines, means including a trunk line and automatic switches controlled over said trunk line for extending a connection between two of said lines, a second trunk line and automatic switches controlled thereover for establishing a second connection between two of said lines, and a phantom signaling circuit superimposed on said trunk lines.

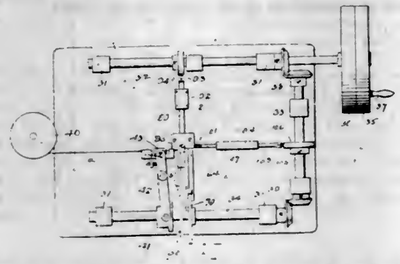
10. In a telephone system, a trunk line terminating in the primary winding of an induction coil, a second trunk terminating in the secondary of said induction coil, a relay at the opposite end of said second trunk, and means for automatically transmitting an impulse through the primary of said induction coil when connection is made with said first trunk to thereby induce an impulse of current by electromagnetic induction in said second trunk to thereby operate said relay.

12. In a telephone system, a trunk line, a relay in said trunk, means inductively related to said trunk for transmitting a series of induced impulses over said trunk to operate said relay, and an automatic switch controlled by said relay.

13. In a telephone system, a plurality of subscribers' lines, means for establishing a connection between two of said lines, said means including a trunk line conductively insulated from the remainder of said connection, and automatic switches for use in establishing said connection controlled by induced impulses transmitted over said conductivly insulated portion of said trunk line by electromagnetic induction.

[Claims 3 to 9, 11, and 14 to 74 not printed in the Gazette.]

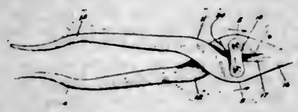
1,267,132. WIRE-FORMING MACHINE. HARRY W. SMITH, Pawtucket, R. I., assignor to Nickerson Art Metal Company, Providence, R. I., a Corporation of Rhode Island. Filed Apr. 24, 1917. Serial No. 164,128. (Cl. 140—93.)



3. In a machine of the character described, wire formers, means for feeding wire to said formers and severing the same into lengths, a magazine for supplying the work, a rest bar for supporting the work in the path of said formers, means whereby said formers are caused to bend the cut length of wire about the work, means for withdrawing the rest bar to permit the finished work to be discharged, and means operated by the withdrawing action of said bar for retaining the next adjacent piece of work until said rest bar is repositioned to receive the work.

[Claims 1 and 2 not printed in the Gazette.]

1,267,133. PLIERS. HENRY V. SMITH, Bridgeport, Conn., assignor of one-half to Eugene H. H. Smith, Bridgeport, Conn. Filed Oct. 4, 1916. Serial No. 123,757. (Cl. 81—47.)



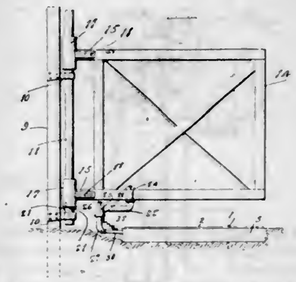
1. A device of the character described comprising two crossed members provided with jaw portions and handle portions, each jaw portion having recesses in its sides registering with corresponding recesses in the other jaw, links extending transversely of the jaw portions and filling the recesses, pivot pins connecting the ends of the links with the respective members, and means loosely retained in position between the crossed members, by the links, for preventing substantial relative longitudinal movement of the crossed members.

[Claim 2 not printed in the Gazette.]

1,267,134. AUTOMATIC GATE. EDWARD SNICKERS, Matlock, Wash. Filed Aug. 14, 1917. Serial No. 186,137. (Cl. 39—18.)

1. An automatic gate comprising a scale, a post located adjacent said scale, a gate hinged to said post, means connecting the gate to the scale to cause said gate to move in an open position upon movement of the said scale, and means rendering said gate inoperative upon movement of the scale.

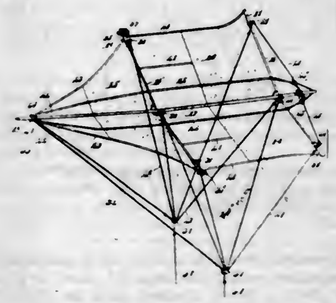
2. An automatic gate comprising a platform, a post located adjacent said platform, a supporting member carried by said post and having reduced portions, spirals formed on said reduced portions, cylindrical members surrounding the reduced portions, a gate secured to said cylindrical members, rollers carried by said gate and



adapted to engage the spirals, and means connecting the gate to the scale.

[Claim 3 not printed in the Gazette.]

1,267,135. TOY AEROPLANE. EDWARD SPRAGUE, Jr., Oak Park, Ill., assignor of one-third to Alphonse W. Laramie and one-third to Charles Robert Wood, Chicago, Ill. Filed June 19, 1916. Serial No. 104,597. (Cl. 244—22.)



1. A toy aeroplane comprising a plane; means for manually adjusting said plane from a position on the ground during operation of the device, said means comprising a plurality of flexible cords secured at their ends to said plane and having their central portions depending therefrom; and a plurality of flexible elements loosely engaging with said central portions of said cords and depending therefrom, substantially as described.

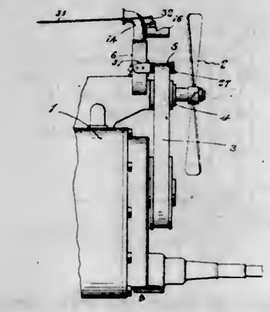
8. A toy aeroplane comprising a plane; flexible means connected with said plane for manually adjusting the same from a position on the ground during operation of the device; and guarded cutting devices carried by said plane, substantially as described.

[Claims 2 to 7 not printed in the Gazette.]

1,267,136. AUTOMOBILE ATTACHMENT. JAMES L. SPROUSE, Comanche, Okla., assignor of one-half to Nannie L. Hundley, Comanche, Okla. Filed Nov. 17, 1915. Serial No. 62,029. (Cl. 116—1.)

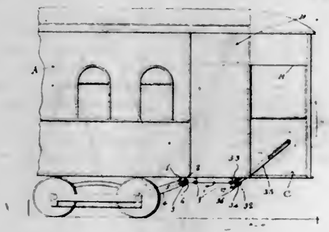
An automobile attachment including a casing, means for attaching the casing to an internal combustion engine, a fan located within the casing, a shaft having one end extending through one side wall of the casing and connected to the fan for supporting the latter, a pulley on the shaft, a belt trained over said pulley for rotating the shaft and fan, an outlet pipe connected to and communicating with said casing, a whistle connected to and extending laterally from the outlet pipe and communicating therewith, a valve pivotally secured to the inner end of the whistle pipe, and means connected to the valve

whereby it may be operated to close the outlet pipe and permit the blast to operate the whistle and by further



operation of the said means the whistle will be closed and outlet pipe opened.

1,267,137. DOOR-OPERATING MECHANISM. SANDY S. SORRENTI, San Francisco, Cal. Filed Aug. 3, 1916. Serial No. 112,972. (Cl. 268—6.)

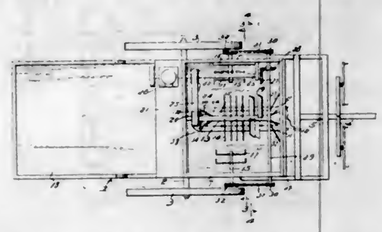


1. The combination with a door and a rotatable shaft having operative connection with the door, of a second rotatable shaft, a sleeve threaded upon the second shaft and adapted to have longitudinal movement in one direction upon rotation of the second shaft, an element carried by the sleeve and having a recess therein for rotatably receiving one end of the sleeve, means for connecting the element tot he first-mentioned shaft so as to effect rotation of the first shaft when the sleeve is moved in the mentioned direction so as to effect closing of the door, and means for rotating the first shaft in the opposite direction when the second shaft is at rest, so as to effect opening of the door and the return of the sleeve to normal position.

2. A door opening and closing device consisting of a rotatable shaft, means for connecting the shaft to a door, a second shaft, a sleeve threaded on and adapted to have longitudinal movement with respect to the second shaft when the second shaft is rotated in one direction, means for connecting the sleeve to the first mentioned shaft so as to rotate the first shaft in one direction when the second shaft is rotated so as to effect closing of the door, and means for effecting rotation of the first shaft in the opposite direction when the second shaft is at rest so as to effect opening of the door and the return of the sleeve to normal position.

1,267,138. HARVESTER. JESSE B. SPRY, Coinjock, N. C. Filed May 9, 1917. Serial No. 167,557. (Cl. 56—1.)

1. A pea picker including a rectangular body, an axle mounted transversely thereof, wheels journaled on the ends of the axle for supporting the body, the rear end of the body serving as a pod receiving compartment, the front end of the body being provided with a longitudinally extending slot, the front wall of the body being provided with a vine receiving opening communicating with the slot, a casing constructed above the front end of the body, a longitudinal shaft the respective ends of which are journaled in the front and rear walls of the casing, beater arms radiating from the shaft for separating the peas from the pods, receiving boards mounted in the bottom of the body tot he sides of the slots, fan blades radiating from the shaft in advance of the beater arms for forcing the pods into the compartment therefor, a main shaft, means for rotating the shaft, means for transmitting rotary motion from the main shaft to the longitudinal shaft to actuate the beater arms and fan blades.



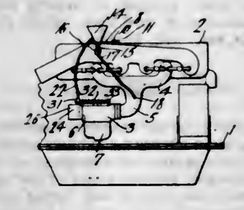
2. A pea picker including a rectangular body the bottom of which is provided with a slot near the front end, the front wall of the body being provided with a vine receiving opening, beater arms operatively mounted above the slot for separating the peas from the pods, guards pivoted upon opposite sides of the slot and serving to maintain the vines as they are engaged by the guards in a substantially upright position and for preventing the escape of the peas through the slot subsequent to the separation thereof.

3. In a pea picker, a supporting body, the bottom of which is provided with a longitudinal slot adjacent the front wall while the front wall is provided with a vine receiving opening, guides supported by the body adjacent the sides of the slot, receiving boards mounted above the body and between the guides and the sides of the body, coöperating beating and fanning means mounted above the slot for separating the peas from the pods and for blowing the pods toward the rear end of the body subsequent to separation, guard plates pivoted to the guides, flexible means for limiting the relative movement of the plates toward each other, and resilient means for normally holding the plates in close relation with each other.

4. In a pea picker, a vehicle body the bottom of which is provided with a longitudinal slot adjacent the front wall while the front wall is provided with a vine receiving opening communicating with the front end of the slot, opposed guides mounted on the upper surface of the bottom adjacent the opposite sides of the slot, receiving boards mounted upon the bottom of the body between the guides andt he sides of the body, coöperating beating and fanning means mounted above the slot for separating the peas from the pods and for blowing the pods beyond the rear end of the body subsequent to separation, guard plates pivoted to the upper edges of the guides and arranged longitudinally thereof, arms extending rearwardly and in divergent relation from the guard plates adjacent the inner ends thereof, a coil spring having its respective ends connected to the arms and tensioned so as to normally hold the guard plates in close relation with respect to each other and approximately over the center of the slot so that the stems of vines will be held above the slot and be readily acted upon by the beating means,a nd flexible cables having their respective ends connected to the body and to the guard plates for limiting relative movement of the guard plates toward each other and permitting the spreading of the plates to accommodate vines therebetween.

5. A pea picker including a transportably mounted rectangular body the bottom of which is provided adjacent the front end with a longitudinal vine receiving slot, the rear end of the body serving as a pod receiving compartment, the front wall of the body being provided with a vine receiving opening communicating with the slot, a casing constructed above the front end of the body, a longitudinally extending shaft having the respective ends journaled in the front and rear walls of the casing, main beater arms radiating from the shaft for separating the peas from the pods, fan blades carried by the shaft for directing the pods toward the receiving compartment therefor subsequent to the separation of the peas therefrom, a main shaft, means for rotating the shaft, means for transmitting rotary motion from the main shaft to the longitudinally extending shaft, a transverse shaft journaled in the sides of the casing and operably connected to the main shaft so as to be actuated simultaneously therewith, stub shafts journaled in the sides of the body, auxiliary beater arms radiating from the inner ends of the stub shaft and coöerating with the main beater arms and the fanning means for separating the peas from the pods and for directing the pods and vines toward the rear end of the body, and means for transmitting rotary motion from the transverse shaft to the stub shafts sot hat the auxiliary beater arms will be actuated simultaneously with the main beater arms and the fanning means.

1,267,139. FUNNEL. FRANCIS J. STEUTERMANN, Webster, Mass. Filed June 8, 1917. Serial No. 173,568. (Cl. 123—122.)



1. The combination with an internal combustion engine comprising a carbureter having an air inlet, of a jacket assembled with the inlet and provided with an outlet; a hot water receptacle; a tube leading from the receptacle to the jacket; and spring means for holding the jacket on the inlet.

2. In a device of the class described, an internal combustion engine comprising a carbureter having an air inlet and a mixture conduit leading from the carbureter; an arm mounted on the engine; a funnel supported in the arm; tubes rotatably connected with the funnel, one tube discharging on the mixture conduit; and a jacket mounted on the air inlet, the other tube communicating with the jacket.

3. A device constructed in accordance with claim 2, with a retractile spring extended between the carbureter and the jacket and constituting means for holding the jacket on the air inlet.

4. The combination with an internal combustion engine comprising a carbureter and an intake member leading therefrom, of a receptacle independent of the cooling system of the engine, and into which water may be poured; and two open, independent conduits leading from the spaced portions of the receptacle and discharging, respectively, upon a part of the carbureter and upon the intake meber.

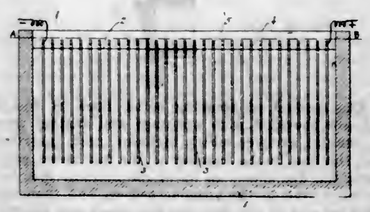
1,267,140. BUOYANT GARMENT. JAMES SMITH STOCKMAN, South Shields, England. Filed Apr. 23, 1917. Serial No. 164,020. (Cl. 9—20.)

A buoyant garment of the character designated, comprising a sleeveless jacket, crescent shaped inflatable bags positioned with their concavities under the arm pits thereof, and between the face cloth and the lining thereof, means for inflating said bags, and plaits in the sides and back portions of the garment which allow the latter to



expand when the bags are inflated.

1,267,141. TOTALLY-SUBMERGED ELECTRODE. HARRY H. STOUT, New York, N. Y., assignor to Nicholas Copper Company, New York, N. Y., a Corporation of New York. Filed July 26, 1916. Serial No. 111,395. (Cl. 204—1.)



1. In combination, an electrolytic tank comprising side walls each provided with a ledge near but below the top of the wall and an electrode provided with laterally extending supporting lugs resting upon said ledges whereby the electrode is suspended from said lugs.

2. In combination, an electrolytic tank comprising side walls each provided with a ledge and having a portion extending upwardly beyond said ledge, an electrode provided with supporting lugs resting upon the ledges of said tank whereby the electrode is suspended from said supports, the top edge of the electrode being below the top of the tank, the electrode being thus adapted to be totally submerged in the electrolyte of the tank.

1,267,142. ARM-SUPPORT. JESSIE ALMA STOWERS and JOHN BAZANT, New York, N. Y. Filed Feb. 14, 1918 Serial No. 217,117. (Cl. 128—52.)



1. An arm support, comprising an open hook having a shank, suporting means connected with the said shank to support the hook on the wearer's body, and an auxiliary arm rest in the form of an open trough attached to the said hook.

3. An arm support, comprising a neckband, an open hook having a shank to which the ends of the said neckband are secured, the hook being made of flat material, an auxiliary rest in the form of an open-ended trough of flexible material and resting at its middle on the said hook, the said rest having openings on opposite sides of the hook, and a lacing string engaging the said openings and extending under the said hook to removably fasten the said rest to the said hook, the said rest projecting beyond the sides of the hook.

[Claims 2 and 4 not printed in the Gazette.]

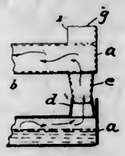
1,267,143. METHOD OF SECURING THE ENDS OF BOILER-FLUES IN FLUE-SHEETS. JOHN SULLIVAN, Peru, Ind. Original application filed May 26, 1916, Serial No. 100,154. Divided and this application filed Feb. 15, 1917. Serial No. 148,905. (Cl. 29—157.)



1. The method of securing boiler flues to flue sheets which are provided with openings and further provided with annular grooves which includes, first, inserting the end of the flue in the opening of the flue sheet, secondly, flanging the flue sheets to lie in the annular groove, then inserting a ring in the annular groove, and then welding the flanged end of the flue, the flue sheet and the ring together.

2. The method of securing boiler flues to flue sheets which are provided with annular grooves which includes, first, inserting the end of the flue in the opening of the flue sheet, then flanging the flue sheet to lie in the annular groove, then inserting a split ring in the annular groove and bending the same to entirely fill the grove, and securing the flanged end of the flue, the flue sheet and the ring together.

1,267,144. FRUIT AND VEGETABLE EVAPORATOR. WHILMORE R. TAYLOR, Germantown, Pa., assignor to Eastern Manufacturing Company, Philadelphia, Pa., a Firm. Filed May 17, 1917. Serial No. 169,168. (Cl. 34—22.)

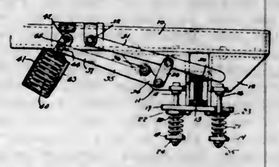


1. A fruit and vegetable evaporator comprising a chamber provided at one corner with a depending pipe tapering toward its lower end and provided at its diagonally opposite corner with an upstanding pipe, whereby the lower part only of said depending pipe is adapted to enter, and be thus directly supported by, the upstanding pipe of a second underlying chamber and said first mentioned upstanding pipe is adapted to similarly engage the depending pipe of a third superimposed chamber, the engagement between said pipes thus affording means whereby one chamber is supported by, and spaced from, another, as well as a passage for steam.

[Claims 2 to 4 not printed in the Gazette.]

1,267,145. VEHICLE SPRING SUSPENSION. JAMES TRBANOR, New York, N. Y. Filed Nov. 10, 1917. Serial No. 201,314. (Cl. 267—8.)

1. A vehicle suspension, comprising a lever, of which one end is fulcrumed on the vehicle body and its other end engages the axle of the vehicle, a second lever fulcrumed on the vehicle body at a point between its ends, a link connecting one end of the said second lever with the said first-named lever at a point between the ends of the said first-named lever, and a spring supported on the vehicle body and engaged by the other end of the said second lever.



3. In a vehicle spring suspension, the combination of an axle, a car body, a light rebound spring device connecting the car body directly with the axle, a lever fulcrumed at one end on the said car body and resting with its free end on the said axle, a second lever fulcrumed near one end on the car body and having a short arm and a long arm, a link connecting the said short arm with the said first-named lever at a point near the said axle, and a spring supported by the said vehicle body and engaged by the said long arm.

[Claim 2 not printed in the Gazette.]

1,267,146. MANDREL AND THE LIKE. CHARLES K. TRIPP, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 1, 1916. Serial No. 128,894. (Cl. 82—44.)



1. In an apparatus of the character described, the combination of a member having an annular surface, a coiled spring thereon, and means for fastening one end of the spring to the member, the other end of the spring being free, whereby when the coils of said spring and the member are turned relative to each other, a turning movement in one direction will expand the spring and a turning movement in the other direction will contract it.

4. In an apparatus of the character described, the combination of a member having an annular surface with a dove-tailed spiral groove therein, a coiled spring of substantially the same contour in section as the groove mounted loosely therein, and means for fastening one end of the spring to the member, the other end being free.

8. The combination with a gripping member and a member to be gripped, said members having annular surfaces adapted to be brought into concentric relation to each other, of means for gripping said members together when they are subjected to a turning movement relative to each other comprising a spiral spring carried by the gripping member and fastened thereto at one end, the other end being free.

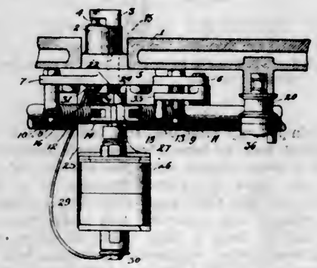
[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

1,267,147. VEHICLE-WHEEL TIRE. WILLIAM F. TROAST, Lancaster, Pa., assignor of one-half to Frank B. Trout, Lancaster, Pa. Filed Feb. 21, 1917. Serial No. 150,094. (Cl. 152—16.)



The combination with a vehicle wheel tire having a plurality of chambers formed in the tread portion thereof, of a plurality of wearing blocks fitting in said chambers respectively; each of said blocks comprising a metallic base piece having a centrally raised portion, a pliable member overlying said base piece surrounding said raised portion, and having its wearing surface lying flush with the wearing surface of the tire tread portion, rivets securing said pliable body to the base piece and the heads of said rivets projecting appreciably beyond the tire tread surface; and means passing through said centrally raised portions securing said wearing blocks in said chambers, substantially as set forth.

1,267,148. IGNITION MECHANISM FOR INTERNAL-COMBUSTION ENGINES. HARRY RANDOLPH VAN DEVENTER, Sumter, S. C., assignor, by mesne assignments, to Splitdorf Electrical Company, Newark, N. J., a Corporation of New York. Filed Dec. 19, 1914. Serial No. 878,196. (Cl. 123—149.)



1. An ignition mechanism for internal combustion engines including in combination, an igniter having a movable electrode, a magneto having a rotor shaft in alinement with the axis of the movable electrode, an arm fixed to said shaft, an operating mechanism for the rotor, said mechanism comprising an arm mounted to turn about the axis of the movable electrode, means for operating said arm, and means for detachably connecting said arm to the arm on the rotor shaft.

2. An ignition mechanism for internal combustion engines, including in combination, a supporting bracket, an igniter having a movable electrode, a magneto detachably connected to said bracket and having its rotor shaft in alinement with the axis of the movable electrode, means mounted on the shaft supporting the movable electrode for operating the rotor of the magneto, said operating means being detachably connected with the rotor shaft whereby the magneto may be removed from the supporting bracket as a unit.

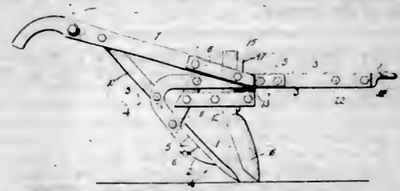
3. The combination of a magneto, and operating mechanism therefor, said magneto comprising a rotor shaft, and an arm fixed to said shaft, said mechanism comprising a shaft co-axial with said magneto shaft, an arm mounted on said mechanism shaft, said arm having a slot therein, said magneto arm passing into said slot, and means for operating said mechanism arm.

4. The combination of a magneto, a supporting bracket on which said magneto is removably supported, and an operating mechanism for the magneto shaft supported independently of the magneto and including a rotatable member having its axis in alinement with the axis of the magneto shaft, a finger projecting from said member, an arm fixed to the member, resilient means connected to said member and supported independently of the magneto, a push rod for operatively engaging said finger, and means for detachably connecting the arm on said rotatable member with the rotor shaft.

5. The combination of a magneto having a rotor shaft, an arm fixed to said rotor shaft, an igniter including a movable electrode having its axis in alinement with the axis of the magneto shaft, a rotatable member mounted on the supporting shaft of the movable electrode, a finger projecting from said member, a push rod adapted to engage said finger for oscillating said rotatable member, resilient means connected with said member and supported independently of the magneto, an arm fixed to said member, and means for detachably connecting said arm to the arm on the rotor shaft.

[Claims 6 to 8 not printed in the Gazette.]

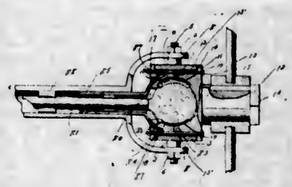
1,267,149. CULTIVATOR. JOHN M. VAUGHN, Indian Mound, Tenn. Filed Mar. 2, 1916. Serial No. 81,699. (Cl. 97—6.)



3. A cultivator comprising a beam formed of horizontally spaced bars, the rear ends of which are bent forwardly at an angle to the beam to form a standard, a diagonal brace bar connected at its ends to the beam and standard, horizontally spacer bars secured at one end of the brace and having their forward ends secured to a block depending from the plow beam, abutment block secured between the horizontal bars, a ground engaging tool having a shank, said shank being adapted to be inserted into the spaces between the abutment and the block at the forward end of the horizontal bars, and a wedge adapted to engage the shank and one of the abutment blocks.

[Claims 1 and 2 not printed in the Gazette.]

1,267,150. BALL-BEARING KNUCKLE FOR AUTOMOBILE FRONT AXLES. JAMES WEBB and FONZO M. COLLINS, Camp Verde, Ariz. Filed Oct. 25, 1916. Serial No. 127,630. (Cl. 74—103.)



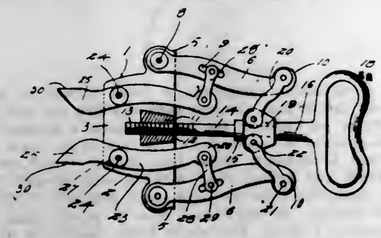
1. A knuckle for automobiles comprising a pair of companion socket members and one of said members having recesses in its inner end, lugs formed on the inner end of the other member and fitting in said recesses to prevent relative movement of said members, bolts connecting said members, annular flanges formed on the outer ends of said members, a cuff journaled on said members between said flanges, means pivotally connecting the cuff to an axle housing, an axle extending in one of said members, a sphere formed on said axle and located in said members, and means operatively connecting the sphere to said members.

2. A knuckle for automobiles comprising a pair of companion socket members, means connecting said members together, a cuff journaled on said members, an axle housing to which said cuff is pivoted, one of said members having an opening in its outer end communicating with the socket thereof, an axle journaled in said housing and extending through the opening of said member, said members having communicating grooves in the walls of their sockets, a sphere formed on said axle and located within said members and having grooves in registration with said grooves of the members, and balls located in said grooves.

3. A knuckle for automobiles comprising a pair of companion socket members, means connecting said members,

a cuff journaled on said members, an axle housing to which said cuff is pivoted, an axle journaled in said housing and extending into said members, a sphere formed on said axle and located in said members, means establishing an operative connection between said sphere and said members, one of said members having a groove formed in its outer end, a sleeve in said housing, a substantially spherical flange formed upon said sleeve and received within said groove to establish a dust-proof connection between the housing and the members and also aiding in holding the members against relative movement in relation to the housing.

1,267,151. HOOF-SPREADER. FREDERICK L. WELLMAN, Walpole, N. H. Filed May 11, 1917. Serial No. 167,963. (Cl. 168—47.)

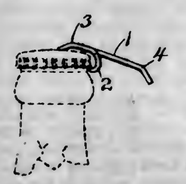


1. A hoof spreader comprising a housing, a threaded bearing located in the housing, jaws pivotally secured in the housing on opposite sides of the bearing, bars pivotally secured to the housing, a shank threaded in the bearing, means pivotally secured to the shank and the bars, and means pivotally secured to the jaws and bars for movement of the jaws upon movement of the shank in the bearing.

4. A hoof spreader comprising a pair of spaced plates constituting a housing, a threaded bearing secured to the opposite faces of the plates centrally thereof adjacent the rear edge thereof, jaws pivotally mounted between the opposing faces of the plates and extending beyond the forward and rear edges thereof, said jaws located on opposite sides of the bearing, a pair of bars having one end pivotally secured between the opposing faces of the plates at the rear edge thereof and located on opposite sides of the bearing, a shank screw-threadedly mounted in the bearing, a stop collar carried intermediate the ends of the shank, a handle rigidly secured to the free end of the shank, a spreading collar rotatably mounted on the shank and located between the inner end of the handle and stop collar to limit the longitudinal movement of the same on the shank, links pivotally securing the free ends of the bars with the spreading collar, and links pivotally secured to the bars and free ends of the jaws for movement of the jaws upon movement of the shank in the bearing.

[Claims 2 and 3 not printed in the Gazette.]

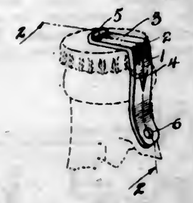
1,267,152. CRIMPED-BOTTLE-CAP REMOVER. SAMUEL T. WHITAKER, Columbus, Ga., assignor of fifty-one one-hundredths to Ralph B. Small, Columbus, Ga. Filed Dec. 18, 1915. Serial No. 67,659. (Cl. 65—46.)



2. A tool for removing crimped caps from bottles comprising a substantially flat body and an approximately hook shaped projection extending therefrom substantially at right angles to the planes of the flat faces of the body, the cap engaging end portion of the body being offset to cause the body to stand up slightly above the cap when the hook portion thereof is engaging the same, and the hook shaped projection being proportioned to, during such engagement, extend beneath the edge of the cap.

[Claim 1 not printed in the Gazette.]

1,267,153. CRIMPED-BOTTLE-CAP REMOVER. SAMUEL T. WHITAKER, Columbus, Ga., assignor of fifty-one one-hundredths to Ralph B. Small, Columbus, Ga. Filed Dec. 18, 1915. Serial No. 67,660. (Cl. 65—46.)



2. A crimped cap removing tool comprising a body of flat material bent to form a right angle projecting portion, and a hook stamped from the material of the body between its edges to extend generally in a direction parallel to the said right angle projecting portion.

3. A crimped cap removing tool comprising a body portion bent to form a right angle extension, a flange engaging hook portion outstanding from the body portion in the general direction of the right angle extension, and a retainer engaging flange projecting from the extension.

[Claim 1 not printed in the Gazette.]

1,267,154. CAP-REMOVER. SAMUEL T. WHITAKER, Columbus, Ga., assignor of fifty-one one-hundredths to Ralph B. Small, Columbus, Ga. Filed Aug. 24, 1916. Serial No. 116,633. (Cl. 65—46.)



1. A crimped cap remover comprising a body formed of a flat strip of metal bent at one end to form a downwardly-turned tab and bent and tapered at the other end to provide a point, a portion of the material of the body being stamped to form an outstanding hook adapted to engage beneath the flange of a crimped cap when the point engages the upper surface of the cap.

[Claim 2 not printed in the Gazette.]

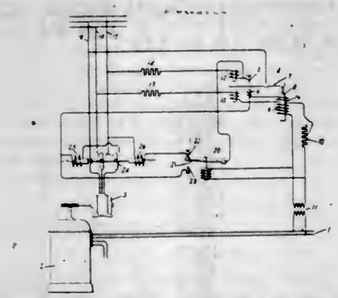
1,267,155. BOTTLE-CAP REMOVER. SAMUEL T. WHITAKER and RALPH B. SMALL, Columbus, Ga. Filed Dec. 4, 1916. Serial No. 135,028. (Cl. 65—46.)

6. A crimped cap remover comprising an integral plate formed into outstanding wings shaped to receive a bottle neck and provided with edges adapted to engage the free edge of the flange of a crimped cap, the said plate being also provided with a coöperating shoulder spaced from said wings a distance for receiving the cap between the wings and the shoulder for retaining the cap against movement as the bottle is being withdrawn from the cap, the plate having a portion folded upon itself for producing said shoulder.



[Claims 1 to 5 not printed in the Gazette.]

1,267,156. CONTACT-MAKING VOLTMETER. FRED H. WINTER, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 1, 1917. Serial No. 151,717. (Cl. 171—119.)



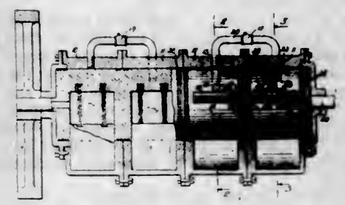
1. In an alternating current contact making meter, the combination of a stationary contact, a movable contact adapted to coöperate therewith, electro-responsive means for actuating said movable contact, a winding adapted to be energized upon the engagement of said movable contact with said stationary contact and tending, when energized, to maintain such engagement, and means adapted to compensate for the magnetic interference between said electro-responsive means and said winding.

3. In an alternating current contact making meter, the combination of a plurality of stationary contacts, a movable contact adapted to coöperate therewith, electro-responsive means for effecting the operation of said movable contact, a winding adapted to be energized upon the engagement of said movable contact with one of said stationary contacts and tending, when energized, to maintain such engagement, and a plurality of windings adapted to be energized upon the engagement of said movable contact with another of said stationary contacts, one of said last mentioned windings tending, when energized, to maintain engagement between said movable contact and said last mentioned stationary contact, and the other of said windings tending, when energized, to compensate for the magnetic interference between said electro-responsive means and the other of the last mentioned windings.

8. The combination with a feeder circuit and an induction type regulator therefor, of a reversible motor for adjusting the position of the movable element of said regulator and thereby adjusting the voltage on said feeder circuit, an alternating current supply circuit for said motor independent of said feeder circuit, electromagnetic reversing means for said motor, a contact making voltmeter adapted to control said electromagnetic reversing means, said contact making voltmeter comprising stationary contacts, a movable contact adapted to coöperate therewith, electro-responsive means, responsive to a decrease in feeder voltage, for effecting the engagement of said movable contact with one of said stationary contacts and, to an increase in feeder voltage, for effecting the engagement of said movable contact with another of said stationary contacts, a winding adapted to be connected to said independent alternating current supply circuit upon the engagement of said movable contact with the first mentioned stationary contact and tending, when so connected, to maintain such engagement, and a plurality of windings oppositely wound with respect to the direction of the magnetic field set up by said electro-responsive means and adapted to be serially connected to said independent alternating current supply circuit upon the engagement of said movable contact with the second mentioned stationary contact, one of said windings tending, when so connected, to maintain engagement between said movable contact and the second mentioned stationary contact and the other of said windings coöperating with and adapted to modify the action of said electro-responsive means, and means operative upon an abnormal decrease in the voltage of said feeder circuit for causing said motor to adjust the regulator for a minimum feeder voltage.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,267,157. ROTARY ENGINE. WALTER ZABRISKIE, Pagosa Junction, Colo. Filed Mar. 20, 1917. Serial No. 156,008. (Cl. 123—16.)



1. In a rotary engine, a compression cylinder having an inlet and an outlet, a motor cylinder having an inlet and an outlet, a member of less diameter than the inner diameter of the compression cylinder disposed in the compression cylinder with its periphery against the wall of the said cylinder at the outlet and rotatable on an axis eccentric to the cylinder, there being a guideway extending out through the periphery of the member, a piston movably disposed in the guideway, there being a by-pass in the member in advance of the piston to lead the gases compressed by the piston to the outlet, means for holding the piston yieldingly against the compression cylinder, and means connecting the outlet from the compression cylinder and the inlet to the motor cylinder.

2. In a rotary engine, two cylinders one a compression cylinder and the other a motor cylinder, disposed side by side each cylinder having an inlet and an outlet, communicating means extending from the outlet of the compression cylinder to the inlet of the motor cylinder, a member of less diameter than the inner diameter of the cylinders disposed in the cylinders, a piston on the member in the motor cylinder, the member being disposed in the compression cylinder with its periphery against the wall of the compression cylinder at the outlet, there being a guideway in the member in the compression cylinder extending out through the periphery of the member, a piston movably disposed in the guideway there being a by-pass in the member in the compression cylinder in advance of the piston to lead the gases compressed by the piston to the outlet in the compression cylinder, and means for holding the piston yieldingly extended against the compression cylinder.

3. In a rotary engine, a compression cylinder having an inlet and an outlet, a motor cylinder having an inlet and an outlet, means connecting the outlet from the compres-

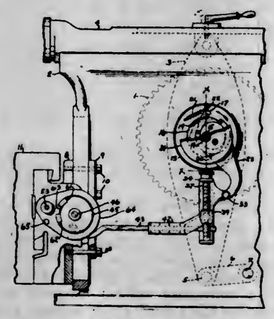
sion cylinder with the inlet to the motor cylinder, a member of less diameter than the inner diameter of the cylinders disposed in the cylinders with its periphery against the wall of the compression cylinder at the outlet and rotatable on an axis eccentric to the compression cylinder, there being a guideway extending out through the periphery of the member and disposed in the compression cylinder, a piston movably disposed in the guideway, there being a by-pass in the member in advance of the piston to lead the gases compressed by the piston to the outlet, a spring in the guideway for pressing the piston yieldingly outwardly against the compression cylinder, there being an opening in the member at its axis through which a cooling fluid may be introduced, and a piston on the member disposed in the motor cylinder.

4. In a rotary engine, a compression cylinder having an inlet and an outlet, a motor cylinder having an inlet and an outlet, means affording communication between the outlet in the compression cylinder and the inlet in the motor cylinder, a member of less diameter than the inner diameter of the cylinders disposed in the cylinders with its periphery against the wall of the compression cylinder at the outlet and rotatable on an axis eccentric with the compression cylinder, a piston on the member in the motor cylinder, there being two guideways in the member in the compression cylinder one at each side of its axis extending through the periphery of the member, pistons movably disposed in the guideways, there being two by-passes in the member one in advance of each piston to lead the gases compressed by the pistons to the outlet at the proper time, and means for holding the pistons yieldingly extended against the compression cylinder.

5. In a rotary engine, a compression cylinder having an inlet and an outlet, a member of less diameter than the inner diameter of the compression cylinder disposed in the compression cylinder with its periphery against the wall of the cylinder at the outlet and rotatable on an axle eccentric to the cylinder, and a piston movably mounted on the member for engaging the inner wall of the compression cylinder, there being a by-pass in the member in advance of the piston to lead the gases compressed by the piston to the outlet.

[Claim 6 not printed in the Gazette.]

1,267,158. SHAPING-MACHINE. WILLIAM F. ZIMMERMANN, Newark, N. J., assignor to Gould & Eberhardt, Newark, N. J., a Corporation of New Jersey. Filed May 4, 1916. Serial No. 95,394. (Cl. 90—39.)



1. In a feeding mechanism for a shaping machine, the combination of a work slide, a screw to feed same, a gear, an eccentric provided with two abutments diametrically opposite, a latch mounted on said gear and arranged to engage either one of the abutments of said eccentric, and connections between said eccentric and screw to intermittently feed said slide.

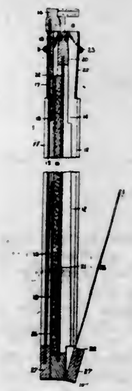
2. In a feeding mechanism for a shaping machine, the combination of a work slide, a screw to feed same, a gear, a member mounted concentric with said gear and having an eccentric periphery, two abutments provided diametrically opposite in said member, a latch mounted on said gear and connected to said member by either of said abutments to revolve same in synchronism with said gear, and connections between said member and screw to intermittently feed said slide.

4. In a feeding mechanism for a shaping machine, the combination of a work slide, a screw to feed same, a gear, an eccentric, two abutments provided diametrically opposite in said eccentric, a latch mounted on said gear and connected to said eccentric by either of said abutments to rotate same, means to disconnect said eccentric and gear during rotation to permit engagement with the opposite abutment to alter the relative positions to each other, and connections between said eccentric and screw to intermittently feed said slide.

7. In a feeding mechanism for a shaping machine, the combination of a work slide, a screw to feed same, a gear, an eccentric, two abutments diametrically opposite provided therein, a latch mounted on said gear and engaging one of said abutments, a plunger so arranged as to be moved into the path of said latch to disengage same, and connections between said eccentric and screw to intermittently feed said slide.

[Claims 3, 5, 6, and 8 to 17 not printed in the Gazette.]

1,267,159. PHOTOGRAPHIC-PLATE HOLDER. SAMUEL G. ZUCKERMAN, New York, N. Y. Filed Mar. 5, 1915. Serial No. 12,233. (Cl. 95—1.1.)

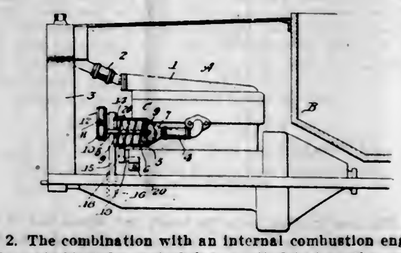


1. A photographic plate holder having a recess for receiving a sensitized plate, said recess being longer than the plate held thereby; a cover slide for said recess, said slide having an aperture coincident with one end of said recess when in service; and means normally covering said aperture to prevent the passage of light therethrough, said means being manually operative to permit the passage of light through said aperture.

2. A photographic plate holder having a recess for receiving a sensitized plate, said recess being longer than the plate held thereby; a cover slide for said recess, said slide having an aperture coincident with one end of said recess when in service; means normally covering said aperture to prevent the passage of light therethrough, said means being manually operative to permit the passage of light through said aperture; and a transparent medium mounted on said slide covering said aperture, said medium being adapted to support an inscription thereon.

3. A photographic plate holder having a recess for receiving a sensitized plate, said recess being longer than the plate held thereby; a cover slide for said recess, said slide having an aperture coincident with one end of said recess when in service; means normally covering said aperture to prevent the passage of light therethrough, said means being manually operative to permit the passage of light through said aperture; and a transparent medium mounted on said slide covering said aperture, said medium being adapted to have imparted thereto and to the inner surface thereof, an inscription for photographically printing on the sensitized surface of said plate.

1,267,160. AIR-COOLING SYSTEM. GEORGE E. ALBIN, Cornish, Okla. Filed Aug. 31, 1917. Serial No. 189,219. (Cl. 123—171.)

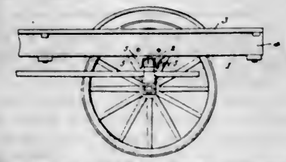


2. The combination with an internal combustion engine, of an air blast fan embodying a cylindrical portion and a frusto-conical velocity increasing chamber, an air blast fan rotatable in said casing and comprising a central shaft journaled in the fan casing, belt pulleys on the fan shaft and the engine shaft, intermediate belt pulleys, driving belt connections between said pulleys, the discharge end of the fan casing being flexibly connected with the jackets of the engine, said fan casing being mounted for movement toward and away from the engine, and yieldable means interposed between the fan casing and engine and acting as a belt tightener.

[Claim 1 not printed in the Gazette.]

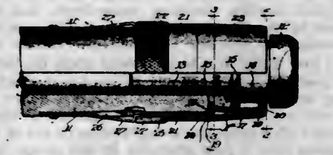
1,267,161. [WITHDRAWN.]

1,267,162. WAGON-RACK BRACKET. FRANK E. ANDERSON, St. James, Minn. Filed Feb. 9, 1916. Serial No. 77,244. (21—74.)



A bracket for the purpose set forth comprising a casting shaped to provide a flat substantially rectangular base, the central portion thereof being of an equal thickness throughout and the under face of which is beveled or gradually decreased in thickness from the said central portion to the ends of the said base, the base, upon its upper face, and at one of its sides having outstanding ears, the inner faces of which are arranged at a right angle to the flat outer surface of the base, and each of said ears having a central transverse opening, the inclined ends of the base having spaced openings struck at a right angle with respect to the said inclined surfaces and designed to receive securing elements whereby the said securing elements will be arranged at an inward angle with respect to the bracket and be disposed in pairs to the opposite sides of the opening in the respective ears, whereby a securing element passing through the openings in the said ears will be disposed centrally between the said securing elements pasaing through the openings in the base, said base, at its juncture with the referred to inclined ends having depending members, the outer corner faces of which are straight or at a right angle with respect to the central portion of the base, and the inner portions of which are beveled or gradually increasing in thickness from the ends thereof to their juncture with the base, and web members integral with the referred to depending members and the beveled ends of the base and arranged upon the opposite sides of the bracket.

1,267,163. PNEUMATIC-HAMMER SAFETY DEVICE. MURVIN E. ARKILLS, Chicago, Ill. Filed Dec. 21, 1916. Serial No. 138,161. (Cl. 279—19.)



1. Tool holding mechanism for pneumatic hammers comprising a plurality of jaws carried by the hammer barrel and embracing a tool, means to tilt the jaws to expand their forward ends whereby to release the tool and to contract the jaws whereby to clamp the tool.

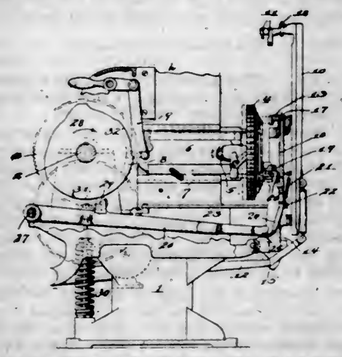
3. Tool holding mechanism for pneumatic hammers comprising a plurality of segmental jaws fulcrumed at their rear ends on the hammer barrel and having tool engaging flanges at their forward ends, and a sleeve movable on the barrel and acting on the jaws to rock the same into and out of clamping relation to the tool.

5. Tool holding mechanism for pneumatic hammers comprising a plurality of segmental jaws having rear and forward flanges engaging the hammer, barrel and tool, the jaws fulcrumed on their rear flanges to tilt from a general parallel position clamping the tool to an expanded flaring position releasing the tool, and a sleeve embracing the jaws and movable on the hammer barrel.

6. Tool holding mechanism for pneumatic hammers comprising a plurality of segmental jaws having inwardly extending forward tool engaging flanges and inwardly and outwardly extending rear flanges, the barrel grooved to receive the inwardly extending rear flanges, a sleeve movable longitudinally of the barrel and embracing the jaws, and means carried by the sleeve to engage the outwardly extending rear flange of the jaws upon the movement of the sleeve to the rear to tilt the jaws on their inwardly extending rear flanges to an expanded flaring position whereby to release the tool.

[Claims 2 and 4 not printed in the Gazette.]

1,267,164. CONTROL FOR TYPOGRAPHICAL MACHINES. HENRY A. ARMSTRONG, Brooklyn, N. Y., assignor to Intertype Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 11, 1916. Serial No. 130,864. (Cl. 199—52.)



1. In a machine of the lintoype class having a reciprocable mold disk rotatable to bring the mold thereon in use to casting and ejecting positions respectively, and an

elevator operative to convey a line of matrices to casting position relatively to such mold, a stopping device for the machine free to operate under control of said elevator and the reciprocatory movement of the mold disk while the mold thereon in use is in casting position, and a cam operative to hold said stopping device in inactive condition while the mold in use is in ejecting position.

3. In a machine of the linotype class having a cam shaft, a mold disk movable to bring a mold thereon into casting and ejecting positions respectively and also reciprocable by the cam shaft while the mold in use thereon is in casting and ejecting positions, an elevator for conveying a line of matrices to such mold while the same is in casting position, and justifying means for the matrices, a stopping device for the machine operative under control of the elevator and actuated by reciprocatory movement of the mold disk while the mold thereon in use is in casting position, and a cam operative at one period to cause actuation of the justifying means and operative at another period to hold said stopping device in inactive condition while the mold in use is in ejecting position.

6. In a machine of the linotype class having a cam shaft, a mold carrier adapted to bring a mold thereon into casting and ejecting positions respectively, means for conveying a line of matrices to casting position relatively to said mold carrier, and a justifying lever, a stopping device for the machine free to operate under control of said matrix-conveying means while the mold is in casting position, and a cam operative from the cam shaft of the machine to cause movement of said lever in one direction to justify the matrices and to cause movement of said lever in a reverse direction to prevent operation of said stopping device while the mold is in ejecting position.

7. In a machine of the linotype class embodying a mold carrier adapted to bring a mold thereon into casting and ejecting positions respectively, said carrier being reciprocable while the mold is in casting position and also in ejecting position, and a stopping device for the machine movable to and from a position for operation by said reciprocatory movement of the mold carrier, said device being in position to operate while the mold in use is in casting position, means for preventing operation of the stopping device by the reciprocatory movement of the mold carrier while the mold thereon in use is in ejecting position, comprising a cam, and a lever actuated thereby to move the stopping device out of position for actuation by the mold carrier.

9. In a machine of the linotype class having a mold carrier shiftable to move a mold thereon to and from the first elevator, and a stopping device controlled by the first elevator and operative by the mold carrier, a justification lever having a cam to operate it, said cam being shaped to actuate said lever to effect justification of matrices in the elevator and to also control the position of the stopping device when the mold carrier is in position for ejection of the slug from the mold in use thereon.

[Claims 2, 4, 5, and 8 not printed in the Gazette.]

1,267,165. FIRE-ALARM PROTECTIVE DEVICE. MARIO ARNAVAS, San Francisco, Cal. Filed July 24, 1917. Serial No. 182,475. (Cl. 177A—379.)

1. The combination with the booth and signal mechanism of a fire alarm signal station, a tube mounted on the booth, an element disposed in the tube and connected to the door of the booth, said element adapted for sliding movement in the tube in the opening and closing of the door and arranged to completely obstruct the tube in every position of the door, and a contact in said tube controlling the signal mechanism of the booth, said contact adapted to be closed by said element to render said mechanism operable in the closed position of the door.

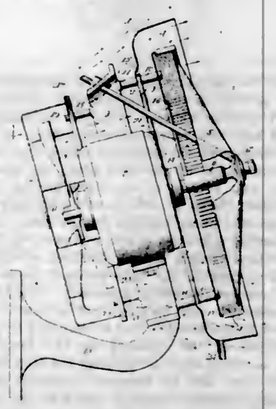
2. The combination with the booth and signal box of a fire alarm signal station, of a tube mounted on the booth, an element disposed in the tube and connected to the door of the booth, said element adapted for sliding movement in the tube in the opening and closing of the door and arranged to completely obstruct the tube in every position of the door, a contact in said tube adapted to be closed by said element in the closed position of the door, a magnet controlling the lock of the signal box, and a circuit for said magnet including said contact.



3. The combination with the booth and signal box of a fire alarm signal station, of a tube mounted on the booth, an element disposed in the tube and connected to the door of the booth, said element adapted for sliding movement in the tube in the opening and closing of the door and arranged to completely obstruct the tube in every position of the door, a contact in said tube adapted to be closed by said element in the closed position of the door, a magnet controlling the lock of the signal box, a circuit for said magnet including said contact, and a spring lock for the door of said booth.

4. The combination with the booth, and signal box of a fire alarm signal station, of a sliding door for the booth, a spring lock for the door, a tube having one end closed mounted on the booth, a rod having a contact head disposed within the tube and having one end projecting from the open end of the tube and attached to the door, said contact head adapted to entirely obstruct said tube in every position of the door, a magnet controlling the lock of the signal box, a contact in said tube adapted to be closed by said contact head in the closed position of the door, and circuit connections between said contact and said magnet.

1,267,166. HUMIDIFIER. FREDERIC F. BAHNSON, Winston-Salem, N. C. Filed Oct. 31, 1917. Serial No. 199,556. (Cl. 261—90.)

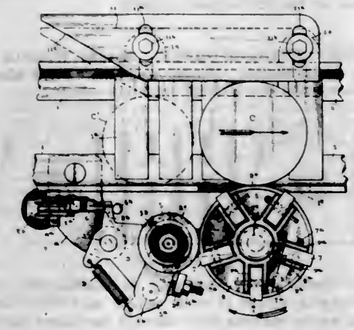


1. In a humidifier, the combination of a rotatable disk, an annular row of obstructions surrounding the disk, a passage-way leading to both sides of said row of obstructions, means for passing a fluid through said passageway and means for delivering a liquid to the disk.

12. In a humidifier, the combination of a case open at its front and having a rear wall, a disk rotatably mounted in the case, a row of obstructions between the edge of the disk and the wall of the case, a disk-like support therefor, the said disk-like support and the rear wall of the case being constructed and arranged to define a passage-way leading into the space between the wall of the case and the said obstructions, a central opening through the disk-like support, a central opening through the said rear wall, a shaft extending through the said openings and connected with the disk, a circular frame connected to the case and the said support, motor means mounted in said frame, a fan driven by the motor means to force air through said openings into the case and means for delivering a liquid to the disk.

[Claims 2 to 11 not printed in the Gazette.]

1,267,167. APPARATUS FOR MARKING CANS AND THE LIKE. JOHN S. BAKER, Los Angeles, Cal. Filed Aug. 7, 1917. Serial No. 184,935. (Cl. 101—35.)



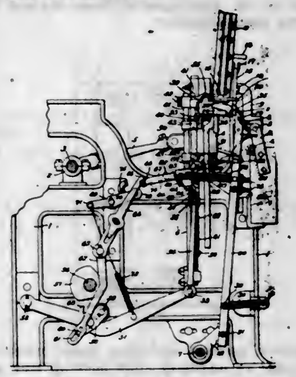
1. In combination a canway, means for moving cans therethrough, a lever pivoted beside the canway, a marking wheel provided with changeable marking devices mounted upon said lever, means for causing said lever to yieldingly move the marking wheel toward the canway, means for limiting the inward movement of the marking wheel; a second lever pivoted on the first lever, a rotatable inking roll mounted on one end of said second lever, means for yieldingly pressing the inking roll against the marking wheel, and adjustable means opposite the marking wheel to cause the cans to properly contact with said marking wheel.

3. In a marking apparatus, the combination of a canway, means for moving cans therethrough; a bracket attached to the canway, a shaft pivoted in said bracket; a lever adjustably mounted on said shaft, a marking wheel mounted on the free end of said lever, means for swinging said lever to hold the marking wheel yieldingly in the canway, and means for inking the marking wheel, means for limiting the inward movement of the marking wheel, and an adjustable guide plate opposite the marking wheel to cause the cans to properly contact therewith.

[Claims 2 and 4 to 11 not printed in the Gazette.]

1,267,168. FILLING-REPLENISHING LOOM. WILLIAM H. BAKER, Boston, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Sept. 20, 1915. Serial No. 51,523. (Cl. 139—85.)

1. In a filling replenishing loom, the combination of the lay having a shuttle-box provided with two cells at the replenishing side thereof, a hopper for supplying shuttles to be transferred to said shuttle-box, a transferrer for transferring a shuttle from the hopper to the shuttle-box, means operative upon call for filling replenishment for moving the transferrer toward the lay into operative relation with the said shuttle-box, means for moving the shuttle-box relative to the lay as the latter moves toward front position, means movable with the shuttle-box to positively remove the shuttle from the transferrer into the normally inoperative cell of the shuttle-box, and means carried by the transferrer to engage the spent shuttle and remove it from the shuttle-box as the transferrer returns to normal position.



4. In a filling replenishing loom, the combination of the lay having a shuttle-box provided with an upper and a lower cell, means normally acting to hold the shuttle-box with the lower cell on the line of the race, a transferrer having shuttle grasping means, means operative on call for filling replenishment to move the transferrer toward the lay to place a shuttle in operative relation to the upper cell of the shuttle-box, means for lowering the shuttle-box to place the upper cell on the line of the race and to remove the shuttle from the transferrer into the upper cell of the shuttle-box, and means carried by the transferrer for engaging the spent shuttle and removing it from the lower cell of the shuttle-box after the transfer of the shuttle into the upper cell has been effected, said shuttle-box lowering means acting to return the lower cell to the line of the race after the shuttle has been picked from the upper cell of the shuttle-box.

7. In a filling replenishing loom, the combination of the lay provided with a recess in the front thereof, a two celled shuttle-box, means for raising and lowering said shuttle-box, a transferrer, means for moving the transferrer rearwardly for transferring a shuttle from a source of supply into the upper cell of the shuttle-box and having spent shuttle removing arms projecting rearwardly therefrom to enter the recess in the front of the lay below the lower cell of the shuttle-box when the transferrer is moved rearwardly and engage the spent shuttle in said cell, fingers carried by said arms to engage behind the spent shuttle, and means for moving the transferrer to cause said spent shuttle-engaging arms to remove the spent shuttle from the lower cell of the shuttle-box.

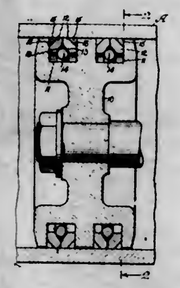
10. In a filling replenishing loom, the combination of the lay provided with a shuttle-box having an upper and a lower cell at the replenishing side of the loom, a transferrer for grasping a shuttle at the source of supply and carrying it toward the lay, means for temporarily locking the transferrer to the lay, means for lowering the shuttle-box to take the shuttle from the transferrer and then unlocking the transferrer from the lay, and means for restoring the transferrer to initial position.

[Claims 2, 3, 5, 6, 8, 9, and 11 to 27 not printed in the Gazette.]

1,267,169. PISTON PACKING-RING. EDWARD R. BALES, Centralia, Ill. Filed May 9, 1917. Serial No. 167,410. (Cl. 121—108.)

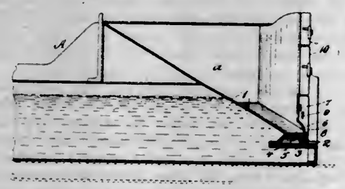
1. A piston packing including a pair of separate expansible split packing rings presenting opposed conver-

gent surfaces at their adjacent inner corners and having beveled surfaces at the opposite outer corners, additional split rings outside the first rings at the said outer corners thereof and having corresponding beveled inner surfaces, the first mentioned rings extending between the second mentioned rings to present peripheries lying in the same cylindrical surface with the second mentioned rings, and a resilient expanding ring acting interiorly on the first rings at the converging surfaces thereof to expand the packing rings obliquely.



2. A piston packing including main expansible split packing rings, an auxiliary split packing ring associated with said main rings at the outer side thereof, the respective main and auxiliary rings having obliquely disposed contacting faces and presenting peripheries in the same cylindrical surface, and resilient expanding means acting on said main rings at the interior and exerting pressure thereon to expand the same obliquely, said main and auxiliary rings breaking joint.

1,267,170. LOCOMOTIVE-TENDER COAL-PIT. EMERY G. BARTLETT, Boston, Mass., assignor of one-half to Philias Daudelin, East Somerville, Mass. Filed Sept. 26, 1917. Serial No. 193,357. (Cl. 105—260.)



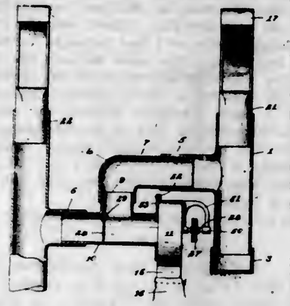
1. A locomotive tender coal-pit having inclined rear and side walls converging into a coal space having a drop with undercut walls.

2. A locomotive tender coal-pit having a relatively narrow shovel space with an overhang and a drop at the sides and back.

[Claim 3 not printed in the Gazette.]

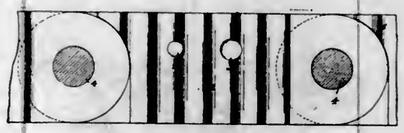
1,267,171. DUST-COLLECTOR. HARLEN L. BEE, Salem, W. Va. Filed Sept. 29, 1916. Serial No. 122,903. (Cl. 183—37.)

A dust collector of the class described, comprising a pair of vertical tubes each having an elbow at a point intermediate its ends, a dust trap at the lower end of each of said tubes, a conduit detachably connected at one end to the elbow of one of said tubes, said conduit having an arm at a point intermediate its ends and being also provided with a valve to close across said conduit or said arm at will, a suction fan having a casing directly connected to the other end of said conduit and into which the latter discharges, a dust collecting receptacle connected to and carried by the fan casing and into which the latter discharges, and a second conduit detachably fitted at one end to the elbow of the other vertical tube



and having an elbow at the opposite end connected to the arm of the first-named conduit.

1,267,172. FURNACE-GRATE. ALFRED WILLIAM BENNIS, Little Hulton, Bolton, England. Filed Mar. 29, 1915. Serial No. 17,858. (Cl. 110—40.)



1. A chain grate comprising in combination, links; interengaging pivots at each end of said links forming driving means enabling their forward movement; and lugs and mating recesses so formed on the sides of the links that each link enters into supporting engagement with each laterally adjacent link at two points intermediate their end pivots.

2. A chain grate comprising in combination a plurality of counterpart links having interengaging ends adapted for pivotal connection, the links having lugs and recesses on their sides whereby each link is adapted to enter into supporting engagement with each laterally adjacent link at two points intermediate its ends; and pivotal supporting and connecting means for the ends of the links.

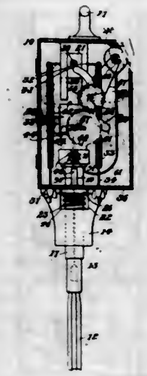
1,267,173. ELECTRIC HEATING DEVICE. ARTHUR FRANCIS BERRY, Ealing, England, assignor to General Electric Company, a Corporation of New York. Filed Nov. 28, 1916. Serial No. 133,879. (Cl. 219—34.)



1. An electric heating device comprising a grid-like structure having an exposed resistance unit, means for directing air against said unit, and means for varying or controlling the flow of air against different parts of said resistance element whereby the simulating effect of combustion may be varied or controlled.

[Claims 2 and 3 not printed in the Gazette.]

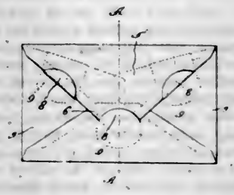
1,267,174. HAND-OPERATED DRILL. CELEST O. BERT, Winooski, Vt. Filed Apr. 27, 1917. Serial No. 164,994. (Cl. 255—43.)



1. A drilling machine comprising a casing, a drill holder mounted for reciprocatory movement therein, a sleeve slidably mounted upon the holder and having an arcuate side provided with a circular guide slot, spaced rollers carried by the sleeve and located around the slot, an operating shaft having an end located in the slot, and a star-wheel mounted on the shaft and adapted to engage the rollers during the reciprocation of the holder.

[Claims 2 and 3 not printed in the Gazette.]

1,267,175. ENVELOP. HERBERT A. BOYINGTON, Newington, Conn Filed Mar. 30, 1917. Serial No. 158,676. (Cl. 229—80.)



An envelop comprising a front panel, end flaps foldable onto said front panel and provided with arcuate slits defining tabs, tongues on the edges of said end flap foldable thereon against the inner side thereof to extend beneath and cover said slits, a bottom flap on the edge of said front panel between said end flaps and provided with an arcuate slit forming a tab, a tongue on said bottom flap foldable thereonto against the inner side thereof to cover the slit therein, and a gummed sealing flap foldable onto the folded end and bottom flaps and having its extreme end engageable beneath the tab in said bottom flap, and having its sides engageable beneath the tabs on said end flaps, said tongues preventing contact of the gummed surface of said sealing flap with the matter contained within the envelop.

1,267,176. NURSING-BOTTLE. ALLIEBEL R. BRITT, Jackson, Miss. Filed Aug. 8, 1916. Serial No. 113,839. (Cl. 215—117.)

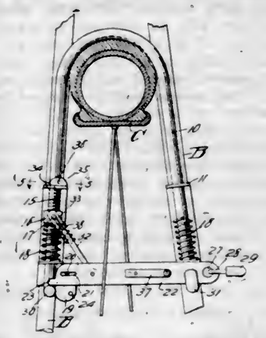
3. A nursing bottle embodying a hollow cylindrical body portion comprising a closed rear end wall and an open front end, a support formed flush with the closed end wall of the body and depending therefrom, a neck formed integral with the body at a point in rear of and adjacent the open forward end thereof, the wall of the neck at a point directly below the open forward end of the body being provided with a channel, a cap for closing the open forward end of the body, a nipple on the forward end of said neck, and a projection formed on the wall of the neck



at a point diametrically opposite the point of formation of the channel.

[Claims 1 and 2 not printed in the Gazette.]

1,267,177. LOCK. CHARLES E. BROOKS, Camden, N. J. Filed May 2, 1917. Serial No. 166,018. (Cl. 70—90.)



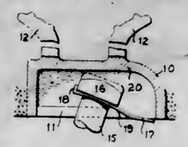
1. A locking device of the character described comprising a braking yoke adapted to straddle the rear wheel of a bicycle or motorcycle for engagement therewith, supports for said yoke, a locking bar pivoted to one of the supports and having connection with the yoke for simultaneously operating the same to bring the yoke in braking position relative to the wheel when the locking bar is swung transverely between the spokes of said wheel, and means for securing the locking bar in locking position.

2. A locking device of the character described comprising a braking yoke adapted to straddle the rear wheel of a bicycle or motorcycle for engagement therewith, supports for the said yoke, a locking bar pivoted to one of the supports and having connection with the yoke for simultaneously operating the same to bring the yoke in braking position relative to the wheel when the locking bar is swung transversely between the spokes of said wheel, means for securing the locking bar in locking position, and means acting upon the yoke to automatically raise the same on the swinging of the locking bar to released position.

3. A locking device of the character described comprising a braking yoke adapted to straddle the rear wheel of a bicycle or motorcycle for engagement therewith, supports for the said yoke, a locking bar pivoted to one of the supports and having connection with the yoke for simultaneously operating the same to bring the yoke in braking position relative to the wheel when the locking bar is swung transversely between the spokes of said wheel, means for securing the locking bar in locking position, means acting upon the yoke to automatically raise the same on the swinging of the locking bar to released position, and terminal hooks on the extremities of the yoke and engageable by the locking bar when in locking position.

[Claims 4 and 5 not printed in the Gazette.]

1,267,178. CONCRETE-INSERT. DAVID W. BROOKS, New York, N. Y., assignor to Concrete Steel Company, New York, N. Y., a Corporation of Delaware. Filed July 31, 1917. Serial No. 183,809. (Cl. 72—105.)



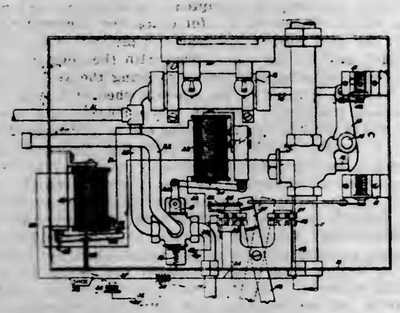
1. In a device of the character described, in combination, a hanger having a recess therein and supporting flanges in said recess, an attaching member adapted to engage said flanges, and a coöperating deformable locking plate assembled therewith for movement into said recess, said plate being deformable within said recess to lock said attaching member therein.

3. A concrete insert comprising a hollow body portion provided with internal supporting flanges forming an elongated slot with an enlarged opening at one end for the insertion of an attachment member, deformable locking means resting upon said flanges, and a headed attachment member adapted when drawn down to deform said locking means and be retained in operative position thereby.

6. The combination with an insert for concrete construction comprising a hollow body portion with internal supporting flanges and provided with an entrance passage for a headed attachment member, of a slotted locking plate having means to engage the head of said attachment member and adapted to be inserted therewith and interposed between the said member and said flanges to retain said attachment member upon the flanges by cooperation with an end wall of the insert.

[Claims 2, 4, and 5 not printed in the Gazette.]

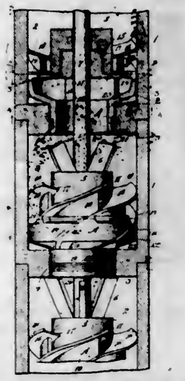
1,267,179. AUTOMATIC TRAIN-STOP. MELBERN B. BULLA, El Paso, Tex. Filed Dec. 14, 1916. Serial No. 136,891. (Cl. 246—58.)



1. In an automatic train stop, the combination with a brake air line, a valve normally closing the same, a fluid pressure motor connected to the valve for opening the same and means controlling the delivery of pressure fluid to the motor including a normally closed valve, of a source of energy, a plurality of electromagnets normally arranged in series in circuit with said source of energy, one of said magnets having an armature connected to the latter mentioned valve holding the same closed against the force of means tending to open it, means to cause said magnets to be deënergised simultaneously when a danger point is passed, and means under the control of the engine driver to reënergise the magnets, one in advance of the other to restore the parts to normal running position.

[Claim 2 not printed in the Gazette.]

1,267,180. CENTRIFUGAL TURBINE-PUMP. CHARLES EDWIN BURRESS, Los Angeles, Cal. Filed Aug. 9, 1916. Serial No. 113,869. (Cl. 253—199.)



1. A centrifugal turbine pump comprising a bowl having an opening in the bottom, a runner having a cylindrical chambered body rotatable in the bowl and formed with an open mouth rotatable in the opening in the bottom of the bowl, impelling blades in the chamber of the runner body, said body having upwardly and outwardly discharging ports, and helical blades fastened to the top of the body and forming helical passages communicating with the said ports.

3. A centrifugal turbine pump comprising a bowl having an opening in the bottom, a runner having a cylindrical chambered body rotatable in the bowl and formed with an open mouth moved rotatably in the opening in the bottom of the bowl, impelling blades in the chamber of the runner body, said body having upwardly and outwardly discharging ports, helical blades on the top of the body and forming helical passages communicating with the said ports, the bottom of the runner body being frusto conical, tangential lugs on the frusto conical bottom of the runner and coöperating with the bottom of the bowl to form a pump means for preventing leakage around the runner body, said runner body having grooves in its external surface through which the pump means discharges, and a packing between the mouth of the runner and the opening of the bowl in which the mouth rotates.

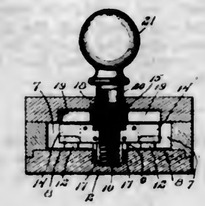
5. A multi-stage centrifugal pump comprising a plurality of bowls each having an open bottom forming a bearing, a lower bearing fastened to and spaced from the bottom of each bowl, the lower bearing of one bowl being disposed in the chamber of the next bowl below it, a runner journaled in the open bottom of one bowl and the lower bearing of the bowl next above it, a shaft common to all the runners and journaled in the lower bearings of the bowls, impelling blades in the body of each runner, and helical blades surrounding the lower bearing of the bowl and fastened to the top of each runner and imparting a helical direction to the liquid discharged by the impelling blades.

[Claims 2 and 4 not printed in the Gazette.]

1,267,181. ELECTRIC-CIRCUIT-CONTROLLING SWITCH. FRANK J. CAMATTA, Tonasket, Wash. Filed Feb. 7, 1916. Serial No. 76,842. Renewed Apr. 10, 1918. Serial No. 227,822. (Cl. 175—284.)

An electric switch comprising an inclosing casing having a transverse recess in the under side of its top wall, a longitudinal partition dividing the interior of said casing into two channels, a pair of separated contact members in each of said channels, said partition and the bottom wall of said casing being provided with a bore alining with said recess, a spring disposed in said bore, a sleeve disposed in said bore around said spring and

provided with slots, a block of insulating material slidable in said sleeve and projecting through said slots, contact blades on said block adapted to bridge said separated contact members, said spring urging said block and said



blades into said recess out of engagement with said contact members, an operating handle connected with said block and extending exteriorly of the casing, and means for holding said blades selectively in and out of engagement with said contact members.

1,267,182. SHADE-BRACKET. FREDERICK CARON, Detroit, Mich. Filed Aug. 25, 1917. Serial No. 188,105. (Cl. 156—24.)

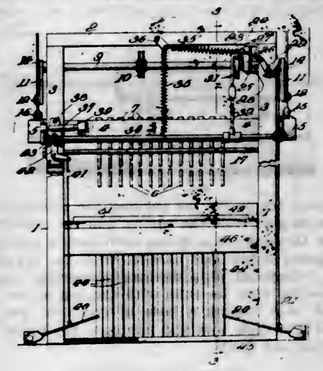


A shade bracket including two members each having an angular outer end provided with inturned teeth, the outer member having its longitudinal edges turned over its back to provide ways receiving the inner member, said outer member, approximately central of its longitudinal edges having slots communicating with the ways, and having its end opposite its angular end provided with oppositely extending hooks, the beaks of which being inturned, the inner member being centrally depressed from its longitudinal edges and the longitudinal edges provided by the said depressed portions being toothed, a lever having an offset head arranged in each of the slots and pivotally secured to the outer plate, each of said heads having a tooth designed to engage with the teeth on the reduced portion of the inner member, and said levers designed to be engaged by the referred to hooks to hold the teeth thereof in engagement with the teeth of the inner member.

1,267,183. FUSEE-TUBE-FILLING MACHINE. GEORGE N. CLARK, Needham Heights, Mass., assignor to Central Railway Signal Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Sept. 12, 1917. Serial No. 191,047. (Cl. 86—20.)

1. A fusee tube filling machine comprising a tube carrier, a reciprocating packing rod carrier, an operating mechanism for reciprocating the rod carrier, a locking member for holding the carrier out of operation, a power actuated device connected with the locking member, and a foot mechanism adapted to control the power actuated mechanism.

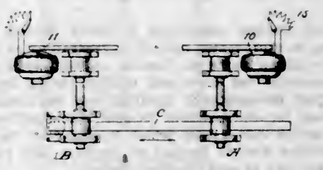
5. A charging board for fusee tubes, comprising a main body portion, having vertically arranged charging pockets with open ends, said charging pockets being closer together than the diameter of the pockets, a longitudinally and laterally movable shutter at the bottom of the filling board, the shutter having openings corresponding with the openings in the board, whereby the longitudinal and



lateral movement of the shutter will completely close and completely open the charging pockets.

[Claims 2 to 4 not printed in the Gazette.]

1,267,184. SYSTEM OF CONTROL FOR TANDEM ROLLING-MILLS AND THE LIKE. WALTER R. CLARK, Bridgeport, Conn., assignor to Bridgeport Brass Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Aug. 22, 1912. Serial No. 716,435. (Cl. 80—35.)



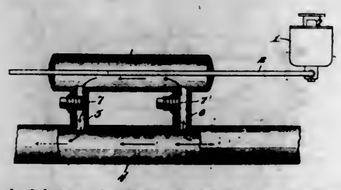
1. In a tandem rolling mill installation, the combination with the respective mills, of a separate prime mover for driving each of the same, and means controlled directly by variations of tension in the stock between the mills, independently of variations of length incident to such tension changes, for automatically varying the speed of the prime mover of one mill, to compensate for speed variations of the other mill, substantially as described.

3. The combination with metal reduction devices arranged in tandem for simultaneous action on successive portions of a length of stock, of individual prime movers to drive the respective devices, one of said prime movers being adapted to so operate the corresponding metal reducing device that it will pull the stock through the other metal working device, and at least one of said prime movers being constructed to decrease in speed with an increase of load caused directly by a change of tension in that portion of the stock in the interval between said reduction devices, said prime mover being constructed to vary its speed independently of variations of length of that portion of the stock in the interval between said devices incident to the aforesaid tension changes.

6. The combination of rolling mills arranged in tandem, of means to drive one of said mills at a substantially constant speed, and an electric motor for driving the other mill, having a relatively large shunt field winding, and a relatively small series field winding, whereby the speed of such last mentioned mill is automatically varied to compensate for speed changes of the first mill; substantially as described.

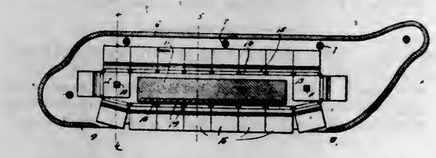
[Claims 2, 4, 5, and 7 to 19 not printed in the Gazette.]

1,267,185. FUEL-HEATER FOR GAS-ENGINES. ROBERT L. COFFMAN, Big Sandy, Tenn. Filed June 3, 1916. Serial No. 101,574. (Cl. 257—241.)



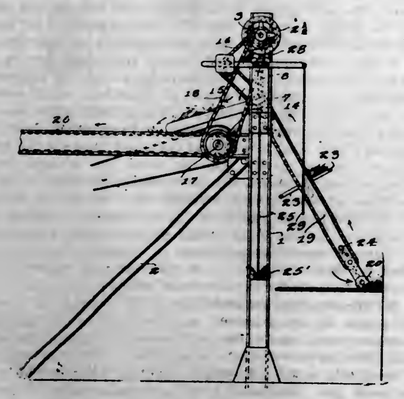
In a fuel heater for gas engines, the combination with the exhaust pipe from the engine, and the carbureter and fuel pipe therefor; of a casing surrounding said fuel pipe and disposed above and parallel with the exhaust pipe, upright cylindrical pipe sections connecting the bottom of the casing near its ends with the top of the exhaust pipe and each having a boss in one side, and a plug threaded into each boss and having a flat inner end, for the purpose set forth.

1,267,186. SLED-RUNNER. VINCENT J. CONCES, Sr., and VINCENT J. CONCES, Jr., East Chicago, Ind. Filed May 11, 1916. Serial No. 96,898. (Cl. 180—5.)



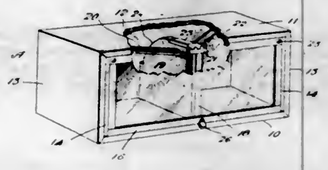
A sled runner comprising a casing having a slotted opening in the bottom thereof, a centrally and longitudinally arranged partition therein, an endless traction element mounted for movement in said casing and adapted to project through said opening, said partition forming a bearing for the traction element, the partition having at its under side a race which is closed at its end, and anti-friction devices located in the race and engaged by the lower run of said traction element.

1,267,187. UNLOADING APPARATUS. EDWIN W. COORS, Shelbyville, Ky. Filed Nov. 14, 1916. Serial No. 131,311. (Cl. 193—14.)



An unloading apparatus, comprising slotted parallel uprights, an operating shaft journaled in the uprights above the slotted portions, a lifting shaft slidably mounted in the slotted portions of the uprights, connections between said shafts to move the lifting shaft in the slots in the operation of the operating shaft, a conveyer mounted on and operated in the operation of the lifting shaft, a power shaft, and connections supported on the operating shaft and connected with the power shaft to actuate the operating shaft for moving the lifting shaft in the slots or to operate the lifting shaft independently of the operating shaft.

1,267,188. SLIDING-DOOR HANGER FOR SECTIONAL BOOKCASES. FRED C. CROUSE, Los Angeles, Cal. Filed June 26, 1917. Serial No. 177,089. (Cl. 45—78.)



1. A cabinet including a vertically disposed partition spaced from the top wall of the cabinet, a door mounted for vertical swinging movement and adapted to be slid within the cabinet with the partition constituting a support therefor, and means for guiding the door in its movements across said partition.

4. A cabinet including a bottom, top, rear and end walls, a cleat secured to each end wall and formed to provide a shoulder, a door, pins projecting laterally from the opposite ends of the door and resting upon said shoulders and supporting the door for vertical swinging movement, a vertically disposed partition spaced from the top wall, said door being adapted to be slid within the cabinet above the partition, said partition serving as a support for said door, and means for guiding the door in its movements across the partition.

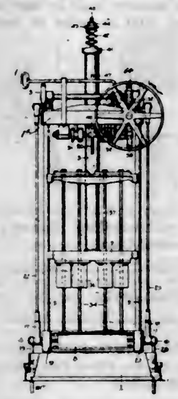
6. A cabinet including a vertically disposed partition spaced from the top wall of the cabinet, a door mounted for vertical swinging movement and adapted to be slid within the casing above the partition, a channel-shaped element embracing the upper edge of the partition, and constituting a guide for said door, a second channel-shaped element carried by the door and adapted to form a continuation of the first mentioned element when the door is swung to a horizontal position, said partition being cut away at its rear edge, and said first mentioned channel-shaped element being mounted to gravitate over the cut away portion of the partition to an out of the way position to allow the door to be wholly moved within the cabinet.

[Claims 2, 3, and 5 not printed in the Gazette.]

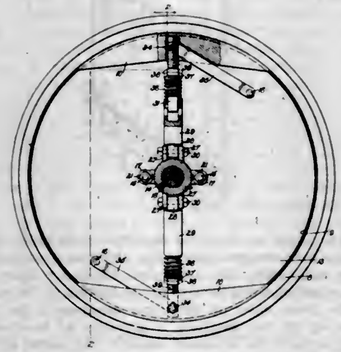
1,267,189. MOLDING-MACHINE. FRANK CURRY and ANSON F. LEWIS, Santa Barbara, Cal., assignors of one-half to William E. Mouck, Santa Barbara, Cal. Filed Aug. 10, 1917. Serial No. 185,509. (Cl. 25—58.)

1. In a molding machine of the character described, a base, a mold adapted to be arranged on said base, a die for compressing the material in said mold, means for elevating said die, manually actuated means for releasing said die after it has been elevated so that the die will drop by gravity and compress the material in said mold, a pair of reciprocating rods, a connection for each of said rods connecting the rods with said mold, each of said connections comprising a pivotally mounted member connected with the rod formed hollow for a predetermined length, said hollow portion accommodating an enlargement on the rod associated therewith, said hollow portion being of the same length as the length of reciprocation of said rod whereby the upward movement of said rods will elevate the mold while the downward movement may be had without affecting the mold, and means for locking the mold in its raised position.

[Claims 2 to 6 not printed in the Gazette.]



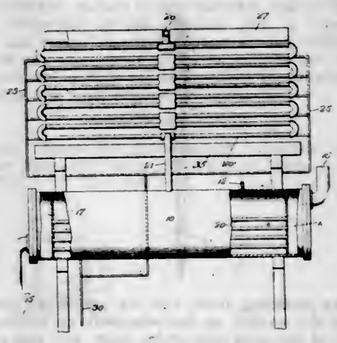
1,267,190. CLUTCH. MELVIN CURTISS DART, New York, N. Y. Filed Feb. 5, 1917. Serial No. 146,626. (Cl. 192—11.)



A clutch comprising two rotary members co-axially related, one of said members having an extended internal friction flange, and the other of said members having a disk disposed within said flange and in a plane parallel with the plane of said first-mentioned member; a plurality of friction shoes adapted to engage said flange; link members connecting said disk and said shoes, said members constituting means for imparting movement to said disk and load carried thereby, the pivotal connections of said link with said disk being closer the center of said disk than the connections of said link members with said shoes, whereby the pull of the shoes on the disk is translated to a contracting effect on said shoes; and manually operated means for moving said shoes for gripping said flange, said means having provision for rotary movement of said shoes with said flange independently of said disk.

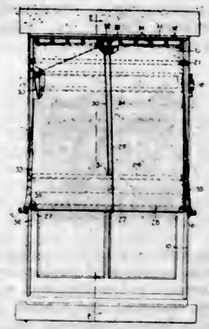
1,267,191. PROCESS AND APPARATUS FOR DEAERATING WATER. HERMAN J. DEMUTH, Kiowa, Kans. Filed Jan. 30, 1917. Serial No. 145,489. (Cl. 210—1.)

In an apparatus of the class described, a reservoir, means for conducting a heating medium through a body of water therein, a plurality of condensing coils located adjacent to the reservoir, means for conducting expanded air, gas and vapor from the reservoir to the coils, a spraying device above said coils, an exhaust connection for withdrawing air and gases and simultaneously reducing the pressure



within the condensing coils below atmospheric pressure, means for returning condensation from the coils to the reservoir, and means for withdrawing the purified and deaerated water from the reservoir.

1,267,192. AWNING. OSCAR H. DESMARAIS, Hackensack, N. J., assignor of one-half to Charles W. Lockwood, New York, N. Y. Filed Aug. 10, 1917. Serial No. 185,510. (Cl. 156—15.)



1. In an awning, the combination of a main awning panel, means to attach the upper edge thereof in fixed position, a bar extending across the awning panel just below the upper edge, means to secure the ends of the bar to a window frame, a stiff rectangular member carried by the awning below said bar and having a width substantially equal to the space between the bar and the top of the window, a cord serving to lift the lower portion of the awning to the top of the window, and another cord connected to the inner face of the awning at about the center of the lower portion of said stiff member and serving to fold the awning complete in a small rectangular body within the top of the window frame.

4. The herein-described awning structure comprising, in combination, a pair of socket members for the opposite sides of a window and having vertical openings, a main awning panel, means to fix the upper end of said panel to the top of the window, a pair of brace arms fixed at their outer ends to the lower corners of the said panel, the inner ends of said arms having downwardly projecting spurs cooperating with said sockets, a pair of triangular flaps each connected along one edge to a side edge of the main panel, and means to secure the flaps to said arms, said arms and flaps being foldable against the inner face of the main panel.

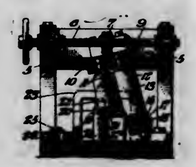
[Claims 2 and 3 not printed in the Gazette.]

1,267,193. GRAIN-BAG. ARCHIPP F. DUNAR, Saskatoon, Saskatchewan, Canada, assignor of one-half to Bertram M. Wakeling, Saskatoon, Saskatchewan, Canada. Filed May 18, 1917. Serial No. 169,518. (Cl. 150—7.)



A bag including front and rear walls, an inwardly directed flap carried by the rear wall, an internal flap secured to the inner face of the front wall and forming therewith a pocket designed to receive the first said flap and an extension carried by the front wall having a V-shaped edge and designed to be turned back and have its edges secured to the edges of the said wall, the said extension and front wall being adapted to form a reversible pocket designed to envelop the mouth of the bag, as and for the purpose specified.

1,267,194. ROLLING-MILL FOR BENDING ANGLE OR CHANNEL IRONS INTO DIFFERENT ANGLES. JOHN P. ECKENROTH, Chester, Pa. Filed Aug. 2, 1916. Serial No. 112,668. (Cl. 153—28.)



1. In a rolling mill, a pair of bending rolls, a rocker block on the frame of the mill having the axes of both rolls mounted thereon, a traveling nut with which said block is rotatably connected, and a screw shaft on which said nut is fitted whereby both rolls may be simultaneously adjusted by the operation of said rocker block.

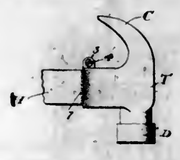
3. In a rolling mill, a pair of bending rolls of differential length, rocker bearings for the upper and lower axes of said rolls, and pillow blocks on the frame of the mill in which the bearings for the lower axes of said rolls are mounted, one of said pillow blocks being of open form adapted to permit an angular bar to pass through the same in reaching said rolls and leaving the same.

6. In a rolling mill, a pair of bending rolls, a rocker block on the frame of the mill and having the upper axes of said rolls journaled in said block, rocker blocks on said frame having the lower axes of said rolls mounted therein, a pillow block on which one of the lower rocker blocks is mounted, and yokes having eyes on which the other lower block is mounted, said yokes being of open form admitting an angle bar to be rolled to pass through said yokes in reaching and leaving said rolls.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,267,195. HAMMER-HANDLE FASTENER. CHARLES M. ERICKSON, Salt Lake City, Utah. Filed July 10, 1917. Serial No. 179,764. (Cl. 145—79.)

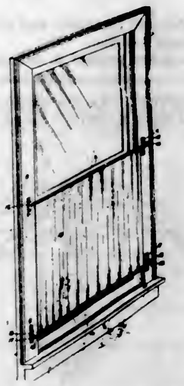
A hammer head comprising a driving portion, a claw portion and a handle receiving boss therebetween, said boss being split in alinement with the claw, forming flanges spaced from each other, ears extending outwardly at the opposing edges of said flanges, a screw passing through a smooth bore in one ear and threaded into the other ear, and a series of teeth at the inner



periphery of the outer end of the handle-receiving opening in said boss and bendable inwardly to penetrate a handle engaged in said boss.

1,267,196. [WITHDRAWN.]

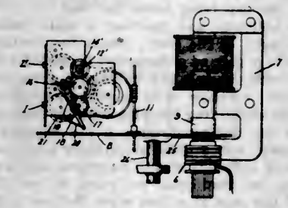
1,267,197. CURTAIN-ROD HOLDER. GEORGE HENRY EULER, Newark, N. J. Filed Feb. 23, 1917. Serial No. 150,397. (Cl. 156—24.)



In an article of the class described, two pairs of members one pair disposed below the other pair, each member having an opening for a bracket, the inner sides of the upper members being beveled at the bottom of the openings and the inner sides of the lower members being beveled at the top of the openings, a plurality of brackets each having a base for disposal against the outer side of a member, a plurality of projections one extending from a face of each base for disposal in the opening in the member against which the base is disposed, the lower edges of the projections on the upper brackets and the upper edges of the projections on the lower brackets being under-cut to fit the beveled edges of the members, and means extending from the other faces of the bases for supporting a curtain.

1,267,198. ELECTRIC METER. EVAN EVANS, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Feb. 10, 1914. Serial No. 817,788. (Cl. 171—34.)

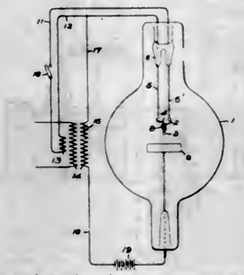
1. An electric meter comprising a magnetic core, a rotatable armature in operative relation therewith, a potential coil surrounding said core adapted to produce a magnetic field in operative relation with the armature, means in operative relation to the core and armature displacing the phase of a portion of said field and causing the armature to rotate in a given direction when the consumption of energy is below a predetermined value, a series coil also surrounding the core and adapted to cause the armature to rotate in a reverse direction when the consumption of energy is above the predetermined value, two registers, means whereby the revolutions of the armature in each direction are registered on one of the registers, and means whereby the revolutions of the armature in one direction only are registered on the other register.



2. An electric meter comprising a magnetic core, a rotatable armature in operative relation therewith, a potential coil surrounding said core adapted to produce a magnetic field in operative relation with the armature, means in operative relation to the core and armature displacing the phase of a portion of said field and causing the armature to rotate in a given direction when the consumption of energy is below a predetermined value, a series coil also surrounding the core and adapted to cause the armature to rotate in a reverse direction when the consumption of energy is above the predetermined value, two registers, means whereby the revolutions of the armature in each direction are registered on one of the registers, and means whereby the revolutions of the armature in one direction only are registered on the other register.

3. An electric meter comprising a magnetic core, a rotatable armature in operative relation therewith, a potential coil surrounding said core adapted to produce a magnetic field in operative relation with the armature, means in operative relation to the core and armature displacing the phase of a portion of said field and causing the armature to rotate in a given direction when the consumption of energy is below a predetermined value, a series coil also surrounding the core and adapted to cause the armature to rotate in a reverse direction when the consumption of energy is above the predetermined value, two registers, a worm and gear wheel connected thereto in operative relation with the armature and adapted to reverse its direction with the direction of rotation of the armature, a gear train operating one of said registers, a ratchet wheel and pawl mechanism connecting said gear train to the gear wheel so that the register only registers for one direction of rotation of the gear wheel, a second gear train for operating the second register and a mechanism connecting said gear train to the gear wheel so that the second register registers for both directions of rotation of the gear wheel.

1,267,199. INCANDESCENT-CATHODE ARC DEVICE. CHARLES V. FERGUSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 20, 1915. Serial No. 51,661. (Cl. 250—27.)

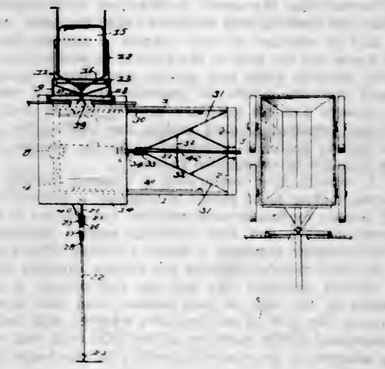


1. A refractory cathode for an electric arc device comprising a supporting stem, an arcing tip therefor of greater diameter than said stem, and a refractory conductor connected to said stem near said arcing tip and extending away from said tip.

2. A rectifier comprising a sealed container, a filling of inert gas therein, a cathode, the tip of said cathode being proportioned to operate at incandescence and having electrical connections at one terminal only, a coöperating anode and means constituting part of said cathode for assisting the starting of an arc in said device whereby the tip of said cathode will be heated to incandescence.

[Claims 3 to 6 not printed in the Gazette.]

1,267,200. LOADING APPARATUS. BERNARD B. FLAHERTY, Davenport, Iowa. Filed Dec. 17, 1917. Serial No. 207,525. (Cl. 214—130.)



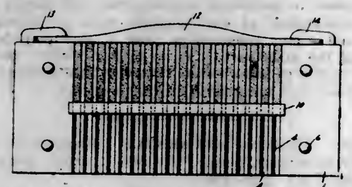
1. In a loading apparatus, the combination of a main frame comprising a horizontal portion and an upright portion that rises from the forward end of the horizontal portion, sheaves mounted in the main frame, a bar connected with and extending laterally from one side of the main frame, a carriage movable on the bar in the direction of the length thereof, a hook pivoted on the carriage, a lever member pivoted on the carriage and connected with the hook and constructed and arranged to maintain the hook in upright position until it reaches the end of the bar, an approach hinged to the opposite side of the main frame, with reference to the bar and carriage, and having an abutment at its inner end, a platform, a vertically-swinging support for the platform, hinged to the main frame, a cable interposed between and connecting the carriage and said support and passed around the said sheaves, and a means constructed and arranged to engage the abutment on the approach and equipped with a tappet adapted to engage the hook of the carriage.

4. In a loading apparatus, the combination of a main frame, a vertically-swinging platform, and a vertically swinging approach pivoted at one side of the main frame and having an abutment on its inner portion constructed and arranged to be engaged by a draft means whereby the approach is swung upwardly.

9. The combination in a loading apparatus, of a main frame, sheaves mounted therein, a carriage supported and movable laterally at one side of the main frame, a hook pivoted on the carriage, means for maintaining the hook in working position during traverse of the carriage and then releasing the same, an approach hinged at the opposite side of the main frame, with reference to the carriage, and having an abutment, a platform, vertically-swinging supporting means for the platform, hinged to the main frame, a cable connecting the supporting means and the carriage and passed around the said sheaves, and a draft means constructed and arranged to engage the abutment on the approach and equipped with a tappet adapted to engage the hook of the carriage.

[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

1,267,201. CAPSULE-FILLER. PAUL JOSEPH FLEMING, St. Martinville, and ROBERT LEE DICKS, Lake Charles, La. Filed Jan. 24, 1918. Serial No. 213,530. (Cl. 128—32.)

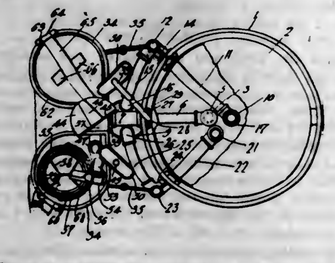


1. A capsule filler comprising a principal grooved section for receiving the matter to be placed in the capsules, a guide for limiting said matter so that the same quantity may be supplied to each capsule, a rammer formed with a ram rod for each of the grooves in said section for forcing capsules along said grooves and thereby scooping up said material before the capsules are forced out of said grooves and an auxiliary grooved section coacting with the principal grooved section for holding the capsules therein during a movement along the grooves, and while caps are being supplied thereto.

2. A capsule filler comprising a grooved member for receiving matter to be placed in capsules, a grooved covering section for the grooved member, the grooves in said grooved member and said covering section registering to make tubular openings, a ramer provided with a ram rod for each tubular opening for forcing capsules along said tubular openings and out one end thereof, a stop arranged at the edge of said member and said section to prevent the exit of said capsules whereby said matter is compressed in the capsules against said stop, said stop being adapted to be removed previous to the removal of the capsules.

[Claims 3 to 5 not printed in the Gazette.]

1,267,202. GAS-MACHINE. JOHN J. FLYCKT, Salina, Kans. Filed Dec. 7, 1916. Serial No. 135,649. (Cl. 48—5.)

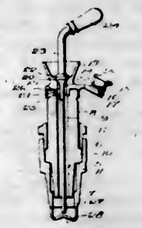


1. In an acetylene gas machine, a main tank; a bell movable in the main tank; means for conducting gas from the bell; a pair of generators; water inlets for the generators; a gas inlet pipe opening into the bell and having branches leading to the generators; a valve in said pipe and constituting means for coupling the pipe to its branches selectively at the will of an operator; a socket on the bell; and a rigid siphon including an intake arm and an outlet arm, the intake arm being journaled in the socket to permit the siphon to be swung as an entity, thereby to position the outlet arm to discharge into the water inlets selectively, the socket constituting a lifting means for the siphon and constituting a means for preventing the siphon from tilting.

2. In an acetylene gas machine, a carbid receptacle; a bucket in the receptacle and having a notch in its upper edge; a carbid holding means in the bucket; a water inlet pipe in the receptacle; a spout discharging into the carbid holding means, the spout being pivoted to the inlet pipe for vertical movement and being received in the notch to retain the bucket against rotation; a bail pivoted to the bucket and supported on the spout; and a cap for the bucket, the cap lying above the bail.

3. In an acetylene gas machine, a main tank; a bell mounted to move in the tank; means for conducting gas from the bell; a pair of generators; a gas inlet pipe communicating with the bell and having branches leading to the generators; a rotary valve in said pipe and constituting means for connecting the pipe with its branches selectively; caps for the generators; a rod engaged directly with the valve; and a disk-like turning head carried by the rod and of sufficient size to overhang and retain both caps at once, the head being cut away at one side to release one of the caps at a time when the cap and the rod are rotated to operate the valve.

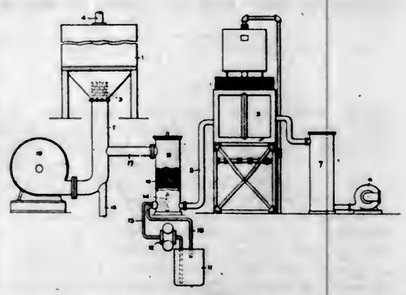
1,267,203. COMBINED SPARK-PLUG AND PRIMING DEVICE. PAUL A. FRANK, Akron, Ohio. Filed Nov. 12, 1917. Serial No. 201,557. (Cl. 123—169.)



1. A combined spark plug and priming device, comprising a tubular metallic body portion; a tubular insulator arranged therein; a metallic priming receptacle secured to the tubular insulator and having a screw-threaded opening adapted for communication with the bore of the tubular insulator; a rod extending longitudinally through the bore and having one end serving as an electrode; a coacting electrode carried by the tubular metallic body portion; a cylindrical screw-threaded member carried by the rod and engaging within the screw-threaded opening and having a longitudinal passage formed therein; a valve arranged above the screw-threaded member and carried by the rod to cover and uncover the opening; means to turn the rod, and a binding post connected with the receptacle.

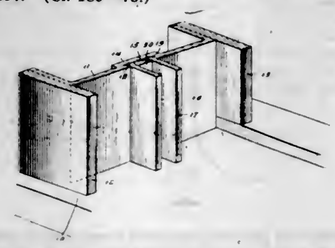
[Claim 2 not printed in the Gazette.]

1,267,204. METHOD OF DEODORIZING GRAIN. WALTHER FRICK, Höchst-on-the-Main, Germany, assignor to General Electric Company, a Corporation of New York. Filed Jan. 8, 1915. Serial No. 1,262. (Cl. 83—28.)



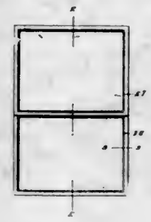
The method of recovering grain which has become wet and musty which consists in subjecting the same to the action of a mixture of ozone and steam, and then treating the grain with fresh air.

1,267,205. WINDOW-JAMB. CLARENCE A. FULLERTON, New York, N. Y. Filed May 17, 1916. Serial No. 98,197. (Cl. 189—73.)



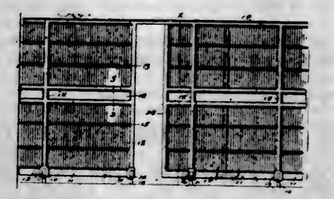
A window jamb construction comprising a stile having a slot formed therein, parting strips secured in said slot, said parting strips having enlarged heads formed on the inner edges thereof for engagement in said slots, and a locking strip insertible in said slot with said enlarged heads of said parting strips, said locking strip engaging the enlarged heads, and means for securing said locking strip to said stile between said parting strips.

1,267,206. WINDOW CONSTRUCTION. CLARENCE A. FULLERTON, New York, N. Y. Filed June 28, 1916. Serial No. 106,514. (Cl. 189—72.)



A window frame construction comprising stiles having longitudinal undercut slots formed therein, parting strips secured to said stiles in said undercut slots, said parting strips comprising complemental rails of similar cross sectional configuration, each of said rails comprising a base to fit in said undercut slot, having said base shaped in cross section to simulate a parallelogram, one of the acute edges formed by this shape fitting in the undercut portion of the slot, the opposite acute edges meeting centrally in said slotted portion, fastening means secured in said stile in the bottom of the slotted portions thereof, for engaging the meeting acute edges, and extending flanges carried by the base portions on the outer faces thereof to receive and guide sash members.

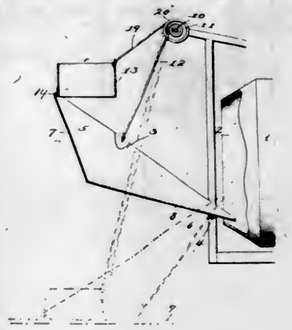
1,267,207. METALLIC CONSTRUCTION. CLARENCE A. FULLERTON, New York, N. Y. Filed June 28, 1916. Serial No. 106,517. (Cl. 189—34.)



1. A partition comprising posts having grooves formed in the opposite faces thereof, fittings carried by said posts, cross rails between the posts secured at their ends to the fittings carried by the posts, said cross faces having their rails grooved, and panel sections insertible between said posts and rails and means for locking said panel sections between said posts and rails as additional posts and rails are added to the structure.

2. A partition comprising hollow posts having the opposite faces thereof grooved, fittings carried by said posts, cross rails secured between said posts to said fittings, said cross rails having their faces grooved, panel sections insertible in the grooved portions of said cross rails and posts, said panel sections being adapted to be locked in said structure as additional cross rails as posts are added thereto, and foot pieces carried by said posts at the bottom thereof in the fittings secured to said posts at the lower end thereof, said foot pieces having adjustable connections with said fittings, to permit adjustment of the foot pieces with the frame to provide for any variations of the floor.

1,267,208. MEASURING MEANS FOR CONCRETE AND OTHER MIXERS. CHARLES M. FURMAN, Jr., Great Falls, S. C. Filed Sept. 7, 1917. Serial No. 190,217. (Cl. 214—130.)



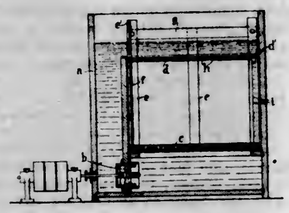
1. In concrete mixing apparatus, the combination of a charging hopper movable from a charge-receiving position to a charge-dumping position, and a measuring device having compartments, each closed on all sides for holding the different constituents of the charge, such device being adapted to receive and hold separately the constituents of each charge when the hopper is in its charge-receiving position and having means for moving it relatively to the hopper to discharge such constituents into the hopper when the hopper is moved into its dumping position.

4. In concrete mixing apparatus, the combination of a hopper, and a measuring receptacle having open-bottom compartments for the constituents of each charge and movable relatively to the hopper to cause the latter to close and uncover respectively the open bottoms of its compartments.

6. In concrete mixing apparatus, the combination of a hopper mounted to rock on a transverse axis, and a measuring receptacle having open-bottom compartments for the constituents of each charge and pivotally connected to the hopper on an axis parallel to the axis of motion of the hopper, the hopper coöperating with the receptacle at one relative position of these parts to close the bottoms of the compartments, and uncovering the bottoms of the compartments to permit discharge of the contents thereof at another relative position of the hopper and receptacle.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,267,209. APPARATUS FOR DYEING WOOL AND OTHER FIBROUS SUBSTANCES. FRANZ GEISSLER, deceased, Cottbus, Germany, by Marianne Geissler, trustee, Cottbus, Germany. Filed Aug. 14, 1916. Serial No. 114,929. (Cl. 8—19.)



1. Apparatus for dyeing wool consisting of a box, adapted to the shape of yarn dyeing machines, both the lid and one side of said box being removable.

2. Apparatus for dyeing wool consisting of a box, adapted to the shape of yarn dyeing machines, both the lid and one side of said box being removably guided in grooves in said box, the lid, when in position, over-lapping the upper edge of the said removable side.

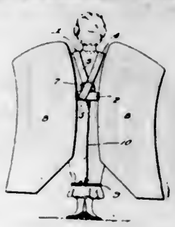
1,267,210. ELECTRIC-MOTOR CONSTRUCTION. GEORGE GILLASPY, Joplin, Mo. Filed Mar. 17, 1915. Serial No. 15,107. (Cl. 172—36.)



A device of the class set forth, including a casing, a field magnet coil located in the casing, substantially semi-cylindrical pole pieces located in the casing in longitudinal alinement with said coil, a relatively short shank extending longitudinally from that end of one of the pole pieces adjacent said coil and provided with an angular attaching arm secured to the adjacent end of the core of said coil, a relatively long shank extending longitudinally from the corresponding end of the other pole piece and located between said casing and coil and having an angular attaching arm secured to the other end of said core, a bearing member secured to said shanks between the coil and pole pieces, a second bearing member carried by the casing, an armature having its shaft journaled in said bearing members, and brushes carried by said first bearing member and engaging the commutator of said armature.

1,267,211. AMUSEMENT DEVICE. KATHARINE DEWSON GOSTIN, Macon, Ga. Filed Sept. 5, 1917. Serial No. 189,817. (Cl. 46—70.)

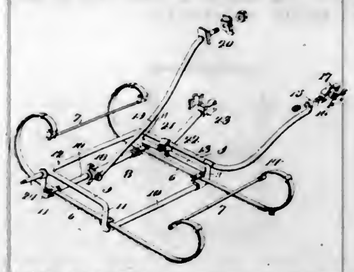
1. A device of the class described comprising means for suspending a person in the air and moving him about, and means for automatically causing the body to assume a horizontal position while being so swung.



5. A device of the class described comprising a harness, suspending means connected therewith, wings connected to the harness, a belt of resilient material, and a cord connecting said belt with the harness.

[Claims 2 to 4 not printed in the Gazette.]

1,267,212. SIDE-CAR ATTACHMENT FOR MOTORCYCLES. CARL J. GUSTAFSON, Springfield, Mass., assignor, by mesne assignments, to Hendee Manufacturing Company, Springfield, Mass., a Corporation of Massachusetts. Filed Feb. 13, 1913. Serial No. 748,172. (Cl. 208—45.)



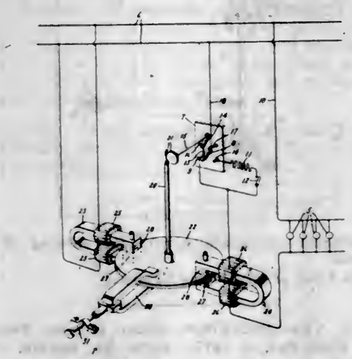
1. A side car attachment for motorcycles comprising, a rectangular body-supporting frame, a bar extending forwardly, upwardly and laterally from the forward end of the inner side of the frame and provided with an attaching clip at its upper end to engage the upper forward portion of a motorcycle drop bar, a second bar having a longitudinally adjustable connection with its rear frame bar and having a clip for connection with the upper rear portion of a motorcycle frame, and a third shorter bar adjustable longitudinally at the lower end along the inner side of the body-supporting frame and having a clip at the upper outer end for connection with a rear vertical bar of a motorcycle frame.

2. A side car attachment comprising, a rectangular body-supporting frame, a bar extending upwardly, forwardly laterally from the forward end of the inner side of said frame, and provided at its upper end with a pivoted attaching clip, a clip adjustable along the rear frame bar, an attaching bar pivoted at the lower end to said clip and extending upwardly and outwardly beyond the inner side of the frame and provided with an attaching clip at the upper end, and a shorter third bar having a clip at its lower end adjustable along the inner side of the frame and provided at its upper end with an attaching clip.

[Claim 3 not printed in the Gazette.]

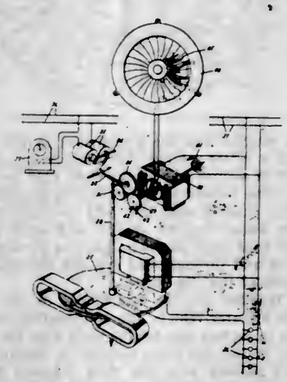
1,267,213. DEMAND-LIMITING APPARATUS. CHESTER I. HALL, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed Apr. 26, 1916. Serial No. 93,788. (Cl. 175—268.)

The combination with an electrical installation, of a demand limiting device comprising a movable member having an initial position, means for moving said member at a rate which is a measure of the demand of the installation in excess of a predetermined value whenever and during such times as the demand of the installation exceeds such predetermined value, and for returning said member to or maintaining said member in its initial position whenever and during such times as the demand of the installation is less than such predetermined value, circuit-controlling means electrically associated with such



installation and having circuit-closing and circuit-modifying positions, and means operatively connecting said movable member to said circuit-controlling means so that the circuit-controlling means occupies its circuit-closing position when the member is in its initial position and is moved to its circuit-modifying position by a predetermined movement of the member.

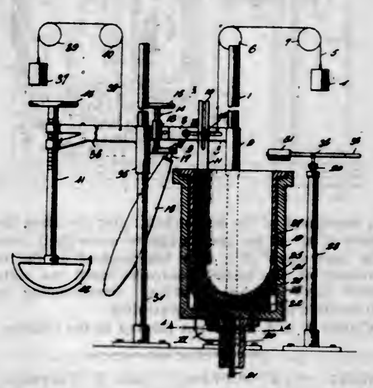
1,267,214. POSITION INDICATOR OR RECORDER. CHESTER I. HALL, Fort Wayne, Ind., assignor to General Electric Company, a Corporation of New York. Filed June 15, 1916. Serial No. 103,852. (Cl. 177—351.)



1. An apparatus for producing a secondary motion indicative of a primary motion comprising in combination, a primary rotatable member, a variable voltage transformer having a stationary magnetic core and a rotatable magnetic core and a primary winding on one of said cores and a secondary winding on the other of said cores, said primary and secondary windings being so arranged that continuous rotation of said movable core periodically varies the amount of primary flux inductively acting upon said secondary winding from zero to a predetermined maximum and back to zero, means operatively connecting said rotatable member to said rotatable core so that continuous rotation of said member produces a corresponding continuous rotation of said core, means for supplying alternating current to the primary winding of said transformer, and an electromagnetic actuator electrically connected to the secondary winding of said transformer and adapted to be actuated by the variation in the magnitude of the alternating electromotive force induced in said secondary winding by the rotation of said core whereby the number of actuations of said actuator are proportional to the revolutions of said primary rotatable member.

[Claims 2 and 3 not printed in the Gazette.]

1,267,215. POT-MAKING MACHINE. EDWARD A. HAMILTON, Hawthorne, Pa. Filed June 29, 1916. Serial No. 106,671. (Cl. 25—24.)



1. In a device of the class described the combination with a forming die or matrix, of a bat in the bottom of the matrix, provided with a concave portion and a forming device engaging the edge of the bat which is substantially coincident with the curvature of the concave portion of the bat.

5. In a device of the class described, in combination with a matrix, a bat mounted in and of a less diameter than the body and a ring shaped to slide within the matrix and embracing the upper edge portion of the bat whereby the bat may be centrally located in the matrix.

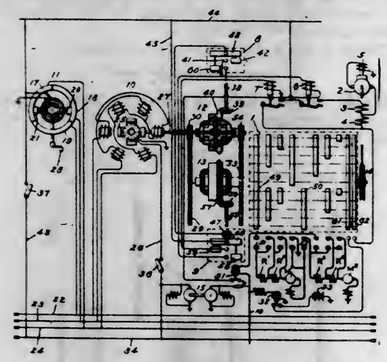
[Claims 2 to 4 not printed in the Gazette.]

1,267,216. MOTOR CONTROL. WILLIAM S. H. HAMILTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 6, 1917. Serial No. 179,046. (Cl. 172—179.)

1. In a motor control, the combination with a main motor controller and a pilot motor for operating the same, of a synchronous motor and switch mechanism controlled thereby for controlling the energization of the pilot motor, a master controller, and connections whereby a movement of the master controller produces a synchronous movement of the synchronous motor and operates the switch mechanism to energize the pilot motor until the main controller has been moved to a position corresponding to the final position of the master controller.

3. In a motor control, the combination with a main motor controller and a pilot motor for operating the same, of switch mechanism for controlling the energization of the pilot motor, a master controller, and a differential gear mechanism for operating the switch mechanism responsively to the relative movement of the master controller and the main controller to energize the pilot motor to move the main controller at a rate independent of the rate of movement of the master controller until the main controller has reached a position corresponding to the final position of the master controller.

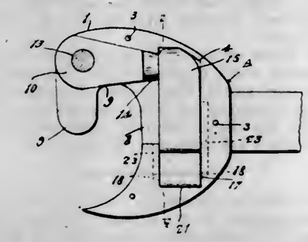
5. A control for the driving motors of a plurality of train units, comprising a master controller on one of the train units; and a main motor controller, a pilot motor for operating the main motor controller, and a synchronous motor for controlling the pilot motor, on each of the train units; and means including train wires connecting the synchronous motors of all of the train units where-



by a movement of the master controller energizes the pilot motors of all of the train units to move their respective main controllers at a rate independent of the rate of movement of the master controller until the main controllers have reached positions corresponding to the final position of the master controller.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,267,217. CAR-COUPLING. CARL F. HARTKOPF, Marion, Ill., assignor of twenty-four one-hundredths to A. M. Norman and twenty-four one-hundredths to P. J. Swan, Marion, Ill. Filed Apr. 12, 1916. Serial No. 90,628. (Cl. 213—12.)

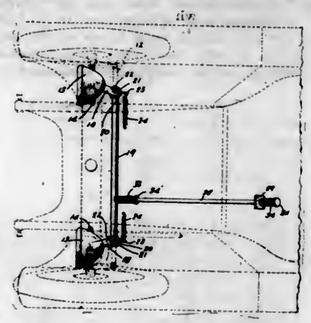


1. A car coupler comprising a head having a recess therein, a knuckle pivotally associated with the head, a tail carried by the knuckle and extending into the recess, a member pivoted directly to the tail, a locking element pivoted within the recess and adapted to engage the member to lock the knuckle, and a manipulating element carried by the locking member, said manipulating member being adapted to move the locking member to locking position.

[Claim 2 not printed in the Gazette.]

1,267,218. DIRIGIBLE HEADLIGHT CONNECTION. HENRY DUDLEY HARVEY, Hillsdale, N. Y. Filed Nov. 28, 1917. Serial No. 204,370. (Cl. 240—62.)

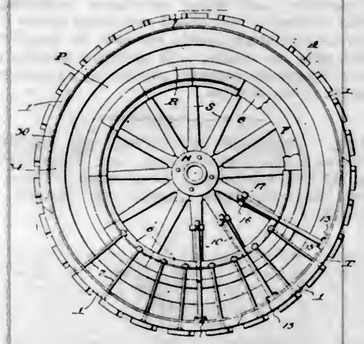
1. The combination with an automobile, a pair of headlights supported thereon and steering devices including a tie bar extending adjacent to both of the headlights, of a rigid member extending along the tie bar and supported thereby, connections between the headlights and said rigid member, resilient means connected to said member and serving normally to hold the member and the headlights stationary with respect to the automobile, and means under the control of the operator to positively lock the member to the tie bar to cause lateral movement of



the headlights coincidentally with the steering of the automobile.

[Claim 2 not printed in the Gazette.]

1,267,219. TRACTION-TIRE. TAKAJI HATTORI, Fellows, Cal. Filed Nov. 3, 1917. Serial No. 200,216. (Cl. 21—214.)



1. In a traction tire for attachment to the wheel and soft tire of a motor-vehicle, the combination with a steel tread made in sectors and having slots near its side edges, the ends of the sectors being beveled on meeting lines; of wear plates passing over the felly between the spokes, clip plates whose centers overlie said wear plates and whose ends have eyes, and bolts passing through the slots in the tread and through said eye and receiving nuts inside the ends of the clip plates.

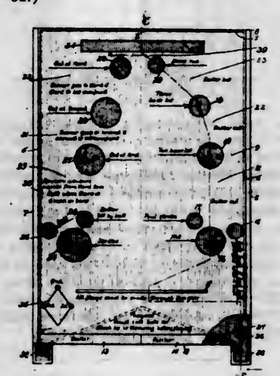
2. In a traction tire for attachment to the wheel and soft tire of a motor-vehicle, the combination with a steel tread made in sectors and having slots near its side edges, the ends of the sectors being beveled on meeting lines; of wear plates passing over the felly between the spokes, clip plates whose centers overlie said wear plates and whose ends have eyes, and bolts passing through the slots in the tread and through said eyes and receiving nuts inside the ends of the clip plates; and an extension spoke whose inner end is attached to each wheel-spoke and whose outer end has a foot bolted to said tread near its outer edge.

3. The herein described means for attaching a steel tread to a motor-vehicle wheel having a soft tire, the same comprising clip plates passing over the felly between the spokes, tie bolts connecting the ends of the clip plates with said steel tread for preventing the movement of the latter radially outward; extension spokes having feet at their outer ends bolted to said tread and their inner ends

lying along the wheel spokes, and spoke grips embracing the latter and having studs passing through said extension spokes for preventing the tread from moving radially inward on the wheel.

4. In a device for attaching a steel tread to the soft tire of an automobile wheel, the combination with clip plates overlying the felly and connected with the edges of said tread for preventing the latter from moving radially outward, and extension spokes connected with the wheel spokes and having their outer ends connected with said tread for preventing the latter from moving radially inward; of a two part saddle whereof each part has a tread underlying said steel tread and a trough lying against the soft tire.

1,267,220. GAME APPARATUS. EDWARD HECKMANN, Hermann, Mo. Filed Apr. 23, 1917. Serial No. 163,847. (Cl. 46—61.)



1. In a game apparatus, a board having a gate, and beyond the gate two sets of openings one set at each side of the board, the set of openings and marks on one side of the board indicating offensive plays and penalties if the player does not succeed in making the attempted play, and the openings and marks on the other side of the board indicating defensive plays and penalties if the player does not succeed in making the attempted defensive play.

3. In a game apparatus, a board having a gate, and beyond the gate two sets of openings one set at each side of the board, the set of openings and marks on one side of the board indicating offensive plays and penalties if the player does not succeed in making the attempted play, and the openings and marks on the other side of the board indicating defensive plays and penalties if the player does not succeed in making the attempted defensive play, two positions being indicated in front of the gate one for the player on the offensive which is on the opposite side of the board as the openings and marks indicating offensive plays, and the other position being for the player on the defensive.

5. In a game apparatus, a board having a gate, and beyond the gate two sets of indicated plays one set at each side of the board, the set of plays at one side of the board indicating offensive plays and penalties if the player does not succeed in making the attempted play, and the plays on the other side of the board indicating defensive plays and penalties if the player does not succeed in making the attempted defensive play.

[Claims 2 and 4 not printed in the Gazette.]

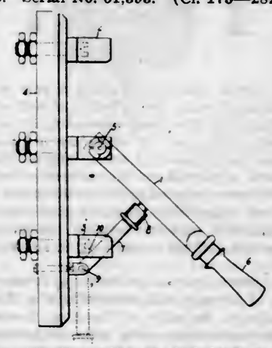
1,267,221. VEHICLE-AXLE. JOHN O. HICKS, Levon, Fla. Filed May 6, 1914. Serial No. 836,715. (Cl. 21—5.)

The combination with an axle rabbeted at its end on its under side, the shoulder of the rabbet and extremity of the axle being beveled inward and upward and the lower face of the axle over its rabbet having a longitudinal groove and a transverse groove of V-shape whose outer wall parallels said bevels; of a spindle, a stock carrying the same and rabbeted on its upper side with its shoulder and ex-



tremity beveled to complement the bevels of the axle, tongues on its upper face to fit said grooves when the parts are assembled, and clips for holding the parts together.

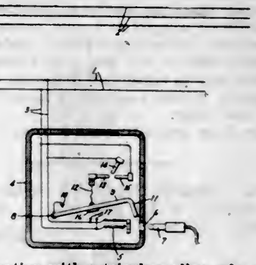
1,267,222. SAFETY-STOP FOR SWITCHES. CHARLES H. HILL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1915. Serial No. 61,393. (Cl. 175—282.)



1. The combination with a switch having a knife blade and coöperating contact clips, of a safety stop comprising a blade pivotally mounted adjacent one of the contact clips and adapted to be held in position by said contact clips when the switch is open and an insulating member on said blade adapted to limit the movement of the knife blade.

[Claims 2 and 3 not printed in the Gazette.]

1,267,223. PROTECTIVE DEVICE FOR TELEPHONE-CIRCUITS. GEORGE H. HILL, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 13, 1915. Serial No. 61,230. (Cl. 179—91.)



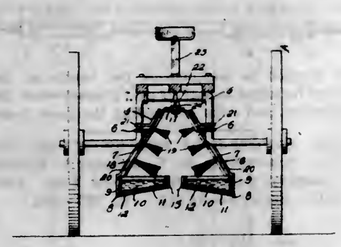
1. The combination with a telephone line, of a jack connected thereto, and means for automatically grounding said line and obstructing said jack when a dangerous voltage is impressed on said line.

3. The combination with a telephone line, of a jack connected thereto, a shutter adapted to obstruct said jack, and means responsive to a dangerous voltage on said line for causing said shutter to move in front of said jack.

5. The combination with a telephone line, of a jack connected thereto, a grounded arm pivoted adjacent to said jack and provided with means for obstructing said jack, a fuse holding said arm in inoperative position with reference to said jack, a spark gap in circuit with said fuse, and contacts for short circuiting the jack when the fuse melts and the arm moves to operative position.

[Claims 2 and 4 not printed in the Gazette.]

1,267,224. BOLL-WEEVIL CATCHER. REED R. HITT, Energy, Tex., assignor to John J. Urquhart, George W. McClellan, and Henry B. Johnson, San Saba, Tex. Filed July 19, 1916. Serial No. 110,243. (Cl. 43—1.)

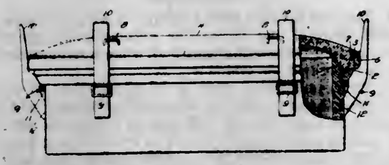


1. A boll weevil catcher including a pair of vertically adjustable hangers each consisting of attaching clamps, a pair of inclined and divergent suspending arms having recesses therein, and a pair of upwardly inclined arms extending from the suspending arms, longitudinally spaced receiving pans supported on the upwardly inclined arms and in the recesses, opposed plant brushing and boll weevil guiding means adjustably mounted above the receiving pans and adjustable with the hangers, and means whereby the brushing and guiding means may be adjusted laterally of each other.

3. A boll weevil catcher including a frame having an arch, a pair of hangers each consisting of a clamp adjustable vertically on the sides of the arm, downwardly inclined and diverging suspending arms projecting from the clamp and having recesses therein, upwardly inclined arms continuing from the suspending arms, opposed receiving pans supported on the inwardly inclined arms and in the recesses and maintained in longitudinally spaced relation with each other, a pair of opposed boll weevil guiding plates provided with vertical slots medially of the ends thereof for accommodating the sides of the arch, another pair of hangers one of each of which is secured to the outer surface of the adjacent plate and embodies a clamp for vertical adjustable engagement on the adjacent side of the arch above the clamp of the other adjacent clamp, said last mentioned hangers maintaining the plates in opposed divergent relation with each other above the pans in a manner that they may be adjusted with the pans and first mentioned hangers as a unit, brushes carried by the adjacent inner faces of the plates, angle bars carried by the upper edges of the plates, and means whereby the angle bars may be adjustably connected so as to maintain the plates in various positions of lateral adjustment relative to each other.

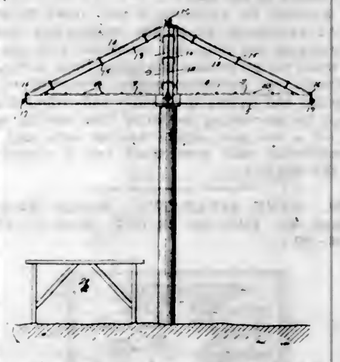
[Claim 2 not printed in the Gazette.]

1,267,225. BURIAL-VAULT. GEORGE H. HOLCOMBE, Lambertville, N. J. Filed Dec. 1, 1917. Serial No. 204,906. (Cl. 72—7.)



A vault comprising a box having a groove in its upper edge, hinged buckles connected with the sides of the box, standards engaging said buckles, and having portions engaging with the box above and below said buckles, and a top guided into position on the box by said standards, and having a tongue for engaging the groove.

1,267,226. CLOTHES-DRIER. JOHN A. HYLTON, Hatcher, W. Va., assignor of one-half to William E. White, Hatcher, W. Va. Filed July 30, 1915. Serial No. 42,772. (Cl. 68—34.)



A clothes drier comprising a vertical standard, a pivot pin secured to and projecting from the upper ends of the standard, a rack including radially arranged arms crossed at their centers, means for connecting the arms together, a vertical strut rotatably mounted upon the pivot pin, said rack being rotatably mounted on the pivot pin and located between the upper end of the standard and lower end of the strut, brace arms secured to the upper side of the arms and to the opposite faces of the strut, said brace arms being inclined downwardly and outwardly from their connection with the strut, and reinforcing wires connected to the strut braces and arms, to reinforce and strengthen the connection of the arms and braces.

1,267,227. TIRE-CARRIER. CHARLES M. JONES, North Yakima, Wash. Filed Apr. 13, 1917. Serial No. 161,841. (Cl. 224—29.)

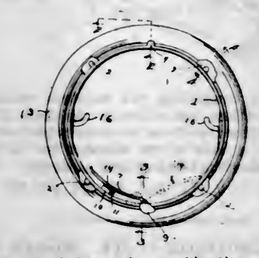


In a tire carrier, the combination with a split rim, a lug secured to one end of said rim, a slot extending longitudinally in the other end of said rim, said slot being open at the end of the split rim in which it is formed, lugs secured to the end of the rim on each side of said slot, said slot being in alinement with the space between the lugs on the other end of the split rim, a lever pivotally secured at one end to the first named lugs, and also pivotally secured intermediate its ends between the lugs on the other end of the split rim, that portion of the lever intermediate its pivots being adapted to move in said slot, whereby the rim may be expanded and contracted by moving said lever.

1,267,228. TIRE-CARRIER. CHARLES M. JONES, North Yakima, Wash. Filed Apr. 13, 1917. Serial No. 161,842. (Cl. 224—29.)

3. In a tire carrier, the combination with a holder adapted to receive and support a demountable rim and tire

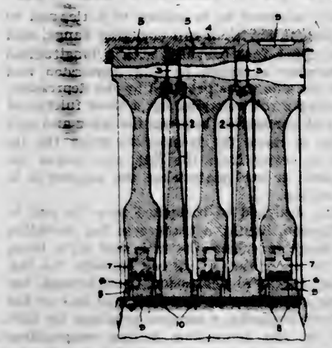
mounted thereon, a plurality of radially disposed lugs at the rear edge of said holder constituting stops to limit the rearward movement of the said rim on said holder, a radially disposed lug at the top and on the front edge of the holder to constituting a stop to limit the forward movement of the rim on said holder and a lever pivoted to said holder to move in a plane substantially parallel to the tire, a lug eccentrically positioned on one end of said lever adapted to be moved to overlap the rim and tire and lock the rim and tire on the holder when the lever is moved to locked position.



4. In a tire holder, the combination with a circular holder, of a lever pivotally mounted on said holder, and a dog or cam depending from said lever and disposed at an oblique angle to the edge of the holder, whereby said dog exerts a wedging action on a tire placed on said holder, as the lever is moved to locking position.

[Claims 1 and 2 not printed in the Gazette.]

1,267,229. ELASTIC-FLUID TURBINE. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 4, 1917. Serial No. 205,455. (Cl. 253—39.)



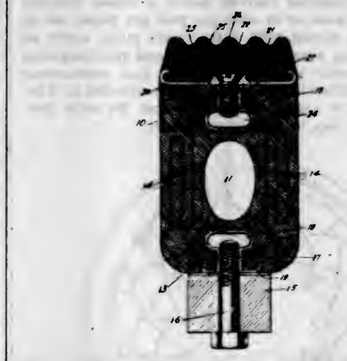
1. In an elastic fluid turbine, the combination of a shaft, wheels thereon, and bushings which are flexible in an axial direction located on the shaft between the wheels to space the wheels apart.

4. In an elastic fluid turbine, the combination of a shaft, wheels thereon, and flexible bushings located on the shaft between the wheels to space the wheels apart, said bushings comprising annular rings each of which is provided with two grooves, one adjacent each end, which extend from the bore radially outward toward the outer surface.

[Claims 2 and 3 not printed in the Gazette.]

1,267,230. RESILIENT VEHICLE-TIRE. IVAN NAIR KEIM, Mount Holly, N. J. Filed Dec. 5, 1917. Serial No. 205,529. (Cl. 152—36.)

2. A resilient vehicle tire, comprising a resilient body in the form of a hollow annulus adapted to be fastened to the felly of a wheel, a ring embedded in the said body adjacent the peripheral face thereof, a floating rim on the peripheral face of the said body, fastening devices fastening the said floating rim to the said ring, and a solid rubber tread attached to the said floating rim.

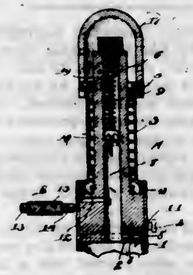


6. A resilient vehicle tire, comprising a resilient body in the form of a hollow annulus, tubular outer and inner rings embedded in the said body adjacent the outer and inner faces thereof, the rings having threaded bosses of which the bosses of the inner ring extend inwardly and the bosses of the outer ring extend outwardly, screws engaging the said bosses of the inner ring to fasten the said body to the felly of a wheel, a floating rim fitting the peripheral face of the said body, screws engaging the said rim and screwing into the bosses of the said outer ring, a tread attached to the said floating rim, and washers on the said bosses and embedded in the outer and inner faces of the said body.

7. In a resilient vehicle tire, a resilient body in the form of a hollow annulus having side walls made in separated layers of rubber, and inner and outer walls of rubber integral with the outer and inner ends of the said side walls and having fabric inserts.

[Claims 1 and 8 to 5 not printed in the Gazette.]

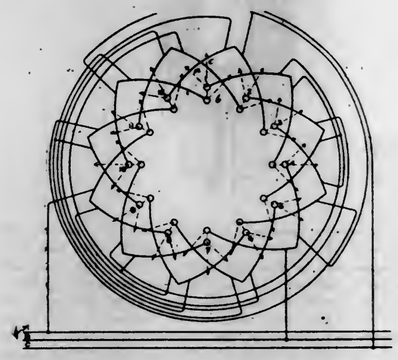
1,267,231. COMBINED TIRE-VALVE AND PRESSURE-GOVERNOR. LOUIS F. KERNDL, Lansing, Mich. Filed Feb. 9, 1916. Serial No. 77,321. (Cl. 152—12.)



In a valve of the class described, a cylinder, a piston head working therein and having a tubular piston rod the bore of which extends through the piston and piston rod and is open at both ends, an inflating valve within said bore of the piston rod, the cylinder being formed with high and low pressure vents in the side wall thereof located at different points in the length of the cylinder, and an audible signal communicating with one of said vents, said piston head being formed with radially extending high and low pressure passages intersecting said bore and respectively movable into and out of line with said high and low pressure vents in the cylinder.

1,267,232. MOTOR-WINDING. WILLEM C. KORTHALS-ALTES, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 16, 1916. Serial No. 84,707. (Cl. 172—280.)

1. In an alternating current motor a stator winding having an even number of coils per pole per phase, all of said coils being wound with a fractional pitch, every alternate coil being wound with n turns and the remaining coils being wound with $1.73n$ turns, and connections whereby the coils having n turns may be connected in Y between three-phase supply conductors, and the coils having $1.73n$ turns may be connected in delta.



6. In an alternating current motor a stator winding divided into twelve sections per pair of poles with an equal number of coils in each section, all of said coils being wound with a pitch of fifty per cent., every alternate coil being wound with n turns and the remaining coils being wound with $1.73n$ turns, and connections whereby the sections whose coils have n turns may be connected in Y between three phase supply conductors and the sections whose coils have $1.73n$ turns may be connected in delta, the connections being made in such a way that the magnetising current in each section will be 30 degrees out of phase with the magnetising current in a section adjacent thereto, and the magnetomotive forces will be equal in all of the sections.

[Claims 2 to 5 not printed in the Gazette.]

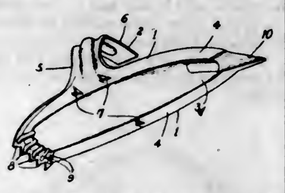
1,267,233. ICE-TOOL. ROBERT C. LAFFERTY, New York, N. Y., assignor to Asa M. Jenkins, New York, N. Y. Filed May 22, 1915. Serial No. 29,723. (Cl. 83—62.)

1. As an article of manufacture, an ice tool comprising a body having pointed members thereon, certain of said members acting to grip the ice to prevent relative motion of the tool and ice in one direction, and certain of said members acting to steady the ice relatively to the tool and to comminute the ice when moved relatively thereto in a direction substantially at right angles to the first-named direction.

3. As an article of manufacture, an ice tool comprising a body having ice penetrating members on one face thereof pointed toward one edge thereof and a hand-engaging member attached to that edge and projecting from the opposite face thereof, said tool being adapted to be used in coöperation with a similar tool to raise a piece of ice by pressing said tools against opposite sides thereof.

10. As an article of manufacture, an ice tool comprising a body member of sheet metal, one end of said body member comprising an ice tool comprising a pointed portion having reinforcing parts lying adjacent one or more of its faces and attached respectively to the edges of said pointed portion.

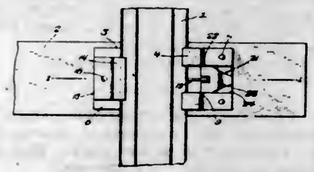
13. As an article of manufacture, an ice tool comprising a substantially flat body member having ice-penetrating projections on one face thereof and being provided on its opposite facs with a hand-engaging member to prevent the hand of the user from slipping therefrom, said tool being adapted to be used in coöperation with a similar tool to raise a piece of ice by pressing said tools against opposite sides thereof.



14. An ice grip comprising two members wholly independent of each other, which are in the form of bodies with teeth extending therefrom, whereby when each member is gripped in a hand of the operator the ice may be held by and between the teeth of said members.

[Claims 2, 4 to 9, 11, and 12 not printed in the Gazette.]

1,267,234. RAILROAD-TIE PLATE. WILLIAM LAFLER, Lake George, Mich. Filed Feb. 9, 1918. Serial No. 216,341. (Cl. 238—2.)



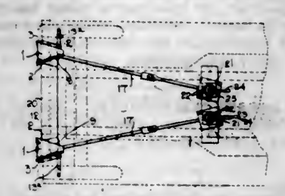
1. A rail plate, designed to be spiked to a tie, and to receive a rail thereon, having a rail engaging flange, said plate having its upper face provided with a longitudinal depression, a member arranged in said depression and interengaged by the side walls provided by the depression, said member having a rail engaging lip, a lever fulcrumed on the plate, a link connection between the lever and said member whereby to move the member to bring the lip thereon toward or away from the rail, and means for locking said member to said plate when the member is in rail engaging position.

2. A rail plate, designed to be spiked to a tie and to receive a rail thereon, having a transverse lug providing an upstanding flange to engage the rail, said plate being thickened upon its upper face at its end opposite the lug, said plate having a central depression therethrough, the side walls of the depression at the thickened end of the plate being inclined inwardly, a member arranged for slidable movement in the depression having outstanding tongues at one of the ends thereof received under the referred to inwardly inclined portions of the side walls of the depression, an angular lever having one of its ends provided with projecting trunnions, said plate having slots to the rear of its rail engaging lug to receive the said trunnions, a link loosely connected with the member and with the lever, and spikes designed to pass through the member and through the plate and enter the tie when the member is moved by the actuation of the lever to rail engaging position.

1,267,235. LAMP FOR AUTOMOBILES. PETER D. LANGAN and MICHAEL L. LANGAN, Scranton, Pa. Filed Oct. 16, 1917. Serial No. 196,834. (Cl. 240—61.)

2. The combination of an automobile, a housing supported at one side of the front of the automobile, a housing secured under the foot board of the automobile at one side thereof, a longitudinal shaft extending between the first-named housing and the second named housing and journaled therein, miter gears fixed on said shaft and

disposed in said housings, upright shafts journaled in the housings and provided within the housings with miter gears intermeshed with the first-named miter gears; the



rear shaft extending upwardly through the foot board, a lamp carried by and revoluble with the forward upright shaft, and a handle on the rear shaft.

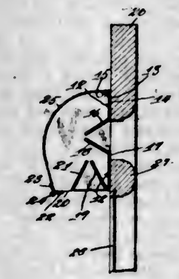
[Claims 1 and 3 not printed in the Gazette.]

1,267,236. POLISHING COMPOSITION. WILLIAM C. LAWRENCE, Indianapolis, Ind. Filed July 13, 1917. Serial No. 180,470. (Cl. 134—24.)

1. A composition of matter for polishing varnished and enameled surfaces comprising paraffin oil, raw linseed oil and lemon oil in about the proportions set forth.

[Claim 2 not printed in the Gazette.]

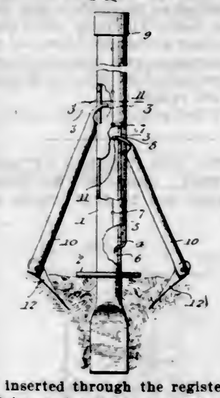
1,267,237. FLY-TRAP. FRED S. LITTLE, Fairfield, Iowa, assignor of one-half to John Samuelson, Fairfield, Iowa. Filed Nov. 6, 1916. Serial No. 129,805. (Cl. 43—22.)



In a device of the class described, the combination of a pair of end plates, each end plate comprising a body having an outwardly extending flange of the same length as the height of the body, each of said plates provided at the top of the inner edge and on the inner face with a horizontal notch, said plate provided on its inner face with converging slots extending inwardly from the inner edge, and separated at their inner end, said plate provided on its inner face and at its lowest edge with a second pair of converging slots, said slots extending upwardly and separated at their inner ends, mesh sheets in the pair of converging slots and constituting fly-run-ways, a mesh strip attached to the lower edges of said blocks, an inner mesh strip attached to the inner edges of said blocks and bent at opposite upper ends into said horizontal notches of said blocks, and a removable cover on the outer edges of said blocks, substantially as shown and described.

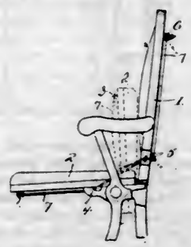
1,267,238. FENCE-POST. ISAAC LOVE, Anchorage, Alaska. Filed Sept. 21, 1917. Serial No. 192,528. (Cl. 256—52.)

A fence post comprising a tubular body provided with elongated openings, a transversely curved bar having a tongue detachably inserted through one of said openings in the body and having an elongated opening registering with the other opening in the body, a brace having a key



shaped head inserted through the registering openings of the body and bar and a fluke carried by the brace.

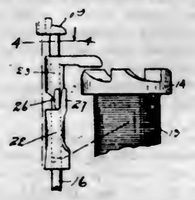
1,267,239. WRAP-HOLDER FOR THEATER-CHAIRS. JORDAN MAX LOVE, Watson, W. Va. Filed Jan. 19, 1918. Serial No. 212,705. (Cl. 155—26.)



2. In combination with a chair comprising a frame and a seat hingedly connected thereto, an article holder comprising eyes applied to the seat, some of the eyes being located in the vicinity of the hinged edge of the seat, other of the eyes being located in the vicinity of the free edge of the seat, a third set of eyes applied to the frame of the chair and a flexible element threaded through all of the eyes and connected at its ends with the frame of the chair.

[Claim 1 not printed in the Gazette.]

1,267,240. CARRIER FOR BRAIDING-MACHINES. GEORGE F. MCCAHEY, Providence, R. I. Filed Nov. 23, 1916. Serial No. 132,958. (Cl. 28—24.)

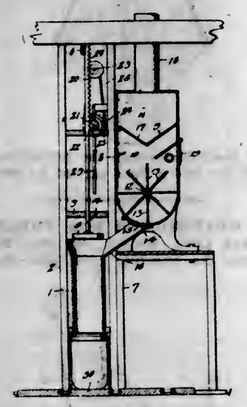


2. A carrier for braiding machines comprising a frame having a spool spindle and a standard, a sliding latch on said standard for engaging teeth on the spool, a lateral extension on the body of said latch, a yarn tension weight also slidable on said standard, a stop lug on the standard of a size to prevent the latch being removed over the end

thereof, one edge of said standard being straight to provide a bearing for the latch to the top of its stroke, said standard being reduced on its opposite edge to permit the latch to be applied thereto at a point below said stop with a rotating motion, and an upward extension on one edge of said weight to engage said lateral extension on the latch to prevent an unlocking rotative movement of the latter when both are raised.

[Claims 1 and 3 not printed in the Gazette.]

1,267,241. MIXING AND PACKING APPARATUS FOR MOLASSES FEED. JOHN W. MCCAUGHEY, Montgomery, Ala. Filed Oct. 28, 1916. Serial No. 128,262. (Cl. 100—57.)

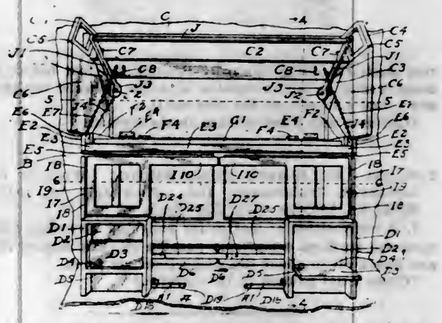


1. In a machine of the class described, a plurality of vertical tubes arranged side by side, plungers above said tubes respectively and movable into and out of the same, a mixing chamber at one side of said tubes above the latter, means for temporarily supporting a charge of dry material in the upper portion of the chamber and comprising a stationary member projecting from one wall of the chamber, and a movable member coöperating with the stationary member and connected with another wall of the chamber, means for feeding syrup and dry food stuff to said chamber, chutes leading from said chamber to said tubes respectively whereby the mixture may be delivered to the tubes, the walls of the chutes extending around the upper walls of the tubes, means controlling communication between said chamber and chutes, means for lowering and elevating said plungers, and a traveling bag carrying table below said tubes whereby the empty bags may be brought into communication with the tubes and the filled bags carried away.

2. In a machine of the class described, a plurality of vertical tubes arranged side by side, plungers above said tubes respectively and movable into and out of the same, a mixing chamber at one side of said tubes above the latter, means for feeding syrup and dry food stuff to said chamber, chutes leading from said chamber to said tubes respectively, the walls of the chutes extending around the upper walls of the tubes and being outwardly flared, and rack and pinion mechanism for elevating and lowering said plungers.

3. In a machine of the class described, a plurality of vertical tubes arranged side by side, plungers above said tubes respectively and movable into and out of the same, a mixing chamber at one side of said tubes above the latter, means for temporarily suporting a charge of dry material in the upper portion of the chamber and comprising a shelf member projecting downwardly from one wall of the chamber and a pivotally mounted member projecting downwardly at a corresponding angle and engaging the free end of the shelf member, means for feeding syrup and dry food stuff to said chamber, chutes leading from said chamber to said tubes respectively, a countershaft, rack and pinion connections between said countershaft and plungers, a line shaft, connections between said line shaft and countershaft whereby the latter may be rotated in one direction to lower the plungers, and connections between said line shaft and countershaft whereby said countershaft may be rotated in the reverse direction to elevate the plungers.

1,267,242. PASSENGER-VEHICLE. GEORGE W. MCCAUSLIN, Stamford, Conn. Filed Feb. 17, 1917. Serial No. 149,294. (Cl. 105—28.)



1. In a passenger vehicle, a pair of seats relatively shiftable toward and from each other and each comprising a seat body and a shiftable back, said backs and said seat bodies being adapted to be arranged edge-to-edge in a horizontal plane to form continuous bed surface, the backs being between the seat bodies, substantially as described.

2. In a passenger vehicle, a pair of seats arranged parallel to each other and relatively shiftable toward and from each other and each having a hinged back, said backs being adapted to be turned down between and to the level of the bodies of said seats and meet each other, and means for staying said backs in the horizontal position, substantially as described.

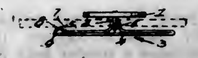
3. In a passenger vehicle, a pair of seats relatively shiftable toward and from each other and each comprising a seat body, said bodies being separated from each other, a distance equal to the combined widths of the backs, and said backs being adapted to be arranged edge-to-edge and in a horizontal plane which is common to the seat bodies to form a continuous bed surface, substantially as described.

4. In a passenger vehicle, a pair of seats arranged parallel to each other and relatively shiftable toward and from each other and each having a bodily shiftable hinged back, said backs being adapted to be turned down between and to the level of the bodies of said seats and meet each other, and means for staying said backs in the horizontal position, substantially as described.

5. In a passenger vehicle, a pair of seats relatively shiftable toward and from each other and each comprising a relatively stationary seat body and a shiftable back, said backs and said seat bodies being adapted to be arranged edge-to-edge in a horizontal plane to form a continuous bed surface, the backs being between the seat bodies, substantially as described.

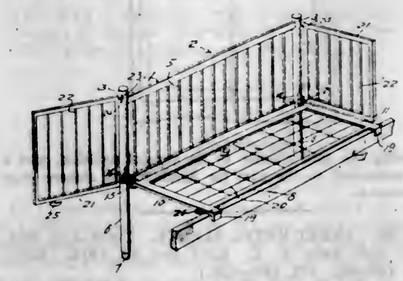
[Claims 6 to 48 not printed in the Gazette.]

1,267,243. BUTTON-FASTENER. IRVIN F. MCDONALD, Baltimore, Md. Filed Mar. 2, 1917. Serial No. 152,097. (Cl. 24—103.)



In a button fastener, the combination with a button, an eye projecting from the rear face thereof, of an attaching member formed from a single piece of resilient wire bent upon itself to provide a pair of resilient arms normally arranged in yielding relation with respect to each other throughout their length and between which arms is slidably arranged and supported the eye of the button, a U-shaped button receiving portion formed in one of the arms, and a hook formed on the terminal of the same arm and having the bill thereof projecting at right angles to the arm and projected over and extended beyond the terminal of the other arm and arranged in close relation therewith for preventing accidental disengagement of the eye and serving as an abutment for coöperating with the eye in applying and removing the button.

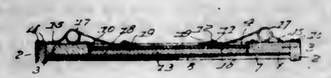
1,267,244. CRIB ATTACHMENT. CLARA ADELINE MCMILLAN, New York, N. Y. Filed May 19, 1917. Serial No. 169,636. (Cl. 5—59.)



2. A collapsible crib attachment for bedsteads including a main side section embodying tubular rods which serve as legs and means for connecting the rods, the rods being provided with vertical slots intermediate their ends, a spring carrying section, means extending from one end of the said spring carrying section for removable engagement with the slots for facilitating pivotal suspending of the spring carrying section on the main side section, engaging means universally connected to the opposite end of the spring carrying section and removably and pivotally engaged in the slot in the adjacent rod for also facilitating the pivotal suspending of the main carrying section, hooks projecting from the opposite ends of the spring carrying section for engagement with the side bar of a bedstead to facilitate the supporting of a crib, ears formed on the respective outer ends of the spring carrying section, end sections pivotally connected to the upper portions of the rods, and hooks pivoted to the end sections and removably engageable in the ears in the spring carrying section for preventing accidental disengagement of the end sections.

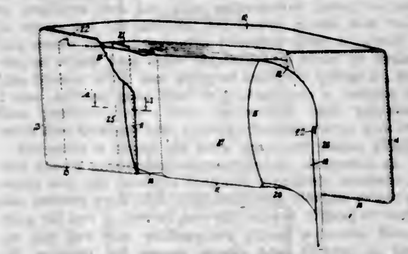
[Claim 1 not printed in the Gazette.]

1,267,245. SELF-SOAPING WASHBOARD. ORVIN E. MCQUEEN, Oakland, Ill. Filed May 8, 1917. Serial No. 167,261. (Cl. 68—29.)



A washboard of the character described consisting of a supporting frame including a back board having a rectangular opening therein, a corrugated rubbing plate the inner portions adjacent the upper end of which are provided with a plurality of transverse slots establishing communication with the opening, a rectangular soap containing receptacle snugly fitted in the opening in the back plate, ears projecting from the outer edges of the receptacle, means for anchoring the ears against the outer faces of the back board, a soap follower plate the outer edges of which are arranged in close relation with the walls of the receptacle, and coil springs the respective ends of which are secured to the rear surface of the supporting frame and bearing against the outer face of the follower plate so as to yieldingly hold the soap in the receptacle against the slots in the rubbing plate.

1,267,246. BILL-BOOK. JAMES MACDONALD, New York, N. Y. Filed Aug. 22, 1917. Serial No. 187,607. (Cl. 150—38.)

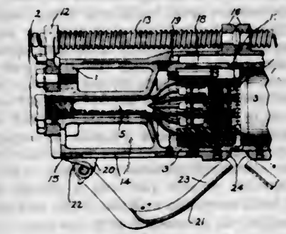


1. A bill fold, comprising a flexible back approximately of the size of a bill, side pieces overlying the side portions of the said back and connected thereto along the outer and bottom edges, and a closing flap connected at the middle portion of the bottom edge with the corresponding portion of the bottom edge of the said back, the ends of the connected middle portion of the said closing flap being spaced from the adjacent inner edges of the said side pieces, the free end portions of the said closing flap being adapted to be tucked under the said side pieces, the latter being adapted to be folded one on the other, the innermost overlying the middle portion of the said closing flap.

3. A bill fold, comprising a flexible back approximately of the size of a bill, side pieces overlying the side portions of the said back and connected thereto along the outer and bottom edges, and a closing flap connected at the middle portion of the bottom edge with the corresponding portion of the bottom edge of the said back, the ends of the connected middle portion of the said closing flap being spaced from the adjacent inner edges of the said side pieces, the free end portions of the said closing flap being adapted to be tucked under the said side pieces, the latter being adapted to be folded one on the other, the innermost overlying the middle portion of the said closing flap, and means to limit the sliding out movement of the free end portions from under the said side pieces.

[Claim 2 not printed in the Gazette.]

1,267,247. ELECTRIC COUPLING. HERBERT D. MEEKER, Niskayuna, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 26, 1914. Serial No. 847,525. (Cl. 173—332.)



1. In an automatic electric coupler, a body portion, contacts carried thereby adjacent one end thereof, a member relatively movable with respect to said body portion and adapted to be retracted or extended, and a cover operated by said member to expose said contacts when said member is retracted and to coact with said member to inclose said contacts when said member is extended.

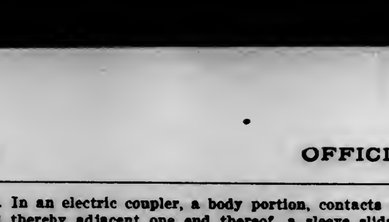
4. In an electric coupler, a body portion, contacts carried thereby adjacent one end thereof, a sleeve slidably mounted on said body portion and adapted to be retracted or extended, and a cover operated by said sleeve to expose said contacts when the sleeve is retracted and to cover said contacts when the sleeve is extended.

6. An electric coupler comprising a body portion, contacts carried thereby adjacent one end thereof, a sleeve slidably arranged upon said body portion and adapted to project beyond the end thereof, a rod for guiding said sleeve, a spring surrounding said rod and arranged to project said sleeve, means for limiting the movement of said sleeve, a cover pivotally attached to said sleeve and arranged to cover said contacts when said sleeve is projected, a spring arranged to press said cover toward said body portion, a cam surface on said body portion, and a coöperating cam surface on said cover whereby said sleeve and cover normally protect said contacts and automatically expose the same when the sleeve is retracted.

7. An automatic electric coupler comprising a body portion, contacts yieldingly mounted adjacent one end thereof, a sleeve slidably arranged upon said body portion and adapted to project beyond the end thereof, a rod for guiding said sleeve, a spring surrounding said rod and arranged to project said sleeve, means for limiting the movement of said sleeve, a cover pivotally attached to said sleeve and arranged to cover said contacts when said sleeve is projected, a spring arranged to press said cover toward said body portion, a cam surface on said body portion, and a coöperating cam surface on said cover whereby said sleeve and cover normally protect said contacts and automatically expose the same when the sleeve is retracted.

[Claims 2, 3, and 5 not printed in the Gazette.]

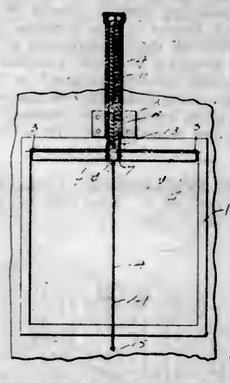
1,267,248. SIGNAL. JOHN EMERY MONIGHAN, Toledo, Ohio. Filed Mar. 11, 1916. Serial No. 83,595. (Cl. 43—31.)



A signal including a casing, an electric battery arranged therein, a tubular extension projecting laterally of the central portion of the casing, a socket arranged in the extension, a lamp fitted in the socket, a reflector supporting said socket, a relatively stationary contact arm carried by said socket, a spring contact movable against the stationary contact arm, said arm being electrically connected with one electrode of said lamp, a conductor connecting one pole of the battery with said spring contact, means electrically connecting the other pole of the battery with the other electrode of the lamp, a substantially U-shaped bearing member secured to said casing, a shaft journaled in said bearing member, a rod slidably mounted in said extension and adapted to engage said spring contact member to move the latter into engagement with the relatively stationary contact arm, an integral collar carried by said rod, and a spring confined between the lateral extension and the collar and normally retaining the slide rod in contact with the cam.

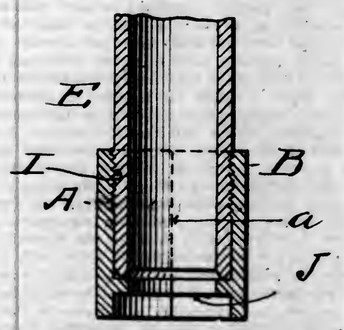
1,267,249. DEVICE FOR CLEANING WINDOWS OR WIND-SHIELDS. HARRY M. MONTOOTH, Newark, N. J. Filed Aug. 10, 1917. Serial No. 185,526. (Cl. 15—59.)

A device of the character set forth comprising a supporting bracket, a cylindrical member carried by said supporting bracket, a cap secured to said cylindrical member, a hollow member slidable in said cylindrical member, an arm pivoted to said hollow member, a cleaner carried by said arm and adapted to engage the window, a coiled spring connected to said arm and to said cap for



returning the said cleaner to its normal position, and a cord connected to the arm for moving said cleaner over the window.

1,267,250. SHEET-METAL SLEEVE. THOMAS E. MURRAY, New York, N. Y. Filed Dec. 14, 1916. Serial No. 136,865. (Cl. 285—128.)

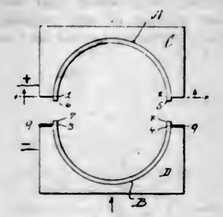


1. A sleeve, comprising two longitudinally divided half sections and having an internal screw thread and an internal shoulder, each section, together with the portion of the screw thread and shoulder thereon being struck up from a metal plate, the screw threads and shoulder on one section registering with the screw threads and shoulder on the other section, and the said sections being electrically welded together at their longitudinal edges.

2. A sleeve as in claim 1, in combination with a tube engaging said screw thread and electrically welded to said shoulder.

1,267,251. METHOD OF MAKING METAL RINGS. THOMAS E. MURRAY, New York, N. Y. Filed Nov. 1, 1917. Serial No. 199,776. (Cl. 219—5.)

The method of making a metal ring, which consists in, first, laying off on each of two flat plates middle portions 1, 2 and 3, 4, each equal in length to a semi-circumference of said ring, and, at the extremities of said laid off middle portions, end portions 1, 6; 2, 5; 3, 7 and 4, 8; second, bending said middle portions to form semi-circular ring sections; third, pressing said end portions of said sections together and electrically heating the same until the metal of said end portions is rendered plastic and extruded at the joints and the extremities of



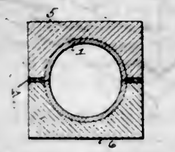
said semi-circular ring sections come together and are united.

1,267,252. HOUSING FOR UNIVERSAL JOINTS. THOMAS E. MURRAY, New York, N. Y. Filed Nov. 20, 1917. Serial No. 202,951. (Cl. 64—89.)



As a new article of manufacture and sale, a housing for a universal joint, consisting of a tube and a cup-shaped enlargement at one end thereof, the rim of said enlargement being of greater diameter than said tube and concentric therewith, the said parts being formed in two similar longitudinal seamless half sections disposed edge to edge and electrically welded together.

1,267,253. ENGINE-CYLINDER. THOMAS E. MURRAY, New York, N. Y. Filed Nov. 20, 1917. Serial No. 202,952. (Cl. 74—85.)



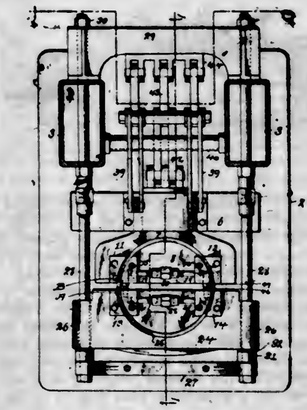
As a new article of manufacture and sale, an engine cylinder and head integrally formed of sheet metal and composed of two longitudinal seamless half sections of said cylinder and integral therewith two diametral sections of said head, the said half sections being placed edge to edge and electrically welded together.

1,267,254. ELECTRIC WELDING-MACHINE FOR MAKING METAL RINGS. THOMAS E. MURRAY and HARRY R. WOODROW, New York, N. Y.; said Woodrow assignor to said Murray. Filed Dec. 10, 1917. Serial No. 206,404. (Cl. 219—5.)

1. An electric welding machine, comprising electrodes having semi-circular recesses for the reception of semi-circular sections of the work, means disposed and operating within said recesses for preventing rotation of said sections in said recesses.

4. In combination with the electrodes of an electric welding machine for uniting the abutting ends of two sections of a ring or other endless shape, two fixed blocks on each electrode, each block having a concavity conforming to the shape of the work, two movable blocks, each having a convexity conforming to the shape of the work, and means for moving said movable blocks simultaneously to clamp said sections between said movable blocks and said fixed blocks.

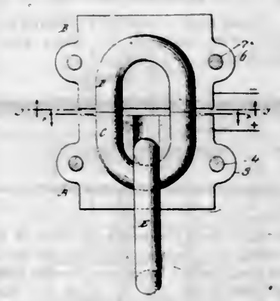
6. An electric welding machine for uniting the abutting ends of two sections of a ring or other endless shape, comprising a fixed support, a clamping electrode for one of said sections thereon, a movable support, a clamping



electrode for the other of said sections thereon, means for establishing welding current to said electrodes, and electrode-magnetic means for moving said movable support to press together said abutting ends.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,267,255. APPARATUS FOR MAKING METAL CHAINS. THOMAS E. MURRAY, New York, N. Y. Filed Dec. 29, 1917. Serial No. 209,380. (Cl. 219—5.)

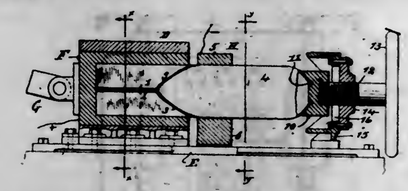


1. An electrical welding apparatus for chain links, comprising two relatively movable electrodes for supporting two U-shaped half link sections with their butt ends in welding contact, each electrode comprising a pair of similar half sections receiving a half link between them, and one of said electrodes having an opening to receive a half link threaded upon one of said half sections, and clamping means for securing together the half sections of each electrode.

4. An electrical welding apparatus for chain links, comprising two relatively movable electrodes, each electrode comprising a pair of similar half sections, each section having in its face a U-shaped groove, the said grooves in one electrode being inverted with respect to the grooves in the other electrode, and the ends of the grooves in one electrode registering with the ends of the grooves in the other electrode, the members of the pair of half sections of one electrode having in their faces registering channels open at their ends, extending across the faces of said members and bisecting the U-shaped grooves therein, and clamping means for securing together the half sections of each electrode.

[Claims 2 and 3 not printed in the Gazette.]

1,267,256. METHOD OF AND APPARATUS FOR ELECTRIC WELDING. THOMAS E. MURRAY, New York, N. Y. Filed Jan. 21, 1918. Serial No. 212,897. (Cl. 219—4.)



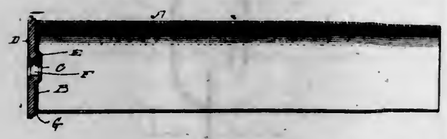
1. An electric welding apparatus, comprising a fixed annular electrode surrounding one of the bodies to be welded through which electrode said body passes, and an electrode having a recess wherein the other body is seated and movable with reference to said fixed electrode.

3. An electric welding apparatus comprising a fixed electrode surrounding one of the bodies to be welded, and an electrode having a recess wherein the other body is seated and movable with reference to said fixed electrode, the said fixed electrode being formed in two sections electrically connected having recesses receiving said body, one of said sections being adjustable with respect to the other section.

11. The method of producing a projectile having a plurality of guide vanes, which consists in, first, shaping each of said vanes at one end to a configuration to correspond to that of the projectile; second, electrically welding said vanes together at a longitudinal edge of each to radiate from a common axis; third, electrically welding said vanes at their shaped ends to said projectile.

[Claims 2 and 4 to 10 not printed in the Gazette.]

1,267,257. TUBULAR CARTRIDGE-SHELL. THOMAS E. MURRAY, New York, N. Y. Filed Jan. 21, 1918. Serial No. 212,899. (Cl. 102—16.)



2. A cartridge shell, comprising a tube of sheet metal having an integrally formed head at one end and a circular reinforcing disk of metal electrically welded to the outer face of said head.

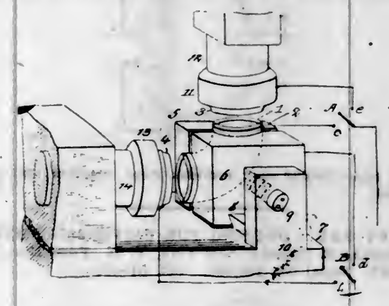
5. A cartridge shell, as set forth in claim 2, the said disk having a central annular projection of greater thickness than the remainder of said disk, and the said shell head having a central recess receiving said projection, there being a central opening in said recess registering with the opening in said annular projection, the said projection entering said recess and being electrically welded therein.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,267,258. ELECTRICAL WELDING APPARATUS FOR PIPE-COUPLINGS. THOMAS E. MURRAY, New York, N. Y. Filed Feb. 16, 1918. Serial No. 217,494. (Cl. 219—4.)

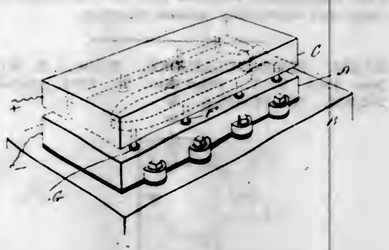
1. An electrical welding apparatus for pipe couplings, comprising members having matrices in their opposing faces for receiving longitudinal half sections unitedly forming the body portion of said coupling, an end of said body portion protruding beyond said members, means for holding and pressing a reinforcing ring against said protruding end, and means for establishing welding current between said half sections and between said ring and said end of said body portion.

2. An electrical welding apparatus for pipe couplings, comprising members having matrices in their opposing faces for receiving longitudinal half sections unitedly forming the body portion of said coupling, the ends of said body portion protruding beyond said members, means



for holding and pressing reinforcing rings against said protruding ends, and means for establishing welding current between said half sections and between said rings and the ends of said body portion.

1,267,259. METHOD OF AND APPARATUS FOR ELECTRIC WELDING. THOMAS E. MURRAY and JOSEPH B. MURRAY, New York, N. Y. Filed Mar. 9, 1918. Serial No. 221,394. (Cl. 219—10.)



1. The method of preventing lateral relative displacement of electrically welded edges of thin metal objects, which consists in placing said edges in contact registry, establishing welding current between said edges, and simultaneously preventing relative lateral expansion of said holding electrodes.

3. An apparatus for electric welding, comprising two electrodes, and means for simultaneously preventing lateral expansion of both of said electrodes during the welding operation.

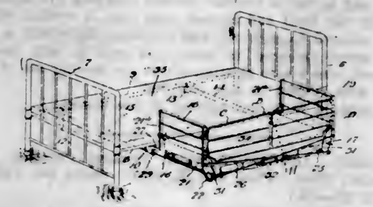
6. An apparatus for electric welding, comprising two electrodes, one of said electrodes being movable with respect to the other, and means for uniting said electrodes at a plurality of points encompassing the work and disposed opposite to one another on the respective facing surfaces of said electrodes.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,267,260. CHILD'S BED. DANIEL E. MYERS, Longview, Tex. Filed Oct. 12, 1917. Serial No. 196,296. (Cl. 5—59.)

2. A crib attachment for bedsteads comprising hangers secured thereto, guide and support members connected to the hangers and extending transversely of the bedstead, a crib provided with coöperative members connecting head and foot boards with its side rails, side boards having a pivotal connection with the guide and support

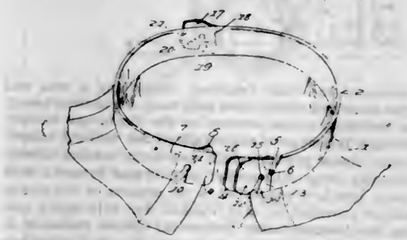
to permit of the raising and lowering of the side rails of the crib, means serving to lock the boards in a raised



position and a swingable closure for the external side of the crib.

[Claim 1 not printed in the Gazette.]

1,267,261. BUTTONLESS NECKBAND. MISSOURI A. NARMORE, Fort Worth, Tex. Filed June 2, 1917. Serial No. 172,412. (Cl. 2—413.)



1. A neck band for shirts including a body, a flap projecting from one end thereof, the body being provided with a slot extending downwardly from its upper edge at a point adjacent the inner end of the flap, the opposite end of the body being provided with a slot extending upwardly from its lower edge and forming a tongue for interlocking engagement with the first mentioned slot, and slotted tabs carried by the rear surface of the body and the outer surface of the flap.

[Claims 2 and 3 not printed in the Gazette.]

1,267,262. LINING AND ADVERTISING DEVICE FOR FINGER-BOWLS. JOHN G. PATTON, Philadelphia, Pa. Filed Apr. 28, 1916. Serial No. 94,201. (Cl. 65—15.)

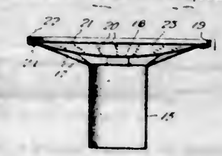


1. A sanitary lining for finger-bowls, comprising a lining having a bottom and side walls extending from the bottom, said lining having a weakened portion below the water line to be affected by the water and cause a deformation of the lining to prevent its reuse and to indicate to the customer if it has been previously used.

3. A sanitary lining for finger-bowls, comprising a paper lining having a bottom portion and side walls extending therefrom, said lining having closely related apertures through it adapted to be covered by the water so that the walls of adjacent apertures will be separated due to the action of the water and cause a deformation of the lining.

[Claim 2 not printed in the Gazette.]

1,267,263. GAS-STOVE ATTACHMENT. FLORENCE P. PEEBLES and HARRY H. K. JEFFERSON, Birmingham, Ala. Filed Jan. 19, 1918. Serial No. 212,654. (Cl. 126—252.)

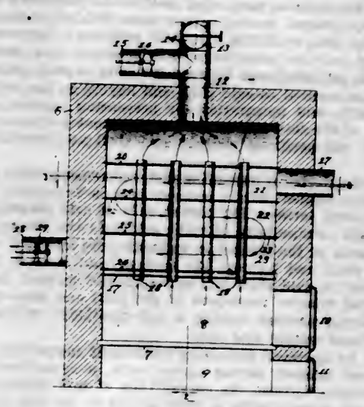


1. In a device of the class described, a tubular member having upwardly inclined arms, and a top member secured on said arms, said top member comprising a downwardly dished, perforated bottom plate and a top plate connected therewith, there being an air space intermediate the top and bottom plates.

3. In a device of the class described, a top member comprising a downwardly dished, perforated plate having a circumferential upstanding flange, a second plate fitted within the flange of the first plate and also having an upstanding flange, the flange of the first plate being turned upon the flange of the second plate to produce an upstanding bead, there being an air space intermediate the first and second plates, a tubular member having radially extending, upwardly inclined arms, and rivets whereby said arms are connected with the plates constituting the top member; said arms being materially spaced beneath the dished plate at the points where said arms join the tubuar member.

[Claim 2 not printed in the Gazette.]

1,267,264. FURNACE. JAMES LOUIS PIERCE, Manila, Philippine Islands, assignor to Pacific Commercial Company, Manila, Philippine Islands, a Corporation of Philippine Islands. Filed Dec. 28, 1916. Serial No. 139,238. (Cl. 126—99.)



In a furnace, the combination of a furnace body having a fire box at its bottom and an outlet space at its top, a plurality of horizontal partitions spaced apart between the said outlet space and the fire box, said partitions each being made of a plurality of sections arranged edge to edge in overlapping relation, the meeting edges of the sections having recesses coöperating to form elongated openings extending alternately from opposite walls of the furnace body, and flat upright flues extending through the corresponding openings of the partitions and having their ends open for gas to pass upwardly therethrough from the fire-box, said flues being staggered and extending alternately from opposite walls of the furnace body and having their inner portions overlapping whereby a sepentine passage is formed between adjacent partitions, the partitions having openings alternately at opposite ends.

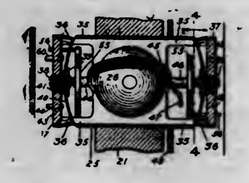
1,267,265. TOOL. LORENZO PIGNANI, Dilltown, Pa. Filed Sept. 5, 1917. Serial No. 189,807. (Cl. 7—8.)



1. A tool including an element having a tubular shank formed with a longitudinal slot extending through the front end of said element and into said shank, a second tool element fitting said slot and formed at its rear end with external threads, and a nut on said shank at the inner end of said slot, the threads of said nut being adapted to engage the threads on the second tool element to hold the latter in the said slot and thereby maintain the whole assembled.

[Claim 2 not printed in the Gazette.]

1,267,266. ELECTRICAL MEASURING INSTRUMENT. WILLARD E. PORTER, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 26, 1916. Serial No. 100,130. (Cl. 171—95.)



1. An electrical measuring instrument comprising a permanent magnet having curved ends with an indentation in one end, a cylindrical shell positioned between the curved ends of said magnet, a magnetic core mounted within said shell and between the ends of said magnet, a member secured to said shell and having an ear registering with said indentation for preventing relative movement of the shell and magnet, and a moving element having a coil positioned within said shell and around said core.

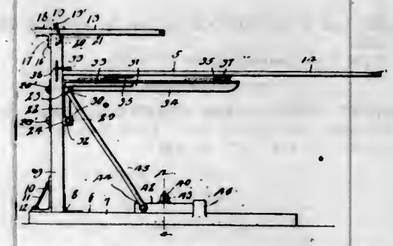
2. An electrical measuring instrument comprising a permanent magnet having curved ends, a cylindrical shell positioned between the curved ends of said magnet with its axis substantially at right angles to the line between the ends of the magnet, a magnetic core mounted within said shell and between the ends of said magnet, means secured to said shell and engaging said magnet for preventing relative movement of the shell and magnet, and a moving element having a coil positioned within said shell and around said core.

3. An electrical measuring instrument comprising a permanent magnet having curved ends, a cylindrical shell positioned between the curved ends of said magnet with its axis substantially at right angles to the line between the ends of the magnet, a magnetic core mounted within said shell and between the ends of said magnet, means for preventing relative displacement of said shell and magnet, and a moving element having a coil positioned within said shell and around said core.

24. An electrical measuring instrument comprising a permanent magnet having curved ends, a cylindrical shell of non-magnetic material positioned between the curved ends of said magnet, a spherical magnetic core positioned within said shell and between the ends of said magnet and supported by the shell, two inwardly extending and oppositely positioned tongues near each end of said shell, said tongues being integral with the material of the shell, a spring clip having its ends sprung beneath the two tongues near each end of said shell, a cap mounted on each end of said shell, a pivot bearing threaded in each cap and having a shoulder engaging the spring clip so that the clip is positioned between the cap and the shoulder, a moving element mounted between said pivot bearings and having a circular current carrying coil arranged within the shell and around said core, a control spring stud secured to each cap and insulated therefrom, a control spring secured to each stud and to said moving element, and a zero shifting means for moving one of said caps with respect to said member.

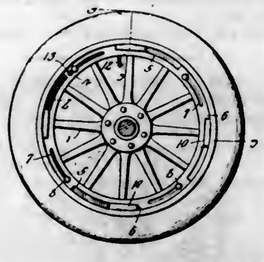
[Claims 4 to 23 not printed in the Gazette.]

1,267,267. IRONING-TABLE. ADOLPH PRITZEL, Stillwater, Minn. Filed Jan. 5, 1917. Serial No. 140,810. (Cl. 68—10.)



A device of the class described comprising a base and a slotted standard rising from said base, an ironing board, cleats, fastening means carried by the cleats and extending through the slots of the standard for vertical adjustment, said cleats provided with sockets, a bearing extending laterally from each socket and formed integral with the cleats, brackets supported in the sockets of the cleats, and means provided on said brackets for detachably connecting the ironing board therewith, screws threaded in said bearings, and brace rods having detachable connection at one end with said screws and a slidable connection at its opposite end with the base.

1,267,268. AUTOMOBILE-WHEEL. JOHN RENWICK, Emmett, Idaho. Filed July 13, 1917. Serial No. 180,434. (Cl. 152—21.)

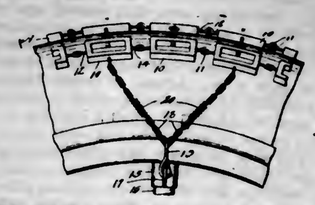


In combination with a wheel having a felly provided with peripheral notches and a locking ring mounted for oscillatory movement on one side of the felly and having notches adapted to be arranged in or out of registry with those of the felly, a demountable rim having locking segments on its inner side for arrangement in the notches of the felly, said segments having grooves for engagement by the locking ring, the said segments being wedge-shape and the sides of said notches being correspondingly angularly related to enable said locking segments to fit therein.

1,267,269. ANTISKID-MAT. JOSEPH RETTELL, Detroit, Mich. Filed Dec. 1, 1917. Serial No. 204,899. (Cl. 152—16.)

An anti-skid mat for tires comprising equidistantly spaced longitudinally and transversely disposed rows of

elongated rectangular shaped gripping elements, eye members projecting from the sides and ends of each of said



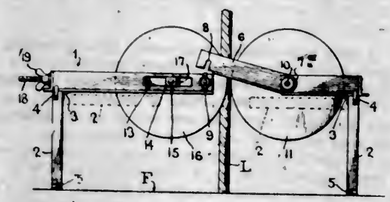
members, and the adjacent eye members being inter-connected as and for the purpose specified.

1,267,270. VACUUM-CUP. RUDOLPH PAUL RHEINLANDER, St. Louis, Mo. Filed May 14, 1917. Serial No. 168,418. (Cl. 248—39.)



A vacuum cup comprising a cup structure, a ring structure merging into said cup structure, and a flexible cord formed with a knot positioned at the juncture of the ring structure and cup structure and with a pair of supporting arms extending partly around said ring structure.

1,267,271. MEASURE FOR OIL-WELLS. ROBERT B. RICHARDSON, Electra, Tex. Filed Aug. 1, 1917. Serial No. 183,918. (Cl. 33—134.)

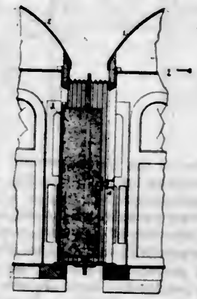


A measuring device of the class described comprising a frame having an opening in one side, folding supporting legs for said frame, the side bars of the latter being slotted longitudinally at one side of said opening, boxes mounted in these slots, a shaft journaled in said boxes, a contact wheel mounted on said shaft, a yoke connecting said boxes, a screw extending from the center of said yoke through the contiguous end of said frame, a nut on the screw outside such end, a spring coiled on the screw between the end of the frame and center of the yoke, a second contact wheel journaled in the frame at the opposite side of the opening therein, a counting mechanism connected with the last-mentioned wheel.

1,267,272. VESTIBULE-CURTAIN COUPLING. MAURICE J. ROCHE, New York, N. Y. Filed Aug. 28, 1917. Serial No. 188,659. (Cl. 105—266.)

1. A coupler of the character described, comprising a pair of pivotally mounted jaws having a socket therein, a head fitting into said socket, a sleeve normally surrounding said jaws, a resilient member for normally holding said sleeve over said jaws and said head, means for connecting said head to a curtain, and means for connecting said jaws to a support.

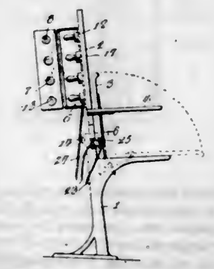
3. A coupler of the character described comprising a pair of pivotally mounted jaws having a socket formed with beveled walls, a casing, a head having beveled walls fitting the walls of said socket, a rod connected with said head extending into said casing, a spring acting on said rod for normally holding said head adjacent said casing, and a sleeve carried by said casing normally surrounding said head and said jaws, said jaws and said head being capable of movement against the action of said spring whereby said jaws will become released.



5. A coupler of the character described comprising a base, a pair of channeled uprights extending from the base, a casing extending from said base between said uprights, a sleeve surrounding said casing, said sleeve being formed with a flange, a spring arranged in the channel part of each of said uprights engaging the base and the flange for urging the sleeve to move toward the outer end of said casing, a reciprocating member arranged in said casing, a spring acting on said reciprocating member holding same resiliently against movement, a head connected with said reciprocating member and positioned normally in the outer end of said sleeve when the sleeve is in its outer position, a pair of pivotally mounted jaws surrounding said head and positioned in the sleeve, said jaws substantially filling the end of said sleeve so that they cannot move away from the head until moved to a position beyond the sleeve against action of said spring, and means for connecting said jaws to a support.

[Claims 2, 4, and 6 not printed in the Gazette.]

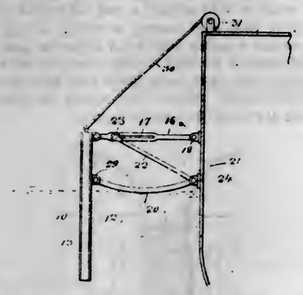
1,267,273. SEAT-INDICATOR FOR THEATERS. HARRY L. ROGERS, Philadelphia, Pa. Filed Sept. 17, 1915. Serial No. 51,232. (Cl. 200—27.)



1. In a device of the class described, the combination of a chair comprising a back and pivotally mounted seat, L-shaped plates fixedly mounted upon the marginal edge of said back and said seat whereby said contact plates will overhang the inner surface of said back and the upper surface of said seat, thereby causing said contact plates to be in alinement with each other, whereby as said seat is swung to an elevated position said plates will be clamped between said seat and said back for forming a positive circuit closure.

[Claims 2 and 3 not printed in the Gazette.]

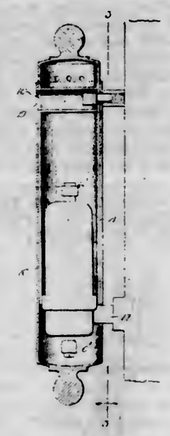
1,267,274. TORPEDO-GUARD. FREDERICK G. ROLF, El Paso, Tex. Filed Nov. 3, 1917. Serial No. 200,107. (Cl. 114—240.)



1. In a device of the class described, a guard unit and means for mounting the latter at the side of the vessel, said means comprising a plurality of outwardly extending arms provided with longitudinal slots, means for securing said arms to the side of a vessel, a plurality of spaced parallel braces pivotally mounted on the vessel at a point below each of the aforesaid arms one end of each brace being movable longitudinally of the arm and guided by the slot therein, the braces folding into position to partly inclose the arms, an additional arm connected with the guard unit, and single means for pivotally mounting the braces and arm last named.

[Claim 2 not printed in the Gazette.]

1,267,275. RADIATOR-AIR-VALVE PROTECTOR. GEORGE RUDISCHHAUSER, New York, N. Y. Filed Jan. 26, 1918. Serial No. 213,971. (Cl. 137—122.)



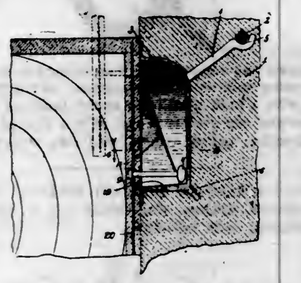
1. In a protector for radiator air valves, a tubular shell having an open end adapted to admit the air valve so that the air vent of the air valve is located within the shell, a socket disposed transversely of said shell, and a set screw having an annular head adapted to be located within the socket, said screw being adapted to secure the shell to a radiator when the shell is engaging the radiator air valve, said shell having openings constituting vents.

2. In a protector for radiator air valves, a tubular shell having an open end for receiving a radiator air valve, a similar tubular shell adapted to telescope over the first, a transverse socket in the first shell, and a set screw having an annular head adapted to be located within the socket, said screw being adapted to engage the two shells and secure the same to a radiator when said shells inclose a radiator air valve.

3. In a protector for radiator air valves, a tubular shell having an open end adapted to admit a radiator air valve, a socket disposed transversely of said shell, said shell having openings registering with said socket, one of said openings being of a smaller diameter than the socket to form an abutment for a set screw, and a set screw having an annular head adapted to be located in said socket when securing the shell to the radiator to protect the valve.

4. In a protector for radiator air valves, a tubular shell having an open end adapted to admit a radiator air valve, a transverse socket in said shell, said shell having openings in register with the socket, one of said openings being of a smaller diameter than the socket, a cover shell adapted to telescope over the first and having a longitudinal slot to clear a portion of the air valve, said cover shell having openings adapted to register with the socket, and a set screw having an annular head adapted to be disposed within the socket and project through the smaller opening of the first mentioned shell by means of said screw, said shells being adapted to be secured to the radiator about the air valve.

1,267,276. WALL CONCRETE ANCHOR. HENRY RUINELLO, Jersey City, N. J. Filed Aug. 27, 1917. Serial No. 188,447. (Cl. 72—105.)



1. A cast wall anchor comprising a body having an anchoring arm extending rearwardly therefrom, said arm being positioned in the upper part of the body and formed with a support for supporting a reinforcement, and a second diagonally arranged arm or lug at the lower part of the body extending in a direction substantially at right angles to the first mentioned arm, and interlocking means for receiving an article to be connected to said body.

2. A cast wall anchor comprising a body having a plurality of apertured lugs cast integral therewith and adapted to receive temporary securing means, a pair of rearwardly extending arms, one near the top and one near the bottom, extending substantially at right angles to each other, and a pair of spaced cam members forming a front wall for the body, said cam members having a slot therebetween and an opening at the top whereby an article may be interlocked with the anchor.

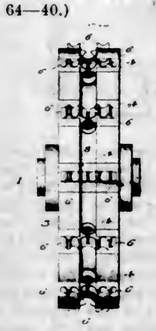
1,267,277. REAR-END SIGNAL FOR VEHICLES. GABRIEL RUSIAS, Habana, Cuba. Filed Aug. 24, 1917. Serial No. 187,987. (Cl. 116—31.)



3. In a rear-end signal for vehicles, a signal apparatus embodying a target, means for pivotally mounting the same on the side of a vehicle, yielding supports for said target for normally maintaining the extended position of said target for permitting the target to yield to pressure applied thereto, and an electric lamp arranged to illuminate the face of said target in all positions thereof; a pivoted standard for said target and associated parts, said standard having a spiral groove; manually-operated means for depressing said standard; a stationary guide pin fitting in said groove for rotating said standard; and a coil spring adapted to retractively rotate said standard when released from manual control.

[Claims 1 and 2 not printed in the Gazette.]

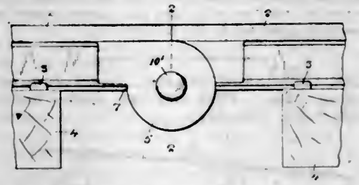
1,267,278. CABLE-DRIVE PULLEY. CHARLEY E. SACKETT, Minot, N. D., assignor of one-third to F. B. Lambert, Minot, N. D. Filed Feb. 19, 1918. Serial No. 218,151. (Cl. 64—40.)



1. A cable drive pulley having a circumferential peripheral groove, blocks mortised and secured transversely and radially in the rim of the pulley, and star-wheels journaled in pairs in the blocks in position to receive and grip the cable, with a space between said wheels less than the width of the peripheral groove in the pulley.

2. A cable drive pulley comprising a hub, body and grooved rim, blocks transversely and radially mortised in the rim, wheels journaled in pairs in the blocks with a space between said wheels smaller than the width of the central peripheral groove of the pulley.

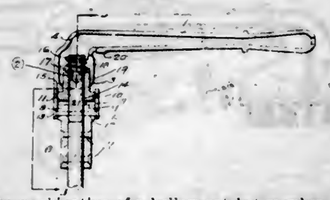
1,267,279. RAIL-JOINT. SYLVESTER SCALPELLI, Joliet, Ill. Filed Aug. 31, 1917. Serial No. 189,173. (Cl. 239—8.)



1. In combination with two alined railway rails, one of said rails having its end provided with a round socket disposed below the head of the rail and extended outwardly of the said end of the rail, the other rail having its end provided with a round tongue arranged below the head of the rail and extending outwardly of the end of the said rail and designed to be received in the socket of the first mentioned rail, and a pivot member centrally passing through the tongue for securing the same in the socket.

2. In combination with two alining rails, one having its end thickened and extended below the head thereof to provide spaced ears, the ears having a round periphery and extending below the base of the rail, the wall between the ears being rounded to conform to the peripheral contour of the said ears, and the said ears having central alining openings, the other rail having its web projected beyond its head and foot to provide a tongue having a round periphery and designed to be received between the ears and the walls at the end of the second mentioned rail opposite the tongue being rounded to receive the round ears of the first mentioned rail, said tongue having an opening designed to aline with the openings in the ears, and a securing element passing through such openings.

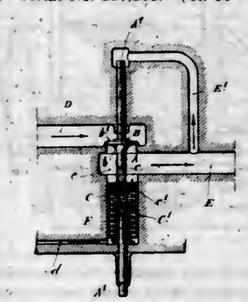
1,267,280. BRAKE-HANDLE. BERNARD SCHECHTER, St. Louis, Mo., assignor of one-half to George H. Tontrup, St. Louis, Mo. Filed Oct. 26, 1917. Serial No. 198,598. (Cl. 74—54.)



1. The combination of a hollow ratchet member, a brake staff fixed thereto, a second ratchet member mounted for detachable engagement with the first member, a brake staff extension passing through the second ratchet member and fixedly related to the staff, said first ratchet member having a bearing part, a spring coiled about the protruding upper end of the extension for urging the second ratchet member into engagement with the first member, and a brake handle pivoted to the second ratchet member for swinging in a vertical plane from its operative horizontal position to its inoperative vertical position alongside the brake staff and having its pivoted end formed into a housing for inclosing the upper end of the staff extension and the coiled spring, the lower edge of the housing being formed into a cam for operating on the bearing part of the first ratchet member to raise the second ratchet member from engagement with the latter when the handle is swung downwardly from its operative position to its inoperative position alongside the staff.

[Claims 2 and 3 not printed in the Gazette.]

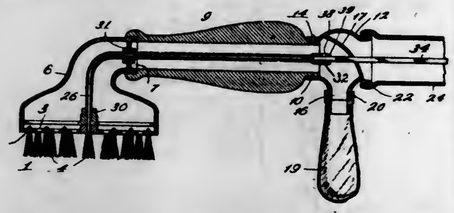
1,267,281. PRESSURE-REDUCING APPARATUS FOR FLUIDS. EUGÈNE SCHNEIDER, Paris, France. Filed Feb. 14, 1918. Serial No. 217,205. (Cl. 50—35.)



In a fluid pressure reducing apparatus, the combination with a main high pressure fluid duct, and a main reduced pressure fluid duct, of a valve for controlling the flow of fluid between the two main ducts, a piston having its inner face exposed to said main reduced pressure duct, a stem connecting said valve and said piston, a branch high pressure fluid duct leading to the outer face of said piston, a balancing spring acting against the outer face of said piston, a branch reduced pressure fluid duct, a stem projecting from the outer face of said valve into said branch reduced pressure fluid duct, and a stem projecting from the outer face of said piston into the atmosphere, whereby the variations of the reduced fluid pressure acting upon the stem end projecting from said valve into said branch

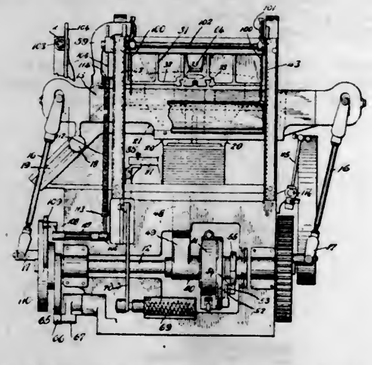
reduced pressure fluid duct will cause said valve to move more or less to one or the other side of its normal position of equilibrium determined by the adjustment of said balancing spring.

1,267,282. VACUUM HAND-BRUSH. JESSIE B. SCULLY, Kansas City, Mo. Filed Aug. 14, 1917. Serial No. 186,103. (Cl. 15—60.)



In a device of the character described, a circular hollow head terminating at its upper portion in a reduced neck extending substantially at right angles to said head, a hollow handle connected to said neck and adapted to permit the passage of dust and other foreign matter received from the hollow head, a rotary brush back arranged at the lower end of the hollow head and provided with inlet openings, bristles fixed to said brush back in groups interspersed between the inlet openings, bearings in the hollow head, and a flexible shaft mounted in said bearings and extending through the hollow handle and the head, and fixed to the brush back to drive the same.

1,267,283. PAPER-CUTTING MACHINE. CHARLES SEYBOLD, Dayton, Ohio. Filed Apr. 11, 1916. Serial No. 90,472. (Cl. 164—54.)

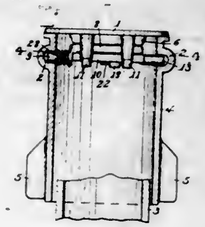


1. In a paper cutting machine, the combination with a pair of knife carriers and a clamp bar intermediate the knife carriers, each mounted to reciprocate in parallel relation, of a clamp column with a pattern board removably coupled thereto, a knife secured to one carrier and a pair of knives secured to the other carrier at right angles to the single knife, and interconnected actuating mechanism for the two carriers and the clamp bar whereby they may be reciprocated in succession to hold and trim the front and ends of a paper pile in one continuous operation.

6. In a paper cutting machine, the combination with the frame and a pair of knife carriers mounted to reciprocate in parallel relation, of a knife secured to one carrier and at right angles to the single knife, two driving shafts, with intermeshing gears to reciprocate the knife carriers, and an end gage pivoted to the frame with a cam on one of the driving shafts, and intermediate connection with the gage whereby the operation of the driving shaft will swing the end gage out of the pathway of the end knives.

[Claims 2 to 5 not printed in the Gazette.]

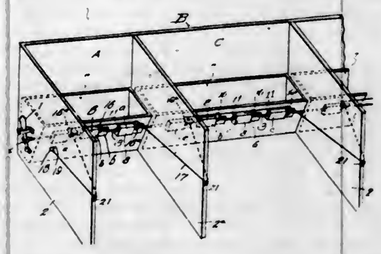
1,267,284. SERVICE-BOX. STEPHEN SHANAHAN, Urbana, Ohio. Filed June 16, 1917. Serial No. 175,120. (Cl. 137—13.)



1. The combination with a casing having oppositely disposed sockets therein adjacent to its upper end, of a cover therefor, a plate slidable on the under side of said cover and carrying a locking bolt on one end thereof adapted for engagement with one of said sockets, means for guiding said plate, means whereby said plate is normally maintained in retracted position, a second plate disposed underneath the first plate and having a bolt for engaging the opposite socket, means supporting said plates, a cam aperture in the first plate, a cam disposed in said aperture, and a vertically disposed key-bolt rotatably mounted in said cover and having a portion in positive rotating relation to said cam.

2. The combination with a casing having oppositely disposed sockets therein adjacent to its upper end, of a cover therefor, a plate slidable on the under side of said cover and carrying a locking bolt on one end thereof adapted for engagement with one of said sockets, means for guiding said plate, means whereby said plate is normally maintained in retracted position, a second plate disposed underneath the first plate and having a bolt for engaging the opposite socket, means supporting said plates, a cam aperture in the first plate, said aperture being formed to provide a pocket at one side thereof, a cam disposed in said aperture and adapted in one position to have a portion seat in said pocket, and a vertically disposed key-bolt rotatably mounted in said cover and having a portion in interlocked relation with said cam whereby rotation of the former is imparted to the latter.

1,267,285. RELEASING MEANS. URBAN J. SHANKLIN, Anamosa, Iowa. Filed Nov. 24, 1917. Serial No. 203,751. (Cl. 119—111.)



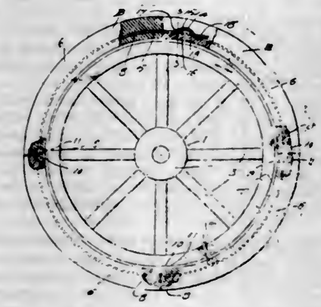
2. In releasing means, a block provided in its outer face with a longitudinally extending groove, a securing pin pivoted at its outer end in said block and operable in the groove, the block being provided with a transverse recess extending across the groove and adapted to receive and tightly secure a ring, a casing slidable on said block

longitudinally thereof and secured against outward movement relative thereto, and means for operating said casing.

3. In releasing means, a block provided in its outer face with a longitudinally extending groove and having its inner face plane so as to permit the block to be secured to a manger, a securing pin pivoted at its outer end in said block and operable in the groove, the block being provided with a transverse recess extending across the groove and adapted to receive a securing ring, and a casing slidable on said block longitudinally thereof and provided at the inner edge of each side wall with an inwardly directed integral flange fitting into a rabbet provided in the inner face of the block, the casing fitting snugly over the block and the flanges coöperating therewith so as to prevent outward movement of the casing relative to the block.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,267,286. FOLDING AUTOMOBILE-RIM PROTECTOR. JOSEPH J. SHOEMAKER, San Jose, Cal. Filed May 18, 1917. Serial No. 169,497. (Cl. 152—23.)



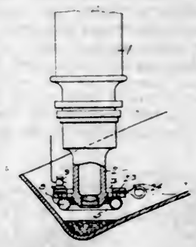
1. A folding automobile rim protector comprising a plurality of tread sections, substantially U-shaped members embedded within said sections, means for pivotally connecting said members together, and means connected to a pair of said members for tightly clamping the tread sections about the rim of a wheel.

2. A folding automobile rim protector comprising a plurality of tread sections, substantially U-shaped members embedded within said sections and having the webs and ends of the arm portions disposed exteriorly of the ends of the sections, hooks formed on the ends of the arm portions of some of said sections and adapted to engage the web portions of the U-shaped members of the next adjacent sections, and means connected to the U-shaped members for tightly clamping the sections upon the rim of a wheel.

3. A folding automobile rim protector comprising a plurality of tread sections, members embedded within said sections, means for pivotally connecting said members, a transverse rod journaled to one of said members, arms carried by said rod, links pivoted to said arms, and to one of the other of said members, and levers secured to said rod for rotating said rod to tightly clamp the sections about the rim of a wheel.

4. A rim protector comprising a plurality of tread sections positioned about the periphery of the wheel, one of said sections having a slot opening out of one end and through the tread face thereof, members embedded in said sections and the adjacent ends of two of said members being disposed in the slot, means connecting the other members together, a rod secured to one of said members in the slot, an arm carried by said rod, a link pivoted to said arm and to the other member located in said slot, and a lever secured to the rod adapted to be swung within the slot to clamp the sections together about the wheel.

1,267,287. ILLUMINATOR FOR MICROSCOPES. ALEXANDER SILVERMAN, Pittsburgh, Pa. Filed Nov. 13, 1917. Serial No. 201,743. (Cl. 240—2.)



1. An illuminator for microscopes and the like comprising a support adapted to be attached directly to the objective of the microscope, a source of light constructed and arranged to lie adjacent to and substantially surround the lens portion of the objective of the microscope carried by said support.

3. An illuminator for microscopes and the like comprising a lamp having means for removably attaching the same directly to the objective of a microscope and having means for maintaining the lamp at all times equidistant from the axis of objectives of different diameters.

11. The combination with a microscope of a lamp having means to attach the same directly to the objective of the microscope, said attaching means permitting the axial adjustment of the lamp with respect to the objective.

[Claims 2, 4 to 10, and 12 not printed in the Gazette.]

1,267,288. FOUNTAIN-PEN. TAGIRO TANIMURA, Rock Springs, Wyo. Filed Oct. 19, 1916. Serial No. 126,597. (Cl. 120—46.)



1. An ink sack deflating device for fountain pens comprising a presser bar, a member operable in two directions, and means associated with said bar and said member and being engaged by said member when the latter is operated in one direction to force said bar into complete sack deflating position, said means being also engaged by said member when the latter is operated in the other direction to force said bar into partial sack deflating position.

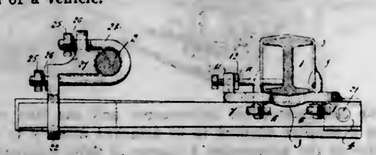
4. An ink sack deflating device for fountain pens comprising an open rectangular frame having registering notches in the outer edges of the side bars thereof, a lever fulcrumed at one end in one end of said frame and extending longitudinally of the same, another lever fulcrumed intermediate of its ends at a point spaced inwardly from the other end of said frame, and when closed, overlapping the first mentioned lever, a head provided on one end of said lever and being disposed in said notches, said head forming a stop for limiting the movement of the last named lever when the latter is actuated in one direction, and coacting elements carried by said levers for limiting the opening movement of one relatively to the other when the last mentioned lever is actuated in the other direction.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,289. STEERING-GEAR ATTACHMENT FOR MOTOR-VEHICLES. WELLINGTON TRACY, Winthrop, Mass. Filed June 6, 1917. Serial No. 173,092. (Cl. 21—200.)

1. In an attachment of the character specified, the combination comprising an attachable, spring-holding

member, a series of leaf springs fixed to said member to project therefrom, said springs consisting of an inner set of springs, an outer set of springs and a set of springs interposed between said inner and outer sets of springs and shorter in length, an attachable slotted spring-retaining member through the slots in which the outer free ends of said inner and outer sets of springs extend, whereby said springs may exert tension upon said spring-retaining member as the springs are bent laterally in either direction, and means whereby said members may be attached, respectively, one to the axle and the other to a movable portion of the steering mechanism of a vehicle.

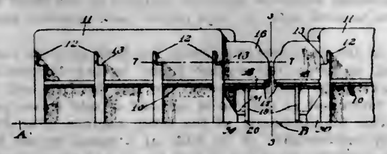


3. In an attachment of the character specified, the combination comprising an attachable spring-holding member, a set of leaf springs fixed to said member to project therefrom, a slotted spring-retaining member through the slots in which the outer free ends of said springs extend, and a tensional member interposed between the ends of said springs projecting beyond said slotted member for maintaining the same normally in yielding contact with said slotted member.

5. In an attachment of the character specified, the combination comprising an attachable spring-holding member, a pair of inner leaf springs fixed to said member and projecting therefrom, said springs having therein, just forward of said spring-holding member, bends extending outwardly in reverse directions, an outer set of leaf springs, and a set of springs interposed between said first-named springs and said outer springs and shorter in length, both said outer and said interposed springs being arranged to yieldingly reinforce said first-named springs at the bends therein and otherwise along the length thereof in the event of lateral distortion, a slotted spring-retaining member through the slots in which the outer free ends of said first-named springs and said outer springs extend, and means whereby said members may be attached, respectively, one to the axle and the other to a movable portion of the steering mechanism of a vehicle.

[Claims 2 and 4 not printed in the Gazette.]

1,267,290. SEAT. FRANK M. TUBBS, San Francisco, Cal. Filed June 27, 1917. Serial No. 177,345. (Cl. 155—22.)



5. The combination with a stationary seat provided with a hollow back, a movable seat secured to said stationary seat and means whereby the back of the movable seat may be folded within the back of a stationary seat, and the seat and the supporting legs of the movable seat folded against the stationary seat.

6. The combination with a stationary seat provided with a hollow back, a movable seat having the seat portion hinged to the side of the stationary seat, a back rigidly secured to the stationary seat and adapted to automatically fold within the hollow back of the stationary seat.

7. The combination with a stationary seat provided with a hollow back, a movable seat having its seat portion hinged to the side of the stationary seat, a back rigidly secured to the movable seat and adapted to fold within the back of the stationary seat, and a weight carried by the back of the folding seat.

9. The combination with a support, of a seat hinged thereto and adapted to be folded against said support, a supporting leg hinged to said seat in a manner to limit its movement in one direction and an inclined member hingedly secured to said support for preventing movement of the leg in an opposite direction when the seat is in an operative position.

[Claims 1 to 4 and 8 not printed in the Gazette.]

1,267,291. BOUND COLLAR. JOHN MANNING VAN HEUSEN, Jamaica Plain, Mass. Filed Jan. 22, 1916. Serial No. 73,525. (Cl. 2—67.)

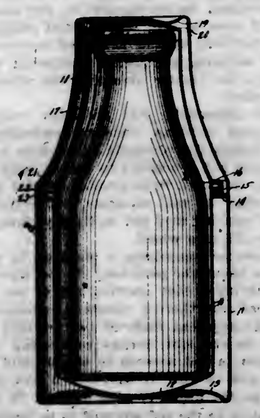


1. A folding collar having an outer folding portion and an end tab portion forming an abrupt angle with each other, and having a notch in the fabric at said angle, and an edge binding for the tab and outer folding portion inclosing the edge of the tab and folding portion and arranged to be taken up by said notch when the collar is folded; substantially as described.

2. A folding collar of multiply fabric having an outer folding portion and an end tab portion forming an abrupt angle with each other, said collar having a weakened portion at its fold and having a notch in said weakened portion at said angle, and a binding for the tab and outer folding portion arranged to be taken up by said notch when the collar is folded; substantially as described.

3. A folding collar of multiply fabric of a weave sufficiently stiff to maintain the shape of the collar without the employment of starch and having an outer folding or turn-down portion and an end tab portion forming an abrupt angle with each other, and having a recess or notch in the fabric at said angle, said collar being provided with a fold portion of increased flexibility, and an edge binding for the tab and outer folding portion inclosing the edge of the tab and folding portion, and arranged to be taken up by said recess or notch when the collar is folded; substantially as described.

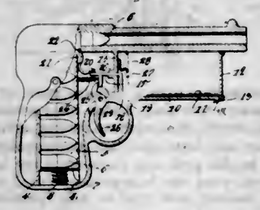
1,267,292. MILK-BOTTLE CASE. ADELINA J. VANSTROM, Jamestown, N. Y. Filed Oct. 23, 1916. Serial No. 127,194. (Cl. 215—3.)



1. A case comprising a pair of detachable sections open at one end, the said sections being adapted to be assembled with their open ends abutting, each section comprising a pair of spaced inner and outer walls extending throughout the length of said sections and providing between them a vacuum chamber, the inner walls of said sections being bowed outwardly at their closed ends, and the corresponding portions of the outer wall of said sections being bent inwardly and into engagement with the said inner walls.

[Claim 2 not printed in the Gazette.]

1,267,293. GUN. JAMES G. VETETO, Amity, Ark. Filed Oct. 15, 1917. Serial No. 196,677. (Cl. 42—84.)



1. In an electric fire arm, the combination with the stock, barrel and trigger of a gun, of an electric battery having one pole thereof electrically connected with the metal of the gun, a sliding contact movable into and out of engagement with the opposite pole of the battery and adapted to be operated by the trigger, a stationary contact secured to the barrel, and an electrical connection between said stationary and sliding contacts.

3. An electric fire arm, comprising in combination with the stock, barrel and trigger of a gun, a chamber arranged beneath said barrel, a battery positioned in said chamber and having one pole electrically connected therewith, a sliding contact movable into and out of engagement with the opposite pole of the battery and adapted to be operated by said trigger, a spring normally holding said contact away from the battery, a stationary contact connected to the barrel and an electrical connection between said stationary and sliding contacts.

[Claims 2 and 4 to 7 not printed in the Gazette.]

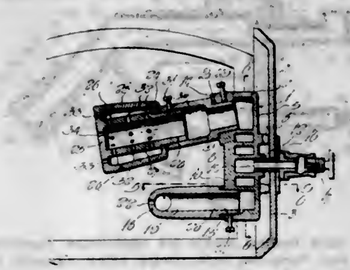
1,267,294. CATTLE-YOKE. CHARLES B. WIEDERHOLT, Hastings, Minn. Filed Oct. 15, 1917. Serial No. 196,676. (Cl. 119—138.)



1. A cattle yoke comprising a neck piece constructed from a piece of wire and formed with a straight shank portion, the lower end of the wire extending at right angles to the shank and terminating in an eye, the upper end of the wire extending inwardly and upwardly from said shank and terminating in an eye positioned above said first mentioned eye and to one side of the vertical axis thereof, a rod extending through said eyes, and hooks formed on either end of said rod.

[Claim 2 not printed in the Gazette.]

1,267,295. FUEL-SAVER AND SMOKE-CONSUMER. LEONIDAS D. WEST, Denver, Colo. Filed June 12, 1917. Serial No. 174,319. (Cl. 110—175.)

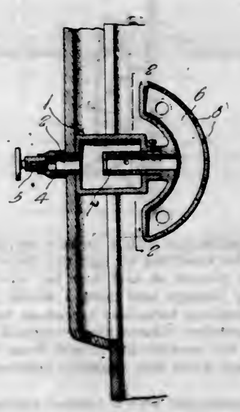


1. A fuel saver and smoke consumer comprising a casing having an open end and having in its other end an opening, a perforated cover for said casing, and a perforated tubular neck joined to said cover and extending through said casing and opening.

3. A structure as specified in claim 2, together with fluid spraying devices having necks detachably secured in said outlets.

[Claim 2 not printed in the Gazette.]

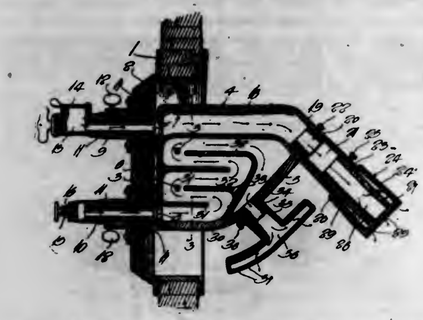
1,267,296. FUEL-SAVER AND SMOKE-CONSUMER. LEONIDAS D. WEST, Denver, Colo. Filed June 12, 1917. Serial No. 174,320. (Cl. 110—172.)



1. A fluid supply device for stoves and furnaces comprising an elongated hollow fluid-heating body adapted to be exposed to the heat from the fire box, one end wall of said body having a central opening for the attachment of a fluid supply pipe, the other end wall of said body also having a central opening, a fluid spraying nozzle adjacent said last named end of said body and on the exterior thereof, and a tubular inlet neck extending from said nozzle into said body through said last named opening, said neck having perforations positioned in said body.

[Claim 2 not printed in the Gazette.]

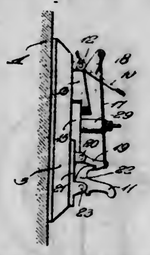
1,267,297. FUEL-SAVING AND SMOKE-CONSUMING DEVICE. LEONIDAS D. WEST, Denver, Colo. Filed June 25, 1917. Serial No. 176,822. (Cl. 110—75.)



1. A fluid feeding device for combustion chambers of stoves and furnaces, said device being adapted to be fixedly mounted in the stove or furnace and comprising a body subjected to heat and having a downwardly and outwardly inclined inner end formed with upper and lower outlet openings, the outer end of said body having a pair of inlet openings, said body having fluid heating passages of different lengths leading from the inlet openings to the outlet openings, a relatively long spraying device extending from the upper outlet, and a comparatively short spraying device extending from the lower outlet, said spraying devices being secured to said body and communicating with said outlets.

[Claims 2 and 3 not printed in the Gazette.]

1,267,298. FURNACE-DOOR ATTACHMENT. LEONIDAS D. WEST, Denver, Colo. Filed June 29, 1917. Serial No. 177,822. (Cl. 110—175.)

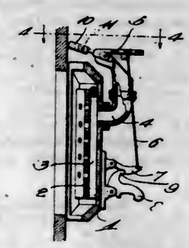


1. The combination with a furnace coaling door having an air inlet for admitting air into the firebox after coaling, of a damper pivoted on said door for controlling the entrance of air through said inlet, a handle pivoted to the door and extending forwardly therefrom for opening said door, and operating connections between said damper and said handle for opening the former from the latter and holding it open when said handle is operated to open said door.

4. The combination with a furnace coaling door having an air inlet for admitting air immediately after coaling, of a damper pivoted to said door for controlling the entrance of air through said inlet, a vertically swinging handle member pivoted to the door below said damper for opening said door, said handle member having a cam, a latch member pivoted to the door above said handle member and having a shoulder, the raising of said handle member serving to cause said cam to correspondingly raise said latch member, and a link pivoted to said damper at one end and pivoted at its other end to one of said members for opening said damper when said handle member is actuated to open the door, said cam and said shoulder coacting in holding said link in raised position.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,299. STOP FOR FURNACE-DOORS. LEONIDAS D. WEST, Denver, Colo. Filed June 29, 1917. Serial No. 177,823. (Cl. 110—175.)

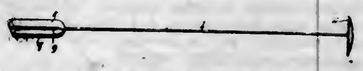


1. The combination with a furnace door, of a movable handle for opening said door, a stop for arresting the closing movement of said door without manual attention when the door nears its closed position, and connecting means between said handle and stop for moving the latter to operative position when the former is operated to open the door and for holding said stop in said operative position until released.

2. The combination with a furnace door, of an air inlet neck therefor, a pivoted damper for said neck, a movable handle for said door, connecting means between said handle and damper for opening said damper when said handle is operated to open the door, said connecting means having means for holding the damper open until released, and a door stop carried by said damper to prevent entire closing of the door while said damper remains in open position.

[Claim 3 not printed in the Gazette.]

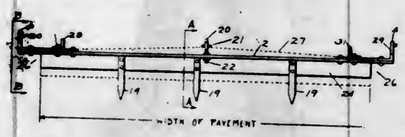
1,267,300. PIN-GUARD. ROBERT WEST, Port Huron, Mich. Filed Aug. 22, 1916. Serial No. 116,327. (Cl. 24—155.)



1. A guard of the class described having a casing, a plurality of separate, inherently yieldable, removable grips within the casing, inwardly extending means on the casing to prevent bodily movement of the grips relatively to the casing, said casing having an insert opening, and the said grips having faces in abutting relation opposite said openings to receive and grip a pin between them.

[Claim 2 not printed in the Gazette.]

1,267,301. EXPANSION-JOINT HOLDER. WILLIAM F. WIEBERG, Cheektowaga, N. Y. Filed Nov. 1, 1916. Serial No. 128,968. (Cl. 94—6.)



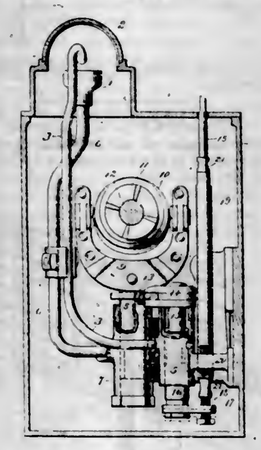
1. In an expansion joint holder the combination of two angle irons, having their vertical legs extending down, fastened together at their ends and spaced apart so that an expansion joint may be interposed between said vertical legs, means to keep said expansion joint in a stationary position, means to keep said joint holder in a stationary and vertical position, means for resting the ends of said holder on the curbs of a street and means to remove said holder and leave said expansion joint in its permanent position.

2. An expansion joint holder having two angle irons spaced and fastened together at their ends to form a frame, handles at the ends of said frame to move said holder, and means to hold an expansion joint in said space in said frame in a stationary and upright position.

3. In an expansion joint holder the combination of a frame composed of two angle irons spaced to receive an expansion joint, means to fasten the parts of said frame together, handles at the ends of said frame and pegs attached to said frame to fasten said device in stationary and upright position.

4. An expansion joint holder consisting of a frame composed of two angle irons fastened together and spaced to hold an expansion joint, catches to maintain said joint in a stationary position, handles at the ends of said angle iron frame and spikes attached to said frame, to be inserted in the road foundation to hold said frame and joint stationary.

1,267,302. LUBRICATOR. FRANK D. WINKLEY, Madison, Wis., assignor to Madison-Kipp Lubricator Company, Madison, Wis., a Corporation of Wisconsin. Filed Jan. 8, 1917. Serial No. 141,312. (Cl. 184—32.)



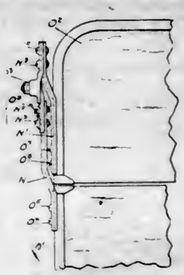
1. In a force feed lubricator, the combination of a casing; a pump located therein; a sleeve adjustably mounted in the pump to vary the effective volume thereof; an arm extending outwardly from the sleeve; a rod having a threaded connection with the arm and extending to a point without the casing; a quill surrounding the rod, the quill having a threaded connection with a fixed portion of the lubricator and being located wholly within the casing; and collars secured upon the rod at the upper and lower ends of the quill.

2. In a force feed lubricator, the combination of a measuring pump; a forcing pump; gearing connecting the pistons of said pumps to cause them to oscillate in unison; a power device to actuate said gears and to raise and lower the pistons; and means for controlling the capacity of the measuring pump.

1,267,303. WIND-SHIELD FOR AUTOMOBILES. RICHARD W. WOOD, Portland, Oreg. Filed Aug. 24, 1916. Serial No. 116,632. (Cl. 21—148.)

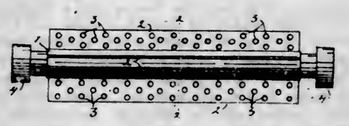
1. In combination with an upper and lower wind shield for automobiles, an upwardly projecting supporting bracket detachably secured to the end of the lower wind shield, an upwardly projecting bracket detachably secured to the end of the upper wind shield, the upper ends of both of said brackets being spaced from the ends of the wind shield frames, and a hinge connecting the upper ends of said brackets together, whereby said upper wind shield can be turned about an axis intermediate its upper and lower edges.

2. In combination with lower and upper wind shields arranged one above the other, an off-set bracket detachably attached at its lower end to the end of each of said wind shields, and extended at a space therefrom at its upper end, and a hinge connecting two ends of said brackets at a space from the ends of said wind shields, the axis of said hinge being intermediate the upper and lower edges of said upper wind shield.



3. In combination with the lower and upper wind shields of an automobile, a bracket detachably secured at its lower end to the end of the lower wind shield and extending outwardly and upwardly at a space from the end of the upper wind shield, a similar bracket detachably secured to the end of the upper wind shield and extended outwardly and upwardly with its upper end in alinement with the upper end of said lower bracket, and a hinge detachably connecting the upper ends of said brackets, substantially as described.

1,267,304. CARPET-SWEEPER BRUSH. JAMES P. N. ADAMS, Grand Rapids, Mich. Filed Nov. 27, 1917. Serial No. 204,288. (Cl. 15—37.)



In combination with a carpet sweeper brush roller, long, narrow, thin strips of flexible material secured at one edge to the roller and radiating therefrom, and provided with numerous uniformly positioned holes through them.

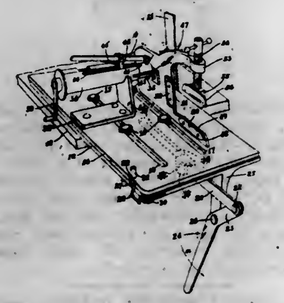
1,267,305. HOSE-NOZZLE SUPPORT. SIDNEY E. BALCOM, Salt Lake City, Utah. Filed July 3, 1917. Serial No. 178,431. (Cl. 248—29.)



A hose nozzle support comprising a body which is concaved longitudinally a distance from the outer ends

thereof, said body, at the terminal of the concaved portion with the said outer end thereof being slotted transversely, said body, adjacent the inner end thereof, having one of its sides provided with a slotted lug, a spring clip hingedly secured thereto, said clip having a hooked end provided with an extension forming a handle, the body, opposite the lug being provided with spaced ears to receive therebetween the clip, the under face of the body inward of the ears, being grooved longitudinally to receive the hooked end of the clip and an angularly disposed supporting rod for the body.

1,267,306. HEEL-CUTTING APPARATUS. PIUS BAMMER, Los Angeles, Cal. Filed June 25, 1917. Serial No. 176,811. (Cl. 12—42.)



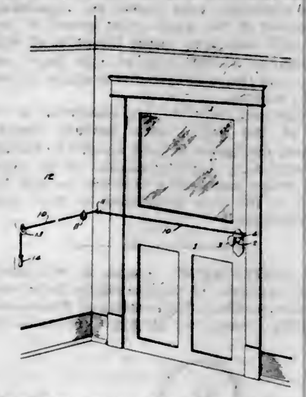
1. A heel cutting machine, comprising a fixed carriage base, a carriage positioned upon said base and alongside a vertically moving saw blade, lever operated means for shifting the carriage to cause it to move alongside the saw blade, a screw operated clamping member positioned upon said carriage, and screw operated means whereby said clamping member may be adjusted transversely of the carriage, the clamping member being adjustably mounted so that it can be positioned horizontally at different angles to the carriage and saw blade.

4. A heel cutting machine comprising a fixed base having a longitudinally extending slot formed therethrough, a carriage plate slidably mounted upon the base, lugs extending downwardly from the carriage plate and through the slot, an operating lever in connection with said lugs whereby the carriage plate may be moved along a path of travel upon the base, said carriage plate having parallel guide slots formed therethrough, sets of guide pins on said base positioned within said guide slots, a clamping plate mounted upon the carriage plate, a pair of fixed clamping jaws formed upon said clamping plate, an adjustable clamping jaw supported by said plate, and means for moving the clamping plate laterally of the carriage, said plate being adjustable so that it can be positioned at different angles to the path of travel of the carriage.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,267,307. DOOR-OPENER. BENJAMIN BECKER, St. Louis, Mo. Filed Oct. 27, 1917. Serial No. 198,871. (Cl. 268—9.)

In a door-opening device, a rocking-lever having an integral ring at its base in which is a slot, a knob-shank on which said slotted ring is loosely mounted to rock, a pin or screw fixed in said shank and entering said slot of said ring, to limit the rocking movement of said lever on said shank; a spring coiled around said shank and having one of its ends fixed to said pin and its other end applied to said lever, and a suitable flexible member attached to the free end of said lever and extending to a distant



point, whereby said shank may be turned from said point, to unlock the door.

1,267,308. WIRE-STRETCHER. WILLIAM B. BELGARD, Boyce, La., assignor of one-half to Claude A. Copenhaver, Alexandria, La. Filed Oct. 1, 1917. Serial No. 194,224. (Cl. 254—83.)



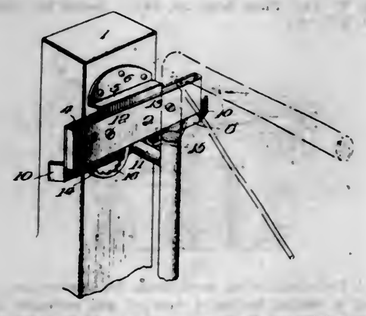
2. In a clamping device, the combination of two normally substantially parallel clamping bars, a yoke-bar having its middle portion spaced from said clamping bars and having its end portions connected to the respective end portions of one of said clamping bars, and a shaft extending through the middle portions of said clamping bars and yoke-bar and being operable to press the middle and end portions of said clamping bars into clamping relation, substantially as described.

4. In a clamping and stretching device, the combination of a clamping bar apertured at its middle portion, a frame provided with an aperture and embracing said clamping bar in such relation that the apertures of said bar and frame register with one another, a shaft extending through the registering apertures and thereby securing said frame and clamping bar in fixed relation to one another, a second clamping bar, means coöperative with said shaft for drawing the first and second said clamping bars toward one another, and means coöperative with said frame for moving said clamping bars and frame and shaft simultaneously.

[Claims 1 and 3 not printed in the Gazette.]

1,267,309. GATE-LATCH. ZEB VANCE BERRY, Norfolk, Va. Filed Oct. 13, 1916. Serial No. 125,457. (Cl. 70—28.)

1. A latch of the character described comprising a body portion, a pin carried by the body portion, a ring supported by the pin and having semi-circular grooves in its inner periphery of a diameter approximately that of the pin.

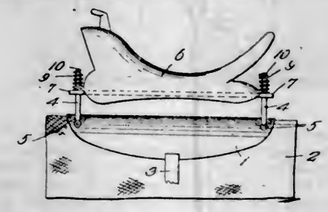


2. A latch of the character described comprising a body portion having an elongated opening therein, a pin extending through said opening adjacent one end, a ring within the opening and having semi-circular grooves of a diameter approximately that of the pin and in which the pin extends, whereby the ring can be moved inwardly to allow the gate to be closed, but held against outward movement.

3. A latch of the character described comprising a body portion having an elongated vertical opening therein, pins carried by the body portion and extending through said opening adjacent the ends of the body portion, two rings within the opening and having semi-circular grooves in their inner periphery adapted to receive the pin of a diameter approximately that of the pin and a guide plate below the body portion and having beveled ends adapted to guide the projection carried by the gate inwardly to engage the rings.

[Claims 4 to 7 not printed in the Gazette.]

1,267,310. SADDLE. EMIL J. BORG, Emerson, Iowa. Filed Sept. 28, 1916. Serial No. 122,727. (Cl. 54—44.)

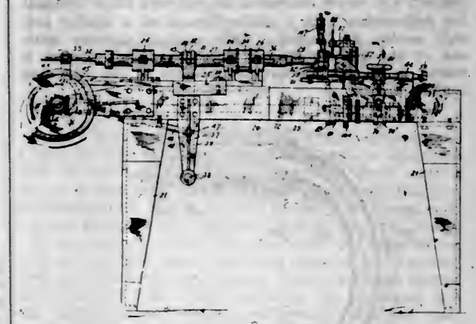


1. In a device of the class described, the combination of a base acting as a supporting member, a frame yieldably supported upon said base, said frame comprising longitudinal and transverse pieces, the latter projecting beyond the sides of the longitudinal pieces, and a saddle positioned upon said longitudinal pieces and bearing against the projecting ends of said transverse pieces whereby said saddle will be supported and will be held against accidental lateral displacement.

[Claim 2 not printed in the Gazette.]

1,267,311. CORK-BLOCKING MACHINE. EMILIO ALBERTI, MICHAEL CARITJ, and GAETANO LA FEMINA, New York, N. Y., assignors to International Cork Company, Brooklyn, N. Y., a Corporation of New York. Filed Mar. 26, 1917. Serial No. 157,489. (Cl. 144—23.)

1. In a machine for blocking corks from strips, a work support having a feedway provided upon one of its sides with a fixed gripping jaw and with a movable gripping jaw upon its other side, means for positively operating said movable jaw for bringing it into both its gripping and releasing positions, and feeding clamps having spring-pressed toothed pawls extending through said gripping jaws, said pawls being in engagement with the two sides of the cork strip on both the idle and feeding strokes of said clamps.

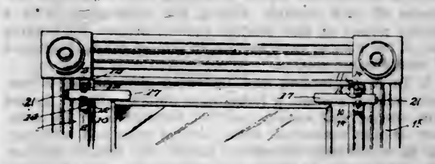


3. In a machine for blocking corks from strips, a work support having a feedway provided upon its sides with gripping jaws, and feeding clamps having spring-pressed pawls extending through said gripping jaws, said pawls being in engagement with the two sides of the cork strip on both the idle and feeding strokes of said clamps.

5. In a machine for blocking corks from strips, the combination with a main frame, of a work support thereon having a feed-way provided upon one of its sides with a fixed gripping jaw and with a movable gripping jaw upon its other side, bars slidably disposed upon said work support to which said movable jaw is secured, a rotary shaft, and coacting means upon said shaft and said bars for positively operating said movable jaw to bring it into both its gripping and releasing positions.

[Claims 2, 4, and 6 to 11 not printed in the Gazette.]

1,267,312. WINDOW-SHADE-ROLLER BRACKET. WILLIAM B. CASWELL, Newport, R. I., assignor of one-fifth to Ann E. Caswell, Newport, R. I. Filed Sept. 27, 1917. Serial No. 193,573. (Cl. 156—24.)

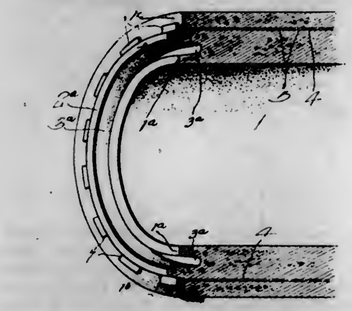


A shade roller bracket comprising a flat body having coacting clamping tongues cut out therefrom and struck up from the body and directed obliquely to the longitudinal plane of the same, each tongue having a clamping lip, and fastening devices piercing the tongues and adapted to secure the body to a support and force the clamping lips into frictional engagement with a shade roller support.

1,267,313. PIPE-JOINT. ABNIRAM J. COOK, Westerlo, N. Y. Filed Aug. 20, 1917. Serial No. 187,320. (Cl. 72—53.)

1. A cylindrical conduit section formed at one end with an inner terminal, an outer terminal, an annular rib between the inner and outer terminals, and an annular groove between said rib and outer terminal, the said outer terminal being disposed in a radial plane cutting the cylinder's axis between said inner terminal and the opposite end of the conduit section; said opposite end being formed with an inner terminal, an outer terminal disposed in a radial plane cutting the axis between said inner terminals, an annular rib between the inner and

outer terminals of this end of the cylinder; and an annular groove between the last said annular rib and the inner terminal at this end of the conduit section, each of said annular grooves being of the correct size and shape to receive such a rib as the one at the remote end of the conduit, and means extending beyond each outer terminal for coöperating with a similar means on a similar conduit section for securing these sections together while one of the annular flanges of each conduit section is seated in one of the annular grooves of the adjoining conduit section.

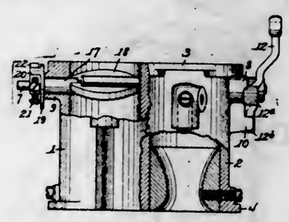


2. A cylindrical conduit section formed at one end with an inner terminal, an outer terminal, an annular rib between the inner and outer terminals, and an annular groove between said rib and outer terminal, the said outer terminal being disposed in a radial plane cutting the cylinder's axis between said inner terminal and the opposite end of the conduit section; said opposite end being formed with an inner terminal, an outer terminal disposed in a radial plane cutting the axis between said inner terminals, an annular rib between the inner and outer terminals of this end of the cylinder, and an annular groove between the last said annular rib and the inner terminal at this end of the conduit section, said annular ribs being tapered toward their outer or free ends, said grooves being tapered inwardly and each adapted to receive one of such outwardly tapered ribs of a similar conduit section, and means extending from said outer terminals of each conduit section for coöperating with a similar means of said similar conduit section for holding one of the ribs of each section in one of the said grooves of said similar section.

3. In a reinforcing and fastening element for a concrete conduit section, a foraminous hollow cylinder formed with spaced and axially parallel extensions at its ends, each of said extensions being formed with and terminating in a radially extending flange, the spaces between the said extensions being only sufficiently wide to receive an extension of a similar reinforcing and fastening element, for the purpose specified.

4. In a reinforced conduit section, a foraminous reinforcing and fastening element of hollow cylindrical form and having axially parallel extensions spaced from one another sufficiently to receive therebetween the similar extensions of a similar reinforcing and fastening element, the free end of each of said extensions terminating in a radial flange, a cementitious cylindrical body enveloping the foraminous part of said reinforcing and fastening element and extending through the foramina thereof and terminating substantially at the bases of said extensions, one end of said cementitious body being formed with an annular rib, the other end of said cementitious body being formed with an annular groove adapted to receive an annular rib of a similar body and to fit snugly therein while the adjacent outer terminals of these bodies are spaced from one another and receive therebetween the radial flanges of the interlapped extensions of two of the said reinforcing and fastening elements, and an annular fastening element coöperating with the said radial flanges for securing the conduit sections together.

1,267,314. FUEL-DISTRIBUTING MECHANISM FOR CARBURETERS. HARVEY O. BROGNIEZ, Wheeling, W. Va., assignor of one-half to Harry L. White, Wheeling, W. Va. Filed Sept. 24, 1917. Serial No. 192,899. (Cl. 277—4.)



1. A fuel-distributing mechanism for carbureters, comprising a casing having a pair of gas passages therethrough, a rotary shaft mounted in said casing and extending transversely through said passages, a throttle valve adjustably mounted on said shaft within one of said passages, a rotary sleeve mounted in said casing adjacent to the other of said passages and having the adjacent end of said shaft rotatable therein, a throttle valve loosely mounted on said shaft within the last-mentioned passage, said sleeve and the last-mentioned valve being relatively fixed, means for adjusting said sleeve in rigid relation to said shaft whereby said last-mentioned valve is maintained in fixed relation to said shaft, and means for imparting movement to said shaft for shifting the positions of said valves with respect to said passages.

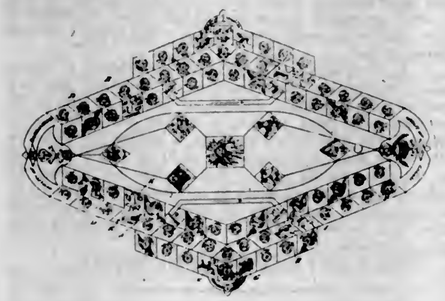
[Claims 2 to 4 not printed in the Gazette.]

1,267,315. STRAINER FOR PUMP-WELLS. PAUL DE CHIME, Youngstown, Ohio. Filed Aug. 1, 1917. Serial No. 183,876. (Cl. 210—16.)



A strainer for hand pump for wells comprising a unitary tubular casing consisting of a main portion and an auxiliary waste portion, said main portion being open at its upper end so as to fit over the spout of the pump and being open at its lower end so as to provide an outlet for the water, a nipple of wood located in the outlet of said main portion, said waste portion extending from a point near the lower end of said main portion laterally and downwardly beyond the lower end of said nipple and having a waste outlet at its lower end permanently open and in communication with the interior of said main portion, a screen upon the inner end of said nipple located at the inlet to said waste portion so that the passage of water though said waste portion will carry the impurities arrested by said screen out through said waste outlet, and a securing bolt passing through a threaded opening in said casing into contact with the pump spout.

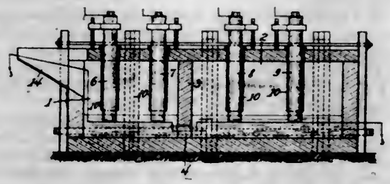
1,267,316. GAME. MARCELINO BARRET DE NAZARIS, New York, N. Y. Filed Feb. 7, 1918. Serial No. 215,858. (Cl. 46—63.)



1. A game-board having its surface inscribed with a substantially diamond-shaped figure having the areas of its opposite longitudinal sides representing positions held by contending armies divided into a plurality of squares each provided with a number, certain of said squares being provided with pictorial representations of conditions entailing penalties or advantages to a player reaching them, the others of said squares being inscribed with the names of geographical points, the central surface of the board between the side areas being inscribed with squares indicating conditions common to both contending armies.

[Claim 2 not printed in the Gazette.]

1,267,317. ELECTRIC GLASS-FURNACE. JOHN O. ERSKINE, Steubenville, Ohio. Filed Nov. 21, 1917. Serial No. 203,116. (Cl. 204—64.)



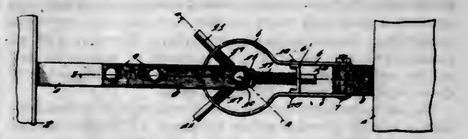
1. The method of producing molten glass, which consists in melting constituent glass-producing materials in an electric furnace by passing a current of electricity between electrodes in contact with a bed of said materials, said bed affording the sole resistance for generating the heat by which its melting is accomplished.

3. A continuous glass melting method which consists in passing an electric current between two electrodes having their ends submerged in molten glass in an electric furnace, so that the resistance of said glass to the passage of said current generates a melting heat, and supplying raw glass-producing materials to said furnace as molten glass is withdrawn from the latter.

5. In an electric glass furnace, a melting chamber and a working chamber, a division wall separating said chambers and having a port therein for the passage of melted glass from the melting chamber to the working chamber, a pair of electrodes located in the melting chamber, an electrode located in the working chamber, and means for diverting an electric circuit from one of the first-mentioned electrodes through the last-mentioned electrode, said first-mentioned electrodes being partially submerged in the material to be melted whereby said material constitutes a resistance element, and the last-mentioned electrode being adapted to be partially submerged in the molten glass in the working chamber.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,267,318. SHOCK-ABSORBER FOR AUTOMOBILE-TRAILERS. OSCAR FENT and MASON RAVENSCROFT, Newton, Kans. Filed May 29, 1917. Serial No. 171,743. (Cl. 213—67.)

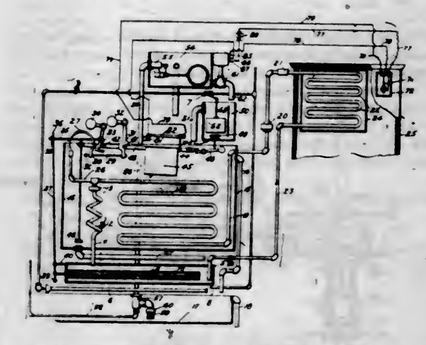


1. In a device of the class described the combination of a pair of bars, said bars being adapted to be supported upon an automobile and upon a trailer, a frame carried by one of said bars, straps carried by the remaining bar, and overhanging said frame, and means yieldably connecting said straps to said frame for drawing upon the straps.

2. In a device of the class described, the combination of a pair of bars, said bars being adapted to be carried upon an automobile and upon a trailer, a frame carried by one of said bars, straps carried by the remaining bar, and spring-pressed plungers reciprocally mounted upon said frame and connected to said straps whereby the shock occasioned by drawing or pushing upon said straps will be absorbed.

[Claims 3 and 4 not printed in the Gazette.]

1,267,319. THERMOSTATIC CONTROL DEVICE. CHARLES L. FORTIER, Milwaukee, Wis., assignor to Johnson Service Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Nov. 9, 1914. Serial No. 871,147. (Cl. 62—5.)



1. The combination with a refrigerating machine of the absorption type, of means for cutting off the supply of heat to and the dissipation of heat by said machine; a refrigerator cooled by said machine; a thermostat located in the refrigerator or cooling chamber; and operative connections between the thermostat and the heat-controlling means, whereby the action of the machine is completely stopped when the artificially produced temperature is at or below a predetermined point, and is started when said temperature is above such point in the refrigerator or cooling chamber.

6. The combination with a refrigerating machine of the absorption type having a combined drive-off and absorption mechanism, and a float actuated mechanism for causing said drive-off and absorption mechanism to perform periodic cycles each consisting of a drive-off period and a succeeding absorption period; of a valve for controlling the flow of the fluid to actuate said float; a thermostat subject to the artificial temperature created by said machine and operatively connected to said valve to open and close the latter in response to variations in said temperature; and a secondary control device adapted to be actuated by the movements of said float actuated mechanism to prevent the closing of said valve by said thermo-

stat in certain positions of said float actuated mechanism.

21. A valve mechanism for automatic control devices comprising a constant level reservoir; a valve adapted to control the flow of water therefrom; and an actuator located above the water level in said reservoir, mechanically connected with said valve to open and close the same and comprising electro-magnets, armatures therefor, and automatic switches adapted to be actuated by said armatures to cut said magnets out of circuit at the completion of their respective valve-shifting actions.

25. An automatic control device comprising in combination a source of water under pressure, an injector mechanism actuated thereby to draw water from a secondary source, a valve adapted to control the flow of water from both said sources, and a thermostat operatively connected to said valve.

[Claims 2 to 5, 7 to 20, and 22 to 24 not printed in the Gazette.]

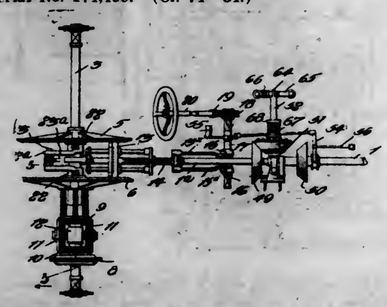
1,267,320. CONFECTION. FRANCIS HENRY FRIES, Winston-Salem, N. C., assignor to Venola Company, Winston-Salem, N. C., a Corporation of North Carolina. Filed Oct. 17, 1916. Serial No. 126,181. (Cl. 99—16.)



2. An article of confection comprising a central sheet of chewing gum and a thick layer on each side of the gum sheet, composed of powdered sugar, the whole being rendered integral by pressure.

[Claim 1 not printed in the Gazette.]

1,267,321. TRANSMISSION MECHANISM. RALPH DOUGLASS GEORGE, Kansas City, Mo. Filed June 13, 1917. Serial No. 174,499. (Cl. 74—34.)



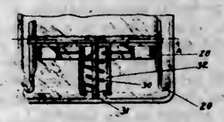
1. A transmission mechanism comprising a driven shaft composed of three sections, one of the sections being hollow and another section being journaled therein, a reversing gear connecting the hollow shaft to the said other section, a differential connecting said other section to the third section, a friction disk mounted on each of the first named sections, a connecting wheel between the disks, a transmission shaft on which the wheel is movable radially of the disks, means for moving the said wheel, means for simultaneously moving one disk away from the wheel and the wheel away from the other disk, a driving shaft in alinement with the transmission shaft, and means for connecting the said shafts directly to rotate together or indirectly to rotae in opposite directions.

3. In a transmission mechanism, the combination with the alined driving and transmission shafts, of a friction wheel secured to the transmission shaft, a second wheel arranged at right angles thereto and contacting therewith, a third wheel having a hub provided with a polygonal bore and having a cylindrical portion at that end of the bore adjacent to the transmission shaft, said shafts having polygonal portions fitting the polgonal bore and the polygonal portion of the transmission shaft being adapted to rotate freely in the cylindrical portion when the hub is moved to bring the wheel out of contact with the second named wheel, and means for moving the hub, a shaft on which the second named wheel is journaled, and a spring normally pressing the wheel toward the first named wheel.

5. A transmission mechanism comprising a driven shaft composed of three sections, a reversing gear connecting the sections, a differential connecting one of the sections to a third section, a friction disk mounted on each of the first named sections, a connecting wheel between the disks, a transmission shaft on which the wheel is movable radially of the disks, means for moving the said wheel, a driving shaft in alinement with the transmission shaft, and means for connecting the said shafts directly to rotate together or indirectly to rotate in opposite directions.

[Claims 2 and 4 not printed in the Gazette.]

1,267,322. STERILIZING-CABINET. OTIS A. HOLLIS, Pittsburgh, Pa., assignor to Hollis Sterilizing Equipment Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 2, 1915. Serial No. 11,520. (Cl. 167—3.)

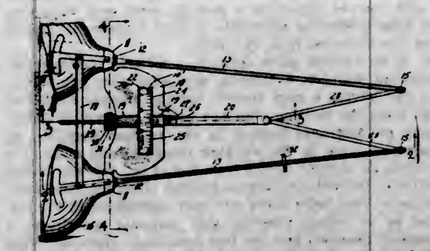


1. In a sterilizing cabinet consisting of an integral container having an open top and a door in one side, the combination of a removable transparent top therefor, an outer reservoir in the middle of the top, having an opening therethrough, and means within the cabinet for distributing liquid disinfectant from said reservoir throughout the cabinet.

2. In a sterilizing cabinet comprising a source of liquid disinfectant on the outside thereof and wicks for distributing the disinfectant within, the combination of an integral case forming the walls and bottom of the cabinet, a removable transparent top for the case, and a rigid, removable shelf rack within the cabinet.

3. The combination with an integral case forming the top and walls of a sterilizing cabinet and having a door therein and a removable top, of a removable metal frame composed of intersecting members, rigidly attached to each other, and adapted to hold shelves, of wicks supported by the frame members and extending throughout the cabinet, of a valved reservoir fixed in the top and adapted to drop liquid disinfectant on said wicks, and means to intermittently agitate the air through the cabinet.

1,267,323. GEOMETRICAL INSTRUMENT. JOSEPH KLEIDMAN, New York, N. Y. Filed July 12, 1917. Serial No. 180,159. (Cl. 33—66.)



1. A range-finder comprising a base plate, two sighting bars pivoted thereto and spaced apart a distance equal to the distance between the eyes of a normal person, a spindle shiftably disposed upon said base in a line intersecting at right angles the middle of the connecting line between the pivots of said bars, said spindle having distance graduations, links connecting said spindle and bars, and means for shifting said spindle upon said base and thereby causing said bars to converge or diverge.

4. A range-finder comprising a base plate, two sighting members pivoted thereto and spaced apart a distance equal to the distance between the eyes of a normal person, a distance-graduated spindle shiftably mounted upon said base and provided with screw-threads, a graduated disk rotatably mounted upon said spindle provided with screw-threads meshing with those of said spindle, said disk being held upon said base against motion in the direction of the longitudinal axis of said spindle, and means connecting said spindle and said sighting members, whereby upon rotating said disk said sighting members are caused to converge or diverge.

7. A range-finder comprising a base plate, two sighting bars pivoted thereto and spaced apart a distance equal to the distance between the eyes of a normal person, a distance-graduated member shiftably disposed upon said base, connecting means between said last mentioned member and said bars, whereby upon shifting said member both bars are caused to converge or diverge, a vertically disposed segment upon said base plate having degree graduations, and a pendulum pivoted to said base plate coöperating with said last named graduations.

9. A range-finder comprising a base plate, two sighting members pivoted thereto and spaced apart a distance equal to the distance between the eyes of a normal person, a distance-graduated spindle shiftably mounted upon said base and provided with screw-threads, a graduated disk rotatably mounted upon said spindle provided with screw-threads meshing with those of said spindle, said disk being held upon said base against motion in the direction of the longitudinal axis of said spindle, means connecting said spindle and said sighting members, whereby upon rotating said disk said sighting members are caused to converge or diverge, a vertically disposed segment upon said base plate having degree graduations, and a pendulum pivoted to said base plate coöperating with said last named graduations.

11. A range-finder comprising a base plate, two sighting members pivoted thereto and spaced apart a distance equal to the distance between the eyes of a normal person, means connecting said sighting members for causing their longitudinal axes to intersect the connecting line between the pivots of said sighting members at equal angles, a vertically disposed segment upon said base plate having degree graduations, and a pendulum pivoted to said base plate coöperating with sad last named graduations.

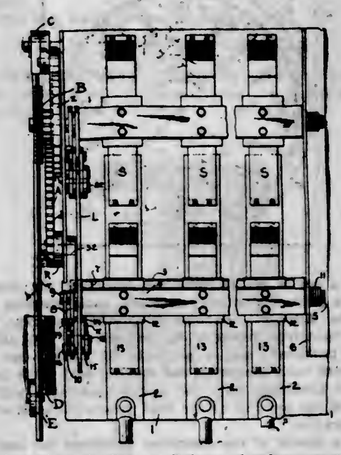
[Claims 2, 3, 5, 6, 8, and 10 not printed in the Gazette.]

1,267,324. AUTOMATIC MOTOR-STARTER. HUBERT F. KRANTZ, Brooklyn, N. Y., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y., a Corporation of New York. Filed Feb. 18, 1916. Serial No. 79,098. (Cl. 200—2.)

1. A switch mechanism combining a first and a second switch blade; means for individually holding said switches in "on" position simultaneously; automatic time controlled means for rendering ineffective the means for retaining said first switch in "on" position; and manually operable means for rendering ineffective the means for holding the two second switch "on."

3. A mechanism of the nature disclosed combining a hand lever adapted to be moved through a pre-determined arc two switches connected to be moved into "on" position by full movement of said lever; a member movable by said lever throughout a portion only of the arc of said lever; and means for automatically enabling said member to resume its normal position and to partially return the lever to thereby move one of the switches to "off" position.

7. A switch mechanism combining a first and a second switch; means operable manually to throw both of said switches "on"; a device operable automatically after a predetermined time interval to throw said first switch "off"; and means whereby the mentioned manually operable means may be employed to throw the second switch "off."



9. A motor starting switch mechanism comprising a conductor, a fuse, a switch by means of which running current may be derived from the conductor for passage through the fuse to the motor; a shunt from the conductor around the fuse by means of which starting current may be derived from the conductor for the motor without traversing the fuse, said shunt including a separate switch, a single operating element for said two switches connected to move said two switches simultaneously into "on" position, and the connections between said operating element and the shunt switch comprising a time controlled device adapted to automatically move the shunt switch into "off" position while the first mentioned switch stands in "on" position.

[Claims 2, 4 to 6, 8, and 10 not printed in the Gazette.]

1,267,325. BELT-FASTENER. STANLEY KRZYWORZYCKI, Detroit, Mich. Filed July 6, 1917. Serial No. 179,000. (Cl. 24—31.)



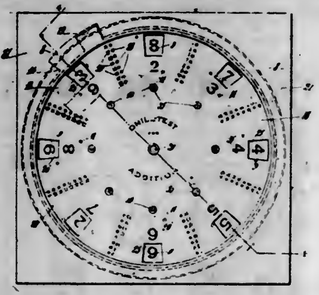
1. In a belt fastener, the combination with a thin spring plate, of a plurality of internally threaded sleeves extending from one side thereof, screws having enlarged heads fitting said sleeves, and means formed with said plate preventing the removal of said screws.

2. In a belt fastener, the combination with a thin spring plate, of a plurality of internally threaded sleeves extending from one side thereof, screws having enlarged heads fitting said sleeves, extensions formed on said screws, said extensions having an annular groove, and reëntrantly turned, spring projections formed with said plates adapted to engage in the mentioned grooves whereby said screws are prevented from loosening.

1,267,326. DEVICE FOR TEACHING ARITHMETIC. EDWIN H. KUHN, New York, N. Y. Filed Oct. 24, 1917. Serial No. 198,303. (Cl. 35—2.)

1. In a device of the character described, the combination of relatively movable parts adapted to present prob-

lems for solution, and a plurality of means for moving said parts to present a new problem, only one of which is operative for the positions of the parts when the problem is set up.



3. In a device of the character described, the combination of a pair of relatively movable parts adapted to be placed in different relations to present different problems; characters representing respectively the answers to said problems; and a plurality of means, one associated with each character, for moving said parts to present new problems, only the means associated with the answer of the problem at the time presented being at that time operative.

5. In a device of the character described the combination of a reciprocatory member adapted for limited reciprocatory movement and provided with a series of element-characters, answer-characters associated with each element character, and answer perforations designated respectively by the answer characters; and a movable member provided with element-figures adapted to be successively brought into proximity with each element-character, and provided with holes corresponding to said element-figures respectively, each hole being adapted to register with the perforations designated by the answer character representing the answer obtained by combining its associated element-character with the element figure corresponding to such hole.

[Claims 2, 4, and 6 to 13 not printed in the Gazette.]

1,267,327. COMBINATION-HANDLE FOR ROLLING-PINS AND OTHER IMPLEMENTS. THOMAS A. McCARTY, Washington, D. C., assignor of one-half to Hosea Cashwell, Moltonville, N. C. Filed Feb. 25, 1918. Serial No. 219,051. (Cl. 107—50.)

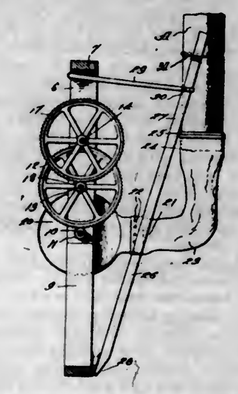


1. In combination with a culinary article having a hollow tubular end with a tapering portion, a cylindrical handle open at one end and its other end closed, and provided with a central open ended inwardly extending tubular portion adapted to telescope within the tubular end of the culinary article, the open end of the handle fitted over the tapering portion of said tubular end of the article.

2. A rolling pin having contracted tapering spindle ends, hollow cylindrical handles fitted over said spindle ends and each having a central inwardly extending tubular portion telescoping within the end of a spindle portion and upon which the latter has a bearing.

3. A rolling pin having hollow tapering spindle ends, hollow cylindrical handles each having its outer end closed and its inner end open and fitted over the spindle ends, each handle having an inwardly projecting contracted cylindrical portion telescoping within the spindle end, and having a rotatable bearing therein.

1,267,328. SOOT-REMOVER. ARCHIE D. MATTHEWS, Calico Rock, Ark. Filed July 18, 1917. Serial No. 181,426. (Cl. 230—11.)



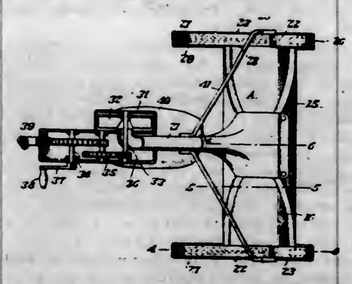
1. In combination with a stove pipe, of means for cleansing said pipe, said means comprising a supporting frame, a fan casing secured to said frame, a shaft journaled in said frame, a fan carried by said shaft and confined within casing, means connected with the casing for conveying the blasts of air through the stove pipe, and means hingedly connected with said frame for supporting the stove pipe in spaced relation with said frame.

3. In combination with a stove pipe, of means for cleansing said pipe, said means comprising a supporting frame including spaced side bars, a fan casing having connection with one of said bars, a driven shaft, a fan on said shaft and housed within said casing, a flexible spout secured to said casing, a clamping member in the discharge end of said spout, and means hingedly connected with the frame for vertical swinging movement for supporting said spout.

5. In combination with a stove pipe, of means for cleansing said pipe, said means comprising a supporting frame, a fan casing secured to said frame, a shaft journaled in said frame, a fan carried by said shaft and confined within the casing, means connected with the casing for conveying the blasts of air through the stove pipe, means hingedly connected with said frame for supporting the stove pipe in spaced relation with said frame, means for limiting the outward swinging movement of the latter mentioned means, and means connected with the former mentioned means for supporting thereto a stove pipe.

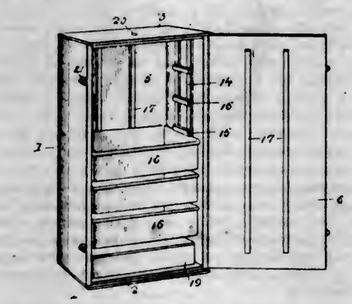
[Claims 2 and 4 not printed in the Gazette.]

1,267,329. VACUUM-SWEEPER. JERRY J. MERITHEW, Akron, Ohio. Filed Nov. 25, 1916. Serial No. 133,459. (Cl. 15—60.)



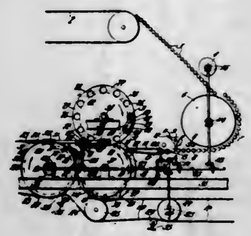
A device of the class described comprising a casing having its bottom cut away, a conduit on each side of said casing tapering upwardly, said casing having an opening in its top, a hollow handle having the opening therein covering said opening in the casing and communicating with the conduits, an elongated casing at each end of the first-mentioned casing, a driving wheel and a pilot wheel in each casing, a brush in the first-mentioned casing, a shaft therefor having its ends extending into the elongated casings, and means for connecting said shaft with the driving wheel.

1,267,330. SEED-SPROUTER. MARY MILLER, Theresa, Wis. Filed Nov. 10, 1917. Serial No. 201,310. (Cl. 47—30.)



A grain sprouter comprising a casing, vertically arranged spacing strips secured to the side and end walls of the casing, vertically spaced horizontal supporting strips secured to the spacing strips of the end walls, a hot water tank arranged in the bottom of the casing, trays removably arranged in vertical spaced relation on the horizontal supporting strips and spaced from the side and end walls of the casing by the vertical strips, whereby heated air may freely circulate about the trays.

1,267,331. MACHINE FOR MOLDING ROOFING-TILES AND THE LIKE. OLIVER J. OAKLEY, Brunswick, Melbourne, and ELDON C. HUGHES, Fitzroy, Melbourne, Victoria, Australia. Filed Jan. 16, 1918. Serial No. 212,065. (Cl. 25—77.)



1. In a machine for molding roofing tiles and other articles upper and lower mold supporting wheels, a series of oscillatory molds mounted upon the circumference of said wheels, means for oscillating said molds, including major pathways and major levers secured to the molds and engaging within the major pathways, ejectors within each of the mold boxes, minor eccentric pathways and minor levers engaging said pathways, a first spindle attached to the inner end of each minor lever, a second spindle gearing with the first spindle, cams carried by said second spindle and adapted to alternately force the ejectors outwardly and return them to normal position and springs acting against the outward movement of the ejectors.

10. In a machine of the character described, a mold having a pocket, a pair of ejectors mounted to reciprocate transversely of the mold, a longitudinally curved pin adapted to move transversely of and within the pocket, a rock-shaft, a crank secured to the rock-shaft and carrying the longitudinally curved pin, a pair of cams secured to the rock shaft and adapted to contact with the ejectors to shift the same to the outer position, springs to shift the ejectors to the inner position, and means to turn the rock-shaft.

[Claims 2 to 9 not printed in the Gazette.]

1,267,332. COKE-OVEN. FREDERICK PRITER, Cleveland, Ohio. Filed Sept. 11, 1916. Serial No. 119,352. (Cl. 202—9.)



1. In a coke oven, combustion flues arranged in groups of four and in serpentine order, a flue having communication with a regenerator and adapted to convey preheated air to the combustion flues, means for supplying combustible gases at corresponding portions of the first and third flues, and a flue communicating with the fourth flue of each group and leading to a regenerator.

2. In a coke oven, combustion flues arranged in groups of four in serpentine order, a flue communicating with each group of four and adapted to supply preheated air thereto, means for supplying combustible gas to each group at spaced points and baffles arranged in the second and third flue of each group, and flues communicating with each group and leading to a regenerator.

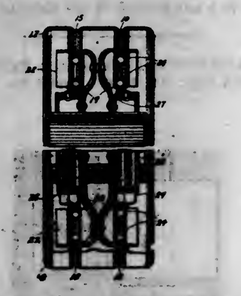
3. In a coke oven, combustion flues arranged in groups of four and in serpentine order, a flue having communication with a regenerator and adapted to convey preheated air to the combustion flues, means for supplying combustible gases at the top of the first and third flues and a flue communicating with the fourth flue of each group and leading to a regenerator.

4. In a coke oven, combustion flues arranged in groups of four, in serpentine order, a flue communicating with a regenerator, and adapted to deliver preheated air to the first flue of each group, means for introducing combustible gases at the top of each first flue, a baffle in the second flue of each group, means for introducing gas at the top of the third flue of each group, and a baffle located in said third flue and a flue communicating with the fourth flue of each group and leading to a regenerator.

1,267,333. PULLEY. JOSEPH PETRELLO, Philadelphia, Pa. Filed Oct. 20, 1917. Serial No. 197,694. (Cl. 64—18.)

1. A split pulley comprising connectible hub sections and connectible rim sections, spokes connecting said hub and rim sections, each of said spokes consisting of a pair of side pieces with each side piece formed of a single piece of metal and terminating at the outer end in a right-angled portion secured to the rim section, the side pieces intermediate their ends being bent toward each

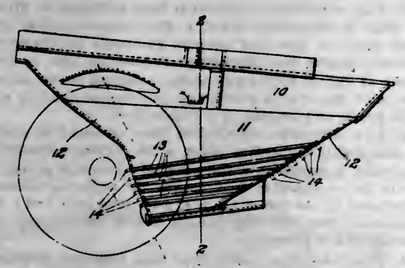
other and riveted together, inner and outer hub pieces forming said hub sections, with the inner ends of the side pieces of the spokes rigidly secured to the inner faces of the inner hub sections, said inner and outer hub pieces having right angled flanges formed thereon, the flanges on the inner hub pieces overlapping the flanges on the outer hub pieces, and bolts for removably securing said hub sections together.



3. A split pulley comprising hub sections and rim sections, said rim sections being formed with peripheral ribs, spokes connecting said hub sections and rim sections, said spokes each comprising opposed side pieces with the inner ends of the side pieces riveted to the inner portions of the hub sections, and the outer ends of the side pieces grooved to fit the ribs in the rim sections and riveted through said grooves to said rim sections, said side pieces of each spoke, intermediate their ends, being bent toward each other and riveted together.

[Claim 2 not printed in the Gazette.]

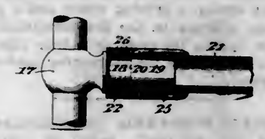
1,267,334. LOCOMOTIVE ASH-PAN. HARRY M. PFLAGER, St. Louis, Mo., assignor to Cast Steel Locomotive Ash Pan Company, St. Louis, Mo., a Corporation of Delaware. Filed July 17, 1916. Serial No. 109,782. (Cl. 257—263.)



As a new article of manufacture, a locomotive ash pan having vertically disposed parallel cast metal side walls and a pair of diverging cast metal end walls, and a plurality of combined strengthening ribs and heat disseminating flanges formed integral with and projecting outwardly from the lower portions of said side walls, which combined ribs and flanges occupy positions parallel with each other and substantially parallel with the lower edges of the walls so that they are disposed lengthwise relative to the direction of movement of air past the side walls while the locomotive is in service.

1,267,335. HOSE-PIPE COUPLING. WILL R. PORTER, Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1916. Serial No. 94,286. (Cl. 285—86.)

1. A coupling for connecting a hose to a hollow nipple over which the end of said hose may be slipped, comprising a collar formed of strands of suitable material wrapped about said hose, and a ferrule having screw-threads arranged to engage said collar, and form threads therein.



2. A coupling for connecting a hose to a hollow nipple over which the end of said hose may be slipped, comprising a collar formed of strands of suitable material wrapped helically about said hose, and a ferrule movable longitudinally on said hose and having screw-threads arranged to engage said collar, and form threads therein.

3. A coupling for connecting a hose to a hollow nipple over which the end of said hose may be slipped, comprising a collar of yielding material formed about that portion of said hose overlying said nipple, and a ferrule having internal screw-threads arranged to engage said collar in threaded relation therewith, and bind said collar thereon.

4. A coupling for connecting a hose to a hollow nipple having a shoulder, over which the end of said hose may be slipped, comprising a collar formed of strands of suitable material helically wrapped about said hose in proximity to said shoulder, and a ferrule having screw-threads arranged to engage said collar thus formed, in threaded relation therewith.

5. A coupling for connecting a hose to a fluid controlling or distributing device, having a hollow nipple provided with a shoulder, over which the end of said hose may be slipped, comprising a collar formed of strands of suitable material wrapped about said hose between its end and said shoulder, and a ferrule rotatably embracing said hose and having screw-threads arranged to engage said collar in threaded relation therewith, irrespective of said strands.

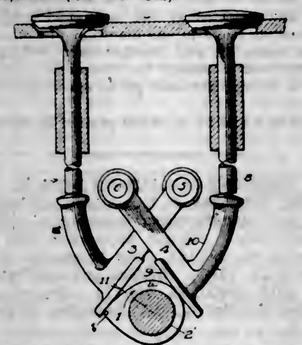
1,267,336. LIFTER FOR FRUIT, VEGETABLES, &c. ELMER F. BUBB, Chicago, Ill. Filed Oct. 25, 1917. Serial No. 198,486. (Cl. 65—52.)



2. A tong for lifting fruit, vegetables, etc., made of a single piece of resilient wire bent at its longitudinal center to form a coil, each arm bent to form a jaw with opposite parallel portions and inclined inner end parts with a loop formed in the wire by bending the same upon itself and disposed in a plane at an angle to the plane in which said parallel portions of the jaws are disposed, the outer ends of the jaws intermediate said loop being slightly bent toward each other.

[Claim 1 not printed in the Gazette.]

1,267,337. VALVE-OPERATING MECHANISM. HARRY A. HUEBOTTER, Davenport, Iowa, assignor to B. W. Phelps, Rock Island, Ill. Filed Oct. 7, 1916. Serial No. 124,302. (Cl. 123—91.)

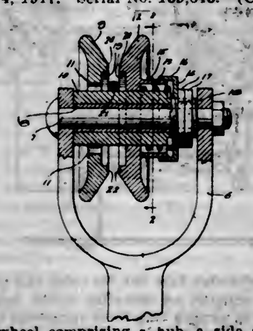


1. In valve operating mechanism, the combination of a cam, a valve and a pivoted flat-faced follower interposed between the cam and valve; the cam, valve, and follower being so constructed and relatively arranged that the diameter of the base circle of the cam, the lift of the cam and the distance from the cam to the center of movement of the follower, are proportioned to afford a lift to the valve proportional to the piston speed during that portion of the stroke in which the flow of gas depends upon the vacuum or the pressure created by the piston.

2. In valve operating mechanism, the combination of a cam, a plurality of valves and a corresponding number of pivoted flat-faced followers interposed between the cam and the valves; the cam, valves, and followers being so constructed and relatively arranged that the diameter of the base circle of the cam, the lift of the cam, and the distance from the cam to the center of movement of the follower, are proportioned to afford a lift to the valve proportional to the piston speed during that portion of the stroke in which the flow of gas depends upon the vacuum or the pressure created by the piston.

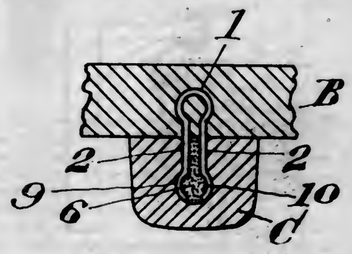
3. In valve operating mechanism, the combination of a symmetrical cam, an inlet valve, an exhaust valve and a pivoted flat-faced follower interposed between the cam and each valve; the cam, valve and follower being so constructed and relatively arranged that the diameter of the base circle of the cam, the lift of the cam, and the distance from the cam to the center of movement of the followers are proportioned to afford a lift to the valves proportional to the piston speed during that portion of the stroke in which the flow of gas depends upon the vacuum or the pressure created by the piston.

1,267,338. TROLLEY-WHEEL. JOHN LONGANECKER and LOUIE G. STOCKBERGER, Hiram, Ohio; said Stockberger assignor of one-sixth of his right to said Longanecker. Filed Apr. 4, 1917. Serial No. 159,645. (Cl. 191—62.)



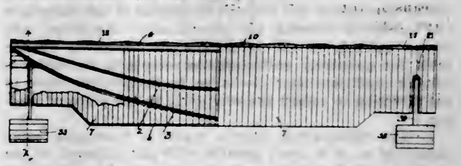
A trolley wheel comprising a hub, a side section fixed thereto, an opposite movable section sleeved on the hub and having an outwardly projecting flange surrounding the hub, an adjustable ring on the hub having an inwardly projecting flange which laps the flange on the movable section, a nut threaded on the hub outside of said ring to adjust the position of said ring, and a spring in compression between the ring and the loose section, and inclosed by said flanges.

1,267,339. MEANS FOR SECURING ARTIFICIAL TEETH TO DENTAL PLATES OR THE LIKE. MALCOLM MILLER MAUPIN, Cincinnati, Ohio, assignor to himself and Henry E. Germann, Cincinnati, Ohio. Filed Aug. 1, 1914. Serial No. 854,541. (Cl. 32—9.)



An artificial-tooth fastening comprising an almost circular metallic anchoring-portion, parallel, resilient arms extending integrally from said anchoring-portion, and semi-circular clamping-extremities at the outer ends of said arms, said anchoring-portion being adapted to be embedded in the labial side of the dental work and with said semi-circular extremities projecting beyond the outer face thereof for ready fastening-engagement with a cavity or narrow passage having straight parallel side-walls and a circularly-expanded bottom provided in the lingual side of the artificial tooth.

1,267,340. SIGN-BOARD. EDMOND MOLLOY, Philadelphia, Pa., assignor to John F. Molloy and Richard T. Molloy, Philadelphia, Pa. Filed July 17, 1916. Serial No. 110,599. (Cl. 40—125.)



1. In a sign board a swinging panel formed of a sheathed truss having a plurality of the truss elements that extend lengthwise of the truss, provide dwith bearings above the center of gravity of the panel and having the greater area of the panel below the bearings, and standards provided with seats for the bearings of the panel upon which the swinging panel swings on the standards.

3. A sign board having in combination a truss structure having a plurality of the truss elements that extend lengthwise of the truss covered with a facing, forming a swinging panel, standards for the panel, bearings placed on the panel above the center of gravity but substantially below the top of the panel and seats for the bearings, placed on the standards.

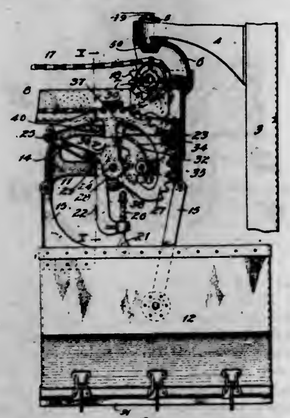
4. A sign board having a swinging panel provided with a truss structure, consisting of downwardly bellied bow pieces, and a longitudinal stringer piece at the upper part of the panel, and having this truss structure covered by a flat facing.

7. In sign boards, the combination with the standard and the swinging panel, composed of a truss structure covered with sheathing and provided with an auxiliary truss composed of compression pieces running crosswise to the panel and diagonal tension members.

10. In a sign board the combination of a swinging panel consisting of a sheathed truss having a plurality of the truss elements that extend lengthwise of the truss and standards placed near the ends of the sheathed truss and swingingly supporting the truss.

[Claims 2, 5, 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,267,341. CONVEYING AND DISTRIBUTING MECHANISM. SAMUEL SHAFER, Jr., Milwaukee, Wis., assignor to Chain Belt Company, Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 22, 1915. Serial No. 16,183. (Cl. 214—59.)



1. The combination of a track, a traversing cable supported so as to move parallel with and adjacent to the track, a discharging receptacle supported entirely by the track and arranged to be traversed thereon by the cable—in one direction when loaded and moving to the place of discharge, or in the opposite direction when empty and moving to the place of loading—the receptacle being movable on the track to a limited extent relative to the cable, means operated by the relative movement of the receptacle and cable for causing the receptacle to discharge, and means carried by the receptacle and operated by the cable for positively restoring the receptacle to load-containing condition after discharge, by moving the cable in the direction to return the receptacle to the place of loading.

2. The combination with a track, a traversing cable supported so as to move parallel with and adjacent to the track, a discharging receptacle supported entirely by the track and arranged to be traversed along the track by the said cable and movable along the track relative to the cable, and means for holding the receptacle in load-containing condition, of means operated by the cable when it is moved in one direction, and arranged first to trip the receptacle and permit it to discharge, and then, by a further movement in the same direction, to again restore the receptacle to condition to receive and hold another charge.

9. The combination with a track, a conveying receptacle supported thereby provided with closing doors, and toggle locking means for holding the doors closed, of a cable for causing the traverse of the receptacle along the track, a gear element having intermeshing connection with the cable, supported by the receptacle and movable relative thereto, stops for limiting the extent to which the said gear element may be moved, and means operated by the gear element for moving the toggle locking means to permit the doors to open when the cable is moved in one direction—a further movement of the cable in the same direction being arranged, through interconnection between the said gear element and the toggle locking means, to restore the latter to locking position.

10. The combination with a track and a dumping conveying receptacle supported thereby, of a cable for causing traverse of the receptacle along the track, and means supported by the receptacle having intermeshing connection with and operated by the cable, and comprising a part arranged to move in one direction to act on the receptacle to dump it, and another part moving in the opposite direction to restore the receptacle to a position to receive a charge, the said parts operating in succession.

[Claims 3 to 8 and 11 to 19 not printed in the Gazette.]

1,267,342. CURRENT-COLLECTING DEVICE. THOMAS W. VARLEY, New York, N. Y., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Original application filed Oct. 3, 1913, Serial No. 793,123, (now Patent No. 1,234,976, dated July 31, 1917.) Divided and application filed June 5, 1916, Serial No. 101,716. Divided and this application filed May 7, 1917. Serial No. 167,082. (Cl. 200—24.)

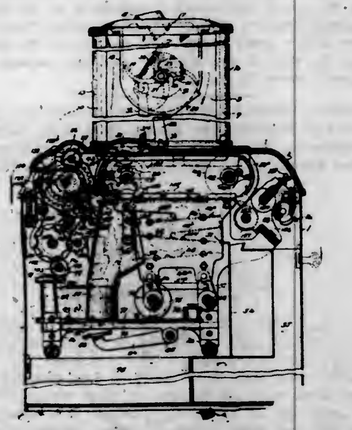


1. A current-collecting device comprising a brush, a relatively stiff member, and a supporting member adapted to support the said brush and the said relatively stiff member normally in alinement, said relatively stiff member being relatively shorter than the brush.

5. A current-collecting device comprising a contact member, means for resiliently supporting the same, and a relatively short stiff member normally in alinement with the said resilient supporting means and adapted to indicate, by the difference in alinement, the pressure being exerted by the contact member.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,267,343. COIN-TICKET-REGISTERING FARE-BOX. DAVID B. WHISTLER, Dayton, Ohio, assignor to The American Railways Equipment Company, Dayton, Ohio, a Corporation of Ohio. Filed July 10, 1916. Serial No. 108,355. (Cl. 235—32.)



1. In a registering fare box for coins and paper tickets, a passenger register, an operating device connected with said register to cause a fare to be registered thereon upon each operation of said device, a device to separate coins from paper tickets, a device to separate coins according to the denominations, and connections between said separating devices and said operating device to cause said separating devices to be operated on each registration of a fare.

5. In a registering fare box for coins and paper tickets, a passenger register, an operating device connected with said register to cause a fare to be registered thereon upon each operation of said device, a device to separate coins from paper tickets, a device to separate coins according to their denominations, connections between said separating devices and said operating device to cause said separating devices to be operated on each registration of a fare, and means to disconnect said passenger register from said operating device to enable said separating devices to be operated independently of said passenger register.

7. In a mechanism of the character described, a coin separating device adapted to receive coins of different denominations and having means to separate said coins according to their denominations, a part having a supporting surface, means to place coins of one denomination in one position on said surface and coins of another denomination in another position on said surface, means to separately remove coins of both denominations from said positions, a registering mechanism, and an actuating device for said registering mechanism arranged to be engaged and actuated by a coin which is removed from either of said positions.

25. In a mechanism of the character described, a part having a supporting surface provided with a discharge opening, means to guide coins to a predetermined position on said supporting surface adjacent to said discharge opening, means to move the coins separately from said position to said discharge opening, an operable device arranged to be engaged and actuated by each coin as it is moved toward said discharge opening, and means to prevent the passage of said coins through said discharge opening until said operable part has been actuated.

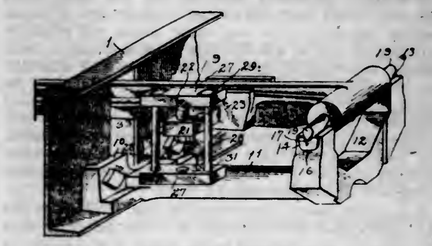
45. In a registering fare box for coins and paper tickets, a passenger register, an operating device connected with said register to cause a fare to be registered thereon on each operation of said device, a device to separate coins from paper tickets, a coin controlled register to register the value of coins, actuating mechanism for said coin controlled register, connections between said operating device, said separating device and said actuating mechanism to cause said separating device and said actuating mechanism to be operated upon each registration of a fare on said passenger register, and means to disconnect said passenger register from said operating device to enable said separating device and said actuating mechanism for said coin controlled register to be operated by said operating device independently of said passenger register.

[Claims 2 to 4, 6, 8 to 24, and 26 to 44 not printed in the Gazette.]

1,267,344. WEIGHING-SCALE. ALBERT J. ZIMMERMAN, Dayton, Ohio, assignor, by mesne assignments, to The Richmond-Standard Manufacturing Company, Richmond, Ind., a Corporation of Indiana. Filed July 17, 1916, Serial No. 109,869. Renewed Apr. 15, 1918. Serial No. 228,806. (Cl. 265—71.)

1. In a weighing scale, the combination with a main frame, a platform, platform levers, and a cross lever connected thereto of a bifurcated supporting bracket for said cross lever, independent fulcrum bearing blocks loosely mounted on said bracket and capable of lateral shifting movement in a substantially horizontal plane in relation with the bracket independent of each other and independent of the bracket and the lever.

7. In a weighing scale, the combination with a main frame, a platform and a system of scale levers by which the weight of a load or draft upon the platform is determined, of a support or bracket, a floating fulcrum bearing block loosely mounted thereon for shifting movement in a horizontal plane, said bearing block having a convex end adjacent to the lever supported thereon, said bearing being free to accommodate itself to lateral variations of the lever.

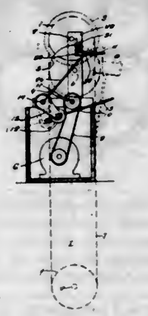


18. In a weighing scale, the combination with a main frame, a platform, platform levers, and a cross lever, of adjustable means for independently connecting the platform levers to the cross lever whereby the influence of the respective platform levers upon the cross lever may be independently varied.

20. In a weighing scale, the combination with a main frame, a platform, platform levers, and a cross lever, of a connecting clevis comprising spaced bearing bars, links connecting said bars and universal joints between the links and bars, substantially as specified.

[Claims 2 to 6, 8 to 17, 19, 21, and 22 not printed in the Gazette.]

1,267,345. STOP MECHANISM FOR HOD-ELEVATORS. CHARLES W. ANDERSON, Brooklyn, N. Y. Filed Apr. 11, 1917. Serial No. 161,344. (Cl. 74—40.)



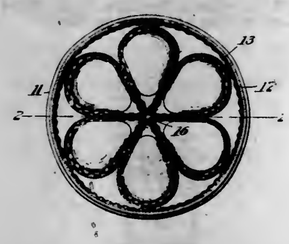
1. A power control mechanism for hod elevators comprising a motor having a pulley, a slack belt engaging between said pulley and a drive pulley of the elevator, a belt tightener bent into non-tightening position in which the driving connection between the motor pulley and the drive pulley is inoperative, the belt tightener comprising a pivotally mounted arm having a roller at its free end to swing into and out of engagement with the belt, a shaft upon which said arm is pivotally mounted, a clutch member slidably mounted upon said shaft to move into and out of engagement with said arm adapted when in engagement with said arm to retain the arm against swinging in one direction, means for manually swinging the arm at will in the opposite direction, and means whereby said clutch may be automatically slid out of engaging position at a predetermined time.

2. A power control mechanism for hod elevators comprising a motor having a pulley, a slack belt engaging between said pulley and a drive pulley of the elevator, a belt tightener bent into non-tightening position in which the driving connection between the motor pulley and the

drive pulley is inoperative, the belt tightener comprising a pivotally mounted arm having a roller at its free end to swing into and out of engagement with the belt, a non-rotatable supporting shaft for said arm about which said arm swings, said arm having a clutch surface formed thereon concentric with said shaft, means for manually swinging the arm at will into tightening position, a clutch member non-rotatably mounted upon the shaft and slidable along the shaft into and out of engagement with the clutch surface of said arm adapted when in engagement with the clutch surface of said arm to retain the arm against swinging in a direction out of tightening position, and means whereby said clutch member may be automatically slid out of engagement with the clutch surface of said arm at a predetermined time.

3. A power control mechanism for hod elevators or the like, said mechanism comprising a motor pulley, a slack belt engaging between said motor pulley and a pulley to be driven, and a belt tightener comprising a pivotally mounted arm having a roller at its free end to swing into and out of engagement with the belt, a shaft upon which said arm is pivotally mounted, a clutch member slidably mounted upon said shaft to move into and out of engagement with said arm adapted when in engagement with said arm to retain the arm against swinging in one direction, and means whereby said clutch member may be automatically slid out of engagement with said arm at a predetermined time.

1,267,346. EGG-CARRIER. FREDERICK W. EDWARDY, Savannah, Ga. Filed Dec. 24, 1914, Serial No. 878,949. Renewed Nov. 15, 1917. Serial No. 202,241. (Cl. 217—23.)



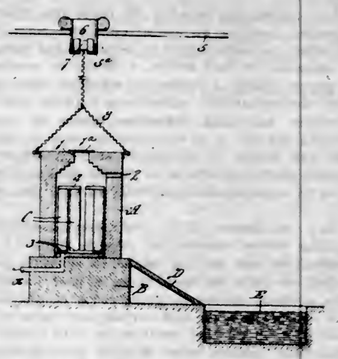
4. In an egg carrier, the combination with a cylinder provided at each end with a cover, of a flexible strip folded back and forth upon itself, the side walls of which are free next the longitudinal axis of the structure, and forming in the outer bights of its folds cells adapted to hold eggs.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,267,347. PROCESS OF ELECTRICAL REDUCTION. CHARLES H. FULTON, St. Louis, Mo., assignor to Metallurgical Laboratories, Incorporated, Chicago, Ill., a Corporation of Illinois. Filed July 25, 1917. Serial No. 182,711. (Cl. 204—64.)

1. A process of reduction, characterized by forming the substance to be reduced into an object that is an electrical conductor, passing a current of electricity through said object so as to heat it sufficiently to bring about the desired reduction, and thereafter treating said object so as to recover the product of the reduction operation.

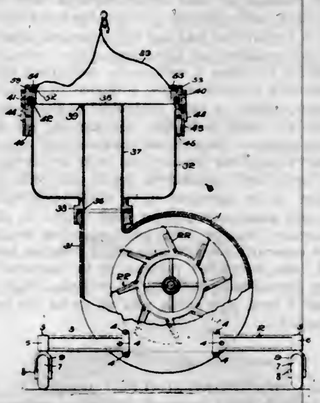
12. A process for producing barium sulfid, characterized by mixing crushed barium sulfate with a material that is a conductor of electricity and also a reducing agent, forming said mixture into briquets that will retain approximately their original form and volume when subjected to a temperature high enough to bring about the desired reduction, passing a current of electricity through one or more of said briquets while they are confined in the chamber of an electric reduction furnace in engagement with the electrodes of said furnace, and subsequently treating the briquets with water after the reduction operation so as to leach them practically free from the barium sulfid produced by the reduction of the barium sulfate.



16. An article for use in electrical reduction furnaces, consisting of a molded object composed of approximately 100 parts of finely-divided barytes, 70 to 85 parts of finely crushed coke, and approximately 20 parts of a carbonaceous binding material.

[Claims 2 to 11 and 13 to 15 not printed in the Gazette.]

1,267,348. MOBILE SUCTION-CLEANER APPARATUS. CHARLES D. LANNING, Boston, Mass. Filed Nov. 24, 1916. Serial No. 133,238. (Cl. 183—60.)



1. In suction cleaner apparatus, the combination of a base embodying suction means, and an inclosing casing having a suction inlet and a discharge outlet with the latter arranged to discharge substantially vertically upward, a dirt receptacle arranged substantially vertically and having a dust-tight, detachable mounting on said discharge outlet, said receptacle having an air-receiving throat registering with said outlet, and an air screening device having a dust-tight, detachable connection to said receptacle.

5. A suction cleaner apparatus, in combination, a base structure having means to suck the air in and discharge it through an outlet, a dirt receptacle having a dust-tight and quick-detachable connection to the outlet, a screen holding ring having a dust-tight and quick-detachable connection to the said dirt receptacle, and an air screen having a dust-tight connection to the said ring, said ring being provided with an annular recess registering with the upper edge of the dirt receptacle and having a compressible packing therein, and cooperative members of the clamping mechanism carried by said ring and dirt receptacle respectively and arranged to clamp the said ring firmly against the said upper edge of the receptacle.

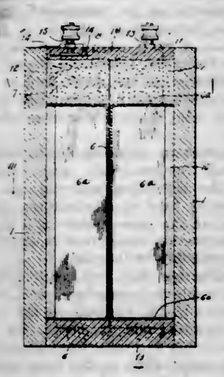
10. A suction cleaner apparatus having a fan and fan casing, a motor attached to said fan casing, a dirt receptacle mounted upon said fan casing, a ring mounted upon the upper end of said dirt receptacle, an air screen connected to said ring, and means to lock said ring to said receptacle, said means including one or more eccentrically mounted disks and surrounding annular members having hooks to engage said ring.

15. A suction cleaner apparatus comprising in combination, air impelling means, a basal support therefor, a dirt receptacle secured to the air outlet of the fan casing, a separate, flexible, textile, air screen, and means for detachably securing said air screen to the dirt receptacle, said means comprising a ring having an inwardly extending lip, said ring being mounted circumferentially at the upper end of the dirt receptacle, and an outwardly expanding spring arranged in the lower part of said air screen and adapted to press the latter outwardly under said lip and against said ring.

23. In suction cleaner apparatus, the combination of a base embodying suction means and a suction means inclosing casing having a suction inlet and discharge outlet with the latter arranged to discharge substantially upward, a dirt receptacle arranged substantially vertically and having a dust-tight quick-detachable mounting on said discharge outlet, said receptacle being permanently, wholly exposed for quick removal from said discharge outlet and having an air receiving throat registering with said outlet, and an air screen device having a dust-tight, quick-detachable connection to said receptacle and arranged to be distended above said receptacle by the discharged air.

[Claims 2 to 4, 6 to 9, 11 to 14, and 16 to 22 not printed in the Gazette.]

1,267,349. DRY-CELL BATTERY. RALSTON F. SMITH, Cleveland, Ohio, assignor to The Hy-Watt Battery Company, Cleveland, Ohio, a Corporation of Ohio. Filed Jan. 4, 1916. Serial No. 210,310. (Cl. 204—38.)



3. In a dry-cell battery, the combination of a container element formed of extruded carbon material and forming the negative electrode, such carbon material constituting the sides only of such container; a positive electrode within said container; an electrolytic mixture interposed between said electrodes; and suitable insulating closures for the ends of said element.

4. In a dry-cell battery, the combination of a container element formed of carbon material and forming the negative electrode, such carbon material constituting the sides only of such container; a positive electrode within said container; an absorbent sheet surrounding said positive electrode; and an electrolytic mixture interposed between said electrodes; said absorbent sheet being bent over and upon the electrolytic mixture so as to cover the ends of the body of such mixture; and suitable closures, including insulating material, for the ends of said container.

5. A dry-cell battery element consisting of a body of extruded carbon material forming a container and open at both ends.

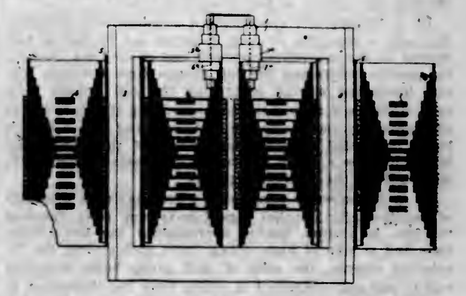
6. A dry-cell battery element consisting of a body of extruded carbon material forming a container having sides integral with each other and open at both ends.

7. A dry-cell battery including in its structure a container element of carbon having a multiplicity of sides each of which is flat and forming an interior space having rectangularly related adjacent surfaces; an electrode in said space formed with a plurality of wings or vanes respectively projecting toward the angles formed by such adjacent surfaces.

[Claims 1, 2, and 8 to 19 not printed in the Gazette.]

REISSUES.

14,473. TRANSFORMER. CHARLES LE G. FORTESCUE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 4, 1916. Serial No. 95,510. Original No. 1,129,463, dated Feb. 23, 1915, Serial No. 510,854, filed Aug. 2, 1909. (Cl. 175—361.)



1. The combination with a low potential body, and a relatively high potential winding comprising a plurality of coils, of an insulating structure interposed between said body and said winding and comprising alternate layers of insulating and conducting materials, the layers of conducting material being superposed and constituting parts of the connections between the coils of the winding.

2. The combination with a winding comprising a plurality of coils, of an adjacent insulating structure comprising alternate layers of insulating and conducting materials, the layers of conducting material being superposed and constituting parts of the connections between the coils of the winding.

3. The combination with a low potential body, and a relatively high potential winding comprising a plurality of coils, of an insulating member interposed between said body and said winding, and conductors adjacent to those surfaces of said member that extend between the said body and said winding constituting parts of the connections between the coils of the winding.

4. The combination with a magnetizable core and a winding comprising a plurality of coils, of an insulating sleeve separating the coils from the core and having a plurality of concentric conducting cylinders embedded in it, said conducting cylinders constituting portions of the electrical connections betwen the coils.

5. A transformer comprising a substantially rectangular core and a plurality of coils disposed end to end, in two groups, on opposite legs of the core, and insulating sleeves disposed between the coils and the core legs on which they are mounted, the coils being connected in a series of which the middle coils of the groups constitute the terminals.

6. A transformer comprising a core, a plurality of coils disposed thereon end to end, and an insulating sleeve separating the coils from the core, the connections between coils being completed through conductors embedded in the insulating sleeve.

7. A transformer comprising a core, an insulating sleeve surrounding a portion of the core, a plurality of coils disposed thereon end to end and connected in a series which successively includes the coils in the order of their separation from the portions of the core not surrounded by the coils, the connections between coils being completed through conductors embedded in the insulating sleeve.

8. A transformer comprising a core, a plurality of winding coils disposed thereon end to end to form a group, and an insulating sleeve separating the coils from the core, said sleeve comprising a series of concentric conducting cylinders graded in length according to their nearness to the core and separated from each other by insulation, and the middle coils of the winding group being connected through the conducting cylinders of largest diameter to form a series which is continued to the outer coils of the winding.

9. A transformer comprising a substantially rectangular core, two groups of coils disposed on the respective opposite legs of the core, insulating sleeves separating the coil groups from the core legs, and insulating sleeves separating the coil groups from each other, each of said sleeves comprising alternate layers of conducting and insulating materials and said coils being interconnected through the agency of the conducting layers.

10. A transformer comprising a substantially rectangular core, a plurality of coils disposed end to end in two groups on the respective opposite legs of the core, insulating sleeves separating the coil groups from the core legs and insulating sleeves separating the coil groups from each other, each of said sleeves comprising alternate layers of conducting and insulating materials and the said coils being connected through the agency of the conducting layers to form a series having its terminals at the innermost coils of the respective groups.

11. A transformer comprising a core having a plurality of substantially parallel legs, low-voltage coils disposed thereon, insulating sleeves surrounding the low-voltage coils and groups of high-voltage coils surrounding the insulating sleeves, the coils of each group being arranged end to end and connected in series from the innermost to the outermost, and the outer coils of each group being connected together.

12. In a transformer, the combination with a magnetizable core and a winding therefor, of insulating means disposed between said core and said winding, and means constituting a part of the winding for rendering the distribution of stress in the insulation independent of the core member.

13. In electric apparatus, the combination with a magnetizable core and a winding therefor and an insulating structure disposed between said core and said winding, of means for effecting a distribution of stress in the insulation which corresponds to that existing in a uniform insulating medium between two concentric conducting cylinders of infinite length spaced at the same distance apart and having the same difference of potential as the winding and the core member.

14. In a transformer, the combination with a substantially rectangular core, two groups of coils disposed on the respective opposite legs of the core and an insulating structure comprising concentric cylinders of conducting material, separated by insulation, disposed between the groups of coils and the core legs, of similar insulating structures disposed on the core legs not occupied by the winding, the conducting cylinders of all of the insulating structures being interconnected according to their distance from the core.

15. In a transformer, the combination with a substantially rectangular core, two groups of coils disposed on one pair of opposite legs, and insulating sleeves or bushings comprising alternating concentric cylinders of insulating and conducting materials separating the coils from the core legs, of insulating sleeves disposed on the remaining pair of opposite core legs having alternating concentric cylinders of insulating and conducting materials, the conducting cylinders of the sleeve on core legs not occupied by the coils being electrically connected to the conducting cylinders separating the winding from the core legs to increase the effective area of the latter cylinders.

16. In a transformer, the combination with a substantially rectangular core and a plurality of coils disposed end to end on one pair of opposite core legs in two similar groups of insulating sleeves comprising a plurality of alternating cylinders of insulating and conducting materials surrounding the groups and separating them from each other, and sleeves or bushings comprising concentric cylinders of insulating and conducting materials, said coil groups being electrically connected by a conductor threaded through the insulating bushings or sleeves.

17. The combination with two conducting members, of an interposed insulating structure, and means for establishing a distribution of potential adjacent to the surfaces of the insulating structure that extend between said members to produce a distribution of the static field in the insulating structure that substantially corresponds to the distribution that would exist if the opposing surfaces of the conducting members were extended as far as possible or infinitely.

18. The combination with two conducting members, of an interposed insulating structure, conductors terminating adjacent to the portions of the surface thereof that extend between said members, and means for fixing the potentials of said conductors to produce a distribution of the static field in the insulating structure that substantially corresponds to the distribution that would exist if the opposing surfaces of the conducting members were extended as far as possible or infinitely.

19. The combination with two substantially cylindrical conducting members, of an interposed insulating structure and means for establishing a distribution of potential adjacent to the surfaces of the insulating structure that extend between said members to produce a distribution of the static field in the insulating structure that substantially corresponds to the distribution that would exist if the opposing surfaces of the conducting members were extended as far as possible or infinitely.

20. The combination with two substantially cylindrical conducting members, of an interposed insulating structure, conductors terminating adjacent to the portions of the surface thereof that extend between said members, and means for fixing the potentials of said conductors to produce a distribution of the static field in the insulating structure that substantially corresponds to the distribution that would exist if the conducting members were of infinite length.

21. The combination with two conducting members, of interposed insulating material, and conductors interspersed with the insulating material the potentials of which are severally fixed at substantially the same values as would exist at the same points if the opposing surfaces of said conducting members were extended in similar form as far as possible or infinitely.

22. The combination with two conducting members, of an interposed insulating structure, and conductors terminating adjacent to the portions of the surface thereof that extend between said members, the potentials of said conductors being severally fixed at substantially the same values as would exist at the same points if the opposing surfaces of the conducting members were extended in similar form as far as possible or infinitely.

23. The method of insulating two conducting members from each other which consists in fixing the potentials adjacent to the surface of an insulating structure that is interposed between the members at substantially the same values as would exist at the same points if the opposing surfaces of the conducting members were extended in similar form as far as possible or infinitely.

24. The method of insulating two conducting members from each other which consists in fixing the potentials of conductors adjacent to the surface of an insulating structure that is interposed between said members at substantially the same values as would exist at the same points if the opposing surfaces of the conducting members were extended in similar form as far as possible or infinitely.

25. An electrical device comprising a winding, an adjacent insulating structure that is tapered in opposite directions from an intermediate point, and conductors that terminate adjacent to the tapered faces of the structure and are connected to and included in circuit with the winding.

26. An electrical device comprising a plurality of series-connected coils, an adjacent insulating structure that is tapered in opposite directions from an intermediate point, and conductors that terminate adjacent to the tapered faces of the structure and constitute parts of the connections between the coils.

27. An electrical device comprising a plurality of side-by-side series-connected coils, the coils of higher potential being disposed intermediate those of lower potential, an adjacent insulating structure that is tapered in opposite directions from an intermediate point, and conductors that terminate adjacent to the tapered faces of the insulating structure and are connected to the coils.

28. An electrical device comprising an insulating structure that is tapered from an intermediate point toward its ends, a plurality of side-by-side series connected coils, the coils of higher potential being disposed adjacent to the intermediate portion of the insulating structure and also intermediate the coils of lower potential, and conductors that terminate adjacent to the tapered faces of the insulating structure and are connected to the coils.

29. A transformer comprising a plurality of side-by-side coils that are connected in a series beginning with intermediately located coils and ending with outer coils, an adjacent insulating structure that is tapered from an intermediate point toward its ends, and conductors that terminate adjacent to the tapered faces of the insulating structure and are connected to the coils.

30. An electrical device comprising a winding, an adjacent insulating structure having its ends similarly stepped, and conductors that terminate adjacent to the steps in the insulating structure and are respectively connected to intermediate points in the winding.

31. The combination with a conducting body having a certain electrical potential, of a conducting electrostatic field flow-line intercepter mounted adjacent thereto, and means for so fixing the potential distribution on the surface of said intercepter that the electrostatic field between said body and said intercepter and in the vicinity of said body is maintained invariable and independent of influences arising from charged bodies beyond said intercepter.

32. In an electrical device, the combination with a plurality of side-by-side coil-sections, of insulating structures respectively within and without the coil-sections each comprising spaced conductors, and connections between the coil-sections including the said conductors.

33. In an electrical device, the combination with a plurality of side-by-side coils that are connected in a series beginning with the centrally located coils and successively including the next outermost coils, of insulating structures respectively within and without the coils each comprising spaced conductors, the connections between the coils alternately including conductors of the respective insulating structures.

34. In an electrical device, the combination with a plurality of side-by-side series connected coils, of insulating structures respectively within and without the coils each comprising spaced conductors, the connections between the coils alternately including conductors of the respective insulating structures.

35. An insulating structure comprising inner and outer conducting sleeves, an interposed insulating body the end faces of which are similarly tapered between the said sleeves, and spaced conductors terminating adjacent to the tapered faces of the said body.

36. The combination with two terminal members having different electrical potentials, of a plurality of conducting electrostatic field flow-line intercepters therebetween which are electrically charged to different potentials, said intercepters being severally so associated with said terminal members that the charging current of the latter is substantially negligible.

37. An electrical device comprising a winding, a member surrounded thereby, an insulating structure interposed between the winding and said member, and spaced conductors in the insulating structure that constitute parts of the said winding.

38. In an electrical device, the combination with a core comprising a coil-receiving portion and other portions extending transversely thereto, of a plurality of connected coils surrounding the said coil-receiving portion of the core, the coils of higher potential relatively to the core being more remote from the transversely extending portions of the core than the coils of lower potential.

39. In an electrical device, the combination with a plurality of side-by-side coils, of an insulating structure adjacent to the coils, and conductors that terminate adjacent to the ends of the insulating structure and are connected to the coils, the conductors being respectively opposite to the coils to which they are connected.

40. In an electrical device, the combination with a plurality of side-by-side coils, of an insulating structure adjacent to the coils, and conductors that terminate adjacent to the ends of the insulating structure and are connected to and included in circuit with the coils, the conductors being respectively opposite to the coils to which they are connected.

41. The combination with two terminal members having different electrical potentials, of a plurality of conducting electrostatic field flow-line intercepters therebetween which are electrically charged to different potentials, each of said terminal members being so associated with a selected intercepter as to produce a distribution of the electrostatic field in the vicinity of said terminal member that substantially corresponds to the distribution that would exist if the opposing surfaces of the intercepter and its associated terminal member were extended as far as possible or infinitely.

42. The combination with a plurality of side-by-side spaced coils, of an adjacent insulating structure of gradually diminishing thickness from an intermediate point toward its ends, and spaced conductors that terminate adjacent to the tapered faces of the structure and are connected to the coils, the said conductors being respectively opposite to the coils to which they are connected.

43. The combination with a plurality of side-by-side spaced coils, of an adjacent insulating structure of gradually diminishing thickness from an intermediate point toward its ends, and spaced conductors that terminate adjacent to the tapered faces of the structure and are connected to, and included in circuit with, the coils, the said conductors being respectively opposite to the coils to which they are connected.

44. The combination with a plurality of side-by-side spaced coils, of an adjacent insulating structure having steps corresponding to the spacing of the coils, and conductors that terminate adjacent to the steps in the insulating structure and are respectively connected to the corresponding opposite coils.

45. The combination with a plurality of coils, of an adjacent insulating structure having a face inclined relatively to the axis of the coils, and spaced conductors that terminate adjacent to the inclined face of the insulating structure and are connected to, and included in circuit with, the coils.

46. The combination with a plurality of side-by-side spaced coils, of an adjacent insulating structure having a face inclined relatively to the axis of the coils, and spaced conductors that terminate adjacent to the inclined face of the insulating structure and are connected to the coils, the said conductors being respectively opposite to the coils to which they are connected.

47. The combination with a plurality of side-by-side spaced coils, of an insulating sleeve having its end portions inclined relatively to its axis, and spaced conductors that terminate adjacent to the inclined faces of the sleeve and are connected to the coils, the said con-

ductors being respectively opposite to the coils to which they are connected.

48. The combination with two conducting members, of an insulating structure interposed between said members the surfaces of said structure that extend between said members being shaped to substantially conform to the locus of the intersections of the equipotential surfaces adjacent to said members.

49. The combination with two conducting members, of an interposed insulating structure, and spaced conductors terminating adjacent to those surfaces of said structure that extend between said members, the ends of the region bounded by the said conductors being shaped to substantially conform to the locus of the intersections of the substantially equi-potential surfaces adjacent thereto.

50. The combination with two conducting members, of an interposed insulating structure, and spaced conductors terminating adjacent to those surfaces of said structure that extend between said members, the surfaces determined by the ends of the conductors being shaped to substantially conform to the locus of the intersections of the substantially equi-potential surfaces adjacent thereto.

51. In an electrical device, the combination with a plurality of spaced coils that are connected in a series beginning with the centrally located coils and successively including the next outermost coils, the coils of higher potential being disposed intermediate the coils of lower potential, and the coils being spaced apart in accordance with their differences of potential, of an adjacent insulating structure, and conductors that are adjacent to the ends of the insulating structure and are connected to and included in circuit with the coils, the conductors terminating respectively opposite to the coils to which they are connected.

52. In an electrical device, the combination with a plurality of spaced coils that are connected in a series beginning with the centrally located coils and successively including the next outermost coils, the coils of higher potential being disposed intermediate the coils of lower potential, and the coils being spaced apart in accordance with their differences of potential, of an adjacent insulating structure having a face inclined relatively to the axis of the coils, and spaced conductors adjacent to the inclined face of the insulating structure and connected to the coils, the said conductors respectively terminating opposite to the coils to which they are connected.

53. An electrical device comprising a plurality of spaced connected coils, the coils of higher potential being interposed between those of lower potential, and the coils of intermediate potential being spaced from the high and low potential coils in accordance with their differences of potential therefrom, and an insulating structure adjacent to the coils and having conductors adjacent to its ends that are connected to the coils, the said conductors respectively terminating opposite to the coils to which they are connected.

54. The combination with a body having a certain electrical potential, of an envelop therefor, and means for so fixing the electrical potential distribution on the surface of said envelop that the electrostatic field internally thereof and in the vicinity of the enveloped body is maintained invariable and independent of influences arising from charged bodies external to the envelop.

55. The combination with a plurality of elements having different electrical potentials of a plurality of metallic envelops therefor, and means for charging each of said envelops to such a potential that an electrostatic field within each metallic envelop and in the vicinity of its associated element is permanently independent of any external electrically charged body.

56. The combination with a distributed potential winding, of metallic envelops charged to fixed electrical potentials of different values, said envelops being so paired with selected portions of said winding as to protect said selected winding portions associated with the properly charged envelops from the influences of external electrical charges.

57. The combination with a plurality of elements having different mean electrical potentials, of metallic envelops charged to fixed potentials of different values, each of said envelops being so paired with a selected element as to maintain the electrostatic field in the vicinity of said element independent of influences arising from electrically charged bodies external to said envelop.

58. The combination with a plurality of elements having different mean electrical potentials, of metallic envelops therefor having potentials of different values, each of said envelops being paired with a selected element, the potential of the envelop of each pair being such that an electrostatic field in the vicinity of its associated element is permanently maintained independent of electrical influence arising from bodies external to the envelop.

59. The combination with a distributed potential winding, of members electrically charged to different and fixed potentials associated therewith, the said charged members being severally associated with selected portions of the winding in order that the charging currents of the portions of said windings so associated with the said charged members are substantially negligible.

60. The combination with a plurality of elements having different electrical potentials, of a plurality of metallic envelops therefor which are electrically charged to different potentials, said elements being severally so associated with the metallic envelops that the charging currents of the former are substantially negligible.

61. The combination with a plurality of elements having different electrical potentials, of a plurality of metallic envelops therefor, and means for electrically charging each metallic envelop to such potential that the charging currents of the elements severally associated with said envelops are substantially negligible.

62. The combination with a plurality of elements having different potentials, of a plurality of metallic envelops therefor which are electrically charged to different potentials, each of said elements being severally so associated with a selected metallic envelop as to produce a distribution of the electrostatic field in the vicinity of said element that substantially corresponds to the distribution that would exist if the opposing surfaces of the envelop and its associated element were extended as far as possible or infinitely.

63. The combination with a plurality of elements having different mean electrical potentials, of a plurality of metallic envelops therefor which are electrically charged to different potentials, the elements being severally and selectively so paired with the metallic envelops as to produce a distribution of the electrostatic field in the vicinity of each element that substantially corresponds to the distribution that would exist if the opposing surfaces of each pair of elements and envelops were extended as far as possible or infinitely.

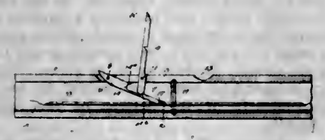
64. The combination with an electrical winding comprising a plurality of elements having different mean electrical potentials, of conducting cylinders severally concentric with the separate elements, and means for fixing the potentials of said cylinders to produce a distribution of the electrostatic field in the vicinity of the elements that substantially corresponds to the distribution which would exist if the opposing surfaces of the pairs of cylinders and elements were extended as far as possible or infinitely.

65. The combination with a distributed potential winding comprising elements that are connected in series relationship and have different mean electrical potentials, of conducting cylinders severally concentric with the separate elements, the potentials of said cylinders being fixed at substantially the same values as would exist at the points occupied by them if opposing surfaces of each pair of conducting cylinders and elements were extended in similar form as far as possible or infinitely.

66. The combination with an electrical winding comprising a plurality of distributed potential elements, of conducting cylinders associated with said separate elements, each of said cylinders being firmly charged to the same potential as its associated element of the electrical winding in order to produce a distribution of the static field surrounding each element that corresponds to the distribution which would exist if the opposing surfaces of each conducting cylinder and its associated element were extended infinitely or as far as possible.

67. The combination with an electrically distributed potential winding comprising a plurality of separate elements that are charged to different mean potentials, of conducting cylinders concentric therewith, each conducting cylinder being fixedly charged to such potential that the distribution of the electrostatic field within the cylinder and in the vicinity of its associated element substantially corresponds to the distribution that would exist if the opposing surfaces of the pairs of conducting cylinders and elements were extended as far as possible or infinitely.

14,474. SELF-FILLING FOUNTAIN-PEN. FELIX RIESENBERG, New York, N. Y., assignor, by mesne assignments, to Herbert L. Carman, New York, N. Y. Filed Mar. 28, 1918. Serial No. 225,356. Original No. 1,249,501, dated Dec. 11, 1917, Serial No. 106,163, filed June 27, 1916. (Cl. 120—46.)



1. In a device of the character described, the combination with a pen barrel having a longitudinal slot, of an ink sack, a presser plate operatively engaged with said sack, a transmitting lever pivotally mounted in said slot and operatively engaged with said presser plate, an operating lever pivotally mounted in said slot and having operative engagement with said transmitting lever, interlocking members carried respectively by said transmitting lever and said operating lever, said interlocking members engaging one another when the parts return to rest position, and means tending to hold said operating lever in rest position.

2. In a device of the character described, the combination with a pen barrel having a longitudinal slot, of an ink sack, a presser plate operatively engaged with said sack, a transmitting lever pivotally mounted in said slot and operatively engaged with said presser plate, an operating lever pivotally mounted in said slot and having operative engagement with said transmitting lever, interlocking members carried respectively by said transmitting lever and said operating lever, said interlocking members engaging one another when the parts return to rest position, and a snap-lock for holding said operating lever in rest position.

3. In a device of the character described, the combination with a pen barrel having a longitudinal slot, of an ink sack, a presser plate operatively engaged with said sack, a transmitting lever pivotally mounted in said slot and operatively engaged with said presser plate, an operating lever pivotally mounted in said slot and having its inner end in operative engagement with said transmission lever, and a recess adjacent the outer edge of said transmission lever and opened longitudinally, the said inner end of said operating lever moving into said recess when the parts return to rest position, substantially as and for the purpose described.

4. In a device of the character described, the combination with a pen barrel having a longitudinal slot, of an ink sack, a presser plate operatively engaged with said sack, a transmitting lever pivotally mounted in said slot and operatively engaged with said presser plate, an operating lever pivotally mounted in said slot and having operative engagement with said transmitting lever, interlocking members carried respectively by said transmitting lever and said operating lever, said interlocking members engaging one another when the parts return to rest position, and a snap-lock for holding said operating lever in rest position, said snap-lock comprising a ring concentrically disposed in the pen barrel and an oblique notch in the inner edge of said operating lever.

5. In a self-filling fountain-pen, a barrel having a slot, an operating lever pivotally mounted in said slot, said operating lever having a notch, and a yielding member in the slot adapted to be engaged by the notch of the lever for retaining the lever in the slot.

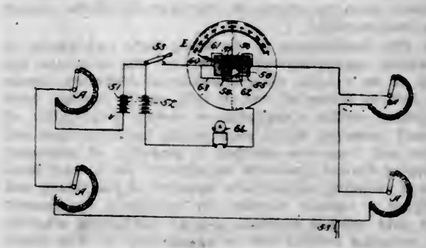
6. In a self-filling fountain-pen, a barrel having a slot and a groove in the barrel intercepted by the slot, an operating lever pivotally mounted in said slot, and an open ring in the groove presenting a portion of the ring across said slot, said operating lever having an oblique notch into which the open ring is adapted to snap when said lever is brought into the slot.

7. In a self-filling fountain-pen, a barrel having a slot and an inner groove intercepted by the slot, an operating lever pivotally mounted in said slot, and a ring in the groove, said operating lever having an oblique notch into which said ring is adapted to snap when the lever is brought into the groove.

8. In a self-filling fountain-pen, a barrel having a slot, an operating lever pivotally mounted in said slot, an ink sack in the barrel, a presser plate engaging the sack and in operative connection with the lever, said operating lever having an oblique notch, and a yielding member disposed transversely of the slot and adapted to be engaged by the notch in the lever for retaining the lever in the slot.

9. In a self-filling fountain-pen, a barrel having a slot and an inner groove intercepted by the slot, an operating lever pivotally mounted in said slot, and a ring in the groove, said ring being slightly narrower than the groove, said operating lever having an oblique notch into which said ring is adapted to snap when the lever is brought against the ring, so as to cause the same to yield in the groove to permit the ring to engage the notch of the lever and lock the lever in the slot.

14,475. LOAD-INDICATOR FOR MOTOR-TRUCKS. FREDERICK J. TROLL, Baltimore, Md., assignor to The Loadometer Company, Baltimore, Md., a Corporation of Delaware. Filed July 20, 1917. Serial No. 181,913. Original No. 1,147,127, dated July 20, 1915, Serial No. 698,250, filed May 18, 1912. (Cl. 177—351.)



1. The combination of the axles, body and wheels of a vehicle; supporting springs adjacent to each wheel, electromechanical resistance changing devices connected to the body and the spring at each end of each axle, electrical means connected to the resistance devices and operable

under the influence of the latter to indicate the maximum load capacity of the vehicle, and means audibly indicating when the aforesaid indicating means has been operated to indicate the maximum load capacity.

2. The combination of the axles, body and wheels of a vehicle, supporting springs adjacent to each wheel, electro-mechanical resistance changing devices connected to the body and spring at each end of each axle, and electrical means common to all of the resistance devices and operable under the influence of the latter to indicate when the maximum load capacity of the vehicle has been reached.

3. The combination with the axles, body and wheels of a vehicle, supporting springs adjacent to each wheel, electro-mechanical resistance changing devices having connection with the spring for operation under the action of the latter and arranged one at each end of each axle, and means connected to the electro-mechanical resistance changing devices and operable under the influence of the latter to indicate when the maximum load capacity of the vehicle has been reached.

4. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body of the vehicle, electro-mechanical resistance changing devices having connection with said springs for operation under the influence of flattening of said springs incident to weight on the body of the vehicle, and electrical means electrically connected to the resistance changing devices and operable under the influence of the latter to sound an alarm when the maximum capacity of the vehicle has been reached.

5. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body of the vehicle, resistance changing devices having connection with the springs for operation when the body is depressed incident to a load placed thereon, and electrical means electrically connected to the resistance changing devices to sound an alarm when the maximum load capacity of the vehicle has been reachced.

6. The combination of the axles, body, and wheels of a vehicle, supporting springs between the axles and the body, resistance changing devices having connection with the springs for operation upon flattening of the latter incident to weight placed on the body, and a common means connected to all of the resistance changing devices to indicate the weight of the load placed on the vehicle and to indicate when the maximum load capacity has been reached.

7. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body, resistance changing devices having connection with the springs for operation upon flattening of the latter incident to weight placed on the body, and a common means connected to all of the resistance changing devices to indicate the weight of the load placed on the vehicle, and an alarm connected to said electrical means to audibly indicate when the maximum load capacity of the vehicle has been reached.

8. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body of the vehicle, electro-mechanical resistance changing devices connected one to each of the springs, each resistance device comprising a casing, a plurality of contact members within each casing insulated from the latter and from one another, a plurality of resistance changing devices connected in series to the contact members, a swinging contact arm mounted in the casing and carrying a contact member for successive engagement with said contact members, a gear mechanism whereby the swinging contact arm is swung step by step under the influence of weight on the vehicle body, a resistance changing electric circuit having connection with each resistance changing device and including a battery and a switch and an indicator in said circuit to indicate when the maximum load capacity of the vehicle has been reached, and an alarm circuit operatively connected to the aforesaid circuit and including a battery and an alarm which latter is operable to audibly indicate when the maximum load capacity of the vehicle has been reached.

9. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body of the vehicle, electro-mechanical resistance changing devices having connection with the springs for operation when the body is depressed incident to a load placed thereon, an electric resistance changing circuit in which said electro-mechanical resistance changing devices are connected in series and including a battery, switch and an indicator to indicate the amount of load placed on the vehicle, and an alarm circuit connected to the indicator and the aforesaid circuit and including a battery and an alarm to sound the latter upon a predetermined amount of resistance being cut out of the first named circuit incident to load on the vehicle.

10. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body of the vehicle, electro-mechanical resistance changing devices having connection with the springs for operation when the body is depressed incident to a load placed thereon, an electrical resistance changing circuit in which said electro-mechanical resistance changing devices are connected in series and including a battery, switch and an indicator to indicate the amount of load placed on the vehicle, and an alarm circuit connected to the indicator and the aforesaid circuit and including a battery and an alarm to sound the latter upon a predetermined amount of resistance being cut out of the first-named circuit incident to load on the vehicle, the battery of the alarm circuit furnishing an independent source of curren' to sound the alarm independently of the battery of the resistance changing circuit.

11. The combination of a vehicle body, electro-mechanical resistance changing devices operable under the influence of the load placed on the vehicle body, an electric resistance changing circuit in which said electro-mechanical resistance changing devices are connected in series and including a battery, switch and an indicator to visibly indicate the amount of load placed on the vehicle, and an alarm circuit connected to the indicator and to the aforesaid circuit and including a battery and an alarm to audibly indicate when a predetermined amount of resistance has been cut out of the first-named circuit incident to load on the vehicle body.

12. The combination of a vehicle body which is subject to depression, resistance changing devices operable under the influence of the vehicle body when depressed incident to load placed thereon, a common means connected to all of the resistance changing devices to visibly indicate the weight or load placed on the vehicle body, and means operatively connected to the visible indicating means to audibly indicate when the visible indicating means operates to indicate the amount of load placed on the vehicle body.

13. The combination of a vehicle including a body, means to yieldingly support the body, a resistance changing circuit carried by the vehicle, means for changing the resistance in said circuit proportionate to the load, a visible indicator connected in said circuit, the indicator being controlled according to the electrical variations in the resistance changing circuit incident to operation of the resistance changing means upon depression of the vehicle body against the action of said yieldable supporting means, and an electric alarm circuit electrically connected to the resistance changing circuit and controlled thereby so as to audibly indicate simultaneously with the visible indication when the predetermined load capacity of the vehicle has been reached.

14. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body of the vehicle, resistance changing devices connected one to each of the springs, each resistance device comprising a casing, a plurality of contact members within each casing insulated from the latter and from one another, a plurality of resistance devices connected in series to the contact members, a swinging contact arm mounted in the casing and carrying a contact member for successive engagement with said contact members, means whereby the swinging contact arm is swung step by step under the influence of weight on the vehicle body, and an indicator electrically connected to each of said electro-mechanical resistance changing devices to indicate when the rated capacity of the vehicle has been reached.

15. The combination of the axles, body and wheels of a vehicle, supporting springs between the axles and the body of the vehicle, resistance changing devices connected one to each of the springs, each resistance device comprising a casing, a plurality of contact members within each casing insulated from the latter and from one another, a plurality of resistance devices connected in series to the contact members, a swinging contact arm mounted in the casing and carrying a contact member for successive engagement with said contact members, means whereby the swinging contact arm is swung step by step under the influence of weight on the vehicle body, an indicator electrically connected to each of said electro-mechanical resistance changing devices to indicate when the rated capacity of the vehicle has been reached, and means operating simultaneously with the aforesaid indicating means to indicate audibly when the predetermined rated capacity has been reached.

16. The combination with a vehicle, electro-mechanical resistance changing devices having operative connection with the body for operation upon depression of the latter incident to weight placed on the body, each resistance changing device comprising a casing, a plurality of resistances in each casing connected in series to the respective contact members, a swinging contact arm mounted in the casing and carrying a contact member for engagement with said contact members, a gear mechanism whereby the swinging contact arm is swung step by step under the influence of weight on the vehicle body, and a resistance changing electric circuit having connection with each resistance changing device and including a battery and a switch, and an indicator in said circuit to indicate when the maximum load capacity of the vehicle has been reached.

17. The combination with a vehicle, electro-mechanical resistance changing devices having operative connection with the body for operation upon depression of the latter incident to weight placed on the body, each resistance changing device comprising a casing, a plurality of resistances in each casing, connected in series to the respective contact members, a swinging contact arm mounted in the casing and carrying a contact member for engagement with said contact members, a gear mechanism whereby the swinging contact arm is swung step by step under the influence of weight on the vehicle body, and a resistance changing electric circuit having connection with each resistance changing device and including a battery and a switch, and an indicator in said circuit to indicate when the maximum load capacity of the vehicle has been reached, and an alarm circuit operatively connected to the aforesaid circuit and including a battery and an alarm which latter is operable to audibly indicate when the maximum load capacity of the vehicle has been reached.

18. The combination with a vehicle, electro-mechanical resistance changing devices having operative connection with the body for operation upon depression of the latter incident to weight placed on the body, each resistance changing device comprising a casing, a plurality of contact members within each casing, a plurality of resistances in each casing connected in series to the respective contact members, a swinging contact arm mounted in the casing and carrying a contact member for engagement with said contact members, a gear mechanism whereby the swinging contact arm is swung step by step under the influence of weight on the vehicle body, and an indicator to visibly indicate when the maximum load capacity of the vehicle has been reached.

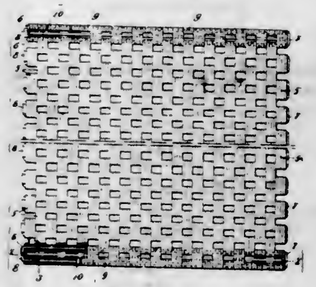
19. The combination with a vehicle, electro-mechanical resistance changing devices having operative connection with the body for operation upon depression of the latter incident to weight placed on the body, each resistance changing device comprising a casing, a plurality of contact members within each casing, a plurality of resistances in each casing connected in series to the respective contact members, a swinging contact arm mounted in the casing and carrying a contact member for engagement with said contact members, a gear mechanism whereby the swinging contact arm is swung step by step under the influence of weight on the vehicle body, an indicator to visibly indicate when the maximum load capacity of the vehicle has been reached, and means coöperating with the visibly indicating means to audibly indicate when the maximum load capacity of the vehicle has been reached.

20. The combination of a vehicle including a body, means for yieldably supporting the body, an electrical circuit carried by the vehicle body, an indicating means connected in said circuit, overlapping members connected to the vehicle body and to the yieldably supporting means therefor and which are adapted to fold with relation to each other upon depression of the vehicle body against the action of said springs, and contact members having connection with said overlapping and foldable members and included in said circuit and which are arranged to contact with each other upon folding of said overlapping and foldable connections between the body and yieldable supporting means when the body is depressed against the action of the yieldable supporting means and thereby operate said indicating means.

21. The combination of a vehicle including a yieldably supported body, a resistance changing circuit carried by the vehicle, an electro-mechanical resistance changing device arranged in the said circuit and connected with the body of the vehicle and operated by the movement of the body under the influence of a load, and an indicator also connected in said circuit and controlled by the resistance changing device.

22. The combination of a vehicle including a yieldably supported body, a resistance changing circuit carried by the vehicle, a plurality of electro-mechanical resistance changing devices located at spaced points and arranged in the said circuit and connected with the body of the vehicle and operated by the movement of the body under the influence of a load, and an indicator also connected in said circuit and controlled by the resistance changing devices.

14,476. LINK MAT. WILLIAM R. WOODWARD, Brockton, Mass., assignor, by mesne assignments, to Brockton Heel Company, Inc., Brockton, Mass., a Corporation of Massachusetts. Filed Apr. 16, 1918. Serial No. 228,988. Original No. 1,222,707, dated Apr. 17, 1917, Serial No. 134,830, filed Dec. 4, 1916. Reissue No. 14,452, dated Mar. 26, 1918, Serial No. 173,253, filed June 6, 1917. (Cl. 15—62.)



1. A link mat comprising pintle rods and links strung upon said rods, in combination with a reinforcing rod passed through the endmost links of the mat between the endmost pintle rod and the next adjacent pintle.

2. A mat comprising interconnected longitudinally ex-

tending links and transversely extending pintle rods, and a stiffening member engaged with the endmost links of the mat and having strength to resist distortion in a direction transverse to the plane of the mat.

3. A link mat comprising pintle rods, and series of overlapping separate links strung upon said rods and free to turn thereon, in combination with a stiffening member engaged with one of said series.

4. A link mat composed of structurally distinct and separate links arranged and spaced apart in longitudinal lines, with the links in each line overlapping at their ends the contiguous links in adjacent lines, transverse pintle or hinge rods extending transversely of the mat and through the said overlapping parts of such links, and a stiffening rod passing through certain transversely alined links and having strength and stiffness.

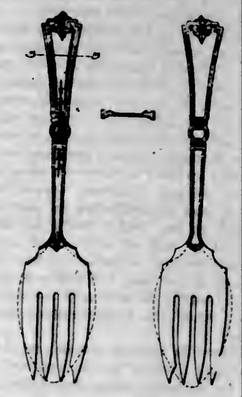
DESIGNS.

52,049. CASING FOR A FEED-THROUGH SWITCH. RALPH A. BELMONT, New York, N. Y. Filed Mar. 13, 1918. Serial No. 222,247. Term of patent 14 years.



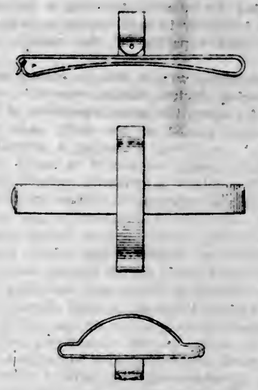
The ornamental design for a casing for a feed through switch, as shown.

52,050. FORK, SPOON, OR SIMILAR ARTICLE. BARTON P. JENKS, Providence, R. I., assignor to Wm. B. Durgin Co., Concord, N. H., a Corporation of New Hampshire. Filed Mar. 28, 1917. Serial No. 225,363. Term of patent 14 years.



The ornamental design for a fork, spoon, or similar article, as shown.

52,051. HAIR-RIBBON HOLDER. ROYAL MARCHER, New York, N. Y., assignor to Cohn & Rosenberger, Inc., New York, N. Y., a Corporation of New York. Filed Mar. 2, 1918. Serial No. 220,062. Term of patent 14 years.



The ornamental design for a hair ribbon holder, as shown.

TRADE-MARKS

PUBLISHED MAY 21, 1918.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 84,970. (CLASS 37. PAPER AND STATIONERY.) R. P. ANDREWS PAPER COMPANY, Washington, D. C. Filed Mar. 6, 1915.



Particular description of goods.—Book-Paper, Bond-Paper, Ledger-Paper, Cardboards, and Envelops.
Claims use since Jan. 1, 1910.

Ser. No. 90,983. (CLASS 10. FERTILIZERS.) THE AMERICAN AGRICULTURAL CHEMICAL CO., New York, N. Y. Filed Nov. 29, 1915.

WHITE OAK

Particular description of goods.—Fertilizers.
Claims use since about 1885.

Ser. No. 96,901. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ORIENTAL DRUG CO. INC., New York, N. Y. Filed July 27, 1916.

FORTIROL

The word "Fortirol."
Particular description of goods.—Anti-Anemic Preparations.
Claims use since May 16, 1916.

Ser. No. 102,235. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) YAKIMA VALLEY FRUIT GROWERS ASSOCIATION, North Yakima, Wash. Filed Mar. 17, 1917.

RED STRIPE



Consisting of a red shield having horizontal bars of white extending across the shield, the words "Red Stripe" being printed in red outlined in white.
Particular description of goods.—Fresh Apples.
Claims use since Aug. 25, 1916.

Ser. No. 102,236. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) YAKIMA VALLEY FRUIT GROWERS ASSOCIATION, North Yakima, Wash. Filed Mar. 17, 1917.

BLUE STRIPE



Consisting of a blue shield having horizontal bars of white extending across the shield, the words "Blue Stripe" being printed in blue outlined in white.
Particular description of goods.—Fresh Apples.
Claims use since Aug. 25, 1916.

Ser. No. 102,405. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OTIS CLAPP & SON, INC., Boston, Mass. Filed Mar. 24, 1917.

OBTUNDIA

Particular description of goods.—A Remedy for Burns, a Sedative and Germicide.
Claims use since 1905.

Ser. No. 104,313. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE GUTTA PERCHA & RUBBER MANUFACTURING COMPANY, New York, N. Y. Filed June 7, 1917.



Particular description of goods.—Mechanical Rubber Goods, as Follows: Hose of All Kinds, Belting of All Kinds, Packing of All Kinds, Tubing of All Kinds, Springs of All Kinds and Spring-Rubber, Valves and Valve-Balls, Gaskets, Diaphragms, Rings, Pulley-Sheave Filling, Play-Pipes as Used for Fire-Department Service, Dredging-Sleeves, and Vehicle-Tires.
Claims use since about 1870.

Ser. No. 105,750. (CLASS 39. CLOTHING.) R. H. MACY & Co., New York, N. Y. Filed Aug. 20, 1917.

Marchioness

Particular description of goods.—Corsets.
Claims use since 1901.

Ser. No. 106,124. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) AMERICAN SAFETY RAZOR CO., INCORPORATED, Brooklyn, N. Y. Filed Sept. 7, 1917.



The picture, comprising a lathered face with safety-razor, is fanciful.
Particular description of goods.—Shaving-Brushes.
Claims use since May 1, 1917.

Ser. No. 106,986. (CLASS 37. PAPER AND STATIONERY.) THE EVANS DOLLAR PEN COMPANY, Waterloo, Iowa. Filed Oct. 27, 1917.



The trade-mark is displayed upon the fountain-pen by the representation of a red disk on one end thereof.
Particular description of goods.—Fountain-Pens.
Claims use since on or about July 1, 1917.

Ser. No. 107,248. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SWIFT AND COMPANY, Chicago, Ill. Filed Nov. 8, 1917.



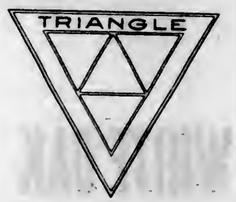
Particular description of goods.—Canned Beef.
Claims use since Feb. 1, 1917.

Ser. No. 107,282. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) MUTUAL FILM CORPORATION, Richmond, Va., and Chicago, Ill. Filed Nov. 10, 1917.



Particular description of goods.—Motion-Picture Films Distributed by Said Company.
Claims use since Jan. 1, 1913.

Ser. No. 107,354. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) FRANK E. BEHRENDT, Chicago, Ill. Filed Nov. 13, 1917.



Particular description of goods.—Talking-Machines and Needles, Records, Tone-Arms, Sound-Boxes, and Reproducers.
Claims use since Oct. 5, 1917.

Ser. No. 107,558. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) MOUNT ROYAL CORPORATION, New York, N. Y. Filed Nov. 23, 1917.



Particular description of goods.—Military Insignia—Namely, Composition-Metal Collar, Shoulder, and Cap Insignia.
Claims use since Nov. 12, 1917.

Ser. No. 107,681. (CLASS 39. CLOTHING.) EDWARD E. HEGUE, Los Angeles, Cal. Filed Nov. 30, 1917.



Particular description of goods.—Hosiery.
Claims use since July 1, 1917.

Ser. No. 107,956. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DEARBORN CHEMICAL COMPANY, Chicago, Ill. Filed Dec. 14, 1917.

NO-OX-ID
IRON+ =RUST

Particular description of goods.—Chemical Compound for Removing and Preventing Rust.
Claims use since Sept. 27, 1917.

Ser. No. 108,283. (CLASS 2. RECEPTACLES.) J. W. BUTLER PAPER CO., Chicago, Ill. Filed Jan. 4, 1918.



Particular description of goods.—Paper Bags.
Claims use since the year 1916.

Ser. No. 108,286. (CLASS 2. RECEPTACLES.) J. W. BUTLER PAPER CO., Chicago, Ill. Filed Jan. 4, 1918.



Particular description of goods.—Paper Bags.
Claims use since the year 1916.

Ser. No. 108,289. (CLASS 2. RECEPTACLES.) J. W. BUTLER PAPER CO., Chicago, Ill. Filed Jan. 4, 1918.



Particular description of goods.—Paper Bags.
Claims use since the year 1916.

Ser. No. 108,333. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) SMALLEY, KIVLAN & ONTHANK, Boston, Mass. Filed Jan. 5, 1918.

KOLD PROSSO

Particular description of goods.—Fruit-Jar Rubbers.
Claims use since Dec. 31, 1917.

Ser. No. 108,433. (CLASS 5. ADHESIVES.) PENNSYLVANIA LINSEED PRODUCTS COMPANY, Pittsburgh, Pa. Filed Jan. 12, 1918.

"CORDOL"

Particular description of goods.—A Synthetic Linseed-Oil Used for Making Cores for Castings.
Claims use since Nov. 15, 1917.

Ser. No. 108,440. (CLASS 43. THREAD AND YARN.) BERNHARD ULMANN CO., INC., New York, N. Y. Filed Jan. 12, 1918.

Pride O' The Flock

Particular description of goods.—Threads and Yarns of Wool, Worsted, Cotton, Silk, Artificial Silk, Flax, or a Combination of Two or More of These Materials.
Claims use since Jan. 5, 1918.

Ser. No. 108,451. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) FOY SIGNAL COMPANY, Chicago, Ill. Filed Jan. 14, 1918.



Particular description of goods.—Vehicle Electric-Light Signaling Devices.
Claims use since Nov. 20, 1917.

Ser. No. 108,476. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) DOMINION ASBESTOS AND RUBBER CORPORATION, New York, N. Y. Filed Jan. 15, 1918.

SOVEREIGN

The trade-mark "Sovereign."
Particular description of goods.—Rubber Hose, Rubber Belting, and Asbestos Packing.
Claims use since June 1, 1917.

Ser. No. 108,477. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) DOMINION ASBESTOS AND RUBBER CORPORATION, New York, N. Y. Filed Jan. 15, 1918.

DOMINO

Particular description of goods.—Rubber Hose, Rubber Belting, and Asbestos Packing.
Claims use since June 1, 1917.

Ser. No. 108,479. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) DOMINION ASBESTOS AND RUBBER CORPORATION, New York, N. Y. Filed Jan. 15, 1918.

DOMINION

"Dominion."
Particular description of goods.—Rubber Hose, Rubber Belting, and Asbestos Packing.
Claims use since June 1, 1917.

Ser. No. 108,573. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) W. H. JOHNSON, Pine Bluff, Ark. Filed Jan. 21, 1918.



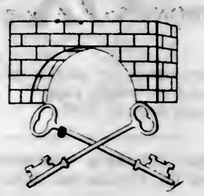
The trade-mark representing my portrait.
Particular description of goods.—A Vegetable Compound to be Taken Internally into the Human System, Being a Tonic for Torpid Liver and Nerves.
Claims use since August, 1910.

Ser. No. 108,695. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CASPER A. KNUTSON, Valley Springs, S. D. Filed Jan. 30, 1918.



Particular description of goods.—A Compound to Prevent Leaks in Automobile-Radiators.
Claims use since about Dec. 1, 1917.

Ser. No. 108,746. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) JAMES J. KEYS, New York, N. Y. Filed Feb. 1, 1918.



Particular description of goods.—Arch-Supports.
Claims use since July 1, 1915.

Ser. No. 108,764. (CLASS 2. RECEPTACLES.) WALTHAM BAG & PAPER COMPANY, Waltham, Mass. Filed Feb. 1, 1918.

BRAWNY BROWN

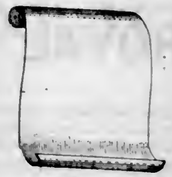
Consisting in the words "Brawny Brown," no claim being made to the word "Brown" except in association with the word "Brawny" as shown.
Particular description of goods.—Paper Bags and Paper Boxes.
Claims use since Oct. 30, 1914.

Ser. No. 108,785. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) JAMES B. BLAIR, Decatur, Ill. Filed Feb. 4, 1918.



Particular description of goods.—Electrically-Operated Stop and Direction Indicators for Vehicles.
Claims use since Jan. 8, 1918.

Ser. No. 109,036. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) OSWEGO SHADE CLOTH COMPANY, Oswego, N. Y. Filed Feb. 16, 1918. Under ten-year proviso.



The mark consists of the representation of a partly-unrolled scroll.
Particular description of goods.—Shade-Cloth.
Claims use since 1873.

Ser. No. 109,038. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) OSWEGO SHADE CLOTH COMPANY, Oswego, N. Y. Filed Feb. 16, 1918. Under ten-year proviso.

OPAQUED HOLLANDS.

The mark consists of the words "Opaqued Hollands" associated with each other.
Particular description of goods.—Shade-Cloth.
Claims use since 1873.

Ser. No. 109,050. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) AMERICAN LA FRANCE FIRE ENGINE CO., INC., Elmira, N. Y. Filed Feb. 18, 1918.

ALFCO

Particular description of goods.—Steam Fire-Engines, Chemical Fire-Engines, Water-Towers, Motor-Driven Fire Apparatus of the Gas-Engine Type, Chemical Fire Apparatus, and Hand-Extinguishers.
Claims use since July 1, 1915.

Ser. No. 109,285. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) THE UNITED TRIMMING CO., New York, N. Y. Filed Feb. 28, 1918.

JOAN OF ARC



Particular description of goods.—Dress-Fasteners.
Claims use since July 1, 1917.

250 O. G.—50

Ser. No. 109,338. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) OZONE SPRING WATER & BEVERAGE CO. INC., New Orleans, La. Filed Mar. 2, 1918.

BobWhite

Particular description of goods.—Non-Alcoholic and Maltless Soft Drinks and Syrups Therefor.
Claims use since about Nov. 1, 1917.

Ser. No. 109,416. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar. 7, 1918.



Particular description of goods.—Electric Push-Buttons and the Shells or Holders in Which They are Inserted. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Jan. 4, 1917.

Ser. No. 109,470. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) SAMUEL LEAVITT, Chicago, Ill. Filed Mar. 9, 1918.

REPUBLIC

Particular description of goods.—Gas Water-Heaters, Combination-Boilers, Gas Undertank-Heaters, and Boilers.
Claims use since Feb. 12, 1918.

Ser. No. 109,472. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) EDWARD R. MAIER, Los Angeles, Cal. Filed Mar. 9, 1918.

KREMAL

Particular description of goods.—A Non-Alcoholic Non-Intoxicant Maltless Cereal Beverage Sold as a Soft Drink.
Claims use since Jan. 15, 1918.

Ser. No. 109,523. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) KWICK-WORK FOUNTAIN BRUSH MFG. CO., Kansas City, Mo. Filed Mar. 12, 1918.

KWICK-WORK

Particular description of goods.—Shoe-Polishers—Namely, Brushes for Applying Polish.
Claims use since Feb. 25, 1918.

Ser. No. 109,570. (CLASS 27. HOROLOGICAL INSTRUMENTS.) WESTERN CLOCK CO., Peru, Ill. Filed Mar. 14, 1918.

O VIGIA

Particular description of goods.—Clocks and Watches.
Claims use since about Feb. 1, 1916.

Ser. No. 109,571. (CLASS 27. HOROLOGICAL INSTRUMENTS.) WESTERN CLOCK CO., Peru, Ill. Filed Mar. 14, 1918.

O ENCOURACADO

Particular description of goods.—Clocks and Watches.
Claims use since about Feb. 1, 1916.

Ser. No. 109,625. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE DANUBIL CO., INC., New York, N. Y. Filed Mar. 18, 1918.

DANUBEST

No claim being made to the word "Best" apart from the mark shown in said drawing.
Particular description of goods.—Asbestos Machinery Packing.
Claims use since Feb. 1, 1918.

Ser. No. 109,650. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) HARRIS BROTHERS COMPANY, Chicago, Ill. Filed Mar. 19, 1918.

PRESTO-UP

Particular description of goods.—Portable Houses, Cottages, Garages, Barns, Sheds, and Buildings.
Claims use since July 17, 1916.

Ser. No. 109,692. (CLASS 38. PRINTS AND PUBLICATIONS.) FAIRCHILD COMPANY, Chicago, Ill. Filed Mar. 21, 1918.

MEN'S WEAR

Particular description of goods.—A Semimonthly Magazine.
Claims use since May, 1896.

Ser. No. 109,714. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) GEO. R. GIBSON CO., New York, N. Y. Filed Mar. 22, 1918.

ROYAL

Particular description of goods.—Toilet-Brushes—viz., Hair-Brushes, Nail-Brushes, Tooth-Brushes, Cloth-Brushes, Hat-Brushes, Bonnet-Brushes, Infant-Brushes, Shaving-Brushes, Bath-Brushes, and Military Brushes.
Claims use since Jan. 3, 1913.

Ser. No. 109,721. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) PACIFIC NOVELTY COMPANY, New York, N. Y. Filed Mar. 22, 1918.

TWIN-PLEX

Particular description of goods.—Knitting-Pins and Knitting-Needles for Hand Use.
Claims use since December, 1917.

Ser. No. 109,725. (CLASS 15. OILS AND GREASES.) PETROLEUM REFINING COMPANY, Houston, Tex. Filed Mar. 22, 1918.

Nyftelite

Particular description of goods.—Petroleum Fuel-Oils.
Claims use since the 2d day of February, 1918.

Ser. No. 109,726. (CLASS 15. OILS AND GREASES.) PETROLEUM REFINING COMPANY, Houston, Tex. Filed Mar. 22, 1918.

Nyftol

Particular description of goods.—Lubricating-Oils.
Claims use since the 29th day of January, 1918.

Ser. No. 109,728. (CLASS 3. BAGGAGE, HORSE EQUIPMENTS, PORTFOLIOS, AND POCKET-BOOKS.) HERMAN SCHEUER & SONS, Brooklyn, N. Y. Filed Mar. 22, 1918.

Gripandall

Particular description of goods.—Traveling-Bags.
Claims use since Mar. 16, 1918.

Ser. No. 109,731. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) CORNELIUS P. TOOMEY, New York, N. Y. Filed Mar. 22, 1918.

WOOLZEE

Particular description of goods.—Clonking Material of Which the Ingredients are Approximately Ninety Per Cent. Waste and Shoddy of Wool and Ten Per Cent. Cotton.
Claims use since the 1st day of January, 1918.

Ser. No. 109,733. (CLASS 37. PAPER AND STATIONERY.) THE WYNNE PAPER CO., INC., New York, N. Y. Filed Mar. 22, 1918.

PATRICIAN

Particular description of goods.—Writing-Tablets, Writing-Papers, and Envelops.
Claims use since Oct. 5, 1915.

Ser. No. 109,768. (CLASS 12. CONSTRUCTION MATERIALS.) KAMPESKA MATERIALS COMPANY, Watertown, S. D. Filed Mar. 25, 1918.

K

Particular description of goods.—Concrete Products—Namely, Building-Blocks, Brick, Fence-Posts, Silo-Staves, Drain-Tile, and Pipe.
Claims use since Dec. 4, 1917.

Ser. No. 109,808. (CLASS 39. CLOTHING.) ARTHUR LETTS, Los Angeles, Cal. Filed Mar. 26, 1918.

Country Club

Particular description of goods.—Ladies' Shirt-Waists.
Claims use since the 1st day of July, 1917.

Ser. No. 109,809. (CLASS 39. CLOTHING.) ARTHUR LETTS, Los Angeles, Cal. Filed Mar. 26, 1918.



Particular description of goods.—Ladies' Shirt-Waists.
Claims use since the 1st day of July, 1917.

Ser. No. 109,829. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE MINOR & DIXON COMPANY, Cincinnati, Ohio. Filed Mar. 27, 1918.

Banner

Particular description of goods.—Coffee.
Claims use since the year 1887.

Ser. No. 109,852. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) RENKEN & YATES SMITH, INC., New York, N. Y. Filed Mar. 28, 1918.



Particular description of goods.—Loganberry and Grape Juice.
Claims use since Feb. 1, 1918.

Ser. No. 109,853. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) RENKEN & YATES SMITH, INC., New York, N. Y. Filed Mar. 28, 1918.

Vinova

Particular description of goods.—Grape-Juice.
Claims use since Feb. 1, 1918.

Ser. No. 109,990. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) SAMSTAG & HILDER BROS., New York, N. Y. Filed Apr. 4, 1918.

PRINCESS

Particular description of goods.—Snap-Fasteners.
Claims use since Mar. 27, 1918.

Ser. No. 109,991. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EDWIN A. STAFFLIN, Toledo, Ohio. Filed Apr. 4, 1918.

OSOLITE

Particular description of goods.—A Baking and Cooking Preparation to Take the Place of Eggs.
Claims use since Mar. 11, 1918.

Ser. No. 110,000. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) APEX COMPANY, Evansville, Ind. Filed Apr. 5, 1918.

A-SCHO

Particular description of goods.—Spark-Plugs.
Claims use since Jan. 18, 1918.

Ser. No. 110,008. (CLASS 8. SMOKERS' ARTICLES, NOT INCLUDING TOBACCO PRODUCTS.) KAUFMANN BROS. & BONDY, New York, N. Y. Filed Apr. 5, 1918.

OVER THE TOP

Particular description of goods.—Pipes.
Claims use since Mar. 1, 1918.

Ser. No. 110,060. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE UNION SALT COMPANY, Cleveland, Ohio. Filed Apr. 8, 1918.

U.S.CO.

Particular description of goods.—Salt.
Claims use since 1895.

Ser. No. 110,124. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE MONROE CHEESE CO., Monroe, N. Y. Filed Apr. 11, 1918.

A la VaTel

Particular description of goods.—Cheese.
Claims use since Mar. 30, 1918.

Ser. No. 110,145. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) MONARCH MANUFACTURING COMPANY, Council Bluffs, Iowa, and Toledo, Ohio. Filed Apr. 12, 1918.

VICTORY

Particular description of goods.—Spark-Plugs.
Claims use since Feb. 15, 1918.

Ser. No. 110,186. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) TRENTON MILLING COMPANY, Trenton, Ill. Filed Apr. 13, 1918.

HOLLYHOCK

Particular description of goods.—Wheat-Flour.
Claims use since Apr. 3, 1918.

Ser. No. 110,210. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) HOYT METAL COMPANY, St. Louis, Mo. Filed Apr. 15, 1918.

LIBERTY

Particular description of goods.—Babbitt Metal.
Claims use since Feb. 20, 1918.

Ser. No. 110,230. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AMERICAN HOMINY COMPANY, Indianapolis, Ind. Filed Apr. 16, 1918.

OVER THE TOP



The picture being fanciful.
Particular description of goods.—White Corn-Flour.
Claims use since Mar. 18, 1918.

Ser. No. 110,253. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WM. HANDLEY MANN, Roanoke, Ala. Filed Apr. 16, 1918.

AGITATOR



Particular description of goods.—Self-Rising Wheat-Flour.
Claims use since October, 1914.

Ser. No. 110,260. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) NORTHERN COCOANUT-BUTTER COMPANY, Minneapolis, Minn. Filed Apr. 16, 1918.

HOLIDAY

Particular description of goods.—Oleomargarin.
Claims use since Dec. 24, 1917.

Ser. No. 110,299. (CLASS 17. TOBACCO PRODUCTS.) CHARLES LANDAU, New York, N. Y. Filed Apr. 18, 1918.

LA BELLA OTERO

Particular description of goods.—Cigars.
Claims use since on or about Jan. 1, 1913.

Ser. No. 110,332. (CLASS 32. FURNITURE AND UPHOLSTERY.) SEALY MATTRESS COMPANY, Sugar Land, Tex. Filed Apr. 19, 1918.

Neverwake

"Neverwake."
Particular description of goods.—Mattresses.
Claims use since Feb. 1, 1918.

Ser. No. 110,333. (CLASS 32. FURNITURE AND UPHOLSTERY.) SEALY MATTRESS CO., Sugar Land, Tex. Filed Apr. 19, 1918.

Texlan

"Texlan."
Particular description of goods.—Mattresses.
Claims use since Feb. 1, 1918.

Ser. No. 110,335. (CLASS 32. FURNITURE AND UPHOLSTERY.) SEALY MATTRESS CO., Sugar Land, Tex. Filed Apr. 19, 1918.

Luxel

"Luxel."
Particular description of goods.—Mattresses.
Claims use since Feb. 1, 1918.

Ser. No. 110,336. (CLASS 32. FURNITURE AND UPHOLSTERY.) SEALY MATTRESS CO., Sugar Land, Tex. Filed Apr. 19, 1918.

Sunspun

"Sunspun."
Particular description of goods.—Mattresses.
Claims use since Feb. 1, 1918.

TRADE-MARK REGISTRATIONS GRANTED

MAY 21, 1918.

121,690. BAKING-POWDER WHICH IS A CHEMICAL PREPARATION. AMO FOOD COMPANY, Stockport, N. Y.
Filed October 29, 1917. Serial No. 107,000. PUBLISHED MARCH 5, 1918.

121,691. WINES—VIZ., CLARET, AUSTRIAN, WHITE, ITALIAN, SHERRY, PORT, MADEIRA, BURGUNDY, TOKAY, SPARKLING, MOSELLE, HOCK—CHAMPAGNES. THE BEAU-SITE COMPANY, New York, N. Y.
Filed November 12, 1917. Serial No. 107,300. PUBLISHED MARCH 5, 1918.

121,692. CERTAIN NAMED TOILET PREPARATIONS. BLOCK & KUHL COMPANY, Peoria, Ill.
Filed June 15, 1917. Serial No. 104,447. PUBLISHED FEBRUARY 19, 1918.

121,693. GINGER-ALE. THE GEO. A. BOHRER BREWING CO., La Fayette, Ind.
Filed February 14, 1918. Serial No. 108,988. PUBLISHED MARCH 12, 1918.

121,694. SPARKLING WINES. BOSCO & COMPANY, INC., New York, N. Y.
Filed December 31, 1917. Serial No. 108,225. PUBLISHED MARCH 12, 1918.

121,695. CERTAIN NAMED FURNITURE AND UPHOLSTERY. TOM B. BURNETT, Dallas, Tex.
Filed February 28, 1917. Serial No. 101,767. PUBLISHED MARCH 12, 1918.

121,696. CERTAIN NAMED FURNITURE AND UPHOLSTERY. TOM B. BURNETT, Dallas, Tex.
Filed February 28, 1917. Serial No. 101,768. PUBLISHED MARCH 12, 1918.

121,697. CERTAIN NAMED FURNITURE AND UPHOLSTERY. TOM B. BURNETT, Dallas, Tex.
Filed February 28, 1917. Serial No. 101,769. PUBLISHED MARCH 12, 1918.

121,698. CERTAIN NAMED FURNITURE AND UPHOLSTERY. TOM B. BURNETT, Dallas, Tex.
Filed February 28, 1917. Serial No. 101,770. PUBLISHED MARCH 12, 1918.

121,699. CANNED SALMON. CALIFORNIA PACKING CORPORATION, San Francisco, Cal.
Filed November 7, 1917. Serial No. 107,211. PUBLISHED MARCH 5, 1918.

121,700. CANNED FRUITS AND CANNED VEGETABLES. CALIFORNIA PACKING CORPORATION, San Francisco, Cal.
Filed July 28, 1917. Serial No. 105,337. PUBLISHED MARCH 5, 1918.

121,701. CERTAIN NAMED FOODS. JOHN F. CAMPBELL CO., Chicago, Ill.
Filed January 4, 1918. Serial No. 108,295. PUBLISHED MARCH 5, 1918.

121,702. FRESH FRUITS, INCLUDING CITRUS FRUITS, AND FRESH VEGETABLES. BERNARD CRAFTON, Malabar, Fla.
Filed September 21, 1917. Serial No. 106,360. PUBLISHED MARCH 5, 1918.

121,703. COFFEE. C. E. COE COFFEE CO., Memphis, Tenn.
Filed January 4, 1918. Serial No. 108,292. PUBLISHED MARCH 5, 1918.

121,704. CERTAIN NAMED FOODS. CRESCA COMPANY, New York, N. Y.
Filed September 19, 1917. Serial No. 106,313. PUBLISHED MARCH 5, 1918.

121,705. FERTILIZERS. SOBRINOS DE EZQUIAGA, San Juan, Porto Rico.
Filed December 27, 1917. Serial No. 108,175. PUBLISHED MARCH 5, 1918.

121,706. STOMACH, NERVE, AND LIVER TONIC. MARGARET DRUM, Baltimore, Md.
Filed January 10, 1918. Serial No. 108,400. PUBLISHED MARCH 5, 1918.

121,707. FOOD PRODUCT OF CERTAIN NAMED INGREDIENTS. FAIRCHILD BROS. & FOSTER, New York, N. Y.
Filed December 19, 1917. Serial No. 108,060. PUBLISHED MARCH 5, 1918.

121,708. DESICCATED FOOD OBTAINED FROM WHOLE WHEAT-BERRY, SOUND PRIME LEAN BEEF, PURE MALTOSE, AND MILK. FAIRCHILD BROS. & FOSTER, New York, N. Y.
Filed January 2, 1918. Serial No. 108,246. PUBLISHED MARCH 5, 1918.

121,709. MALT BEVERAGE CONTAINING LESS THAN ONE-HALF PER CENT. OF ALCOHOL. JOSEPH FALLERT BREWING CO. LTD., Brooklyn, N. Y.
Filed December 6, 1917. Serial No. 107,787. PUBLISHED MARCH 5, 1918.

121,710. DOLLS AND DOLL-DRESSES. FLEISCHAKER & BAUM, New York, N. Y.
Filed December 8, 1917. Serial No. 107,833. PUBLISHED FEBRUARY 12, 1918.

121,711. PREPARATION FOR TREATMENT OF NASAL CATARRH, HEAD-NOISES, HEAD-COLDS, FRONTAL HEADACHE, AND HAY-FEVER. ROBERT B. GILMORE, Morrow, Ohio.
Filed December 31, 1917. Serial No. 108,229. PUBLISHED MARCH 5, 1918.

121,712. NON-INTOXICATING MALT BEVERAGE. GRAND RAPIDS BREWING CO., Grand Rapids, Mich.
Filed January 24, 1918. Serial No. 108,612. PUBLISHED MARCH 12, 1918.

121,713. GROUND CHOCOLATE, CAKE CHOCOLATE, TEA, COCOA, CAYENNE PEPPER, MUSTARD, PEPPER, SAGE, AND COFFEE. GUITTARD COMPANY, San Francisco, Cal.
Filed January 8, 1918. Serial No. 108,355. PUBLISHED MARCH 5, 1918.

121,714. FACE-POWDER. HALL & RUCKEL, New York, N. Y.
Filed October 3, 1917. Serial No. 106,576. PUBLISHED JANUARY 22, 1918.

121,715. FOOD PREPARATION OF CERTAIN NAMED INGREDIENTS. JACOB HOUSE & SONS, INC., Buffalo, N. Y.
Filed January 18, 1918. Serial No. 108,525. PUBLISHED MARCH 5, 1918.

121,716. CERTAIN NAMED CHEMICALS SUITABLE FOR TANNING, ALONE OR IN COMBINATION. INNIS, SPEIDEN & CO., INC., New York, N. Y.
Filed June 1, 1917. Serial No. 104,192. PUBLISHED MARCH 5, 1918.

121,717. MAILING-TUBES, MAILING-BAGS, MAILING-BOXES, COLLAPSIBLE MAILING-BOXES, MAILING-FOLDERS, AND MAILING-WRAPPERS. INTERNATIONAL MAILING TUBE AND WRAPPER CO., Brooklyn, N. Y.
Filed July 25, 1917. Serial No. 105,259. PUBLISHED FEBRUARY 26, 1918.

121,718. WHEAT-FLOUR. JAMESON, HEVENER CO., St. Paul, Minn.
Filed December 30, 1916. Serial No. 100,262. PUBLISHED MARCH 5, 1918.

121,719. CERTAIN NAMED ELECTROMEDICAL APPARATUS. THE KNY-SCHEERER CORPORATION, New York, N. Y.
Filed June 26, 1917. Serial No. 104,698. PUBLISHED FEBRUARY 26, 1918.

121,720. CANDY. LORIENT-CARTIER, INCORPORATED, New York, N. Y.
Filed January 12, 1918. Serial No. 108,430. PUBLISHED MARCH 5, 1918.

121,721. ANILIN COLORS AND DYESTUFFS. JOHN L. MCKENNA, New York, N. Y.
Filed December 19, 1916. Serial No. 100,044. PUBLISHED MARCH 5, 1918.

121,722. POWDER FOR SORE, TIRED, ACHING FEET. GEORGE E. MORAY, New York, N. Y.
Filed December 31, 1917. Serial No. 108,233. PUBLISHED MARCH 5, 1918.

121,723. APPLE CIDER. NATIONAL FRUIT PRODUCT COMPANY, INC., Alexandria, Va.
Filed September 21, 1917. Serial No. 106,371. PUBLISHED OCTOBER 30, 1917.

121,724. COUGH-DROPS. CHARLES H. L. ORTON, Pittsburgh, Pa.
Filed May 17, 1917. Serial No. 103,903. PUBLISHED OCTOBER 2, 1917.

121,725. MEDICINAL COMPOUND FOR THE TREATMENT OF HEMORRHOIDS. ANDREA PERNICIARO, Brooklyn, N. Y.
Filed November 17, 1917. Serial No. 107,439. PUBLISHED MARCH 5, 1918.

121,726. CORNMEAL, CORN-CHOPS, WHOLE-WHEAT FLOUR, HEN FEED, CHICK FEED. PITTSBURG ELEVATOR COMPANY, Pittsburg, Kans.
Filed November 3, 1917. Serial No. 107,141. PUBLISHED JANUARY 22, 1918.

121,727. CANNED PEAS. OWEN CANNING CO., Owen, Wis.
Filed January 4, 1918. Serial No. 108,311. PUBLISHED MARCH 5, 1918.

121,728. CANNED PEAS. OWEN CANNING CO., Owen, Wis.
Filed January 4, 1918. Serial No. 108,312. PUBLISHED MARCH 5, 1918.

121,729. TRAVELING HAND-BAGS. WILLIAM H. SMITH, Newark, N. J.
Filed January 30, 1918. Serial No. 108,702. PUBLISHED MARCH 12, 1918.

121,730. NATURAL MINERAL WATER. SOCIETÀ ANONIMA FIUGGI, Rome, Italy.
Filed August 24, 1916. Serial No. 97,605. PUBLISHED MARCH 12, 1918.

121,731. POULTRY FEEDS. SOUTHERN FEED COMPANY, INC., Newport News, Va.
Filed October 30, 1917. Serial No. 107,034. PUBLISHED MARCH 5, 1918.

121,732. STOCK FEEDS. SOUTHERN FEED COMPANY, INC., Newport News, Va.
Filed October 30, 1917. Serial No. 107,033. PUBLISHED MARCH 5, 1918.

121,733. BAKING COMPOUND USED AS SHORTENING HAVING AS ITS BASE PEANUT-OIL AND COCOA-NUT-OIL. SUPERIOR PRODUCTS COMPANY, St. Louis, Mo.
Filed November 10, 1917. Serial No. 107,293. PUBLISHED MARCH 5, 1918.

121,734. WHEAT-FLOUR. SPERRY FLOUR COMPANY, San Francisco, Cal.
Filed October 25, 1917. Serial No. 106,963. PUBLISHED MARCH 5, 1918.

121,735. CERTAIN NAMED FOODS. SUSSMAN WORMSER & CO., San Francisco, Cal.
Filed January 4, 1918. Serial No. 108,316. PUBLISHED MARCH 5, 1918.

121,736. CERTAIN NAMED CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. CHARLEY ISRAEL TRYON, Little Rock, Ark.
Filed August 31, 1917. Serial No. 106,003. PUBLISHED MARCH 5, 1918.

121,737. CHEMICAL PREPARATIONS FOR EXTERMINATING VERMIN AND INSECTS FROM TREES, PLANTS, GRASS, FLOWERS, VEGETABLES, AND FRUITS. UNITED LIQUID SULPHUR CO., New York, N. Y.
Filed January 11, 1918. Serial No. 108,422. PUBLISHED MARCH 5, 1918.

121,738. GASOLENE REFINED FROM CRUDE OIL OR PETROLEUM. THE WESTERN REFINING CO., Wichita, Kans.
Filed July 9, 1917. Serial No. 104,951. PUBLISHED FEBRUARY 19, 1918.

121,739. PAPER BAGS AND PAPER BOXES. WALTHAM BAG & PAPER COMPANY, Waltham, Mass.
Filed December 26, 1917. Serial No. 108,168. PUBLISHED MARCH 5, 1918.

121,740. CANNED TOMATOES, CANNED CORN, CANNED PEAS, AND CANNED KRAUT. WITWER TATE GROCERY CO., Centralia, Ill.
Filed February 3, 1917. Serial No. 101,162. PUBLISHED MARCH 5, 1918.

LABELS

REGISTERED MAY 21, 1918.

20,612.—*Title:* "AUNT MARTHA'S PLUM PUDDING." (For Plum Pudding.) GEORGE H. ALLEN, Clinton, N. Y. Filed March 6, 1918.

20,613.—*Title:* "AUNT MARTHA'S HULLED CORN." (For Hulled Corn.) GEORGE H. ALLEN, Clinton, N. Y. Filed March 6, 1918.

20,614.—*Title:* "KUM-A-PART." (For Cuff-Buttons.) THE BAER AND WILDE CO., Attleboro, Mass. Filed March 8, 1918.

20,615.—*Title:* "NIAGARA LUMINATOR." (For Dry Batteries.) ANDREW HALL BERRY, Montclair, N. J., and New York, N. Y. Filed February 9, 1917.

20,616.—*Title:* "NIAGARA FIRE POT." (For Dry Batteries.) ANDREW HALL BERRY, Montclair, N. J., and New York, N. Y. Filed February 9, 1917.

20,617.—*Title:* "POPPY BRAND." (For Melons.) CRUTCHFIELD & WOOLFOLK, Pittsburgh, Pa. Filed March 26, 1918.

20,618.—*Title:* "WHITE MALTESE CROSS." (For Apples.) DENNIS, KIMBALL & POPE, INC., New York, N. Y. Filed September 13, 1916.

20,619.—*Title:* "BLUE MALTESE CROSS." (For Apples.) DENNIS, KIMBALL & POPE, New York, N. Y. Filed September 13, 1916.

20,620.—*Title:* "W. H. DYER'S OWN PACK." (For String-Beans.) W. H. DYER COMPANY, Evansville, Ind. Filed October 26, 1917.

20,621.—*Title:* "EGGOE." (For Egg Substitute.) THE EGGOE COMPANY, Marshalltown, Iowa. Filed February 28, 1918.

20,622.—*Title:* "FRAZIER'S GREEN CHECKERED BRAND." (For Beans with Pork.) THE FRAZIER PACKING CO., Elwood, Ind. Filed February 16, 1918.

20,623.—*Title:* "FOR TIRED WHEELS." (For Containers of Axle-Grease.) INDIAN REFINING COMPANY, New York, N. Y. Filed February 16, 1918.

20,624.—*Title:* "SNOW WHITE." (For Water-Color Fluid.) JOHN W. JOHNSTON, Rochester, N. Y. Filed October 18, 1917.

20,625.—*Title:* "MARY'S PURE RIBBON CANE SYRUP." (For Table-Syrups.) MARY AND TUMA, Washington and New Orleans, La. Filed March 16, 1918.

20,626.—*Title:* "LUSTER AUTO KLEAN." (For Auto-Polish.) W. C. NILES, Oklahoma, Okla. Filed January 30, 1918.

20,627.—*Title:* "WINIFRED CLARK TWIN-PLEX KNITTING NEEDLE." (For Knitting-Needles.) PACIFIC NOVELTY COMPANY, New York, N. Y. Filed March 14, 1918.

20,628.—*Title:* "STEELE'S PREMIUM." (For Canned Sardines.) PREMIER PACKING CO., San Diego, Cal. Filed February 12, 1918.

20,629.—*Title:* "PYROTOL." (For Dental Preparations.) PYROTOL CHEMICAL COMPANY, Beaumont, Tex. Filed March 23, 1918.

20,630.—*Title:* "LA NELDA." (For Cigars.) LAWRENCE RICHARDS, Hancock, Mich. Filed November 5, 1917.

20,631.—*Title:* "CARITAS." (For Cigars.) OSCAR SACHSEL, Chicago, Ill. Filed December 29, 1917.

20,632.—*Title:* "TRENCH." (For Shirts.) SALANT & SALANT, New York, N. Y. Filed March 14, 1918.

20,633.—*Title:* "VALIANTINE." (For Liniment.) VALIANT SALES COMPANY, Kansas City, Kans. Filed March 11, 1918.

PRINTS

REGISTERED MAY 21, 1918.

4,889.—*Title:* "COOPER'S ORIGINAL SPRING NEEDLE UNDERWEAR." (For Underwear.) BLACK CAT TEXTILES COMPANY, Kenosha, Wis. Filed September 10, 1917.

4,890.—*Title:* "THE PIPE SMOKERS DELIGHT." (For Compound for Use by Smokers.) LOUIS W. KRAMER, Denver, Colo. Filed March 30, 1918.

4,891.—*Title:* "LIBERTY BREAD." (For Bread.) ROBERTSON PAPER COMPANY, Bellows Falls, Vt. Filed February 2, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

MACCONNELL *v.* WOOD.

Decided March 4, 1918.

INTERFERENCE—PRIORITY—STEREOTYPE - PLATE-FINISHING MACHINE.

Where W. had completed working drawings of the device of the issue and had filed his application prior to the dates on which M. completed his machine or filed his application, *Held* that priority was properly awarded to W.

Mr. C. J. Sawyer for the appellant.

Mr. L. W. Southgate for the appellee.

VAN ORSDEL, *J.*:

This is an appeal in an interference proceeding, the subject-matter of which relates to stereotype printing-plates. The issue is defined in the following counts:

1. In a stereotype plate finishing machine, the combination of means for first finishing the plate, means for thereafter applying a cooling fluid to the plate, and a support arranged so that the plate will be directed from the finishing means to a position where it may be acted upon by the cooling means and the truth of the finished plate preserved.

2. In a stereotype plate finishing machine, the combination of a runway or guide along which semicylindrical plates can be guided on their straight edges, and a finishing mechanism, and a cooling mechanism arranged so that the plates will be guided by the straight edges through the finishing mechanism on and through the cooling mechanism.

3. In a stercotype plate finishing mechanism the combination with a finishing device having means for freely supporting a plate therein after it is finished, and a series of rollers arranged in alinement with said supporting means for receiving plates therefrom, of a cooling arch located over said rollers and adapted to cool the plate as it passes along the same.

The Examiner of Interferences awarded priority to Wood as to count 3 and to MacConnell as to counts 1 and 2. On appeal the Board of Examiners-in-Chief reversed the Examiner of Interferences as to counts 1 and 2, awarding priority as to all counts to Wood. On appeal the Commissioner of Patents affirmed the Board of Examiners-in-Chief, and from this decision the case was appealed to this court.

The invention is described in the opinion of the First Assistant Commissioner, as follows:

> The invention relates particularly to the finishing of stereotype plates and especially to the means for cooling these plates in the machine in which they are finished. Prior to the present invention it was customary to cool the plates by removing them from the finishing mechanism and dipping them in a water bath. This was open to several objections and in the devices of the parties the plates are supported between the finishing mechanism and the cooling means, so that as the plates are conveyed from the finisher to the cooler they are free from uneven strains and are not distorted from the form imparted thereto by the finisher.

The interference turns upon an issue of fact. Voluminous testimony was given, which it would serve no good purpose to here review. We will content ourselves with a statement of conclusions. It is unnecessary to pursue Wood's case further than was done by the tribunals below. He was accorded by each January 15, 1906, as a date of conception of the invention. This conservative finding is not even questioned by appellant. We may, therefore, let Wood's case rest with this date, since it cannot be questioned that his working drawings of that date, from which his second machine was built, disclosed a complete conception of the invention of the issue. Whatever conception Wood may have shown in his first machine or by other evidence, we need not consider.

We now come to MacConnell's case. Does he overcome Wood's date of January 15, 1906? It may be inferred from the testimony that MacConnell had a nebulous idea of some sort of a cooling device, but his conduct forbids the conclusion that he had any formulated plan. In the winter of 1905–1906 he built a machine for the *Philadelphia Press*, a photograph of which is in evidence. While the machine shows a conveyer by which the plates were carried from the finishing mechanism to a point of delivery, it not only possessed no cooling device, but the plates were manually taken from the conveyer and cooled by dipping them in a tank of water, a method concededly old in the art.

On December 7, 1904, MacConnell applied for a patent for a machine which disclosed a device substantially the same as the *Philadelphia Press* machine. True, he claims that when his application was made he disclosed the present issue to his attorneys, but the attorneys were not put upon the stand to corroborate this statement, and the application itself is strong evidence of what was in his mind on that date. But it is contended that it was his intention to attach the cooling device to the *Philadelphia Press* machine after its installation. Ericsson, an employee of the *Philadelphia Press*, testified that MacConnell, in January, 1905, gave him—

> a sketch that provided a spray, that is, the plate was to be sprayed as it turned over the conveyer, in a half circular arrangement he had drawn, a half cylinder, showing a water trough at the bottom to take up the surplus water and a waste pipe at the extreme end to take the water away. That sketch he gave me and to the best of my recollection I took it down to Mr. Townsend to show him what we were going to get.

Townsend was the manager of the *Philadelphia Press*, and later had the machine discarded as unsatisfactory. He would certainly have known if an agreement existed at the time of its installation to subsequently attach a cooling device, or if Ericsson showed him a sketch; but, as in the case of the attorneys, he was not put upon the stand. The unexplained failure to produce these very material witnesses irresistibly leads to the inference that their testimony would have been unfavorable.

Having this evidence within his control, and not producing it, it must be presumed that it was unfavorable to his case. (*Huff* v. *Gulick*, 38 App. D. C., 334; 179 O. G., 579.)

A witness Ruwell, who constructed the *Philadelphia Press* machine, testifying ten years after the event, makes some indefinite statements of MacConnell's idea to attach a device for cooling the plates by means of a spray while passing over the conveyer, but this evidence, when given the full credit to which it is entitled, amounts only to an indefinite idea in the mind of MacConnell. The fact remains that the *Philadelphia Press* machine was delivered on January 26, 1906, eleven days after Wood's date, without the device of the issue, and the finished machine is strong evidence of what was in MacConnell's mind on and prior to that date.

Wood constructively reduced the invention to practice by filing his application for a patent April 6, 1906. MacConnell actually reduced to practice by the completion of a machine in December, 1906, or early in January, 1907. MacConnell was the junior party, and has failed, we think, to overcome Wood's case.

The decision of the Commissioner of Patents is affirmed, and the clerk is directed to certify these proceedings as by law required.

Affirmed.

ADJUDICATED PATENTS.

(U. S. C. C. A. Ill.) The Webster patent, No. 640,846, for a pencil-sharpener containing cutter with spiral blades, *Held* valid and infringed. *Automatic Pencil Sharpener Co.* v. *Stewart Mfg. Co.*, 249 Fed. Rep., 52.

(U. S. D. C. N. Y.) The Fessenden reissue patent, No. 12,168, (original No. 706,737,) for improvements in transmission of energy by electromagnetic waves, claims 2, 3, 10, 15, 16, and 17, *Held* valid and infringed; claims 19, 20, and 21 *Held* void as too broad. *Kintner* v. *Atlantic Communication Co.*, 249 Fed. Rep., 73.

(U. S. D. C. Pa.) The Latham patent, No. 707,934, for a projecting-kinetoscope, claim 7 *Held* void for lack of invention. *Motion Picture Patents Co.* v. *Calehuff Supply Co.*, 248 Fed. Rep., 724.

(U. S. D. C. Pa.) The Berry patent, No. 726,792, for a feed-water regulator, *Held* valid and infringed. *Berry* v. *Fuel Economy Engineering Co.*, 248 Fed. Rep., 736.

(U. S. D. C. Pa.) The Edmands and Hoyt patent, No. 755,105, for an improved electrical surgical baker, construed and *Held* not anticipated. *Edmands* v. *Perlman*, 248 Fed. Rep., 731.

(U. S. C. C. A. Cal.) The Thomas Strain patent, No. 775,015, for a new and useful fruit-grader which evenly distributes fruit in bins, *Held* not infringed. *Stebler* v. *Porterville Citrus Ass'n*, 248 Fed. Rep., 927.

(U. S. C. C. A. Ill.) The Webster patent, No. 810,104, for a pencil-sharpener provided with bearings at opposite ends of frame, *Held* not infringed. *Automatic Pencil Sharpener Co.* v. *Stewart Mfg. Co.*, 249 Fed. Rep., 52.

(U. S. C. C. A. Ill.) The Baines patent, No. 839,806, for a pencil-sharpener having an adjustable stop in frame, *Held* not infringed. *Automatic Pencil Sharpener Co.* v. *Stewart Mfg. Co.*, 249 Fed. Rep., 52.

(U. S. C. C. A. Ohio.) The Kuch patent, No. 883,725, for method of operating vapor-lamps, claim 1 *Held* void for lack of invention. *General Electric Co.* v. *Cooper Hewitt Electric Co.*, 249 Fed. Rep., 69.

(U. S. D. C. Pa.) The Davey patent, No. 890,968, for a process of treating wounds in trees, *Held* valid and infringed. *Davey Tree Expert Co.* v. *Van Billiard*, 248 Fed. Rep., 718.

(U. S. C. C. A. Ohio.) The Clemons patent, No. 924,966, for a road-grading machine, *Held* valid, but not infringed. *F. B. Zieg Mfg. Co.* v. *Russell Grader Mfg. Co.*, 249 Fed. Rep., 56.

(U. S. C. C. A. Cal.) The Stebler patent, No. 943,799, for a fruit-distributing apparatus, *Held* not infringed. *Porterville Citrus Ass'n* v. *Stebler*, 248 Fed. Rep., 916.

(U. S. D. C. Pa.) The Davey patent, No. 958,478, for a process of reinforcing trees having cavities in the trunk, claim 1 *Held* invalid and other claims valid and infringed. *Davey Tree Expert Co.* v. *Van Billiard*, 248 Fed. Rep., 718.

(U. S. C. C. A. N. J.) The Turner patents, Nos. 985,119 and 1,003,384, for a steel-skeleton concrete construction, *Held* void for lack of invention. *Turner* v. *Lauter Piano Co.*, 248 Fed. Rep., 930.

(U. S. C. C. A. Mich.) The Vanmanen patent, No. 988,677, for a warehouse-truck, *Held* not infringed. *Vanmanen* v. *Leonard*, 248 Fed. Rep., 939.

(U. S. C. C. A. N. Y.) The Mayer patent, No. 1,043,021, for a machine for coating paper, mainly adapted for coating paper with carbon, etc., *Held* invalid, for prior public use. *Mayer* v. *A. & H. G. Mutschler*, 248 Fed. Rep., 911.

(U. S. C. C. A. Pa.) The Speer and Forster patent, No. 1,071,364, for an alloy of iron, called "adamite," claim 1 *Held* not anticipated and valid, but not infringed. *Pittsburgh Iron & Steel Foundries Co.* v. *Seaman-Sleeth Co.*, 248 Fed. Rep., 705.

(U. S. C. C. A. Cal.) The Soule patent, No. 1,072,669, for a window, *Held* valid and infringed. *Simplex Window Co.* v. *Hauser Reversible Window Co.*, 248 Fed. Rep., 919.

(U. S. C. C. A. Ohio.) The Kuch patent, No. 1,090,992, for a mercury-vapor lamp, *Held* valid and infringed. *General Electric Co.* v. *Cooper Hewitt Electric Co.*, 249 Fed. Rep., 61.

(U. S. C. C. A. Pa.) The Wendell patent, No. 1,137,438, for an ironing-machine, *Held* void for prior public use. *Wendell* v. *American Laundry Machinery Co.*, 248 Fed. Rep., 698.

(U. S. D. C. Pa.) The Blackburn patent, No. 1,144,318, claim 1, for a cable-hanger, *Held* valid and infringed. *Blackburn* v. *Bonita Mfg. Co.*, 248 Fed. Rep., 743.

(U. S. C. C. A. Ill.) The Rousso patent, No. 1,157,046, claims 1 to 6, for improvements in towel-cabinets designed for supplying in public places individual towels for successive users, *Held* valid and infringed as to claims 1, 2, 3, and 5. *Chicago Towel Co.* v. *Rousso*, 248 Fed. Rep., 693.

Enemy Owned or Controlled Patents.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 28, 1918.

I am requested to publish the following.

J. T. NEWTON,
Commissioner.

It is estimated by competent authorities that there are over one thousand enemy owned or controlled patents used by manufacturers in the United States that are earning royalties or fees of some kind for enemies. Less than one-fifth of them have been reported to the Alien-Property Custodian. This means that 800 persons, inventors, manufacturers, holders, or licensees are liable to $10,000 fine or ten years' imprisonment, or both.

If the persons using these patents will not report, it becomes the duty of loyal and patriotic citizens to do so, or at least to send in information on which the Government may proceed.

The Trading with the Enemy Act provides that any person in the United States who holds or has custody of any property of, for, or on behalf of an enemy or ally of an enemy or who is indebted to an enemy or ally of an enemy, or any person whom he may reasonably believe to be such, shall make report of this fact to the Alien-Property Custodian.

Adverse Decisions in Interference.

PATENT NO. 1,152,202.

On May 7, 1918, a decision was rendered that Walter P. Murphy was not the first inventor of the subject-matter covered by claim 10 of his Patent No. 1,152,202, subject, "Car end braces," and no appeal having been taken within the time allowed such decision has become final.

PATENT NO. 1,249,159.

On May 18, 1918, a decision was rendered that Talbot G. Martin was not the first inventor of the subject-matter covered by claim 51 of his Patent No. 1,249,159, subject, "Two-wire automatic telephone system," and no appeal having been taken within the time allowed such decision has become final.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 1, 1918.

Hercules Cement Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Hercules Cement Corporation, of Stockertown, Pa., for registration of a trade-mark and trade-mark registered May 5, 1896, No. 28,215, to Hercules Cement Company, of Catasauqua and Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Hercules Cement Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Hercules Cement Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 1, 1918.

The Universal Pasting Machine Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Albert G. Prior, of 136 Liberty street, New York, N. Y., for registration of a trade-mark and trade-mark registered December 20, 1904, No. 43,908, to The Universal Pasting Machine Company, of Jersey City, N. J., and a notice of such declaration sent by registered mail to The Universal Pasting Machine Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless The Universal Pasting Machine Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 31, 1918.

Lyman F. Palmer, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frank B. McCrary, Knoxville, Tenn., for registration of a trade-mark and trade-mark registered January 22, 1889, No. 16,212, to Lyman F. Palmer, 1029 Kansas avenue, Topeka, Kans., and a notice of such declaration sent by registered mail to said Lyman F. Palmer at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Lyman F. Palmer, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 16, 1918.

Greek American Confectionery Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Jacobs Candy Company, Ltd., 827–835 Carondelet street, New Orleans, La., for registration of a trade-mark and trade-mark registered September 20, 1910, No. 79,572, to the Greek American Confectionery Co., New York, N. Y., and a notice of such declaration sent by registered mail to said Greek American Confectionery Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Greek American Confectionery Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order

the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 8, 1918.

The Farmers' Preserving Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Miner, Read & Tullock, 91–115 State street, New Haven, Conn., for registration of a trade-mark and trade-mark registered August 10, 1909, No. 74,803, to The Farmers' Preserving Company, of Rising Sun, Del., and a notice of such declaration sent by registered mail to the said The Farmers' Preserving Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said The Farmers' Preserving Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

[Vol. 250. No. 3.]

THE OFFICIAL GAZETTE OF THE United States Patent Office.

Vol. 250—No. 4. TUESDAY, MAY 28, 1918. Price—$5 per year.

[PUBLISHED JUNE 28, 1918.]

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Issue of May 28, 1918.

Patents	729	No. 1,267,350 to No.	1,268,078,	inclusive.
Designs	16	No. 52,052 to No.	52,067,	inclusive.
Trade-Marks	102	No. 121,741 to No.	121,842,	inclusive.
Labels	23	No. 20,634 to No.	20,656,	inclusive.
Prints	8	No. 4,892 to No.	4,899,	inclusive.
Reissues	1	No. 14,477.		
Total	879			

Attorneys.

(ORDER No. 2,396.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 11, 1918.

Acting under the provisions of section 487 of the Revised Statutes and with the approval of the Secretary of the Interior, Mr. W. Hayden Evans, of Scranton, Pa., is hereby disbarred from practice before this Office.

J. T. NEWTON,
Commissioner.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 31, 1918.

Lyman F. Palmer, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frank B. McCrary, Knoxville, Tenn., for registration of a trade-mark and trade-mark registered January 22, 1889, No. 16,212, to Lyman F. Palmer, 1029 Kansas avenue, Topeka, Kans., and a notice of such declaration sent by registered mail to said Lyman F. Palmer at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Lyman F. Palmer, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

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R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 1, 1918.

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R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 1, 1918.

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An interference having been declared by this Office between the application of Hercules Cement Corporation, of Stockertown, Pa., for registration of a trade-mark and trade-mark registered May 5, 1896, No. 28,215, to Hercules Cement Company, of Catasauqua and Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Hercules Cement Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Hercules Cement Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 16, 1918.

Greek American Confectionery Co., its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Jacobs Candy Company, Ltd., 827–835 Carondelet street, New Orleans, La., for registration of a trade-mark and trade-mark registered September 20, 1910, No. 79,572, to the Greek American Confectionery Co., New York, N. Y., and a notice of such declaration sent by registered mail to said Greek American Confectionery Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Greek American Confectionery Co., its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

APPLICATIONS UNDER EXAMINATION.

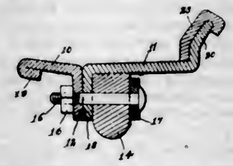
Condition at Close of Business May 24, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 23	Apr. 27	167
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 5	Mar. 16	267
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 20	Apr. 12	173
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Apr. 6	May 2	186
167	5. Bookbinding; Harvesters; Jewelry; Music	Feb. 28	Mar. 29	228
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Nov. 21	Feb. 7	382
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Jan. 21	Mar. 8	369
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 6	Apr. 17	311
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Nov. 21	Apr. 8	423
235	10. Carriages and Wagons; Motor Vehicles	Jan. 31	Apr. 11	614
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Feb. 27	May 1	227
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Feb. 7	Mar. 21	655
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Jan. 19	Apr. 5	540
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 8	Apr. 11	164
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	Apr. 26	Apr. 26	229
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Jan. 8	Feb. 21	533
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Mar. 25	Apr. 22	115
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 23	Mar. 16	364
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Jan. 21	Mar. 2	409
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	Apr. 13	May 1	189
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Jan. 28	Apr. 2	222
249	22. Aeronautics; Firearms; Ordnance	Mar. 1	Apr. 18	273
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Feb. 26	Apr. 18	306
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	Apr. 18	Apr. 8	210
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	Apr. 15	Apr. 11	161
105	26. Electricity, Generation; Motive Power	Nov. 30	Mar. 30	510
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Mar. 7	Apr. 4	296
225	28. Internal-Combustion Engines	Dec. 8	Mar. 5	440
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 8	Mar. 1	429
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Feb. 15	Apr. 27	388
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 6	Mar. 4	220
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Dec. 1	Apr. 20	658
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 9	Apr. 15	206
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	May 2	May 4	78
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Jan. 5	Jan. 26	550
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Mar. 11	Apr. 18	507
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Dec. 13	Jan. 10	685
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	May 6	May 8	122
220	39. Water Distribution; Multiple Valves	Jan. 22	Mar. 11	370
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 4	Mar. 16	484
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Feb. 23	Mar. 8	328
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling.	Dec. 15	Jan. 14	659
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Feb. 26	Apr. 16	236
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Mar. 27	Apr. 4	189
379	45. Clutches; Lubrication; Motors; Railway Brakes	Feb. 18	Feb. 16	367
	Oldest new case, Nov. 21; oldest amended, Feb. 7.			
	Total number of applications awaiting action			15,439
163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	Apr. 17	May 8	669
	Designs	Mar. 15	Mar. 20	482
	Labels and Prints	May 6	May 8	117

PATENTS

GRANTED MAY 28, 1918.

1,267,350. CAR-WHEEL. WARRINGTON E. ADAMS, Chicago, Ill. Filed Jan. 11, 1918. Serial No. 211,369. (Cl. 105—158.)



1. A car wheel comprising a rim divided on a circumferential line positioned intermediate the lateral edges thereof; inwardly projecting flanges provided on the divided portions of the rim at the meeting edges thereof; and a center part connected with said flanges.

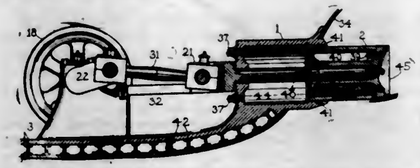
2. A car wheel comprising a rim divided on a circumferential line positioned intermediate the lateral edges thereof; inwardly projecting flanges provided on the divided portions of the rim at the meeting edges thereof, the inner edges of said flanges being united; and a center part connected with said flanges.

3. A car wheel comprising a rim formed of two annular sections detachably connected together at their inner sides.

4. A car wheel comprising a rim formed of two annular independent sections; a wheel center part; and means arranged at the inner side of the rim for detachably connecting said rim sections and center part.

[Claims 5 to 11 not printed in the Gazette.]

1,267,351. PROPULSION OF VESSELS. JOSEF ANDERS BACKLUND, New York, N. Y. Filed Nov. 5, 1917. Serial No. 200,331. (Cl. 115—32.)



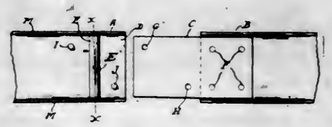
1. A boat provided with a cylinder exposing an open end to the water, a piston mounted in said open end adapted to reciprocate outwardly into the water and into said cylinder, and a protective sheath secured to the exposed extremity of said piston surrounding the latter and extending to the open end of said cylinder, said sheath attenuating and contracting in accord with said reciprocation.

3. A boat provided with a cylinder having an inner closed end and exposing an open end to the water, a piston adapted to reciprocate in said cylinder and project from the open end into the water, a shaft secured to said piston passing through the closed end of said cylinder, and air intake valves situated in said closed end and communicating with the interior of said cylinder.

[Claims 2 and 4 not printed in the Gazette.]

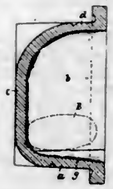
1,267,352. JOINT FOR MEETING MEMBERS. ROBERT D. BAKER, Detroit, Mich. Filed May 22, 1914. Serial No. 840,191. (Cl. 189—36.)

1. The combination with alined channel members, of an eccentric journaled in the flanges of one of said channel members and spaced from the face thereof, a plate secured to the face of the other of said members having a portion projecting therebeyond and adapted to be inserted between said eccentric and the face of the first-mentioned member, there being interlocking projections upon the last-mentioned face and the projection of the plate, for the purpose described.



2. The combination with two elongated meeting members having alined longitudinal flanges, of a plate connecting said members, disposed between the flanges, said plate having a rigid connection with one of the members, and an eccentric having its ends respectively journaled in the flanges of the other member, for clamping said plate against the same.

1,267,353. WALL-RECEPTACLE. STEPHEN D. BAKER, New York, N. Y. Filed July 7, 1917. Serial No. 179,240. (Cl. 45—28.)



1. As an article of manufacture, a one-piece holder for soap or the like article formed with a draining surface sloping downwardly and forwardly clear to the front of the holder, an upstanding back abutment for the article and a plurality of limited-contact article-supporting projections upstanding from said surface and having their tops sloping rearwardly and downwardly.

[Claim 2 not printed in the Gazette.]

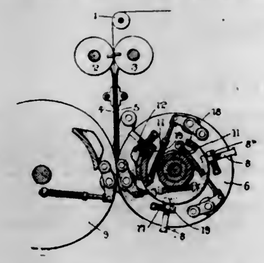
1,267,354. SHEET-COLLECTING MECHANISM. HOWARD M. BARBER, Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 3, 1917. Serial No. 194,517. (Cl. 270—60.)

1. Sheet collecting mechanism including a collecting cylinder having end and side grippers coöperating to collect the sheets thereon.

4. Sheet collecting mechanism including a collecting cylinder having end and side grippers, the side grippers serving to close on and hold the collected sheets as the end grippers are opened to receive additional sheets, and also as the end grippers are opened to transfer the collection.

8. Web sheet cutters, a folding cylinder, and a collecting cylinder having end grippers arranged to collect the sheets fed from the cutters and transfer the collection to the folding cylinder and side grippers arranged to

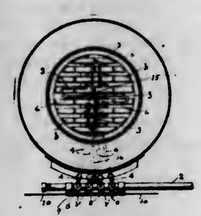
hold the sheets on the collecting cylinder as the end grippers are opened to collect and also as the end grippers



are opened to transfer the collection to the folding cylinder.

[Claims 2, 3, 5 to 7, and 9 to 16 not printed in the Gazette.]

1,267,355. GAS-BURNER. WILLIAM JOHN BARBER, Cleveland, Ohio. Filed Sept. 12, 1917. Serial No. 190,882. (Cl. 158—105.)

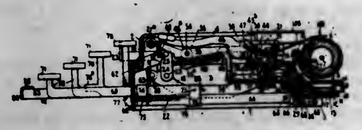


1. A gas burner unit consisting of a relatively small pipe bent back upon itself near its middle with a U bend and the sides thereof provided with opposite gas jets inclined inwardly and upwardly at an angle of approximately forty-five degrees to a vertical plane and one end of said unit open to make pipe connections therewith.

2. A gas burner unit consisting of a single piece of pipe bent substantially U shape and having parallel sides provided with oppositely disposed gas jets in their inner sides said jets spaced apart to approximately one-fourth the length of the unit.

3. A hot air furnace and a plurality of substantially U-shaped burner units disposed about a common center therein having opposite inwardly inclined gas jets along the inner and upper side portions of the sides of each unit and a pilot lighting burner located in said center to ignite said units.

1,267,356. TYPE-WRITING MACHINE. JOHN H. BARR, New York, N. Y., assignor to Remington Typewriter Company, Ilion, N. Y., a Corporation of New York. Filed Aug. 12, 1915. Serial No. 45,103. (Cl. 197—26.)



3. The combination of printing instrumentalities, and two-part key actuated devices therefor, one member of each key actuated device carrying a key and being movable on its companion member to enable the keys to be moved from their operative positions in the keyboard into a contracted relationship, said key carrying members varying in length according to operative positions of their keys in the keyboard of the machine.

15. A series of two-part key levers, each lever comprising one member within the frame of the machine and a second key carrying member carried by the first mentioned member and movable thereon from its position in the keyboard into the frame of the machine to an extent which will bring the associated key adjacent to the frame; and means which by a single operation is effective to move all of said key carrying members to bring the keys thereon adjacent to the frame of the machine.

16. The combination of printing instrumentalities, two-part key actuated devices therefor, one member of each key actuated device carrying a key and being movable on its companion member to enable the keys to be moved from their operative positions in the keyboard into a contracted relationship, said key carrying members varying in length according to operative positions of their keys in the keyboard of the machine, a cross-bar which co-acts with said key carrying members to take up successively those members having keys for different banks and shift them, and means by which said cross-bar may be shifted at will.

38. The combination of a series of segmentally arranged type bars, a series of substantially horizontally disposed segmentally arranged sub-levers each of which has a plane of movement substantially coincident with the plane of movement of and directly engages the associated type bar, a second series of parallel sub-levers, links directly connecting the sub-levers of the two series, and extending at substantially right angles to said sub-levers, a series of key levers, and links connecting said key levers and the second series of sub-levers.

75. In a typewriting machine, the combination of printing keys, a space key, means for mounting said keys for direct relative fore and aft movement in order to bring the space key into compact relation with the printing keys, and means for mounting the space key for pivotal operating movement to control the escapement.

[Claims 1, 2, 4 to 14, 17 to 37, and 39 to 74 not printed in the Gazette.]

1,267,357. CUFF-BUTTON. CLIFFORD V. BATES, Chicago, Ill., assignor to Bassett Jewelry Co., Providence, R. I., a Corporation of Rhode Island. Filed Sept. 27, 1917. Serial No. 193,412. (Cl. 24—102.)



1. A cuff button comprising two body members, lugs extending from said body members substantially at right angles therewith and at the edge thereof, the ends of said lugs being permanently pivoted together to permit the body members to be swung to assume various relative angles.

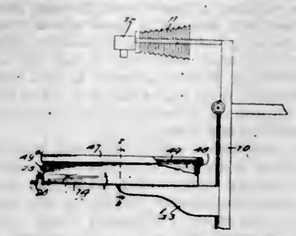
[Claims 2 and 3 not printed in the Gazette.]

1,267,358. COPY-HOLDER. GEORGE C. BEIDLER, Rochester, N. Y. Filed June 11, 1914. Serial No. 844,515. (Cl. 45—86.)

1. In a copy holder, copy holding tables, a book hinge pressing head, the said tables and head coacting to support a book in open position, and means for urging the coacting book supporting parts to predetermined planes.

3. In a copy holder, copy holding tables and a pressing head coacting as supports for a book in open position, means for urging the head against the hinge of the book, means for urging the tables to move the book outwardly, means for oscillatingly supporting the tables, and a member for limiting the movement of the urged portions of the book.

4. In a copy holder, copy holding tables and a pressing head coacting as supports for a book in open position, means for oscillatingly supporting the head, means for moving the tables outwardly and a member for limiting the outward movement of the book.

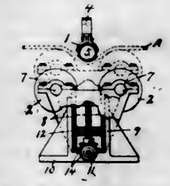


6. In a copy holder, a base, a member slidable on the base, means for moving the said member on the base, a frame, means on the sliding member for moving the frame outwardly with relation to the base, copy supporting members carried by the frame comprising tables and a pressing head coacting to support a copy, and means for yieldingly holding the said copy supporting members with relation to the frame.

8. In a copy holder, a copy holding table and a pressing head coacting to support a book in open position, means for pressing the head against a hinge of a book, means for pressing the table outwardly, and means for limiting the movement of the pressed members.

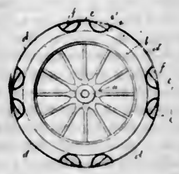
[Claims 2, 5, and 7 not printed in the Gazette.]

1,267,359. FELT-CLEANER FOR PAPER-MAKING MACHINES. EDWARD D. BENNETT, Pulaski, N. Y. Filed Nov. 6, 1916. Serial No. 129,761. (Cl. 92—50.)



A felt-cleaning device for paper-making machines comprising a pipe having an open side adjacent the felt, and means for creating a fluid current in the pipe and through the open side thereof and adjacent portion of the fabric for removing any substance which may have become lodged in the felt, a pair of rollers for engaging the felt at opposite sides of the pipe, and means for adjusting said rollers to force said felt against the open side of the pipe.

1,267,360. GUARD FOR TIRES. ANTON BERTRAM, Westfield, N. J. Filed Oct. 19, 1917. Serial No. 197,405. (Cl. 152—17.)

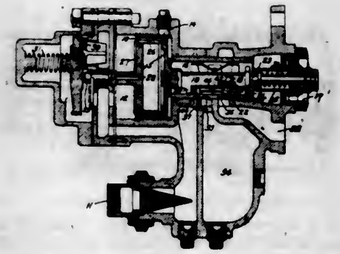


3. In a tire guard, the combination with a pneumatic tire, of a rim adapted to embrace the periphery of said tire and composed of individual sections, each section being formed at one end with a recess and at the opposite end with a tongue, a tongue of one rim section being adapted to pass through the recess of the adjoining rim section, a hemispherically shaped socket for each end of the several rim sections adapted to loosely bear on and to be embedded in the outer surface of the tire when inflated and a spring in each socket to be attached to the end of the rim section passed into it and to hold the rim sections in position on the tire.

[Claims 1 and 2 not printed in the Gazette.]

1,267,361. [WITHDRAWN.]

1,267,362. TRIPLE VALVE. HENRY F. BICKEL, Plainfield, N. J. Filed Sept. 21, 1917. Serial No. 192,478. (Cl. 188—15.)



1. A triple valve for air brakes, comprising in combination a piston subject to opposing train pipe and reservoir pressures; a measuring chamber; slide and graduating valves operable by said piston; and a valve seat, said valves and seat being provided with suitable ports providing communication to the brake cylinder, train pipe, measuring chamber and atmosphere, whereby said chamber is connected to the train pipe in service application position, to the brake cylinder in service lap position and to the atmosphere in release position.

2. A triple valve for air brakes, comprising in combination a piston subject to opposing train pipe and reservoir pressures; a measuring chamber; a valve seat having ports leading to the train pipe, measuring chamber, brake cylinder and atmosphere; a slide valve having ports adapted in application position of the valve to communicate with the train pipe, brake cylinder and measuring chamber ports of the valve seat; and a graduating valve coacting with the slide valve to connect the train pipe to the measuring chamber in application position, and movable to a lap position in which it interrupts said communication and connects the measuring chamber to the brake cylinder.

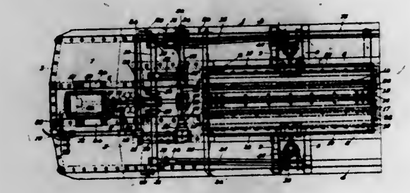
3. The combination with a triple valve having a slide valve and a graduating valve, the graduating valve alone moving between application and lap positions, of a measuring chamber and suitable ports leading to the train pipe, brake cylinder and measuring chamber, and controlled by the graduating valve, to connect the train pipe and measuring chamber in application position and the measuring chamber and brake cylinder in lap position.

1,267,363. DISCHARGE-DOOR-OPERATING MECHANISM. MINOT C. BLEST, Bellevue, Pa., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Oct. 30, 1917. Serial No. 199,291. (Cl. 105—185.)

1. In a railway dump car, a discharge door operating mechanism, and a plurality of pairs of operatively connected motors for operating said mechanism, one of the motors of each pair being adapted to time the action of the other motor of each pair, and locking means slidable by one of the motors of each pair into and out of engagement with the other of said motors of each pair.

5. In a railway dump car, a discharge door a fluid pressure motor, connections from said door to said motor, a member slidable across the path of operation of said motor, and a motor for operating said member.

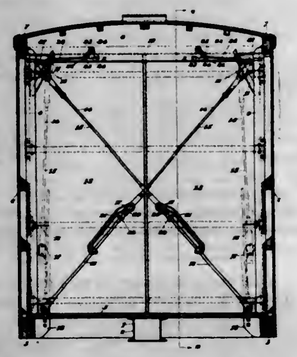
16. In a dump car discharge door operating mechanism, a plurality of operatively connected motors for operating said mechanism, each one of said motors comprising a pressure cylinder and a piston rod, and a bearing member secured to said car having openings formed therein at an angle to each other, the piston rod of one of said motors being slidably mounted in one of said openings and the piston rod of the other of said motors being slidably mounted in the other of said openings, one of said piston rods having an opening formed therein through which the other of said piston rods is adapted to pass, said openings being adapted to register with one of the openings in said bearing member.



22. In a railway dump car, a pair of bodily movable discharge doors, toggle mechanisms for operating said doors, a rotatable shaft extending transversely of said car, connections from said shaft to said toggle mechanisms, an arm on said shaft, a motor having a piston rod loosely connected with said arm for operating said shaft, means adapted to be moved into and out of engagement with said piston rod to lock and unlock said doors, a motor and a hand lever for operating said means, a rotatable shaft for manually operating the first mentioned shaft and means for operatively connecting said shafts.

[Claims 2 to 4, 6 to 15, 17 to 21, and 23 to 26 not printed in the Gazette.]

1,267,364. BRACING AND DOOR-STOCK FOR CARS. MINOT C. BLEST, Bellevue, Pa., assignor to Pressed Steel Car Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 20, 1918. Serial No. 218,331. (Cl. 105—192.)



1. The combination with a car body having an opening formed therein of a door movable into said opening, a movable brace adapted to extend across said body, and means actuated by said brace for preventing the closing of said door.

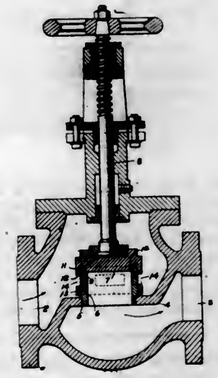
4. The combination with a car body having an opening formed in its end, of doors for closing said opening, movable braces adapted to extend across said opening, and means movable into and out of the path of said doors, said means being actuated by said braces.

12. The combination with a car body having a door opening formed in its end, of superstructure framing defining said opening, a door hinged to said framing and movable into said opening, a brace pivotally connected with said framing and movable transversely of the body, an arm on said brace extending beyond the connection to said framing, a member mounted in said body having a portion adapted to be moved into and out of the path of said door, an arm on said member, and means for operatively connecting said arms.

13. The combination with a car body having a door opening formed in its end, of superstructure framing defining said opening, said framing comprising spaced door posts, a transverse member connecting the upper ends of said posts, and an end plate, doors hinged to said posts adapted to be moved into said opening, braces connected with said body and adapted to extend diagonally across said opening when in operative position, said braces comprising upper and lower sections which are pivotally connected with said body and adapted to be swung to inoperative positions substantially clear of said opening, members mounted in said transverse member and end plate, said members having portions which said doors are adapted to engage when the braces are in inoperative positions, and which are out of the paths of said doors when the braces are in operative positions, and means for operatively connecting one of said members with one of the pivoted sections of each of said braces.

[Claims 2, 3, 5 to 11, 13, and 14 not printed in the Gazette.]

1,267,365. VALVE. CHARLES A. BORCHERT and MICHAEL G. O'NEIL, Woodlawn, Pa. Filed Dec. 13, 1917. Serial No. 206,941. (Cl. 137—4.)

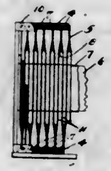


1. The combination with a valve casing provided with an inlet and an outlet and with a port affording communication therebetween, of means for controlling flow through said port, said means comprising a sleeve member provided interiorly with a valve seat and a closure member adapted to fit said seat, said closure being provided with a flange telescoping in close-fitting contact with the exterior of said sleeve and projecting beyond the seating portion of said closure, and means for moving one of said members with relation to the other.

3. The combination with a valve casing provided with an inlet and an outlet and with a port affording communication therebetween, of a sleeve projecting from a side of said port and beveled interiorly at its outer end to form a valve seat, and a movable closure beveled to fit said seat and provided with a flange telescoping in close-fitting contact with the exterior of said sleeve, said flange projecting beyond the seating portion of said closure.

[Claim 2 not printed in the Gazette.]

1,267,366. FILING DEVICE FOR TALKING-MACHINE RECORDS. CHARLIE J. BOUSFIELD, Bay City, Mich., assignor to The Delpheon Company, Bay City, Mich., a Corporation of Michigan. Filed July 10, 1916. Serial No. 108,497. (Cl. 211—16.)



1. A filing device of the character specified, comprising a plurality of flexible partitions spaced apart, and having end portions of alternate opposite adjacent partitions brought together and secured to form compartments having the ends of alternate compartments in a different plane from the corresponding ends of the intermediate compartments.

2. A filing device of the character specified, comprising a plurality of vertically disposed compartments arranged side by side, with the lower ends of alternate compartments in a higher plane than the lower ends of the intermediate compartments, and the alternate compartments having their upper ends flared and the intermediate compartments having their lower ends flared.

3. A filing device of the character specified, comprising a plurality of flexible partitions spaced apart, and having end portions of alternate opposite adjacent partitions brought together and secured to form compartments having the ends of alternate compartments in a different plane from the corresponding ends of the intermediate compartments, and supporting and spacing strips disposed between the united end portions of the partitions which are secured thereto.

5. In a device of the class described, a cabinet, a door pivoted to said cabinet, a record holder secured to said door and including spaced end members and a plurality of strips arranged side by side and constituting side members connected to said end members, a plurality of flexible partitions secured between the aforesaid strips and comprising a plurality of record compartments, said compartments being constructed whereby the alternate ends of adjacent pockets are spaced from the said side walls of the holder.

[Claim 4 not printed in the Gazette.]

1,267,367. DIAL-SCALE. JOHN H. A. BOUSFIELD, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed May 27, 1916. Serial No. 100,232. (Cl. 265—62.)

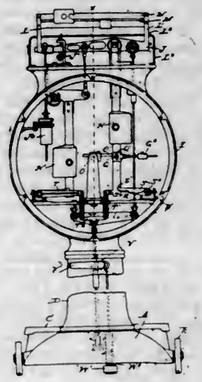
1. The combination in a dial scale having a main and auxiliary pendulum, of pins carried by said pendulums and rockable locking members adapted to engage said pins when the scale is in zero position.

2. The combination in a dial scale having a main and auxiliary pendulum, of pins carried by said pendulums and locking members adapted to yieldably engage said pins when the scale is in zero position, and an operating lever for actuating said locking members.

3. The combination with a portable base, of a dial scale mounted thereon, an operating mechanism for said scale, a locking foot adapted to engage the floor, a locking lever for said operating mechanism, and means connecting said locking lever with said operating mechanism and locking foot.

5. In a scale, the combination with a dial indicator, of a rack for actuating the same, a pendulum and a connection between said rack and pendulum vertically adjustable to different selected positions.

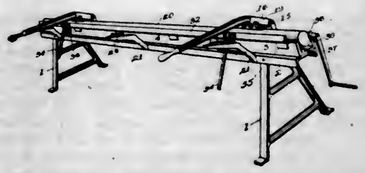
8. The combination with a portable base, of a scale mounted thereon, operating mechanism for said scale, means for locking said operating mechanism, and means upon said scale dependent upon said locking means for



bearing firmly against the floor when said operating mechanism is unlocked.

[Claims 4, 6, and 7 not printed in the Gazette.]

1,267,368. BEADER AND GUTTER-FORMER. EDWARD J. BOWLES, ELMER METZ, and HERMAN METZ, Clinton, Ill. Filed July 30, 1915. Serial No. 42,683. (Cl. 153—5.)



1. A mechanism of the character described, including in combination, a trough, a beading rod mounted on one side thereof, a forming roll pivotally mounted on the same side thereof, means for forcing said forming roll into said trough, an additional forming element pivoted to the other side of said trough to form the other side of the blank, operating levers for said additional forming element, and means connected to said additional forming element and extended into said trough and adapted to be engaged by the blank when the forming roller is in its lowermost position, so as to move said operating levers to a convenient position for operation.

3. A mechanism of the character described, including in combination a trough into which a sheet metal blank is adapted to be forced, a beading rod mounted on one side of said trough and adapted to form a bead in one edge of said blank, a forming roll pivotally mounted on said trough and means for forcing the said roll into said trough for forming said blank into a gutter section conforming in cross section to said forming roll, and guides for holding the blank in proper position.

7. A mechanism of the character described, including in combination, a support, a trough mounted on said support, said trough being adjustable so that the size thereof, may be varied, a beading rod rotatably mounted on one side of said trough, a forming roll pivotally mounted on one side of said trough and means for moving said forming roll into and out of said trough, a plurality of guiding members for one edge of the blank, said guiding members being adjustably and resiliently held toward said trough.

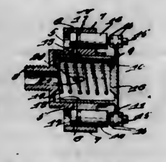
10. A mechanism of the character described including in combination, a trough into which a sheet metal blank is adapted to be forced, a forming roll pivotally mounted on

said trough and having means for forcing it into said trough for forming said blank into a gutter section, a beading rod mounted on the same side of said trough and adapted to form a bead in one edge of said blank, and guiding means on the other side of said trough adapted to engage the unbeaded edge of said blank.

13. A mechanism of the character described, including in combination, a trough, a pivotally mounted forming roll, means for forcing said forming roll into said trough, an additional forming element, an operating lever for said additional forming element, and means connected to said additional forming element and extended into said trough and adapted to be engaged by the blank when the forming roller approaches its lowermost position so as to move said operating levers to a convenient position for operation.

[Claims 2, 4 to 6, 8, 9, 11, and 12 not printed in the Gazette.]

1,267,369. AUXILIARY VALVE FOR INTERNAL-COMBUSTION ENGINES. GEORGE FREDRICK BOYER, Lima, Ohio, assignor of twenty-four and one-half one-hundredths to David W. Dorris and twenty-four and one-half one-hundredths to Eugene M. Bushong, Lima, Ohio. Filed Jan. 16, 1917, Serial No. 142,687. Renewed Mar. 22, 1918 Serial No. 224,050. (Cl. 137—32.)



1. In a valve of the class described, the combination of a casing, a cup valve reciprocally mounted within said casing, means for urging said cup valve in one direction, sleeves formed upon said casing, plungers adjustably mounted upon said cup valve and reciprocally mounted within said sleeves, said sleeves, casing and cup valve having ports, said plungers having annular grooves, whereby said plungers and sleeves will hold said cup valves against rotary movement for causing said ports and grooves to positively register at intermittent intervals, and said plungers being adapted to be adjusted upon said cup valve so as to permit varying amounts of registration of said ports and grooves at intermittent intervals.

[Claim 2 not printed in the Gazette.]

1,267,370. LASTING-MACHINE. MATTHIAS BROCK, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 16, 1913. Serial No. 790,029. Renewed June 30, 1917. Serial No. 177,994. (Cl. 12—14.)

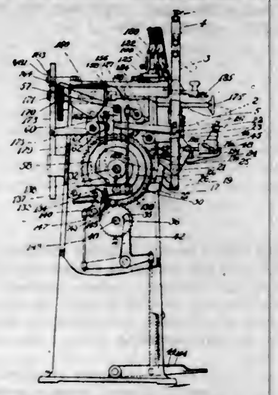
1. In a lasting machine, the combination with toe lasting plates or wipers and means for operating them, of shoe handling means and means for operating it to seize a shoe, vertically move the last with relation to the wipers and advance the last under the wipers.

2. In a lasting machine, the combination with toe lasting plates or wipers and means for operating them, of shoe handling means and means for operating it to seize a shoe, depress the last with relation to the wipers, advance the last under the wipers and then raise the last against the wipers.

3. In a lasting machine, the combination with toe lasting plates or wipers, and power driven means for operating them, of shoe handling means and means for operating it to seize a shoe, vertically move the last with relation to the wipers and advance the last under the wipers.

4. In a lasting machine, the combination with toe lasting plates or wipers and means for operating them, of shoe handling means and power driven means for operating it to seize a shoe, vertically move the last with relation to the wipers and advance the last under the wipers.

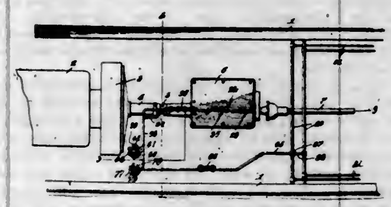
5. In a lasting machine, the combination with toe lasting plates or wipers and shoe handling means, of independently controlled power driven means for operating the



wipers to do their work and for operating the handling means to seize a shoe, vertically move it with relation to the wipers and advance it under the wipers.

[Claims 6 to 79 not printed in the Gazette.]

1,267,371. PEDAL-CONTROL MECHANISM FOR GEARING. GEORGE H. BROWN, Wilkinsburg, Pa. Filed Nov. 14, 1916. Serial No. 131,315. (Cl. 74—58.)



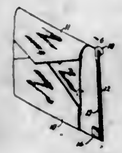
1. In a motor vehicle, a controlling device comprising a spring pressed depressible foot pedal mounted for rotative movement, means operable by the rotative movement of said foot pedal to select a mechanism to be actuated, and means operable by depression of said foot pedal in any position in which it may be rotated for producing such actuation.

3. In a motor vehicle, a foot operated controlling device, including a plurality of contiguously disposed vertically reciprocable movable elements each operatively connected to a mechanism to be actuated, a foot operated element mounted for reciprocation and rotative movement, and means operable by means of the foot operated means to bring the same into position for engaging any one of the reciprocable elements whereby the selected elements may be moved by depressing the foot operated means to actuate the associated mechanism.

5. In a motor vehicle, a foot operated controlling device, including a plurality of concentric tubular members movable within each other, means operatively connecting each of said members with a particular mechanism to be actuated, each of said tubular members being provided at their upper ends with a plurality of openings arranged in a number of series corresponding to the number of tubular elements used and wherein the openings of each tubular member in the series are in alinement except where such alined relation is interrupted by the solid portion of one of the tubular elements, a foot operated element mounted for reciprocation and rotative movement over the tubular members and having a member adapted to enter the openings whereby upon rotating said foot operated element to dispose the same over a set of openings in the series, the member may be depressed to enter the openings without moving any of the tubular members except the one whose solid portion intersects the set of openings selected, whereby said member may be moved and its associated mechanism actuated.

[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

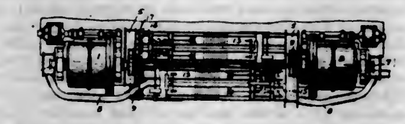
1,267,372. ENVELOP-OPENER. LOUIS BRUDICK, Ralston, Pa. Filed Mar. 23, 1918. Serial No. 224,319. (Cl. 229—85.)



3. In an envelop opener, the combination with a commercial envelop, of a clip engaged at one of the lower corners thereof, an elastic cord secured in said clip, said elastic cord extending closely adjacent to the folded edge of the envelop, a cutter formed in the shape of a hook secured to the free end of said elastic cord, said cutter being adapted to engage with the folded edge opposite to said clip, said cutter being operable whereby said elastic cord, due to its elasticity, causes the folded edge or seam of the envelop to be severed.

[Claims 1 and 2 not printed in the Gazette.]

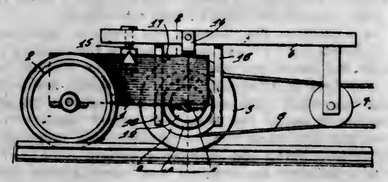
1,267,373. APPARATUS FOR CLASSIFYING ORES. HENRY KENYON BURCH, Miami, Ariz. Filed Nov. 8, 1916. Serial No. 130,241. (Cl. 83—9.)



1. In an ore crushing or comminuting plant, the combination of two crushing mills, means for feeding ore to said mills, and means including classifiers for conducting material from the discharge opening of each mill and discharging coarse material to the feed opening of the other mill.

2. In an ore crushing or comminuting plant, the combination of two crushing mills arranged in or approximately in the same horizontal plane, classifiers arranged to receive material from the discharge openings of the respective mills and to raise the oversize material to such a height that it will flow to the feed boxes of the other mill.

1,267,374. FLEXIBLE SHEAVE. CLYDE BURKHOLDER, Ruth, Nev. Filed Nov. 20, 1917. Serial No. 203,054. (Cl. 104—18.)

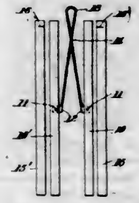


1. The combination with a truck, a table pivotally mounted thereon, an axle, a flexible sheave carried by said axle, and means carried by said table and engaging said sheave for keeping the driven portion of said sheave in proper alinement with respect to said table.

4. In an apparatus of the class described, the combination with an axle, a flexible sheave carried by said axle, of a frame mounted on said axle, a table positioned above said frame, a bolt extending through said table near one end thereof and connecting the same to said frame, a bracket secured to said table and bearing upon said frame, said table provided near its front end with a bracket carrying a pulley, a belt passing over said pulley and over said sheave, a plurality of pairs of fingers secured to the under face of said table, each pair of fingers arranged in parallelism and the fingers in each pair positioned upon opposite sides of said sheave, said sheave comprising a plurality of pivoted sections, and said fingers engaging the outer section of said sheave for holding said outer section in alinement with said pulley, substantially as shown and described.

[Claims 2 and 3 not printed in the Gazette.]

1,267,375. TROUSERS PRESSER, CREASER, AND HANGER. ELMER F. CASSEL, New York, N. Y. Filed July 16, 1912. Serial No. 709,761. (Cl. 100—57.)



1. A trousers presser comprising interior tension members, and exterior presser members provided with longitudinally disposed complemental faces, said presser members being sufficiently resilient to spring over the tension members and retain a portion of a garment between said complemental faces to crease the garment independent of internal pressure on said tension members.

3. A trousers presser comprising interior tension members, and exterior presser members provided with longitudinally disposed complemental faces, said presser members being sufficiently resilient to spring over the tension members and retain a portion of a garment between said complemetnal faces to crease the garment independent of internal pressure on said tension members, said presser members being provided with means for permitting their end portions to accommodate cloth of greater thickness than that engaged by the main portion.

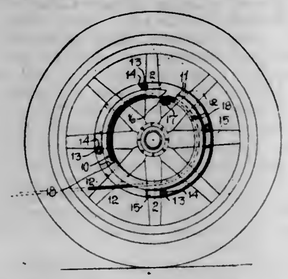
5. A trousers presser comprising V-shaped tension members adapted to fit within a trousers leg, and V-shaped presser members corresponding in length with said tension members and adapted to fit over the latter, whereby the cloth of the garment may be clamped between the tension and presser members, said presser members being provided with transverse slits near their ends.

6. A trousers presser comprising tension members adapted to fit within a trousers leg, a bowed spring having crossed arms connected with said tension members, and presser members corresponding in length with said tension members and sprung over the latter, whereby the cloth of the garment may be clamped between the tension and presser members, the tension of said spring being insufficient to stretch the garment.

7. A trousers presser comprising tension members adapted to fit within a trousers leg, a bowed spring having crossed arms connected with said tension members, and presser members corresponding in length with said tension members and adapted to fit over the latter, whereby the cloth of the garment may be clamped between the tension and presser members, said presser members being provided with transverse slits near their ends, the tension of said spring being insufficient to stretch the garment.

[Claims 2 and 4 not printed in the Gazette.]

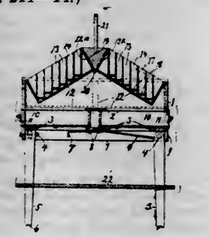
1,267,376. AUTOMOBILE-PULLER. BENN AUSTIN CHILSON, Covington, Ky. Filed Oct. 13, 1917. Serial No. 196,475. (Cl. 242—95.)



1. A pulling device for automobiles comprising a winding drum formed of relatively thin metal transversely curved to form lateral flanges defining a cable groove between them, one of said flanges being provided with pairs of inwardly projecting spoke engaging studs and with a plurality of bolts, each bolt being formed at its upper end to provide a flattened hook adapted to engage around the spoke of an automobile, said winding drum being adapted to receive a cable, the winding drum being formed at the bottom of the groove with a perforation extending to the interior face of the winding drum for the reception of the knotted end of a cable.

2. A pulling device for automobiles comprising an annulus formed to provide lateral flanges and a metal cable groove, one of the flanges being provided with laterally projecting pairs of studs adapted to embrace the spokes of the wheel and also provided with a plurality of bolts having terminal ends adapted to engabe with the spokes of a wheel, said annulus being formed in a plurality of sections, each section at one end having a tongue projecting from the outer flange remote from the studs and with a groove at the other end into which the corresponding tongue fits.

1,267,377. DISPLAY-CABINET. JOHN A. CHILSTROM, Red Wing, Minn. Filed Apr. 12, 1917. Serial No. 161,610. (Cl. 211—14.)

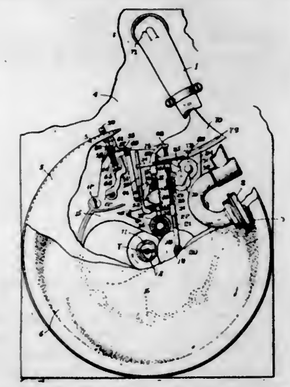


1. In a cabinet of the class described, a horizontally disposed hollow frame, a pair of trays placed in the upper part of the frame and divided into pockets for holding goods to be partly exposed above the pockets, a wedge-shaped member interposed between the adjacent edges of the two trays to hold the trays inclined one of them away from each side of the wedge.

2. The structure set forth in claim 1, in which the wedge-shaped member is detachable to allow the tray to occupy a horizontal position in the frame.

1,267,378. AUTOMATIC BRAKE MECHANISM. EDWARD T. CONDON, Jr., New York, N. Y., assignor to Condon-Autostop Company, a Corporation of New York. Filed Oct. 8, 1912. Serial No. 724,500. (Cl. 74—46.)

1. In brake mechanism, the combination with two moving members of a brake member for one of said moving members and means adapted to remain inoperative during variations in the speed of the second of said movable members above a certain predetermined minimum and to be rendered operative by a reduction of its speed below such minimum to render said brake member operative to stop the first of said moving members.



2. In brake mechanism, the combination with two moving members adapted to travel one at substantially constant and the other at varying speeds of a brake member for said constant speed moving member and means adapted to compensate for normal variations in the movement of said varying speed movable member and rendered operative by the stopping thereof to render said brake member operative.

3. In brake mechanism, the combination with two movable members and a motor adapted to drive them, one at substantially constant and the other at varying speeds, of brake means for said constant speed movable member which are adapted to remain inoperative while permitting said varying speed movable member to move at varying speeds and are rendered operative by the stopping thereof.

7. In brake mechanism, the combination with two moving members of a brake for one of said members and means located immediately beneath such member and rendered operative by the stopping of the other member to render the brake operative.

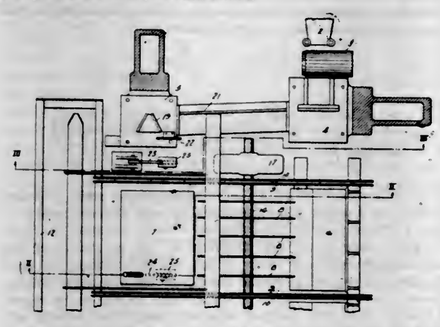
22. In brake mechanism, the combination of a brake, a trip for the brake, and means for actuating the trip which include a ratchet-worm, means for driving the ratchet-worm, a pawl slidingly mounted upon the ratchet-worm and normally held out of engagement therewith, means for throwing the pawl into engagement with the ratchet-worm, means for disengaging the pawl from the ratchet-worm after it has been carried thereby a predetermined distance, and means for restoring the pawl to its original position with respect to the ratchet-worm.

[Claim 4 to 6, 8 to 21, and 23 to 32 not printed in the Gazette.]

1,267,379. SKELP CUPPING AND CLIPPING APPARATUS. HOWARD D. COOK, Lorain, Ohio. Filed Oct. 1, 1915. Serial No. 53,534. (Cl. 113—113.)

1. In apparatus for clipping and cupping pipe skelp, the combination of a shear having means for clipping and cupping the skelp, an alining mechanism whereby the skelp are held in alinement with said shear, means for moving the skelp into alined position and a transfer mechanism whereby the skelp are moved sidewise into position for alinement relative to said shear preparatory to the skelp clipping and cupping operation.

3. In apparatus for clipping and cupping pipe skelp, the combination of a shear having means for clipping and cupping the skelp, an alining mechanism whereby the skelp are held in alinement with said shear, a transfer mechanism whereby the skelp are moved sidewise into position for alinement relative to said shear preparatory to the skelp clipping and cupping operation, means for moving the skelp into alined position, a guide adapted to engage with and move the skelp endwise into position to be clipped and cupped during the sidewise movement of the skelp by said transfer mechanism, and means on said transfer mechanism for moving the clipped and cupped skelp away from in front of said shear.

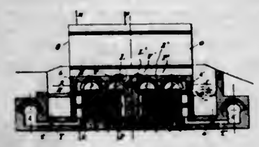


5. In apparatus for clipping and cupping pipe skelp, the combination with an end shear whereby the skelp are cut to length, and a second shear having means for clipping and cupping the sheared skelp, of means for automatically alining the skelp relative to said clipping and cupping shear, and a transfer mechanism for moving the sheared skelp sidewise from in front of said end shear into position to be engaged by said skelp alining means.

11. In apparatus for clipping and cupping pipe skelp, the combination with an end shear whereby the skelp are cut to length, and a second shear whereby the skelp are clipped and cupped, of a transfer mechanism for moving the skelp sidewise from in front of said end shear into position in front of said clipping and cupping shear, a plurality of stops for alining the skelp sidewise in front of said clipping and cupping shear, a plurality of counterweighted levers forming means for moving and yieldingly holding the skelp in contact with said stops in alining the skelp preparatory to the clipping and cupping operation, and an inclined guide extending between the shears and arranged to engage with and move the sheared skelp lengthwise into clipping and cupping position during the sidewise movement of the skelp on said transfer mechanism.

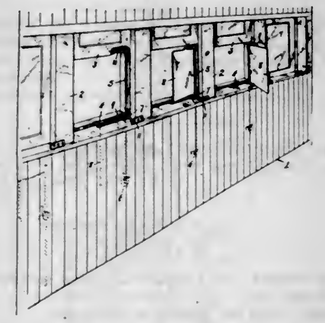
[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

1,267,380. REGENERATIVE COKE-OVEN. EVENCE COPPÉE, Brussels, Belgium. Filed July 28, 1914. Serial No. 853,603. (Cl. 202—9.)



In a system of regenerative coke ovens, a series of regenerators, a plurality of ovens for which said regenerators are provided, a feed channel leading to the regenerators, said regenerators being disposed in parallel therewith, a collecting channel communicating with said regenerators whereby the discharges therefrom will be successively brought together, an uptake, a plurality of sole-flues into one of which the heated body is discharged and from the other of which said body is drawn by suction to communicate with the uptake and means for reversing the action of the working.

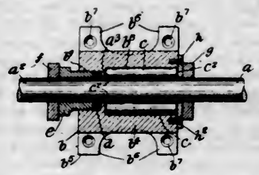
1,267,381. DUST AND WIND GUARD FOR CAR-WINDOWS. HENRY P. COULTER, Toledo, Ohio. Filed Oct. 22, 1917. Serial No. 197,891. (Cl. 98—21.)



1. In combination, a window-casing having a slot in its sill portion, a sash vertically movable in said casing, a pivot-rod fixed to the bottom portion of said sash for movement therewith and extending down through said slot, a guard-plate pivotally carried by said rod and adapted to be disposed in inoperative position in said slot and, when the sash has been raised, to be taken from said slot and swung outward on said pivot-rod to operative position relative to the casing.

[Claim 2 not printed in the Gazette.]

1,267,382. BEARING FOR PROPELLER-SHAFTS. JAMES J. COURTNEY, Brooklyn, N. Y. Filed Oct. 16, 1917. Serial No. 196,813. (Cl. 64—39.)



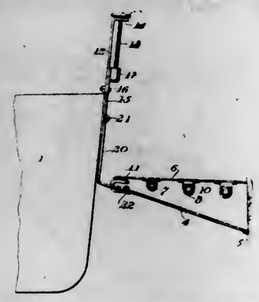
1. A bearing for power shafts, comprising a main outer casing having a central longitudinal bore through which the shaft passes, one end portion of said bore being enlarged to form a roller bearing chamber in which are placed bearing rollers, and the other end portion of said bore being enlarged to form a stuffing box, the inner end of the roller bearing chamber being closed by an inwardly directed annular shoulder formed in the casing and the outer end of said chamber being closed by a washer secured to the casing, and said shaft being provided at both ends of the bearing with collars which are adjustably secured thereto.

2. A bearing for propeller shafts, comprising a main outer casing having a central bore through which the shaft passes, the outboard end of said bearing being provided with a stuffing box and the inner portion thereof being enlarged to form a roller bearing chamber in which are placed bearing rollers, and the shaft being provided at each end of the bearing with collars which are adjustably secured thereto.

1,267,383. TORPEDO-GUARD. JOSEPH BRAINARD CRESSLER, Norfolk, Va. Filed Aug. 24, 1917. Serial No. 187,995. (Cl. 114—240.)

4. A torpedo guard for ships, comprising a guard member supported at an incline, a cushion member rigidly

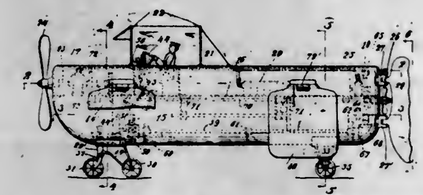
attached to and overlying the inclined member substantially horizontally, with its cushions facing the top of the



inclined member, and an auxiliary guard suspended from the outboard end of the inclined member.

[Claims 1 to 3 not printed in the Gazette.]

1,267,384. FLYING-BOAT. LEONARDO CRIMAUDO, New York, N. Y. Filed Mar. 7, 1917. Serial No. 153,126. (Cl. 244—13.)



1. In a device of the character described, the combination with a hull carrying a running gear including a swiveled wheel, an air propeller carried on the bow of the boat and means for driving it, a water propeller carried on the stern of the boat and independent means for driving it, a rudder carried by the stern of the boat adapted to direct its course either in the air or in the water, wings hinged exteriorly of the hull of the boat and adapted to flap in unison in pairs in vertical arcs, means for operating the wings from the air propeller driving mechanism and a main steering mechanism common to the running gear and to the rudder steering mechanism for operating each of them independently.

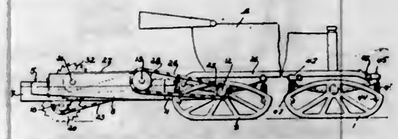
3. In a device of the character described, in combination with a hull having a running gear including a swiveled wheel, a water propeller carried by the stern, a rudder carried by the stern adapted to direct the course of the boat in the water and in the air, and a steering mechanism capable of adjustment to control independently the movements of either the swiveled wheel or the rudder.

7. In a mechanism for flying craft provided with running gear and rudder mechanisms, a steering column having a vertical element, a gear wheel rotatable with and axially movable on the vertical element, a pair of shafts parallel to said vertical element but spaced therefrom, a rocker arm carried by each shaft and each provided with a toothed gearing-head, said arms being arranged in different horizontal planes, means for shifting the gear wheel into and out of engagement with each of the toothed gearing-heads, means carried by one vertical shaft for controlling the direction of movement of the running gear and means operable by the other vertical shaft for controlling the rudder mechanism.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,267,385. SLEIGH. OLIVER CROOKS, Minneapolis, Minn. Filed Aug. 1, 1917. Serial No. 183,944. (Cl. 180—6.)

1. In automobile sleighs, the combination with an automobile, of a frame mounted in rear thereof and having forwardly projecting beams loosely secured at their forward ends about the housings of the rear axle of the automobile, toothed drive wheels carried by said frame and projecting below the same, supplemental drive wheels carried by the frame and mounted therein for vertical movement independently of the frame and of each other, and means for operatively connecting the main drive wheels and the supplemental drive wheels to the rear axle of the automobile so as to be rotated thereby.

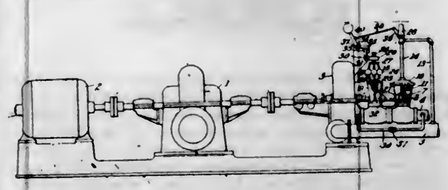


2. In automobile sleighs, the combination with an automobile, of a main frame mounted in rear thereof and having forwardly projecting beams loosely secured at their forward ends about the housings of the rear axle of the automobile, toothed main drive wheels carried by said frame and projecting below the same, supplemental frames loosely secured at their forward ends to the main frame adjacent each side thereof, supplemental drive wheels carried by the supplemental frames, and driving connections between the main and supplemental drive wheels and the rear axle of the automobile.

3. In automobile sleighs, the combination with an automobile, of a main frame mounted in rear thereof and having forwardly projecting beams loosely secured at their forward ends about the housings of the rear axle of the automobile, a drive-shaft rotatably mounted therein, means for operatively connecting said drive shaft to the rear axle of the automobile so as to be rotated thereby, a counter shaft mounted in the rear of said drive shaft, driving connections between said shafts, main drive wheels secured on said counter shaft and projecting below the frame, supplemental frames carried by the main frame adjacent each side thereof loosely secured at their forward ends about the drive shaft, supplemental drive wheels carried by said supplemental frames and driving connections between said drive shaft and the supplemental drive wheels.

4. An attachment for automobiles comprising a main frame adapted to be secured at its forward end to the rear axle housing of an automobile, a drive shaft mounted in said main frame, a counter shaft mounted in the frame in rear of said drive shaft, driving connections between said shafts, main drive wheels secured on the counter shaft and projecting below the main frame, supplemental frames mounted adjacent each side of said main frame and having their forward ends loosely secured about the drive shaft, supplemental drive wheels in said supplemental frames, and driving connections between the said supplemental drive wheels and the drive shaft.

1,267,386. HEAT-BALANCE DUPLEX-DRIVE. DION K. DEAN, Winthrop, Mass., assignor to Alberger Pump and Condenser Company, New York, N. Y., a Corporation of New York. Filed Jan. 25, 1917, Serial No. 144,375. Renewed Mar. 19, 1918. Serial No. 223,468. (Cl. 121—118.)



1. In a heat balance duplex drive, the combination of a machine, an electric motor and a steam turbine arranged to drive the machine singly or together, and either operative to drive the rotor of the other when the latter is idle, a steam supply for the turbine and an exhaust for the same, and a pressure governor responsive to the variations of pressure in the exhaust, and a valve for relieving the pressure at certain times in the pressure governor, together with means for operating said relief valve.

10. The combination of a machine, a plurality of means for actuating the same, each serving to drive to machine when operating singly or together, a steam supply line and a steam exhaust line for one of said operating means, a pressure governor connected with the exhaust, a speed governor responsive to the speed of the driven machine and serving as a secondary control for the admission of steam through the supply line, means for connecting the steam exhaust line and the pressure governor, a pressure relief valve arranged in connection with said means, and a mechanism actuated by the speed governor when the machine is running at a predetermined speed for operating the pressure relief valve.

[Claims 2 to 9 not printed in the Gazette.]

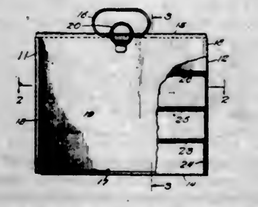
1,267,387. NECKTIE. CYRIL J. DILL, Burrwood, La. Filed Feb. 23, 1917. Serial No. 150,563. (Cl. 2—11.)



1. A new article of manufacture including a necktie formed of two sections, one section having a portion thereof adapted to extend around a collar, a hook formed on the free end thereof, and a loop on one end of the other section adapted to be engaged by said hook.

2. The combination with a collar, of a necktie formed in two sections adapted to be tied intermediate the ends of one section and adjacent one end of the other section, the projecting long end of said necktie extending around the collar to a point adjacent the front thereof, a hook formed on the free end of said section, and a loop formed on the projecting short end of said necktie and adapted for engagement with the hook to secure the necktie on a collar.

1,267,388. SHELVING ARRANGEMENT AND CONTAINER THEREFOR. MARY B. DODSON, Geneva, Ill. Filed Aug. 19, 1916. Serial No. 115,783. (Cl. 45—71.)

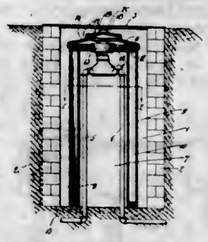


1. In a container and shelving arrangement therefor, a frame, and a plurality of shelves, said shelves adapted to have separate legs resting on a common foundation and arranged to be placed in said frame in nested relation whereby they stand one above the other and capable of being individually and bodily removed.

3. In a device of the class described, a plurality of shelves, legs for said shelves, said shelves adapted to stand in spaced apart relation, the legs of the different shelves being of different lengths so that when said legs rest on a common base the shelves are held in their spaced apart relation, and a container for said shelves, said container having a vertically sliding door whereby the lower of said trays may be removed without exposing the remaining shelves.

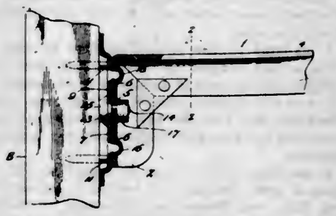
[Claims 2 and 4 not printed in the Gazette.]

1,267,389. WATER-METER INSTALLATION. FRANK J. DOUL, Green Bay, Wis. Filed May 12, 1917. Serial No. 168,250. (Cl. 137—13.)



In combination with a vault containing a water meter, a plurality of concentric cylinders arranged intermediate the wall of the vault and the meter, the annular chamber between said cylinders being closed at the bottom and top to provide an insulating layer of dead air, a cover for the top of said inner cylinder, and means in said cover to permit inspection of said meter.

1,267,390. CORNER-LOCK FOR BEDSTEADS. DARRELL F. DYKE, Chicago, Ill., assignor to The Seng Company, a Corporation of Illinois. Filed Mar. 13, 1918. Serial No. 222,075. (Cl. 5—55.)



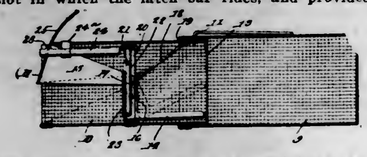
1. In a corner-lock for bedsteads, the combination with a post, and a pillar-plate secured thereto and provided with an angular opening and above and below the same with equidistant lugs, of a rail formed of angle-iron and provided with an angularly disposed extension having a bolt-hole agreeing with the opening in the pillar-plate and upper and lower apertures agreeing with and adapted to receive the lugs of said plate, and a bolt having an angular portion fitting the opening in the plate and having its stem extending through the bolt-hole in the extension and beyond the same provided with a nut.

[Claims 2 to 6 not printed in the Gazette.]

1,267,391. ANIMAL-TRAP. THOMAS J. ELLISON, Terrill, Ky. Filed Feb. 19, 1918. Serial No. 218,084. (Cl. 43—24.)

4. An animal trap comprising a victim chamber, an entrance chamber opening thereinto, a swinging closure for the entrance chamber, a tiltable platform in said chamber and connected to the closure, a pivoted barrier in the entrance chamber between the closure and the platform, and a slidable latch bar operatively connected to

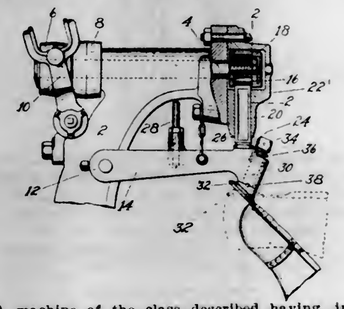
the barrier and engageable with the closure for holding the same in open and closed positions, said closure having a slot in which the latch bar rides, and provided with



lateral keeper recesses, and lateral retaining lugs on the latch bar adapted to seat in the recesses.

[Claims 1 to 3 not printed in the Gazette.]

1,267,392. SHOE-SHAPING MACHINE. EDWARD ERICKSON, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Oct. 19, 1915. Serial No. 56,783. (Cl. 12—51.)



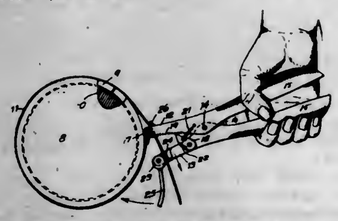
2. A machine of the class described having, in combination, means for forming an upper in the angle between the lip and the feather edge of an innersole and means for beating a shoe upon the heel seat, the machine being constructed and arranged for adjustment to bring either of said means alternatively into convenient position for treating a shoe.

3. A machine of the class described having, in combination, a tool adapted to beat the heel seat of a shoe and shaped also to crease an upper in the angle between the lip and the feather edge of an innersole, and means for operating said tool, the tool being adjustable to different positions for heel seat beating and for upper creasing respectively.

5. A machine of the class described having, in combination, a shoe beating tool having a substantially flat beating face, and means for imparting operative movements to said tool, the tool being pivoted for manual adjustment to change the angular face to the line of its operative movement.

[Claims 1, 4, and 6 to 17 not printed in the Gazette.]

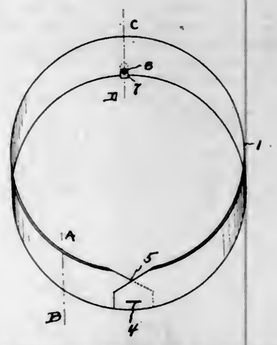
1,267,393. COMPRESSING-TOOL. HERBERT O. EWING, Middleport, Ohio. Filed Sept. 13, 1916. Serial No. 119,966. (Cl. 81—3.)



1. In a piston ring compressing tool, pliers comprising a pair of jaws, and handles connected to said jaws to separate said jaws when said handles approach, a relatively wide and thin flexible band pivotally connected to one of said jaws, forming a loop and extending through said one of said jaws past its pivotal connection thereto and through the other one of said jaws, and gripping means on said other jaw where said band extends therethrough to grip said band as said jaws recede, substantially as and for the purposes set forth.

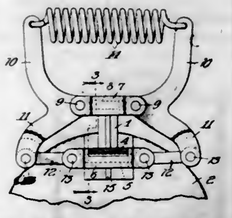
[Claim 2 not printed in the Gazette.]

1,267,394. COLLAR-PROTECTOR. MARIE A. FERGUSON, New Haven, Conn. Filed Sept. 11, 1913. Serial No. 789,335. (Cl. 2—54.)



A collar and garment band protector comprising a band having a lower turned over straight edge and having an upper edge turned over intermediate its ends with both turned over edges on the same side of the body of the band, the ends of the upper edge being cut away to form bevels, said turned over portions coacting to keep the intermediate portion of the band away from the collar, the ends of said band having front button holes therethrough and means for attaching the center of the band to the garment band, said means comprising a U-shaped metal clip straddling the lower edge of the band and having a relatively short leg affixed directly to one side of the body of the band, a fastener passed through the short leg and through the band for holding the clip in place the turned over portion of the edge being interrupted to form a flat bearing for said leg, said clip having a relatively long leg projecting upwardly upon the opposite side thereof with an open space therebetween adapted to contain a tab covering the rear button hole of the garment collar.

1,267,395. SHOCK-ABSORBER. SHELLEY W. FORD, Chicago, Ill., assignor of one-half to Ode D. Jennings, Chicago, Ill. Filed July 12, 1917. Serial No. 180,062. (Cl. 267—19.)



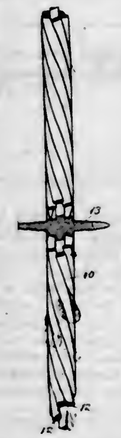
1. In a shock absorber, the combination with a bracket and a vehicle spring, a pair of oppositely disposed levers pivoted to said bracket, links connecting said levers to the end of said vehicle spring, and a spring connecting said levers for resisting the vertical movement of the end of said vehicle spring.

2. In a shock absorber, the combination with a bracket and a vehicle spring, of a pair of oppositely disposed bell crank levers pivotally mounted on said bracket, links connecting the lower arms of said bell crank levers to the end of said vehicle spring and a spring connecting the upper arms of said levers.

9. In a shock absorbing shackle for vehicle springs, the combination with a vehicle spring and a supported part, of two members pivotally mounted respectively on said part and the end of said vehicle spring, two separate opposed levers both pivoted on one of said members to swing to and from each other in a plane at right angles to said vehicle spring, links connecting said lever arms and the other of said members, and a spring connecting said levers for resisting the vertical movement of the end of said vehicle spring, the pivotal mounting of said members being arranged to permit the horizontal movement of the end of said vehicle spring.

[Claims 3 to 8 not printed in the Gazette.]

1,267,396. WIRE-CABLE RING AND METHOD OF MAKING THE SAME. JOHN R. GAMMETER, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Dec. 11, 1916. Serial No. 136,172. (Cl. 29—156.)



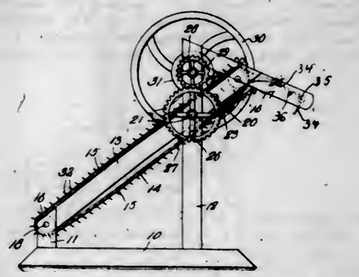
3. The process of making pneumatic-tire bead-core rings which consists in taking a piece of wire cable which will make a ring of slightly less than the desired circumference, butting the ends, fusing the strand metal at the ends to produce a welded joint, annealing said joint by a separate operation, and expanding said ring to the desired size by an outward radial stretching action exerted simultaneously at various points throughout its circumference.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,267,397. POTATO-SEED-CUTTING MACHINE. GEORGE E. GARBOW, Pierson, Mich. Filed Sept. 17, 1917. Serial No. 191,816. (Cl. 146—11.)

1. A potato seed cutter comprising a frame including a base, forward and rear standards extending from the base, side bars connected with the standards and positioned at an incline, an endless apron movably mounted between the side bars, potato penetrating and carrying pins extending from the apron, cutting means positioned above the upper flight of the apron and in operative relation to the potato carrying pins, and means for engaging cut sections of potato and removing the same from the pins.

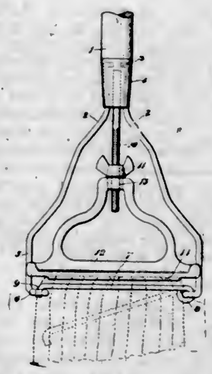
5. A slicing machine comprising a conveyer frame including side bars and standards for the side bars with one set of standards extending above the side bars, upper and lower shafts extending between the side bars, sprocket wheels carried by the upper and lower shafts, an endless conveyer belt in the conveyer frame, sprocket chains carried by the belt and engaging the sprocket wheels, a knife carrying shaft rotatably supported by the standards extending above the side bars with the knives of the knife carrying shaft positioned in operative relation to the conveyer belt, a driving shaft, means for imparting rotary movement from the driving shaft to the knife carrying shaft, and means for imparting rotary movement from the driving shaft to one of the first mentioned shafts.



7. A potato seed cutter comprising a frame, an endless apron movably mounted in the frame, potato penetrating and carrying pins extending from the apron, cutting means positioned above the apron in an operative relation to the potato carrying pins, and means for engaging cut sections of a potato and removing the same from the pins.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

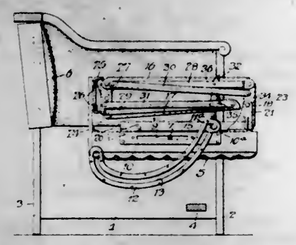
1,267,398. MOP-HOLDER. THOMAS E. GAVIN, Minneapolis, Minn. Filed May 24, 1916. Serial No. 99,630. (Cl. 15—56.)



A mop holder, which comprises a handle having a sleeve on one end, diverging side bars each having one end anchored in the sleeved end of the handle, said bars also serving as guides, the other and free ends of the bars being bent inwardly toward each other and provided with eyes, a cross-bar having an eye at one end and a hook at the other end, said eye being rotatably connected with a side bar eye and the hook being adapted to removably engage with the eye of the opposite side bar, said cross bar being adapted to detachably carry the mop, an approximately T-shaped movable clamping frame having grooved ends adapted to slidably engage the side bars and be guided thereby, a stationary screw stud having one end anchored in the handle and projecting therefrom between the side bars, the clamping frame being provided with a through hole so that said frame is adapted to receive and be slidably engaged on the stud, and a nut on the

stud serving to force the frame downwardly for causing the transverse portion of the frame to clamp the mop on the cross-bar, said stud passing through the frame and serving to guide and coöperate with the frame independently of the position of the nut.

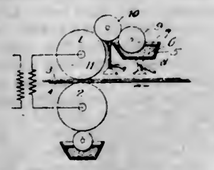
1,267,399. BED DAVENPORT OR COUCH. SAMUEL GOLDSTEIN, Chicago, Ill., assignor of one-fourth to Isadore Goldstein, one-fourth to Abe Goldstein, and one-fourth to Meyer Goldstein, Chicago, Ill. Filed May 27, 1913. Serial No. 770,099. (Cl. 5—50.)



1. In furniture of the class described, the combination of stationary end frame members having on their inner side trackways consisting of curved slots, said slots curving upwardly from the center and the front ends of such slots extending sharply downward over a crest in each trackway to form offset sockets, a seat mounted to rotate in the frame members, sliding pivot members carried by said seat coacting with the slots and arranged to rest in the sockets when the seat is in inverted position, whereby said pivot members remain in the sockets until positively raised and forced rearwardly past the crest in the trackway.

2. In furniture of the class described, the combination of stationary end frame members having on their inner sides trackways consisting of curved slots, said slots curving upwardly from the center and the front ends of such slots extending sharply downward over a crest in each trackway to form offset sockets, a seat mounted to rotate in the frame members, bearing brackets secured to the ends of the seat, bearing members intermediate said stationary frame members and said bearing brackets whereby the seat is mounted to rotate, sliding pivot members carried by said bearing brackets coacting with the slots and arranged to rest in the sockets when the seat is in inverted position, whereby said pivot members remain in the sockets until positively raised and forced rearwardly past the crest in the trackway.

1,267,400. METHOD OF TREATING ELECTRODES FOR ELECTRIC WELDING. JAMES H. GRAVELL, Brooklyn, N. Y., assignor to Thomson Spot Welder Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 20, 1917. Serial No. 197,543. (Cl. 219—10.)



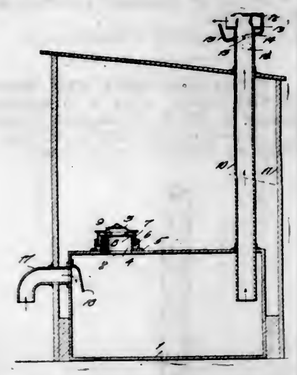
1. The method of treating electrodes for welding consisting in applying a thin layer of fusible metal to their welding surfaces.

4. The method of electric welding consisting in providing a thin layer of fusible metal between the electrode and the surface of the work engaged thereby, passing an electric current through the work by means of said electrode and applying pressure.

9. An electrode for resistance welding consisting of a metallic body having its surface which contacts with the work coated with a metal whose melting point is lower than that of the electrode.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

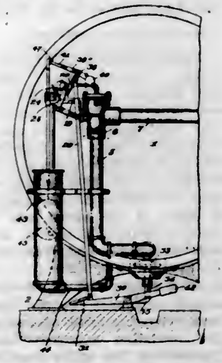
1,267,401. INCINERATOR-CLOSET. GEORGE A. GREENE, Rogers, Tex. Filed July 5, 1917. Serial No. 178,590. (Cl. 4—20.)



A device of the character specified, a casing having an inlet in its top, an annular flange secured to the top of the casing in line with the inlet thereof, a ring extending upwardly from the inner edge of the annular flange and having an inwardly extending flange at its top, a rib projecting upwardly from the outer portion of the annular flange coaxial with the said upstanding ring and spaced therefrom, a seat ring supported on the inner flange at the top of the upstanding ring, and a cover extending over the seat ring and inlet and having a depending flange entering the space formed between the upstanding ring and rib.

1,267,402. [WITHDRAWN.]

1,267,403. VALVE MECHANISM FOR WASHING MACHINERY. ARTHUR T. HAGEN, Rochester, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed July 14, 1915. Serial No. 39,898. (Cl. 137—68.)



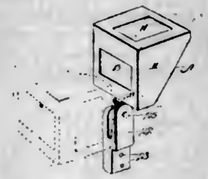
2. The combination with a liquid receptacle, of inlet and outlet valves, a controlling device for the outlet valve, means actuated by the controlling device and operating to automatically close the inlet valve when the receptacle is filled and to automatically open the inlet valve and close the outlet valve when the receptacle is emptied.

3. The combination with a liquid receptacle, of inlet and outlet valves, and means controlled by the liquid in the receptacle acting automatically to open the inlet valve and close the outlet valve when the receptacle is emptied, and to close the inlet valve when the outlet valve is opened.

6. The combination with a liquid receptacle, of inlet and outlet valves, a supplemental valve for governing the position of the inlet valve, a controller for the supplemental valve, a movable carrier, an actuator mounted on the carrier and coöperating with the controller, and operative connections between the carrier and outlet valve whereby the controller for the supplemental valve is moved by the actuator to open the inlet valve when the outlet valve is closed, and means controlled by the liquid in the receptacle to move the controller and close the inlet valve when the receptacle is filled.

[Claims 1, 4, 5, 7, and 8 not printed in the Gazette.]

1,267,404. VIEW-FINDER FOR CAMERAS. NORMAN W. HALSEY, New York, N. Y. Filed Aug. 20, 1915. Serial No. 46,508. (Cl. 88—1.5.)



8. A finder for photographic cameras having an optical system provided with two separated apertures, each conforming to a required field of view for a different operating position of a camera, and adapted to serve alternatively as a view aperture or as an objective aperture.

9. A finder for photographic cameras having an optical system provided with a pair of apertures, each conforming to a required field of view, and located respectively at opposite ends of said optical system, and means whereby the finder may be so moved that either aperture may serve as an objective aperture or as a view aperture.

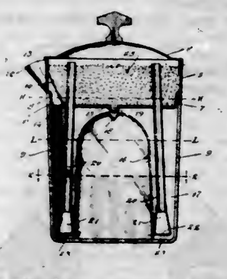
10. A finder for photographic cameras having, in combination, an optical system adapted to receive a view at either end and to project said view upon the other end thereof, said optical system having an aperture associated with each of its ends, adapted to define the field of view; and means whereby the optical system may be moved so that either aperture may be correctly correlated with a camera to serve as a view aperture while the other serves as an objective aperture.

11. A finder for photographic cameras having an optical system comprising a pair of lenses, each a duplicate of the other, and a reflector, and having an aperture associated with each lens conforming to a required field of view; and a mounting, whereby the finder may be moved to direct either lens, with its respective aperture, toward the front of a camera and the other lens toward one side of said camera.

13. A finder for photographic cameras having, in combination a reversible optical system provided with an oblong aperture of the same dimensions at each end, the longer dimensions of said apertures extending at right angles to each other; and means for mounting said finder upon a camera whereby said finder may be turned to bring either aperture to the front.

[Claims 1 to 7, 12, 14, and 15 not printed in the Gazette.]

1,267,405. COFFEE-PERCOLATOR. ARTHUR HAMMERSTEIN, New York, N. Y. Filed May 26, 1916. Serial No. 99,952. (Cl. 53—3.)



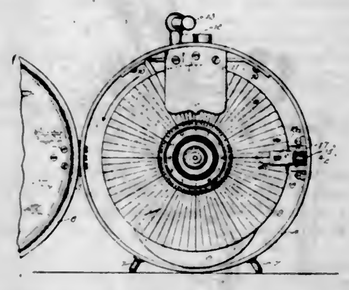
1. A coffee percolator comprising a receptacle, percolating means combined therewith and an inverted cup resting upon the bottom of said receptacle and having a freedom of movement independent of the receptacle and percolating means.

3. A coffee percolator comprising a receptacle, a container for the ground or powdered coffee detachably connected with said receptacle and having a perforated bottom, a plurality of tubes extending into said container and through the coffee therein, perforated hollow members carried by said tubes and located near the bottom of said receptacle and an inverted cup located within said receptacle and having its open end resting upon the bottom thereof between said perforated hollow members.

4. A coffee percolator comprising a receptacle, a container for the ground or powdered coffee detachably connected with said receptacle and having a perforated bottom, a plurality of tubes extending into said container and through the coffee therein, perforated hollow members carried by said tubes and located near the bottom of said receptacle, an inverted cup located within said receptacle and having its open end resting upon the bottom thereof between said perforated hollow members, said cup being provided at its closed end with an exterior recess and a projection depending from said container and loosely fitting into said recess and permitting a limited tilting of said cup relatively to said receptacle.

[Claim 2 not printed in the Gazette.]

1,267,406. WATCHMAN'S CLOCK. FRANKLIN HARDINGE, Chicago, Ill., assignor to The Hardinge Brothers Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 7, 1913. Serial No. 746,718. (Cl. 234—37.)



1. A watchman's clock comprising a casing, a movable dial within the casing, said clock casing having one side thereof arranged to permit access to the dial, means for locking said side in closed position, and devices comprising a member having a substantially crescent-shaped edge adapted to make a cut upon said dial when said side is unlocked from said casing, the crescent shaped cut made

by said member having its ends pointing in the direction of movement of the dial to prevent the cut portion of the dial from being caught in the mechanism disposed immediately adjacent thereto.

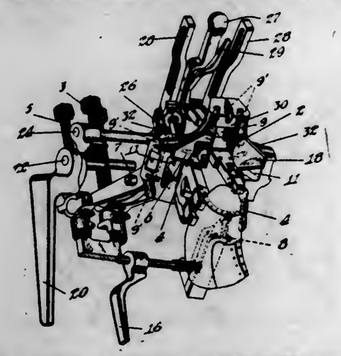
[Claims 2 to 7 not printed in the Gazette.]

1,267,407. SIGNAL APPARATUS. WILLIAM EDWARD HARRISON, Union City, Ind. Filed Nov. 3, 1916. Serial No. 129,309. (Cl. 40—125.)



In signaling apparatus, a single display placard blocked off on one side into a series of distinct areas adapted to be simultaneously displayed, and each area being formed with a surface having a different color from all of the other areas, the relation of the areas being such with respect to each other that when one of said areas is displayed in a given position affording the intended meaning of the signal the relationship of the colors of the other areas coöperate to aid the observer in recognizing the location of the governing area, the placard having indicia in each area and the indicia of the several areas being different from one another and corresponding to the intended meaning of the respective colors.

1,267,408. PULLING-OVER MACHINE. SYLVANUS BENJAMIN HENDERSON, Sanford, Me., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Apr. 23, 1914. Serial No. 833,916. (Cl. 12—4.)



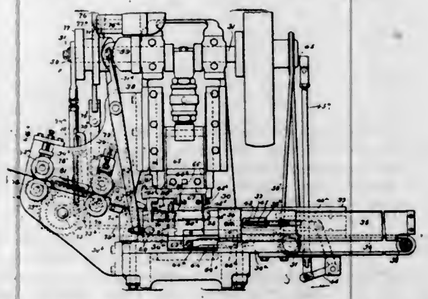
1. In a pulling-over machine in which the shoe is arranged with the upper toward the operator, the combination with means for pulling-over the shoe, a sole rest against which the innersole of the shoe is pressed by the tension applied to the upper by the pulling-over means, and means for moving the sole rest longitudinally while the upper is under tension, of a mirror, and means locating the mirror in the machine at one side of the median line of the machine and maintaining it in a position inclined toward the median line to enable the operator to see the toe portion of the innersole while making adjustment of the innersole by use of the sole rest moving means.

4. In a pulling-over machine, the combination with means for positioning the shoe with its top face toward the operator, and means for pulling-over the shoe, of two mirrors each of which is arranged to reflect an image of a part of the toe portion of the shoe bottom and each of which is arranged to reflect light upon the work to illuminate the portion of the work that is to be seen in the other mirror.

6. In a pulling-over machine, the combination with shoe resting means arranged to position a shoe with its bottom face away from the operator, and means for operating upon the shoe, of mirror supporting means located within the machine behind the bottom face of the shoe, a two-part mirror casing having interlocking connections and depending mirror retaining flanges, and a mirror held in said flanges, one of said casing parts having an attaching member fitted to the mirror supporting means and a spacing device to position the mirror to reflect to the outside of the machine the image of the toe portion of the shoe bottom.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,409. APPARATUS FOR APPLYING HINGE-PINTLES TO BOX-PART BLANKS. HENRY HERMANI, Baltimore, Md., assignor to Tin Decorating Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 4, 1917. Serial No. 184,514. (Cl. 113—1.)



1. In apparatus for applying pintles to box parts and in combination, a shiftable carrier for supporting the box part blank, and means for successively preparing the blank to receive the pintle and for positioning the pintle in such prepared blank while the blank is so supported, a positioned pintle being of substantially similar cross-section throughout its length.

3. In apparatus for applying pintles to box parts and in combination, pintle-applying mechanism operative to provide endwise movements of the pintle during pintle applying operation, mechanism for preparing the box part blank to receive the pintle, and blank feeding means for delivering the blank to said mechanism in predetermined succession.

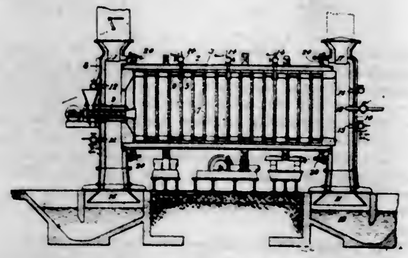
4. In apparatus for applying pintles to box parts and in combination, pintle-applying mechanism, mechanism for preparing the box part blank to receive the pintle, and blank feeding means for delivering the blank to said mechanisms in predetermined succession, said blank preparing means including a form having projections, and means controlled by movements of said blank feeding means for positioning the blank relative to such projections.

8. In apparatus for applying pintles to a box part and in combination, a box part blank preparing station, a pintle-applying station, mechanisms operative at the respective stations, and means for advancing a blank successively through said stations, said feeding means including a shiftable carrier for supporting the blank during its travel through the stations, and means for advancing the supported blank by a step-by-step movement.

16. In apparatus for applying pintles to box parts and in combination, pintle-applying mechanism, mechanism for preparing the box part blank to receive the pintle, and blank feeding means for delivering the blank to said mechanisms in predetermined succession, said feeding means including a shiftable carrier support for the blank, means for introducing a blank to said carrier, and means for advancing the blank in said carrier to locate it in the successive mechanisms.

[Claims 2, 5 to 7, 9 to 15, and 17 to 72 not printed in the Gazette.]

1,267,410. GAS-PRODUCER. JOHN W. HORNSEY, Summit, N. J., assignor to General Reduction Gas and By-Products Company, a Corporation of Delaware. Filed July 3, 1914, Serial No. 848,704. Renewed Aug. 17, 1917. Serial No. 186,825. (Cl. 48—85.1.)



1. In apparatus for continuously making producer gas, a rotary vessel having an intake and offtake for the material and an outlet for the gas, a refractory lining in said vessel, said lining containing a plurality of sets of pockets, the pockets of each set being staggered with reference to the pockets of adjacent sets, and retarding rings arranged at intervals through the length of the casing and being adapted to retard the flow of the material therethrough, each set of pockets being adapted to shower the material clear across the cross section of the vessel in a series of showers out of longitudinal alinement with showers falling from adjacent sets.

2. In apparatus for continuously making producer gas, a rotary vessel having an intake and an offtake for the material and an outlet for the gas, a refractory lining in said vessel, said lining containing a plurality of lifting blades, said lifting blades comprising means for lifting the material and for showering it across the inner circumference of the vessel, each set of lifting blades being arranged in staggered relation with the adjacent set of lifting blades, and a plurality of retarding rings arranged at intervals throughout the length of the vessel.

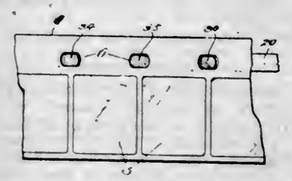
3. In apparatus for continuously making producer gas, a rotary vessel having an intake and an offtake for the material, the vessel being equipped with a plurality of sets of lifting blades for lifting and showering the material across the cross section of the vessel, the lifting blades of each set being arranged out of longitudinal alinement with the blades of an adjacent set, outlets for the gas at opposite ends of the vessel, one of said outlets being arranged for removal of tar-free gas and another of said outlets being adapted for removal of gas and gaseous by-products, and means for reversing the direction of the gas to remove it through the said outlets.

4. In apparatus for continuously making producer gas, a rotary vessel having an intake and an offtake for the material, the vessel being equipped with means for maintaining the material in a finely comminuted and subdivided condition in its travel through the vessel, means consisting of a plurality of sets of lifting blades on the inner periphery of the vessel, each set having its blades out of longitudinal alinement with the blades of adjacent sets, the sets being adapted to cause the material to fall in a series of succeeding showers out of longitudinal alinement with showers falling from adjacent sets, an outlet for gas at the same end of the vessel as the intake, adapted to be used for removal of gas and gaseous by-products, an outlet for gas at the same end of the vessel as the offtake, adapted to be used for the removal of fixed gas, and means for reversing the flow of gas to remove it through said outlets.

9. In apparatus for gasifying materials, a rotary vessel having an intake and an offtake for the material, a refractory lining for the vessel, means for admitting an oxygen-bearing agent into the interior of the vessel and other means for bringing the material repeatedly into contact with the oxygen-bearing agent, and means within the vessel for retarding the travel of the material.

[Claims 5 to 8 not printed in the Gazette.]

1,267,411. CINEMATOGRAPH OR MOTION-PICTURE FILM. ALBERT S. HOWELL, Chicago, Ill., assignor to Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1915. Serial No. 7,929. (Cl. 88—19.5.)



1. A cinematograph or motion picture film having a longitudinal path adapted to contain a series of successive views, and a series of perforations upon one edge of said view path, the centers of which aline with a medial line between adjacent views, the major axes of said perforations being disposed longitudinally of said film whereby said film is adapted to coöperate with an actuating element that is provided with two or more projections, one of which projections accurately fitting a perforation in said film, and the remaining projection or projections constructed to position the film transversely with respect to the aperture of the machine.

4. A cinematograph or motion picture film having two parallel longitudinal paths, each adapted to contain a series of successive views, and a series of perforations arranged longitudinally of said film and medially of said view paths, the major axes of said perforations being disposed longitudinally of said film whereby said film is adapted to coöperate with an actuating element that is provided with two or more projections, one of which projections accurately fitting a perforation in said film, and the remaining projection or projections constructed to position the film transversely with respect to the aperture of the machine.

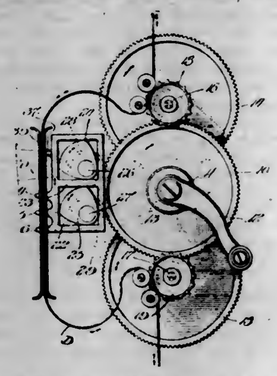
[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,267,412. ACTUATING MECHANISM FOR CINEMATOGRAPHIC FILMS. ALBERT S. HOWELL, Chicago, Ill., assignor to Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Filed Feb. 13, 1915. Serial No. 7,930. (Cl. 74—53.)

1. A shuttle for moving perforated film comprising a member provided with a plurality of picks disposed thereon in a vertical plane, the horizontal diameters of each of said picks corresponding to substantially the horizontal dimension of the film perforations and one of said picks being of greater vertical diameter than the remaining picks and corresponding to substantially the vertical dimension of the film perforations.

2. A shuttle for moving film comprising a substantially rectangular frame consisting of side and end members, a

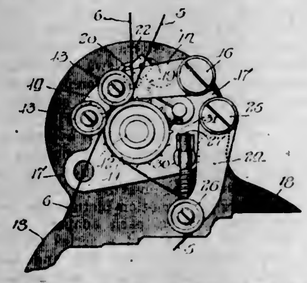
transverse bar dividing the frame into two substantially rectangular compartments and simultaneously operating corresponding cams disposed in said compartments and



adapted to bodily move said shuttle in a path describing a rectilinear figure.

[Claims 3 to 7 not printed in the Gazette.]

1,267,413. LOOP-FORMING MECHANISM FOR MOTION-PICTURE APPARATUS. ALBERT S. HOWELL, Chicago, Ill., assignor to Bell & Howell Company, Chicago, Ill., a Corporation of Illinois. Original application filed Apr. 20, 1915, Serial No. 23,020. Divided and this application filed Sept. 27, 1915. Serial No. 52,833. (Cl. 88—18.)



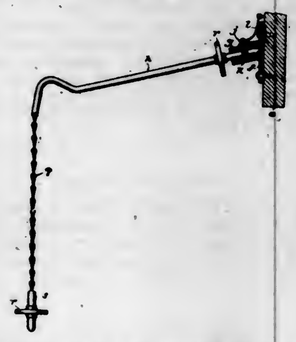
1. In apparatus for handling film a film sprocket, a member adapted to be moved across the film path adjacent said sprocket whereby a loop is formed in the film, devices adapted to adjust the range of movement of said member whereby the length of film in said loop formed thereby is increased or diminished, and means whereby said member is retained at either end of its movement.

3. In apparatus for handling film a film sprocket, a member adapted to be moved across the film path adjacent said sprocket whereby a loop is formed in the film, a rod connected at one end to the movable end of said member, a swivel to which the opposite end of said rod is connected, means adapted to adjust the length of said rod between its points of connection, and means whereby said member is retained at either end of its movement.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,267,414. TOWEL-HOLDER. GEORGE M. HUBINGER, Milwaukee, Wis., assignor to Star Detachable Towel-Holder Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Aug. 23, 1915. Serial No. 46,803. (Cl. 45—32.)

2. In a towel holder the combination of a wall bracket formed with a socket, a portable hanger rod removably fitted at one end in said socket, a flexible transfer holder inseparably attached to the other end of the rod, and lock stops removably attached to the free end of the transfer holder and to the rod adjacent its opposite end.



4. In a towel holder the combination of a bracket formed with a socket, a towel supporting rod tapered and removably fitted at one end in said socket and formed adjacent to that end with an annular groove, a flexible transfer holder inseparably attached at one end to the other end of the rod and provided at its other end which is unconfined with a bar having a tapered free end and an annular groove, and spring lock stops removably fitted on said rod and bar and adapted to automatically engage with said grooves and to be disengaged therefrom by a key.

7. In a towel holder the combination of a cabinet having upper and lower compartments with side openings for the withdrawal of clean towels from the upper compartment and the insertion of soiled towels in the lower compartment, a towel hanging rod removably fastened at one end in the upper compartment of said cabinet and inclined downwardly toward the opening therein, the side of the cabinet serving to hold the towels on said rod until they are withdrawn therefrom, a flexible transfer holder attached at one end to the free end of said rod and unconfined at the other end, and lock stops removably connected with said rod adjacent to its supported end and with the loose end of the flexible holder, which is adapted to be thrown with soiled towels into the lower compartment of the cabinet through the opening therein.

[Claims 1, 3, 5, 6, and 8 not printed in the Gazette.]

1,267,415. SLIDING-DOOR POCKET. NORMAN C. HUCKESTEIN, Pittsburgh, Pa. Filed Nov. 30, 1917. Serial No. 204,489. (Cl. 20—19.)



1. A sliding door pocket comprising a base, a header adapted to support door hanging mechanism, upright wall supports pivotally secured to said header and base and spaced to form a door opening, door pocket and false pocket, said uprights being reinforced by metallic angle members which extend along the rear and one side face of each of said uprights.

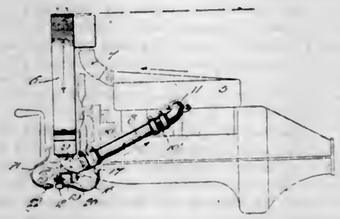
3. A sliding door pocket comprising a base, a header adapted to support door hanging mechanism, upright wall supports pivotally secured to said header and base and extending an appreciable distance above said header, reinforcing angle members secured to the rear and one side face of each of said uprights, and transverse reinforcing strips pivotally secured on said upright supports.

5. A sliding door pocket comprising a base, a header adapted to support door hanging mechanism, upright wall supports pivotally secured to said header and base and extending an appreciable distance above said header, reinforcing metallic angles secured to and extending along the entire rear face and one of the side faces of each of said upright wall supports, said upright wall supports being spaced to form a door opening, and transverse metallic reinforcing strips pivotally secured at spaced intervals on said upright supports, substantially as described.

6. In combination with a building wall having a suitably framed opening therein, a sliding door pocket comprising a base, a header adapted to support door hanging mechanism, upright wall supports pivotally secured to said header and base and extending an appreciable distance above said header to permit securing of said pocket to the upper portion of said frame, said upright wall supports being spaced to form a door opening, metallic angle reinforcing members extending along the entire surface of the rear face and one side face of said upright wall supports, and transverse metallic reinforcing strips pivotally secured at spaced intervals across said uprights and extending past the farthermost of said uprights to permit of securing to the side portion of said frame, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,267,416. CIRCULATING DEVICE FOR AUTOMOBILE-COOLING SYSTEMS. THOMAS H. JACOB, Wausau, Wis. Filed Oct. 11, 1917. Serial No. 195,954. (Cl. 123—174.)



1. The combination with a fluid cooling system of an internal combustion engine including a flexible hose coupling having an opening through its wall, of an electric heating element disposed in said hose coupling, a hollow threaded shank extending from said element and projected through the opening in said coupling, a pair of washers on said shank and disposed one on each side of the wall of the coupling around the opening therein, clamping nuts threaded on said shank on each side of the wall of the coupling to bind the same between said washers, and a conducting wire extended through said hollow shank.

[Claim 2 not printed in the Gazette.]

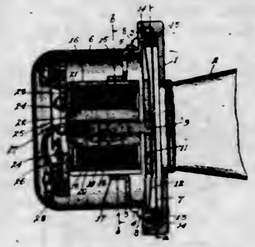
1,267,417. STRAINER ATTACHMENT FOR DRINKING VESSELS. CHARLES ROBERT JONES, Rossville, Ga. Filed Nov. 5, 1917. Serial No. 200,404. (Cl. 210—16.)



1. A straining attachment for drinking vessels comprising a rim adapted to fit upon the upper edge of a vessel and having a mouth opening therein, an annular flange depending from the central portion of said rim, and straining material over said mouth opening and across the lower end of said flange.

[Claims 2 and 3 not printed in the Gazette.]

1,267,418. SIGNALING-HORN. WILLIAM KAISLING, Chicago, Ill., assignor to Kellogg Switchboard & Supply Company, Chicago, Ill., a Corporation of Illinois. Filed June 11, 1914. Serial No. 844,413. (Cl. 177—7.)



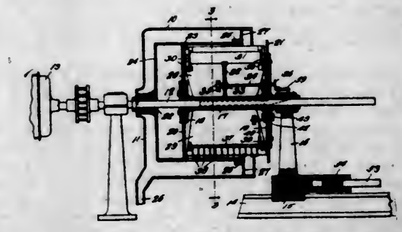
1. A device of the character described including a front plate, a circular mounting ring, a diaphragm securely held between said plate and said mounting ring, a striker normally in engagement with said diaphragm, a resilient mounting member for said striker adapted to impel said striker against said diaphragm, a cylindrical forwardly extending cup concentrically secured to said mounting ring, a magnet contained within said cup, a circular armature secured to said striker and extending out over the edge of said cup whereby said cup is included in the magnetic circuit of said magnet, said electromagnet adapted upon energization to withdraw said striker away from said diaphragm against the action of said resilient mounting member, and means for deënergizing said magnet whereby said striker impinges said diaphragm.

4. An electrical device including a mounting member, a circular front plate, a diaphragm securely held between said mounting member and said front plate, a striker for said diaphragm normally in engagement therewith, a leaf spring for holding said striker in engagement with said diaphragm, orifices in the ends of said leaf spring adapted to fit over pins in said mounting member to hold said spring and striker in normal position, an electromagnet attached to said mounting member for actuating said striker, and means for intermittently energizing said electromagnet to cause said striker to vibrate said diaphragm.

5. An electrical signaling device including a diaphragm, a circular mounting ring provided with a concentrically disposed orifice, a cylindrical cup member having its forward end open and adapted to be mounted within said orifice, an electromagnet, a striker for actuating said diaphragm, and a circular armature secured to said striker and extending out over the edge of said cup to include the said cup in the magnetic circuit of the magnet.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,267,419. SUGAR-REFINING APPARATUS. KISEL K. KAITA, Lahaina Main, Hawaii. Filed Oct. 18, 1917. Serial No. 197,312. (Cl. 210—29.)

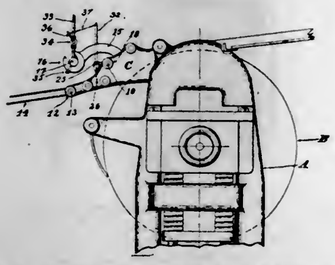


1. In a device of the class described, a rotatable drum, a sleeve movable into and out of said drum, a pair of heads

arranged in spaced relation on said sleeve, a scraper supported by said sleeve, means for moving said scraper toward and away from said drum, and filling hoppers on said sleeve and communicating with the interior of said drum.

[Claims 2 to 5 not printed in the Gazette.]

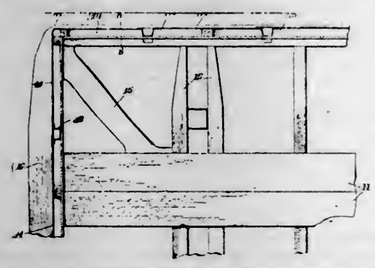
1,267,420. AUTOMATIC GAS SHUT-OFF FOR CYLINDER-PRESSES. RAYMOND A. KERLEY, Chicago, Ill. Filed Jan. 21, 1918. Serial No. 213,105. (Cl. 34—18.)



1. In a cylinder printing press, a rotatable cylinder, a gas burner located adjacent said cylinder above the line of movement of a sheet issuing from said cylinder, a stop cock for regulating the supply of gas to said burner, and a movable abutment interposed between said cylinder and said gas burner and in close adjacency to said issuing sheet, said movable abutment being connected to said stop cock to turn off the gas supply when said abutment is moved by said issuing sheet.

[Claims 2 to 7 not printed in the Gazette.]

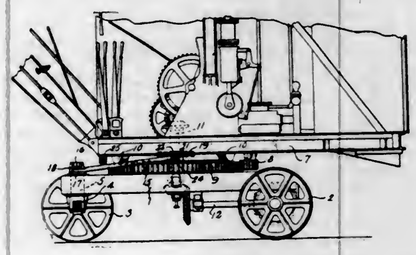
1,267,421. RAILWAY-CAR. WILLIAM F. KIESEL, Jr., Altoona, Pa. Filed Feb. 18, 1914. Serial No. 819,452. (Cl. 105—192.)



1. A railway car body having an end consisting of a pair of plates bent intermediate their ends to provide portions at right angles to one another to form the corners of the car at one end, said plates having integral vertical hollow ribs therein at opposite sides of the center of the end to form hollow reinforcing posts, the ribs in said plates forming corresponding grooves therein opening outwardly, and a plate united to the outer sides of said pair of plates and covering the grooves formed by said ribs.

2. In a railway car body, the combination of a side sill, a roof supporting member, and sheathing consisting of a plurality of plates, each plate having an integral rib near one vertical edge thereof, said ribs being disposed on the inside of the sheathing and their outer open sides being overlapped by plane portions of adjacent plates, the plane portions of said plates having inwardly extending flanges at their upper and lower edges, the flanges of each plate terminating short of the rib thereon, and extending over the ends of the hollow rib on the adjacent plate, and means for securing said flanges to the roof supporting member and side sill.

1,267,422. STEERING DEVICE FOR REVOLVING SHOVELS AND THE LIKE. CHARLES B. KING, BENJAMIN JACOBY, and HERBERT E. ROUSH, Marion, Ohio, assignors to The Marion Steam Shovel Company, Marion, Ohio, a Corporation of Ohio. Filed Oct. 24, 1917. Serial No. 198,225. (Cl. 180—81.)



1. In a machine of the character described, a truck comprising a base, a steering axle pivotally connected with said base, and wheels on said axle; a structure mounted on said truck for swinging movement, an arm rigidly connected to said steering axle, and a link connected at one end to said arm and at the other end to said rotatable structure.

2. In a machine of the character described, a truck comprising a base, a steering axle, wheels on said steering axle, and a trunnion connecting said steering axle with said base; a structure mounted on said truck for swinging movement, an arm rigidly secured to said trunnion, and means for operatively connecting said arm with said swinging structure.

3. In a machine of the character described, a truck comprising a base, a steering axle, wheels on said steering axle, and a trunnion connecting said steering axle with said base; a structure mounted on said truck for swinging movement, an arm rigidly secured to said trunnion, and detachable means for operatively connecting said arm with said swinging structure.

8. In a machine of the character described, a truck comprising a base, a steering axle, wheels on said axle, and a trunnion connecting said axle with said base; a structure mounted on said truck for swinging movement, detachable steering devices to connect said swinging structure with and disconnect the same from said trunnion, and means to lock said axle against movement relatively to said base when said steering devices have been detached.

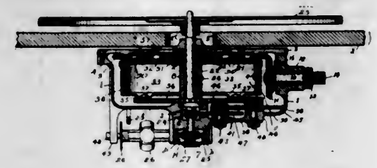
9. In a machine of the character described, a truck comprising a base, a steering axle, wheels on said axle, and a trunnion connecting said axle with said base; a structure mounted on said truck for swinging movement, an arm rigidly secured to said trunnion, a link detachably connected at one end with said arm and connected at its other end with said swinging structure, and means for locking said arm against movement relatively to said base when said link has been detached therefrom.

[Claims 4 to 7 not printed in the Gazette.]

1,267,423. SPRING-MOTOR. GEORGE R. KUNKLE, Richmond, Ind. Filed June 29, 1917. Serial No. 177,799. (Cl. 185—37.)

1. A spring motor including an inclosing case adapted to contain lubricant, a vertical hollow shaft adapted to revolve in one direction only, a spring barrel comprising a cup-like body and a top covering the body and mounted to revolve around on said hollow shaft, a spring coiled in the barrel with its inner end attached to the hollow shaft and its outer end attached to the barrel, a gear wheel located below and secured to said barrel, a driven shaft mounted in the casing concentric of the hollow shaft, and spaced therefrom, a pinion secured to the

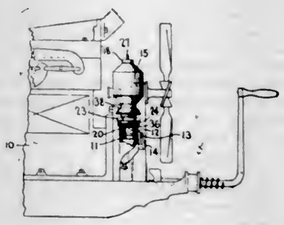
driven shaft, two intermediate pinions, and two intermediate gear wheels each connected to one of said intermediate pinions and together connecting the first named gear wheel to the first mentioned pinion, a hub extending down from the center of the case and having a chamber



formed in its lower end, a worm gear located in said chamber, a governor operated by said worm gear, and a detachable cap closing the lower open end of said chamber, all substantially as shown and described.

[Claims 2 to 4 not printed in the Gazette.]

1,267,424. LUBRICATOR AND RESERVOIR FOR INTERNAL-COMBUSTION ENGINES. ELMER E. LARCH and CLARENCE C. BROWN, Boswell, Ind., Filed June 15, 1917. Serial No. 174,981. (Cl. 184—6.)



1. The combination with an internal combustion engine having a breather pipe, of a lubricator for the engine including a container, a discharge pipe extending therefrom and connected with the breather pipe to support the container thereon, the said discharge pipe being formed with an opening admitting air into the breather pipe, and means associated with the container for controlling the flow of a lubricant from the container into the breather pipe.

7. A lubricator of the character described including a container, a discharge pipe extending therefrom and provided with an opening, a screen supported within the discharge pipe at a point between the said opening and the outer end of the discharge pipe and means associated with the container for controlling the flow of a lubricant therefrom into the discharge pipe, the said discharge pipe being adapted for connection to an engine breather pipe for supplying a lubricant thereto from the container with the said opening admitting air into the breather pipe.

[Claims 2 to 6 not printed in the Gazette.]

1,267,425. ATTACHMENT FOR CULTIVATORS. SIMON O. LARSON, Pipestone, Minn. Filed Dec. 4, 1917. Serial No. 205,393. (Cl. 97—13.)

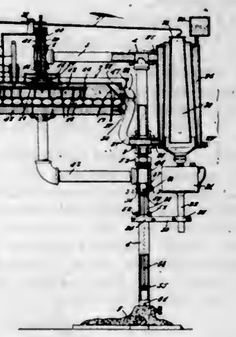
3. A plant shield for cultivators comprising a plate having cleats arranged transversely thereof in longitudinally spaced relation, a pair of bars hingedly connected together at one end, one of said bars being provided with a plurality of longitudinally spaced apertures for adjustably connecting it to said plate, an apertured lug extending rearwardly from said bar, bearings carried by the other bar at a point beyond its pivotal connection, a link pivotally connected at one end with said apertured lug and provided with a plurality of longitudinally spaced apertures, a bolt extending through one of said apertures and



engaging the bearing in the other bar whereby said bars are adjustable relative to each other to position said plate at any desired angle, and U-shaped clips carried by the bar having the bearing to adapt it for connection to a cultivator beam.

[Claims 1 and 2 not printed in the Gazette.]

1,267,426. INCUBATOR. JOHN J. LE DUC, Mankato, Minn. Filed Aug. 27, 1917. Serial No. 188,414. (Cl. 119—36.)



1. An incubator including a hatcher having a flexible diaphragm, means for supplying heat to the upper surface of the diaphragm, and spaced means above the diaphragm for yieldingly supporting the central portion of the diaphragm, said supporting means including a ring connected to the top of the hatcher, and flexible hangers suspended from the ring and spaced apart, said hangers being connected at their lower ends to the diaphragm.

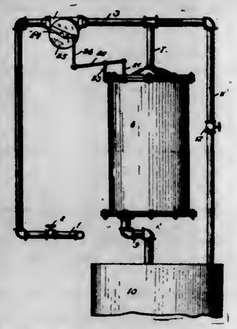
4. An incubator embodying a hatcher having a lower pliant diaphragm, means for supplying heat to the diaphragm from above, and an egg tray below the hatcher, the hatcher and tray being movable vertically relatively, and the tray having an upstanding flared rim for snugly receiving the hatcher.

7. An incubator embodying a hatcher, an egg tray having an upstanding rim to receive the hatcher, fluid circulating means connected to the hatcher, the rim of the tray having a slot for receiving a portion of said means, and a spring pressed curtain carried by said tray and movable upwardly to close the slot when the hatcher and tray are separated.

9. An incubator embodying a hollow hatcher having a lower pliant diaphragm, an egg tray below the hatcher, fluid supplying means connected centrally to the top of the hatcher, a thermostat centrally within the hatcher below said means, means for heating the fluid, and means controlling the heating means operatively connected with the thermostat.

[Claims 2, 3, 5, 6, 8, and 10 not printed in the Gazette.]

1,267,427. FILTER. ARSÈNE LEGAULT, Beauharnois, Quebec, Canada. Filed Dec. 5, 1917. Serial No. 205,482. (Cl. 210—15.)



1. A filter of the character described comprising a tank having an inlet leading thereto and an outlet leading therefrom, a pump arranged within said tank and means whereby the water supplied to said inlet will cause said pump to be operated.

[Claims 2 to 4 not printed in the Gazette.]

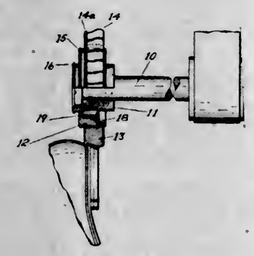
1,267,428. MANUFACTURE OF LEAD ARSENATE. IENS PAULI LIHME, Lakewood, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 25, 1916. Serial No. 111,289. (Cl. 23—13.)

1. The method of making lead arsenate, which consists in reacting between lead oxid and arsenic acid in the presence of an acid-halogen derivative of silicon.

3. The method of making lead arsenate, which consists in reacting between lead oxid and arsenic acid, used in the proportions of their combining weights, in the presence of hydrofluosilicic acid, the latter being used in an amount less than one per cent. of such arsenic acid.

[Claim 2 not printed in the Gazette.]

1,267,429. BEADING-TOOL. THOMAS LUND, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 27, 1915. Serial No. 52,859. (Cl. 12—49.)

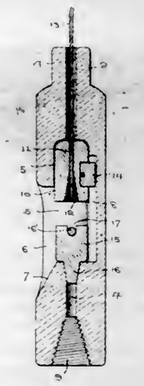


1. A burnishing instrumentality comprising a series of relatively adjustable burnishing tools each, except the last of the series, serving as a gage when the next of the series is being used.

3. A burnishing instrumentality comprising a series of co-axial relatively adjustable burnishing tools, said tools diminishing in diameter from one end of the series to the other and each of the larger tools serving as a tread rest when the next smaller tool is being used.

[Claims 2 and 4 to 6 not printed in the Gazette.]

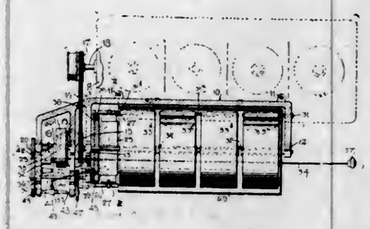
1,267,430. ROPE-SOCKET. SCOTT RUSSELL MCCONNELL, Wichita Falls, Tex. Filed Oct. 9, 1917. Serial No. 195,561. (Cl. 24—123.)



1. A rope socket comprising a cylindrical body having a central longitudinal bore communicating with a larger bore arranged intermediate its ends, said body being provided with an entrance opening in its vertical wall communicating with said larger bore, a swivel member slidably mounted in said larger bore, a rope extending freely through the upper end of said body and rigidly attached to said swivel member, means to prevent independent rotation of the swivel member with respect to said body, and means for maintaining said swivel member within said larger bore.

[Claims 2 to 5 not printed in the Gazette.]

1,267,431. STARTING MECHANISM FOR AUTOMOBILES. BURNARD MCGEHEE, New Orleans, La., assignor of one-third to Joseph Harris Brewer, New Orleans, La. Filed Dec. 1, 1917. Serial No. 204,856. (Cl. 185—41.)



1. The combination with a driving motor; of a starting mechanism therefor comprising a starting shaft operatively connected to the motor to drive or be driven therefrom, a spring motor, means operatively connecting the spring motor to the starting shaft to rotate the latter in a direction to start said driving motor, means normally holding the spring motor from actuation, a clutch member mounted on the starting shaft, a stub shaft carrying a coacting clutch member, springs normally throwing said clutch members into engagement with each other, manually operable means for shifting the clutch members out of engagement with each other and simultaneously shifting said holding means out of operative position, a rewinding shaft operatively connected to the spring motor to rewind it, gearing between said stub shaft and the rewinding shaft, and means acting when the springs of the motor have been rewound to a predetermined tension shifting said clutches out of engagement with each other and releasing said holding means to permit the holding means to return to its normal position to hold the spring motor from actuation.

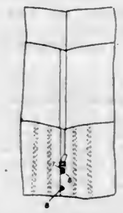
3. A starting mechanism including an engine shaft, a starting shaft, operative connections between the engine shaft and the starting shaft, a spring motor, a drum mounted upon the main starting shaft, an outer drum concentric to the first named drum and operatively connected to the motor to be rotated thereby, pawls disposed between the outer drum and the inner drum and causing the simultaneous rotation of the drums in one direction but permitting the outer drum to rotate in a reverse direction to the inner drum, a latch holding the outer drum from rotation by the spring motor, manually operable means for releasing said latch, and means operating when the spring motor has run down to automatically connect the starting shaft with the outer drum to cause a reverse rotation of the outer drum and a rewinding of the motor, and means acting automatically when the springs have been rewound to disconnect the operative engagement between the outer drum and the starting shaft.

5. A starting mechanism including an engine shaft, a starting shaft, operative connections between the engine shaft and the starting shaft, a spring motor, a drum mounted upon the main starting shaft, an outer drum concentric to the first named drum and operatively connected to the motor to be rotated thereby, pawls disposed between the outer drum and the inner drum and causing the simultaneous rotation of the drums in one direction but permitting the outer drum to rotate in a reverse direction to the inner drum, a latch holding the outer drum from rotation by the spring motor, a clutch member mounted on the starting shaft, a stub shaft carrying a coacting clutch member, springs normally throwing said clutch members into engagement with each other, and manually operable means for shifting the clutch members out of engagement with each other and simultaneously releasing said latch, a rewinding shaft operatively connected to the outer drum, gearing between said stub shaft and the rewinding shaft, a screw-threaded shaft driven from the rewinding shaft, a sleeve engaging the screw-threads of the said shaft, a lever connected to said sleeve operatively engaging the shiftable clutch member to thereby cause the shifting of the shiftable clutch member out of engagement with the clutch member on the main shaft when the rewinding shaft is rotated a predetermined amount, and means on said lever operatively engaging the latch to hold it out of engagement while the springs are being rewound but permitting the latch to engage the outer drum when the springs have been rewound.

7. A starting mechanism including a starting shaft, an engine shaft, said shafts having sprocket wheels thereon, a sprocket chain connecting the shafts, an inner drum mounted upon the starting shaft and rotating therewith, an outer drum concentric to the main drum, pawls disposed between the drums and causing a simultaneous rotation of the drums in one direction but permitting the outer drum to rotate reversely in reference to the inner drum, a spring motor connected to the outer drum, gear teeth on the inside face of the outer drum, a clutch member carried on the starting shaft, a stub shaft having a coacting clutch member movable toward or from the first named clutch member, a spring normally urging the movable clutch member into engagement with the opposed clutch member, a pinion on the stub shaft, a rewinding shaft having a gear wheel engaging the internal teeth on the outer drum and having a gear wheel engaged by the pinion, a lever operatively connected to the shiftable clutch member, a manually actuable rod connected to said lever to shift the movable clutch member away from the opposite clutch member, a screw shaft operatively geared to said rewinding shaft, a sleeve mounted on the screw shaft, a lever connected to said sleeve and operatively engaging with the first named lever upon a movement in one direction but having free movement in the opposite direction, a latch normally engaged with the outer drum and yieldingly urged into such engagement, and flexible connections from said latch to the first and second named levers.

[Claims 2, 4, and 6 not printed in the Gazette.]

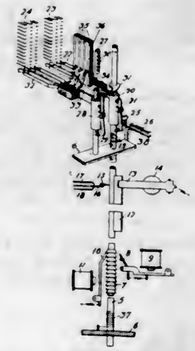
1,267,432. BRASSIÈRE. PAULINE S. MCOMBER, Hastings, Mich. Filed Mar. 28, 1918. Serial No. 225,152. (Cl. 2—98.)



1. The combination with a brassière provided with a corset attaching strap, of a fastener having spaced slots adapted to receive said strap, the lower end of said fastener being adapted to engage a corset stud, the upper end being provided with a hook adapted to engage a corset lace, the lower edge of the upper strap slot having a rearwardly projecting tongue with which a corset lace engaged with said hook coacts to bind the strap and prevent the forward tilting of the fastener, the upper edge of the lower slot having a strap engaging tooth thereon.

[Claims 2 to 7 not printed in the Gazette.]

1,267,433. AUTOMATIC SWITCH. JAMES L. MCQUARRIE, Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 30, 1916. Serial No. 139,836. (Cl. 179—27.5.)



1. In an automatic switch, a brush contact support, a plurality of sets of passive contacts, sets of active contacts carried by said support and arranged to interconnect any set of passive contacts with any of the other sets of passive contacts, and means for moving said support longitudinally to cause one set of active contacts to engage with a set of fixed contacts, and directively to move another set of active contacts into engagement with a desired set of passive contacts.

2. In an automatic switch, a plurality of sets of fixed contacts, a plurality of sets of movable contacts arranged to interconnect any set of fixed contacts with any other set of fixed contacts, a shaft for operating said movable contacts arranged for longitudinal movement, and means for controlling said shaft to operate said sets of movable contacts successively.

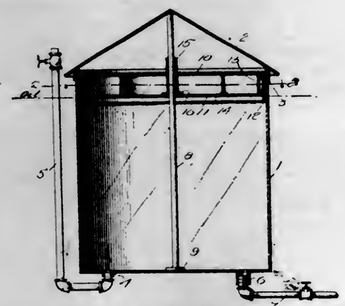
3. In an automatic switch, a plurality of sets of fixed contacts, a plurality of sets of movable contacts arranged to interconnect any set of fixed contacts with any other set of fixed contacts, a member for operating the sets of said movable contacts, and means for operating said member through a series of short movements.

4. In an automatic switch, a plurality of sets of fixed contacts, a plurality of sets of movable contacts arranged to interconnect any set of fixed contacts with any other set of fixed contacts, a shaft for operating said sets of movable contacts arranged for longitudinal movement, a single means for elevating said shaft, and means for controlling said shaft to elevate said sets of movable contacts successively.

5. In an automatic switch, a plurality of fixed contacts, two sets of movable contacts arranged to interconnect any set of fixed contacts with any other set of fixed contacts, one se of said movable contacts being arranged to engage one face of said fixed contacts, the other set of said movable contacts being arranged to engage the other face of said fixed contacts, and means for operating said movable contacts.

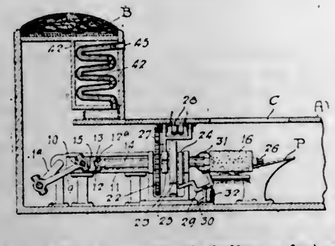
[Claims 6 to 8 not printed in the Gazette.]

1,267,434. OIL-TANK. WILLIAM MACPHERSON, Wichita, Kans. Filed Oct. 19, 1917. Serial No. 197,428. (Cl. 220—122.)



In combination with a tank and the cover therefor, of a standard at the center of the tank, a float fitting within the tank and mounted to slide upon the standard for covering the surface of the oil, said cover comprising upper and lower disks connected in spaced relation and having a central bearing sleeve for the standard, said float having a depending marginal flange for the purpose specified.

1,267,435. AUTOMATIC SHOE-SHINING MACHINE. GEORGE W. MARTIN and CHARLES PRICE, Worcester, Mass. Filed Apr. 7, 1917. Serial No. 160,415. (Cl. 15—61.)



1. A shoe shining machine including a foot plate, a brush carrying plunger, means for reciprocating the plunger back and forth in operative relation to the foot plate, a dauber carried by the plunger, means for rotating the plunger to bring the dauber into and out of operative position, a blacking pot, and automatic means actuated by the plunger for bringing the blacking pot into position to supply blacking to the dauber when the latter is in position to act upon the shoe.

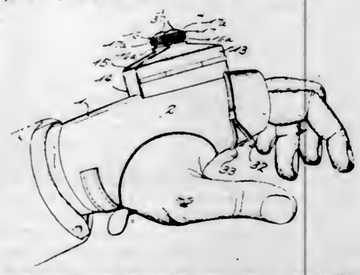
4. A shoe shining machine including a foot plate, a brush carrying plunger, means for reciprocating the plunger back and forth in operative relation to the foot plate, a series of brushes carried by the plunger, means for rotating the plunger to bring the different brushes successively into operative position, a blacking pot, an oscillating lever carrying the blacking pot, and a cam mounted upon the plunger for coöperation with the oscillating lever to move the blacking pot into position to supply blacking to one of the brushes.

5. A shoe shining machine including a foot plate, a brush carrying plunger, means for reciprocating the plunger back and forth in operative relation to the foot plate, a series of brushes carired by the plunger, a notched disk having a feather and spline connection with the plunger, a spring normally tending to rotate the plunger about its longitudinal axis, and a detent coöperating with the notched disk to impart an intermediate rotary movement to the plunger and bring the different brushes successively into operative position.

7. A shoe shining machine including a foot plate, a cross head, a pair of substantially parallel brush carrying plungers operatively connected to the cross head, means for operating the cross head to reciprocate the plungers back and forth in operative relation to the foot plate, a series of brushes carried by each plunger, guides for the plungers, gear wheels having feather and spline connections with the plungers and meshing with each other to cause the plungers to have a simultaneous rotation about their longitudinal axes, a cam having a feather and spline connection with one of the plungers, a notched disk having a feather and spline conenction with one of the plungers, yielding means normally tending to rotate the plungers in one direction, a detent coöperating with the notched disk to permit an intermitten rotary movement of the plungers to bring the different plungers successively into operative position, and means actuated by the cam for automatically supplying blacking to one set of the brushes.

[Claims 2, 3, 6, and 8 to 10 not printed in the Gazette.]

1,267,436. SIGNALING DEVICE. LOUIS WILLIAM MARTIN, New York, N. Y. Filed Mar. 14, 1917. Serial No. 154,675. (Cl. 240—8.5.)

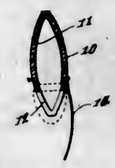


1. In a signaling device in combination, a flexible base or support having means for strapping the device in place upon the user, a casing mounted thereon and having a base and removable cover, batteries arranged in said base, a lamp projecting through the cover, a contact cooperating with and engaging one terminal of the lamp when the cover is closed, electrical connections within the casing from the batteries to the lamp and conductors from the lamp and battery to a switch device for controlling said lamp, said switch device operable by the hand of the user for controlling the electrical connections of the battery and lamp.

5. In a signaling device in combination, a flexible base applicable to the hand of the user, a casing mounted upon said base and resting at the back of the hand with the base in place, a base-part for said casing, a hinged cover therefor, batteries mounted in the base, a plurality of lamps mounted in the cover, electrical contacts within the base for engaging the central contacts of the lamps with the cover closed, electrical connections from said contacts and the battery extending without the casing and switch devices, and a plurality of switch devices controlling said circuits, there being a switch for each lamp circuit.

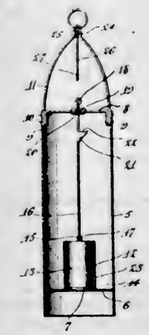
[Claims 2 to 4 not printed in the Gazette.]

1,267,437. MATCH STRIKING AND SHIELDING DEVICE. WILLIAM W. MEDLEY, Terre Haute, Ind. Filed Jan. 22, 1917. Serial No. 143,759. (Cl. 206—36.)



A striking and shielding device comprising a normally flat body open at one end, the body being formed of flexible material and moved to an open position through pressure applied upon opposite side portions thereof, the adjoining edge portions of said body being provided with registering cutouts forming a side opening for the reception of a pipe when the body is compressed and opened, and a striking medium carried by the body.

1,267,438. WELL-BUCKET. ASBURY F. MOOD, Claremore, Okla. Filed Aug. 25, 1916. Serial No. 116,894. (Cl. 103—35.)

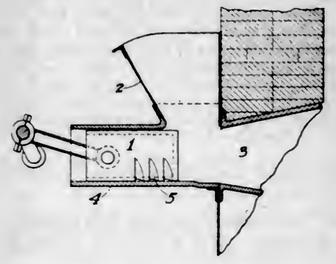


1. A well bucket having a closed bottom formed with an opening, a tubing supported upon the bottom of the bucket, and provided with a pair of diametrically arranged openings communicating with the opening of the bottom, a valve operatively mounted in said tubing, a bail, and a hook supported by the bail of the bucket for holding the valve in a raised position with said casing.

2. A well bucket having a closed bottom, formed with an opening, a bail for said bucket, a casing supported upon the closed bottom of the bucket and over the opening therein, and having a series of openings, a valve operatively mounted in said casing, operating means for said valve, and a hook suspended from the bail of the bucket engaging with the valve operating means for suspending the same in non-obstructing relation with respect to the opening of the bottom and the openings of said casing.

3. A well bucket having a closed bottom formed with an opening, a casing supported upon the bottom and over said opening, a valve slidably mounted in said casing, a rod for operating said valve, said rod being bent to provide a laterally extending stop for limiting the upward stroke of the valve substantially as and for the purpose specified.

1,267,439. STOKING MECHANISM. HARVEY LEE MOORE, Pittsburgh, Pa., assignor of one-half to William C. Stripe, Pittsburgh, Pa. Filed June 19, 1916. Serial No. 104,628. (Cl. 193—62.)

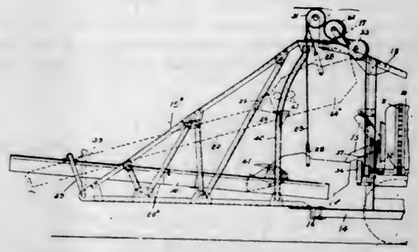


1. In a stoking mechanism the combination of a hopper, a plunger guiding shell arranged at an angle to the movement of the fuel in the hopper, and a reciprocating plunger for forcing fuel into the fire-box and movable back and forth in the shell, said plunger being provided in its underside with a groove having its rear end at a greater inclination than its front, to the axis of the plunger.

2. In a stoking mechanism the combination of a hopper, a plunger guiding shell arranged at an angle to the movement of fuel through the hopper, and a reciprocating plunger for forcing fuel into the fire-box, said plunger being provided with a groove in its under side having its rear wall in a plane at approximately right angle to the axis of the plunger, and its front wall in a plane at an angle less than a right angle to the axis of the plunger.

3. In a stoking mechanism the combination of a hopper, a plunger guiding shell arranged at an angle to the movement of the fuel in the hopper, and a reciprocating plunger for forcing fuel into the fire-box and movable back and forth in the shell, said plunger being provided with a groove having its rear wall at a greater inclination than its front, to the axis of the plunger, a section of the grooved portion of the plunger being formed in the arc of a circle of less diameter than that of other portions of the plunger.

1,267,440. APPARATUS FOR DISTRIBUTING CONCRETE. ALFRED D. MOSBY, Chicago, Ill., assignor to Marsh-Capron Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 19, 1915. Serial No. 15,539. (Cl. 214—148.)



1. In apparatus of the character described, the combination with the supporting frame, of a boom vertically pivoted to said supporting frame, a distributing chute pivoted near its discharge end to the boom, guide members on the boom, guide engaging members on the chute, and means for hoisting the receiving end of said chute substantially vertically along said guide members.

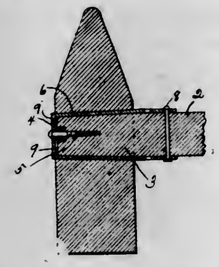
3. In apparatus of the character described, the combination with a supporting frame, of a boom pivoted on a vertical axis to said supporting frame, a chute pivot-

ally secured to the boom, means for tilting said chute to its discharging position, and a guiding track which at the same time shifts the chute bodily toward said supporting frame.

10. The combination with a receptacle for material, of a spout, means to deliver material from said receptacle to said spout, a frame supporting the said spout, mounted upon vertical pivots so as to be free to swing upon them, the frame being provided with guideways that direct the up and down movements of the inner end of the spout, a cable connected with the inner end of the spout, winding means for the cable, and manually controlled power actuated devices through which said cable is wound up and let off.

[Claims 2 and 4 to 9 not printed in the Gazette.]

1,267,441. HEAD FOR HAMMERS AND OTHER TOOLS. NOAH S. MOSLEY, Fort Worth, Tex. Filed July 16, 1917. Serial No. 180,695. (Cl. 287—35.)



1. A hammer comprising a head having a tapering eye, a handle having a tapering end fitted into said eye and projecting through said head, a cross-stay dovetailed in said head and in said handle, said handle having a slot for said cross-stay deeper than the cross-stay, a strap countersunk in the inner walls of said eye and in the face of said cross-stay, and a screw running through said strap and cross-stay and penetrating said handle for tightening said handle in said eye.

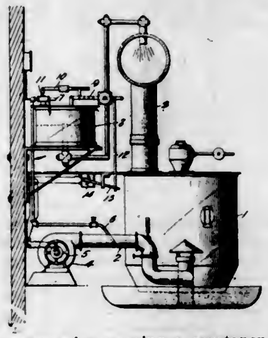
2. A hammer comprising a head having a tapering eye, a handle having a tapering end fitted into said eye, a cross-stay for tightening said handle in said eye dovetailed in said head and said handle having a slot for said cross-stay, a strap countersunk in said cross-stay and engaging the end of said handle and projecting through said eye, and a screw running through said strap and cross-stay and into said handle and coöperating with said cross-stay, and means attaching said strap to said handle.

1,267,442. ARTIFICIAL TOOTH. WILLIAM MARK MUCHOW, Evanston, Ill. Filed Sept. 17, 1917. Serial No. 191,829. (Cl. 32—9.)



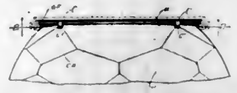
The combination of an artificial tooth facing, and a metallic backing for the same, said artificial tooth facing having its back-surface pronouncedly concaved without an offset or shoulder therein, a concaved, tapering, projection on the back of said tooth facing, said concaved projection starting at the occlusal or biting surface of the tooth facing and vanishing near the root of said tooth facing, said concaved projection being undercut; said metallic backing being of concavo-convex contour, the convex face of said backing fitting the concave surface of the back of said tooth facing, a hollow projection on the concave surface of the metallic backing said hollow projection being tapering and affording in the convex face of the backing a tapering groove constructed to engage the concave projection on the back surface of said tooth facing.

1,267,443. MEANS FOR AUTOMATICALLY REGULATING THE BLAST COMPONENTS OF PRODUCERS. HUGH T. NEWELL, Pittsburgh, Pa., assignor to Chowning Regulator Corporation, Elmira, N. Y., a Corporation of New York. Filed July 19, 1917. Serial No. 181,567. (Cl. 236—7.)



In an apparatus for securing a constancy in the proportions of steam and air forming the blast of a producer, and for automatically controlling the combined blast in accordance with the demand upon the producer, the combination with an air blast intake for the producer, of a blower supplying air thereto, and a steam jet supplying steam thereto, of means for varying the speed of rotation of the blower, a valve for controlling the pressure of the steam supplied to the steam jet, and means actuated by a variation in the pressure of the outlet side of the producer for controlling the speed of the said motor, and the position of the said valve.

1,267,444. GLOBE-GUARD SUPPORT. WILLIAM F. NICHOLS, Chicago, Ill. Filed Mar. 6, 1917. Serial No. 152,866. (Cl. 240—102.)



1. A globe guard support, comprising a ring formed of a single piece of material, one longitudinal edge thereof being bent, folded and overlapped upon itself leaving the opposite edge to form an outwardly extending circumferential flange adapted to rest upon the rim of the globe, and means projecting from said ring and engaging the guard, substantially as described.

3. A globe guard support comprising a ring formed of a single piece of material, one longitudinal edge of which is bent, folded and overlapped upon itself, the ends of said piece of material being joined together to form the ring having an outwardly extending circumferential flange, a plurality of engaging devices secured in said ring at predetermined distances apart and extending outwardly therefrom to engage the guard substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

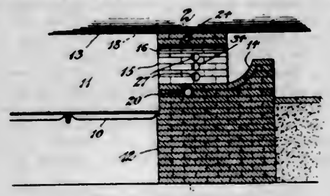
1,267,445. IMITATION GOLD OR COLORED LEAF. KARL E. OLSON, Irvington, N. J. Original application filed Mar. 2, 1915, Serial No. 11,635. Divided and this application filed Sept. 18, 1915. Serial No. 51,426. (Cl. 106—37.)

1. A self-supporting leaf or film comprising soluble cotton, a coloring matter, and gum elemi, the proportion of gum elemi present being in excess of that of the soluble cotton.

6. An imitation gold leaf comprising a binder, a metallic coloring matter, and gum elemi.

[Claims 2 to 5 not printed in the Gazette.]

1,267,446. SMOKE-CONSUMING FURNACE. ORLAND D. ORVIS, New York, N. Y., assignor to Annie D. Orvis, New York, N. Y. Filed Oct. 23, 1916. Serial No. 127,115. (Cl. 110—73.)

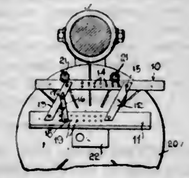


1. In a furnace, the combination with a bridgewall, of a plurality of piers erected upon said bridgewall and extending rearwardly from the front thereof so as to produce intervening combustion chambers of appreciable width and depth over said bridgewall, nozzles positioned in the sides of the combustion chambers and in inclined relation to the line of flow of the furnace gases through said combustion chambers, the nozzles at the respective sides of each chamber being inclined oppositely to each other and operating to direct sheets of steam and air in converging paths within the respective chambers and rearwardly of the front portion of the bridgewall, and a supply conduit communicating with said nozzles.

7. In a furnace, the combination with a bridgewall, of piers and arches positioned thereon and spaced relatively to each other to produce combustion chambers extending for appreciable distances rearwardly from the front portion of the bridgewall, blast nozzles positioned in inclined relation to the line of flow of furnace gases through said combustion chamber, the nozzles on one side of each chamber being inclined in an opposite direction to the inclination of other nozzles in the opposite side of the same chamber and each nozzle being provided with an elongated blast outlet, said nozzles being located in the sides of the combustion chambers and operating to direct sheets of steam and air on converging lines within the respective combustion chambers and the sheet of steam and air from each nozzle being free to spread so as to intersect with the sheet of steam and air from an adjacent nozzle or nozzles, and a supply conduit communicating with said nozzles.

[Claims 2 to 6 not printed in the Gazette.]

1,267,447. WORK GUIDE AND SUPPORT FOR DRILL-PRESSES. THOMAS N. PHELAN, Madison, Wis. Filed Oct. 22, 1917. Serial No. 197,933. (Cl. 77—55.)



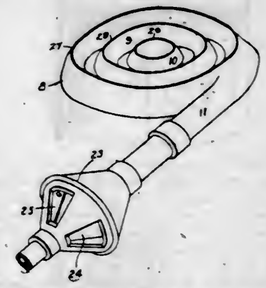
1. A work holder and guide for drill presses comprising a base member and a work engaging member, links pivoted to the base member and to the work engaging member, and means holding the links at variable angles with relation to the work engaging and base members.

3. A work holder and guide for drill presses comprising a base member and a work engaging member, a link pivoted to the base member and to the work engaging member, a second link pivoted to one end of the work engaging member and perforated at its other end, the base member being provided with a plurality of perforations, a pin passing through the perforation in the second named link and through any one of said perforations in the base member, and means for holding the links in an angularly adjusted relation to the work engaging member and base member comprising a brace pivotally connected to the first named link and perforated at its opposite extremity, and a pin adapted to pass through said perforations, the work engaging member being formed with a plurality of longitudinally extending perforations with which said pin can be engaged.

5. A work holder and guide for drill presses, comprising a base member and a work engaging member, means for adjusting said members in different spaced relations from each other, and means for adjusting said members into different angular relations to each other.

[Claims 2 and 4 not printed in the Gazette.]

1,267,448. GAS-BURNER. JOSEPH W. PIATT, New York, N. Y., assignor to L. H. Piatt, New York, N. Y. Filed Nov. 10, 1916. Serial No. 130,561. (Cl. 158—114.)



1. A gas burner comprising a series of concentric chambers with an outer chamber connected with a next adjacent inner chamber through ports, the walls of which are in arcs of circles eccentric to the walls of the chambers, and an intake connected with the source of gas supply and the outer of said chambers only for the purpose specified.

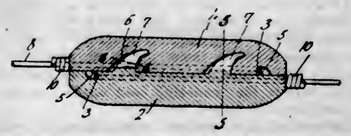
[Claims 2 to 18 not printed in the Gazette.]

1,267,449. MANUFACTURE OF SYNTHETIC MILK. JAMES PIPERNO, New York, N. Y. Filed May 7, 1917. Serial No. 167,077. (Cl. 99—11.)

1. A synthetic milk consisting of an element producing fats and organic salts, an element for the production of protein, carbohydrates and organic salts, a lactic culture, the first and second elements being extracted by ebullition, the resultant liquids being mixed together and the culture added while the mass is warm.

[Claims 2 to 5 not printed in the Gazette.]

1,267,450. CONNECTOR. HARRY W. POWERS, Northwest, Va. Filed Feb. 25, 1918. Serial No. 219,049. (Cl. 24—123.)

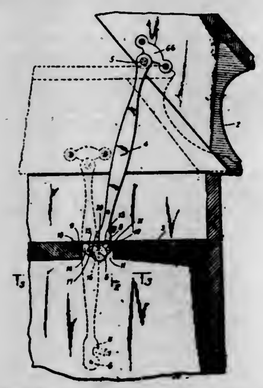


1. A connector embodying a pair of blocks provided on their inner faces with loop-shaped grooves opening through the ends of the respective blocks, at one end of each block, one block being provided in its inner face with recesses which are prolonged longitudinally of said block, and the

other block being provided upon its inner face with outstanding lugs prolonged longitudinally of the said block and adapted to be received in the recesses of the other block.

[Claim 2 not printed in the Gazette.]

1,267,451. LID-PROP. RICHARD JAMES PRETTIE, Jamaica, N. Y., assignor to The Aeolian Company, a Corporation of Connecticut. Filed Mar. 24, 1915. Serial No. 16,671. (Cl. 217—60.)



1. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, a support for said toe, stationary guide-members forming an upwardly extending passage for said pin when raising the lid and a downwardly extending passage which delivers the prop into a position wherein its toe supports the lid.

9. In combination, a lid-prop guided for endwise movement, having a toe for supporting the lid in raised position and a guide-pin, guide-members forming an upwardly extending passage for said pin when raising the lid directed to deliver the prop into a position wherein its toe supports the lid and a spring part which yields to permit the pin to pass it in upward direction but which prevents its return thereby and delivers the pin and prop into a position wherein the toe of the latter is carried out of its supporting position and the prop is permitted to descend, a slotted plate forming the guide for the endwise movement of the prop, and a cross-piece across said slot to coact with and support the toe of the prop.

[Claims 2 to 8 not printed in the Gazette.]

1,267,452. AUTOGRAPHIC REGISTER. STANLEY M. RATLIFF and WILLIAM L. PAYNE, Norwood, Ohio. Filed July 28, 1917. Serial No. 183,222. (Cl. 282—5.)



1. An autographic register comprising a tablet, a wicketed casing over the tablet, the casing and tablet being relatively movable and adapted to receive freely and to clamp papers between them, an agent normally urging the casing and tablet toward each other, and manually operative means for rendering said agent inactive, combined substantially as set forth.

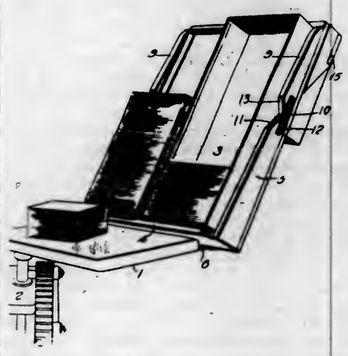
6. An autographic register comprising, a removable wicketed casing, a tablet disposed thereunder, a pivotally supported tablet-frame carrying the tablet, and a strut carried by the tablet-frame at the initial end of the tablet and provided with a slot extending lengthwise of and entirely through it for the heel of a piece of carbon paper, combined substantially as set forth.

8. An autographic register comprising, a base, a pair of supply-rolls supported thereby, a record storage-roll supported by the base, a tablet supported by the base above the level of the rolls, and a pair of embossing rolls supported below the tablet in position to engage the pair of papers coming over the tablet from the supply-rolls, combined substantially as set forth.

16. An autographic register comprising, a bearing, a hub journaled in the bearing and having an axial socket in its inner face and provided with a diametrical groove, a gear fast on said hub, an open-sided bearing in line with the first-mentioned bearing, a storage-roll spindle having one end supported by the open-sided bearing and having its other end loosely engaging said socket, a pin crossing the socket end of the spindle and engaging the groove in the hub, a blade-spring provided with a perforation engaging the end of the spindle supported by the open-sided bearing, a supply-roll, and a tablet supported above the level of the rolls and adapted to support the paper on its way between the rolls, combined substantially as set forth.

[Claims 2 to 5, 7, and 9 to 15 not printed in the Gazette.]

1,267,453. RACK. CHARLES MANLEY RAY, Asheville, N. C. Filed May 23, 1917. Serial No. 170,393. (Cl. 211—41.)



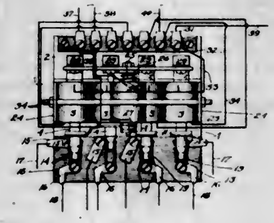
1. A device of the character specified comprising a fixed portion having means for connecting the same to a table to hold the said fixed portion in an inclined position with respect to the table, said fixed portion comprising a bottom wall, end walls and a lower side wall, the end walls being extended above the bottom wall and beveled at both corners, a movable portion consisting of a bottom and end walls secured to the underface of the bottom and hinged to the end walls of the fixed portion and beveled at their hinged ends to engage either beveled face of the end wall to support the movable portion in alinement with the fixed portion or in horizontal position, said movable portion supporting a tray, said tray consisting of a front section fixed to the bottom of the movable portion and a rear section detachcably connected with the said bottom and forming with the fixed section a complete tray, the removable section having a latch for connecting the same with the box.

[Claims 2 and 3 not printed in the Gazette.]

1,267,454. CIRCUIT-CONTROLLER. WALTER C. REED, Dalton, Mass., assignor to The Telelectric Company, Pittsfield, Mass., a Corporation of Massachusetts. Filed Jan. 30, 1913. Serial No. 745,094. (Cl. 175—281.)

1. A circuit controller comprising an electromagnet, a movable member subject to the attraction thereof, a contact device including two circuit terminals, a metallic strip connected to one of the terminals and a pair of spring wires each connected to the other terminal and independently movable in opposite directions into contact with the metallic strip, and means carried by said

movable member for spreading the spring wires in one position of the member and thereby moving both of them out of contact with the metallic strip, and for releasing said wires and permitting them to spring into contact with the metallic strip in another position of said member.

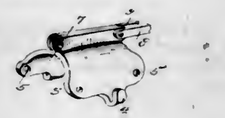


3. A circuit controller comprising a plurality of independently-energized horizontal solenoids each having a free plunger movable inward thereby when energized and projecting at both ends beyond the ends of the solenoid, contact devices each controlled by one end of one of said plungers, a supplementary horizontal solenoid having a spring-actuated plunger movable in one direction thereby when energized, and means carried by the latter plunger for engaging the first-mentioned plungers and moving them outward independently of one another.

5. A circuit controller comprising a plurality of solenoids each having a free plunger movable in one direction thereby and adapted to remain without restraint in either of its extreme positions, a supplementary solenoid having a plunger movable in the opposite direction thereby, means for restoring the latter plunger to its normal position, a plurality of resilient fingers connected to the plunger of the supplementary solenoid and each located in position to engage one of the first-mentioned plungers at the limit of the inward movement of the latter, and contact devices each controlled by one of the latter plungers.

[Claims 2 and 4 not printed in the Gazette.]

1,267,455. AUTO-WHEEL DEVICE. WINFIELD S. RILEY, Oakhill, Kans. Filed Mar. 10, 1915. Serial No. 13,521. (Cl. 152—14.)

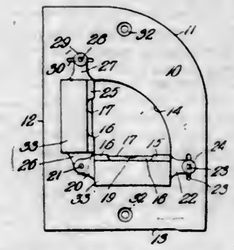


1. Tire protecting means, comprising alternate attaching link members and intermediate connecting links, each attaching link member comprising similar halves which unitedly extend over the tread and along the sides of the tire and having attaching elements at their inner edges and abutting flanges at their outer edges to provide tractor lugs and link elements.

[Claim 2 not printed in the Gazette.]

1,267,456. LEVELING INSTRUMENT. ANDREW P. RUNGE, Blue Island, Ill. Filed Apr. 24, 1917. Serial No. 164,258. (Cl. 33—214.)

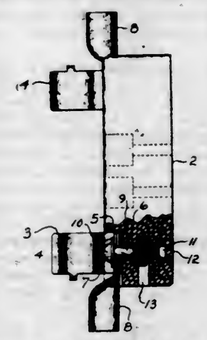
2. A leveling instrument comprising a plate having two edges perpendicular to each other, a spirit level parallel to each of said edges, each of said levels having an ear projecting from one end and overlapping the corresponding ear on the other level, a pin extending through said ears and into said plate for pivotally mounting said spirit levels, an ear projecting from the opposite end of each of said levels, screw pins each passing through a slot in said plate and through one of said ears to permit limited



adjustment of the levels, and a nut on each screw to secure the levels in position after adjustment.

[Claim 1 not printed in the Gazette.]

1,267,457. CLIP. JOSEPH SACHS, Hartford, Conn. Filed July 26, 1916. Serial No. 111,383. (Cl. 175—273.)

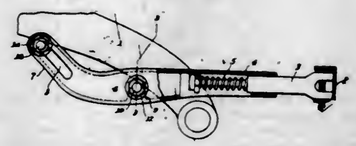


1. The combination of a block, a clip, a holding down device for the clip, the block having an opening to receive the holding down device and also having a lateral slot intersecting said opening, and a securing element insertible through said slot and engaging the holding down device to maintain the same in operative position.

3. An insulating block having a bore extending partly therethrough and also having a nut receiving slot intersecting and extending across the bore, said block having a clip seat in one face into which said bore opens at one end.

[Claims 2, 4, and 5 not printed in the Gazette.]

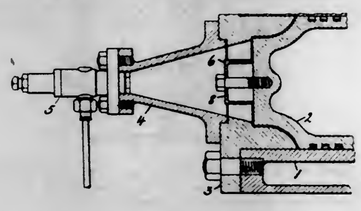
1,267,458. AUTOMOBILE-BUMPER. JAMES H. SAGER, Rochester, N. Y., assignor to J. H. Sager Company, Rochester, N. Y., a Corporation. Filed Apr. 13, 1917. Serial No. 161,749. (Cl. 293—55.)



A bumper supporting arm having a vertical channeled face for abutting the vertical side face of a channeled bar with a curved end, and also having a bolt opening and a slot, the length of the slot extending in a direction to intersect a plurality of arcs having the bolt opening as a center, the arm also having an integral channeled projec-

tion extending from its channeled face adjacent the bolt opening, a hooked bolt fitted in said opening and channeled projection, and a hooked bolt fitting in said slot.

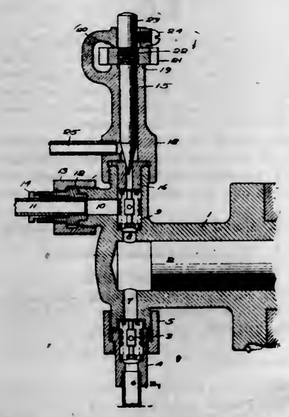
1,267,459. INTERNAL-COMBUSTION ENGINE. CHARLES S. SALFELD, Milwaukee, Wis. Filed June 8, 1914. Serial No. 843,777. (Cl. 123—30.)



1. In an internal combustion engine, a cylinder, a piston reciprocal therein, a head for the cylinder having an opening through which a jet of fuel may be injected, means for injecting a jet of fuel through the opening of the head, and a cup-shaped ignition chamber detachably and reversibly carried by the piston, the bottom of the cup being perforated.

2. In an internal combustion engine, a cylinder, a piston reciprocal therein, a head for the cylinder having an opening through which a jet of fuel may be injected, means for injecting a jet of fuel through the opening of the head, and a cup-shaped ignition chamber having a perforated bottom and secured with its opened end against the piston whereby the perforated end will be adjacent the opening of the cylinder head.

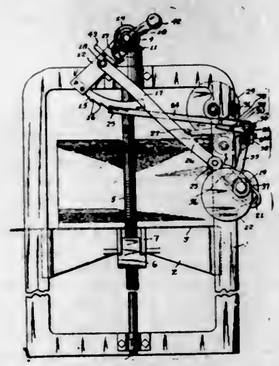
1,267,460. GOVERNING APPARATUS FOR INTERNAL-COMBUSTION ENGINES. CHARLES S. SALFELD, Milwaukee, Wis. Filed June 8, 1914. Serial No. 843,779. (Cl. 123—140.)



1. A speed governing appliance for internal combustion engines comprising the combination of a fuel injection pump, a pump plunger working therein, a suction valve, a delivery valve, and a governing valve provided with screw thread, a toothed pinion provided with corresponding screw thread and arranged to actuate said valve axially, and means to effect a rotative movement of said pinion in accordance with changes in the speed of the engine.

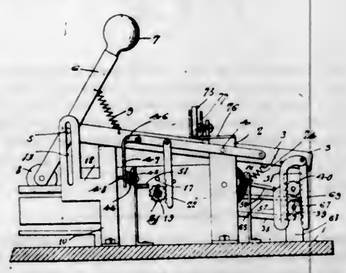
2. A speed governor appliance for internal combustion engines comprising the combination of a fuel injection pump casing having a delivery passage, a pump plunger in the casing, a delivery valve reciprocable in the delivery passage and adapted to seat at the inner end of said passage, a needle valve seating sleeve in the other end of the passage, a flange on the outer end of the sleeve engaging against the pump casing, a tubular member threaded on the pump casing and clampingly engaging said needle valve seating sleeve, a needle valve slidably mounted in the tubular member and adapted to seat against said sleeve, and means for operating the needle valve.

1,267,461. CONSTANT-LEVEL DEVICE FOR SHEET-FEEDERS. FREDERICK W. SAUER, Brooklyn, N. Y. Filed July 5, 1917. Serial No. 178,627. (Cl. 271—62.)



In a sheet feeder, the combination with a table and elevating means including a reciprocatory pawl, of an abutment connected with the pawl, a transverse rock-shaft over the forward part of the table, a feeler carried by said shaft, a stop arm also carried by the rock-shaft and extending rearward into operative relation to said abutment, and a yielding connection interposed between said stop arm and the rock-shaft, said stop arm comprising a short-arm section having means for adjusting it angularly upon the rock-shaft, a long-arm section pivoted to the short-arm section, and a spring yieldingly holding the two sections of the stop arm in normal relation.

1,267,462. STAMP-AFFIXING MACHINE. JOHN PAUL SCHIBER, Edwardsville, Ill. Filed June 22, 1917. Serial No. 176,389. (Cl. 216—25.)



1. A stamp affixing machine comprising a frame, operating members pivoted to said frame, means supporting a strip of stamps on said frame, means actuated by the operating members to feed the stamps forwardly of the frame, means for gripping the first stamp of the strip of stamps and to move said stamp forwardly and downwardly, means applying moisture to the first stamp, means for severing said stamp from the strip of stamps, and means depositing the severed stamp on an envelop.

2. A stamp affixing machine comprising a frame, operating members pivoted to said frame, means supporting a strip of stamps on said frame, feed rollers journaled in said frame and receiving the strip of stamps, means for connecting the feed rollers with the operating members to be rotated upon movement of the operating members, means for gripping the end stamp of the strip of stamps and moving the same forwardly and downwardly, means for applying moisture to said end stamp, means severing said end stamp from the strip of stamps, and means for depositing said stamp on an envelop.

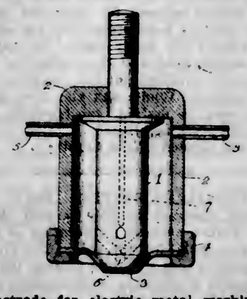
4. A stamp affixing machine comprising a frame, operating members pivoted to said frame, means supporting a strip of stamps on said frame, feed rollers receiving said stamps, means for connecting the feed rollers with the operating members, a shaft slidably mounted in said frame, a rod pivoted on said shaft, a member pivoted at one end of said rod, a roller journaled to said member, a clamp pivoted to said member, a lever formed on said clamp, means for causing the clamp to grip a stamp against the roller, means connected with said rod for causing the clamp and member to move forwardly, means for engagement with the lever when moved forwardly to disengage the clamp from the roller to free the stamp, and means for compressing the stamp upon a letter.

8. A stamp affixing machine comprising a frame, means supporting a strip of stamps on said frame, means for cutting said stamps, a track carried by said frame, a brush operable on said track, a receptacle carried by said frame and normally receiving said brush to apply moisture thereto, a trip carried by said track, a projection carried by said brush and adapted to engage the trip to cause said brush to move upwardly to apply moisture to the adhesive face of a stamp, and means for causing the brush to travel upon the track.

10. A stamp affixing machine comprising a frame, operating members pivoted on said frame, a handle pivoted on said operating members, a roller carried by said handle, means supporting stamps on said frame, means for feeding the stamps forwardly, an anvil slidable on said frame, means for connecting the anvil to the operating members to move said anvil forwardly upon the downward movement of the operating members, a knife pivoted to said frame and disposed over the stamps and anvil, and means carried by the operating members for engagement with the knife to move said knife downwardly to cut the stamps.

[Claims 3, 5 to 7, 9, 11, and 12 not printed in the Gazette.]

1,267,463. ELECTRODE FOR ELECTRIC WELDING-MACHINES. GUSTAVE HERMANN SCHKOMMODAU, Cincinnati, Ohio, assignor to Thomson Spot Welder Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 8, 1917. Serial No. 195,219. (Cl. 219—4.)



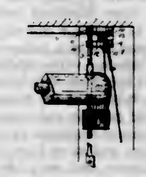
1. An electrode for electric metal working apparatus comprising a steel core or center and a surrounding shell carried thereby and provided at its lower end with a removable conducting plate forming the contact surface of the electrode and receiving the pressure of the steel center.

3. An electrode for electric metal working apparatus comprising a center, a shell surrounding the same and forming a container for a cooling medium and a closure for said container removably secured to the lower end thereof and adapted to receive the pressure of the center.

6. A compound electrode for electric metal working apparatus comprising a pressure applying central rod, a shell of good conducting material carried thereby and provided with means for circulating a cooling medium through the space between the shell and center, said rod being provided with transverse passages for the cooling medium at the work engaging end and a closure for the end of said shell and engaged by said rod.

[Claims 2, 4, and 5 not printed in the Gazette.]

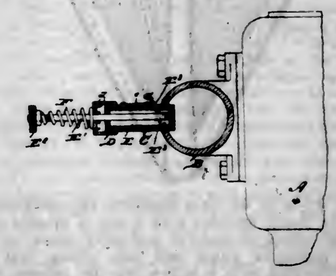
1,267,464. ADJUSTABLE SUPPORT FOR WINDOW-SHADES. HARRY M. SCHLOSS, Jersey City, N. J. Filed Sept. 26, 1914. Serial No. 863,597. (Cl. 156—27.)



1. In a shade adjuster comprising a rod, a member adapted to slide upon said rod comprising a shade receiving bracket, a plurality of lugs formed integral with one side of said bracket and adapted to engage said rod, a box shaped portion formed integral with said bracket and projecting transverse to said lugs, said box shaped portion being provided with a V shaped groove and a distending means one end of which is adapted to be received in said groove.

2. In a shade adjuster comprising a rod, a member adapted to slide upon said rod, and means for supporting the upper end of said rod and comprising a plate having a plurality of perforated foot pieces turned at right angles to said plate, a plurality of tubular lugs extending in the direction of said foot pieces and adapted to receive said rod and a plurality of lugs formed integral with said plate and extending in a direction opposite to said foot pieces, a roller received between said last mentioned lugs and a flexible member passing over said roller and connected to said slidable member for operating said slidable member as and for the purpose set forth.

1,267,465. AUXILIARY AIR-INLET VALVE. JOHN H. SCHMIDT, Detroit, Mich., assignor of one-half to Carl H. Mitchell, Detroit, Mich. Filed July 26, 1917. Serial No. 182,923. (Cl. 48—180.)



1. A device of the class described including a tubular valve casing provided at its inner end with a valve seat

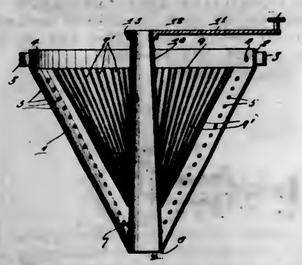
and having an inlet at its outer end, a tubular valve slidable in the valve casing and provided with an inner closed end forming a head for engaging the valve seat to close the inner end of the valve casing, said tubular valve being provided intermediate of its ends with apertures arranged to be successively carried beyond the valve casing and yieldable means for urging the tubular valve to its closed position.

2. A device of the class described including a tubular valve casing designed to pierce the intake manifold of a combustion engine and provided at its inner end interiorly of the manifold with a valve seat and having an inlet at its outer end, a tubular valve slidable in the valve casing and provided at its inner end with the engaging portion to coact with the valve seat to close the inner end of the valve casing, said tubular valve having apertures arranged to be carried beyond the valve casing, said tubular valve being also provided at intervals with recesses arranged with relation to the apertures and spring actuated detent mounted on the valve casing and arranged to engage the said recesses for yieldably maintaining the tubular valve in a plurality of positions.

3. A device of the class described including a tubular valve casing provided at its inner end with a valve seat, a cap mounted on the outer end of a valve casing and having inlet perforations, a tubular valve slidable in the valve casing and provided at its inner end with a head or portion to coact with the valve seat for closing the inner end of the valve casing, said tubular valve being also provided at intervals with apertures arranged to be carried beyond the valve casing, a valve rod extending through the valve and connected at its inner end with the same, said rod being slidable through the cap and provided at the outer end with adjusting means and the spring disposed on the rod and interposed between the cap and the adjusting means.

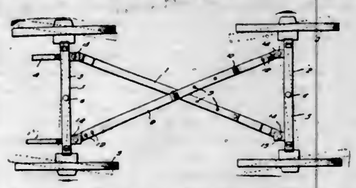
4. A device of the class described including a valve casing designed to pierce the intake manifold of an internal combustion engine and provided at its inner end with a valve seat arranged interiorly of the manifold, a tubular valve slidable in the valve casing and provided at its inner end with the portion arranged to engage the valve seat and close the inner end of the valve casing, said tubular valve being provided at intervals with exterior recesses and having spaced perforations arranged to be carried beyond the valve casing, a spring actuated detent located beyond the intake manifold and arranged to engage the said recesses for yieldably maintaining the tubular valve in a plurality of positions and yieldable means for urging the tubular valve toward its closed position.

1,267,466. COLANDER. ESTHER SCOFIELD, Tipton, Ind., assignor of one-half to James E. Fisher, Tipton, Ind. Filed July 19, 1917. Serial No. 181,485. (Cl. 146—9.)



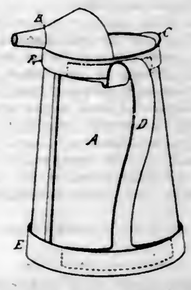
In a device of the class described, the combination of an outer casing provided with a rim, a primary hollow cone-like column attached to said outer casing, an inner casing positioned within said outer casing, said inner casing provided with a hollow cone-like column resting upon the hollow column of the outer casing, the cone-like structure of the primary column constituting means for preventing the inner casing from dropping to the bottom of the outer casing, the columns of both casings extending about the rim of the outer casing, means attached to the column of the inner casing for producing a relative rotation between the inner and the outer casing.

1,267,467. VEHICLE RUNNING-GEAR. HERMAN SCOFIELD and ERNEST N. DAWSON, Syracuse, N. Y. Filed Jan. 24, 1917. Serial No. 144,195. (Cl. 21—144.)



In a vehicle running gear, the combination with the forward and rear wheels and bolsters of a vehicle, of spaced U-shaped vertically disposed brackets on said bolsters, crossed adjustable reach bars, substantially U-shaped spring metal bracket members having inclined base portions and connected at their longest arms to the ends of the reach bars, the arms of said brackets and the bolster brackets being interengaged, and fastening bolts positioned therethrough.

1,267,468. LIQUID-MEASURE. WALTER F. SHERMAN, Elsmere, N. Y. Filed Nov. 16, 1917. Serial No. 202,355. (Cl. 221—1.)



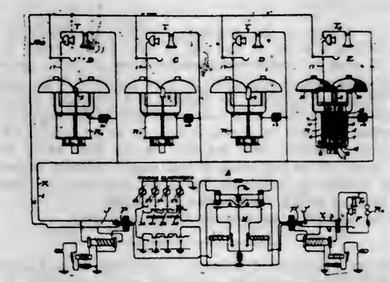
2. A liquid measure, consisting of the body of the measure, a funnel fixedly attached to the top on one side, a lip fixedly attached to the top on another side, a band around the bottom of the measure adapted to receive the end of the handle between the band and the surface of the measure, another band around the top of the measure adapted to receive the upper end of the handle between the second named band and the surface of the measure whereby liquid contained in the measure may be discharged through the funnel and also over the lip of the measure, as may be desired, substantially as described and for the purposes mentioned.

[Claim 1 not printed in the Gazette.]

1,267,469. SIGNALING SYSTEM. FRANK M. SLOUGH, Elyria, Ohio, assignor to The Garford Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed May 8, 1914. Serial No. 837,125. (Cl. 177A—341.)

1. In a selective reed signaling system, the combination of a main station, a plurality of substations and a signaling line connecting said stations, a bridge at each substation including a reed signaling device, said signaling devices being provided with parts to determine the mechanical tuning of the same, said parts being different for the

different signaling devices, the other parts of the signaling device being substantially the same for each signaling device, condensers connected in said bridges in series with the signaling devices, the capacity of the condensers being such that the bridges are approximately electrically attuned for the highest frequency current employed, said condensers being of substantially the same capacity, a plurality of generators at the main station adapted to produce currents of substantially the same voltage but of different frequencies, and each of a frequency to which one of the signaling devices is mechanically tuned to respond, and means to connect the generators to the signaling line.



3. In a selective reed signaling system, the combination of a main station and a plurality of substations, a signaling line connecting said stations, a bridge of the signaling line at each of the substations, a reed signaling device connected in each of said bridges, certain parts of said devices being different to determine the mechanical tuning of the devices, the other parts of the devices being the same in construction and mode of operation, a condenser connected in each bridge in series with the signaling devices, such condensers being of the same capacity and of such a capacity that the bridges are electrically attuned for the highest frequency currents employed, means at the main station for producing currents of the same voltage but of different frequencies and means for connecting said current producing means to the signaling line.

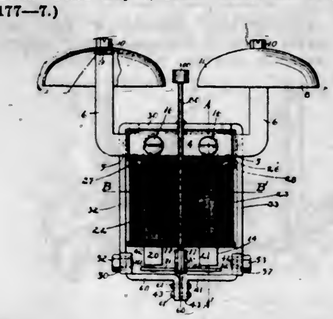
5. In a selective reed signaling system, the combination of a main station, a plurality of substations, and a signaling line connecting said stations, a bridge at each substation including a reed signaling device, said signaling device being provided with parts to determine the mechanical tuning of the same, said parts being different for the different signaling devices, the other parts of the signaling devices being substantially the same for each signaling device, condensers connected in said bridges in series with the signaling devices, said bridges being tuned for the highest frequency current employed for signaling purposes, and means at the main station for producing and throwing upon the line currents of different frequencies but of substantially the same voltage, the frequency of the currents produced thereby being those for which the signaling devices are adapted to selectively respond.

7. In a selective reed party line system, the combination of a main station, a signaling line connected to said main station, a plurality of substations on said signaling line, bridges of the line at the substations, mechanically tuned reed signaling devices in said bridges, generating apparatus at the main station for generating currents of substantially the same voltage but of different frequency, and means including the signaling devices for electrically attuning the subetation bridges to be in resonance to the highest frequency current.

9. The method of selectively operating differently tuned signals, arranged in bridge of a telephone line which consists in electrically attuning said bridges uniformly to be in resonance with the highest frequency current used and selectively operating said signals by the application of various frequency currents to the telephone line.

[Claims 2, 4, 6, 8, and 10 not printed in the Gazette.]

1,267,470. RINGER. FRANK M. SLOUGH, Elyria, Ohio, assignor, by mesne assignments, to Stromberg-Carlson Telephone Mfg. Co., Rochester, N. Y., a Corporation of New York. Filed May 8, 1914. Serial No. 837,126. (Cl. 177—7.)



1. In a ringer, the combination of a supporting member having a channel-shaped body and a pair of arms forming gong posts, the arms being bent at right angles to one of the channel sides of the body and then turned to extend substantially parallel thereto and in opposite directions from each other, each arm then being turned upward to form a gong post, gongs on said posts, a tapper and a tapper rod supported from said supporting member and means to operate said tapper to cause said tapper rod to strike said gongs.

3. In a ringer, the combination of a suporting member having a channel-shaped body and a pair of arms forming gong posts, the arms being bent at right angles to one of the channel sides of the body and then turned substantially parallel thereto and in opposite directions from each other, each arm then being turned upward to form a gong post, gongs on said posts, an electromagnet incinding a plurality of U-shaped punchings forming the core thereof having their short limbs connected in said channel-shaped member and a permanent magnet connected to said supporting member, an armature, tapper and tapper rod, and means to support said armature adjacent the electromagnet and with the tapper in position to strike the gongs when the armature is vibrated.

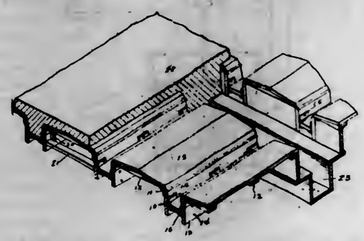
6. In a ringer, the combination of a supporting member having a channel-shaped body and a pair of arms forming gong posts, the arms being bent at right angles to one of the channel sides of the body and then turned to extend substantially parallel thereto and in opposite directions from each other, each arm then being turned upward to form a gong post, gongs on said posts, an electromagnet and a permanent magnet connected to said supporting member, an armature, tapper and tapper rod, and means to support said armature adjacent the electromagnet and with the tapper in a position to strike the gongs when the armature is vibrated.

7. In a ringer, the combination of a supporting member, gong posts supported therefrom, gongs on said gong posts, an electromagnet comprising a core formed of a plurality of U-shaped punchings and magnet windings on the limbs thereof, common means to clamp said punchings together and connect them to the supporting member, a U-shaped integral permanent magnet supported from the supporting member with its limbs extending substantially parallel to the limbs of the magnet core and outside the same, a bridge of magnetic material adjustably and removably connected to the ends of the limbs of the permanent magnet, a reed connected at one end to said bridge and free at the other, an armature connected to the other end of the reed and held in operative relation to the electromagnet, a tapper rod, a clamp integral with the armature for connecting the reed and tapper rod together, said clamp being provided with two wings folded one against the other, means for fastening the wings of the clamp together and securing the ends of the spring and the tapper rod therebe-

tween and a tapper on said tapper rod in operative relation to the gong.

[Claims 2, 4, and 5 not printed in the Gazette.]

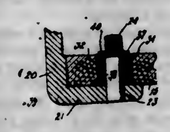
1,267,471. ADJUSTABLE ARCH-SPAN AND BEAM FORM. HARRY E. SMITH, Indianapolis, Ind. Filed Oct. 9, 1916. Serial No. 124,703. (Cl. 25—131.5.)



2. An adjustable arch span and beam form including side walls, an arch support adapted to be removably supported thereby, said support being formed in two sections, said sections being oppositely inclined, substantially pyramidal supporting beams for said arch support having their ends resting on said side walls, substantially L-shaped brackets for coöperation with said side walls, the vertically extending portions of said brackets having elongated slots, a single bolt for each bracket, said bolt extending through the side wall and slot of the bracket whereby the bracket may be adjusted vertically or rotated on the bolt to reverse the position of the horizontal portion thereof, wing nuts adapted to screw onto said bolts for securing them in their adjusted positions, and beam supports adjustably supported by said brackets, whereby they may be raised or lowered to form any desired depth of beam.

[Claim 1 not printed in the Gazette.]

1,267,472. LENS-POST SLEEVE AND METHOD OF FORMING THE SAME. FREDERICK A. STEVENS, Providence, R. I. Filed Feb. 14, 1918. Serial No. 217,071. (Cl. 88—47.)



2. The method of uniting a lens and post consisting in surrounding the post within the lens with a compressible tubular core carrying a coating of cementitious material, applying heat to soften the coating, and longitudinally compressing the core to expel and spread the softened coating.

5. As a new article of manufacture a lens-post sleeve comprising a spiral core, and cementitious coating incorporated in the core.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,267,473. NEW SOLUBLE AND ASSIMILABLE PHOSPHATE MANURE AND PROCESS FOR MAKING IT. ERMENEGILDO STOPPANI, Bologna, and VITTORIO VOLPATO, Milan, Italy. Filed Oct. 5, 1916. Serial No. 123,920½. (Cl. 71—7.)

4. The process of making a phosphatic fertilizer which consists in grinding phosphorite containing about 60% of calcium phosphate, grinding sodium carbonate, mixing the phosphorite with about 6% of sodium carbonate, roasting the mixture to a temperature of about 600° C., and hydrating said mixture while still in a hot condition.

[Claims 1 to 3 not printed in the Gazette.]

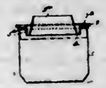
1,267,474. FUSE-IGNITING DEVICE. ARCHIBALD J. STRANE, Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 11, 1918. Serial No. 221,699. (Cl. 102—8.)



1. A device of the character described comprising a pin having a point at one end, a head at the other end, and a mass of match composition adapted to be ignited by friction and of substantially pear shape with its small end disposed inwardly to constitute a spreader for the powder in the core of a fuse, said pin projecting a considerable distance beyond said mass to adapt it to project to such an extent into the core of the fuse as to hold the mass of match composition firmly against dislodgment during the scraping movement necessary to ignite the mass of match composition by friction.

[Claims 2 to 4 not printed in the Gazette.]

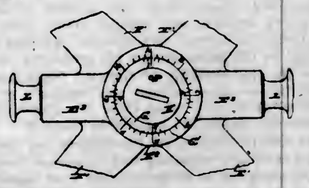
1,267,475. SOLID-ALCOHOL BURNER. ALEXANDER STROBL, New York, N. Y., assignor to S. Schmau & Company, Inc., a Corporation of New York. Filed Jan. 19, 1915. Serial No. 3,022. (Cl. 158—97.)



1. A burner comprising a receptacle open at the top, a solid hydrocarbon fuel within the receptacle, a chimney associated with the opening and of less diameter than the opening, providing an annular orifice outside of the chimney, said orifice directing the air to support combustion on the entire exposed surface of the fuel, the inside of the receptacle being unencumbered above the top of the fuel and below the chimney.

[Claims 2 to 6 not printed in the Gazette.]

1,267,476. STEERING-WHEEL LOCK FOR MOTOR-DRIVEN VEHICLES. PAUL SZYDLOWSKI, Hamtramck, Mich. Filed Sept. 14, 1917. Serial No. 191,330. (Cl. 70—129.)



1. In a device of the character described, a steering post, a steering wheel its hub sleeved upon the steering post, a spring actuated bolt carried by the hub of the steering wheel adapted to lock the wheel in operative relation to the post, and means operable by the rotary movement of the steering wheel independently of the steering post for controlling the entry of said bolt into locked relation with the steering post.

2. In a device of the character described, a steering post, a steering wheel with its hub sleeved upon the post, a spring actuated bolt carried by the hub of the steering wheel adapted when released to lock the wheel in operative relation to the post, means operable by the rotary movement of the steering wheel independently of the steering post for controlling the locking engagement of the spring actuated bolt with the post, and means to secure the bolt in its locked relation with the post until manually released.

3. In a device of the character described, a steering post having an enlarged head, a steering wheel having a hub fitted to the enlarged head of the post and free to turn thereon, spring actuated bolts carried by the hub of the steering wheel adapted to lock the wheel to the post that it may control the action of the latter, and means operable by the rotary movement of the steering wheel independently of the steering post adapted to control the entry of the spring actuated bolts into locking relation with the post.

[Claims 4 to 6 not printed in the Gazette.]

1,267,477. CLEVIS. BRANT TALKINGTON, Harrington, Wash. Filed Nov. 28, 1917. Serial No. 203,573. (Cl. 97—4.)



1. A clevis of the character described, comprising the combination with parts to be connected, of straps engaging the same and having oppositely disposed perforations, and interengaging links, each of which is generally U-shaped, having the ends of their extensions bent angularly and inwardly for engagement and retention in the perforations of the supporting straps, whereby to avoid the perforation of the parts to be connected as well as projecting connected parts.

2. A clevis of the character described, comprising the combination with parts to be connected, of straps generally of U-shape extending partially around the said parts to be connected, with their free ends projecting toward one another, and having openings in their extensions adjacent relatively opposite faces of the said parts to be connected, and interengaging U-shaped links having their extremities provided with inturned angular extensions for engagement and retention in the openings of the said supporting plates.

1,267,478. DOUGH-CUTTING DEVICE. CHARLES A. THOMAS, Wilkinsburg, Pa. Filed Apr. 29, 1916. Serial No. 94,271. (Cl. 107—51.)



A hand implement for cutting doughnut dough comprising a roll, a plate detachably connected to each end and of greater diameter than the roll, the axes of said plates registering with the axis of the roll whereby the plates will project beyond the periphery of the roll, an operating handle connected to each of said plates, a series of rows of cutters disposed at the periphery of said roll, each of said cutters consisting of a pair of spaced annular members arranged concentrically, the outer of each of said members being flanged and detachably connected to the roll, said inner members having an integral connection with said outer members at the inner ends of said cutters, said roll provided with openings communicating with said inner members, a pin projecting through each of said openings, a head carried on the outer end of the pin and operating in the inner member, said pins arranged in rows, a series of apertured bars loosely arranged in said roll and each associated with a row of pins, the pins of each row detachably connected with a bar, a coil spring interposed between said rolls and said heads and surrounding the pins.

1,267,479. COAL-CARRIER FOR RETORTS. GLENN W. TRAER, Chicago, Ill. Filed Mar. 10, 1917. Serial No. 153,911. (Cl. 202—9.)



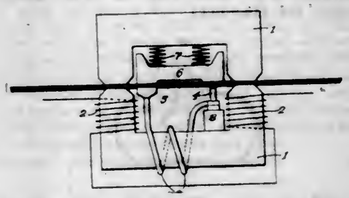
1. A coal carrier of the class described, comprising an elongated metallic container of greater vertical dimensions than transverse dimensions so as to provide a comparatively narrow column of coal, and a bottom hinged at one end and provided with rollers at both ends thereof.

3. A coal carrier of the class described, comprising a rectangular container composed of heat-conducting material, said container being of greater vertical dimension than the transverse dimension thereof, a series of partitions of heat-conducting material disposed from top to bottom and extending from side to side in the container and secured thereto whereby the container is divided into a series of vertically disposed narrow chambers, the side walls whereof are formed by the side walls of the container, a bottom for said container pivotally secured at one end so as to swing from beneath the container, and a pivoted latch member whereby the free end of the bottom is held in closed position.

6. A coal carrier of the class described, comprising a rectangular metallic container of greater vertical dimension than the transverse dimension thereof and open at its top, a plurality of metallic partitions extending from top to bottom and from side to side of the container whereby the coal in the container is divided into narrow vertically disposed columns, and a removable metallic bottom.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,267,480. ELECTRIC WELDING APPARATUS. EDMUND J. VON HENKE, Lynn, Mass., assignor to Thomson Spot Welder Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 8, 1917. Serial No. 195,270. (Cl. 219—4.)



1. In an apparatus for electric welding or riveting, an electro-magnet carrying working parts of said apparatus and adapted to engage and attach itself to the work for the purpose of holding the apparatus in working position.

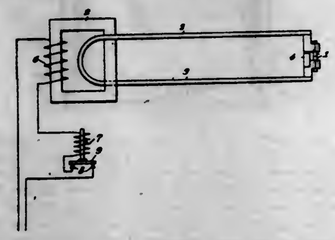
5. In an apparatus of the character described, a transformer having poles adapted to engage and attach themselves to the work as and for the purpose described.

9. In an apparatus of the character described, a transformer having a magnetic circuit formed by a sectional core the sections of which are adapted respectively for application to opposite sides of the work and have their magnetic circuit completed by the work and a secondary

for said transformer having its electrical circuit in sections applied respectively to opposite sides of the work and completed therethrough.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,267,481. AUTOMATIC SWITCHING OR CIRCUIT-BREAKING DEVICE FOR ELECTRIC WELDING OR OTHER METAL-WORKING APPARATUS. EDMUND J. VON HENKE, Lynn, Mass., assignor to Thomson Electric Welding Company, Lynn, Mass., a Corporation of Massachusetts. Filed Oct. 8, 1917. Serial No. 195,272. (Cl. 219—4.)



1. The combination with an electric metal working apparatus of the character described, of means for automatically forming a shunt of the secondary current around the work-engaging electrodes and means energized by the resultant increased flow of current for automatically breaking the primary circuit.

2. In an electric metal working apparatus of the character described, the combination with a secondary circuit for the transformer, of means for closing a short circuit around the work-engaging electrodes supplied by the secondary and an electro-magnetic circuit breaker having its magnet coils in the circuit of the primary and adapted to break the primary circuit by the increased flow of current therein resulting from the operation of the circuit closer connected to the secondary.

3. In an electric metal working apparatus, the combination with work-engaging electrodes, of short-circuiting contacts movable therewith to complete the circuit of the secondary around said work-engaging electrodes as they move in completing the work, a circuit breaker controlling the primary circuit and an actuating magnet therefor energized by the current of the primary as and for the purpose described.

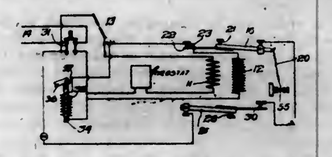
1,267,482. CALF-WEANER. CHARLES B. WAGNER, JR., Burlington, Wis. Filed June 22, 1916. Serial No. 105,213. (Cl. 119—132.)



1. A calf weaner comprising a solid concavo-convex body portion having a smooth continuous convex face, a suspension loop having an intermediate horizontal portion and terminal attaching arms bearing against and rigidly secured to the concave side of the body portion, a nose engaging member provided with an eye fitting around the horizontal portion of the suspension loop, a mating nose engaging member pivotally connected with the first-mentioned member, there being registering openings formed in said nose engaging members, and a locking device extending through said openings for holding said nose engaging members in closed position.

[Claim 2 not printed in the Gazette.]

1,267,483. ELECTRIC CONTROLLER. KENNETH M. WALLEY, Chicago, Ill. Filed Jan. 19, 1914, Serial No. 812,992. Renewed Dec. 22, 1917. Serial No. 208,527. (Cl. 175—335.)



3. In apparatus of the class described, a magnetic core, a low resistance coil of a relatively small number of turns wound on said core, an armature mounted adjacent one end of said core, a second armature mounted adjacent the other end of said core, a circuit in which said low resistance coil is adapted to be permanently connected in series, a switch operated by one of said armatures in response to a change in the magnetic field of said core for intermittently connecting said high resistance coil in shunt with said circuit, and a second switch controlled by the other armature for preventing the formation of a circuit through said high resistance coil until a circuit has been established through said low resistance coil.

4. In apparatus of the class described, a magnetic core, a low resistance coil of a relatively small number of turns wound on said core, an armature mounted adjacent one end of said core, a second armature mounted adjacent the other end of said core, a circuit in which said low resistance coil is adapted to be permanently connected in series, a switch operated by one of said armatures in response to a change in the magnetic field of said core for intermittently connecting said high resistance coil in shunt with said circuit, a second switch controlled by the other armature for preventing the formation of a circuit through said high resistance coil until a circuit has been established through said low resistance coil, and means carried by said armatures for regulating the operation of said switches.

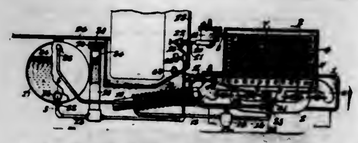
6. In apparatus of the class described, a single magnetic circuit comprising two armatures, two inductive coils for energizing said magnetic circuit, an electric circuit for each of said coils, and two switch devices each operable by one of said armatures, both of said switch devices being located in one of said electric circuits to control the current to the corresponding coil, the flow of current to said coil being prevented when either of said switch devices is open.

7. In apparatus of the class described, a pair of magnetizing coils, a movable magnetic member arranged to be acted upon by the joint field of said coils, an electric circuit for each of said coils, a switch actuated by said movable member for controlling the circuit of one of said coils, the circuit of the other coil being continuously closed during the operation of the apparatus, said switch being normally open but closed to render the corresponding coil operative when said magnetizable member is released by the magnetic field of the other coil, and a second automatic switch in the circuit with said first-named switch and the corresponding coil, said second-named switch being normally closed when said other coil is operative but being arranged to open automatically when the circuit through said other coil is open.

[Claims 1, 2, and 5 not printed in the Gazette.]

1,267,484. KEROSENE-VAPORIZER. LEWIS B. WHITE, Manson, N. C., assignor of one-half to Amos H. Mylin, Lancaster, Pa. Filed Feb. 24, 1917. Serial No. 150,750. (Cl. 48—102.)

1. Vaporizing means for the utilization of heavy liquid fuels for explosion engines, comprising an exhaust manifold having an enlargement or chamber rising therefrom immediately adjacent to and communicating with and located above the exhaust ports leading from the engine cylinders, and an extended fuel conveying pipe lodged within the chamber and continued therefrom and embracing the exhaust pipe leading from the exhaust manifold and finally discharging into the intake manifold.



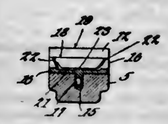
2. Vaporizing means for the utilization of heavy liquid fuels for explosion engines, comprising an exhaust manifold having an enlargement or chamber rising therefrom immediately adjacent to and communicating with and located above the exhaust ports leading from the engine cylinders, and an extended fuel conveying pipe lodged within the chamber and continued therefrom and embracing the exhaust pipe leading from the exhaust manifold and finally discharging into the intake manifold, said vaporizing means also including a reservoir for liquid fuel under pressure and communicating with the inlet end of the extended fuel conveying pipe, and there provided with a governor for controlling the amount of liquid fuel fed to the fuel conveying pipe within the chamber communicating with the exhaust manifold.

3. A means for the utilization of kerosene or the like as a fuel for explosion engines, comprising an exhaust manifold for the engine having an extension rising from said manifold closely adjacent to the exhaust ports thereof, an extended fuel conveying pipe located within the exhaust manifold and extending therefrom and then coiled about the exhaust pipe leading from the exhaust manifold and finally discharging into the intake manifold of the engine, a reservoir for liquid fuel under pressure, and a pipe leading from the reservoir at a point above the liquid level therein and communicating with the intake manifold, said last-named pipe including a controllable valve whereby fuel vapor under pressure may be delivered from the reservoir directly into the intake manifold at will.

4. Vaporizing means for the utilization of heavy liquid fuels for explosion engines, comprising an exhaust manifold having an enlargement or chamber rising therefrom immediately adjacent to, communicating with and located above the exhaust ports leading from the engine, said enlargement being constructed separately from and secured to the manifold, and an extended fuel-conveying pipe lodged within the enlargement and communicating with the intake manifold of the engine.

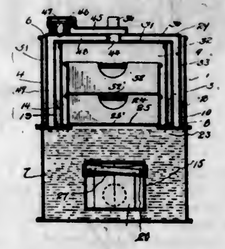
5. Vaporizing means for the utilization of heavy liquid fuels for explosion engines, comprising an exhaust manifold having an enlargement or chamber rising therefrom immediately adjacent to, communicating with and located above the exhaust ports leading from the engine, said enlargement being constructed separately from and secured to the manifold, and an extended fuel-conveying pipe lodged within the enlargement and communicating with the intake manifold of the engine, the fuel pipe between the enlargement and the intake manifold being formed into a coil in close surrounding relation to the exhaust pipe leading from the exhaust manifold.

1,267,485. BUSHING. WILLIAM R. WIDDUP, Spartanburg, S. C. Filed Jan. 16, 1915. Serial No. 2,694. (Cl. 64—10.)



As an article of manufacture, a bushing comprising a trough-shaped body provided on its lower face and intermediate its ends with a depending pin, the upper concaved face of the body being equipped with two L-shaped grooves, each comprising an arm extended transversely of the body from a point adjacent one edge of the body to a point adjacent the longitudinal center of the body and located near the ends of the body, each groove comprising also an arm extended longitudinally of the body and located adjacent the longitudinal center of the body, the inner ends of the last specified arms of the grooves being spaced apart to define an integral rib located directly above the pin and defining a support for the part journaled in the body.

1,267,486. CANNING DEVICE. JOHN F. WILLSON, Tampa, Fla. Filed Aug. 28, 1916. Serial No. 117,334. (Cl. 126—346.)



2. A steam cooker comprising a boiler including inner and outer shells forming a water seal therebetween and open at their tops, a cover formed of a hollow top and a hollow continuous wall depending therefrom, said top resting on said inner shell and said wall being positioned loosely between said shells and having an open bottom, means for admitting air into the space within said hollow top, an outlet opening from said space located in the upper part of said top, an upwardly opening check valve controlling said opening, a horizontal passage leading across said top from said opening and positioned on the exterior of the cover, and a vertical passage through said top leading from said horizontal passage and adapted for supplying air to the space within said inner shell.

3. A steam cooker comprising a boiler including inner and outer shells forming a water seal therebetween and open at their top, a cover formed of a hollow top and a hollow continuous wall depending therefrom, said top resting on said inner shell and said wall being positioned loosely between said shells and having an open bottom, the upper portion of said top having air inlet openings for supplying air to the space within said top and wall, said upper portion of the top also having an additional opening communcating with said space, an upstanding annular wall rising from the top around said additional opening, a plug within said wall for normally closing said opening, a vertical passage passing through the entire top at a distance from said additional opening, and an external passage extending along the top and inclosing said vertical passage and said wall, said external passage having a removable closure above said plug.

[Claim 1 not printed in the Gazette.]

1,267,487. TRAILER-TRUCK. JOHN O. WILSON, Chicago, Ill. Filed May 19, 1917. Serial No. 169,627. (Cl. 21—145.)

1. In a vehicle, the combination of a supporting frame, a pair of axles pivoted on said frame, a reach rigidly mounted on each of said axles and having the inner ends thereof extending toward and being adjacent each other, means for slidably and pivotally connecting the inner ends of said reaches together, a guideway on said supporting frame, said guideway being of arcuate shape on a center coincident with the pivot of one of said axles, and means on the reach of said one axle for slidably engaging said guideway.

2. In a vehicle, the combination of a supporting frame, a pair of axles pivoted on said frame, a reach rigidly mounted on each of said axles and having the inner ends thereof extending toward and being adjacent each other, means for slidably and pivotally connecting the inner ends of said reaches together, a guideway on said supporting frame, said guideway being of arcuate shape on a center coincident with the pivot of one of said axles, a horizontally disposed ledge formed on said guideway, and opposed shoulders on the end of one of said reaches slidably engaging opposite sides of said ledge.



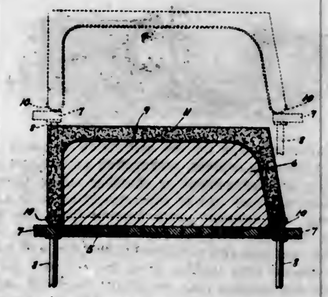
3. In a vehicle, the combination of a supporting frame, a pair of axles pivoted on said frame, a reach rigidly mounted on each of said axles and having the inner ends thereof extending toward and being adjacent each other, means for slidably and pivotally connecting the inner ends of said reaches together, a guideway on said supporting frame, said guideway being of arcuate shape on a center coincident with the pivot of one of said axles, a horizontally disposed ledge, and a C-shaped member located on the end of one of said reaches adapted to embrace said ledge so as to be slidably supported thereon.

4. In a vehicle, the combination of a supporting frame, a front axle pivotally mounted at one end of said frame, a rear axle pivotally mounted at the other end of said frame, a rearwardly extending reach rigidly mounted on said front axle, a flat V-shaped hollow guide-box rigidly mounted on the free end of said reach with the apex of said V-shaped box extending forwardly, the rear end of said box being open, a forwardly extending reach rigidly mounted on said rear axle, the free end of said rear reach being adapted to extend into the open rear end of said guide-box and being provided with a longitudinally disposed slot therein, a pin mounted on said box and adapted to extend through said slot, said pin and slot connection permitting said reaches to have a slidable and pivotal connection with each other, a guideway on said supporting frame, said guideway being of arcuate shape on a center coincident with the pivot of said front axle, and means on said guide-box for slidably engaging said guideway.

5. In a vehicle, the combination of a supporting frame, a pair of axles pivoted on said frame, a reach rigidly mounted on each of said axles and having the inner ends thereof extending toward and being adjacent each other, means for slidably and pivotally connecting the inner ends of said reaches together, a guideway mounted at its ends on said supporting frame, said guideway being of arcuate shape on a center coicident with the pivot of one of said axles, means on the reach of said one axle for slidably engaging said guideway, and a supporting brace having its ends mounted on said supporting frame and its medial part connectd to the medial part of said arcuate guideway for supporting the same.

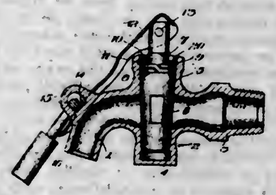
[Claim 6 not printed in the Gazette.]

1,267,488. MOLDING APPARATUS. JAMES T. WISNER, New York, N. Y. Filed July 27, 1914, Serial No. 853,268. Renewed Oct. 12, 1917. Serial No. 196,847. (Cl. 25—120.)



In a device of the kind described, a relatively stationary platform, a filler block carried thereby, a relatively vertically movable platform surrounding the stationary platform, a shell covering the filler block and having its edges resting upon the vertically movable platform.

1,267,489. FAUCET. CHARLES F. WEAY, Rochester, N. Y., assignor to National Brass Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 9, 1916. Serial No. 77,112. (Cl. 137—7.)

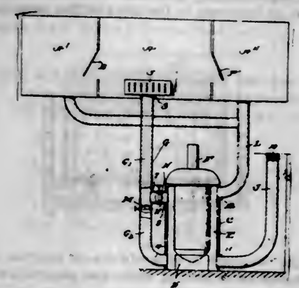


1. The combination with a valve body and a plug therein having a stem, of means for retaining the plug in the body comprising a plate on the plug stem having greater lateral dimensions than the plug receiving opening of the body and lying in a groove therein providing a shoulder overhanging the plate, and expansible means between the plug and the plate normally seating the plug in the valve body.

2. The combination with a valve body and a plug therein having a stem, of means for retaining the plug in the body comprising a plate on the plug stem having greater lateral dimensions than the plug receiving opening of the body and lying in a groove therein providing a shoulder overhanging the plate, expansible means between the plug and the plate normally seating the plug in the valve body, an operating handle pivoted to the plug stem, an eye on the body adapted to enter an opening in the handle, and means engaging the eye while overlying the handle to lock the faucet closed.

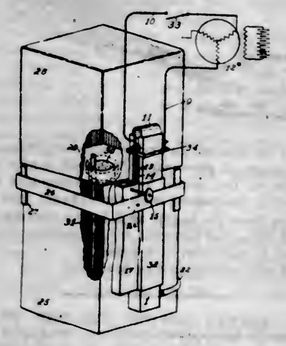
1,267,490. HEATING SYSTEM. JOHN W. WURTS, Elyria, Ohio. Filed Oct. 9, 1917. Serial No. 195,567. (Cl. 237—48.)

In a heating system, the combination of a furnace for heating air provided with an air jacket thereabout, a first duct communicating with one of a set of rooms or apartments at one end and connected at the other end near the bottom of the air jacket into which it opens, a second duct opening at one end into the air jacket near the top thereof and at the other end into the first duct, means to close either duct and open the other, a third duct placing said air jacket in communication with a source of cold air connected to the air jacket near the bottom thereof and a fourth duct connected to the air jacket near the top thereof and placing said air jacket



in communication with all the other rooms or apartments of said set than the room with which the first duct communicates.

1,267,491. HUMIDIFIER. DANIEL H. YOUNG and CHARLES W. PORTER, Manchester, Iowa; said Porter assignor of one-half of his right to Grant Brayton, Manchester, Iowa. Filed Apr. 16, 1917. Serial No. 162,590. (Cl. 219—38.)



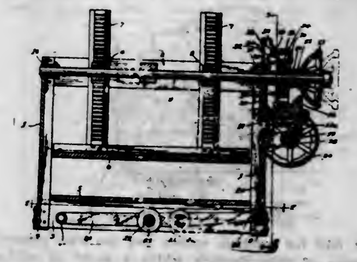
1. A humidifier, comprising a relatively small vessel open at the top, a relatively large supply-tank in communication therewith, and electrodes adjustably positioned within said vessel and in circuit with a source of electric current.

2. A humidifier, comprising a relatively large supply-tank, a relatively small boiler positioned near it, a casing in which said boiler is movably mounted, a clamping-device detachably securing said casing upon said supply-tank, and a body positioned between said boiler and tank which is a poor conductor of heat.

3. A humidifier, comprising a relatively small boiler, a relatively large supply-tank in communication therewith, a casing in which said boiler is movable, operative mechanism mounted in said casing for moving said boiler relatively to said supply-tank, and means positioned within the boiler to heat its contents.

1,267,492. **PRESS.** JOHN YOUNG, Chillicothe, Ohio. Filed Nov. 8, 1916. Serial No. 130,256. (Cl. 100—19.)

2. In a press, a frame structure, a roller structure capable of supporting said frame when in one position but allowing said frame structure to rest on the floor when in the other position, a plunger movable up and down, means for moving said plunger up and down, means whereby said plunger operating means may be disconnected from operative connection with said plunger, and means operated by said plunger operating means for moving said roller structure from a position of non-support of said frame structure to one of supporting it, said last specified means being operable whether said plunger operating means are operatively connected with said plunger or not.



3. In a press, a frame structure, a roller structure capable of supporting said frame structure when in one position but allowing said frame structure to rest on the floor when in the other position, a plunger movable up and down, means for moving said plunger up and down, means whereby said plunger operating means may be disconnected from operative connection with said plunger, and means operated by said plunger operating means for moving said roller structure from a position of non-support of said frame structure to one of supporting it, said last specified means being operable when said plunger operating means is operatively disconnected from the plunger.

4. In a press, a frame structure, a roller structure capable of supporting said frame when in one position but allowing the frame structure to rest on the base when in its other position, said roller structure comprising a yoke member pivoted to the frame structure at one end, rollers carried by said yoke intermediate of its ends, a vertically movable plunger, mechanism for effecting the vertical movements of said plunger, said mechanism including a gear carried by the drive shaft thereof, studs projecting from one side of said gear, a connecting structure operable to shift said roller structure from inactive to active positions and vice versa, and a clutch member pivotally carried by said connecting structure and capable of engaging with the studs of said gear to effect the movements of said roller structure.

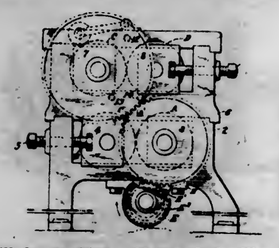
5. In a press, a frame structure, a roller structure capable of supporting said frame when in one position but allowing the frame structure to rest on a base when in its other position, said roller structure comprising a yoke member pivoted at one end to the frame structure, rollers carried by said yoke member, a vertically movable plunger associated with said frame, operating means for said plunger including a drive shaft, a worm locked gear carried by said shaft, studs projecting from said gear, a roller structure shifting mechanism embodying a vertically movable strut, and a pivoted catch member carried by the upper end of said strut and movable into engagement with the studs of said gear, whereby said roller structure may be positioned to support the frame structure.

6. In a press, a frame structure, a roller structure capable of supporting said frame when in one position but allowing the frame structure to rest on the floor when in the other position, said roller structure comprising a yoke member pivoted to the frame at one end, rollers carried by said yoke intermediate its ends, a plunger movable up and down, a strut member attached at one end to the free end of said yoke, and a catch member pivotally carried by the other end of said strut member and arranged to be thrown in mesh with said plunger

operating means to force the free end of said yoke member down to support said frame structure upon said rollers.

[Claim 1 not printed in the Gazette.]

1,267,493. WASHMILL. PHILIP E. YOUNG, Fairhaven, Mass., assignor to Acushnet Process Company of New York, Inc., a Corporation of New York. Filed July 28, 1917. Serial No. 182,188. (Cl. 18—2.)



1. A mill for washing rubber and the like, comprising two pairs of rolls through which a sheet of rubber is adapted to pass successively, means for causing the rubber to pass more rapidly through the second pair than the first pair so that the rubber may be placed under tension between the two pairs of rolls, and means for washing the rubber while under such tension.

6. In a rubber mill, the combination of a pair of driven rolls adapted to sheet the rubber, and an idler roll readily movable into and out of contact with the sheet formed thereby and adapted when in contact with such sheet to hold the same against one of said rolls to return the sheet for further treatment, said idler roll being likewise adapted to have its speed of rotation directly under the control of the operator so that the speed with which said sheet of rubber is returned for treatment may be controlled.

[Claims 2 to 5 not printed in the Gazette.]

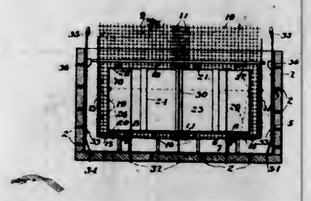
1,267,494. PRESS-BUTTON. MILTON F. ALEXANDER, Milwaukee, Wis., assignor of one-half to August Sauer, Milwaukee, Wis. Filed Dec. 26, 1916. Serial No. 138,850. (Cl. 24—218.)



A female member for press buttons comprising a stamped circular body portion having a central, hollow, spherical dome, the base of which is contracted to form a neck provided with spring receiving and retaining slots, a laterally turned spring retaining bead being formed at the peripheral edge of said body portion, and a pair of opposite elliptical springs carried by the body portion, the outer major arcs of which are interrupted to permit the same to expand and contract and are loosely seated within said bead, said arcs when seated being of the same curvature as the circular body portion, the inner major arcs of said springs being confined within the dome slots.

1,267,495. BURIAL-VAULT. GEORGE G. BABICH, New York, N. Y. Filed May 23, 1916, Serial No. 99,309. Renewed Oct. 20, 1917. Serial No. 197,739. (Cl. 72—7.)

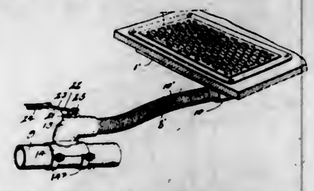
1. A burial vault comprising an outer casing constituting a mold for forming an inner plastic casing to envelop a casket, a reinforcing element of mesh material surrounding the casket and embedded in the plastic material, U-shaped rods arranged in upright position within the mesh material and extending across the bottom and up the sides of the same substantially midway between the casket and outer casing, and means for securing said U-shaped rods at intervals to the sides of the mesh material



for retaining the same in properly spaced position between the casket and outer casing while the plastic material is being poured into the mold.

[Claims 2 and 3 not printed in the Gazette.]

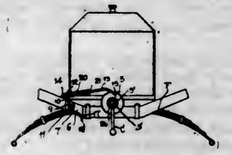
1,267,496. AUTOMOBILE EXHAUST-HEATER. GILBERT A. BARTHOLOMEW, Kendallville, Ind., assignor to The Noble Heater Company, Kendallville, Ind., a Corporation of Indiana. Filed Nov. 24, 1917. Serial No. 203,795. (Cl. 237—21.)



1. Means for heating an automobile comprising a heater within the same, a pipe connecting said heater with the exhaust pipe of the motor, a tube surrounding said pipe and connecting the heater with the exhaust pipe for leading the gases from the heater back to the exhaust pipe, and a combined valve and deflector for controlling the passage of the gases to and from said heater.

[Claim 2 not printed in the Gazette.]

1,267,497. SAFETY DEVICE FOR THE STARTING-CRANKS OF MOTOR-VEHICLES. HARRY O. BARTON, Bloomfield, Iowa. Filed Oct. 1, 1917. Serial No. 194,229. (Cl. 74—16.)

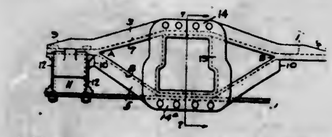


1. The combination with the starting shaft of a motor vehicle, of a ratchet thereon, a support mounted upon the vehicle frame, a rod axially movable upon the support and operatively engaged at one end with the ratchet teeth, a spring engaged on the rod and co-acting with the support to yieldingly hold the rod against movement away from the ratchet, and means for adjusting the support to angularly position the rod with respect to the ratchet.

2. The combination with the starting shaft of a motor vehicle, of a ratchet on the starting shaft, a plate pivotally mounted on the vehicle frame for movement in a vertical plane, a support rotatably mounted upon said plate, a rod axially movable upon the support and operatively engaged at one end with the teeth of the ratchet, a spring on said rod co-acting with the support to yieldingly urge the rod toward the ratchet, and means for vertically adjusting the pivoted plate to angularly position the rod with respect to the ratchet.

[Claim 3 not printed in the Gazette.]

1,267,498. CAR PART. SAMUEL A. BENNER, Pittsburgh, Pa. Filed Sept. 15, 1913, Serial No. 789,823. Renewed Oct. 26, 1917. Serial No. 198,744. (Cl. 105—243.)



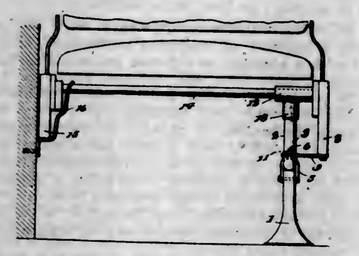
1. A blank for a car part or other structure consisting of a rolled section comprising a web having one or more flanges projecting from the opposite faces thereof, said web being cut or sawed intermediate its ends in a plane substantially parallel with its opposite flat faces, whereby the parts on the opposite sides of said cut may be bent or stretched to form continuous truss members.

2. A blank for a car part or other structure consisting of a rolled section comprising a web having one or more flanges projecting from the opposite faces thereof, said web being cut or sawed intermediate its ends in a plane substantially parallel with its opposite flat faces, whereby the parts on the opposite sides of said cut may be bent or stretched to form continuous truss members, the web and flange being of varied thickness.

3. A blank for a car part or other structure consisting of a rolled section, comprising a web having a plurality of flanges projecting from the opposite faces thereof, said web being cut or sawed intermediate its ends in a plane substantially parallel with its opposite flat faces whereby the parts on the opposite sides of said cut may be bent or stretched to form continuous channel shaped truss members.

[Claims 4 to 16 not printed in the Gazette.]

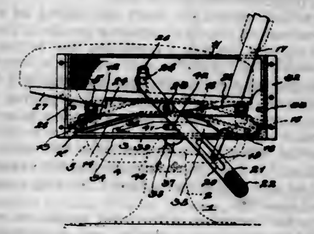
1,267,499. CAR-SEAT. FREDERICK BENNETT, Ravenswood, N. Y., assignor to Walker & Bennett Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Jan. 8, 1913, Serial No. 740,886. Renewed Oct. 23, 1917. Serial No. 198,183. (Cl. 155—2.)



3. A car seat, comprising inner and outer end plates connected by tie-rods, means for supporting the inner plate detachably adjacent to the wall of the car, a pedestal comprising a base, adapted for attachment to the floor of a car, and an upper portion having upwardly extending arms and a connecting portion, a clip embracing the connecting portion and having a slot therein, a stud carried by the connecting portion, and working in said slot for the purpose described, T-castings having their vertical portions embracing the upper ends of the upper part of the pedestal and their horizontal portions embracing the tie-rods, and an arm connecting the outer end plate with the stud, whereby an additional support is provided for the end plate and the tie-rods are prevented from sliding through their bearings when the seat is rocked to vertical position.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,267,500. CAR-SEAT. FREDERICK BENNETT, Ravenswood, N. Y., assignor to Walker & Bennett Manufacturing Company, New York, N. Y., a Corporation of New York. Filed Oct. 18, 1913, Serial No. 795,981. Renewed Oct. 26, 1917. Serial No. 198,742. (Cl. 155—2.)



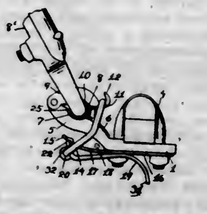
2. A car seat, having in combination flanged end plates; a seat detachably supported at one end by a flanged support and hinged to a pedestal at the other end, a seat back, means for guiding the seat back and its accessories in their travel; back standards; a slidable lock carried by the detachable end of the seat, for locking the detachable end of the seat to the flanged support, said lock being provided with a locking head adapted to pass through a slot in the flanged support and engage either edge of the slot, so as to lock the detachable end of the seat to the support, and means carried by the seat back to shift the lock from its engagement with the flange, so as to permit the detachable end of the seat to be lifted.

3. A car seat, having in combination a seat hinged at one end to a pedestal and detachably supported at the other end by a flanged end plate; back standards, means for shifting said back standards from one side of the seat to the other, a slidable lock adapted to lock the detachable end of the seat to the flanged end plate; end heads carried by the slidable lock, and a rod carried by the back standards for shifting the slidable lock, so as to permit the detachable end of the seat to be raised and swung over upon the pedestal.

6. In a car seat, locking mechanism comprising a flange suitably supported, said flange having a slot or recess and a correlative member supported by a car seat, said member having a double flanged head projecting therefrom, said head being adapted to pass through said slot or recess of the flanged support and also being adapted to slide so as to effect a locking relation between the car seat and supporting flange.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,267,501. THILL-COUPLING. MCKENDREE F. BISHOP, Elgin, Ill. Filed Mar. 19, 1914. Serial No. 825,859. (Cl. 21—57.)



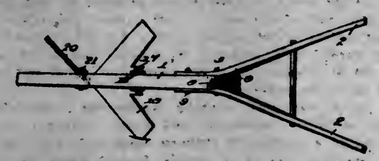
1. In a thill coupling, a draft bar having a horizontal rear body and a forward portion provided with an open top recess, an axle clip engaging said body, a cap pivoted

to the forward end of the draft bar and overlying said recess, a depending link having an upper transverse bar engaging the free end of said cap and a lower transverse bar, a thill iron having a transverse bar engaging said recess, a retaining spring having a horizontal body below said body of the draft bar and a resilient end portion projecting directly from the forward portion of its body below the forward portion of the draft bar, and a lever having near its forward end a fulcrum connection with the lower bar of said link, an upwardly extending work arm detachably engaging the free end of said spring and a rearwardly extending power arm.

2. In a thill coupling, a draft bar having an open-top recess bearing, an axle clip engaging the draft bar, a pivoted cap for said bearing, a depending link having an upper transverse bar engaging said cap and a lower bar, a thill iron having a transverse bar engaging said bearing, a substantially straight retaining spring having a lower shoulder in rear of its free end, said spring being located below the draft bar and engaged by said axle clip, and a lever having fulcrum connection with the lower bar of said link and a bent work-arm detachably engaging the free end of said spring and adapted for stop engagement with said shoulder.

3. In a thill coupling, a draft bar having an upwardly extending shoulder and a pivoted cap, a depending link having an upper transverse bar engaging said cap and a lower bar, a thill iron having a transverse bar provided with an approximately spherical enlargement, said draft bar and said cap having correspondingly shaped recesses surrounding said enlargement, a retaining spring, a lever having fulcrum connection with the lower end of said link and engagement with said spring, a hollow approximately spherical washer surrounding said enlargement and interposed between the same and said recesses, and a wire device having loops connecting the free ends of said washer and bearing at their upper ends against the free end of said cap, and a downward extension bearing against said shoulder of the draft bar, whereby the washer is secured in position against displacement.

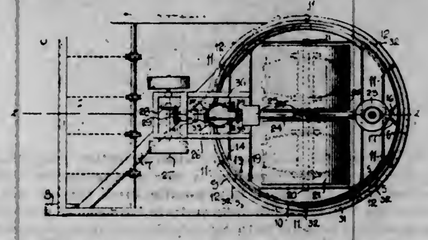
1,267,502. PLOW. GEORGE BURDOCK, Clinton, N. C. Filed Feb. 12, 1916. Serial No. 77,938. (Cl. 97—26.)



In an implement of the character set forth, a beam, inclined handle bars connected with the rear of the beam, a runner comprising a lower portion substantially parallel with the beam and an upwardly extending portion at the rear of the horizontal portion having at its upper end an inclined portion secured to the beam, the handle bars being connected to the runner at the junction of the upwardly extending and inclined portions, the horizontal portion having a vertically disposed longitudinal slot intermediate its ends, a standard pivoted to the forward end of the said portion of the runner and having at its upper end portions extending on opposite sides of the beam, said beam having a series of openings concentric with the pivotal connection of the standard and the runner, the portions of the standard having an opening adapted to register therewith to receive a securing means, and a shovel blade attached to the standard and movable therewith, a shoe beneath the horizontal portion of the runner, and a bolt passing through the shoe and the slot for adjustably connecting the shoe to the runner.

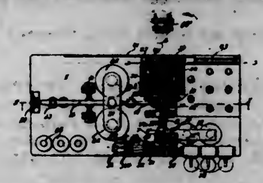
1,267,503. FARM-TRACTOR. SOLOMON L. BLOCHER, Packerton, Ind. Filed Mar. 6, 1917. Serial No. 152,769. (Cl. 180—52.)

In a vehicle of the character described, the combination of a frame having a track at one end, a second frame disposed within said track, tractor wheels rotatably mounted in the second frame, means on the tractor frame co-acting with the main frame to support the latter, driving means mounted upon the tractor frame including a shaft, an internal gear fixed to the track, a vertically disposed shaft mounted upon the tractor frame, a pinion fixed to said shaft meshing with said internal gear, a second gear element fixed on said vertically disposed shaft and having gear teeth on its opposite faces, a vertically rotating gear element mounted upon the tractor frame



having teeth meshing with the teeth on one face of the gear element on said vertical shaft, and manually shiftable gears mounted upon the power shaft, one of said gears being adapted for engagement with the gear teeth on the other face of said gear element, said vertically disposed gear element also having a second set of gear teeth to be engaged by the other gear mounted upon the power shaft, whereby said pinion may be rotated in either direction to turn the tractor frame and wheels with respect to the main frame.

1,267,504. ELECTRICALLY-CONTROLLED VOTING-MACHINE. BORNETT L. BOSKOFF, Milwaukee, Wis., assignor to Universal Indicator Co., Milwaukee, Wis. Filed Oct. 2, 1916. Serial No. 123,271. (Cl. 235—50.)



1. A voting machine comprising a main station including a plurality of indicating mechanisms, each provided with a plurality of differing indicating portions, a plurality of substations each including means for actuating the portions of a respective indicating mechanism, a plurality of circuits each including like portions of the indicating mechanisms in parallel, a current meter associated with each of said circuits, and adapted to indicate the number of like indicating portions actuated, said circuits including a plurality of batteries, a common return wire, a multiple switch connected with said return wire, and wires extending from the switch to the batteries whereby a constant current may be maintained for each current meter circuit.

6. In a voting machine, a plurality of indicating mechanisms each including a series of signal lamps at the front thereof, a dial member at the front thereof, and a slide member at the rear thereof, said dial and slide members each having a series of symbols thereon corresponding with the signal lamps, a journaled shaft, said dial member being carried by one end of said journaled shaft, a gear and gear rack connecting between the other end of said shaft and said slide member, and means for rotating said shaft to simultaneously display one of the lights and corresponding symbols on the slide member and dial member, substantially as described.

[Claims 2 to 5 not printed in the Gazette.]

1,267,505. RESILIENT TIRE FOR VEHICLE-WHEELS. GUSTAV ADOLF ARNO BOERNER, Amsterdam, Netherlands. Filed Aug. 8, 1916. Serial No. 113,821. (Cl. 152—8.)



A resilient tire for vehicle wheels, consisting of a flexible outer casing, a rubber resilient ring of segmental cross section fitting within said casing and having a plurality of openings extending from face to face, the said openings being spaced apart all over the width and circumference of the rubber ring, and a metallic expansion ring built up of a plurality of segments and arranged within the resilient ring and normally exerting and maintaining an outward pressure thereon, to thereby place the rubber webs between the openings under tension and expand the same laterally.

1,267,506. PROPELLER DEVICE. WILLIAM SPENCER BOWEN, New York, N. Y. Filed Sept. 10, 1917. Serial No. 190,556. (Cl. 115—42.)



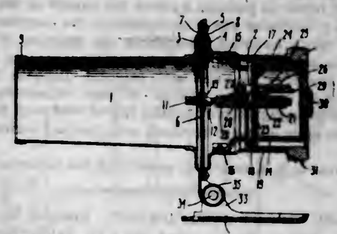
1. A device of the class described including a concentrator comprising a casing having a bore gradually decreasing from its forward end, an inner member arranged in spaced relation to said casing and forming a longitudinal fluid space of annular cross section and gradually decreasing area, said inner member having a forward end of gradually increasing dimensions followed by a portion of gradually decreasing dimensions, and a propeller in said casing arranged to revolve at or near the rear end of said inner member.

4. A device of the class described including a concentrator comprising a casing having a tapering exterior and having a bore the forward portion of which gradually decreases from its forward end and the rearward portion gradually decreasing but on a longer angle to the decrease of said forward portion, an inner member of double conical shape spaced from the casing to provide a fluid space of gradually decreasing area, the rear end of said inner member terminating at or near the juncture of said forward and rear bore portions and a propeller arranged near the rear end of said inner member.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,507. SIGNAL-HORN. HARRISON HURLBERT BOYCE, Forest Hills, N. Y. Filed Sept. 22, 1914. Serial No. 862,886. (Cl. 116—1.)

1. In a diaphragm signal horn, the combination of a tubular housing, a diaphragm supported thereby, a striker rotatable on an axis parallel to the diaphragm, a support for said striker including a spindle, means for rotating said spindle including a pinion, a member having a tubular portion fitting within and having rotatable bearing engagement with said housing and having its inner end provided with serrations adapted to intermesh with said pinion, said tubular member being adapted for manual operation to function said striker to vibrate said diaphragm.



2. In a diaphragm signal horn, the combination of a tubular housing, a diaphragm supported thereby, means for vibrating said diaphragm mounted to rotate on an axis parallel with said diaphragm, and a tubular member conformed to fit within said housing and rotatable in a plane parallel to said diaphragm to actuate said vibrating means, the inner wall of the housing forming a bearing surface for a portion of said tubular member, the remaining portion of said member being enlarged and extending beyond the plane of the outer end of the housing to provide a surface for the application of power to said member.

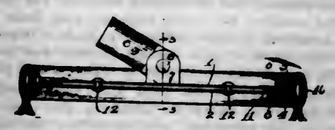
3. In a diaphragm signal horn, the combination of a housing, a diaphragm supported thereby, a striker mechanism within said housing and an actuator for said striker mechanism comprising a substantially cylindrical tubular member having a closed outer end and having teeth on its inner end and having an enlarged portion forming a hand-grip, the inner portion of said member being received within the rear end of the housing and the end of said member constituting a closure for the housing.

5. In a diaphragm signal horn, the combination of a diaphragm, a housing in rear of said diaphragm, a spindle supported within the housing and rotatable about an axis parallel with the diaphragm, a toothed striker on said spindle adapted to vibrate the diaphragm, a pinion on said spindle adjacent to the wall of said housing and an annular gear member meshing with said pinion and rotatable about an axis perpendicular to said diaphragm, the periphery of said annular gear member fitting closely within and being directly supported by contact with the inner surface of the portion of said housing inclosing said gear member.

7. In a diaphragm signal horn, the combination of a diaphragm, a housing in rear thereof, a yoke mounted within said housing, a striker supported by said yoke and rotatable about an axis parallel with said diaphragm, an actuating member for the striker mounted in said housing and closing the rear end thereof and means for pivotally connecting said member to said yoke.

[Claims 4, 6, and 8 not printed in the Gazette.]

1,267,508. MOP. PETER BROWN, Chicago, Ill., assignor to Channell Chemical Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 9, 1915. Serial No. 1,350. (Cl. 15—13.)



2. In a device of the class described the combination with a continuous looped mop fabric, of a tab of fabric stitched to said mop fabric, a mop head comprising a plurality of plates adapted to be secured one to another with said fabric tab engaged therebetween to hold the mop fabric attached upon the mop head.

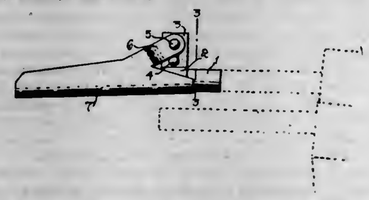
5. The combination with a mop fabric provided with a tab of similarly constructed flanged plates adapted to be

connected one to another in parallel relation, and registering ribs and grooves on said respective plates inside of the flanged portions thereof and engaging said tab to hold the mop fabric in position against the flanges of the plates.

7. In a device of the class described the combination of a mop fabric having an attaching tab thereon, of a mop head comprising a plurality of plates adapted to be connected one upon another with said tab disposed therebetween, and registering means on said respective plates adapted to engage the attaching tab of said mop fabric to hold the same securely retained and clamped between said plates.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,267,509. SPOUT ATTACHMENT. BENDICK E. BRUNSVOLD, Hatton, N. D. Filed June 30, 1917. Serial No. 177,907. (Cl. 137—9.)



1. A spout attachment comprising a collar adapted to be engaged with a spout and provided with a substantially radially disposed upstanding extension, a substantially straight chute provided at opposite sides with transversely spaced arms pivotally engaged with the extension of the collar, said arms being positioned inwardly of the rear end of the chute and disposed on a predetermined incline toward said end.

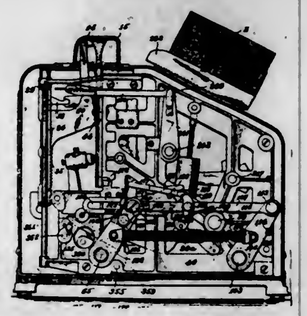
2. A spout attachment comprising a collar adapted to be engaged with a spout and provided with a substantially radially disposed upstanding extension, a substantially straight chute provided at opposite sides with transversely spaced arms pivotally engaged with the extension of the collar, said arms being positioned inwardly of the rear end of the chute and disposed on a predetermined incline toward said end, and terminating inwardly thereof.

3. In combination with the milk spout of a cream separator provided with an upstanding extension adjacent the discharge end thereof, a substantially straight chute provided at its opposite sides with transversely spaced arms pivotally engaged with the extension of the spout, said arms being positioned inwardly of the rear end of the chute and disposed on a predetermined incline toward said end wherel y the rear end portion of the chute may underlie the discharge end portion of the spout.

1,267,510. CALCULATING-MACHINE. JAMES W. BRYCE, Brooklyn, N. Y., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed July 31, 1915. Serial No. 43,024. (Cl. 235—58.)

1. In an elapsed time calculating machine, the combination with a receiver for a card punched with holes which by their positions indicate different periods of time, of a pin box and series of pins carried thereby and movable toward the card so that such pins as register with perforations will pass through the card, time type wheels and differentially acting racks for adjusting the type-wheels according to the particular pins projecting through the card, means for operating the racks controlled solely by projecting pins and means for printing from the exposed portions of the wheels at a given point the elapsed time between the periods which the positions of the perforations in the card indicated.

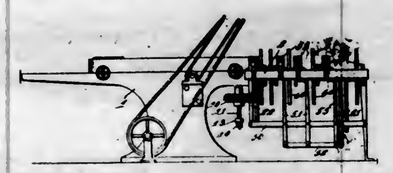
5. In a calculating machine, the combination with a plurality of pins movable toward a receiver for a punched card so that the pins in register with perforations in the card will pass through the same, of time type-wheels, means for adjusting the same according to the pins which pass through the card, mechanism for printing from portions of the type-wheels exposed at a given point, impulse mechanism for operating the adjusting and printing mech-



anism and a flexible connection between the same and the adjusting mechanism operative during the first part of the movement of the impulse mechanism for performing the more delicate operations of type-wheel adjustment.

[Claims 2 to 4 and 6 to 10 not printed in the Gazette.]

1,267,511. AUTOMATIC FEEDING ATTACHMENT FOR GLUE-JOINTERS. BRUCE H. CARNAHAN, HENRY M. WILLIAMS, and HENRY W. BERTRAM, Indianapolis, Ind. Filed Mar. 13, 1916. Serial No. 83,968. (Cl. 144—242.)



1. A device of the class described comprising a body, means for engaging a plank and moving the same from a vertical to a horizontal position, and means for turning said plank from a horizontal to a vertical position whereby a plank may be entirely inverted to rest upon its opposite side edge.

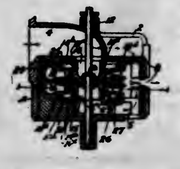
4. A machine of the class described comprising a frame, shifting arms carried by said frame, a turn-over arm supporting shaft carried by said frame, turn-over arms carried by said supporting shaft, clutch means coöperating with said shaft, tripping means for throwing said clutch means to an operative position, means for causing the rotation of said shaft one-half of a revolution, and said turn-over arms coöperating with said shifting arms whereby said shifting and turn-over arms will entirely invert a piece of material fed through said machine.

13. A machine of the class described comprising a bed plate, means for inverting a piece of material passing thereover, return rollers adjustably mounted upon said bed plate and adapted to facilitate the return of a piece of material toward the feeding end of said bed plate, tracks carried by said bed plate, a frame supporting each feeding roller and slidably mounted upon said tracks, yieldable means for normally urging said frame toward a piece of material adapted to be engaged thereby, means for regulating the tension of said yieldable means, one of said feeding rollers provided with a beveled gear upon the lower end thereof, a horizontal feeding roller provided with a beveled gear adapted to mesh with said first-mentioned beveled gear and adapted to engage the lower edge of a piece of material adapted to pass thereover, each vertical feeding roller provided with a depending shaft, a

universal joint carried by each vertical shaft, a plurality of driving shafts connected to said universal joint, and means for driving said driving shafts.

[Claims 2, 3, 5 to 12, and 14 not printed in the Gazette.]

1,267,512. HYDRAULIC BALANCE FOR CENTRIFUGAL PUMPS. WILLIAM D. CARTER, San Jose, Cal. Filed Dec. 12, 1916. Serial No. 136,464. (Cl. 103—43.)



1. In a centrifugal or similar pump having two or more double service impellers each capable of series or parellel operation, a pair of suction passages and a discharge passage connected with each impeller, means for changing the connection of said passages so that said impellers may be operated in series, in parallel or in multiple series, and a hydraulic end-thrust balancing means for automatically balancing the impellers whether the device is operated in series, in parallel or in multiple series.

2. In a centrifugal pump, the combination of a casing and a double impeller therein having two independent stream passages separated by a transverse partition, means by which said passages operate in series, or in parallel, counter-balancing means for the impeller whereby the impeller is automatically counter-balanced irrespective of whether the pump operates in series or parallel.

3. In a centrifugal pump, the combination of a casing, an impeller therein having two independent stream passages separated by a transverse partition, a pair of concentric flanges on each side of the impeller, corresponding flanges on the casing coöperating with the flanges on the impeller to form a hydraulic counter-balancing chamber on each side of the impeller, each of said counter-balancing chambers being in leakage connection with the intake, and also in leakage connection with a respective discharge column of said stream passages, and connections between the chamber of lower pressure with the discharge column of higher pressure when the pump is operating in series.

4. The combination in a centrifugal pump of impellers operating in series, a counter-balancing chamber at each end of the series, each counter-balancing chamber being in leakage connection with the discharge to which said chamber is immediately adjacent, and means by which the discharge at highest pressure is connected with the counter-balancing chamber of lowest pressure.

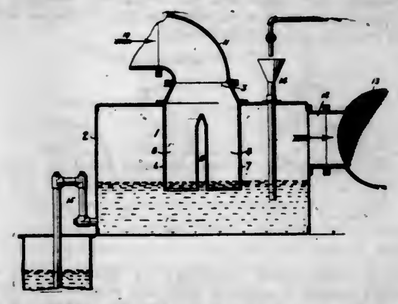
5. The combination in a centrifugal pump having a double flow impeller operating in series, of means for hydraulically balancing the two sides thereof.

[Claims 6 to 16 not printed in the Gazette.]

1,267,513. GAS-WASHBOX. CHARLES S. CHRISMAN, West Chester, Pa., assignor to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 8, 1916. Serial No. 70,924. (Cl. 261—123.)

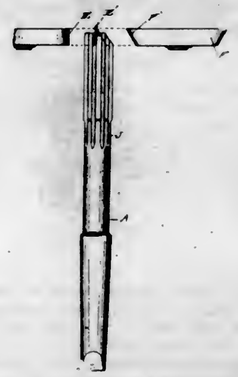
1. A dip-element for a gas wash-box comprising a hollow body having at one end a circular gas-inlet-opening and having at the other end projecting continuous walls parallel with the central axis of the body and respectively inclosing quadrant-shaped gas outlet openings commensurate in area with the gas inlet opening and forming between them a cruciform reëntrant space, and providing in the aggregate an extensive rim wall in respect to the combined areas of the gas outlets.

2. A dip-element for a wash-box comprising a hollow body having at one end a gas inlet opening and having at the other end projecting continuous walls parallel with the central axis of the body and respectively inclosing gas outlet openings and forming between them reëntrant space and providing in the aggregate an extensive rim wall in respect to the combined areas of the gas outlets.



3. A dip-element for a gas wash-box comprising a hollow body having at one end a gas-inlet-opening and having at the other end projecting continuous walls parallel with the central axis of the body and respectively inclosing sector-shaped gas outlet openings commensurate in total area with the gas inlet opening and forming between them reëntrant gas discharging spaces, and thus providing in the aggregate an extensive rim wall in respect to the combined areas of the gas outlets.

1,267,514. METHOD OF SALVAGING REAMERS OR LIKE TOOLS. STUART A. COGSDILL, Detroit, Mich., assignor to Detroit Reamer Salvage Co., Detroit, Mich., a Corporation of Michigan. Filed May 21, 1917. Serial No. 169,898. (Cl. 76—101.)



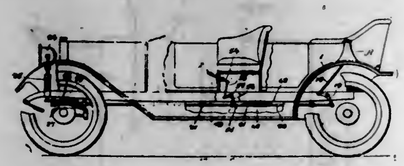
1. The method of salvaging reamers or like tools which comprises cutting down the tool to form a male projection on the cutting end thereof and using the projection thus formed as a centering device while re-grinding the tool.

2. The method of salvaging reamers having a plain body portion and fluted portion of greater diameter than the body portion which comprises arranging a grinding periphery so that it will cut down the end of the reamer beyond the worn or broken portion and leave a male centering device, cutting back the fluted portion to secure the necessary length of the cutting edges and re-grinding the cutting surfaces of the reamer so that its axis corresponds to the new male center.

1,267,515. TRAFFIC-SIGNAL. CHARLES N. COX, Brockman, Cal. Filed July 18, 1917. Serial No. 181,372. (Cl. 116—31.7.)

3. A traffic signal embodying, in combination, a stationary casing, a movable signaling member, a housing

for said signaling member movable into and out of said casing, means for imparting movement to said housing, means controlled by the movement of said housing for projecting and retracting said signaling member, and guiding means for said signaling member contained within said housing and carried thereby.



5. A traffic signal embodying, in combination, a stationary casing, a movable signaling member, a housing for said signaling member movable into and out of said casing, means for imparting movement to said housing, means controlled by the movement of said housing for projecting and retracting said signaling member, the signaling member projecting and retracting means comprising an elbow lever having a fixed pivot, a link connecting said elbow lever with the signaling member, and another link connecting said elbow lever with a pivot having a fixed relation to the housing of said signaling member, whereby the movement of the signaling member is controlled by the movement of the housing of said signaling member.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,267,516. LOCK-SWITCH. WARREN R. COX, Cleveland, Ohio. Filed Sept. 7, 1915. Serial No. 49,249. (Cl. 175—282.)



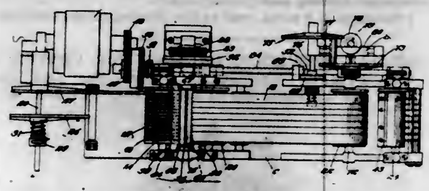
1. A cylindrical casing having a base member of insulating material at its rear, electric switch contacts upon said base member, a cover plate for said casing, and a key-controlled locking device carried by said cover comprising a shell having a rotatable plug provided with a locking extension for the base, and a disk of insulating material loosely sleeved upon said extension in thrust engagement with said shell and having spring arms engaged with said switch contacts.

[Claims 2 and 3 not printed in the Gazette.]

1,267,517. POWER MOISTENING-MACHINE. CHARLES H. CROWELL, Brooklyn, N. Y. Filed Sept. 15, 1916. Serial No. 120,402. (Cl. 91—14.5.)

1. In a machine of the character described, the combination of a feeding mechanism, severing mechanism, a conveyer and moistening mechanism, said conveyer comprising upper and lower belts each of which is itself composed of a plurality of adjacent narrow belts.

12. In a machine of the character described, a conveyer comprising a plurality of adjacent upper narrow belts running parallel with and in the same plane with each other, and a plurality of adjacent lower narrow belts running parallel with and in the same plane with each other, one set of belts being above the other, the proximate surfaces of the two sets of belts running in the same direction, the narrow belts of each set being arranged in close order whereby there is a substantially



continuous bearing surface through the full width of the combined belts of each set.

[Claims 2 to 11 and 13 to 21 not printed in the Gazette.]

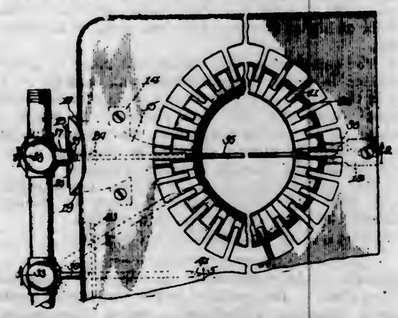
1,267,518. CULTIVATOR-SHOVEL. VALENTINE DANIELS, Geneseo, Ill. Filed Mar. 9, 1918. Serial No. 221,465. (Cl. 97—11.)



4. A cultivator shovel having a lower approximately triangular blade, and prongs including a central and side prongs projecting upwardly from the blade, and having rearwardly presented flanges, a bracket extending along the rear face of the central prong and secured to the flange thereof, and clamping arms extending rearwardly from the said bracket, and a clamping bolt connecting the rear extremities of the said clamping arms, for the purpose described.

[Claims 1 to 3 not printed in the Gazette.]

1,267,519. AUTOMATIC CUT-OUT FOR GAS-BURNERS. JOHN A. L. DETERS, Chicago, Ill. Filed June 29, 1917. Serial No. 177,634. (Cl. 67—116.)

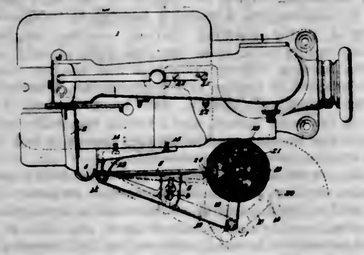


1. The combination with a gas burner and a source of gas supply therefor including an upright pipe, of a valve head slidably mounted upon said pipe, a gas jet carried by said head, the upper end of said pipe being formed with a seat, a valve carried by the head and adapted to close said seat when the head is in lower position, and a thermostatic rod anchored at the rear end of said burner traversing the flame area of the burner and terminating in proximity to said head.

2. The combination with a vertically disposed gas pipe provided with a valve seat in its upper end, of a valve head telescoping over said pipe and carrying an internal valve adapted to close said seat, there being a gas discharge duct communicating with the interior of said head at a point above the valve; a fixed gas burner fed from said head, and an expansible rod anchored at one end, traversing the flame area of said burner, and having its opposite end positioned to contact with said valve head in the heated condition of the rod.

[Claim 3 not printed in the Gazette.]

1,267,520. TAPE-CONTROLLING DEVICE. ALBERT H. DE VOE, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed July 16, 1917. Serial No. 180,753. (Cl. 273.)



1. In a device for controlling tape as it is supplied to sewing machines, in combination, a strip-guide, an abutment to one side of said strip-guide, a tape-roll, a tape-roll support movably controlled by the size of the tape-roll to maintain the periphery of the roll in contact with the receiving end of said strip-guide and with the abutment whereby the edges of the tape are prevented from curling.

5. In a sewing machine, in combination, a binder having its longitudinal axis arranged substantially parallel to the line of feed, a strip-guide having its longitudinal axis disposed at an angle to the line of feed, a vertically extending pivot for said strip-guide adjacent its delivery end, an arm pivotally connected to said strip-guide and carrying a support for a roll of tape, a spring for urging said arm bodily toward said abutment, and a second spring for simultaneously urging said support on the arm bodily toward the receiving end of the strip-guide.

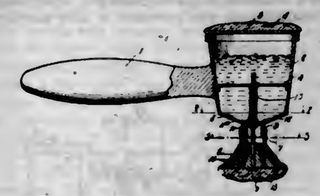
8. A device for controlling tape as it is supplied to sewing machines, in combination, a strip-guide, an abutment to one side of said strip-guide, a tape-roll, a tape-roll support, and means for maintaining the periphery of the tape-roll in contact with the receiving end of said strip-guide and with the abutment whereby the edges of a tape are prevented from curling.

9. In a device for controlling bias cut knit binding as it is supplied to sewing machines, in combination, a binder having a U-shaped folding portion, a roll of tape, a tape-roll support, an abutment having a face which is straight in vertical directions and of a vertical length at least equal to the width of the widest binding to be handled, means between said U-shaped folding portion of the binder and the tape-roll for maintaining the binding flat, and means controlled by the size of the roll for maintaining the roll in contact with the face of the abutment whereby tension may be applied uniformly over the surface of the binding.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

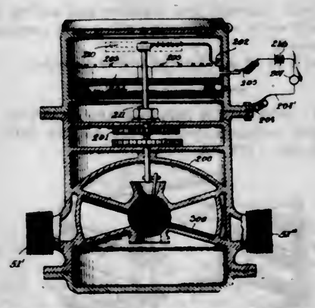
1,267,521. SHOE-DAUBER. DEVOE DOVER, Carbon, Tex. Filed Nov. 1, 1917. Serial No. 199,683. (Cl. 15—46.)

In a shoe dauber, a container provided at its lower end with a reduced downwardly tapering neck, a daubing head mounted below the container and having a tapered nipple fitting snugly about said neck, said head being further provided with ducts extending through its outer face and communicating with the nipple, a fixed member carried by the container and extending across the interior thereof, a pin secured in the head and projecting through said neck, said pin being slidable through said fixed member, a disk valve mounted on the pin and adapted to fit snugly in the upper end of the neck so as to close the same, an expansion spring mounted about the pin and confined between said valve and the fixed member, and adjusting and securing nuts threaded on the pin above and below the valve and serving to adjust the valve in



either direction longitudinally of the pin and to secure it in adjustment.

1,267,522. HYDRAULIC APPARATUS. GEORGE GOODELL EARL, New Orleans, La., and CHARLES ARTHUR BROWN, Lorain, Ohio, assignors of one-third to Albert Baldwin Wood, New Orleans, La. Original application filed Jan. 13, 1913, Serial No. 741,637. Divided and this application filed July 5, 1916. Serial No. 107,524. (Cl. 234—34.)



1. In a fluid measuring apparatus, the combination of a chart provided with two lines parallel to each other, means to move said chart, a duct through which fluid flows and apparatus operated by the flow of fluid in the duct including a pen to trace curves on said chart back and forth between said parallel lines, each curve indicating the same quantity of fluid flowing through said duct.

[Claim 2 not printed in the Gazette.]

1,267,523. FLUID SYSTEM. GEORGE GOODELL EARL, New Orleans, La., assignor of one-third to Charles Arthur Brown, Lorain, Ohio, and one-third to Albert Baldwin Wood, New Orleans, La. Filed Mar. 2, 1917. Serial No. 151,968. (Cl. 210—19.)

1. The method of feeding gas to a liquid, which consists in establishing a flow of liquid under negative pressure and adding the gas to the liquid of said flow at said negative pressure.

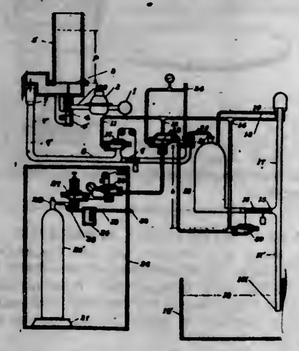
2. The method of feeding gas to a liquid, which consists in establishing a flow of liquid under a negative pressure, adding the gas to the liquid of said flow at a negative pressure and adding the resulting solution of gas and liquid to the liquid to be fed with the gas.

3. The method of feeding gas to a liquid, which consists in establishing a flow of liquid under negative pressure, establishing a proportional flow of the gas to be fed to the liquid and adding said proportional flow of gas to the liquid at said negative pressure.

4. The method of feeding chlorin gas to water, which consists in establishing a flow of water under negative pressure, establishing a proportional flow of chlorin gas and adding said proportional flow of gas to the flow of water at said negative pressure.

5. The method of feeding gas to water flow, which consists in establishing a flow of water, maintaining the

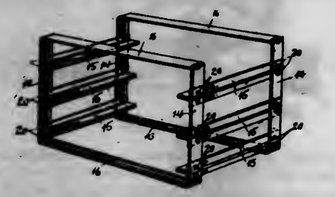
pressure in said water flow constant at one point in said flow, maintaining the pressure of said flow at another point at a constant negative pressure, establishing a flow of gas, maintaining the pressure in said gas flow at one



point therein constant and negative and adding said gas flow to said water at a pressure below said constant negative pressures.

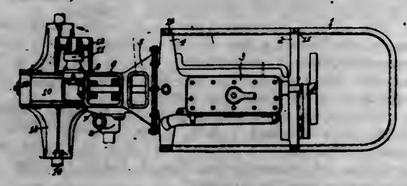
[Claims 6 to 13 not printed in the Gazette.]

1,267,524. PORTABLE DRYING APPARATUS. NELLIE E. EWART, Arlington, Mass. Filed Aug. 21, 1917. Serial No. 187,450. (Cl. 34—39.)



A portable drying apparatus comprising two substantially rectangular frame elements, formed of metal strips bent and united to form upright end portions and horizontal top and bottom portions, said elements constituting an open front and an open rear of a skeleton frame in which trays may be inserted, horizontal tray runs attached to said upright portions and connecting the rectangular elements in spaced relation, said runs projecting into the front and rear openings bounded by said frame elements, and a plurality of trays movable through said openings and supported by said runs, said skeleton frame having spaced apart feet, formed by said horizontal bottom portions and adapted to rest on an oven bottom, grid-shaped ends formed by said upright portions and tray runs, and an open top formed by said horizontal top portions.

1,267,525. TRACTOR. THOMAS L. FAWICK, Waterloo, Iowa. Filed Dec. 26, 1916. Serial No. 138,999. (Cl. 180—54.)



1. In combination, a U-shaped frame, a housing for mechanism rigidly mounted on the members of said frame, and alined communicating housing-compartments for other connected mechanism in communication with said housing and mounted on the rear part of said first-mentioned housing rigidly.

2. In combination, a U-shaped frame, and alined housing-parts for moving mechanism mounted on said frame in medial alinement therewith to extend rearwardly therefrom, said housing having laterally-directed housing-compartments for laterally-directed mechanisms operatively connected to the mechanism in the main housing.

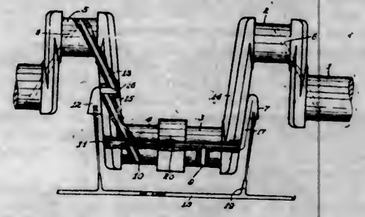
3. In combination, a frame, a housing to independently receive a motor mounted thereon, another single-piece housing rigidly secured to the rear part of said motor-housing opening directly thereinto and having compartments adapted to receive clutch-mechanism, transmission-gearing, belt-wheel gearing, and traction-wheel mechanism, in the order named, and a boxing removably secured to the latter housing opening directly thereinto and adapted to receive steering-gear elements.

4. In combination, a housing to independently receive a motor, another housing for mechanism mounted rigidly upon said motor-housing in communication therewith, and a steering-gear boxing mounted upon one side of said second-mentioned housing, said boxing and housing having registering openings.

5. In combination, a housing to independently receive a motor, another housing for mechanism mounted rigidly upon said motor-housing in communication therewith, a steering-gear boxing mounted upon one side of said second-mentioned housing, and a bearing-box for a belt-wheel shaft mounted upon the opposite side of said second-mentioned housing, both said boxings having openings and said housings having openings registering therewith.

[Claim 6 not printed in the Gazette.]

1,267,526. LUBRICATING MEANS FOR CRANK-SHAFTS. THOMAS L. FAWICK, Waterloo, Iowa. Filed Jan. 30, 1917. Serial No. 145,553. (Cl. 184—6.)



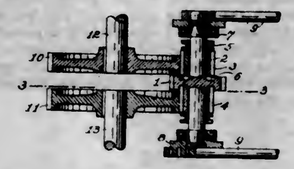
1. Means for lubricating a crank-pin bearing, comprising crank-shaft having a crank and crank-pin provided with a passage leading to the crank-pin bearing from an opening in line with the axis of the crank-shaft, a cup opening away from the opening of said passage, and means for delivering a jet of fluid lubricant under pressure into said cup and passage.

2. Means for lubricating crank-pin bearings, comprising a crank-shaft with cranks having crank-pins with communicating passages therein leading from a receiving port in a crank in line with the axis of the crank-shaft to the bearings of the crank-pins, a cupped receptacle in communication with said port, and means for delivering a jet of fluid lubricant into said receptacle.

3. A rotatable shaft having a crank provided with a crank-pin, and a crank extending from said crank-pin across the axis of the shaft and having beyond said axis a crank-pin, the latter crank having an axially located inlet-port for lubricant, and having a passage leading from said inlet-port to an outlet-port in a crank-pin.

1,267,527. POWER-TRANSMISSION DEVICE. THOMAS L. FAWICK, Waterloo, Iowa. Filed May 3, 1917. Serial No. 166,179. (Cl. 74—7.)

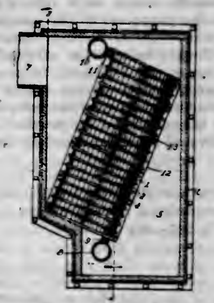
1. In a power transmission-device, alined spaced like driven gears, a driving-shaft having clutch-elements thereon between said driven gears, and like pinions loosely slidably mounted on said driving-shaft on opposite sides of said clutch-elements and independently shiftable into or out of mesh with said clutch-elements, the pinions having wider teeth than said driven gears and in constant mesh therewith respectively.



2. In a power transmission-device, alined rotatable shafts, like driven gear-wheels fixedly mounted thereon, a crank-shaft provided at opposite ends with cranks having crank-pins, and connecting-rods pivotally mounted on the crank-pins, like clutch elements fixedly mounted on the crank-shaft between said driven gears, and like pinions loosely slidably mounted on said crank-shaft and independently shiftable into or out of mesh with said clutch-elements, the pinions having wider teeth than said driven gears and in constant mesh therewith respectively.

3. In a power transmission-device, alined spaced, like driven gears, a driving-shaft, a gear-wheel fixed thereon intermediate said driven-gears, said intermediate gear having like clutch-elements formed in its opposite faces, a gear-wheel in mesh with said intermediate gear, and like pinions loosely slidably mounted on said driving-shaft and independently shiftable into or out of mesh with said clutch-elements, the pinions having wider teeth than said driven gears and in constant mesh therewith respectively.

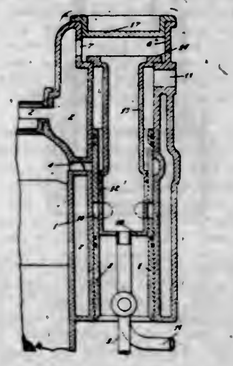
1,267,528. WATER-TUBE BOILER. THOMAS L. FAWICK, Waterloo, Iowa. Filed May 7, 1917. Serial No. 166,905. (Cl. 122—260.)



In a steam-boiler, a fixed combustion-chamber having rigid walls, a plurality of spaced flattened water-tubes within and spaced from the walls of said chamber, a plurality of spaced transverse plates having orifices in which said tubes are fitted, longitudinal plates engaged between opposite ends of said plurality of plates parallel to the flattened sides of said water-tubes and the walls of said chamber, and bolts passed through said chamber walls and securing said longitudinal plates upon said transverse plates, the walls and longitudinal plates acting as abutments for the transverse plates and inclosed flattened water-tubes.

1,267,529. INTERNAL-COMBUSTION ENGINE. THOMAS J. FAY, Cleveland, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 6, 1914. Serial No. 836 634. (Cl. 123—177.)

1. The combination, with an engine cylinder and a cooling-liquid jacket therefor, of a cylindrical valve casing within the jacket and having a port communicating with the upper end of the cylinder, a reciprocating valve sleeve within the casing and having a port intermediate of the ends thereof, a hollow abutment within the valve casing and having an enlarged lower end extending downwardly from the cylinder port and provided with a reduced extension projecting upwardly from such enlarged lower end and communicating at its upper end with the jacket space, the valve casing being provided with a port above such lower end of the abutment, and a liquid supply pipe arranged to discharge into the hollow abutment adjacent to the bottom thereof, the abutment extension projecting beyond such fluid port and communicating with the jacket space, and a liquid supply pipe connected to the bottom of said abutment and by means of which liquid is positively circulated through the elongated abutment, the extension thereof and the jacket space.



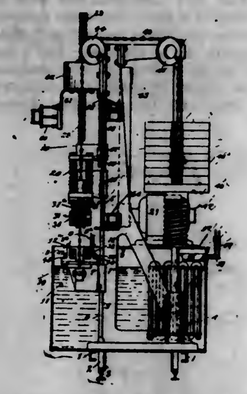
2. The combination, with an engine cylinder and a cooling-liquid jacket therefor, of a cylindrical valve casing within the jacket and having a port communicating with the upper end of the cylinder, a reciprocating valve sleeve within the casing and having a port intermediate of the ends thereof, a hollow abutment within the valve casing and having an enlarged lower end extending downwardly from the cylinder port and provided with a reduced extension projecting upwardly from such enlarged lower end and communicating at its upper end with the jacket space, the valve casing being provided with a port above such lower end of the abutment, and a liquid supply pipe arranged to discharge into the hollow abutment adjacent to the bottom thereof.

3. The combination, with an engine cylinder and a cooling-liquid jacket therefor, of a cylindrical valve casing within the jacket and having a port communicating with the upper end of the cylinder, a reciprocating valve sleeve within the casing and having a port intermediate of the ends thereof, a hollow abutment within the valve casing and having an enlarged lower end extending downwardly from the cylinder port and provided with a reduced extension projecting upwardly from such enlarged lower end and communicating at its upper end with the jacket space, the valve casing being provided with a port above such lower end of the abutment, and a liquid supply pipe connected to the bottom of said abutment and by means of which liquid is positively circulated through the elongated abutment, the extension thereof and the jacket space.

1,267,530. APPARATUS FOR CAMBERING AND QUENCHING METAL. THOMAS J. FAY, Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Aug. 19, 1914. Serial No. 857,522. (Cl. 266—6.)

1. In a machine of the character set forth, the combination of a frame having laterally spaced vertically projecting grids, a pair of cambering templets in the space between said grids and each being supported adjacent to a grid and being themselves laterally spaced, a second frame having a pair of grids adapted to enter the space between

the said cambering members and to substantially contact with the opposed inner edges of said members, a pair of cambering members complementary to the first mentioned members and carried by the second frame outside of the gride thereof, and means for moving one of said frames toward and from the other.



15. In a machine of the character described, the combination, with a supply of quenching liquid, of an anvil member reciprocable toward and from the liquid supply, a non-yieldable templet carried by said member, removable counter-weights connected to said member and normally serving to support the same with the templet out of operative relation to the quenching liquid, a hammer member, a non-yieldable templet carried thereby, an electric motor for driving the hammer member, a yielding device interposed between said motor and the hammer member, an electric circuit including said motor, a reversing switch in said circuit, and switches arranged to be alternately opened and closed by the hammer member when said members shall have been moved a predetermined distance in opposite directions by said motor.

[Claims 2 to 14 not printed in the Gazette.]

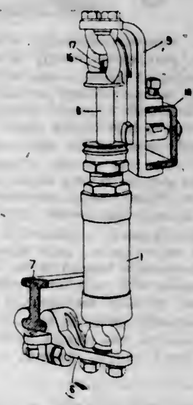
1,267,531. SPARK-PLUG. WILLIAM CHAS. FISCHER, New York, N. Y. Filed Feb. 26, 1917. Serial No. 151,052. (Cl. 123—169.)



A spark plug comprising a metal body, a ring disposed horizontally below said body and having a polysided central opening, a straight central electrode extending below said body through said opening and insulated from the former, the lower end of said electrode being spaced from the sides of said opening to provide a plurality of spark gaps, and a plurality of vertical electrodes secured to said body and spaced around said central electrode, the lower ends of said plurality of electrodes being secured to said ring and each of said plurality of electrodes having a number of vertically spaced V-shaped teeth having their points spaced from said central electrode to provide additional spark gaps.

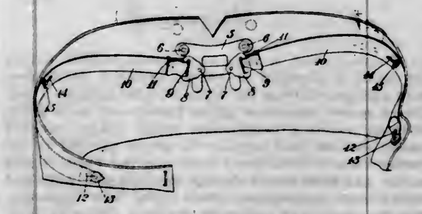
1,267,532. SHOCK-ABSORBER. ERNST FLENTJE, Cambridge, Mass. Filed Jan. 16, 1918. Serial No. 211,999. (Cl. 21—105.)

1. In a shock absorber, the combination with a cylinder, of a valved piston therein, a hollow piston rod secured to the piston and extending through one end of the cylinder, said piston rod having ports therein above the piston, a hollow piston valve situated within the piston rod, the outer end of said valve fitting the interior of the piston rod and the inner end being of smaller diamter and provided with lateral ports, a valve stem secured to said smaller end of the piston valve and extending through the hollow piston rod and by which the larger end of said piston valve may be adjusted to control the ports in the piston rod, the space within the hollow piston rod constituting an air chamber which has communication with the space below the piston through the ports in the piston valve.



2. In a shock absorber, the combination with a cylinder adapted to contain liquid, of a valved piston therein, a hollow piston rod connected to the piston, said piston rod having two sets of ports therein situated different distances from the piston, a collar situated within the cylinder at its upper end fitting the piston rod, said ports being so situated that when the piston is at the upper end of the cylinder the ports of one set are situated within and closed by the collar and the ports of the other set are situated within and partially closed by the collar.

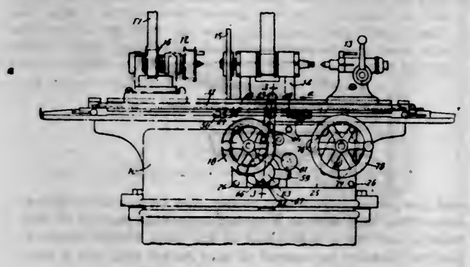
1,267,533. TROUSERS-SUPPORT. DELBERT A. FRANCIS, Columbus, Ohio. Filed June 22, 1915. Serial No. 35,680. (Cl. 241—9.)



2. A garment support comprising, in combination, a plate having means in its upper portion whereby it may be attached to the rear of the garment, loop members pivoted to opposite sides of said plate below said plate attaching means, said loop members having elongated eyes and flat flexible members secured in said eyes extending forward and upward and secured to the forward portion of the garment.

[Claim 1 not printed in the Gazette.]

1,267,534. GRINDER. WARREN F. FRASER, Boston, Mass., assignor to Warren F. Fraser Co., Boston, Mass., a Corporation of Massachusetts. Filed Mar. 20, 1917. Serial No. 158,415. (Cl. 51—4.)



1. A grinder having, in combination, a reciprocatory carriage, tappets on said carriage, a main driving shaft, gearing connecting said main driving shaft to said carriage and mechanism adapted to reverse the direction of rotation of said gearing and the direction of motion of said carriage comprising a rock-shaft, an arm thereon, a lever adapted to be alternately engaged by said tappets and thereby rocked alternately in opposite directions, a pair of oppositely disposed spring-actuated contact members mounted on said lever and engaging said arm on opposite sides thereof, a pair of oppositely disposed movable stops adapted to alternately engage said arm to lock the same against movement in one direction and a stationary support for said stops, said lever being adapted to alternately engage said stops and move them to allow said arm to be moved by one of said spring-actuated members, whereby said rock-shaft may be rocked alternately in opposite directions.

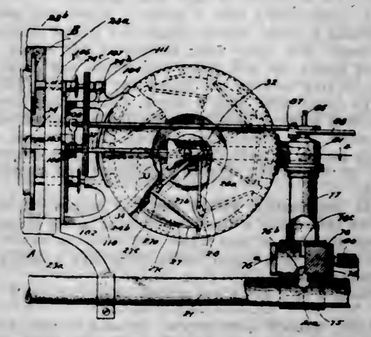
2. A grinder having, in combination, a reciprocatory carriage, tappets on said carriage, a main driving shaft, gearing connecting said main driving shaft to said carriage and mechanism adapted to reverse the direction of rotation of said gearing and the direction of motion of said carriage comprising a rock-shaft, an arm thereon, a lever adapted to be alternately engaged by said tappets and thereby rocked alternately in opposite directions, a pair of oppositely disposed spring-actuated contact members mounted on said lever and engaging said arm on opposite sides thereof, a pair of oppositely disposed spring-actuated bell crank levers adapted to alternately engage said arm to lock the same against movement in one direction, a stationary support for said bell crank levers and means on said lever adapted to alternately engage said bell crank levers and move them to allow said arm to be moved by one of said spring-actuated contact members, whereby said rock-shaft may be rocked alternately in opposite directions.

3. A grinder having, in combination, a reciprocatory carriage, a main frame upon which said carriage is arranged to slide, tappets on said carriage, a main driving shaft, gearing connecting said main driving shaft to said carriage and mechanism adapted to reverse the direction of rotation of said gearing and the direction of motion of said carriage comprising a rock-shaft, an arm thereon, a lever adapted to be alternately engaged by said tappets and thereby rocked alternately in opposite directions, a pair of oppositely disposed spring-actuated contact members mounted on said lever and engaging said arm on opposite sides thereof, a pair of oppositely disposed movable stops adapted to alternately engage said arm to lock the same against movement in one direction, a stationary support for said stops, said lever being adapted to alternately engage said stops and move them to allow said arm to be moved by one of said spring-actuated members, whereby said rock-shaft may be rocked alternately in opposite directions, and an auxiliary frame fast to said main frame upon which said gearing and reversing mechanism are mounted.

4. A grinder having, in combination, a reciprocatory carriage, a main frame upon which said carriage is arranged to slide, tappets on said carriage, a main driving shaft, gearing connecting said main driving shaft to said carriage and mechanism adapted to reverse the direction of rotation of said gearing and the direction of motion of said carriage comprising a rock-shaft, an arm thereon, a lever adapted to be alternately engaged by said tappets and thereby rocked alternately in opposite directions, a pair of oppositely disposed spring-actuated contact members mounted on said lever and engaging said arm on opposite sides thereof, a pair of oppositely disposed movable stops adapted to alternately engage said arm to lock the same against movement in one direction, a stationary support for said stops, said lever being adapted to alternately engage said stops and move them to allow said arm to be moved by one of said spring-actuated members, whereby said rock-shaft may be rocked alternately in opposite directions, an auxiliary frame fast to said main frame upon which said gearing and reversing mechanism are mounted, and means to lock said lever to said auxiliary frame.

5. A grinder having, in combination, a reciprocatory carriage, tappets on said carriage, a main driving shaft, a countershaft, a bevel gear fast to said countershaft, a pair of bevel gears mounted on said main driving shaft and meshing into said countershaft bevel gear, a clutch slidable on said main driving saft and adapted to alternately lock each gear of said pair of bevel gears to said main driving shaft, gears connecting said countershaft to said carriage, a rock-shaft, an arm on said rock-shaft engaging said clutch, whereby the same may be moved longitudinally of said main driving shaft and alternately lock each gear of said pair of bevel gears to said main driving shaft, a second arm on said rock-shaft, a lever adapted to be alternately engaged by said tappets and thereby rocked alternately in opposite directions, a pair of oppositely disposed spring-actuated contact members mounted on said lever and engaging said second arm on opposite sides thereof, a pair of oppositely disposed movable stops adapted to alternately engage said second arm to lock the same against movement in one direction, a stationary support for said stops and means on said lever adapted to alternately engage said stops and move them to allow said second arm to be moved by one of said spring-actuated members, whereby said rock-shaft may be rocked alternately in opposite directions to shift said clutch and thereby cause said carriage to be moved in opposite directions.

1,267,535. MOTOR FOR PLAYER-PIANOS. CHARLES FREBORG, Kankakee, Ill. Filed Jan. 7, 1914. Serial No. 810,873. (Cl. 230—36.)

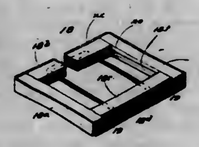


1. In a device of the class described, a casing, a rotatable shaft journaled in said casing, a plurality of bellows located about said shaft, a dividing wall located in said casing, said dividing wall being constructed of a plurality of partitions, each of said bellows being provided

with a passage communicating with the space between a pair of said partitions, said casing being provided with a valve chamber in communication with said space between each of said partitions, a distributing valve rotatably mounted in said casing, a negative pressure line communicating with said chamber, said valve being adapted to throw successive of said bellows in communication with said vacuum line to cause collapsing of the former and being arranged to permit a supply of air to said bellows not in communication with said negative pressure line.

2. In a device of the class described, a casing, a rotatable shaft journaled in said casing, said casing being provided with a valve chamber, a vacuum line in communication with said valve chamber, a plurality of bellows located in said casing about said shaft and operatively connected thereto, said bellows being mounted on an annular wall and said wall being provided with a plurality of ducts communicating with the interior of said bellows, ducts in said casing connecting said valve chamber with said passages, a valve operatively secured to said shaft and located in said valve chamber, said valve being provided with a groove adapted to communicate with a plurality of said bellows, a second groove also adapted to communicate with a plurality of said bellows, said first named groove being in communication with said vacuum line and said second named groove being in communication with the atmosphere, whereby when said device is operating said valve will operate to cause collapsing of successive of said bellows and permit expansion of other of said bellows to cause rotation of said shaft.

1,267,536. MOTOR-MOUNTING FOR PIANO-PLAYERS. CHARLES FREBORG, Kankakee, Ill., assignor to Price & Teeple Piano Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 4, 1915. Serial No. 48,973. (Cl. 64—52.)



1. In combination with a motor, a supporting member comprising a flexible cross member secured at its ends, said motor being secured to said cross member.

2. In combination with a motor, a supporting member comprising a flexible cross member secured at its ends, said motor being secured to said cross member, and means to vary the flexibility of said cross member.

6. In combination with a motor, a supporting member comprising a frame, flexible supporting means carried by said frame, said motor being secured to said means, supporting means for said frame and motor, and deadening means located between said frame and supporting means.

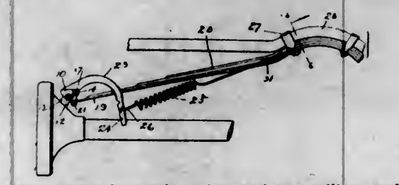
7. In combination with a motor, a supporting member comprising a frame, flexible supporting means carried by said frame, said motor being secured to said means, supporting means for said frame and motor, and deadening strips of felt located between said frame and supporting means.

9. In combination with a motor, a supporting means therefor comprising a frame, supporting cables extending between the sides of said frame, and means to secure said motor to said cables, said means comprising a detachable clamping plate.

[Claims 3 to 5 and 8 not printed in the Gazette.]

1,267,537. SHOCK-ABSORBER. EUGENE FULLER, Arctic, R. I., assignor to Benjamin F. Tefft, Jr., Arctic, R. I. Filed Apr. 20, 1917. Serial No. 165,361. (Cl. 267—19.)

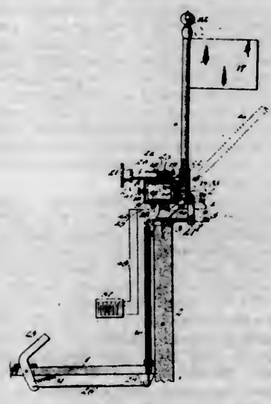
1. A shock absorbing device comprising a rocker member pivoted to a vehicle element, a main spring clamped adjacent its middle to the vehicle body and shackled at its end to said rocker at a point slightly offset from its connection to said element, means in said rocker for preventing said shackle from swinging outwardly without causing a corresponding rocking movement of said rocker on its pivot, a lever arm on said member extending forwardly



and downwardly from said rocker, and an auxiliary spring connecting said arm to a spring supported portion of the vehicle whereby a depression of the main spring causes a positive relative movement of said rocker arm and a consequent elongation of said auxiliary spring.

[Claim 2 not printed in the Gazette.]

1,267,538. AUTOMOBILE-SIGNAL. EDWARD J. GENSLER, Buffalo, N. Y. Filed June 7 1916. Serial No. 102,206. (Cl. 177—330.)



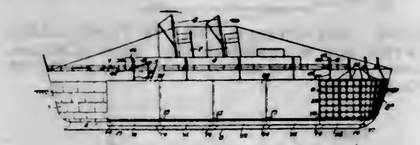
2. An automobile signal, comprising a body having a compartment and electrical contacts, a signal arm pivoted on said body, an electric lamp mounted on said arm, electrical contacts mounted on said arm and forming the terminals of said lamp and adapted to engage with said contacts on said body, said compartment being adapted to receive a battery the terminals of which are adapted to engage with the terminals mounted on said body, and an electrical coupling mounted on the body and adapted to connect a storage battery with said body contacts.

[Claims 1 and 3 not printed in the Gazette.]

1,267,539. ANTISUBMARINE. WILLIAM A. GILDAY, Philadelphia, Pa. Filed Sept. 7, 1917. Serial No. 190,153. (Cl. 114—240.)

1. A protective device, comprising the combination of a plate pivotably mounted upon the side of the hull of a vessel, means to yieldingly maintain said plate in angular relation or parallel with said side, a second plate pivotably mounted to the underside of the said hull, keel provided with apertures and means carried by said second plate and extending into said apertures to limit downward movement of said second plate with respect to said hull.

4. A protective device, comprising the combination of a plate pivotably mounted upon the side of the hull of a vessel, means to yieldingly maintain said plate in angular relation or parallel with said side, a second plate pivotably mounted to the underside of the said hull, keel provided with apertures, means carried by said second plate and extending into said apertures to limit downward movement of said second plate with respect to said hull, and a lattice work section pivotably carried by the tapered bow portion of said side, and comprising longitudinal angle irons and transversely extending bars, the flange of said angle irons lying in the plane of said lattice work being removed from between said bars.



6. An apparatus for protecting ships against exterior harmful agencies, comprising a series of protecting members pivotably connected at their lowermost portions to the said ship adjacent to the bottom thereof, and means for oscillating the said members toward or away from the sides of the ship, said means including guides upon the ship, members movable along said guides, and members pivotably connected to said last-named members and said first named members.

8. An apparatus for protecting ships against exterior harmful agencies, comprising a series of protecting members pivotably connected at their lowermost portion to the ship adjacent to the bottom thereof, braces pivotably connected to said first members and slidably connected to the sides of the ship, and means for oscillating the said members toward or away from the sides of the ship, said means including guides upon the ship, members movable along said guides, actuating means carried by said ship and operative to actuate said last-named members along said guides and members pivotably connected to said movable members and to said protecting members.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

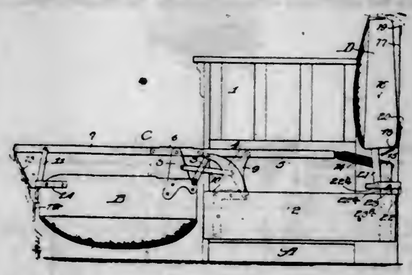
1,267,540. DETENT MECHANISM FOR WIRE-STRETCHERS. FRED O. GREEN, Lubbock, Tex. Filed May 2, 1917. Serial No. 165,898. (Cl. 74—16.)



A wire stretcher including a frame having a circular series of openings, a drum mounted in the frame and having a transverse bar mounted on one end exteriorly of the frame, said bar being formed with an opening arranged for successive registration with the series of openings, a pivoted angle member mounted on the bar and engaging through the opening of the bar and one of the openings of the frame, said angle member having a pair of notches in the outer face thereof and at opposite sides of the pivot thereof, and a leaf spring carried by the bar and arranged to be engaged in one of the notches at times to hold the angle member in one of the series of openings and in the other notch to hold the member out of such engagement.

1,267,541. SOFA-BED. SIVERT GUNDERSEN, Chicago, Ill., assignor to S. Karpen & Bros., Chicago, Ill., a Corporation of West Virginia. Filed Sept. 16, 1914. Serial No. 861,962. (Cl. 5—49.)

1. In a structure of the character set forth, the combination of a frame, a seat, means tending to turn said seat to open position, a back movably mounted on said frame and adapted to lock said seat in closed position, latch mechanism acting automatically to hold the back against movement when said back is moved away from said seat, and means on said seat adapted to coact with said latch mechanism to render the latch mechanism inoperative when said seat is turned to closed position.

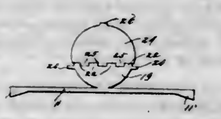


3. In a structure of the character set forth, the combination with a frame, of a forwardly-turning seat, means tending to turn said seat to the open position, a yieldingly-held back movably connected with the frame and normally locking the seat in closed position, a latch carried by the back, latch-engaging means carried by the rear portion of the frame and serving to engage the latch when the back is moved rearwardly, and latch-releasing means carried by and projecting from the rear portion of the seat.

5. In a structure of the character set forth, the combination with a frame, of a forwardly-swinging reversible seat, a folding-bed normally housed beneath and connected with the seat, a spring tending to swing the seat open, a back movably mounted on the frame and normally locking the seat closed, means for moving the back to the locking position, an arm depending from the back, a seat-released latch-member carried by said arm, and latch-engaging means carried by the frame.

[Claims 2 and 4 not printed in the Gazette.]

1,267,542. BARREL-COVER. BERNARD J. HANSON, Hayward, Wis. Filed Jan. 22, 1917. Serial No. 143,772. (Cl. 217—83.)



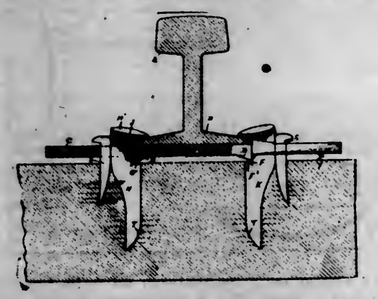
A blank for a barrel cover consisting of a body portion including two segments separated by a zigzag line of cut, a narrow strip connected to the center of the curved edge of one of the segments and having its ends enlarged, said strip extending tangentially to said segment, the ends of the curved edge of the said segment having oppositely extending tabs, the center of the curved edge of the other segment being formed with an outwardly extending tab.

1,267,543. MEANS FOR FASTENING RAILWAY-RAILS TO TIES. HUBERT E. HARRIS, Atlanta, Ga., assignor of three-fourths to Spurgeon King, Guy King, and De Witt King, Atlanta, Ga. Filed Sept. 13, 1917. Serial No. 191,321. (Cl. 238—2.)

1. A means for fastening railway rails to ties, comprising, in combination with a tie, a tie plate having spike apertures therein, spikes adapted to be passed through said apertures and each provided with a recess adapted to receive the flange of a rail and the marginal wall of the aperture in the plate, and a locking space spike driven into the tie and positioned intermediate the recessed spike and the wall of the aperture through which the spike passes.

2. A means for fastening railway rails to ties, comprising, in combination with a tie, a tie plate having spike apertures therein, with spurs upon the under surface thereof,

spikes adapted to be passed through the apertures, and each provided with a recess adapted to receive the flange of a rail and a spur upon the under surface of the plate, and a locking spike passed through said aperture intermediate the outer wall of the latter and the recessed spike.



3. A means for fastening railway rails to ties, comprising, in combination with a tie, a tie plate having spike apertures therein, with spurs upon the under surface of the plate, spikes, each with a recess upon its inner edge for the reception of the flange of the rail and spurs, said spike being so formed as to compact the fiber of the tie as the spike is driven into the latter and causing the spike to bind against the flange of the rail and wall of the aperture in the plate, and a locking spike passed through the spike aperture into the tie and intermediate the outer edge of the recessed spike and the outer wall of the spike aperture.

4. Means for fastening railway rails to ties, comprising in combination with a tie, a tie plate having spurs upon its under edge and flanges upon its upper surface, said plate having spike apertures the inner ends of which are flush with the edges of said flanges and spurs, spikes having recesses upon their inner edges, each recess adapted to receive the edge of the rail flange and the spur a slight space intervening between the end of the spur and the lower end of the recess, each spike having a head designed to extend over the flange of the rail and the inner edge of the spike being convexed near its lower end and its outer edge being on the line of a compound curve and terminating in a straight portion near its lower end, a locking spike passing through the spike aperture of said plate and adapted to bear intermediate the outer edge of the recessed spike and the end of the aperture.

1,267,544. ANTISKID FOR WHEELS. ROBERT W. HAUBNER, Somerville, Mass., assignor, by mesne assignments, to Non Skid Company of America, Boston, Mass., a Corporation of Massachusetts. Filed May 26, 1917. Serial No. 171,240. (Cl. 152—14.)

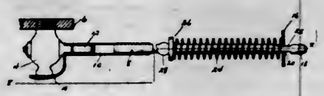


1. An antiskid for wheels comprising a cross-retaining member extending over the face of the tire to the wheel and a plurality of generally tubular road-engaging and wear-resisting elements rotatably mounted upon said cross member, and which elements have jointed engagement with one another by the entering of an end of one into an end of the other next adjacent to it.

6. An antiskid for wheels comprising a cross-retaining member extending over the face of the tire to the wheel and a plurality of generally tubular road-engaging and wear-resisting elements rotatably mounted upon said cross member, the outer ends of said elements in reverse directions away from the central portion of the combined elements being provided with sockets and the inner ends of said elements entering said sockets substantially as and for the purposes set forth.

[Claims 2 to 5 not printed in the Gazette.]

1,267,545. DETACHABLE PETCOCK-CONTROLLING DEVICE FOR MOTOR-VEHICLES. GRANT N. HAYNIE, Hamilton, Mo. Filed Mar. 17, 1917. Serial No. 155,575. (Cl. 137—189.)



1. A detachable valve operating device comprising, in combination with a supporting structure, a valve operating rod having one of its ends detachably engaged with said supporting structure and provided at its other end with means for removably engaging the stem of the valve, and a guard element associated with said valve engaging means and extending in position to shield the valve outlet when said valve is closed.

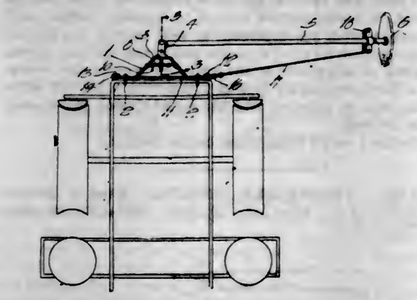
2. A detachable valve operating device comprising, in combination with a supporting structure, a valve operating rod detachably engaged with said supporting structure and having one of its ends provided with a socket element shaped to fit over the stem of the valve for removable engagement therewith, a guard element projecting from one side of said socket and extending in position to shield the valve outlet when said valve is closed, and a spring member carried by said rod in engagement with said supporting structure and urging said rod in the direction of said valve for holding said socket element in engagement with the valve stem.

3. A detachable pet cock controlling device for motor vehicles, comprising a valve operating rod having one end provided with means for removably engaging the stem of the valve, said means permitting a slight angular movement relatively to said valve, the other end of said rod extending through a portion of the body of the vehicle, said body portion of the vehicle being formed with a keyhole slot and said rod having a flattened portion adapted to fit the straight portion of the slot for locking the rod with the valve in closed position, the rounded portion of said slot being of a diameter equal to that of the rod to permit shifting of the rod thereinto and turning of said rod to operate the valve.

1,267,546. MARKING ATTACHMENT FOR CORN-PLANTERS. LEVI L. HEIZER, Nichols, Iowa. Filed Aug. 2, 1917. Serial No. 184,116. (Cl. 97—83.)

2. In combination with a marking attachment for a planter, a bracket comprising a horizontal bar having its intermediate portion bowed laterally, means for securing the ends of said bar to the rear end of the planter frame, a marker pivotally mounted on said rearwardly bowed portion of said bar, a brace for said marker having at its inner end a guide, an arched rod upon which said guide is mounted slidably, one end of said rod being anchored to one end of said bar, and a hook-like keeper formed on the other end of said bar for detachably receiving the remaining end of said rod, said guide being removable from said rod when the last named end thereof is disengaged from said seat.

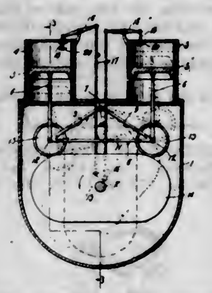
4. In combination with a marking attachment for a planter, a bracket comprising a horizontal bar having its intermediate portion bowed laterally, means for securing the ends of said bar to the rear end of the planter frame, a brace rod disposed between the outwardly bowed arms of said bracket, said brace bar and said bracket being provided with alined apertures, a marker having one end pivotally mounted between the arms of the frame provided with a pivot pin extending through said apertures, a pivoted catch on said brace bar for engaging the inner ends of said pivot pin thereby locking the marker to the planter, a brace for said marker having at its inner



end a guide, an arched rod upon which said guide is slidably mounted, one side of said rod being anchored to one end of said bar and a hook like keeper formed on the other end of said bar for detachably connecting the remaining ends of said rod, said guide being removable from said rod when said last mentioned end is disengaged from said seat.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,267,547. HYDROCARBON-ENGINE. JAMES W. HENRY, Gooding, Idaho. Filed Oct. 30, 1917. Serial No. 199,326. (Cl. 123—54.)



5. An internal combustion motor comprising a casing having a pair of cylinders mounted thereon, spaced apart and at equal distances from the center of the said casing, a rocker beam pivotally mounted within the casing at a fixed point between the said cylinders, rollers carried by the ends of the said rocker beam, pistons mounted for reciprocation in the said cylinders, piston rods connecting the said pistons with the ends of the said rocker beams whereby the said beam may be rocked on its pivot when the said pistons are reciprocated, a shaft arranged within the casing, and a cam member including an elongated plate, centrally mounted on the said shaft and having straight longitudinal edges and rounded ends engageable with the said rollers.

[Claims 1 to 4 not printed in the Gazette.]

1,267,548. CUT-FEATHER POMPON. MAX HERMAN, New York, N. Y. Filed Sept. 21, 1917. Serial No. 192,442. (Cl. 41—16.)

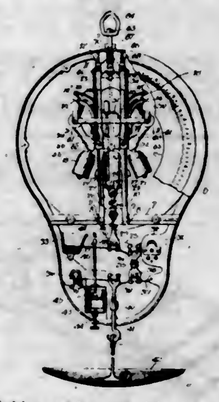
3. The method of making pompons from cut feathers which consists in forming a plurality of bunches of cut feathers arranged symmetrically and having a temporary wrapped binding stem and a projecting temporary wire bunch stem, assembling the bunches into a symmetrical cluster with the bunch stems wrapped to produce a temporary pompon stem, binding the assembly together by an external wrapping or binding adjacent the temporary



binding stems, and severing the temporary binding, bunch and pompon stems, and adding a stem to the formation.

[Claims 1 and 2 not printed in the Gazette.]

1,267,549. WEIGHING-SCALE. SAMUEL N. HERT, Toledo, Ohio, assignor to Toledo Scale Company, Jersey City, N. J., a Corporation of New Jersey. Filed July 22, 1914. Serial No. 852,384. (Cl. 265—62.)



1. In a weighing scale comprising a casing, a load receiver and load-counterbalancing means, means for suspending the casing, means for locking a movable part of the scale, connected to said suspending means, and a spring normally forcing the locking means into engagement with the part to be locked.

2. In a weighing scale comprising a casing, a load receptacle and load-counterbalancing means, a support for the scale vertically movable with reference thereto, a locking means for a movable part of the scale connected to said support and a spring engaging the locking means and normally forcing it into engagement with the movable part.

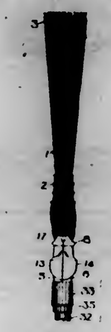
3. In a weighing scale comprising a casing, a load receiver and a pendulum for counterbalancing the load, means for locking the pendulum, a means for hanging the scale vertically movable with reference to the casing and a connection between the pendulum locking means and the hanging means.

[Claims 4 to 19 not printed in the Gazette.]

1,267,550. BROOM. IRA J. HOLLENBEE, Greensburg, Ind., assignor, by direct and mesne assignments, to The United Broom Company, Kokomo, Ind., a Corporation of Maine. Filed Feb. 2, 1916. Serial No. 75,715. (Cl. 15—19.)

5. In a broom, a brush provided with a broom-ring adapted to integrate the fibers thereof under pressure; a detachable hinged bifurcated clamp adapted to envelop the shoulder of said brush and to lockedly engage said broom-ring; tapered hollow handle half-members, one formed integrally on either half of said bifurcated clamp, adapted to receive a handle; a handle provided with a conical point adapted to wedgedly spread the fibers of said brush within said clamp and provided with a conically tapered locking-shank adapted to engage said tapered handle half-

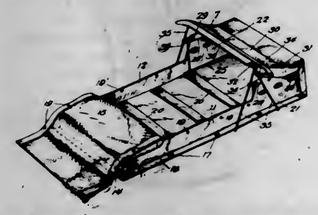
members; and a tapered locking-sleeve adapted to telescopically envelop said hollow handle half-members, said members of said clamp-construction being adapted, upon



the introduction of said tapered locking-shank of said handle within said hollow half-members, to automatically lock together all parts of said broom.

[Claims 1 to 4 not printed in the Gazette.]

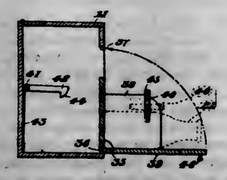
1,267,551. SLEEPING-BAG. LOUIS JACOBS, Chicago, Ill. Filed Sept. 10, 1917. Serial No. 190,465. (Cl. 5—5.)



5. A sleeping bag comprising a fabric envelop, a head protecting structure having side and end walls, a frame comprising end and side members foldable upon each other for holding the end and side walls in erect position, a canopy extending from the upper edge of the end wall over the head structure, a transverse rod secured to the canopy near its end, ground engaging rods secured to the ends of the transverse rod to hold the canopy in erected position, and loops formed in the side members for engagement by the ground engaging rods to hold the frame in open position.

[Claims 1 to 4 not printed in the Gazette.]

1,267,552. MILK-RECEPTACLE. MIKE JAKAB, Woodland, Me., assignor of one-fourth to Andrew Gorej and one-fourth to John Juhasz, Woodland, Me. Filed Dec. 29, 1917. Serial No. 209,462. (Cl. 232—41.)

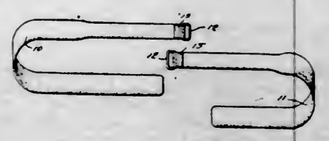


2. A device of the class described comprising a box having an opening in one wall thereof, a bottle carrier right-angular in cross section hinged in the said opening and having end walls, a latch board pivoted between the end walls of the carrier positioned a distance from the front plate of the carrier equal to the diameter of a milk bottle adapted for reception by the device and a locking frame resiliently mounted in the box adapted for engaging the board when the latter is in its upright position with the carrier closed within the box.

4. In combination with a box having an opening in its front wall and further having a hinged lid upon the top thereof, a bottle carrier hinged to the box within said opening, a latch board pivoted to said carrier, the carrier being adapted to have a bottle positioned therein within the path of movement of the board to prevent the swinging of the board, and a locking frame within the box within the path of movement of the board during the closing of the carrier.

[Claims 1 and 3 not printed in the Gazette.]

1,267,553. ADJUSTABLE NECKTIE. WIRT J. JONES, Phoenix, Ariz. Filed Mar. 20, 1917. Serial No. 156,055. (Cl. 2—11.)



1. A necktie comprising a pair of sections, overlapping at their inner ends, and a loop carried upon the inner end of each section and adapted to receive therethrough the outer end of the opposite section.

3. In a necktie, the combination of a pair of independent end sections, and a loop secured upon the inner extremity of each section, the free ends of said sections being adapted for slidable engagement through the loops of the opposite sections to hold the inner extremities thereof in overlapping position and to slidably connect said sections.

[Claims 2 and 4 not printed in the Gazette.]

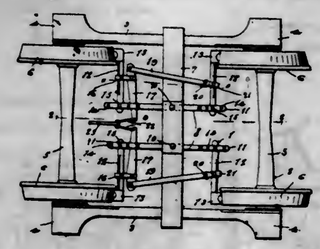
1,267,554. COMBINATION PERCUSSION-HAMMER. TOKUMITSU KARATSU, Los Angeles, Cal. Filed May 23, 1917. Serial No. 170,474. (Cl. 128—28.)



1. A hammer comprising a bifurcated head the abutting halves of which are provided with a peripheral groove, a detachable impact element mounted in the groove, a latch to lock the halves together, and a handle therefor.

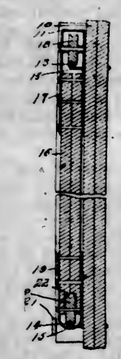
2. A hammer comprising a bifurcated percussor head formed with two abutting halves, and jointly formed with a peripheral groove, a detachable impact element carried in the groove, a latch to lock the halves together, and a hollow handle for the head.

1,267,555. SAFETY CAR-BRAKE. CHARLES HENRY KEMMER, Buffalo, N. Y. Filed July 19, 1917. Serial No. 181,549. (Cl. 188—24.)



In a car brake system, the combination with a truck including side bars, and a bolster connecting the same, said bolster having a transverse slot formed therein, a pair of spaced parallel arranged supporting bars extended through said slot, said supporting bars having their free ends bent downwardly and forwardly, brake levers pivotally and adjustably carried by the free ends of said supporting bars, operating levers for said brake levers, a connecting link secured to the free ends of said operating levers and connected to certain of said brake levers intermediate the ends thereof, and connecting links pivotally secured to the operating levers intermediate the ends, and to said brake levers, as and for the purpose specified.

1,267,556. DOOR-HANGER. LEANDER J. KNISELEY and WILLIAM B. KNISELEY, Burnsville, W. Va. Filed July 7, 1914. Serial No. 849,585. (Cl. 16—7.)



In a car door construction, the combination of a door body having recesses formed upwardly from its lower edge between the front and rear sides of the body, rollers mounted in said recesses, said rollers being carried upon journals which project through the door body, a rail supporting said rollers, U-shaped brackets having arms embracing the outer sides of the wall of said recesses and bridging over the latter and also said rail, said roller journals also passing through said arms and being fastened therein, and connecting bolts passing entirely through the arms of the brackets and the door body.

1,267,557. AUTOMOBILE-LOCK. GOTTHARDT KOCH, Chicago, Ill. Filed Nov. 12, 1917. Serial No. 201,415. (Cl. 70—128.)

1. The combination with an oscillatory shift lever of a socket fixed with relation to the fulcrum for the lever, a hollow hood fixed upon said lever in spaced relation to the socket and a plug fitting said socket and movable into closely fitting relation with said hood, said plug being of sufficient length to engage both the socket and the hood simultaneously.

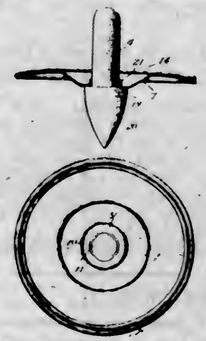


2. The combination with an oscillatory shift lever of a socket fixed with relation to the fulcrum for the lever, a hollow hood fixed upon said lever in spaced relation to the socket, a plug fitting said socket and movable into closely fitting relation with said hood, and means for locking the plug to the hood, said plug being of sufficient length to engage both the hood and the socket simultaneously.

3. The combination with a shift lever of a socket fixed with relation to the fulcrum for said lever, said socket being formed with upwardly extending cams, a plug closely fitting said socket and formed with cams complementary to those upon said socket, a hollow hood fixed upon the lever in spaced relation to said socket, the upper end of said plug being formed to fit closely within the hood and mechanism for locking the plug in the hood, said plug being of such length that when fully seated in the socket it clears the hood and when locked in the hood it engages both the hood and socket.

[Claims 4 to 7 not printed in the Gazette.]

1,267,558. SPINNING-TOP. JOSEPH KOMOROUS, Chicago, Ill., assignor to Parisian Novelty Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 24, 1916. Serial No. 127,349. (Cl. 46—32.)



1. In a top, in combination, a spindle, a centrally-apertured disk through which said spindle extends, a cover-disk secured to said first-named disk and through which said spindle also extends, said first-named disk being provided at its spindle-receiving aperture with a flange formed with spaced contacting surfaces adapted to exert a biting grip on said spindle whereby to prevent independent rotative movement of said parts and their separation longitudinally of each other.

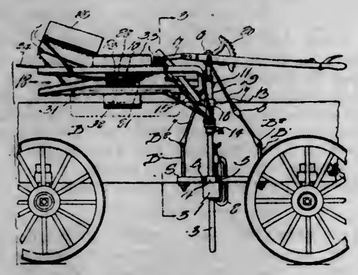
2. In a top, in combination, a spindle, a centrally-apertured disk through which said spindle extends, a cover-disk secured to said first-named disk and through which said spindle also extends, said first-named disk being provided at its spindle-receiving aperture with a flange extending lengthwise of the spindle and formed with spaced contacting surfaces adapted to exert a biting

grip on said spindle whereby to prevent independent rotative movement of said parts and their separation longitudinally of each other.

3. In a top, in combination, a spindle provided with a shoulder, a centrally apertured disk through which said spindle extends, a cover-disk secured to said first-named disk and through which said spindle also extends, one of said disks bearing against said shoulder, said first-named disk being provided at its spindle-receiving aperture with a flange formed with spaced contacting surfaces adapted to exert a biting grip on said spindle whereby to prevent independent rotative movement of said parts and their separation longitudinally of each other.

4. A top comprising a central spindle, a rigid centrally-apertured disk-portion through which said spindle extends, said disk-portion having a flange surrounding the aperture therein, the sections of said flange bearing angular relation to each other and at which flange said disk grips said spindle and prevents separation of said parts longitudinally of each other.

1,267,559. KAFIR-CORN HEADER. ELMER L. KOON, Woodward, Okla. Filed Jan. 29, 1917. Serial No. 145,227. (Cl. 56—131.)



2. A corn header comprising a portable receptacle, a support movable bodily with said receptacle, a knife mounted on said support and adapted to be depressed by engagement with each corn stalk, and means for suddenly raising said knife to its initial position the moment the stalk is cut, whereby to throw the severed head into said receptacle.

3. A corn header comprising a deck having an inlet throat at its front end, a horizontal heading blade extending obliquely across the rear end of said throat and disposed above the deck, front and rear fasteners passing slidably through the blade and connecting the same with the deck, and springs surrounding said fasteners and interposed between the deck and blade to yieldably support the knife above said deck.

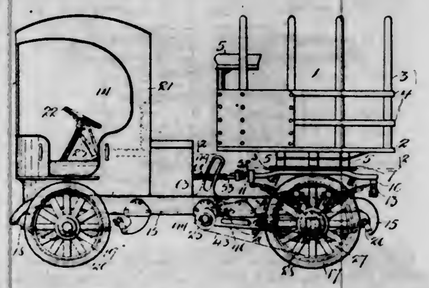
[Claims 1 and 4 not printed in the Gazette.]

1,267,560. [WITHDRAWN.]

1,267,561. MOTOR-VEHICLE. CHARLES C. LAPHAM, New York, N. Y., assignor of one-half to Walter S. Lapham, New York, N. Y. Filed Jan. 16, 1913. Serial No. 742,365. (Cl. 180—14.)

1. A device of the character described, comprising a tractor having rear wheels and a rear axle, a vehicle drawn by said tractor and having forward supporting springs, and means adjustable along the said rear tractor axle for connecting the vehicle springs to the said rear tractor axle.

3. A device of the character described, comprising a tractor, a vehicle having supporting springs, means connecting said vehicle and tractor so that a portion of the draw will be transmited to said vehicle through its supporting springs and flexible, longitudinally resilient means connecting the tractor and vehicle so that a portion of the draw will be transmitted to the vehicle independently of said supporting springs above and simultaneously with the said first drawing action.



6. A device of the character described, comprising a tractor, including front and rear axles and wheels, a chassis, springs supporting said chassis on said axles, a vehicle drawn by said tractor, said vehicle having supporting springs supported upon the rear axle of the tractor so that said chassis and said vehicle will have independent movement upon their respective supporting springs, and a draw connection between said tractor and said vehicle above the springs of the latter, said connection permitting the chassis and vehicle to move independently upon their respective springs without substantially changing the proportion of draw transmitted through said latter connection.

7. A device of the character described, comprising a tractor, a vehicle drawn thereby, and partially supported thereon, a pivotal connection between said vehicle and tractor which permits said vehicle and tractor to pivot vertically in relation to each other, a second connection for transmitting drawing force from the said tractor to said vehicle, comprising members having a contact which changes in accordance with the relative vertical pivoting of the tractor and truck so that the relative proportions of the drawing force transmitted to the vehicle through said connections will be substantially unchanged by said pivotal action.

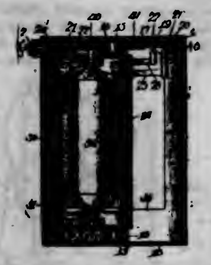
10. A device of the character described, comprising a tractor, having a rear axle, and a vehicle drawn by the tractor, having supporting springs, and means for connecting said springs with the rear axle of the tractor, comprising a block having a recess to receive the rear axle of the tractor, engaging teeth on said axle and block, a bolt for locking said block on said axle, an eccentric on said bolt for tightening the connection between the block and axle, a spring plate secured to the vehicle spring, having a circular member, said block having a circular recess to receive the spring plate and ears between which the circular member of the spring plate is received, and a shaft passing through said ears and said spring plate.

[Claims 2, 4, 5, 8, and 9 not printed in the Gazette.]

1,267,562. AGITATING DEVICE. WILLIAM LINDSAY, Chicago, Ill. Filed Aug. 30, 1917. Serial No. 188,951. (Cl. 74—14.)

1. A device of the character described, comprising, in combination a freely movable structure, a motor mounted theeron upon an axis eccentric to the axis of the body of said motor, and means interposed between the motor shaft and said structure and operatively connected with them for imparting rotary motion to said motor body.

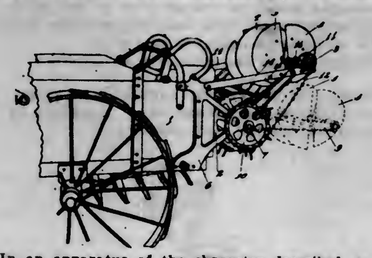
5. A device of the class described, comprising, in combination, a structure to be agitated, flexible means for suspending the same to permit it to swing in an orbit around a vertical axis while free to take a different motion in addition to that of said obital movement, an electric motor having its frame rotatably mounted upon said structure upon an axis eccentric to the axis of said frame, said frame being so adjusted with reference to said structure as to cause a wabbling action of the latter, and means in operative connection with the motor shaft and structure for imparting a rotary movement to said motor frame around said eccentric axis.



14. An agitating device, comprising a freely movable structure, a motor journaled in said structure upon an axis eccentric to that of the motor body, a motor shaft concentric with said body and interposed gears for operatively connecting the same with said freely movable structure.

[Claims 2 to 4 and 6 to 13 not printed in the Gazette.]

1,267,563. BROADCAST SPREADER. HENRY L. LITCHFIELD and CLARENCE E. SHIPLET, Waterloo, Iowa, assignors to The Litchfield Manufacturing Company, Waterloo, Iowa, a Corporation of Iowa. Filed Sept. 22, 1915. Serial No. 51,932. (Cl. 275—3.)



1. In an apparatus of the character described, a primary distributer adapted to throw a stream of material outwardly and rearwardly, a secondary distributer in position to receive said stream and give the elements thereof added momentum, and means for adjusting the elevation of said distributers relatively to each other, to maintain the proper relation between them under different conditions of material and speed of operation.

4. In an apparatus of the character described, two distributers positioned to act one after the other on oncoming material to discharge the same, the first of the distributers being adapted to deliver the material to the second distributer in the form of a stream projected through space, and the second distributer including means for acting on the stream to cause it to continue its flight and at the same time be widened, and means for adjusting said distributers relatively to each other to maintain the proper relation between them under different conditions of material and speed of operation.

7. In an apparatus of the character described, a bed for containing material to be distributed, a beater wheel mounted on a shaft extending transversely of the bed at the rear end of the latter, two arms journaled upon said shaft at the ends of the beater wheel and extending radially beyond the beater wheel, a secondary distributer mounted between the outer ends of said arms, links extending rearwardly from the bed past said arms, and means for connecting said arms to said links at any one of a plurality of points distributed lengthwise of the latter.

10. In an apparatus of the character described, a primary distributer, a secondary distributer arranged behind the primary distributer and adapted to receive from the latter a stream of material and without checking its progress give it added momentum, and means for permitting the rearmost distributer to be raised and lowered in order to bring it to the best elevation for any given condition of material and speed of operation for the purpose of receiving the stream from the primary distributer.

[Claims 2, 3, 5, 6, 8, 9, and 11 to 14 not printed in the Gazette.]

1,267,564. SALT AND PEPPER SHAKER. IRA W. LIVINGSTON, Bridgeport, Ohio. Filed Aug. 1, 1917. Serial No. 183,959. (Cl. 65—45.)



1. A salt and pepper shaker comprising a container divided longitudinally into two separate compartments, a stationary disk closing the open end of said container, said disk having a quadrantal opening and an adjacent quadrantal perforated area overlying each compartment, a cap rotatably disposed in overlying relation to said disk, said cap having a quadrantal opening therein, a tubular thumb-piece formed integral with said cap, and a rib extending partially around the periphery of said container near the uppermost portion thereof, the ends of said rib serving as stops against which said thumb-piece abuts for limiting the extent of normal rotary movement of said cap, said thumb-piece being adapted to be raised up and passed over said rib until the cap occupies positions wherein its opening directly overlies either of the quadrantal openings in said disk.

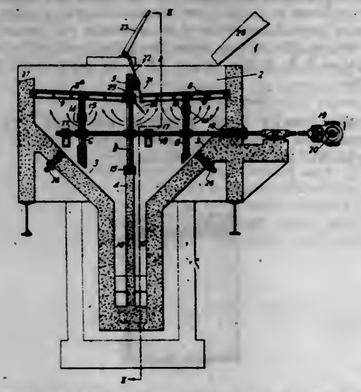
4. A salt and pepper shaker comprising a container divided longitudinally into two separate compartments, a stationary disk closing the open end of said container, said disk having a quadrantal opening and an adjacent quadrantal perforated area overlying each compartment, a cap rotatably disposed in overlying relation to said disk, said cap having a quadrantal opening therein, a tubular member flexibly connected to a portion of the lower edge of said cap, a second tubular member mounted upon said cap and having its lower end telescopically received within the first-mentioned tubular member, a rib extending partially around the periphery of said container near the uppermost portion thereof, the ends of said rib serving as stops against which said first-mentioned tubular member abuts for limiting the extent of normal rotary movement of said cap, each of the ends of said rib occupying such position that when said tubular member occupies abutting relation thereto the opening in said cap directly overlies one of the perforated areas in said disk, upward pressure against the lower end of said first-mentioned tubular member being adapted to raise the same and cause the last-mentioned tubular member to telescope therein, whence said members may be passed over said rib, thus permitting said cap to be rotated into a position wherein its opening overlies one or the other of the quadrantal openings in said disk.

[Claims 2 and 3 not printed in the Gazette.]

1,267,565. COAL-WASHING APPARATUS. LEE LLEWELLYN, Dormont borough, Pittsburgh, Pa., assignor to Pittsburgh Coal Washer Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 5, 1918. Serial No. 210,415. (Cl. 83—79.)

1. In a coal washing apparatus, a tank having a receiving and an outlet portion, a supporting screen arranged transversely of the tank, a plunger located below and at

one end of the screen and another puncture located below and about midway of the screen respectively, and means for reciprocably actuating said plungers together.



2. In a coal washing apparatus, a tank having a receiving and an outlet portion, a supporting screen arranged transversely of the tank, a plunger located below and at one end of the screen and another plunger of different area located below and about midway of the screen, and means for reciprocably actuating said plungers together.

3. A coal washing apparatus comprising a tank having a middle transverse partition terminating below the top of the tank, a perforated screen arranged across the upper portion of the tank at each side of the partition and extending downwardly toward said partition at each side, an individual plunger framing between and below each screen respectively, a reciprocable shaft extending through the jig chamber below said screens, a plurality of plungers mounted thereon each operable in one of said framings adapted to impart series of pulsations, and means for actuating said shaft.

5. A coal washing apparatus comprising a tank having a middle transverse partition terminating below the top of the tank, a perforated screen arranged across the upper portion of the tank at each side of the partition and extending downwardly toward said partition at each side, a reciprocable shaft extending through the jig chamber below said screens, a plurality of plungers mounted thereon and having different areas adapted to impart correspondingly different pulsations toward the screens in different proportions as to selected portions thereof, and means for actuating said shaft.

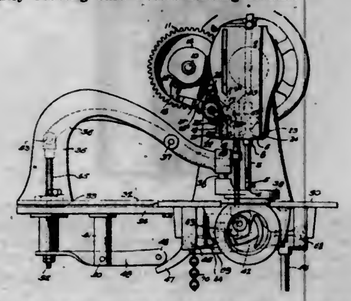
10. In a coal washing apparatus, a tank provided with an outlet conduit at one end, a middle transverse partition, a receiving screen sloping downwardly toward said partition with an intervening slate outlet space, a gate for said space, a protecting shield therefor, a similar delivery screen at the other side of the partition, a transverse partition below and between said screens and below the middle portion of each screen each having a plunger housing, a plunger operatively mounted in each of said housings, and means for actuating all of said plungers together.

[Claims 4 and 6 to 9 not printed in the Gazette.]

1,267,566. SEWING-MACHINE. RUDOLF LOEB, Jenkintown, Pa. Filed Dec. 31, 1913, Serial No. 809,799. Renewed July 11, 1916. Serial No. 108,713. (Cl. 112—7.)

1. In an eyelet forming machine, the combination of stitch forming means, a manually operable swinging member having a turntable, and rotatable fabric-holding means carried by said swinging member for coöperation with said turntable, said fabric-holding means being manually turnable when the fabric is clamped between the same and the turntable.

2. In an eyelet forming machine, the combination of stitch forming means adapted to laterally vibrate in a single plane, a swinging plate laterally disposed with respect to the machine and in line with said stitch forming means, a turntable carried by said plate, rotatable fabric-holding means carried by said plate and manually operable with respect to said turntable, and means for vertically moving said fabric-holding means.



3. In an eyelet forming machine, the combination of stitch forming means adapted to laterally vibrate in a single plane, a swinging plate having a turntable, fabric-holding means carried by said plate and coöperating with with said turntable, said plate being manually movable with the fabric-holding means, means for locking said swinging plate in line with the vibrating stitch forming means, and means for releasing the locking device, said fabric-holding means being manually rotatable at the end of the swinging movement of said plate.

[Claims 4 to 14 not printed in the Gazette.]

1,267,567. ADVERTISING ATTRACTION-FORM. LUDVIG LUNDGREN, Youngstown, Ohio. Filed June 24, 1916. Serial No. 105,668. (Cl. 46—70.)



1. In an advertising attraction form, a bust, head and arms arranged to be firmly attached to the front of the body portion of a pedestrian, leg forms and feet arranged to be securely attached to the pedestrian at the hips of the same.

2. In an advertising attraction form, the combination of a bust, head and arms, means of attaching the same to the front of the body portion of a pedestrian, leg forms and feet and means of attaching the same to a pedestrian over the hips of the same, a supporting rod attached to the knees of the leg forms, said supporting rod hooked to a rod supporting the bust, head and arms, attached to the front of the body portion of the pedestrian, supporting rods fastened to the bust form near the arm pits and hooked into the shoulder straps fitting over the shoulders of the pedestrian, with the belt attached to the lower portion of the bust form, belt attachment to hold leg forms over the hips of the pedestrian, and shoulder straps into which rods are hooked supporting upper portion of the bust, head and arms.

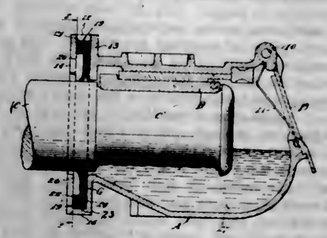
1,267,568. METAL FENCE-POST. ALBERT W. MCALISTER, Milan, Tenn. Filed May 18, 1916. Serial No. 97,365. (Cl. 256—52.)

1. In a device of the class described, the combination of a metallic rib, means for supporting said rib, said rib having slots formed therein, each slot having a pair of spaced edges, each slot having one edge projecting inwardly beyond the remaining edge, thereby forming biting edges, wire strands positioned within said slots, a key positioned within said rib in front of said strands, whereby said key will hold said strands within said slots, and said biting edges biting into said strands for holding said strands from slipping through said slots.



2. In a device of the class described, the combination of a metallic body, said body being bent along its central portion to form a rib, said rib having a plurality of slots formed therein, the edges of said rib communicating with said slot being formed in spaced relation, one of said edges projecting inwardly beyond the remaining edge, thereby forming a biting edge in each slot, wire strands extending through said slots, a key positioned within said rib in front of said strands, thereby forcing said strands upon said biting edges, said biting edges biting into said strands for holding said strands from slipping through said slots, the remaining edges within said slots limiting the biting of said biting edges into said strands.

1,267,569. DUST-GUARD FOR JOURNAL-BOXES. HARRY C. MCCARTY, Williamsport, Pa. Filed Aug. 29, 1917. Serial No. 188,698. (Cl. 64—22.)

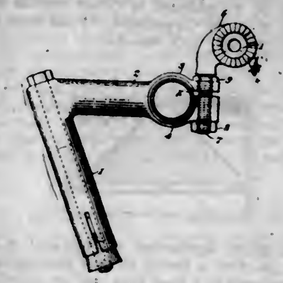


1. A dust guard composed substantially entirely of flexible material, said dust guard being thicker at the marginal portion than at the intra-marginal portions.

11. In a dust guard, the combination of a flexible body portion comprising a plurality of thicknesses of wick-like material; a flexible frame of wick-like material disposed on the marginal portions of said body portion and comprising a plurality of thicknesses in addition to the body portion; and stitches securing the frame to the body portion, said dust guard being thicker and stiffer at the marginal portion than at the intra-marginal portions.

[Claims 2 to 10 and 12 to 21 not printed in the Gazette.]

1,267,570. LAMP-HOLDER FOR BICYCLES. JOHN J. MCGUCKIN, Brooklyn, N. Y., assignor to Louis Schwab, New York, N. Y., as surviving partner of the Firm of Stevens & Company, formerly composed of said Louis Schwab and Frank N. Stevens. Filed Dec. 8, 1917. Serial No. 206,156. (Cl. 208—87.)



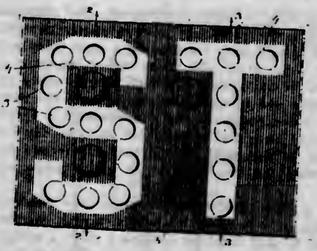
4. The combination, with the gripping jaws of a bicycle handle-bar-post extension, of a lamp bracket provided with an integral, threaded shank and anti-rotation means and a coöperating nut, adapted to contract the gripping jaws and to hold the lamp bracket in operative position.

7. The combination, with the gripping jaws of a bicycle handle-bar-post extension, of a bracket provided with a plurality of integral lamp-holding elements and an integral, threaded shank and a coöperating nut, adapted to contract the gripping jaws and to hold the bracket in a plurality of optional operative positions.

9. The combination with a bicycle handle-bar-post extension, provided with handle-bar-gripping jaws apertured to receive a clamping shank, of a lamp holding bracket having an integral threaded shank provided with a tapered portion constituting anti-rotation means and with coöperating clamping means.

[Claims 1 to 3, 5, 6, 8, and 10 not printed in the Gazette.]

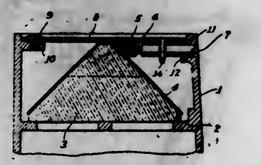
1,267,571. ILLUMINATED SIGN. CHARLES A. MCNEAL, Columbus, Ohio. Filed May 14, 1917. Serial No. 168,435. (Cl. 40—130.)



In an illuminated sign, a face plate having a reflecting surface, a source of light forward of said face plate, a bulb or globe surrounding the same and having tip and side portions, reflectors set in the outline of a letter or design and unequally distant from, in the rear of and grouped around said source of light, said reflectors having different inclinations with respect to said face plate, toward and facing the source of light, the inclinations varying according to the distance of the reflector from said light and being decreased in those reflectors that are nearer the light, to reflect the rays incident to corresponding portions of all of the reflectors outwardly in parallel lines, direct rays from said source being transmitted through the tip portion of the bulb to the observer, the tip and side portions of the bulb being colored differently

and the reflecting surface of said face plate being colored to harmonize with the color of said tip portion and transmitting rays of light from said source to the observer.

1,267,572. OPTICAL INSTRUMENT. FRANK MIHALYI, Rochester, N. Y., assignor to Crown Optical Company, Rochester, N. Y., a Corporation. Filed Dec. 18, 1916. Serial No. 137,553. (Cl. 88—33.)

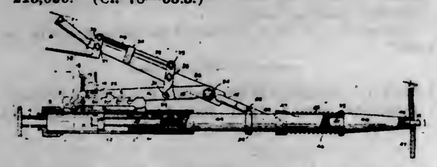


1. In an optical instrument, a prism seat, a prism adjustable on the seat, a spring member bearing against the prism and secured to a fixed part, and an adjusting screw mounted on the spring and connected independently of the latter with the prism for moving the prism independently of the spring.

4. In an optical instrument, a prism seat, a prism adjustable on said seat, a device coöperating with two angularly arranged faces of the prism, two coöperating screw parts, one rigid with the prism, a leaf spring secured at one end, coöperating between its ends with the prism, and having its other end secured to and supporting the other screw part against longitudinal movement while permitting the rotation of said screw part.

[Claims 2 and 3 not printed in t[illegible]azette.]

1,267,573. RIVET-HOLDING TOOL. GEORGE S. MONSON, San Francisco, Cal. Filed Jan. 21, 1918. Serial No. 218,099. (Cl. 78—53.5.)



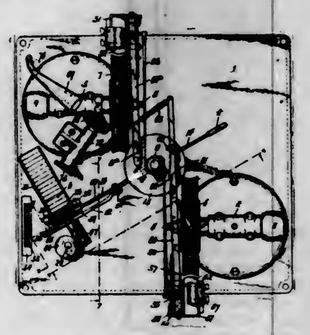
1. In a rivet holding instrument, the combination of a housing, a body slidable therein, means carried by the front end of said body for holding a rivet, a collar slidable upon the body, a bar the front end of which is pivotally connected to said collar, a second bar pivotally connected at its front end to said first-named bar, the rear end of said bar being supported by the housing, a spring coiled around said body and compressed between the collar and a portion of the body, and detachable means for securing together the two bars at an acute angle with each other.

2. In a rivet holding instrument, the combination of a housing, a body slidable therein, means carried by the front end of said body for holding a rivet, a collar slidable upon the body, a bar the front end of which is pivotally connected to said collar, a second bar pivotally connected at its front end to said first-named bar, the rear end of said bar being supported by the housing, a spring coiled around said body and compressed between the collar and a portion of the body, detachable means for securing together the two bars at an acute angle with each other, a hammer block movably attached to said body and a spring for holding said hammer block to said body.

3. In a rivet holding instrument, the combination of a housing, a body slidable therein, a rivet holder carried by the front end of said body, a collar slidable upon the body and having trunnions, a bar the front end of which is yoke-shaped and pivotally engages said trunnions, a second bar pivotally connected at its front end to said first-named bar, the rear end of said bar being adjustably supported by the housing, a spring coiled around said body and compressed between the collar and a portion of the body, and detachable means for securing together the two bars at an acute angle with each other.

[Claim 4 not printed in the Gazette.]

1,267,574. ARTICLE POLISHING OR GRINDING MACHINE. FRANK H. MOONEY, Toledo, Ohio, assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed May 7, 1917. Serial No. 167,072. (Cl. 51—4.)



1. In a machine of the class described, rotatable means having a plurality of work carrying arms projecting therefrom, means for feeding cylindrical work pieces into rotatable carrying position on each arm at a predetermined point in a revolution thereof, means for rotating the work pieces on the arms and polishing the same at a predetermined point in a revolution thereof, and means for delivering a polished work piece from each arm at a predetermined point in a revolution thereof.

2. In a machine of the class described, a revoluble arm, means operable to impart intermittent revoluble movements thereto, means automatically operable to deliver a work piece to carrying position on said arm at a predetermined point in a revolution thereof, the work piece being rotated on the arm when carried thereby, and means operable to act on the work piece at a predetermined point in a movement of said arm to both rotate the work piece on the arm and to abrade the same.

3. In a machine of the class described, a revoluble arm, means operable to impart step by step revoluble movements to said arm, means automatically operable to deliver a work piece to carrying position on said arm at a predetermined point in its movement, the work piece being carried by the arm for rotary movements thereon, and separate means both operable on the carried work piece at different points in a revolution of the arm to rotate the work piece on the arm and to abrade the same.

4. In a machine of the class described, rotatable means having a projecting arm, means for imparting intermittent rotary movements to said first means, means for feeding a work piece onto said arm for rotary movements thereon when the arm is at a predetermined point in a revolution thereof, and means for acting on each work piece at a predetermined point in its revolution with its carrying arm to rotate the work piece on the arm and to abrade the same.

5. In a machine of the class described, rotatable means having a plurality of projecting arms, means for imparting intermittent rotary movements to said first means, means for feeding a work piece onto each arm for rotary movements thereon at a predetermined point in a revolution of the arm, and separate means for successively acting on each work piece at different predetermined points in a revolution of the arm carrying the same to rotate the work piece on the arm and to abrade the work piece.

[Claims 6 to 20 not printed in the Gazette.]

1,267,575. FOUNTAIN-PEN CLIP. FRANK H. MOONEY, Toledo, Ohio, assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio, a Corporation of Ohio. Filed May 7, 1917. Serial No. 167,073. (Cl. 24—11.)

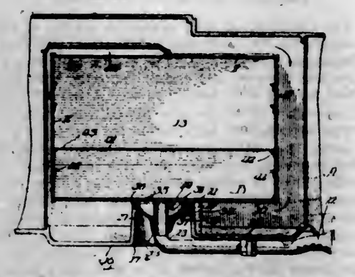


1. The combination with a fountain pen cap having an opening in a side thereof, of a clip lever, a spring carrying said lever and projecting therefrom intermediate its ends and through said opening into the interior of the cap in holding engagement therewith.

5. In a fountain pen, the combination of a cap having an opening in a side thereof in spaced relation to its ends, said opening having its forward wall inclined longitudinally of the cap, a clip lever extending longitudinally of said cap disposed at one side of said cap longitudinally thereof, a spring strip having one end portion carrying said lever and projecting laterally therefrom intermediate its ends through said opening and thence toward the rear end of the cap along the side thereof in which the opening is provided and having its free end terminating in a transversely projecting spur in bracing contact with the opposite side of the cap to that in which the opening is provided, the projecting portion of said spring which projects through said opening being curved and bearing against the inclined side of the opening.

[Claims 2 to 4 not printed in the Gazette.]

1,267,576. OVEN-BURNER FOR COMBINED SOLID AND FLUID FUEL RANGES. LEWIS MOORE, Joliet, Ill., assignor to Moore Brothers Company, Joliet, Ill., a Corporation of Illinois. Filed Mar. 29, 1915. Serial No. 17,671. (Cl. 126—36.)



1. A range provided with an oven and having a burner chamber therebeneath opening into the bottom of said oven, and a movable valve and burner member adapted when in one position to close communication between said oven and said chamber and when in a second position to provide a burner above the oven bottom.

2. A range provided with an oven and having a burner chamber therebeneath opening into the bottom of said oven, a movable valve and burner member adapted when in one position to close communication between said oven and said chamber and when in a second position to provide a burner above the oven bottom, and a baffle plate located above the last mentioned position of said burner.

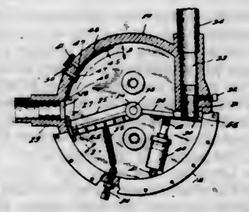
5. A range provided with an oven and having a burner chamber beneath said oven, a fluid fuel supply pipe extending upwardly into said chamber, and a combined valve and burner member embracing the end of said pipe, the confining walls of said chamber and said member being provided with coöperating elements for guiding said member in its movement on said pipe and for retaining it in elevated burning position.

10. In a combined coal and gas range, an oven having an opening through the bottom thereof, a burner having a part arranged within said opening and movable from a position in which it projects into the oven to a position in which said opening is closed and the top of the burner lies flush with the top of the bottom wall of the oven.

13. In a combined coal and gas range, an oven having an opening through the bottom thereof, a burner arranged within said opening and movable from a position in which it closes the same with the upper surface thereof lying in the plane of the top of the bottom wall of the oven to a position in which the burner projects upwardly into the oven, a flat plate having a solid central portion and perforated at the edges, and means for supporting said plate at various elevations in the oven in the same manner that the trays or shelves in the oven of the ordinary coal range are supported, whereby said plate will serve as a flame spreader while gas in being burned and as an ordinary tray or shelf when coal is being burned.

[Claims 3, 4, 6 to 9, 11, and 12 not printed in the Gazette.]

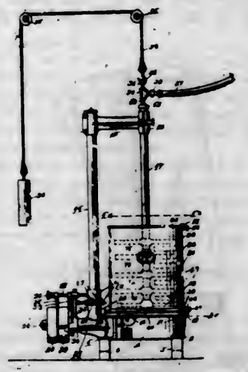
1,267,577. REGULATOR FOR FLUID-FLOW. OTTO N. MOORE, Indianapolis, Ind., assignor of one-half to John W. Moore, Indianapolis, Ind. Filed Feb. 3, 1916. Serial No. 76,055. (Cl. 50—13.)



1. A regulator for fluid flow, comprising a chamber having a fluid supply line thereto and a fluid discharge line therefrom, two valve members controlling the entrance to said fluid discharge line from said chamber, one of said valve members being manually operated, and a vane controlled by the velocity of fluid discharge from the fluid supply line into said chamber for operating the other valve member, said two valve members being movable over the entrance to said fluid discharge line from opposite sides thereof.

[Claims 2 to 4 not printed in the Gazette.]

1,267,578. MIXING-MACHINE. WILLIAM F. MORAN, Rochester, N. Y., assignor to Samuel R. Parry, Rochester, N. Y. Filed Mar. 19, 1917. Serial No. 155,900. (Cl. 259—88.)



1. In a mixing machine the combination of a base, an upright mounted on said base, an arm projecting from said upright, a rod mounted to slide on the end of said arm,

paddles carried on the end of said rod, a turn table mounted to rotate on said base, said turn table being adapted to hold a can rigidly in place thereon, said rod with said paddles being adapted to vertically slide in and out of said can or hold stationary suspended in said can.

4. In a mixing machine the combination of a hollow base, a series of pockets on the inside of the wall of said base, antifriction rollers mounted to rotate in said pockets and projecting above said base, a center pin mounted in said base, a turn table mounted to rotate on top of said antifriction rollers, the center of said turn table being adapted to engage said center pin to provide a pivot around which said turn table is adapted to revolve.

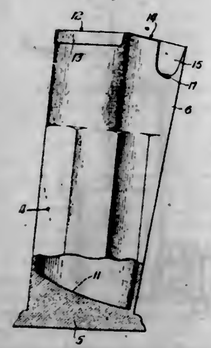
7. In a mixing machine the combination of a base, a turn table mounted to rotate on said base, a can clamped to the top of said turn table, a bracket provided on said base, said bracket having a vertical extension, an upright mounted on said extension, an arm mounted on said upright, said arm being provided with a clamp, a rod mounted in said clamp and held vertically in place in said clamp, a counter-weight adapted to lift said rod when said clamp is released, paddles carried on the lower end of said rod, said rod and said paddles being adapted to project into a can rigidly mounted on said turn table, means for driving said turn table.

10. In a mixing machine the combination of a base, a turn table mounted to rotate on top of said base, a can being adapted to be clamped on top of said turn table, a bracket having a hook formed at the top thereof adapted to engage the rim of said can, means on said hook to clamp the top of said bracket in place on the top of said can, said bracket projecting inside of said can, arms carried on said bracket and projecting radially into said can, a pair of lugs at the top and bottom of the inside of the wall of said can, said lugs being in line with each other and being adapted to hold the bracket projecting into said can.

14. In a mixing machine, the combination of a base, a turn table mounted to rotate on said base, a can adapted to be clamped to said turn table, a rod held stationary suspended in the center of said can, a series of mixing paddles clamped to said rod, each of said mixing paddles comprising a pair of arms having a semi-circular sleeve on the inner end thereof, said sleeves being adapted to embrace said rod, means to clamp each of said pair of sleeves on said rod to hold said arms on said rod and in line with each other, a series of paddles clamped to the wall of said can, said stationary paddles on said rod being adapted to pass between said mixing paddles in said can on the rotation thereof.

[Claims 2, 3, 5, 6, 8, 9, and 11 to 13 not printed in the Gazette.]

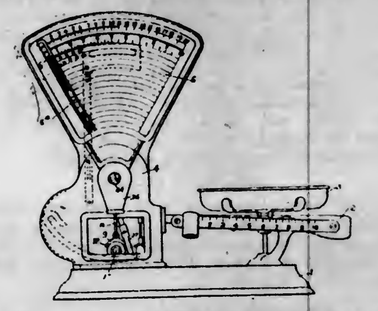
1,267,579. STRAW-DISPENSER. DOSIER H. MOSTELLER, Oak Park, Ill. Filed Apr. 2, 1915, Serial No. 18,778. Renewed Oct. 22, 1917. Serial No. 197,993. (Cl. 211—8.)



1. A device for dispensing straws or the like, comprising a hollow body portion of cylindrical form, a base member whereon said body portion is mounted, said base member being so formed that the body portion tilts forward when the base stands on a horizontal surface, the forward portion of said body having its walls drawn together to provide an angular space between them, there being a pair of notches in the upper adjacent portions of said surfaces, the bottom of the receptacle being formed substantially on the arc of a circle drawn about said notches as a center, and a lid pivotally mounted on the upper portion of the receptacle, said lid being provided with a pair of downwardly depending ears adapted to lay over and close the aforementioned notches when the lid is lowered, lugs on the lower ends of said ears, and there being a notched opening between the ears.

[Claims 2 and 3 not printed in the Gazette.]

1,267,580. AUTOMATIC WEIGHING-SCALE. HUBERT A. MYERS, Toledo, Ohio, assignor to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed July 5, 1916. Serial No. 107,602. (Cl. 265—36.)



1. The combination with pendulum scales, of an auxiliary weight for the pendulum, mechanical operating means for displacing and replacing the weight including a shaft, a crank arm thereon, and means connected with the crank arm for forcing said weight to travel its full extent of movement when moved from or toward the pendulum.

4. The combination with pendulum scales, of an auxiliary weight for the pendulum, mechanical means for displacing and replacing said weight, comprising a hanger arm adapted to be swung to engage the weight to remove it from the pendulum and to allow the return of the weight to the pendulum, a shaft on which said hanger arm is mounted, a crank on said shaft, and gravity-acting means connected with said crank for forcing the hanger arm to travel the full extent of its movement when swung in either direction.

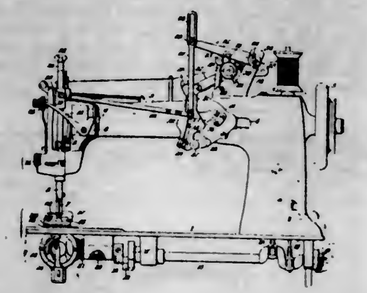
8. The combination with pendulum scales, of an auxiliary weight for the pendulum, a track upon which said weight may travel into and out of engagement with the pendulum, a swinging arm for propelling the weight along said track and supporting it when not engaged with the pendulum, a shaft on which said hanger arm is mounted, a stud projecting from said hanger arm adjacent the shaft, rotatable means mounted on the shaft adapted to engage said stud, a crank arm connected with said rotatable means, and means connected with the crank arm for forcing said arm to swing the full extent of its travel when swung in either direction.

11. The combination with pendulum scales, of an auxiliary weight for the pendulum, a track upon which said weight may travel into and out of engagement with the pendulum, a swinging arm for propelling the weight along said track and supporting it when not engaged with the pendulum, a shaft on which said hanger arm is mounted, a stud projecting from said hanger arm adjacent the shaft, a thrust plate mounted on the shaft adapted to engage said stud, a crank arm connected with said thrust plate, and gravity-acting means connected with the crank arm for forcing said hanger arm to swing the full extent of its travel when swung in either direction.

14. The combination with pendulum scales, an auxiliary weight for the pendulum, a track upon which said weight may travel into and out of engagement with the pendulum, a swinging arm for propelling the weight along the track and supporting it when out of engagement with the pendulum, and means for swinging said arm comprising rotatable means adapted to engage the hanger arm and including a crank, a plunger pivotally connected with the crank, a weight supported upon and adapted to be raised and lowered with the plunger upon the rotation of the crank, and means for cushioning the falling movement of the weight and plunger.

[Claims 2, 3, 5 to 7, 9, 10, 12, and 13 not printed in the Gazette.]

1,267,581. ORNAMENTAL-STITCH SEWING-MACHINE. WALTER MYERS, Bridgeport, Conn., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Oct. 8, 1914. Serial No. 865,769. (Cl. 112—4.)

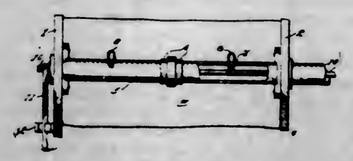


1. In a machine for ornamental stitching, the combination with a rotary pattern-cam disk, a stitch-forming mechanism including a cloth-presser carrying bar and a needle having lateral movements, of a cloth-presser carried by said bar and on which said disk is mounted and means, including a cam-follower operatively connected with said disk, for giving to said cloth-presser lateral movements.

2. In a machine for ornamental stitching, the combination with a rotary pattern-cam disk, a stitch-forming mechanism including a cloth-presser carrying bar and a needle having lateral movements and means for varying the amplitude of the latter, of a cloth-presser carried by said bar and upon which is mounted said disk, and means including a cam-follower held against movement in the direction of the diameter of said disk for giving to said cloth-presser lateral movements.

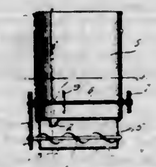
[Claims 3 to 5 not printed in the Gazette.]

1,267,582. MULTIPLE HORSE HOLDER AND RELEASER. ISAAC NIEMI, Chatham, Mich., assignor of one-fourth to John F. Maki, Chatham, Mich. Filed Sept. 11, 1916. Serial No. 119,583. (Cl. 119—116.)



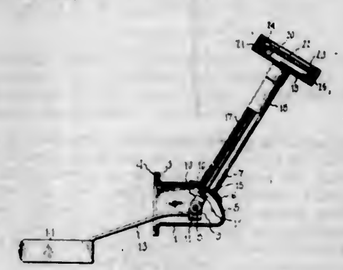
In a multiple horse holder and releaser, an apertured tubular casting, a rotary shaft extending centrally and longitudinally of said casting, hooked pins carried by said rotary shaft diametrically opposite the apertured portions of said casting, hitching rings normally disposed in the apertured portions of said casting for releasable engagement with the said hooked pins, means for actuating said rotary shaft, and wedges adapted to temporarily support said hitching rings in the apertured portions of said tubular casting.

1,267,583. PEANUT-PLANTER. WILLIAM A. NORMAN and MACK D. NORMAN, Saltillo, Tex. Filed Nov. 27, 1916. Serial No. 133,749. (Cl. 221—120.)



A planter comprising a main container and a supplemental container attached thereto and beneath the same, a spout leading from the main container to the supplemental container near one end of the latter, the bottom of the supplemental container having a discharge opening at the end opposite to the said spout, agitating arms mounted in the main container above the said spout, one of the said arms being directly above the opening, the other arms being on opposite sides of the opening, a spiral conveyer rotatably mounted in the said supplemental container, and means for simultaneously rotating the said agitating elements and the said conveyer.

1,267,584. GAGE. WALTER I. OESCHGER, Detroit, Mich., assignor, by mesne assignments, to National Gauge & Equipment Company, La Crosse, Wis., a Corporation of Wisconsin. Filed Oct. 19, 1916. Serial No. 126,487. (Cl. 73—82.)



1. A gage comprising a hollow connection adapted for attachment to an oil pan, a convex wall forming part of said connection, a gage mounted upon said wall, gage operating means extending into said hollow connection and including a slotted crank, and float actuated means extending into said connection to engage said slotted crank and impart movement to said gage.

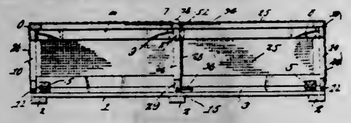
2. The combination with a gage having a tube, and a pointed shaft therein, of a hollow connection adapted for attachment to an oil pan, means for attaching said gage tube to said connection at a desired angle relative thereto, and means in said connection adapted to impart movement to said pointer shaft.

[Claims 3 and 4 not printed in the Gazette.]

1,267,585. FOLDING POULTRY-COOP. FRANCIS M. OGLE, Cheyenne, Okla., assignor of one-third to Charles P. McClain and Morris L. Ebstone, Cheyenne, Okla. Filed July 7, 1917. Serial No. 179,211. (Cl 217—47.)

A coop comprising a base; an upstanding wall hinged to the base and adapted to be folded on the base; a top disposed above the base when the wall upstands and when the wall is folded, the top having an opening; projections

on the wall and disposed at an angle to each other, one of said projections extending through the opening when the wall upstands, the other of said projections extending through the opening when the wall is folded; a latch slidably mounted on the top and coöperating with the projections at different times, the latch having a longitudinal slot; a securing element extended into the slot and



connected with the top, the securing element holding the latch on the top for sliding movement; and a spring keeper mounted on the securing element, beneath the latch, one end of the spring keeper coacting with the latch at one end of the slot, to hold the latch advanced with respect to the projections, the top having a recess into which the spring keeper is adapted to retire.

1,267,586. PENCIL-SHARPENER. CHARLES S. PALMER and DEAN PALMER, Saranac Lake, N. Y. Filed Jan. 29, 1917. Serial No. 145,114. (Cl. 120—84.)



1. The improved pencil attachment comprising a band for attachment to a pencil, a spring shank portion connected with the band and adapted to extend along side of the pencil whereby the device may coöperate with a pencil held therein for attachment to a pocket, and a pencil sharpener on the opposite end of the shank from that to which the band is attached, the shank portion being concave transversely to form a guide for a pencil.

[Claims 2 and 3 not printed in the Gazette.]

1,267,587. SOUND-REPRODUCING APPLIANCE. HERMAN G. PAPE, New York, N. Y. Filed Feb. 28, 1916. Serial No. 80,874. (Cl. 179—179.)

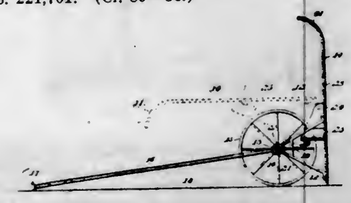


1. In a sound reproducing instrument, a wall provided with an annular seat for the periphery of a diaphragm, said wall having a central opening, the interior surface of said wall being of radially convex sound concentrating contour between said seat and said opening and curving away from said diaphragm seat toward said opening, the curvature of said sound concentrating surface increasing toward said central opening, said wall being provided with a constantly full open groove or capacity chamber between the diaphragm seat and said opening, said chamber providing a means to swell or retransform the reproduced sounds in a location directly adjacent to the diaphragm seat, said radially convex sound concentrating surface being preferably only a hair line distance from the diaphragm adjacent to the groove or chamber.

2. In a sound reproducing instrument, a wall providing an annular seat for the periphery of a diaphragm, said wall having a central opening, the surface of the wall between said seat and said opening constituting an inverted trumpet bell, or a radially convex sound concentrating surface, said surface curving away from the diaphragm seat toward said opening, the curvature increasing toward said opening, said wall formed with a constantly full open fixed groove or chamber facing the diaphragm and providing capacity to permit the swelling or retransformation of harsh sounds, said hollow or chamber being located directly adjacent to said seat and between the same and the central opening.

3. A sound reproducing instrument as defined in claim 2, and having an exterior trumpet bell with an interior convex line sound projecting or sound swelling contour merging into the sound concentrating surface of the interior inverted trumpet bell contour.

1,267,588. SOLDIER'S SHIELD. ALEXANDER PONIATOWSKI, Perth Amboy, N. J. Filed Mar. 11, 1918. Serial No. 221,701. (Cl. 89—36.)



1. A shield comprising a plate having port-holes therethrough, a wheeled shaft, brackets upon said plate journaled upon said shaft, locking connections between the said brackets and shaft operable with the plate in either its horizontal or vertical position, and arms rearwardly projecting from the shaft with their free ends positioned upon the ground when the plate is arranged upright as a bullet shield with its lower edge contacting the ground.

[Claims 2 and 3 not printed in the Gazette.]

1,267,589. FENDER-BRACE. LOUIS ARTHUR PRINCE, Sumter, S. C. Filed Oct. 4, 1917. Serial No. 194,690. (Cl. 21—23.)



1. In an automobile, the combination with an automobile fender curtain, the lower edge of which is free with respect to the frame members of the automobile, of means for preventing the vibration of said fender curtain comprising a bar having a flat portion attached to the bottom of the automobile body, and an angularly disposed portion secured to the lower edge of the fender curtain.

2. In an automobile, the combination with a fender and curtain, the rear lower edge of the fender and the lower edge of the curtain being approximately at right angles to each other, and both of said edges being free with respect to the frame members of the automobile, of means for preventing the vibration of said fender and curtain comprising a bar having a flat portion attached to the bottom of the automobile body and an angularly disposed portion secured to the lower edges of the fender and curtain.

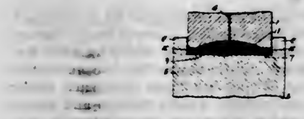
1,267,590. CHILD'S TOILET-SEAT. MYRTON E. REAM, Chicago, Ill. Filed Apr. 24, 1916. Serial No. 93,080. (Cl. 155—22.)



6. A child's toilet seat comprising a base, a guard spaced above the base, two links pivotally connecting opposite sides of the base to opposite sides of said guard, and a third link detachably connecting the rear portions of the base and the guard, the first mentioned links being arranged to fold rearwardly and downwardly when the third link is disengaged, and the guard being then movable into inverted position to lie close to the base.

[Claims 1 to 5 not printed in the Gazette.]

1,267,591. EMBOSSING-PRESS. CONRAD REHBEIN, Detroit, Mich., assignor to Hayes Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 6, 1914. Serial No. 829,747. (Cl. 113—38.)



1. A press comprising a female die having an opening therein, portions of which are curved in longitudinal cross-section and parts of the longitudinally curved portions being curved transversely to correspond to the shape of a surface that it is desired to impart to a sheet-metal member, a male die having a working surface in alinement with the opening in the female die and curved longitudinally to correspond to the longitudinal curvature of the said opening, one of the dies being movable in respect to the other, a resilient pad between the dies, and tough flexible longitudinal strips carried by the edges of the pad, whereby an intermediate portion of a sheet of metal may be embossed and wrinkling of its longitudinal edges may be avoided.

2. A press comprising a female die having a working surface, portions of which are curved longitudinally, and parts of the longitudinally curved portions being curved transversely to correspond to a surface that it is desired to impart to a sheet-metal member, a male die having a working surface curved longitudinally to correspond to the longitudinal curvature of the working surface of the female die, one of the dies being movable in respect to the other, a resilient pad resting on the working surface of the male die, and tough flexible longitudinal strips resting on the edges of the pad, whereby a sheet of metal may be embossed and wrinkling of its longitudinal edges may be avoided.

3. A press comprising a female die having a lower working surface, portions of which are curved longitudinally and parts of the longitudinally curved portions being curved transversely to correspond to the shape of a surface to be imparted to a sheet-metal member, a male die having an upper working surface curved longitudinally to correspond to the longitudinal curvature of the working surface of the female die, one of the dies being movable in respect to the other, a rubber pad resting on the working surface of the male die, and leather strips resting on the edges of the pad, whereby a sheet of metal may be embossed and wrinkling of its longitudinal edges may be avoided.

4. A press comprising a female die having a working surface, portions of which are curved longitudinally and parts of the longitudinally curved portions being curved transversely to correspond to the shape of an embossed surface which is to be formed on a sheet-metal member, other portions of the surface being curved longitudinally to correspond to the shape of flanges that are to be formed on the sheet-metal member, a male die, one of the dies being movable in respect to the other, said male die having a working surface, portions of which are curved longitudinally to correspond to the longitudinal curvature of the flange-forming surfaces on the female die, a resilient pad carried by the male die and covering the working surface thereon, and strips of tough flexible material carried by the edges of the resilient pad, whereby a sheet of metal may be embossed and wrinkling of its longitudinal edges may be avoided.

5. A press comprising a female die having a working surface, portions of which are curved longitudinally and parts of the longitudinally curved portions being curved transversely to correspond to the shape of an embossed surface which is to be formed on a sheet metal member, other portions of the surface being curved longitudinally to correspond to the shape of flanges that are to be formed on the sheet metal member, a male die having a working surface curved longitudinally to correspond to the longitudinal curvature of the working surface of the female die, longitudinal ribs on one of the dies adapted to embrace the sides of the other die, one of the dies being movable toward and from the other, a resilient pad carried by the male die and covering the working surface thereon, and strips of tough flexible material carried by the edges of the resilient paid, whereby a sheet of metal may be embossed and wrinkling of its longitudinal edges may be avoided, said longitudinal ribs serving to prevent the material of the pad from being forced out laterally by the pressure between the dies.

[Claims 6 to 17 not printed in the Gazette.]

1,267,592. OPTICAL INSTRUMENT. GEORGE REISINGER, Rochester, N. Y., assignor to Crown Optical Company, Rochester, N. Y., a Corporation. Filed Mar. 23, 1917. Serial No. 157,051. (Cl. 88—33.)



1. In an optical instrument, a prism seat, a prism supported on said seat and having angularly arranged faces, means coöperating with both of said faces, two screw parts mounted on said means at opposite ends of the prism to move with said means, two screw parts mounted on a part fixed relatively to the prism seat and coöperating with the first named screw parts to move the prism in opposite directions.

5. In an optical instrument, a prism seat, a prism supported on said seat and having two angularly arranged faces, a saddle coöperating with both of said faces, two screw parts carried by the saddle near opposite ends of the prism, and two screw parts mounted to rotate on a part fixed relatively to the prism seat and coöperating with the screw parts on the saddle, said last named screw parts having their axes of rotation at angles to the plane of the prism seat.

7. In an optical instrument, a prism seat, a prism adjustable thereon, having angularly arranged faces, means coöperating with said angularly arranged faces of said prism, and two pairs of screws, one pair being arranged at

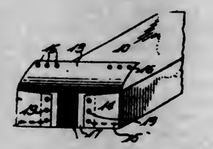
one end of said prism and coöperating with said means and the other pair being arranged at the opposite end of the prism and coöperating with said means to adjust the prism laterally on its seat.

14. In an optical instrument, a prism seat, a prism supported on said seat and having two angularly arranged faces, a saddle coöperating with said faces, two pairs of screw members arranged on said saddle, and two pairs of coöperating screw members mounted on a part fixed with reference to the seat, said two pairs of screw members being arranged at opposite ends of the prism and the members of each pair having their axes converging.

17. In an optical instrument a prism seat, a prim supported on the seat, and having angularly arranged faces, a saddle for the prism having spring arms engaging the angularly arranged faces of the prism, and means coöperating with the saddle for adjusting the prism on its seat.

[Claims 2 to 4, 6, 8 to 13, 15, 16, 18, and 19 not printed in the Gazette.]

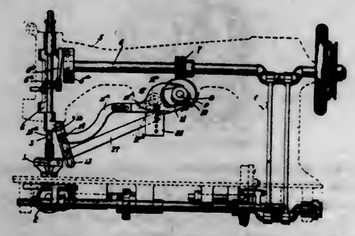
1,267,593. SPRING-BED COVER. JULIUS ROEVER, New York, N. Y., assignor to Mary A. Roever, Richmond Hill, N. Y. Filed May 24, 1916. Serial No. 99,482. (Cl. 5—3.)



3. A bed cover comprising a main blank adapted to turn down at the sides to form the sides of the cover, corner flaps forming extensions of such sides, main flaps located between the corner flaps, elastic elements detachably secured to the corner flaps, and fastening devices connecting the lower edges of the main flaps with the corresponding edges of the corner flaps.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,267,594. EMBROIDERING MECHANISM. WILLIAM R. ROGERS, Newark, N. J., assignor to William Raubitschek, Brooklyn, N. Y. Filed July 20, 1916. Serial No. 110,356. (Cl. 112—7.)

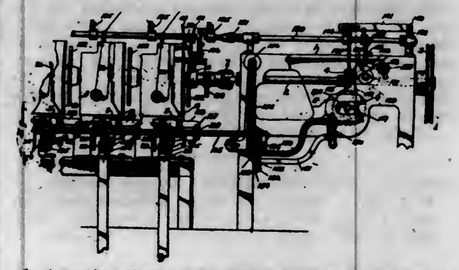


1. In a sewing machine, in combination, a needle bar rock frame mounted for lateral motion, a rotary eccentric cam, a yoke which receives motion from the eccentric cam and imparts motion to the rock frame, a rotary pattern cam, a second rotary eccentric cam from which the pattern cam is rotated, means for rotating the eccentric cams, a link system connecting the pattern cam directly with the rock frame and a second link system connecting such pattern cam with the yoke to control the lateral motions thereof.

2. In a sewing machine, in combination, a needle bar rock frame mounted for lateral motion, a rotary eccentric cam, a yoke which receives motion from the eccentric cam and imparts motion to the rock frame, a removable, rotary pattern cam, a second rotary eccentric cam from which the pattern cam is rotated, means for rotating the eccentric cams, a link system connecting the pattern cam directly with the rock frame and a second link system connecting such pattern cam with the yoke to control the lateral motions thereof.

3. In a sewing machine, in combination, a needle bar rock frame mounted for lateral motion, a rotary eccentric cam, means for rotating the same, a yoke which receives motion from the eccentric cam and imparts motion to the rock frame, a rotary pattern cam, means for intermittently rotating the same, a link system connecting the pattern cam directly with the rock frame and a second link system connecting such pattern cam with the yoke to control the lateral motions thereof.

1,267,595. MACHINE FOR MAKING EDGING. WILLIAM R. ROGERS, Newark, N. J., assignor to William Raubitschek, Brooklyn, N. Y. Filed Aug. 16, 1917. Serial No. 186,509. (Cl. 112—24.)

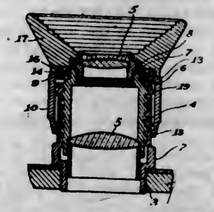


1. A number of sewing machines adapted for producing a zig zag stitch suitable for an edging, a power shaft common to all thereof, detachable connections engaging such machines with such power shaft, means for the automatic disengagement of any of such machines from such power shaft on failure of the material supply thereto and means for the multiple, variable control of the width and location on the material of the successive zig zag stitches.

4. A number of machines adapted to produce a zig zag stitch suitable for an edging and provided with means for trimming the product without interruption of the stitching operation, a power shaft, detachable means for engaging such machines with the power shaft, a transmission shaft connected with the needle bar frames of all the machines and means connected with shaft for the variable control of the lateral motions of the needle bars to vary the width and location on the material of the successive zig zag stitches.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,596. OPTICAL INSTRUMENT. JOHN SCHLEINZER, Rochester, N. Y., assignor to Crown Optical Company, Rochester, N. Y., a Corporation. Filed July 30, 1917. Serial No. 183,614. (Cl. 88—33.)



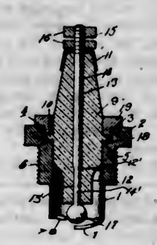
1. In combination with the stationary sleeve carrying an index, of an eye-piece carrier adjustable axially of said sleeve, and a diopter ring for coöperation with the index, carried by the eye-piece carrier, one of the last two named parts having an annular series of recesses and the other part having a projection adapted to enter any one of said recesses to lock the two parts together.

2. In combination with a casing, a sleeve having screw-threaded connection with said casing and provided with an index, an eye-piece carrier adjustable axially in said sleeve, a diopter ring carried by said eye-piece carrier for coöperation with the index, an interlocking connection between the diopter ring and the eye-piece carrier comprising a projection on one of said parts, the other of said parts having an annular series of recesses any one of which is adapted to receive said projection to lock the parts together.

3. In combination with a stationary sleeve carrying an index, an eye-piece carrier adjustable axially in said sleeve and provided with a shoulder, a diopter ring for coöperation with the index having a flange resting against said shoulder and provided with a plurality of recesses, and a projection on the eye-piece carrier arranged to enter any one of said recesses to lock the diopter ring in its adjusted position with reference to the eye-piece carrier.

4. In combination with a casing, a stationary sleeve having screw-threaded connection with said casing and provided with an index, an eye-piece carrier adjustable axially in said sleeve and provided with an annular shoulder, a diopter ring having a flange engaging said shoulder, said ring being adapted to coöperate with the index, and the flange being provided with an annular series of recesses, a projection on the eye-piece carrier arranged to enter any one of said recesses to lock the diopter ring against turning with reference to the eye-piece carrier, and a clamping ring engaging said flange on the diopter ring to hold the latter in engagement with said projection.

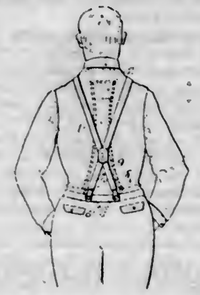
1,267,597. SPARK-PLUG. ROBERT W. SCHULTZ, Cincinnati, Ohio. Filed June 24, 1916. Serial No. 105,648. (Cl. 123—169.)



A spark plug comprising a casing, an insulating plug carried upon said casing, said insulating plug having a longitudinally extending bore forward formed therethrough, said bore being reduced adjacent the lower end of said plug, thus forming a shoulder adjacent the lower end of said plug, thus forming a shoulder, an electrode fitting in the reduced portion of said bore, thus causing the electrode to bear upon said shoulder for limiting its movement in one direction, a head formed upon the lower end of said electrode, said head bearing against the lower end of said plug, thus limiting the movement of said electrode, a fixed electrode on said casing extending to a point adjacent the side of said head, a second fixed electrode on said casing extending to a point below said head, wire attaching means mounted upon said first mentioned electrode, said first mentioned electrode being free to rotate, thus causing said head to turn for allowing said fixed electrode to remove deposits of carbon therefrom, while the formation of the reduced portion of said first mentioned electrode will hold said first mentioned electrode against displacement.

1,267,598. SPINE-PROTECTOR. AUGUST SEIBERT, New York, N. Y. Filed Feb. 7, 1918. Serial No. 215,785. (Cl. 2—190.)

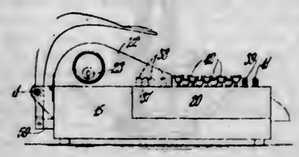
1. A device for the purpose described comprising a base or the like adapted to be worn upon the back of the human body and a protruding member extending lengthwise of the back and adapted to project into the groove of the back for the purpose set forth.



3. A device for the purpose set forth comprising a base or the like of pliable material adapted to be worn upon the back of the human body a strip of pliable material secured to said base to form a pocket between the base and said strip extending along the line of the spinal column and a filler in said pocket to form a protrusion adapted to extend into the back groove of the body when said base is worn upon the back.

[Claims 2 and 4 not printed in the Gazette.]

1,267,599. STRIP-PUNCHING APPARATUS. BENJAMIN M. SHANKLIN, Springfield, Mass. Filed Jan. 15, 1917. Serial No. 142,434. (Cl. 164—86.)



1. In a strip punching device, a casing having means to receive the strip and a pasage through which the latter may be passed, a separately operable punching mechanism mounted adjacent said passage, and means operable independently of said mechanism to arrest the strip when it becomes properly positioned relatively to said mechanism and to lock the strip in such position until it is punched.

6. A strip punching device, comprising in combination, a casing having means at one end to receive the strip in roll form and a channel extending to the other end thereof through which the strip may be drawn, punching mechanism mounted adjacent said channel leaving the forward end exposed, whereby the strip may be pulled through the channel, means engageable with the strip to arrest the latter when it comes into proper alinement with said mechanism, means operable by the actuation of the arresting means to lock the first-named means against further movement, means to actuate the punching mechanism, and devices operable by actuation of the latter to release the strip from engagement with the arresting and locking means to permit the punched strip to be withdrawn.

10. A strip punching device, comprising, a casing having means at one end to receive the strip in roll form, and a channel extending to the other end thereof through which the strip may pass, punching mechanism mounted adjacent the channel leaving the forward end exposed whereby the strip may be pulled through the channel, a guide mounted adjacent the channel in the rear of said mechanism, and means to arrest the strip when it comes into proper position relatively to the punching mechanism, said last-named means comprising a pivoted lever, means tending to swing the latter toward the strip, a member pivoted to the end of the lever and resilient means connecting the lever and member, all constructed and arranged so that

the member bears against the strip while it is backed up by said guide and so that, as the strip is drawn forwardly, a perforation therein engages said member and moves the latter forwardly of the guide so that the member may pass through the perforation.

15. In a strip punching device, a casing, a supporting member removably mounted therein, supporting, guiding, positioning, and locking devices for the strip, all mounted on said member, and a unitary self-contained punching mechanism removably mounted on said member, all constructed and arranged so that said devices may be conveniently assembled on said member and the latter with the devices thereon may be positioned as a unit within the casing and so that the punching mechanism may be separably assembled and applied to said member as a unit.

[Claims 2 to 5, 7 to 9, 11 to 14, 16, and 17 not printed in the Gazette.]

1,267,600. TIRE-VALVE. SIDNEY C. SLADEN, New York, N. Y. Filed Sept. 15, 1917. Serial No. 191,534. (Cl. 152—12.)



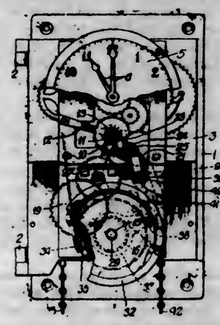
1. A valve as characterized comprising a valve casing, having an air inlet and an enlarged passage formed therein, and a valve seat adjacent the upper end of said enlarged passage; a gasket having an upwardly tapered body and an annular flange for engaging said seat, said flange being adapted to collapse upwardly on said body, to permit the insertion of said gasket inwardly through said inlet passage, to aline with said valve seat; and means manually operable for forcefully seating said flange on said seat.

2. A valve as characterized comprising a valve casing, having an air inlet and an enlarged passage formed therein, and a valve seat adjacent the upper end of said enlarged passage; a gasket having an upwardly tapered body and an annular flange for engaging said seat, said flange being adapted to collapse upwardly on said body, to permit the insertion of said gasket inwardly through said inlet passage, to aline with said valve seat; a screw threaded stem for manipulating said gasket, said stem being rigidly connected with said gasket and extending into said inlet passage; and means operatively engaging said stem for forcefully drawing said flange on said valve seat.

[Claims 3 and 4 not printed in the Gazette.]

1,267,601. FURNACE-REGULATOR. CARLTON H. STALKER, Ann Arbor, Mich., assignor of one-half to C. J. Hall, personally and as trustee, Grand Rapids, Mich. Filed Oct. 16, 1916. Serial No. 125,845. (Cl. 161—8.)

1. In an automatic damper regulator, a clock mechanism having a release member, a spring actuated drum, chains attached thereto adapted, for opening and closing the dampers, a brake controlling the operation of said drum governed by the release member of said clock mechanism, and means operable in front of said drum for releasing said brake mechanism independently of the release member of said clock mechanism.

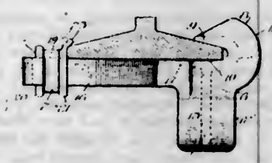


3. In an automatic damper regulator, a clock mechanism having a release member, a spring actuated drum adapted to have the spring thereof wound up to rotate said drum, means attached to said drum adapted for simultaneously opening one damper and closing another damper, a brake controlling the operation of said drum in one direction, and adapted to be released by the release member of said clock mechanism, and means operatable in front of said drum adapted for a manual release of said brake.

4. In an automatic damper regulator, a hinged casing, a clock mechanism in the upper part thereof having a release member, a spring actuated drum in the lower part of said casing, chains attached to said drum adapted for opening and closing dampers, means operatable outside of said casing for placing the spring of said drum under tension, a brake holding said drum normally against rotation and adapted to be automatically released by the release member of said clock mechanism, and means operatable by said spring winding means adapted to release said brake independent of the release member of said clock mechanism.

[Claims 2 and 5 not printed in the Gazette.]

1,267,602. RAIL-ANCHOR. ARTHUR L. STANFORD, Chicago, Ill. Filed Oct. 8, 1917. Serial No. 195,325. (Cl. 238—4.)



1. A rail anchor consisting of a jaw member adapted to grip a rail flange, connecting means adapted to underlie the rail base, a locking member adapted to be driven onto the connecting means, and the connecting means having end portions adapted to be struck over to retain the locking member in position, substantially as described.

2. A rail anchor consisting of a jaw member adapted to grip a rail flange, connecting means adapted to underlie the rail base, a locking member adapted to be driven onto the connecting means, the connecting means having end portions adapted to be struck over to retain the locking member in position, and a jaw element on the locking member adapted to overlie the opposing rail flange, substantially as described.

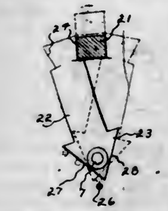
4. A rail anchor consisting of a jaw member adapted to grip a rail flange and extended on its under side to furnish a foot adapted to abut against the tie, connecting means adapted to underlie the rail base, a locking member adapted to be driven onto the connecting means, the connecting means having end portions adapted to be struck over to retain the locking member in position, and a jaw element on the locking member adapted to overlie the opposing rail flange, substantially as described.

14. In a rail anchor, the combination of a gripping member consisting of a jaw having reinforcing flanges at its front and rear ends and adapted to engage a rail flange, a pair of connecting bars inwardly extending from the front and rear flanges and converging toward one another, a locking collar provided with a slot adapted to receive and engage the ends of the connecting bars, the bars being of a length to project beyond the collar when driven to contact with the opposing rail flange and adapted to be hooked down over the collar to hold the same in place, and a jaw member on the collar adapted to engage the upper edge of the opposing rail flange, substantially as described.

17. In a rail anchor, the combination of a gripping member adapted to engage a rail flange, a connecting device in the form of a collapsible wedge and having a convergence away from the jaw member, and locking means adapted to be driven onto the converged end of the connecting means to draw in the same and furnish an abutment for the opposite rail flange, substantially as described.

[Claims 3, 5 to 13, 15, and 16 not printed in the Gazette.]

1,267,603. ELECTRIC SNAP-SWITCH. CLARENCE C. STIRLING, Hartford, Conn., assignor to the Hart & Hegeman Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 19, 1917. Serial No. 197,421. (Cl. 175—287.)



1. The combination of a switching member having a wedge-like head, an actuator, a yieldable finger on the actuator adapted to traverse the wedge head and thus shift the switching member when the latter is released, and a detent to prevent movement of the switching member until the actuator has traveled a certain distance.

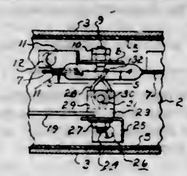
2. The combination of an oscillatory switching member having a wedge-like head, a slidable actuator, a yieldable finger on the actuator adapted to traverse the wedge head to thus shift the switching member, and a detent rigid with the actuator, to prevent movement of the switching member until the actuator has traveled a certain distance.

5. The combination of an actuator movable in a straight line, a guiding element for the actuator, an oscillatory switching member having a wedge-like head, supported by said guiding member, a yieldable finger to traverse the wedge head to thus shift the switching member, and a detent on the actuator to prevent movement of the switching member until the actuator has traveled a certain distance, the yieldable finger being connected with the actuator.

[Claims 3, 4, 6, and 7 not printed in the Gazette.]

1,267,604. SNAP-SWITCH. CLARENCE C. STIRLING, Hartford, Conn., assignor to the Hart & Hegeman Manufacturing Company, Hartford, Conn., a Corporation of Connecticut. Filed Oct. 19, 1917. Serial No. 197,422. (Cl. 175—287.)

2. A snap switch comprising an oscillatory switching member, and actuating means for imparting a snap movement to the switching member, comprising two yieldable arms to engage opposite faces of the switching member and to roll along said faces between stations at opposite sides of the center of oscillation of the switching member.



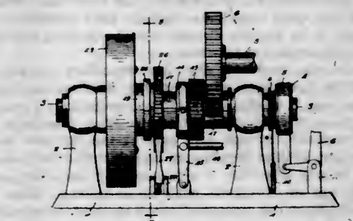
4. A snap switch comprising an oscillatory switching member, and actuating means for imparting a snap movement to the switching member, comprising two spring arms to engage opposite faces of the switching member and to roll along said faces between said stations at opposite sides of the center of oscillation of the switching member.

6. A snap switch comprising a switching member, an oscillatory actuator having a notch, a spring set in the notch and provided with two crossed branches, the free portions of which roll along opposite faces of the switching member between stations at opposite sides of the center of oscillation thereof, to thereby snap the switching member between on and off positions.

8. A snap switch comprising an oscillatory switching member, an actuator provided with a hub having a slot, the actuator being mounted to turn about an axis extending through the hub, a coiled spring set in the slot, the sides of the spring extending from the hub, being normally crossed and engaging opposite faces of the switching member at opposite sides of the axis of oscillation thereof, and a pin extending through the coiled body of the spring to permit free lateral movement of the branches thereof, said sides as the hub is moved from one extreme position to the other rolling across opposite faces of the switching member, uncrossing during their rolling movement, and recrossing to a position reverse to that they last occupied to thus snap the switching member from one position to another.

[Claims 1, 3, 5, 7, and 9 not printed in the Gazette.]

1,267,605. AUTOMOBILE STARTING MECHANISM. JOHN F. STOWE, Lincoln, Nebr. Filed Mar. 29, 1917. Serial No. 158,270. (Cl. 123—185.)



1. A device of the character described comprising a fly wheel to be disposed on a shaft adapted for starting an engine, a pivotally mounted dog on said wheel, a clutch member to be disposed on the shaft and provided with a recess for normal engagement with said dog to form a clutch, and means for lifting said dog from the recess to automatically disengage the clutch upon a back-fire of the engine.

3. A device of the character described comprising in combination, a shaft adapted for starting an engine, a fly wheel secured on said shaft, a sleeve surrounding said shaft adjacent the fly wheel, an annular member on the sleeve adjacent the fly wheel and provided with a recess in its periphery, a dog pivoted on the fly wheel and normally engaged in the recess to form a clutch, a ratchet wheel rotatably mounted on said sleeve, a pawl suitably

disposed to prevent movement of the ratchet wheel upon a back-fire of the engine, a cam secured to the ratchet wheel to lift the dog on the fly wheel from the recess in the sleeve when said ratchet wheel is arrested by the pawl, and separable driving connection between said sleeve and the engine.

[Claims 2 and 4 to 11 not printed in the Gazette.]

1,267,606. CLARIFIER. OTTO E. SZEKELY, Rock Island, Ill., assignor to Velie Motors Corporation, Moline, Ill., a Corporation of Illinois. Filed Aug. 31, 1917. Serial No. 189,050. (Cl. 183—100.)



1. A cleaning device comprising a tubular body, means for connecting the upper end of the body with the end of a pipe, a bottom for said body, a tube of less diameter than said body extending upwardly through the bottom and communicating at its lower end with the atmosphere, a hood suspended over the inner end of the tube with its sides intermediate those of the tube and the body, a screen covering the inner end of said tube, and another screen depending from the lower end of said hood whereby the incoming air must travel in a roundabout way and must be screened before leaving the device.

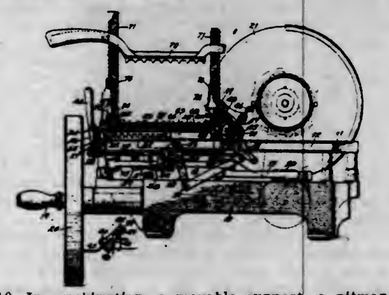
2. In a device for cleaning the air for explosive mixtures for gas engines, the combination of a body part adapted for connection at its upper end with the air intake for the engine, a bottom for said body part, an open-ended tube extending upwardly through said bottom and into the body part, cleaning fluid in said body part at the lower end of said body part surrounding said tube, a hood suspended over the inner end of said tube with its sides depending between the tube and the body part and with its lower end terminating a short distance above said cleaning fluid, and a screen depending from said hood and extending a distance into said fluid to bridge the gap between said hood and fluid whereby air traveling through said tube and hood must pass through fluid splashed onto said screen to be thereby cleaned before reaching the body part and the explosive mixture.

3. A cleaning device of the class described comprising a cylindrical body a tubular coupling head on said body for connecting it with an air intake conductor, a bottom for said body, a tube of less diameter than said body extending centrally through said bottom and into the body, said tube and bottom forming an annular reservoir, cleaning fluid in said reservoir, a deflector hood suspended over the inner end of said tube with its cylindrical sides depending between the tube and the body and terminating above the fluid, and a cylindrical screen depending from the lower end of said hood into said fluid to be in the path of the air to clean it before it reaches the air intake conductor.

[Claims 4 to 6 not printed in the Gazette.]

1,267,607. SLICING-MACHINE. WILHELMUS ADRIANUS VAN BRAKEL, Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 28, 1913. Serial No. 764,216. (Cl. 74—54.)

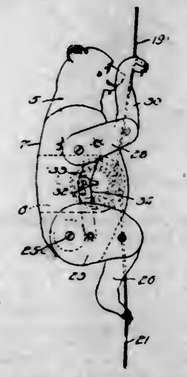
1. In a slicing machine, a reciprocating member, a cam device supported for movement with and for pivotal movement with respect to the member, and a coöperating element supported for movement with and for pivotal movement with respect to the member, the pivots of the cam and element being arranged transversely with respect to each other, said cam and element being responsive one to the movement of the other, and means for causing an oscillation of the cam device about its pivot during the reciprocation of the member.



10. In combination, a movable support, a pitman for reciprocating said support, a link connected with said pitman and arranged to be moved thereby relative to said support, feeding mechanism on said support, and means actuated by said link for periodically operating said feeding mechanism.

[Claims 2 to 9, 11, and 12 not printed in the Gazette.]

1,267,608. MECHANICAL TOY. THOMAS M. VAUGHAN, Battle Creek, Mich., assignor to American Flyer Manufacturing Company, a Corporation of Illinois. Filed May 5, 1917. Serial No. 166,579. (Cl. 46—40.)



1. As a new article of manufacture, a mechanical toy comprising a wooden body portion having a forwardly extending recess in its central portion, a U-shaped sheet metal plate enveloping the body portion and covering over said recess, a pin extending through the recess and journaled in the arms of the U-shaped plate, one of the protruding ends of said pin being provided with a crank, a differential pulley mounted on and secured to the central portion of the pin and within the recess, a pair of cords differentially wound on the two portions of said pulley, one of said cords passing upward from the smaller portion of the pulley and outward through the body portion, and the other cord passing downward from the larger portion of the pulley and out through the body portion, suitable limbs pivoted to the body portion, and link connections from the crank to said limbs, substantially as described.

3. As a new article of manufacture, a mechanical toy comprising a hollow body portion, a pin extending through said body portion and journaled in the walls thereof, a crank on a protruding end of said pin, a suitable element lying outside of the body portion and operatively connected to said crank, a differential pulley on the pin within the body portion, a pair of cords differentially wound on the two portions of said pulley, one of said cords passing from the smaller portion of the pulley upwardly and out through the body portion, and the other of said cords passing from the larger portion of the pulley downwardly and out through the body portion, substantially as described.

[Claims 2 and 4 not printed in the Gazette.]

1,267,609. SPRING SUSPENSION FOR ROAD-VEHICLES. GEORGE F. VOIGHT, San Francisco, Cal. Filed Mar. 19, 1917. Serial No. 155,778. (Cl. 267—19.)



1. In a device of the nature described, a lever, a spring hanger having one end pivotally supported by the lever, the free end of said hanger being resiliently supported by an auxiliary spring carried by the lever, and a connection between said free end of said hanger and one end of the principal leaf spring.

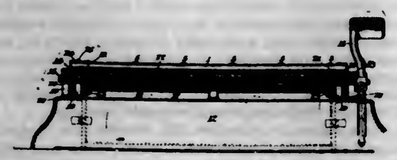
5. In a device of the nature described, a lever, a spring hanger, a connection between one end of said hanger and the lever, a spiral compression spring seated upon the lever intermediate its ends, a connection between the other end of said hanger and said spring so that said last mentioned end of said hanger may move downward against the tension of said spring, and a connection between said second mentioned end of said hanger and one end of the principal leaf spring.

9. In a device of the character described, an oscillatory lever having one end pivotally supported by the axle assembly, a support vertically movable relative to the axle assembly, a connection between the free end of the lever and said support, a spring hanger having one end supported by said lever, a spiral compression spring seated upon the lever, a connection between the free end of said hanger and said compression spring so that said free end of said hanger can be moved downward against the tension of said compression spring, and a connection between said hanger and one end of the principal leaf spring.

16. In a spring suspension for road vehicles, an oscillatory lever pivoted at one end to the axle assembly, a support vertically movable relative to the axle assembly, a connection between the free end of the lever and said support, a spring hanger, a nonresilient connection between one end of the hanger and the lever, a resilient connection between the free end of the hanger and said lever, said resilient connection embodying a compression spring carried by the lever, and a connection between one end of the principal leaf spring and said hanger adjacent the free end of the latter.

[Claims 2 to 4, 6 to 8, and 10 to 15 not printed in the Gazette.]

1,267,610. LUBRICATING ATTACHMENT. JAMES V. WASHBURNE, Fulton, N. Y. Filed Apr. 21, 1914. Serial No. 833,422. (Cl. 184—102.)

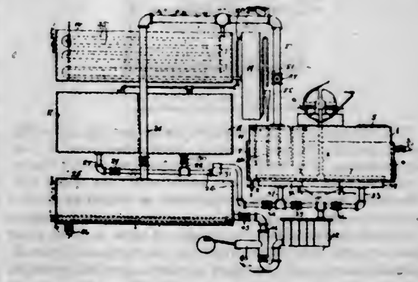


1. The combination of a machine including a frame formed with bearings, a cylindrical cutter mounted in the bearings, and having a lengthwise cutting edge, a lubricator attachment comprising an elongated housing extending lengthwise of the periphery of the cutter adjacent the same, an absorbent material carried by the housing and exposed on the side thereof adjacent the periphery of the cutter in position to engage the periphery of the cutter, and supporting means at the ends of the housing, said means being mounted upon the axis of the cutter, and means for moving the cutter about its axis, substantially as and for the purpose described.

7. A device for lubricating the cutter cylinder of machines of the character described comprising an elongated housing open at its bottom and extending lengthwise of the cylinder, the full length of the cutting edge, means at the ends of the housing for attachment to the machine, and an absorbent material within the housing projecting through the open bottom thereof into engagement with the cylinder, and means for rotating the cylinder, substantially as and for the purpose described.

[Claims 2 to 6 not printed in the Gazette.]

1,267,611. METHOD OF EXTRACTING OILS AND THE LIKE. RAYMOND WELLS, Homer, N. Y., assignor to Cobwell Corporation, Cleveland, Ohio, a Corporation of Virginia. Filed Mar. 11, 1915, Serial No. 13,718. Renewed Oct. 22, 1917. Serial No. 197,996. (Cl. 87—6.)



1. In a method of extracting oils and the like from a material also containing water, the steps which consist in mixing such material to be treated in a suitable chamber with a medium insoluble in water but capable of dissolving the oil or other ingredient to be extracted; raising the temperature of the mass to a point where the combined vapor tensions of such solvent and water are equal to or greater than the vapor pressure in such chamber, thereby simultaneously evaporating such water with such medium; and adding more of such medium so as to maintain the body thereof in such chamber substantially constant.

8. In a method of extracting oils, or the like, from a material also containing water, the steps which consist in evaporating off such water by heating said material along with a solvent medium having a higher boiling point than water; and then extracting such oils, or the like, by washing such material with a solvent medium having a lower boiling point than water.

9. In a method of the character described, the steps which consist in disposing the material to be treated in a chamber in a relatively thin layer, that is in a layer considerably less in vertical than in horizontal extent; submerging such layer of material in a suitable solvent medium; and then imparting an undulatory movement to such layer, without moving the same bodily, by vertically displacing successive portions thereof from beneath, substantially as described.

11. In a method of the character described, the steps which consists in disposing the material to be treated in a chamber in a relatively thin layer, that is in a layer considerably less in vertical than in horizontal extent; submerging such layer of material in a suitable solvent medium; moving an arm underneath such layer, so as vertically to displace successive portions thereof and thereby impart an undulatory movement to such layer without moving the same bodily; and at the same time stirring the upper surface of such layer.

12. In a method of the character described, the steps which consist in placing the material to be treated in a chamber, agitating such material by moving an arm along the floor of such chamber, and mingling with such material a quantity of relatively hard fragmentary material, substantially as described.

[Claims 2 to 7, 10, and 13 not printed in the Gazette.]

1,267,612. WINDOW CONSTRUCTION. CHARLES O. WHITNELL, Kingsley, Iowa. Filed Feb. 21, 1917. Serial No. 150,091. (Cl. 189—69.)



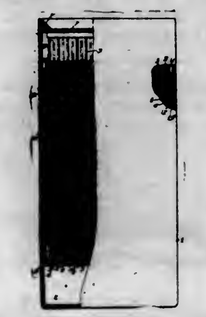
1. The combination of a window frame having inwardly-directed upright flanges provided with apertures, a vertically-swinging sash hinged at its upper end to the frame, inwardly extending lugs on the sash; said lugs being constructed and arranged when the sash is closed to extend inwardly through said apertures and beyond said flanges, and a vertically-swinging bail-shaped handle having arms hinged at their ends to the lugs on the sash; said handle being constructed and arranged to rest in pendent position against the flanges of the frame when the sash is closed and thereby fasten the sash against outward movement.

2. The combination of a window frame having apertures in its upright portion, a vertically swinging sash hinged at its upper end to said frame and adapted to close against said upright portion, inwardly extending lugs on the sash constructed and arranged to extend inwardly through said apertures when the sash is closed, and a handle hinged to said lugs and constructed and arranged to rest in pendent position against said frame portion when the sash is closed and thereby fasten the sash against outward movement.

3. The combination of a window frame formed of sheet metal and having a face plate in which is a window opening and also having flanges extending inwardly from the face plate above and below and at opposite sides of said opening and also having stop flanges extending laterally from the inner edges of the lower and side inwardly-extending flanges and further having a downwardly and forwardly extending lip on the upper inwardly-extending flange, a vertically-swinging sash formed of sheet metal and hinged at its upper end to the inner edge of the upper inwardly extending flange of the frame and arranged when closed to bring up against the said stop flanges of the frame; and glass carried by the said sash; the upper end of the sash being disposed back of and above the lower edge of the said lip, for the purpose set forth.

1,267,613. MEANS FOR HOLDING BATTERY ELEMENTS. FRANK E. WHITNEY and MARTIN MELIA, Philadelphia, Pa., assignors to Commercial Truck Company of America, Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 27, 1916. Serial No. 111,625. (Cl. 204—29.)

1. The combination of a battery jar; electrodes and separators therein; with a plurality of plates having inclined co-acting surfaces and free to move relatively to each other to cause the inclined surface of one plate to ride upon that of the other plate and take up any spaces between the electrodes.



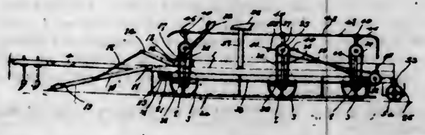
2. The combination of a battery cell; and two plates between one wall of the jar of said cell and the face of the electrode adjacent said wall, said plates having inclined co-acting surfaces and one of them being weighted and free to move down relatively to the other.

5. The combination of a battery jar; positive and negative electrodes therein; relatively thin non-conducting perforated separator plates adjacent the faces of each positive electrode; porous separator plates between each perforated plate and the adjacent negative plate; and means for clamping said electrodes and separators within the jar to retain the porous plates in intimate engagement with the faces of the positive electrodes including at least one plate of relatively heavy material having a plurality of transverse ribs providing surfaces acutely inclined to its plane.

7. The combination in a battery of a jar; electrodes and separators therein; two plates respectively of insulating material and metal having inclined coacting surfaces and mounted to permit said metal plate moving under the action of gravity to cause the electrodes and separators to be tightly held within the jar.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,267,614. PEANUT-HARVESTER. HENRY C. WILLIAMS, Ravine, Miss. Filed Aug. 9, 1916. Serial No. 114,006. (Cl. 55—132.)



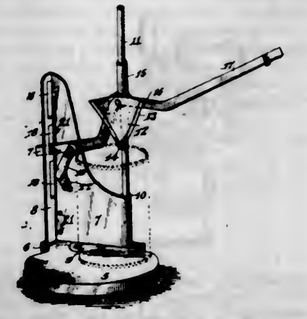
1. In a harvester structure, the combination of a supporting frame, uprooting means carried by said supporting frame, a plurality of axles rotatably supported by said frame, supporting wheels mounted upon said axles, a conveyer positioned for receiving articles from said uprooting means, means for operating said conveyer by the rotation of one of said axles, a plurality of shafts rotatably supported above said conveyer, a plurality of radiating arms carried by each of said shafts, and means operatively connecting said shafts to said axles for rotating the shafts for rotating said radiating arms above said conveyer.

2. In a harvester structure, the combination of a supporting frame, uprooting means carried by said supporting frame, a plurality of axles rotatably supported by said frame, supporting wheels mounted upon said axles, a conveyer positioned for receiving articles from said uprooting means, means for operating said conveyer by the rotation of one of said axles, a plurality of shafts rotatably supported above said conveyer, a plurality of radiating arms carried by each of said shafts, means operatively connecting said shafts to said axles for rotating the shafts for rotating said radiating arms above said conveyer, a guard structure positioned above said shafts and comprising a plurality of longitudinally and transversely extending rods.

3. In a harvester structure, the combination of a supporting structure, an endless conveyer carried by said supporting structure, a plurality of shafts rotatably supported above said conveyer, means for rotating said shafts, a plurality of radiating arms carried by said shafts, the outer ends of said arms being enlarged for beating agricultural products being conveyed to said conveyer, a guard structure positioned higher than said shaft and arms and comprising a plurality of longitudinally and laterally extending rods, said longitudinally extending rods having their ends bent downwardly for preventing said arms from throwing agricultural products off the ends of said harvester.

4. In a harvester structure, the combination, of a supporting structure, an endless conveyer carried by said supporting structure, a plurality of shafts rotatably supported above said conveyer, means for rotating said shafts, a plurality of radiating arms carried by said shafts, the outer ends of said arms being enlarged for beating agricultural products being conveyed by said conveyer, a guard structure positioned higher than said shafts and arms and comprising a plurality of longitudinally and laterally extending rods, said longitudinally extending rods having their ends bent downwardly for preventing said arms from throwing agricultural products off the ends of said harvester, and a platform positioned beneath said conveyer for guarding the conveyer from interference by the dirt over which the harvester is traveling.

1,267,615. CAN-OPENER. CORA E. WILSON, Centralia, Wash. Filed July 31, 1917. Serial No. 183,764. (Cl. 30—3.)



1. In a can opener comprising a base, a frame rising from said base, a post support in the frame, a cutter slidable on the post, and detachable therefrom, a lever pivoted to the cutter and having one end adjustably engageable in the frame at intervals thereof, and a fulcrum pivotally connected with the lever and adjustably and detachably engageable with the frame.

2. A can opener comprising a base, a cutter movable vertically relative to the base, a frame supported upon the base, a lever pivoted to the cutter and having one end adapted for adjustable engagement with the frame, and a fulcrum arm pivoted to the lever and having a nib adapted for detachable and adjustable connection with the frame.

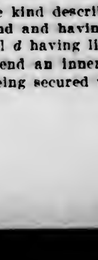
3. A can opener comprising a support, a lever having a fulcrum for adjustable and detachable connection with the support, a vertically movable cutter pivoted to the lever and a guide for said cutter, said support being formed at intervals with slots for adjustably accommodating one end of the lever.

4. A can opener comprising a support, a lever having a fulcrum for adjustable and detachable connection with the support, a vertically movable cutter pivoted to the lever, and a guide for said cutter, said support being formed at intervals with slots for adjustably accommodating one end of the lever, and a finger engaging ear formed on the fulcrum for permitting the easy disengagement thereof from the support.

5. A can opener comprising a support, a post on said support, a cutter movable upon the post, a lever pivoted to the cutter, fulcrum means detachably and swingingly connecting the lever to the support, a sleeve on the cutter slidably embracing the post, a base for the support and forming a can rest, and a slotted flange on the support for adjustably and detachably receiving one end of the lever to guide the same in its movement.

[Claims 6 and 7 not printed in the Gazette.]

1,267,616. SYRINGE. MORRIS ABRAMOVITZ, Baltimore, Md., assignor to David B. Levy, New York, N. Y., a Corporation of New York. Filed Dec. 1, 1916. Serial No. 134,429. (Cl. 128—25.)



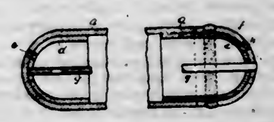
1. A syringe for treating the posterior urethra with a liquid medicament comprising a barrel, adapted to receive and retain a body of liquid, a compressible bulb mounted on and communicating with the barrel, and a second, independently compressible, bulb mounted on and communicating with the first bulb, compression of the second bulb creating a sufficient vacuum to cause the desired amount of liquid to enter the barrel when the bulb is released or to expel the liquid charge from the barrel into the anterior urethra, and subsequent compression of the first bulb acting to force the expelled liquid into the posterior urethra.

3. A syringe comprising a barrel having a discharge outlet at one end and having two superposed compressible air bulbs mounted on its opposite end for the purpose described.

5. A syringe comprising a barrel adapted to receive and retain a body of liquid having a suitable outlet, an air bulb supported by the barrel and communicating with the interior thereof and adapted when compressed to force a charge of liquid from the barrel, and a second air bulb adapted to discharge through the barrel a volume of air larger than said liquid charge, for the purposes specified.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,267,617. CONTAINER. JOHN F. AHERN, Longmeadow, Mass. Filed May 28, 1917. Serial No. 171,380. (Cl. 128—18.)



1. In a device of the kind described a main body portion *a* closed at one end and having suitable circulating openings, an inner shell *d* having like openings, an outer cap *f* at the opposite end an inner shell *e* both having openings, the shell *e* being secured to the shell *a* against

rotation and the shells *d* and *f* being adapted to rotate and a rod connecting the shells *d* and *f*, all in combination substantially as shown.

4. An inhaler for medicinal compounds, comprising a body portion having circulating openings at each end, closure members at each end having like openings, the closure members being secured to a rod as *g* whereby the movement of one insures the movement of the other.

[Claims 2 and 3 not printed in the Gazette.]

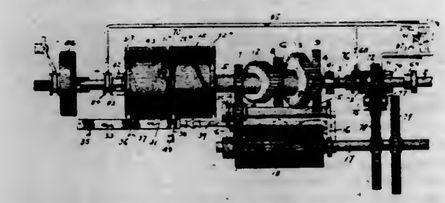
1,267,618. SUPPORT. CHARLES C. ANDERSEN, Chicago, Ill. Filed Nov. 14, 1917. Serial No. 201,954. (Cl. 20—82.)



3. A support of the character described comprising a pair of independent slidably connected members, each member being composed of a series of parallel, spaced rails, the rails of one member seating slidably between the rails of the other member, means at the ends of the rails for securing the same in spaced relation, and resilient arms extending from said means alongside and engaging the outer faces of the end rails.

[Claims 1 and 2 not printed in the Gazette.]

1,267,619. VARIABLE-SPEED MECHANISM. JAMES ARNOTT, Oakland, Cal. Filed June 8, 1914. Serial No. 843,628. (Cl. 74—58.)



1. In a variable speed mechanism, a driving shaft, a driven shaft, gear connections including a composite gear composed of alternate concentric and eccentric gears between said shafts, means for releasing said connections, and means for directly coupling said shafts.

10. In a variable speed mechanism, a shaft, a composite gear composed of alternate concentric and eccentric gears mounted on said shaft, a second shaft, a gear mounted on said second shaft, a rock frame journaled on said second shaft and a gear on said rock frame engaging both of said previously mentioned gears.

20. In a variable speed mechanism, concentric and eccentric gears, parts coöperating with said gears, said gears having coincident portions which vary with respect to alinement according to the varying position of the associated coöperating parts.

21. In a variable speed mechanism, a composite gear composed of alternate concentric and eccentric gears, a cylindrical gear of the same length as said composite gear arranged parallel thereto, and a longitudinally shiftable gear connection between said gears.

25. In a variable speed mechanism, a driving shaft, a driven shaft, a sleeve mounted on one of said shafts, a composite gear on said sleeve, gear connections between said composite gear and the other shaft, a clutch between said sleeve and the shaft on which it is mounted, a clutch between said gear connections and the other shaft, a clutch for directly connecting said shafts, and means for moving said clutches.

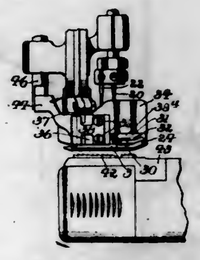
[Claims 2 to 9, 11 to 19, 22 to 24, and 26 to 50 not printed in the Gazette.]

1,267,620. DRY BATTERY. FERDINAND PAUL BAUMAN, Küsnacht, Switzerland. Filed Feb. 18, 1916. Serial No. 79,198. (Cl. 204—38.)



A dry battery of the kind having plate electrodes of which the carbon electrodes are impregnated with impervious substances and formed with a cavity at one side for the reception of soft electrolyte which is in contact with the negative electrode each of which latter is in contact with the positive of the adjacent element, fitted with carbon electrodes impregnated to a suitable depth at the face rearward of the cavity only where the impregnating substance is made to form only a complete surface filling layer for the pores, and a metal frame applied to the impregnated face of each carbon electrode to serve as solid contact portion with the adjacent negative electrode.

1,267,621. PRESSER-FOOT FOR SEWING-MACHINES. JOSEPH BERGER, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 20, 1915. Serial No. 40,896. (Cl. 112—13.)

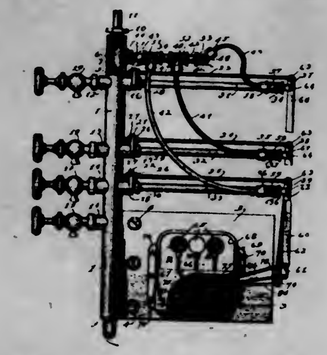


2. A presser foot for sewing machines including in combination, a supporting shank, a main foot portion rigidly connected to said shank and having means for supporting the stationary member of a trimming mechanism, said presser foot having a guiding channel for directing the edges to be trimmed to the trimming mechanism, and a projecting arm carried by said main shank and adapted to have sliding engagement with a bar supported by the head of the machine for resisting the lateral force of the movable trimming member.

4. A presser foot for sewing machines including in combination, a supporting shank, a main foot portion rigidly connected to said shank and having means for supporting the stationary member of a trimming mechanism, said presser foot having a guiding channel for directing the edges to be trimmed to the trimming mechanism, a strip deflector carried by the presser foot and extending across said guiding channel for deflecting the trimmed off strip away from the needles, means for pivotally supporting said strip-deflector, whereby the same may be turned away from the needles to give access thereto for threading, and a spring for holding the strip deflector in either operative or inoperative position.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,267,622. WATER-INDICATING MEANS FOR STEAM-BOILERS. WILLIAM C. BLUNDELL, Los Angeles, Cal., assignor of one-half to Mary R. Blundell, Los Angeles, Cal. Filed Sept. 18, 1916. Serial No. 120,860. (Cl. 73—54.)

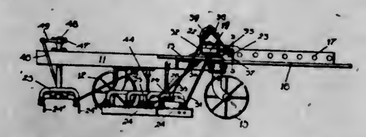


4. A water indicating system for boilers comprising a water column having separate water and steam chambers connected, respectively, with the water and steam portions of the boiler, expansion tubes supported thereon and communicating at opposite extremities with said water and steam chambers, a housing supported on said column, a plurality of indicators mounted for operation in said housing, and means supported on the outer ends of each of said tubes connected with and for operating said indicators to correspond to the expansion of the tubes.

5. A water indicating system for boilers comprising a water column connected with the water and steam portions of the boiler and provided with expansion tubes arranged at different elevations thereon, connections between said tubes and the steam portion of the boiler, mechanical indicators respectively operably connected with said tubes, respectively for indicating the high, intermediate and low stages of the water, and valves at and below the planes of said tubes for further indicating the stages of the water therein.

[Claims 1 to 3 and 6 to 8 not printed in the Gazette.]

1,267,623. ROAD DRAG AND LEVELER. ALPHEUS C. BOWEN, Des Moines, Iowa. Filed June 25, 1917. Serial No. 176,891. (Cl. 37—5.)



1. In a device of the class described, a frame supported on wheels, a draw bar slidably mounted for fore-and-aft movement on the frame, slide bars mounted on said frame between their ends for pivotal and sliding movement, the inner ends of said slide bars being pivotally connected with said draw bar, and ground working members having their outer ends operatively connected with the other ends of said slide bars whereby when a source of power hitched to said draw bar is moved rearwardly, said draw bar is slid rearwardly, the outer ends of said ground working members will be drawn forwardly and inwardly.

3. In a device of the class described, a frame mounted on wheels, a draw bar designed to be attached to a source of power, ground working members arranged diagonally on said machine, and means for operatively connecting said draw bar with said ground working members whereby when said draw bar is moved rearwardly by said source of power, the outer ends of said ground working members are swung toward the longitudinal central axis of the machine.

7. In a device of the class described, a frame supporting wheels therefor, a draw bar mounted for fore-and-aft movement on said frame, slide bars mounted between their ends on said frame for pivotal and sliding movement, the inner ends of said slide bars being pivotally connected with said draw bar, spaced ground working members having their inner ends pivotally connected with said frame, means for operatively connecting the outer ends of said members with the outer ends of said slide bars, guide members on said slide bars, and flexible devices secured to the outer ends of said ground working members and extended around said guide members and secured to said frame whereby when the draw bar is slid rearwardly said flexible members will be tightened for raising the outer ends of said ground working members.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,267,624. FOUNTAIN-PEN. GEORGE FRANKLIN BRANDT, Boston, Mass., assignor to The Moore Pen Company, Boston, Mass., a Corporation of Massachusetts. Filed Mar. 19, 1917. Serial No. 155,654. (Cl. 120—50.)

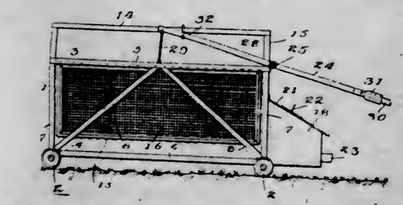


1. A fountain pen including a feed bar having a longitudinal feed-groove and having a plurality of grooves independent of said feed-groove on either side thereof, and troughs extending longitudinally of and effecting direct intercommunication between said grooves.

5. A fountain pen including a feed bar having a longitudinal feed-groove along the median of its upper face, a plurality of grooves in each of the sides of the bar adjacent said feed-groove, said grooves being formed in said sides at an acute angle to the downward working flow of the ink so that any surplus may readily flow into the grooves and re-flow to the barrel supply when the fountain pen is held in normal inverted position, and troughs extending longitudinally of and effecting direct intercommunication between said grooves.

[Claims 2 to 4 not printed in the Gazette.]

1,267,625. PORTABLE RABBIT-CAGE. WALTER WILLIAM BRINDLEY, Pasadena, Cal. Filed Aug. 21, 1917. Serial No. 187,365. (Cl. 119—17.)



2. A device of the character described comprising an open work transportable frame, an animal house at one side of the frame having a doorway at its side facing the space bounded by the frame, a door for closing said door way, a closed cage movably mounted in the frame, said cage being inclosed at its bottom with a wire or other screen and provided with a passage way adapted to register with the door way of the animal house when the cage is lowered, a pivotally mounted lever upon the frame for raising and lowering the cage, and counterweight means upon said lever for counterbalancing the weight of the cage.

3. A device of the character described comprising an open work wheeled transportable frame, an animal house at the front of the frame and provided with a door way at its side facing the space bounded by the frame, a door for closing said door way, an inclosed cage mounted for

vertical movement within the frame, said cage being provided with a screen at its base, and having a passage at its front for communication with the door way when the cage is in lowered position, a lever pivotally mounted at the front of the frame and having an operating end extending beyond the frame and provided with a central arm and side arms extending inwardly above the central and end portions of the cage, connections between said arms and the said portions of the cage, and means upon the frame for engagement with one of said arms to support the cage in an elevated position.

[Claims 1 and 4 not printed in the Gazette.]

1,267,626. DASH-POT BUFFER. ALFRED T. BROWN, Cincinnati, Ohio, assignor to The Warner Elevator Mfg. Company, Cincinnati, Ohio, a Corporation of Ohio. Filed Apr. 2, 1917. Serial No. 159,320. (Cl. 74—69.)



1. In a device of the class described, a fluid holder having a cylindrical portion at one end and a conical portion communicating therewith, a piston reciprocal therein, a hollow piston rod communicating through the piston with the fluid holder, a concentric guide post secured within the holder and passing through the piston into the hollow rod, a coil spring within the piston rod surrounding said guide post, and adapted to move the piston in one direction, an external guide sleeve in the upper portion of the holder for the piston rod, and means for freely flowing the fluid from one side of the pistop to the other during the spring actuated piston stroke.

7. In a device of the class described, a cylinder, a piston reciprocal therein, the cylinder having a fluid overflow portion projected beyond the normal piston position, a hollow piston rod, a guide-post in the cylinder extending into the hollow piston rod, and a coil spring supported on the guide post and extended into the piston rod for moving the piston to normal position.

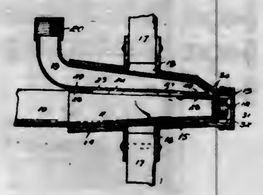
[Claims 2 to 6 and 8 not printed in the Gazette.]

1,267,627. ARTIFICIAL BAIT. FRANKLIN L. CAMPBELL, Delaware, Ohio. Filed Sept. 20, 1916. Serial No. 121,225. (Cl. 43—30.)



An artificial bait, comprising an elongated body made from flexible material and adapted to be connected at one point to the hook, the said body being formed with a substantially crescent-shaped head and tail and also corrugated side edges, the means of connection between the body and hook having terminal projections stiffened to project beyond the body plane to indicate legs, a hanger connected at the point of connection of the body and hook, and a triple hook loosely connected to the hanger.

1,267,628. DEVICE FOR OILING AXLE-SPINDLES WITH HARD OIL. EDMUND H. CASSEL, Madrid, Iowa. Filed June 25, 1917. Serial No. 176,890. (Cl. 64—26.)

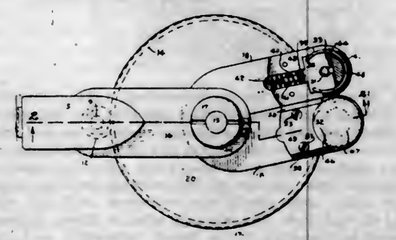


1. In a device of the class described, the combination of a spindle with a vehicle hub comprising a sleeve mounted on said spindle, a hub casing mounted on said sleeve having in one portion a compartment, an oil tube received within said compartment having a portion extending away from said compartment, an oil cup on said last portion, said tube being tapered from its end adjacent to the oil cup toward its other end, said sleeve being provided with a longitudinal slot having portions offset from other portions circumferentially of the sleeve, said tube having holes extending through it registering with said slot, said casing having an extension, and a cap on said extension.

4. In a device of the class described, the combination of a spindle with a sleeve thereon, having a slot extending through it, provided with a portion offset circumferentially of the sleeve from another portion, a hub casing receiving sad sleeve, and having a compartment for an oil tube, an oil tube received in said compartment and extending away therefrom, a cup on said oil tube, said tube being provided with graduated openings registering with said slot, said openings being gradually larger in size as they are farther from said cup, an extension on the outer end of said casing, and a cap on said extension.

[Claims 2 and 3 not printed in the Gazette.]

1,267,629. DENTAL DRILL. HERMAN E. S. CHAYES, New York, N. Y. Filed Aug. 16, 1915. Serial No. 45,748. (Cl. 29—145.)



1. In a device of the kind described, a bifurcated spring-pressed drill retaining member, and cam means for moving said member.

5. In a device of the character described, a drill socket, a drill mounted in said socket and provided with a cut out portion, a spring pressed plate having a forked end for engagement with the cut out portion of the drill to retain the drill within the socket and a rotatable cam means for moving said spring pressed plate to release the drill, said

means provided with a circular groove and a retaining plate provided with a forked end for engagement within said groove to retain the cam in operative position.

[Claims 2 to 4 not printed in the Gazette.]

1,267,630. BINDER. HAL G. CHILD, Spokane, Wash., assignor to Child and Walton Company, Spokane, Wash., a Corporation. Filed Jan. 3, 1917. Serial No. 140,351. (Cl. 129—38.)



1. A binder for catalogues, pamphlets and the like, comprising a back adapted to be placed adjacent the back of the catalogues, pamphlets and the like, means detachably connected at both ends with said back, adapted to extend between the leaves of the catalogues, pamphlets and the like and to hold the same adjacent said back, separate covers detachably connected with said back and adapted to inclose said catalogues, pamphlets and the like and a flange on each of said covers at the rear edge thereof adapted to extend inwardly between the catalogues, pamphlets and the like and said back.

2. A binder for catalogues, pamphlets and the like, comprising a rigid back with caps at the ends thereof and adapted to be placed adjacent the back of the catalogues, pamphlets and the like, extendible anchor rods adapted to be placed between the leaves of the catalogues, pamphlets and the like, and means at each end of said back detachably connecting said anchor rods to said back.

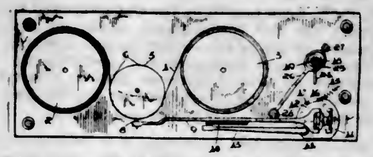
3. A binder for catalogues, pamphlets and the like, comprising a rigid back adapted to be placed adjacent the back of the catalogues, pamphlets and the like, anchor rods adapted to be placed between the leaves of the catalogues, pamphlets and the like, links having rounding ends, detachable caps at the ends of said back to which said links are secured and means of connection between said anchor rods and links.

4. A temporary binder comprising a rigid back, a link at each end of said back, anchor rods, paralleling said back, detachably and slidably connected with said links, combined with a removable cover composed of two parts each having an inwardly extending flange at the rear edge thereof, said flanges being adapted to meet or overlap each other.

5. A temporary binder comprising a rigid back, a link at each end of said back, said links being each composed of two parts, means for locking the two parts together, anchor rods paralleling said back detachably and slidably connected with said links and a removable cover connected with said links.

1,267,631. SPEED-RECORDER. WILLARD CHIPMAN, Toronto, Ontario, Canada. Filed May 19, 1917. Serial No. 169,680. (Cl. 234—31.)

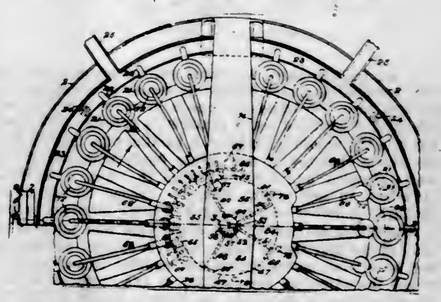
1. In a speed recorder, the combination of a clock driven chart sheet graduated for time and speed; a tablet roller over which the sheet passes; a rotatable member behind the plane of the part of the sheet passing over the roller and movable also in a direction parallel to its axis of rotation and transversely of the sheet, and adapted to take up positions corresponding to the rate at which it is rotated; a sleeve movable by said member; a forwardly extending lever fulcrumed behind the sleeve and actuated by said sleeve; a stylus arm carrying a stylus engaging the part of the chart sheet passing over the roller; parallel motion links pivotally connected to the stylus arm and a suitable support whereby the stylus arm is movable in a plane at an angle to the plane in which the lever moves and the stylus may be moved over the chart in a direction



parallel to the time graduations; and a connecting link between the stylus arm and the aforesaid lever having universal joint connections with each.

[Claim 2 not printed in the Gazette.]

1,267,632. MACHINE FOR MAKING PLASTIC ARTICLES. EDWARD E. CLAUSSEN, Hartford, Conn. Filed June 3, 1916. Serial No. 101,608. (Cl. 92—54.)



1. The combination of a revoluble mold, a duct member revoluble with the mold and provided with a nozzle, and means for relatively moving the nozzle into and out of the mold at predetermined points in the revolution of the mold and duct member.

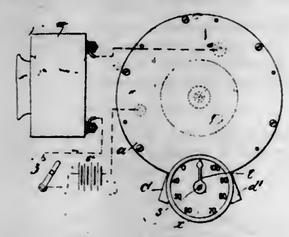
47. The combination of a bearing member having passages, a rotary hub surrounding the bearing member, the hub being provided with hollow arms provided with hollow heads and the hub on its rotation bringing the inner ends of the arms into register with said perforations, rotary hollow spindles extending into said heads and having outlets therein, containers having perforated bottoms, supported by the spindles, means for rotating the hub and for independently more rapidly rotating the spindles, a pulp-delivering head having chambers, a rotary pocketed member surrounding the head, the pockets of which are adapted to register in series with the respective chambers on the rotation of said pocketed member, swinging ducts connected with said pocketed member and in communication with the respective pockets thereof, said swinging ducts having nozzles, means for rotating said pocketed member with said hub, and means for acting against the swinging ducts to effect the movement of the nozzles thereof into and out of the molds.

[Claims 2 to 46 not printed in the Gazette.]

1,267,633. AIR SPEED-INDICATOR FOR USE ON AEROPLANES AND THE LIKE. FREDERIC HOLLOCOMBE CLIFT, Barnes, London, England. Filed Sept. 21, 1917. Serial No. 192,513. (Cl. 175—183.)

1. An audible speed indicator for aeroplanes and the like, comprising a case divided by means of a flexible diaphragm into two chambers, one a pressure chamber and the other a so-called static chamber, a pressure pipe leading into the pressure chamber, a suction pipe leading into the static chamber, a flat spring finger mounted in the static chamber and insulated from the case, a contact

point carried by said spring finger, a terminal connected to said finger, a second spring finger similarly mounted in said case, a contact point carried by said spring finger and adapted to engage the contact point carried by the other spring finger, a terminal connected to said second spring finger, a pin carried by the diaphragm and adapted to contact the first spring finger, means for adjusting the position of one of the contact points carried by one of the spring fingers relative to that carried by the other spring finger, an electric buzzer or the like, a battery or other source of electric energy and an electric lead connecting said contact maker, buzzer and battery.



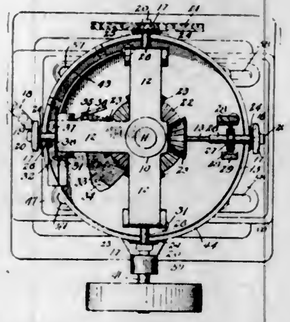
2. An audible speed indicator for aeroplanes and the like, comprising a case divided by means of a flexible diaphragm into two chambers, one a pressure chamber and the other a so-called static chamber, a pressure pipe leading into the pressure chamber, a suction pipe leading into the static chamber, a flat spring finger mounted in the static chamber and insulated from the case, a terminal connected to said spring finger, a second spring finger similarly mounted and having a similar terminal, a pin or projection carried by the diaphragm and adapted to contact the first spring finger, electric contact points carried by the two spring fingers and opposed to one another, means for adjusting the position of one of these contact points relative to the other, an electric buzzer or the like and a battery or other source of electric energy both of which are coupled up in circuit with the instrument through the terminals connected to the spring fingers, and means for adjusting the speed at which the instrument will produce the audible signal.

4. An audible speed indicator for aeroplanes and the like, comprising a case divided by means of a flexible diaphragm into two chambers one a pressure chamber and the other a so-called static chamber, a pressure pipe leading from a position in the slip stream of the propeller of the aeroplane to the pressure chamber, a suction pipe leading from a position in the slip stream of the propeller of the aeroplane to the static chamber, a flat spring finger mounted in the static chamber and insulated from the case, a terminal connected to said spring finger, a second spring finger similarly mounted and having a similar terminal, a boss or projection carried by the diaphragm and adapted to contact the first spring finger, electric contact points carried by the two spring fingers and opposed to one another, means for adjusting the position of one of these contact points relative to the other and an electric buzzer or the like and a battery or other source of electric energy both of which are coupled up in circuit to the spring fingers.

5. An audible speed indicator for aeroplanes and the like, comprising a case divided by means of a flexible diaphragm into two chambers one a pressure chamber and the other a so-called static chamber, a pressure pipe leading from a position in the slip stream of the propeller of the aeroplane to the pressure chamber, a suction pipe leading from a position in the slip stream of the propeller of the aeroplane to the static chamber, a flat spring finger mounted in the static chamber and insulated from the case, a terminal connected to said spring finger, a second spring finger similarly mounted and having a similar terminal, a boss or projection carried by the diaphragm and adapted to contact the first spring finger, electric contact points carried by the two spring fingers and opposed to one another, means for adjusting the position of one of these contact points relative to the other, an electric buzzer or the like and a battery or other source of electric energy both of which are coupled up in circuit with the instrument through the terminals connected to the spring fingers, means for adjusting the speed at which the instrument will produce the audible signal, means for indicating at what speed the instrument is set to produce the audible signal, and an electric buzzer or the like, a switch and a battery or other source of electric energy said contact maker buzzer switch and battery being coupled up in one circuit.

[Claims 3 and 6 to 10 not printed in the Gazette.]

1,267,634. BUFFING-MACHINE. SIMON COOPER, New York, N. Y., assignor to Brass Goods Manufacturing Co., Brooklyn, N. Y., a Corporation of New York. Filed Aug. 24, 1916. Serial No. 116,590. (Cl. 51—4.)



1. In a machine of the character set forth, the combination of a revolving turret, radially extending rotating shafts carried by said turret, means for supporting objects to be finished on said shafts and finishing means disposed at different angles in the path of movement of the objects supported on said shafts.

2. In a machine of the character set forth, the combination of a revolving turret, radially extending rotating shafts carried by said turret, means for supporting objects having major and minor axes on said shafts, supports on said shafts patterned after said objects and arranged with their minor axes in line with the major axes of the objects, finishing means disposed in the path of movement of said objects and tracks disposed in the path of movement of said patterned supports.

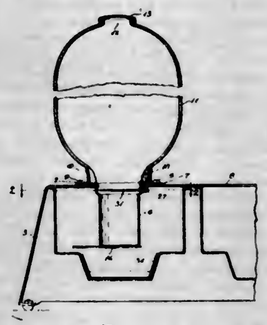
3. In a machine of the character set forth, a revolving turret having radially extending arms, shafts movably supported by said arms, means on said shafts for supporting irregular shaped objects thereon, supports on said shafts patterned after said irregular shaped objects, finishing means disposed in the path of movement of said objects and tracks disposed in the path of movement of said patterned supports in position to shift the supports and shafts toward said finishing means.

4. In a machine of the character set forth, the combination of a revolving turret, radially extending rotating shafts carried by said turret, means for supporting objects to be finished on said shafts, finishing means disposed in the path of movement of the objects supported on said shafts, and means for intermittently rotating said turret and means for temporarily locking the turret and its contained shafts in coöperative relation to the finishing means aforesaid.

23. In a machine of the character set forth, the combination of a revolving turret, radially extending rotating shafts carried by said turret, means for supporting objects to be finished on said shafts, finishing means disposed in the path of movement of the objects supported on said shafts, detents arranged adjacent each shaft, a keeper arranged to be successively engaged by the detents, a lever associated with the keeper to withdraw the detent and a combined releasing and driving member adapted to actuate the lever thereby releasing the detent from the keeper and subsequently engage said detent to drive the turret in its path of movement.

[Claims 5 to 22 not printed in the Gazette.]

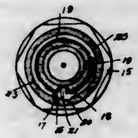
1,267,635. CONTAINER. CARLOS COX, Sedro Woolley, Wash., assignor of one-half to Charles A. Beaulieu, Seattle, Wash. Filed May 21, 1917. Serial No. 170,078. (Cl. 221—113.)



In a structure of the class described, the combination with a hollow supporting base having a hole through its top wall, of a receptacle of the form of a hollow cylinder disposed to project downwardly through said hole with its upper end portion fastened to said top wall, said upper end portion being provided with a slot extending through one side of its cylindrical wall; a container having an opening through its bottom and adapted to be disposed to rest on said top wall with its said opening over the hole through said top wall of said supporting base; shaft bearings associated with said receptacle with their axes in the same vertical line spaced from and parallel with the exterior cylindrical surface of said receptacle; a shaft vertically disposed to be rotatively movable in said bearings with its upper end portion projecting above the surface of said top wall; a shutter plate of the form of a sector rigidly fastened to the lower end portion of said shaft in a position to adapt it to swing in a horizontal plane to a position where it will serve as a removable bottom for said receptacle; a hand lever fastened to the upper end portion of said shaft to swing in a horizontal plane above said top wall; a grate-like shutter freely mounted on the upper end portion of said shaft adjacent to the underside of said top wall and adapted to be rotatively movable in a horizontal plane to project it through the slot in the upper portion of said one side of the wall of said receptacle thereby to obstruct the passageway between said receptacle and said container; and a helical spring associated with said shaft and with said grate-like shutter, and adapted to exert its force with a tendency to dispose said grate-like shutter to register with a certain portion of said shutter plate with respect to its circumferential position on said shaft whereby when said shutter plate is not in a position to serve as a bottom wall of said receptacle, then said grate-like shutter will be in a position to obstruct the passageway between said container and said receptacle.

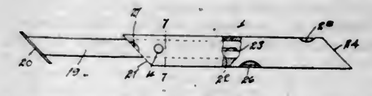
1,267,636. DUST-CAP. CHARLES CRATTY, Grinnell, Iowa. Filed July 2, 1917. Serial No. 178,272. (Cl. 152—12.)

In a device of the class described, a base having a central screw-threaded opening, said base being adapted to be screwed on to the externally screw-threaded valve casing on an inner tube, and fit against a vehicle wheel rim, said base having a sleeve thereon provided with external screw-threads, and provided adjacent to said base with an annular groove and with a hole, a spring received in said groove having at one end an outwardly extending portion, and an inwardly extending member received in said hole, a cover cap closed at one end, and having at its open end a portion of larger diameter than its main body, internally



screw-threaded to fit said sleeve, said larger portion having near its open end an internal groove having spaced recesses.

1,267,637. COMBINATION SQUARE AND BEVEL. JOHN DAUJAT, San Martin, Cal. Filed July 19, 1916, Serial No. 110,145. Renewed Oct. 23, 1917. Serial No. 198,178. (Cl. 33—98.)



1. A device of the class described including a stock provided with a beveled end and having an opening extending inwardly from the said beveled end, said stock being also provided with longitudinal recesses opening inwardly from one of the side edges of the stock, said recesses having end walls arranged at different angles to the edge of the stock, a slide mounted in the said opening and having its outer end beveled and provided with an inclined head arranged to fit against and conform to the configuration of the beveled end of the stock and arms pivoted in the said recesses of the stock and arranged to swing outwardly against the said end walls of the recesses.

2. A device of the class described including a stock comprising an intermediate and outer longitudinal sections fitting flat against one another, the outer sections being provided at their inner faces with longitudinal recesses open at one of the side edges of the stock and the intermediate section being recessed to form a longitudinal opening which extends inwardly from one end of the stock, the latter being beveled thereat, pivoted arms mounted in the recesses of the sides or outer sections and a slide operating in the said opening of the intermediate section and having its outer end cut at an angle and provided with a plate or head arranged to conform to the configuration of the said beveled end of the stock, said slide being movable inwardly and outwardly to form an extension bevel.

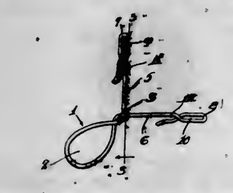
1,267,638. PROCESS OF PRODUCING BROMIN. RASIKLAL DATTA, Calcutta, India. Filed Aug. 17, 1916. Serial No. 115,555. (Cl. 23—10.)

The herein described process of producing bromin which consists in oxidizing nitrosyl bromids for forming bromin and nitrous gases, and separating out the bromin thus produced.

1,267,639. PACKAGE-TIE. JOSEPH W. DE CAMP, Elkhorn, Mont. Filed May 18, 1916. Serial No. 98,414. (Cl. 24—18.)

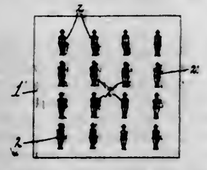
A package tie comprising a single strand of wire bent intermediate its ends to provide an enlarged loop, the wire being twisted to maintain the configuration of the loop, right angularly disposed retaining arms projecting from the said twisted portion of the wire, the terminals of the said retaining arms being bent to provide loops 9 and 10, the said loops being elongated and having their side portions disposed parallel and in the same plane as the corresponding retaining arm, the terminal of the loop 9 being bent over the top of the corresponding re-

taining arm and flared outwardly from the same to form a V shaped notch, the terminal of the loop 16 being bent under the corresponding retaining arm and flared out-



wardly to form a second V shaped notch, each of the said terminals being disposed in the same plane as the said retaining arms and the side portion of each of the said loops.

1,267,640. WRITING PAPER, CARD, TABLET, OR THE LIKE. FRANK W. EAGELSTON, Berkeley, Cal., assignor to Edwin W. Beardsley, trustee, San Francisco, Cal. Filed Nov. 22, 1917. Serial No. 203,333. (Cl. 35—12.)



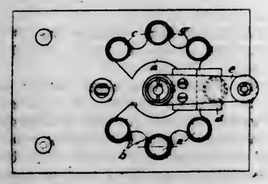
Writing paper, cards, pads or the like, having a surface initially prepared with a plurality of pictorial representations of an armless human figure, adapted for the subsequent additions, by the user, of the omitted limbs, in varying relations according to a given code, to indicate words, letters of the alphabet and numerals.

1,267,641. RESISTANCE-BODY. GEORG EGLY, Berlin-Treptow, Germany, assignor to Gebrueder Siemens & Co., Berlin-Lichtenberg, Germany, a Corporation of Germany. Filed Feb. 21, 1914. Serial No. 820,270. (Cl. 219—76.)

1. In a compression resistance in combination a plurality of juxtaposed resistance elements of a non-porous electrically conductive material whose conductivity is lessened under the influence of electric arcs, and a carbon skin on the contacting faces of said elements.

2. In a compression resistance in combination a plurality of juxtaposed resistance elements of silit and a carbon skin on the contacting faces of said elements.

1,267,642. REGULATING RESISTANCE. GEORG EGLY, Berlin-Treptow, Germany, assignor to Gebr. Siemens & Co., Lichtenberg, near Berlin, Germany, a Copartnership. Filed Dec. 5, 1914. Serial No. 875,604. (Cl. 219—48.)



1. A regulating resistance comprising in combination, an approximately horse-shoe shaped resistance block, projections extending radially from the outer periphery of said block, metallic contact pieces disposed adjacent to the outer ends of said projections, and a centrally pivoted contact switch adapted to successively contact with all the contact pieces.

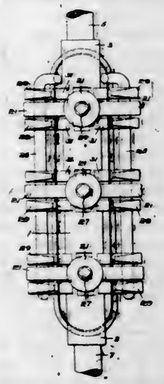
2. A regulating resistance comprising in combination, an approximately horse-shoe shaped resistance block of varying cross-section, projections extending radially from the outer periphery of said block, metallic contact pieces disposed adjacent to the outer ends of said projections, and a centrally pivoted contact switch adapted to successively contact with all the contact pieces.

3. A regulating resistance comprising in combination, an approximately horse-shoe shaped resistance block, projections extending radially from the outer periphery of said block, metallic contact pieces disposed adjacent to and partly inclosing the outer periphery of said projections, and a centrally pivoted contact switch adapted to successively contact with all the contact pieces.

4. A regulating resistance comprising in combination, an approximately horse-shoe shaped resistance block whose cross-section steadily increases from one end of the body to the other, projections extending radially from the outer periphery of said block, metallic contact pieces disposed adjacent to the outer ends of said projections, and a centrally pivoted contact switch adapted to successively contact with all the contact pieces.

5. A regulating resistance comprising in combination, an approximately horse-shoe shaped resistance block of varying cross-section, projections extending radially from the outer periphery of said block, metallic contact pieces disposed adjacent to and partly inclosing the outer periphery of said projections and a centrally pivoted contact switch adapted to successively contact with all the contact pieces.

1,267,643. WATER-GAGE. CARL EIBEN, Dorchester, Mass., assignor to Wilthance Manufacturing Company, Jamaica Plain, Mass., a Corporation of Maine. Filed Apr. 27, 1916. Serial No. 94,024. (Cl. 73—54.)

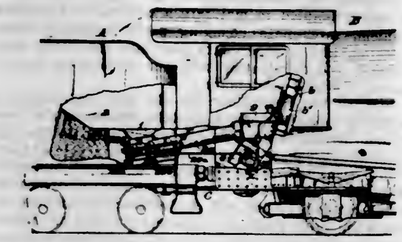


1. A gage comprising in combination, a container, a frame having a sight aperture, a glass between said container and frame, yokes straddling said container, pins entered through said yokes and frame, screws tapped into said yokes engaging the back of said container, and ribs on said frame and container bearing against each other at points outward beyond the lines of strain from said screws to said pins, to tend to draw the portions of the frame at the sides of said aperture inwardly.

7. A gage comprising in combination, a container 1, a frame 15 having a sight aperture 17, a glass 9 confined between said frame and container, securing means 21, 23, 25, 27 for drawing said frame and container toward one another, and means 29, 31 to prevent said securing means from distorting said frame.

[Claims 2 to 6 not printed in the Gazette.]

1,267,644. MECHANICAL STOKER. ALBERT G. ELVIN, Plandome, ADAM BRUCE FAHNESTOCK, Great Neck, and FRANK H. CLARK, New York, N. Y.; said Fahnestock and said Clark assignors to said Elvin. Filed Sept. 20, 1917. Serial No. 192,260. (Cl. 110—113.)



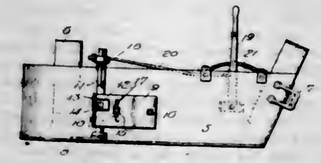
1. In a mechanical stoker, the combination of a receptacle, adapted to be supported on a locomotive, and to communicate with a firing opening in the firebox thereof; a fuel projecting member, mounted in said receptacle; an elevator casing, communicating at its top with said receptacle; an elevator plunger fitted to reciprocate in said casing; a motor; and positive connections actuated by said motor, for effecting the coördinated alternate operation of the fuel projecting member and the elevator plunger.

7. In a mechanical stoker, the combination of a shovel box, adapted to be supported on a locomotive, and to communicate with a firing opening in the firebox thereof; a fuel shovel, mounted to swing in said shovel box; an elevator casing, communicating, at its top, with said shovel box; an elevator plunger fitted to reciprocate in said casing; a fuel receiving pocket, opening into said casing; an automatically operable wiper, mounted at the delivery end of said pocket, and acting to prevent undue protrusion of fragments of fuel beyond the adjoining side of the elevator plunger; means for supplying fuel to the pocket; a motor; and positive connections for actuating the fuel supply means, the elevator plunger, and the shovel, by said motor.

19. In a mechanical stoker, an inclosing casing for gearing and other movable members, comprising a shovel box, divided by a partition into upper and lower sections, and having a fuel receiving pocket at one side of its lower section; an elevator casing extending through and below the lower section, at an angle to the upper section, and open thereto at its top, and also open to the fuel receiving pocket; and a gear case, secured to, and depending from, the shovel box, on the side of the elevator casing farther from the fuel receiving pocket, said gear case forming a lubricant receptacle for the inclosed movable members.

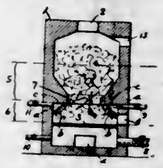
[Claims 2 to 6, 8 to 18, and 20 not printed in the Gazette.]

1,267,645. WEED-CUTTER. JOHN L. ESTELL, Reed, Okla. Filed Aug. 18, 1917. Serial No. 186,949. (Cl. 55—60.)



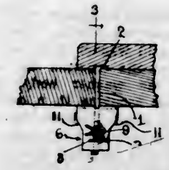
A weed cutter comprising a portable supporting frame, a bearing plate mounted on the side of the frame and adjustable to position the bearing at different angles to the vertical, said plate having an edge recess intersecting the bearing, a stem rotatably mounted in the bearing and adjustable vertically therein, a set collar on the stem and seating in the aforesaid recess, an elongated cutting blade carried by the stem and extending outward therefrom, and means for locking the stem against turning in the bearing.

1,267,646. PROCESS OF BURNING SOLID FUEL. OWEN BROOKE EVANS, Lansdowne, Pa., assignor to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 3, 1916. Serial No. 69,730. (Cl. 110—31.)



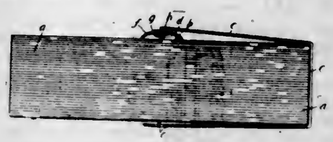
The process of burning fuel which consists in feeding a burning fuel-bed through a furnace chamber, establishing and maintaining in the contents of said chamber in superposed relation an ash fusing region and a clinker solidifying and carbon burning region by appropriate blast control, passing a combustible admixture or association of residue and carbon from the ash fusing region to the clinker solidifying and carbon burning region and separating the surfaces of the furnace wall and of the passing admixture or association by providing space at the furnace wall in the vicinity of the entrance to the ash solidifying and carbon consuming region, and thereafter burning the carbon out of the admixture in the clinker solidifying region, substantially as described.

1,267,647. DOOR-FASTENER. THOMAS LEE EVERETT, Wellsburg, W. Va. Filed Sept. 28, 1917. Serial No. 193,774. (Cl. 16—8.)



A device of the class described comprising an elongated plate having one end bent at right angles and sharpened, ears formed on the edges of said plate adjacent its other end and provided with perforations, an angular plate having one member thereof provided with a slot to receive the elongated plate and its other member resting on said plate and provided with an opening to receive either one of the ears, and a cotter pin adapted to pass through the opening in the ear to hold the second plate thereon.

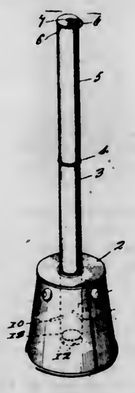
1,267,648. PACKAGE-TIE. WILBERT C. FAWKES, Portland, Oreg. Filed Mar. 9, 1916. Serial No. 83,195. (Cl. 24—127.)



A package tying device consisting of a dished button provided with a hole at the center for securing a cord, and with a concavity on its convexed surface about such hole, providing a space for seating the rings of a coil

wound about the cord portion extending from the button and adjacent the latter, whereby the free end of the cord will be locked against disengagement, substantially as described.

1,267,649. CLOTHES-POUNDER. GUY W. FERDON, Cresskill, N. J. Filed Oct. 16, 1917. Serial No. 196,865. (Cl. 68—5.)

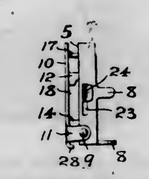


1. In a clothes pounder in combination an open mouthed washer body, a tubular handle entering the top of the washer body and extending below said top, stays secured to the inside of said washer body and crossing in and secured to said tubular handle, a pair of rods crossing in the lower part of the handle and secured thereto, the two pairs of crossing rods forming with the handle a cage and a valve within said cage adapted to move up and down therein.

2. In a clothes pounding device, in combination, a hollow open mouthed washer body in the shape of a frustum, a tubular handle for said washer body, said handle passing through the top of the frustum and secured to discharge well within the washer body, braces passing through the handle for securing it, a cage in the lower end of the handle, and a valve within the cage to control passage of air and fluid through the handle, a side of said cage being formed by said securing braces.

3. In a clothes pounder, in combination, a hollow open mouthed frustum shaped washer body, a tubular open-ended handle for said body, said handle entering and terminating within the body, the upper end adapted to be closed by a thumb, a valve in the lower end for controlling passage of air, and an opening in said washer body near the upper end thereof through which jets of water may be made to squirt at will by control of the opening in the upper end of the handle as the device is reciprocated in use.

1,267,650. LOCKING-CATCH FOR PORTFOLIOS AND THE LIKE. ROBERT O. FLOCKS, Newark, N. J., assignor to The R. Neumann Hardware Co., a Corporation of New Jersey. Filed Feb. 9, 1918. Serial No. 216,143. (Cl. 70—116.)



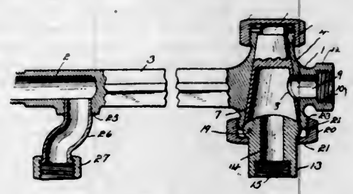
1. A catch for portfolios, and the like, comprising a main casing adapted to contain a cover-plate actuating mechanism, means connected with the said casing for engagement therewith of a latch-plate, and a cover-plate pivotally connected with said casing and coöperating with the actuating mechanism thereof to conceal the said latch-plate.

2. A catch for portfolios, and the like, comprising a main casing adapted to maintain a cover-plate actuating mechanism, latch-plate engaging posts extending from said casing, and a cover-plate pivotally connected with said casing and coöperating with the mechanism thereof to conceal the said latch-plate.

6. A catch for portfolios, and the like, comprising a main casing consisting of a face-plate, side-walls and end-walls, one of said walls being provided with an opening and the said face-plate being provided with a pair of post-receiving openings, means connected with said face-plate for engagement therewith of a latch-plate, a coverplate pivotally connected with said said casing, a lock-post extending from said cover-plate into and through one of the openings in the said face-plate, a spring-engaging post also extending from said cover-plate into and through the other opening in said face-plate, a resilient post-engaging lever within said casing having a portion normally in engagement with said lock-post, said lever having another portion extending into and through the opening in the wall of said casing, said projecting portion of the lever serving as a fingerpiece, a spring-plate also within said casing, said spring-plate having a portion in engagement with said spring-engaging post, and a stop means connected with said cover-plate to limit the outward movement of the same.

[Claims 3 to 5, 7, and 8 not printed in the Gazette.]

1,267,651. SUSPENDING AND CONTROLLING HEADER. WILLIAM B. FORD, Birmingham, Ala. Filed Mar. 30, 1917. Serial No. 158,682. (Cl. 73—167.)



1. A combined suspending and controlling header for meters, comprising a spacing member carrying at its ends an inlet casing and an outlet casing adapted respectively to connect the inlet of the meter with the supply pipe and the outlet of the meter with the service pipe; the inlet casing being essentially a T connection, with a transverse bore in line with the supply and a through bore; a meter connecting member carried at one end of the through bore, a hollow tapered plug in the through bore having an open end presented to the meter connecting member, and a manipulating end presented through the other end of the through bore, and a coupling collar threaded upon the end of the inlet casing around the open end of the plug and adapted to draw the meter connecting member against said plug and seat the same.

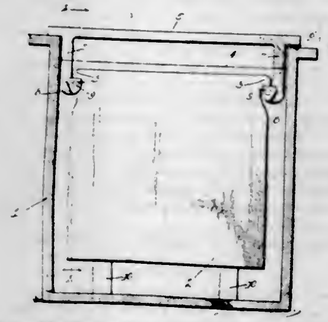
2. A combined suspending and controlling header for meters, comprising a spacing member carrying at its ends an inlet casing and an outlet casing adapted respectively to connect the inlet of the meter with the supply pipe and the outlet of the meter with the service pipe; the inlet casing being essentially a T-connection, with a transverse bore in line with the supply and a through bore; a meter connecting member carried at one end of the through bore, a hollow tapered plug in the through bore having an open end presented to the meter connecting member, and a manipulating end presented through the other end of the through bore, and a cap fitted to the end of the inlet casing surrounding the protruding manipulating end of the plug and adapted to bar access to the latter.

1,267,652. HAT-PIN GUARD. JESSE FRIERSON, Albany, Ga. Filed Apr. 24, 1914. Serial No. 834,234. (Cl. 24—155.)



A hat pin guard comprising a cylindrical housing, a curved wall closing one end of said housing, a tubular casing located concentrically within the housing and having one end closed, securing straps formed on the closed end of the casing and having their free ends curved to conform to the contour of the curved wall, means for securing the straps to the curved wall, straps secured to the casing intermediate its ends and to the housing for supporting the casing concentrically within the housing, and curved springs secured to the housing and engaging the open end of the casing to guide a hat pin within the casing and to hold it against withdrawal therefrom.

1,267,653. ANODE-CONNECTOR. JULIUS H. GILLIS, Toronto, Ontario, Canada, assignor to British America Nickel Corporation Limited, Toronto, Ontario, Canada, a Corporation of Canada. Filed Oct. 15, 1917. Serial No. 196,690. (Cl. 204—4.)

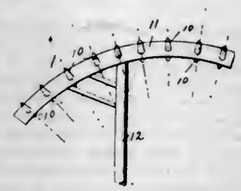


1. In combination with a soluble anode and a suitable electrolyte, an anode connector of aluminum.

2. In combination with a soluble anode and a suitable electrolyte, an anode connector of aluminum having secured therein one or more contact pieces of a conductive material other than aluminum.

3. In combination with a soluble anode and a suitable electrolyte, an anode connector of aluminum having secured therein one or more contact pieces of copper.

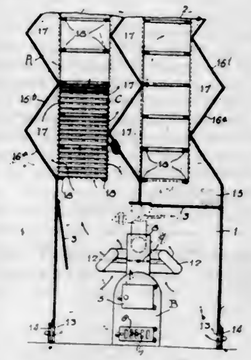
1,267,654. HAND-RAKE. ANNA K. GILSON, Quechee, Vt. Filed Aug. 19, 1916. Serial No. 115,892. (Cl. 55—114.)



1. A rake comprising a head, a handle connected with the head, rows of teeth projecting from top and bottom of the head respectively, the teeth of both rows extending at an angle with the direction of the handle, and the angle of one row being different from the other row, and the teeth of the row on one side of the rake head converging and those on the opposite side diverging, whereby the distance between the points of the teeth is less on one side of the head than on the other.

2. A rake comprising a head, a handle connected with the head and extending at an incline upward and rearward from its point of connection with the head, a row of teeth projecting from top and bottom of the head, the teeth of one row extending rearward in the direction of the pull of the rake when such teeth are lowermost and in raking position and forming an acute angle with the direction of the handle, and the teeth of the other row extending in a direction that is inclined rearward with reference to a horizontal plane and the direction of pull of the rake, the teeth of the row on one side of the rake head converging and those on the opposite side diverging, whereby the distance between the points of the teeth is less on one side of the head than on the other.

1,267,655. FRUIT-DRIER. ALBERT N. GODFREY, Wenatchee, Wash. Filed June 23, 1917. Serial No. 176,523. (Cl. 34—39.)



1. A drier including a tower formed with zigzag side walls of which corresponding portions have a substantially parallel relation, and a vertical column of horizontally disposed and horizontally spaced superposed trays supported within the tower between the zigzag side walls, the said zigzag side walls providing alternately arranged air pockets on opposite sides of the column of trays for deflecting the air back and forth between the trays.

2. A drier including a vertical tower formed with zigzag side walls having reversely inclined portions, a vertical column of horizontally disposed and horizontally spaced superposed trays supported within the column between the zigzag side walls, the reversely inclined portions of the side walls serving to deflect air back and forth between the horizontally spaced drying trays, and ventilating means for controlling the passage of air through the tower.

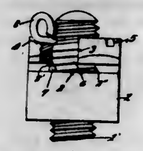
[Claims 3 to 10 not printed in the Gazette.]

1,267,656. LOCK-NUT. THORWALD GOSERUD, Sturgeon Bay, Wis. Filed Nov. 22, 1917. Serial No. 203,418. (Cl. 151—14.)

1. The combination with a bolt and a nut therefor, of an element encircling the bolt, and means on the nut for selectively engaging the element, whereby the nut is locked to the bolt against movement in one direction, or in the reverse direction, or in either direction.

3. The combination with a bolt and a nut therefor, said nut being counter bored, of a coil surrounding the bolt and seated in the counter bore, the ends of said coil bent outwardly, said nut provided with a transverse slot into

which one end of the coil projects, and a longitudinal slot and notches into which the other end of the coil ef-



fectively projects, whereby the nut and bolt are locked against relative movement.

[Claim 2 not printed in the Gazette.]

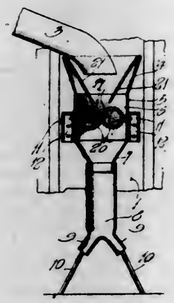
1,267,657. MATERNITY-CORSET. EDNA GRACE, Hoquiam, Wash. Filed Aug. 9, 1917. Serial No. 185,396. (Cl. 2—73.)



2. A corset of the class described including two similar non-elastic back sections and two similar non-elastic front sections adapted to be separably connected to form a non-elastic corset, and three elastic sections, one of which is adapted to be interposed between and detachably connected to the back sections to form a larger and elastic corset for use by a woman in early stages of pregnancy, and each of the other two elastic sections being adapted to be interposed between and detachably connected to one of the front sections and one of the back sections to form a still larger and highly elastic corset for use by a woman in later stages of pregnancy.

[Claim 1 not printed in the Gazette.]

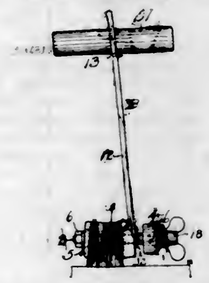
1,267,658. CRUSHING ATTACHMENT FOR THRESHING-MACHINES. JAMES C. GREEN, Prairie City, Oreg. Filed Feb. 12, 1917. Serial No. 148,101. (Cl. 193—29.)



1. The combination with an elevated casing, of a vertical discharge pipe for said casing having its lower end spaced above the ground for delivery into a receptacle, said pipe being detachable from said casing by downward movement, and a pair of inclined legs movably connected with said pipe and resting on the ground to prevent downward movement of said pipe and to brace the same.

2. In a receptacle filling means, the combination of an elevated casing having a depending outlet collar, a vertical outlet pipe whose upper end slidably surrounds said collar and is removable therefrom by downward movement, the lower end of said outlet pipe having a plurality of downwardly diverging outlet branches, and a plurality of inclined downwardly diverging legs pivoted at their upper ends to said pipe, the lower ends of said legs resting on a solid surface to support said outlet pipe in operative position and to brace the same, said legs being disposed adjacent said branches, whereby the receptacles to be filled may rest against said legs and be thus prevented from tilting.

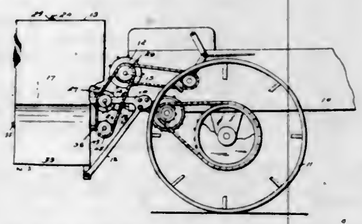
1,267,659. HANDLE FOR LIFTING AND OTHER USES. WILLIAM GRIES, Newark, N. J. Filed July 26, 1917. Serial No. 182,925. (Cl. 57—9.)



1. A device of the class described comprising a pair of guide bolts, a fixed clamping jaw located at one end of the bolts and having an engaging surface, a bar on the opposite ends of said bolts, a movable clamping jaw slidably mounted on the latter between the fixed clamping jaw and bar, said movable clamping jaw having engaging means and a manipulating handle extending therefrom, and an operating screw mounted in the fixed bar and adapted to engage the said movable clamping jaw.

2. A handle of the class described including a clamp frame including a pair of guide bolts having integral heads at one end and nuts and bearing washers at the other, a fixed gripping jaw having a rockable bearing engagement with the washers on said bolts, a clamping bar having a rigid engagement with the heads of said bolts, a movable jaw slidably mounted on the bolts between the bar and fixed jaw and having a handle shank, said movable jaw also having a rockable engagement with the guide bolts, and a clamping screw carried by the said bar and adapted to force the movable gripping jaws toward said fixed jaw.

1,267,660. TOP-DRESSER FOR SPREADERS. LEWIS E. HEALY, Keystone, Iowa. Filed Sept. 24, 1917. Serial No. 193,018. (Cl. 275—3.)

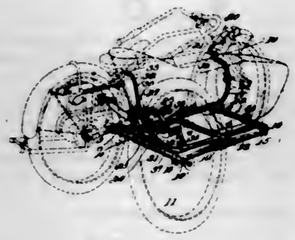


1. In a device of the class described, a casing adapted to receive the fertilizer from the beater cylinder of a spreader, a plurality of partitions disposed within said casing whereby it is divided into compartments, lateral extensions projecting from either end of the casing, a conveyer mounted on each of said extensions and extended into one of the compartments in the casing whereby the fertilizer received in said compartments may be carried therefrom by said conveyer, a chute formed at the outer end of each of said supports adapted to receive the fertilizer from said conveyers and to drop same upon the ground in narrow strips, a central chute formed below the central compartment of the casing, and means for operatively connecting said conveyers with the operating mechanism of the spreader whereby the fertilizer delivered by the spreader to said casing may be delivered to said chutes.

3. In a device of the class described, a central casing adapted to be secured to a spreader and to receive the fertilizer therefrom, an extension formed at either side of said casing, chutes formed at the outer ends of both of said extensions and centrally of the casing whereby the fertilizer delivered to said chutes may be dropped in narrow strips on three adjacent rows of growing plants, means for conveying the fertilizer received by said casing to said chutes, and means for regulating the proportionate amount of fertilizer received by each of said chutes.

[Claims 2 and 4 not printed in the Gazette.]

1,267,661. SIDE-CAR CONSTRUCTION. CARL O. HEDSTROM, Portland, Conn., assignor to Hendee Manufacturing Company, Springfield, Mass., a Corporation of Massachusetts. Filed Aug. 7, 1917. Serial No. 184,925. (Cl. 208—45.)



12. A side car comprising a frame, means for connecting it to the motorcycle frame, an axle pivoted to one side of the frame and extending beyond the other side of the frame, a wheel mounted on the axle beyond the frame, an intermediately pivoted cantaliver spring carried by the frame and having one end linked to the frame and its opposite end pivoted to the axle on the inside of the wheel.

14. A side car comprising a frame, a body supported by the frame, a vertical and horizontal pivotal adjustable connection between the frame and the motor cycle frame, an axle pivoted to the frame adjacent the inner side of the frame and extending beyond the outside of the frame, a cantaliver spring intermediately pivoted to the frame intermediate its ends, a link connection between the forward end of the spring and frame, a pivotal connection between the rear end of the spring and the axle on the inside of the wheel carried by the axle, and a brace pivoted to the motorcycle frame and having a sliding and oscillating connection with the frame.

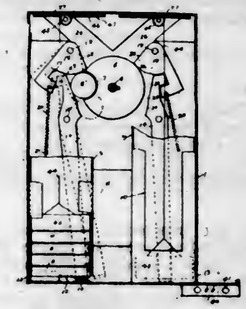
16. A side car comprising a frame, means for connecting the frame to the chassis of a motorcycle, an axle pivotally connected to the chassis of the motorcycle, and a cantaliver spring connection between the axle and frame.

[Claims 1 to 11, 13, 15, and 17 to 23 not printed in the Gazette.]

1,267,662. COIN-CONTROL MECHANISM FOR VENDING-MACHINES. GARABED GEORGE HEGHINIAN, Brooklyn, N. Y. Filed Dec. 1, 1911, Serial No. 663,838. Renewed Jan. 29, 1914. Serial No. 815,290. (Cl. 194—63.)

1. In a vending machine, the combination with a lever adapted to force out goods from a vending machine, of means adapted to receive a coin to operate said lever, and locking means for said lever adapted to lock the coin before the coin completely operates said lever.

2. A vending machine having vertical hoppers adapted to contain goods to be vended combined with means adjacent to and lying in a plane parallel with each hopper to force out the goods from said hopper, and means lying between said forcing out means adapted to receive a coin to operate either forcing out means.

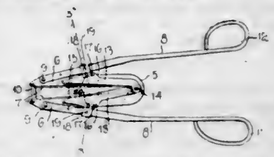


6. In a vending machine, a goods container, a goods ejector, means to operate said ejector by a coin and a locking device adapted to maintain said ejector in normal position and also to return said ejector to normal position, and means tending to maintain said locking device in normal position.

9. In a vending machine, a goods container, means to eject the goods from said container, means to operate said first-named means by a coin, and a spring-pressed locking member adapted to return said first-named means to normal position after being operated and also to trap the operating coin against return before the coin completely operates said first named means.

[Claims 3 to 5, 7, 8, and 10 to 12 not printed in the Gazette.]

1,267,663. BOLT-CUTTER AND SHEARS. WILLIAM H. HENDERSHOT, Akron, Ohio, assignor of one-half to Ruby S. Starcher, South Akron, Ohio. Filed May 14, 1917. Serial No. 168,439. (Cl. 81—196.)

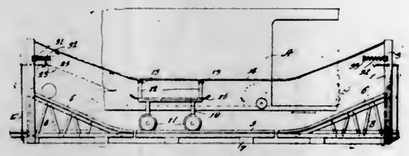


A bolt cutting tool including a body plate provided with elongated divergently disposed arms, relatively movable shear blades mounted upon one side of said plate, a common pivot for the shear blades at one of their ends fixed in the body plate at the inner ends of said diverging arms, handle members pivotally connected to the respective arms beyond and in spaced relation to the free ends of the shear blades, said handle members extending longitudinally in the same plane with the shear blades, and means fixed to each handle member and having a shiftable connection with the respective shear blades adjacent the free ends of the latter.

1,267,664. MAIL RECEIVING AND DELIVERING APPARATUS. EGGE T. HILBRANDS, Greene, Iowa. Filed Oct. 20, 1917. Serial No. 197,069. (Cl. 258—10.)

1. A mail bag transferring apparatus mounted at the side of a railway track, a carrier mounted at the side of the railway, a runway upon which the said carrier travels, standards arranged at each end of the runway and supporting the ends of the latter, the said standards carrying a pair of expansion springs engageable with the end of the said carrier, a latch mounted on each pair of standards and engageable with the truck to maintain the carrier in position against the action exerted by the said springs, a shoe arranged in close proximity to one of the said rails, means connecting the shoe with the said latche

to release the latter for permitting the springs to act upon the said truck, and a retaining rail disposed above the said truck for preventing displacement thereof from the said runway.



2. A mail bag transferring apparatus comprising a runway having inclined ends, the runway being arranged adjacent the side of a railway track, upright supporting standards at the end of the said runway, compression springs carried by the uprights at each end of the said runway, a carrier mounted on the runway and normally held on either one of the said inclined portions whereby either one or the other of the said springs may be compressed to exert a pressure on the end of the carrier arranged at either end of the runway, means for releasing the carrier from the compression springs, and means for maintaining the carrier on the runway when the springs impart a forward thrust to the same, the said carrier being provided with a rack bar, and means carried by the railway car to engage the said rack bar for diminishing the shock of engaging the said carrier.

3. In combination with a railway car mounted on railway rails, shafting arranged within the car and carrying a gear disposed on the exterior of the car, a runway parallel with the said railway rails and including rails having their intermediate portions on the level with the said railway rails and their end portions inclined to form lifts at the ends of the runway, a carrier mounted on the said runway and including a platform level with the floor of the mail car when the said carrier is traveling over the intermediate portions of the runway, and a rack bar formed on the carrier and engageable with the said gear when the said carrier and mail car are moved into close proximity to each other.

1,267,665. STRAIGHT-EDGE ATTACHMENT. HAROLD H. HUNDLEY, Panther, W. Va. Filed June 29, 1917. Serial No. 177,780. (Cl. 33—109.)



1. The combination with a straight edge, of a pair of blocks, a roller mounted transversely in one end of each block and projecting therebelow, and clamping means carried upon the other end of each block for binding engagement with the opposite ends of the straight edge and for supporting the same for movement in an edgewise direction.

2. In a drafting instrument the combination of a block, a roller seated in the lower face of the block and projecting therebelow to support the block, said block being provided with a pair of spaced-apart arms laterally extending therefrom, and clamping means carried by one of said arms to clamp a straight edge against the other arm.

3. In a drafting instrument, the combination of a block provided with an upwardly extending lug adapted to be grasped by the fingers, a roller seated in the lower face of the block, a pair of arms extending laterally from and in vertically spaced-apart relation to the block, a clamping plate arranged between said arms, and a set screw carried by one of the arms and having engagement with said clamping plate to advance the same toward the opposite arm for clamping a straight edge between said arms.

4. In a drafting instrument, the combination of a block provided with an upstanding lug adapted to be grasped between the fingers, a roller seated in the lower face of the block for supporting the same, a pair of arms extending from one side of the block and adapted to receive one end of a straight edge therebetween, a clamping plate mounted between said arms, a set screw swiveled to the clamping plate and engaging one of said arms, and guiding means carried by the clamping plate and engaging the said arm to hold the clamping plate from turning with said set screw.

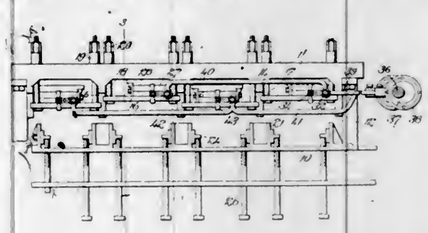
1,267,666. RESPIRATOR-HELMET. FREDERICK EVANS JACKSON, Chorlton-cum-Hardy, England. Filed Aug. 30, 1917. Serial No. 188,893. (Cl. 128—42.)



1. In a respirator helmet, the combination with a helmet member having a sight opening, of a closure of transparent material therefor, an apron depending from the sight opening and overlying the inside face of the helmet, an open-ended tubular member situated on the outside of the helmet and arranged with its axis parallel to the plane of the sight opening, means securing said tubular member to said depending apron, and a breathing tube leading from the tubular member through the apron into the interior of the helmet.

[Claim 2 not printed in the Gazette.]

1,267,667. PAPER-MAKING MACHINE. LOUIS F. JURGENSON, Grand Rapids, Minn. Filed Apr. 16, 1917. Serial No. 162,378. (Cl. 92—51.)



1. In a paper making machine, the combination of suction box carriers, suction boxes on said carriers reciprocable longitudinally of the machine, and means for reciprocating said boxes including links each connected to a box and offset out of the path of removal of an adjacent box.

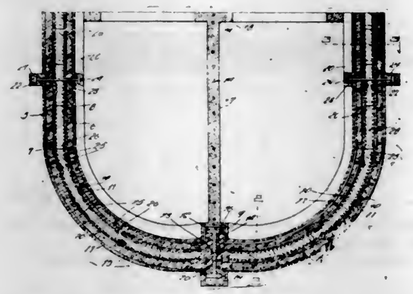
[Claims 2 to 6 not printed in the Gazette.]

1,267,668. CONCRETE SHIP-HULL. EDWARD F. KENNELLY, Boston, Mass., assignor of one-half to William J. Sheils, Boston, Mass. Filed Feb. 13, 1918. Serial No. 216,914. (Cl. 114—65.)

1. A concrete ship-hull of the character described, comprising inner and outer spaced shells to afford a chamber therebetween, and an elastic composition serving as a filler for the chamber.

2. A concrete ship-hull of the character described, comprising inner and outer spaced shells to afford a chamber therebetween, and a filler for the chamber comprising an elastic waterproof composition.

6. A concrete ship-hull of the character described, comprising inner and outer spaced shells to afford a chamber therebetween, two sets of metallic plates arranged upon the inner sides of the spaced shells and arranged in spaced relation, spacing elements serving to connect the two sets



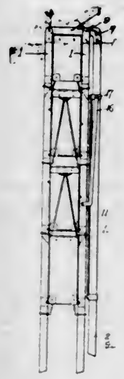
of metallic plates, and a filler arranged between the two sets of metallic plates.

[Claims 3 to 5 not printed in the Gazette.]

1,267,669. PROCESS OF PRODUCING A HARD COPPER ALLOY. OSCAR C. M. KNUDSEN, Brooklyn, N. Y. Filed Mar. 22, 1917. Serial No. 156,744. (Cl. 75—1.)

The process of producing a hard alloy composed chiefly of copper and having only a small percentage of aluminum, consisting in melting the aluminum first, then adding thereto the copper broken up into small particles, then increasing the temperature after the copper is added to melt the copper particles, and mixing the copper particles with the molten aluminum during the increased temperature thereof.

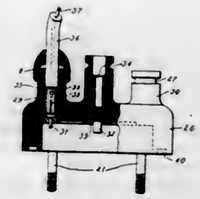
1,267,670. COLLAPSIBLE STEP-LADDER. GEORGE H. A. KOHLER, New York, N. Y., assignor to Tuckaway Folding Ladder Company, Inc., a Corporation of New York. Filed July 10, 1917. Serial No. 179,618. (Cl. 228—16.)



1. In a collapsible step-ladder, the combination comprising two pairs of lateral uprights, a plurality of folding steps having a central hinge and pivotally supported between the uprights, horizontal cross-bars pivotally connected to the front and rear uprights of each pair adjacent the top-ends thereof, a pair of rear legs for supporting the ladder in a self-supporting position, said rear legs being pivotally secured to said cross-bars and to said rear uprights of each lateral pair at spaced points, so as to provide a lever arm between said points, two pairs of slidable braces the upper ends of each pair being pivotally secured to said steps adjacent the center thereof and the lower ends being slidably secured to the respective pairs of lateral uprights, and stops for limiting the downward movement of said braces.

[Claims 2 and 3 not printed in the Gazette.]

1,267,671. TIMER-DISTRIBUTER. GEORGE L. LANG, Newark, N. J., assignor to Splitdorf Electrical Company, Newark, N. J. Filed Oct. 28, 1914. Serial No. 869,017. (Cl. 123—168.)



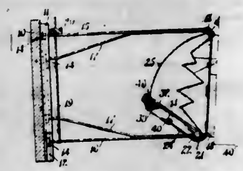
1. In a device of the character described, the combination of a distributer block having secondary electrodes mounted therein, a timer case, a cam adapted to rotate within said case, a distributing finger mounted on said cam, a rotatable member pivoted on said timer case, said rotatable member having a wearing element adapted to engage said rotatable cam and also having a horn like projection, a second rotatable member having two elements mounted thereon and adapted to receive said horn projection of the first rotatable member therebetween, whereby the operation of said first rotatable member by said cam causes the second rotatable member to close and open a primary electrical circuit thereby causing secondary electrical impulses to pass from said distributing finger to said secondary electrodes mounted in said block, substantially as described.

2. In a device of the character described, the combination of a distributer block having secondary electrodes mounted therein, a timer case, a cam adapted to rotate within said case, a distributer finger mounted on said cam, a stationary contact, a movable member pivoted to said case and carrying the following members, a flexible member having a contact adapted to coöperate with said stationary contact, a rigid member having a hook at one end to engage said flexible member whereby said contacts are quickly separated after being closed, a second rigid member below the first and a flexible member adjacent the second rigid member; a rotatable member pivoted to the case and having a part adapted to be engaged by said cam and a part extending between the last mentioned rigid and flexible members, whereby when the rotatable member is operated by said cam in one direction said contacts are closed and opened to cause electrical impulses to pass from said distributer finger to said second electrodes and when said cam is operated in the reverse direction said contacts are not closed.

3. In a device of the character described, the combination of a distributer block having electrodes mounted therein, a timer case, a driving shaft projecting into said case, a rotatable cam mounted on the end of said shaft, a distributing device mounted on said cam, and adapted to distribute current impulses to said electrodes in said distributer block, a rotatable member rotated by said cam and a second rotatable member operated by said first rotatable member, an adjustable contact mounted within said timer case, a second contact carried on said second rotatable member, said contacts being closed and opened by said rotatable member through the movement of said cam, whereby current impulses are sent out from the electrodes mounted in said distributer block, substantially as described.

[Claims 4 to 9 not printed in the Gazette.]

1,267,672. TORPEDO AND MINE DEFLECTOR. ANTHONY LANZETTA, New York, N. Y. Filed Sept. 1, 1917. Serial No. 189,321. (Cl. 114—240.)



1. A torpedo deflector comprising a net pivotally supported at one of its lower ends, and supports therefor, said net being so arranged that when struck by a floating body it will be turned upon its axis at its lower end and deflect said body.

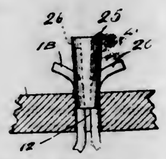
3. A ship defending net having an arcuate portion and an exterior face presenting a series of alternating projections and indentations, means adapted to distend said net, means for extending said net from a ship, and means for raising and lowering said net.

8. A torpedo deflector comprising slideways secured to the hull of a ship, upper and lower arms slidable in said slideways, floats carried by said upper arms, vertically disposed nets pivotally secured to said lower arms and normally secured to said upper arms, a cable connecting the ends of each net, and hinged plates supported by said lower arms and engaging said nets to distend them.

11. A torpedo deflector comprising slideways secured to the hull of a ship, arms slidable therein, vertically disposed nets pivotally secured to said arms, cables engaging the ends of said net and adapted to draw said ends toward each other when said net is forcibly struck by a body, and means for limiting the movements of said cables with respect to said net.

[Claims 2, 4 to 7, 9, and 10 not printed in the Gazette.]

1,267,673. MEANS FOR BONDING RAILS. FREDERICK C. LAVARACK, Orange, N. J. Filed Jan. 8, 1914. Serial No. 810,974. (Cl. 173—262.)

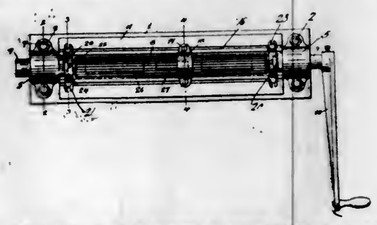


A bonding pin for use in connecting the terminals of a plurality of bonding wires to rails, comprising a tapered body formed with diametrically-opposed wire receiving grooves of uniform depth throughout and parallel with the tapered surface of the pin to provide a wedge-shaped section between the bottoms of the groove, the grooves extending from end to end of the body and open at both ends.

1,267,674. REAMER. FANNIE LELA LEE, Paducah, Ky. Filed May 24, 1917. Serial No. 170,744. (Cl. 77—72.)

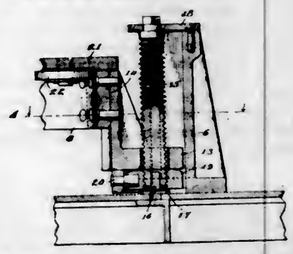
1. A reaming device embodying bars disposed side by side, a reamer mounted for rotation between said bars longitudinally thereof, and means for securing bearings on said bars astride the reamer, the reamer projecting partially from between the bars to engage a bearing disposed astride thereof.

5. A reaming device embodying a bed plate, pairs of posts carried by the bed plate near its ends, parallel bars disposed longitudinally upon the bed plate, means attaching the bars to the bed plate for transverse adjustment, bearings slidable upon said posts, a shaft seated in said bearings and having a reamer between said bars, set screws threaded through the bed plate and supporting said bearings for adjustment, means for securing bearings on said bars astride the reamer, caps slidable upon the posts to hold the shaft seated in the first mentioned bearings, and springs upon the posts pressing the caps toward the bed plates.



[Claims 2 to 4 and 6 not printed in the Gazette.]

1,267,675. SUPPORTING AND ADJUSTING MECHANISM FOR MINING-MACHINES. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Original application filed Sept. 30, 1911, Serial No. 652,099. Divided and this application filed Mar. 7, 1913, Serial No. 752,742. Renewed Oct. 16, 1917. Serial No. 196,975. (Cl. 125—14.)



9. In a coal cutting mechanism, the combination of a wheel-supported rigid base adapted to run upon and be braced by the rails of a mine track, an elongated laterally movable endless chain cutter apparatus carried by the base and projecting horizontally therefrom, supporting means between the laterally movable cutter apparatus and the base comprising a plurality of upright supports extending upward from the base and held in upright positions at the angles of a relatively widely extended horizontal polygon, two of the said supports being situated at widely separated points near the front end of the base to furnish two abutments for the cutter apparatus close to the coal face, and connections between all of the upright supports and the cutter apparatus for sustaining said apparatus and adjusting it vertically in relation to the base, motor devices carried by the base, and driving connections whereby the power of said motor devices is caused to drive the cutter apparatus and to move it laterally, thereby forming a horizontally extending kerf.

[Claims 1 to 8 not printed in the Gazette.]

1,267,676. NON-SKID DEVICE. HENRY J. LIST, San Francisco, Cal. Filed July 27, 1917. Serial No. 183,194. (Cl. 152—16.)

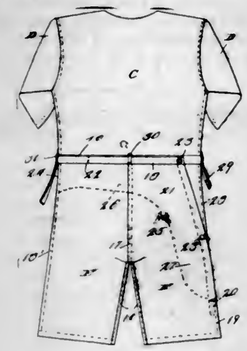


3. A non-skid device for vehicle tires comprising a series of metallic rings interwoven to bring diametrically opposed points of each ring on opposite sides of the mid-

plane of the tire; and transverse clamps detachably interwoven with the rings to detachably secure said rings on a tire.

[Claims 1 and 2 not printed in the Gazette.]

1,267,677. UNION-PAJAMAS. PHILIP A. LUCKETT, Salisbury, Md. Filed Nov. 13, 1916. Serial No. 131,047. (Cl. 2—144.)



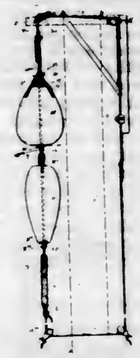
A union garment, including, below the waist-line, two overlying back members each of which extends from one side seam of the garment to the other, the lower member consisting of a blank having an upper edge coextensive with the waist-line, a side edge along one side seam extending to a point near the lower end of the corresponding leg and connected thereto at the side seam only, a comparatively short side edge along the opposite side seam, and a lower edge determined by an irregular curve extending from the lower end of the short edge to the lower end of the long edge and defining a hollowed out portion across the middle of the garment, and the upper member consisting of a blank substantially coextensive with the back of the garment below the waist-line and having that vertical edge corresponding to the short edge of the lower member, fastened throughout the length of the side seam, its upper edge attached along the waist-line to permanently overlie for a short distance the short portion of the lower member and its opposite vertical edge secured from the lower end of the long edge of the lower member to the lower end of the leg, the remainder of the upper blank constituting an upwardly closing portion which will cover said hollowed out portion and provide double folds of the garment around the edges of the latter opposite all points where the upper member is unattached.

1,267,678. PRACTICE APPARATUS FOR BOXERS. WILLIAM H. MCARDLE and ROBERT B. MCARDLE, Camden, N. J. Filed Dec. 14, 1915. Serial No. 66,797. (Cl. 46—69.)

1. In a device of the character described, the combination of a member flexibly supported by a bracket, means for holding same at a flexible tension, a striking bag slidably mounted on said member, means for supporting said bag on said member, and means for returning said bag to its original position on said member when forced upwardly.

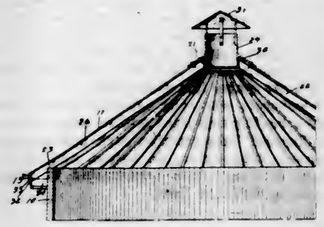
2. In a device of the character described, the combination of a member flexibly supported by a bracket, means for holding same at a flexible tension, a striking bag slidably mounted on said member, means for movably supporting said bag on said member, and a compression spring carried by said member acting on said bag for the purpose set forth.

3. In a device of the character described, the combination of a member flexibly supported by a bracket, means for holding same at a flexible tension, a striking bag slidably mounted on said member, means for movably supporting said bag on said member, a compression spring carried by said member acting on said bag for the purposes set forth, and means for raising and lowering said member in relation to said bracket.



[Claims 4 to 7 not printed in the Gazette.]

1,267,679. SHEET-METAL SILO-ROOF. JAMES F. MCGAFFEE, Des Moines, Iowa. Filed Mar. 7, 1916. Serial No. 82,652. (Cl. 108—32.)



1. In a silo roof construction, the combination of an annular flexible or springing channel, the flanges of said channel extending outwardly and downwardly, a series of roof beams provided with means near their lower ends for engaging a side wall, the upper ends of said beams being designed to be inserted in and secured to said channel, the flexibility or springing tendency of the channel providing means whereby any irregularities in contour of the silo wall may be compensated for by the flexible or springing channel without changing the position of the wall relative to the roof beams, waterproof roofing extended over said beams, and a ventilating cylinder having between its upper and lower ends an outwardly and downwardly extending flange and being designed to be inserted in the annular channel with its flange overlapping the roofing and forming a water shedding joint even though the annular channel is bent or sprung considerably out of a true circle.

2. In a silo roof construction, the combination of an annular springing or flexible channel, the flanges of said channel extending outwardly and downwardly, a series of roof beams provided with means near their lower ends for engaging a side wall, the upper ends of said beams being designed to be inserted in and secured to said channel, the flexibility or springing tendency of the channel providing means whereby any irregularities in contour of the silo wall may be compensated for by the flexible or springing channel without changing the position of the roof beams relative to the wall, waterproof roofing extended over said beams, a ventilating cylinder having between its upper and lower ends an outwardly and downwardly extending flange and being designed to be inserted

in the annular channel with its flange overlapping the roofing and forming a water shedding joint even though the annular channel is bent or sprung considerably out of a true circle, and means for connecting the flange of the ventilating cylinder to the beams for strengthening and firmly supporting the flexible annular channel.

3. A silo roof comprising a plurality of spaced roof beams, and a plurality of flexible roof sections having each side edge secured to a roof beam, the roof sections having a longitudinal portion adjacent to each side edge inclined downwardly and laterally and a longitudinal central V shaped raised rib adapted to strengthen the roof section longitudinally and to spread as the roof beams move toward or from each other.

4. In a silo roof adapted to be placed on a substantially circular silo, a plurality of roof beams having a notch at a predetermined point adjacent to their outer ends whereby they may be secured to the silo wall, a plinole collar, and means for securing the inner ends of said beams to said collar.

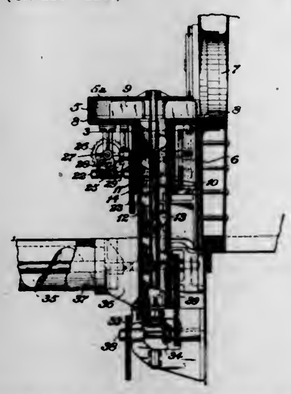
1,267,680. CONCRETE SHIP. ALAN MACDONALD, San Francisco, Cal., assignor to San Francisco Ship Building Co., San Francisco, Cal., a Corporation of California. Filed Oct. 23, 1917. Serial No. 198,010. (Cl. 114—65.)



1. In a concrete ship, the concrete side walls thereof having embedded within them a plurality of obliquely disposed metallic bars crossing each other, and the concrete deck and concrete bottom of said ship having embedded in them continuations of said bars disposed obliquely to the fore and aft center line of the ship.

2. In a concrete ship, the concrete sides, bottom and deck thereof having embedded within them a plurality of obliquely disposed bars crossing each other in the sides, and continued obliquely in the bottom and deck, the extremities of alternate bars terminating in said bottom and deck along different lines.

1,267,681. MECHANICAL STOKER. FREDERICK W. MARTIN, New York, N. Y., assignor to Albert G. Elvin, Plandome, N. Y. Filed Oct. 26, 1917. Serial No. 198,556. (Cl. 110—115.)



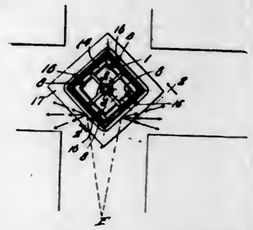
1. In a mechanical stoker, the combination of a casing having an opening at one side adapted to communicate with a furnace; a rotary distributing disk mounted in said casing; and automatically operable means for rotating said disk at variable speeds in the course of each revolution.

4. In a mechanical stoker, the combination of a casing having an opening at one side adapted to communicate with a furnace; a rotary distributing disk having vanes on its upper face and mounted in said casing; and a reversing and variable speed mechanism for operating said disk.

7. In a mechanical stoker, the combination of a casing having an opening at one side adapted to communicate with a furnace; a rotary distributing disk having a central opening and mounted on a substantially vertical axis in said casing; and means for feeding fuel up through said opening and upon the upper face of said disk.

[Claims 2, 3, 5, 6, and 8 to 11 not printed in the Gazette.]

1,267,682. SAFETY DEVICE. CHARLES C. MASON, Perth Amboy, N. J. Filed Jan. 26, 1917. Serial No. 144,729. (Cl. 88—67.)



1. A reflector of the class described comprising a spider having an attaching collar, a substantially rectangular band supported by said collar, brackets depending from said band and having their lower ends converging and provided with hooks, mirror containing casings supported at their lower edges in said hooks, and other brackets carried by said band and engaging the upper edges of said casings.

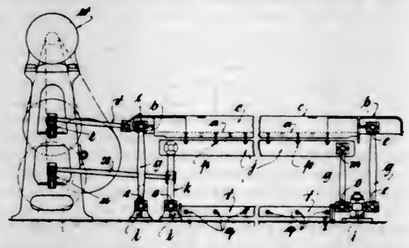
3. A reflector of the class described comprising a spider having arms with a collar connecting their inner ends, the free ends of said arms being bent laterally outward and upward to form hangers, a substantially rectangular band supported by said hangers, brackets depending from said band and having their lower ends bent outwardly and upwardly to form hooks, said brackets converging toward their lower ends, securing clips carried by the free ends of said spider arms above the hooks and adapted to coöperate to engage the upper edge of said band for clamping and holding it in engagement with said hooks, mirror containing casings supported at their lower edges in the hooks of said brackets, and means carried by said band for engaging the upper edges of said casings.

4. In a device of the class described, the combination of a supporting frame, of a rectangular frame carried thereby, each of its side walls having its ends converging toward the lower edge thereof and formed of a plate having pockets on its outer face at its upper and lower edges, said pockets opening toward each other, a mirror arranged on the outer face of said plate with its upper and lower edges disposed in said pockets, said plate being offset outwardly adjacent said pockets to form a chamber at the back of said mirror, and a moisture absorber disposed in said chamber.

[Claim 2 not printed in the Gazette.]

1,267,683. APPARATUS FOR WASHING OR SIMILARLY TREATING PULP. SAMUEL MILNE, Edinburgh, Scotland. Filed Dec. 26, 1916. Serial No. 138,985. (Cl. 141—12.)

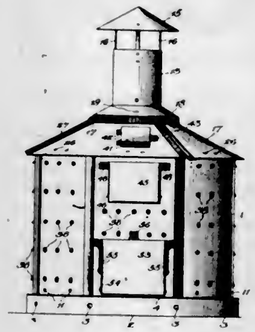
3. Apparatus for treating pulp, comprising, in combination, a cloth tray, a frame with sides to support said tray, a second frame below the tray, a series of sprinklers on said second frame, a water conduit, flexible connections between the conduit and the sprinklers, valves to control the flow of the fluid, rocking members to support the frames, cranks and connecting rods to reciprocate said frames together with gearing to actuate said frames at different relative speeds, substantially as described.



4. Apparatus for treating pulp, comprising, in combination, a cloth tray, a frame with sides to support said tray a second frame below the tray, a series of sprinklers on said second frame, a water conduit, flexible connections between the conduit and the sprinklers, valves to control the flow of the fluid, rocking members to support the frames, cranks and connecting rods to reciprocate said frames together with means to vary the inclination of the first mentioned frame and the sprinkler frame to the horizontal plane, substantially as described.

[Claims 1 and 2 not printed in the Gazette.]

1,267,684. SHEET-METAL BIN AND CORN-CRIB. HENRY E. MOOMAW, Salem, Va., assignor to John E. Annis, Chattanooga, Tenn. Filed Oct. 22, 1917. Serial No. 197,932. (Cl. 189—3.)

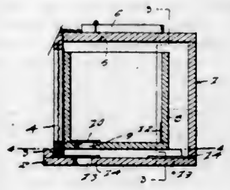


1. In a structure of the class set forth, a base, a sectional wall, a peaked roof-plate supported on the wall, a ventilating flue extending from the base up through a hole in the roof-plate, a flue extension inclosing the upper end of the flue and provided with an annular apron-like flange 14 at its lower end which lies under the roof-plate, an annular collar 18 bearing upon the roof and also against the exterior of said flue extension, and fastening bolts extending through said collar and said apron-like flange and the intermediate roof-plate.

2. In a structure of the class set forth, a base, a sectional wall supported thereon, a sectional roof supported on the wall, and means for detachably anchoring the roof to the upper edge of the wall, said means embodying a plate 21 fastened to the upper edge of each section and set away from the inner face thereof, and anchoring straps fastened to the roof and extending down between the plate and the adjacent face of the wall and bent upwardly around the under edge of said plate.

3. In a metallic building, a wall consisting of a series of vertical sections connected together by slidable vertical joints at their edges and anchored to the base of the building to hold the sections against relative sliding action, said vertical joints consisting of vertical interlocking flanges and channels, said flanges and channels being formed by folding one end of each section back upon itself to form a double-edge vertical flange having one of its edges of double thickness, and the other edge of the section being folded upon itself to form a vertical double channel in which said double-edged flange has a sliding fit, the free edge of said double channel lying between the wall part of the adjacent section and the double thickness part of said flange.

1,267,685. DRY CLOSET. ALBERT H. MOORE, Kensett, Ark. Filed Sept. 6, 1916. Serial No. 118,681. (Cl. 4—32.)



A device of the class described comprising a casing having the upper wall thereof provided with openings, a lower wall having its rear edge extending beyond the rear wall of said casing, a longitudinally extending strip secured to the extending portion of said lower wall, spacing strips located within the casing and secured to the lower wall thereof and extending toward the rear wall, a detachable rear wall supported o nthe extended portion of said lower wall between said longitudinally extending strip and said spacing strips, means for detachably securing said rear wall to said upper wall, and a receptacle removably mounted within the casing and resting on the spacing strips.

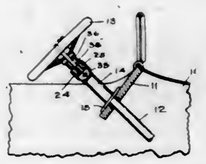
1,267,686. REFRACTORY FURNACE-LINING AND PROCESS OF MAKING. SPENCER B. NEWBERRY, Cleveland, Ohio. Filed June 25, 1917. Serial No. 176,850. (Cl. 106—9.)

1. The process of making basic refractory material for furnace lining, consisting in mixing and grinding limestone with a small percentage of oxids capable of forming fusible compounds with lime substantially free from silica, and calcining the mixture to a dense, sintered clinker.

13. A basic refractory material consisting of magnesian lime with 2 to 10 per cent. of an oxid of the aluminum-iron group substantially free from silica in dense and sintered condition.

[Claims 2 to 12 not printed in the Gazette.]

1,267,687. DEVICE FOR LOCKING MOTOR-VEHICLES. JOSEPH R. NICHOLS, Seattle, Wash. Filed Jan. 17, 1918. Serial No. 212,362. (Cl. 70—126.)

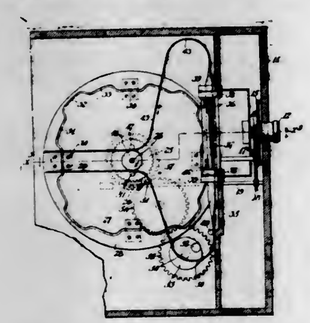


1. A locking device for the steering apparatus of a motor vehicle comprising a two part collar adapted to be secured to a fixed steering post housing, oppositely disposed outwardly projecting arms on said collar said arms having perforations in their outer ends and one of said perforated portions having a transverse slot, a U-shaped locking mem-

ber adapted to straddle the hub portion and fit between the spokes of a steering wheel the ends of said locking member being adapted to project within the perforations in said arms and one of said ends having a transverse slot that registers with the slot in the perforated portion of said arm and locking means engageable within the said slots to lock the U-shaped member to the collar.

2. In a locking device of the class described, the combination with a steering apparatus including a steering wheel with its associated spark and fuel control levers and steering post that is mounted in a fixed housing, of a two part collar secured on the said housing, stud pins connecting said collar and said housing to prevent the collar from being turned on the housing, arms projecting outwardly from opposite sides of the collar said arms each having perforations in their outer extremities that extend parallel with said housing and one of said arms having a transverse slot through its perforated portion for the reception of a lock; a U-shaped locking member adapted to project downwardly over the hub of the steering wheel and between the spokes thereof in a position to intercept and prevent movement of said spark and fuel control levers when said levers are in an inoperative position, the lower ends of said locking member being adapted to project through the perforations in the extremities of said arms and one of said ends having a transverse slot that registers with the slot in the perforated portion of one of said arms for the reception of a lock; and a stop on said locking member to engage with the top side of one of said arms.

1,267,688. MOTION-PICTURE CAMERA. HENRY K. NORTON, Los Angeles, Cal. Filed June 27, 1916. Serial No. 106,256. (Cl. 88—16.6.)

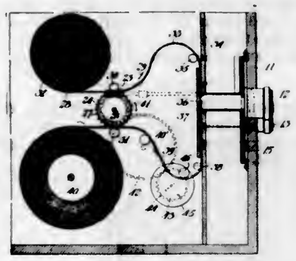


1. A motion picture camera comprising a light tight box; a photographic film in said box; a pair of lenses set in the front of said box and so arranged that they are focused on the same portion of space, the center of said lenses being separated by a distance approximately equal to the distance between the centers of a pair of adult human eyes; a rotating shutter having a single opening for causing an exposure first through one lens and then through the other lens with considerable dark intervals between said exposures; mechanism connected to move synchronously with said shutter to advance said film a distance at least equal to one exposure in each of said dark intervals between exposures; a pair of prisms, each prism being arranged to direct the image produced by one of said lenses upon the film in such a manner that the vertical axes of the images from both lenses coincide with the vertical axis of the film, and the horizontal axes fall in a plane to which said vertical axis of said film is perpendicular; a carrier in which said film slides vertically, said carrier being arranged to swing about the vertical axis of the film, a cam driven synchronously with said shutter and engaging said carrier, said cam being so formed that it swings said carrier in each of said dark intervals into a proper position to receive vertically the image from the lens to be next exposed by said shutter.

10. A motion picture camera comprising a light tight box; a photographic film in said box; a pair of lenses set in the front of said box and so arranged that they are focused on the same portion of space, the center of said lenses being separated by a distance approximately equal to the distance between the centers of a pair of adult human eyes; means for alternately exposing said lenses with dark intervals between exposures; mechanism connected to move synchronously with said shutter to advance said film a distance at least equal to one exposure in each of said dark intervals between exposures; a pair of light deflecting means, each arranged to direct the image produced by one of said lenses upon the film in such a manner that the vertical axes of the images from both lenses coincide with the vertical axis of the film, and the horizontal axes fall in a plane to which said vertical axis of said film is perpendicular; and means for twisting said film during each dark interval into a position to vertically receive the image of the succeeding exposure.

[Claims 2 to 9 not printed in the Gazette.]

1,267,689. DUPLEX STEREOSCOPIC MOTION-PICTURE CAMERA. HENRY K. NORTON, Los Angeles, Cal. Filed July 1, 1916. Serial No. 107,477. (Cl. 88—16.6.)



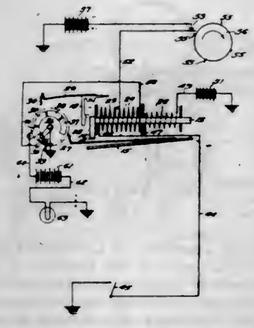
1. A motion picture camera comprising a light tight box; a film in said box; two sets of lens systems rigidly secured in the front wall of said box and focused on the same field of view, the centers of said lenses being approximately the same distance apart as the distance between the centers of an average pair of adult human eyes; a shutter having an aperture so placed that an exposure may be made alternately through both lenses; a pair of primary mirrors each so placed as to turn the light rays from one of said lenses toward the center of said box; a pair of secondary mirrors each arranged to direct said light rays on said film, said lenses and mirrors being so arranged that the image from one lens falls upon the film directly below the image from the other lens; and mechanism for advancing the film a distance a little greater than the length of the two said images during one of the two dark intervals between exposures.

2. A motion picture camera comprising a light tight box; a film in said box; two sets of lens systems rigidly secured in the front wall of said box and focused on the same field of view, the centers of said lenses being approximately the same distance apart as the distance between the centers of an average pair of adult human eyes; means for alternately making an exposure through both lens systems; a pair of primary mirrors each so placed as to turn the light rays from one of said lenses toward the center of said box; a pair of secondary mirrors each arranged to direct said light rays on said film, said lenses and mirrors being so arranged that the image from one lens falls upon the film directly below the image from the other lens; and mechanism for advancing the film a distance a little greater than the length of the two said images during one of the two dark intervals between exposures.

3. A motion picture camera comprising a light tight box; a film in said box; two sets of lens systems rigidly secured in the front wall of said box and focused on the same field of view, the centers of said lenses being approximately the same distance apart as the distance between the centers of an average pair of adult human eyes; a shutter having an aperture so placed that an exposure may be made alternately through each lens; means for directing the image from one lens to a portion of said film below the image projecting thereon from the other lens; and mechanism for advancing the film a distance a little greater than the length of the two said images during one of the two dark intervals between exposures.

4. A motion picture camera comprising a light tight box; a film in said box; two sets of lens systems rigidly secured in the front wall of said box and focused on the same field of view, the centers of said lenses being approximately the same distance apart as the distance between the centers of an average pair of adult human eyes; means for alternately making an exposure through each lens; means for directing the image from one lens to a portion of said film below the image projecting thereon from the other lens; and mechanism for advancing the film a distance a little greater than the length of the two said images during one of the two dark intervals between exposures.

1,267,690. AUTOMATIC TIMING DEVICE FOR CLOSED CIRCUITS. EARL H. PLAISTED and ARTHUR O. BLACK, Butler, Pa. Filed Feb. 20, 1917. Serial No. 149,815. (Cl. 161—19.)



1. The combination with a main circuit adapted to be closed, a yielding time indicator normally held at a predetermined position of rest, means in said main circuit actuated when the latter is closed to prevent the retrograde movement of the time indicator, a time circuit adapted to be closed subsequent to the closing of the main circuit, and means in the circuit for advancing the indicator when the main circuit is closed, both of said means being adapted to release the time indicator when said main circuit is opened, whereby the indicator is adapted to automatically return to normal position of rest.

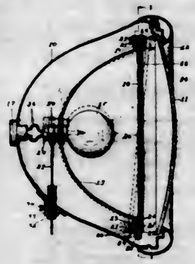
2. The combination with a main circuit adapted to be closed, of a time indicator yieldingly held in a predetermined position of rest, retaining means included in the main circuit adapted to engage the indicator and prevent the retrograde movement thereof when the main circuit is closed, a time circuit adapted to be closed, advancing means in said time circuit for actuating the indicator when the main circuit is closed, and a neutralizing circuit including the time indicator and said time circuit and adapted to retain the advancing means from operation when said indicator has moved through a predetermined distance, said retaining means being adapted to release the indicator when said main circuit is opened and said indicator being adapted to return to its normal position of rest when released.

9. The combination with a main circuit adapted to be closed, an actuating device included in said main circuit, a time indicator associated with said actuating device to be moved thereby, a spring connected to said indicator for normally urging the same into a predetermined position of rest, and a deënergizing circuit including the indicator and said actuating device to arrest the operation of the latter upon the advancement of the indicator at predetermined distances, said spring being adapted to return the indicator to normal position when said main circuit is open.

11. The combination with a main circuit adapted to be closed, of an actuating device included in said main circuit, a time indicator associated with said actuating device, said indicator being provided with a contact arm movable therewith, a row of contacts arranged in the path of said contact arm, a signal circuit including the last contact of the row, and means for connecting two or more contacts of the row to include the same in said signal circuit and vary the time of closing the same during the operation of the indicator.

[Claims 3 to 8, 10, and 12 not printed in the Gazette.]

1,267,691. HEADLIGHT. TRUMAN W. POST, Providence, R. I., and CLARENCE B. DES JARDINS, Toledo, Ohio, assignors to Electric Auto-Lite Corporation, Toledo, Ohio, a Corporation of Delaware. Filed Sept. 14, 1917. Serial No. 191,404. (Cl. 240—41.)

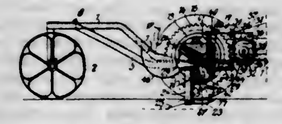


4. A device of the class described, comprising the combination of a casing; a reflector within said casing, the forward edge of said reflector being rolled back to form a circular stiffening bead; a reinforcing wire disposed within said bead; a reflector trunnion integral with said wire; and a bearing for said trunnion carried by said casing.

5. A device of the class described, comprising the combination of a casing; a reflector within said casing, the front edge of said reflector being rolled back to form a stiffening bead; a reinforcing wire in said bead provided with a trunnion integral therewith; a spring strip carried by said casing; and a trunnion bearing mounted on said spring strip.

[Claims 1 to 3 and 6 not printed in the Gazette.]

1,267,692. POTATO-SEPARATOR. ALFRED PRINZ, Schwiebus, Germany. Filed July 24, 1913. Serial No. 780,956. (Cl. 130—32.)



1. In a potato separator, the combination, of a rotary disk adapted to receive the potatoes dug from the soil, a stationary member provided above the said disk and adapted to permit the potatoes revolving with said disk to be thrown over the said member but to arrest heavy objects, the edge of the disk being free or exposed at a

point out of registry with said stationary member, to allow the heavy objects to be thrown off at such point.

2. In a potato separator, the combination, of a rotary disk adapted to receive the potatoes dug from the soil, a stationary member provided above the said disk and adapted to permit the potatoes revolving with said disk to be thrown over the same but to arrest heavy objects, and a stripping member arranged above said disk behind the stationary member and adapted to strip from said disk the objects arrested by said member.

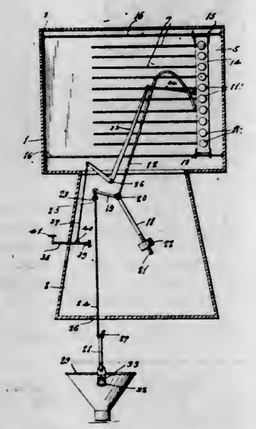
3. In a potato separator, the combination, of a rotary disk adapted to receive the potatoes and stones dug from the soil, and a stationary non-radial member arranged above said disk and adapted to arrest and deflect stones while allowing potatoes to be thrown over said member.

5. In a device of the class described, the combination, with a rotary disk adapted to receive the articles to be separated, of a stationary non-radial member arranged above said disk and adapted to arrest and deflect relatively heavy articles while allowing relatively light articles to be thrown over said member, and a stripping member located above said disk and arranged to remove therefrom the articles arrested and deflected by said first-named member.

6. In a device of the class described, the combination, with a rotary disk adapted to receive the articles to be separated, of a stationary stop member arranged above said disk and adapted to arrest and deflect relatively heavy articles while allowing relatively light articles to be thrown over said member, and a stripping member also located above said disk and arranged to remove therefrom the articles arrested and deflected by said stop member.

[Claim 4 not printed in the Gazette.]

1,267,693. RECORDING-SCALE. EMIL P. QUIRAM, Elysian, Minn. Filed June 8, 1917. Serial No. 173,596. (Cl. 265—8.)



1. A recording scale of the class described including a frame or casing provided with means for holding a chart sheet, weighing mechanism having a hand or pointer arranged to swing across the chart sheet, and marking mechanism operable manually and also movable across the chart sheet to position it contiguous to the hand or pointer, said marking mechanism being provided with manually operable marking means.

4. A recording scale including a casing adapted to receive a chart sheet and provided with a pocket having parallel longitudinal slots, a member movable backwardly and forwardly and having a plurality of punches located at the said slots, means for guiding the said member, weighing mechanism having a hand or pointer movable over the chart, and operating mechanism connected with the slidable member.

6. A recording scale of the class described including a frame or casing adapted to receive a chart sheet, weighing mechanism comprising an angle lever having angularly related arms, one of the arms being provided with an adjustable weight, a pendent rod connected with the other arm, a hand or pointer carried by the weighing mechanism and movable over the chart sheet, and means movable over the chart sheet to position it contiguous to the pointer or hand for manually marking the chart sheet for indicating the weight thereon.

7. A recording scale including a frame or casing having a rectangular upper chart receiving portion and a lower portion or housing, means located within the upper portion of the frame or casing for holding a chart sheet, weighing mechanism mounted within the lower portion of the frame or casing and having a hand or pointer extending into the upper portion of the frame or casing and movable over the chart sheet, a series of marking devices movable over the chart sheet, and operating means for setting the marking devices with relation to the hand or pointer of the weighing mechanism.

[Claims 2, 3, and 5 not printed in the Gazette.]

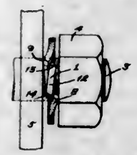
1,267,694. METALLIC CLOTHES-PIN. ARTHUR W. RALSTON, Sheridan, Mo. Filed Sept. 25, 1916. Serial No. 122,029. (Cl. 24—139.)



2. A clothes pin consisting of a length of wire formed to produce coils, the wire at the terminal of one of the coils being formed to produce an elongated loop lying outwardly of the coils and being formed beyond the loop to produce a jaw consisting of a doubled portion of the wire, one of said doubled portions having the free extremity lying within the loop, the other coil having its terminal portion engaged through the loop and formed therebeyond to produce a jaw for coöperation with the first jaw, the wire at the union of the two coils being formed to produce a shoulder extending across the loop and disposed to act as a stop to limit the movement of the jaws away from each other.

[Claim 1 not printed in the Gazette.]

1,267,695. LOCK-WASHER. ALFRED J. RICH, Jr., San Francisco, Cal. Filed Feb. 19, 1917. Serial No. 149,385. Renewed Dec. 17, 1917. Serial No. 207,621. (Cl. 151—35.)



1. A lock washer provided on its outer peripheral edge with a plurality of fingers arranged in pairs at opposite sides thereof, the fingers of each pair extending in a direction toward each other with the free ends thereof separated by a solid portion of the washer body and bent to point in opposite directions from opposite sides of the washer body.

[Claim 2 not printed in the Gazette.]

1,267,696. MANUFACTURE OF ELECTRIC INSULATING MATERIALS AND THE LIKE. WALTER EDWIN WINDSOR RICHARDS, High Holborn, London, England. Filed Dec. 22, 1915. Serial No. 68,224. (Cl. 91—70.)

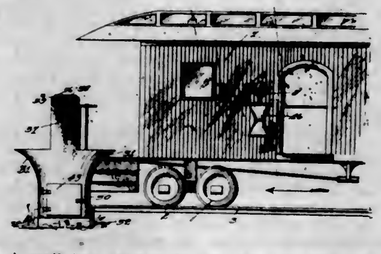
1. The method of manufacturing electric insulating materials which consists in impregnating articles made of cement with the soluble pitch like residuum described.

2. The method of manufacturing products having a polished solid black surface and which have also waterproof and electric insulating qualities which consist solely in impregnating articles made of cement with the soluble pitch like residuum described.

3. As an article of manufacture a porous cohesive mineral base impregnated with the soluble pitch-like residuum described.

4. As an article of manufacture a porous cohesive mineral base impregnated with a soluble pitch-like residuum consisting of products obtained by distillation from the lighter fraction of tar, after the same has been acidulated and properly treated.

1,267,697. MAIL-BAG CATCHER. ALBERT E. ROARK, Scott, Kans. Filed Nov. 24, 1914. Serial No. 873,789. (Cl. 258—20.)



2. A mail bag catcher for use in conjunction with a car traveling upon a railway track, comprising a mail bag receiver disposed adjacent said railway track, a baffle plate pivotally and slidably mounted above said receptacle having its axis at substantially right angles to the direction of travel of the vehicle, resilient elements disposed upon each side of the said baffle plate, whereby to absorb shock resulting from the impact of a mail bag engaging the said baffle plate, and means for limiting the movement of said baffle plate.

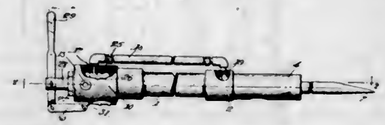
3. A mail bag catcher adapted for use in conjunction with a car traveling upon a railway track, comprising a mail bag retainer mounted on the car, a receiver disposed adjacent said railway track, said receiver having upwardly extending standards thereon, a baffle plate mounted on the upper ends of said standards to have free swinging and sliding movement, cushion springs mounted on opposite sides of the baffle plate and connected in tension with the standards, and lateral extensions on said standards, said lateral extensions being engageable with said mail bag retainer, whereby to release the same and deposit the bag within the receptacle.

4. A mail bag catcher adapted for use with a car traveling upon a railway track, comprising a receiver disposed adjacent and at one side of the track, upright standards mounted at the sides of the receiver, bearing members having elongated openings therein mounted on the upright standards, shock absorbing means in the form of a baffle plate, a shaft connected with said baffle plate and mounted in the elongated openings of the bearings to thus support the baffle plate to have free swinging and sliding movement within the bearings, and springs connected with the baffle plate and with portions of the supporting structure to resiliently oppose both swinging and sliding movement.

5. A mail bag catcher adapted for use with a car traveling upon a railway track, comprising a receiver disposed adjacent and at one side of the track, upright standards mounted at the sides of the receiver, bearing members having elongated openings therein mounted on the upright standards, shock absorbing means in the form of a baffle plate, a shaft connected with said baffle plate and mounted in the elongated openings of the bearings to thus support the baffle plate to have free swinging and sliding movement within the bearings, springs connected with the baffle plate and with portions of the supporting structure to resiliently oppose both swinging and sliding movement, the ends of the openings of the bearings acting to limit sliding movement of the baffle plate, and stop means to limit swinging movement of said plate.

[Claim 1 not printed in the Gazette.]

1,267,698. PNEUMATIC TOOL. ADDO M. ROBERTS and EDWIN G. WILLIAMSON, Greenville, Pa. Filed Sept. 7, 1917. Serial No. 190,234. (Cl. 121—20.)



1. A pneumatic tool comprising a cylinder provided at one end with a tool, a hammer for impacting with said tool slidable in said cylinder, a reciprocable valve connected with a source of air supply at the opposite end of said cylinder, a lever pivoted to said cylinder and connected with said valve to effect its reciprocation, and passages in said cylinder and valve adapted to normally hold the valve in a position where air pressure is admitted to said cylinder to hold said hammer out of engagement with said tool.

2. A pneumatic tool comprising a cylinder provided at one end with a tool, a hammer for impacting with said tool slidable in said cylinder, a reciprocable valve connected with a source of air supply at the opposite end of said cylinder, a lever pivoted to said cylinder and connected with said valve to effect its reciprocation, passages controlled by said valve for operating said hammer, and means controlled by the air pressure from said source of supply for normally holding the valve in inoperative position.

1,267,699. ADHESIVE. CLARENCE R. ROBINSON, Brooklyn, N. Y., assignor to Perkins Glue Company, a Corporation of Pennsylvania. Filed Mar. 13, 1916. Serial No. 83,831. (Cl. 87—17.)

1. The process of making adhesives or coatings, which consists in treating starch in dry form with bisulfate of soda, and caustic soda, mixing therewith tri-sodium phosphate, adding water thereto and cooking the batch until the starch is substantially solubilized, then neutralizing the batch and adding cupra ammonium sulfate.

2. The process of making adhesives or coatings, which consists in treating starch in dry form with bisulfate of soda, and caustic soda, mixing therewith tri-sodium phosphate, adding water thereto and cooking the batch until the starch is substantially solubilized, then neutralizing the batch and adding cupra-ammonium sulfate and casein.

5. The process of making adhesives or coatings, which consists in treating about 100 parts of dry cassava starch with about 1 part bisulfate of soda, and about 6 parts caustic soda, to modify the starch, mixing therewith about 1 part of tri-sodium phosphate and about 6 parts of water, and some ammonia, cooking the mixture until the starch is substantially solubilized, then neutralizing the batch and adding about 1 part of cupra ammonium sulfate.

8. The improved adhesive or coating comprising substantially solubilized starch in water, casein, and a ma-

point out of registry with said stationary member, to allow the heavy objects to be thrown off at such point.

2. In a potato separator, the combination, of a rotary disk adapted to receive the potatoes dug from the soil, a stationary member provided above the said disk and adapted to permit the potatoes revolving with said disk to be thrown over the same but to arrest heavy objects, and a stripping member arranged above said disk behind the stationary member and adapted to strip from said disk the objects arrested by said member.

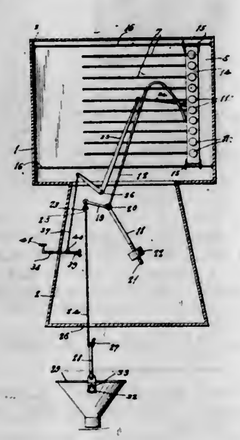
3. In a potato separator, the combination, of a rotary disk adapted to receive the potatoes and stones dug from the soil, and a stationary non-radial member arranged above said disk and adapted to arrest and deflect stones while allowing potatoes to be thrown over said member.

5. In a device of the class described, the combination, with a rotary disk adapted to receive the articles to be separated, of a stationary non-radial member arranged above said disk and adapted to arrest and deflect relatively heavy articles while allowing relatively light articles to be thrown over said member, and a stripping member located above said disk and arranged to remove therefrom the articles arrested and deflected by said first-named member.

6. In a device of the class described, the combination, with a rotary disk adapted to receive the articles to be separated, of a stationary stop member arranged above said disk and adapted to arrest and deflect relatively heavy articles while allowing relatively light articles to be thrown over said member, and a stripping member also located above said disk and arranged to remove therefrom the articles arrested and deflected by said stop member.

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1. A recording scale of the class described including a frame or casing provided with means for holding a chart sheet, weighing mechanism having a hand or pointer arranged to swing across the chart sheet, and marking mechanism operable manually and also movable across the chart sheet to position it contiguous to the hand or pointer, said marking mechanism being provided with manually operable marking means.

4. A recording scale including a casing adapted to receive a chart sheet and provided with a pocket having parallel longitudinal slots, a member movable backwardly and forwardly and having a plurality of punches located at the said slots, means for guiding the said member, weighing mechanism having a hand or pointer movable over the chart, and operating mechanism connected with the slidable member.

6. A recording scale of the class described including a frame or casing adapted to receive a chart sheet, weighing mechanism comprising an angle lever having angularly related arms, one of the arms being provided with an adjustable weight, a pendent rod connected with the other arm, a hand or pointer carried by the weighing mechanism and movable over the chart sheet, and means movable over the chart sheet to position it contiguous to the pointer or hand for manually marking the chart sheet for indicating the weight thereon.

7. A recording scale including a frame or casing having a rectangular upper chart receiving portion and a lower portion or housing, means located within the upper portion of the frame or casing for holding a chart sheet, weighing mechanism mounted within the lower portion of the frame or casing and having a hand or pointer extending into the upper portion of the frame or casing and movable over the chart sheet, a series of marking devices movable over the chart sheet, and operating means for setting the marking devices with relation to the hand or pointer of the weighing mechanism.

[Claims 2, 3, and 5 not printed in the Gazette.]

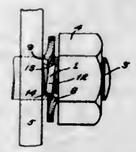
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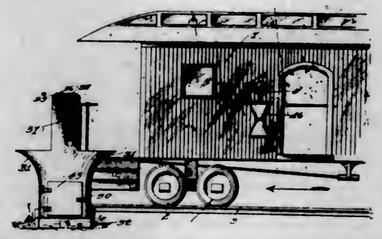
1. The method of manufacturing electric insulating materials which consists in impregnating articles made of cement with the soluble pitch like residuum described.

2. The method of manufacturing products having a polished solid black surface and which have also waterproof and electric insulating qualities which consist solely in impregnating articles made of cement with the soluble pitch like residuum described.

3. As an article of manufacture a porous cohesive mineral base impregnated with the soluble pitch-like residuum described.

4. As an article of manufacture a porous cohesive mineral base impregnated with a soluble pitch-like residuum consisting of products obtained by distillation from the lighter fraction of tar, after the same has been acidulated and properly treated.

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2. A mail bag catcher for use in conjunction with a car traveling upon a railway track, comprising a mail bag receiver disposed adjacent said railway track, a baffle plate pivotally and slidably mounted above said receptacle having its axis at substantially right angles to the direction of travel of the vehicle, resilient elements disposed upon each side of the said baffle plate, whereby to absorb shock resulting from the impact of a mail bag engaging the said baffle plate, and means for limiting the movement of said baffle plate.

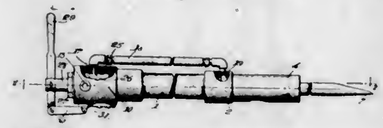
3. A mail bag catcher adapted for use in conjunction with a car traveling upon a railway track, comprising a mail bag retainer mounted on the car, a receiver disposed adjacent said railway track, said receiver having upwardly extending standards thereon, a baffle plate mounted on the upper ends of said standards to have free swinging and sliding movement, cushion springs mounted on opposite sides of the baffle plate and connected in tension with the standards, and lateral extensions on said standards, said lateral extensions being engageable with said mail bag retainer, whereby to release the same and deposit the bag within the receptacle.

4. A mail bag catcher adapted for use with a car traveling upon a railway track, comprising a receiver disposed adjacent and at one side of the track, upright standards mounted at the sides of the receiver, bearing members having elongated openings therein mounted on the upright standards, shock absorbing means in the form of a baffle plate, a shaft connected with said baffle plate and mounted in the elongated openings of the bearings to thus support the baffle plate to have free swinging and sliding movement within the bearings, and springs connected with the baffle plate and with portions of the supporting structure to resiliently oppose both swinging and sliding movement.

5. A mail bag catcher adapted for use with a car traveling upon a railway track, comprising a receiver disposed adjacent and at one side of the track, upright standards mounted at the sides of the receiver, bearing members having elongated openings therein mounted on the upright standards, shock absorbing means in the form of a baffle plate, a shaft connected with said baffle plate and mounted in the elongated openings of the bearings to thus support the baffle plate to have free swinging and sliding movement within the bearings, springs connected with the baffle plate and with portions of the supporting structure to resiliently oppose both swinging and sliding movement, the ends of the openings of the bearings acting to limit sliding movement of the baffle plate, and stop means to limit swinging movement of said plate.

[Claim 1 not printed in the Gazette.]

1,267,698. PNEUMATIC TOOL. ADDO M. ROBERTS and EDWIN G. WILLIAMSON, Greenville, Pa. Filed Sept. 7, 1917. Serial No. 190,234. (Cl. 121—20.)



1. A pneumatic tool comprising a cylinder provided at one end with a tool, a hammer for impacting with said tool slidable in said cylinder, a reciprocable valve connected with a source of air supply at the opposite end of said cylinder, a lever pivoted to said cylinder and connected with said valve to effect its reciprocation, and passages in said cylinder and valve adapted to normally hold the valve in a position where air pressure is admitted to said cylinder to hold said hammer out of engagement with said tool.

2. A pneumatic tool comprising a cylinder provided at one end with a tool, a hammer for impacting with said tool slidable in said cylinder, a reciprocable valve connected with a source of air supply at the opposite end of said cylinder, a lever pivoted to said cylinder and connected with said valve to effect its reciprocation, passages controlled by said valve for operating said hammer, and means controlled by the air pressure from said source of supply for normally holding the valve in inoperative position.

1,267,699. ADHESIVE. CLARENCE R. ROBINSON, Brooklyn, N. Y., assignor to Perkins Glue Company, a Corporation of Pennsylvania. Filed Mar. 13, 1916. Serial No. 83,831. (Cl. 87—17.)

1. The process of making adhesives or coatings, which consists in treating starch in dry form with bisulfate of soda, and caustic soda, mixing therewith tri-sodium phosphate, adding water thereto and cooking the batch until the starch is substantially solubilized, then neutralizing the batch and adding cupra ammonium sulfate.

2. The process of making adhesives or coatings, which consists in treating starch in dry form with bisulfate of soda, and caustic soda, mixing therewith tri-sodium phosphate, adding water thereto and cooking the batch until the starch is substantially solubilized, then neutralizing the batch and adding cupra-ammonium sulfate and casein.

5. The process of making adhesives or coatings, which consists in treating about 100 parts of dry cassava starch with about 1 part bisulfate of soda, and about 6 parts caustic soda, to modify the starch, mixing therewith about 1 part of tri-sodium phosphate and about 6 parts of water, and some ammonia, cooking the mixture until the starch is substantially solubilized, then neutralizing the batch and adding about 1 part of cupra ammonium sulfate.

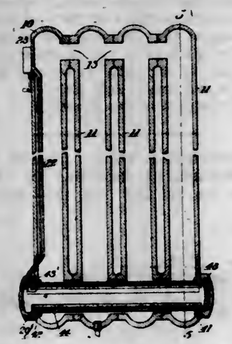
8. The improved adhesive or coating comprising substantially solubilized starch in water, casein, and a ma-

terial to increase the waterproof character of the dried adhesive or coating.

9. The improved adhesive or coating having in combination substantially solubilized starch and water and a material to increase the waterproof character of the dried adhesive or coating.

[Claims 3, 4, 6, 7, and 10 to 12 not printed in the Gazette.]

1,267,700. RADIATOR. WILL R. SAVAGE, Omaha, Nebr. Filed Aug. 21, 1913. Serial No. 785,970. (Cl. 219—38.)



1. In combination with a plurality of radiator sections; a heating element support connected to the outer sections and holding the sections closely together.

2. A raidator of the class described comprising a plurality of sections formed to provide a radiator; with an upper expansion chamber and a lower heating chamber, and a series of tubes connecting said chambers; in combination with a heating element extending lengthwise of the heating chamber and adapted to hold the sections together and to heat the water at the lower ends of all of said tubes uniformly.

3. In a radiator of the class described, a series of sections provided at their upper ends with communicating passages arranged to form an expansion chamber, said sections being further provided at their lower ends with similar passages arranged to form a heating chamber, a filling tube extending downward from the upper end of one of said sections and terminating below the expansion chamber, and a heating element supported in the heating chamber and holding the sections together.

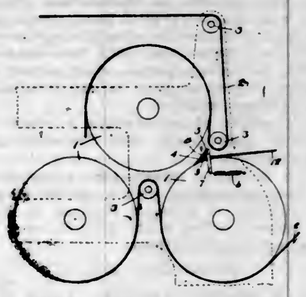
7. In a device of the character described, a plurality of radiator sections provided with a conduit at the bottom, a chambered bonding rod located in said conduit and adapted to hold the sections together at the bottom, and an electric heater mounted in said chambered rod.

13. In a radiator of the class described, a plurality of sections arranged side by side and having alined openings, a heating element support projecting through said alined openings and supported at its ends only in the end sections of the radiator, the ends of the support extending entirely through the end sections, caps secured to the projecting ends of said support, an electric circuit, an electric heating element carried by said support and connected to said circuit, and a thermostat connected in said circuit to intermittently make and break the circuit and thereby maintain a constant heat within the room without a constant current.

[Claims 4 to 6, 8 to 12, 14, and 15 not printed in the Gazette.]

1,267,701. APPARATUS FOR MAKING PAPER. GARRET SCHENCK, Jr., Millinocket, Me., assignor to Great Northern Paper Company, Millinocket, Me., a Corporation of Maine. Filed Mar. 18, 1915. Serial No. 15,361. (Cl. 34—48.)

1. In a papermaking machine, having rotatable drying cylinders arranged in tiers and endless felts for the respective tiers contacting and moving synchronously with the outer surfaces of the cylinders, the combination with a drying cylinder in one tier and a subsequent drying cylinder in the other tier, of a blade arranged adjacent to the earlier drying cylinder, to cause the moist web to leave the earlier cylinder and direct it toward the subsequent drying cylinder, said blade having air passages, and means arranged to blow air through said passages, force the moist web away from the blade and direct it between the subsequent drying cylinder and its felts so as to be led around the subsequent drying cylinder.

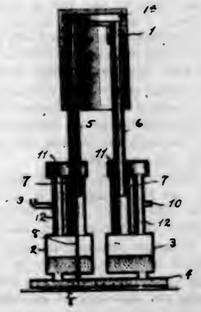


2. In a papermaking machine having drying cylinders arranged in tiers, the combination with a drying cylinder, of a blade associated therewith, arranged to cause the web to leave the cylinder, said blade having numerous perforations, and an air-pipe arranged back of said blade having corresponding perforations, and air supplying means connected with said pipe, whereby air may be forcibly projected through the perforations of said pipe and blade to deflect the web and direct it to another drying cylinder.

3. In a papermaking machine having a series of drying cylinders arranged in tiers, and felts for the respective tiers, the combination with a drying cylinder of the lower tier, and a drying cylinder of the higher tier, of means associated with the lower drying cylinder and arranged to strip the web therefrom and to direct it to contact with and be led around between the upper felt and the higher drying cylinder, and pneumatic means associated with said stripping-means to project currents of air in a direction to blow the stripped web toward the higher drying cylinder.

[Claims 4 and 5 not printed in the Gazette.]

1,267,702. COOLING OF PISTONS. ROBERT SCHLAEPFER, Winterthur, Switzerland, assignor to Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo., a Corporation of Missouri. Filed Sept. 21, 1914. Serial No. 862,830. (Cl. 123—176.)



1. In apparatus of the kind described, a water-supply apparatus, a reciprocating piston having a sliding joint with such apparatus, a chamber above the joint and surrounding the reciprocating part thereof and a drainage passage from such chamber to the water-supply apparatus.

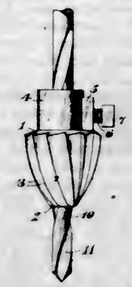
2. In apparatus of the kind described, the combination of a piston having a cooling chamber, a reciprocating tube connected to the piston, a stationary casing wherein said tube reciprocates, a joint between the outside of the tube and the casing, a catch-basin above the tube, and a drainage passage from such chamber.

1,267,703. PISTON-RING. HENRY SCHMITT, Detroit, Mich. Filed Apr. 5, 1917. Serial No. 159,869. (Cl. 121—108.)



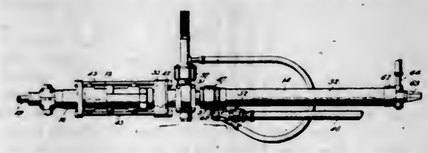
A piston packing ring, comprising a split eccentric member having ends A and B, the end A having its inner wall provided with a recess and an edge undercut to provide a thin extremity, a guide member connected to the thin extremity of the end A and protruding from the extremity, a ledge carried by said guide member and of less length than said guide member, and extending under said extremity, and the end B of said eccentric member having the inner wall thereof, recessed to receive the guide member of the end A, the recessing of the end B providing a tongue to ride against the guide member of the end A and said tongue having a shape for matched relation with the extremity and ledge of the end A when said tongue rests on the guide member of the end A, said eccentric member and said guide member having the inner walls thereof beveled.

1,267,704. COUNTERSINK. OLAF O. SKRUKRUD, Lanesboro, Minn. Filed Aug. 26, 1916. Serial No. 117,000. (Cl. 145—125.)



A one-piece countersink, comprising a body portion or head of conoidal form centrally bored to receive a bit, and a circular series of angularly disposed teeth with a retrogressive pitch or trend from the larger end of the body portion toward the smaller end thereof with respect to the direction of active rotation of the countersink and conforming to the contour of the conoidal shape thereof, each tooth comprising solely two surfaces outwardly converging to form a knife edge extending from the smaller to the larger end of the body portion, with the intervening grooves opening through the upper face of said body portion.

1,267,705. ROCK-DRILL. WILLIAM A. SMITH, Denver, Colo., assignor to The Denver Rock Drill Manufacturing Cumpany, Denver, Colo., a Corporation of Delaware. Filed Dec. 16, 1916. Serial No. 137,364. (Cl. 121—10.)

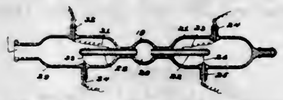


1. In apparatus of the character set forth, the combination with a motor, of a rear head block therefor having a rearwardly extending collar, extensible feeding means for the motor, including a member fitting within the collar and having an outstanding stop flange arranged at the end thereof, a sleeve fitting over the collar and flange and having an inset shoulder overlying said flange, and means for securing the sleeve on the collar and thereby retaining said member in place.

8. In apparatus of the character set forth, the combination with a motor, of extensible feeding means therefor comprising telescoping members, one of which is attached to the motor, the other having an outer end for abutment against a support, a cleansing fluid tube extending longitudinally in the feeding means and connected to said abutment end, and means mounted on the tube and detachably engaging the inner member for holding the feeding means in contracted relation.

[Claims 2 to 7 not printed in the Gazette.]

1,267,706. VACUUM REGULATION. HOMER CLYDE SNOOK, Oak Park, and EDWIN W. KELLY, Chicago, Ill. Original application filed June 11, 1915, Serial No. 33,433. Divided and this application filed Oct. 6, 1917. Serial No. 195,009. (Cl. 250—35.)



1. A regulator for the vacuum of a vacuum tube comprising an osmotic member serving as a resistance, and means for passing current through said osmotic member for heating the same.

8. Means for regulating the vacuum of a vacuum tube comprising an osmotic member forming a wall of said vacuum tube, and a heating circuit including said osmotic member, a source of current and adjustable current restraining means.

13. A regulator for the vacuum of a vacuum tube comprising an osmotic member, a bulb closed to the atmosphere and charged with gases only some of which are adapted to pass through said member into said tube, said member forming a wall between said tube and bulb, and means for heating said member.

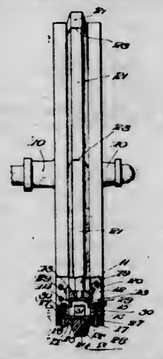
17. A regulator for the vacuum of a vacuum tube comprising an osmotic member, a bulb closed to the atmosphere and charged with a mixture of hydrogen and nitrogen, said member forming a wall between said bulb and said tube, and means for heating said member.

[Claims 2 to 7, 9 to 12, 14 to 16, and 18 to 28 not printed in the Gazette.]

1,267,707. RESILIENT TIRE. WILLIAM C. STEIN, Buffalo, N. Y. Filed Dec. 31, 1917. Serial No. 209,692. (Cl. 152—8.)

1. In a resilient wheel, a rim adapted to bear upon a wheel felly and including laterally directed inner and outer flanges in spaced relation, a plurality of stops extending inwardly from said outer flanges, a tire formed of a plurality of yieldable sections each including a tread portion extending beyond the outer flanges and lateral

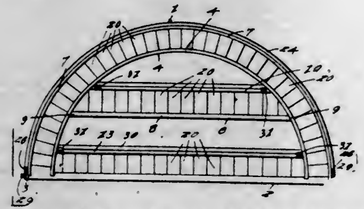
flanges bearing against the outer lateral flanges of the rim, said tire flanges having recesses to receive said stops, and yieldable devices operating to maintain said tire sections normally in outer position.



4. In a resilient wheel, a rim adapted to bear upon a wheel felly and including inwardly opening annular channels, a tire formed of a plurality of yieldable sections each including a tread portion extending beyond the rim and lateral flange portions engaging in said channels, an annular bearing plate engaging the inner faces of the tire sections, yieldable devices within said channels and operating to maintain the plate and the tire sections in normal position, and auxiliary yieldable devices connected to said plate and operating to engage the inner portion of the rim when the tire sections are abnormally depressed.

[Claims 2 and 3 not printed in the Gazette.]

1,267,708. ELECTRIC SIGN. JACOB J. STEINKE, Flint, Mich. Filed Feb. 20, 1917. Serial No. 149,754. (Cl. 40—130.)

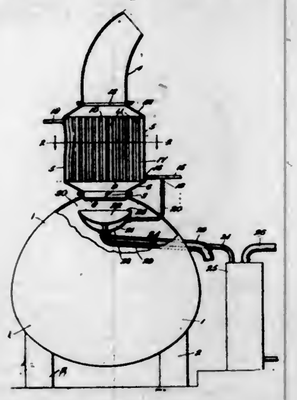


1. An electric sign having a base bar, an arcuate angle bar secured to the base bar, a second bar secured to the base bar and in spaced relation to the first named bar, said last mentioned bars constituting a substantially semicircular frame, a horizontal angle bar connected with the inner face of the arcuate angle bar, a second horizontal bar connected with the angle bar and in spaced relation to the first named horizontal angle bar and constituting a frame, a plurality of glass panels removably fitted in the frames, and weather strips removably secured to each of the frames upon the upper edges of the glass panels.

2. An electric sign comprising a horizontal supporting bar, arcuate bars secured to the opposite ends of the supporting bar constituting a frame, horizontal bars secured to the inner arcuate bar and spaced apart forming an auxiliary frame, a plurality of removable glass panels positioned within the frames, and removable weather strips secured over the upper edges of the panels and to the ends of the frames.

3. An electric sign comprising a horizontal base supporting bar, spaced arcuate bars secured adjacent each end of the base bar, a casing secured to the rear face of said arcuate bars forming a frame, spaced horizontal bars secured to the inner arcuate bar, casings secured to the rear side of certain of said horizontal bars forming a frame, a plurality of glass panels removably supported in the frames, incandescent lights located in the casings, and weather strips secured over the upper edges of the panels and removably connected to the frames.

1,267,709. DISTILLING APPARATUS. ALEXANDER L. STRAUS, Baltimore, Md., assignor to Baltimore Process Company, Baltimore, Md., a Corporation of Delaware. Filed Aug. 31, 1917. Serial No. 189,125. (Cl. 195—11.)



1. In an apparatus for separating alcohol from beer the combination of a vessel in which the beer may be heated; a condenser to which the vapors from said beer may pass located above said vessel; and a collecting vessel located below said condenser and inside said first named vessel adapted to receive the condensed vapors from said condenser, substantially as described.

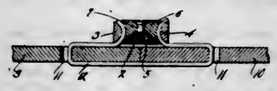
4. In an apparatus for distilling liquids the combination of a vessel in which the liquid may be heated; a collecting vessel for the condensed vapors located inside said first named vessel; means to maintain the temperature of said collecting vessel below that of said first named vessel; a condenser provided with substantially vertically disposed open ended tubes located above said collecting vessel; a tapered connection open to the atmosphere located above and joined to said condenser; means for separating alcohol from water; and a connection between said collecting vessel and said last mentioned means; substantially as described.

6. In an apparatus for separating alcohol from beer, the combination of a brewer's kettle in which the beer may be heated; a collecting pan provided with a water cooling means located inside said kettle near the mouth thereof; a condenser having a neck terminating in a lip and provided with a plurality of substantially vertically disposed open ended tubes detachably attached to said kettle above said pan; a spout open to the atmosphere joined to said condenser; means for separating water from alcohol; a connection leading from said pan to said means; and means to maintain said pan at a temperature below that of the interior of said kettle, substantially as described.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,710. BELT-LACING FASTENER. LEONARD J. SULLIVAN, North Sydney, New South Wales, Australia. Filed June 22, 1916. Serial No. 105,239. (Cl. 24—37.)

A belt lacing fastener comprising a block cored out in its central portion and having a transversely extending rib substantially centrally disposed across the lower part of the cored opening, the ends of the block in the cored opening being rounded to receive the end of a belt lacing passed through the opening and to present a board surface therefor, said rib portion having a threaded opening formed therein, a substantially wedge-shaped clamp member made of a size to fit loosely within the cored opening of the block and having the inner end thereof grooved to receive the rib so that the wedge portion will substantially fill the cored opening, said clamp member having an opening



therethrough registering with the screw-threaded opening of the transversely extending rib, and a clamp screw to be received through the opening of the clamp member and turn the threaded opening of the rib to draw the clamp member down against the ends of the belt lacing as the same are drawn over the ends of the block.

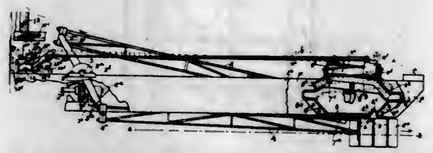
1,267,711. MANUFACTURE OF FUEL BLOCKS OR BRIQUETS. EDGAR ROUSE SUTCLIFFE, Leigh, England, assignor to Pure Coal Briquettes Limited, Cardiff, Wales. Filed Mar. 27, 1915. Serial No. 17,504. (Cl. 44—1.)

1. A method of manufacture of fuel blocks from carbonaceous substances, consisting in reducing the carbonaceous substance in a dry state to the substantially uniform condition of extreme fineness (of example such as represented by 200 meshes to the linear inch) subjecting the dry carbonaceous substance in the said condition to high pressure in a completely inclosed mold space, and permitting the expansion of the block or briquet in a direction transverse to the line of application of the high pressure applied, under the internal stresses created in the block or briquet as the result of its compression, to a high degree, substantially as described.

4. A new product of manufacture being a hard block or briquet of fuel, consisting of a carbonaceous substance of the character of coal in the dry state, in the substantially uniform condition of extreme fineness (for example, such as represented by 200 meshes to the linear inch) very closely and densely compressed and expanded, and which when burnt in an open grate is wholly consumed, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,267,712. BOAT-PROPELLER. HENRY A. W. THOMASSON, Bellingham, Wash. Filed Nov. 1, 1917. Serial No. 199,616. (Cl. 115—33.)



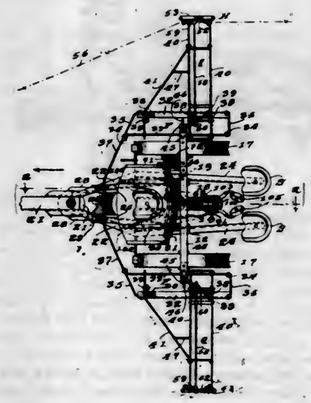
1. In combination, a paddle, a roller mounted on said paddle, a fixed lower rollway, a pivoted upper rollway, mounted to rock into and out of register with said lower rollway, and means to cause said roller to traverse said rollways in opposite directions.

5. In combination, a paddle, a roller mounted on said paddle, a fixed lower rollway, a pivoted upper rollway mounted to alternately register with each end of said lower rollway, a longitudinal slide rod on said upper rollway, a counterweight movable on said slide rod, and means to move said weight to predetermined locations on said slide rod and maintain the same therein.

6. In combination, a boat; a prime mover in said boat; an outrig extension on the stern of said boat; a shaft mounted for rocking on the stern of said boat; one fixed hand lever, having a dog, mounted on said rocker shaft; a plurality of loose hand levers, each having a dog, mounted on said rocker shaft; a ratchet, having two notches engageable with the dog of said fixed lever, mounted on said boat; a plurality of ratchets, each having three notches, rigidly mounted on said rocker shaft, the said three notches on each ratchet being engageable with the dog on one of said loose levers; a shaft having a plurality of cranks mounted for turning on said extension; power-transmission connections between said prime mover and said crank shaft; a plurality of pairs of facing paddle rollways, the lower two of which are rigidly attached to said extension and the upper two are pivoted to said extension; a slide rod mounted on each of said upper rollways; a counterweight slidable on each of said slide rods, the weights on each pair of rollways being rigidly connected; a paddle for each pair of said rollways, each paddle mounting a pair of rollers mounted on a pair of said rollways; two connecting rods rigidly fastened to each of said paddles and connected to a registering pair of cranks on said crank shaft; and a connecting rod between each pair of connected counterweights and one of said loose hand levers.

[Claims 2 to 4 not printed in the Gazette.]

1,267,713. CHECK-ROW TRANSPLANTER. JASPER LEE THOMPSON, Hurlock, Md. Filed Apr. 14, 1917. Serial No. 162,058. (Cl. 111—7.)



2. In a transplanting machine, a wheel supported frame structure, substantially rectangular stationary frames supported adjacent to the outer faces of the ground wheels, frames swingingly connected with said stationary frames, and checking heads supported by the swingingly supported frames.

5. In a transplanting machine, a wheel supported carrying frame having an axle member extending beyond the outer faces of the ground wheels, stationary substantially rectangular frames supported on the axle adjacent to the outer faces of the ground wheels, a connection between the forward ends of the stationary frames and the carrying frame, bracket members on the outer side bars of the stationary frames, frames supported swingingly on said bracket members and having members that extend beneath the inner side bars of the stationary frames to limit the downward movement of said swinging frames, and checking heads carried by the swinging frames.

6. In a transplanting machine, a wheel supported carrying frame, extension frames adjacent to the outer faces of the ground wheels, checking heads carried by said extension frames, swingingly supported forks associated with the checking heads, a countershaft supported on the frame structure, and means for transmitting rocking motion over the ground wheels of the machine from the forks associated with the checking heads to the countershaft.

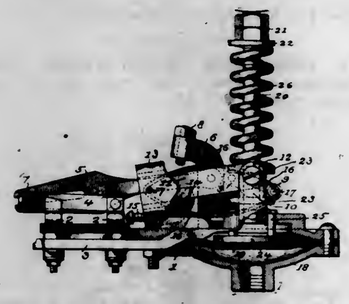
7. In a transplanting machine, a wheel supported carrying frame, a furrow opener connected therewith, a water supplying device, and a movably supported gage bar on

the furrow opener operating independently of the water supply.

10. In a transplanting machine, a wheel supported carrying frame, a furrow opener connected therewith, a gage member supported for longitudinal sliding movement with respect to the furrow opener, and checking mechanism and transmission means for intermittently actuating said gage member, said transmission means including mechanism whereby the gage member will be quickly projected and slowly retracted.

[Claims 1, 3, 4, 8, 9, and 11 not printed in the Gazette.]

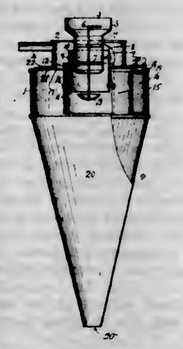
1,267,714. ELECTRIC CONTROLLER. OBNE H. TORGERSEN, Chicago, Ill., assignor of one-half to Frank A. B. Holmes, Chicago, Ill. Filed June 11, 1917. Serial No. 173,989. (Cl. 175—308.)



3. In an electric controller of the type herein described, the combination of a frame, an electric switch, a switch operating link, a primary toggle link, a secondary toggle link, the series of links being pivoted to said frame in adjacent relation and on an approximately common plane, the secondary toggle link having operative connection with the switch operating link aforesaid by means permitting limited independent movement between the parts, a tension spring attached at its respective ends to the toggle links aforesaid, a collar having operative engagement with the primary toggle link, a spring adapted to move said collar in one direction, and a power means for moving said collar in the opposite direction, substantially as set forth.

[Claims 1, 2, and 4 to 9 not printed in the Gazette.]

1,267,715. DUST COLLECTOR AND SEPARATOR. CASWELL E. TUTWILER, Clay Center, Kans. Filed July 6, 1915. Serial No. 38,056. (Cl. 183—86.)



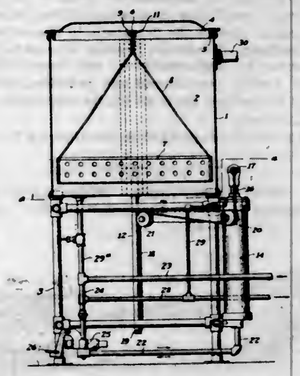
3. In a dust collector and separator, the combination with a hopper of inverted cone shape having a discharge opening at its apex, of a separating chamber mounted on the upper end of said hopper and having an air inlet and an apertured top, and an air outlet flue extending through the aperture of said top, one dimension of said aperture being greater than the diameter of said flue, whereby said flue may be slidably moved in such aperture and adjusted laterally relative to the axis of said cone-shaped hopper.

8. In a dust collector and separator, the combination with a hopper having a discharge opening at its lower end, of a separating chamber mounted at the upper end thereof and having an apertured top, an air outlet flue extending through the aperture of said top and projecting into said separating chamber, an inlet conduit arranged to deliver dust-laden air tangentially into the annular space between said flue and the walls of said separating chamber, an adjustable shutter pivotally mounted adjacent the mouth of said conduit, means for adjusting the same to regulate the incoming air, and means for shifting said flue laterally toward and from said shutter, one dimension of said aperture being greater than the diameter of said outlet flue, to permit such movement.

10. In a dust collector and separator, the combination with a hopper having a discharge opening at its lower end, of a separating chamber having an air inlet, and a slotted top mounted on the upper end of the hopper, guide members secured to said top and an air outlet flue slidably movable in said slot, and controlled in such movement by said guide members.

[Claims 1, 2, 4 to 7, and 9 not printed in the Gazette.]

1,267,716. STERILIZER. WEEDEN B. UNDERWOOD, Rochester, N. Y., assignor to Wilmot Castle Company, Rochester, N. Y., a Corporation. Filed Sept. 1, 1916. Serial No. 118,056. (Cl. 167—3.)



1. A sterilizer comprising a sterilizing chamber, a tray movable therein, and a single fluid pressure actuated member, arranged exteriorly of said chamber and having connection with opposite sides of the tray.

5. A sterilizer comprising a sterilizing chamber, a cover therefor, a tray suspended from the cover within the chamber, guide rods secured to the cover, an actuating member arranged exteriorly of said chamber, and flexible connections between the actuating member and the guide rods.

7. A sterilizer comprising a sterilizing chamber, a cover therefor, rods guided on the sterilizer casing, supporting the cover at their upper ends and having their lower ends, when the cover is closed, projecting below the bottom of the sterilizing chamber, a cylinder arranged at the rear of the sterilizing chamber, a piston movable vertically in said cylinder, a cross head carried by said piston, two flexible connections extending from said cross head to the lower ends of the rods, and pulleys about which said connections pass.

[Claims 2 to 4, 6, 8, and 9 not printed in the Gazette.]

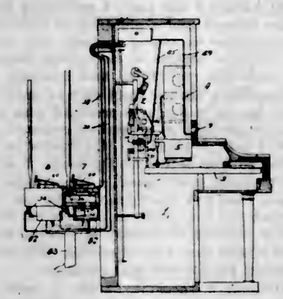
1,267,717. CONTAINER. NEWTON E. VANCE, Red Oak, Iowa. Continuation and substitute of Serial No. 737,135, filed Dec. 6, 1912. This application filed Mar. 26, 1915. Serial No. 17,159. (Cl. 220—91.).



A cracker can comprising confining walls, one of said walls being provided with an aperture, a pane of glass and a non-breakable inset, said pane of glass and said inset being replaceable each for the other behind said aperture, a wall of said container being slit to permit easy withdrawal and insertion of said pane of glass and said non-breakable inset, and guides on opposite sides of said aperture, into which said pane of glass and said inset may be positioned and from which said pane of glass and said inset may be moved for withdrawal from said slit.

1,267,718. [WITHDRAWN.]

1,267,719. CONTROL-CHEST. BURT R. VAN VALKENBURG, Oakland, Cal., assignor to American Photo Player Company, Berkeley, Cal., a Corporation of California. Filed Nov. 4, 1913. Serial No. 799,117. (Cl. 84—198.)



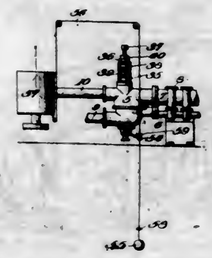
1. The combination with a central musical instrument and its complemental key-board, of a plurality of manually operated stop valves, a plurality of hinged valves adapted to be actuated from the keyboard of said central musical instrument, one or more auxiliary musical instruments, a control chest, a plurality of pairs of valves in said control chest adapted to be controlled by the said manually controlled stops, said valves controlling the operation of the auxiliary musical instruments, a set of valves, controlled by said hinged valves, one valve of the said set of valves being adapted to control its respective sounding member of each auxiliary musical instrument.

3. The combination with a central instrument having an action, of a plurality of auxiliary musical instruments, individual pneumatic mechanisms for operating said auxiliary instruments to sound the notes thereof, there being one of said pneumatic mechanisms associated with each of said auxiliary instruments, stops for controlling the operation of each of the said pneumatic mechanisms as a whole, valves individual to each of the note sounding devices in the action of said central instrument, said valves being opened upon the sounding of the corresponding note, and tubes normally closed by said valve, each of said tubes having branches running to each of said auxiliary instruments, means operated upon the opening of said branches to sound the corresponding notes in all or a portion of said auxiliary instruments, depending upon the position of said stops.

8. The combination of a music-playing instrument having a piano action, a plurality of groups of music-producing elements, means for controlling the operation of said groups of music-producing elements independently of each other to cause either to be thrown into or out of action, and a plurality of mechanisms for operating, respectively, the individual music-producing elements of said groups, said last-named mechanisms being controlled by one of the note-producing elements of said action.

[Claims 2, 4 to 7, and 9 to 11 not printed in the Gazette.]

1,267,720. HYDRAULIC PUMP-UNLOADER. LEONARD A. VIGNERI, Pittsburgh, Pa. Filed Apr. 11, 1917. Serial No. 161,182. (Cl. 103—85.)



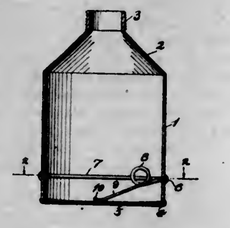
1. An unloading device for fluid pumps, means for shutting off supply of fluid to the intake of the pump and means for diverting the discharge from the pump to its intake.

7. In an unloading device for fluid pumps, a suction passage intended to communicate with the intake of the pump, a discharge passage intended to communicate with the discharge of the pump and with an accumulator, the suction passage opening into the discharge passage, by-pass valve mechanism for closing off the suction passage from the discharge mechanism, said by-pass valve mechanism comprising a main by-pass valve provided with by-pass ports and an auxiliary by-pass valve operatively connected thereto and closing said by-pass ports, means for normally maintaining said by-pass valve mechanism closed, means for opening the auxiliary by-pass valve and subsequently opening the main by-pass valve, a supply passage communicating with the suction passage and a check valve adapted to close off said supply passage when the by-pass valve mechanism is open.

8. In an unloading device for fluid pumps, a suction passage intended to communicate with the intake of the pumps, a discharge passage intended to be interposed between the discharge of the pump, and an accumulator, the suction passage opening into the discharge passage, by-pass valve mechanism for closing off the suction passage from the discharge mechanism, a spring normally closing the by-pass valve mechanism, a hydraulic plunger for opening said by-pass valve mechanism, means for operating the hydraulic plunger controlled by the accumulator, a supply passage communicating with the suction passage and a check valve adapted to close off said supply passage when the by-pass valve is opened.

[Claims 2 to 6 not printed in the Gazette.]

1,267,721. OIL-CAN. GERHARD VON HAGEL, Akron, Iowa. Filed Aug. 17, 1915. Serial No. 45,969. (Cl. 221—34.)

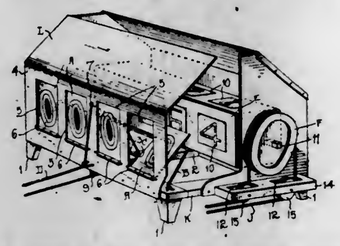


1. An oil can comprising a body portion having an interior circumferential groove located a distance above the bottom and a bottom secured to the body portion below the groove, and means engaging the groove and bottom for holding the bottom under tension.

2. An oil can comprising a body portion having an interior circumferential groove located a distance above the bottom, and a resilient bottom secured to the body below the groove, and a ring adapted to be seated in the groove, said ring having spring extensions engaging the bottom.

[Claim 3 not printed in the Gazette.]

1,267,722. TARGET. MATHEW WALTER, Easton, Pa. Filed Nov. 27, 1916. Serial No. 133,785. (Cl. 46—59.)

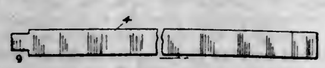


1. A device of the character described comprising a substantially vertical wall provided with a series of substantially horizontally alined openings, a movable target plate normally closing each of said openings and adapted to be moved into open position under the influence of the force of a projectile, a rotatable member positioned rearwardly of the wall and angular in cross section and having each of its faces provided with a series of value indications adapted to be exposed through the openings in the wall when the target plates are in open position, and means for rotating said rotatable member.

[Claim 2 not printed in the Gazette.]

1,267,723. [WITHDRAWN.]

1,267,724. WHEEL FOR TOYS. WILLIAM THOMAS WATSON, Vancouver, British Columbia, Canada. Filed Nov. 19, 1917. Serial No. 202,798. (Cl. 46—48.)

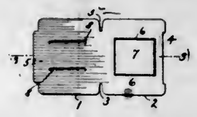


3. In a wheel of the character described, a single integral metallic rim sunk into the wheel along its peripheral center line and having its edges sunk into the sides of the wheel.

6. The method of making wheels for toys which consists in first forming a wooden wheel, fixing thereto one end of a metallic strip of greater width than the wheel thickness, rotating the wheel to draw the said strip thereonto, and then simultaneously sinking the strip into the wheel along its peripheral center line and turning and sinking its edges into the opposite sides of the wheel.

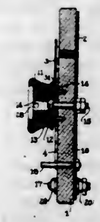
[Claims 1, 2, 4, 5, and 7 to 10 not printed in the Gazette.]

1,261,725. SEAL. HENRY L. C. WENK, Brooklyn, N. Y. Filed Dec. 28, 1917. Serial No. 209,245. (Cl. 70—101.)



A seal consisting of two sections folded on a transverse middle line, one section having a lip engaging and folding into a recess on the edge of the other section after the two parts are folded together, and one of the said parts having a struck up loop providing two parallel openings through which the strap to which the seal is to be attached may be passed, and the other of said parts having one or more raised ribs to guide the strap into one or the other of said parallel openings, said ribs contiguous to and parallel with said openings.

1,267,726. RHEOSTAT. HENRY J. WIEGAND, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 8, 1915. Serial No. 12,890. (Cl. 219—53.)



1. A rheostat having a flat base, a resistance arranged on the rear face thereof, and a plurality of contacts each having pliable portions extending through said base and overturned at the rear thereof to electrically engage and mechanically hold said resistance, said contacts having spaced headed portions on the front face of said base.

4. A rheostat having a flat base provided with a series of apertures therethrough, a resistance mounted on the rear face of said base, a plurality of contacts each comprising a headed portion seated on the front of said base and a multipart pliable shank passing through one of the apertures in said base and overturned at the rear of said base for fastening and for electrical connection with said resistance and a coating of insulating cement adhering to the rear face of said base and embedding said resistance and the overturned portions of said contacts.

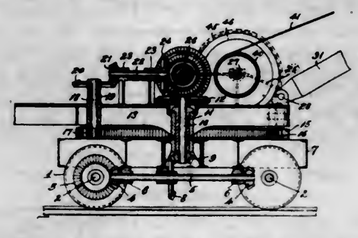
5. In combination, a rheostat having a base and a regulating resistance thereon and panel attaching means for said base readily reversible with respect thereto for mounting the rheostat in front or rear of a panel without reversing said base.

6. A rheostat having a base and a resistance thereon, panel attaching bolts penetrating said base and spacing members associated with said bolts and readily transferable from the front to the rear of said base, for the purpose set forth.

7. In combination a panel, a rheostat for front or back mounting thereon having a rotatable contact arm, a hand grip for operating the same, and extension operating means for said contact arm comprising a second hand grip and a spindle keyed to said first mentioned hand grip.

[Claims 2, 3, 8, and 9 not printed in the Gazette.]

1,267,727. HOISTING AND CONVEYING APPARATUS. EMERY J. WILSON, Cleveland, Ohio. Filed Aug. 9, 1915. Serial No. 44,499. (Cl. 105—222.)

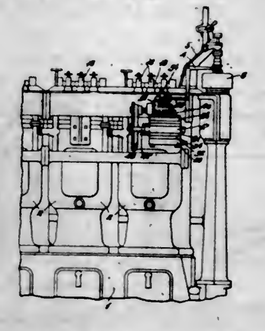


1. In a hoisting and conveying apparatus, a truck, wheels for said truck, a rotatable bed mounted on said truck, a driving shaft, and two pairs of driving members mounted on said shaft, one pair for transmitting direct and reverse motion to the truck wheels and the other pair for transmitting direct and reverse motion to the bed, the members of one of said pairs lying between the members of the other pair.

3. In a hoisting and conveying apparatus, a truck, wheels for said truck, a rotatable bed mounted on said truck, a horizontal driving shaft, two pairs of beveled gears mounted on said shaft, the gears of one pair lying between the gears of the other pair, a horizontal shaft connected to rotate said bed and provided with a beveled gear coöperating with the gears of the inner pair for transmitting direct and reverse motion to the bed, a vertical shaft connected to the truck wheels and provided with a beveled gear coöperating with the gears of the outer pair for transmitting direct and reverse motion to the truck wheels, a clutch on said driving shaft between the gears of the inner pair for selectively connecting either one thereof to said shaft, and two clutches on said shaft and coöperating with the outer faces of the gears of the outer pair for selectively connecting either one thereof to said shaft.

[Claims 2 and 4 not printed in the Gazette.]

1,267,728. FUEL-FEEDING MECHANISM. ALEXANDER WINTON, Lakewood, Ohio. Filed Mar. 29, 1917. Serial No. 158,272. (Cl. 123—140.)



1. In an internal combustion motor, a cylinder, a piston, a governing device for the motor and fuel feeding mechanism under the control thereof and comprising a fuel injecting device, fuel inlet mechanism for the cylinder, and motor means for actuating the fuel injecting device and controlled by said governing device for the internal combustion motor.

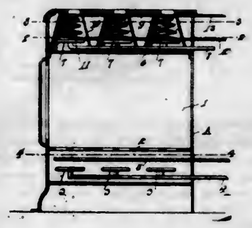
2. In an internal combustion motor, a cylinder, a piston, fuel injecting valve therefor, a governor for said internal combustion motor, and fuel injecting mechanism comprising an injecting device, and independent motor means for actuating the same and controlled in its operation by said governor.

3. In an internal combustion motor, a cylinder, a piston, fuel injecting valve therefor, a governor for said internal combustion motor, and fuel injecting mechanism comprising an injecting device, an independent motor for actuating the injecting device, and connections between said motor and said governor whereby the operation of said independent motor is controlled thereby.

4. In an internal combustion motor, a cylinder, a piston, fuel injecting valve therefor, a governor for said internal combustion motor, and fuel injecting mechanism comprising an injecting device, an independent motor for actuating the injecting device, a controlling device for said independent motor, and connections between said controlling device and the main motor governor.

[Claims 5 and 6 not printed in the Gazette.]

1,267,729. WATER-HEATING SYSTEM. SAMUEL A. WISNOM, San Mateo, Cal. Filed Jan. 18, 1917. Serial No. 143,176. (Cl. 126—53.)



A heating system of the character described comprising a plurality of burners, a frusto-conical casing embracing each burner, the top plate of the stove having an opening formed therein for each casing, the top end of each casing being preferably integrally formed with the marginal edge of the opening, a partition having the said burners mounted thereon, and integrally connected with the lower end of the casing, to form a single unit having the burners mounted therein, a spiral coil of piping arranged in each casing and having an intake and a discharge end, a supply pipe connected to the intake ends of the coils, a return pipe connected to the discharge ends of the coils, the lowermost turn of each coil being equal in diameter to the diameter of the burner, and the uppermost coil being approximately the diameter of the opening in the top of the casing whereby the flame from the said burner will rise directly toward the coils of pipe and toward the restricted end of the casing.

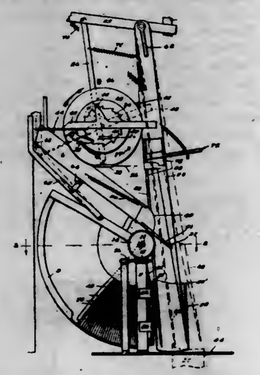
1,267,730. AUTOMATIC VENDING-MACHINE. IRA T. WOLFE, Seattle, Wash. Filed May 10, 1915. Serial No. 27,122. (Cl. 211—8.)

1. In an automatic vending machine, a receptacle for paper bags, said bags each having the rear edge of its opening projecting above its forward edge, means to impart pressure upon said paper bags to impel them in forward directions, and a tongue rigidly connected to said receptacle and adapted to be engaged by said rear edge of the foremost of said bags to cause such bags to gape open.

8. In an automatic vending machine, the combination with a receptacle for paper bags, of means for opening the top of the foremost of said bags and bag opening members comprising two substantially flat plates adapted to enter a bag and then be separated to extend the bag, the said plates when separated constituting a chute for the passage of material into the bag.

17. An automatic vending machine, comprising a receptacle for paper bags, means for advancing said bags in said receptacle, and resilient devices provided in the forward end of said receptacle to exert a yielding pressure against the foremost one of said bags.

20. An automatic vending machine comprising a frame, a horizontal arm pivoted at one end to said frame, a bag-opener comprising two members that are pivoted to said arm at their upper ends, rotatably mounter spaced disks, a bar extending between said disks, a leg pivoted to said arm and having a notched end adapted to rest upon said bar, a stop engaging said leg whereby, when said disks are ro-



tated, said leg will drop off of said bar and lower said bag-opening device and will then be reëngaged by said bar and lifted to its original position as said disks continue to rotate, and means for arresting the movement of said disks at the end of one complete revolution.

[Claims 2 to 7, 9 to 16, 18, 19, and 21 to 28 not printed in the Gazette.]

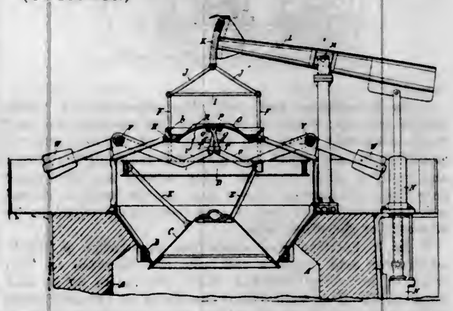
1,267,731. WRENCH. WILLIAM J. WRIGHT, Oakland, Cal. Filed Mar. 31, 1917. Serial No. 158,841. (Cl. 81—142.)



1. A wrench comprising a shank having a fixed jaw on one end and a handle on the other, a jaw slidable on the shank and having an extension lying in close proximity to the handle, a series of teeth formed on the shank, a depressible pawl on the extension of the slidable jaw to cooperate with the teeth whereby the distance between the jaws may be varied, the outer portion of the pawl projecting through the extension for engagement by the thumb to permit the same to be depressed, a spring for lifting said pawl out of engagement with the teeth, a pivoted latch device on the extension of the slidable jaw adjacent the handle to engage a projection on the pawl for retaining the latter depressed and a spring for holding the latch in engagement with said projection, said latch having means formed upon it engageable by the thumb to retract the same for releasing the pawl, said pawl projection and latch coöperating to bring about an automatic locking of the pawl when the latter is depressed.

2. A wrench comprising a shank having a fixed jaw on one end and a handle on the other, a jaw slidable on the shank and having an extension lying in close proximity to the handle, a series of teeth formed on the shank, a depressible pawl on the extension of the slidable jaw to cooperate with the teeth whereby the distance between the jaws may be varied, the outer portion of the pawl projecting through the extension for engagement by the thumb to permit the same to be depressed, a spring for lifting said pawl out of engagement with the teeth, a pivoted latch device on the extension of the slidable jaw adjacent the handle to engage a projection on the pawl for retaining the latter depressed and a spring for holding the latch in engagement with said projection, said latch having means formed upon it engageable by the thumb to retract the same for releasing the pawl, said pawl projection and latch coöperating to bring about an automatic locking of the pawl when the latter is depressed.

1,267,732. BLAST-FURNACE AND THE LIKE. THOMAS GARMONDSWAY WRIGHTSON and JUSTUS MAGNUS RINGQUIST, Thornaby-on-Tees, England, assignors to Head, Wrightson and Company, Limited, Thornaby-on-Tees, England. Filed Sept. 24, 1917. Serial No. 192,973. (Cl. 214—36.)

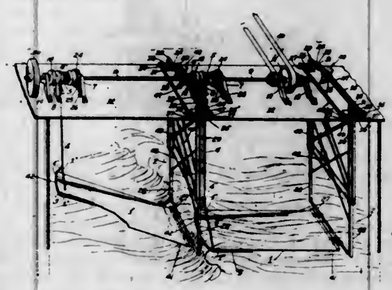


1. In a furnace, a top casing, a bell adapted to close the furnace mouth, a ring, connections between the bell and the ring, beams, connections between the ring and the beams, and means for actuating the beams.

8. In a furnace a top casing having top and bottom openings, a bell for closing the bottom opening, a ring within the casing, links suspending the bell from the ring, means applied to the ring for moving it and the bell downward to open the mouth of the furnace, a seal for closing the top opening of the casing and which is movable downward within the ring to uncover said top opening, levers pivotally mounted on the casing and extending across the ring to the central portion of the casing, and links connecting these levers with the underside of the seal.

[Claims 2 to 7 not printed in the Gazette.]

1,267,733. WAVE-POWER. NILS S. ABRAHAMSON, Los Angeles, Cal. Filed Jan. 15, 1917. Serial No. 142,568. (Cl. 253—11.)



2. In a wave power provided with a drum adapted to be rotated and having take-up means, the combination of a leaf pivotally mounted at one end next to the oncoming wave and having upturned edges forming forwardly deepening walls and a forwardly narrowing space between said walls and having the longitudinal traces of its top side straight, a flexible connection connected to the front end of said leaf and wound upon the drum to rotate it in opposition to the take-up means, and a flexible connection connected by branches to the front ends of said upturned edges.

5. In a wave power the combination of a power shaft journaled to revolve, a fly-wheel on said power shaft, a clutch member fixed to the power shaft, a drum, clutch dogs pivoted to the drum and engaging the clutch member to rotate the same in one direction with the drum, a support, a gear wheel, means connected to the support to adjust the gear wheel, a spring connected to the gear wheel at one end and to the drum at the other end, a flexible connection to rotate the drum, to wind up the spring and to operate the clutch, and a leaf pivoted at one end and connected at the other end to the flexible connection, the pivot end of the leaf being adapted to receive the oncoming waves.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,267,734. CIGAR-WRAPPING MECHANISM. GUSTAV ANDERSON, Brooklyn, N. Y., assignor to International Cigar Machinery Company, New York, N. Y., a Corporation of New Jersey. Filed Nov. 21, 1917. Serial No. 203,067. (Cl. 131—39.)

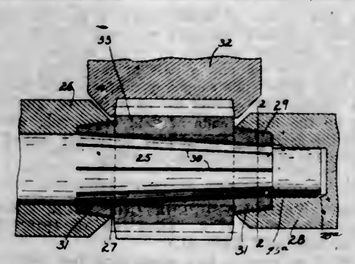


1. In a cigar wrapping mechanism, the combination with a bunch rolling mechanism, of a wrapper support provided with means for holding a wrapper in outspread condition thereon, said mechanism and said support having a relative crossing movement whereby a wrapper is delivered by the support to a bunch in said mechanism, a wrapper tension plate, and means associated with the rear end of the support and operative when said end is adjacent said plate for transferring the flag of the wrapper from the support to the plate.

6. In a cigar wrapper mechanism, the combination with a wrapper support provided with means for holding a wrapper in outspread condition thereon, of air blast mechanism connected with the rear end of said support and operative near the end of the wrapper delivering movement to blow the flag end of the wrapper from the support.

[Claims 2 to 5 not printed in the Gazette.]

1,267,735. DEVICE FOR CHUCKING BLANKS IN GEAR-ROLLING MACHINES. HAROLD N. ANDERSON, Cleveland, Ohio, assignor to The Anderson Rolled Gear Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 22, 1914. Serial No. 846,516. (Cl. 80—16.)

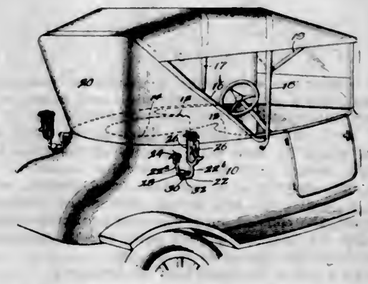


5. A device for chucking a blank in a gear rolling machine, comprising a pair of clamping members between which to clamp a blank, an arbor fixed to one of the members, adapted to pass through the blank and by a feathered connection drive or be driven by the other member, and projections on said member adapted to sink into the blank when it is clamped between them.

14. A device for mounting a blank in a gear rolling machine, comprising a pair of clamping members having tapered sockets to fit over hubs on the blank, a tapered arbor which is fixed with reference to one of said members adapted to pass through a central bore in the blank and into an axial recess in the bottom of the opposite socket, means for causing the opposite clamping member to rotate in unison with the arbor, and longitudinal ribs on the arbor and in the sockets.

[Claims 1 to 4, 6 to 13, and 15 not printed in the Gazette.]

1,267,736. BOW-TOP HOLDER FOR VEHICLE-TOPS CONTRACTED AT REAR. CLARENCE L. BAIR, Detroit, Mich., assignor to Auto Specialties Manufacturing Co., St. Joseph, Mich., a Corporation of California. Filed May 29, 1916. Serial No. 100,500. (Cl. 21—61.)



1. A vehicle bow top holder comprising an arm, means for securing said arm to the side of a vehicle, so that it extends a substantial distance from said vehicle, means on the end of the arm which is away from the vehicle for detachably retaining a vehicle top bow in rigid position with reference thereto, and means on said arm intermediate between its ends for supporting another vehicle top bow.

2. A vehicle bow top holder, comprising an arm, means for securing said arm to the side of a vehicle, so that it extends a substantial distance from said vehicle, means on the end of the arm which is away from the vehicle for detachably retaining a vehicle top bow in rigid position with reference thereto, means on said arm intermediate between its ends for supporting another vehicle top bow, and means for adjusting said intermediate supporting means lengthwise of the supporting arm.

3. A vehicle bow top holder, comprising a generally U-shaped frame, means for connecting one arm of said U-shaped frame to the body of a vehicle, means on the other arm of said U-shaped frame for receiving and retaining a bow of a vehicle top, and a support for a vehicle top mounted upon the portion of the U-shaped member intermediate between its arms, for the purposes set forth.

4. A vehicle bow top holder, comprising a generally U-shaped frame, means for connecting one arm of said U-shaped frame to the body of a vehicle, means on the other arm of said U-shaped frame for receiving and retaining a bow of a vehicle top, a support for a vehicle top mounted upon the portion of the U-shaped member intermediate between its arms, and means for adjusting said intermediate supporting means lengthwise of the supporting arm, for the purposes set forth.

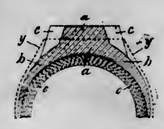
5. In a device of the class described, in combination with a vehicle, a U-shaped frame open at its top, having one of its arms secured to said vehicle in such a position that the general plane of the U-shaped frame is at right angles to the side of the vehicle, means on the other arm of said frame for detachably securing a bow of a vehicle top thereto, and a support on the intermediate portion of the U-shaped frame for receiving and retaining another top bow.

[Claim 6 not printed in the Gazette.]

1,267,737. CLEANSING OF LINEN, WOOLEN, COTTON, AND OTHER GOODS. FRIEDRICH LUDWIG BARTELT, Corston Lodge, near Bristol, England. Filed Dec. 10, 1914. Serial No. 876,592. (Cl. 87—5.)

A cleansing compound for fabric or fibers from which fabrics are made, consisting essentially of carbonate of soda and glycerin and having incorporated therewith a soluble zinc salt, in substantially the proportions specified.

1,267,738. ELASTIC WHEEL-TIRE. GEORGE WILLIAM BELDAM, Ealing, England. Filed Feb. 27, 1912. Serial No. 680,201. (Cl. 152—14.)

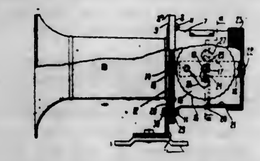


1. A wheel tire comprising a laminated non-elastic inner wall and a one-piece elastic outer wall formed with a narrow uninterrupted tread flanked on each side by V-shaped incut outwardly beveled bracings the outer surfaces of which lie flush with the face of the tread and constitute inward projecting non-skidding members.

3. A tire, embodying a yieldable tread portion, comprising a medial rib and lateral interspaced V-shaped projections, the ends of such V-shaped projections being flush with the tread, and their outer edges terminating some distance from the sides of the tire.

[Claims 2 and 4 not printed in the Gazette.]

1,267,739. SIGNAL-HORN. HARRISON HURLBERT BOYCE, Forest Hills, N. Y. Filed Jan. 2, 1915. Serial No. 47. (Cl. 116—1.)



1. A diaphragm signal horn, having striking mechanism mounted to rotate in one direction only, on an axis parallel to the diaphragm of the horn, and manually rotatable means for operating said striking mechanism, said means being capable of rotation in two directions, the movement thereof in either direction effecting the rotation of the striking mechanism in the same direction.

4. In a diaphragm signal horn, the combination with a diaphragm, of a rotatable striker arranged to vibrate said diaphragm, a driving member arranged for a direct manual rotation in either direction and operative connections between said driving member and said striker, said connections being such that rotation of said driving member in either direction acts to positively rotate said striker in the same direction, said striker being capable of independent rotation in said direction whereby it may continue to rotate under the effect of its own inertia after the rotation of said driving member has ceased.

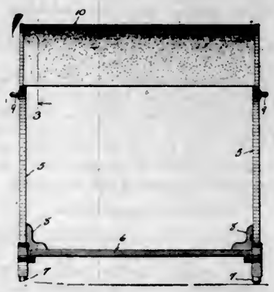
6. In a signal horn, the combination with a diaphragm having a wear piece centrally positioned thereon, a ratchet wheel mounted to rotate in one direction on an axis parallel with said diaphragm and adapted to engage said wear piece, a pinion positioned on each side of said ratchet wheel and normally independent thereof, means capable of manual operation in engagement with said pinions, said means being mounted for rotation on an axis at a right angle to the axis of rotation of said ratchet wheel, and a spring pressed dog mounted on each side of said ratchet wheel and adapted to couple said ratchet wheel to the adjacent pinions under certain predetermined conditions, whereby the movement of said manually operated means in any direction will function said ratchet wheel to engage said wear piece and produce a signal.

8. In a signal horn, having a housing, the combination with a diaphragm having an adjustable wear-piece centrally positioned thereon, a ratchet wheel mounted to rotate in one direction on an axis parallel with said diaphragm and adapted to engage said wear-piece, a pinion positioned on each side of said ratchet wheel and normally independent thereof, a tubular member mounted to rotate within said housing on an axis at a right angle to the axis of rotation of said ratchet wheel, said tubular member being provided with teeth adapted to mesh with said pinions, whereby the rotation of said tubular member will rotate said pinions, and a spring-pressed dog mounted on each side of said ratchet wheel and adapted to couple said ratchet wheel to one of the adjacent pinions upon the rotation of said tubular member, to produce a signal.

9. In a signal horn, having a housing, the combination with a diaphragm, of means for functioning said diaphragm, a tubular member having a portion fitting and mounted to rotate within said housing and having a hand-grip portion and means for coupling said tubular member to said diaphragm functioning mechanism, whereby the rotation of said tubular member in either of two directions will produce a signal, said tubular member being capable of positive actuation in both of said directions.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

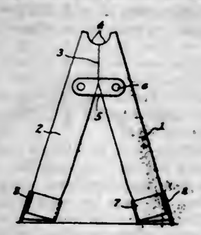
1,267,740. PORTABLE GARMENT-SUPPORT. ALOYSIUS G. BRENNAN and JOHN S. BRENNAN, Milwaukee, Wis. Filed Oct. 11, 1917. Serial No. 195,891. (Cl. 211—14.)



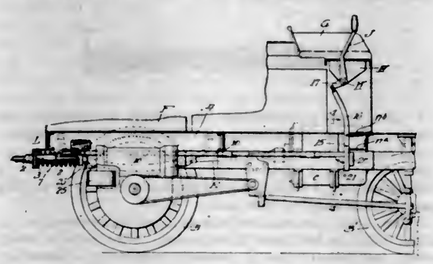
As a new article of manufacture, a garment support comprising a hollow garment receiving column of substantially inverted U-shape in cross section, a nappy covering for the column, a pair of supporting members having their upper ends shaped to conform with the shape of said column and closing the ends thereof, and means carried by the lower ends of said supporting members whereby the garment support may be readily moved from place to place substantially as described.

1,267,741. VEHICLE-SUPPORTING JACK. MONROE BUCK, Glens Falls, N. Y. Filed Jan. 15, 1918. Serial No. 211,986. (Cl. 248—41.)

A vehicle supporting jack comprising two brace members having their opposed sides near their upper ends beveled and abutting, the extreme upper ends of said brace members being provided with notches forming a single pocket between them, a pair of links pivoted to opposite sides of the two brace members below said pocket to permit the brace members to fold in parallel relation, and two foot pieces, one for each brace, each foot piece lying on the outer side of its brace and projecting in opposite directions from the plane of the two braces, each foot piece also having a socket portion on its inner face substantially midway between the projecting ends of the foot piece receiving the lower end of the brace.



1,267,742. REGULATOR FOR DRAFT-VEHICLES. GEORGE W. BULLEY, Chicago, Ill., assignor to Mercury Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 18, 1915. Serial No. 46,054. (Cl. 180—14.)



1. The combination of a draft vehicle, a draft member adapted for connection with the load to be drawn, a controller for said vehicle having a range of operation by which the speed of the vehicle is determined, and means actuated by said draft member in response to the pull thereon for governing the operation of said controller within said range.

2. The combination of a power driven draft vehicle, a manually operated controller therefor, and a draw bar adapted for connection with the load to be drawn for regulating the manual operation of said controller.

3. The combination of a power driven draft vehicle, a controller for governing the speed of said vehicle, a lock for the controller, and a draw bar to which the load is connected for actuating the lock to release said controller in response to a load on the draw-bar.

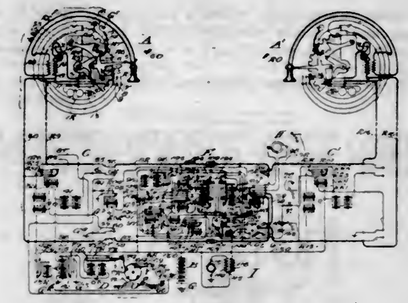
4. The combination of a power driven draft vehicle, a draft member carried by said vehicle to which the load to be drawn is connected, a controller for the vehicle, and means interconnecting said draft member and said controller for rendering the controller responsive to the pull of the load upon the draft member.

5. The combination of a motor-driven load-propelling vehicle, a member carried by said vehicle to which the load is adapted to be connected, a controller for said vehicle, and mechanism interconnecting said load member and said controller to render the operation of the controller dependent upon the load value at said member.

[Claims 6 to 12 not printed in the Gazette.]

1,267,743. TELEPHONE SYSTEM. WILSON L. CAMPBELL, La Grange, Ill., assignor, by mesne assignments, to Automatic Electric Company, a Corporation of Illinois. Filed Oct. 7, 1907. Serial No. 396,230. (Cl. 179—27.)

1. In a telephone system, a bank of terminals, subscribers' lines leading from one or more of the levels of said bank of terminals, trunk-lines leading from at least one of the levels of said bank of terminals, switch wipers adapted to engage said terminals, two motors both subject at one instance to the direct control of the calling subscriber for causing said wipers to seize the terminal of any idle subscriber's line, and only one, at another instance, subject to the direct control of the calling subscriber, for causing said wipers to pass terminals of busy trunk-lines and stop on the terminal of the first idle trunk-line when a trunking connection is desired.



2. In a telephone system, a connector provided with a bank of terminals arranged in a plurality of levels, subscribers' lines leading from one or more of said levels, trunk-lines leading from at least one of said levels, and automatic means comprising two motors for causing said connector to select idle trunk-lines or to connect with any one of said subscribers' lines, only one of said motors under the direct control of the calling subscriber to find an idle trunk line and both of said motors under the control of the calling subscriber to connect with one of the subscribers' lines, and a calling line for controlling the connector.

3. In a telephone system, an automatic switch provided with a bank of terminals arranged in a plurality of levels, suitable lines leading from said terminals, said switch having provisions for enabling it to seize any particular line desired by the calling subscriber in one or more of the levels thereof, and having provisions for automatically selecting the first idle line in at least one of said levels, said first provisions comprising two motors under the direct control of the calling line and said last provisions comprising only one motor under the direct control of the calling line, and a calling line for controlling the automatic switch.

65. In a telephone system, a plurality of lines, a selector switch adapted to connect with any one of said lines, means whereby said switch will not stop upon certain of said lines unless said lines are idle, and means whereby said switch will stop upon other of said lines whether they are idle or busy.

69. In a telephone system, a connector switch having primary and secondary movements, groups of lines accessible to said switch, means for directly controlling the primary movement of said switch to select a desired group, means for directively controlling the secondary movement of said switch to select a desired line in a selected group, automatic controlling means for the secondary movement, and means actuated at a predetermined point in the primary movement of said switch for rendering said automatic controlling means operative.

[Claims 4 to 64 and 66 to 68 not printed in the Gazette.]

1,267,744. CHECK-PROTECTOR. GEORGE W. CLAYTON and JOHN MORRISON, Sharon, Pa. Filed Feb. 20, 1918. Serial No. 218,275. (Cl. 101—20.)

2. In a check protector, the combination of a box-like casing comprising a base and a cover hingedly connected at one end and having a slot between the pair of hinges,

the cover having a hole at a proper point, a die roller rotatably mounted in the base and having a ring of dies under said hole, means for manually setting said roller, a feed roller rotatably mounted in the base between said



die roller and slot and having a knob on one of its trunnions, and a platen movably carried by the cover and adapted to be driven through said hole, for the purpose set forth.

[Claims 1 and 3 not printed in the Gazette.]

1,267,745. WINDOW CONSTRUCTION. BENJAMIN R. COLEMAN and LEROY B. TAYLOR, Chicago, Ill. Filed Mar. 24, 1915. Serial No. 16,608. (Cl. 20—42.)



3. The combination with a window frame of a pair of sashes therein, sliding connections between corresponding edges of said sashes and the window frame, means for connecting said corresponding sash edges together to move in unison, and swinging arms upon which said sashes are mounted, said arms being pivotally mounted at a common point near one end of the window frame and the arms for one sash being longer than the arms for the other sash.

[Claims 1, 2, and 4 to 7 not printed in the Gazette.]

1,267,746. WINDOW CONSTRUCTION. BENJAMIN R. COLEMAN and LEROY B. TAYLOR, Chicago, Ill. Filed Mar. 24, 1915. Serial No. 16,609. (Cl. 20—42.)

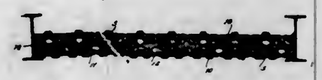


1. The combination with a window frame, of window sashes therein, said sashes being mounted for sliding movement in said window frame and also being mounted for swinging movement about corresponding edges extending between the opposite sides of said window frame, means for connecting said corresponding edges of the window sashes together so that they will slide in unison, and means for supporting said sashes to permit them to swing about said corresponding edges and also to permit said corresponding edges to slide in the window frame, said supporting means being located near the middle of said sides of the window frame.

2. The combination with a window frame, of sashes therein, said sashes having corresponding edges provided with pivotal and sliding connections with opposite sides of the window frame, means for connecting said edges of said sashes together to slide in unison, and arms pivoted to the opposite sides of the window frame between the sashes when open, and pivotally supporting said window sashes.

[Claims 3 to 6 not printed in the Gazette.]

1,267,747. TILE-ARCH CONSTRUCTION. JOHN COMERMA, New York, N. Y., assignor to John C. Forster, New York, N. Y. Filed Apr. 26, 1917. Serial No. 164,622. (Cl. 72—65.)



1. An arch construction comprising a plurality of courses of tiles, projections of substantially even dimensions throughout on said tiles extending into the joints between adjacent courses and giving a zig-zag form to said joints and a binder in said joints extending in zig-zag lines transversely to said arch.

2. An arch construction comprising tiles arranged in courses, in break joint arrangement relatively to each other, individual ribs of substantially even dimensions throughout extending upwardly from the tiles in one course, a plurality of ribs of substantially even dimensions throughout extending downwardly from the tiles in the next course, said ribs forming a zig-zag joint between said courses and a binder in said joint extending in a zig-zag line transversely to said arch.

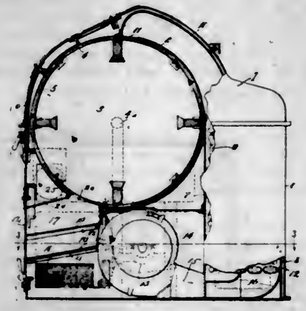
4. An arch construction comprising a plurality of superimposed courses of tiles, the tiles in adjacent courses being staggered relatively to each other in two directions, ribs on the tiles of said adjacent courses disposed in juxtaposed relation to the joints between tiles of adjacent courses, thereby forming with the tiles zig-zag joints extending transversely of said arch, and a binder in said joint.

5. An arch construction comprising tiles arranged in courses, in break joint arrangement relatively to each other, individual projections extending upwardly from the tiles in one course, a plurality of projections extending downwardly from the next course, said projections forming a zig-zag joint between said courses and a binder in said joint extending in a zig-zag line transversely to said arch, lower beveled surfaces at the edges of said tiles whereby the pressing of the latter into said binder is facilitated and upper beveled surfaces at the edges of said tiles arranged to form diverging spaces between adjacent tiles for the accommodation of said binder.

[Claim 3 not printed in the Gazette.]

1,267,748. DRYING APPARATUS. EDWARD I. CUTTER, Norwood, Ohio, assignor to The American Laundry Machinery Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 19, 1916. Serial No. 104,545. (Cl. 34—5.)

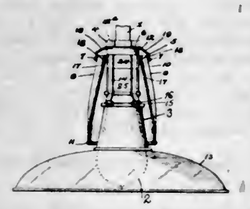
1. Drying apparatus, comprising a casing, a drying chamber therein, a heating chamber communicating with the drying chamber, an air pump in advance of the heating chamber, a screening chamber in advance of the air pump, screens located in said screening chamber for filtering the air current pasing to the pump, and an inlet to and an outlet from said screening chamber open to the atmosphere.



2. Drying apparatus, comprising a casing, a drying chamber in the upper portion of said casing, a heating chamber behind the drying chamber, a pump located below the drying chamber, and a screening chamber communicating with the air inlet to said pump and located at the front of the casing, and removable filtering screens in said screening chamber, said screening chamber having an air inlet of less area than said pump inlet.

[Claim 3 not printed in the Gazette.]

1,267,749. VENTILATING STRUCTURE FOR ELECTRIC LAMPS. HENRY D'OLIER, Jr., Bridgeport, Conn. Continuation in part of application Serial No. 95,217, filed May 3, 1916. This application filed Oct. 30, 1917. Serial No. 199,226. (Cl. 240—111.)



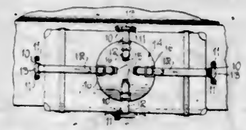
1. Electric lamp ventilating structure comprising a cap, a hood member having longitudinally extending inner and outer ribs forming internal and external grooves, a flange on said cap, said hood secured to said flange at said outer ribs, said cap spaced from the end of said hood member, whereby ventilating passages are formed from within said hood over the end thereof into said external grooves.

9. The combination with a lamp socket member, of a cap, a hood member inclosing said socket member and longitudinally fluted to form internal and external ribs, said hood member attached at its one end only to said cap, a shade or reflector member spaced from the free end of said hood, said cap spaced from the end of said hood member, whereby ventilating passages are formed from within said hood member over the end thereof into grooves between said external ribs.

[Claims 2 to 8, 10, and 11 not printed in the Gazette.]

1,267,750. SUITCASE-HOLDER FOR AUTOMOBILES. ELMER W. EATON, Nashua, N. H. Filed Dec. 1, 1917. Serial No. 204,869. (Cl. 224—29.)

The combination with the running board of an automobile, of means for holding suit causes thereon comprising brackets attached in quadrilateral relation and having medially disposed deflected portions, a disk of relatively flexible material adapted to be disposed on top of the case and having a plurality of radially disposed strap sections, buckles attached to said strap sections, and a plurality of straps engaged with said buckles and extending downward to the brackets, each of said straps at its lower end being



passed beneath a bracket, then upwardly extended, the end of said strap being then detachably engaged with the body of the strap.

1,267,751. VEHICLE-SIGNAL. HARRY C. FAIRCHILD, Maplewood, N. J. Filed Feb. 27, 1917. Serial No. 151,221. (Cl. 177—327.)



3. A motor vehicle signal comprising, with means for attachment to the rear of a motor vehicle, a hinge having an upper and an under leaf pivoted upon an axis, a warning member attached to the upper leaf of the hinge and movable therewith to a vertical or to a horizontal position, a spring arranged around said axis with tension to hold the upper leaf of the hinge and warning member in a horizontal position, a contact member attached to the upper leaf of the hinge and operable with the warning member and adjustably engageable with an electric switch, a U-shaped bracket attached to the under leaf of the hinge and having an upward extension with an electric switch thereon engageable with said contact member, electric means to illuminate the warning member when the same is in a raised position, a weather case attached to the U-shaped bracket having the top extended to provide a stop for the upper leaf of the hinge and warning member in a vertical position, means for electrically connecting said electric switch and said electric illuminating means, a rod attached to the rear side of the warning member, and a pull connection attached to said rod to raise the warning member and to provide contact between the contact member and the electric switch or to lower the warning member and to break said contact.

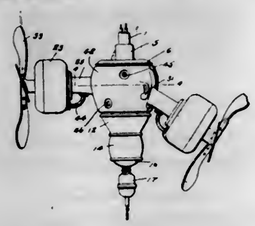
[Claims 1 and 2 not printed in the Gazette.]

1,267,752. REVOLVING VENTILATING-FAN. HERBERT I. FINCH, St. Louis, Mo., assignor to The Emerson Electric Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed July 13, 1916. Serial No. 109,146. (Cl. 230—1.)

1. In a revolving fan mechanism, the combination of a supporting pedestal, a frame member rotatably supported thereon, laterally projecting arms each having independently adjustable connection with said frame member, an independently operable motor supported by each arm, a fan operably supported by each motor, means driven by one of said motors for rotating said frame member about said pedestal, and an independently operable means cooperating with each of said arms for securing it in selectively different positions relative to said frame member.

3. In a revolving fan mechanism, the combination of a supporting pedestal, a frame rotatably mounted thereon, independently adjustable arms carried by said frame, independently operating motors supported on the arms,

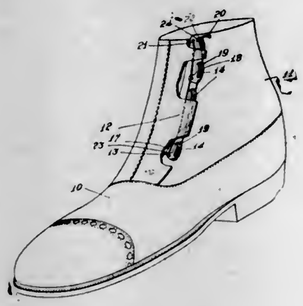
means actuated by one of said motors and coöperating with the pedestal to rotate the frame and cause the revolution of the motors about the pedestal, and fans operably associated with the motors.



8. A revolving fan mechanism including a pedestal member, a frame member rotatably mounted thereon, motor arms pivotally connected to said frame member for supporting motors at the outer ends thereof, motors at the outer ends of said arms, means for adjusting said motor arms and motors with respect to said frame member, a gear supporting shaft coaxial with the pivotal point of one of said arms, a worm and gear connection between the armature shaft of said motor and said gear supporting shaft, and a worm and gear connection between said gear supporting shaft and said pedestal.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,267,753. SHOE-FASTENER. AUBREY H. FISHER, Pukwana, S. D., assignor of one-half to A. R. Newman, Pukwana, S. D. Filed Sept. 10, 1917. Serial No. 190,594. (Cl. 24—68.)



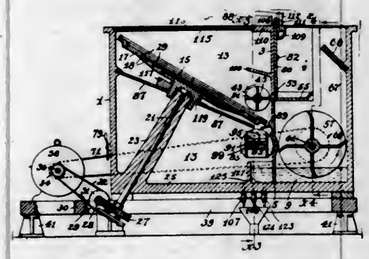
1. A shoe fastening device comprising a plurality of plates adapted for pivotal attachment to one flap of a shoe, each having a tangentially slotted wing, a plurality of studs adapted for attachment to the other flap of the shoe for engagement with said slots, and means for turning said plates simultaneously about said points of pivotal attachment.

[Claims 2 to 5 not printed in the Gazette.]

1,267,754. APPARATUS FOR TREATING ARTICLES WITH FLUID. FREDERICK A. FLICK, New York, N. Y. Filed Mar. 3, 1915. Serial No. 11,912. (Cl. 41—9.)

1. Apparatus for the treatment with a plurality of fluids of such articles as printing plates, said apparatus comprising a retainer having a plurality of supply compartments for said fluids, means to support said article for treatment, means to apply to said article the fluids from said supply compartments respectively, and means to return to said several compartments at will the fluid drained from said article.

2. Apparatus for the treatment with a plurality of fluids of such articles as printing plates, said apparatus comprising a container having a plurality of supply compartments for said fluids, means to support said article for treatment, means to apply to said article the fluids from said supply compartments respectively, and means to return to said several compartments at will the fluid drained from said article, said means comprising elevators in said compartments respectively.



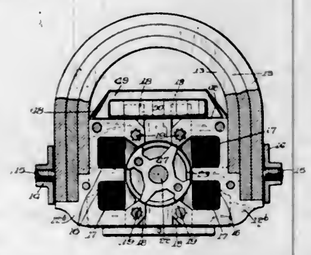
5. The combination with a container having a plurality of compartments for fluids and a support for an article to be treated by said fluid, of a drainage controlling device comprising a member having a recessed portion to receive fluid drained from said article, said member having outlets to direct said drainage toward said compartments selectively.

6. The combination with a container having a plurality of compartments for fluids and a support for an article to be treated by said fluid, of a drainage controlling device comprising a member channeled longitudinally to receive fluid drained from said support.

14. Appparatus for treating articles with fluids, comprising a container divided into supply compartments and a compartment for the article to be treated, a supply member to receive fluids from said supply compartments respectively, a spreader to receive fluid from said supply member and apply it to said article compartment, and a flushing channel constructed to supply washing fluid to said supply member and thence to said article compartment.

[Claims 8, 4, and 7 to 13 not printed in the Gazette.]

1,267,755. MAGNETO-MACHINE. HARRY F. GEIST, Racine, Wis., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed Apr. 12, 1916. Serial No. 90,631. (Cl. 171—209.)



1. In a magneto machine the combination with a pair of oppositely disposed and symmetrical substantially E-shaped pole pieces, permanent magnets having their poles attached to said pole pieces, generating windings supported by the middle projections of said pole pieces, an inductor movable between said pole pieces and comprising four prongs, alternate prongs having broad faces and the other prongs being narrow faced, each of said narrow faced prongs being closer to one of the broad faced prongs than it is to the other, spring means normally retaining each of said prongs adjacent one of the unwound projections of the pole pieces, and engine driven devices for oscillating the inductor and releasing it at a position such that the broad faced inductor prongs lie opposite the middle pole piece projections for the purpose set forth.

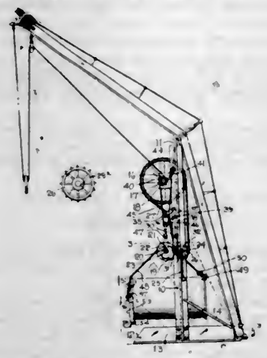
5. A pole piece for a magneto of the class described comprising in combination a middle polar projection adapted to support primary and secondary windings and unwound polar projections on each side of said middle projection said unwound polar projections being of substantially T-shape with the arms thereof extending crosswise of said pole piece.

6. A pole piece for a high tension magneto of the class described comprising in combination a middle polar projection adapted to support primary and secondary windings, unwound polar projections on each side of said middle projection, said unwound polar projections being of substantially T-shape, said pole piece consisting of a group of substantially E-shaped laminæ constituting the central portion of the middle polar projection and the shanks of the T-shaped polar projections, two groups of laminæ supplementing the middle projections of the E-shaped laminæ and blocks having a relatively low coefficient of magnetic permeability disposed on each side of the E-shaped laminæ and constituting the wings of the T-shaped polar projections.

7. In a high tension magneto the combination with a pair of primary windings, secondary windings in inductive relation thereto, a primary circuit including an interrupter, a secondary circuit including a spark gap, a condenser in shunt of both of the primary windings and a pair of supplemental condensers, one in shunt of each of the primary windings.

[Claims 2 to 4 not printed in the Gazette.]

1,267,756. HOISTING AND HANDLING MACHINE. ALONZO GHENT, Helix, Oreg. Filed Nov. 12, 1917. Serial No. 201,591. (Cl. 248—52.)



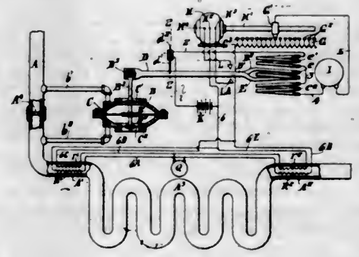
1. A hoisting mechanism comprising a supporting frame including uprights and a cross bar, a winding shaft mounted on the frame, a tilting shaft, a cable on the winding shaft operatively engaging the tilting shaft to raise or lower it, means on the tilting shaft for engaging the article to be handled, seats carried by the supporting frame for the tilting shaft, means for rotating the driven shaft to raise or lower the tilting shaft, and means for rotating the tilting shaft to tilt an article supported thereby.

3. A hoisting mechanism of the character described comprising a supporting frame, a hoisting shaft thereon, a cable engaged by the hoisting shaft, a tilting shaft, supporting brackets mounted on the frame, and upon which the tilting shaft is adapted to rest and rotate, the tilting shaft being removable from the supporting brackets, means on the cable for operatively engaging the tilting shaft, said means permitting the tilting shaft to rotate, a sprocket wheel on the tilting shaft, a sprocket chain passing thereover, article clamping devices carried by the chain, and means whereby the hoisting shaft may be rotated to raise or lower the tilting shaft or whereby the tilting shaft may be rotated when disposed upon said brackets to thereby tilt the supported article.

5. A hoisting device of the character described comprising a supporting frame including parallel uprights, a hoisting shaft rotatably mounted adjacent the upper end of the frame, a sprocket wheel thereon, a cable wound upon the hoisting shaft, a driving shaft carrying a sprocket wheel, a chain engaging the sprocket wheel on the driving shaft of the first named sprocket wheel, brackets extending from the uprights, a tilting shaft, means detachably connecting the tilting shaft with the cable, said tilting shaft being detachably but rotatably supported on said brackets, a sprocket wheel mounted on the tilting shaft, a sprocket chain passing over the sprocket wheel and engageable with an article to be hoisted and tilted, and means for engaging the driving shaft with the sprocket wheel thereon or operatively engaging the driving shaft with the tilting shaft to cause a rotation of the latter when it is disposed on said brackets, said means including a gear wheel on the tilting shaft, a gear wheel loose on the driving shaft, and means on the driving shaft for engaging either the sprocket wheel thereon or the gear wheel thereon.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,267,757. METHOD OF AND APPARATUS FOR HEAT DETERMINATION. GEORGE H. GIBSON, Montclair, N. J. Filed Dec. 1, 1916. Serial No. 134,287. (Cl. 73—184.)



1. The method of determining the amount of heat lost or absorbed by fluid in flowing between separated points in a conduit, which consists in creating an electrical current modifying effect proportional to the temperature difference between said points, and in creating an electrical current modifying effect proportional to the quantity rate of fluid flow in said conduit, and utilizing said current modifying effects in combination to thereby obtain an indication proportional to the product of said effects.

3. The combination with a conduit, of means for determining the amount of heat lost or absorbed by fluid in flowing between separated points in said conduit, comprising resistances subjected to the temperatures of the fluid at said points and varying in resistance with the temperatures to which they are subjected according to a pre-determined law, a flow meter responsive to the quantity rate of fluid flow through said conduit, a current regulator actuated by said device, and electrical indicating means operatively connected to said resistances and to said current regulator and jointly influenced thereby to indicate the product of said rate of flow and the difference in temperatures between said points.

4. The combination with a conduit, of means for determining the amount of heat lost or absorbed by fluid in flowing between separated points in said conduit, compris-

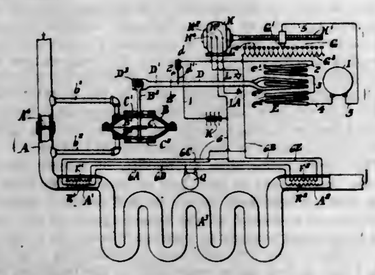
ing means including parts subjected to the temperatures at said points and adapted to exert an electric current modifying effect proportional to the difference in temperature at said points, means responsive to the fluid rate of flow through said conduit, a current regulator actuated thereby and electrical exhibiting means operatively connected to the first mentioned means and to said current regulator and jointly influenced thereby to indicate the product of said rate of flow and the differences of temperature between said points.

7. The combination with a conduit, of means for determining the amount of heat lost or absorbed by fluid in flowing between separated points in said conduit, said means comprising a source of electro-motive force, parallel circuits connected to said source and including resistances subjected to the temperatures of the fluid at said points and varying in resistance with the temperatures to which they are subjected according to a predetermined law, an external resistance connected to said parallel circuits at points therein between which a potential difference exists due to the difference between the temperatures at said conduit points, an electrical indicating device, a flow meter responsive to the quantity rate of fluid flow through said conduit, and a contact actuated by said meter to include a portion of said external resistance in circuit with said indicating device varying proportionately with the quantity rate of fluid flow through said conduit.

10. Means for determining the amount of heat lost or absorbed by a fluid in flowing between two separated points in a conduit, comprising in combination a source of current, circuit connections providing two parallel circuits supplied with current from said source and each including a resistance at each of said points and an intermediate connecting portion, said connections being so arranged that the currents flow in opposite directions through said circuits between the resistances located at said separated points, a cross connection between the intermediate portions of said parallel circuits, a contact movable along said cross connection, a second contact movable along one of said intermediate circuit portions, a flow meter responsive to the quantity rate of fluid flow through said conduit and moving the first-mentioned contact along said cross connection in proportion to said rate of flow and means responsive to the potential difference between said contacts for adjusting said second contact to minimize said potential difference.

[Claims 2, 5, 6, 8, and 9 not printed in the Gazette.]

1,267,758. METHOD OF AND APPARATUS FOR HEAT DETERMINATION. GEORGE H. GIBSON, Montclair, N. J. Filed June 10, 1916. Serial No. 103,044. (Cl. 73—184.)

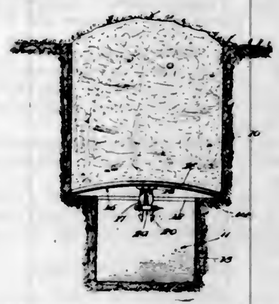


1. The method of determining the amount of heat lost or absorbed by a fluid in flowing between separated points in a conduit which consists in causing an electric current proportional in strength to the quantity rate of fluid flow in said conduit, to flow through resistances subjected to the temperatures of the fluid at said points and comparing the losses of potential in said resistances.

2. The combination with a conduit, of means for determining the amount of heat lost or absorbed by a fluid in flowing between separated points in said conduit comprising resistances subjected to the temperatures of the fluid at said points, means for causing an electric current proportional in strength to the quantity rate of fluid flow in said conduit to pass through said resistances, and means for comparing the losses of potential in said resistances.

3. The combination with a conduit, of means for determining the amount of heat lost or absorbed by a fluid in flowing between separated points in said conduit comprising a differential pressure device, an electro-magnetic balancing device, a motor driven rheostat controlled by said devices, resistance bodies subjected to the temperature in said conduit at said points, a source of electrical current connected in circuit with said resistances, rheostat and balancing device, and exhibiting means for comparing the losses of potential in said resistances.

1,267,759. SELF-LOCKING COVER FOR GRAVE-VAULTS. ROBERT G. GLEAVES, Greenbrier, Tenn. Filed July 31, 1917. Serial No. 183,706. (Cl. 72—7.)



1. In a grave vault cover, the combination with a burial box, of a transversely arched vault cover of greater width than the box, a pair of latch dogs pivotally supported from the underface of the vault cover adjacent each end with their outer faces formed with locking notches, strings secured to the dogs and normally tending to hold the dogs of each pair away from each other, and keeper eyes secured to the ends of the box and adapted to receive the locking dogs whereby the vault cover will be locked to the box.

6. The combination with a burial box, of a vault cover, and coacting means upon the cover and box for locking the cover to the box at various positions of elevation above the box.

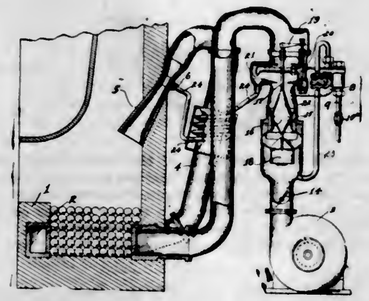
[Claims 2 to 5 not printed in the Gazette.]

1,267,760. LIQUID-FUEL COMBUSTION. JOHN GOOD, Brooklyn, N. Y. Filed Mar. 24, 1916. Serial No. 86,455. (Cl. 158—28.)

3. The method of burning liquid fuels which consists in controlling the liquid fuel and air in the proportions of an explosive mixture of such liquid fuel, heating said proportioned air and then finely atomizing and mixing the proportioned liquid therewith to form a blast mixture, and directing said mixture against a combustion-locating bed at a velocity, between its place of formation and said bed, which exceeds the rate of flame propagation through said mixture, whereby the locus of the combustion is established and maintained in or on said bed.

4. Surface combustion apparatus comprising in combination with a combustion locating bed, an air-blast nozzle provided with means for producing therein a homogeneous mixture of liquid fuel and air and adapted to atomize the liquid to an extent rendering said mixture ignitible in a cold condition, and an air source to supply said nozzle adapted to maintain the blast mixture therefrom at a velocity between said nozzle and bed exceeding the rate of flame propagation through said mixture.

7. Combustion apparatus comprising a combustion-locating bed, a Venturi blast nozzle directed toward said bed, an air source adapted to discharge initially cold air through said nozzle and means for introducing liquid fuel into the throat of the Venturi tube in proportions producing a blast mixture which is ignitible in a cold condition.

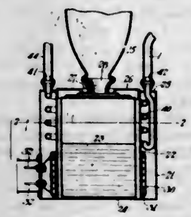


8. Combustion apparatus comprising a combustion-locating bed, a Venturi blast nozzle connected to means to supply it with air at a suitable pressure and directed toward the bed, means for introducing liquid fuel to the throat of said nozzle and means for applying heat to the air and liquid fuel supplied to said nozzle.

18. Combustion apparatus comprising a combustion-locating bed, an air pipe, an air-sustained body therein, a liquid fuel supply receptacle having its liquid surface and liquid outlet respectively subjected to the pressure existing on opposite sides of said body, in combination with a blast nozzle supplied with air from said pipe and directed toward said combustion-locating bed, a transfer pipe for conducting liquid from said outlet to the blast nozzle and means independent of the pressure affecting said liquid surface and liquid outlet of the supply receptacle, for maintaining liquid flow through said transfer pipe.

[Claims 1, 2, 5, 6, and 9 to 17 not printed in the Gazette.]

1,267,761. METHOD OF AND APPARATUS FOR GENERAL ANESTHESIA. WALTER V. GOODFELLOW, Los Angeles, Cal. Filed Nov. 4, 1916. Serial No. 129,623. (Cl. 128—13.)



1. An apparatus for producing general anesthesia by the use of an anesthetic liquid which comprises a vessel formed of two concentric cylinders, the inner cylinder being of sufficient size to contain a standard sulfuric ether can; a heating element between said cylinders; a superheating coil between said cylinders; a variable volume container; means for connecting a standard sulfuric ether can carried inside said inner cylinder with said variable volume container; means for connecting said variable volume container with said superheating coil; and means for passing vapor from said superheating coil into a body cavity of the patient to be anesthetized.

2. An apparatus for producing general anesthesia by the use of an anesthetic liquid which comprises a vessel formed of two concentric cylinders, the inner cylinder being of sufficient size to contain a standard sulfuric ether can; a heating element between said cylinders; a superheating coil between said cylinders; a variable volume container; means for connecting a standard sulfuric ether can carried inside said inner cylinder with said variable volume container; means for connecting said variable volume container with said superheating coil; and means for passing vapor from said superheating coil into the rectum of the patient to be anesthetized.

1,267,762. LAND-MARKER FOR PLANTERS. WILLIAM S. GRAHAM, Canton, Ill., assignor to Parlin & Orendorff Company, Canton, Ill., a Corporation of Illinois. Filed Mar. 1, 1918. Serial No. 219,762. (Cl. 97—83.)



1. In a device of the class described, the combination with a planter-frame, of a transversely-arranged bar at the rear of said frame, a bracket connected with said frame and supporting said bar, means for adjusting said bracket to slightly adjust the bar vertically, other means for supporting the bar, and a marker-bar pivotally connected with said first-named bar.

3. In a device of the class described, the combination with a planter-frame, of a transversely-arranged bar at the rear of said frame, said bar comprising a horizontal central section, a downwardly-extending member at each end of said central section and two laterally-extending members, a bracket connecting said central section of the bar with said frame, other brackets clamped to the said downwardly-extending members of the bar and connected with the frame, and a marker-bar pivotally connected with each end of said first-named bar.

5. In a device of the class described, the combination with a planter-frame, of a transversely arranged bar at the rear of said frame, said bar being bent to provide a horizontal central section, a downwardly-extending member at each end of said central section, a lateral member extending from each downwardly-extending member and two substantially-horizontal end members, a bracket connecting said central section of the bar with said frame, other brackets clamped to the downwardly-extending members of the bar and connected with the frame, and a marker-bar connected by a universal coupling to each of the said two horizontal end members of said first-named bar.

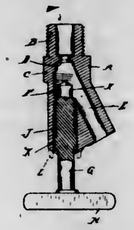
12. In a device of the class described, the combination with a planter-frame, of a transversely-arranged bar secured to the rear of the frame, an end portion of said bar being turned at an angle to the main or body portion thereof and a marker-bar pivotally connected by a coupling to said turned end, such coupling comprising a body portion pivotally mounted upon said turned end, a laterally-extending ear to which the marker-bar is pivoted at an angle to the pivot of the said body portion, and a stop device adapted to contact the bar adjacent to its said turned end when the marker-bar is moved to inoperative position.

[Claims 2, 4, and 6 to 11 not printed in the Gazette.]

1,267,763. DRAIN-COCK. WILLIAM GRIKSCHEIT, Detroit, Mich. Filed Mar. 14, 1918. Serial No. 222,278. (Cl. 137—4.)

2. A drain-cock comprising a casing having an axial passage therethrough, and an intersecting angular passage with a valve seat adjacent to the point of intersection, said axial passage being threaded, a stem for engaging said seat threaded to engage the threads of said axial passage having a shank of less diameter and an unthreaded portion of the diameter of the threaded portion and between the same and said shank, and a fin on said casing

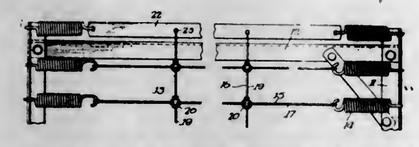
closed in to surround said shank and form a shoulder for engaging the larger diameter unthreaded portion, the latter being located to permit outward movement of the stem to clear the connection between said angular and axial passages.



4. A drain-cock comprising a casing and a valve stem having a T-shaped head, said stem having a threaded portion, a shank portion of less diameter and an unthreaded portion of larger diameter than the shank portion between said shank and threaded portion and said casing being provided with an axial passage and an intersecting angling passage with a valve seat adjacent to the point of intersection, said axial passage having a threaded portion for engaging the threads of said stem, and an unthreaded portion at its outer end for receiving said unthreaded portion of larger diameter on said stem, and a fin at the outer end turned in around said shank and adapted to prevent the detachment of the stem from said casing.

[Claims 1 and 3 not printed in the Gazette.]

1,267,764. BED-SPRING FABRIC. HENRY F. HAGER, Chicago, Ill. Filed July 31, 1916. Serial No. 112,221. (Cl. 245—5.)



2. A fabric for a bed-spring, comprising a plurality of links each terminating in hooks at its two ends and arranged in rows extending lengthwise of the fabric, and a plurality of links each having an eye at one end and provided with a hook forming the other end and arranged in rows extending across the fabric, the hooks of the last-mentioned links engaging in the eyes of adjacent links to form the cross rows, and each of said eyes forming a connection between the hooked ends of the two adjacent links in a lengthwise row, whereby the spring tension of the fabric in a bed applied to the ends of the lengthwise rows of links will result in all of the links of the fabric being under spring tension.

[Claim 1 not printed in the Gazette.]

1,267,765. CLASP. WILHELM HAMANN, Charlottenburg, Germany. Filed Apr. 6, 1914. Serial No. 829,910. (Cl. 24—248.)

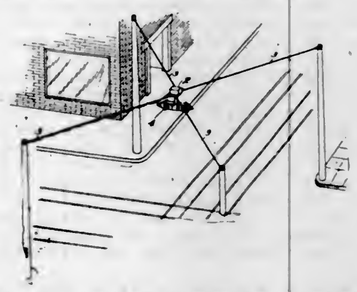


2. A clasp comprising a support having two interengaging loops, one of said loops being formed with an enlarged portion at one end and a smaller portion at the other end, and the other loop being reversely formed, said loops being fashioned in serpentine configuration so that the smaller portion of the reversely formed loop may enter the enlarged portion of the other loop, and the smaller portion of the last mentioned loop may enter the enlarged portion of the reversely formed loop for fastening the two loops together and to form a plurality of engaging surfaces along the sides of the clasp and at an end thereof for confining a fabric therebetween, said reversely formed loop having a hook formed thereon in which the upper portion of the other loop is received for confining the fabric between the loops at their upper edges.



[Claim 1 not printed in the Gazette.]

1,267,766. TOBACCO-PIPE STEM. JOHN S. HARBACH, Atlantic City, N. J., assignor of forty one-hundredths to A. W. Solomon, Atlantic City, N. J. Filed Oct. 18, 1916. Serial No. 126,291. (Cl. 131—12.)



1. A tobacco pipe stem consisting of a body having a channel therethrough and open at both ends, an integral tube formed therewith, a portion of said tube projecting beyond the outer end of the body to form a mouthpiece, said tube having a channel running therethrough, the wall between the channels having a duct formed therein adjacent the outer end of the body and communicating with each of said channels and a plug for closing the outer end of the first named channel, said plug having an angular face formed at the inner end and of sufficient length whereby when said plug is turned in one direction, the duct will be opened and when turned in the opposite direction the duct will be closed.

2. A device of the character stated comprising a bowl, a hollow stem communicating with the bowl and open at its outer end, a tube in communication with the stem adjacent the outer end of the latter and a plug having an angular face, said plug being located in the outer end of the stem and of sufficient length to project beyond the point of communication between the stem and tube, said plug adapted to be turned with the angular face away from said point of communication to close said communication and prevent any moisture of the tube from entering the stem as and for the purpose described.

1,267,767. STREET-TRAFFIC-CONTROLLING APPARATUS. BENJAMIN M. HARRIS, San Francisco, Cal. Continuation in part of application Serial No. 838,056, filed May 12, 1914. This application filed Jan. 25, 1915. Serial No. 4,198. Renewed Oct. 18, 1916. Serial No. 126,452. (Cl. 177—337.)

1. In a traffic signal apparatus, a signaling device capable of producing signals of varying characteristics, means for operating the device to produce a signal of a certain characteristic, other means for operating the device to produce a signal of a different characteristic, and means for operating the signaling device to produce a third signal embodying the first two signals and to effect a continuation of the production of said third signal.

7. In a traffic signal apparatus, a turnable visible signal, electrical means for turning the signal, a shutter mounted for covering the signal to render the same invisible, and electrical means for operating the shutter to uncover the signal.

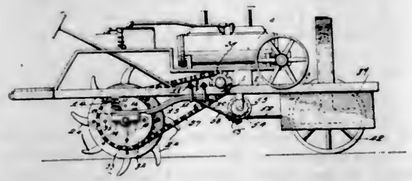
10. In a traffic signal apparatus, a signal, a shutter movably mounted to cover the same, means to move the shutter including a shaft, a rotatable member loose thereon and provided with an aperture, a second rotatable member fixed on the shaft, a spring actuated lock pin carried by the second rotatable member and adapted to engage in the aperture of the first rotatable member to connect the two members, a slidably mounted ejecting member on the first rotatable member adapted to disengage the lock pin from the second rotatable member, a cam to actuate the ejecting member, and means to hold the shaft in its rotated position subsequent to the unlocking of the first and second rotatable members.

14. A semaphore for street-crossing traffic, comprising a support, a movable semaphore carried thereby, a mechanism for moving said semaphore from one position to another, electrical means for operating the mechanism, means for limiting the movement of the mechanism to stop the semaphore in its several positions, and an audible signal device carried by said support, the operation of which is controlled by said mechanism, said device including means for rendering audible signals of different characteristics, upon successive movements of the visual semaphore.

20. In a street traffic signaling apparatus, an audible signal device and means for actuating same at any desired intervals to automatically produce signals of different characteristics on successive actuations and of like characteristics on alternate actuations.

[Claims 2 to 6, 8, 9, 11 to 13, 15 to 19, and 21 to 30 not printed in the Gazette.]

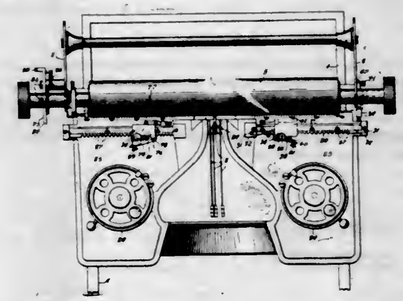
1,267,768. TRACTION-ENGINE. FRANCIS RUSSELL HEMENGER, Algonac, Mich. Filed Feb. 23, 1916. Serial No. 80,035. (Cl. 21—202.)



1. In a tractor engine of the class described, the combination of a frame, said frame being adapted to carry a motor, means for supporting the rear portions of said frame and being adapted to be connected to the motor for driving the engine, guides fixedly mounted upon the forward portions of said frame, said guides being provided with elongated curved sockets having abutment shoulders at their ends, an axle having its end portions positioned within said sockets, said sockets being of greater width than the diameter of said axle, a guiding wheel carried upon said axle, means for moving said axle in a horizontal plane, whereby the tractor engine may be moved in a desired direction, means for yieldably supporting the forward portions of said frame upon said axle, whereby when passing over uneven surfaces the frame may be moved so as to reduce the vibration or jar thereon.

2. In a tractor engine of the class described, the combination of a frame, said frame being adapted to carry a motor, means for supporting and driving said frame, a yoke fixedly carried upon the forward end of said frame and having a top at its upper portion, said top having a pocket formed therein, guides carried upon the lower forward portions of said frame, said guides having curved sockets terminating in abutment shoulders at their ends, an axle having its end portions fitting within said sockets, a steering wheel carried upon said axle, a fork mounted upon said axle and being provided with a stem at its upper end, a coil spring bearing upon the upper end of said fork and fitting within the pocket of said top, whereby the forward end of said frame will be yieldably supported, said sockets being of a greater width than the diameter of said axle, whereby when passing over uneven ground said coil spring may yield for taking up the jar and vibrations, and means for swinging said axle for turning said wheel in a desired direction when it is desired to steer said engine.

1,267,769. TYPE-WRITING MACHINE. EDWARD B. HESS, Brooklyn, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed July 13, 1917. Serial No. 180,261. (Cl. 197—63.)



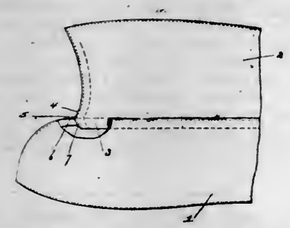
1. A visible typewriting machine comprising: printing elements including normally forwardly recumbent type bars and a transversely movable carriage having a platen, said carriage and platen being in rear of said type bars, and visible margin controlling devices adjacent the front of the carriage and platen and above the type bars including means movable with the carriage and platen and extending in front thereof, and means mounted independently of said carriage and platen adjacent to the front thereof and above the type bars coacting with said first means.

16. A visible typewriting machine comprising: printing elements including a transversely movable platen and a series of type bars having a common printing center in front of a vertical line drawn through the axis of the platen, a guide for the type bars located in front of said printing center, and a pair of margin rails in front of the platen, one on each side of the type bar guide, between which the type bars pass to the printing center.

31. A typewriting machine comprising: printing elements including a platen and type bars having a common printing center, said platen having a transverse movement with relation to the type bars, a pair of margin rails one on each side of the printing center to afford between said rails unobstructed passage of the type bars to the platen, complementary means, one carried by the right hand margin rail and the other adjacent the right hand end of the platen and transversely movable therewith for determining the extent of the transverse left hand movement of the platen, complementary means, one carried by the left hand margin rail and the other adjacent the left hand end of the platen and transversely movable therewith for determining the extent of the transverse right hand movement of said platen, a bell ringing device, a line lock mechanism, and means for actuating both the bell ringing device and the line lock mechanism from the right hand complementary means.

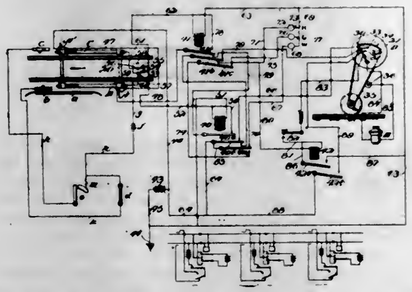
[Claims 2 to 15 and 17 to 30 not printed in the Gazette.]

1,267,770. FOLD-COLLAR. HUBBARD F. HURD, Troy, N. Y., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y., a Corporation of New York. Filed July 19, 1915. Serial No. 40,557. (Cl. 2—67.)



A launderable fold-collar comprising a band and a folded-over top inserted in the band, the exposed end-portions of the top retreating obliquely inwardly from the neighboring edge of the band and its inserted end-portions similarly retreating obliquely inward between the band-plies.

1,267,771. BLOCK-SIGNAL SYSTEM. MARSENA R. JULIAN, Cincinnati, Ohio, MARK H. HOVEY, Madison, Wis., and THOMAS E. CLARK, Detroit, Mich., assignors to Julian-Beggs Signal Company, Terre Haute, Ind., a Corporation of Maine. Filed Apr. 22, 1915. Serial No. 23,273. (Cl. 246—58.)



1. In a block signal system, an electrical valve mechanism adapted, when energized, to be closed, a plurality of circuits through said mechanism, means in each circuit for closing its circuit, and a plurality of controlling circuits for closing such circuits, said controlling circuits being so arranged that but one of them can be closed at any given time.

2. A block signal system including a mechanical circuit breaker, a clear contact shoe, a caution contact shoe, an electrical brake controlling mechanism, a normally energized clear relay, a caution relay, a circuit normally closed through the clear relay and brake controlling mechanism, a second circuit normally closed through the circuit breaker and the clear relay, means for energizing the caution relay, and a circuit through the clear relay, caution relay and brake controlling mechanism, said circuit being open in the clear relay when the clear relay is energized and in the caution relay when the caution relay is de-energized.

5. In a block signal system, the combination with a vehicle and a brake controlling mechanism, of a track controlled clear signal, a track controlled caution signal, a danger signal controlled by a closed circuit including a mechanical circuit breaker operable by a track trip, means for actuating the brake controlling mechanism to apply the brake upon receipt of a danger signal, means for actuating the brake controlling mechanism to release the brake upon receipt of a caution or clear signal, and means controlling the speed of the vehicle under any signal.

11. In a block signal system, the combination with a vehicle, of a brake actuating mechanism, track controlled clear, caution and danger signals, means operable upon receipt of a danger signal for operating the brake actuating mechanism to apply the brake, and means controlling the speed of the vehicle under any signal, including clear, caution and danger circuits, to all of which the brake actuating mechanism is common.

19. In a block signal system, an electrical brake governing mechanism, a multi-branched brake governing circuit through said mechanism having one branch normally closed, a normally closed circuit controlling the opening of the first circuit, a trip operated mechanical circuit breaker in the second circuit, and means operable under certain conditions for creating one or another substitute controlling circuits to maintain and control one or another of the branches of the brake governing circuit during such time as the normal controlling circuit is open.

[Claims 3, 4, 6 to 10, 12 to 18, and 20 to 26 not printed in the Gazette.]

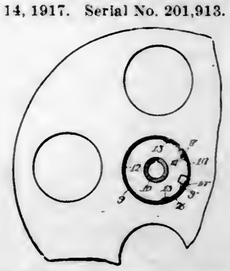
1,267,772. REFRIGERATING COMPOSITION. FREDERICK G. KEYES, Boston, Mass. Filed Aug. 17, 1917. Serial No. 186,691. (Cl. 252.)

1. A refrigerating composition comprising a volatile refrigerant, an active absorbent therefor, water as a solvent, and a substance that materially reduces the vapor pressure of the water without interfering with the use of the material in the process of refrigeration.

4. A refrigerating composition, comprising, with a sufficient amount of ammonia, sixty per cent. of ammonium nitrate, twenty-five per cent. of glycerin, and fifteen per cent. of water.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,773. FILM-REEL. SAMUEL KOHN, Chicago, Ill. Filed Nov. 14, 1917. Serial No. 201,913. (Cl. 242—70.)



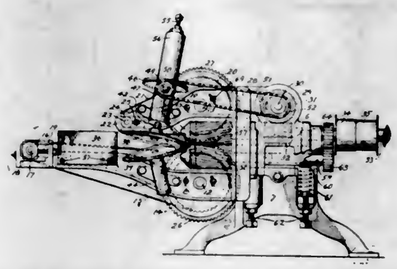
10. A film reel comprising end plates having radial slots therein; a hub drum of sheet material in cylindrical form securing the end plates together, there being an opening between adjacent edges of the sheet material of the hub drum; straps cut out and struck up from the sheet material of the hub drum and extending inwardly of the latter; a member of sheet material of substantially the same thickness as the material in the hub drum in said opening and having its outer surface curved similarly to the curvature of the periphery of the hub drum; extensions on the ends of said member disposed in said slots and adapted to engage the outer ends of the latter and hold said member against movement beyond a cylinder coincident with the periphery of the hub drum; and a spring disposed around the inside of the hub drum and secured to the latter by being disposed under said straps with its ends engaging the under side of said member.

[Claims 1 to 9 not printed in the Gazette.]

1,267,774. [WITHDRAWN.]

1,267,775. [WITHDRAWN.]

1,267,776. TOBACCO-STEMMING MACHINE. LEO W. LAWRENCE, Winston-Salem, N. C., assignor to Standard Tobacco Stemmer Company, New York, N. Y., a Corporation of Virginia. Filed Jan. 5, 1917. Serial No. 140,850. (Cl. 131—57.)



1. In a tobacco stemming machine, the combination with means for feeding tobacco leaves, of stripping means, and stem butt arranging means comprising operating connections and a pair of co-acting manipulating devices adapted to gather and aline stem butts that are moved in irregular formation into its range of action by the feeding means and to deliver said stem butts directly to said stripping means.

7. In a tobacco stemming machine, the combination with means for feeding tobacco leaves, of stem butt arranging means comprising operating connections and a pair of rotary manipulating disks having co-acting curved peripheral operating surfaces to which the feeding means delivers stem butts.

43. In a tobacco stemming machine, the combination with a pair of superposed belts the upper belt being shorter than the lower for feeding tobacco leaves to stem stripping position between the belts, of mechanism presenting a substantially continuous stripping medium traveling alongside and in the same direction as the feed belts at stripping position, and coöperating means for seizing the leaf stems and drawing them through the stripping medium.

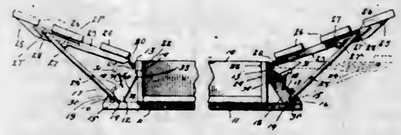
63. In a tobacco stemming machine, the combination with a support, of stripping mechanism, coöperating means for seizing the leaf stems and drawing them through the stripping mechanism, and means for projecting said stripping mechanism beyond said support to cause it to engage tobacco leaves before the stem drawing means comes into action and for afterward retracting said stripping mechanism to cause it to be disengaged from the strip.

79. In a tobacco stemming machine, the combination with a support, of tobacco leaf feeding means actuated by and operative to advance leaves to said support, a plurality of stripping members carried by said support, and means for producing relative movements of said support and said members whereby the members are positioned to operate upon the tobacco leaves and are then disengaged therefrom.

[Claims 2 to 6, 8 to 42, 44 to 62, 64 to 78, and 80 to 111 not printed in the Gazette.]

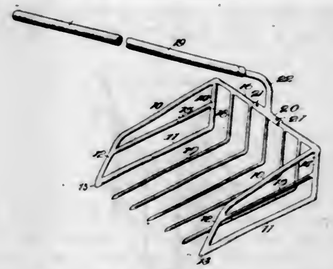
1,267,777. HAY AND STOCK RACK IRON. CLYDE H. LAWSON, Avoca, Mich. Filed Jan. 5, 1914, Serial No. 810,448. Renewed Apr. 26, 1918. Serial No. 230,999. (Cl. 21—74.)

1. The combination with a wagon body having a side section hingedly connected thereto, of a brace having a substantially vertically disposed slot open at its upper end and an extension of said slot disposed horizontally and closed at its inner end, a stake secured to extend transversely of said side section, the said stake comprising a web having a pair of parallel spaced slots extending longitudinally thereof, one of said slots communicating at one end with the medial portion of the other of said slots and extending beyond the same and angularly inwardly at its opposite end, a bar having pins at each end for engagement within the slots of said brace and web respectively, and means for holding said bar with its pins at the outermost extremity of said horizontally disposed slot extension and at the lower extremity of the innermost of said parallel slots, substantially as described.



2. The combination with a wagon body having a side section hingedly connected thereto, of a brace having a substantially vertically disposed slot open at its upper end, and an extension of said slot disposed horizontally, and closed at its opposite end, a stake secured to extend transversely of said side section, the said stake comprising a web having a pair of spaced parallel slots extending longitudinally thereof, the outermost of said slots communicating with the medial portion of the adjacent slot through an inwardly and angularly inclined slot and extending at its outer end beyond the said adjacent slot and being inclined inwardly, a stake brace comprising a pair of spaced bars, pins connecting the ends of said bars, one of said pins extending through said web slots and the other of said pins being adapted for engagement within said brace slot, and the said pins being spaced apart on said bars a distance equal to the distance between the outermost extremity of said horizontal extension of the brace slot and the lower extremity of the innermost of said web slots when the said stake is vertical, substantially as described.

1,267,778. AGRICULTURAL IMPLEMENT. CHARLES E. LEEN, Monarda, Me. Filed June 6, 1916. Serial No. 102,020. (Cl. 55—28.)

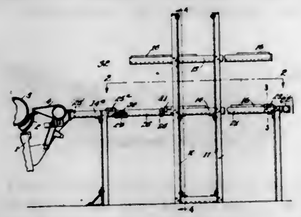


A gathering device including spaced vertical side members connected at their rear ends by a transverse cylindrical bar and a bottom member formed of a plurality of rods having their forward ends spaced apart and their rear ends extended upwardly and rigidly secured to the cylindrical bar, an elongated socket member having its lower face concave and fitting over and rigidly secured to the cylindrical bar at the center thereof and its upper face provided with an upwardly and forwardly extending shank disposed obliquely to the sides and bottom, and a handle rigidly secured to the obliquely disposed portion of the shank and having its free end extending forwardly and at one side of the adjacent side member.

1,267,779. FEEDING DEVICE FOR IRONING-MACHINES. EDWIN LICHTENSTEIN, New York, N. Y. Filed Aug. 5, 1916. Serial No. 113,282. (Cl. 214—1.)

1. Apparatus for feeding work to a machine, comprising a frame, two sets of guideways thereon spaced from each other and lying at different levels, one of said guideways leading to the machine and having loading and

feeding station at the same level, and work carrying devices movable on said guideways from station to station, the other of said guideways serving to return said devices to the loading station.

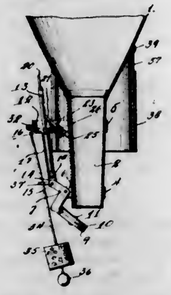


2. Apparatus for feeding work to a machine, comprising a frame, two sets of guideways thereon spaced from each other and lying at different levels, one of saide guideways leading to the machine and having loading and feeding stations at the same level, and work carrying devices movable on said guideways from station to station, said guideways being provided with a movable portion adapted when opened to permit the operator to enter the frame for feeding the work from said devices to the machine.

3. Apparatus for feeding work to a machine, comprising a frame, two sets of guideways thereon spaced from each other and lying at different levels, one of said guideways leading to the machine and having loading and feeding stations at the same level, work carrying devices movable on said guideways from station to station, said guideways being provided with a movable portion adapted when opened to permit the operator to enter the frame for feeding the work from said devices to the machine and means operable at will for elevating said devices from the lower to the upper guideways.

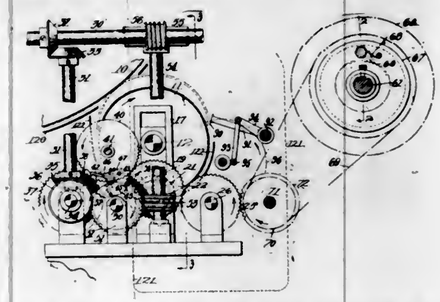
[Claims 4 to 6 not printed in the Gazette.]

1,267,780. FUNNEL. ALFRED T. LUNDE, Union, N. D. Filed Mar. 7, 1916. Serial No. 82,687. (Cl. 226—33.)



In a device of the class described the combination of a funnel having a closure means, a bell crank lever connected to said means, a spring pressed rod connected to said bell crank lever, whereby said rod will be normally urged in one direction, a bracket provided with a U-shaped portion mounted upon said funnel, a spring pressed trigger mounted upon said bracket and releasably engaging said rod, a yoke pivotally supported upon said U-shaped portion of the bracket and engaging said trigger, a finger extending from said yoke, a float strand connected to said finger, a float mounted upon said strand, whereby when said rod is lifted by said float, said finger will swing said yoke, causing said trigger to be moved from engagement with said rod, whereby said rod will swing said bell crank lever for moving said closure means to a closed position and at a predetermined time.

1,267,781. CARD-CYLINDER-STRIPPING DEVICE. HENRY MCDERMOTT, Clinton, Mass. Filed Oct. 20, 1917. Serial No. 197,747. (Cl. 19—15.)



2. A card cylinder stripping device comprising a normally inoperative stripper roll, devices to periodically move said roll to operative position, means to rotate said roll while in operative position, stock feeding devices, and means to increase the rate of feed during the stripping operation.

5. A card cylinder stripping device comprising a normally inoperative stripper roll, bearings for said roll, cam mechanism effective to raise said bearings, actuating devices therefor, and means to periodically connect said actuating devices to said cam mechanism said means including a continuously driven escapement device.

9. A card cylinder stripping device comprising a normally inoperative stripper roll, devices to periodically move said roll to operative position, means to rotate said roll while in operative position, stock feeding devices, means to operate said feeding devices at a predetermined rate, and additional means to operate said feeding devices at a higher rate, said additional means being controlled by the devices which periodically move the stripper roll to operative position.

[Claims 1, 3, 4, and 6 to 8 not printed in the Gazette.]

1,267,782. CUTTING-TOOL. GEORGE MCKERAHAN, Altoona, Pa. Filed Oct. 19, 1917. Serial No. 197,427. (Cl. 29—95.)



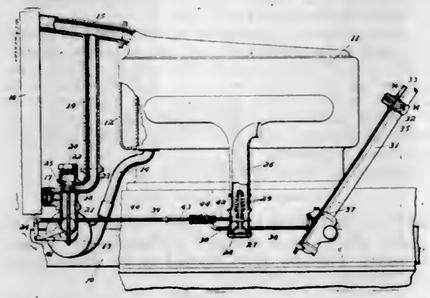
1. A cutter for metal working machines formed of high speed steel having cast around it a body or holder which completely incloses the cutter except at the projecting cutting end thereof.

5. A cutter for metal working machines, comprising a cutting tool formed of high speed steel having a holder formed of cast-iron cast around the body portion of the cutting tool and provided with a channel portion producing a base portion connected to the body portion of the holder by an apertured web, said base portion being adapted to be nicked in alinement with one of the apertures to allow said base portion and web portion to be broken away from the body portion of the holder.

[Claims 2 to 4 not printed in the Gazette.]

1,267,783. MOTOR-VEHICLE. ALVAN MACAULEY, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich, a Corporation of Michigan. Filed Aug. 16, 1915. Serial No. 45,795. (Cl. 123—179.)

2. In a hydrocarbon motor, in combination, the water circulation system having a valve therein, a carbureter having a mixture control valve, and a hand controlled device for operating both of said valves.



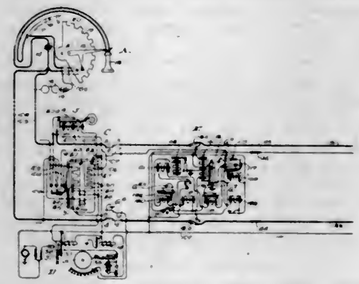
3. In a hydrocarbon motor, in combination, the water circulation system having a valve therein, a carbureter having a mixture control valve, and a hand controlled device for opening and closing the water system valve and connected for independent adjustment of the mixture valve when the water system valve is in a given position.

5. In a hydrocarbon motor, the combination with the water circulation system including a radiator, a by-pass around the radiator, a valve for said by-pass, a carbureter having a hand controlled mixture valve, and an operating connection from said by-pass valve to the carbureter mixture valve.

10. The combination with the water circulation system and the carbureter of a hydrocarbon motor, of valves in said system and carbureter, interconnections between said valves, and a device for adjusting said valves, said interconnections permitting independent adjustment of one of said valves when the other valve has reached a given position.

[Claims 1, 4, 6 to 9, and 11 not printed in the Gazette.]

1,267,784. TELEPHONE SYSTEM. TALBOT G. MARTIN, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 7, 1913. Serial No. 793,945. Renewed Oct. 22, 1917. Serial No. 197,994. (Cl. 179—9.)



1. In a telephone system, a calling and a called subscriber's line, means for establishing a connection between said lines, a meter for said calling line, means for automatically applying ringing current to the called line, means for automatically disconnecting said ringing current from the called line and for operating said calling line meter when connection has been established with the called line, a traffic trunk terminating in the operator's board, said first means also for establishing connection from said calling line to said traffic trunk and for automatically applying ringing current thereto, and means responsive to the establishment of a connection with said traffic trunk for automatically disconnecting the ringing current therefrom without operating said calling meter.

2. In a telephone system, a plurality of subscribers' lines, an automatic connector switch provided with bank contacts in which a plurality of said lines terminate, a traffic trunk connected with certain of said bank contacts, means for extending connection from one of said lines to said connector, means for then operating said connector to establish a connection with another of said subscribers' lines, means in said connector for automatically applying ringing current to said called line, a meter on the calling line, means controlled by the response of the called subscriber for automatically disconnecting the ringing current from the called line and for operating the meter, means for operating said connector to establish connection with said traffic trunk and applying ringing current thereto, an operator's set adapted to be connected with said trunk, and means responsive to the establishment of a connection with said traffic trunk for automatically disconnecting the ringing current therefrom without operating said calling meter.

3. In a telephone system, an automatic connector switch, a line with which said switch is adapted to make connection, a relay in said switch, a second relay bridged across said line and adapted to be connected in series with said first relay when said connector establishes connection with said line, said second relay being of high resistance to prevent energization of said first relay, a trunk terminating in said connector switch, a meter associated with said trunk, means for automatically short-circuiting said high resistance relay responsive to the establishment of a connection with said line to thereby cause the operation of said first relay and means for automatically preventing said first relay from operating said meter.

4. In a telephone system, an automatic connector switch, a line with which said switch is adapted to make connection, a relay in said switch, a second relay bridged across said line and adapted to be connected in series with said first relay when said connector establishes connection with said line, said second relay being of high resistance to prevent energization of said first relay, a trunk line extending to said connector switch, a meter associated with said trunk, means for automatically short-circuiting said high resistance relay responsive to the establishment of a connection with said line to thereby cause the operation of said first relay, means for applying ringing current to said line when connection is established therewith, and means controlled by the energization of said first relay for disconnecting said ringing current from the line and for preventing the operation of said meter.

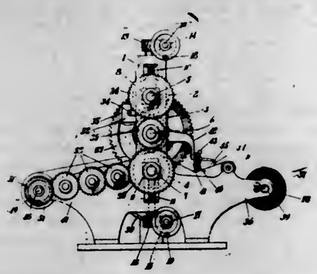
5. In a telephone system, an automatic connector switch, a line with which said switch is adapted to make connection, a relay in said switch, a second relay bridged across said line and adapted to be connected in series with said first relay when said connector establishes connection with said line, said second relay being of high resistance to prevent energization of said first relay, means for automatically short-circuiting said high resistance relay responsive to the establishment of a connection with said line to thereby cause the operation of said first relay, means for automatically connecting ringing current to said line when connection is established therewith, a trunk line extending to said switch, a meter associated with said trunk, means controlled by the energization of said first relay for disconnecting said ringing current from the line and for reversing the current in said trunk and means for preventing the reversal of said current from operating said meter.

[Claims 6 to 31 not printed in the Gazette.]

1,267,785. METHOD OF PRODUCING PYROXYLIN-COATED FABRICS. WALTER E. MASLAND, Wilmington, Del., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Sept. 3, 1914. Serial No. 859,974. Renewed Oct. 4, 1917. Serial No. 194,709. (Cl. 91—68.)

1. The process which comprises coating a fabric with a pyroxylin composition of such consistency as to constitute substantially a surface coating and then placing the same

under pressure while setting to anchor the coating on the fabric.

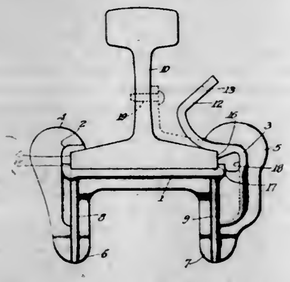


5. A process which comprises winding a fabric having a coating of such consistency as to constitute substantially a surface coating, into a roll, and setting the coating while said fabric is so wound into a roll.

10. The process of anchoring a coating of such consistency as to constitute substantially a surface coating upon a fabric which comprises winding the coated fabric tightly upon a roll before the coating has set, and maintaining the resulting pressure until such setting has taken place.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,267,786. ANTICREEPER. PHILIP W. MOORE, Evanston, Ill., assignor to The P. & M. Co., Chicago, Ill., a Corporation of Illinois. Filed June 5, 1915. Serial No. 32,288. (Cl. 238—4.)



1. The combination with a railroad rail having an opening therein, of a one-piece anti-creeper fitting over both sides of the rail base and provided with a pin of such size as to have a driving fit in said opening to aid in securing said rail anchor in place.

2. An anti-creeper comprising integral means for engaging the opposite flanges of a rail base both above and below the same, means engaging a tie to transmit the creeping thrust thereto and to insure a tilting action whereby the rail base is firmly gripped by said anti-creeper, and an extension on one of said rail engaging means having positive engagement with the rail to prevent tilting in a direction which would relax the grip on the rail base.

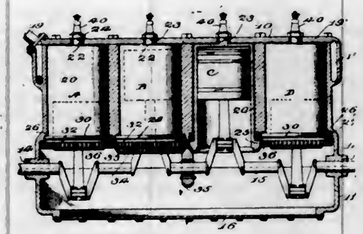
3. A rail anchor comprising a yoke having an extension at each end thereof, the extension at one end fitting against the top, side and bottom of the base flange, the extension at the other end also fitting against the top, side and bottom of the opposite base flange, but being cut away to provide a clearance sufficient to admit said base flange when said anti-creeper is tilted, and means for preventing tilting.

4. An anti-creeper comprising a body portion which bears against the bottom of the rail, a pair of gripping members integral with said body portion and extending upward above the plane of said body portion, a depending member integral with said body portion, said depending member and gripping members being in substantially a vertical plane and in advance of said body portion and an extension on one of said gripping members coöperating with the rail to prevent movement of the anti-creeper in a direction to decrease its effectiveness.

5. An anti-creeper comprising a single member shaped to fit against the bottom of the rail and over the base flanges thereof and bear against the side of a tie, the portion bearing against the bottom of the rail being to the rear, both of the portions fitting over the base flanges and the portion bearing against said tie, and an integral extension coöperating with said rail for maintaining said anti-creeper in position.

[Claims 6 to 13 not printed in the Gazette.]

1,267,787. ROTARY-VALVE GAS-ENGINE. JAMES W. NANCE, Filer, Idaho, assignor to Franklin Gas Turbine Company, Phoenix, Ariz. Filed Feb. 27, 1917. Serial No. 151,324. (Cl. 123—80.)



1. In an internal combustion engine, a cylinder having a head formed with spaced inlet and outlet ports and with a spark plug receiving opening spaced from the ports, the ports and opening being equally spaced from the center of the cylinder head, a sleeve valve rotatably mounted in the cylinder and having a head formed with a port adapted to successively register with the inlet port, spark plug opening and exhaust port of the cylinder head, and a packing ring surrounding the port in the valve head and engaging the cylinder head, said packing ring including a split resilient ring having its upper face beveled, seated in a channel formed in the valve head and communicating with the port, and a second ring having its lower face beveled engaging upon the first whereby it will be forced toward the cylinder head by radial expansion of the first ring, due to internal pressure from the port.

5. In an internal combustion engine, a cylinder having a cylinder head formed with a central opening, a bushing in the opening, a sleeve valve rotatably mounted in the cylinder and having a head engaging the cylinder head, a trunnion carried by the head of the valve and extending through the opening of the cylinder head, an annular flange upon the lower end of the sleeve valve, the cylinder at its lower end being counterbored to provide with the sleeve valve and flange an annular chamber above the flange, and a bearing adjustably mounted in the chamber.

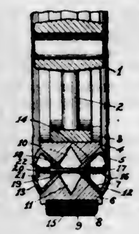
[Claims 2 to 4 and 6 not printed in the Gazette.]

1,267,788. RESILIENT WHEEL. MICHAEL NAYLON, Cleveland, Ohio. Filed Jan. 26, 1918. Serial No. 213,889. (Cl. 152—32.)

2. In a resilient wheel, the combination of an annular band, a rim arranged in spaced relation around the band, the rim and the band having oppositely inclined surfaces, hollow wedge shaped rings arranged at the sides of the band and the rim, the rings projecting into the space between the band and the rim and coöperating with the inclined surfaces thereof, and means inclosed by said hollow wedge shaped rings for resiliently drawing said rings together, substantially as described.

4. In a resilient wheel, the combination of an annular band, the band having inclined surfaces, a rim arranged in spaced relation around the band, rings arranged at

the sides of the band and the rim, the rings projecting into the space between the band and the rim, the rings having inclined surfaces for coöperating with the inclined surfaces of the band, means for resiliently holding the rings in position, rods having one of their ends fixed to the rim,



the other ends of the rods passing loosely through said band, adjustable nuts on the projecting ends of the rods, and coiled springs interposed between the band and the nuts tending to resiliently hold the rim toward the band, substantially as described.

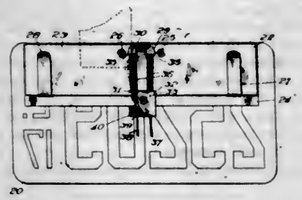
[Claims 1 and 3 not printed in the Gazette.]

1,267,789. SLEIGH-RUNNER. IVER J. NELSON, Wittenberg, Wis. Filed Apr. 23, 1917. Serial No. 163,971. (Cl. 21—96.)



A sleigh attachment for vehicle wheels, comprising a runner consisting of a resilient bar having its opposite end portions curved upwardly, a sheet metal blank having its medial portion widened and longitudinally and transversely curved to form a wheel seat which is secured centrally to the runner, and having its opposite end portions reversely curved to form spring braces which are attached at their lower ends to the upwardly curved end portions of the runner.

1,267,790. AUTOMOBILE-SIGNAL. CHARLES J. NORDSTROM, Evanston, Ill. Filed Feb. 5, 1917. Serial No. 146,819. (Cl. 116—31.)



1. In an automobile signal, in combination, a substantially flat supporting plate, a pair of differentiated swinging targets both normally resting against the back of the supporting plate and concealed thereby, the two targets extending outwardly in opposite directions from the center line of the supporting plate with the upper edges of the targets substantially flush with the upper edge of the plate, a pivot uniting each target with the supporting plate near the upper inner corner of the target, a bracket projecting rearwardly from the supporting plate, a pair of upright links each having its upper end connected with one of the targets at the upper inner corner of the target and sliding through the said bracket, a spring coiled about each link above the bracket and an independent cord attached to the lower end of each link.

[Claim 2 not printed in the Gazette.]

1,267,791. PENCIL-SHARPENER. DOCTOR F. OLIVER, Oakland, Cal. Filed Apr. 27, 1914, Serial No. 834,624. Renewed Nov. 3, 1917. Serial No. 200,194. (Cl. 120—96.)



1. In a pencil sharpener, the combination with a casing, of a frame journaled therein, oppositely extending bearing extensions on the frame, shafts mounted in the bearing extensions and extending within the frame in opposing relation to each other, opposing grinding members carried by the shafts within the frame and each being retained against longitudinal movement on its shaft by the opposing member, and means for rotating the shafts.

5. In a pencil sharpener, the combination of a casing having journaled extensions formed thereon, a sleeve journaled in one of said extensions, a crank secured to the sleeve outside of the casing, a shaft slidably mounted and turnable with the sleeve, means for limiting the sliding movement of said shaft within the sleeve, a frame secured at one end to said shaft, a pencil holder secured in the opposite end of the frame and extending into the opposite casing bearing extension, a pencil centering device in said bearing extension, a pair of shafts journaled in the frame, grinding disks secured on the inner ends of said shafts, gears secured on the outer ends of said shafts, and a stationary gear with which said gears intermesh.

8. In a pencil sharpener, the combination with a casing composed of separable sections one of which is provided with a fixed gear, a frame journaled in each casing section transverse to the plane of the gear, said frame having limited sliding movement in said specified section and being removable from the component section, a shaft slidably and rotatably journaled in the frame, a grinding member slidably receiving the shaft and removable therefrom by sliding the shaft from the grinding member, and a gear fixed on the shaft and engaging with the fixed gear for driving the shaft and holding it from sliding, said slidable mounting of the frame in the first casing section permitting of the gears being disengaged from each other n separating the casing sections.

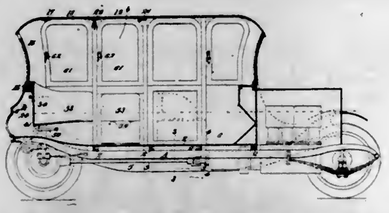
[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,267,792. SEAT SUSPENSION. DOCTOR F. OLIVER, Oakland, Cal. Filed Apr. 28, 1914, Serial No. 834,931. Renewed Nov. 3, 1917. Serial No. 200,195. (Cl. 21—44.)

1. The combination with a vehicle body, of a pair of crank arms pivotally mounted therein, a shaft secured in the free ends of said arms, a seat, journal brackets on the bottom of said seat through which said shaft extends, means for guiding said seat against tilting movement on the shaft, and cushioning means associated with the shaft and seat for cushioning any up or down movement of the seat.

6. The combination with a vehicle body, of a pair of crank arms pivotally mounted therein, a shaft connecting the free ends of the arms, a seat journaled on the shaft, oppositely threaded parts on the shaft, a nut member on each threaded part, a casing surrounding the nut members, coiled springs interposed between the nut members and between each nut member and the adjacent end of the cas-

ing, and means for effecting relative turning between the nut members and the threaded parts to vary the tension of the springs.



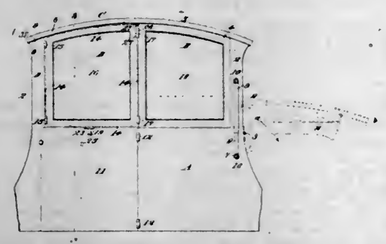
7. The combination with a vehicle body of a relatively movable member, and a cushioning means between the body and member including a coiled spring and a tensioning element for compressing the spring axially and operable on relative movement between the body and member.

8. The combination with a vehicle body, of a relatively movable member, and a cushioning means between the body and member including a threaded element, a nut on the latter, and a spring adapted to be tensioned by the nut on relative movement between the body and member.

14. In combination with a vehicle and a seat, a shaft rotatably carried by the seat and swingingly mounted on the vehicle whereby the seat is mounted for movement, said shaft being provided with oppositely threaded portions, a sectional casing surrounding the threaded portions of the shaft and comprising end sections and an intermediate section, spaced nuts slidable in the casing and each engaged with a respective threaded portion of the shaft whereby on rotation of the latter the nuts will move in opposite directions, a coiled spring interposed between the nuts, other coiled springs one of which is disposed in each end section of the casing to abut the adjacent nut, a peripherally arranged gear on the intermediate section of the casing, a worm gear journaled on the seat and meshing with the gear to adjust the casing around the shaft and adapted for holding the former against rotative movement with the latter, means for rotating the worm gear, and a U-shaped link pivoted to the upper portion of the seat and having its free terminals pivoted in the vehicle.

[Claims 2 to 5 and 9 to 13 not printed in the Gazette.]

1,267,793. CONVERTIBLE COUPÉ-BODY. DOCTOR FRANKLIN OLIVER, Oakland, Cal. Filed Sept. 12, 1914, Serial No. 861,449. Renewed Nov. 3, 1917. Serial No. 200,196. (Cl. 21—14.)



1. A convertible coupé for motor vehicles and the like, comprising a main body section, a door in said body, a side frame secured to and foldable on said door, a pair of sashes mounted on the side frame and foldable with relation to each other, and a foldable top to cover the coupé.

2. The combination with a vehicle body having an entrance opening and a door for closing the entrance opening, of an open frame hinged to the upper edge of the door for swinging thereover, a sash hinged to the front side of the frame for closing the latter, and a second sash hinged to the rear side of the frame.

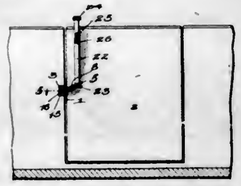
3. The combination with a vehicle body having a foldable top of the character described and a side door, of a side frame carried by and foldable on said door, and a pair of sashes carried by said frame and foldable with relation to each other.

4. The combination with a vehicle body having a foldable top of the character described and a side door, of a side frame hinged to the door which is adapted to be folded down on the inside of the door, means for locking said frame in a vertical position on top of the door, and a pair of sashes carried by said frame and foldable with relation to each other.

5. The combination with a vehicle body having a foldable top of the character described and a side door, of a side frame hinged to the door which is adapted to be folded down on the inside of the door, means on the door for locking said frame in a vertical position on top of the door, means for locking said frame with relation to the foldable top, and a pair of sashes hingedly secured to said frame.

[Claims 6 to 11 not printed in the Gazette.]

1,267,794. AUTO-DOOR LATCH. DOCTOR FRANKLIN OLIVER, Oakland, Cal. Filed Sept. 11, 1915, Serial No. 50,207. Renewed Nov. 3, 1917. Serial No. 200,197. (Cl. 70—49.)



1. In a door latch, a spring actuated rockable latch pawl, a rocking member for unlatching the pawl, means to limit the rocking movement of said pawl, and a keeper for engagement with the pawl having an inclined part adapted to engage the pawl and rock the same independent of said member.

2. In an auto door latch, a door member having a rockable element, a spring pressed latch proper rotatable on said element, means whereby to restrict the extent of rotation of the latch on said element, a keeper engageable with the latch and having a beveled part to engage the latch and rotate the same on and independent of movement of the element, a crank arm in connection with said element, and a push rod connected to said arm and adapted to have its upper end projected above the top of the auto door.

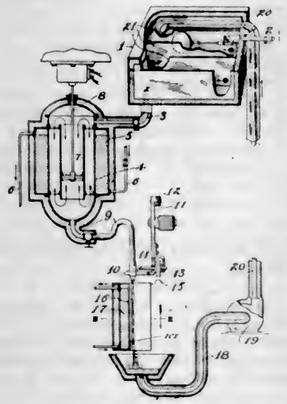
3. In a door latch, a member for mounting on the door, a rocking element borne by said member, a spring actuated latch pawl rotatably mounted on said rocking element, means for limiting the relative rotation of the element and pawl, and a keeper for mounting on the door jamb adapted to receive said member and to rock the latch independent of said element.

[Claims 4 to 10 not printed in the Gazette.]

1,267,795. APPARATUS FOR ICE MANUFACTURE. FRED OPHULS, Brooklyn, N. Y. Filed Nov. 4, 1915. Serial No. 59,523. (Cl. 62—151.)

1. Ice-making apparatus, comprising a supercooler capable of cooling the water below 32° F. and having means for keeping the water in commotion so as to prevent its freezing, an ice-cake forming support, and means for delivering the supercooled water over the support during the building up of an ice-cake thereon.

7. Apparatus for making ice, comprising a congealing surface, a nozzle for discharging water upon the surface, and means for oscillating the nozzle substantially parallel with the surface and for traversing it outwardly therefrom.



9. Apparatus for making ice, comprising a circulating system for water to be frozen including a supercooler therefor, a refrigerated surface receiving the supercooled water and on which it is converted into ice, and a separator to prevent the passage of ice crystals to the cooler, in combination with means for cooling the water in the supercooler below 32° F. without freezing, and means for maintaining the refrigerating surface at a temperature which converts such supercooled water into ice.

[Claims 2 to 6 and 8 not printed in the Gazette.]

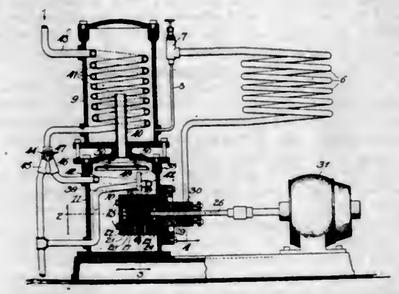
1,267,796. ARCH-SUPPORT. SOLOMON L. PAKAS, Spuyten Duyvil, N. Y. Filed Aug. 22, 1917. Serial No. 187,620. (Cl. 36—71.)



A foot arch pad composed of sponge rubber, having its upper surfaces of a contour similar to that of the bottom of the foot arch and its bottom surface convex so that when the pad is in place on the foot and uncompressed, such bottom surface will extend a considerable distance beyond the plane contacting the heel and ball surfaces of the foot, all the dimensions of the pad except the longitudinal dimensions being considerably greater than the corresponding dimensions of the arch space.

1,267,797. REFRIGERATING APPARATUS. HERBERT A. PARKYN, Chicago, Ill., assignor to Leonard Pump & Motor Company, Chicago, Ill., a Corporation of Maine. Filed July 29, 1915. Serial No. 42,531. (Cl. 62—115.)

1. In refrigerating apparatus, the combination of a compression-chamber containing a sealing and lubricating fluid, a condenser-chamber, a pump in said compression-chamber submerged in said fluid, means for conducting a refrigerant in gaseous condition into said pump, means for conducting the gas compressed by the pump, into said condenser-chamber, said condenser-chamber being constructed and arranged to prevent the return of the liquid refrigerant to the compression-chamber, and means for separating from the compressed refrigerant while the latter is in gaseous condition and before it enters the condenser-chamber, the lubricating fluid discharged from the pump with the gaseous refrigerant, whereby the liquid refrigerant is maintained substantially free of lubricating fluid.

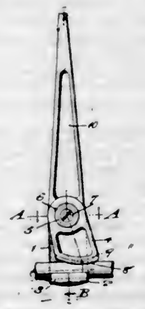


9. In refrigerating apparatus, the combination of a compression-chamber containing a sealing and lubricating fluid, a condenser-chamber, a pipe connecting said chambers and opening into said condenser-chamber above the level of the refrigerant therein, a pump in said compression-chamber submerged in the said sealing and lubricating fluid and discharging directly into said compression-chamber, whereby said pipe is in communication with said pump only through said compression-chamber, means for conducting a refrigerant in gaseous condition into said pump, means for conducting the gas compressed by the pump into said compression-chamber, and means in said compression-chamber for separating from the compressed refrigerant while the latter is in gaseous condition and before it enters the condenser-chamber, the lubricating fluid discharged from the pump with the gaseous refrigerant, said pipe operating to cause the lubricating fluid entering said condenser-chamber with said refrigerant, to flow back into said compression-chamber, through said pipe and discharge into the body of lubricating fluid in said condenser-chamber.

11. In refrigerating apparatus, the combination of two chambers, one located above the other and each formed of sides and a top and a bottom with a pipe connecting the lower with the upper chamber through the top and bottom thereof, respectively, one of said chambers being a condenser-chamber and the other a compression-chamber, the latter containing a sealing and lubricating fluid, a pump in said compression-chamber submerged in the said sealing and lubricating fluid and discharging into said compression-chamber, and means for conducting a refrigerant in gaseous condition into said pump.

[Claims 2 to 8, 10, and 12 to 16 not printed in the Gazette.]

1,267,798. DEVICE FOR BENDING PIPES. CHARLES P. PARNELL, New York, N. Y., assignor of one-half to George R. King, New York, N. Y. Filed Apr. 25, 1916. Serial No. 93,534. (Cl. 81—15.)



1. A device of the character described comprising a member having an offset portion forming an extended

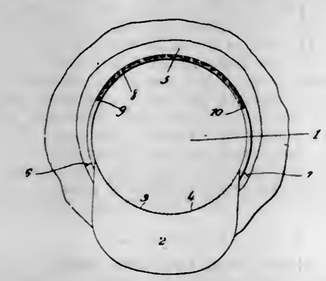
longitudinal bearing for the pipe to be bent, a jaw pivoted to said member and arranged to swing longitudinally of the pipe, said jaw being provided with a cam face arranged to coact with said offset portion for clamping and releasing the pipe, said cam face having a longitudinal groove to receive the pipe, and a handle connected to the jaw for operating it and manipulating the device.

2. A device of the character described comprising a member having an offset portion forming an extended longitudinal bearing for the pipe to be bent, a jaw pivoted to said member and arranged to swing longitudinally of the pipe, said jaw being provided with a cam face arranged to coact with said offset portion for clamping and releasing the pipe, said cam face having a longitudinally tapered groove to receive the pipe, and a handle connected to the jaw for operating it and manipulating the device.

3. A device of the character described comprising a member having an offset portion, said offset portion having a longitudinal groove forming an extended longitudinal bearing for the pipe to be bent, a jaw pivoted to said member and arranged to swing longitudinally of the pipe, said jaw being provided with a cam face arranged to coact with said offset portion for clamping and releasing the pipe, said cam face having a longitudinal groove to receive the pipe, and a handle connected to the jaw for operating it and manipulating the device.

4. A device of the character described comprising a member having an offset portion, said offset portion having a longitudinal groove forming an extended longitudinal bearing for the pipe to be bent, a jaw pivoted to said member and arranged to swing longitudinally of the pipe, said jaw being provided with a cam face arranged to coact with said offset portion for clamping and releasing the pipe, said cam face having a longitudinally tapered groove to receive the pipe, and a handle connected to the jaw for operating it and manipulating the device.

1,267,799. CAP. MAX PERLMAN, BENJAMIN PERLMAN, and HARRY PERLMAN, Brooklyn, N. Y. Filed Jan. 12, 1918. Serial No. 211,646. (Cl. 2—106.)



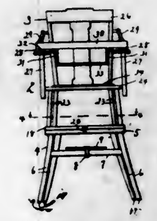
1. A cap having an adjustable portion comprising material cut on the bias and elastic fabric material extending over at least a portion of said bias-cut material.

3. A cap having an adjustable portion comprising the outer material cut on the bias, lining cut on the bias and elastic fabric material extending over at least a portion of said bias-cut outer material and said lining.

[Claims 2 and 4 to 8 not printed in the Gazette.]

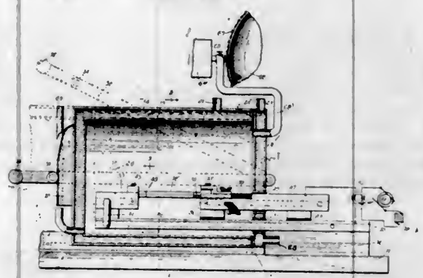
1,267,800. COMBINATION-CHAIR. JOHN C. PETERMAN, Olney, Pa. Filed Mar. 2, 1917. Serial No. 151,936. (Cl. 155—12.)

A combination chair comprising a walking chair unit provided with a rest frame, catches secured to the opposite outer edges of the rest frame, each having an inwardly projecting tongue overlying the frame, a nursery chair unit provided with a frame adapted to coact with the frame of the walking chair, said frame having grooves in its side edges for registering with the tongues of the catches and a latch pivoted to the inner edge of the nursery chair frame and adapted to engage the inner edge of the walking chair frame to prevent accidental move-



ment of the nursery chair unit with relation to the walking chair unit.

1,267,801. PROCESS FOR WELDING TUNGSTEN INGOTS. CARL A. PFANSTIEHL, Waukegan, Ill., assignor to Pfanstiehl Company, Inc., North Chicago, Ill., a Corporation of New York. Filed Oct. 15, 1915. Serial No. 55,943. (Cl. 219—10.)



1. The improvement in the art of sintering tungsten ingots which consists in subjecting the whole of an ingot of compressed tungsten particles to a longitudinal compressive stress and heating the ingot while it is thus subjected to a longitudinal compressive stress.

3. The process which consists in heating an ingot of compressed tungsten particles to sintering temperature while the entire ingot is being subjected to a compressive stress.

6. The process which consists in clamping a tungsten ingot between a pair of carborized tungsten electrodes abutting against the opposite ends of the ingot, and passing an electric current through the electrodes and ingot.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,267,802. TROLLEY-TRACK. ELLIS J. G. PHILLIPS, Aurora, Ill., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill., a Corporation of Illinois. Filed Feb. 11, 1916. Serial No. 77,612. (Cl. 16—7.)

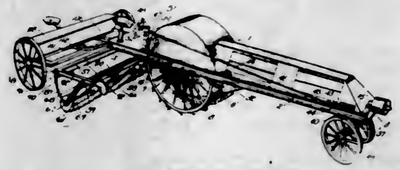


1. A sheet metal trolley track comprising, in combination, a rear member bent along its lower edge to form a horizontally disposed track rail and having at its upper edge an angularly disposed supporting flange, a front member supported by said flange and having at its lower edge an inwardly bent section to form a track rail, and an outwardly and downwardly inclined deflector depending from said track rail.

2. A sheet metal trolley track comprising, in combination, a rear member bent at its lower edge to form a track rail and having at its upper edge an angularly disposed supporting flange, a front member supported by said flange and having an upwardly extending securing web at its upper edge, the lower edge of said front member being inwardly bent to form a track rail complementary to the first mentioned track rail, and an integral deflector inclined outwardly and downwardly from said last mentioned track rail.

3. A sheet-metal trolley-track, comprising, in combination, a vertical rear member bent adjacent to its lower margin to form a track-rail and again bent to provide a notch below such track-rail and bent adjacent to its upper margin to form a supporting flange; a second member bent to form a top piece for attachment to said supporting flange, a front wall spaced from and parallel to the said vertical rear wall, a track-rail opposite the first-mentioned track-rail and an outwardly-inclined deflector integral with the track-rail whereby a notch is formed between such track-rail and deflector; and metal strengthening strips secured to the outer faces of the section near its end and bent to enter the said notches, said strips projecting beyond the end of the section to overlap and engage the end of another similarly-shaped section.

1,267,803. POWER-DRIVEN FARM IMPLEMENT. ANDREW H. REED, Kansas City, Mo. Filed Feb. 16, 1916. Serial No. 78,605. (Cl. 97—72.)



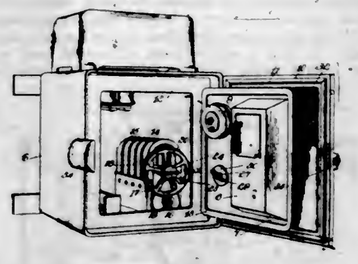
1. The combination with a main frame, of brackets suspended from the main frame and having rear ends spaced therefrom, a sub-frame having a member at one side provided with a flange for projection between the bracket ends and the main frame, and means for removably supporting the opposite side of the sub-frame from the main frame.

3. The combination with a main frame comprising spaced sidebeams having apertures therein at opposite sides of the frame and brackets suspended from said beams in spaced relation with said apertures and having their rear ends spaced from the supporting beams, of a sub-frame comprising spaced side rails extending transversely beneath said main frame, one of said rails having a hanger member attached thereto provided with a flange for projection between the bracket ends and the main frame, and the opposite side rail having apertures therein in registration with the main frame apertures and bolts extending through the said registering apertures to secure the sub-frame in suspended position.

[Claim 2 not printed in the Gazette.]

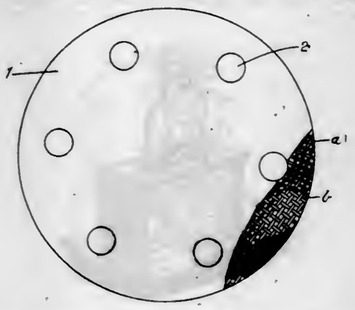
1,267,804. DEVICE FOR MOISTURE AND GAS PROOF TELEPHONE SETS. EUGENE A. REINKE, Rochester, N. Y., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y., a Corporation of New York. Filed May 13, 1915. Serial No. 27,850. (Cl. 171—76.)

1. In a telephone set, the combination with a casing of a generator disposed within the casing, a disk mounted on the operating shaft of the generator, a pair of pins carried by the disk and disposed diametrically opposite each other, a door for said casing, a crank provided with a shaft mounted in and extending through said door, and an arm secured to the inner end of the shaft arranged when the door is closed to extend between the pins carried by the disk.



2. In a telephone set, the combination with a casing of a generator disposed within the casing, a disk mounted on the operating shaft of the generator adapted to move longitudinally relative to the generator, a pair of pins carried by the disk and disposed diametrically opposite each other, a door for said casing, a crank provided with a shaft mounted in and extending through said door, an arm secured to the inner end of the shaft arranged when the door is closed to extend between the pins carried by the disk, and spring means for holding said disk toward the door of the casing.

1,267,805. METHOD OF MAKING WASHERS FOR JOINTS. GEORGE DAUBNEY ROSE, Salford, Manchester, England. Filed July 18, 1916. Serial No. 109,962. (Cl. 154—2.)



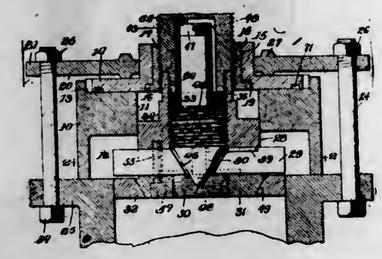
1. The herein described method of making washers from fabric which consists in forming openings in the fabric by pushing aside the threads of the fabric and then securing them in this position.

2. The herein described method of making washers from fabric which consists in impregnating the fabric with a rubber solution, forming openings in the fabric by pushing aside the threads of the fabric and then vulcanizing the rubber while the threads of the fabric are pushed aside.

1,267,806. PORTABLE MACHINE FOR REBORING ENGINE-CYLINDERS. ROBERT E. ROSEBERRY, Baltimore, Md., assignor to Universal Tool Company, Detroit, Mich., a Corporation. Filed Dec. 14, 1916. Serial No. 137,018. (Cl. 77—2.)

2. In a machine for reboring engine cylinders, a cutter head, cutters mounted in slots formed in one face of the head, a beveled head, shoulder and recess centering means between the heads, fastening means between the heads, and an expanding guide ring engaging the beveled head.

8. In an engine reboring machine, a supporting ring, means for clamping the supporting ring in axial alinement with a cylinder to be rebored, a split resilient centering ring adapted to seat partially within the supporting ring and to project beyond the same, a feed nut carried by the supporting ring, a feed screw threaded through the nut, a cutter head, a beveled head secured to the cutter head, means for connecting the beveled



head to the extended end of the feed screw, and a split expansible guide ring carried by the beveled head to engage the wall of the cylinder, the centering ring, guide ring and beveled head being all capable of being drawn into the supporting ring when the cutter head moves into the adjacent end of the cylinder.

[Claims 1, 3 to 7, and 9 not printed in the Gazette.]

1,267,807. ATTACHMENT FOR CLOCKS. THEODORE SCHISGALL, New York, N. Y., assignor to Travelight Mfg. Co., Philadelphia, Pa., a Corporation of Delaware. Filed Oct. 29, 1917. Serial No. 198,937. (Cl. 46—40.)



1. A figure provided with a head having therein openings simulating eye sockets, a plate adapted to be mounted on said head back of said eye-sockets, said plate having therein simulations of eye balls, a mechanically operated motor, and jointed levers connected with each other and respectively with said plate and a member of said motor whereby short oscillations are imparted to said plate and consequently to said eye balls.

2. A figure provided with a plate having therein simulations of eye balls, a head having therein openings simulating open lips, a hanger mounted on said head back of said lips, said hanger having thereon the simulation of a tongue, which latter is adapted to occupy and play in said lips, said hanger being adapted to stiffen said plate and to form means for the suspension of the plate in said head, a mechanically operated motor, and a connection for said hanger, and a movable member of said motor, whereby oscillations are imparted to said hanger and consequently to said tongue.

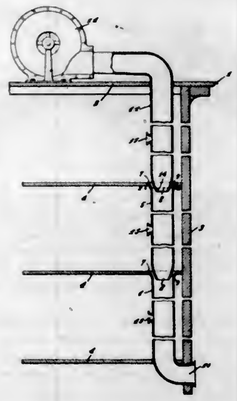
3. A figure provided with a head having therein openings simulating eye sockets, and open lips, an oscillating hanger mounted on said figure back of said head, a plate carried by said hanger having simulations of eye balls, a tongue on said hanger adapted to play in said lips, said hanger being adapted to stiffen said plate and to form means for the suspension of the plate on said head, and jointed levers forming a connection with said hanger, and a movable member of a train of gearing adapted to oscillate said hanger and consequently said plate and tongue.

4. An upright piece provided with a head having therein openings simulating eyesockets and open lips, a plate back of said head, a hanger mounted on said head and adapted to carry said plate and stiffen the same, said plate having thereon simulations of eye balls, and said hanger having connected therewith a tongue which is adapted to enter said lips, a mechanically operated motor, and a connection for said hanger and a movable member of said motor, said connection being formed of jointed arms.

5. A figure provided with a head having therein openings simulating eye-sockets and open lips, a hanger mounted on said head back of said openings, a plate secured to said hanger having on its front face simulations of eye balls, a simulation of a tongue on said hanger adapted to play in said lips, and a mechanically operated motor having a movable member adapted to be connected with said hanger for oscillating the latter and said tongue.,

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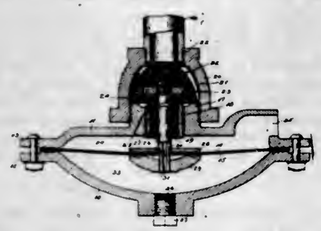
1,267,808. DEVICE FOR VENTILATING HOTELS AND OFFICE-BUILDINGS. WILLIAM R. SELF, Newton, N. C. Filed Mar. 7, 1918. Serial No. 221,009. (Cl. 98—27.)



In a ventilating system, a building comprising floors; a plurality of pipe sections each having its upper end mounted in one floor and having its lower end inserted into the upper end of an adjoining section and spaced peripherally therefrom to define an air inlet; a blast conduit having its lower end inserted into the upper end of the uppermost pipe section and spaced peripherally therefrom to define an air inlet; means assembled with the conduit for creating a blast through the conduit and through the pipe sections, the conduit and pipe sections having air outlets spaced above the respective floors.

1,267,809. VACUUM-VALVE. WILFRED SHURTLEFF, Moline, Ill. Filed June 11, 1917. Serial No. 174,024. (Cl. 137—122.)

1. In a vacuum check valve for heating systems, the combination of a casing, a diaphragm dividing said casing into an upper diaphragm chamber and a lower diaphragm chamber, a valve chamber formed in said casing above said upper diaphragm chamber and adapted for connection with a heating system to receive fluid under pressure, a passageway for connecting said valve chamber and upper diaphragm chamber, a valve in said valve chamber for controlling said passageway and connected to be shifted by said diaphragm, said upper diaphragm chamber being always open to atmosphere and said lower diaphragm chamber being always in communication with said valve chamber.



2. In a vacuum check valve for heating systems, the combination of a casing, a diaphragm dividing said casing into an upper diaphragm chamber and a lower diaphragm chamber, a valve chamber formed in said chamber above said upper diaphragm chamber and adapted for connection with a heating system to receive fluid under pressure, a passageway for connecting said valve chamber and upper diaphragm chamber, a valve in said valve chamber for controlling said passageway and connected to be shifted by said diaphragm, said upper diaphragm chamber being always open to atmosphere and said lower diaphragm chamber being always in communication with said valve chamber, said lower diaphragm chamber being otherwise closed.

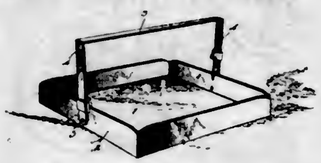
3. In a vacuum check valve for heating systems, the combination of a casing, a diaphragm dividing said casing into an upper diaphragm chamber and a lower diaphragm chamber, a valve chamber above the upper diaphragm chamber adapted for connection in a heating system to receive fluid under pressure, a valve port between said valve chamber and upper diaphragm chamber controlled by said valve, said upper diaphragm chamber being always open to atmosphere, said valve being connected with said diaphragm to be shifted thereby and having a passageway therethrough for connecting the lower diaphragm chamber with the valve chamber.

4. In a vacuum check valve for heating systems, the combination of a casing, a diaphragm dividing said casing into an upper diaphragm chamber and a lower diaphragm chamber, a valve chamber above the upper diaphragm chamber, a valve port between said valve chamber and upper diaphragm chamber, a valve in said valve chamber for controlling said port, a stem extending from said valve through said port and secured to the diaphragm, there being a passageway through said valve and stem for connecting the valve chamber with the lower diaphragm chamber, said upper diaphragm chamber being open to atmosphere, said valve being shifted by the diaphragm to open the port when the pressure in the valve chamber is greater than atmosphere pressure, and the valve being shifted to close the port when the pressure in the valve chamber is less than that of atmosphere.

5. In a vacuum check valve for heating systems, the combination of a casing, a diaphragm dividing said casing into an upper diaphragm chamber and a lower diaphragm chamber, a valve chamber formed in the casing above the diaphragm chamber, a port for connecting said valve chamber and diaphragm chamber, a valve in said valve chamber for controlling said port, a valve stem extending through said port and secured to the diaphragm, said lower diaphragm chamber being always in communication with said valve chamber and said upper diaphragm chamber being open to atmosphere, the weight of said valve structure and diaphragm tending to hold the valve in position to close said port, said valve structure being raised by the diaphragm to open the port when the pressure in the valve chamber is sufficiently greater than atmospheric pressure to overcome the weight of the valve structure and diaphragm, atmospheric pressure within the upper diaphragm chamber causing said diaphragm to securely hold the valve structure down to close the port when the pressure in the valve chamber is less than atmosphere.

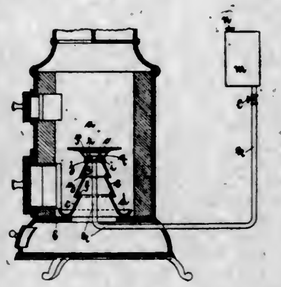
[Claims 6 to 8 not printed in the Gazette.]

1,267,810. TRAY. STEPHEN GILBERT SINGLETON, Burke, Idaho. Filed Dec. 21, 1917. Serial No. 208,241. (Cl. 220—27.)



A tray comprising a tray body rectangular in form and a yoke or U-shaped handle, consisting of a body extending transversely of the tray and arms pivoted to opposite sides of the tray, a clip mounted to slide on each arm and slidable the full length of the arm and having an inwardly extending lug, the side wall of the tray at the arm being notched to receive the lug to lock the handle perpendicular to the plane of the body of the tray and the body of the handle being of greater length than the distance between the pivotal connection of the handle with the tray for permitting the clips to fit outside of the tray when the handle is folded into the plane of the tray.

1,267,811. OIL-BURNER. MOGENS C. A. SMEDEGAARD, Hörning, Denmark. Filed Aug. 16, 1917. Serial No. 186,635. (Cl. 158—91.)



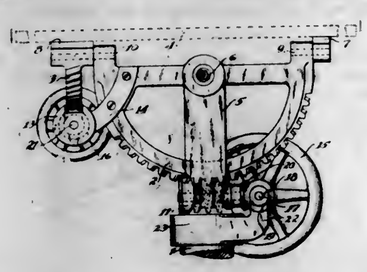
1. In an oil burner, the combination of a plurality of superposed conical members; a distributing plate mounted above the uppermost conical member and having a central opening; and an oil supply pipe having its outlet end fitted in said opening; said plate having air holes formed through it around said opening.

[Claims 2 to 4 not printed in the Gazette.]

1,267,812. SURGICAL OPERATING-TABLE. LEO SMITH, Hammond, Ind., assignor to Frank S. Betz Company, Hammond, Ind., a Corporation of Indiana. Filed Apr. 6, 1917. Serial No. 160,158. (Cl. 45—50.)

1. In a device of the class described, the combination of a standard, a gear sector tiltably mounted on said standard on a transverse axis, a second gear sector tiltably mounted on said first mentioned gear sector on an axis transverse to said standard and substantially perpendicular to the axis of said first mentioned gear sector, said gear sectors coacting to support a table, gearing journaled on said standard and meshing with said first mentioned gear sector, other gearing journaled on said first mentioned gear sector and meshing with said second

mentioned gear sector, and means for operating said gearing whereby to shift said gear sectors relative to said standard and to each other for the purpose of adjusting the angular disposition of the table with respect to said standard.



3. In a device of the class described, the combination of a standard, a gear sector tiltably mounted on said standard on a transverse axis, a second gear sector tiltably mounted on said first mentioned gear sector on an axis transverse to said standard and substantially perpendicular to the axis of said first mentioned gear sector, said gear sectors coacting to support a table, a worm journaled on said standard and meshing with said first mentioned gear sector, a hand wheel also journaled on said standard on an axis substantially parallel to the axis of said first mentioned gear sector and having gearing connecting it with said worm, a second worm journaled on said first mentioned gear sector and meshing with said second gear sector, and a hand wheel connected to said second worm and having the axis thereof disposed substantially parallel to the axis of said first mentioned gear sector, said hand wheels being adapted to be manipulated for adjusting the angular disposition of the table with respect to the standard.

6. In a device of the class described, the combination of a standard, a gear sector tiltably mounted on said standard on a transverse axis, a second gear sector tiltably mounted on said first mentioned gear sector on an axis transverse to said standard and substantially perpendicular to the axis of said first mentioned gear sector, said gear sectors coacting to support a table, a worm journaled on said standard and meshing with said gear sector, a hand wheel also journaled on said standard on an axis substantially parallel to the axis of said first mentioned gear sector and having gearing connecting it with said worm, a second worm journaled on said first mentioned gear sector, and a hand wheel connected to said worm and having the axis thereof disposed substantially parallel to the axis of said first mentioned gear sector, said hand wheels being adapted to be independently manipulated for adjusting the angular disposition of the table with respect to the standard.

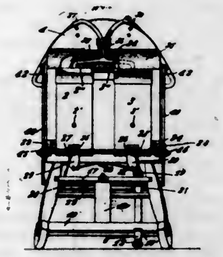
[Claims 2 to 4 not printed in the Gazette.]

1,267,813. OIL-BURNER. GARFIELD A. SPENCE, Aldine, Tex. Filed Sept. 7, 1916. Serial No. 118,811. (Cl. 158—75.)



AN oil burner including a block having a passageway extending therethrough from end to end, a thimble threaded into one end of said passageway whose inner end is obtusely convex, said thimble having an enlarged internal chamber communicating with said passageway through a restricted orifice in its inner end through which steam is projected into said passageway in a continuous stream from said chamber, a steam pipe connected to the outer end of said thimble, a neck upstanding from said block and integral therewith, a thimble having an obtusely convex inner end and an enlarged internal chamber, said thimble being threaded into said block through said neck at right angles to the first mentioned thimble, said chamber communicating with said passageway through a restricted orifice in its inner end, through which fuel is discharged in a continuous stream, a removable plug threaded into and closing the outer end of said chamber, a fuel pipe threaded through the wall of said neck and thimble and communicating with the internal chamber of said thimble, said thimbles being arranged to discharge steam and fuel respectively at right angles to each other in said passageway.

1,267,814. PNEUMATIC ATTACHMENT FOR ROCKING-CHAIRS. VENDEL SRAMCIK, Senecaville, Ohio. Filed Mar. 30, 1917. Serial No. 158,663. (Cl. 230—8.)



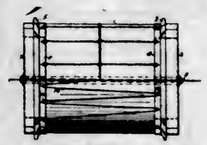
1. The combination with a rocking chair; of an apparatus associated therewith and comprising a pair of bellows mounted thereon, a surface engaging member pivotally connected at one end with the front of said chair, a lever fulcrumed intermediately of its ends, a pulley and cable connection between said bellows and lever, a connection between said lever and the front end of said surface engaging member whereby the bellows are alternately actuated on the rocking of the chair, and means for conducting air from said bellows.

5. The combination with a rocking chair having a back; of an apparatus associated therewith and comprising a pair of bellows mounted on said back, a surface engaging member pivotally connected at its front end to said chair at the front end thereof, an upright rising from the pivoted front end of said member, an upright carried by the rear end of said chair, a lever fulcrumed intermediately of its ends on said last mentioned upright, a link pivotally connected with the first mentioned upright and with said lever between its fulcrum and one of its ends, a connection between the ends of said lever and said bellows whereby the oscillating movement of said lever will operate to expand first one of said bellows and then the other, arms depending from said bellows, a pulley mounted on said chair bottom, and a belt connected at its opposite ends with said arms and extending around said pulley, whereby the expansion of one of said bellows will operate to collapse the other.

8. The combination with a rocking chair having a back, and front and rear connecting cross bars; of an apparatus associated therewith and comprising a surface engaging bar arranged longitudinally of said chair between the rockers thereof and extending at its rear end beyond the rear rocker connecting cross bar, a roller mounted on the rear end of said surface engaging bar, means pivotally connecting the front end of said bar with the front rocker connecting cross bar, said surface engaging bar and said rear rocker connecting cross bar having oppositely disposed registering recesses, a connection between the pivoted front end of said surface engaging bar and said bellows whereby the rocking motion of the chair will operate to alternately expand and collapse said bellows, and means for conducting air from said bellows.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,267,815. PROTECTOR FOR PAPER-ROLLS. WILLIAM O. STALEY, Houston, Tex., assignor of forty-five one-hundredths to Harry R. Decker and ten one-hundredths to F. P. Risdon, Harris county, Tex. Filed July 30, 1917. Serial No. 183,418. (Cl. 206—59.)



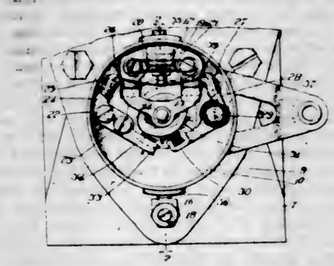
1. A protector for rolls of paper and the like including a cap fitted over each end of the roll, each cap being formed of sections and means securing said sections together, said means also securing said caps on said roll.

2. A protector for rolls of paper and the like including a cap fitted over each end of the roll, each cap being formed of sections adjustable relative to each other, and means securing said sections together, said means also securing said caps on said roll.

3. A device of the character described including end plates adapted to fit against the ends of a paper roll, each plate being formed of sections and means for securing said plates clamped against the roll ends.

[Claims 4 and 5 not printed in the Gazette.]

1,267,816. INTERRUPTER MECHANISM. JOHN ROY STARK, Racine, Wis., assignor, by mesne assignments, to The Webster Electric Company, Racine, Wis., a Corporation of Wisconsin. Filed July 16, 1917. Serial No. 180,743. (Cl. 123—166.)

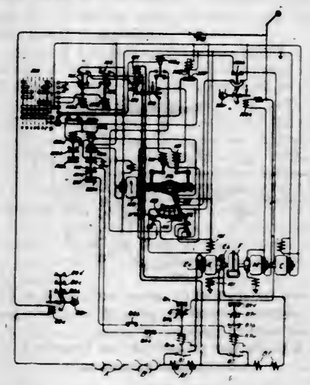


3. Interrupter contact mechanism comprising a flat spring fixed at one end, a pivoted lever attached to the opposite end of the spring, a contact normally engaging the spring at a point intermediate its ends, said contact being arranged to hold the spring in the form of an arc, and to prevent the spring from assuming a straight line position, and means for operating the lever to move the end of the spring attached thereto toward the opposite end thereof, whereby the spring is given a bulge and caused to separate from the said contact.

[Claims 1 and 2 not printed in the Gazette.]

1,267,817. SYSTEM OF CONTROL. RAY STEARNS and WILLIAM S. H. HAMILTON, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Mar. 24, 1916. Serial No. 86,332. (Cl. 172—179.)

1. In combination, a plurality of electric motors, a controller for connecting said motors in series and in parallel, a source of current adapted to be connected to the field winding of each of said motors, a controller arranged to control the connection between said source of current and said field winding, and means for determining the relative operation of said controllers.



2. In combination, a plurality of series electric motors, a power supply circuit, resistances, a controller connected and arranged to control the connections between said power supply circuit, said resistances, and said motors, and to connect said motors directly in series and in parallel with said source of supply, means for causing said motors to act as generators, a controller for controlling said latter means, and means mechanically connecting said controllers arranged to prevent the operation of said latter controller when said first controller is in such a position that the resistances are connected in circuit.

5. The combination of a plurality of electric motors, a series parallel controller for said motors, a braking controller for causing said motors to operate as braking generators, and means preventing the operation of said braking controller unless the motor circuit has first been closed by the operation of the series parallel controller.

7. The combination of an electric motor, a controller for controlling the operation of said motor while the same is absorbing electrical energy, said controller having a movable element rotatable about a vertical axis and provided with an operating handle adjacent its upper end, a braking controller for controlling the operation of said motor so that the same shall deliver electrical energy, said controller having a movable element rotatable about a vertical axis and provided with an operating handle adjacent its lower end, said braking controller being detachably secured to the upper end of said first-named controller, and means associated with said controllers for determining their relative operation.

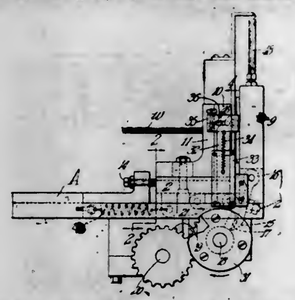
35. In combination, a source of supply, a pair of series motors, means for connecting said motors in series and in parallel to said source of supply by short-circuiting one of said motors while keeping the flow of current through the other motor uninterrupted, an auxiliary source of current connected to the field winding of each of said motors, and means for disconnecting said auxiliary source only from the field winding of the motor which is short-circuited, and for reducing the potential of the auxiliary source which remains connected to its associated field winding.

[Claims 3, 4, 6, and 8 to 34 not printed in the Gazette.]

1,267,818. PINION-FILLING MACHINE. THOMAS B. STEPHENSON, Forestville, Conn. Filed Aug. 24, 1917. Serial No. 187,985. (Cl. 29—88.)

1. In a machine of the character described, the combination with relatively movable members, each provided with means to receive and support in predetermined group relation a plurality of wires or the like, of means associated with one member to simultaneously and independ-

ently grip each wire of the group, means to move said members, the one relatively to the other while the wires are held by the gripping means, and means to simul-



taneously and independently sever each wire of the group after the relative movement of said members and while the wires are held in grouped relation.

[Claims 2 to 12 not printed in the Gazette.]

1,267,819. ANILIN-REDUCER. ALFRED H. STEVENS, Brooklyn, N. Y., assignor to Stevens Brothers, New York, N. Y., a Partnership. Filed Mar. 25, 1918. Serial No. 224,452. (Cl. 259—108.)



1. In a machine of the character set forth, a tank, a vertical shaft therein, a bar mounted transversely in an opening in said shaft with its ends projecting oppositely, a series of rabble blades slidably mounted side by side on such ends and inclosing said bar, a locking-pin arranged axially of said shaft and engaged in said bar, and a filler in such opening holding said locking pin and bar in engagement.

3. In a machine of the character set forth, a tank, a vertical shaft therein, a bar mounted transversely in said shaft with its ends projecting in opposite directions, a series of intermediate rabble blades slidably mounted side by side on such ends and inclosing said bar, and an outer rabble blade for each series, having a pocket receiving and covering the outer extremity of such ends, and means for securing said outer rabble blades to said bar.

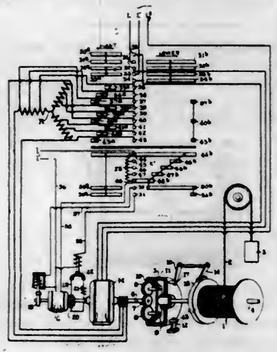
4. In a machine of the character set forth, a tank, a vertical shaft therein having a socket at its lower end and a transverse opening above said socket, a bar extending through such opening and having a central recess in its lower face, a stud in said tank received in said socket, a locking-pin vertically mounted in said stud and extending from said socket axially of said shaft to and partially across such opening, and adapted to engage such recess, a filler in such opening on the upper face of said bar, and a series of rabble blades slidably mounted side by side on the projecting ends of said bar and inclosing the latter.

6. In a machine of the character set forth, a tank, a vertical shaft therein having a socket at its lower end, a foot removably mounted on the bottom of said tank and having a vertical stud received in said socket and serving as a step for said shaft, and stirrer arms extending radially from said shaft.

7. In a machine of the character set forth, a tank, a vertical shaft therein having a socket at its lower end, a foot mounted on the bottom of said tank and having a vertical stud received in said socket and serving as a step for said shaft, a bar mounted transversely in said shaft, a series of rabble blades slidably mounted on the ends of said bar and inclosing the latter and forming therewith oppositely extended stirrer arms.

[Claims 2 and 6 not printed in the Gazette.]

1,267,820. HOISTING SYSTEM. WILLIAM C. STEVENS, Summit, N. J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Mar. 2, 1916. Serial No. 81,737. (Cl. 172—152.)



1. In a hoisting system, in combination, a hoisting machine, a generator to be driven thereby, a normally closed dynamic braking circuit for said generator and jointly operable control means for said machine and generator insuring interruption of said dynamic braking circuit upon starting of said machine for hoisting and insuring reëstablishment of said dynamic braking circuit upon starting of said machine for lowering.

4. In a hoisting system, in combination, a hoisting mechanism, a driving machine therefor, a mechanical brake for said mechanism, driving connections between said machine and said mechanism acting upon said brake to apply the latter under overhauling load conditions, a generator to be driven by said machine, a normally closed dynamic braking circuit for said generator, and jointly operable control means for said machine and generator.

6. In a hoisting system, in combination, a hoisting mechanism, a driving machine therefor, a mechanical brake for said mechanism, driving connections between said machine and said mechanism acting upon said brake to apply the latter under overhauling load conditions, a generator to be driven by said machine, a normally closed dynamic braking circuit for said generator, and jointly operable control means for said machine and generator, insuring interruption of said dynamic braking circuit upon starting of said machine for hoisting and enabling operation of said machine in lowering direction with said dynamic braking circuit either completed to assist said mechanical brake or interrupted to relieve said machine of its retarding effect, leaving the braking duty to said mechanical brake, said control means also providing for regulation of said generator, when its dynamic braking circuit is closed, to vary the dynamic braking effect thereof.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,267,821. LENS. HARRY H. STYLL, Southbridge, Mass. Filed Dec. 11, 1916. Serial No. 136,241. (Cl. 88—54.)



1. An optical lens blank, including a major portion having a countersink, a segment having a portion fitting within the countersink, and a portion extending thereabove, and means for laterally bracing the projecting portion of the segment.

4. A blank for a two part bifocal lens, comprising a major portion and a segment, a transparent cementitious medium interposed between and uniting the parts, and a second cementitious medium of considerably higher melting point than the first engaging and additionally uniting the parts.

7. A lens blank comprising a major portion and a segment, means for interlocking the segment with the major portion of the blank, and means surrounding the segment for laterally bracing the same against movement with respect to the major blank during the grinding operation.

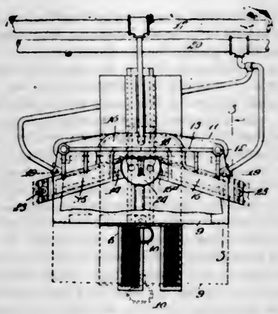
[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,267,822. APPLIANCE FOR HUMIDIFYING WARPS. JAMES TAYLOR, Horwich Junction, near Bolton, England, assignor to Mather & Platt Limited, Manchester, England. Filed July 18, 1914. Serial No. 851,700. (Cl. 139—82.)



Apparatus for damping warps in a weaving loom comprising a hollow holder extending across the machine in proximity to the warps, capillary absorbent material in said holder, a covering for said holder of capillary absorbent material, perforations in the wall of said holder for permitting the liquid in the absorbent material in said holder to be transferred to the absorbent covering, a source of liquid separate from said holder, means for feeding the liquid from said source to said material in said holder also comprising capillary absorbent material, and means for regulating the supply of liquid fed from said source to said capillary and absorbent material comprised within said feeding means.

1,267,823. MACHINE FOR IRONING THE YOKES OF SHIRTS. WILLIAM ARTHUR TOOKE, Montreal, Quebec, Canada. Filed Oct. 20, 1916. Serial No. 126,734. (Cl. 68—9.)



1. In a machine for ironing the yokes of shirts, an ironing board and a neck band localizer adapted to support a shirt with the neck band thereof fitted about the localizer; a horizontally disposed frame overhanging a portion only of the ironing board, presenting arms having slideways on their undersides coincident with the yoke lines extending from the neck band to the sleeves of the shirt, and a pair of irons mounted in said slideways and adapted to be moved therein with relation to the neck band localizer for ironing the yoke from the neck band to the sleeves, and means for heating said irons.

2. In a machine for ironing the yokes of shirts, a standard; a vertically and horizontally movable ironing board; a neck band localizer carried by the ironing board; a horizontally disposed frame located above the ironing board and supported from said standard, such frame being of U-form and presenting arms extending transversely of the ironing board and having slideways on their undersides coincident with the yoke lines extending from the neck band to the sleeves of the shirt; an ironing member mounted in each of said slideways and adjustable with relation to the neck band localizer for ironing the yoke from the neck band to the sleeves; a handle on each ironing member for operating same by hand, and means for heating said ironing members.

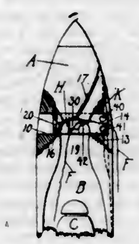
3. In a machine for ironing yokes for shirts, a movable ironing board; a neck band localizer; a support overhanging a portion only of the ironing board, and having slideways on its underside coincident with the yoke lines extending from the neck band to the sleeves of the shirt, and a pair of irons slidably arranged on said slideways: each of said irons presenting a horizontal ironing surface for operating upon the yoke of the shirt from the neck band to the sleeve and a vertical ironing surface conforming to the neck band localizer for operating upon the neck band and each iron extending from an opposite side of the ironing board coincidently with the yoke lines extending from the neck band to the sleeves of the shirt and being slidably adjustable with relation to the neck band localizer.

5. In a machine for ironing the yokes of shirts, an ironing board, a horizontally disposed frame above the ironing board, irons slidably carried upon the underside of the frame, said frame having heating chambers above the irons.

6. In a machine for ironing the yokes of shirts, an ironing board, a horizontally disposed frame above the ironing board having a forwardly extending U-form chamber and heating chambers communicating with the arms of the U-chamber and extending diagonally forward in oposite directions, an iron slidably carried by the frame beneath each of said diagonal chambers and means for circulating a heating medium through said chambers.

[Claims 4 and 7 not printed in the Gazette.]

1,267,824. SHUTTLE. ULYSSE N. TREMBLEY, Lawrence, Mass. Filed June 25, 1917. Serial No. 176,908. (Cl. 139—46.)



6. The combination in a loom shuttle having a bobbin recess, a yarn groove, and a lateral plug hole through one side which passes through the front end of the bobbin recess and into but not through the yarn groove and a threading slot which extends from the bobbin recess into such lateral hole, of a plug which fits into such hole and has a yarn passage which extends from the bobbin recess into the yarn groove, a recess which passes from the top into the yarn passage and which registers with the inside end of the threading slot, a plug slot which runs from the recess diagonally and thence vertically into the yarn passage and through the outside end of the plug, a cut away portion between the plug slot and the yarn passage, parallel vertical pin holes which pass into the plug and terminate in dead ends on each side of and near the outlet of the plug slot, and an interior pin hole which extends into the plug through the yarn passage and terminates in a dead end in position to be partly inside the plug recess, the outside end of the plug being cut away to register with the yarn groove and to expose the outside pin holes and the recess being cut away to expose the

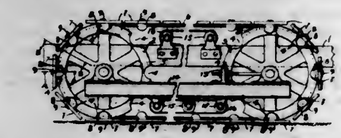
inside pin hole, and porcelain pins driven into said pin holes.

10. A plug for loom shuttles having a recess, a yarn passage with an outlet and a slot which extends therefrom vertically and thence to the recess, and removable exterior porcelain pins therein on each side of such slot near the outlet of the plug, together with a removable interior porcelain pin which projects into the recess.

11. The combination in a loom shuttle having a bobbin recess and a lateral plug hole through its side which enters the front end of the bobbin recess and a threading slot which extends from the bobbin recess into such lateral hole, of a plug which fits into such hole and has a yarn passage which extends out through the side of the shuttle, a plug slot which near its inlet registers with the threading slot and enters the yarn passage and extends out vertically through the end of the plug, parallel vertical pin holes which pass into the plug and terminate in dead ends on each side of and near the outlet of the plug slot, and releasing holes which enter the dead ends of the pin holes, the outside end of the plug being cut away to register with the yarn groove and to expose the outside pin holes, with pins driven into said pin holes.

[Claims 1 to 5, 7 to 9, and 12 to 15 not printed in the Gazette.]

1,267,825. TRACTOR. ALFRED J. TRIGWELL, San Jose, Cal. Filed Sept. 5, 1916. Serial No. 118,380. (Cl. 21—150.)



1. In a tractor, a pair of sprockets, each sprocket having a plurality of transversely positioned grooves and a plurality of annular channels formed in the outer circumference thereof, and an endless track adapted to be carried by said sprockets, said track comprising a plurality of flexible connecting elements adapted to engage said channels, and a plurality of juxtaposed shoes secured to said connecting elements, each shoe having a bar secured to its inner surface adapted to engage one of said transverse grooves.

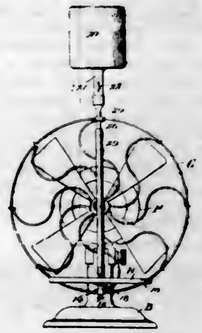
2. In a tractor, a pair of sprockets, each sprocket having a plurality of transversely positioned grooves and a plurality of annular channels formed in the outer circumference thereof, and an endless track adapted to be carried by said sprockets, said track comprising a plurality of flexible connecting elements adapted to engage said channels, and a plurality of juxtaposed shoes secured to said connecting elements, each shoe having a bar secured to its inner surface adapted to engage one of said transverse grooves, and each of said grooves having open communication with the inner circumference of the sprocket in which it is formed.

3. A traction belt composed of a plurality of independent juxtaposed shoes having substantially flat inner surfaces, a plurality of cables along which said shoes are arranged, and a plurality of bars, each bar having a flat side for engagement with the flat inner surface of said shoes, and a plurality of transverse grooves formed in said flat side for spacing and engaging said cables, and means for detachably securing one of said bars to the inner surface of each shoe.

4. In a tractor, a pair of sprockets, each sprocket having a plurality of transversely positioned grooves and a plurality of annular channels formed in the outer circumference thereof, and an endless track adapted to be carried by said sprockets, said track comprising a plurality of flexible connecting elements adapted to engage said channels, and a plurality of juxtaposed shoes secured to said connecting elements by means of a bar secured to the inner surface of each shoe and adapted to tightly engage said connecting elements, said bars being adapted to engage said transverse grooves in said sprockets, and each of said connecting elements having its ends approach each other between a different pair of shoes from any other connecting element.

5. In a tractor, a pair of sprockets, each sprocket having a plurality of transversely positioned grooves and a plurality of annular channels formed in the outer circumference thereof, and an endless track adapted to be carried by said sprockets, said track comprising a plurality of flexible connecting elements adapted to engage said channels, and a plurality of juxtaposed shoes secured to said connecting elements by means of a transversely grooved bar secured to each of said shoes and adapted to tightly engage said connecting elements, said bars being adapted to engage said transverse grooves in said sprockets.

1,267,826. DEODORIZING ATTACHMENT FOR FANS. JAROSLAUS VOKALEK, Savannah, Ga. Filed Nov. 13, 1916. Serial No. 131,041. (Cl. 167—3.)



1. In a deodorizing attachment for fans and the like, the combination of a liquid receiving tray, and barometrically controlled supply means therefor.

2. In a deodorizing device for fans and the like, the combination of a liquid deodorizing receiving tray, means to fasten said tray on a fan guard or the like, a container, a supply nozzle associated therewith, means to mount said supply nozzle on said fan guard, and a conduit connecting said nozzle with said receiving tray.

3. In a deodorizing device for attachment to fans and the like, the combination of a liquid deodorant receiving tray, an angularly adjustable clamp member carried by said tray to engage a fan guard frame, a liquid container, valve control means associated therewith, an outlet nozzle, means to support said outlet nozzle on said frame, and a conduit connecting said outlet nozzle with said tray, said conduit extending to said tray and opening beneath the liquid level in the tray whereby to barometrically control the supply of liquid thereto.

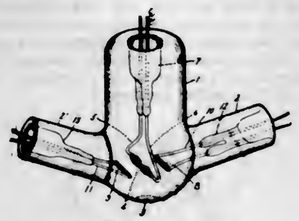
[Claim 4 not printed in the Gazette.]

1,267,827. ELECTRIC DISCHARGE DEVICE. WILLIS R. WHITNEY, Niskayuna, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 6, 1914. Serial No. 870,699. (Cl. 250—27.)

1. In an electrical device having an envelop, an incandescing electrode mounted therein, a current-conveying conductor therefor and a conductive shield mounted upon said conductor and extending around the negative end of said electrode but spaced apart therefrom.

5. A vapor electric device comprising an envelop, a cathode operating at incandescence, supports therefor connected to said cathode, an anode, a gaseous atmosphere surrounding said electrode and a shield located between the region of the cathode adjacent the support and the anode.

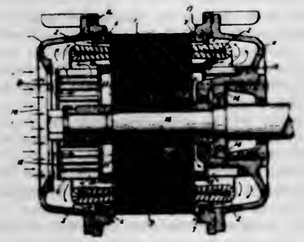
8. The method of protecting an incandescent cathode operating in a gas from electrical erosion which consists



in maintaining in the vicinity of said cathode a conductor negative with respect to said cathode.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,267,828. DYNAMO-ELECTRIC MACHINE. JOHN B. WIAND, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 28, 1917. Serial No. 193,815. (Cl. 172—36.)



1. A dynamo electric machine comprising a field member and end frame members forming with the field member an inclosing casing provided with an air outlet opening adjacent each end of the field member, one of said end frame members having a relatively large air inlet opening, windings on said field member, a rotor provided with longitudinal air passages, windings on said rotor, and a fan member at each end of said rotor for drawing cooling air into the machine through said air inlet opening and passing it through said machine in two paths, one of said paths being through the fan member adjacent said inlet opening, around the field windings and out through the outlet opening at that end of the machine, the other of said paths being through the longitudinal air passages in the rotor through the fan at the opposite end around the field windings and out through the outlet opening at that end of the machine.

2. A dynamo electric machine comprising a field member and two end frame members forming with the field member an inclosing casing and provided with an air outlet opening adjacent each end of the field member, windings on said field member, a shaft bearing in only one of said end frame members, the other of said end frame members being provided with a relatively large unobstructed air inlet opening, a shaft carried in said shaft bearing, a rotor member mounted on said shaft and provided with longitudinal air passages therethrough, windings on said rotor, fan members at each end of said rotor for drawing cooling air into the machine through said air inlet opening and passing it through said machine in two paths, one of said paths being through the fan member adjacent said inlet opening, around the field windings and out through the outlet opening at that end of the machine, the other of said paths being through the longitudinal air passages in the rotor, through the fan at the bearing end, around the field windings and out through the outlet opening at that end of the machine.

3. A dynamo electric machine comprising a field member and two end frame members forming with the field member an inclosing casing and provided with a plurality of radially distributed air outlet openings adjacent each end of the field member, windings on said field member, a shaft bearing in only one of said end frame members, the other of said end frame members being provided with a relatively large, unobstructed air inlet opening, a shaft carried in said shaft bearing, a rotor member mounted on said shaft and provided with longitudinal air passages therethrough, windings on said rotor, fan members at each end of said rotor for drawing cooling air into the machine through said air inlet opening and passing it through said machine in two paths, one of said paths being through the fan member adjacent said inlet opening, around the field windings and out through said outlet openings at that end of the machine, the other of said paths being through the longitudinal air passages in the rotor, through the fan at the bearing end, around the field windings and out through said outlet openings at that end of the machine.

[Claim 4 not printed in the Gazette.]

1,267,829. BINDER DEVICE. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Filed Feb. 2, 1917. Serial No. 146,106. (Cl. 45—57.)



1. In a device of the class described, the combination of a holder member comprising a base and side and end members mounted thereon in coacting relation, the end member being pivoted for adjustment to an outwardly inclined or to a horizontal position, a coacting holder member comprising a base and a side member pivotally mounted thereon and provided with arms adapted when the side member is adjusted to horizontal position to support said adjustable end member in an inclined position, and means for detachably connecting the bases of said holder members.

3. In a device of the class described, the combination of a pair of side members, one of said side members being pivotally mounted and a coacting end member pivoted at its edge opposite said pivotally mounted side member, means for supporting said pivotally mounted side member in its erected position, and arms on said side member engaging the under side of said end member to elevate and support it in an inclined relation when said side member is collapsed.

4. In a device of the class described, the combination of a pair of side members, one of said side members being pivotally mounted, and a coacting end member pivoted at its edge removed from said pivotally mounted side member, means for supporting said side member in its erected and collapsed position, and means for actuating said end member when said side member is collapsed.

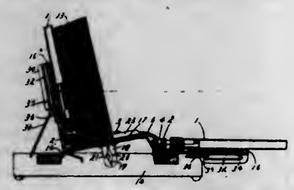
13. In a device of the class described, the combination of side members, one of which is pivotally mounted at its lower end, a coacting end member mounted between said side members, for tilting adjustment, and an arm on said pivoted side member engaging said end member to support it in an inclined relation to the other side member when said pivoted side member is collapsed.

15. In a device of the class described, the combination of a pair of side members and a single end member adjustably mounted between said side members so that it may be adjusted to a substantially horizontal position to coact with both side members providing a U-shaped holder or inclined toward one of said side members and coact therewith to provide a trough-like support, the other side member being adjustably mounted so that it may be ad-

justed to provide a second support independent of such trough-like support.

[Claims 2, 5 to 12, 14, and 16 to 18 not printed in the Gazette.]

1,267,830. BINDER DEVICE. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Filed Feb. 5, 1917. Serial No. 146,762. (Cl. 45—57.)



1. In a device of the class described, the combination of a pair of base members and connecting cross pieces therefor, of a pair of side members hinged upon said cross members to be adjusted to rest upon said base members or to a raised position, an end member disposed between said side members, plates mounted centrally on said end member to project downwardly at the inner sides of said base members and having slots therein with opposed pivot seats intermediate the ends of the slots, pivots on said base members engaging said slots, arms mounted on said side members to support said end member in an elevated position when both are collapsed and inclined toward the erected side member when one side member is erected and the other collapsed and to permit it to rest on said base members in a horizontal position between said side members when both are erected, and supports for said side members.

5. In a device of the class described, the combination of side members mounted for adjustment, an end member adjustably mounted between said side members to coact therewith, and operating connections for said side and end members whereby said end member is adjusted to an inclined relation to the erected side member when one is erected and the other collapsed and permitted to rest in a horizontal position between said side members when both are erected.

6. In a device of the class described, the combination of side members mounted for independent adjustment, an end member mounted between said side members for tilting adjustment relative to said side members so that said end member may be adjusted to an inclined relation toward the erected side member when one is erected and the other collapsed and permitted to rest in a horizontal position between said side members when both are erected.

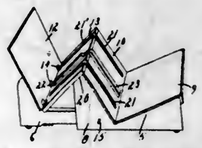
8. In a device of the class described, the combination of side members pivotally mounted at their lower ends, a coacting end member mounted between said side members for tilting adjustment, and arms on said side members engaging said end member to support it in an inclined relation to the other side member when one of said side members is collapsed.

10. In a structure of the class described, comprising an end member and coacting side member, a guide member mounted on said end member, said guide member being removably supported in a slideway on said end member so that it may be removed and introduced by a longitudinal movement, and a spring locating stop for said guide member.

[Claims 2 to 4, 7, 9, and 11 not printed in the Gazette.]

1,267,831. BINDER DEVICE. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor to Kalamazoo Loose Leaf Binder Company, Kalamazoo, Mich. Original application filed Feb. 2, 1917, Serial No. 146,106. Divided and this application filed Sept. 7, 1917. Serial No. 190,232. (Cl. 45—57.)

1. In a device of the class described, the combination of a holder member comprising a base, and side and end members mounted thereon in coacting relation, the end member being pivoted at its outer edge for adjustment to an outwardly inclined position, and a coacting holder member comprising a base and side and end members mounted thereon in an oppositely inclined coacting relation, said adjustable end member being supported in an outwardly inclined relation when said holder members are operatively associated, and means for detachably connecting the bases of said holder members.



2. In a device of the class described, the combination of a holder member comprising coacting side and end members, the end member being adjustable, and a coacting holder member removably associated therewith and comprising coacting side and end members, said adjustable end member being supported in an outwardly inclined relation when said holder members are operatively associated.

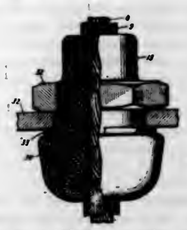
3. In a structure of the class described, the combination of a holder member comprising a base and side and end members mounted thereon in coacting relation, the end member being pivoted at its edge adjacent said side member, and a coacting holder member removably associated therewith, said adjustable end member being supported in an outwardly inclined relation when said holder members are operatively associated.

4. In a device of the class described, the combination of a holder member comprising coacting side and end members, the end member being adjustable, and a removable trough-like holder member removably associated therewith and adapted when associated therewith to support said end member in an outwardly inclined relation.

6. A holder member of the class described comprising a base, a side member mounted thereon, an end member pivoted at its edge adjacent said side member for adjustment to a horizontal position or to an outwardly inclined position, and a coacting holder member detachably connected to said base and constituting means for supporting said end member when associated therewith.

[Claim 5 not printed in the Gazette.]

1,267,832. FILLED CABLE AND FLUID-STOP. JAMES WILKINSON, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed June 2, 1917. Serial No. 172,527. (Cl. 173—268.)

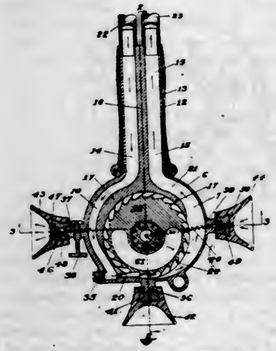


1. The method of filling a portion of a stranded cable with a solidifiable fluid which consists in supplying the solidifiable material to said portion of the cable in a fluid form while locally pressing the strands of said cable portion closely together, solidifying the inserted material, and removing the locally applied pressure.

7. A stranded cable having an insulating covering and provided with a fluid stop comprising a portion in which the periphery of the cable is locally indented and a solid material fills the interstices between the strands and an impervious plastic insulating material closely surrounds said cable, extending into the indentation.

[Claims 2 to 6 and 8 to 13 not printed in the Gazette.]

1,267,833. FLUID-ACTUATED VIBRATOR. CHARLES P. WILSON, Chicago, Ill. Filed Feb. 18, 1914. Serial No. 819,326. (Cl. 128—16.)

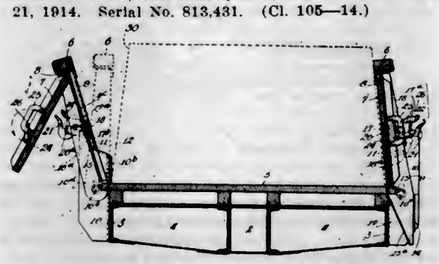


1. A fluid actuated vibrator comprising in combination a casing, a rotatable motor having its bearings in said casing provided with a chamber surrounding the axis thereof, an applicator mounted upon said casing, and means whereby a vacuum is produced in said axial chamber.

5. A fluid actuated vibrator comprising in combination a casing provided with a fluid supply passage and a discharge passage therethrough bisecting said supply passage, a rotatable motor mounted in the casing provided with a vacuum chamber, a passage in and through the casing connected with said vacuum chamber, an applicator mounted on said casing, and means whereby said applicator may be simultaneously connected with the fluid supply passage and said vacuum chamber.

[Claims 2 to 4 not printed in the Gazette.]

1,267,834. CAR SIDE CONSTRUCTION. WINFIELD HANCOCK YOST, Montreal, Quebec, Canada. Filed Jan. 21, 1914. Serial No. 813,431. (Cl. 105—14.)



1. A car, the sides of which are yieldingly held in an inwardly inclined position with relation to the car.

3. An open ended car having inwardly inclined sides.

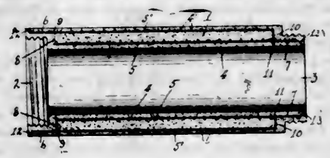
4. A car having an inwardly inclined side adapted to be moved to an outwardly inclined position with relation to the car.

5. In a car adapted to have a plow passed therethrough and having a yielding side including stakes and doors hinged between the stakes, such side being adapted to be moved by the plow.

30. In a car, the combination with two-part stakes, each including a stub stake and a stake pivoted to the stub stake and adapted to swing outwardly from the car and hinged doors supported by the pivoted stakes, of a movable stop between each of the stub stakes and pivoted stakes and means for holding the doors closed and adapted to be operated to successively release the doors and remove the stops between the stub stakes and pivoted stakes.

[Claims 2, 6 to 29, 31, and 32 not printed in the Gazette.]

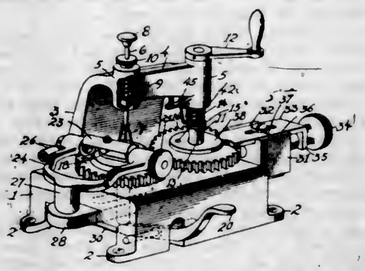
1,267,835. REINFORCING-COIL FOR CONCRETE PIPES. JULIUS G. ZWICKER, Berkeley, Cal. Filed Feb. 1, 1917. Serial No. 145,887. (Cl. 72—53.)



1. As a reinforcement for concrete-pipe sections, a hollow metallic skeleton comprising longitudinally disposed members and associated circumferential members, the ends of the longitudinal members projecting beyond the terminal circumferential members, said projecting ends at one end of the skeleton being turned inwardly and those at the other end being turned outwardly to lie substantially flush with the inner and outer surfaces of the pipe respectively.

2. As a reinforcement for concrete pipe sections, a hollow metallic skeleton comprising connected concentric series of longitudinally disposed members, the inner series, at one end, projecting beyond the outer series, and the outer series, at the other end projecting beyond the inner series, the extremities of the projecting ends of the inner series being turned inwardly and those of the outer series being turned outwardly to lie substantially flush with the inner and outer surfaces respectively of the pipe, and associated circumferential members about and connected with the longitudinally disposed members.

1,267,836. CUTTER. ARTHUR A. ARNOLD, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 5, 1917. Serial No. 140,849. (Cl. 33—28.)



2. A lens cutter, including a base, a pair of intermeshing gears mounted on the base, a lens support carried by one of the gears, a former rotatable with the other of said gears, and a slide mounted on the base having a part for engaging the former and a second part for cutting a lens on the lens support to the shape of the former.

4. In a lens cutter, the combination with a base, of a pair of non-axial gears rotatably supported thereby, a former supported for rotation with one of the gears, and lens bearing means disposed for rotation with the other of the gears, a transversely movable slide mounted on the base, and former engaging and lens cutting means carried by the slide for coöperation with the respective gears.

6. A lens cutter, including a base, a pair of shafts rising from the base, means for synchronously rotating said shafts, a former on one of the shafts, a lens holder cooperating with the other shaft, a slide on the base, and a contact shoe adjustably mounted on the slide for engagement with the former to control the position of the slide relative to the lens holder.

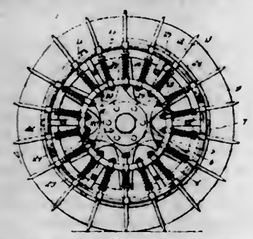
8. A lens cutter, including a base, a pair of intermeshing horizontally alined gears carried by the base, means for rotating the gears, a former carried by one of the gears and a lens support carried by the other, a trans-

versely shiftable slide on the base having an adjustable contact shoe engaging the former, means for resiliently retaining the shoe in engagement with the former, and a yoke on the slide spanning the gear and carrying an adjustable cutting device overlying the lens holder, substantially as and for the purpose described.

9. In a lens cutter, the combination with a lens holder, of a yoke spanning the lens holder, a cutter bar rotatably supported by the yoke and having a relieved portion overlying the lens holder, a cutter carried by the bar and having its point disposed in the axis of rotation thereof, and means for locking the bar in desired rotatively adjusted position.

[Claims 1, 3, 5, and 7 not printed in the Gazette.]

1,267,837. ANTISKID DEVICE. FREDERICK E. BANNING and KENNEY E. BANNING, Hadlyme, Conn. Filed Aug. 15, 1916. Serial No. 115,002. (Cl. 21—212.)



1. An anti-skid device including a frame, seats on said frame comprising recesses formed to fit and receive therein the edge of the rim of a wheel, clamp arms projecting from the frame and having their outer ends recessed to fit the rim of a wheel opposite said seats, said clamp arms each having bases with flat contacting surfaces and means for securing the bases of said arms in place.

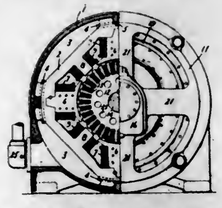
2. An anti-skid device including a frame comprising concentric rings, radial arms joining said rings, seats at the outer ends of said radial arms, said seats comprising recesses formed to fit and receive the edge of a wheel rim, clamp arms seated against said radial arms and projecting with their outer ends spaced from said frame, said arms each having bases with flat resting surfaces said outer ends being recessed to fit the edge of the wheel rim opposite said seats, and means for drawing the flat resting surfaces of the bases of said clamp arms against the radial arms to secure them in place.

3. An anti-skid device including a frame, seats on said frame formed to receive the rim of a wheel, clamp arms projecting from the frame and having their outer ends formed to fit the rim of a wheel, said clamp arms comprising bases having flat resting surfaces to fit against flat surfaces on said frame, and means to engage said bases at that end nearest the rim of the wheel, to draw said bases in place and their outer ends against the wheel rim.

1,267,838. DYNAMO-ELECTRIC MACHINE. SVEN R. BERGMAN, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Jan. 12, 1911. Serial No. 602,205. (Cl. 171—252.)

1. In a dynamo electric machine, a frame having a substantially cylindrical internal periphery, a substantially square stator member secured in said frame and engaging the same at two or more points so as to form a plurality of distinct longitudinally extending ventilating spaces between the interior surface of said frame and the exterior surfaces of said stator member, a rotatable member, and a fan driven with said rotatable member for forcing a cooling fluid through said ventilating spaces.

2. In a dynamo electric machine, a frame, a member mounted therein having a different configuration than said frame and thereby forming ventilating spaces between said frame and said member, windings for said member, a rotatable member, cover plates inclosing said windings and the rotatable member, and means for forcing cooling fluid through said ventilating spaces.

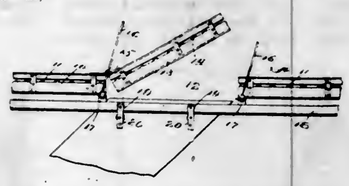


6. A dynamo electric machine, a frame member having a substantially cylindrical internal periphery, a laminated core member composed of a plurality of substantially square plates having their corners rounded to fit the frame, said core members being secured in said frame and so assembled as to form a plurality of distinct, longitudinally extending ventilating spaces between the interior surface of the frame and the exterior surfaces of the core member, a rotatable member, and a fan driven with said rotatable member for forcing cooling fluid through said ventilating spaces.

10. An electric mortor or generator having, in combination, an outer supporting frame, a field magnet and armature supported thereby, a dust-proof casing having thin-walled heat-conducting portions for covering rotating parts of the motor or generator, and blowing means for causing a cooling circulation of air over the outer surface of the covering means, substantially as described.

[Claims 3 to 5 and 7 to 9 not printed in the Gazette.]

1,267,839. MOVABLE CHUTE. ELBRIDGE PALMER BERNHEIM, Oakley, Ohio, assignor to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed July 15, 1915. Serial No. 40,113. (Cl. 193—1.)



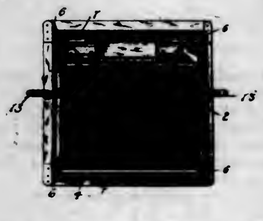
1. A package conveying mechanism, comprising an upper straight downwardly inclined section having its bed formed of freely rotatable rollers on which the packages gravitally move, said section having an interruption in the bed to provide a downwardly open hatchway, a hatch for closing the hatchway, said hatch having freely rotatable rollers which form a part of the bed of the straight section when the hatch is closed and being hinged at one end to open in a direction across the path of the package adjacent the hatchway, and a downwardly extending chute arranged below the gravity section and at an angle to the bed of the latter for conducting to a lower level packages discharged thereinto through the open hatchway, the hatch and chute being so correlated that the hatch when open guides the packages onto the chute.

5. A package conveying mechanism, comprising an upper downwardly inclined gravity conveyer having its bed formed of freely rotatable rollers interrupted at intervals to provide spaced downwardly open hatchways through which the packages may fall, displaceable hatches having freely rotatable rollers which form parts of the bed of the conveyer when not displaced, a plurality of lower gravity conveyers whose receiving ends are arranged at angles to the axis of the upper gravity conveyer, and a chute movable along the upper gravity conveyer and twisted between its ends to connect the open hatchways of the upper conveyer with the lower gravity conveyers, respectively.

7. A conveying mechanism comprising an upper conveying member having a bed provided with displaceable hatches which when not displaced form parts of the bed of the member, a chute supported beneath and movable along the conveying member to selected positions beneath the respective hatches, the chute being provided with a reversible curved lower end adapted to deliver material at either side of the upper conveying member, and lower conveying members arranged in pairs oppositely disposed on opposite sides of the upper conveying member and extending substantially at right angles to the upper member, the lower members being disposed to receive material delivered from the chute.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,267,840. KNOCKDOWN ISOTHERMAL SHIPPING-BOX. JOSEPH TÊTU BERTRAND, Isle Verte, Quebec, Canada. Filed Sept. 14, 1917. Serial No. 191,334. (Cl. 45—133.)



1. A shipping box of the character described comprising a plurality of knock-down sections, a support arranged within said sections, a reservoir arranged upon said support, a plurality of tanks surrounding said reservoir, a pan arranged below said reservoir and tanks, valve controlled communications between said tanks and said pan and a lining for the interior of said box comprising absorbent material and the upper ends of said lining adapted to communicate with said pan.

2. A shipping-box of a knock-down construction comprising vertical and horizontal bars, two partitions of absorbent material carried by the bars of each section, a top and bottom comprising two spaced partitions, detachable end and side members for covering said sections, means for retaining said box in an upright position and a liquid cooling agent adapted to be retained within said box and adapted to pass over said absorbent partitions substantially as and for the purpose specified.

3. A shipping box comprising a plurality of sections, a canvas lining for the inner faces of said sections, a support arranged within said box, a central reservoir, a plurality of tanks connected to and surrounding said reservoir, a pan mounted upon said support, flanges formed with said tanks and said pan, the upper end of said lining adapted to be retained between said flanges and extending within said pan, means of communication between said tanks and said pan and float valves arranged within said means of communication substantially as and for the purpose specified.

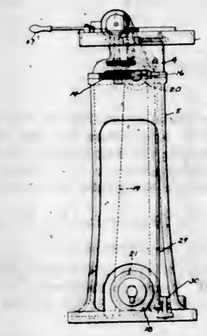
1,267,841. MILITARY BUTTON. ALVA D. BLAKE, Los Angeles, Cal. Filed Nov. 27, 1917. Serial No. 204,284. (Cl. 24—90.)

A military button comprising a concaved back plate, an annular retaining rim extending inwardly from the edge of the back plate, an expanding ring adapted to be inserted through the retaining rim and extend behind the rim, a convexed front plate of the same diameter as the back plate, a hinge connecting corresponding edges of the plates together, a snap connecting opposite edges of the



plates together, and an eye secured to the back plate for attachment to a garment.

1,267,842. MACHINE FOR OPERATING UPON CASTING-PATTERNS. CHARLES C. BLAKE, Brookline, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Sept. 18, 1915. Serial No. 51,450. (Cl. 144—152.)



1. A machine for operating upon a pattern for casting leaders for use in automatic shoe machines having a marginal flange, having, in combination, means for resting the pattern, and means for beveling the exterior face of the flange at the upper edge thereof, substantially as described.

7. A machine for operating upon a casting pattern having a marginal flange, having, in combination, a support for the pattern, and a knife for beveling the flange on the pattern movable laterally from a position in which it makes its rough cut to another position in which it makes its finishing cut, substantially as described.

11. A machine for operating upon a casting pattern having a marginal flange, having, in combination, a support for the pattern, a cutter for beveling the flange and rotating in a direction tending to lift the pattern from the support, and a presser foot arranged to engage the top of the flange to prevent the lifting of the pattern, substantially as described.

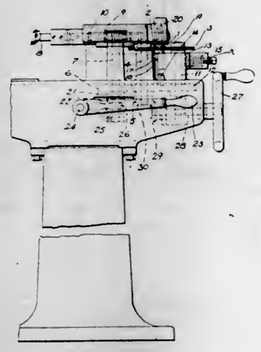
[Claims 2 to 6 and 8 to 10 not printed in the Gazette.]

1,267,843. WELT-SLITTING MACHINE. CHARLES C. BLAKE, Brookline, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Sept. 23, 1915. Serial No. 52,179. (Cl. 12—67.)

1. A welt-slitting machine, having, in combination, a welt guide engaging the top, bottom and edge faces of the welt, means for feeding the welt through the guide, and means for forming a longitudinal slit in the face of the welt which is exposed in the finished shoe, substantially as described.

3. A welt slitting machine, having, in combination, a welt guide engaging the top, bottom and edge faces of the

welt, feed rolls for feeding the welt through the guide, and a disk cutter for slitting the face of the welt which is exposed in the finished shoe, having its direction of travel at the operating point opposite in direction to the feed of the welt, substantially as described.



5. A welt slitting machine, having, in combination, a welt guide engaging the top, bottom and edge faces of the welt, feed rolls for feeding the welt through the guide, and a disk cutter for slitting the welt and resisting the passage of the welt through the guide, substantially as described.

[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

1,267,844. APPARATUS FOR PRINTING CINEMATOGRAPHIC FILMS. PERCY D. BREWSTER, East Orange, N. J. Filed Apr. 22, 1915. Serial No. 23,025. (Cl. 88—24.)



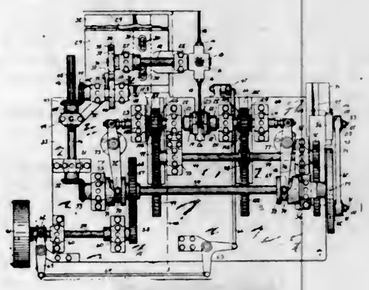
1. In a photographic printer for projecting suitably registered images from a negatived film upon opposite sides of a positive film, in combination, negative and positive film gates arranged to support two independent films, means to illuminate a film in the negative film gate, and optical means for projecting images from both sides of the illuminated film upon opposite sides of the other film.

5. In a photographic printer for projecting suitably registered images from a negative film upon opposite sides of a positive film, in combination, negative and positive film gates arranged to support two independent films, optical means for projecting upon the two sides of a film in the positive film gate images from opposite sides of a film in the negative film gate, and exposure-shutters in the paths of the light rays from the film in the negative film gate.

[Claims 2 to 4 and 6 to 12 not printed in the Gazette.]

1,267,845. TUBE-BENDING MACHINE. WILLIAM H. BUAT, Waterbury, Conn., assignor to Waterbury Mfg. Co., Waterbury, Conn., a Corporation. Filed Dec. 29, 1917. Serial No. 209,407. (Cl. 153—40.)

1. A tube-bending machine having two bending-heads, automatic means for moving both of the said heads toward and away from each other, means for turning them simultaneously when in their closed positions, a mandrel-carrier supporting a mandrel, and means for automatically operating the said mandrel-carrier intermittently, whereby one end of the tube to be bent is positioned and held at rest between the said heads when the same are in their open positions, after which the heads are closed upon the tube which is then bent by the rotation of the heads which then separate to release the bent tube and permit the mandrel-carrier to move to present another tube.



4. A tube-bending machine having two complementary bending-heads adapted to grip a tube and to bend the same into curved form, means for moving the said heads toward and away from each other and for turning them when in their closed positions, and means for automatically presenting the outer end of a tube-carrying mandrel between them.

5. A machine for bending tubes having two bending-heads adapted to grip a tube by one of its ends and to bend the tube into curved form, means for moving the said heads toward and away from each other and for turning them, a mandrel-carrier for presenting the tubes to the said heads, and means for the step-by-step rotation of the mandrel carrier.

7. A tube-bending machine having complementary bending-heads for gripping the outer end of a tube and bending the tube into curved form, means for moving the said heads into their open and closed positions and for turning them, means for automatically presenting a tube to the said heads, and means for regulating the turning movement of the heads.

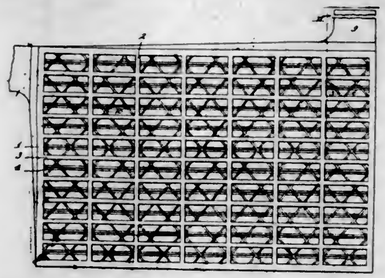
8. A tube-bending machine having complementary bending-heads for gripping the outer end of a tube and bending the tube into curved form, means for moving the said heads into their open and closed positions and for turning them, a mandrel for presenting a tube to the heads, and means for regulating the position of the arc in which the heads turn, with respect to the end of the mandrel when the same is in its tube-delivering position.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,267,846. BATTERY-GRID. CLARENCE H. CABLE, Topeka, Kans., and ELMER W. JONES, Kansas City, Mo. Filed June 25, 1917. Serial No. 176,748. (Cl. 204—29.)

1. In a grid for a secondary battery, a rectangular frame, diagonal members extending obliquely across said frame from one face to the other, and other diagonal members extending obliquely across the frame from one face to the other in a direction opposite to the first-mentioned diagonal members, all of said diagonal members being cast integral with each other at their points of intersection and integral with the rectangular frame where they join the same.

5. A grid for a secondary battery, consisting of a rectangular frame having a terminal, vertical members extending through said frame, horizontal members extending through the frame and disposed adjacent to one face thereof, companion horizontal members extending through the frame and disposed at the opposite face thereof from the first horizontal members, diagonal members extending obliquely across said frame from one face to the other, and other diagonal members extending obliquely across the frame from one face to the other in



a direction opposite to the first-mentioned diagonal members, all members of the grid being cast integral with each other at their points of intersection and integral with the rectangular frame where they join the same.

[Claims 2 to 4 not printed in the Gazette.]

1,267,847. PARACHUTE ATTACHMENT FOR FLYING-MACHINES. ALONZO C. CAMBRIDGE, Charleston, S. C. Filed May 24, 1917. Serial No. 170,701. (Cl. 244—21.)



2. A device of the class described including a tubular supporting standard adapted to be secured to a flying machine, a parachute carried by said standard, means extending through the standard for raising the parachute, and a spring surrounding said parachute to normally hold the same closed.

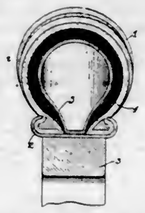
3. A device of the class described including a tubular supporting standard adapted to be secured to a flying machine, an umbrella like parachute carried by said standard, cables connected with the outer edges of the said parachute and extending into said standard, a terminal ring connecting the ends of said cables, an operating cable on said ring extending through said standard, and an expansible spring surrounding said parachute and secured thereto to normally hold the same closed.

[Claim 1 not printed in the Gazette.]

1,267,848. ARMORED INTERLINER FOR TIRES. JOHN W. D. CARSLAW, Prospect, Ky., assignor of one-half to J. H. Loeser, Louisville, Ky. Filed Apr. 20, 1917. Serial No. 163,347. (Cl. 152—18.)

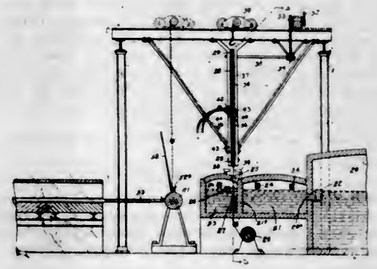
1. The combination with a tire casing, and an inner tube, of an interliner disposed therebetween and comprising a plurality of layers of rubber, and a plurality of layers of staggered plate elements vulcanized between the layers of rubber, said layers of plate elements comprising plates of different sizes and arranged with the larger plates disposed in the outer portion of the interliner and with the smaller plates disposed in the inner portion thereof.

2. The combination with a tire casing, and an inner tube, of an interliner disposed therebetween and comprising a plurality of layers of rubber, a plurality of layers



of fabric members sewed together to form pockets and disposed between said layers of rubber, and plate members disposed in said pockets in staggered relation with respect to each other.

1,267,849. METHOD OF AND APPARATUS FOR DRAWING SHEET-GLASS. THOMAS H. CHADWICK, Arnold, Pa. Filed Nov. 23, 1916. Serial No. 132,984. (Cl. 49—17.)



1. That improvement in the art of glass making which consists in drawing a continuous sheet of glass from the mass of molten glass, successively severing individual sheets from the continuous sheet by the action of a traveling flame, and moving the severed sheet away from the continuous sheet at an increased speed over the travel of the continuous sheet.

7. That improvement in the art of glass making which consists in concurrently drawing a sheet of glass from the mass of molten glass and edge-defining metallic cores from below the level of the molten glass, with the drawing level located within a chamber having a passageway for the sheet of glass, whereby said cores will be embedded within the sheet parallel with each other and with the sheet edges, subjecting the core-contained edge portions of the sheet to air blasts in proximity to the point of emergence of the sheet from the passageway, and producing individual sheets by subjecting the continuous sheet to successive operations of an oxy-acetylene flame while the continuous sheet is traveling from the point of air blast application, moving the severed sheet in the drawing plane at an increased speed and then away from the drawing plane.

9. In a glass drawing machine and in combination, a receptacle for molten glass, means for drawing a continuous sheet of glass therefrom, said means including a traveling elevator structure, a grip structure detachably carried by the elevator structure and adapted to extend across and clamp the sheet, and means operative on one side of the sheet for severing it into individual sheets during the travel of the continuous sheet, said severing means including a burner structure supported from the gripping means, said grip structure acting as a support and carrier for the individual sheet after it has been severed.

13. In a glass drawing machine and in combination, a receptacle for the molten glass, said receptacle having means projecting upwardly from its bottom to permit the passage of metallic structures in the drawing plane, said means terminating below the level of glass within the receptacle, means for maintaining the level of the glass in the receptacle, a float for defining the drawing limits of the receptacle, and means including a grip structure for drawing a continuous sheet of glass from the receptacle and concurrently drawing the metallic structure from said receptacle means, whereby said metallic structure will act to prevent narrowing of the sheet, means for applying an air blast to the edge of a sheet, and means for severing individual sheets including a burner structure carried by the grip structure.

15. In glass drawing mechanism and in combination, a receptacle for molten glass, means for drawing a continuous sheet of glass of predetermined width therefrom with the width of the sheet maintained as the sheet recedes from the drawing level, said means including a pair of endless carriers having their axes transverse to the plane of the sheet, and grip structures detachably engaging the sheet and said carriers, means traveling with the sheet and including a burner structure for severing the continuous sheet into individual sheets during the travel of the continuous sheet, said grip structure forming a support for the severed sheet, a crane having members adapted to engage said grip structure and remove it from the carriers, said crane being movable in a direction transverse to the sheet drawing plane to remove the sheet and its grip structure bodily from said plane, a sheet treating structure, and mechanism in advance of said latter structure and below the path of travel of the crane for delivering the sheet to the structure after the crane has moved the sheet from the drawing plane.

[Claims 2 to 6, 8, 10 to 12, and 14 not printed in the Gazette.]

1,267,850. MACHINE FOR HANDLING FISH. SIMON COOPER, New York, N. Y., assignor to Gorton-Pew Fisheries Company, Gloucester, Mass., a Corporation of Maine. Filed Sept. 30, 1915. Serial No. 53,288. (Cl. 17—10.)



1. In an apparatus of the class described, a machine including a neck cutting and gill removing mechanism in combination with a belly slitting and entrail removing means.

5. In an apparatus of the class described, in combination, a fish treating machine including means for feeding the fish through the machine in a plurality of directions, a neck cutting and gill removing means located in one path of direction and a belly slitting and entrail removing means located in the other.

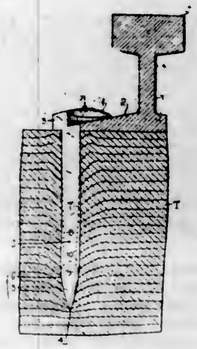
16. In a fish dressing machine consisting of a neck cutting and gill removing means in combination with a body slitting and entrail removing means.

17. In a fish dressing machine consisting of a plurality of body slitting means, in combination with cleaning means associated with each of said body slitting means.

19. In a fish-cleaning machine, in combination, means for cutting the neck of the fish, means for removing the gill of the fish, a plurality of buckets for receiving and conveying the fish, an endless chain on which said buckets are mounted, means for intermittently advancing said chain, means for holding each bucket in predetermined adjacency to the neck-cutting means and to the gill-removing means, and a conveyer mechanism traveling at an angle to said chain and adapted predeterminedly to engage with a fish body when a bucket carrying said fish body is halted as aforesaid.

[Claims 2 to 4, 6 to 15, 18, and 20 not printed in the Gazette.]

1,267,851. SPIKE. ROBERT E. L. CROSBY, Jonesboro, Ark. Filed Aug. 22, 1917. Serial No. 187,644. (Cl. 85—19.)



1. A spike comprising a shank having a head at one end and having its opposite end portion provided with an entrance point, opposite faces of the shank being channeled from the inner end of the point to a predetermined point inwardly of the head, the bases of the channels being straight in cross section and longitudinally inclined inwardly toward the point, the ends of the channels adjacent the point being defined by transverse beveled shoulders, the longitudinal margins of the channels being defined by flanges affording cutting edges, opposed faces of the entrance point being beveled, the side marginal portions of the beveled faces being also defined by outstanding flanges affording cutting edges, said flanges of the entrance point being substantially in continuity with the flanges defining the first named channels.

[Claim 2 not printed in the Gazette.]

1,267,852. UNIVERSAL JOINT. GEORGE V. CURTIS, Springfield, Mass. Filed Jan. 10, 1917. Serial No. 141,669. (Cl. 64—102.)



A universal joint comprising bifurcated coupling-heads having bearing-socket members, a block within the space between said members, a spindle passing through said block into the bearing sockets of one coupling-head, a second spindle passing through said block and said first-named spindle, at right-angles thereto, into the bearing sockets of the other coupling-head, and a lock pin passing through both of said spindles to secure them to said block and prevent either from moving independently of the other, and having means at both ends to engage contiguous parts of the pin-engaging members and retain said pin in place.

1,267,853. LEATHER-WORKING MACHINE. LEWIS F. CUTLER, Salem, Mass., assignor to The Turner Tanning Machinery Company, Peabody, Mass., a Corporation of Maine. Filed Sept. 4, 1917. Serial No. 189,467. (Cl. 149—12.)

1. In a machine of the character described, in combination, a flexible bed fastened at one end and having its opposite end free to move, means connected with said free end to place the flexible bed under tension and to maintain the latter substantially uniform, a rigid member located under said flexible bed and coöperating therewith to move bodily with the flexible bed under the action of a working tool, means coöperating with said rigid member to prevent movement thereof under one condition, to permit movement thereof under another condition, and to limit movement of the rigid member under the influence of said working tool, and a cushion for yieldingly resisting movement of said rigid member and the flexible bed under the last-mentioned condition.



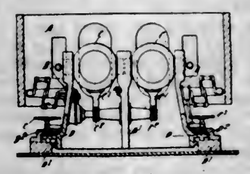
2. In a machine of the character described, in combination, a flexible bed fastened at one end and having its opposite end free to move, means connected with said free end to place the flexible bed under tension and to maintain the latter substantially uniform, a rigid member located under said flexible bed and coöperating therewith to move bodily with the flexible bed under the action of a working tool, means coöperating with said rigid member to prevent movement thereof under one condition, to permit movement thereof under another condition, and to limit movement of the rigid member under the influence of said working tool and means for yieldingly resisting movement of said rigid member and the flexible bed under the last mentioned condition.

5. In a machine of the character described, in combination, a flexible bed, means for placing the same under tension while permitting movement of said bed under the action of an operating tool, and means coöperating with the underside of said bed between its ends to yieldingly resist movement of the flexible bed under the influence of said tool while maintaining the contour of the flexible bed the same irrespective of the place in the length of the said bed with which the said operating tool is engaged.

7. In a machine of the character described, in combination, a flexible bed, uprights spaced apart to support said bed and form a working section, mechanical means for yieldingly supporting the bed between the ends of its working section and to resist movement of the bed under the action of an operating tool, and rigid means interposed between said working section and said mechanical means for placing the portions of the bed between the operating tool and the rear support for the bed in the same inclined position irrespective of the position of said tool.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,267,854. GUN-MOUNTING. ARTHUR TREVOR DAWSON and GEORGE THOMAS BUCKHAM, Westminster, London, England, assignors to Vickers Limited, Westminster, London, England. Filed May 26, 1915. Serial No. 30,707. (Cl. 89—37.)

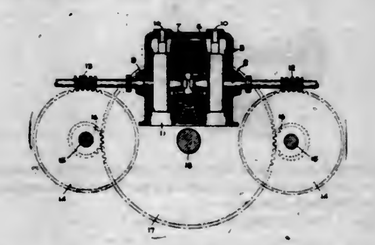


1. In a gun mounting, the combination with the shield and the gun carriage cheeks, of downward extensions of said cheeks, gun elevating means arranged centrally beneath the gun and between said downward extensions, and a handle arranged between one of the cheeks and the shield for operating said elevating means.

5. In a gun mounting, the combination with the shield, of gun carriage cheeks extending downward to the deck, gun elevating means arranged centrally beneath the gun and between the downward extensions, a handle arranged between one of the cheeks and the shield for enabling the elevating number of the gun's crew to operate said elevating means while situated between one of the downward extensions and the shield, means for rotatably mounting said downward extensions on the deck, gun training means carried by one of said extensions and a handle arranged between one of the cheeks and the shield for enabling the training number of the gun's crew to operate said training means while situated between one of the downward extensions and the shield.

[Claims 2 to 4 not printed in the Gazette.]

1,267,855. GEARING. JOHN H. DORAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 12, 1917. Serial No. 201,665. (Cl. 74—7.)



3. In combination, a pair of oppositely rotating shafts, a third shaft, means including a worm and worm wheel for transmitting power from one of said pair of shafts to the third shaft, and means for transmitting power from the other of said pair of shafts to the third shaft.

7. The combination with an elastic fluid turbine having rotors which revolve in opposite directions, of a driven shaft, and means for transmitting power from said rotors to said driven shaft, said means comprising a worm and worm wheel through which power is transmitted from one of the rotors to the driven shaft, said worm wheel comprising a plurality of disks clamped together at their central portions and slightly spaced apart at their peripheries.

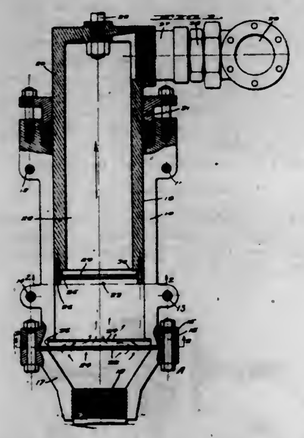
[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,267,856. PUMP. ROBERT HENRY ELSEY, Prescott, Ariz. Filed Mar. 23, 1917. Serial No. 156,885. (Cl. 103—17.)

1. In a pump, a pump cylinder formed in two parts, said parts meeting on diametrical longitudinal lines and said parts being rigidly bolted together, a bolting coupling flange formed integral around the lower end of the cylinder, a tapered fitting secured to the bolting flange and having an internal thread in its lower reduced end, a pipe in the internal thread; there being a counter-bored chamber at the lower end of the cylinder and upper end of the fitting; a perforated valve seat disk rigidly mounted in the counter-bored chamber, and a floating valve disk loosely mounted in the counter-bored chamber upon the rigid disk and having perforations mismatching the perforations in the rigid disk so as to form an up flowing check-valve; the area of the check-valve capacity being equal to the capacity of the pipe.

3. In a pump, a pump cylinder formed in two pieces meeting on diametrical and longitudinal lines, bolts securing the two pieces rigidly together, a pump plunger fitting closely in the pump cylinder, means forming a stuffing box around the pump plunger, a reducing fitting connected to the lower end of the pump cylinder, a pipe connected to the reducing fitting; there being a counter-bored chamber at the lower end of the pump cylinder and a counter-bored

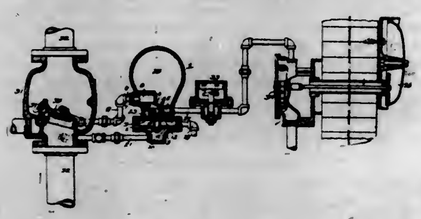
chamber at the lower end of the pump plunger; valve seat disks rigidly mounted in said counter-bored chambers, and valve disks loosely mounted in said counter-bored chambers above the rigid disks; there being mismatching perfora-



tions through each rigid disk and its coöperating loose disk so as to form up flowing check-valves equal in capacity to the flow through the pipe.

[Claim 2 not printed in the Gazette.]

1,267,857. FLOW-RETARDING APPARATUS. POWELL EVANS, Philadelphia, Pa., assignor, by mesne assignments, to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Dec. 17, 1914. Serial No. 877,786. (Cl. 169—23.)



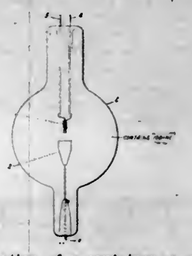
1. The combination in a flow retarding device of a casing having an inlet and an outlet; a diaphragm structure dividing said casing into chambers; a valve connected to said structure and normally closing the outlet, there being an opening in the valve through which one of the chambers is open to the inlet; and means for supplying fluid under pressure to the other of the chambers to hold the valve closed.

2. The combination in a flow retarding device of a casing having an inlet and an outlet; a diaphragm movably mounted in the casing; a valve carried by the diaphragm and normally closing the outlet while leaving the inlet partially open; there being a normally open waste outlet from the casing; and means for supplying fluid under pressure to hold the diaphragm in position to close the valve.

3. The combination in a flow retarding device of a casing; a valve seat therein; said casing having an inlet and an outlet both opening on said seat; a valve for the seat formed to close the outlet and partly close the inlet; a diaphragm exposed to liquid under pressure in the casing; and means for normally holding the valve closed.

[Claims 4 to 13 not printed in the Gazette.]

1,267,858. INCLOSED-ARC DEVICE. CHARLES V. FERGUSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed July 3, 1916. Serial No. 107,276. (Cl. 250—27.)

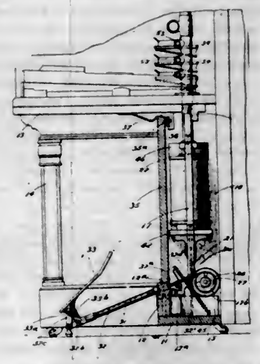


1. The combination of a container, a cathode which is refractory enough to be operable at incandescence, an anode and a quantity of iodin within said container.

3. The method of suppressing deleterious arcing from anode to cathode in an arc device provided with a cathode operating at incandescence and an anode operating below the temperature at which electron emission is appreciable, which consists in providing an environment of iodin vapor for the arc during the operation of the device.

[Claim 2 not printed in the Gazette.]

1,267,859. PLAYER-PIANO AND PUMP THEREFOR. CHARLES FREBORG, Kankakee, Ill. Filed Feb. 7, 1914. Serial No. 817,145. (Cl. 84—169.)



1. In combination, a pair of foot actuated air exhausting means, a vacuum box communicating with each of said means, duct members communicating with each of said boxes, tubes across between and in communication with said first named ducts, actuating pneumatics secured to and in communication with said last named tubes, another tube extending between and in communication with said first named ducts, and a motor supported by and in communication with said last named tube.

4. In a device of the class described, a pump comprising a cylinder, a piston reciprocably mounted in said cylinder, a piston rod secured to said piston and extending through the end of said cylinder, means to move said piston in one direction in said cylinder, and means to return said piston after such movement, said last named means comprising a spring.

14. In a device of the class described, a rotatable shaft, a pulley mounted upon said shaft, a flexible member having one end secured to said pulley adapted to wind upon the same, a rod, a pedal, said rod being pivotally connected to said pedal and to said flexible member, and a tube, said rod being reciprocably mounted in said tube.

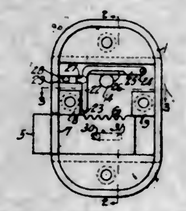
20. In a device of the class described, having a toe rail, said rail being slotted, a foot actuated means extending

through said slot when in operative position and located outwardly of said slot when in inoperative position, means to automatically close said slot when said actuating means is moved therefrom to prevent entrance of mice or the like through said slot, said means comprising a follower slidably mounted in said slot, means to normally move said follower to position closing said slot, said means comprising a rod secured to said follower, a spring coacting therewith, said rod and spring being mounted in an aperture in said toe rail, said aperture being normally closed at one end, and means to permit ingress of air thereinto.

28. In combination, an air pump, a vacuum box, a duct connecting said vacuum box with said air pump, said vacuum box being provided with a partition therein, said partition being apertured, and means to close said aperture to prevent flow of air from said pump to said box, said means being arranged to permit exhausting of air from said box by said pump, and a second duct communicating with the interior of said box through said partition.

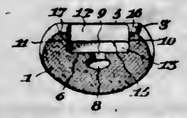
[Claims 2, 3, 5 to 13, 15 to 19, 21 to 27, 29, and 30 not printed in the Gazette.]

1,267,860. LOCK. ISIDOR GISSER, Brooklyn, N. Y. Filed Oct. 3, 1917. Serial No. 194,435. (Cl. 70—75.)



In a lock, the combination of a bolt having notches at the side thereof, a key having a lever hingedly attached to the end thereof adapted to engage with said notches and thereby move said bolt when the key is turned, a bar hingedly attached to the casing of the lock adapted to have its end engage with one of the notches in the bolt and thereby lock it in position, and means for raising said bar by the insertion of the key.

1,267,861. ARTIFICIAL TOOTH. THOMAS F. GLENN, Ardmore, Pa., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Dec. 22, 1916. Serial No. 138,398. (Cl. 32—9.)



1. A tooth having in its lingual face, a recess whose lateral walls are disposed substantially normal to said lingual face, the incisively disposed wall being undercut to form a transversely directed pocket, and the labially disposed wall comprising an undercut cavity extending labially.

2. A tooth having in its lingual face a recess forming an undercut shoulder, and having an undercut cavity in the labial wall of said recess, spaced from said shoulder.

1,267,862. COMBINED MICROSCOPE AND OBJECT-HOLDER. HERMAN HAEFLIGER, Denver, Colo. Filed Feb. 24, 1917. Serial No. 150,857. (Cl. 88—39.)

1. The combination of a curved base plate, holders adjustably mounted upon the extremities of said plate, a post also mounted upon the plate intermediate the extremities of the latter, and a microscope adjustably supported upon said post and adapted to coöperate with the holders for the purpose set forth.

3. The combination of a base plate, a pin secured upon the latter, a fitting rotatably mounted upon said pin, a holder pivotally attached to the fitting, a post mounted upon the base plate, and a microscope adjustably supported upon said post and adapted to coöperate with the holder for the purpose set forth.

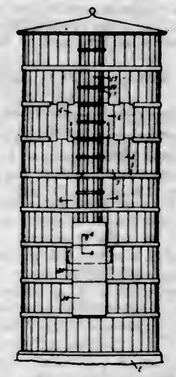


5. The combination of a base plate, a pin secured upon the latter, a fitting rotatably mounted upon said pin, a holder pivotally attached to the fitting, said holder comprising an approximately semicircular band, the extremities of said band being provided with inwardly disposed triangular shaped notched portions, a similar shape notched portion being also secured to the inner surface of the band intermediate the extremities of the latter, and the said notched portions adapted to receive and retain in position a suitable object, a post mounted upon the base plate, and a microscope adjustably supported upon said post whereby the object retained within the said holder can be inspected.

6. The combination of a base plate, a holder adjustably mounted upon the latter, said holder comprising an approximately semi-circular band, notched portions secured to the interior surface of said band and adapted to receive and retain in position a suitable object, a post also mounted upon the base plate, and a microscope adjustably supported upon said post whereby the object retained within the holder can be inspected.

[Claims 2 and 4 not printed in the Gazette.]

1,267,863. SILO. JOHN S. HAINES, Dowagiac, Mich. Filed Mar. 13, 1916. Serial No. 83,839. (Cl. 72—6.)

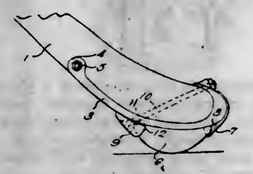


1. A wall structure of the class described comprising blocks formed as rights and lefts with rabbet-like recesses at one end extending one-half the width of the blocks, said blocks being laid in tiers in coacting pairs of rights and lefts with the recesses of such pairs opposed, the length of one block of each pair exceeding that of the other by the depth of such recesses, the blocks of adjacent tiers being lapped one-half their width with the longer blocks of one tier interlocked in the recesses of the blocks of the adjacent tier, and hoops disposed over such tier joints.

2. A wall structure of the class described comprising blocks formed as rights and lefts with rabbet-like recesses at one end, said blocks being laid in tiers in coacting pairs of rights and lefts with the recesses of such pairs opposed, one block of each pair being longer than the other, the blocks of adjacent tiers being laid with the longer blocks of one interlocked in the recesses of the other.

3. A wall structure of the class described comprising blocks laid in tiers, adjacent pairs of blocks in the tiers having opposed rabbet-like recesses, one block of each pair being longer than the other, the blocks of adjacent tiers being laid with the longer blocks of one interlocked in the recesses of the other, and hoops disposed over the tier joints.

1,267,864. REMOVABLE SHOE FOR AIRPLANE-SKIDS. ERNEST C. HALL, Warren, Ohio. Filed Oct. 20, 1917. Serial No. 197,531. (Cl. 244—2.)



1. In an airplane, the combination with a skid and a fitting therefor, of a wearing plate separate from said fitting, and means for detachably securing said wearing plate to said fitting near the rear end of said skid.

5. In an airplane, the combination with a skid, of a shoe separate from said skid, and a device secured to said skid and having a socket to receive one edge of said shoe, a clamping member to engage another edge of said shoe, and a bolt to operate said clamping member and secure the same to said skid.

10. In an airplane, the combination with a skid, of a shoe separate from said skid, having a thickened portion and shaped to fit upon the end portion of said skid, and means for detachably securing said shoe to said skid in substantially longitudinal alinement therewith.

15. In an airplane, the combination with a skid, and a fitting mounted on the lower end of said skid, of a part secured to said fitting along the under side of said skid to form a socket, a bolt extending through said fitting at the rear end thereof, a clamping member mounted on said bolt, and a shoe having one edge adapted to enter said socket and having its other edge arranged to be engaged by said clamping member.

[Claims 2 to 4, 6 to 9, and 11 to 14 not printed in the Gazette.]

1,267,865. LIGHT-FIXTURE. CROMWELL A. B. HALVORSON, JR., Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 4, 1916. Serial No. 134,886. (Cl. 240—25.)



1. In combination, a support, an insulating base mounted thereon, an incandescent lamp socket mounted on one side of said base, and a transformer mounted on the opposite side thereof and electrically connected to said socket.

3. A lighting fixture comprising a casing having a globe mounted thereon, an insulating base supported by said casing and having on one side a transformer housed within said casing and on the opposite side a lamp socket extending within the globe.

[Claims 2 and 4 not printed in the Gazette.]

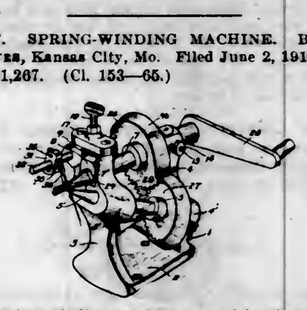
1,267,866. THREADED-JAR CLOSURE. CHARLES HAMMER, Queens, N. Y., assignor, by direct and mesne assignments, to American Metal Cap Co., Brooklyn, N. Y. Filed Apr. 25, 1917. Serial No. 164,355. (Cl. 215—13.)



1. A closure cap comprising a body portion formed of a metal strip bent into the proximate form of a cylinder with the strip end portions lapping, the inner edge being doubled back on itself outwardly, and the outer lapping edge of the strip being doubled back on itself inwardly, with the edges of the two bent ends in contact without lapping, the outer face of the inner doubled portion lying against the inner wall of the outer lapping end beyond its doubled portion, and the inner face of the outer doubled portion lying against the outer wall of the inner lapping portion beyond the doubled portion, an end member closing one end of the cylinder and secured thereto, and means for securing the lapping portions at the open end of the closure.

[Claims 2 to 7 not printed in the Gazette.]

1,267,867. SPRING-WINDING MACHINE. BENJAMIN P. HAYES, Kansas City, Mo. Filed June 2, 1916. Serial No. 101,267. (Cl. 153—65.)



1. A spring winding machine comprising base spindles having upwardly-inclined, converging axes and terminating in conical points, a pressure spindle rotatably mounted on an axis equidistant from those of the base spindles and at an angle convergent relative thereto, the pressure spindle having a tapered point lying between the points of the base spindles to form a tortuous transverse path therebetween, and said tapered point having a circumferential groove adjacent its smaller end for retaining a spring wire against movement along the spindles.

2. A spring winding machine comprising base spindles having upwardly-inclined, converging axes and terminating in conical points, a pressure spindle rotatably mounted on an axis equidistant from those of the base spindles and at an angle convergent relative thereto, the pressure spindle having a tapered point lying between the points of the base spindles to form a tortuous transverse path therebetween, said tapered point having a circumferential groove adjacent its smaller end for retaining a spring wire against movement along the spindles, and means for rotating the paired spindles and the pressure spindle in clockwise and counter-clockwise directions respectively.

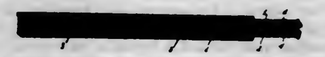
3. A spring winding machine comprising base spindles having upwardly-inclined, converging axes and terminating in conical points, a pressure spindle rotatably mounted on an axis equidistant from those of the base spindles and at an angle convergent relative thereto, the pressure spindle having a tapered point lying between the points of the base spindles to form a tortuous transverse path therebetween, and said tapered point having a circumferential groove adjacent its smaller end for retaining a spring wire against movement along the spindles, gear wheels on the base spindles, a gear wheel on the pressure spindle meshing with the gear wheels on both of the base spindles, and means for rotating the pressure spindle.

4. A spring winding machine comprising a base member having spaced standards thereon, a pair of conically pointed spindles revolubly carried by said standards with the smaller ends extending in the same direction, a spindle revolubly mounted above said paired spindles with its axis in a plane that would bisect the axial plane of the paired spindles, and having a conical point closely overlying the conical points of the first named spindles, means for adjusting the last named spindle point toward or from the first named points, means for simultaneously rotating the spindle points, so that a wire rolled therebetween will be continuously curved to form convolutions, and adjustable means for spacing said convolutions.

5. In a spring winding machine, the combination with a pair of conically pointed spindles placed with their smaller ends in the same direction, of a conically pointed spindle, having its axis in a plane bisecting the axial plane of the paired spindles and revolubly supported near its pointed end in a slidable bearing, and at its opposite end in a pivotally supported bearing, and means for rocking the single spindle in its pivotal mounting to adjust the pointed end thereof toward or from the pointed ends of the paired spindles for the purpose set forth.

[Claim 6 not printed in the Gazette.]

1,267,868. ELECTRIC CONDUCTOR. WILLIAM C. HAKMAN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Mar. 9, 1916. Serial No. 83,056. (Cl. 173—264.)



1. A conductor having a covering treated with a saturating water proofing compound, said covering comprising a marking thread which previous to being applied to the conductor has been impregnated with a filler of distinctive color which renders the thread impervious to the saturating compound whereby the distinctive coloring of the marking thread will not be obliterated by the saturating compound.

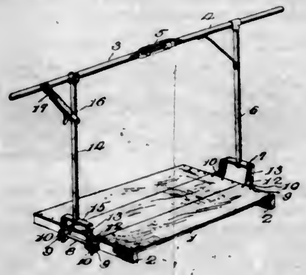
4. In a cable comprising a plurality of conductors having braided coverings which are saturated with a water proofing compound, a marking thread braided into the covering of one of said conductors, which thread is impregnated with paint of a distinctive color, said paint serving to render the marking thread impervious to the saturating compound whereby the distinctive coloring of the marking thread will not be obliterated by the saturating compound.

[Claims 2 and 3 not printed in the Gazette.]

1,267,869. TRAY-STACKING APPLIANCE. GUY J. HELY, Fresno, Cal. Filed June 26, 1917. Serial No. 177,056. (Cl. 57—9.)

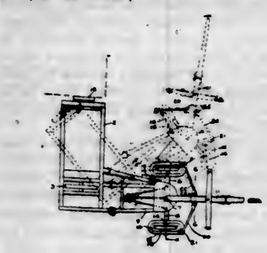
1. A device for the purpose set forth comprising a handle member, a hanger rigidly secured at its upper end to the handle member, a coöperating hanger pivotally suspended at its upper end from the handle member, and a toggle connected at its lower end to the last-mentioned hanger and at its upper end to the handle member between the hanger and the adjacent end of the handle.

2. A device for the purpose set forth comprising a handle member, hangers suspended from the handle member, yokes swiveled upon the lower ends of the hangers, and tray-engaging devices carried by the lower ends of said yokes.



3. A device for the purpose set forth comprising a handle member, hangers suspended from said handle member, yokes swiveled on the ends of the hangers, shafts journaled in the lower ends of the yokes, disks on the ends of the shafts provided with teeth adapted to penetrate the ends of a tray, ratchets on said shafts, dogs on the yokes adapted to engage said ratchets, and yieldable means for holding the dogs in engagement with the ratchets.

1,267,870. BINDER-TRUCK. HIRAM C. HUFF, Vegreville, Alberta, Canada. Filed Sept. 4, 1917. Serial No. 189,432. (Cl. 21—139.)



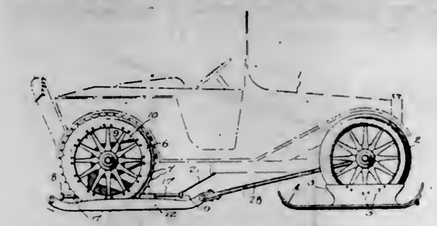
1. A binder truck comprising an axle having means for connecting it with a binder frame and held against horizontal oscillation, frames pivoted on said axle, spindles pivoted at one end on the ends of said axle and having bearings at their opposite ends in said frames, wheels mounted on said spindles, a draft tongue connected with said axle, and bars pivotally connected at their inner ends to said tongue and having a pivotal connection at their outer ends with said frames.

2. A binder truck comprising an axle having means for connecting it with a binder frame and held against horizontal oscillation, frames pivoted on said axle, spindles pivoted at one end on the ends of said axle and having bearings at their opposite ends in said frames, wheels mounted on said spindles, a draft tongue connected with said axle, and bars pivotally connected at their inner ends to said tongue and having pivotal connections at their outer ends with the outer portions of said frames outside the plane of said wheels.

1,267,871. SLED ATTACHMENT FOR AUTOMOBILES. MIELI ROHKEA JARITI, Glencoe, Wyo. Filed Jan. 10, 1917. Serial No. 141,668. (Cl. 180—6.)

1. A sled attachment for motor vehicles, rear runners having openings to receive the vehicle drive wheels, wedge blocks slidably disposed above said rear runners, manually operable means for actuating said wedge blocks, pivotally

hung straddle blocks engaging and operable by said wedge blocks and supporting means for said vehicle drive wheels carried by said straddle blocks.



2. A sled attachment for motor vehicles, rear runners having openings to receive the vehicle drive wheels, trough-like members carried by said rear runners, wedge blocks slidably disposed in said trough-like members, straddle blocks pivotally connected to the sides of said trough-like members and contacting with said wedge blocks and supporting means for said vehicle drive wheels carried by said straddle blocks.

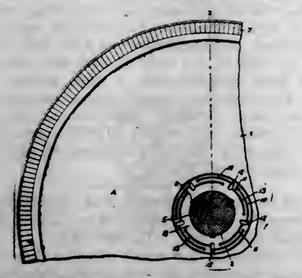
3. A sled attachment for motor vehicles, rear runners having openings to receive the vehicle drive wheels, trough-like members carried by said rear runners, wedge blocks slidably disposed in said trough-like members, straddle blocks pivotally and terminally connected to said trough-like members, roller bearings carried by said straddle blocks and engaging with said wedge blocks and supporting means for said straddle blocks and engaging with said wedge blocks and supporting means for said vehicle drive wheels carried by said straddle blocks.

4. A sled attachment for motor vehicles, rear runners having openings to receive the vehicle drive wheels, trough-like members parallel with and carried by said rear runners, wedge blocks slidably disposed in said trough-like members, straddle blocks pivotally and terminally connected to said trough-like members and embracing said wedge blocks, roller bearings carried by said straddle blocks and engaging with the beveled faces of said wedge blocks and means for supporting said vehicle drive wheels carried by said straddle blocks.

5. A sled attachment for motor vehicles, rear runners having openings to receive the vehicle drive wheels, trough-like members fast to said rear runners, wedge blocks slidably disposed in said trough-like members, straddle blocks pivotally and terminally connected to said trough-like members, the sides of said straddle blocks overlapping the sides of said wedge blocks, roller bearings carried by said straddle blocks and bearing upon the inclined faces of said wedge blocks and stub shafts carried by said straddle blocks and supporting the said drive wheels.

[Claim 6 not printed in the Gazette.]

1,267,872. ELASTIC-FLUID TURBINE. OSCAR JUNGGREN, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 17, 1917. Serial No. 162,701. (Cl. 253—39.)



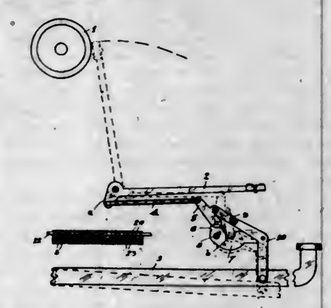
1. In an elastic fluid turbine, the combination of a shaft, a wheel and links connecting the wheel to the shaft forming a flexible connection between them, said links being arranged in a plane at right angles to the shaft.

5. In an elastic fluid turbine, the combination of a shaft and a wheel fastened thereon, said wheel having slots in it adjacent the shaft to give flexibility to the wheel in a radial direction.

8. In an elastic fluid turbine, the combination of a shaft and a wheel fastened thereon, said wheel having a plurality of arcuate overlapping slots arranged in concentric rings, the slots in one ring overlapping the spaces between the slots in the other ring.

[Claims 2 to 4, 6, 7, and 9 to 11 not printed in the Gazette.]

1,267,873. TYPE-BAR ACTION. SYDNEY L. KAUFMAN, Kittanning, Pa. Filed Nov. 18, 1914. Serial No. 872,765. (Cl. 197—28.)



1. In mechanism for operating the type bar of a typewriting machine, the combination with a type bar, type bar connecting rod, and key lever, of a pair of intersecting levers pivotally connected to each other, one of the levers being pivotally connected to the key lever, a link pivotally connecting the opposite lever to the type bar connecting rod, and a second link pivotally connecting the first link to the first mentioned lever and arranged to have a toggle action in connection with the first mentioned lever when the type bar is actuated.

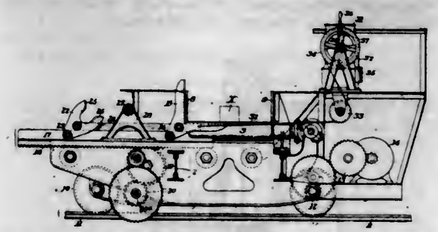
4. In mechanism for operating the type bar of a typewriting machine, the combination with a type bar, type bar connecting rod and key lever, of a bell crank pivotally connected at one end thereof to the key lever, a second bell crank having one end thereof pivotally connected to the middle portion of the first mentioned bell crank, a link member pivotally connecting the opposite end of the second bell crank to the type bar connecting rod, and a second link member pivotally connecting the first link member to the opposite end of the first mentioned bell crank and arranged for coöperation with the first mentioned bell crank to produce a toggle action upon the first mentioned link member when the type bar is actuated.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,267,874. ROLLING-MILL TABLE. JULIAN KENNEDY, Pittsburgh, Pa. Filed Apr. 21, 1916. Serial No. 92,615. (Cl. 80—48.)

3. A rolling mill table having a carriage mounted to move transversely thereon, a manipulator member pivoted to the carriage, said member having two arms at substantially right angles to each other, means for actuating said carriage to move said member laterally, and means whereby the said member may be turned on its pivot through an angle of substantially ninety degrees, at the completion of its lateral movement, substantially as described.

5. A rolling mill table having a carriage mounted to move transversely thereon, a manipulator member pivoted to the carriage, a tappet member also pivoted to the carriage and connected with said manipulator, and a relatively fixed member arranged to be engaged by the tappet member at a certain point in the movement of the carriage to thereby effect a pivotal movement of the manipulator member, together with a reversible motor for reciprocating said carriage, substantially as described.



[Claims 1, 2, 4, and 6 to 9 not printed in the Gazette.]

1,267,875. CASING FOR LAMP-SOCKETS AND THE LIKE. CHARLES J. KLEIN, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 8, 1912. Serial No. 689,287. (Cl. 173—362.)



3. In combination, a cap, a shell telescoping therewith, one of said parts having a plurality of circumferential shoulders and the other having shoulders spaced therefrom, and a device contained in said shell and having a portion engaging a shoulder thereof and a shoulder of said cap for locking the same against relative rotation in any telescoped rotary relation.

5. In combination, a cap, a shell, a device removably housed therein and locking said cap and shell against relative rotary movement in any one of a plurality of rotary positions, and independently operative means to releasably lock said cap and shell against separation.

6. In combination, a cap having a serrated margin, a shell telescopically engaged therewith and a radial projection carried by said shell engaging the sides of one of the serrations of said cap to lock said cap and shell against relative rotation.

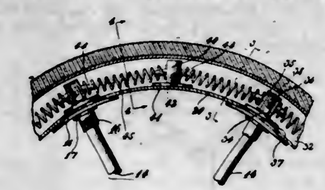
7. In combination, a cap and shell adapted to telescopically unite, said cap having a plurality of notches about its lower edge, and a radial projection carried by said shell adapted to enter any one of said notches to lock said cap and shell against relative rotation.

10. In combination, a shell, a cap therefor having a scalloped rim, a switch mechanism housed in said shell, a base having a guiding member for a portion of the switch mechanism protruding from the shell and received in the scalloped rim of said cap to lock said base in position in said shell and to lock said cap and shell against relative rotation and means to lock the same against axial separation.

[Claims 1, 2, 4, 8, and 9 not printed in the Gazette.]

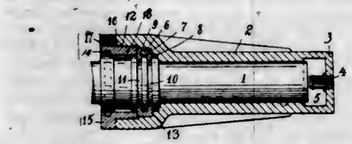
1,267,876. RESILIENT WHEEL. CHARLES KOVACS, Perth Amboy, N. J., assignor of one-half to John Kerekes, Greenpoint, N. Y. Filed May 24, 1917. Serial No. 170,781. (Cl. 152—48.)

In a resilient wheel, the combination with a rigid hub, a plurality of spokes rigidly engaged therein, and a rigid hollow rim containing slots through which the outer ends of said spokes extend, of plate washers engaged upon the ends of said spokes, said washers making contact upon both sides of the inner element of said rim so as to cover the slots therethrough, sleeves engaged on the ends of said spokes within the space in said rim, projections secured within said rim intermediate of said sleeves, pins



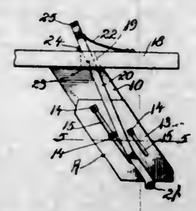
set obliquely in opposite sides of said sleeves, and said projections, the adjacent pins being in alinement, and compression springs extending between adjacent sleeves and projections, the ends of said springs encircling said pins and constituting resilient connecting means between said rim and said spokes.

1,267,877. VEHICLE-WHEEL AND THE LIKE. DANIEL KRUSSAND, Drammen, and ARNE STEEN, Christiania, Norway. Filed Mar. 27, 1917. Serial No. 157,713. (Cl. 21—30.)



A hub attaching device for vehicle wheels comprising a hub closed at its outer end, a trunnion projecting into said hub, an annular body formed of a plurality of parts located inside said hub, a screw threaded bushing for keeping said annular body in position, a plurality of inwardly projecting annular ribs on said annular body, said ribs fitting into grooves in the trunnion inclosed by the hub, and a dust collecting groove in the trunnion between said grooves and the open end of the hub.

1,267,878. FOLDING CAR-STEP. JACOB LANG, Salisbury, Mo. Filed June 12, 1917. Serial No. 174,806. (Cl. 105—87.)

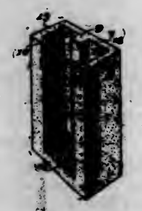


The combination with the steps of a railway car, of bolts disposed transversely beneath certain of the steps and through the sides of the steps, L-shaped plates disposed at the sides of the steps and having longitudinal slots engaging with the ends of said bolts, an auxiliary step tread carried by the horizontal portions of the said L-shaped plates, the sill of the car having an opening therein, a transverse yoke member disposed at one end of the opening, a rod secured to the lower portion of one of said L-shaped plates and extending upwardly through said opening in the sill, said rod having a notch for the reception of said yoke to hold the rod and auxiliary step in elevated

position, and a leaf spring secured to said sill at the other end of the opening and bearing against said rod to normally force said rod in engagement with said yoke to insure the engagement thereof in the notch of the rod.

1,267,879. RHEOSTAT. NILS D. LEVIN, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Aug. 17, 1915. Serial No. 45,961. (Cl. 219—68.)





1. The herein described resistance element composed of a series of insulated layers each layer comprising longitudinal strips and transverse strips arranged to leave projections at the ends of the longitudinal strips and having a freely separable engagement therewith, an insulating retainer arranged to engage with the transverse strips and with the projecting ends of the longitudinal strips to prevent their displacement in relation to each other, and means for pressing the strips together.

2. In a rheostat, a resistance element having a series of insulated layers each layer composed of two longitudinal strips and two transverse strips respectively situated inside of the adjacent ends of the longitudinal strips, each strip having a freely separable engagement with adjacent strips, insulating retainers for the end parts of the element having chambers and flanges substantially as set forth to engage with the longitudinal strips and the transverse strips to prevent their lateral displacement in relation to each other, and means for pressing the strips together.

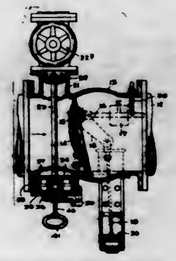
3. In a rheostat, the combination with a series of resistance strips arranged end to end to provide an electric circuit section, each strip being positioned to have its longitudinal lines transverse to the longitudinal lines of adjacent strips whereby the series of strips surrounds an insulating space, of insulating retainers having recesses wherein the ends of the strips are loosely fitted and by which the strips are held against lateral displacement, and means for pressing the strips together on lines transverse to their wider faces.

4. In a rheostat, the combination with a series of conducting strips arranged end to end to form a circuit section throughout the series and so disposed as to form two side sets of strips and two end sets, the four sets surrounding a parallel side chamber, and all of the strips of the end sets being transverse to those of the side sets, insulating retainers which loosely engage the overlapping ends of the strips and hold them against lateral displacement, and clamping devices acting to hold all of the strips in predetermined position.

7. In a rheostat, the combination of a series of flat elongated relatively thin resistance strips arranged to have their wider faces freely separably engage with each other, insulating retaining devices engaging the edges of the end parts of the strips to secure them against lateral displacement, a casing surrounding said strips and retaining devices, and pressure devices for locking the casing, the strips and the retaining devices rigidly together.

[Claims 5 and 6 not printed in the Gazette.]

1,267,880. CENTRIFUGAL COMPRESSOR. WILLIAM J. MCBRIDE, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 18, 1917. Serial No. 186,883. (Cl. 230—11.)



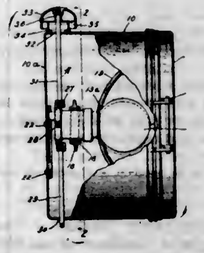
1. The combination with a centrifugal compressor, of a conduit for wasting fluid connected with the discharge side thereof, a valve in the conduit, a movable abutment connected to said valve and having its opposite sides subjected to the pressure on the discharge side of the compressor, means for biasing said valve toward closed position, means for relieving the pressure on one side of said abutment to permit the valve to open, and means actuated by the flow of fluid through the compressor for controlling said relieving means.

3. The combination with a centrifugal compressor having an inlet conduit and a discharge conduit, of a waste conduit connected to the discharge conduit, a valve in the waste conduit, a cylinder carried by the discharge conduit, a piston in said cylinder, one side of which is exposed directly to the pressure in the discharge conduit, a restricted passage connecting the cylinder on the other side of the piston to the discharge conduit, an escape passage leading from the cylinder on the last referred to side of the piston, a valve controlling it, a member in the discharge conduit which is moved by the flow therethrough, a spindle upon which said member is pivoted, and means connecting the spindle to said last named valve for moving it to cover and uncover said escape passage.

4. The combination with a centrifugal compressor having an inlet conduit and a discharge conduit, of a conduit for wasting fluid connected with the discharge conduit, a valve in said conduit for wasting fluid, a non-return flap valve in the discharge conduit which is actuated by the flow of fluid through such conduit, and means controlled by the movement of the flap valve for actuating the first named valve.

[Claims 2 and 5 not printed in the Gazette.]

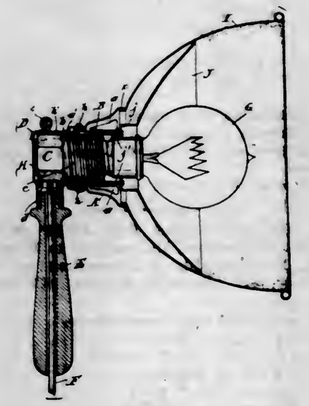
1,267,881. PROJECTOR. JAMES D. MCDONALD, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed Dec. 1, 1916. Serial No. 134,313. (Cl. 240—44.)



1. A headlight comprising a casing, a reflector located therein, an incandescent lamp located within the reflector, a support for the lamp affording the same a universal movement, and a member engaging the lamp socket, one end of said member being pivoted in the casing and the other end passing through and laterally movable in the opposite side of the casing whereby the position of said lamp may be adjusted with reference to the reflector from without the casing.

[Claim 2 not printed in the Gazette.]

1,267,882. HAND-LAMP FOR THERAPEUTIC PURPOSES. HARRISON D. MCFADDIN, East Orange, N. J. Filed Aug. 2, 1917. Serial No. 184,051. (Cl. 240—41.)



1. A hand lamp for therapeutic purposes embodying a lamp, a polished reflector therefor, which reflector is so shaped and positioned relative to the filament of the lamp as to project the rays thereof in parallel relation, and a housing for said reflector, which housing projects forwardly of the forward edge of the reflector and is provided with a matted interior, whereby those rays which cannot be satisfactorily projected in parallel relation by the reflector are absorbed or diffused and the penetrating qualities of the infra-red rays are preserved.

2. A hand lamp for therapeutic purposes embodying a base shell, a lamp socket supported thereby, a reflector housing seated at the forward end of the base shell, and a reflector seated within the housing and threaded connections extending directly between the reflector and the base shell for drawing the reflector toward the base shell to seat the reflector within the housing and simultaneously draw the housing into rigid engagement with the shell.

8. A hand lamp for therapeutic purposes embodying a base shell, a lamp socket mounted thereon and partially projecting thereinto, a casing for housing the remainder of said socket, and a handle rigid with the casing, in combination with a reflector housing having a portion fitted into the forward end of the shell, a reflector positioned within the housing, and means for drawing the reflector toward the shell, whereby the periphery of the reflector is jammed within the housing and said housing forced tightly against the forward edge of the shell.

14. A hand lamp for therapeutic purposes embodying a base shell, a lamp supported thereby, a flaring reflector housing seated at the forward edge of the base shell, a reflector seated within the housing, the reflector having a greater flare than the housing, and means for drawing the reflector toward the base shell, whereby said reflector is wedged within the housing and the housing firmly held to its seat at the forward end of the base shell, the difference in the flare of the housing and reflector providing a dead air space between the back of the reflector and the housing for the purpose of facilitating the escape from the housing of the heat of the reflector.

[Claims 3 to 7 and 9 to 13 not printed in the Gazette.]

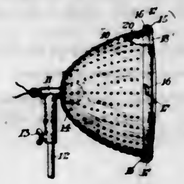
1,267,883. INSULATING MATERIAL AND PROCESS OF MAKING THE SAME. JAMES MCINTOSH, Norristown, Pa., assignor to Diamond State Fibre Company, Bridgeport, Pa., a Corporation of Delaware. Filed Jan. 26 1918. Serial No. 213,909. (Cl. 91—68.)

1. The process which consists in impregnating parchmentized fiber with an oleaginous body; treating said fiber to render it flexible; shaping the fiber to a definite form; and subjecting it to an oxidizing treatment to harden it and solidify said oleaginous material.

4. As a new article of manufacture, a hard molded water-proof body consisting of parchmentized fiber uniformly impregnated with oxidized oil.

[Claims 2 and 3 not printed in the Gazette.]

1,267,884. VEHICLE-LAMP. CHARLES MCKEEVER, Jersey City, N. J., assignor of one-half to Clem B. Mears, Jersey City, N. J. Filed June 13, 1917. Serial No. 174,423. (Cl. 240—41.)

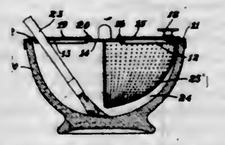


1. In a vehicle lamp an imperforate sheet metal reflector having an outer or unpolished surface and an inner polished reflecting surface interrupted at predetermined intervals in spaced positions and in prearranged configurations by a plurality of projections made in one surface by corresponding indentations in the other surface.

4. In a vehicle lamp an imperforate sheet metal reflector having a plurality of recesses indented in the outer surface thereof producing corresponding projections in the inner or reflecting surface thereof, certain of said projections being arranged in radial rows emanating from the center thereof while other projections are arranged in relatively short intermediate rows adjacent the outer edge of the reflector.

[Claims 2 and 3 not printed in the Gazette.]

1,267,885. COMBINATION GREASE STRAINER AND RECEPTACLE. ROSA A. MACDONALD, Los Angeles, Cal. Filed May 2, 1917. Serial No. 165,960. (Cl. 65—15.)

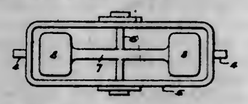


A kitchen utensil, comprising a bowl, a lid rim detachably mounted upon said bowl, a pair of semi-circular openings formed through the lid member, complementary covers adapted to close said openings, a strainer mounted on said lid member and describing a quarter of a sphere, said strainer being disposed to catch liquid and solid materials entering the receptacle through one opening, and to retain the solid substance so that the liquid may be removed through the opposite opening.

1,267,886. MECHANICAL MOVEMENT. ALEXANDER P. MALYSHEFF, Tomsk, Russia. Filed Oct. 5, 1916. Serial No. 123,818. (Cl. 74—14.)

1. The combination of a reciprocating member; a structure rotatable on an axis at right angles to the line of movement of said member and actuated thereby; with a

second structure carried by said first structure and rotatable on an axis transverse to the line of movement of the reciprocating member and at right angles to the axis of rotation of the first structure.

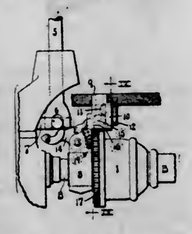


5. The combination of a reciprocating element; a structure oscillated thereby on an axis at right angles to the line of movement of said element; with a spindle and oppositely disposed weights thereon, carried by said structure and rotatable on an axis at right angles to said first axis, when the structure is oscillated.

7. The combination of a reciprocatory member; a structure oscillated by operation of said member; with a second member including a rotary structure and weighted arms extending in opposite directions therefrom in position to be continuously rotated by the action of centrifugal force when the first member is reciprocated.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,267,887. AUTOMOBILE-LOCK. HARRY P. MAMMEN, Springfield, Ohio. Filed Aug. 13, 1917. Serial No. 185,929. (Cl. 70—126.)



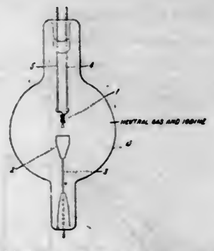
1. In a locking device for an automobile having a drive shaft and power transmission device for transmitting power to said shaft, the combination of a shaft fastening device preventing rotation of the drive shaft, a transmission latch whereby the transmission device is secured to prevent the transmission of power to the drive shaft, said transmission latch being adapted to retain the transmission device in its neutral position, both the transmission latch and shaft fastening device being inoperative when the transmission device is not in its neutral position, and key controlled locking means common to said transmission latch and shaft fastening device.

2. In a locking device for an automobile having a drive shaft and power transmission device for transmitting power to said shaft, the combination of a shaft fastening device preventing rotation of the drive shaft, and a transmission latch associated with said shaft fastening device so as to latch the transmission device thereby preventing the transmission of power to the drive shaft, said transmission latch being movable into the path of a portion of the tranmission device so as to secure the latter in its neutral position, and said shaft fastening device including a rotary member arranged to be actuated with the drive shaft and a latch movable into the path of said rotary member.

3. In a locking device for an automobile having a drive shaft and power transmission device for transmitting power to said shaft, the combination of a transmission latch for the transmission device and a shaft latch for preventing the rotation of the drive shaft, said transmission latch including a latch member movable into the path of a portion of the transmission device, said shaft latch including a rotary member arranged to be actuated with the drive shaft and a latch member movable into the path of said rotary member, and a locking means whereby both of said latch members are secured in their operative positions.

[Claims 4 to 8 not printed in the Gazette.]

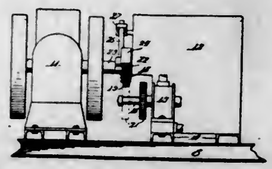
1,267,888. INCANDESCENT-CATHODE DEVICE. GEORGE S. MEIKLE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 15, 1916. Serial No. 115,109. (Cl. 250—27.)



1. The combination of a sealed container, a filling of neutral gas therein, a quantity of iodin, and coöperating electrodes at least one of which is adapted to operate at incandescence.

[Claims 2 to 4 not printed in the Gazette.]

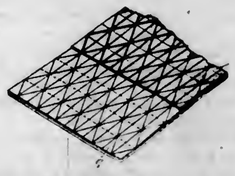
1,267,889. DRIVE-GEARING FOR PUMP OUTFITS. ROBERT MILNE, Rockford, Ill., assignor to Ward Pump Company, Rockford, Ill., a Corporation of Illinois. Filed Nov. 27, 1917. Serial No. 204,175. (Cl. 137—63.)



1. In a pump outfit of the character described, the combination with a supporting structure upon which is mounted two pump units and an engine arranged with the driving shaft of the engine intermediate and in parallel relation with the pump shafts, of a gear on each of the pump shafts and the engine shaft, an intermediate gear always in mesh with the engine, and means holding said intermediate gear always in mesh with the engine shaft gear and operable to swing said intermediate gear into and out of mesh with either of the pump gears.

[Claims 2 to 7 not printed in the Gazette.]

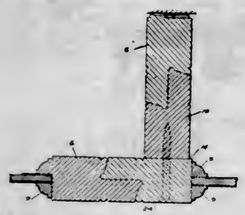
1,267,890. LEATHER AND TEXTILE OR LIKE COVERING. FREDERICK W. MOORE, New York, N. Y., assignor to Dual Leathers Corporation, a Corporation of New York. Filed Apr. 24, 1916. Serial No. 93,319. (Cl. 154—47.)



1. A covering comprising a basic material having a textile fabric embedded in one surface of the basic material, said surface and the weave being coated or filled with adhesive cohesive material to form a film of finish on the surface of said covering and forming a coalescence of the composite surface or surfaces, the film of finish entering the mesh of said weave forming component parts of one surface, the design of the interposed weave characterizing said surface.

[Claims 2 to 12 not printed in the Gazette.]

1,267,891. OFFICE-PARTITION STRUCTURE. WILLIAM H. H. MOUNT, Jr., Millington, N. J. Filed Apr. 11, 1916. Serial No. 90,355. (Cl. 20—4.)



1. An office partition structure including in combination a series of vertical panels connecting directly by their stiles, the contacting junctures of the stiles comprising a joint having a vertically extending surface forming an acute angle with the exterior face of the stile, said surface terminating in a vertical groove, a vertically extending surface extending away from said groove substantially parallel to the outer surfaces of the stile and terminating at a vertical tongue, and a vertically extending surface extending from the tongue to the other outer face of the stile substantially parallel to the first-mentioned surface, the adjoining stile having the same shape but in reverse order so that they fit together by edgewise movement and lock against transverse displacement.

2. A stile for use in office partitions having a substantially flat back, sides perpendicular thereto, and its front comprising a vertically extending surface starting at an acute angle from one side of the stile and terminating in a vertically extending groove, a surface extending outwardly from said groove substantially parallel to the sides of the stile and terminating in a vertically extending tongue, and a vertically extending surface extending from the tongue, substantially parallel to said first-mentioned surface, to the other outer side of the guide.

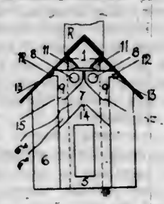
3. An office partition structure including in combination a series of vertical panels, connecting directly by their stiles, the contacting edges of the stiles comprising a joint having a vertically extending surface forming an acute angle with the exterior face of the stile, a vertically extending surface extending away from said acute angle surface and substantially parallel to the outer surfaces of the stile, and a vertically extending surface extending from said last-mentioned vertically extending surface to the other outer face of the stile in the same direction as the first-mentioned acute angle vertically extending surface, the adjoining stile having the same shape but in reverse position, so that they fit together by edgewise movement and lock against transverse displacement.

7. A stile for paneled partitions having a joining edge adapted to interlock directly with the similar edge of another stile, being formed with two longitudinally extending transverse surfaces and an intermediate, longitudinally extending surface approximately in a plane midway between and parallel to the side surfaces of the stile, the said transverse surfaces forming acute angles with the other said surface, and the stile being formed with a longitudinally extending bead on a side surface adjacent one of said transverse edge surfaces and with a second longitudinal bead on a side surface and spaced from a transverse edge surface of the stile a distance proportional to the width of the said intermediate surface.

[Claims 4 to 6 not printed in the Gazette.]

1,267,892. WIRE-STITCHING MACHINE. JOHN WILLIAM NASMITH, Stockport, England. Filed June 12, 1917. Serial No. 174,236. (Cl. 1—13.)

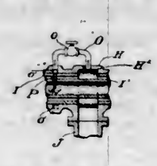
1. In a clenching apparatus for corner stitchers, the combination of a pair of loose clencher blocks having clenching faces, and block-operating mechanism having means for maintaining said clenching faces approximately in alinement with each other at the commencement of the clenching operation and for causing said faces to gradually assume a position at right angles with each other as the clenching operation proceeds.



6. In a clenching apparatus for wire stitchers, the combination of a fixed guiding plate having longitudinally extending guiding means and transverse ledges, a reciprocating plunger guided by said guiding means, and clencher blocks pivoted to one end portion of said plunger and provided with clenching faces, and with projections coöperating with said ledges, the plunger being provided with a stop, and the clencher blocks with faces coöperating with said stop.

[Claims 2 to 5 not printed in the Gazette.]

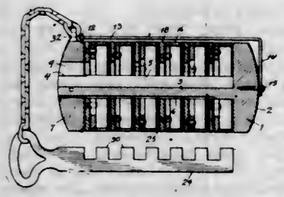
1,267,893. VALVE-MOTION FOR INTERNAL-COMBUSTION ENGINES. JOHN O'CONNOR, New York, N. Y. Filed Jan. 31, 1914. Serial No. 815,618. (Cl. 123—122.)



1. The combination with a multi-cylinder engine, of a valve chest provided with an intake chamber, a tubular rotary valve positioned within said chest and provided with ports to establish the flow of fresh gases to, and the exhaust of spent gases from, the cylinders, and means for burning fuel within said valve when the engine is in and out of service condition so as to preheat the valve structure and maintain the same in a condition for instant operation when starting the engine into service.

2. In an engine of the class described, the combination with the cylinders and a valve mechanism for controlling the inflow of fresh gas to, and the outflow of burnt gases from, said cylinders, of means for feeding gas to said valve mechanism, and a valve controlled gas burner positioned in coöperative relation to said valve, said burner operating to consume fuel when the engine is in and out of service condition for preheating parts of said engine prior to starting it.

1,267,894. LOCK. LARS OLSON, Winnipeg, Manitoba, Canada. Filed Oct. 28, 1916. Serial No. 128,234. (Cl. 70—19.)



1. A permutation lock comprising a base, a longitudinally slotted spindle integral with said base, a cap adapted for engagement with said spindle and formed with a grooved portion, a band encircling said cap and formed

with an eye, rotary tumblers spaced away from each other upon said spindle and formed with grooved portions which may be alined with each other and with the grooved portion of said cap, a shackle insertible into the groove in said pintle and formed with lugs for insertion through the grooved portions of said cap and rotary tumblers when they are alined and a rod pivotally connected to said base and to the said eye and movable and readable with relation to said tumblers.

2. A permutation lock comprising a base, a spindle integral therewith and formed with diametrically opposed longitudinally slotted portions, a grooved cap adapted for engagement with said spindle, crown shaped toothed members encircling said spindle, apertured toothed crown rings carried by said crown shaped members, the teeth of said last named members being in mesh with each other; cap rings carried by said crown rings and formed with pegs for engagement with the apertured portions of said crown rings and with grooved portions adapted to be alined with each other and with the groove in said cap, washers separating said crown shaped members and cap rings and formed with grooves adapted for alinement with each other and with the grooves in said cap rings and cap and with lugs adapted to register with one of the longitudinally grooved portions of said spindle, a shackle insertible into the groove in said pintle and formed with lugs for insertion through the grooved portions of said cap, washers, and cap rings when they are alined and an indicator rod pivotally carried by said base and readable in connection with said crown shaped members.

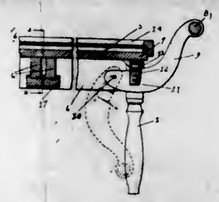
1,267,895. BRASSIÈRE-BUCKLE. BENJAMIN FRANKLIN ORDWILER, Chicago, Ill., assignor to Kabo Corset Co., Chicago, Ill., a Corporation of West Virginia. Filed Aug. 18, 1917. Serial No. 186,904. (Cl. 24—73.)



A brassière buckle formed of a body consisting of a single piece of spring-metal bent at one end to form a hook, the opposite end being formed with a transverse slot extending substantially thereacross to receive a suspending strap, said slot extending close to the side edges of the body to form a thin web at such points, said body being further formed with a longitudinal slot extending from said transverse slot to adjacent the end of the hook, said longitudinal slot for that portion lying beneath the hook being formed to receive a stud shank, and the walls of said slot expanding when the shank is inserted against the tension of the thin webs beyond the ends of the transverse slot, whereby the walls of said longitudinal slot may freely expand and contract for the purpose of accommodating stud shanks of different diameters, substantially as described.

1,267,896. SERVING-TABLE. JOHN H. PAALMAN, Grand Rapids, Mich. Filed Jan. 2, 1918. Serial No. 209,949. (Cl. 45—17.)

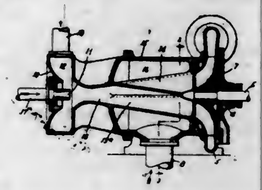
1. In a serving table, the combination of corner uprights, a top frame comprising side pieces and an end piece narrower than the side pieces, a top mounted on said top frame, a handle comprising a hand piece and a pair of upwardly curved supporting arms therefor disposed with their inner ends between and pivoted to the side pieces at a point at the inner side of the end piece and so that it may be collapsed within the legs or erected with its hand piece in a plane above the table top and in a spaced relation thereto, a cross piece connecting said arms disposed so that it lies against the under edge of the end piece when the handle is erected, a spring latch pin on said end piece, and a spring latch on said cross piece adapted to automatically engage said pin when the handle is erected.



3. In a serving table, the combination of corner uprights, a top frame comprising side pieces and an end piece, a top mounted on said top frame, a handle comprising a hand piece and a pair of upwardly curved supporting arms therefor disposed with their inner ends between and pivoted to the side pieces at a point at the inner side of the end piece and so that it may be collapsed within the legs or erected with its hand piece in a spaced relation to the top, a cross piece connecting said arms, and coacting latch and keeper members on said end piece and handle cross piece.

[Claim 2 not printed in the Gazette.]

1,267,897. AIR-PUMP. GUSTAV PAGEL, Berlin, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 3, 1915. Serial No. 19,043. (Cl. 230—32.)



1. In an apparatus of the character described, the combination of a pump and a fluid ejector arranged on the suction side thereof with the diverging portion of its discharge nozzle extending up to and connected directly with the inlet of the pump.

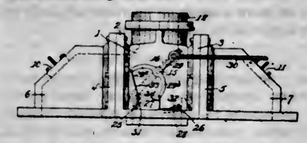
5. In an apparatus of the character described, the combination of a centrifugal water throwing pump, a steam ejector arranged on the suction side thereof with its discharge nozzle extending up to and discharging directly into the inlet of the pump, said nozzle having V-shaped indentations therein which extend down to the pump inlet, a casing surrounding said nozzle, and means for supplying throwing water to said casing from which it flows through said indentations to the impeller of the pump.

7. In an apparatus of the character described, the combination of a centrifugal pump having an inlet and an outlet, a steam ejector arranged on the suction side thereof with its discharge nozzle adjacent to and discharging directly into the inlet of the pump, and means independent of the ejector and connected directly with the inlet of the pump for supplying water thereto.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,267,898. REVERSING-VALVE FOR GAS-FURNACES. STEPHEN PARISH, Steubenville, Ohio. Filed Aug. 17, 1917. Serial No. 186,739. (Cl. 137—7.)

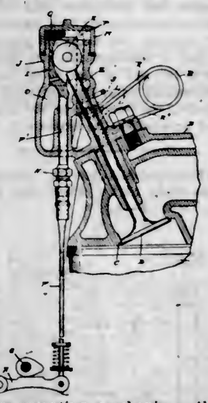
1. A reversing-valve for gas furnaces comprising a casing having inlet and outlet ports therein and having passages leading to opposite sides of the furnace, a butterfly-valve rotatably disposed within said casing and designed to divide the interior thereof into two separate continuous passages, recesses formed in the interior of said casing for receiving the upper end of said valve, means for shielding the lower end of said valve from contact with the products of combustion passing through said casing, a substantially Y-shaped crank associated with said valve for rotating the latter, and means associated with the divergent arms of said crank for actuating said valve-shielding means.



7. A reversing-valve for gas furnaces comprising a casing having inlet and outlet ports therein and having passages leading to opposite sides of the furnace, a rotatable shaft directed transversely through the center of said casing, a butterfly-valve fixed on said shaft within said casing and designed to divide the interior thereof into two separate continuous passages, recesses formed in the interior of said casing for receiving the upper end of said valve, wings having integral trunnions received in opposite sides of said casing and on which said wings are rotatable, said wings being designed, when in one position, to protect the lower ends of said valve from contact with heated products of combustion, a crank mounted upon one extremity of said shaft whereby said valve may be shifted, said crank having a pair of divergent arms, cranks fixed to the outer ends of said trunnions, and chains connecting the extremities of the last-mentioned cranks with the extremities of the divergent arms of said first-mentioned crank, said chains being of such length and said last-mentioned cranks being so disposed with respect to said wings that when said valve occupies one of its limits of movement the free end of the wing adjacent to the lower edge of the former is forcibly drawn upward against said valve and the opposite wing is permitted to swing to an out-of-the-way position.

[Claims 2 to 6 not printed in the Gazette.]

1,267,899. VALVE-OPERATING MECHANISM. LAVE V. PESCH, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 27, 1917. Serial No. 188,331. (Cl. 121—97.)

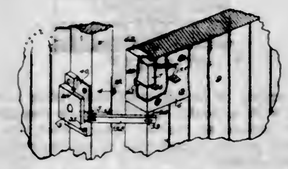


1. In a valve-operating mechanism, the combination with a valve and its stem, of an actuating rod extending at an angle to the axis of the stem, a common guide member for the actuating rod and stem, a spring acting upon the stem to seat the valve, and a roller carried by the actuating member within said guide member bearing upon the end of the stem.

7. In a valve-operating mechanism, the combination with a valve and its stem, of an actuating rod extending at an angle to the axis of the stem, a guide member for the actuating rod and stem, a connection within said guide member for communicating movement from the rod to the stem, means for conducting a lubricant from the lower to the upper portion of said guide member, and means in the upper portion of the guide member engageable by one of the actuating and actuated members to produce a periodic discharge of lubricant.

[Claims 2 to 6 not printed in the Gazette.]

1,267,900. LOCK FOR FREIGHT-CAR DOORS. GIBSON T. PETTICREW, Deer Lodge, Mont. Filed Nov. 5, 1917. Serial No. 200,238. (Cl. 70—102.)



1. A car door lock comprising a rotatively mounted bolt placed with its axis in line with the direction of movement of the door at closing and with an end projecting, said projecting end having a transverse groove, a socket piece placed to receive said projecting end when the door is closed, a block movably mounted in said socket piece and adapted to be entered in the transverse groove of the bolt, and means for turning the bolt on its axis to displace said block.

3. A car door lock comprising a bolt rotatively mounted in the door jamb with its axis parallel the line of movement of the door in closing, one end of said bolt projecting beyond the face of the jamb and having a transverse groove on its upper side, a socket member mounted on the door to receive the end of the bolt, said socket member containing a chamber extending upwardly from the bolt-receiving socket, a vertically movable catch block fitting loosely in said chamber and adapted to enter the transverse groove in the bolt, and means for turning the bolt to release it.

11. A lock for sliding doors comprising two members mounted respectively upon the door and the door jamb, one of said members having a bolt mounted to turn upon its axis and extending in the direction of the movement of the door, the end of said bolt projecting and having a transverse slot and having an upper beveled surface between said slot and its outer end, an arm secured to and extending transversely from the opposite end of the bolt, a casing plate outwardly of said arm and in which the bolt is journaled, said plate having stop surfaces limiting the swing of the arm between locked and unlocked positions of the bolt, the other member of the lock having a chamber into which the projecting end of the bolt enters, a locking member vertically movable in said chamber and adapted to enter the transverse slot in the bolt and a support for said locking member holding it in position for engagement by the beveled end of the bolt to be lifted thereby.

[Claims 2 and 4 to 10 not printed in the Gazette.]

1,267,901. BOLT-ANCHOR. HENRY W. PLEISTER, Westfield, N. J., assignor to Henry B. Newhall. Original application filed Sept. 20, 1916, Serial No. 121,105. Divided and this application filed Sept. 18, 1917. Serial No. 191,918. (Cl. 85—2.4.)

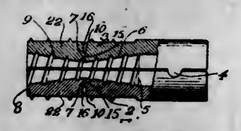


1. An article of manufacture comprising a one part lag shield having an open side and provided with an inner

inclined expanding surface inclined from near its outer end to a point intermediate its ends and from that point reversely inclined to the inner end of the lag shield.

[Claims 2 to 6 not printed in the Gazette.]

1,267,902. BOLT-ANCHOR. HENRY W. PLEISTER, Westfield, N. J., assignor to Henry B. Newhall. Original application filed Sept. 20, 1916, Serial No. 121,105. Divided and this application filed Sept. 18, 1917. Serial No. 191,919. (Cl. 85—2.4.)



1. An article of manufacture comprising a bolt anchor provided with a double inclined screw engaging surface and with means to further insure that the maximum strains will not be transmitted to the support by the end of the bolt anchor.

2. In a bolt anchor the combination of an expansible member having an inclined expanding surface reaching its nearest approach to the axis of the anchor between the ends of said anchor and from that point reversely inclined to form a flaring surface, said bolt anchor being provided with a weakening portion, and an expanding member adapted to engage with both of said inclined and flaring surfaces.

3. In a bolt anchor the combination of a two part bolt anchor having an axial bore diminishing in diameter to a point intermediate its ends and from that point increasing in diameter as it advances toward the other end of the anchor, said bolt anchor being provided with one or more weakening portions, and an expanding member adapted to engage with both of said inclined and flaring surfaces.

4. In a bolt anchor the combination of a bolt anchor member having an inner expanding surface inclined from near one end to a point intermediate the ends of the anchor member and from that point reversely inclined to form a flaring surface, said bolt anchor member being provided with a weakening portion, and an expanding member adapted to engage with both the inclined and flaring surfaces.

[Claims 5 to 7 not printed in the Gazette.]

1,267,903. BOLT-ANCHOR. HENRY W. PLEISTER, Westfield, N. J., assignor to Henry B. Newhall. Original application filed Sept. 20, 1916, Serial No. 121,105. Divided and this application filed Sept. 18, 1917. Serial No. 191,920. (Cl. 85—2.4.)



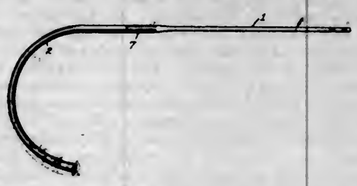
1. The combination of a ductile anchor provided with an axial bore of minimum diameter between its ends said bore flaring from its minimum diameter toward each end, and a screw to directly engage both of said flaring surfaces to cut its own female threads to expand the ductile anchor.

2. The combination of a ductile anchor provided with an axial bore of minimum diameter between its ends, said bore flaring from its minimum diameter toward each end, said ductile anchor being provided with one or more weakening portions and a screw to directly engage both of said flaring surfaces to cut its own female threads to expand the ductile anchor.

3. The combination of a ductile anchor having a collar, tines, and an axial bore having its minimum diameter between the ends of the anchor and flaring from its minimum diameter toward each end, and a screw to directly engage both of said flaring surfaces to cut its own screw threads and expand the ductile anchor.

4. The combination in a ductile anchor of a collar, tines, an axial bore having its minimum diameter between the ends of the anchor and flaring from its minimum diameter toward each end, said anchor being provided with one or more weakening portions adjacent to the minimum diameter of the axial bore.

1,267,904. TEMPLE FOR OPHTHALMIC MOUNTINGS. LAWRENCE POETON and JOEL C. WELLS, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed July 20, 1914. Serial No. 851,912. (Cl. 88—52.)



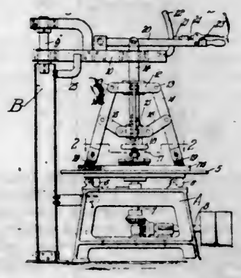
1. In a temple for spectacles, the combination with a solid ear piece of comparatively large diameter composed of celluloid or similar material and having a recess in its forward end, of a smaller lens attaching wire anchored in the recess of the ear piece by inserting it endwise therein, the recess being substantially the same size as the wire to be inserted therein, and the wire being formed with lateral projections embedded in the walls of the recess for anchoring the parts against relative twisting movement.

3. In a temple for spectacles, the combination with an ear piece of celluloid or similar material, having a recess in its forward end, of a smaller lens attaching wire anchored in the recess of the ear piece by inserting it endwise therein, the recess being substantially the same size as the wire to be inserted therein, and the wire being formed with projections embedded in the walls of the recess for anchoring the parts against relative movement.

4. In a temple for spectacles, the combination of a metallic side piece terminating in a flattened portion having a shoulder between the flattened portion and the side piece proper, and a non-metallic ear portion having an orifice to receive the end of the metal side, said ear portion being compressed over the flattened side portion to prevent withdrawal or twisting of the side portion.

[Claim 2 not printed in the Gazette.]

1,267,905. CLEANING-MACHINE. HAROLD M. RICHARDSON, Chicopee Falls, Mass. Filed July 14, 1917. Serial No. 180,590. (Cl. 15—8.)



1. A cleaning machine, comprising, a rotatable member to support articles to be cleaned, a supporting member movable into and out of alinement with said rotatable member, a plurality of cleaning tools carried by the supporting member and radially movable relatively thereto, means to move the supporting member axially toward and away from said rotatable member, and means to simultaneously move said tools radially toward and away from said supporting member.

2. A cleaning machine, comprising, a rotatable table adapted to support the articles to be cleaned, a swinging arm, a supporting member mounted therein, said arm adapted to be moved to bring said member into or out of alinement with said table when desired, a plurality of brush carrying arms radially arranged on said member, means to simultaneously move said arms radially with respect to said member, and means to move the latter axially toward and away from said table.

3. A cleaning machine, comprising, a rotatable table adapted to support the articles to be cleaned, a swinging arm, a supporting member mounted therein, said arm adapted to be moved to bring said member into or out of alinement with said table when desired, a plurality of arms radially arranged on said member, a brush extensibly and angularly adjustable on each of said arms, means to simultaneously move said arms radially with respect to said member, and means to move the latter axially toward and away from said table.

4. A cleaning machine, comprising, a rotatable table adapted to support the articles to be cleaned, a swinging arm, a supporting member mounted therein, said arm adapted to be moved to bring said member into or out of alinement with said table when desired, a plurality of brush carrying arms radially arranged on said member, means to simultaneously move said arms radially with respect to said member, means to move the latter axially toward and away from said table, and means associated with the last named means to hold said member in the position to which it is moved.

6. A cleaning machine, comprising, a member to support articles to be cleaned, a second member movable into and out of alinement with the first-named member, a radially-adjustable cleaning tool carried by the second member, means to rotate one of said members, means to move one of said members axially toward and away from the other member, and releasable means to hold the axially movable member in various positions of axial adjustment relatively to the other member.

[Claim 5 not printed in the Gazette.]

1,267,906. FUSIBLE LINK. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Aug. 6, 1917. Serial No. 184,696. (Cl. 286—16.)

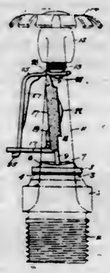


1. A fusible link consisting of two similar plates each having a perforation for the reception of a tension-exerting element and each including a tongue projecting from one edge of said perforation at an angle to its plane; a second tongue projecting from each member in a plane parallel to that of said first tongue; and relatively fusible material separably connecting said plates, each with the two sets of tongues parallel and immediately adjacent each other respectively.

5. A link element consisting of a substantially flat plate having an opening for the reception of a tension element and including a tongue projecting from one edge of said opening at an angle to its plane; with a second tongue projecting from one end of the plate in a plane parallel to that of said first tongue.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,267,907. SPRINKLER-HEAD. ARTHUR C. ROWLEY, Philadelphia, Pa., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Sept. 28, 1917. Serial No. 193,712. (Cl. 169—5.)

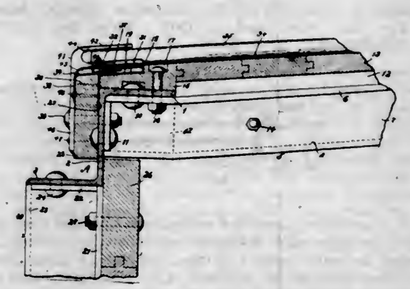


1. The combination in a sprinkler head of a valve; an abutment; and a fusible link including a lever engaging one of said parts, a fulcrum plate engaging the other part and the lever, with means including a latch, a keeper plate, and relatively fusible material separably connecting said latch and keeper plate to the fulcrum plate, for normally holding said lever in place.

2. The combination in a fusible link of a lever having two portions substantially at right angles to each other; a fulcrum member engaging one of said portions; and two plates having relatively fusible material separably connecting them to the fulcrum member, one of said plates having a tongue connecting the fulcrum member with the other plate, and said second plate having a portion engaging the second portion of said lever.

[Claims 3 to 5 not printed in the Gazette.]

1,267,908. CAR-ROOF. THOMAS NATHAN RUSSELL, Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company, a Corporation of Illinois. Filed Sept. 1, 1914. Serial No. 859,676. (Cl. 108—5.)

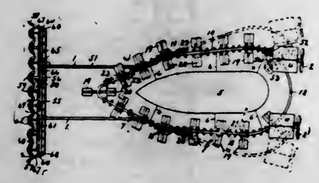


1. In an outside metal car roof, in combination; side plates formed of Z-bars having inwardly extending top flanges, vertical webs and outwardly extending bottom flanges; carlines carried by and beneath the said inwardly extending flanges; top sheathing carried by the carlines; a wooden filler bar fitted and secured on the top flange of the side plate and confining the outer edge of the top sheathing; a side fascia attached to the vertical web of the side plate and extending up and confining the outer edge of the said filler bar; and roof sheets extending over the top sheathing and the said filler bar, substantially as specified.

2. A roof sheet seam clip for car roofs, formed with a top inwardly extending projection to confine the top of the seam, inwardly extending fingers to engage on the top of the roof sheet at the sides of the seam, and with

front and rear openings at the outer ends of the said projection and fingers, and with widely separated front and rear legs adapted to be attached to the side of the car and having between them a space extended upward to near the top of the clip; substantially as specified.

1,267,909. MINE AND TORPEDO GUARD FOR VESSELS. JOSEPH E. RUZYCKI, Holyoke, Mass., assignor of one-fourth to Constant Wolski, Holyoke, Mass. Filed Aug. 20, 1917. Serial No. 187,040. (Cl. 114—240.)

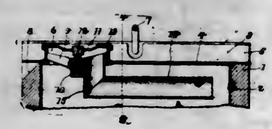


1. The combination, in a guard for vessels, with a partially submerged floating skeleton frame capable of inclosing a vessel, and explosive members carried by said frame, of a source of electrical energy, and circuit-forming members to explode said first-named members, when the circuit through said circuit-forming members is closed, as by contact with the latter of a torpedo.

13. The combination, in a guard for vessels, with a partially submerged floating frame, contact members attached to but insulated from said frame, means to project a part of any of said contact members which may be broken, as by the impact therewith of a torpedo, and cartridges carried by said frame in alternate relationship to said members, of electrical means to fire the cartridges on both sides of the vertical plane of any contact member, in the event such member be broken, such means including circuit-closing members in operative position relative to any projected part of a broken contact member.

[Claims 2 to 12 and 14 not printed in the Gazette.]

1,267,910. RECEPTACLE. CLARENCE SCHOCK, Mount Joy, Pa. Filed Mar. 6, 1917. Serial No. 152,779. (Cl. 221—9.)



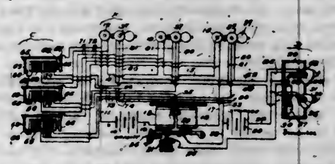
1. A receptacle provided with a recess portion upon one face, a pouring neck within the recess portion terminating below the outer surface of the receptacle, a guard plate within the recess, the side wall of the receptacle being cut away near said guard plate, the end of said guard plate overhanging said cut-away portion.

5. A receptacle provided with a pouring neck projecting beyond the top, a plurality of radially disposed arms within the neck, a centrally disposed stud supported by said radially disposed arms, a vent tube extending within the receptacle secured to and confined between a pair of said radially disposed arms, a cap covering said pouring neck, and a screw for securing said cap in position, said screw engaging said centrally disposed stud.

7. The combination with a receptacle provided with a pouring neck, radial arms arranged within the pouring neck, and a central stud supported by said radial arms, of a spout detachably secured to said neck, supporting means within the spout, and a screw passing through said pouring means and engaging said stud.

[Claims 2 to 4 and 6 not printed in the Gazette.]

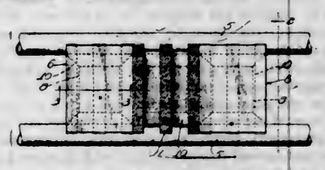
1,267,911. DISTRESS-SIGNAL. MAURICE SCHOLDER, New York, N. Y. Filed Oct. 13, 1916. Serial No. 125,432. (Cl. 177—314.)



1. In a building protective system, a normally closed master circuit, a relay in said master circuit, a plurality of circuit breakers connected in series in said master circuit, a plurality of annunciators each having a magnet, a winding for each magnet shunted across a respective circuit breaker, signal means controlled by said relay, armatures for said magnets, and normally closed contacts connected to said windings and adapted to be actuated by said armatures to open said master circuit.

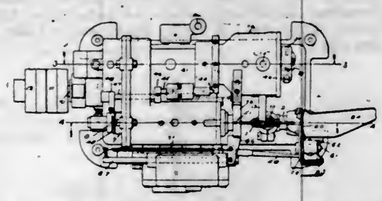
[Claims 2 to 4 not printed in the Gazette.]

1,267,912. LOCOMOTIVE-ARCH BRICK. WILLIAM SCHUTTLER, Chicago, Ill. Filed Dec. 28, 1917. Serial No. 209,238. (Cl. 110—87.)



A locomotive arch brick, comprising a body configured along opposite edges to rest against water tubes, said brick having a passage formed therein extending in a direction crosswise of the brick and from side to side thereof, said passage permitting a uniform heating and cooling of all portions of the brick whereby an even expansion and contraction of the entire body of the brick is obtained, substantially as described.

1,267,913. BOBBIN-WINDING MACHINE. ERICH R. SEIFERT, Hartford, Conn., assignor to The Seifert Special Machinery Company, Hartford, Conn., a Corporation of Connecticut. Filed Apr. 18, 1917. Serial No. 162,822. (Cl. 242—41.)



1. A machine for forming thread bobbins having a winding needle spindle, gears for rotating said spindle, a clutch for connecting the driving gears with the spindle, an oscillatory head, means for oscillating the head, means carried by the head for controlling the clutch between the driving gears and the spindle, a thread guiding finger pivotally mounted in the head, means in the head for vibrating the guiding finger, a bobbin ejecting finger, and mechanism for periodically advancing and retreating the ejecting finger.

5. A machine for forming thread bobbins having a winding needle, mechanism for rotating and periodically halting the needle, a thread guiding finger, mechanism for vibrating the guiding finger adjacent to the needle, a hook for temporarily engaging the thread between the guiding finger and the needle, mechanism for periodically advancing and retreating the guiding hook along the needle, a bobbin ejecting finger, mechanism for periodically advancing and retreating the ejecting finger along the needle, thread cutting shears, and mechanism for periodically opening and closing the shears across the path of the discharged bobbins.

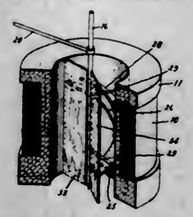
12. A machine for forming thread bobbins having a winding needle, mechanism for rotating and periodically halting the needle, a thread guiding finger, mechanism for vibrating the guiding finger adjacent to the needle, a hook for temporarily engaging the thread between the guiding finger and the needle, mechanism for periodically advancing and retreating the guiding hook along the needle, a finger for disengaging the thread from the guiding hook, mechanism for periodically reciprocating the disengaging finger across the guiding hook, a bobbin ejecting finger, mechanism for periodically advancing and retreating the ejecting finger along the needle, thread cutting shears, means movable with the ejecting finger for periodically opening the shears, and means for closing the shears across the path of the discharged bobbins.

14. A machine for forming thread bobbins having a winding needle, mechanism for rotating and periodically halting the needle, an oscillatory head, a cam and levers for oscillating said head, a thread guiding finger pivotally mounted in the head, an eccentric in said head for vibrating the guiding finger adjacent to the needle, a hook for temporarily engaging the thread between the guiding finger and the needle, mechanism for periodically advancing and retreating the guiding hook along the needle, a finger carried by said head for disengaging the thread from said hook, a bobbin ejecting finger, mechanism for periodically advancing and retreating the ejecting finger along the needle, thread cutting shears, mechanism for periodically opening and closing the shears across the path of the discharged bobbins, and mechanism actuated from the bobbin for setting the ejecting finger and cutting shears mechanisms into action.

17. A machine for forming thread bobbins having a winding needle, mechanism for rotating and periodically halting the needle, an oscillatory head, a cam and levers for oscillating said head, a thread guiding finger pivotally mounted in the head, an eccentric in said head for vibrating the guiding finger, a bobbin ejecting finger, and mechanism for periodically advancing and retreating the ejecting finger along the needle.

[Claims 2 to 4, 6 to 11, 13, 15, 16, and 18 not printed in the Gazette.]

1,267,914. ELECTRICAL MEASURING INSTRUMENT. ROBERT SHAND, Lynn, Mass., assignor to General Electric Company, a Corporation of New York. Filed May 19, 1916. Serial No. 98,555. (Cl. 171—95.)



1. An electrical measuring instrument comprising a solenoid coil, a magnetic member of helical configuration, secured to the inner wall of said coil, a moving element pivotally mounted substantially in the axis of said coil, and a magnetic vane of helical configuration secured to said removing element and separated from said first mentioned magnetic vane by a substantially uniform air gap of a different width for every position of the moving element.

2. An electrical measuring instrument comprising a non-magnetic supporting spool having a helical supporting ledge on its inner wall, a current carrying coil wound on said spool, a stationary magnetic member of helical configuration secured to said ledge, a moving element pivotally mounted substantially in the axis of said spool, and a movable magnetic member of helical configuration secured to said moving element and separated from said first mentioned magnetic member by a space of substantially uniform but variable width.

3. An electrical measuring instrument comprising a non-magnetic supporting spool having a helical supporting ledge on its inner wall, a current carrying coil wound on said spool, a stationary magnetic member of helical configuration secured to said ledge, a moving element pivotally mounted substantially in the axis of said spool, a movable magnetic member of helical configuration secured to said moving element and separated from said stationary magnetic member by a space of substantially uniform but variable width, a closure for the top and bottom of said spool whereby a substantially closed air chamber is formed in which said magnetic members are positioned, a radially positioned partition in said air chamber, and a radially positioned air damping vane secured to said moving element within said air chamber.

1,267,915. HANDLE FOR SHOVELS. ROBERT M. SHELLABARGER, West Liberty, Iowa. Filed June 4, 1917. Serial No. 172,768. (Cl. 55—116.)



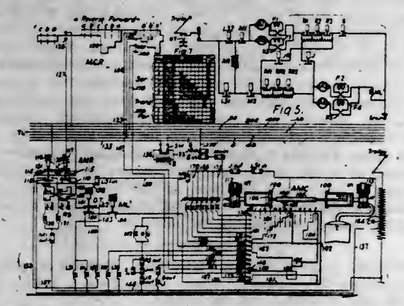
1. A collapsible handle comprising a shank portion adapted to be secured to a shovel blade, a tubular member slidable on said shank member and snugly receiving the same, said tubular member being of uniform thickness and uniform diameter throughout its entire length and provided with an inner longitudinally extending groove and a groove communicating with said longitudinally extending groove and disposed at right angles thereto, said shank being provided with a radially projecting lug engaging into the grooves of the tubular member and an upper tubular member slidably receiving the first mentioned tubular member, said upper member being of uniform diameter and thickness throughout its entire length and having an inner longitudinally extending groove and a groove communicating with said longitudinally extending groove at the lower ends thereof and disposed at right angles thereto, said first mentioned tubular member being provided with a radially projecting lug engaging into the grooves of the uppermost tubular member.

[Claim 2 not printed in the Gazette.]

1,267,916. SYSTEM OF CONTROL. FRANCIS H. SHEPARD, New Rochelle, N. Y., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 29, 1915. Serial No. 24,716. (Cl. 172—179.)

1. The combination with a motor-control system having a plurality of motor-controlling switching devices adapted

to operate in a predetermined sequence, of a plurality of dissimilar motor-control systems embodying switching devices for partially manipulating the circuits of the corresponding motors and each embodying pneumatically operated switching means for effecting the concurrent operation of said dissimilar systems with said first system.



3. The combination with a motor-control system having a plurality of motor-controlling switches adapted to operate in a predetermined sequence, of a plurality of dissimilar motor-control systems, a plurality of master controllers for the several systems, and a plurality of train-line conductors, of auxiliary control means adapted to be embodied in each of said dissimilar systems to permit of concurrent operation thereof with said first system from any one of said master controllers and all of said conductors.

11. The combination with a plurality of dissimilar control systems, a plurality of identical master controllers therefor, and a plurality of train-line conductors, of auxiliary control means adapted to be embodied in each of the systems to permit concurrent operation thereof from any one of said master controllers and all of said conductors.

13. The combination with a plurality of dissimilar control systems, of a plurality of dissimilar controllers therefor, electrically-controlled means for operating said controllers in accordance with the corresponding motor current, and a plurality of identical master controllers severally associated with and a set of train-line conductors interconnecting said systems, said dissimilar controllers being adapted to be governed from any of said master controllers.

17. The combination with a plurality of dissimilar control systems, of a plurality of controllers therefor severally provided with contact segments for suitably governing the operation of the associated system, and means for effecting concurrent operation of said systems, said means comprising a master control switch, a plurality of inter-system conductors, and controller-actuating means partially governed by the movement of said controllers.

[Claims 2, 4 to 10, 12, 14 to 16, and 18 to 24 not printed in the Gazette.]

1,267,917. DISPLAY-RACK. ERNEST G. SHINNER, Chicago, Ill. Filed Aug. 16, 1917. Serial No. 186,452. (Cl. 211—14.)

1. A display rack comprising a series of vertical, composite superposed supports, each divided into a series of sections separably connected together, each section having an outwardly extending bracket and means for connecting stringers to the free ends of said brackets to connect the supports together; stringers for connecting said brackets; hooks spaced apart on the stringers and a base support for the superposed sections.

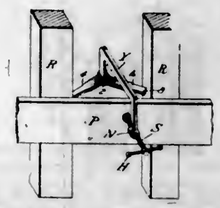
2. A display rack comprising a series of vertical, composite superposed supports, each support divided into a series of sections separably connected together by tenon and socket joints; a curved outwardly-extending bracket, secured to each section, having its free end downturned; a threaded plug in the free end of each bracket; stringers having a series of spaced-apart perforations to receive attaching screws, attaching screws taking through said perforations into said plugs to hold the supports properly spaced apart and hooks on said stringers.



3. A display rack comprising a series of vertical, composite supports, each support divided into a series of longitudinal sections separably connected together by slip joints, the base section of each support provided with means for supporting a shelf, the superposed sections of said supports each having an outwardly projecting bracket to which stringers may be connected; stringers connecting the brackets of each section together and having spaced-apart hooks at intervals along said stringers.

4. A display rack comprising a series of vertical, composite supports, each divided into a series of longitudinal sections separably connected together by detachable joints, and base sections of each support provided with means for supporting a shelf, each superposed section of each support, having an outwardly projecting bracket to which hook supporting stringers may be connected; a floor socket for each base section; spacing blocks, one for each section, to separate the supports from a wall and screws taking through the supports and through the spacing blocks, respectively, to hold said supports in upright position against said wall.

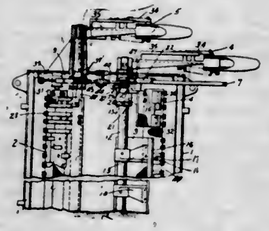
1,267,918. CLAMP. CARL THEADAR SILBERG, Bellingham, Wash. Filed Sept. 12, 1917. Serial No. 191,042. (Cl. 144—298.)



1. In a clamp of the class described, the combination with a yoke having an upstanding threaded stud on one arm and a nut on its other arm, and a screw threaded through the nut; of a pair of dogs each having two material engaging ends and a plurality of holes through its body intermediate its ends for selective engagement with said stud at right angles to the yoke, and means for removably holding the dogs thereon.

2. In a clamp for ship's planking, the combination with a yoke having a stud and screw; of a pair of dogs whereof each has a series of holes for selective engagement with said stud at right angles to the yoke, and a dowel in one dog and a socket in the other for holding them superposed in registry when desired.

1,267,919. CONTROLLER. KARL A. SIMMON and ARTHUR J. HALL, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 4, 1914. Serial No. 829,421. (Cl. 200—11.)



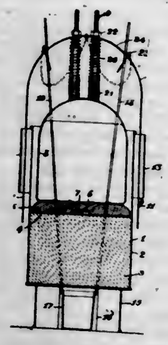
1. In a controller, the combination with a plurality of co-axially disposed control drums, another control drum in side-by-side relation thereto, and a plurality of operating handles respectively associated with said control drums, of means embodying a single locking member operatively associated with said drums for mutually interlocking all of said drums.

2. In a controller, the combination with a plurality of co-axially disposed control drums, another control drum in side-by-side relation thereto, and a plurality of operating handles respectively associated with said control drums, of a single pivotally mounted locking member having a plurality of integral arms operatively associated with the respective control drums for interlocking said drums against improper movements.

3. In a controller, the combination with a plurality of co-axially disposed rotatable drums, and an auxiliary drum in side-by-side relation thereto, of a single locking member operatively associated with said drums for interlocking all of the same.

[Claims 4 and 5 not printed in the Gazette.]

1,267,920. PRESS SUITABLE FOR PRESSING CHEESE OR MEAT. FRANCIS WILLIAM SIMPSON and ROBERT SIMPSON, Otley, England. Filed Sept. 27, 1917. Serial No. 193,602. (Cl. 100—55.)



1. A press for compressing food substances, comprising a container, a plunger, a bow on said plunger, a second bow, springs between said bows, a means to lock said bow with the springs compressed.

3. A press for compressing food substances, comprising a container, a plunger, a bow on said plunger, a second bow, springs between said bows, a means to lock said bow with the springs compressed, and sockets on the outside of said container forming guides for the ends of said second bow.

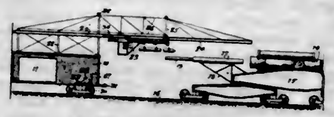
5. A press for compressing food substances, comprising a container, a plunger, a bow on said plunger, a second bow, compound springs of variable strength between said bows, a means to lock said bow with the springs compressed, sockets on the outside of said container forming guides for the ends of said second bow, and means to adjust said springs.

7. A press for compressing food substances, comprising a container, a plunger, a bow on said plunger, a second bow, springs between said bows, locking pins engaging with holes in the said bow to lock the said bow with the springs compressed, and loops pivoted on the base of said container and acting as fixed abutments for said pins.

8. A press for compressing food substances, comprising a rectangular container, a rectangular plunger, a rectangular bow on said plunger, a second bow, springs between said bows, a means to lock said bow with the springs compressed.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,267,921. CAR. AUGUSTUS SMITH, Roselle, N. J., assignor to Bergen Point Iron Works, Bayonne, N. J., a Corporation of New Jersey. Filed Feb. 27, 1917. Serial No. 151,383. (Cl. 89—1.)

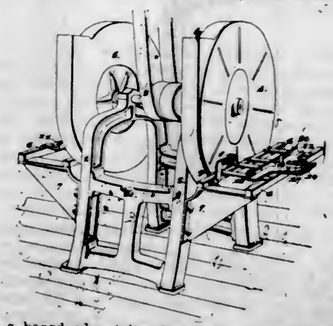


3. A car suitable for containing materials to be handled, with an overhead track system and telpher for handling said materials, the track consisting of a fixed portion over each side of the car and a swinging track connectible with either of the fixed tracks, in combination with a curved ground track for the car to operate on, together with means for shifting the center of motion of the swinging track to adapt the alinement of the telpher track to the varying curvature of the ground track on which the car operates.

4. For use with a track traveling gun having a loading tray at the breech thereof, a novel magazine car having a telpher track adapted to be substantially alined with the gun bore and a telpher traveling thereon to deposit a charge from said car onto the loading tray in position to be shoved into the gun.

[Claims 1, 2, and 5 to 7 not printed in the Gazette.]

1,267,922. BOX-SHOOK-EDGE-TRIMMING MECHANISM. GEORGE ANDREWS SMITH, South Hill, Va. Filed Aug. 29, 1917. Serial No. 188,842. (Cl. 144—118.)



1. In a board edge trimming machine, the combination with an edge planer; of means for holding the board to be trimmed at right angles to the planer and for pushing the board toward the planer with the edge to be trimmed in a

plane parallel with the planer, a selective stop device including a ratchet and a manually shiftable pawl, the latter being adapted for being moved into engagement with the ratchet at such predetermined times as the condition of the edge of the board being trimmed may indicate, whereby to leave the remainder of the board of a standard width.

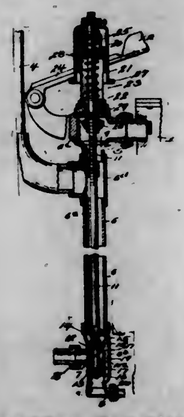
4. The combination with a planer, the table and the board feeding slide, a selective stop device for arresting the forward movements of the slide and a member cooperative with the slide and the selective stop device and adapted for substantially simultaneously advancing the slide and setting the stop device.

8. The combination with a cutter; of a slide member movable in a plane at right angles to the cutter, a pusher frame pivotally mounted on the slide member for adjustment laterally with respect to the slide and in the horizontal plane, a handle by which the slide and pusher are advanced and a selective device cooperative with the said handle for directing the movement of the slide member and the pusher, means mounted on the pusher and cooperative with the slide for shifting and holding the said pusher to different lateral adjustments, whereby to present the board engaging face of the pusher at different angles with respect to the cutter, said means including a detent, a lever that carries the detent having a fixed fulcrum on the pusher frame and a slidable fulcrum connection with the slide, the said pusher frame having annularly arranged detent locking portions.

10. In a mechanism of the character stated, a rotary cutter disk, means for holding the board to be trimmed at right angles to the disk, means for gradually advancing the board edgewise toward the disk, further means for determining the time operations of the said board advancing means including a rotatable hand hold and a detent on the hand hold that coöperates with the means for determining the time operations of the board advancing mechanism.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

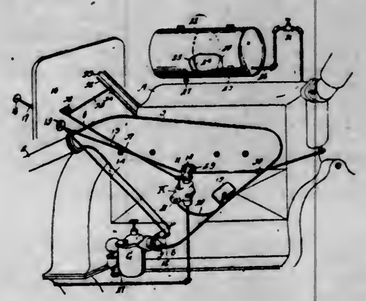
1,267,923. **FLUSHING APPARATUS FOR WATER-CLOSETS.** JOHN B. R. SMITH, Hamilton, Md., assignor of one-fourth to John P. Quinn, one-fourth to Carroll E. Neser, and one-fourth to Thomas D. Neser, Baltimore, Md. Filed Mar. 24, 1915. Serial No. 16,740. (Cl. 4—28.)



1. In a frost-proof-closet, the combination with a supply pipe, a tank, a pipe connecting the tank and the supply pipe, a closet bowl, and a flush pipe connecting the supply pipe and the closet bowl, the supply pipe having a valve seat between the flush pipe and the pipe which leads to the tank, of a valve working in relation to said seat, a stem carrying said valve, a head mounted on the upper end of the supply pipe, the stem projecting into said head, a stuffing box associated with the base of the head and surrounding the stem, a collar mounted on the stem within the head, a coil spring for holding the valve in normal position and surrounding the stem within the head, one end of said spring bearing against the base of the head and the other end of said spring bearing against said collar, a hood secured upon the upper end of the stem and fitting over said head, the hood having a flange at its lower end and a hinged seat-carrying bracket having its arms arranged to engage said flanges.

2. In a frost-proof closet, the combination with a supply pipe, a tank, a pipe connecting the tank and the supply pipe, a closet bowl, and a flush pipe connecting the supply pipe and the closet bowl, the supply pipe having a valve seat between the flush pipe and the pipe which leads to the tank, of a valve working in relation to said seat, a stem carrying said valve, a head mounted on the upper end of the supply pipe, the stem projecting into said head, a stuffing box associated with the base of the head and surrounding the stem, a collar mounted on the stem within the head, and a coil spring for holding the valve in normal position and surrounding the stem within the head, one end of said spring bearing against the face of the head and the other end of said spring bearing against said collar, the head being threaded into said supply pipe, and having its base formed as a nut whereby the head, the parts inclosed therein, the stem, and the valve mounted upon said stem may be removed from and replaced into said supply pipe as a unit.

1,267,924. **VAPORIZER FOR ENGINES.** MILTON R. SMITH, Dwight, Ill., assignor of two-fifths to Jens J. Knudsen, Dwight, Ill. Filed Sept. 29, 1917. Serial No. 194,058. (Cl. 123—127.)

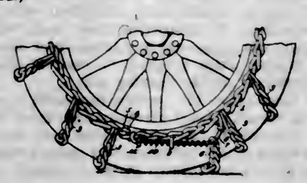


1. Means for vaporizing hydrocarbon fuel, comprising an exhaust manifold of triangular formation having an inlet neck for a gasolene carbureter and outlet neck for attachment to the exhaust pipe of an engine, an intake manifold contained entirely within said exhaust manifold, a kerosene carbureter having communication with the intake manifold and located about centrally of the exhaust manifold, a cut off for the gasolene carbureter, another cut off for the kerosene carbureter, and manually controlled means for simultaneously opening one of said cut offs and closing the other cut off.

2. Means for vaporizing hydrocarbon fuel, comprising an exhaust manifold of triangular formation having an inlet neck for a gasolene carbureter and an outlet neck for attachment to the exhaust pipe of an engine, an intake manifold contained entirely within said exhaust manifold, a kerosene carbureter having communication with the intake manifold and located about centrally of the exhaust manifold, a cut off for the gasolene carbureter, another cut off for the kerosene carbureter, manually controlled means for simultaneously opening one of said cut offs and closing the other cut off, and a pipe having one end in communication with the exhaust manifold and the other end in communication with the air intake of the kerosene carbureter.

3. Means for vaporizing hydrocarbon fuel, comprising an exhaust manifold of triangular formation having an inlet neck for a gasolene carbureter and an outlet neck for attachment to the exhaust pipe of an engine, an intake manifold contained entirely within said exhaust manifold, a kerosene carbureter having communication with the intake manifold and located about centrally of the exhaust manifold, a cut off for the gasolene carbureter, another cut off for the kerosene carbureter, manually controlled means for simultaneously opening one of said cut offs and closing the other cut off, a water supply tank, a pipe leading from said tank to the kerosene carbureter between the throttle valve thereof and the engine, and means for regulating the flow of water through said pipe.

1,267,925. **TIRE-CHAIN.** WALTER L. SMITH, New York, N. Y. Filed Oct. 2, 1917. Serial No. 194,313. (Cl. 152—14.)



1. In a tire chain including side members and a plurality of cross members fixed thereto at intervals, said side members having interengaging parts whereby the whole is adapted to encircle the tire, the combination of an auxiliary cross member adjacent one end of said side members and arranged for limited movement toward the adjacent fixed cross member in mounting, and means positively urging said auxiliary member toward the limit of its movement adjacent said end of said side members.

2. A tire chain including, in combination, side members, and a plurality of cross members fixed thereto at intervals less than the arcuate dimension of the tire tread in close proximity to its supporting surface, said side members having interengaging parts whereby the whole is adapted to encircle the tire, an auxiliary cross member adjacent one end of said side members and arranged for longitudinal movement with respect to the latter for increasing the free terminal extent thereof in mounting, and spring means urging said member toward midway position between adjacent fixed cross members when the chain is mounted.

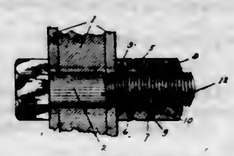
1,267,926. **AUTOMOBILE-CLUTCH LOCK.** FRANCIS T. SNOW and PETER E. MAUSER, San Jose, Cal. Filed Mar. 20, 1918. Serial No. 223,500. (Cl. 70—128.)



1. In an automobile clutch lock of the class described; a metal casing, having a flanged base integral therewith, means for fastening the casing to the floor of an automobile; a depression in the under side of said base; a spiral spring, positioned in said depression; means for holding the spring in place; a bore through said casing, substantially at right angles to the base; a shaft, turnable in said bore; a locking bar, eccentric to said shaft and integral therewith; a reinforcing projection, on the upper side of the locking bar, adapted to strengthen and to assist in the operation of the locking bar; a projection on the under side of the locking bar, adapted to engage a clutch pedal of an automobile; a metal washer secured to the lower end of the shaft, adapted to hold the shaft in place; means for attaching the spiral spring to the lower end of said shaft; a stop pin on the under side of the locking bar; shoulders in the casing, adapted to engage said stop pin, thereby limiting the turning movement of the locking bar; a depression, near the lower end of the shaft, adapted to receive a lock bolt therein; substantially as and for the purpose described.

2. In an automobile clutch lock of the class described; a metal casing, a flanged base integral with said casing; a plurality of threaded openings in said base, adapted to receive machine screws therein, for fastening the casing to the floor of an automobile; a depression in the under side of said base; a spiral spring positioned in said depression; means for fastening one end of the spiral spring to the base; a bore through said casing, substantially at right angles to the base; a shaft, turnable in said bore; means for retaining said shaft in place; a depression near the lower end of the shaft; a longitudinal bore substantially at right angle to the first mentioned bore and communicating therewith; a lock bolt, slidable in the longitudinal bore, adapted to engage the depression in the shaft; a helical spring positioned in the longitudinal bore, adapted to resiliently engage the end of said lock bolt; means for holding said spring in place, a key operative means for withdrawing the lock bolt out of engagement with the depression in the shaft, substantially as and for the purpose set forth.

1,267,927. **BALL-BEARING LOCK-NUT.** ERNEST E. SOWELL and JOHN A. SOWELL, Sacramento, Cal. Filed Mar. 30, 1917. Serial No. 158,565. (Cl. 151—15.)



A nut lock comprising two members, one having a projecting threaded shoulder forming a recess in its face, the other having a threaded recess whereby it may be mounted upon the threaded shoulder to inclose the recess in the first named member to render it dirt and moisture proof, and a split spring washer arranged to be disposed in said inclosed recess and engage the two nut members.

1,267,928. **CURRENT WATER-MOTOR.** EMANUEL A. SPEEGLE, Washington, D. C. Filed Jan. 4, 1917. Serial No. 140,571. (Cl. 170—86.)



1. A current water motor comprising a body formed with spaced parallel pontoons providing a water way therebetween and having forwardly convergent passages leading from without to the water way, swinging gates located at one end and forwardly of the passages, an air tank located between the gates above the passages, water operating means located in the water way and supported by the pontoons and supported above and below the tank, a guard extending from one end of the tank and having the outer end curved and constituting a dam for preventing water from passing over the tank and affecting the upper lay of the water operating means.

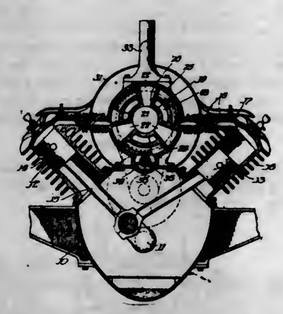
2. A current water motor comprising a body formed with spaced parallel pontoons providing a water way therebetween, water operated means located in the water way and supported by the pontoons, buoyant elements supported by the water operated means, said water operating means including a pair of flexible conveyers, each having

a series of triangular shaped frames and links pivotally connected to each other the longer and outer blades supported by the frames, means for swingingly connecting the outer blades with the inner blades, means for limiting the swinging movement of the outer blades, motors for said conveyers and having radial spokes and tangentially arranged braces forming supports for the triangular shaped frames, and means for detachably connecting the buoyant elements to the inner blades.

3. A current water motor comprising a body formed with spaced parallel pontoons providing a waterway therebetween and having forwardly convergent passages leading from without to the waterway, swinging gates located at one end and forwardly of the passages, water operated means located in the waterway and supported by the pontoons, inwardly directed beveled ends formed on said pontoons, an air tank located between the pontoons above the passages and having a curved end constituting a dam, buoyant elements supported at intervals by the water operated means, and each having a removable plug for permitting the admission and expulsion of water ballast, the water operated means including a pair of flexible conveyers, each having series of triangularly shaped frames and links pivotally connected to each other, inner and outer blades supported by the frames, means for swingingly connecting the outer blades with the inner blades, means for limiting the swinging movement of the outer blades, rotors for said conveyers and having radial spikes and tangentially arranged braces connecting the same and forming supports for the triangularly shaped frames, and means for detachably connecting the buoyant elements to the inner blades.

[Claim 4 not printed in the Gazette.]

1,267,929. V-TYPE ENGINE. BURT D. STEVENS, Evanston, Ill., assignor of three-fourths to William V. Kelley, Chicago, Ill. Filed July 28, 1915. Serial No. 42,288. (Cl. 128—55.)

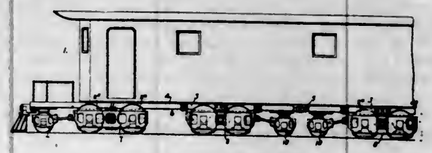


1. In an engine, the combination of a plurality of pairs of angularly disposed cylinders, a valve casing disposed between and independent of the pairs of cylinders, a single rotary valve within said casing, a housing around said casing, and means for inducing a current of air through said valve and between said casing and housing.

2. In an engine the combination of a plurality of pairs of angularly disposed cylinders, a valve casing disposed between and independently of the pairs of cylinders, a single rotary valve within said casing, and means for inducing a current of air through said valve and around the exterior of said casing, substantially as described.

1,267,930. ELECTRIC LOCOMOTIVE. NORMAN W. STORER, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 5, 1915. Serial No. 59,804. (Cl. 105—259.)

1. In a locomotive, the combination with a cab, of a plurality of running gears associated therewith and each comprising a rigid inner truck, a pivotal inner truck and two pivotal outer trucks.

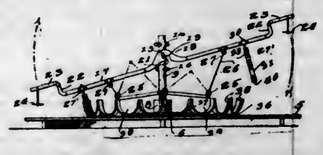


2. An electric locomotive running gear comprising driving axles and wheels thereon, gearless electric driving motors mounted on said axles, said motors having their centers of gravity substantially coincident with the centers of gravity of the respective axles upon which they are mounted, and a two-wheel guiding truck located outside the driving axles adapted to restrain the lateral swinging tendency of the running gear.

3. In a locomotive, the combination with a cab, of a plurality of running gears pivotally associated therewith and each comprising two main trucks and two guiding trucks pivotally associated with said main trucks.

[Claims 4 to 11 not printed in the Gazette.]

1,267,931. AMUSEMENT DEVICE. HAKULYO CHUHACHI TANABE, Marysville, Cal. Filed June 2, 1917. Serial No. 172,446. (Cl. 46—27.)



2. An amusement device comprising a base, a vertical upright post journaled in the base, a frame rotating from the post, a plurality of supporting arms mounted on the post, and means loosely connected with each of the arms and with said frame for imparting a rotary movement to said arms.

5. An amusement device embodying a base, a supporting post journaled in said base, a frame radiating from the post, a plurality of supporting arms pivoted to said post, means loosely connected with each of the supporting arms and frame for simultaneously rocking the supporting arms, an annular track embracing the base, and a resilient leg depending from each of the arms and coacting with the track for producing to the arm a step by step rotation.

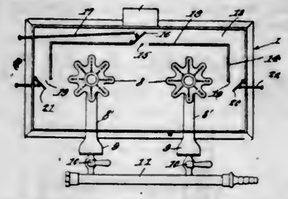
7. An amusement device comprising an upright, a frame fixedly secured to the upright, a plurality of supporting arms pivotally connected with the upright at a point above the frame, an eye on the frame, an eye on each of the supporting arms, a flexible element trained through each of said eyes, and means carried by each of the supporting arms at a point in advance of the latter mentioned means for imparting to the arms a step by step rotation.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,267,932. HOT-PLATE. WILLIAM F. TELLER, Columbus, Ohio. Filed June 18, 1917. Serial No. 175,470. (Cl. 126—40.)

1. A hot plate embodying a casing having an outlet in its rear wall intermediate its ends, burners within the casing and situated between the center and ends thereof, a partition within the casing parallel with and spaced from the rear wall thereof, forwardly extending wings at the ends of said partition, said wings spaced from and parallel with the end walls and terminating at the line of centers between the front and rear walls, the partition and wings forming with the casing a flue having openings on opposite sides of the burners and adjacent the ends of the casing and an opening between the burners and adjacent the outlet, and individual dampers for the openings.

2. A hot plate embodying a casing having an outlet opening in its rear wall intermediate the ends of the casing, burners within the casing and adjacent each end



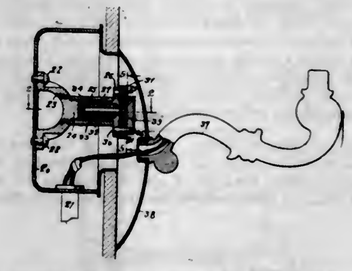
thereof, and elements within the casing for directing gases of combustion from a burner to the opposite end of the casing, or about its end of the casing and to the outlet, or directly to the outlet.

1,267,933. MIRROR-HOLDER. CLARENCE E. TIBBS, Seattle, Wash., assignor of one-third to B. B. Nervo, Seattle, Wash. Filed June 26, 1917. Serial No. 177,080. (Cl. 45—97.)



In a device of the class described, a block having a recess in one side thereof opening out through the top of said block, a reinforcing plate on said block coacting with said recess in providing the block with a handle receiving opening, attaching means on said plate, and an arm on said plate extending above the top of said block adapted to act as a brace for a handle inserted in the handle receiving opening in the block.

1,267,934. FIXTURE-SUPPORT. ARTHUR J. TIZLEY, Brooklyn, N. Y., assignor to Edward F. Caldwell & Company, New York, N. Y., a Corporation of New York. Filed Apr. 19, 1917. Serial No. 163,317. (Cl. 240—85.)

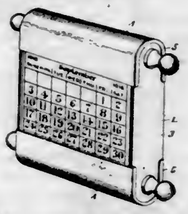


2. A supporting device comprising an apertured locking plate, a key plate longitudinally and rotatably displaceable with relation thereto, spring means for maintaining said parts normally together, in combination with a fixture having means for engaging said key plate when the latter is spaced from the locking plate and additional means for engaging the locking plate to hold said fixture and locking plate against relative displacement when the normal relation of the key and locking plates is reëstablished, for the purpose specified.

3. A supporting device comprising a stationary locking plate and a fixture supporting plate movable with relation thereto, in combination with a fixture engageable upon said supporting plate when the latter is moved in relation to the locking plate and means on said fixture engaging the locking plate and serving to prevent the relative rotary movement of said parts when the supporting plate is returned to its normal position with relation to the locking plate.

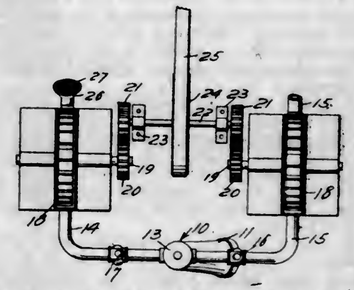
[Claim 1 not printed in the Gazette.]

1,267,935. ROLL-CALENDAR. ISAAC W. TOWNSEND, Galveston, Tex. Filed Nov. 28, 1916. Serial No. 133,910. (Cl. 40—117.)



A roll calendar comprising a casing including a back, side walls integral with and extending at right angles to said back, the ends of said side walls extending beyond the top and bottom edges of said back and being semi-circular, substantially semi-cylindrical end walls disposed upon the semi-circular ends of said side walls and overlapping the top and bottom edges of said back, flanges on the ends of said end walls bent to engage the side walls, rollers journaled between said side walls, and a continuous strip wound upon said rollers.

1,267,936. HYDRAULIC AIR-COMPRESSOR AND MOTOR. CHRISTIAN CARL TUCH, Honolulu, Hawaii. Filed Dec. 9, 1916. Serial No. 136,026. (Cl. 230—32.)



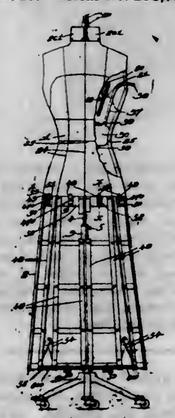
1. In a device as specified, in combination, a vertically disposed cylinder having its lower end curved and flared and open and adapted to be submerged in a body of water, a guard screen connected to the lower open end, a cap connected to the upper end of the cylinder closing the same, a buoyant piston operating in the cylinder and adapted to rise and fall with the surface level of the water, an air intake pipe connected to the cylinder to admit air upon downward movement of the piston, and an outlet pipe connected to the cylinder and adapted to permit the escape of air when displaced in the cylinder by the piston.

2. In a device as specified, in combination with a cylinder having communication with a body of water, and a buoyant piston mounted in the cylinder and adapted to rise and fall therein with the change of the surface level of the water, a turbine connected to the cylinder adapted to be actuated by the inflow of air to the cylinder upon the lowering of the piston, a second turbine connected to the cylinder adapted to be actuated by air ejected from the

cylinder by the rise of the piston, a gearing connecting said turbines and adapted to transmit power from the same.

8. In a device as specified, in combination, a vertical cylinder open at its lower end and adapted to be submerged in a body of water, a buoyant piston mounted in the cylinder and adapted to rise and fall with the surface level of the water, intake and outlet pipes leading into and from the cylinder, inlet and outlet check valves located respectively in said pipes, a turbine in each pipe, a pinion mounted on the shaft of each turbine, a countershaft, gears on the countershaft meshing with said gears on the turbine shaft, and a pulley on said countershaft adapted to be turned by the rotation of said turbines.

1,267,937. DRESS-FORM. CHARLES A. UFFORD, Boston, Mass. Filed June 28, 1912, Serial No. 706,844. Renewed Oct. 23, 1917. Serial No. 198,737. (Cl. 223—18.)



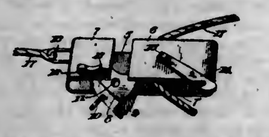
4. In a dress form, the combination with a body portion divided into sections and expansible at the waist line, of a central supporting member, an inflatable chamber situated on the interior of the form at the waist line, and means for inflating said chamber sustained by said supporting member.

10. In a dress form, the combination with a body portion divided vertically at the hips in a plurality of places, of a central supporting member, a plurality of plates sustained thereby and adjustable in radial directions, and means for adjustably connecting the form sections to the plates to permit of an independent radial and lateral adjustment of each form section relative to the plate to which it is secured.

13. In a dress form, the combination with a sectional skirt portion, of a link pivotally connected to each skirt section, a frame having radial arms, runners slidably mounted on said arms, and means for pivotally connecting the links to the runners and for clamping the runners in adjusted positions on the arms.

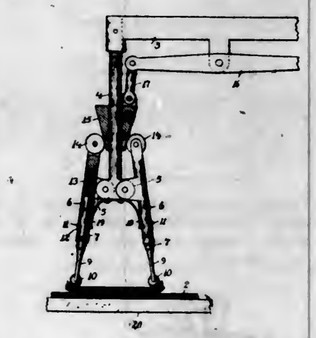
[Claims 1 to 3, 5 to 9, 11, 12, and 14 not printed in the Gazette.]

1,267,938. SHOCK-BINDER. TEUNIS W. VAN ZANTE, Pella, Iowa. Filed May 15, 1914. Serial No. 838,809. (Cl. 100—31.)



A shock binder, comprising a metal strap having its end portions folded and the extremities of the folded ends spaced apart, bolts connecting the folded ends with the body of the strap, clamping elements mounted on the bolts and adapted to grip a binder inserted through the space formed between the extremities of the said folded ends, a clamp held against the outer side of one of the said folded ends by one of the said bolts, and a cutter held against the outer side of the remaining folded end by the other bolt.

1,267,939. PETAL-FORMER. JOSEPH E. VINCENT, Cambridge, Mass. Filed Apr. 17, 1917. Serial No. 162,614. (Cl. 41—2.)

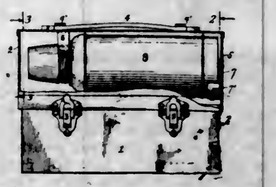


1. A flower forming instrumentality comprising a plurality of shanks each having a rounded head at its lower end, a pivoted tubular lever slidably receiving each shank, a helical spring in each tubular lever pressing the shank therein downward, a yielding surface for the paper blanks, and means for simultaneously moving the tubular levers to slide the heads along the paper blanks toward each other.

2. A flower forming instrumentality comprising a stationary rod, a plurality of tubular levers intermediately pivoted to its lower end, a shank having a rounded lower end slidably located in each tubular lever, resilient means pressing the said shanks downward, a cone slidable on the rod to force the upper ends of the tubular levers outward and the rounded heads toward each other, means for thus moving the cone, and a soft surface for supporting the paper blanks beneath the rounded heads.

3. A flower forming instrumentality comprising a plurality of tubular levers each having an anti-friction roll at its upper end, a stationary rod having said levers pivoted at an intermediate point of each to its lower end, springs for pressing the lower ends of the levers away from each other, a shank having a rounded lower head slidable in each tubular lever, a spring in each lever pressing the shank therein downward, means for limiting the outward movement of each shank from its tubular lever, and a cone forcibly slidable on said rod for moving the lower ends of the levers toward each other.

1,267,940. LUNCH-BOX. CHARLES R. H. VISSCHER, Norwich, Conn., assignor to American Thermos Bottle Company, New York, N. Y., a Corporation of Maine. Filed Jan. 13, 1917. Serial No. 142,186. (Cl. 220—5.)



1. In a lunch box, a top secured thereto, an arm pivotally secured to one end of the top, a ledge secured to the free end of the arm adapted to engage the base of a vessel, a spring clip secured to the top adjacent to the other end and adapted to partially encircle and engage the top portion of the vessel.

2. In a lunch box, a top secured thereto, a ledge secured adjacent to one end thereof adapted to engage the base of a vessel, a spring clip secured to the top adjacent to the other end, the free ends being corrugated and adapted to engage and partially encircle the top of the vessel.

1,267,941. TOILET OUTFIT. ANTON FETTING WALTZ, New York, N. Y. Filed Sept. 19, 1917. Serial No. 192,082. (Cl. 132—32.)



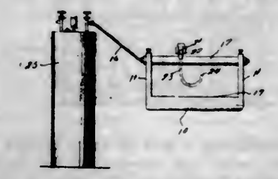
2. In a toilet outfit, a brush having a hollow back provided in its side wall with an opening, a drawer adapted to fit into the said hollow back and adapted to be inserted or removed by way of the said opening, the latter extending from one end of the back to approximately the middle of the sides of the side wall, the said drawer completely closing the said opening, the drawer having its bottom extending beyond its sides and the upper surface of the bottom of the drawer being provided with retaining devices and toilet articles held in position in the said retaining devices and removable therefrom by the open rear end of the drawer when the latter is withdrawn from the hollow back.

5. In a toilet outfit, a military brush having a hollow back open at one end, and a drawer slidably fitting into the said hollow back and closing the open end, the drawer having in its bottom a compartment for the reception of a mirror, the compartment being open at the rear to hold the mirror against movement at the time the drawer is inserted in the brush back.

6. In a toilet outfit, a military brush having a hollow back open at one end and a drawer slidably fitting into the said hollow back and closing the said open end, the drawer having in its bottom a compartment for the reception of a mirror, the compartment being open at the rear, the side wall of the drawer terminating near the rear end of the drawer, and retaining devices on the upper surfaces of the drawer bottom and adapted to hold toilet articles adapted to be inserted or removed through the open rear end of the drawer at the time the latter is withdrawn from the brush back.

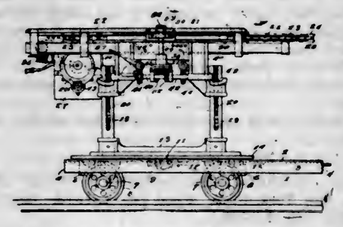
[Claims 1, 3, and 4 not printed in the Gazette.]

1,267,942. LIQUID-FUEL BURNER. JOHN WILLMAN WALVATNE, Sherman, S. D. Filed Dec. 3, 1917. Serial No. 205,112. (Cl. 158—63.)



The combination with a pressure supply of liquid fuel, of a burner including a pan-shaped base, uprights at the ends of the base, a horizontal vaporizing chamber supported by the uprights, a longitudinal heat retaining member within the chamber, a vertical pipe connected to the upper side of the chamber and extending therebelow and having its lower end turned upwardly in position to direct the flame therefrom against the lower side of the chamber, and oil conveying means between the said supply and one end of the said chamber.

1,267,943. MINING APPARATUS. CARL J. E. WAXBOM, Westerville, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed Oct. 11, 1912, Serial No. 725,322. Renewed Oct. 27, 1917. Serial No. 198,884. (Cl. 125—14.)



3. In a mining apparatus, the combination of a main base frame, a bed frame, connections between the two frames providing for movement of the bed frame vertically with respect to the base frame and angularly with respect thereto about a vertical axis, a horizontally extending cutter frame, connections between the cutter frame and the bed frame adapted to permit longitudinal movement of the former away from and toward the said axis and, in coöperation with the connections between the base frame and bed frame, to support the cutter frame in a definite unvarying angular relation to the base frame for each position of angular adjustment in which the said bed frame is held, cutting mechanism carried by the cutter frame at the outer end thereof and active at points widely separated transversely of the cutter frame, and power feed devices coöperating with the cutter frame to advance the said cutting mechanism toward the coal beyond all other parts of the machine, whereby a broad kerf can be cut with the bed frame in any position with respect to the base frame.

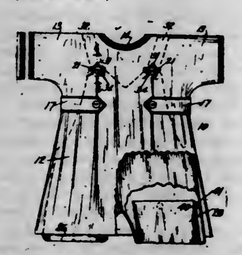
15. In a wheel supported mining apparatus adapted to be transported over the tracks of a mine and to cut a horizontal kerf extending across its front while supported on a track extending longitudinally toward the face of the coal, the combination of a base frame, supporting track wheels therefor, an elongated horizontally extending cutter frame, an endless cutter chain mounted to move in a horizontal path around the periphery of the cutter frame, said cutter frame and chain having their rear parts arranged permanently directly above the base frame, supporting connections between the cutter frame and the base frame adapted to permit the cutter frame and chain to move bodily vertically and longitudinally and to turn around an upright axis within the vertical bounding lines of the base frame so that the front part of the cutter frame and chain are moved laterally across the longitudinal lines of the base frame, said supporting connections comprising a supporting frame mounted to swing laterally in relation to the base frame and having four upright supports arranged at the angles of a widely extended horizontal quadrangle, two of said supports being disposed lateraly opposite each other in front of the others and the cutter frame being disposed between said front supports to extend forward across their vertical transverse plane to points in front of the base frame, means for adjusting the cutter frame upwardly and downwardly relative to the upright supports, motor devices carried by the base frame, and means actuated by the motor devices for driving the cutter chain and simultaneously moving the cutter frame and chain horizontally to cut the kerf.

20. In a wheel supported mining apparatus adapted to be transported over the tracks of a mine and to cut a horizontal kerf extending across its front while supported on a track extending longitudinally toward the

face of the coal, the combination of a base frame, supporting track wheels therefor, a supporting frame mounted on the base frame directly over its wheel base to turn in horizontal planes and comprising a plurality of upright supports disposed at the angles of a widely extended horizontal polygon, a horizontally disposed bed frame vertically adjustably mounted on the upright supports, a horizontally extending cutter frame mounted for longitudinal movement on the bed frame, an endless cutter chain mounted to move in a horizontal path around the periphery of the cutter frame, and a motor for driving the cutter chain fixedly connected to the cutter frame, the cutter frame and chain being disposed near the upperside of the bed frame and the motor being disposed in planes below the cutter chain in position to move with the cutter frame in the space between the axes of the said upright supports.

[Claims 1, 2, 4 to 14, and 16 to 19 not printed in the Gazette.]

1,267,944. CONVERTIBLE GARMENT. ELLEN M. H. WEBB, New York, N. Y. Filed Feb. 1, 1918. Serial No. 214,882. (Cl. 2—145.)

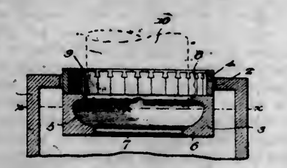


1. A convertible garment, comprising a dress and overalls, of which either is adapted to be worn outside of the other, the overalls having shoulder straps connecting the back and front of the overalls with each other, fastening devices detachably connecting the back of the overalls with the back of the dress, and fastening devices detachably connecting the front of the overalls with the front of the dress.

2. A convertible garment, comprising a dress and overalls, of which either is adapted to be worn outside of the other, the overalls having shoulder straps connecting the back and front of the overalls with each other, the overalls having the lower portions of the legs adapted to be turned up within the upper portions of the legs and fastened thereto, fastening devices detachably connecting the back of the overalls with the back of the dress, and fastening devices detachably connecting the front of the overalls with the front of the dress.

[Claim 3 not printed in the Gazette.]

1,267,945. DRAWING-RING. WILLIAM WESTBURY, Okmulgee, Okla., assignor to L. S. Skelton, Okmulgee, Okla. Filed Jan. 26, 1916. Serial No. 74,471. (Cl. 49—61.)



1. A glass drawing apparatus comprising a receptacle, a ring therein having an upper and lower internal flange, the opening formed by the lower flange being of less diameter than that formed by the upper flange and said flanges forming a chamber, and a shield resting on the top of said ring and projecting from the receptacle.

2. A device of the class described comprising a ring having upper and lower inwardly projecting flanges forming a chamber, the opening formed by the lower flange being of less diameter than that formed by the upper flange, and the lower face of the upper flange being substantially horizontal and the upper face of the lower flange curving upwardly to form the chamber of bowl shape, and a shield removably supported by said ring.

1,267,946. MICROMETER. EMERICK WEBSTER, Philadelphia, Pa. Filed Aug. 28, 1916. Serial No. 117,340. (Cl. 33—164.)

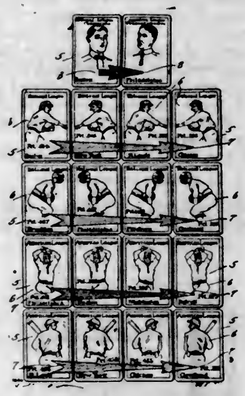


1. A micrometer embodying an outer casing having sight openings, slidable hollow scale tubes supported within said casing, an adjusting screw threadedly connected with said casing whereby the rotation of said screw will extend or withdraw the outer extremities of said slidable tubes with respect to said casing.

7. A micrometer embodying adjustable measuring elements, said elements being provided with right and left handed threads, an adjusting screw formed with right and left handed threaded portions adapted to coöperate with the threads of said measuring elements, removable end members connected with said measuring elements, means provided by said casing to prevent the measuring elements from rotating but to permit of their reciprocating movement, scale indications provided on said measuring elements and adapted to register with side openings formed in said casing and a scale carrying member rotatable with said adjusting screw to determine the degree of rotation of the latter.

[Claims 2 to 6 not printed in the Gazette.]

1,267,947. PUZZLE. WILLIAM C. WHITESIDE, Knoxville, Tenn. Filed Mar. 1, 1916. Serial No. 81,472. (Cl. 46—41.)



A puzzle embodying a deck of cards divided into two series of eight cards each representing the National and American Leagues respectively, the cards of each series representing a team and its percentage in its particular league and adapted to be arranged in a row of four cards, a third series of two cards representing the champions of the respective leagues and adapted to be arranged to occupy a position above said rows of four cards in solving the puzzle, and each of said series of eight cards being subdivided into series of four each having sections thereon to complete an arrow when assembled in the same row, and the sections of one complete arrow being distinguishable in color from the sections of the other arrow.

1,267,948. TRUNK-HANDLE. JESSE O. WILEY, Lemongrove, Cal. Filed Aug. 23, 1917. Serial No. 187,886. (Cl. 16—10.)



A device of the character described including an attaching body formed with a main recess in its front face and a journaling recess in communication with the upper edge of the main recess, the body being further provided with a supplemental recess having a curved bottom and a vertical wall communicating with the upper wall of the journaling recess and a horizontal wall at right angles to the vertical wall and communicating with the curved bottom of the journaling recess, a rectangular loop-shaped grip, the upper portion of which is formed into a sleeve slightly offset from the adjacent ends, a pintle engaged through the ends of the journaling recess and also through the sleeve portion and a lug formed integral with and projecting from the sleeve portion and engageable with the vertical wall simultaneously with the engagement of the grip with the bottom of the main recess and also engageable with the horizontal wall when the grip abuts the upper edge of the journaling recess for limiting the movement of the grip and for relieving strain on the pintle, the loop normally lying in the main recess and within the plane of the outer surface of the body.

1,267,949. SOAP CAKE. PHILIP K. WILLIAMS, Glastonbury, Conn., assignor to The J. B. Williams Company, Glastonbury, Conn., a Corporation of Connecticut. Filed Apr. 5, 1917. Serial No. 160,066. (Cl. 87—23.)



1. A soap cake comprising a body part, and an insert inclosed within the body part, and both of substantially the same material, said body part having more moisture than the insert.

2. A soap cake comprising a body part, and an insert inclosed within the body part and secured by a contracting action of the body part on the insert.

3. A soap cake comprising a body part, and an insert inclosed within the body part and both of substantially the same material, the insert being secured within the body part by the contracting action of the latter caused by shrinking.

4. The process of securing an insert within the body part of a cake of soap, both being of substantially the same material, that consists in forming the body part from a soft mass having a certain amount of moisture and with a recess therein, and placing in the recess an insert of substantially the same material as the body part but having a less degree of moisture.

5. The process of making a soap cake that consists in forming the body of the cake from a mass having a certain degree of moisture and with a recess therein, placing in said recess another soft mass with a less degree of moisture and then permitting the entire cake to dry out whereby the insert is held by the binding action of the body of the cake caused by shrinking.

[Claim 6 not printed in the Gazette.]

1,267,950. SWITCH. MORRIS WINNING, Ottawa, Ontario, Canada. Filed May 3, 1917. Serial No. 166,250. (Cl. 104—23.)



The combination with a railway track, of track switching means comprising a crank shaft, spring including means operatively connecting the crank shaft to the switch, and means coacting with the crank shaft, comprising yoke-shaped resilient members on each side of the spring including means.

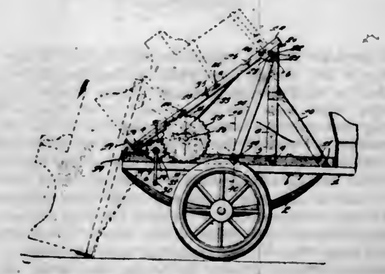
1,267,951. SWITCH. MORRIS WINNING, Ottawa, Ontario, Canada. Filed Sept. 15, 1917. Serial No. 191,622. (Cl. 104—24.)



1. A switching device of the class described including track means, car means for operating the track means consisting of a standard, a plunger slidably mounted in the standard, a roller on the lower end of the plunger, a wheel below the roller, resilient means for returning the plunger to a normal position, a foot pedal on the plunger, and a manually operated cam on the standard co-acting with the head of the plunger.

2. A switching device of the class described including track means, car means consisting of a standard, a plunger slidably mounted in the standard, a roller on the lower end of the plunger, foot means for actuating the plunger, a hand controlled cam on the top of the standard co-acting with the top of the plunger, and resilient means for holding the cam to normally permit of the plunger being held in an elevated position.

1,267,952. PIANO-HOIST. JOHN WILLIAM WOLFE and JOSEPH ALBERT SNOW, Shenandoah, Iowa. Filed Apr. 7, 1917. Serial No. 160,509. (Cl. 214—77.)



1. In a device of the class described, the combination of a supporting frame, said frame being adapted to be carried

upon a vehicle, arms pivotally mounted upon said frame, a platform pivotally secured to said arms, whereby said platform will be carried in a tilted position when upon said frame, means for limiting the movement of said arms in one direction, whereby said platform will have its upper end efficiently supported, means for starting said platform to move over the end of said frame, and means for gently lowering said platform into engagement with the ground or other supporting structure, said last-mentioned means being adapted to lift said platform upwardly causing said arms to swing the lower end of said platform upon said frame.

4. In a device of the class described, the combination of a plurality of longitudinally extending beams, vertical standards carried by said beams, means for reinforcing said standards, arms pivotally mounted upon said beams, a platform positioned upon said beams, supporting blocks carried by said platform, a rod carried by said supporting blocks, said rod passing through the upper ends of said arms, whereby said platform will be pivotally mounted upon said arms, and means for raising and lowering said platform.

6. In a device of the class described, the combination of a plurality of longitudinally extending beams, vertical standards carried by said beams, means for reinforcing said standards, arms pivotally mounted upon said beams, a platform positioned upon said beams, supporting blocks carried by said platform, a rod carried by said supporting blocks, said rod passing through the upper ends of said arms, whereby said platform will be pivotally mounted upon said arms, bearing blocks mounted upon said beams, a rotating shaft carried by said bearing blocks, a drum keyed upon said shaft, a gear keyed upon said shaft, a drive shaft secured to said beams, a pinion keyed upon said drive shaft and meshing with said gear, means for rotating said drive shaft, whereby rotary motion will be imparted through said pinion and gear to said rotating shaft so as to cause said drum to be rotated, a starting cable connected to said platform and being wound upon said drum, lifting cables connected to said platform and being wound upon said drum, whereby when said drum is rotated said cables will be operated so as to either move said platform to a lowered position or to a position upon the frame.

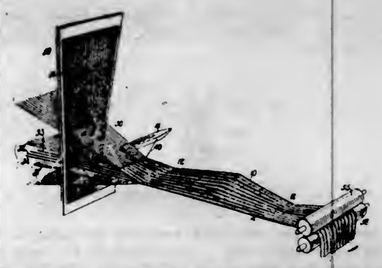
[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,267,953. PORTABLE SEAT. SYLVESTER A. ZOLP, Eustis, Nebr. Filed May 8, 1917. Serial No. 167,303. (Cl. 155—22.)



A portable seat of approximately circular shape and having a flat bottom face, radially disposed angle irons secured on said bottom face and having downwardly extending inner ends, the outer ends of said angle irons having terminal eyes adjacent to and beyond the circumference of the seat at the side and back portions thereof, an additional angle iron secured on the bottom face of the seat and having a downwardly extending inner end, the outer end of said last mentioned angle iron terminating within the circumference of the seat adjacent to the front portion thereof, links engaging the eyes of the first mentioned angle iron, straps connected with the links, a belt connected adjustably with the straps, and a leg secured to and between the downwardly extending inner ends of the several angle irons.

1,267,954. METHOD FOR WEAVING GARTER-PADS. WILLIAM ACHTMEYER, Middletown, Conn., assignor to The Russell Mfg. Co., Middletown, Conn., a Corporation of Connecticut. Filed Oct. 12, 1917. Serial No. 196,284. (Cl. 139—70.)



1. The herein described method of weaving approximately triangular garter pads having the upper edges concave which consists in providing top and bottom sets of warps formed of inelastic warp threads and an intermediate warp having inelastic warp threads and at one side a number of elastic warp threads, the said intermediate warp being interposed between the said sets of inelastic warps, moving the warp threads in each warp gradually from each other and then gradually toward each other, and interweaving the said warps with weft threads to form a multiply fabric gradually decreasing in width from the median line to the ends thereof.

3. The herein described method of weaving approximately triangular garter pads having the upper edges concave, which consists in providing top and bottom sets of warps formed of inelastic warp threads and an intermediate warp having inelastic warp threads and at one side a number of elastic warp threads, moving the warp threads in each warp gradually from each other and then gradually toward each other, interweaving the said warps with weft threads to form a multiply fabric gradually decreasing in width from the median line to the ends thereof, dividing a number of the warp threads of the intermediate warp, and interweaving the said divided warp threads with the sets of the top and bottom warp threads at the wide middle portion of the weave to form a pocket therein.

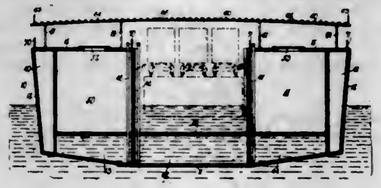
[Claim 2 not printed in the Gazette.]

1,267,955. PENCIL ERASER ATTACHMENT. EBEN G. BALCH, Newburyport, Mass. Filed Sept 18, 1917. Serial No. 191,158. (Cl. 120—38.)



The herein described pencil attachment comprising a cylindrical cap threaded exteriorly and adapted at its inner end to fit on a pencil and having spurs projecting lengthwise from its outer end and within the circumference of said cap, a cylindrical sleeve threaded interiorly its full length and screwed at its inner end on said cap and a cylindrical rubber eraser screwed into and closely fitting the sleeve with the outer portion of said sleeve projecting at its outer end beyond the sleeve and having its inner end entered longitudinally by the end spurs of the cap, as shown and described.

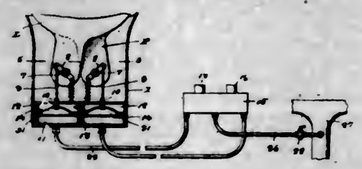
1,267,956. MARINE VESSEL. EUGENE C. BAECK, Irvington, N. Y. Filed Sept. 29, 1917. Serial No. 193,972. (Cl. 114—0.5.)



1. A marine vessel, comprising a hull having a longitudinal central passage extending from bow to stern and open at both ends, freight compartments at each side of said passage, air compartments at the sides of the freight compartments, water tanks below the said passage and freight compartments, gates for closing the central passage, a hinged prow in front of the front gate, and means for filling and emptying the said tanks to increase or decrease the draft of the vessel.

[Claims 2 to 4 not printed in the Gazette.]

1,267,957. VEHICLE-SEMAPHORE. BERTON G. BARSHAW and DANIEL F. GETTINGS, Carthage, N. Y. Filed Apr. 20, 1917. Serial No. 163,467. (Cl. 116—31.)



3. In a traffic signal, the combination with an internal combustion engine of a movable signaling member, means behind which said signaling member is normally concealed, means operable by the suction of the engine for actuating said signaling member, said concealing means having a stencilled cautionary symbol, and a source of light arranged behind said concealing means and also behind said signaling member when in its concealed position.

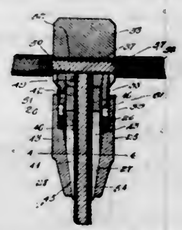
6. In a traffic signal, the combination with an internal combustion engine of a casing, a plurality of movable signaling members normally concealed therein, a plurality of suction chambers, diaphragms in said suction chambers operatively connected with said signaling members, a valve casing, a suction conduit extending from said valve casing to the suction connection of said engine, other conduits extending from said valve casing to said suction chambers, and a plurality of manually operable suction controlling valves each adapted to open up communication between said suction conduit and the respective suction chamber, said valves being held normally and yieldingly closed.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

1,267,958. [WITHDRAWN.]

1,267,959. CONNECTOR. ROBERT A. BECKER, Poughkeepsie, N. Y., assignor to Charles Tremain, Poughkeepsie, N. Y. Filed Nov. 27, 1916. Serial No. 133,633. (Cl. 173—303.)

2. A connector comprising a member recessed and provided with threads at one end, the walls of said recess being oppositely slotted and adapted to receive a conductor therethrough, a second member secured to first member in threaded engagement and provided with a tapered bore through which passes a second conductor, a split contractible member surrounding said second conductor within said bore, and a bushing also adapted to surround said second conductor and adapted to compress said first conductor against said first member as the engagement between



said first and second members is increased, and said split member sliding in said bore contracts.

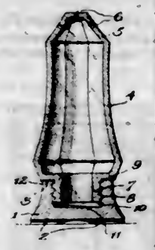
[Claims 1 and 3 not printed in the Gazette.]

1,267,960. RAIL-HOLDING DEVICE. WILLIAM R. BELL, Dunham, Ala. Filed Aug. 3, 1917. Serial No. 184,329. (Cl. 238—5.)



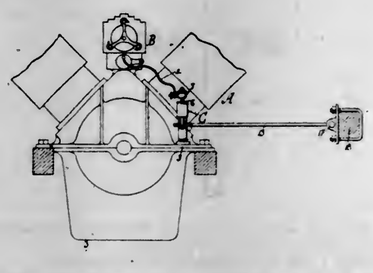
A device of the character described, comprising a tubular bar; flattened end portions formed on the bar; upwardly extending jaws carried by the opposite end portions of the metal bar to engage the outer bases of parallel rails; plates pivoted between their ends to the flattened end portions of the bar, said plates being located inwardly of and adjacent the upwardly extending jaws carried by the end portions of the bar; upturned jaws formed on the end of the plates to coact with the upwardly extending jaws carried by the end portions of the bar in holding rails in place; and striking elements carried by the opposite ends of the plates.

1,267,961. GLASS CONDIMENT-HOLDER. ARTHUR J. BENNETT, Cambridge, Ohio. Filed Mar. 2, 1918. Serial No. 220,043. (Cl. 65—45.)



A condiment holder comprised of a glass base and a glass body, said body having a dome at its top formed with discharge apertures and having an integral hollow neck depending from its bottom, said neck being exteriorly threaded and being of less diameter than the bottom of the body and being surrounded by a circular flat face, said base having a bottom with supporting means depending therefrom and having an interiorly threaded upwardly extending wall to receive the threads of the neck, said wall being formed with a flat seat on its free upper end to engage the circular flat face of the body so as to form an exposed joint between the seat and face, said neck being formed of a length so as to have its outer end spaced from the bottom of the base when said joint is formed.

1,267,962. AUTOMATIC IGNITION-CUT-OUT SWITCH FOR AEROPLANES. JOSEPH S. BENNETT, Hammondsport, N. Y. Filed Sept. 6, 1917. Serial No. 190,005. (Cl. 123—198.)

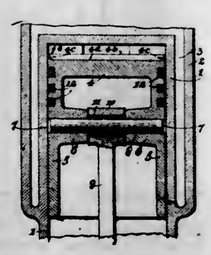


1. The combination of an aeroplane frame, an engine mounted thereon, an ignition system for the engine, a normally open cut-out switch for grounding the ignition system, and means depending on the displacement of the engine in the frame for permitting the cut-out switch to close.

2. The combination of an aeroplane frame, a propelling engine therefor having an ignition system including a ground wire, a normally open cut-out switch for grounding the said wire, said switch including normally separated contacts, means for urging the contacts toward each other, and a device connected with the aeroplane frame and associated with the contacts, whereby the movement of the engine with respect to the frame causes the said device to permit the contacts to engage each other.

3. The combination of an aeroplane frame, an engine thereon, a magneto for the ignition system, a ground wire connected with the magneto, a cut-out switch for grounding the said wire, said switch including a movable contact and a fixed contact, a spring normally tending to move the movable contact into engagement with the fixed contact, a support for the contacts, a rod connected with the aeroplane frame, and a member on the rod and slidably engaging the support and normally holding the movable contact in open-circuit position, whereby the displacement of the engine causes the rod to shift the member to permit the movable contact to engage the fixed contact.

1,267,963. PISTON FOR INTERNAL-COMBUSTION ENGINES. JESSE THOMAS BENTHALL, Suffolk, Va. Filed Feb. 25, 1916. Serial No. 80,507. (Cl. 74—85.)



A piston for internal combustion engines, having a flat surface facing the combustion chamber, and a relatively narrow continuous integral rigid flange surrounding the flat surface and projecting therefrom at the outer edge, the inner surface of said flange formed on a continuous concave curve beginning at its upper edge and merging at its base into the flat surface, whereby the currents of the expanding and eddying gases are directed by such inner curved surface away from the space between the piston and cylinder wall.

1,267,964. CALIPERS. THEODORE E. BISSON, Bellingham, Wash. Filed Jan. 23, 1918. Serial No. 213,398. (Cl. 33—148.)

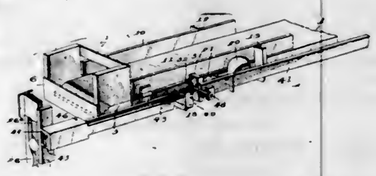


1. In combination, a graduated hand wheel having a tapped central hole, a conical hub centrally positioned on the lower side of said handwheel, a pair of calipers having a stud screw fixed on one leg, and engaged in the tapped hole in said hand wheel, a spring-pressed lever fulcrumed on said caliper leg, a cone fixed on the lower end of said lever and bearing on said conical hub, a datum stud fixed on said lever and bearing a mark registerable with the graduations on said hand wheel, a pivot joint between the other end of said lever and the upper end of the other caliper leg, and means to clamp said pivot joint.

3. In combination, a hand wheel having numbered graduations thereon and also having a tapped central hole, a plurality of spaced teeth on the periphery of said hand wheel each of which bears a radial, numbered graduating mark, a tooth near and on each side of the 0 tooth of said spaced teeth, a conical hub fixed centrally on the bottom of said hand wheel, a pair of calipers having a stud screw fixed on one leg and engaged in said tapped hole in said hand-wheel, a spring-pressed lever fulcrumed on said caliper leg, a cone fixed on the lower end of said lever and bearing on said conical hub, a datum stud fixed on said lever and bearing a mark registerable with the graduations on said hand wheel, a pivot joint between the upper end of said lever and the upper end of the other caliper leg, and means to clamp said pivot joint.

[Claim 2 not printed in the Gazette.]

1,267,965. VENDING-MACHINE. CHARLES A. BLANK, Miller, Ind., assignor of one-half to Arthur M. Blank, Miller, Ind. Filed Dec. 16, 1915. Serial No. 67,210. (Cl. 211—8.)

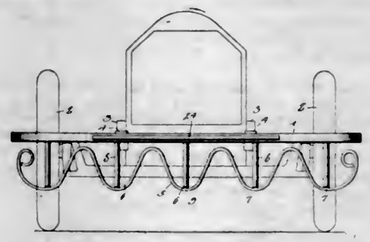


3. In a vending machine, the combination with a frame, of a shelf, longitudinal strips pivoted thereon, beveled actuated means mounted on said strips, dispensing means mounted upon said shelf in engagement with said beveled actuated means, means for operating said dispensing means, the whole being so arranged that upon the operation of the dispensing means the longitudinal strips will be oscillated about their pivots on the shelf for the purpose of alining goods upon said shelf.

7. In a vending machine, the combination with a frame, of a shelf, a gravity catch mounted on said shelf, and actuating means capable of engaging with and operating said dispensing means, said gravity catch being adapted to hold the dispensing means out of its normal position until the disengagement of the operating means therewith, said operating means being adapted to release the dispensing means from the gravity catch after said disengagement.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,267,966. FENDER. ELLIS MONROE BROWN, Roanoke, Va. Filed Oct. 12, 1917. Serial No. 196,251. (Cl. 293—37.)

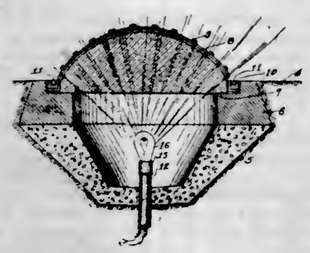


1. In a fender, the combination of a main horizontal bumper bar, attaching means for securing said bar to the frame of a vehicle, a bottom bar of serpentine formation, telescopic bars connecting said top and bottom bars, thrust springs housed within said telescopic bars and serving to thrust the bottom bar downwardly, latches engaging portions of said telescopic bars to hold the bottom bar in an elevated position, and tripping means for operating said latches.

5. In a fender, the combination of a main horizontal bumper bar, attaching means for securing said bar to the frame of a vehicle, a bottom bar of serpentine formation, telescopic bars connecting said top and bottom bars, thrust springs housed within said telescopic bars and serving to thrust the bottom bar downwardly, latches engaging portions of said telescopic bars to hold the bottom bar in an elevated position, tripping means for operating said latches, said tripping means comprising a rock shaft, arms thereon having a jointed connection with said latches, an operating arm extending from said rock shaft, and means for turning said rock shaft.

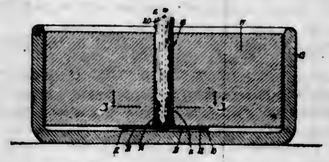
[Claims 2 to 4 not printed in the Gazette.]

1,267,967. TRAFFIC-GUIDE SIGNAL. ALBERT C. BRUNNWORTH and CLARENCE M. SACKETT, Anaheim, Cal. Filed Apr. 16, 1917. Serial No. 162,307. (Cl. 240—1.)



An illuminated traffic guide, comprising an open ended receptacle adapted to be embedded in the earth, the inner peripheral edge of said receptacle being grooved for the reception of a retaining ring, a retaining ring mounted in said groove, a substantially semi-spherical light transmitting element mounted in the groove of said receptacle and projecting thereabove, a latticed iron guard mounted on said light transmitting element, said retaining ring rigidly maintaining both the guard and light transmitting element in position, and an electric lamp mounted in said receptacle.

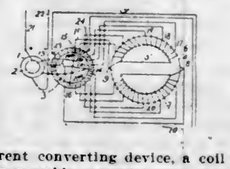
1,267,968. CANDLE-WICK SUPPORT. ADOLF G. BULLE, New York, N. Y. Filed Sept. 5, 1917. Serial No. 189,717. (Cl. 67—22.)



1. As an article of manufacture the herein described candle wick support comprising a single sheet metal structure comprising a base having downward projections to so support the base as to elevate it to provide free flow of oil beneath it, said base having a central hole to receive the lower end of the wick, and a pair of rectangular wick holding jaws bent upwardly toward each other on opposite sides of the central hole, said jaws having square corners adapted to be embedded into the body of the candle.

[Claims 2 and 3 not printed in the Gazette.]

1,267,969. CURRENT-CONVERTING MACHINE. ARTHUR R. BULLOCK, Cleveland, Ohio. Filed June 19, 1913. Serial No. 774,520. (Cl. 171—123.)



1. In a current converting device, a coil and a body of magnetically permeable material upon which the coil is mounted, said coil being adapted to conduct a single phase alternating current, tap-offs from said coil throughout its length, said tap-offs being so spaced along the coil as to include different numbers of turns of the coil whereby the potential difference between the adjacent tap-offs at the successive points where the current is collected will remain substantially the same, a current collecting means adapted to sequentially be connected with points of equal voltage change from opposite ends of said coil, and means for moving said current collecting means and taps relatively to each other.

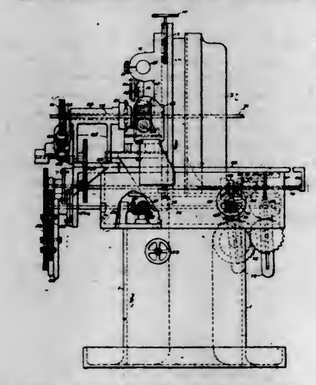
3. The combination with a single phase alternating current circuit, of a direct current circuit, a coil and a core of magnetically permeable material upon which the coil is mounted, said coil being adapted to be energized by the alternating current from said A. C. circuit, said coil being provided with tap-offs throughout its length, said tap-offs being so spaced along the coil as to include different numbers of turns of the coil whereby the potential difference between the adjacent tap-offs at the successive points where the current is collected will remain substantially the same, a current collecting means adapted to sequentially connect points of equal voltage difference with respect to the ends of said coil, and means for moving the current collecting means and said taps relatively to each other in synchronism with the reversals of the alternating current.

11. In a device for rectifying three phase current, the combination with three auto transformers connected between adjacent legs of a three phase circuit, each of said transformers serving to conduct a single phase current, tap-offs from each of said transformers throughout the length thereof, said tap-offs being so spaced along the coil

as to include different numbers of turns of the coil whereby the potential difference between the adjacent tap-offs at the successive points where the current is collected will remain substantially the same, three non-rotatable commutators, the tap-offs from each transformer being connected in sequence with the segments of one of the commutators, a pair of brushes adapted to bear upon the interior of each of said commutators, a shaft upon which said brushes are mounted, the brushes and segments for each set being arranged 120 electrical degrees from each other and means for rotating the brushes.

[Claims 2 and 4 to 10 not printed in the Gazette.]

1,267,970. **PINION-WIRE AND SPUR-GEAR** CUTTING MACHINE. FRANK BURGESS, Wollaston, Mass. Filed Apr. 9, 1915. Serial No. 20,174. (Cl. 90—4.)



1. A machine of the kind described, comprising a prime drive shaft, a cutter fixed thereon, means for adjusting said shaft angularly, means for moving a work piece into operative relation with said cutter and transversely of said shaft, and a second cutter mounted to act on the work opposite the first named cutter and in geared connection with said shaft, the last named cutter having provision for angular adjustment whereby it may be set oppositely to the first named cutter.

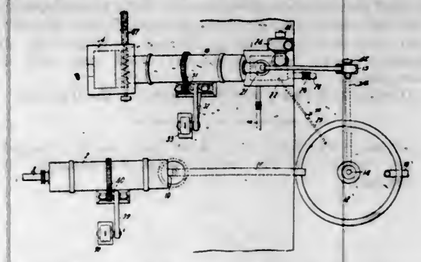
10. A machine of the kind described, comprising a prime drive shaft, a cutting hob mounted thereon, feed operating means connected to be driven by said shaft for effecting a feed of a work piece into operative relation with said hob, and a mounting for said shaft having provision for angular adjustment of said shaft and the hob carried thereby, said feed operating means being formed and arranged to preserve a continuous gear drive to the feed throughout the adjustments of said prime drive shaft.

12. A machine of the kind described, comprising a cutting hob, means for operating the same, a work support having a slide way extending transversely of said hob underneath the same, an upright having a hollow chuck journaled therein fitted to slide on said way, means for feeding said upright along said way, and means for rotating the said chuck.

[Claims 2 to 9 and 11 not printed in the Gazette.]

1,267,971. **TREATING MINE-WATER.** JAMES R. CAMPBELL, Scottdale, and ADDISON F. HOFFMAN, Pittsburgh, Pa. Filed Sept. 22, 1914. Serial No. 862,959. (Cl. 23—1.)

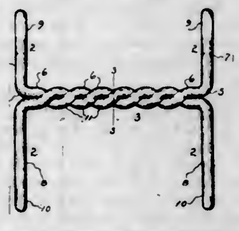
1. That way of treating acid mine water containing ferric sulfate, which consists in adding comminated calcareous material to the water to neutralise the free acid and precipitate basic ferric sulfate, regulating the addition of calcareous material to avoid decomposition of the basic ferric sulfate, separating the precipitated sludge from the body of treatrd water, calcining the sludge to recover the iron oxid and vaporize the sulfuric acid, and liquefying the vapor to collect and recover the acid.



3. That way of treating acid mine water containing ferric sulfate, which consists in adding sufficient comminuted calcerous material to the water to neutralize the free acid and precipitate basic ferric sulfate, separating the precipitated sludge from the body of treated water, heating the sludge to vaporize the sulfuric acid therein, and liquefying the vaporized acid.

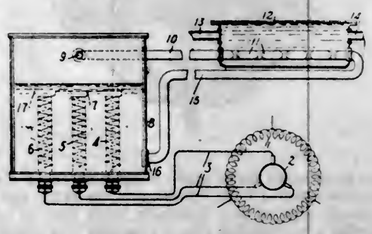
[Claim 2 not printed in the Gazette.]

1,267,972. BIT. JOHN F. CARPMILL, New Britain, Conn., assignor to The North & Judd Manufacturing Company, New Britain, Conn., a Corporation of Connecticut. Filed July 31, 1917. Serial No. 183,699. (Cl. 54—7.)



A bit comprising two zigzag elements, the transverse portions of the elements being intercoiled to present the mouth-piece of the bit, two end portions coöperating to present one cheek of the bit and the other two end portions coöperating to present the other cheek of the bit, each of the end portions terminating in an eye, two of the eyes being adapted to receive bridle cheeks, and the other two being adapted to receive driving reins, the end portions which coöperate as bit cheeks being approximately coaxial.

1,267,973. ELECTRIC-RESISTANCE DEVICE. LEWIS W. CHUBB, Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 6, 1915. Serial No. 798. (Cl. 219—63.)



2. An electric resistance device comprising a resistance element provided with a covering which acts as an electrical insulator but has substantially no heat-insulating effect, and means for surrounding the said resistance element with a cooling fluid.

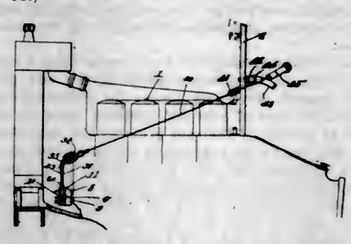
9. An electric resistance device comprising a resistance element having a surface covered with an electrolytic insulating film, a casing for inclosing the said element, and means for causing cooling fluid to circulate through the said casing.

11. An electric resistance device comprising an aluminum resistance element covered with an electrolytic insulating film and means for surrounding the said resistance element with a cooling fluid.

14. An electric resistance element comprising a core of conducting material, a coil of resistance material surrounding the said core and provided with an electrolytic insulating film, and spacing strips of non-conducting material interposed between the said core and the said coil.

[Claims 1, 3 to 8, 10, 12, 13, 15, and 16 not printed in the Gazette.]

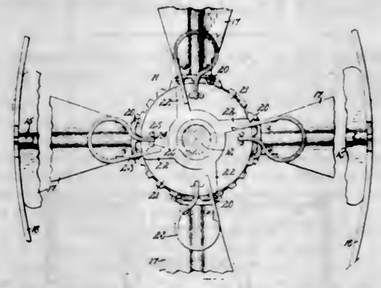
1,267,974. ENGINE-STARTER. HORACE O. CLARK, Chicago, Ill. Filed June 8, 1917. Serial No. 173,638. (Cl. 74—53.)



1. In a device of the class described, a shaft; a head mounted to rotate thereon and having a cam; a lever fulcrumed on the head; and a shaft engaging clamping roller journaled on the lever for limited movement longitudinally of the lever, the roller being forced against the shaft by the action of the cam when the lever is swung.

[Claims 2 and 3 not printed in the Gazette.]

1,267,975. THERMOSTATIC FAN. ROY N. COATS, Marshalltown, Iowa. Filed June 3, 1916. Serial No. 101,512. (Cl. 230—1.)



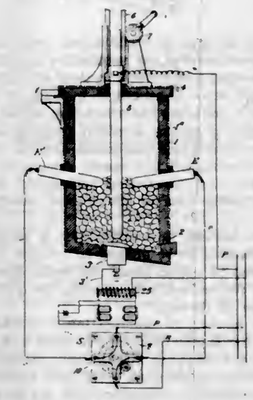
1. A fan comprising a hub, vanes mounted to turn on the said hub, pinions on the said vanes adjacent the hub, a gear wheel mounted to turn loosely on the hub and in mesh with the said pinions, a driving means for the said hub, and thermostatic bars connecting the said driving means with the said gear wheel.

2. A fan, comprising a hub, a driving member on the hub, vanes mounted to turn on the hub, pinions on the vanes adjacent the hub, a gear wheel loosely mounted on the hub and meshing with the pinions of the vanes, and thermostatic bars, connecting the gear wheel and driving member, each thermostatic bar having one end fixedly secured to one of the said parts and its other end loosely secured to the other part.

4. A fan, comprising a hub, a rim, radial shafts between the hub and rim, vanes mounted to turn on the shafts, pinions on the inner ends of the vanes, a gear loosely mounted on the hub and meshing with the pinions, said gear wheel having radial arms, a pulley mounted on the hub and having pairs of pins projecting from one end, and thermostatic bars, each having one end secured to an arm of the gear wheel and its other end extending between a pair of pins of the pulley.

[Claim 3 not printed in the Gazette.]

1,267,976. METHOD AND APPARATUS FOR THE ELECTRICAL REDUCTION OF ORES. BAYARD G. COBB, Dawson City, Yukon, Canada, assignor to John F. Skerrett, Howard Giffin, Henry M. Kidder, Robert I. Barr, and Elaine Inescort, New York, N. Y., and to Andes Exploration and Smelting Corporation, a Corporation of Delaware. Filed May 23, 1913, Serial No. 769,351. Renewed Oct. 11, 1917. Serial No. 196,094. (Cl. 204—64.)



1. The method of fusing metallic ores which consists in producing an electric arc between a positive and a negative electrode of one circuit within the crushed ore and passing an electric current between electrodes of a second circuit at the surface of the ore at predetermined distances from the positive electrode of the first circuit, and causing the polarity of the electrodes of the second circuit to frequently vary.

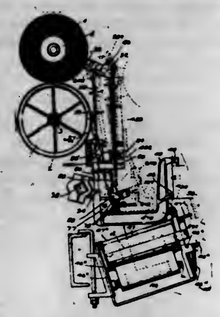
4. In an apparatus of the class described, the combination of an ore chamber, a pair of main electrodes for producing an arc within the ore in said chamber supplementary electrodes in contact with the ore in said chamber and means for reversing the polarity of said supplementary electrodes.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,267,977. WINDER. HOWARD D. COLMAN, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners trading as Barber-Colman Company, Rockford, Ill. Continuation in part of application Serial No. 809,797, filed Dec. 31, 1913. This application filed Nov. 28, 1916. Serial No. 133,981. (Cl. 242—44.)

39. A winder-tending mechanism having, in combination, a carriage; means for causing the carriage to travel; a cheese-rotating roll on said carriage; a suction device arranged adjacent to the rear end of the roll; a second cheese-rotating roll arranged rearwardly of the suction device; a down-take arm arranged to swing in the space between the suction device and the second roll; a slack-take-up roll arranged rearwardly of the second roll; means for driving said rolls, the slack-take-up roll being driven in

the direction opposite to the direction of rotation of the other rolls, and the second roll being driven at a higher peripheral speed than the first roll to furnish slack to the down-take arm; and means for raising and lowering the slack-take-up roll to lift the cheese off the second roll.



65. A winder having, in combination, yarn-mass rotating means, a pivoted lever for supporting a yarn mass on said rotating means; a bell-crank against one arm of which a portion of said lever is arranged to bear; a bell-crank, one arm of which underlies the other arm of the first mentioned bell-crank; a spring strained between said other arm of the first mentioned bell-crank and the other arm of the second mentioned bell-crank, means to lift said other arm of the first mentioned bell-crank; and means to depress said other arm of the second mentioned bell-crank.

68. A winder having, in combination, a series of yarn clearers each adapted to be opened to receive a thread, a carriage arranged to travel along the series, and a device on the carriage for successively opening the yarn clearers for the reception of threads.

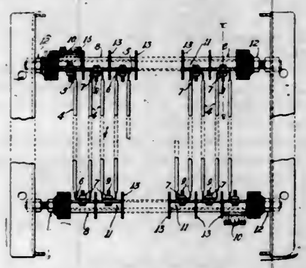
97. A winder having, in combination, a winder unit including means for supporting a yarn mass and a reserve thread holder; a knot-tying mechanism; means for moving the knot-tying mechanism past the reserve thread holder; a device movable transversely of the path of movement of the knot-tying mechanism for deflecting the reserve thread out of the path of movement of the knot-tying mechanism; means for gaging the yarn mass; and means actuated by said gaging means for operating said deflecting means.

146. A winder having a plurality of supports for yarn-receiving carriers; supports for an active and a reserve thread supply for each receiving carrier; and means for rotating each carrier; in combination with a traveling winder-tender coöperating in timed relation and in succession with each of said carriers and its wound and reserve threads, said winder-tender having the following characteristics, namely, a wound-end finder; means to move the carriers in succession away from their rotating means and into coöperation with the end finder; a knotter acting to tie a reserve thread to the end of a thread extending from a wound yarn-mass; means to transfer the found end of a wound yarn-mass within reach of the knotter; and means for restoring the carriers in succession to winding position after the tying.

[Claims 1 to 38, 40 to 64, 66, 67, 69 to 96, 98 to 145, and 147 to 151 not printed in the Gazette.]

1,267,978. ELECTRICAL RESISTANCE. JOHN COLLINSON, Manchester, England, assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 4, 1915. Serial No. 12,192. (Cl. 219—69.)

1. An electrical resistance device comprising a series of sheet metal resistance elements, means individual to adjacent end portions of said elements for fastening the elements together to form a continuous current path, and means for supporting the assembled elements, the said fastening means permitting the said resistance elements to be severally removed and replaced without substantially displacing the remaining elements.



3. An electrical resistance device comprising a series of sheet-metal resistance elements having bent end portions fastened together in pairs, means individual to each adjacent pair of bent end portions for fastening the adjacent elements together, and means for supporting the assembled elements.

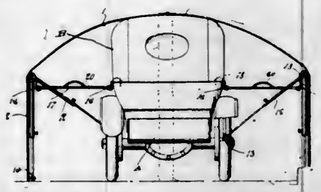
6. An electrical resistance device comprising a series of laterally-opposed sheet-metal grids having end portions bent in opposite directions, means for clamping together each adjacent pair of bent end portions, terminal devices secured to certain of the said grids by the said clamping means, and means for supporting the assembled elements.

8. An electrical resistance device comprising a series of sheet-metal resistance elements having end portions bent in opposite directions, means for clamping together each adjacent pair of bent end portions, the said clamping means comprising a flat strip engaging one of the said end portions, another member engaging the other end portion and provided with a bent eye, and means for securing the said clamping means together, and rods extending through the eyes in the said clamping members for supporting the assembled elements.

10. An electrical resistance device comprising a series of laterally-opposed, flat resistance elements, means individual to adjacent end portions of said elements for fastening the elements together and permitting them to be severally removed and replaced without substantially displacing the remaining elements, and means for supporting the assembled elements.

[Claims 2, 4, 5, 7, and 9 not printed in the Gazette.]

1,267,979. TENT ATTACHMENT FOR AUTOMOBILES. OTIS W. COOK, Fort Dodge, Iowa. Filed Oct. 21, 1916. Serial No. 126,927. (Cl. 135—1.)

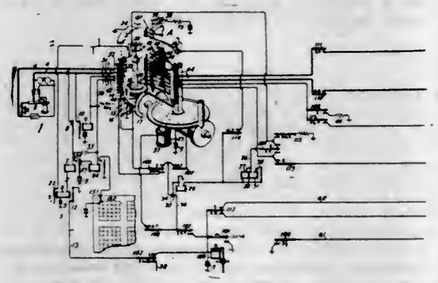


1. The combination with a vehicle, of a tent therefor, means adapted to support the sides of the tent in spaced relations to the sides of the vehicle, and a cot adapted to be supported at one side of the vehicle and at its outer side by said means.

3. The combination with a vehicle body, of a tent structure detachably associated with the body, supporting frames for the tent structure, cots located on opposite sides of the vehicle body and each consisting of a flexible body, rods located at the opposite sides of the body of each cot, supporting straps extending below the cot and having hooks thereon for connection with the body and the adjacent supporting frame, and detachable rods located at the opposite ends of the cots and having connection with the rods at the side edges of the cots, for the purpose specified.

[Claim 2 not printed in the Gazette.]

1,267,980. AUTOMATIC TELEPHONE-EXCHANGE SYSTEM. EDWARD B. CRAFT, Hackensack, N. J., and JOHN N. REYNOLDS, Greenwich, Conn., assignors, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Dec. 19, 1914. Serial No. 878,047. (Cl. 179—27.)



1. In a telephone exchange system, the combination with lines, and a line selector having terminals for said lines arranged in groups, a plurality of multiply connected brushes one for each group, a brush carrier and brush selector mechanism of means for rendering any of said lines selectable, and means for starting and operating said line selector to connect with a selectable line by adjustment of said brush selector mechanism in accordance with the group in which the terminal of said selectable line lies and adjustment of said brush carrier in accordance with the location of said terminal in that group.

2. In a telephone exchange system, the combination with lines and a line selector having line terminals arranged in coördinate groups, a plurality of brushes connected in multiple, a brush carrier and a brush selector, of means for rendering any of said terminals selectable, and means for starting and automatically operating said line selector by adjustment of said brush selector and said brush carrier, respectively, in accordance with the location of a selectable terminal in said coördinate groups.

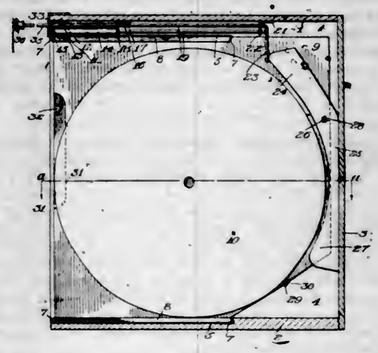
3. In a telephone exchange system, the combination with a plurality of lines arranged in groups and a brush carrier having a plurality of multiply connected sets of brushes, of a brush selector, a contact member carried by said brush selector, contact points, one for each of said line groups adapted for coöperating with said member, and means operable by a calling line for rendering one of said contact points selectable and means for starting and for adjusting said brush selector in accordance with the position of said selectable contact point.

4. In a telephone exchange system, the combination with a line selector having terminals arranged in groups, said selector being adjustable in successive movements to connect with any terminal, of a call receiving device for each of said groups, means for rendering any of said terminals selectable, and means for operating said selector in its first movement to find a group containing a selectable terminal and thereupon to connect with said call receiving device and in its second movement to find a selectable terminal in that group.

5. In a telephone exchange system, the combination with a line selector having terminals arranged in groups, said selector being adjustable in successive movements to connect with any terminal, of a call receiving device for each of said groups, means for rendering any of said terminals selectable, and means for operating said selector in its first movement to find a group containing a selectable terminal and thereupon to connect with said call receiving device and in its second movement to find a selectable terminal in that group and thereupon to disconnect said call receiving device.

[Claims 6 to 45 not printed in the Gazette.]

1,267,981. CABINET FOR PHONOGRAPH-RECORDS. ARTHUR J. CRIPPEN, Rochester, N. Y., assignor to Crippen-Rase Co. Inc., Rochester, N. Y., a Corporation of New York. Filed May 26, 1915. Serial No. 30,507. (Cl. 211—16.)



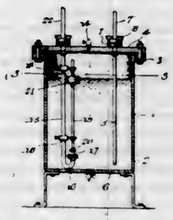
1. In a record cabinet, the combination with a series of partitions forming compartments for receiving records, top and bottom removable holding members for said partitions provided with inwardly sloping walls, and spaced strips slidably mounted between said walls in clamping engagement with the partitions, the upper and lower strips being held against movement in a direction toward each other by the walls.

3. In a record cabinet, the combination with a series of partitions forming compartments for receiving records, of spacing strips interposed between said partitions, and guides between which the opposite ends of the strips are slidably mounted, the guides serving to prevent both vertical and longitudinal displacement of the strips, the partitions being extended in rear of one of the guides.

5. In a record cabinet, a series of partitions forming compartments for receiving records, pivotally mounted record ejecting levers for said records, a plurality of tubes mounted independently of the partitions, operating rods having their rear ends positioned to engage said levers and their forward ends projecting into the tubes, and means adapted to be inserted in the forward ends of the tubes to engage and move the operating rods for the purpose of actuating the ejecting levers.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,267,982. FLUID-CONTROLLING MECHANISM. JAMES CROWN, Philadelphia, Pa. Filed May 25, 1917. Serial No. 170,948. (Cl. 225—9.)



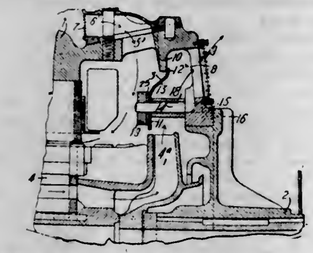
1. In fluid controlling mechanism of the class described, the combination with a source of fluid supply, of a closed

receptacle, a valved pipe extending from said fluid supply into said receptacle and terminating adjacent the bottom thereof, an outlet pipe extending into said receptacle and provided at its lower end with a valve seat, a valve engageable with said seat, and a float associated with said valve operable to open and close said outlet pipe when fluid within said receptacle reaches predetermined levels, said valve and float mechanism being arranged exteriorly of said outlet pipe.

2. In fluid-controlling mechanism of the class described, the combination with a source of fluid supply, of a valve receptacle, a valve inlet pipe extending from said fluid supply to a position within said receptacle and terminating adjacent to the bottom of the latter, an outlet pipe having portions thereof positioned within said receptacle, and terminating in an upwardly-bent neck, located adjacent to said bottom, and a float-actuated valve operable to open and close the neck of said outlet pipe when fluid within said receptacle reaches predetermined levels.

3. In fluid controlling mechanism of the class described, the combination with a source of fluid supply, of a receptacle, a valved inlet pipe extending from said fluid supply to within said receptacle and terminating adjacent the bottom thereof, an outlet pipe having portions thereof positioned within said receptacle, and terminating in an upwardly bent neck adjacent the bottom of the receptacle, guide brackets secured on said outlet pipe, a rod slidable through said brackets, a valve on the lower end of said rod engageable upon the end of said neck, and a float secured to said rod whereby said valve will be operated to open and close said neck when fluid within said receptacle reaches predetermined levels.

1,267,983. DYNAMO-ELECTRIC MACHINE. JAMES F. CURTIS, Pitcairn, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 19, 1914. Serial No. 819,812. (Cl. 171—252.)

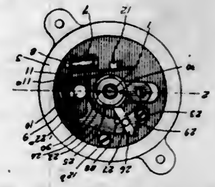


1. In a dynamo-electric machine, the combination with a frame having a plurality of openings in the end thereof comprising inlet and discharge openings for ventilating fluid, and a rotatable member provided with a plurality of fan blades, of an annular member of greater outside diameter than the diameter of the largest of said openings, said member comprising a plurality of assembled segmental pieces and being adapted to cause all of the ventilating fluid to flow through portions of said rotatable member before reaching said discharge opening.

2. In a dynamo-electric machine, the combination with a frame having a plurality of ventilating openings, and a rotatable member provided with a plurality of fan blades for producing currents of air, of a sectional annular diaphragm having one periphery engaging said frame intermediate said openings and the other periphery located adjacent to said fan blades to separate the inlet openings from the discharge openings, a spacing member disposed between said frame and said diaphragm, and a clamping means associated with the spacing means for rigidly positioning said diaphragm and for securing the sections thereof together.

3. In a dynamo-electric machine, the combination with a frame having a plurality of ventilating openings and an internal annular projection intermediate said openings, and a rotatable member provided with a plurality of fan blades for producing currents of air, of an annular diaphragm having its outer periphery engaging said projection and its inner periphery located adjacent to said fan blades, a spacing member disposed between said frame and said diaphragm, a supporting member detachably associated with said frame and extending through said spacing member and said diaphragm, and clamping means adjustable on said supporting member to rigidly position said diaphragm against said projection.

1,267,984. IGNITER. FREDERIC H. DAVENPORT and HOWARD H. MANNING, Meadville, Pa. Filed June 22, 1914. Serial No. 846,475. (Cl. 123—168.)



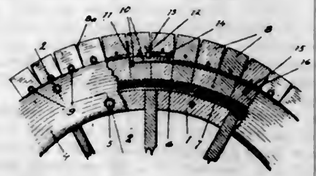
1. In an igniter for explosive engines, the combination of a driver; a first fixed contact; a second fixed contact; a movable contact arranged between the two fixed contacts and normally in contact with the first fixed contact; and means actuated by the driver for momentarily moving the movable contact out of contact with the first fixed contact and into contact with the second fixed contact.

2. In an igniter for explosive engines, the combination of a driver; a first fixed contact; a second fixed contact; a movable contact normally in contact with the first fixed contact; a hammer arranged to operate on the movable contact and to actuate the same by the momentum of the hammer; and means actuated by the driver for actuating the hammer.

3. In an igniter for explosive engines, the combination of a driver; a first fixed contact; a second fixed contact; a spring contact arranged between the fixed contacts and normally in contact with the first of said fixed contacts; and a hammer driven by the driver arranged to operate upon the spring contact to actuate the spring contact by the momentum of the hammer.

[Claim 4 not printed in the Gazette.]

1,267,985. TIRE FOR MOTOR-VEHICLE WHEELS. HAROLD R. DAVIDSON, Oakdale, Cal. Filed Nov. 19, 1917. Serial No. 202,714. (Cl. 152—9.)



A wheel tread comprising a plurality of tread sections, one section having a side slot and an adjacent section having an orifice extending at right angles to the side slot, a cable extending through all the blocks, a nut threaded on the end of the cable within the side slot, the excess length of the cable occasioned by the advancement of the nut upon the threaded end being free to move through the orifice.

1,267,986. TRACTOR. ALMA MORGAN DAVIS, Mesa, Ariz. Filed Dec. 7, 1917. Serial No. 206,008. (Cl. 180—8.)

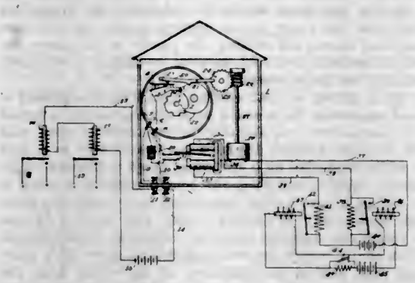
1. A tractor of the character described, comprising a body, supporting members for supporting said body, a guideway connected with said guide, a slide guided by said guideway, a traction shoe connected with said slide by a parallel link motion, a power member arranged in said body, means for connecting the power member with the slide for causing the slide to reciprocate, and means operated by the power member for raising said shoe when said slide is moving in one direction.



2. A tractor of the character described, comprising a body, supporting members therefor, a plurality of slides supported by said body, a pair of traction shoes for each slide, each of said traction shoes being connected with the respective slides by a parallel link motion, power means for reciprocating said slides, means for raising said shoes during the travel of said slide in one direction, and means for maintaining one of said shoes in an elevated position during the movement of said slide whereby the device may be propelled in either direction.

3. A tractor of the character described, comprising a body, supporting means for supporting said body, a plurality of pairs of guides supported by said body and extending longitudinally thereof, a slide supported and guided by each pair of guides, a pair of shoes for each slide, a plurality of links connecting said shoes with said guides, said links being arranged to produce a parallel motion, a connecting rod pivotally connected with each of said slides, a crank connected with each of said connecting rods, a power member for rotating said cranks thereby reciprocating said slides, means operated by said power member for maintaining one of said shoes connected with each slide in an elevated position, said means being capable of reversing so that either shoe may be brought in contact with the ground at any time and the device propelled in either direction without reversing the direction of movement of said cranks, and means for raising said shoes from the ground at the completion of each power stroke thereof.

1,267,987. AUXILIARY SIGNAL SYSTEM. LEWIS DEGEN, Pasadena, Cal. Filed May 11, 1917. Serial No. 167,910. (Cl. 177A—369.)



1. In a signaling system, the combination of a normally closed main circuit extending from a central exchange, said main circuit including a source of current, non-sensitive signal receiving apparatus, sensitive signal receiving apparatus, and a sub-station; signal sending means at said sub-station for opening and closing the circuit, whereby the non-sensitive receiving apparatus is effective: a shunt circuit disposed across said signal sending means including a resistance and switch means for opening and closing said shunt circuit: and automatic means to operate said switch means.

2. In a signaling system, the combination of a normally closed main circuit extending from a central exchange, said main circuit including a source of current, non-sensitive signal receiving apparatus, sensitive signal receiving apparatus, and a sub-station; signal sending means at said sub-station for opening and closing the circuit, whereby the non-sensitive receiving apparatus is effective; a shunt circuit disposed across said signal sending means including a resistance and switch means for opening and closing said shunt circuit: and automatic means to operate said switch means and to render said signal sending means effective.

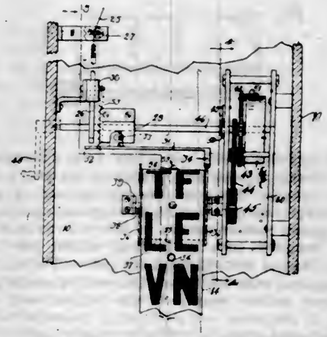
[Claims 3 to 7 not printed in the Gazette.]

1,267,988. EGG-RECEPTACLE. FRANCISCO ESPAILLAT DE LA MOTA, San Pedro de Macoris, Dominican Republic. Filed Dec. 19, 1916. Serial No. 137,898. (Cl. 99—2.)

2. In a device of the class described, a casing, a central stud upon the bottom of said casing, crossed bars engaging said stud and the bottom of said casing, and a tray having an annular flange upon the bottom thereof provided with spaced recesses through which said bars pass.

[Claims 1 not printed in the Gazette.]

1,267,989. WORKMAN'S TIME-RECORDING SYSTEM. JOHN A. DEMUTH, Oberlin, Ohio. Filed Apr. 6, 1917. Serial No. 160,302. (Cl. 234—41.)

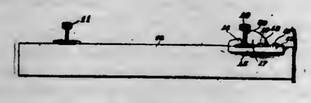


5. In a workmen's time recording system, the combination of means carrying a series of cryptic symbols, a casing containing such means and having an opening through which one of said symbols may be visible, means for advancing the symbols to present them in succession at predetermined intervals, a record strip, means containing said record strip and having a writing opening where workmen may make an entry identifying themselves, and record the symbol displayed.

9. In a system of the character described, the combination of a belt having thereon a series of successively arranged code symbols, rollers carrying the belt, a casing in which the rollers are mounted and inclosing the belt and having an opening adapted to display only a portion of the belt, mechanism for advancing the belt to present the different symbols to the opening, a clock, means whereby the clock may cause the actuation of such mechanism at measured intervals, and a record sheet for workmen's entry of symbols.

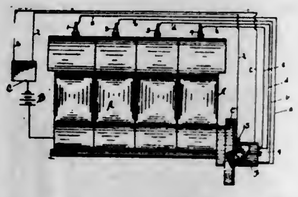
[Claims 1 to 4, 6 to 8, and 10 to 16 not printed in the Gazette.]

1,267,990. RAIL-BRACER. WILLIAM H. DENNIS, Exeter, N. H. Filed Apr. 3, 1917. Serial No. 159,516. (Cl. 239—15.)



A rail brace including a U-shaped body member stamped from a single piece of sheet metal and embodying a web and sides adapted to be straddled about a tie, means for securing the web of the body member, arms projecting inwardly from the sides of the body member and adapted to lie upon opposite sides of the tie, upwardly and inwardly projecting hooks on the free ends of the arms adapted to engage the upper surface of one side of the base of a rail, an interlocking member also stamped from a blank of sheet metal and embodying a web adapted to be snugly arranged between the web of a body member and the opposite side of the rail base and on the upper surface of the tie, upwardly and inwardly extending lugs on the opposite sides of the web of the interlocking member and adapted to engage the opposite side of the rail web and beneath the head of the rail, and means for securing the interlocking member.

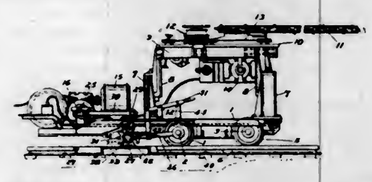
1,267,991. IGNITION DEVICE. ARTHUR DICKERSON, Salt Lake City, Utah. Filed June 28, 1916. Serial No. 106,535. (Cl. 123—168.)



1. An ignition device consisting of a cylindrical cup shaped casing, having an opening in its wall; an outwardly extended flange on the rim thereof; a primary curved contact spring operable through said opening; radially disposed contact screws in the wall of said casing having rounded ends protruding within the interior thereof; contact posts through the end wall of said casing and connected with said contact screws; a secondary contact screw axially secured in the bottom wall of said casing; an induction coil electrically connected with said last mentioned screw; a rotatable timing shaft; a source of electric energy grounded on said shaft; an insulating rotary member secured on the end of said shaft and concentrically operable within said casing; contact screws radially disposed in the wall of said rotary member and in electrical connection with said shaft and having rounded ends protruding beyond the periphery of said rotating member each adapted to contact with said curved spring when said shaft is rotated; and a curved spring radially secured on the end of said rotary member with one end portion bearing against said secondary contact screw and the other end protruding beyond the periphery of said rotating member adapted to touch the inner ends of said screws in the wall of said casing.

2. An ignition device consisting of an induction coil; a source of electric energy; an engine having cylinders and spark plugs therein; a timing shaft and a gear case thereon; an insulating member on the end of said shaft and rotating therewith; radially disposed contact screws in the wall of said member with ends protruding beyond its periphery; a curved spring radially secured on the end of said member; an insulating casing concentrically mounted over said rotating member and having an opening in its wall; a spring operable through said opening adapted to touch the protruding ends of said contact screws when said shaft is rotated; contact screws in the wall of said casing having rounded ends entering the interior of said casing and adapted to touch the end of said curved spring when said rotating member is operated; means to form a low tension electric circuit when either of the said contact screws in said rotating member touches said spring in said casing; and means to form a high tension electric circuit including said low tension circuit when the curved spring on the end of said rotating member touches either of the contact screws in the wall of said casing.

1,267,992. MINING-MACHINE. ROBERT R. DUNLOP, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation. Filed July 28, 1914. Serial No. 853,644. Renewed Oct. 25, 1917. Serial No. 198,545. (Cl. 125—14.)

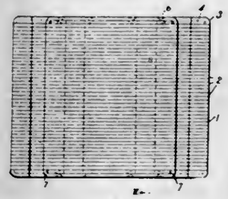


1. In a system of coal mining apparatus comprising a ground supported track and a portable mechanism adapted to be transported over and remain permanently upon said track and also adapted to cut a horizontal kerf in a coal face while supported on a section of track extending longitudinally toward said face, the combination of a track, a base frame, track wheels supporting the frame, an elongated horizontally projecting cutter arm carried by the base frame and movable laterally across the front thereof, endless chain cutter devices mounted to move in a horizontal path around the periphery of the cutter arm, the arm and cutter devices being adapted to be thrust bodily into and withdrawn bodily from the coal while cutting and while the arm is fixed relatively to the base frame and to be moved laterally while cutting, mechanism carried by the base frame adapted to engage a part of the track structure to positively feed the apparatus bodily toward and away fom the coal face to thrust the cutter arm into and withdraw it from the coal as aforesaid, mechanism for swinging the cutter arm laterally, mechanism for driving the track wheels to transport the apparatus bodily over the track, motor devices carried by the base frame, and means for causing the power of the motor devices to actuate the said feeding, swinging and track-wheel-driving mechanisms.

6. In a system of coal mining apparatus comprising a ground supported track and a portable mechanism adapted to be transported over and remain permanently upon said track and also adapted to cut a horizontal kerf in a coal face while supported on a section of track extending longitudinally toward said face, the combination of a track, a base frame, track wheels supporting the frame, an elongated horizontally projecting cutter arm carried by the base frame and movable laterally across the front thereof, endless chain cutter devices mounted to move in a horizontal path around the periphery of the cutter arm, the arm and cutter devices being adapted to be thrust bodily into and withdrawn bodily from the coal while cutting and while the arm is fixed relatively to the base frame and to be moved laterally while cutting, a rack-like member secured stationarily external to the base frame, mechanism caried by the base frame adapted to engage the rack-like member to positively feed the apparatus bodily toward and away from the coal face to thrust the cutter arm into and withdraw it from the coal as aforesaid, mechanism for swinging the cutter arm laterally, motor devices carried by the base frame, and means for causing the power of the motor devices to actuate the said feeding and swinging mechanisms.

[Claims 2 to 5 not printed in the Gazette.]

1,267,993. DYNAMO-ELECTRIC MACHINE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 4, 1915. Serial No. 25,716. (Cl. 171—252.)



1. A laminated structure comprising a plurality of assembled plates having alined openings, a plurality of end plates provided with depressed portions surrounding said alined openings, and retaining members extending through said openings, the end portions of said retaining members occupying the recesses provided by the said annular depressed portions.

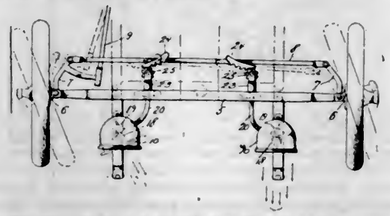
2. A laminated structure comprising a plurality of assembled plates having alined openings, of a plurality of end plates provided with annular depressed portions surrounding said alined openings, and rivets extending through said openings the ends of which are upset and occupy the recesses provided by the said annular depressed portions.

3. A laminated structure comprising a plurality of assembled plates having alined openings, a plurality of end plates provided with annular depressed portions adapted to register with said alined openings, a plurality of plates interposed between said end plates and said assembled plates and provided with openings to receive the said annular depressed portions, and retaining means passing through said openings and the ends of which occupy the recesses provided by the said depressed portions.

5. A laminated structure comprising a plurality of side-by-side body plates of like dimensions, end plates of less width than said body plates and outer plates having their edges bent into engagement with the adjacent faces of the outermost body plates to embrace the edges of the narrow end plates.

[Claims 4 and 6 not printed in the Gazette.]

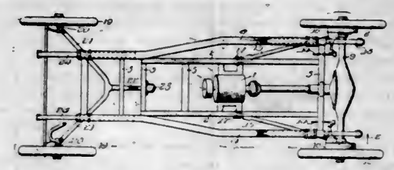
1,267,994. DIRIGIBLE MOTOR-VEHICLE HEADLIGHT. ROBERTS E. EHRGOTT, Chicago, Ill. Filed Oct. 2, 1917. Serial No. 194,339. (Cl. 240—62.)



1. The combination with the headlights and the spindle connecting rod of a motor vehicle; of rotatable stems carrying the headlights, racks on the spindle connecting rod, and pinions in mesh with the racks and having driving connections with the respective stems, said racks alternately coming out of mesh with the pinions when the spindle connecting rod is moved in opposite directions.

[Claims 2 and 3 not printed in the Gazette.]

1,267,995. WHEELED VEHICLE. ROLAND S. FEND, Chicago, Ill. Original application filed Oct. 28, 1913, Serial No. 796,768. Divided and this application filed Apr. 13, 1914. Serial No. 831,367. (Cl. 21—8.)



1. A wheeled vehicle including a vehicle body carrying frame; cushions which yieldingly support the frame upon its wheels; brake mechanism having a brake member for engaging a wheel driven portion to check the vehicle, and means for connecting said brake member and frame and serving to transfer braking strain and torque comprising a rigid reach rod and a flexible connection between said brake member and said reach rod, a pivot for said connection having its axis substantially in the intersection of the vertical planes through the axis of the reach rod and the axis of the rear wheels.

2. A wheeled vehicle including a vehicle body carrying frame; brake mechanism having a brake member for engaging a wheel driven portion to check the vehicle; means for connecting said brake member and frame and serving to transfer braking strain and torque to the frame comprising a rigid reach rod; and a cushion carried by the reach rod and taking part in carrying said frame, said cushion engaging the reach rod between the axes of the front and rear vehicle wheels.

3. A wheeled vehicle including a vehicle body carrying frame; brake mechanism having a brake member for engaging a wheel driven portion to check the vehicle; means for connecting said brake member and frame and serving to transfer braking strain and torque to the frame comprising a rigid reach rod, flexible means connecting said reach rod with said frame; and a cushion carried by the reach rod and taking part in carrying said frame, said cushion engaging the reach rod between the axes of the front and rear vehicle wheels.

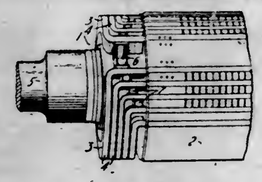
4. A wheeled vehicle including a vehicle body carrying frame; brake mechanism having a brake member for engaging a wheel driven portion to check the vehicle; means for connecting said brake member and frame and serving to transfer braking strain to the frame comprising a reach rod, the connection of said reach rod with said brake member being flexible, and a cushion carried by the reach rod and taking part in carrying said frame, said cushion engaging the reach rod between the axes of the front and rear vehicle wheels.

5. A wheeled vehicle including a vehicle body carrying frame; brake mechanism having a brake member for engaging a wheel driven portion to check the vehicle; means for connecting said brake member and frame and serving to transfer braking strain to the frame comprising a reach rod, the connection of said reach rod with said frame and brake member being flexible; and a cushion carried by the reach rod and taking part in carrying said frame, said cushion engaging the reach rod between the axes of the front and rear vehicle wheels.

1,267,996. COIL-SUPPORT FOR DYNAMO-ELECTRIC MACHINES. ALLAN BERTRAM FIELD, West Cliff-on-Sea, England, assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1914. Serial No. 815,569. (Cl. 171—252.)

1. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of slots and a plurality of coils of the concentric turn type disposed therein, of a plurality of wedging-members severally attached to the shaft of said machine and disposed intermediate the confronting outermost turns of adjacent coils for bracing the same, and a plurality of individual rela-

tively small wedging members severally secured to said shaft and disposed intermediate the pairs of the closely adjacent turns of each coil for spacing the same.



2. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of slots and a plurality of magnet coils of the concentric turn type disposed therein and having overhanging end portions, of a plurality of box-like wedging-members severally detachably secured to the shaft of said machine and disposed intermediate the confronting outermost turns of the pairs of end portions of adjacent coils for bracing the same, and a plurality of individual relatively small hollow wedging members severally adjustably attached to said shaft and disposed intermediate the pairs of the closely adjacent turns of the end portions of each coil for spacing the same.

4. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of slots and a plurality of magnet coils of the concentric turn type disposed therein and having overhanging end portions, of a plurality of box-like wedging members severally detachably secured to the shaft of said machine and severally adapted to engage the pairs of closely adjacent turns of each coil for bracing the same.

5. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of slots and a plurality of coils of the concentric turn type disposed therein, of a plurality of individual relatively small wedging members severally detachably secured to the shaft of said machine and severally adapted to engage the pairs of the closely adjacent turns of each coil for spacing the same.

7. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of slots and a plurality of concentric coils disposed therein, of a wedge for engaging adjacent turns of said coils and comprising a sheet metal U-shaped member having flared leg portions, braces connecting the legs of said member, bolts extending through the base of said member for securing said wedge in place.

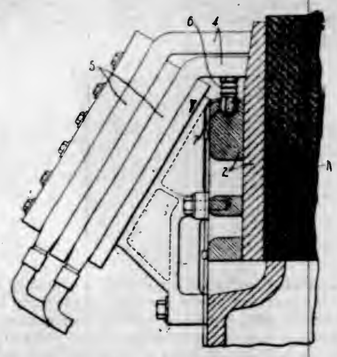
[Claims 3 and 6 not printed in the Gazette.]

1,267,997. COIL-SUPPORTING MEANS. ALLAN BERTRAM FIELD, West Cliff-on-Sea, England, assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Jan. 30, 1914. Serial No. 815,570. (Cl. 171—253.)

1. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of slots and a plurality of coils disposed within said slots and having overhanging end-portions respectively comprising a straight portion and an inclined portion, of a plurality of independent insulating pins located within said overhanging portions for supporting each of said straight portions and biasing the same away from the bottoms of said slots.

2. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of slots and a plurality of coils disposed in said slots and having overhanging end-portions respectively comprising a straight portion and an inclined portion, of a plurality of independent radial pins located within said overhanging portions for supporting each of said straight portions at points adjacent to said magnetizable member and adapted to bias said coils away from the bottoms of said slots at the ends of said magnetizable member.

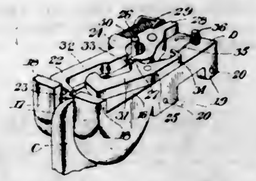
3. In a dynamo-electric machine, the combination with a magnetizable member having a plurality of peripheral slots and a plurality of coils disposed in said slots and having straight portions extending beyond the end of said member, and inclined portions adjacent thereto, of a plurality of radial insulating pins severally disposed in recesses in said member and adapted to prevent said straight portions from bearing upon the sharp inner edges of the slots under the bending action of said inclined portions.



4. In a dynamo-electric macine, the combination with a magnetizable member having a plurality of peripheral slots and a plurality of coils disposed in said slots and having straight portions extending beyond the edges of said member, of an end-plate for said member having a plurality of recesses severally disposed radially within said straight portions, and a plurality of pins severally disposed in said recesses to engage the inner surfaces of said portions.

5. In a dynamo-electric machine, the combination with a magnetizable core having a plurality of peripheral slots and a plurality of coils disposed in said slots and having straight portions extending beyond the edges of said core, of an end-plate for said core having a plurality of recesses severally disposed radially within said straight portions and a predetermined distance from said core, and a plurality of pins severally disposed in said recesses to radially support said straight portions and having uneven surfaces for increasing the insulating properties of the pins.

1,267,998. SWITCH-LOCK. CHARLES FORTH, Ottawa, Ontario, Canada, assignor to Flexible Metal Hose Company, Limited, Ottawa, Ontario, Canada. Filed Sept. 30, 1916. Serial No. 123,084. (Cl. 104—25.)

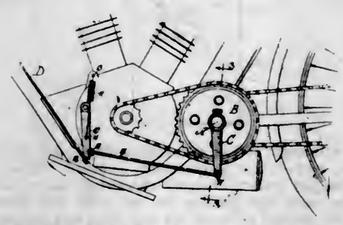


3. The combination with a switch stand, including a switch lever and tongue, of a casing integral with the switch lever and provided with a hollow curvilinear projection, a removable plate coacting with the lever, a spring controlled locking bolt pivotally mounted on the plate provided with an offset beveled end, and a spring controlled tumbler lever coacting with the locking bolt and provided with an offset beveled end.

4. The combination with a switch stand including a switch lever and tongue, of a lock comprising a pivotally mounted locking bolt provided with an offset beveled end, a curvilinear projection on the inner edge of the locking bolt provided with a shoulder, a spring controlled tumbler lever provided with an offset projection intermediate of its length coacting with the shoulder, and having an offset beveled end, as and for the purpose specified.

[Claims 1, 2, and 5 not printed in the Gazette.]

1,267,999. MOTOR-CYCLE ATTACHMENT. GLEN E. FRETZ, Pratt, Kans. Filed Aug. 25, 1917. Serial No. 188,144. (Cl. 192—1.)

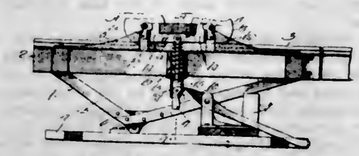


The combination with a driven shaft, a spring pressed disk clutch associated with said shaft, a clutch lever, and an operating lever for said clutch lever, of a controlling lever fulcrumed at one end on a relatively fixed support and connected at the opposite end with the operating lever, a connecting rod establishing connection between the said controlling lever and the clutch lever, and a spring secured at one end to a relatively fixed support and connected at its opposite end with the controlling lever between the ends of the latter, the said spring being movable with the controlling lever in response to movements of the clutch lever and operating lever to a position to exert zero force on the controlling lever when the clutch lever is in position for extreme clutch engagement, said spring being adapted to exert its force on the controlling lever through an increasing lever arm as the said controlling lever is moved by a releasing movement of the clutch element.

1,268,000. PLASTIC COMPOSITION. JOHN G. FUNCK, New Orleans, La. Filed May 1, 1917. Serial No. 165,726. (Cl. 106—34.)

A plastic composition for use as a substitute for wood consisting of about two parts by measure each of lime and plaster of Paris combined with approximately five parts of cement and ten parts of sand.

1,268,001. CAR-LOCK FOR MINE-ELEVATORS. SERAFINO GALLI, Breezy Hill, Kans. Filed Jan. 4, 1918. Serial No. 210,305. (Cl. 187—97.)



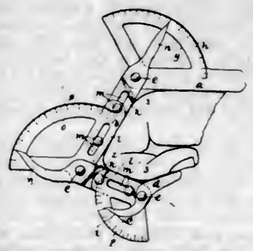
1. In a car lock for elevators, the combination of a car elevator, a lock for holding the car on said elevator, means for releasing said lock, a latch for holding said lock in released position, a car-depressed operating member for partially releasing said latch when the car leaves the elevator, means including said operating member for completely releasing said latch when another car passes onto said elevator, and means for moving said lock to operative position when said latch is released.

4. In a car lock for elevators, the combination of a car elevator, a lock for holding a car on said elevator, means for releasing said lock, a horizontally slidable latch bolt for holding said lock in released position, said bolt having a longitudinal slot, a car-depressed plunger whose lower end is positioned above one end of said slot and beveled to engage said end, whereby to partially withdraw said bolt upon depression of said plunger by passage of the car from the elevator, a plate mounted on said bolt and having a slot whose end is disposed for engagement by said beveled end of said plunger when the latter is depressed by passage of a second car onto the elevator, whereby to totally release said bolt, said plate being slidable away from said end of the slot in said bolt upon said first named depression of said plunger, means for returning said plate upon ascent of said plunger, and means for moving said lock to operative position when said bolt is released.

5. In a car lock for elevators, the combination of a car elevator, a vertically slidable lock block of a length to about both axles of the car, means for raising said block between the car axles, a fixed guide for said block, a pair of axle-gripping dogs mounted pivotally on said guide at the ends of said block and moved to operative position by ascent of said lock block, and means for lowering said block.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,268,002. MEASURING INSTRUMENT. WILLIAM M. GOODWIN, Newark, N. J. Filed Sept. 12, 1917. Serial No. 190,929. (Cl. 33—175.)



1. A measuring instrument including several substantially straight phalanx members pivoted together and forming when alined a straight edge parallel with a straight line joining the pivots, one of each two adjoining members including a protractor and the other a pointer movable with reference to the scale of the protractor, the pointers and the starting end of the scale of each protractor being in substantial coincidence with said line when the members are alined.

3. A measuring instrument including several substantially straight phalanx members pivoted together, one of each two adjoining members including a protractor and the other a pointer movable with reference to the scale of the protractor, the member in each case which has the pointer also having an oblique bend confining the pivotal movement of the other member relatively thereto within the arc represented by the protractor of the latter member.

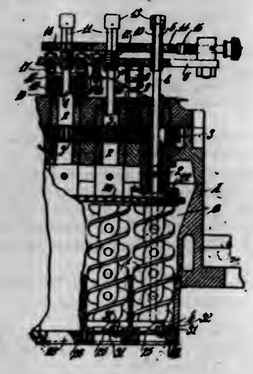
[Claim 2 not printed in the Gazette.]

1,268,003. DECORATING-DEPOSITOR. OSCAR F. GRANLUND, Springfield, Mass., assignor to National Equipment Company, Springfield, Mass., a Corporation of Massachusetts. Filed Jan. 8, 1916. Serial No. 70,975. (Cl. 107—27.)

1. A depositor for decorating purposes comprising a receptacle for chocolate and the like, a rotatable plate in the bottom thereof having an outlet offset from the axis of the plate, agitating and expelling means arranged adjacent the outlet and adapted to continuously expel chocolate from the latter in the form of a string, and means to rotate said plate whereby said string may be laid in a curved line.

2. A depositor for decorating purposes comprising a receptacle for chocolate and the like, means movable with respect to the axis of said receptacle and provided with an outlet for the receptacle in the bottom portion thereof,

and agitating and expelling means operable to positively and continuously eject chocolate through the outlet in the form of a string and driving devices for said movable means.

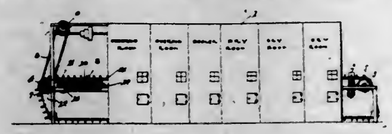


3. A depositor for decorating purposes comprising a receptacle for chocolate and the like, a rotatable bottom portion for the receptacle provided with an outlet, a spindle in the latter arranged to eject chocolate therefrom, mechanism to revolve said spindle and said bottom portion, the outlet being arranged in offset relation to the axis of the plate whereby the material issuing therefrom is laid in a curved line.

6. A decorating depositor, comprising a receptacle for decorative material, a rotatable disk arranged to close the bottom of the receptacle and provided with an outlet offset from the axis of the disk, a spindle carried by the latter and associated with the outlet, means to continuously rotate said disk, means to rotate said spindle relatively to said disk, and means to vibrate said spindle in its outlet, all constructed and arranged so that material from said receptacle is positively expelled from the outlet in the form of a continuous string and so that the string may be laid in a curved line for decorative purposes.

[Claims 4, 5, and 7 not printed in the Gazette.]

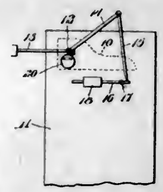
1,268,004. INDICATOR FOR TOBACCO-DRYING MACHINES. HANSFORD L. GREGORY, South Richmond, Va. Filed Aug. 1, 1916. Serial No. 112,576. (Cl. 116—50.)



1. In an indicator for tobacco drying machines, a stationary indicating board graduated in accordance with the rooms of a drying machine, a sprocket chain composed of a plurality of connecting links, means for moving said sprocket chain along said indicating boards, laterally extending projections formed upon certain of said links, and grade indicating plates adapted for detachable connection with said projections and coacting with said indicating board during the travel of the chain along the board.

2. In an indicator for tobacco drying machines, a stationary indicating board graduated in accordance with the rooms of a drying machine, a sprocket chain composed of a plurality of links, means for moving said sprocket chain along said indicating board, laterally extending projections formed upon certain of said links and provided with openings the walls of which converge, grade indicating plates, lugs formed upon the lower edges of said grade indicating plates and adapted to be seated in the openings carried by said laterally extending projections for connecting the indicating plates to the sprocket chain.

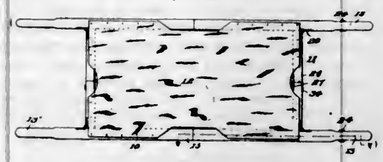
1,268,005. AUTOMATIC SEED-TESTER. CHARLES W. HASENJAEGER, Memphis, Tenn. Filed Apr. 29, 1916. Serial No. 94,514. Renewed Mar. 8, 1918. Serial No. 221,325. (Cl. 73—177.)



1. An automatic cotton seed testing device for delinting machines, embodying a pivotally mounted hopper, an angular shaped lever associated therewith, means having connection with one branch of the lever for normally holding the hopper in receiving position, said hopper being capable of assuming a discharge position under the weight of its contents, and a weighted member on the other branch of said lever for returning the latter and its associated parts to normal position.

[Claims 2 to 4 not printed in the Gazette.]

1,268,006. STRETCHER. DRAGUTIN HERL, La Salle, N. Y. Filed Dec. 8, 1917. Serial No. 206,192. (Cl. 21—80.)

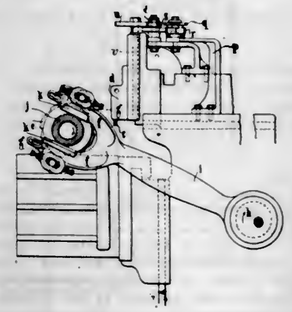


1. A stretcher comprising side rails formed in sections hingedly connected together at their inner ends, transverse braces hinged to the side rails and formed of hingedly connected sections, locking means slidably carried by the rail sections at one end of the stretcher adapted for normally projecting beyond the hinging point thereof, receiving keepers for said locking means carried by the inner ends of the side rail sections at the opposite end of the stretcher, transverse slots being formed in the rail sections in which the locking means are arranged, cross pins carried by said locking means within said slots and sliding buttons carried by the opposite ends of the pins contacting the opposite sides of the lock carrying rail sections.

2. A foldable stretcher including opposite side rails formed of two sections of equal length with handle portions at their free ends, a longitudinal bore in one of said sections and a keeper recess in the other section in axial alinement with the said bore when the sections are in their open arrangement, a rod slidably arranged axially of said bore, a bolt upon said rod adapted for normally projecting outwardly of the adjacent end of the rail section, a positioning spring surrounding said rod tensioned between said bolt and the inner end of the bore, the handle portion of the rail section having a transverse slot therein within which the outer end of said rod projects, a cross pin carried by said rod within said slot and sliding buttons upon the opposite ends of the pin flatly engaging the opposite sides of the handle portion of the section adjacent the open ends of the slot.

1,268,007. MACHINE FOR PRODUCING MILLING-CUTTERS. JOSEPH HIGGINSON and HUBERT ARUNDEL, Stockport, England. Filed Nov. 18, 1916. Serial No. 132,186. (Cl. 90—40.)

1. A machine for the production of milling cutters by forming teeth around the peripheral edge of a work piece, comprising in combination a work piece with means for rotating the same, a cutting tool, means moving said cutting tool in a plane nearly tangential to the peripheral edge of the work piece, and means causing the work piece to follow up or move simultaneously with the cutting tool as the latter is being withdrawn after a cutting stroke, as set forth.

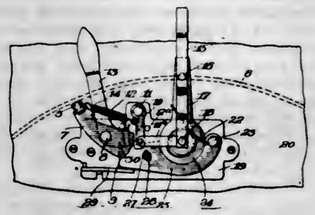


2. A machine for the production of milling cutters by forming teeth upon the peripheral edge of a work piece, comprising in combination a work piece with means for rotating the same, a cutting tool, a tool carrier, means moving said cutting tool in a line forming an obtuse angle with the radial line of the cutter tooth under treatment, and means causing the work piece to follow up or move simultaneously with the cutting tool as the latter is being withdrawn after a cutting stroke, as set forth.

3. In a machine for the production of milling cutters, the combination with a tool having a back and forth movement along the surface of and in a direction at right angles to the axis of the work piece it is cutting, of means imparting a circular movement to the said work piece during the cutting and return strokes of the tool, as set forth.

4. In a machine for the production of milling cutters, the combination with a tool having a back and forth movement along the surface of and in a direction at right angles to the axis of the work piece it is cutting, of means imparting to the said work piece circular movements synchronizing with the cutting and return strokes of the tool, as set forth.

1,268,008. STOP MECHANISM. JOSEPH F. HITCHCOCK, Rochester, N. Y. Filed Mar. 19, 1917. Serial No. 155,681. (Cl. 74—46.)

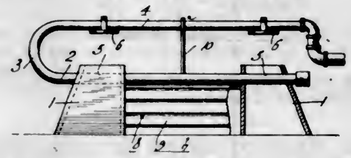


1. In a stop mechanism for sound reproducing apparatus, the combination with a brake and movable brake lever, of a movable retaining latch arranged to coöperate with the brake, an adjustable spring actuated controlling arm connected to the latch, a friction lock acting to hold the controlling arm in adjusted position, and a setting lever operatively associated with the brake lever and the friction lock and acting both to release the friction lock and to move the brake lever to released position.

10. In a stop mechanism for sound reproducing apparatus, the combination with a brake and movable brake lever, of a movable retaining latch coöperating with the brake lever, an adjustable member on the brake lever coöperating with the latch to vary the position thereof when the brake lever is released, an adjustable spring actuated controlling arm connectd to the latch and having its position controlled thereby, and a lock governing the adjustable controlling arm and acting to hold it in adjusted position.

[Claims 2 to 9 not printed in the Gazette.]

1,268,009. OIL-BURNER. DELTON I. HOCH, Columbus, Ohio. Filed Sept. 14, 1917. Serial No. 191,417. (Cl. 158—64.)



1. A device of the class described comprising spaced supports; a loop-shaped pipe including an upper arm, and a lower arm carried by the supports and having a combustion orifice; and a priming-charge holder connecting the supports and including walls which converge upwardly and meet below the lower arm of the pipe.

3. A device of the class described, comprising spaced supports; a loop shaped pipe including an upper arm, and a lower arm carried by the supports and having a combustion orifice; and a priming charge holder connecting the supports and including walls which converge upwardly toward the pipe, the converging walls of the priming charge holder being supplied with longitudinal corrugations constituting charge holding seats.

[Claims 2 and 4 not printed in the Gazette.]

1,268,010. OPTICAL-ILLUSION DEVICE. OWEN HUDGEN, Los Angeles, Cal. Filed Apr. 2, 1917. Serial No. 159,356. (Cl. 88—1.)



1. In an optical illusion device, the combination of an unframed mirror, and means supporting said mirror at its ends so that the position of the latter may be adjusted, whereby composite images may be produced.

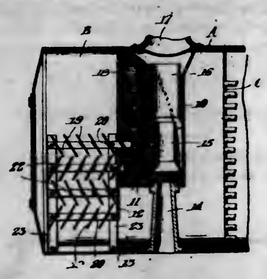
5. In an optical illusion device, the combination of an elongated slide bar provided at each end with a handle, a cross bar slidably mounted on said slide, upwardly extending supporting standards mounted on said cross bar, and an unframed mirror pivotally supported by said standards.

[Claims 2 to 4 not printed in the Gazette.]

1,268,011. SPARK-ARRESTER. ALBERT EDMUND HUDSON, Calgary, Alberta, Canada. Filed Oct. 4, 1917. Serial No. 194,740. (Cl. 110—124.)

In a spark arrester, a plurality of pairs of uprights, a plurality of spaced cross pieces connecting the pairs of

uprights, the upper edges of the cross pieces being notched, the notches of adjacent pieces being oppositely inclined,



and baffle plates having bars, the bars adapted to fit into and be carried by the notches.

1,268,012. NEEDLE-CLAMP FOR SEWING-MACHINES. BOHUMIL L. JIROUCH, Cleveland, Ohio, assignor to White Sewing Machine Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 6, 1917. Serial No. 152,460. (Cl. 112—37.)

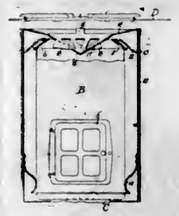


1. In a needle clamp for sewing machines employing a vertically reciprocating needle bar, the combination of the vertically reciprocating needle bar having a vertical flat surface 12 and an adjacent vertical shoulder 14 for engagement respectively with the flat surface of a needle shank and with said needle shank adjacent said flat surface, said needle bar having also adjacent the flat surface specified two vertical parallel flat surfaces at substantially right angles to said flat surface, a four sided needle clamp having two side members which slidably engage the two parallel flat surfaces on the needle bar and having opposed to the first mentioned flat surface on the needle bar a member on the inner face of which is a vertical rib 16 placed to engage the convex surface of the needle shank at the opposite sides of the center of said shank to that on which lies the vertical shoulder on the needle bar when said needle is in engagement with flat side and adjacent rib on the needle bar, and said clamp having an intermediate member opposite that which carries said vertical rib, and a set screw which screws through the last mentioned intermediate member into engagement with the needle bar.

[Claims 2 and 3 not printed in the Gazette.]

1,268,013. OIL-STOVE ATTACHMENT. JAMES THOMAS KELLEY, West Rush, N. Y. Filed Oct. 24, 1917. Serial No. 198,246. (Cl. 126—45.)

1. An attachment for oil cook stoves, including a cylindrical jacket adapted to be removably positioned on the stove chimney to inclose the same, a hanger at the interior of the chimney, said hanger comprising a ring below the top of the jacket adapted to rest on the chimney at the top and having radial arms extending from said ring to the jacket and secured to the latter, and curved plate springs secured to the jacket at the interior near the bottom and free at their ends to yieldingly bear against the sides of the chimney.



2. An attachment for oil stoves including a cylindrical jacket adapted to be removably positioned on the stove chimney to inclose the same, a hanger on the jacket below the top thereof to support the jacket on the chimney, a heat deflector in the form of an inverted cone formed with radial openings therein for the direct upward passage of heat, radial wings on the deflector at the openings along one side of each opening, and spaced supporting arms on said deflector and extending therefrom outward to the jacket above said hanger to sustain the deflector on the jacket above and clear of the chimney.

1,268,014. AUTOMATIC PROTECTIVE DEVICE. KARL KARPPINEN, Brisbane, Queensland, Australia, assignor of one-half to Thomas Garrett and Paul Jenner Ure, Brisbane, Australia. Filed June 7, 1917. Serial No. 173,372. (Cl. 175—215.)



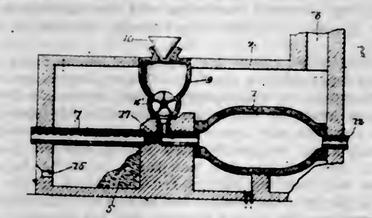
1. In an automatic device for shunting excessive electrical potentials and amperages and subsequently reëstablishing original line, the combination of an electric current intake bracket, a conducting bracket, a grounded bracket, a lever pivotally supported in said conducting bracket and having its free end arranged to contact with said intake bracket, a spring contact carried by said lever and arranged to be brought into engagement with said grounded bracket, a conductor connected between said intake bracket and lever through which the current for the original line normally passes, said conductor adapted to hold the lever out of contact with said intake bracket and the spring contact out of engagement with the grounded bracket, but also adapted to expand when heated consequent upon overload to release said lever and spring contact, a pressure spring bearing upon said lever and adapted to cause the lever to make contact with said intake bracket and the spring contact with said grounded bracket, and adjusting means to vary the pressure of said last-named spring, substantially as described.

2. In an automatic device for shunting excessive electrical potentials and amperages and subsequently reëstablishing original line, the combination of an electric intake bracket, a conducting bracket, a grounded bracket, a lever having one end pivotally supported in said contact bracket and having its other end adapted to make contact with said intake bracket, a spring contact carried on said lever and adapted to engage said grounded bracket, a metallic conductor connected at one end to the pivotal end of said lever, a nut having a slot for receiving the other end of said conductor, a threaded bolt mounted for adjustment in said intake bracket for adjustably holding said slotted nut, a lock nut on said bolt for holding said slotted nut in adjusted position thereon, said conductor

normally forming the original line and holding the lever out of contact with said intake bracket and said spring contact out of engagement with said grounded bracket but adapted to expand when heated consequent upon overload to release said lever, and a pressure spring for moving said lever into contact with said intake bracket and said spring contact into engagement with said grounded bracket when said conductor is overheated, substantially as described.

[Claims 3 and 4 not printed in the Gazette.]

1,268,015. PROCESS OF MAKING ALUMINUM CHLORID. GEORGE H. KING and GERALD I. ROBERTS, Port Arthur, Tex., assignors to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed June 15, 1917. Serial No. 175,006. (Cl. 23—13.)



2. The process of forming aluminum chlorid from solid reaction mixtures and chlorin which comprises passing the required proportions of chlorin with highly preheated reaction mixture in a dustlike form through a heated conduit.

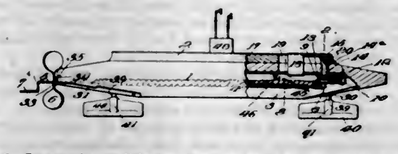
4. The process of forming aluminum chlorid from solid reaction mixtures and chlorin which comprises contacting the chlorin with the powdered reaction mixture and passing the two together through a heated chamber, then passing these vapors in contact with refractory material and collecting and condensing the aluminum chlorid vapors produced.

6. The process of forming aluminum chlorid from solid reaction mixtures and chlorin which comprises feeding preheated finely powdered alumina and carbon together with preheated free chlorin through a heated reaction chamber and collecting and condensing the aluminum chlorid vapors produced.

7. In the manufacture of aluminum chlorid the process which comprises heating a mixture of alumina and carbon in suspension in a flowing current of chlorin.

[Claims 1, 3, 5, and 8 to 11 not printed in the Gazette.]

1,268,016. AQUATIC TOY. HARRY T. KINGSBURY and EDWARD J. KINGSBURY, Keene, N. H. Filed Jan. 2, 1918. Serial No. 209,914. (Cl. 46—37.)



1. In a submersible toy boat, a hull formed from a piece of hard or dense wood and having a deck or upper section of lighter wood to give greater buoyancy and stability.

2. In a submersible boat, a hull formed from a piece of hard or dense wood channeled along the keel, and a deck or upper section of lighter wood to give greater buoyancy and stability, and a torsional spring motor lying within said channel.

5. A toy boat having a propeller, a torsional spring connected at one end thereto, a rock shaft connected at one end to the opposite end of said torsional spring and provided with an arm or extension at one side, and a supplemental device controlled by the partial rotation of said shaft.

6. A toy boat having a propeller, a torsional spring connected at one end thereto, a rock shaft connected to the opposite end of the said torsional spring and provided with an arm or extension, a spring detent secured at one end and extending at its free end into the path of said arm or extension for operation thereby, a pivoted flag-carrying arm held retracted by said spring detent when the torsional spring in being wound causes the rock shaft to rotate in one direction to raise the spring detent; the unwinding of the torsional spring permitting reverse rotation of the rock shaft and release of said detent.

7. A toy having a main and a supplemental element or device to be operated, a torsional spring for operating the main element or device, a rock shaft connected to one end of the torsional spring for partial rotation thereby and having an arm or extension controlling the supplemental element or device.

[Claims 3, 4, and 8 to 12 not printed in the Gazette.]

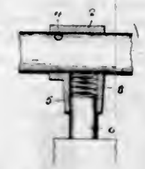
1,268,017. SAUCEPAN. ALICE MAY KNIGHT, Tunbridge Wells, England. Filed Mar. 7, 1916. Serial No. 82,605. (Cl. 53—8.)



1. The combination of nested saucepans, each saucepan having at its upper end two angular flanges, the inner flange being below the upper flange, the latter being upwardly bent to form a recess, and a rigid handle secured to each saucepan and extending through the recess and above the plane of the top of the adjacent outer saucepan, whereby the handles of all the saucepans may be nested one on the other.

2. The combination of nested saucepans, each saucepan having at its upper end two angular flanges, the inner flange being below the upper flange and the upper flange having a recess formed therein, and a rigid handle secured to the outside of each saucepan and extending up through the recess and above the plane of the top of the outer saucepan and then extended outwardly therefrom, whereby the handles of all the saucepans may be nested one on the other.

1,268,018. CARBON-BRUSH HOLDER. JAMES H. KNIGHT, Fort Worth, Tex. Filed Mar. 6, 1917. Serial No. 152,747. (Cl. 200—24.)

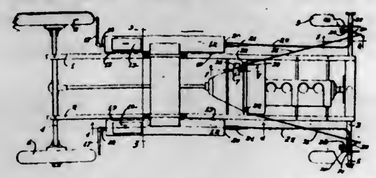


1. In a device of the class described a combination, a shaft, a support for said shaft, a commutator, a pin passing through said shaft so as to have its opposite ends projecting in a diametrically opposite point from said shaft, a sleeve adapted to slide upon said shaft, said sleeve being formed with longitudinal diametrically opposed recesses in which the projecting ends of said pins are adapted to project so as to be rocked against and rotated upon said shaft, said sleeve being formed with an integral retiring tubular portion, spaced from said commutator, a centrifugal brush engaging said commutator and projecting into the tubular portion of said

sleeve and a spring mounted within said tubular portion and having one end project against said shaft and another end projecting against said brush so as to apply tension against said brush.

2. In a device of the class described a combination of a shaft, a support for said shaft, a sleeve slidable upon said shaft, a pin passing through said shaft and having its opposite end projecting radially therefrom, such sleeve being provided with recesses extending longitudinally thereof, the projecting ends of the said pin adapted to enter said recess of said sleeve, and a brush carrying arm formed upon said sleeve.

1,268,019. ANTISKID-SANDER FOR VEHICLES. DAVID KUPFER, Chicago, Ill. Filed June 28, 1917. Serial No. 177,449. (Cl. 291—22.)



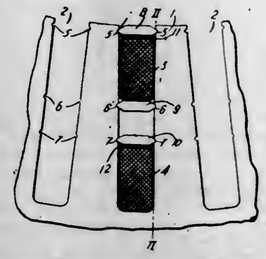
1. The combination with a vehicle, of sand spreader means mounted thereon, and means connected therewith and with the front wheels of the vehicle adapted to actuate the same to sprinkle sand in front of the rear wheels of the vehicle to prevent skidding thereof.

2. In a device of the class described the combination with an automobile, of sand containers mounted on said automobile, means movably disposed within said containers, mechanisms associated with the front wheels of the automobile and connected with said means adapted when operated to actuate said means to sprinkle sand before the rear wheels of the automobile to hold the same from skidding, and means connected with said mechanisms adapted to return the same to normal position to stop the spreading of sand.

3. In a device of the class described adapted for use on an automobile, a sand container, a spreader nozzle connected therewith disposed before one of the rear wheels of the automobile, means rotatably disposed within said container, a gear mechanism connected therewith associated with one of the front wheels of the automobile, and means connected therewith adapted to be actuated to operate said gear mechanism and said rotatable means to force sand through said spreader nozzle before said rear wheel to hold the same against skidding.

[Claims 4 to 6 not printed in the Gazette.]

1,268,020. VENTILATING APPARATUS. JAN ARTHUR KUYSER, Edgewood, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 3, 1914. Serial No. 822,207. (Cl. 171—206.)



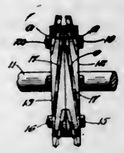
1. Ventilating means for armature slots carrying conductors arranged in a plurality of superposed layers comprising means for maintaining the said layers a sufficient distance apart to secure an appreciable air space between them, the said means comprising a series of discontinuous members for supporting certain of the said conductors above the remaining conductors and other separate and independent discontinuous members for confining the remaining conductors to the bottom of the slot whereby ventilating currents traversing said air space may impinge at intervals upon the exposed surfaces of said layers.

2. Ventilating means for armature slots carrying conductors arranged in a plurality of superposed layers, comprising means for maintaining the said layers a sufficient distance apart to secure an appreciable air space between them, the said means comprising spaced wedges for supporting certain of the said conductors above the remaining conductors and other spaced wedges for confining the remaining conductors to the bottom of the slot whereby ventilating currents traversing said air space may impinge at intervals upon the exposed surfaces of said layers.

3. Ventilating means for armature slots carrying conductors arranged in a plurality of superposed layers comprising means for maintaining the said layers a sufficient distance apart to secure an appreciable air space between them, the said means comprising a plurality of short coil-supporting wedges disposed in longitudinal grooves in the sides of the slot, and other similarly disposed wedges for confining part of the conductors to the bottom of the slot, the wedges in the several slots being in staggered relation to one another, and the wedges in the same slots being separated by a distance at least as great as the length of a single wedge.

[Claims 4 and 5 not printed in the Gazette.]

1,268,021. TACK-PULLER. JOHN T. LANCASTER, Haverhill, Mass., assignor to Hamel Shoe Machinery Company, Haverhill, Mass., a Corporation of Massachusetts. Filed July 11, 1917. Serial No. 179,959. (Cl. 12—16.)



1. The improved rotary tack puller comprising a disk and a tack extracting blade, the edge of which is concentric with the axis of rotation of the disk, said blade being set diagonally of the periphery of the disk and having a flange along the side of the peripheral edge.

4. The improved tack puller comprising a rotary cylindrical member provided with a series of blades arranged diagonally of the periphery thereof, and said blades having an inturned notched flange along their effective edges.

6. The improved tack puller comprising two adjacent disks arranged to rotate on the same axis and each provided with a series of blades arranged diagonally of the periphery thereof, said blades having inturned flanges along their effective edges.

8. The improved tack puller comprising two adjacent disks arranged to rotate on the same axis and each provided with a series of blades arranged in pairs, one on each disk, diagonally of the peripheries of the respective disks, and at an angle to each other, the proximate ends of the two blades of each pair of disks being at a distance from each other to permit the passage of a tack, and said blades having inturned flanges along their effective edges.

[Claims 2, 3, 5, 7, 9, and 10 not printed in the Gazette.]

1,268,022. TACK-PULLER. JOHN T. LANCASTER, Haverhill, Mass., assignor to Hamel Shoe Machinery Company, Haverhill, Mass., a Corporation of Massachusetts. Filed July 11, 1917. Serial No. 179,960. (Cl. 12—16.)

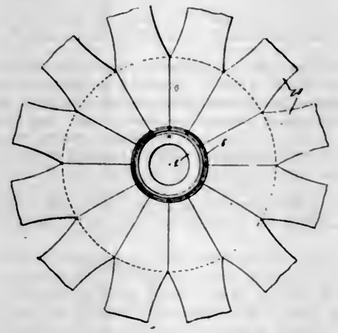
1. The improved sole tack puller comprising a rotary disk provided with one or more tangential slots, and a tack pulling blade secured in said slot with its edge projecting slightly beyond the periphery of the disk, the periphery of said disk being substantially unbroken except for a cut away portion immediately in front of the said blade.



2. The improved sole tack puller comprising a rotary disk provided with one or more tangential slots, and a tack pulling blade secured in said slot with its edge projecting slightly beyond the periphery of the disk, the periphery of said disk being of a width as great as the length of the edge of the blade, and being substantially unbroken except for a cut away portion immediately in front of the said blade, whereby a supporting surface is formed behind the blade while free access to its edge is afforded in front.

[Claim 3 not printed in the Gazette.]

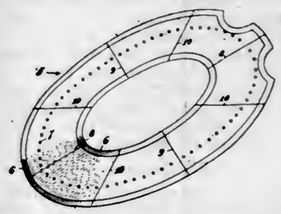
1,268,023. HUB. JOHN W. LAWHORN, Maryville, Tenn. Filed Oct. 18, 1917. Serial No. 197,290. (Cl. 21—31.)



1. A hub, comprising a box formed with a stepped flange, there being a lug projecting from the flange, a sleeve on the box and formed with tongues, a retaining plate having a cylindrical projection formed with spaced inner and outer walls mounted on the sleeve and box, the said outer wall of the cylindrical projection provided with a slot for the reception of the lug, means for locking the sleeve against rotation relative to the box and retaining plate, spokes seated on the tongues, means for expanding the tongues to force the spokes outwardly along radial lines, and means for clamping the spokes against the retaining plate.

2. A hub, comprising a box formed with a stepped annular flange at one end, there being a lug on the flange, a sleeve on the box formed with a lug at one end and tongues at the other end, a retaining plate, provided with a central cylindrical projection formed with spaced inner and outer walls, mounted on the sleeve and box, said inner and outer walls each provided with a slot for the reception of the lug on the sleeve and the lug on the flange, respectively, whereby the plate is locked against revolution relative to the box and sleeve, a sleeve threaded on the box and adapted to take under the tongues to expand the same, a retaining plate threaded on the sleeve, spokes between the retaining plates and resting on the tongues, and a cap threaded on the last mentioned retaining plate for closing the hub.

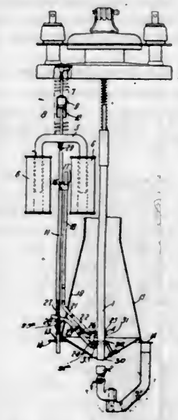
1,268,024. SANITARY TOILET-SEAT PROTECTOR. ISRAEL LEVIN, Los Angeles, Cal. Filed Oct. 22, 1917. Serial No. 197,752. (Cl. 4—18.)



1. A toilet seat protector comprising an annulus of craped paper having a waxed margin and formed with perforations adjacent to its outer edge, said annulus having longitudinal, transverse and diagonal fold lines.

2. A toilet seat protector comprising an annulus of craped paper having a waxed margin and formed with perforations adjacent to its outer edge, said annulus having longitudinal, transverse and diagonal fold lines, and a cornucopia container for the reception of the annulus when folded and rolled.

1,268,025. ARC-LAMP. GEORGE M. LITTLE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 3, 1913. Serial No. 793,111. (Cl. 176—105.)

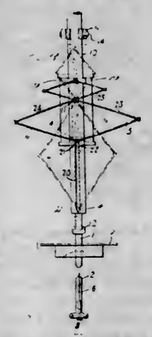


1. An arc lamp comprising a central draft tube provided with a lateral opening, a movable electrode positioned in said draft tube, an exterior main supporting rod, guiding means therefor, means for moving said rod longitudinally of said electrode, and a mechanism supported by said main rod that projects through the lateral opening in said draft tube to engage said electrode and impart motion thereto that is transmitted from said main rod.

4. In an arc lamp, the combination with a movable electrode, of a clutch mechanism therefor comprising a main rod that is constrained to move longitudinally of said electrode, an electrode-engaging member supported by said main rod, an inclined lever member pivotally connected at one end to said electrode-engaging member and slidingly engaging said main rod and a gripping member attached to said inclined lever member for gripping said electrode when said main rod is moved upwardly, and a tripping mechanism for releasing the electrode when the said clutch mechanism is moved downwardly in excess of a predetermined amount.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,268,026. ARC-LAMP. GEORGE M. LITTLE, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 6, 1915. Serial No. 19,455. (Cl. 176—55.)

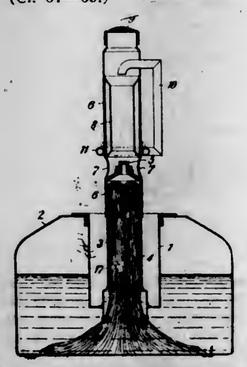


1. An arc lamp comprising coöperating alined electrodes, a central tubular member in which the upper electrode is positioned, and lazy tongs having an intermediate point pivotally secured to said tubular member and operatively connected to feed and focus both of said electrodes.

5. An arc lamp comprising coöperating alined electrodes, a central tubular member in which the upper electrode is positioned, lazy tongs having an intermediate point pivotally secured to said tubular member and one end point pivotally secured to the upper electrode, and a guide member loosely embracing the tubular member and pivotally secured to the other end of the lazy tongs, the said lazy tongs being adapted to feed and focus both of said electrodes.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,268,027. WICK-VAPORIZER. PAUL LUCAS, Friedenau, near Berlin, Germany. Filed Oct. 8, 1914. Serial No. 865,711. (Cl. 67—69.)

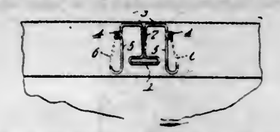


1. In a vapor burner the combination with a wick tube, of a nozzle, a Bunsen-burner, means for externally heating said wick and a wick of organic material tightly fitting inside said tube, said wick before being drawn into said tube having been carbonized to such an extent as to resist heat without shrinking and to maintain its original position in close contact with the inner surface of said externally heated tube for a considerable period of use.

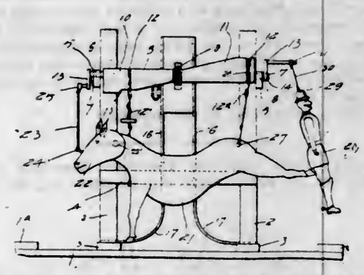
[Claims 2 and 3 not printed in the Gazette.]

1,268,028. GARMENT-SUPPORT. FRANCIS DE SALES LUETTSCHWAGER, Tucson, Ariz. Filed Sept. 18, 1914. Serial No. 862,331. (Cl. 24—86.)

A garment support formed of a single piece of wire bent to form a depending shank, a cross bar at the lower end of the shank, oppositely disposed, laterally extending portions at the upper end of the shank, a downwardly bent portion at the outer end of each laterally extending portion extending substantially parallel to the shank, a keeper formed on each downwardly bent portion, and the end of each downwardly bent portion bent to form a pin the end of which is adapted to be engaged by the keeper.



1,268,029. TOY. EDWIN R. LYON, Queen, N. Mex. Filed Oct. 5, 1917. Serial No. 194,901. (Cl. 46—40.)



1. A toy including a platform, spaced uprights secured to the platform, a shaft journaled in the upper end of the uprights, means secured to the platform for rotating the shaft, crank handles carried by the shaft, flexible means secured to the crank handles, a figure secured to one of the flexible means, a flexible means secured to the shaft, an animal secured to the free end of the flexible means of the shaft and to the free end of the flexible member of the other crank handle, and said animal and figure adapted to be operated upon the rotation of the shaft.

4. A toy of the class described including a base, uprights secured to the base, arms carried by the uprights, a shaft journaled in the arms, crank handles secured to the opposite ends of the shaft, gears carried by the shaft, a figure mounted upon the base, means for connecting the figure to one crank arm and shaft, a second figure secured to the free crank arm, and means secured to the base and engaging the gear for rotating the shaft and moving the figures, as and for the purpose specified.

7. A toy of the class described including a base, uprights carried by the base, a shaft journaled in the uprights, cranks carried by the shaft, figures carried by the cranks and shaft, a braking mechanism secured to the shaft, and a winding mechanism secured to the base for rotating the shaft and figures, said braking mechanism retarding the rotational movement of the shaft.

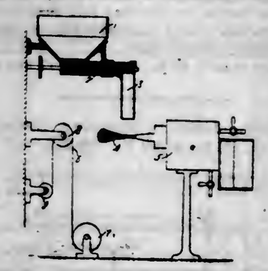
[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,268,030. COATING PROCESS. JAMES P. A. MCCOY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 3, 1914. Serial No. 848,804. (Cl. 91—70.2.)

1. A coating process that comprises reducing and liquefying a powdered material consisting of a metallic compound and projecting the liquid against the surface to be coated.

2. A coating process that comprises reducing and liquefying a powdered material consisting of a metallic oxid and projecting the liquid against the surface to be coated.

10. A coating process that comprises introducing a powdered material consisting of a metallic oxid into a flame that is directed toward the surface to be coated, whereby the said oxid is reduced to metal and simultaneously projected in a spray upon the said object.



12. A coating process that comprises introducing a finely-divided metallic oxid into a reducing flame that is directed toward the surface to be coated, whereby the said oxid is reduced to molten metal which is projected in a spray upon the said surface.

[Claims 3 to 9 and 11 not printed in the Gazette.]

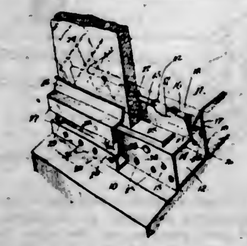
1,268,031. MOLDABLE MATERIAL. JAMES P. A. MCCOY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 30, 1915. Serial No. 18,151. (Cl. 106—12.)

1. The process of making molded articles that comprises mixing an inert filler with a vegetable oil that polymerizes substantially simultaneously throughout its mass, effecting the polymerization of the said oil, and molding the resulting mixture.

10. A moldable composition containing comminuted asbestos, raw China wood oil and a relatively small amount of coal tar pitch.

[Claims 2 to 9 not printed in the Gazette.]

1,268,032. METALLIC SASH-BAR. CHESTER E. MCGOWAN, Memphis, Tenn. Filed Oct. 13, 1915. Serial No. 55,639. (Cl. 189—78.)



1. In a metallic sash-bar, the combination of a combined shelf and back stop for a plate of glass, with the back stop portion presenting a contact line to the plate removed from the edge of the plate, said combined shelf and back stop being produced from a single piece of metal brought to form, with the edges thereof secured to each other; a face molding; and means for securing said molding in place with reference to the plate supported by the shelf.

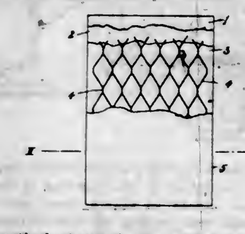
2. In a metallic sash-bar, the combination of a hollow combined base, shelf and back stop produced from a single piece of metal brought to form and having the edges thereof interlocked; a face molding, said molding and back stop having opposing line contact with the plate of glass supported by the shelf; and means for securing said molding in place with reference to said shelf and back stop.

3. As a new article of manufacture, a combined shelf and back stop for use in metallic sash-bars, produced from a single sheet of metal bent to form and having its edges interlocked and presenting a hollow base, a shelf thereon, and a back stop extending upwardly and inwardly from the shelf at one side thereof.

4. As a new article of manufacture, a combined shelf and back stop for use in metallic sash-bars, produced from a single sheet of metal bent to form and presenting a hollow base, a shelf thereon, and a back-stop extending upwardly from the shelf at one side thereof and inclining toward the opposite edge of the shelf, the proximate edges of the sheet being secured together.

[Claims 5 to 10 not printed in the Gazette.]

1,268,033. PROCESS FOR SECURING PLASTIC COMPOSITIONS. CHARLES MACDONALD, South Shields, England, assignor to Wailes, Dove & Company Limited, Newcastle-upon-Tyne, England. Filed Oct. 23, 1914. Serial No. 868,311. (Cl. 94—1.)



1. A method of securing a coating of cementitious composition upon a metal plate or other non-porous surfaces, consisting of depositing an adhesive coating upon the metal plate by applying a bituminous solution thereto, securing an indurated layer of bituminous enamel to said adhesive coating, partially embedding expanded metal in the enamel, and molding a cementitious material upon and about the separate portions of the expanded metal to thereby form a bond between the cementitious material and the plate.

3. A floor, wall, ceiling or other structural support, comprising a metal base, an indurated bituminous enamel layer or coating, an adhesive bituminous binding agent interposed therebetween and incorporated with the adjacent surface of said enamel coating and adhering to the metal throughout its extent, an outer cementitious layer superposed upon said enamel, and an embedded metallic bonding network extending into said enamel and into said cementitious layer and forming a bond therebetween.

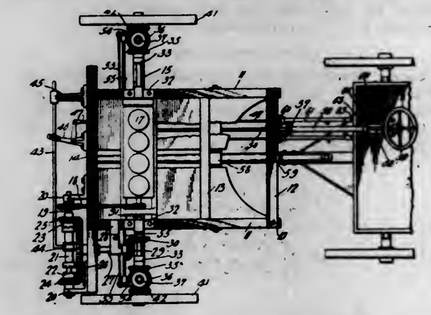
[Claim 2 not printed in the Gazette.]

1,268,034. TRACTOR. AUGUST J. MARESCH, Faithorn Junction, Mich., assignor of one-half to Kading & Kading, Watertown, Wis., a Firm composed of Charles A. Kading and Elizabeth Kading. Filed Mar. 9, 1917. Serial No. 153,683. (Cl. 180—12.)

1. A tractor comprising a frame composed of two parallel beams, cross braces attaching the beams together, there being a cross brace at each end of the beams, a fixed axle on which the frame is mounted, traction wheels, stub axles on which the traction wheels are journaled, the stub axles having knuckle joint connections with the fixed axle, an engine mounted on the frame above the fixed axle, connection between the engine and the traction wheels, a selective clutch mechanism included in said connection, a steering means for the traction wheels, a yoke mounted upon the frame and adapted to receive the tongue of a vehicle, the cross brace on the rear end of the frame being adapted to rest on top of the vehicle tongue and being provided with a hole, so that a draw bolt may be inserted through the hole and through the vehicle tongue, whereby the vehicle may be drawn.

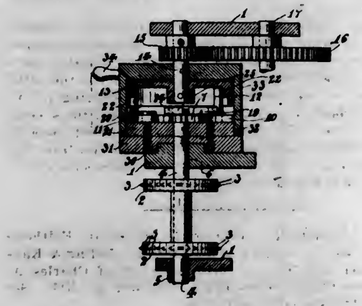
2. A tractor comprising a frame composed of parallel beams and cross braces connecting the beams together, a cross brace obtaining at either end of the frame, a fixed

axle mounted near the forward end of the frame, traction wheels, means for connecting the traction wheels to the axle so that they may be maintained in parallel relation and yet move angularly in respect to the axle, an engine mounted on the frame above the axle, connections between the engine and the traction wheels, selective controlling means for said connections, means for moving the traction wheels angularly with respect to the axle, and a yoke carried by the frame between the fixed axle and the rear



end thereof, the yoke being adapted to receive the tongue of a vehicle, the cross brace at the rear end of the frame being provided with a hole, so that a draw bolt may be inserted therethrough and through the vehicle tongue, the said cross brace being adapted to rest on top of the tongue, whereby the tractor may be attached to a vehicle and the tractor frame maintained in a horizontal position during such attachment.

1,268,035. INTERMITTENT MOVEMENT. CHARLES MARTI, Newark, N. J. Filed June 17, 1914. Serial No. 845,527. (Cl. 88—18.)



1. In an intermittent movement, the combination of a shaft to be rotated, an index operatively connected therewith, index engaging means for alternately moving and locking said index, and a cam rotatable concentrically with said index to actuate said index engaging means.

4. In an intermittent movement, the combination of a shaft to be rotated, an index operatively connected therewith, means for moving said index, means for locking said index, and means between said index moving and index locking means to adjust the same with respect to their engagement with said index.

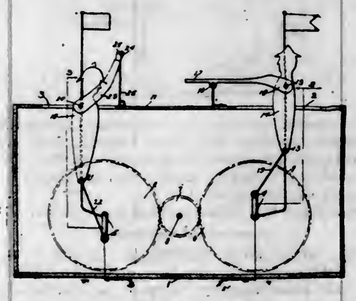
9. In an intermittent movement, the combination of a rotatable member, means for alternately moving and arresting the same, and means concentric with the rotatable member for actuating said moving means.

15. In a motion picture projecting machine, the combination of film feeding means and rotatable means for rotating said film feeding means in either direction to frame the projected pictures.

18. In a motion picture projecting machine, the combination of a shaft, means for rotating said shaft intermittently, means fixed on said shaft for operatively engaging a film, and means for rotating said shaft and thereby said film operating means independently of intermittent motion of rotation of the shaft.

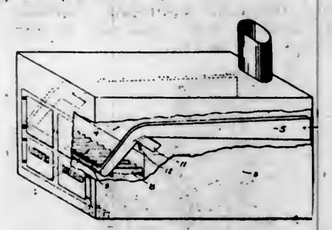
[Claims 2, 3, 5 to 8, 10 to 14, 16, and 17 not printed in the Gazette.]

1,268,036. TOY. JAMES G. MASUNIAN, Brooklyn, N. Y. Filed Oct. 12, 1917. Serial No. 196,222. (Cl. 46—40.)



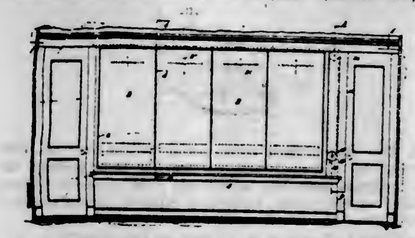
A toy comprising, a container having openings therein, objects arranged to be raised from and lowered in said openings, crank shafts respectively connected with said objects for actuating the same, a jointed section carried by each object and mounted to tilt from the container when movement is transmitted to the object, and means for transmitting motion to said crank shafts.

1,268,037. FURNACE. WILLIAM E. MILDNER and LEE WEBSTER, Los Angeles, Cal. Filed Feb. 28, 1916. Serial No. 81,042. (Cl. 110—75.)



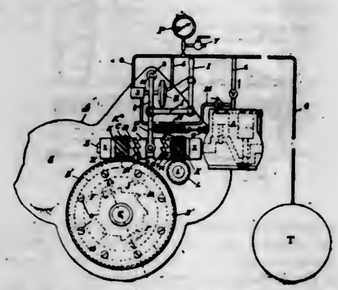
In a furnace having a fire box and grate, the combination with a combustion chamber, of air ducts extending longitudinally of said chamber at the sides thereof and having the rear ends thereof open to the atmosphere through the rear wall of the furnace, and the other ends extending downwardly across the ends of the fire box and over the ends of the grate and terminating at the outer edge of the grate, and a distributing pipe extending across said outer edge of the grate and having the ends thereof in communication with the ducts, said pipe being provided with a longitudinal slot for discharging air over the fuel on the grate, a pipe connected with each of said ducts at the downwardly deflected portion thereof and adjacent to the horizontal portion, and on the side of the grate opposite to the distributing pipe, for discharging air into the combustion chamber behind the burning fuel, and dampers pivotally mounted at the point where the pipes discharging behind the grate communicate with the downwardly extending portions of the ducts, said dampers when closed providing substantially continuous wall members for the ducts first named, and when in open position deflecting a portion of the incoming air to the pipes discharging air behind the grate.

1,268,038. CLASS-ROOM SANITARY WARDROBE AND BLACKBOARD. FRANK B. MILLER, Jefferson City, Mo. Filed Oct. 8, 1917. Serial No. 195,383. (Cl. 45—37.)



A wardrobe including a plurality of blackboard sections, each having garment-hanging means on its rear side, a pivot on which each section turns, a pinion loose on each pivot, a locking device mounted on each section and releasably engaging the associated pinion to lock the same to the associated section, means on each section for releasing the locking device thereof, and a common actuating means for the pinions.

1,268,039. PNEUMATIC STARTING DEVICE FOR INTERNAL-COMBUSTION ENGINES. JOHN E. MILLER, Moline, Ill., assignor to Midland Motor Company, a Corporation of Illinois. Filed Aug. 11, 1911. Serial No. 643,580. Renewed Oct. 26, 1917. Serial No. 198,738. (Cl. 230—37.)



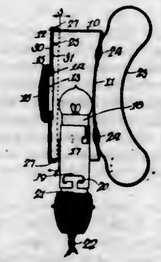
1. In a starting device for internal combustion engines, the combination of an engine shaft, a countershaft connected with the said engine shaft, a compressed air system, a combination air motor and compressor included in the air system, means operable at will for connecting the engine shaft with the said combination motor and compressor, means operable at will for connecting the said countershaft with the motor and compressor, and automatic means for disengaging the last mentioned connection when the pressure in the air system reaches a predetermined point.

2. In a starting device for internal combustion engines, the combination of a main engine having a crank shaft and a countershaft, a combined compressor and motor having a shaft, two power transmitting devices mounted loosely on the latter shaft, mechanical connections between one of said power transmitting devices and the countershaft of the engine, mechanical connections between the other of said power transmitting devices and the crank shaft of the engine, means for connecting either of said power transmitting devices with the shaft of the motor and compressor to revolve with the same, a compressed air storage tank, and pipes for conducting air from the motor and compressor to the storage tank to be stored therein and for conducting the stored air to the motor and compressor to actuate the latter as a motor, substantially as set forth.

3. In a starting device for internal combustion engines, the combination of a main engine, an air compressor and motor, a compressed air storage tank, an air pipe leading from the compressor and motor and having a check valve opening toward the tank, a second air pipe through which compressed air may be received by the compressor and motor from the storage tank and which is provided with a check valve opening toward the compressor and motor, a third valve controlling the passage of compressed air through the second air pipe, a loose mechanical connection between the shaft of the compressor and motor and a countershaft of the engine, a second loose mechanical connection between the shaft of the compressor and motor and the crank shaft of the engine, means for connecting up either of the said mechanical connections for the transmission of power, which means engages the said third valve to open the same and allow compressed air to pass to the compressor and motor when the second mechanical connection is operated betwen the shaft of the motor and compressor and the crank shaft of the engine, substantially as set forth.

[Claims 4 to 6 not printed in the Gazette.]

1,268,040. HAND-LAMP AND SIGNAL. CHARLES G. MOLLAN, Chicago, Ill. Filed Mar. 12, 1917. Serial No. 154,246. (Cl. 40—132.)

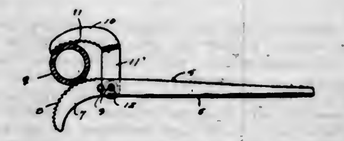


1. A signal lamp comprising a casing, a cap or cover detachably and revolubly mounted on the casing and having sign forming openings therein, means to limit its rotation in one direction, a lamp within the casing and a hand engaging device carried by the casing.

2. A signal lamp comprising a casing, a window in the casing and a resilient hand strap extended across and carried by the casing, said strap having loops at its ends and bowed inwardly between its ends.

3. A signal lamp comprising a portable casing having an inwardly curved wall to fit the back of a human hand, a cap or cover detachably mounted on the casing and having sign forming openings therein, means to fix said cover on the casing in such a position as to render the said sign forming openings legible when the lamp is in use on the hand, a lamp within the casing, and a hand engaging device carried by the casing cross-wise the curved wall thereof.

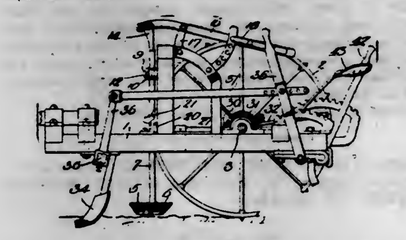
1,268,041. PIPE-WRENCH. JOSEPH D. MOORE, Burkett, Tex. Filed Mar. 5, 1918. Serial No. 220,592. (Cl. 81—90.)



A wrench comprising a tapered handle having its enlarged end curved downwardly and forwardly to provide a relatively stationary jaw, the convex face of which is serrated, a curved relatively movable jaw having a serrated concave face having formed integrally with its rear

end a pair of depending spaced shanks, said shanks being at substantially right angles to the jaw and in chordal relation thereto and adapted to have their terminals pivotally secured to the handle in rear of the stationary jaw, and said handle provided with means whereby the movable jaw may be adjusted longitudinally with relation to the active face of the stationary jaw.

1,268,042. COTTON-CHOPPER. THOMAS M. MORAN, Colton, Cal., assignor of one-half to R. E. Thomas, Los Angeles, Cal. Filed Aug. 29, 1916. Serial No. 117,508. (Cl. 97—45.)

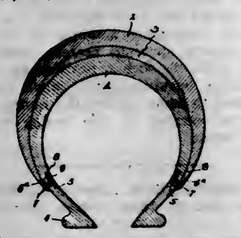


1. A cultivator of the class described including in combination a supporting frame, oppositely arranged cooperating chopping hoes, pivoted supports for said chopping hoes, adjusting devices for pivoting and laterally positioning said chapping hoes upon the said pivoted supports, means including a reciprocating member for swinging said chopping hoes upon the pivoted adjusting devices, and means for adjustably attaching the chopping hoes to the reciprocating member with relation to the aforesaid pivoted supports.

3. A cultivator of the class described including in combination, a supporting frame, oppositely arranged chopping hoes pivotally carried by said frame, and means for moving said chopping hoes, said means including a horizontally disposed bar having an intermediate slot therein oppositely curved at each end, guides for said bar, and a rotating roller alternately operable against each curved end of the aforesaid slot.

[Claims 2 and 4 not printed in the Gazette.]

1,268,043. PNEUMATIC TIRE. ALBERT M. MYERS, Harrisburg, Pa. Filed Dec. 1, 1917. Serial No. 204,813. (Cl. 152—17.)



2. A wheel-tire, the inner member of which is provided with an annular member set into a socket in the inner wall of said inner member, said annular member receiving the fastening or connecting means between said inner member and the outer member of the tire and including a body portion with inwardly foldable end portions serving as flaps, one of said flaps providing for the passage of the fastening means therethrough and the other flap adapted to inwardly fold upon the body portion and the latter with the inwardly folded flap, adapted to be received within said socket and serve to guard or isolate said fastening means received by the aforesaid end flap.

[Claims 1 and 3 not printed in the Gazette.]

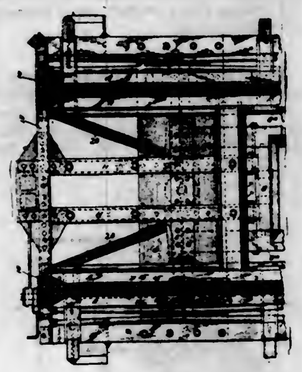
1,268,044. COLLAR-BUTTON. THOMAS NAST, Mamaroneck, N. Y. Filed Aug. 7, 1917. Serial No. 184,966. (Cl. 24—63.)



3. The combination in a collar button, of the base portion, the elliptical stem portion, the head portion, the head portion provided at its end with recessed guides, bridged at the center, to form a channel, for retaining a safety pin or the like.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,268,045. RAILWAY-CAR. JOHN O. NEIKIRK, Lombard, Ill. Filed Apr. 26, 1916. Serial No. 93,662. (Cl. 105—76.)



1. A car structure comprising longitudinal wooden sills adapted to support the vertical load, and longitudinal metallic members embraced by said wooden sills adapted to receive the pulling and buffing stresses.

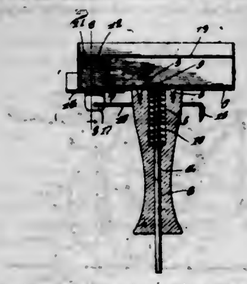
5. A car structure comprising bolsters end sills and longitudinal sills, said longitudinal sills consisting of wooden beams adapted to support the vertical load, and metallic members to receive the pulling and buffing stresses, said metallic members being embedded in said wooden beams and secured to said bolsters and end sills and extending from one end sill to the other.

10. A car structure comprising bolsters having wide top plates to afford means for secure attachment to the overlying sills, side sills, intermediate sills between said side sills and the longitudinal center of the car, said side and intermediate sills lying above and resting on said bolsters, draft sills lying substantially in the plane of said bolsters, said intermediate sills consisting of wooden beams adapted to carry the vertical load, and metallic members to receive the pulling and buffing stresses, said metallic members adjacent said bolster being secured to the top plate thereof.

[Claims 2 to 4, 6 to 9, and 11 not printed in the Gazette.]

1,268,046. MOLDING DEVICE. OLIVER NEWMAN, Madrid, Iowa. Filed Oct. 5, 1916. Serial No. 123,907. (Cl. 107—48.)

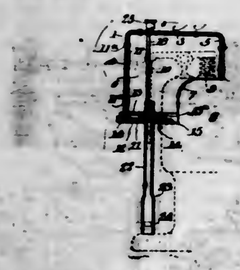
1. In a molding device of the class described, the combination of a receptacle, a handle secured to said receptacle, said receptacle having alined slots, extending longitudinally thereof, a flat knife projecting through said slots, parallel bent portions extending from the ends of said knife, said bent portions extending around under said receptacle, whereby said knife will be held against displacement, and means for moving said knife longitudinally of said slots.



3. In a molding device of the class described, the combination of a receptacle, a handle secured to said receptacle, said receptacle having alined slots extending longitudinally thereof, a flat knife projecting through said slots, parallel bent portions extending from the ends of said knife, said bent portions extending around under said receptacle, whereby said knife will be held against displacement, means for moving said knife longitudinally of said slots, and means positioned below said knife for preventing the packing of ice-cream under said knife.

[Claims 2 and 4 not printed in the Gazette.]

1,268,047. DUST AND SILENCER HOOD FOR VALVE-IN-HEAD MOTORS. CHARLES O. NORMAN, Montgomery, Ala. Filed Nov. 24, 1917. Serial No. 203,855. (Cl. 123—87.)



2. The combination with a one-piece hood for valve-in-head motors, and a hood supporting base having slots, of straps attached to the hood and having tongues projecting from the hood for engaging the slots.

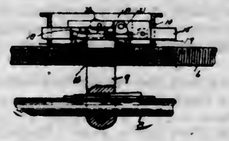
5. The combination with a hood for valve-in-head motors, and a hood-supporting base adapted to fit one side of the motor and having slots, of tongues depending from one side of the hood and extending through the slots, clamping bolts for securing the hood to the base, and bolts for securing the base to the motor.

7. The combination with a hood for valve-in-head motors adapted to have one side member supported by the top of the motor, and a portion of this side thereof closed by application to the motor, and inclined hood ends having a cut out, of a supporting bottom fitting the said closing side of the motor and having the other side of the hood resting thereon, a plurality of push rod casings held by said bottom and projecting into the hood, means for connecting the hood with the bottom, and means for connecting the bottom with the motor.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,268,048. MECHANICAL MOVEMENT. ORVILLE P. NORMAN, Los Angeles, Cal. Filed Sept. 10, 1917. Serial No. 190,450. (Cl. 74—98.)

1. A mechanical movement comprising the combination of a pair of screws spaced from each other, a conveyer therebetween having threads thereon and arranged to be moved into engagement with either of said screws, a change bar for maintaining said conveyer in engagement with either screw, means on said bar to transfer said conveyer from one screw to the other, and means operable at will to hold said conveyer in neutral position out of engagement with both screws.

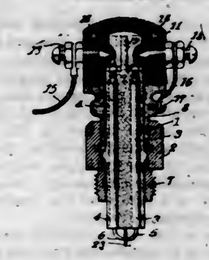


2. A mechanical movement comprising the combination of a pair of screws spaced from each other, a conveyer having threads arranged to be swung into engagement with either screw, a change bar for said conveyer arranged to hold the latter in engagement with either screw, means on said bar to transfer said conveyer from one screw to the other, and means on said bar permitting the conveyer to transfer and automatically locking the conveyer against a screw after its transfer.

5. A mechanical movement, comprising the combination of a pair of screws spaced from each other, a shaft disposed below and between said screws, a conveyer pivotally and slidably mounted thereon, said conveyer having threads and arranged to be moved into engagement with either of said screws, a change bar slidably disposed with respect to said conveyer and arranged to engage and old said conveyer in engagement with either screw, said bar having a pair of openings through which said conveyer may pass from one side to the other, means adjacent to said openings and on said bar to transfer said conveyer from one side of said bar to the other, latches normally closing said opening, and means operable at will to hold said conveyer in neutral position out of engagement with both screws.

[Claims 3 and 4 not printed in the Gazette.]

1,268,049. SPARK-PLUG. WILLIAM J. O'GORMAN, New York, N. Y. Filed Feb. 10, 1917. Serial No. 147,761. (Cl. 123—169.)



1. In a spark plug of the character described, the combination of the insulating core, a metallic threaded bushing therefor having its upper end formed to constitute a socket or holder provided with observation openings in its sides, a chambered body of insulation mounted in said socket or holder and provided with openings in its sides registering with the openings in the holder and a terminal post mounted directly in said insulating body and having a spark point located in said chamber in line with the opening therein.

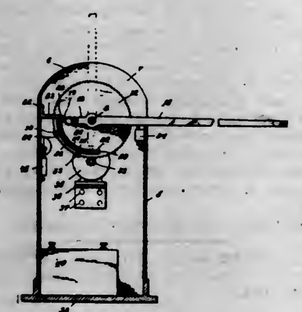
2. A spark plug having two artificial gaps located in the head of the plug and provided with an insulating core or porcelain having conducting wires or rods terminating at their upper ends in points for two artificial gaps, the end of said porcelain being extended as a web or barrier between said points to form an insulating barrier between the gaps and prevent short circuiting of the ignition gap.

3. In a spark plug having two artificial gaps located in the head of the plug, conducting wires or rods extending

longitudinally through the insulating core or body and terminating at their upper ends in points for artificial gaps, said gaps being located in chambers the side walls of which are formed in part by the metallic extension of the fastening bushing for the core and in part by a chambered block of insulating material having openings registering with openings in the metallic extension and spark plug terminals the points of which terminate in the chambers formed in the insulation and opposite the upper ends of the said conducting wires or rods as and for the purpose described.

4. In a spark plug, the combination substantially as described, of the insulating body or core provided with the conducting wires or rods terminating at their upper ends in points for a spark gap or gaps, a fastening bushing for said core extending up above the level of said terminal points, the metal of said extension being provided with openings opposite the wire terminals, and an insulating body fastened in said extension and carrying the spark plug terminals, the ends of which coöperate with the ends of said wires or rods to form artificial spark plug gaps opposite said openings and a web or barrier extending vertically between the spark gaps.

1,268,050. RAILROAD-CROSSING GATE. JOSEPH OMERZO, Chicago, Ill. Filed Aug. 17, 1917. Serial No. 186,781. (Cl. 269—3.)

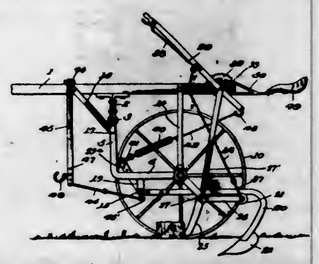


1. A device of the class described comprising a gate, a reversible motor to operate the gate and having a field coil, normally open, train operated switches on opposite sides of the gate, a circuit for the coil closed by one switch for causing the current to flow in one direction through the coil, another circuit for the coil closed by the other switch for causing the current to flow in the opposite direction through the coil, means for holding said switches closed when operated by the train, an electro-magnet at each switch for controlling said means, circuits for said magnets closed by said gate near the respective limits of its opening and closing movement.

2. A device of the class described comprising a gate, a reversible motor to operate the gate and having a field coil, normally open, train operated switches on opposite sides of the gate, a circuit for the coil closed by one switch for causing the current to flow in one direction through the coil, another circuit for the coil closed by the other switch for causing the current to flow in the opposite direction through the coil, each of said switches including a spring controlled arm having a plurality of insulated portions thereon, contacts coöperating with each portion, said contacts and portions being connected with the circuits, a catch member for holding the arm in closed position when operated by the train, and an electro-magnet controlling said catch member, and circuits for said magnets closed by said gate near the respective limits of its opening and closing movement.

1,268,051. PLOW. CHARLES OQUIST, Neosho, Mo. Filed May 7, 1917. Serial No. 166,966. (Cl. 97—36.)

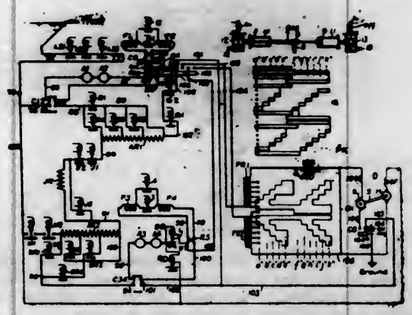
2. In a riding plow, a plow beam mounted for upward and downward swinging movement, and a rocker comprising one arm extending beneath the beam and arranged to ride thereon and lift the said beam when the rocker is moved upon its pivot in one direction and a second arm located in advance of the share supporting portion of the beam and forming an obstruction-engaging member.



3. In a riding plow, a plow beam mounted for upward and downward swinging movement, a rocker including an arm extending rearwardly beneath the beam and arranged to ride thereagainst and lift the said beam when the rocker is moved upon its pivot in one direction, and a downwardly extending obstruction engaging arm located in advance of the share supporting portion of the beam, and means yieldably holding the beam in coöperative relation to the rocker.

[Claims 1 and 4 to 6 not printed in the Gazette.]

1,268,052. SYSTEM OF CONTROL. LAURENCE M. PERKINS, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Mar. 13, 1916. Serial No. 83,724. (Cl. 172—179.)



1. In a system of control, the combination with a supply circuit and a plurality of dynamo-electric machines adapted for regenerative operation, of a single means directly dependent upon initial regenerative voltage conditions of said machines for selectively grouping the machines in accordance with the relation of such voltage conditions to supply-circuit voltage conditions.

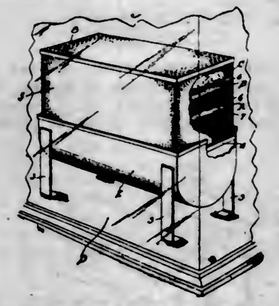
2. In a system of control, the combination with a supply circuit and a plurality of dynamo-electric machines adapted for regenerative operation, of a single electromagnetic means directly associated with said machines for effecting the selective grouping of the machines under different regenerative conditions in such manner that the voltage of each group approximately equals the supply-circuit voltage.

6. In a system of regenerative control, the combination with a supply circuit, and a plurality of momentum-driven dynamo-electric machines, of a single relay device for automatically connecting the machines in parallel relation when conditions are suitable for parallel-connected regeneration thereof and for connecting the machines in series relation when conditions are suitable for series-connected regeneration thereof.

13. The combination with a plurality of dynamo-electric machines adapted for series-parallel operation, of a plurality of main-circuit multi-section resistors, a plurality of sets of switches for varying the active values of said resistors, means for connecting a first and a second switch from each set intermediate the corresponding machine and the respective terminals of the corresponding resistor, and means for disposing the other switches to permit of the same sequence of operation thereof during both series and parallel operation of the machines.

[Claims 3 to 5, 7 to 12, 14, and 15 not printed in the Gazette.]

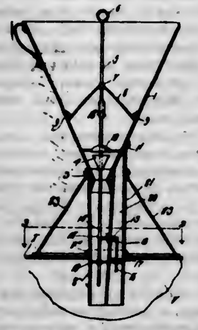
1,268,053. APPARATUS FOR THE ABSORPTION OF MOISTURE AND GASES. PAUL POETSCHKE, Milford, Del., assignor to Palo Company, New York, N. Y., a Corporation of New York. Filed Mar. 1, 1917. Serial No. 151,849. (Cl. 34—1.)



1. A device for the spontaneous treatment of air, comprising a trough having rests or seats, a box with walls perforated by small apertures and bottom adapted to nest in the top of said trough at the seats, a series of finely perforated shelves insertible in said box to form separate compartments into and out of which air may pass through said walls and bottom, and a perforate closure for the top of the box.

2. A device for the spontaneous treatment of air, comprising, in combination, a moisture receiving trough having an open top, a box for receiving different reagents, and having its walls, top and bottom perforated with fine apertures, said box nesting in the top of the trough, and detached shelves spaced one above the other in said box for subdividing the chamber to hold separately the different reagents.

1,268,054. FUNNEL. HERMAN G. RASMUSSEN, Ivanhoe, Minn. Filed June 29, 1917. Serial No. 177,804. (Cl. 226—33.)



A funnel having a valve seat arranged at the junction of the body and spout, centering guides carried by said body and spout, a valve stem mounted to slide in said guides, a valve carried by said stem and adapted to seat on the above referred to valve seat, a lateral projection carried by said stem, a chamber formed at one side of said spout with an opening communicating with the spout, a lever fulcrumed intermediately of its ends in said opening, with one end extending into the path of the projection on said valve stem, a rod pivoted to the other end of said lever and provided with a float, said lever being designed to engage the projection on said valve stem, and hold the valve in raised position whereby the raising of the float incident to the rising of the liquid in said chamber will operate to release the valve.

1,268,055. MOP-WRINGER. SÖREN CHRIS REPSHOLDT, Omaha, Nebr. Filed Sept. 13, 1917. Serial No. 191,169. (Cl. 15—12.)



1. A mop wringer comprising a receptacle supporting base, a wringer mechanism tiltably and adjustably mounted thereon whereby the same may be bodily tilted and adjusted vertically relative to said base, and operating means for the wringer mechanism.

5. In combination with a wringer mechanism and a support therefor, parallel upright standards carried by the support and having a V-shaped slot and an inclined slot rearwardly opening at the free edges of the standards and with sockets at the bottoms of said slots, depending legs carried by the wringer mechanism, parallel rods carried by said legs adapted for reception within said slots and for seating in said sockets when the legs are arranged parallel with said standards and the device is operatively positioned, one of said rods being arranged at an intermediate point within the inclined slots and the other rod being arranged at the rear ends of said V-shaped slots when the legs are in their adjusted angular arrangement with respect to said standards.

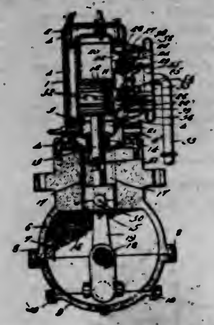
8. In combination, a receptacle supporting base, upright standards upon the base, a wringer mechanism including a box connected to said standards, a presser board within the box, an operating shaft carried by the box, a guide secured between said standards, a treadle means operatively connected to said shaft and slidably arranged through said guide, and means associated with the treadle means to maintain the board in its rearward inoperative position.

[Claims 2 to 4, 6, 7, and 9 not printed in the Gazette.]

1,268,056. INTERNAL-COMBUSTION ENGINE. ALBERT E. RUETHER, St. Paul, Minn. Filed Apr. 24, 1917. Serial No. 164,214. (Cl. 123—63.)

1. In a multiple cylinder internal combustion engine, a block of cylinders, multiple cylinder heads detachably secured to said block of cylinders and forming combustion chambers at opposite sides of the pistons, said cylinder block being formed with an intake port and an exhaust port for each combustion chamber arranged at such distances from the cylinder heads as to be covered and uncovered by the respective piston in each complete back and forth movement thereof, rotary valves controlling said intake and exhaust ports and turning on parallel axes, said valves being geared to and positively driven from the crank shaft, a sectional plate housing in said valves and divided along intersecting longitudinal and transverse lines into series of sections, each section having an intake port and an exhaust port in alinement with the respective intake and exhaust ports in the cylinder

walls, and means for fastening the sections of said plate in position enabling any section to be detached without disturbing the other sections.



2. In a multiple cylinder internal combustion engine, a block of cylinders, multiple cylinder heads detachably secured to said block of cylinders and forming combustion chambers at opposite sides of the pistons, said cylinder block being formed with an intake port and an exhaust port for each combustion chamber arranged at such distances from the cylinder heads as to be covered and uncovered by the respective piston in each complete back and forth movement thereof, rotary valves controlling said intake and exhaust ports and turning on parallel axes, said valves being geared to and positively driven from the crank shaft, a sectional plate housing in said valves and divided along intersecting longitudinal and transverse lines into series of sections, each section having an intake port and an exhaust port in alinement with the respective intake and exhaust ports in the cylinder walls, means for fastening the sections of said plate in position enabling any section to be detached without disturbing the other sections, the valve driving means comprising bevel gears fast on the shafts of said rotary valves, a countershaft perpendicular to the valve shafts and having reversely facing bevel gears thereon meshing with the bevel gears on the valve shafts, and motion transmitting means between the crank shaft and said countershaft.

1,268,057. DIRECTION-INDICATOR. JOSEPH R. RUMMERFIELD, Plattsmouth, Nebr., assignor of forty-five one-hundredths to Adolph Giese, Plattsmouth, Nebr. Filed July 18, 1916. Serial No. 109,929. (Cl. 116—31.)

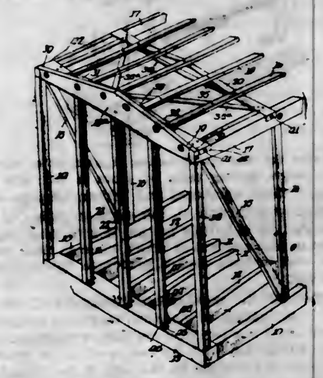


1. A direction indicating device including a tubular member provided with means for mounting it on a vehicle, a vertical shaft carried by the tubular member at the front end thereof and having an indicating member, a rear box or casing mounted on the tubular member at the rear end thereof, a shaft journaled in the rear box or casing and provided with a segmental drum, a flexible connection arranged on the segmental drum and extending therefrom to the front vertical shaft and connected therewith, said rear shaft being provided with a plurality of flat faces, a spring engaging the flat faces for holding the indicating member against accidental movement and a stop arranged in the path of the flat face of the segmental drum for limiting the rotary movement thereof to prevent breakage of the flexible connection.

2. A direction indicator of the class described including a tubular supporting member extending longitudinally of a vehicle and composed of frant and rear portions arranged at an obtuse angle to each other, said supporting member being provided at the angle formed by the said front and rear portions with means for securing it to a vehicle at one end of the wind shield with the said front portion extending forwardly and laterally from the wind shield in position to be seen from the front and the rear as well as by the driver, a pivoted indicating member mounted on the front portion of the tubular member at the outer end thereof, and operating means located at the rear end of the rear portion of the said tubular member and connected with the pivoted indicating member for turning the same.

[Claim 3 not printed in the Gazette.]

1,268,058. CAR CONSTRUCTION. THOMAS NATHAN RUSSELL, Chicago, Ill., assignor to Chicago Cleveland Car Roofing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 26, 1914. Serial No. 814,519. (Cl. 105—192.)



1. A car end framing construction comprising, in combination, metallic end posts, a metallic end carline having a curved central portion downwardly and rearwardly inclined with respect to the outer faces of said end posts and provided with an outwardly projecting lower flange and an inwardly projecting upper flange, said lower flange being connected to said end posts.

4. A car end framing construction, comprising, in combination, end posts, a metallic end carline having a curved central portion downwardly and rearwardly inclined with respect to the outer faces of said end posts and provided with outwardly projecting lower flanges and inwardly projecting upper flanges, said lower flanges being connected to said end posts.

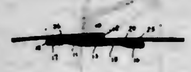
7. A car end framing construction, comprising, in combination, end posts, a metallic end carline having a curved central portion downwardly and rearwardly inclined with respect to the outer faces of said end posts and provided with outwardly projecting lower flanges and inwardly projecting upper flanges, said lower flanges being connected to said end posts and projecting beyond said central portion to a substantially uniform extent throughout its length.

10. A car end framing construction comprising in combination end posts, a pressed metallic end carline having a downwardly disposed central portion and provided with an outwardly projecting lower flange of substantially uniform width throughout and an inwardly projecting upper flange, said lower flange being directly connected to said end posts and projecting beyond the central portion to a substantially uniform extent throughout its length.

11. A car end framing construction comprising in combination end posts, a metallic end carline having a downwardly disposed central portion and provided with an outwardly projecting lower flange of substantially uniform width throughout and an inwardly projecting upper flange, said lower flange being connected to said end posts, said inwardly projecting upper flange increasing in width from the center toward the ends.

[Claims 2, 3, 5, 6, 8, and 9 not printed in the Gazette.]

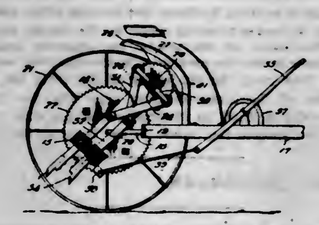
1,268,059. SEAM FOR RAIN-COATS. RALPH ROSE SANDFORD, New London, Ohio, assignor of one-half to The New London Mfg. Co., New London, Ohio. Filed Oct. 31, 1917. Serial No. 199,459. (Cl. 2—86.)



3. In a waterproof garment, a seam comprising overlapping seam sides, a seam strip of fabric material overlying the said overlaping seam sides, the said seam strip having one edge tucked under and the other edge provided with a binding, an adhesive substance between the contacting surfaces of the said seam sides and the said strip, and stitches connecting the said seam sides with the tucked under edge and the said binding edge, the said cement filling the stitch holes.

[Claims 1 and 2 not printed in the Gazette.]

1,268,060. STALK-CUTTER. CHARLES E. SCHAEFFER, Lucas, La. Filed Aug. 25, 1917. Serial No. 188,218. (Cl. 56—63.)



In a stalk cutter, a cross bar having a forwardly extending bracket and provided with front and rear rods operating therethrough and having knives at their lower ends, uprights rising from the ends of the cross bar, a tongue having hound members provided with spindles journaled in the uprights, ground wheels mounted for rotation on the spindles, a crank shaft supported for rotation on the uprights, pitmen connecting the cranks of said shaft with the front and rear knife carrying rods, means for transmitting motion from the ground wheels to the crank shaft, a lever fulcrumed on the tongue and having a latch, a rack segment secured on the tongue and engaged by the latch, and a link connecting the lever with the forwardly extending bracket of the cross bar.

1,268,061. BINDING DEVICE FOR MOLDS, &c. ELMER E. SPEER, Ballston, Va., assignor to Gabriel Edmonston, Washington, D. C. Filed Aug. 17, 1916. Serial No. 115,491. (Cl. 24—25.)

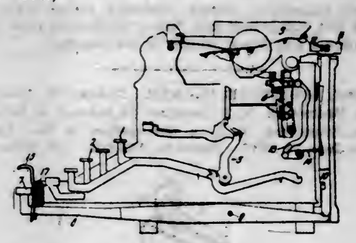
1. A device for binding molds, &c., comprising a band, a metal keeper for connecting the ends of the band, said keeper being U-shaped in cross-section and having alining apertures in its side walls near the opposite ends thereof, cams rotatably mounted in said apertures to coact with a part of the keeper to clamp the ends of the band therein, means for tightening said band around the



mold, and means carried by one of the cams to provide for manually turning the same.

[Claims 2 to 5 not printed in the Gazette.]

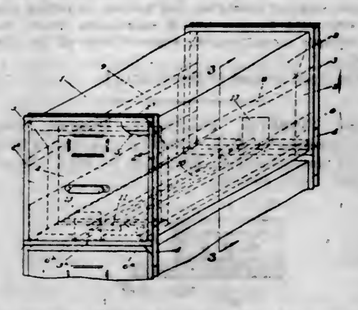
1,268,062. TYPE-WRITING MACHINE. HARRY YATES, Hapeville, Ga., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 27, 1917. Serial No. 188,278. (Cl. 197—176.)



1. The combination with a series of closely-nested keys having striking surfaces in close proximity and in alinement with each other, of a false key for making one of said series of keys more accessible, said false key supported below the striking surface of the key with which it is associated and extending to a projected position above the striking surface of such associated key.

[Claims 2 to 4 not printed in the Gazette.]

1,268,063. METALLIC FILING-CASE. WILLIAM K. COCHRAN, Springfield, Ohio. Filed Aug. 11, 1915. Serial No. 44,868. (Cl. 45—2.)



1. A metallic filing case, comprising an open bottom open ended case body provided with surrounding end frames, and a drawer having bottom and end sections normally closing said open bottom and ends, respectively.

2. A metallic filing case, comprising a single blank of sheet metal formed into top and side sections, said side sections terminating in drawer sustaining slide ways spaced from each other forming an open bottom, end frames surrounding said top and side sections and extending across said open bottom, and a drawer having a

bottom section provided with side runners mounted on said slide ways and provided with heads normally forming the ends of said filing case.

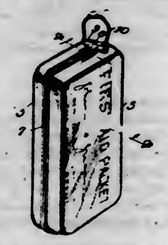
3. In a metallic filing case, a blank adapted to be folded along predetermined lines to form top and side sections and provided with notches opposite said predetermined lines of fold and having notched corners forming marginal portions at the front and rear adapted to be bent into front and rear flanges, the sides of said blank being provided with marginal portions adapted to be bent inwardly to form drawer sustaining slide ways when the case body is formed.

6. A metallic filing case, comprising an open bottom open ended case body formed of a single blank of sheet metal provided with stop flanges projecting within said open ends, and a drawer having bottom and end sections forming the bottom and ends of said case body and abutting against said stop flanges when closed.

7. A metallic filing case, comprising an open bottom open ended case body formed of a single blank sheet of metal and provided with end flanges forming drawer stops and terminating in inwardly extending drawer sustaining slide ways at the sides of said open bottom, and surrounding end supporting frames extending across said open bottom and supporting said drawer sustaining slide ways.

[Claims 4 and 5 not printed in the Gazette.]

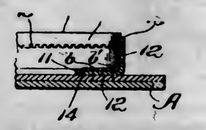
1,268,064. FIRST-AID PACKET. ROBERT W. JOHNSON, New Brunswick, N. J., assignor to Johnson & Johnson, New Brunswick, N. J., a Corporation of New Jersey. Filed June 19, 1917. Serial No. 175,602. (Cl. 220—68.)



1. A first aid packet, comprising the combination of confronting packet sections whereof each is provided with a continuous marginal sealing lip or flange, said flanges diverging so as to form an intermediate V space, a channel member overlying and having clenching engagement with said flanges, and a suspension device including a stripper straddling the opposed ends of the channel member.

[Claim 2 not printed in the Gazette.]

1,268,065. INSOLE. FRANCIS P. MURPHY, Newport, N. H., assignor to W. H. McElwain Company, a Corporation of Massachusetts. Filed Feb. 17, 1917. Serial No. 149,348. (Cl. 36—22.)



1. An insole having a strip comprising a pair of strip members free at one edge and secured together on a line spaced from the other edge, said members being respectively of woven material and paper.

2. An insole having a strip comprising a pair of strip members free at one edge and secured together on a line spaced from the other edge, one of said members having transversely extending stiffening elements.

[Claims 3 to 5 not printed in the Gazette.]

1,268,066. HOSIERY-FINISHING APPARATUS. JOSEPH G. PROSSER, Chicago, Ill., assignor to Paramount Hosiery Form Drying Co., Chicago, Ill., a Corporation of Illinois. Filed Apr. 6, 1918. Serial No. 227,069. (Cl. 223—17.)

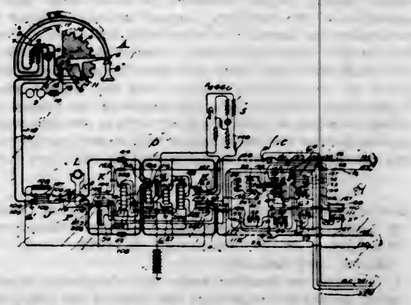


1. A drying and shaping structure for treating hosiery including a hollow form to contain a heating medium and having its front portion provided with a crease-forming edge, the opposite edge being flattened to present a seam-engaging surface whereby the seam of the goods is internally lined up and into a crease-formation.

2. A drying and shaping structure for treating moistened "full fashioned" hosiery comprising a hollow form to contain a heating medium and having sides which converge to a crease-forming edge at its front portion to crease the front of the goods, the opposite edge being approximately flat to present a seam-engaging surface of a width less than the thickness of the form but greater than that of the crease-forming edge whereby the seam of the goods is lined up internally and set with a crease-formation opposite the crease in the front of the goods.

1,268,067. [WITHDRAWN.]

1,268,068. AUTOMATIC MANUAL TELEPHONE SYSTEM. BERNARD D. WILLIS, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 18, 1910, Serial No. 538,583. Renewed Aug. 31, 1917. Serial No. 189,224. (Cl. 179—27.)



1. In a telephone system, a line, a cord for connecting therewith, a signal for said line, a relay, a source of current for operating said relay for opening the two sides of said cord to prevent current from said source from operating said signal, a second relay for controlling said first-mentioned relay, a condenser in series with the energizing circuit of said second relay, and substation-controlled means for operating said second relay.

2. In a telephone system, a line, a cord for connecting therewith, a signal for said line, a relay, a source of current for operating said relay for opening the two sides of said cord for preventing current from said source from operating said signal, a second relay for controlling said first-mentioned relay, a condenser in series with the energizing circuit of said second relay, and central station switchboard means for controlling said first relay.

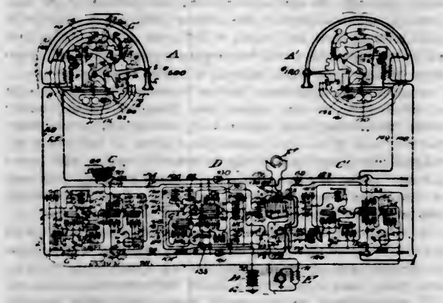
3. In a telephone system, a line, a cord for connecting therewith, a trunk line for extending a connection to said cord, means for supplying ringing current to said cord over the trunk circuit, a signal at said cord responsive to said current, and means responsive to said current for opening the cord to prevent the ringing current from ringing said line.

4. In a telephone system, a line, a flexible cord for connecting therewith, a trunk line terminating in said cord, a signal at said cord, means for transmitting ringing current over the trunk line to operate the said signal, and a relay responsive to said current when the signal is operated for opening the cord to prevent the ringing current from ringing the said line.

5. In a telephone system, a line, a switchboard cord for connection therewith, means by which a calling subscriber may extend connection to said cord, means controlled by the calling subscriber for transmitting ringing current to the cord, a signal at the cord responsive to said ringing current, and means for preventing said current from ringing the said line if the latter is still connected with said cord.

[Claims 6 to 28 not printed in the Gazette.]

1,268,069. AUTOMATIC COMMON-BATTERY TELEPHONE SYSTEM. EDWARD D. FALES, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Company, a Corporation of Illinois. Filed Nov. 6, 1906, Serial No. 342,259. Renewed Sept. 19, 1917. Serial No. 192,222. (Cl. 179—18.)



1. In a telephone exchange system, a talking circuit, a battery for supplying talking current to said circuit, a connector provided with a side switch, a trunk conductor extending from said connector, and means operated by the side switch for bridging the battery across the said circuit, said trunk conductor excluded from said circuit but included in said bridge.

2. In a telephone exchange system, a talking circuit, an automatic switch provided with a side switch, a battery, a trunk conductor extending from said automatic switch, and means operated by the side switch for bridging the battery across the said circuit, said trunk conductor excluded from said circuit but included in said bridge.

3. In a telephone exchange system, a talking circuit, a battery, a connector provided with a so-called private magnet, a trunk conductor extending from said connector, and means controlled by said magnet for bridging the battery across said circuit, said trunk conductor excluded from said circuit but included in said bridge.

[Claims 4 to 29 not printed in the Gazette.]

1,268,070. PROCESS FOR PREVENTING THE DEVELOPMENT OF BLACK ROT AND OTHER FUNGOUS AND BACTERIAL DISEASES IN LEAF-TOBACCO. WIGHTMAN W. GARNER and ERNEST G. BEINHART, Washington, D. C. Filed Jan. 10, 1918. Serial No. 211,164. (Cl. 131—6.) (Dedicated to the public.)

1. The hereindescribed method of treating leaf tobacco, consisting in subjecting the tobacco to alternate degrees of temperature and humidity for preventing the growth of fungous and other diseases in leaf tobacco.

2. The hereindescribed method of treating leaf tobacco, consisting in controlling the moisture content of tobacco by subjecting the material to the action of heated air at varying conditions of temperature and humidity for preventing the growth of fungous and other diseases in leaf tobacco.

1,268,071. TIRE-TOOL. THOMAS CATCHINGS HOLLIDAY, Canton, Miss. Filed Nov. 4, 1916. Serial No. 129,466. (Cl. 81—3.)



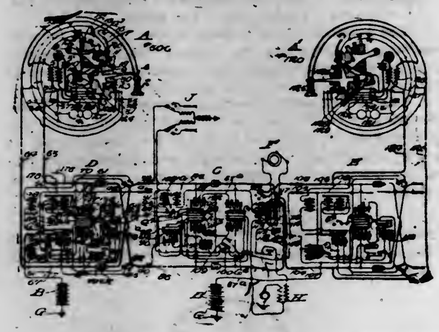
1. A tool of the class described including a handle, a resilient scraper element of thin, plate-like material disposed transverse to the axis of the handle and presenting broad front and back surfaces substantially perpendicular to the general plane of the tool, said element being flexible in the said plane and non-yielding in a transverse plane, the opposite edges of the bowed element being in the form of narrow dull scraper edges, and resilient members connected with the handle and with the bowed element at the ends only thereof to be responsive to a yielding of the said element in the plane of the tool, said resilient connecting members being flattened and tapering from the bowed element toward the handle.

[Claims 2 to 4 not printed in the Gazette.]

1,268,072. COMBINED SELECTOR AND REPEATER APPARATUS FOR LOCAL-BATTERY TELEPHONE-EXCHANGE SYSTEMS. TALBOT G. MARTIN, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co., a Corporation of Illinois. Filed July 22, 1917, Serial No. 384,891. Renewed Sept. 19, 1917. Serial No. 192,224. (Cl. 179—18.)

1. In a telephone system, a combined selector and repeater, a grounded battery, a pair of line relays for said

combined selector and repeater normally connected with said battery, a private normal conductor, a cut-off relay permanently connected at one end with said battery, means for connecting the other end of said relay with said private normal conductor, whereby when said private normal conductor is grounded the cut-off relay may energize to disconnect the line relays from said battery, an automatic switch, and means by which a calling subscriber uses said line relays to successively control said combined selector and repeater and said switch.



2. In a telephone system, a plurality of subscribers' stations, a battery local to each of said stations for supplying current thereto for talking purposes, trunk lines, a combined selector and repeater for selecting a trunk line comprising a pair of line relays, a pair of operating magnets, and a pair of switch wipers, said wipers controlling circuit connections whereby said relays first control said operating magnets and then control the transmission of impulses over said selector trunk line.

3. In a telephone system, a battery local to each subscriber's station for supplying current thereto for talking purposes, a combined selector and repeater for each subscriber, other switches whereby any subscriber may obtain connection with any other subscriber, a pair of condensers in opposite sides of the talking circuit, each said combined selector and repeater including a pair of line shaft wipers permanently connected with the subscriber's line through said condensers.

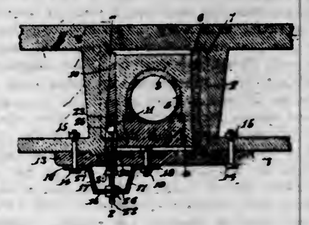
4. In a telephone system, a subscriber's station, a local battery for the same, trunk lines, an automatic trunk selector, and a suitable automatic switch, said trunk selector provided with line relays for controlling its own operations to seize said switch and also to control the operation of the said automatic switch.

5. In a telephone system, a subscriber's line, trunk lines terminating in automatic switches, a trunk selector subject to the control of the subscriber and provided with one or more line relays for controlling its own operations to seize a trunk line and also to control the said automatic switches over seized trunk lines, and a central battery for operating said selector, said line being free from said battery current during use of the same for conversational purposes.

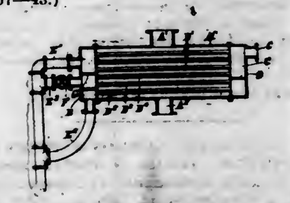
[Claims 6 to 27 not printed in the Gazette.]

1,268,073. ADJUSTABLE WEDGE. JOHN B. SWAN and ZORASTO P. CORNELL, Gladstone, Mich. Filed Aug. 6, 1917. Serial No. 184,699. (Cl. 105—113.)

In a device of the class described, the combination with a frame, a block within said frame, a strap against the bottom of said frame and supporting said block, of an auxiliary frame engaging the strap, fastening means engaging the bottom of the block and extending through said strap and a part of the auxiliary frame, said strap being provided with an aperture to one side of said block, a sleeve in said aperture, said sleeve provided at its upper end with an elongated, integral flange, a wedge resting upon said elongated flange of said sleeve, said wedge being positioned between the block and frame, said sleeve provided with a smooth bore throughout its length, an adjusting bolt loosely mounted in said sleeve, said adjusting bolt engaging at its upper end said wedge, a pair of nuts on said bolt between the inner face of said auxiliary frame and the lower end of said sleeve, one nut normally engaging the bottom of the sleeve, the other nut engaging the inner face of said auxiliary frame, and another nut on said bolt and engaging the outer face of said frame, substantially as shown and described.



1,268,074. SURFACE CONDENSER AND METHOD OF OPERATING SAME. PAUL A. BANCEL, Nutley, N. J., assignor to himself, and GEORGE H. GIBSON, Upper Montclair, N. J. Filed Dec. 7, 1915. Serial No. 65,448. (Cl. 257—43.)



1. The method of condensing steam in a surface condenser which consists in forcing one stream of cooling water through the tubes traversing the portion of the condensing space adjacent the steam inlet at a relatively high velocity and in forcing a different stream of cooling water through the tubes traversing a portion of the space more remote from said inlet at a lower velocity.

4. A surface condenser having a condensing space with a steam inlet at the upper end thereof, cooling water tubes traversing said space and circulating connections thereto, said tubes and connections being so relatively arranged and proportioned as to provide upper and lower parallel paths of flow, the expenditure of energy per unit of tube area for causing the flow of cooling water being greater in the upper path than in the lower path.

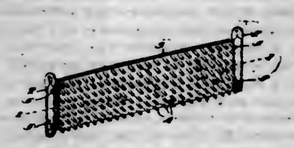
5. A surface condenser having a condensing space with a steam inlet at the upper end thereof, cooling water tubes traversing said space, and circulating connections thereto, said tubes and connections being so relatively arranged and proportioned as to provide upper and lower parallel paths of flow, for separate streams of cooling water through different groups of tubes, with the loss of head per unit of tube length greater in the upper path than in the lower.

8. A surface condenser having cooling water tubes forming multiple paths for the cooling water, means for subjecting some of said tubes to a greater difference in internal pressure or loss of head per unit of length than others, and means providing a by-pass of regulable flow resistance about some of said tubes.

9. In a surface condenser having cooling water tubes forming multiple paths for the cooling water, means for subjecting some of said tubes to a greater difference in internal pressure or loss of head per unit of length than others, and means providing a by-pass about some of said tubes.

[Claims 2, 3, 6, 7, and 10 not printed in the Gazette.]

1,268,075. GARMENT-HOLDER. STEPHEN A. GLYNN, Antigo, Wis., assignor of one-half to William Griffith and Michael E. Entzminger, Green Bay, Wis. Filed Sept. 6, 1917. Serial No. 190,012. (Cl. 241—7.)



In a garment supporting device, the combination of an elongated flexible member, a toothed rubber garment retaining strip secured over one side of the flexible member to frictionally engage a garment, and securing pins pivotally attached to the ends of the flexible member to adjustably engage the adjacent garment, substantially as shown.

1,268,076. PROCESS FOR MANUFACTURING SURGICAL DRESSINGS. KARL J. HOLLIDAY, Glen Osborne borough Pa., assignor to Holliday Chemical Company, Neville Island, Neville township, Pa., a Corporation of Pennsylvania. Filed Mar. 29, 1918. Serial No. 225,574. (Cl. 167—9.)

1. The process of manufacturing a surgical dressing which consists in taking paraffin and beeswax in the necessary proportions to obtain for the composition a definite melting point of from 120° to 140° Fahr. and mixing the same with a base to form an emulsion, then separating the waxes and soaps of said emulsion, and then eliminating the soaps, thereby obtaining a composition of paraffin and the esters and hydrocarbons of beeswax, substantially free from all free acids, and capable, when melted and applied to the flesh, of forming an elastic, non-cracking and non-irritating covering.

2. The process of manufacturing a surgical dressing which consists in taking paraffin and beeswax in substantially the proportions of from 95% to 65% paraffin and from 5% to 35% beeswax and mixing the same with a base to form an emulsion, then separating the waxes and soaps of said emulsion, and then eliminating the soaps, thereby obtaining a composition of paraffin and the esters and hydrocarbons of beeswax, having a definite melting point of 120° to 140° Fahr., substantially free from all free acids, and capable, when melted and applied to the flesh of forming an elastic, non-cracking and non-irritating covering.

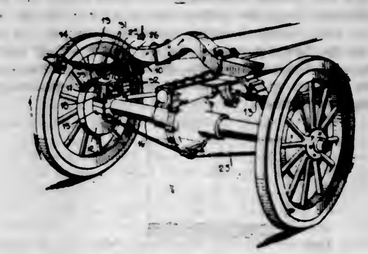
4. The process of manufacturing a surgical dressing which consists in taking paraffin, beeswax and a gum of the elemi group, in substantially the proportions of from 95% to 65% paraffin, from 5% to 35% beeswax, and from ½% to 5% gum, and mixing the same with a base to form an emulsion, then separating the waxes and soaps of said emulsion, and eliminating the soaps, thereby obtaining a composition of paraffin, the esters and hydrocarbons of beeswax, and gum, having a definite melting point of 120° to 140° Fahr., substantially free from all free acids, and capable, when melted and applied to the flesh of forming an elastic, non-cracking and non-irritating covering.

[Claim 3 not printed in the Gazette.]

1,268,077. SPRING-SUPPORT. JOHN KLEIN, Washington, D. C. Filed Sept. 15, 1917. Serial No. 191,640. (Cl. 267—27.)

1. The combination with an automobile chassis having a spring support embodying a pivot, of an auxiliary spring support clamped about the rear axle adjacent the brake housing and connected with the normal spring support at the pivot and an auxiliary spring carried upon the auxiliary spring support.

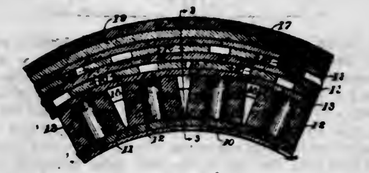
4. The combination with an automobile chassis having a spring support embodying a pivot, of an auxiliary spring support clamped about the rear axle adjacent the brake housing and connected with the normal spring support



at the pivot, a cradle pivoted upon the support, and an auxiliary spring carried by the cradle.

[Claims 2 and 3 not printed in the Gazette.]

1,268,078. CUSHION-TIRE FOR VEHICLE-WHEELS. HENRY M. LAMBERT, Portland, Oreg., assignor to Lambert Multiplus Co., Phoenix, Ariz., a Corporation of Arizona. Filed Sept. 11, 1916. Serial No. 119,437. (Cl. 152—1.)



1. The combination with a wheel having a rigid rim, of a cushion tire therefor comprising a flexible, but in itself substantially non-compressible, superstructure formed in part of circumferential fabric belts stretched to their approximate limit of elongation and a yielding support between the superstructure and the wheel rim comprising a fabric base secured to the wheel rim and rubber cushioning devices vulcanized to said base and to the superstructure.

2. The combination with a wheel having a rigid rim, of a cushion tire consisting of a superstructure embodying a plurality of concentrically spaced, non-stretchable, flexible, endless belts, separated by circumferentially and symmetrically spaced, non-compressible, flexible fillers, a circumferential fabric base to fit the wheel rim and spaced apart from the inner belt of the superstructure, and rubber cushioning devices between the base and the inner belt, the whole being integrally bonded.

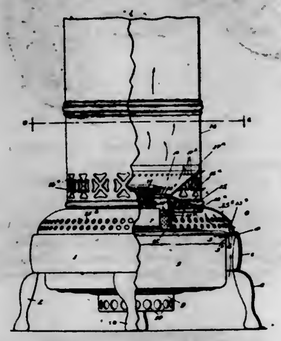
3. The combination with a wheel having a rigid rim, of a cushion tire consisting of a superstructure embodying a plurality of concentrically spaced, non-stretchable, flexible, endless belts, separated by circumferentially and symmetrically spaced, non-compressible, flexible fillers, a circumferential fabric base to fit the wheel rim and spaced apart from the inner belt of the superstructure, and rubber cushioning devices between the base and inner belt, the whole being integrally bonded, the circumferential edges of the inner belt of said superstructure being turned to engage the sides of the cushioning devices.

REISSUES.

14,477. OIL-STOVE. WILLIAM R. JEAVONS and ARNOLD R. WHITTAKER, Cleveland, Ohio. Filed Apr. 24, 1918. Serial No. 230,614. Original No. 1,258,416, dated Mar. 5, 1918, Serial No. 855,044, filed Aug. 4, 1914. (Cl. 158—94.)

1. In an oil stove, the combination of a font, a pair of wick tubes projecting upwardly from said font, a gal-

lery surrounding and spaced from the wick tubes, the top of the font extending outwardly from said gallery, a drum, a base for said drum extending outwardly above the font and extending inwardly substantially as far as the gallery, the base being provided with perforations in the outer and the inner portions thereof, and a shield within the drum and located above the inner portion of the drum base, the portion of the drum between the shield and the base being perforated.



2. In an oil stove, the combination of a font, a pair of wick tubes projecting upwardly from said font, a gallery surrounding and spaced from the wick tubes, the font having a top projecting horizontally outwardly from the gallery, a stove base surrounding and spaced from the font, said base having an annular seat at the upper end thereof and provided with segmental flanges projecting inwardly from said seat, the top of the font being provided with a flange adapted to seat the font upon the segmental flanges, an annular drum base adapted to be supported within said seat and extending above said top and provided with perforations, a drum mounted on said drum base between the inner and outer edges thereof, a collar depending from the inner edge of the drum base and coöperating with the top of the gallery, and a shield projecting downwardly and inwardly from the drum above the inwardly extending part of the drum base, the drum being perforated between said shield and the drum base.

3. In an oil stove, the combination of a font, a pair of wick tubes projecting upwardly from said font, a gallery surrounding and spaced from the wick tubes, the font having a top projecting horizontally outwardly from the gallery, a stove base surrounding and spaced from the font, said base having an annular seat at the upper end thereof and provided with segmental flanges projecting inwardly from said seat, the font being provided with means whereby it may be seated upon the segmental flanges, a perforated annular drum base adapted to be supported within said seat and extending above the top of the font, a drum mounted on said base between the inner and outer edges thereof, and a shield within the drum and above and spaced from the inner portion of the drum base, the drum being perforated between said shield and the drum base therebeneath.

4. In an oil stove, the combination of a font, a pair of wick tubes projecting upwardly from said font, a perforated gallery surrounding the wick tubes, the font having a top extending horizontally outwardly from said gallery, a stove base surrounding the font and having an annular seat with segmental flanges projecting inwardly from said seat with recesses between said flanges, a flange projecting outwardly from the top of the font and adapted to rest on said segmental flanges, an annular drum base adapted to fit within the seat and to extend above the top of the font and above the recesses between the segmental flanges, said drum base being provided with perforations above its outer edge, a drum mounted on said base between the edges thereof, a collar depending from the inner edge of said drum base and adapted to engage the top of the gallery, and a shield having its inner edge in proximity to and in substantial engagement with the inner edge of the drum base and projecting upwardly and outwardly therefrom to the inner wall of the drum, the drum being perforated between said shield and said drum base and the portion of the drum base within the drum being perforated.

5. In an oil stove, the combination of a font, a pair of wick tubes projecting upwardly from said font, the font having a top extending horizontally outwardly from the wick tubes, a stove base surrounding the font and having an annular seat with segmental flanges projecting inwardly from said seat with recesses between said flanges, a flange projecting outwardly from the font and adapted to rest on said segmental flanges, an annular drum base adapted to fit within the seat and to extend above the top of the font and above the recesses between the segmental flanges, a drum mounted on said base between the inner and outer edges thereof, and a shield within the drum above the portion of the drum base therewithin and spaced therefrom and arranged to protect such portion against the radiant heat of the flame above the wick tubes, the arrangement of parts permitting the air flowing through the recesses to circulate between the shield and the drum base.

6. In an oil stove, the combination of a font having an extended top, a burner projecting upwardly therefrom, a drum surrounding said burner, a drum base extending above the top of the font and spaced therefrom and supporting the drum intermediate of the inner and outer edges of said base, the drum base being perforated near its outer periphery and being perforated in the portion which is within the drum, a shield extending outwardly from the inner edge of the drum base as far as the drum and forming a space with the portion of the drum base therebeneath, said drum being perforated between the shield and the drum base.

7. In an oil stove, the combination of a font having a substantially horizontal top, a burner projecting upwardly from said top, a drum surrounding the burner and having a base extending outwardly and inwardly therefrom above the font, and a shield within the drum above the inner portion of said base, the arrangement of parts permitting air to circulate beneath the outer portion of the drum base above the font and through the inner portion of said base and outwardly through the space between the same and the shield.

8. In an oil stove, the combination of a font, a burner projecting upwardly from said font, the top of the font extending outwardly from said burner, a stove base surrounding the font and having an annular seat with segmental flanges projecting inwardly from said seat, each of said flanges being provided with one or more upwardly projecting bosses, there being recesses between said flanges, a flange projecting outwardly from the font and adapted to rest upon said bosses, an annular drum base adapted to fit within the seat and to extend inwardly above the top of the font and above the recesses between the segmental flanges, said drum base being provided with perforations above its outer edge, a drum mounted on said base between the edges thereof, a shield within the drum and above the drum base and spaced therefrom, the portion of the drum base below the shield being perforated and the portion of the drum between the shield and the drum base being perforated.

9. In an oil stove, the combination of a font, a burner projecting upwardly from said font, the top of the font extending outwardly from said burner, a stove base surrounding the font and having an annular seat with segmental flanges projecting inwardly from said seat, each of said flanges being provided with one or more upwardly projecting bosses, a flange projecting outwardly from the font and adapted to rest upon said bosses, an annular drum base adapted to fit within the seat and to extend inwardly above the top of the font and above the recesses between the segmental flanges, a drum mounted on said base between the edges thereof, an annular shield within the drum and above the drum base and spaced therefrom and forming an annular chamber therewith which is closed at its inner end, the portion of the drum base below the shield being perforated and the portion of the drum between the shield and the drum base being perforated.

10. In an oil stove, the combination of a font having a top, a burner projecting upwardly from said top, a drum surrounding the burner and having an annular bottom extending inwardly above the font, and an annular shield within the drum and above such bottom and forming therewith an annular chamber which is closed at the inner edge, the arrangement of parts permitting air to circulate above the font and outwardly through said chamber.

11. In an oil stove, the combination of a font, a burner projecting upwardly from said font, a drum surrounding the burner, an annular bottom for said drum and extending outwardly above the top of the font from the burner to the drum, said bottom being perforated, an annular shield within the drum and located above such drum bottom and forming therewith a chamber which is closed at the inner edge, the portion of the shield which is adjacent to the drum being provided with perforations arranged to admit a limited supply of air therethrough and the wall of the drum between the shield and the drum bottom being perforated.

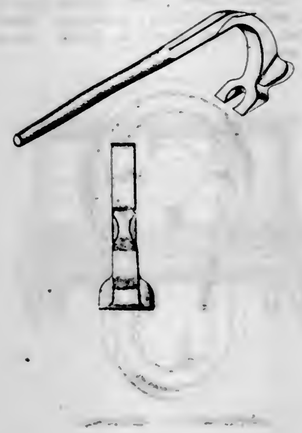
12. In an oil stove, the combination of a font, a burner projecting upwardly from said font, a drum surrounding the burner, an annular bottom for said drum extending outwardly above the top of the font from the burner to the drum, and an annular shield within the drum and located above such drum bottom and forming therewith a chamber which is closed at the inner edge, the portion of the shield which is adjacent to the drum being provided with perforations arranged to admit a limited supply of air therethrough and the portion of the drum between said annular bottom and said annular shield being perforated for the circulation of air therethrough.

13. The combination of a combustion chamber, means for producing a flame therein, a device for causing the flame to spread outwardly as it rises, a diaphragm constructed and arranged adjacent to the flame and extending substantially parallel therewith from a point near its base to a point near its upper extremity, and a casing surrounding the said flame and extending above and below the same and provided with openings below the upper extremity of said diaphragm, said diaphragm secured to said casing above the openings, and a partition below the said diaphragm provided with openings through which air passes to the said diaphragm and to the said openings in the casing.

14. The combination, with a font, of a burner projecting thereabove, a drum surrounding and extending above said burner and providing a combustion space thereabove, and a pair of partitions extending inwardly from the lower portion of the drum toward the burner and forming with such portion of the drum a chamber interposed between the combustion space and the font, the upper of said partitions being inclined downwardly from said drum and the portion of the drum between said partitions offering no material resistance to the outward radiation of heat from the upper partition.

DESIGNS.

52,052. SPIKE-BAR. LEONARD B. BAIRD and BASCUM H. HARPER, Townley, Ala., assignors of one-third to David F. McCullar, Townley, Ala. Filed Dec. 17, 1914. Serial No. 877,819. Term of patent 14 years.



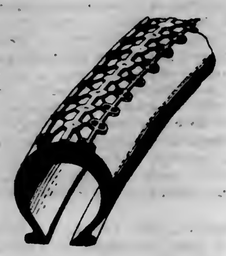
The ornamental design for a spike bar, as shown.

52,053. CASING FOR AUTOMOBILE-RADIATORS. ERNEST G. BRUCKMAN, New York, N. Y. Filed May 20, 1916. Serial No. 98,959. Term of patent 3½ years.



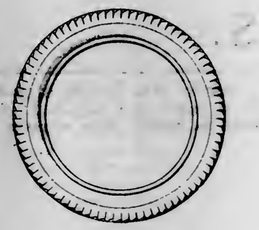
The ornamental design for a casing for automobile radiators, as shown.

52,054. PNEUMATIC TIRE. JOHN C. COLE, Springfield, Mass., assignor to The Dreadnaught Tire & Rubber Company, Orangeville, Md., a Corporation of Maryland. Filed Mar. 12, 1918. Serial No. 222,040. Term of patent 14 years.

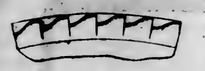


The ornamental design for a pneumatic tire, as shown.

52,055. TIRE. FRANK M. HALE and FLOYD C. MCLAUGHLIN, Kent, Ohio. Filed Oct. 31, 1917. Serial No. 199,588. Term of patent 14 years.







The ornamental design for a tire, as shown.

52,056. LAMP-CANOPY. SAMUEL JANKELSON, Rockaway Beach, N. Y., assignor to Incandescent Supply Company, New York, N. Y. Filed Feb. 9, 1918. Serial No. 216,354. Term of patent 3½ years.



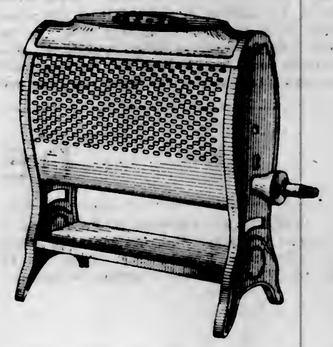
The ornamental design for a lamp canopy as shown.

52,057. LAMP-SOCKET COVER. SAMUEL JANKELSON, Rockaway Beach, N. Y., assignor to Incandescent Supply Company, New York, N. Y. Filed Feb. 9, 1918. Serial No. 216,355. Term of patent 3½ years.



The ornamental design for a lamp socket cover as shown.

52,058. HEATING-STOVE. LINDLEY S. LAWSON, Pittsburgh, Pa., assignor to Lawson Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 15, 1918. Serial No. 222,748. Term of patent 14 years.



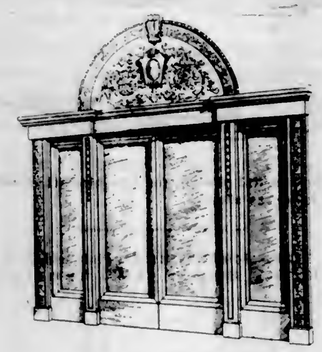
The ornamental design for a heating stove, substantially as shown.

52,059. WATER-CLOSET-BOWL FLOOR-PLATE. JOHN B. LUKOMSKI and ANTHONY LUKOMSKI, Detroit, Mich. Filed Jan. 19, 1916. Serial No. 73,054. Term of patent 14 years.



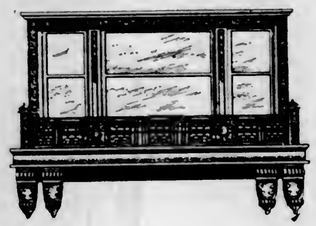
The ornamental design for a water closet bowl floor plate, as shown.

52,060. COMBINED DOOR AND DOOR-GRILLE. HELEN MATHEWSON, Los Angeles, Cal. Filed June 8, 1916. Serial No. 102,586. Term of patent 3½ years.



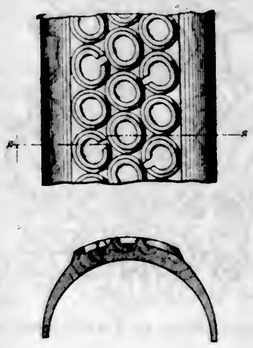
The ornamental design for a combined door and door grille as shown.

52,061. WINDOW. HELEN MATHEWSON, Los Angeles, Cal. Filed June 8, 1916. Serial No. 102,588. Term of patent 3½ years.



The ornamental design for a window as shown.

52,062. AUTOMOBILE-TIRE. JAMES B. MCDEVITT and MARIUS GREENSPAN, Chicago, Ill. Filed Apr. 17, 1917. Serial No. 162,775. Term of patent 14 years.



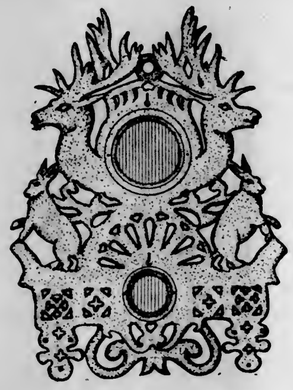
The ornamental design for an automobile tire, as shown.

52,063. COMMERCIAL UNIT FOR NITROGEN-LAMPS. BARNET NEWLAND, New York, N. Y., assignor to Incandescent Supply Company, New York, N. Y. Filed Feb. 9, 1918. Serial No. 216,359. Term of patent 3½ years.



The ornamental design for a commercial unit for nitrogen lamps as shown.

52,064. WATCH-HOLDER. PIOTR PAZNICKI, West Toronto, Ontario, Canada. Filed Apr. 18, 1918. Serial No. 229,439. Term of patent 14 years.



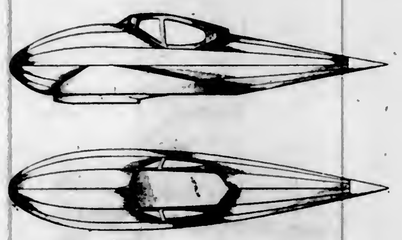
The ornamental design for a watch holder as shown.

52,065. CASING FOR WASHING-MACHINES. OTTO G. PFEIFFER, St. Louis, Mo., assignor, by mesne assignments, to St. Louis Washing Machine Company, a Corporation of Illinois. Filed Apr. 20, 1914. Serial No. 833,319. Term of patent 14 years.



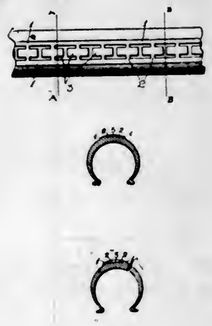
The ornamental design for a casing for washing machines as shown.

52,066. AIRCRAFT-FUSELAGE OR SIMILAR DEVICE. WILLIAM B. STOUT, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 1, 1918. Serial No. 219,902. Term of patent 7 years.



The ornamental design for an aircraft fuselage or similar device, as shown.

52,067. TIRE. JOHN TENNEY, Jr., Plainfield, N. J. Filed Nov. 13, 1915. Serial No. 61,439. Term of patent 14 years.



The ornamental design for a tire, as shown and described.

TRADE-MARKS

PUBLISHED MAY 28, 1918.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 93,291. (CLASS 39. CLOTHING.) BURD KNITTING MILLS CO., Philadelphia, Pa. Filed Mar. 4, 1916.

Dainty Maid

Particular description of goods.—Hosiery.
Claims use since March, 1914.

Ser. No. 95,309. (CLASS 38. PRINTS AND PUBLICATIONS.) THE PEOPLE'S LIFE INSURANCE COUPON CO., Baltimore, Md. Filed May 20, 1916.

RED, WHITE & BLUE.

No claim being made to a red, white, and blue coupon.
Particular description of goods.—Insurance Coupons or Certificates, Insurance-Stamps, Cash Coupons or Certificates, and Cash-Stamps.
Claims use since Feb. 15, 1916.

Ser. No. 100,313. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) ROLLS-ROYCE LIMITED, Toronto, Ontario, Canada. Filed Jan. 2, 1917.



Particular description of goods.—Automobiles.
Claims use since about January, 1911.

Ser. No. 101,471. (CLASS 38. PRINTS AND PUBLICATIONS.) H. W. BAUMGARTNER, Chicago, Ill. Filed Feb. 19, 1917.

Pit and Quarry

Particular description of goods.—A Trade-Paper Published Monthly.
Claims use since Oct. 1, 1916.

Ser. No. 102,120. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE KANSAS FLOUR MILLS COMPANY, Wichita and Kansas City, Kans. Filed Mar. 13, 1917.



Particular description of goods.—Wheat-Flour.
Claims use since Jan. 2, 1912.

Ser. No. 102,266. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STILLWATER GRAIN MILLS, Smithfield, R. I. Filed Mar. 19, 1917.



Particular description of goods.—Rye-Meal, Cornmeal.
Claims use since Feb. 19, 1917.

Ser. No. 102,490. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LONG SYRUP REFINING CO., San Francisco, Cal. Filed Mar. 27, 1917. Under ten-year proviso.

Long's

Particular description of goods.—Cane and Maple Syrup, Sugar, Preserved Fruits.
Claims use since the month of August, 1892.

Ser. No. 103,318. (CLASS 48. MALT BEVERAGES, EXTRACTS AND LIQUORS.) THE CROWN BREWING COMPANY, Cincinnati, Ohio. Filed Apr. 26, 1917.

TANG

Particular description of goods.—A Non-Alcoholic Extract of Malt and Hops.
Claims use since Apr. 14, 1917.

Ser. No. 103,363. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) RESO PRODUCTS CO. LTD., Zurich, Switzerland. Filed Apr. 27, 1917.

PYRESON

Particular description of goods.—Toilet Soaps.
Claims use since Jan. 30, 1917.

Ser. No. 103,526. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ROBERT E. CLARK, Charlottesville, Va. Filed May 4, 1917.

LIN-TOL

Particular description of goods.—A Liquid Preparation for Eczema and Dandruff.
Claims use since Sept. 1, 1916.

Ser. No. 103,574. (CLASS 39. CLOTHING.) UNITED WORKINGMEN'S BOOT & SHOE MFG. CO., San Francisco, Cal. Filed May 5, 1917.

KIDDIE'S KICKS

Particular description of goods.—Boots and Shoes of Kid, Leather, and Canvas.
Claims use since about Jan. 1, 1916.

Ser. No. 103,817. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EAU DE COLOGNE FABRIEK v. h. J. C. BOLDOOT, Amsterdam, Netherlands. Filed May 15, 1917.

PASTOL

Particular description of goods.—Paste for Cleaning Teeth.
Claims use since Jan. 19, 1917.

Ser. No. 105,389. (CLASS 15. OILS AND GREASES.) SMITH & NICHOLS, INC., New York, N. Y. Filed July 31, 1917.

STAR

Particular description of goods.—Mineral Waxes.
Claims use since June 1, 1917.

Ser. No. 106,628. (CLASS 39. CLOTHING.) WARING HAT MFG. CO., Yonkers, N. Y. Filed Oct. 5, 1917.

EAGLE

Particular description of goods.—Headwear—Namely, Felt, Cloth, Straw, and Silk Hats and Caps.
Claims use since 1861.

Ser. No. 107,157. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) HARRY GOLDMAN, St. Louis, Mo. Filed Nov. 5, 1917.

SMILE

Particular description of goods.—A Preparation to Remove Corns.
Claims use since Aug. 1, 1917.

Ser. No. 107,353. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed Nov. 13, 1917.

TRI COLOR

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Jan. 31, 1917.

Ser. No. 107,504. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE INTRAVENOUS PRODUCTS COMPANY, Denver, Colo. Filed Nov. 21, 1917.

VENCUPRO

Particular description of goods.—A Preparation for the Treatment of Tuberculosis.
Claims use since Apr. 1, 1917.

Ser. No. 107,596. (CLASS 38. PRINTS AND PUBLICATIONS.) UHLEMANN OPTICAL CO., Chicago, Ill. Filed Nov. 24, 1917.

Uhlco EYE-tems

The lining appearing on the drawing is intended for the purpose of shading only.
Particular description of goods.—A Monthly Publication.
Claims use since Nov. 1, 1917.

Ser. No. 107,888. (CLASS 2. RECEPTACLES.) THERMOKEPT PRODUCTS CORPORATION, New York, N. Y. Filed Dec. 10, 1917.

THERMOKEPT

Particular description of goods.—Containers for Food Products—Namely, Cans Made of Tin.
Claims use since June, 1916.

Ser. No. 108,014. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) KIPS BAY BREWING & MALTING COMPANY, New York, N. Y. Filed Dec. 17, 1917.

KIPPS

Particular description of goods.—A Non-Intoxicating, Richly-Hop-Flavored, Soft Drink, Maltless Beverage, Containing Less Than One-Half of One Per Cent. of Alcohol by Volume.
Claims use since Dec. 8, 1917.

Ser. No. 108,081. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) A. BOURJOIS & CO. INC., New York, N. Y. Filed Dec. 18, 1917. Under ten-year proviso.



Particular description of goods.—Face-Powder.
Claims use since January, 1879.

Ser. No. 108,170. (CLASS 10. FERTILIZERS.) AMERICAN NITROGEN PRODUCTS COMPANY, Seattle, Wash. Filed Dec. 27, 1917.



Particular description of goods.—Nitrogen Products—Namely, Ammonium Nitrate, Calcium Nitrate, Sodium Nitrite-Nitrate, Sodium Nitrite, and Sodium Nitrate, the Same Being Used as Components of Fertilizers.
Claims use since July 2, 1917.

Ser. No. 108,284. (CLASS 2. RECEPTACLES.) J. W. BUTLER PAPER CO., Chicago, Ill. Filed Jan. 4, 1918.



Particular description of goods.—Paper Bags.
Claims use since the year 1916.

Ser. No. 108,285. (CLASS 2. RECEPTACLES.) J. W. BUTLER PAPER CO., Chicago, Ill. Filed Jan. 4, 1918.



Particular description of goods.—Paper Bags.
Claims use since the year 1916.

Ser. No. 108,287. (CLASS 2. RECEPTACLES.) J. W. BUTLER PAPER CO., Chicago, Ill. Filed Jan. 4, 1918.



Particular description of goods.—Paper Bags.
Claims use since the year 1916.

Ser. No. 108,357. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) INTERSTATE IRON & STEEL CO., Chicago, Ill. Filed Jan. 8, 1918.



Particular description of goods.—Shoe-Nails.
Claims use since Dec. 18, 1917.

Ser. No. 108,394. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) E. H. PITTS, Toomsboro, Ga. Filed Jan. 9, 1918.



The picture being a portrait of the applicant.
Particular description of goods.—A Preparation for the Treatment of Neuralgia, Headache, Backache, Biliousness.
Claims use since Sept. 14, 1917.

Ser. No. 108,464. (CLASS 5. ADHESIVES.) W. H. TOMLINSON & Co., Bay City, Mich. Filed Jan. 14, 1918.

Vulk-Seal

No claim is made to the word "Seal" apart from the mark shown in the drawing.
Particular description of goods.—Rubber Putty.
Claims use since Dec. 11, 1917.

Ser. No. 108,798. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) JOHN MEURER, Brooklyn, N. Y. Filed Feb. 4, 1918.

SAXOLA

Particular description of goods.—A Non-Alcoholic, Maltless, Effervescent, Carbonated, and Flavored Beverage Sold as a Soft Drink.
Claims use since Dec. 29, 1917.

Ser. No. 108,904. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Feb. 8, 1918.



Particular description of goods.—Leather Belting.
Claims use since Sept. 21, 1895.

Ser. No. 108,980. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) NATIONAL TRACTOR COMPANY, Chicago, Ill. Filed Feb. 13, 1918.



Particular description of goods.—Tractors.
Claims use since the month of August, 1917.

Ser. No. 109,009. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILBERT P. JACOBS, Emlenton, Pa. Filed Feb. 15, 1918.

CRYSTAL

Particular description of goods.—A Radiator-Cooling Compound.
Claims use since Nov. 11, 1917.

Ser. No. 109,037. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) OSWEGO SHADE CLOTH COMPANY, Oswego, N. Y. Filed Feb. 16, 1918. Under ten-year proviso.



The mark consists of the representation of the head and upper part of the body of an Indian.
Particular description of goods.—Shade-Cloth.
Claims use since 1873.

Ser. No. 109,042. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) BENJAMIN L. ROSENBLOOM, Wheeling, W. Va. Filed Feb. 16, 1918.

SHUWEAR

Particular description of goods.—A Liquid Preparation for the Preservation of the Leather in Boots and Shoes.
Claims use since Aug. 17, 1917.

Ser. No. 109,137. (CLASS 39. CLOTHING.) QUAKER ROBE CO., INC., Philadelphia, Pa. Filed Feb. 20, 1918.

QUAKER

Particular description of goods.—Puttees.
Claims use since Aug. 1, 1917.

Ser. No. 109,144. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SATVI HEALTH FOOD COMPANY, Long Beach, Cal. Filed Feb. 14, 1918.



The portrait on the drawing is a print from a portrait of the head and shoulders of a man in which the form and expression resemble the features, earlier in life, of President Lincoln.
Particular description of goods.—Instant Coffee.
Claims use since the first day of the month of September, 1917.

Ser. No. 109,167. (CLASS 39. CLOTHING.) SIDNEY WILLIAMS, San Francisco, Cal. Filed Feb. 21, 1918.

EUREKA

Particular description of goods.—Insoles.
Claims use since Feb. 14, 1918.

Ser. No. 109,182. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE TOLEDO COOKER COMPANY, Toledo, Ohio. Filed Feb. 23, 1918.

Universal

Particular description of goods.—Fireless Cook-Stoves.
Claims use since Feb. 8, 1918.

Ser. No. 109,316. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BIG FOUR CANNING COMPANY, Stanley, Wis. Filed Mar. 2, 1918.

HOLLYHOCK



Particular description of goods.—Canned Peas and Canned Sauer-Kraut.
Claims use since June 4, 1913.

Ser. No. 109,330. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LANGE CANNING CO., Eau Claire, Wis. Filed Mar. 2, 1918.

LADY SLIPPER



Particular description of goods.—Canned Vegetables.
Claims use since Aug. 24, 1904.

Ser. No. 109,334. (CLASS 5. ADHESIVES.) CHAS. MORNINGSTAR & CO. INC., New York, N. Y. Filed Mar. 2, 1918.

ARROW STAR

Particular description of goods.—Dextrin.
Claims use since Nov. 1, 1917.

Ser. No. 109,394. (CLASS 39. CLOTHING.) FRANCIS T. SIMMONS & CO., Chicago, Ill. Filed Mar. 5, 1918.

ATHLEETA

Particular description of goods.—Underwear—Namely, Union-Suits Made of Textile Material.
Claims use since Feb. 27, 1918.

Serial No. 109,459. (CLASS 39. CLOTHING.) FERRY HAT MANUFACTURING COMPANY, New York, N. Y. Filed Mar. 9, 1918.



Particular description of goods.—Hats.
Claims use since Feb. 6, 1918.

Ser. No. 109,498. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GURLEY CANDY CO., Minneapolis, Minn. Filed Mar. 11, 1918.

Joan D'Arc

Particular description of goods.—Candies.
Claims use since January, 1918.

Ser. No. 109,521. (CLASS 2. RECEPTACLES.) F. H. HILL CO., Chicago, Ill. Filed Mar. 12, 1918.

SPARTAN

Particular description of goods.—Metal Burial-Caskets.
Claims use since Aug. 19, 1915.

Ser. No. 109,555. (CLASS 39. CLOTHING.) JOHN TEN EICK CONOVER, New Brunswick, N. J. Filed Mar. 14, 1918.

BONDO

The trade-mark comprising the word "Bondo."
Particular description of goods.—Ladies' Brassières, Knitted and Flat Underwear of Cotton and Silk in One and Two Piece Garments, Hosiery, Fabric Gloves, Kid Gloves, and Corsets.
Claims use since Mar. 2, 1918.

Ser. No. 109,608. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

MOHAWK

Particular description of goods.—Belt-Dressing.
Claims use since Sept. 21, 1895.

Ser. No. 109,610. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

UNCAS

Particular description of goods.—Leather Belting.
Claims use since Sept. 21, 1895.

Ser. No. 109,611. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.



Particular description of goods.—Leather Belting.
Claims use since Sept. 1, 1898.

Ser. No. 109,612. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 16, 1918.

"ULCOTAN"

Particular description of goods.—Leather Belting.
Claims use since Feb. 10, 1915.

Ser. No. 109,624. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) COLUMBIA FASTENER COMPANY, Chicago, Ill. Filed Mar. 18, 1918.

RITE-SNAP

No claim being made for the word "Snap" except in connection with the mark shown.
Particular description of goods.—Dress-Fasteners.
Claims use since Oct. 20, 1917.

Ser. No. 109,626. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN GIBBS, Terre Haute, Ind. Filed Mar. 18, 1918.



The portrait shown being that of the applicant.
Particular description of goods.—A Preparation for Rheumatism, Neuralgia, Headache, Stiff Joints, Acute Pleurisy, Lumbago, and Cramps in the Legs.
Claims use since Feb. 19, 1918.

Ser. No. 109,641. (CLASS 39. CLOTHING.) ARTHUR S. ANABLE, New York, N. Y. Filed Mar. 19, 1918.

THE KING LEAR

Particular description of goods.—Men's Coats, Pants, and Vests.
Claims use since Jan. 1, 1918.

Ser. No. 109,658. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PAXTON CANNING CO., Paxton, Ill. Filed Mar. 19, 1918.

"FRONT LINE"

Particular description of goods.—Canned Corn and Canned Pork and Beans with Tomato Sauce, Canned Red Beans, Canned Pink Beans, Canned Red Kidney-Beans.
Claims use since Feb. 1, 1918.

Ser. No. 109,666. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) CARBOLINEUM WOOD PRESERVING CO., Milwaukee, Wis. Filed Mar. 20, 1918.



Particular description of goods.—Anthracene-Oil Wood-Stain.
Claims use since Dec. 15, 1917.

Ser. No. 109,682. (CLASS 17. TOBACCO PRODUCTS.) ERNEST MILTON WHITE, Los Angeles, Cal. Filed Mar. 20, 1918.

FLIVVER

Particular description of goods.—Cigars, Cigarettes, Smoking-Tobacco, and Chewing-Tobacco.
Claims use since Feb. 25, 1918.

Ser. No. 109,703. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) ALEX. D. SHAW & CO., New York, N. Y. Filed Mar. 21, 1918.

Camouflage

The trade-mark consists of the arbitrary word "Camouflage."
Particular description of goods.—A Beer Substitute—Namely, a Non-Alcoholic Maltless Beverage Sold as a Soft Drink, Effervescent, Amber Color, Moderately Sweet, and the Chief Ingredients of Which are Vegetable Concoctions.
Claims use since Feb. 18, 1918.

Ser. No. 109,722. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) PETROLEUM REFINING COMPANY, Houston, Tex. Filed Mar. 22, 1918.

Nyftene

Particular description of goods.—Turpentine Substitutes.
Claims use since the 2d day of February, 1918.

Ser. No. 109,723. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) PETROLEUM REFINING COMPANY, Houston, Tex. Filed Mar. 22, 1918.

Nyfte

Particular description of goods.—Turpentine Substitutes.
Claims use since the 27th day of January, 1918.

Ser. No. 109,724. (CLASS 15. OILS AND GREASES.) PETROLEUM REFINING COMPANY, Houston, Tex. Filed Mar. 22, 1918.

Nyfte

Particular description of goods.—Fuel and Lubricating Oils and Greases.
Claims use since the 27th day of January, 1918.

Ser. No. 109,752. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) NORTH AMERICAN ELECTRIC LAMP COMPANY, St. Louis, Mo. Filed Mar. 23, 1918.

NALCO

Particular description of goods.—Electric-Incandescent-Light Bulbs.
Claims use since Feb. 1, 1918.

Ser. No. 109,771. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) MINARD'S LINIMENT MANUFACTURING COMPANY, Framingham, Mass. Filed Mar. 25, 1918.

01-IN-01

Particular description of goods.—A Cleansing and Polishing Preparation in the Nature of a Furniture-Polish for the Bodies of Automobiles, Carriages, Pianos, Organs, Phonographs, Bank and Store Fixtures, and Furniture in General.
Claims use since Mar. 10, 1918.

Ser. No. 109,836. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) RICHARD YOUNG COMPANY, New York, N. Y. Filed Mar. 27, 1918.

RYKID

Comprising the word "Rykid."
Particular description of goods.—Leather—viz., Goat, Kid, Sheep, Kangaroo, and Cordovan.
Claims use since Mar. 1, 1918.

Ser. No. 109,855. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SCHIEFFELIN & CO., New York, N. Y. Filed Mar. 28, 1918.

PARADINE

Consisting of the word "Paradine."
Particular description of goods.—An Antiseptic.
Claims use since Jan. 10, 1918.

Ser. No. 109,893. (CLASS 38. PRINTS AND PUBLICATIONS.) PETROLEUM PUBLICATION COMPANY, Chicago, Ill. Filed Mar. 30, 1918.

Petroleum

Particular description of goods.—Trade Journals Published Monthly.
Claims use since July 1, 1916.

Ser. No. 109,943. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LOUIS KADANS, New York, N. Y. Filed Apr. ?, 1918.

YANKEE

Particular description of goods.—Neufchâtel Cheese.
Claims use since Dec. 1, 1917.

Ser. No. 109,966. (CLASS 39. CLOTHING.) CHURCHILL & ALDEN CO., Brockton, Mass. Filed Apr. 4, 1918.

Particular description of goods.—Shoes for Men, Women, and Children, Made of Leather, Canvas, or Fabrics.
Claims use since Mar. 1, 1918.

Ser. No. 109,973. (CLASS 43. THREAD AND YARN.) EATON RAPIDS WOOLEN MILLS, Eaton Rapids, Mich. Filed Apr. 4, 1918.

WOLVERINE

Particular description of goods.—Yarn, Woolen Yarn, and Yarn for Hand-Knitting.
Claims use since about Mar. 23, 1918.

Ser. No. 109,992. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) WM. SIMPSON, SONS & CO., Philadelphia, Pa. Filed Apr. 4, 1918.

LOYALTY

Particular description of goods.—Cotton Piece Goods and Cotton Dress Goods.
Claims use since about Mar. 22, 1918.

Ser. No. 110,018. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SALVADOR DOMINGUEZ, San Antonio, Tex. Filed Apr. 6, 1918.

MALINTZIN

Particular description of goods.—Hair-Dressing and Color-Restorer.
Claims use since February, 1918.

Ser. No. 110,025. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) IDEAL MANUFACTURING COMPANY, Milford, Mass. Filed Apr. 6, 1918.

U-SA-VO

Particular description of goods.—Washing Compound.
Claims use since Mar. 1, 1917.

Ser. No. 110,036. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE ULMER LEATHER CO., Norwich, Conn. Filed Apr. 6, 1918.

"REMLU"

Particular description of goods.—Leather Belting.
Claims use since Jan. 2, 1915.

Ser. No. 110,067. (CLASS 15. OILS AND GREASES.) CALUMET OIL COMPANY, El Paso, Tex. Filed Apr. 9, 1918.

CALUMET

Particular description of goods.—Lubricating Oils and Greases.
Claims use since July 1, 1917, and was first used for shipment in interstate commerce on July 25, 1917.

Ser. No. 110,089. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) CRIBBEN & SEXTON COMPANY, Chicago, Ill. Filed Apr. 10, 1918.

UNIVIT

Particular description of goods.—Porcelain Enamel and Porcelain-Enamel Finish for Metal Members, Including Cooking or Heating Stoves, Cooking Utensils, Electrical Fixtures, Surgical and Sanitary Apparatuses, Plumbing Goods, Railway Supplies, Bar and Soda-Water Fixtures, Automobiles or Parts Thereof, and Any other Porcelain-Enameled Surface or Coating.
Claims use since the 1st day of February, 1917.

Ser. No. 110,098. (CLASS 12. CONSTRUCTION MATERIALS.) ABRAM EMERSON MINIUM, Denver, Colo. Filed Apr. 10, 1918.

VIKO

Particular description of goods.—Plastic Compositions Consisting of a Compounded Concrete Mixture of Cement, Crushed Serpentine Rock, Carbon Waste, and a Woody-Stock Filler.
Claims use since approximately Mar. 5, 1918.

Ser. No. 110,137. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) RUTH L. TIRRELL, Boston, Mass. Filed Apr. 11, 1918.

Elec-Tone

Particular description of goods.—A Lotion for Giving Strength, Tone, and Firmness to Tired, Flabby, or Neglected Skin.
Claims use since April, 1916.

Ser. No. 110,153. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. C. AINSLEY PACKING CO., Campbell, Cal. Filed Apr. 13, 1918.

Foxglove

Particular description of goods.—Canned Apricots, Canned Pears, and Canned Peaches.
Claims use since May 13, 1910.

Ser. No. 110,154. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) J. C. AINSLEY PACKING CO., Campbell, Cal. Filed Apr. 13, 1918.

DREAMLAND

Particular description of goods.—Canned Apricots, Canned Pears, and Canned Peaches.
Claims use since June 18, 1902.

Ser. No. 110,157. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BREWSTER GORDON & CO., Rochester, N. Y. Filed Apr. 13, 1918. Under ten-year proviso.

THRUSH



Particular description of goods.—Tea.
Claims use since Mar. 15, 1883.

Ser. No. 110,158. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BREWSTER, GORDON & CO., Rochester, N. Y. Filed Apr. 13, 1918. Under ten-year proviso.

THISTLE

Particular description of goods.—Tea.
Claims use since Mar. 15, 1883.

Ser. No. 110,166. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE ECONOMETER COMPANY, St. Louis, Mo. Filed Apr. 13, 1918.

ECONOMETER

Particular description of goods.—Machines for Measuring the Length of Textile Fabric; Machines for Computing the Price of Measured Lengths of Textile Fabric; and Fabric-Winding Reels for Said Machines.
Claims use since Sept. 21, 1917.

Ser. No. 110,179. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROUNDUP FISHERIES COMPANY, Spokane, Wash. Filed Apr. 13, 1918.

Roundup

Particular description of goods.—Canned Salmon.
Claims use since Jan. 2, 1918.

Ser. No. 110,187. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WIELAND BROS., San Francisco, Cal. Filed Apr. 13, 1918.

RAMONA

Particular description of goods.—Canned Sardines.
Claims use since Dec. 14, 1917.

Ser. No. 110,208. (CLASS 15. OILS AND GREASES.) HOLBAM COMPANY, INC., New York, N. Y. Filed Apr. 15, 1918.

SAMOL

Particular description of goods.—Lubricating Oils.
Claims use since the 1st day of January, 1918.

Ser. No. 110,235. (CLASS 37. PAPER AND STATIONERY.) CROWN WILLAMETTE PAPER COMPANY, San Francisco, Cal., and Ocean Falls, British Columbia, Canada. Filed Apr. 16, 1918.



Particular description of goods.—Wrapping-Paper.
Claims use since Dec. 6, 1917.

Ser. No. 110,236. (CLASS 37. PAPER AND STATIONERY.) CROWN WILLAMETTE PAPER COMPANY, San Francisco, Cal., and Ocean Falls, British Columbia, Canada. Filed Apr. 16, 1918.



Particular description of goods.—Wrapping-Paper.
Claims use since Dec. 6, 1917.

Ser. No. 110,256. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE MERCHANTS BISCUIT CO., Denver, Colo. Filed Apr. 16, 1918.



Particular description of goods.—Cakes, Crackers, and Biscuits.
Claims use since Apr. 1, 1906.

Ser. No. 110,261. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) ORIENTAL SILK PRINTING COMPANY, New York, N. Y. Filed Apr. 16, 1918.



Particular description of goods.—Silk Piece Goods, Cotton and Silk Piece Goods, and Silk and Wool Fabrics.
Claims use since Nov. 21, 1917.

Ser. No. 110,280. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) PATRICK J. LOWRY, San Francisco, Cal. Filed Apr. 17, 1918.



Particular description of goods.—Washing Compound.
Claims use since Feb. 5, 1918.

Ser. No. 110,290. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BENJAMIN O. BOWERS, New York, N. Y. Filed Apr. 18, 1918.

CONCORDIA

Particular description of goods.—Canned Sardines and Canned Shrimps.
Claims use since May 22, 1916.

Ser. No. 110,300. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EUGENE LEVERING, Jr., Baltimore, Md. Filed Apr. 18, 1918.

LORD CALVERT

Particular description of goods.—Tea.
Claims use since Sept. 10, 1907.

Ser. No. 110,301. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EUGENE LEVERING, Jr., Baltimore, Md. Filed Apr. 18, 1918.

VESPER

Particular description of goods.—Tea.
Claims use since Apr. 5, 1906.

Ser. No. 110,302. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE MIHALOVITCH CO., Cincinnati, Ohio. Filed Apr. 18, 1918.

RI-WHIS

Particular description of goods.—A Non-Intoxicating Non-Alcoholic Sugar Maltless Beverage Containing Aromatic Flavor, "Not ½ of 1% Alcohol."
Claims use since Mar. 25, 1918.

Ser. No. 110,354. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., INC., New York, N. Y., and San Francisco, Cal. Filed Apr. 20, 1918.

SARDY



The picture being fanciful.
Particular description of goods.—Canned Sardines.
Claims use since Dec. 14, 1917.

Ser. No. 110,356. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., INC., New York, N. Y., and San Francisco, Cal. Filed Apr. 20, 1918.

KITTY



Particular description of goods.—Canned Sardines.
Claims use since Dec. 14, 1917.

Ser. No. 110,357. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., INC., New York, N. Y., and Eastport, Me. Filed Apr. 20, 1918.

WAYSIDE



The picture being fanciful.
Particular description of goods.—Canned Sardines.
Claims use since Dec. 14, 1917.

Ser. No. 110,358. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., INC., New York, N. Y., and San Francisco, Cal. Filed Apr. 20, 1918.



Particular description of goods.—Canned Sardines.
Claims use since Dec. 14, 1917.

Ser. No. 110,361. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESSLE CO., INC., New York, N. Y., and Eastport, Me. Filed Apr. 20, 1918.



Particular description of goods.—Canned Sardines.
Claims use since Dec. 10, 1917.

Ser. No. 110,533. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) HEWLETT-WILSON BEVERAGE CO., Salt Lake City, Utah. Filed Apr. 29, 1918.

BERRIJU

Particular description of goods.—A Non-Intoxicating Non-Alcoholic Fruit Beverage Sold as a Soft Drink.
Claims use since about Mar. 1, 1918.

Ser. No. 110,546. (CLASS 47. WINES.) HENRY P. SCHROEDER, St. Louis, Mo. Filed Apr. 29, 1918.



Particular description of goods.—Wine.
Claims use since Apr. 1, 1916.

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TRADE-MARK REGISTRATIONS GRANTED

MAY 28, 1918.

121,741. GINGER-ALE, GRAPE-JUICE, ROOT-BEER, AND SODA-WATERS. ALBANY COCA-COLA BOTTLING COMPANY, Albany, Ga.
Filed March 14, 1917. Serial No. 102,132. PUBLISHED MAY 22, 1917.

121,742. TOILET-PAPER AND PAPER TOWELS. ALBANY PERFORATED WRAPPING PAPER COMPANY, Albany, N. Y.
Filed October 17, 1917. Serial No. 106,798. PUBLISHED JANUARY 1, 1918.

121,743. CANDY BREATH-DEODORIZERS. AMERICAN CHICLE COMPANY, New York, N. Y.
Filed June 9, 1917. Serial No. 104,356. PUBLISHED MARCH 12, 1918.

121,744. COTTON, COTTON AND SILK, AND COTTON AND ARTIFICIAL-SILK PIECE GOODS. AMERICAN TEXTILES EXPORT CORPORATION, New York, N. Y.
Filed January 18, 1918. Serial No. 108,519. PUBLISHED MARCH 12, 1918.

121,745. VULCANIZED FIBER. AMERICAN VULCANIZED FIBRE COMPANY, Wilmington, Del.
Filed December 22, 1917. Serial No. 108,091. PUBLISHED MARCH 5, 1918.

121,746. GINGHAMS. AMOSKEAG MANUFACTURING COMPANY, Manchester, N. H.
Filed January 28, 1918. Serial No. 108,661. PUBLISHED FEBRUARY 26, 1918.

121,747. COTTON PIECE GOODS. APPLETON COMPANY, Lowell, Mass.
Filed February 9, 1918. Serial No. 108,907. PUBLISHED MARCH 12, 1918.

121,748. MEDICINE USED IN TREATING CERTAIN NAMED DISEASES. EMANUEL ARNOLD, Herreid, S. D.
Filed January 23, 1918. Serial No. 108,594. PUBLISHED MARCH 12, 1918.

121,749. CUFF-BUTTONS. THE BAER AND WILDE CO., Attleboro, Mass.
Filed November 6, 1917. Serial No. 107,191. PUBLISHED FEBRUARY 26, 1918.

121,750. CERTAIN NAMED PAPER AND STATIONERY. THE BANKERS SUPPLY COMPANY, Denver, Colo., and Chicago, Ill.
Filed December 26, 1916. Serial No. 100,152. PUBLISHED MARCH 12, 1918.

121,751. PNEUMATIC RUBBER TIRES. THE BATAVIA RUBBER CO., Batavia, N. Y.
Filed January 9, 1918. Serial No. 108,369. PUBLISHED MARCH 5, 1918.

121,752. SILK PIECE GOODS. BENTLEY & TWOHEY SILK CO., New York, N. Y.
Filed January 31, 1918. Serial No. 108,703. PUBLISHED MARCH 12, 1918.

121,753. SNAP-FASTENERS, HOOKS, EYES, AND SNAP-FASTENING BUTTONS. BOSTON SNAP FASTENER CO., Boston, Mass.
Filed September 26, 1916. Serial No. 98,250. PUBLISHED JULY 17, 1917.

121,754. HOSIERY. BUTLER BROTHERS, Chicago, Ill.
Filed January 16, 1918. Serial No. 108,485. PUBLISHED MARCH 5, 1918.

121,755. CANNED BEETS AND CANNED TOMATOES. CALIMA CANNING COMPANY, Los Angeles, Cal.
Filed February 4, 1918. Serial No. 108,788. PUBLISHED MARCH 12, 1918.

121,756. CANNED BEET-TOPS, CANNED TOMATOES, AND CANNED STRING-BEANS. CALIMA CANNING COMPANY, Los Angeles, Cal.
Filed February 4, 1918. Serial No. 108,787. PUBLISHED MARCH 12, 1918.

121,757. HAND KNITTING-NEEDLES. THE CELLULOID COMPANY, New York, N. Y.
Filed November 17, 1917. Serial No. 107,430. PUBLISHED MARCH 5, 1918.

121,758. HOSIERY. CHIPMAN KNITTING MILLS, Easton and Selinsgrove, Pa.
Filed January 18, 1918. Serial No. 108,521. PUBLISHED MARCH 5, 1918.

121,759 [WITHDRAWN.]

121,760. BOOTS AND SHOES MADE OF OR CONTAINING RUBBER. CONVERSE RUBBER SHOE CO., Malden, Mass.
Filed January 21, 1916. Serial No. 92,283. PUBLISHED FEBRUARY 26, 1918.

121,761. MEN'S GARTERS. CRESCENT GARTER COMPANY, New York, N. Y.
Filed April 24, 1917. Serial No. 103,250. PUBLISHED MARCH 5, 1918.

121,762. RUBBER TIRES. CUPPLES COMPANY MANUFACTURERS, St. Louis, Mo.
Filed April 5, 1917. Serial No. 102,734. PUBLISHED MARCH 5, 1918.

121,763. CERTAIN NAMED KNITTED, NETTED, AND TEXTILE FABRICS. DERBYVALE LINEN COMPANY, New York, N. Y.
Filed October 27, 1917. Serial No. 106,985. PUBLISHED MARCH 5, 1918.

121,764. WATCHES. DUBOIS WATCH CASE COMPANY, Brooklyn, N. Y.
Filed October 20, 1917. Serial No. 106,877. PUBLISHED MARCH 5, 1918.

121,765. WATCHES. DUBOIS WATCH CASE COMPANY, Brooklyn, N. Y.
Filed January 9, 1918. Serial No. 108,377. PUBLISHED MARCH 5, 1918.

121,766. PREPARATION FOR CONSUMPTION, RHEUMATISM, WEAKNESS, AND KIDNEY TROUBLE. PETER EAGLE, Bridgeport, Conn.
Filed December 5, 1917. Serial No. 107,764. PUBLISHED MARCH 12, 1918.

121,767. LADIES' HATS. MAX ECKSTEIN, New York, N. Y.
Filed November 8, 1917. Serial No. 107,228. PUBLISHED MARCH 12, 1918.

121,768. COTTON GOODS IN THE PIECE. EVERETT, HEANEY & COMPANY, INC., New York, N. Y.
Filed September 19, 1917. Serial No. 106,314. PUBLISHED MARCH 12, 1918.

121,769. VEGETABLE-OIL PRODUCT FOR SALADS AND COOKING. THE N. K. FAIRBANK COMPANY, Union township, near Guttenberg, N. J., and Chicago, Ill.
Filed January 2, 1918. Serial No. 108,247. PUBLISHED MARCH 12, 1918.

121,770. BATH-ROBES. FEDERAL UNDERWEAR CO., New York, N. Y.
Filed August 29, 1917. Serial No. 105,935. PUBLISHED MARCH 5, 1918.

121,771. UNDERWEAR—NAMELY, SHIRTS AND DRAWERS MADE OF KNITTED MATERIAL. FORDOM TEXTILE COMPANY, INC., New York, N. Y.
Filed December 8, 1917. Serial No. 107,834. PUBLISHED FEBRUARY 26, 1918.

121,772. UNDERWEAR—NAMELY, SHIRTS AND DRAWERS MADE OF KNITTED MATERIAL. FORDOM TEXTILE COMPANY, INC., New York, N. Y.
Filed December 8, 1917. Serial No. 107,836. PUBLISHED FEBRUARY 26, 1918.

121,773. BUTTER. THE FOX RIVER BUTTER COMPANY, Chicago, Ill.
Filed February 5, 1918. Serial No. 108,823. PUBLISHED MARCH 12, 1918.

121,774. KNITTED AND WOVEN WOOLEN PIECE GOODS. FRENCH & WARD, New York, N. Y.
Filed January 16, 1918. Serial No. 108,488. PUBLISHED FEBRUARY 26, 1918.

121,775. SHEEPSKIN-LINED COATS, BLANKET-LINED COATS, SPORTSMEN'S COATS, MACKINAW COATS, AND OVERCOATS. GEM HAMMOCK & FLY NET COMPANY, Milwaukee, Wis.
Filed October 15, 1917. Serial No. 106,772. PUBLISHED MARCH 5, 1918.

121,776. NERVE-TONIC AND MEDICAL PREPARATION TAKEN INTERNALLY FOR TREATMENT OF SKIN DISEASES. GOLD CROSS REMEDY COMPANY, Kansas City, Mo.
Filed December 8, 1917. Serial No. 107,837. PUBLISHED MARCH 5, 1918.

121,777. FABRIC WOVEN OF WOOLEN YARN, WORSTED YARN, AND SILK. HOLDEN-LEONARD CO., New York, N. Y.
Filed January 29, 1918. Serial No. 108,684. PUBLISHED FEBRUARY 26, 1918.

121,778. PHONOGRAPHS AND THEIR PARTS. HOFFAY TALKING MACHINE COMPANY, INC., New York, N. Y.
Filed December 5, 1917. Serial No. 107,768. PUBLISHED MARCH 5, 1918.

121,779. CIGARS, CHEROOTS, AND LITTLE CIGARS. CHARLES J. HOLTON, Detroit, Mich.
Filed May 18, 1917. Serial No. 103,927. PUBLISHED MARCH 5, 1918.

121,780. FURNACES. THE HURON FURNACE COMPANY, Huron, S. D.
Filed October 19, 1917. Serial No. 106,859. PUBLISHED MARCH 12, 1918.

121,781. SATIN RIBBON. JOHNSON, COWDIN & CO., New York, N. Y.
Filed January 26, 1918. Serial No. 108,651. PUBLISHED FEBRUARY 26, 1918.

121,782. CERTAIN NAMED FOODS. GABRIEL KAHAN, Lowell, Mass.
Filed July 27, 1917. Serial No. 105,319. PUBLISHED MARCH 12, 1918.

121,783. OVERCOATS. K. KATZ & SONS, Baltimore, Md.
Filed January 8, 1917. Serial No. 100,432. PUBLISHED MARCH 5, 1918.

121,784. KNITTED UNION-SUITS, VESTS, CHEMISES, AND CAMISOLES. JULIUS KAYSER & CO., New York, N. Y.
Filed July 28, 1917. Serial No. 105,344. PUBLISHED FEBRUARY 26, 1918.

121,785. NUT BUTTER AND MARGARIN, COOKING-FATS, AND SALAD-OILS. KELLOGG PRODUCTS INC., Buffalo, N. Y.
Filed October 27, 1917. Serial No. 106,992. PUBLISHED MARCH 12, 1918.

121,786. NUT BUTTER AND MARGARIN, COOKING-FATS, AND SALAD-OILS. KELLOGG PRODUCTS INC., Buffalo, N. Y.
Filed October 27, 1917. Serial No. 106,994. PUBLISHED MARCH 12, 1918.

121,787. NUT BUTTER AND MARGARIN, COOKING-FATS, AND SALAD-OILS. KELLOGG PRODUCTS INC., Buffalo, N. Y.
Filed October 27, 1917. Serial No. 106,993. PUBLISHED MARCH 12, 1918.

121,788. DRESS-SHIELDS. I. B. KLEINERT RUBBER COMPANY, New York, N. Y.
Filed February 2, 1918. Serial No. 108,772. PUBLISHED MARCH 12, 1918.

121,789. CHILLI-CON-CARNE. KITTLE & WATSON, Evans Mills, N. Y.
Filed December 5, 1917. Serial No. 107,769. PUBLISHED MARCH 12, 1918.

121,790. CORSETS, BRASSIÈRES, AND LADIES' UNDERWAISTS. KOPS BROS., New York, N. Y.
Filed January 3, 1918. Serial No. 108,277. PUBLISHED MARCH 5, 1918.

121,791. CHILDREN'S DRESSES. WILLIAM L. LEAVY, Brooklyn, N. Y.
Filed January 18, 1918. Serial No. 108,530. PUBLISHED MARCH 12, 1918.

121,792. WOMEN'S HATS. CECILIA LEVY, New York, N. Y.
Filed January 14, 1918. Serial No. 108,455. PUBLISHED FEBRUARY 26, 1918.

121,793. FURS. LOWELL LAMB & COMPANY, INC., New York, N. Y.
Filed December 12, 1917. Serial No. 107,914. PUBLISHED MARCH 12, 1918.

121,794. HANDKERCHIEFS. R. H. MACY & CO., New York, N. Y.
Filed December 29, 1917. Serial No. 108,219. PUBLISHED MARCH 12, 1918.

121,795. CIGARS. JOSEPH P. MANNING CO., Boston, Mass.
Filed November 18, 1916. Serial No. 99,379. PUBLISHED MARCH 5, 1918.

121,796. WHEAT-FLOUR. J. D. MANOR & CO., New Market, Va.
Filed November 21, 1916. Serial No. 99,446. PUBLISHED MARCH 12, 1918.

121,797. BELTING MADE PARTLY OF FABRIC AND PARTLY OF RUBBER. THE MANHATTAN RUBBER MFG. CO., New York, N. Y.
Filed January 24, 1918. Serial No. 108,619. PUBLISHED MARCH 5, 1918.

121,798. COTTON-BATTING. MARSHALL FIELD & COMPANY, Chicago, Ill.
Filed November 8, 1917. Serial No. 107,241. PUBLISHED MARCH 12, 1918.

121,799. HEN FEED. ALBERT R. MARTIN, Dallas, N. C.
Filed September 12, 1917. Serial No. 106,211. PUBLISHED MARCH 12, 1918.

121,800. BROAD SILKS IN THE PIECE. J. A. MIGEL, New York, N. Y.
Filed January 31, 1918. Serial No. 108,718. PUBLISHED MARCH 12, 1918.

121,801. COTTON PIECE GOODS. MERITAS MILLS, North Highland, near Columbus, Ga.
Filed November 28, 1917. Serial No. 107,650. PUBLISHED MARCH 12, 1918.

121,802. HAIR-NETS. EMMA T. MITTELSTAEDT, New York, N. Y.
Filed December 3, 1917. Serial No. 107,730. PUBLISHED MARCH 5, 1918.

121,803. HAIR-NETS. EMMA T. MITTELSTAEDT, New York, N. Y.
Filed December 3, 1917. Serial No. 107,728. PUBLISHED MARCH 5, 1918.

121,804. HAIR-NETS. EMMA T. MITTELSTAEDT, New York, N. Y.
Filed December 5, 1917. Serial No. 107,772. PUBLISHED MARCH 5, 1918.

121,805. RUBBER TIRES. THE MOHAWK RUBBER CO., Akron, Ohio.
Filed September 28, 1917. Serial No. 106,487. PUBLISHED MARCH 5, 1918.

121,806. COTTON DUCK. MOUNT VERNON-WOODBERRY MILLS, INCORPORATED, Baltimore, Md.
Filed January 23, 1917. Serial No. 100,858. PUBLISHED MARCH 12, 1918.

121,807. HAIR-NETS. EMMA T. MITTELSTAEDT, New York, N. Y.
Filed December 3, 1917. Serial No. 107,729. PUBLISHED MARCH 5, 1918.

121,808. CARBON-PAPER. MODERN TYPEWRITER SUPPLY CO., St. Louis, Mo.
Filed October 8, 1917. Serial No. 107,237. PUBLISHED MARCH 5, 1918.

121,809. LOAD-CARRYING WHEELS FOR VEHICLES. NATIONAL WIRE WHEEL WORKS, INC., Geneva, N. Y.
Filed January 9, 1918. Serial No. 108,391. PUBLISHED MARCH 5, 1918.

121,810. BUTTER. CARL W. NELSON, Chicago, Ill.
Filed November 5, 1917. Serial No. 107,166. PUBLISHED MARCH 12, 1918.

121,811. FRESH APPLES. NORTHERN FRUIT COMPANY, Wenatchee, Wash.
Filed January 4, 1918. Serial No. 108,310. PUBLISHED MARCH 12, 1918.

121,812. REMEDY FOR CHILLS, FEVER, AGUE, MALARIA, LA GRIPPE, BILIOUSNESS, AND COLDS. OAK CITY DRUG COMPANY INC., Tuscaloosa, Ala.
Filed April 2, 1917. Serial No. 102,662. PUBLISHED JULY 10, 1917.

121,813. COTTON PIECE GOODS. PACIFIC MILLS, Lawrence and Boston, Mass.
Filed October 31, 1917. Serial No. 107,066. PUBLISHED FEBRUARY 5, 1918.

121,814. VALVE-CUPS FORMED OF RUBBERIZED FABRIC, SUCH AS A RUBBER AND DUCK COMPOSITION. PARKER CUP & SPECIALTY WORKS, INC., Parkers Landing, Pa.
Filed September 8, 1917. Serial No. 106,143. PUBLISHED MARCH 5, 1918.

121,815. CANNED SALMON. PETERSBURG PACKING CO., Seattle, Wash., and Petersburg, Territory of Alaska.
Filed January 21, 1918. Serial No. 108,580. PUBLISHED MARCH 12, 1918.

121,816. CANNED SALMON. PETERSBURG PACKING CO., Seattle, Wash., and Petersburg, Territory of Alaska.
Filed January 21, 1918. Serial No. 108,579. PUBLISHED MARCH 12, 1918.

121,817. CANNED SALMON. PETERSBURG PACKING CO., Seattle, Wash., and Petersburg, Territory of Alaska.
Filed January 21, 1918. Serial No. 108,578. PUBLISHED MARCH 12, 1918.

121,818. SALTED PEANUTS AND PEANUT BARS. PLANTERS NUT & CHOCOLATE CO., Wilkes-Barre, Pa.
Filed March 12, 1917. Serial No. 102,096. PUBLISHED MARCH 12, 1918.

121,819. COMPLEXION-LOTION. ELIZABETH PALETTE, Flushing, N. Y.
Filed December 6, 1917. Serial No. 107,791. PUBLISHED MARCH 12, 1918.

121,820. CLASPS FOR WRIST-BRACELETS, LOCKETS, NECKLACES, AND SIMILAR ARTICLES. ALEXANDER G. PLANCHENAULT, Coytesville, N. J.
Filed January 19, 1918. Serial No. 108,549. PUBLISHED MARCH 5, 1918.

121,821. DEHYDRATED EGGS. HERBERT G. PORTER, Malden, Mass.
Filed December 24, 1917. Serial No. 108,180. PUBLISHED MARCH 12, 1918.

121,822. DENTAL CREAM. PYROTOL CHEMICAL CO., Beaumont, Tex.
Filed February 10, 1917. Serial No. 101,308. PUBLISHED MARCH 12, 1918.

121,823. AUTOMOBILE ATTACHMENTS FOR CONVERTING THEM INTO TRUCKS. RALSTON IRON WORKS, INC., San Francisco, Cal.
Filed September 13, 1917. Serial No. 106,233. PUBLISHED MARCH 5, 1918.

121,824. MEN'S OUTER SHIRTS. RICE-STIX DRY GOODS COMPANY, St. Louis, Mo.
Filed November 28, 1917. Serial No. 107,655. PUBLISHED FEBRUARY 12, 1918.

121,825. CERTAIN NAMED PAPER AND STATIONERY. SAFEPACK PAPER MILLS, Brockton, Mass.
Filed November 21, 1917. Serial No. 107,514. PUBLISHED MARCH 12, 1918.

121,826. TOILET-PAPER. SAUQUOIT TOILET PAPER CO., New Hartford, N. Y.
Filed May 26, 1917. Serial No. 104,104. PUBLISHED JULY 24, 1917.

121,827. HOUSEHOLD RUBBER GLOVES. JULIUS SCHMID, INCORPORATED, New York, N. Y.
Filed March 22, 1917. Serial No. 102,358. PUBLISHED MARCH 12, 1918.

121,828. COTTON PIECE GOODS—VIZ., DUCK, SHEETINGS, DRILLS, AND OSNABURGS. T. A. SHAW AND CO., New York, N. Y., and Chicago, Ill.
Filed February 15, 1918. Serial No. 109,014. PUBLISHED MARCH 12, 1918.

121,829. WOVEN COTTON FABRICS IN THE PIECE. GEORGE ALBERT STAFFORD, New York, N. Y.
Filed January 16, 1918. Serial No. 108,494. PUBLISHED FEBRUARY 26, 1918.

121,830. COTTON PIECE GOODS. L. & E. STIRN, New York, N. Y.
Filed January 30, 1918. Serial No. 108,701. PUBLISHED FEBRUARY 26, 1918.

121,831. COATS. SCOTT & COMPANY, LIMITED, Boston, Mass.
Filed December 19, 1917. Serial No. 108,064. PUBLISHED MARCH 5, 1918.

121,832. LADIES' AND MISSES' LEATHER BOOTS AND SHOES. THE SHOECRAFT SHOP, INC., New York, N. Y.
Filed February 6, 1917. Serial No. 101,197. PUBLISHED JANUARY 29, 1918.

121,833. BLEACHED MUSLIN PIECE GOODS. M. E. SMITH & CO., INC., Omaha, Nebr.
Filed January 31, 1918. Serial No. 108,723. PUBLISHED MARCH 12, 1918.

121,834. CERTAIN NAMED JEWELRY AND PRECIOUS-METAL WARE. TAUNTON PEARL WORKS, INC., Taunton, Mass.
Filed February 2, 1918. Serial No. 108,779. PUBLISHED MARCH 12, 1918.

121,835. INDIAN VEGETABLE GUM USED AS A CONSTITUENT FOR ICE-CREAM. TALBOT MANUFACTURING CO., New York, N. Y.
Filed January 28, 1918. Serial No. 108,677. PUBLISHED MARCH 12, 1918.

121,836. BOYS' OUTER CLOTHING, AS FOLLOWS: MACKINAWS, JACKETS, TROUSERS, OVERCOATS, COATS, SUITS, AND BOYS' BREECHES. PHILIP WALCOFF, New York, N. Y.
Filed November 27, 1917. Serial No. 107,642. PUBLISHED FEBRUARY 26, 1918.

121,837. PREPARATION FOR RHEUMATISM, ASTHMA, AND APPENDICITIS. JESSIE WALKER, Waco, Tex.
Filed October 6, 1917. Serial No. 106,646. PUBLISHED MARCH 12, 1918.

121,838. SEWING KIT. JOHN WANAMAKER, NEW YORK, New York, N. Y.
Filed June 29, 1917. Serial No. 104,761. PUBLISHED MARCH 12, 1918.

121,839. CANNED TUNA FISH. WHITE STAR CANNING Co., East San Pedro and Los Angeles, Cal.
Filed February 4, 1918. Serial No. 108,815. PUBLISHED MARCH 12, 1918.

121,840. SHOES MADE OF LEATHER, CANVAS, RUBBER, AND A COMBINATION OF SAID MATERIALS. ALBERT H. WEINBRENNER Co., Milwaukee, Wis.
Filed May 14, 1917. Serial No. 103,804. PUBLISHED OCTOBER 30, 1917.

121,841. OVERALLS, COATS, WORK-SHIRTS, AND PANTS. THE WINDER MANUFACTURING Co., Winder, Ga.
Filed January 26, 1918. Serial No. 108,659. PUBLISHED MARCH 5, 1918.

121,842. TANNED AND FINISHED LEATHERS. ZIEGEL, EISMAN & COMPANY, Newark, N. J.
Filed December 12, 1917. Serial No. 107,919. PUBLISHED MARCH 5, 1918.

TRADE-MARK REGISTRATIONS CANCELED.

40,270. COFFEE. PARNAC M. AYVAD, New York, N. Y.
Registered May 5, 1903. Canceled June 8, 1918.

112,513. MEDICATED SOAP. FERD. T. HOPKINS & SON, New York, N. Y.
Registered September 12, 1916. Canceled June 8, 1918.

118,808. DYES FOR DYEING LEATHER. ALFRED PASSERO, Rochester, N. Y.
Registered October 2, 1917. Canceled June 8, 1918.

LABELS

REGISTERED MAY 28, 1918.

20,634.—*Title:* "CAMPBELL." (For Canned Apricots.) J. C. AINSLEY PACKING Co., Campbell, Cal. Filed April 13, 1918.

20,635.—*Title:* "PYRAMID." (For Coffee.) KEVORK ARABADJIAN, New York, N. Y. Filed April 27, 1918.

20,636.—*Title:* "NIAGARA SIGNAL." (For Dry Batteries.) ANDREW HALL BERRY, Montclair, N. J. Filed February 9, 1917.

20,637.—*Title:* "SABNOR." (For Cigars.) BRAWLEY BROS., Litchfield, Ill. Filed April 15, 1918.

20,638.—*Title:* "CHIEF OF ALL PATCHES." (For Self-Vulcanizing Patches.) MATTHEW J. CAGLE, San Francisco, Cal. Filed April 25, 1918.

20,639.—*Title:* "FIG-ORANG." (For a Preparation for Cake, Candy, and Ice-Cream Topping.) CALIFORNIA BAKERS SPECIALTY Co., Los Angeles, Cal. Filed April 6, 1918.

20,640.—*Title:* "CALIFORNIA GROWERS." (For Canned Apricots.) CALIFORNIA GROWERS ASSOCIATION, Los Angeles, Cal. Filed April 29, 1918.

20,641.—*Title:* "CALIFORNIA PRODUCERS." (For Canned Pears.) CALIFORNIA GROWERS ASSOCIATION, Los Angeles, Cal. Filed April 29, 1918.

20,642.—*Title:* "GAETANO D'AMICO." (For Macaroni.) GAETANO D'AMICO, Chicago Heights, Ill. Filed April 6, 1918.

20,643.—*Title:* "KIL-ODOR." (For Deodorants.) A. B. ELDRED, Chicago, Ill. Filed June 21, 1917.

20,644.—*Title:* "KIL-ODOR." (For Deodorants.) THE ELDRED CHEMICAL Co., Chicago, Ill. Filed April 19, 1918.

20,645.—*Title:* "SPHINX." (For Canned Sardines.) FRENCH SARDINE COMPANY, San Pedro, Cal. Filed April 6, 1918.

20,646.—*Title:* "ED'S ROCHELL SALTS IN TABLETS." (For Rochelle Salts.) EDWARD GLASS, Troy, N. Y. Filed April 25, 1918.

20,647.—*Title:* "CORONET." (For Snap-Fasteners.) ABRAHAM GLASSHEIM, New York, N. Y. Filed April 18, 1918.

20,648.—*Title:* "REAL AMERICAN." (For Cigars.) LOUIS NAES, St. Louis, Mo. Filed April 5, 1918.

20,649.—*Title:* "PACKARD SHOE POLISHES." (For Shoe-Dressing.) PACKARD DRESSING Co., Stoughton, Mass. Filed April 15, 1918.

20,650.—*Title:* "ZATEK (THE ECONOMICAL COCOA)." (For Cocoa.) PENNSYLVANIA CHOCOLATE COMPANY, Pittsburgh, Pa. Filed April 1, 1918.

20,651.—*Title:* "DR. CHAS. PRATT'S LEMON OLIVE CREAM." (For a Cream.) PRATT OLIVE COMPANY, Los Angeles, Cal. Filed April 9, 1918.

20,652.—*Title:* "CREME DE VIE." (For Tonic Beverages.) RIVAS MANUFACTURING Co., INC., New York, N. Y. Filed March 6, 1918.

20,653.—*Title:* "MARTHA-ANN." (For Fruit Cake.) GRACE A. RUSH. Cincinnati, Ohio. Filed October 24, 1918.

20,654.—*Title:* "RUSSIAN STYLE FRUIT KARAMEL." (For Candy.) RUSSIAN CANDY Co., Chicago, Ill. Filed February 4, 1918.

20,655.—*Title:* "SUNDERLAND TIRE PUMP." (For Tire-Pumps.) SUNDERLAND MANUFACTURING Co., Chicago, Ill. Filed April 22, 1918.

20,656.—*Title:* "VAN CAMP'S." (For Canned Sardine Paste.) VAN CAMP SEA FOOD Co., San Pedro, Cal. Filed April 6, 1918.

PRINTS

REGISTERED MAY 28, 1918.

4,892.—*Title:* "THAIS FETTPUDER." For Face-Powder.) JACOB DAVIS, Philadelphia, Pa. Filed March 10, 1917.

4,893.—*Title:* "KIL-ODORITE." (For Deodorants.) THE ELDRED CHEMICAL Co., Chicago, Ill. Filed April 19, 1918.

4,894.—*Title:* "IROQUOIS INDIAN HEAD." (For Beer.) IROQUOIS BREWING COMPANY, Buffalo, N. Y. Filed April 18, 1917.

4,895.—*Title:* "PLAYING MULTO-DEVO AS PARTNERS." (For Card Game.) CHAS. FREMONT MAY, Lakeport, Cal. Filed April 8, 1918.

4,896.—*Title:* "BUILT TO GO AROUND THE WORLD." (For Rubber Tires.) K. F. & C. TIRE & RUBBER CORPORATION, Roanoke, Va. Filed April 29, 1918.

4,897.—*Title:* "PINDAPAN PEANUT SHORTENING." (For Shortening for Use in Cooking.) MAGNOLIA PROVISION COMPANY, Houston, Tex. Filed March 30, 1918.

4,898.—*Title:* "GROUP OF CHILDREN'S PHOTOGRAPHS." (For Cocoanut-Oil.) THE R. L. WATKINS Co., Cleveland, Ohio. Filed March 6, 1918.

4,899.—*Title:* "WOMAN DRYING HAIR WITH FAN." (For Cocoanut-Oil.) THE R. L. WATKINS Co., Cleveland, Ohio. Filed March 6, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

LUCKETT *v.* STRAUB.

Decided February 4, 1918.

1. INTERFERENCE—PRIORITY.

The evidence reviewed and *Held* that since L. conceived, disclosed, and reduced the invention to practice prior to the earliest date of conception alleged by S. priority should be awarded to L.

2. SAME—RIGHT TO MAKE THE CLAIM—QUESTIONS NOT RAISED IN THE PATENT OFFICE ARE NOT BEFORE THE COURT.

The question whether L.'s construction embodies the issue not having been raised in the Patent Office, *Held* that this question is not before the court; but it was noted that L.'s garment responds to the terms of the issue.

Mr. D. P. Wolhaupter for the appellant.

Mr. P. B. Turpin for the appellee.

ROBB, *J.*:

Appeal from a decision of an Assistant Commissioner of Patents in an interference proceeding awarding priority to the appellee.

The invention will be understood from a reading of the single claim, as follows:

A union undergarment having a permanently closed crotch, an opening extending partially across the back of the undergarment and down the outside of one of its legs and terminating short of the lower end of said leg, the latter being permanently closed below the said terminus of said opening, and means for detachably fastening the drop seat flap defined by said opening.

The earliest date of conception claimed by Straub was December of 1912. He filed August 11, 1913. Luckett's application was not filed until later.

It is clearly established that Luckett conceived and disclosed the invention in February of 1912, many months before Straub's entry into the field. Soon after this Luckett produced and showed to others a garment embodying the issue. Among those to whom he disclosed the invention was a Mr. Ellinghaus, a merchant tailor. Mr. and Mrs. Ellinghaus, on August 18, 1912, called at the Luckett home and were told that Mr. Luckett was lying down. Thereupon Mr. Ellinghaus, who knew Mr. Luckett well, went to Mr. Luckett's room and found that the only clothing he had on was the garment above referred to. Mr. Ellinghaus's attention was directed to it and Mr. Luckett demonstrated its intended functions. Thereupon Mr. Luckett dressed and went downstairs. Mrs. Ellinghaus fixes the date with great certainty. She testified that a friend of hers was married at St. Francis De Sales Church, Maryland, on the 12th of September; that this friend called at the Ellinghaus home exactly one month prior to the wedding, and the fact was commented upon; that this call from the prospective bride was a subject of discussion the following Sunday between Mrs. Ellinghaus and Mrs. Luckett.

In the fore part of September of 1912 Dr. Dick, the family physician of the Lucketts, was shown the garment previously described, the result being that a partnership between the doctor and Mr. Luckett was formed for the purpose of exploiting the invention. The doctor advanced small sums of money and finally garments embodying the invention were made and placed upon the market.

We agree with the Examiner of Interferences and the Examiners-in-Chief that Luckett reduced the invention to practice as early as August 18, 1912. While the record fails to disclose that any question was raised in the Patent Office as to whether the Luckett construction embodies the issue, the suggestion now is made that it does not because "the opening of the exhibit extends entirely across the back" of the garment. This question really is not before us, but we may observe that Luckett's garment responds to the terms of the issue, for on one side of the back there is no opening; that is to say, in Luckett's garment a line may be drawn diagonally from the waist on one side to a point below the crotch on the other. The opening on one side, therefore, is from the waist to a point below the crotch, while on the other side there is no opening at all. Obviously, this opening extends only partially across the back, within the meaning of the count.

Having reduced his invention to practice, and not having attempted to conceal and suppress it but, on the contrary, having repeatedly disclosed it, there is no reason why Luckett should not be given the fruits of his discovery. Appellee, citing *Adams* v. *Murphy* (18 App. D. C., 172; 96 O. G., 845,) contends that Luckett should be required to prove his case beyond a reasonable doubt. We do not think so. The applications were copending and Luckett, in the circumstances of this case, merely has the burden of establishing his case by a preponderance of the evidence. In the case just cited there was a long period of delay "wholly unexplained," the evi-

dence of reduction to practice vague and unsatisfactory, and the court naturally concluded—

that what was claimed to be reduction to practice amounted to no more than a mere abandoned experiment.

As we said in *Schartow* v. *Schleicher*, (35 App. D. C., 347, 351; 156 O. G., 800:)

This is not a case where an incomplete invention has been put to one side until another has worked out the problem.

Neither is it a case of suppression or concealment of invention, as in *Deickman* v. *Brune*, (37 App. D. C., 399; 171 O. G., 1258;) *Brown* v. *Campbell*, (41 App. D. C., 499; 201 O. G., 905.) Rather is it a case where the evidence conclusively shows good faith on the part of the one who conceived and reduced to practice before the entry of his rival into the field, and whose conduct thereafter was free from suspicion.

The decision is reversed and priority awarded Luckett.

Reversed.

Court of Appeals of the District of Columbia.

MALCOM *v.* RICHARDS.

Decided April 1, 1918.

1. INTERFERENCE—PRIORITY—GLARE-SCREEN.
   Record reviewed and *Held* that priority was properly awarded to R.
2. SAME—SAME—REDUCTION TO PRACTICE.
   Merely sticking a glare-screen on an office-window by means of a suction-cup is not a reduction to practice where the device is intended to be stuck on the windshield of an automobile in motion.

Mr. T. K. Bryant and *Miss Florence King* for the appellant.

Mr. Ellis Spear and *Mr. Wm. F. Hall* for the appellee.

SMYTH, *C. J.*:

The invention covered by this appeal may be shortly described as a light-absorbing member to be attached by means of a suction-cup to an automobile for the purpose of protecting the eyes of a motorist from the glare of the lights of an approaching car. There are four counts of the issue. It appears that Richards conceived the invention about July, 1914, and constructively reduced it to practice in October of the same year by filing his application in the Patent Office. His date of conception is conceded by Malcom, and there is, of course, no dispute about the filing date. He was diligent from the beginning. This, if not admitted, is not seriously denied by his opponent.

Malcom offered testimony tending to show that he conceived counts 1 and 3 in the spring of 1914, but he failed to establish actual reduction to practice prior to 1915. Under the law his own testimony on this point must be corroborated. (*Sharer* v. *McHenry*, 19 App. D. C., 158; 98 O. G., 585; *Petrie* v. *De Schweinitz*, 19 App. D. C., 386; 99 O. G., 1387; *Flora* v. *Powrie*, 23 App. D. C., 195; 109 O. G., 2443.) He relies upon one Dietrich to supply the corroboration. All that Dietrich says is that some time about January or February, 1914, Malcom handed to him some shields and asked him "what he thought of them," and that Malcom said "it was a dimmer for a light;" that he stuck it on the window and that "it had a little rubber attached to it." When asked how Malcom stuck it on the window, the witness replied:

I do not know just exactly * * * I did not look at it very closely but he stuck it on the window and there it was. I suppose it was round.

Assume that the device he was speaking about was the one involved in this interference, the sticking of it upon a window by some means unknown to the witness was not a reduction to practice. It might stick to a window but not to the wind-shield of an automobile in motion where the jar of the machine might seriously affect its adhesiveness. In other words, what would stick to a window at rest might not adhere to a wind-shield in motion. To establish successful reduction to practice generally requires a test under actual working conditions. (*Sherwood* v. *Dreiwson*, 29 App. D. C., 161; 130 O. G., 657; *Wickers* v. *McKee*, 29 App. D. C., 4; 129 O. G., 869.)

Malcom's constructive reduction to practice by filing his application in the Patent Office in October, 1915, avails him nothing, for he failed to show by any one outside of himself that he had been at all diligent between the date on which he claims conception in 1914 and the filing of the application.

With respect to counts 2 and 4, Malcom did not prove that they were conceived by him prior to the date upon which he filed his application in October, 1915, about fifteen months after Richards's conception and a year subsequent to his constructive reduction to practice.

Therefore the record considered independently of the holdings of the different tribunals below would compel us to award priority to Richards as to all the counts. But, even if this were not so, it would be our duty to affirm the decision of the Commissioner of Patents, since it is the law, often stated by this court, that where all the tribunals of the Patent Office concur upon a question of fact, we will not disturb the finding except for palpable error. (*Lindmark* v. *Hodgkinson*, 31 App. D. C., 612; 137 O. G., 228; *Murphy* v. *Meissner*, 24 App. D. C., 260; 114 O. G., 1830; *Stone* v. *Pupin*, 19 App. D. C., 396; 100 O. G., 1113; *Podlesak* v. *McInnerney*, 26 App. D. C., 399; 120 O. G., 2127.)

Malcom in his very carefully prepared brief invites our attention to many decisions. We have considered them all, but find nothing inconsistent with the conclusions we have reached. The dominant question here is one of fact. The law applicable is well settled.

The decision of the Commissioner of Patents must be affirmed.

Affirmed.

Applications Made to the Federal Trade Commission for Licenses Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 1,014,824, dated January 16, 1912, to Gottlob Honold, of Stuttgart, Germany, Max Rall, of Paris, France, and Paul Mumprecht, of Brussels, Belgium, assignors to the Firm of Robert Bosch, of Stuttgart, Germany, for "Electric ignition system for internal-combustion engines." License applied for by Splitdorf Electrical Company, 98 Warren street, Newark, N. J.

Patent No. 1,030,817, dated June 25, 1912, to Gottlob Honold, of Stuttgart, Germany, assignor to the Firm of Robert Bosch, of Stuttgart, Germany, for "Binding-post for connecting electric cables." License applied for by Splitdorf Electrical Company, 98 Warren street, Newark, N. J.

Patent No. 982,897, dated July 7, 1908, to Karl Schirmacher and Hermann Landers, of Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Red vat dye." License applied for by National Aniline & Chemical Company, Inc., 21 Burling Slip, New York city.

Patent No. 906,367, dated December 8, 1908, to Oscar Bally, of Mannheim, and Hugo Wolff, of Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Anthracene dye and process of making same." License applied for by National Aniline & Chemical Company, Inc., 21 Burling Slip, New York city.

Patent No. 916,029, dated March 23, 1909, to Albrecht Schmidt and Ernst Bryk, of Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Red-violet dye and process of making same." License applied for by National Aniline & Chemical Company, Inc., 21 Burling Slip, New York city.

Patent No. 925,917, dated June 22, 1909, to Filip Kačer, of Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Compound of the anthracene series and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 929,442, dated July 27, 1909, to Max Henry Isler, of Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Germany, for "Anthracene dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 931,598, dated August 17, 1909, to Louis Haas, of Heidelberg, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Sulfur dye and process of making same." Application applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 818,336, dated April 17, 1906, to Oscar Bally, of Mannheim, and Hugo Wolff, of Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Blue dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., Burling Slip, New York city.

Patent No. 809,892, dated January 9, 1906, to Oscar Bally and Max Henry Isler, of Mannheim, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Violet dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 807,422, dated December 12, 1905, to Karl Elbel, of Biebrich, Germany, assignor to the Firm of Kalle and Company, Aktiengesellschaft, of Biebrich, Germany, for "Zinc azonaphthol dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 796,393, dated August 1, 1905, to Oscar Bally, of Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Germany, for "Anthracene coloring-matter and process of producing the same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 787,859, dated April 18, 1905, to Roland Heinrich Scholl, of Karlsruhe, and Oscar Bally, of Mannheim, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Baden, for "Anthracene compound and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 770,177, dated September 13, 1904, to Paul Julius, Hans Reindel, and Fritz Carl Günther, of Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Bavaria, Germany, a corporation of Baden, for "Azo dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 741,029, dated October 13, 1903, to Richard Gley and Otto Siebert, of Berlin, Germany, assignors to Actien-Gesellschaft für Anilin Fabrikation, of Berlin, Germany, for "Red azo lake." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 754,768, dated March 15, 1904, to Eduard Hepp, of Frankfort-on-the-Main, and Ernst Wolpert, of Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Process of making anthraquinone dyes." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 734,866, dated July 28, 1903, to Eduard Hepp, of Frankfort-on-the-Main, and Christoph Hartmann, of Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Blue anthraquinone dye and process of making same." License applied for

by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 734,325, dated July 21, 1903, to Otto Hess, of Höchst-on-the-Main, Germany, assignor to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Green anthraquinone dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 715,662, dated December 9, 1902, to Max H. Isler, of Mannheim, Germany, assignor to the Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Germany, for "Anthracene dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 714,882, dated December 2, 1902, to Otto Ernst, of Höchst-on-the-Main, Germany, assignor to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Monoazo dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York City.

Patent No. 863,397, dated August 13, 1907, to Max Isler and Filip Kačer, of Mannheim, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Anthraquinone compound and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 948,204, dated February 1, 1910, to René Bohn, of Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Indanthrene monosulfonic acid and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 955,105, dated April 12, 1910, to Roland Scholl, of Gratz, Austria-Hungary, and Max Henry Isler, of Mannheim, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Anthracene dye and process of making." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 938,566, dated November 2, 1909, to Paul Fischer, of Elberfeld, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, Germany, a corporation of Germany, for "Yellow dye." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 876,810, dated January 14, 1908, to Max Albert Kunz, of Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Anthracene dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 875,390, dated December 31, 1907, to Paul Thomaschewski, of Elberfeld, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, Germany, a corporation of Germany, for "Anthraquinone derivative." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 858,065, dated June 25, 1907, to Otto Ernst and Gillis Gullbransson, of Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Monoazo dye for lakes and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 856,811, dated June 11, 1907, to Roland Heinrich Scholl, of Karlsruhe, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Baden, for "Dye of the anthraquinone series and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 853,041, dated May 7, 1907, to Paul Thomaschewski, of Elberfeld, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, Germany, a corporation of Germany, for "Anthraquinone derivative." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York City.

Patent No. 828,778, dated August 14, 1906, to Roland Heinrich Scholl, of Karlsruhe, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Compound of the anthraquinone series and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 818,992, dated April 24, 1906, to Oscar Bally and Max Henry Isler, of Mannheim, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Anthracene dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 1,063,173, dated May 27, 1913, to Christian Rampini, deceased, by William E. Warland, administrator, of Brooklyn, N. Y., assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the Rhine, Germany, for "Producing amino-anthraquinones and derivatives thereof." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 1,063,172, dated May 27, 1913, to Christian Rampini, deceased, by William E. Warland, administrator, of Brooklyn, N. Y., assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, for "Producing amino-anthraquinones and derivatives thereof." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 1,003,268, dated September 12, 1911, to Richard Just and Hugo Wolff, of Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Anthracene dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 999,439, dated August 1, 1911, to Karl Elbel and Edward Wray, of Biebrich, Germany, assignors to the Firm of Ralle & Company, Aktiengesellschaft, of Biebrich, Germany, for "Vat-dyeing coloring-matter." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 999,062, dated July 25, 1911, to Fritz Singer, of Offenbach-on-the-Main, Germany, assignor to the corporation of Chemische Fabrik Griesheim Elektron, of Frankfort-on-the-Main, Germany, for "Manufacture of anthranol." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 998,596, dated July 25, 1911, to Wilhelm Bauer, of Vohwinkel, and Alfred Herre and Rudolf Mayer, of Elberfeld, Germany, assignors to Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, Germany, a corporation of Germany, for "Vat dye." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 970,878, dated September 20, 1910, to René Bohn, of Mannheim, Germany, assignor to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Baden, for "Vat dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 968,697, dated August 30, 1910, to Albrecht Schmidt, Ernst Bryk, and Robert Voss, of Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Vat dye and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 965,170, dated July 26, 1910, to Karl Elbel, of Biebrich, Germany, assignor to the Firm of Kalle & Company Aktiengesellschaft, of Biebrich, Germany, for "Process of condensing reduction products of acenaphthene-quinone, &c." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 961,612, dated June 14, 1910, to Max Henry Isler, of Mannheim, and Hugo Wolff, of Ludwigshafen-on-the-Rhine, Germany, assignors to Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation, for "Anthracene compound and process of making it." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 961,048, dated June 7, 1910, to Fritz Ullmann, of Berlin, Germany, assignor to Actien Gesellschaft für Anilin Fabrikation, of Berlin, Germany, for "Anthraquinone-di-acridones." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 958,325, dated May 17, 1910, to Albrecht Schmidt and Georg Kränzlein, of Höchst-on-the-Main, Germany, assignors to Farbwerke vorm. Meister Lucius & Brüning, of Höchst-on-the-Main, Germany, a corporation of Germany, for "Urea of the anthraquinone series and process of making same." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 957,042, dated May 3, 1910, to Joseph Deinet, of Elberfeld, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, Germany, a corporation of Germany, for "Vat dye." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

Patent No. 957,040, dated May 3, 1910, to Joseph Deinet, of Elberfeld, Germany, assignor to Farbenfabriken vorm. Friedr. Bayer & Co., of Elberfeld, Germany, a corporation of Germany, for "Orange vat dye." License applied for by National Aniline & Chemical Co., Inc., 21 Burling Slip, New York city.

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MAY, 1918.

[The opinion of the Solicitor of the Department of the Interior is indicated by a double dagger (‡); decisions of the Court of Appeals of the District of Columbia are indicated by one star (*), of the United States Circuit Court of Appeals by the letter ᵈ, and of the Supreme Court of the United States by two stars (**).]

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OF THE

DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

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A patent for an improved acid arsenate of lead in the form of a fine powder cannot on motion to dismiss a bill for infringement be declared invalid for want of invention on the ground that the prior art as disclosed by the patent showed nothing new was produced except a difference in degree of fineness of the powder, for in so recondite a science as chemistry a difference in degree may produce revolutionary results, and hence the validity of the patent should be determined by trial on the merits.

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Blended whisky and straight whisky being goods of the same descriptive properties, a decree based on the use of the trade-mark on blended whisky is conclusive between the parties on the question of its use on straight whisky.

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RIGHT TO MAKE CLAIMS—QUESTIONS NOT RAISED IN THE PATENT OFFICE ARE NOT BEFORE THE COURT.

The question whether L.'s construction embodies the issue not having been raised in the Patent Office, *Held* that this question is not before the court; but it was noted that L.'s garment responds to the terms of the issue. [* Luckett *v.* Straub, 999.

INVENTION.

See Construction of Specifications and Patents; Patentability.

JURISDICTION OF THE COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

1. ABANDONMENT OF APPLICATION—APPEAL FROM THE DECISION OF COMMISSIONER.

Where the Commissioner of Patents decides that the showing made is not sufficient to establish that the delay in the prosecution of an application was unavoidable within the meaning of section 4894, Revised Statutes, *Held* that his action is not reviewable on appeal to the Court of Appeals of the District of Columbia. [* *In re* Carvalho, 513.

2. COURT OF APPEALS OF THE DISTRICT OF COLUMBIA.

The jurisdiction of the Court of Appeals of the District of Columbia to entertain appeals from the decision of the Commissioner of Patents embraces but two classes of cases: first, where an application for a patent or the reissue of a patent has been twice rejected by the Primary Examiner, then by the Examiners-in-Chief, and afterward by the Commissioner, and, second, where the Commissioner in an interference has awarded priority to one of the parties. [* Id.

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IN ENEMY COUNTRIES—POWER TO ADMINISTER AND PROVE AUTHORITY.

Held that the Spanish diplomatic and consular officers in charge of the interests of the United States in enemy countries are not vested with power to administer oaths or to prove the authority of officials of the enemy countries under section 4892, Revised Statutes. [‡ Opinion of the Solicitor of the Interior, 513.

PATENTABILITY.

GRANTING OF PATENTS—PRESUMPTION.

The granting of a patent creates the presumption of patentable invention.

[d Corona Chemical Co. *v.* Latimer Chemical Co., 514.

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Where there is pleaded in bar a previous decision in a suit by the present plaintiff against one H. for alleged infringement of the trade-mark, in which decision the court had held that the defendant H. had been prior in adoption and use of the word "Crow" or the words "Old Crow" employed as a descriptive term in dealing with whisky and continued to a limited extent up to the time of the institution of the suit in good faith, and the defendant was not guilty of infringing, it is now held that that prior adjudication was conclusive as between G. and the present defendant, who is privy with H., the previous defendant, and the previous decision did not merely adjudge a defensive right to H. merely extending to the territory and trade of that previous defendant at the time the previous bill was filed. It had, in fact, adjudged title to the party H. in view of previous adoption and use.

[** Rock Spring Distilling Company and Rosenfield *v.* W. A. Gaines & Company, 265.

PRIORITY OF ADOPTION AND USE.

See Prior Adjudication.

PRIORITY OF INVENTION.

See Jurisdiction of the Court of Appeals of the District of Columbia; Reduction to Practice.

1. DILIGENCE.

Where S. completed drawings of the device of the issue just prior to C.'s entry into the field and immediately commenced the construction of a machine and was diligent until the filing of his application, which was a few months after C. filed his application, *Held*, that priority was properly awarded to S.

[* Cragg *v.* Strickland, 255.

2. STEREOTYPE-PLATE-FINISHING MACHINE.

Where W. had completed working drawings of the device of the issue and had filed his application prior to the dates on which M. completed his machine or filed his application, *Held* that priority was properly awarded to W. [* MacConnell *v.* Wood, 767.

3. CONCEPTION—REDUCTION TO PRACTICE.

The evidence reviewed and *Held* that since L. conceived, disclosed, and reduced the invention to practice prior to the earliest date of conception alleged by S. priority should be awarded to L. [* Luckett *v.* Straub, 999.

4. GLARE-SCREEN.

Record reviewed and *Held* that priority was properly awarded to R. [* Malcom *v.* Richards, 1000.

QUESTION BEFORE THE COURT.

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REDUCTION TO PRACTICE.

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INTERFERENCE—PRIORITY.

Merely sticking a glare-screen on an office-window by means of a suction-cup is not a reduction to practice where the device is intended to be stuck on the wind-shield of an automobile in motion. [* Malcom *v.* Richards, 1000.

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* *In re* The American Sugar Refining Company, 255.

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As C.'s application was not twice rejected by the Primary Examiner nor passed upon by the Examiners-in-Chief, *Held* that its rejection was not one of those contemplated by section 4909. [* *In re* Carvalho, 513.

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ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED DURING THE MONTH OF MAY, 1918.

A. F. Weymer Co., The, *et al.* (See Weymer, August F., assignor.)
Abady, Jacques. (See Simmance and Abady.)
Abbott, Frank T., Newton Falls, N. Y. Quick-shifting awning-frame. No. 1,267,036; May 21; v. 250; p. 658.
Abbott, James A., Leavenworth, Wash. Artificial tree. No. 1,266,749; May 21; v. 250; p. 579.
Abbott, Robert R., assignor to The Case Hardening Service Company, Cleveland, Ohio. Carbonizing material for steel articles. No. 1,265,158; May 7; v. 250; p. 79.
Abbott, William G., Jr., Wilton, N. H. Evaporator. No. 1,265,863; May 14; v. 250; p. 302.
Abell, Rollin, Boston, Mass. Odometer. No. 1,265,023; May 7; v. 250; p. 43.
Abell, Rollin, Milton, Mass., assignor to J. B. Carburetor Corporation, Los Angeles, Cal. Carbureter. No. 1,265,024; May 7; v. 250; p. 43.
Abrahamson, Nils S., Los Angeles, Cal. Wave-power. No. 1,267,733; May 28; v. 250; p. 878.
Abramovitz, Morris, Baltimore, Md., assignor to D. B. Levy, New York, N. Y. Syringe. No. 1,267,616; May 28; v. 250; p. 847.
Ach, Lorenz, Mannheim, A. Rothmann, Heidelberg, and G. Glemsa, Hamburg, assignors to Farbwerke vorm. Meister Lucius & Bruening, Höchst-on-the-Main, Germany. Preparing stable solutions of di-methylamino-tetramino-arsenobenzene. No. 1,265,864; May 14; v. 250; p. 303.
Ach, Lorenz, and H. Dieterich, Mannheim, assignors to Farbwerke vorm. Meister Lucius & Bruening, Höchst-on-the-Main, Germany. Preparing derivatives of bis-methylaminotetraminoarsenobenzene which are soluble in water. No. 1,265,865; May 14; v. 250; p. 303.
Achtmeyer, William, assignor to The Russell Mfg. Co., Middletown, Conn. Weaving garter-pads. No. 1,267,954; May 28; v. 250; p. 942.
Ackerman, Charles N., Chicago, Ill. Expansion-bolt. No. 1,265,866; May 14; v. 250; p. 303.
Acme Universal Joint Manufacturing Co. (See Rhodes, Bert O., assignor.)
Acushnet Process Company of New York. (See Young, Philip E., assignor.)
Adams, Andrew, Kahuku, Hawaii. Extracting sucrose from sugar-cane. No. 1,265,582; May 7; v. 250; p. 198.
Adams, Arthur H., Sparkill, assignor to Western Electric Company, Incorporated, New York, N. Y. Circuit-changing switch. No. 1,266,190; May 14; v. 250; p. 395.
Adams, Charles D., Jacksonville, Fla. Stock-car. No. 1,266,375; May 14; v. 250; p. 443.
Adams, James D., North Belle Vernon, Pa. Annealing-furnace. No. 1,266,750; May 21; v. 250; p. 579.
Adams, James P. N., Grand Rapids, Mich. Carpet-sweeper brush. No. 1,267,304; May 21; v. 250; p. 731.
Adams, James S., and M. Day, Belton, S. C. Picker-check for looms. No. 1,265,985; May 14; v. 250; p. 337.
Adams, Leon G., St. Louis, Mo. Driving mechanism. No. 1,265,583; May 7; v. 250; p. 198.
Adams, Warrington E., Chicago, Ill. Car-wheel. No. 1,267,350; May 28; v. 250; p. 773.
Adams, William A. (See Skublin, Charles P., assignor.)
Adjustable Wrapping Machine Company. (See Wells, Arthur F., assignor.)
Adelt, Frank W., Minneapolis, Minn. Banking-plane for automobiles. No. 1,266,191; May 14; v. 250; p. 396.
Aeolian Company, The. (See Prettie, Richard J., assignor.)
Aeolian Company, The. (See Schaad, Hermann B., assignor.)
Agar, Robert, Shortlands, England, assignor to The Babcock & Wilcox Company, Bayonne, N. J. Draft-controlling installation for boiler-furnaces. No. 1,267,037; May 21; v. 250; p. 659.
Ahern, Frank T., New York, assignor to F. Strauss, Yonkers, N. Y. Toy. No. 1,265,718; May 14; v. 250; p. 261.
Ahern, John F., Longmeadow, Mass. Container. No. 1,267,617; May 28; v. 250; p. 847.
Airless Auto Wheel & Tire Company. (See Amodio, Roberto, assignor.)
Akans, Walter C., assignor of one-half to J. A. Ryan, Birmingham, Ala. Loose-leaf binder. No. 1,267,038; May 21; v. 250; p. 659.
Aker, Eldon, Smithville, Mo. Feed-rack. No. 1,265,025; May 7; v. 250; p. 43.
Akin, Claud O., Princeton, Ky. Dental implement. No. 1,267,039; May 21; v. 250; p. 659.
Aktiebolaget Svenska Kullager-Fabriken. (See Miller, Clarence H., assignor.)
Aktiengesellschaft der Maschinenfabriken Escher Wyss & Co. (See Graemiger, Benjamin, assignor.)
Alam, Bert R., Winnebago, Nebr. Cultivator attachment. No. 1,266,542; May 21; v. 250; p. 519.
Alberger Pump and Condenser Company. (See Dean, Dion K., assignor.)
Albers, O. J. *et al.* (See Pratt, Edward, assignor.)
Alberti, Emilio, M. Cariti, and G. La Femina, New York, assignors to International Cork Company, Brooklyn, N. Y. Cork-blocking machine. No. 1,267,311; May 21; v. 250; p. 733.
Albig, William O. (See Currie and Gruenberg, assignors.)
Albin, George E., Cornish, Okla. Air-cooling system. No. 1,267,160; May 21; v. 250; p. 695.
Alden, Carroll R., Detroit, Mich., assignor to Westinghouse Electric and Manufacturing Company. Electrical system. No. 1,266,898; May 21; v. 250; p. 619.
Alexander, Andrew, New York, N. Y. Expansion shell-reamer and arbor therefor. No. 1,266,588; May 14; v. 250; p. 488.
Alexander, Frank F., and L. W. Bruun, International Falls, Minn. Potato-digger. No. 1,266,376; May 14; v. 250; p. 443.
Alexander, James H., Conquest, Kans. Trap. No. 1,266,751; May 21; v. 250; p. 580.
Alexander, James W., assignor to American Auto Lock Company, Pittsburgh, Pa. Hood-lock. No. 1,265,026; May 7; v. 250; p. 44.
Alexander, John E., Covington, Va. Display device. No. 1,266,899; May 21; v. 250; p. 619.
Alexander, Milton F., assignor of one-half to A. Sauer, Milwaukee, Wis. Press-button. No. 1,267,494; May 28; v. 250; p. 812.
Alexander, Verne P., assignor to W. G. Wilmot, Chicago, Ill. Means to supply heated air to carbureters. No. 1,266,900; May 21; v. 250; p. 620.
Alexander, Victor W., Milwaukee, Wis. Coupon-envelop. No. 1,265,159; May 7; v. 250; p. 79.
Alexander, W. B. D. (See Johnson, Wilfred G., assignor.)
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Condenser. No. 1,266,377; May 14; v. 250; p. 444.
Alldread, David, Bay City, Mich. Cross-head. No. 1,265,027; May 7; v. 250; p. 44.
Allen, Andrews, assignor to Wood Equipment Company, Chicago, Ill. Car-tipple. No. 1,265,028; May 7; v. 250; p. 44.
Allen, John D., Philadelphia, Pa. Compensating driving mechanism for motor-vehicles. No. 1,265,160; May 7; v. 250; p. 80.
Almy, Almon, Bellefontaine, Ohio. Oil-burner. No. 1,265,867; May 14; v. 250; p. 303.
Altgelt, Rudolph J., assignor to Oliver Chilled Plow Works, South Bend, Ind. Plow structure. No. 1,266,752; May 21; v. 250; p. 580.
Altgelt, Rudolph J., assignor to Oliver Chilled Plow Works, South Bend, Ind. Plow structure. No. 1,266,753; May 21; v. 250; p. 580.
Altgelt, Rudolph J., assignor to Oliver Chilled Plow Works, South Bend, Ind. Plow structure. No. 1,266,754; May 21; v. 250; p. 580.
Alvey-Ferguson Company, The. (See Bernheim, Elbridge P., assignor.)
Aman and Sandmann. (See Brigel, Leo A., assignor.)
American Auto Lock Company. (See Alexander, James W., assignor.)
American Broom and Brush Co. *et al.* (See Weymer, August F., assignor.)
American Buckle Co., The. (See Hartshorn, Henry A., assignor.)
American Can Company. (See Dillon, Laurence F., assignor.)
American Can Company. (See Eberhart, Felix, assignor.)

American Can Company. (See Ford, Ben K., assignor.)
American Can Company. (See Hothersall, John M., assignor.)
American Electric Company. (See Burns, Peter C., assignor.)
American Flyer Manufacturing Company. (See Vaughan, Thomas M., assignor.)
American Graphophone Company. (See Larsen, Louis G., assignor.)
American Laundry Machinery Company, The. (See Cutter, Edward I., assignor.)
American Laundry Machinery Company, The. (See Hagen, Arthur T., assignor.)
American Laundry Machinery Company, The. (See Miller, Ernest W., assignor.)
American Metal Cap Co. (See Hammer, Charles, assignor.)
American Optical Company. (See Arnold, Arthur A., assignor.)
American Optical Company. (See Bugbee, Lucian W., assignor.)
American Optical Company. (See Bugbee and Tillyer, assignors.)
American Optical Company. (See Day, George H., assignor.)
American Optical Company. (See Day and Styll, assignors.)
American Optical Company. (See Gagnon, Leo O., assignor.)
American Optical Company. (See Poeton, Lawrence, assignor.)
American Optical Company. (See Poeton and Wells, assignors.)
American Optical Company. (See Schumacher, Elmer L., assignor.)
American Optical Company. (See Tillyer, Edgar D., assignor.)
American Photo Player Company. (See Van Valkenburg, Burt R., assignor.)
American Products Company. (See Hodge and Rugglee, assignors.)
American Radiator Company. (See Howell, Frank B., assignor.)
American Railways Equipment Company, The. (See Whistler, David B., assignor.)
American Steam Gauge & Valve Manufacturing Company. (See Young, Charles D., assignor.)
American Telephone and Telegraph Company. (See Williams, Harry C., assignor.)
American Thermos Bottle Company. (See Visscher, Charles R. H., assignor.)
American Utilities Company. (See Barnes, Edward M., assignor.)
American Wagon Company. (See Kuhnen, Alexander F., assignor.)
American Warp Drawing Machine Company. (See Lanning, Charles D., assignor.)
American Well Works, The. (See Chapman, Matthew T., assignor.)
Amodio, Roberto, assignor to Airless Auto Wheel & Tire Company, Inc., Rochester, N. Y. Vehicle-wheel. No. 1,266,089; May 14; v. 250; p. 366.
Andersen, Charles C., Chicago, Ill. Support. No. 1,267,618; May 28; v. 250; p. 848.
Andersen, Karl A. J., Salem, assignor to T. A. Mulkern, Salt Lake City, Utah. Beet-topping machine. No. 1,266,378; May 14; v. 250; p. 444.
Anderson, Andrew O., *et al.* (See Anderson, Martin E., assignor.)
Anderson, Ausfrid L., *et al.* (See Stampka, Paul, assignor.)
Anderson, Bailey R. (See Brown, Frank O., assignor.)
Anderson, Carl O., Lancaster, Pa. Milking-machine. No. 1,266,544; May 21; v. 250; p. 519.
Anderson, Charles A., assignor of twenty-two and five-tenths one-hundredths to E. L. Cook and twenty-two and five-tenths one-hundredths to J. A. Olson, Chicago, Ill. Fluid-pump. No. 1,267,040; May 21; v. 250; p. 659.
Anderson, Charles W., Brooklyn, N. Y. Stop mechanism for hod-elevators. No. 1,267,345; May 21; v. 250; p. 743.
Anderson, Frank E., St. James, Minn. Wagon-rack bracket. No. 1,267,162; May 21; v. 250; p. 695.
Anderson, Frank G., *et al.* (See Anderson, Martin E., assignor.)
Anderson, Gustav, Brooklyn, assignor to International Cigar Machinery Company, New York, N. Y. Cigar-wrapping mechanism. No. 1,267,734; May 28; v. 250; p. 879.
Anderson, Harold N., assignor to The Anderson Rolled Gear Company, Cleveland, Ohio. Device for chucking blanks in gear-rolling machines. No. 1,267,735; May 28; v. 250; p. 879.
Anderson, Ingemar, Ridgefield Park, N. J. Snap-fastener. No. 1,265,719; May 14; v. 250; p. 261.
Anderson, John W., New London, Conn., assignor to Electric Boat Company, New York, N. Y. Valve-setting gear for Diesel engines. No. 1,265,029; May 7; v. 250; p. 44.
Anderson, John W., Hamilton, Ontario, Canada. Apparatus for shaping metal channel-bars. No. 1,266,545; May 21; v. 250; p. 520.
Anderson, Martin E., assignor of one-third to F. G. Anderson and one-third to A. O. Anderson, De Kalb, Ill. Vehicle-tongue. No. 1,265,868; May 14; v. 250; p. 304.
Anderson, Newton M., assignor of one-half to W. T. Jean, Worthington, Ind. Vulcanizer. No. 1,266,901; May 21; v. 250; p. 620.
Anderson, Oscar, Råsunda, Sweden. Apparatus for measuring the weight of fluid quantities. No. 1,266,543; May 21; v. 250; p. 519.
Anderson Rolled Gear Company, The. (See Anderson, Harold N., assignor.)
Anderson, Rudolph M., New York, N. Y. Moving-picture-film reel. No. 1,266,379; May 14; v. 250; p. 444.
Anderson, William B., assignor to Haggard and Marcusson Company, Chicago, Ill. Corner-bracket for bed-bottoms. No. 1,266,755; May 21; v. 250; p. 581.
Anderwert, Eugen, H. Fritzsche, and H. Schobel, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Substantive orthooxyazo dyestuffs and making same. No. 1,265,030; May 7; v. 250; p. 45.
Anderwert, Eugen, H. Fritzsche, and H. Schobel, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Substantive orthooxyazo dyestuffs and making same. No. 1,265,031; May 7; v. 250; p. 45.
Andes Exploration and Smelting Corporation. (See Cobb, Bayard G., assignor.)
Andre, Thomas C., Bridgeport, Wis. Door-closer. No. 1,265,416; May 7; v. 250; p. 150.
Andree, Armida, Manistee, Mich. Note-reading device. No. 1,265,720; May 14; v. 250; p. 261.
Andres, Charles S., and W. T. Jones, assignor to Sound-O-Photoplay Co., Philadelphia, Pa. Machine for continuous reproduction of phonographic compositions. No. 1,265,286; May 7; v. 250; p. 114.
Andresen, Julius C. (See Marten, Grahn, and Andresen.)
Andress, John S., Jr., Sneads Island, Fla. Plow-point fastener. No. 1,266,380; May 14; v. 250; p. 444.
Andrew, William E., Atlantic Highlands, N. J. Resilient tire. No. 1,265,032; May 7; v. 250; p. 45.
Angular Drill & Machine Corporation. (See Otis, Gerald E., assignor.)
Annis, John E. (See Moomaw, Henry E., assignor.)
Anspach, Jacob, Cleveland, Ohio. Gas-burner. No. 1,267,041; May 21; v. 250; p. 660.
Anthony, Sidney R., New York, N. Y. Pump connection. No. 1,266,192; May 14; v. 250; p. 396.
Applas, Clarence S., and W. T., Moline, Ill. Box-lid holder. No. 1,265,033; May 7; v. 250; p. 46.
Applas, Walter T. (See Applas, Clarence S., and W. T.)
Applebee, Burton M. (See Johnson and Applebee.)
Arco, Georg von, and A. Meissner, assignors to Gesellschaft für drahtlose Telegraphie m. b. H., Berlin, Germany, Transmitting apparatus for wireless telegraphy and telephony. No. 1,267,018; May 21; v. 250; p. 653.
Arion Manufacturing Company. (See Cole, Otto B., assignor.)
Arkills, Murvin E., Chicago, Ill. Pneumatic-hammer safety device. No. 1,267,163; May 21; v. 250; p. 695.
Arkin, Louis, Boston, Mass. Fastener. No. 1,265,869; May 14; v. 250; p. 304.
Armstrong, Henry A., Brooklyn, assignor to Intertype Corporation, New York, N. Y. Control for typographical machines. No. 1,267,164; May 21; v. 250; p. 695.
Arnavas, Mario, San Francisco, Cal. Fire-alarm protective device. No. 1,267,165; May 21; v. 250; p. 696.
Arnold, Arthur A., assignor to American Optical Company, Southbridge, Mass. Cutter. No. 1,267,836; May 28; v. 250; p. 909.
Arnold, Emma C., Mount Clemens, Mich. Comforter. No. 1,267,042; May 21; v. 250; p. 660.
Arnott, James, Oakland, Cal. Variable-speed mechanism. No. 1,267,610; May 28; v. 250; p. 848.
Arntz, Lew, Des Moines, Iowa. Spectacle-lens mount. No. 1,265,417; May 7; v. 250; p. 150.
Arntz, Lew, Des Moines, Iowa. Attachment for eye-glass-mountings. No. 1,266,757; May 21; v. 250; p. 581.
Aronson, Harry, Roxbury, assignor to Boston Superior Petticoat Company, Boston, Mass. Adjustable skirt. No. 1,265,870; May 14; v. 250; p. 304.
Arrington, Perry B., Chicago, Ill. Calculating appliance. No. 1,267,043; May 21; v. 250; p. 660.
Art Metal Construction Company. (See Fosberg and Strachan, assignors.)
Artz, Frederick T., Manchester, N. H., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Automatic filling-replenishing loom. No. 1,265,584; May 7; v. 250; p. 193.
Arundel, Hubert. (See Higginson and Arundel.)
Arvidson, Clarence G. (See Ebelhare and Arvidson.)
Asbestos Protected Metal Company. (See Moses and Greene, assignors.)
Ashby, Lena B., Homer, Ky. Sanitary sputum-cup. No. 1,266,758; May 21; v. 250; p. 581.
Ashinger, Herman H., assignor to George Cutter Company, South Bend, Ind. Lighting socket and holder. No. 1,266,651; May 21; v. 250; p. 551.
Ashworth, Fred, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Wax-thread shoe-sewing machine. No. 1,266,986; May 14; v. 250; p. 337.
Askeland, Norval, Orland, Cal. Tie-wire for cement-sacks. No. 1,266,902; May 21; v. 250; p. 620.

Astrom, Carl P., East Orange, N. J., assignor to M. H. Treadwell Company. Tilting mechanism for cars. No. 1,266,193; May 14; v. 250; p. 396.
Atkins, Joseph L. (See Enid, Clayton T., assignor.)
Atkinson, Percival H., Burns, Oreg. Attachment for the check-chutes of check-operated locks. No. 1,266,759; May 21; v. 250; p. 581.
Atlantic Welding Corporation. (See Jansen and Waltmann, asignors.)
Atlas Powder Company. (See Strane, Archibald J., assignor.)
Auclair, Napoleon J., Portland, Oreg. Mail-bag-delivering means. No. 1,266,760; May 21; v. 250; p. 582.
Audifred, Alfred, Virginia City, Mont. Necktie-form. No. 1,265,721; May 14; v. 250; p. 261.
Aufuldish, John B., Dayton, Ohio. Clamp. No. 1,265,287; May 7; v. 250; p. 114.
Austen, Thomas M., Ithaca, N. Y. Torpedo-guard for ships. No. 1,265,161; May 7; v. 250; p. 80.
Austin, Raymond C. (See Worthington and Austin.)
Auto Specialties Manufacturing Co. (See Bair, Clarence L., assignor.)
Automatic Button Co. (See Kemo, Albert F., assignor.)
Automatic Electric Company. (See Campbell, Wilson L., assignor.)
Automatic Electric Company. (See Fales, Edward D., assignor.)
Automatic Electric Company. (See Martin, Talbert G., assignor.)
Automatic Electric Company. (See Mellinger, Edward A., assignor.)
Automatic Electric Company. (See Powell, Winfred T., assignor.)
Automatic Electric Company. (See Smith, Arthur B., assignor.)
Automatic Electric Company. (See Willis, Bernard D., assignor.)
Automatic Electric Company. (See Yanochowski, George A., assignor.)
Automatic Powdered Soap Dispenser Company. (See Beckmann, John W., assignor.)
Ayer, Harry C., Seattle, Wash. Process and apparatus for making bottles from paper pulp. No. 1,265,162; May 7; v. 250; p. 80.
Azoline, Albert J. (See Azoline, Peter M. and A. J.)
Azoline, Peter M. and A. J., Torrington, Conn. Incubator attachment. No. 1,265,717; May 7; v. 250; p. 229.
B. & B. Photo Co. (See Bergman, Wilhelm, assignor.)
B. F. Goodrich Company, The. (See Gammeter, John R., assignor.)
B. F. Sturtevant Company. (See Bergstrom, Carl O., assignor.)
Baars, Fred C., Elkader, Iowa. Gambrel. No. 1,265,722; May 14; v. 250; p. 261.
Babcock & Wilcox Company, The. (See Agar, Robert, assignor.)
Babcock and Wilcox Company, The. (See Jacobus, David S., assignor.)
Babcock & Wilcox Company, The. (See Pratt, Arthur D., assignor.)
Babich, George G., New York, N. Y. Burial-vault. No. 1,267,495; May 28; v. 250; p. 812.
Bache, Leigh S., Middlesex borough, N. J., assignor to Bound Brook Oil-Less Bearing Company. Self-lubricating bearing. No. 1,266,381; May 14; v. 250; p. 445.
Bachelder, Frank H., Orange, Mass. Hemstitching attachment for sewing-machines. No. 1,265,585; May 7; v. 250; p. 194.
Backlund, Josef A., New York, N. Y. Propulsion of vessels. No. 1,267,351; May 28; v. 250; p. 773.
Bader, Gustav A., Rochester, N. Y. Knife. No. 1,265,723; May 14; v. 250; p. 262.
Badische Anilin & Soda Fabrik. (See Wolff and Kaeer, assignors.)
Baeck, Eugène C., Irvington, N. Y. Marine vessel. No. 1,267,956; May 28; v. 250; p. 943.
Bahls, Otto, and T. Siebert, Jr., New York, N. Y. Plug and plug-receptacle for electric conductors. No. 1,265,163; May 7; v. 250; p. 81.
Bahnson, Frederic F., Winston-Salem, N. C. Humidifier. No. 1,267,166; May 21; v. 250; p. 696.
Bailey, Clarence A., and L. C. Solleau, Rayne, La. Automobile-crank. No. 1,266,761; May 21; v. 250; p. 582.
Bailey, George D., Chicago, Ill., assignor to Geo. D. Bailey Co. Bearing. No. 1,265,871; May 14; v. 250; p. 304.
Bailey, George D., and F. E. Rice, Detroit, Mich., assignors, by mesne assignments, to Bailey Non-Stall Differential Corporation, Chicago, Ill. Positive releasing-clutch. No. 1,266,903; May 21; v. 250; p. 620.
Bailey, Glenn M. (See Bailey, Hugh A. and G. M.)
Bailey, Hugh A. and G. M., Davenport, Iowa. Toothbrush case. No. 1,266,382; May 14; v. 250; p. 445.
Bailey Non-Stall Differential Corporation. (See Bailey and Rice, assignors.)
Bain, William H., St. Louis, Mo. Shoe and making the same. No. 1,264,880; May 7; v. 250; p. 3.
Bain, William H., St. Louis, Mo. Shoe. No. 1,264,881; May 7; v. 250; p. 3.
Bair, Clarence L., Detroit, assignor to Auto Specialties Manufacturing Co., St. Joseph, Mich. Bow-top holder for vehicle-tops contracted at rear. No. 1,267,736; May 28; v. 250; p. 879.
Baker, Alfred Z., New York, N. Y., assignor to T. B. Toy Company, Newark, N. J. Wheeled reciprocating toy. No. 1,265,586; May 7; v. 250; p. 194.
Baker, Alfred Z., New York, N. Y., assignor to T. B. Toy Company, Newark, N. J. Toy. No. 1,265,587; May 7; v. 250; p. 194.
Baker, John S., Los Angeles, Cal. Apparatus for marking cans and the like. No. 1,267,167; May 21; v. 250; p. 697.
Baker, Melyn E., Robert, Nebr. Tractor. No. 1,266,904; May 21; v. 250; p. 620.
Baker, Robert D., Detroit, Mich. Joint for meeting members. No. 1,267,352; May 28; v. 250; p. 778.
Baker, Stephen D., New York, N. Y. Wall-receptacle. No. 1,267,353; May 28; v. 250; p. 773.
Baker, William H., Cherokee, Okla. Doser. No. 1,266,383; May 14; v. 250; p. 445.
Baker, William H., Boston, assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Filling-replenishing loom. No. 1,267,168; May 21; v. 250; p. 697.
Balch, Eben G., Newburyport, Mass. Pencil eraser attachment. No. 1,267,955; May 28; v. 250; p. 942.
Balcom, Sydney E., Salt Lake City, Utah. Hose-nozzle support. No. 1,267,305; May 21; v. 250; p. 731.
Balcom, William W., Sioux City, Iowa. Liquid-container indicator. No. 1,265,724; May 14; v. 250; p. 262.
Baldwin, Carl H., Fellows, Cal. Rod-coupling. No. 1,265,418; May 7; v. 250; p. 150.
Baldwin Company, The. (See Gally, Robert A., assignor.)
Baldwin Locomotive Works, The. (See Rushton, Kenneth, assignor.)
Bales, Edward R., Centralia, Ill. Piston packing-ring. No. 1,267,169; May 21; v. 250; p. 697.
Ball and Roller Bearing Company, The. (See Heim, Lewis R., assignor.)
Baltimore Oil Engine Company. (See Wygodsky, Leon, assignor.)
Baltimore Process Company. (See Straus, Alexander L., assignor.)
Bammer, Pius, Los Angeles, Cal. Heel-cutting apparatus. No. 1,267,306; May 21; v. 250; p. 732.
Bancel, Paul A., Nutley, assignor to himself, and G. H. Gibson, Upper Montclair, N. J. Surface condenser and operating same. No. 1,268,074; May 28; v. 250; p. 974.
Banning, Frederick E. and K. E., Hadlyme, Conn. Anti-skid device. No. 1,267,837; May 28; v. 250; p. 910.
Banning, Keeney E. (See Banning, Frederick E. and K. E.)
Banwell, Henry C., London, and F. Phillips, Bromley, England, assignors to The National Cash Register Company, Dayton, Ohio. Ticket-printing mechanism. No. 1,265,725; May 14; v. 250; p. 262.
Banzett, William H., Bergenfield, N. J., assignor to Mercantile Corporation, Dayton, Ohio. Machine for making window-envelops. No. 1,265,987; May 14; v. 250; p. 337.
Barber-Colman Company. (See Colman, Howard D., assignor.)
Barber, Howard M., Stonington, Conn., assignor, by mesne assignments, to C. B. Cottrell & Sons Company, New York, N. Y. Sheet-feeding mechanism for printing-presses. No. 1,265,726; May 14; v. 250; p. 263.
Barber, Howard M., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y. Sheet-collecting mechanism. No. 1,267,354; May 28; v. 250; p. 773.
Barber, William J., Cleveland, Ohio. Gas-burner. No. 1,267,355; May 28; v. 250; p. 774.
Bard, Jacob W., assignor to Sangamo Electric Company, Springfield, Ill. Electricity-meter. No. 1,266,052; May 21; v. 250; p. 552.
Bardeen, Hugh A., Los Angeles, Cal. Collar and lead ring and process of coupling drill-pipes. No. 1,265,706; May 7; v. 250; p. 226.
Bardons and Oliver. (See Busch, Frederic C., assignor.)
Barker, John J., Cowansville, Quebec, Canada. Sign. No. 1,266,194; May 14; v. 250; p. 396.
Barker, Wyndham E., Fortuna, Cal. Rotary sprinkler. No. 1,266,384; May 14; v. 250; p. 446.
Barkley, William J. (See Ford, Reid G., assignor.)
Barlow, Walter S., Marysville, Tex. Expansion-plug. No. 1,266,653; May 21; v. 250; p. 552.
Barnes, Edward M., Hastings, assignor to American Utilities Company, St. Joseph, Mich. Electric water-purifier. No. 1,267,044; May 21; v. 250; p. 661.
Barnes, Frederick W., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-printing machine. No. 1,266,385; May 14; v. 250; p. 446.
Barnum, Thomas E., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Circuit-controller. No. 1,265,727; May 14; v. 250; p. 263.
Barr, Charles R., Philadelphia, Pa. Combined roller and ice skate. No. 1,266,386; May 14; v. 250; p. 446.
Barr, John H., New York, assignor to Remington Typewriter Company, Ilion, N. Y. Type-writing machine. No. 1,267,356; May 28; v. 250; p. 774.
Barr, Robert L., *et al.* (See Cobb, Bayard G., assignor.)
Barr, Samuel C., Chillicothe, Ohio. Eye-testing machine. No. 1,266,090; May 14; v. 250; p. 396.
Barron, Andrew F., Watervliet, N. Y. Horseshoe. No. 1,265,034; May 7; v. 250; p. 46.

Barry, James P., Ptedmont, and J. F. Barry, Oakland, Cal. Concrete-structure pile and the like and producing the same. No. 1,265,164; May 7; v. 250; p. 81.
Barry, John F. (See Barry, James P. and J. F.)
Barshaw, Berton G., and D. F. Gettings, Carthage, N. Y. Vehicle-semaphore. No. 1,267,957; May 28; v. 250; p. 943.
Bartelt, Friedrich L., Corston Lodge, near Bristol, England. Cleansing of linen, woolen, cotton, and other goods. No. 1,267,737; May 28; v. 250; p. 880.
Bartholomew, Gilbert A., assignor to The Noble Heater Company, Kendallville, Ind. Automobile exhaust-heater. No. 1,267,496; May 28; v. 250; p. 812.
Bartlett, Charles H., Boston, Mass. Table or stand for telephones, &c. No. 1,266,905; May 21; v. 250; p. 621.
Bartlett, Emery G., Boston, assignor of one-half to P. Daudelin, East Somerville, Mass. Locomotive-tender coal-pit. No. 1,267,170; May 21; v. 250; p. 698.
Bartley, Henry L., Philadelphia, Pa. Fire-escape. No. 1,265,105; May 7; v. 250; p. 81.
Barton, Harry O., Bloomfield, Iowa. Safety device for the starting-cranks of motor-vehicles. No. 1,267,497; May 28; v. 250; p. 812.
Bartow, Harry E. (See Sandmann, Fred A., assignor.)
Barva, Bernard R., and F. T. Wichman, Fort Wayne, Ind. Manufacturing rubber balls. No. 1,265,419; May 7; v. 250; p. 150.
Basch, David, assignor to I. B. Kleinert Rubber Co., New York, N. Y. Folding carrying-case. No. 1,266,091; May 14; v. 250; p. 366.
Baskerville, John W., Bayonne, N. J. Railway-car. No. 1,266,387; May 14; v. 250; p. 446.
Bassett Jewelry Co. (See Bates, Clifford V., assignor.)
Bate, Ira D., West Jefferson, Ohio. Farm-gate. No. 1,265,288; May 7; v. 250; p. 114.
Bates, Clifford V., Chicago, Ill., assignor to Bassett Jewelry Co., Providence, R. I. Cuff-button. No. 1,267,357; May 28; v. 250; p. 774.
Batton, Seaborn M. (See Langhorne, Jacob V., assignor.)
Bauer & Black. (See Shaw, Herbert C., assignor.)
Bauer, Perry S., Chicago, Ill. Fumigator. No. 1,265,166; May 7; v. 250; p. 81.
Bauer, Wilhelm, and A. Herre, Opladen, near Cologne, Germany, assignors to Synthetic Patents Co., Inc., New York, N. Y. Yellowish-brown vat dyes. No. 1,266,092; May 14; v. 250; p. 367.
Bauman, Ferdinand P., Kilnacht, Switzerland. Dry battery. No. 1,267,620; May 28; v. 250; p. 848.
Baumann, Leopold, Sr. (See Meredith, Baumann and Black.)
Bausch & Lomb Optical Company. (See Kellner, Gustav A. H., assignor.)
Bayerey, François, assignor to Societe du Carburateur Zenith, Lyon, France. Carbureter for explosive-motors. No. 1,265,588; May 7; v. 250; p. 194.
Baxter, Oscar L., assignor to The Solar Metal Products Company, Columbus, Ohio. Door and window structure. No. 1,266,546; May 21; v. 250; p. 520.
Baxter, Oscar L., assignor to The Solar Metal Products Company, Columbus, Ohio. Door or window casing. No. 1,266,547; May 21; v. 250; p. 520.
Bazaine, Léon, assignor to Société Anonyme Des Établissements Nieuport, Issy-les-Moulineaux, France. Construction of hulls for hydroplanes. No. 1,265,035; May 7; v. 250; p. 46.
Bazant, John. (See Stowers and Bazant.)
Beach, Edward S., Ridgefield, Conn., assignor to Multicolor Intaglio Press Company, Dover, Del. Lay-out and transfer machine. No. 1,264,882; May 7; v. 250; p. 3.
Beach, Edward S., Ridgefield, Conn., assignor to Multicolor Intaglio Press Company, Dover, Del. Machine for guide-marking a plurality of etchable surfaces. No. 1,265,988; May 14; v. 250; p. 338.
Beach, John C., assignor to Lachman Wall Bed Company, San Francisco, Cal. Folding bed. No. 1,267,045; May 21; v. 250; p. 661.
Beaird, David M., Columbus, Ohio. Writing-desk. No. 1,267,046; May 21; v. 250; p. 661.
Beale, James C., and J. Hayes, Kansas City, Kans. Vehicle-wheel. No. 1,266,654; May 21; v. 250; p. 552.
Beard, William G., assignor to H. C. Burnstine, New York, N. Y. Talking-machine. No. 1,264,883; May 7; v. 250; p. 3.
Beardsley, Edwin W., trustee. (See Eagelston, Frank W., assignor.)
Beatty, Ross J. (See Snyder, Parke T., assignor.)
Beaulieu, Charles A. (See Cox, Carlos, assignor.)
Beauprie, Arthur W., Atlanta, Ga. Telegraph-sounder. No. 1,265,589; May 7; v. 250; p. 195.
Beaverstock, Elisha F., Holyoke, assignor to Draper Corporation, Hopedale, Mass. Weft clamping and parting mechanism for looms. No. 1,265,590; May 7; v. 250; p. 195.
Beaverstock, Elisha F., Holyoke, assignor to Draper Corporation, Hopedale, Mass. Weft clamping and parting mechanism for looms. No. 1,265,591; May 7 v. 250; p. 195.
Becher, Otto G., Omaha, Nebr. Stencil for sand-blast etching. No. 1,265,989; May 14; v. 250; p. 338.
Beck, Heinrich, Schenectady, N. Y. Toy gun. No. 1,266,583; May 14; v. 250; p. 487.
Becker, Anton, assignor to The Ralston Steel Car Company, Columbus, Ohio. Underframe construction for railway-cars. No. 1,264,884; May 7; v. 250; p. 4.
Becker, Benjamin, St. Louis, Mo. Door-opener. No. 1,267,307; May 21; v. 250; p. 732.
Becker, Robert A., assignor to C. Tremain, Poughkeepsie, N. Y. Connector. No. 1,267,959; May 28; v. 250; p. 948.
Beckett, William N., Savannah, Ga. Combined priming and vaporizing device. No. 1,265,872; May 14; v. 250; p. 305.
Beckman, Jacob H., Seattle, Wash. Car-repairing device. No. 1,266,093; May 14; v. 250; p. 367.
Beckman, Jacob H., Seattle, Wash. Automobile-turning device. No. 1,266,094; May 14; v. 250; p. 367.
Beckmann, John W., assignor to Automatic Powdered Soap Dispenser Company, Inc., New York, N. Y. Soap-powder dispenser. No. 1,266,195; May 14; v. 250; p. 397.
Beckner, Noah J., North Yakima, assignor to Safety Patent Co., Yakima, Wash. Collapsible step. No. 1,266,762; May 21; v. 250; p. 582.
Becton, Dickinson & Co. (See Shull, Ivan R., assignor.)
Bee, Harlen L., Salem, W. Va. Dust-collector. No. 1,267,171; May 21; v. 250; p. 698.
Beidler, George C., Rochester, N. Y. Copy-holder. No. 1,267,358; May 28; v. 250; p. 774.
Beinhart, Ernest G. (See Garner and Beinhart.)
Beldam, George W., Ealing, England. Elastic wheel-tire. No. 1,267,738; May 28; v. 250; p. 880.
Beler, Adolf, Pittsburgh, Pa. Water-heater. No. 1,265,592; May 7; v. 250; p. 196.
Beler, Adolf, Pittsburgh, Pa. Regulating-valve for water-heaters. No. 1,265,593; May 7; v. 250; p. 196.
Belgard, William B., Boyce, assignor of one-half to C. A. Copenhaver, Alexandria, La. Wire-stretcher. No. 1,267,308; May 21; v. 250; p. 732.
Bell & Howell Company. (See Howell, Albert S., assignor.)
Bell, James H., Philadelphia, Pa. Timing device for pigeons. No. 1,266,907; May 21; v. 250; p. 622.
Bell, John E., New York, N. Y. Vertical water-tube boiler. No. 1,266,906; May 21; v. 250; p. 621.
Bell, John H., East Orange, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telegraph system. No. 1,265,728; May 14; v. 250; p. 263.
Bell, Silas D., Childress, assignor to J. H. Mowery, Childress county, Tex. Mouse-guard for pianos. No. 1,267,047; May 21; v. 250; p. 662.
Bell, William E., Dunham, Ala. Rail-holding device. No. 1,267,960; May 28; v. 250; p. 942.
Belmont, Ralph A. (See Schoenberg, Ralph A.)
Bendelow, Tom, assignor to Thomas E. Wilson & Company, Chicago, Ill. Golf-ball. No. 1,265,036; May 7; v. 250; p. 46.
Benjamin, Dana H., assignor to S. D. Guggenheim, Cleveland, Ohio. Gearing for washing-machines. No. 1,265,289; May 7; v. 250; p. 115.
Benjamin Electric Manufacturing Company. (See Benjamin, Reuben B., assignor.)
Benjamin Electric Manufacturing Company. (See Dean, William W., assignor.)
Benjamin Electric Manufacturing Company. (See Norgate, George W., assignor.)
Benjamin, Reuben B., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Show-case-lighting device. No. 1,266,908; May 21; v. 250; p. 622.
Benner, Samuel A., Pittsburgh, Pa. Car part. No. 1,265,990; May 14; v. 250; p. 338.
Benner, Samuel A., Pittsburgh, Pa. Car part. No. 1,267,498; May 28; v. 250; p. 813.
Bennett, Arthur J., Cambridge, Ohio. Glass condiment-holder. No. 1,267,961; May 28; v. 250; p. 943.
Bennett, Clarence D., Goose Creek, Tex. Hose-clamp. No. 1,266,655; May 21; v. 250; p. 553.
Bennett, Edward D., Pulaski, N. Y. Felt-cleaner for paper-making machines. No. 1,267,359; May 28; v. 250; p. 775.
Bennett, Frederick, Ravenswood, assignor to Walker & Bennett Manufacturing Company, New York, N. Y. Car-seat. No. 1,267,499; May 28; v. 250; p. 813.
Bennett, Frederick, Ravenswood, assignor to Walker & Bennett Manufacturing Company, New York, N. Y. Car-seat. No. 1,267,500; May 28; v. 250; p. 813.
Bennett, Joseph S., Hammondsport, N. Y. Automatic ignition-cut-out switch for aeroplanes. No. 1,267,962; May 28; v. 250; p. 944.
Bennett, Louis B., assignor to F. M. Eckman, Detroit, Mich. Multiple fuse. No. 1,266,095; May 14; v. 250; p. 368.
Bennett, Samuel L., assignor to The Vermont Farm Machine Company, Bellows Falls, Vt. Speed-indicator. No. 1,266,763; May 21; v. 250; p. 582.
Bennis, Alfred W., Little Hulton, Bolton, England. Furnace-grate. No. 1,267,172; May 21; v. 250; p. 698.
Benthall, Jesse T., Suffolk, Va. Piston for internal-combustion engines. No. 1,267,963; May 28; v. 250; p. 944.
Bentley, Frederic W., Chicago, Ill. Protective armor for ships. No. 1,266,196; May 14; v. 250; p. 397.
Berent, Adam. (See Ebrenhardt and Berent.)
Beresford, Ignacio. (See Hutzelman and Beresford.)
Berg, John, assignor to Metal Specialties Manufacturing Company, Chicago, Ill. Sealing-strip machine. No. 1,266,197; May 14; v. 250; p. 397.

Berg, Joseph, assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Brush-mount for electric motors. No. 1,265,879; May 14; v. 250; p. 305.
Berg, Sigard E. (See Kightmire and Berg.)
Bergen Point Iron Works. (See Smith, Augustus, assignor.)
Berger, Joseph, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Seam for sewed articles. No. 1,264,885; May 7; v. 250; p. 4.
Berger, Joseph, Jr., Utica, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Presser-foot for sewing-machines. No. 1,267,621; May 28; v. 250; p. 848.
Berglund, Nils G., Vedevåg, Sweden. Drill-chuck. No. 1,265,707; May 7; v. 250; p. 226.
Bergman, Sven R., Nahant, Mass., assignor to General Electric Company. Dynamo-electric machine. No. 1,265,594; May 7; v. 250; p. 196.
Bergman, Sven R., Nahant, Mass., assignor to General Electric Company. Dynamo-electric machine. No. 1,266,388; May 14; v. 250; p. 446.
Bergman, Sven R., Lynn, Mass., assignor to General Electric Company. Dynamo-electric machine. No. 1,267,838; May 28; v. 250; p. 910.
Bergman, Wilhelm, Arlington, N. J., assignor to B. & B. Photo Co. Photographic washing apparatus or tank. No. 1,265,291; May 7; v. 250; p. 115.
Bergstrom, Carl O., assignor to B. F. Sturtevant Company, Boston, Mass. Lubrication. No. 1,265,991; May 14; v. 250; p. 339.
Bergwardt, Max A., Elizabeth, N. J. Picot-edging attachment. No. 1,264,886; May 7; v. 250; p. 4.
Bernet, John. (See Miller, Ephraim, assignor.)
Bernheim, Elbridge P., Oakley, assignor to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio. Movable chute. No. 1,267,839; May 28; v. 250; p. 910.
Berry, Arthur F., Ealing, England, assignor to General Electric Company. Electric heating device. No. 1,267,173; May 21; v. 250; p. 698.
Berry Brothers. (See Griem, Otto C., assignor.)
Berry, Zeb V., Norfolk, Va. Gate-latch. No. 1,267,309; May 21; v. 250; p. 732.
Bersted, Martin, assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Cover-support for phonographs. No. 1,265,874; May 14; v. 250; p. 305.
Bert, Celest O., Winooski, Vt. Hand-operated drill. No. 1,267,174; May 21; v. 250; p. 699.
Bertram, Anton, Westfield, N. J. Guard for tires. No. 1,267,360; May 28; v. 250; p. 775.
Bertram, Henry W. (See Carnahan, Williams, and Bertram.)
Bertrand, Joseph T., Isle Verte, Quebec, Canada. Knock-down isothermal shipping-box. No. 1,267,840; May 28; v. 250; p. 941.
Bertsch, John C., Edgewood Park, Pa. Process of and apparatus for refrigeration. No. 1,265,037; May 7; v. 250; p. 47.
Besse, Edward L., Fairhaven, Mass. Warping-beam. No. 1,265,292; May 7; v. 250; p. 116.
Bessemer Gas Engine Company. (See Ellis, Lewis M., assignor.)
Betz, Harry D., Kansas City, Mo. Automatic wireless apparatus for preventing collisions. No. 1,266,889; May 14; v. 250; p. 447.
Bickel, Henry F., Plainfield, N. J. Triple valve. No. 1,267,362; May 28, v. 250; p. 775.
Bieber, Albert I. (See Bieber, Alexander R., assignor.)
Bieber, Alexander R., assignor of one-half to A. I. Bieber, Swiss, Mo. Weather-vane. No. 1,265,420; May 7; v. 250; p. 150.
Bieman, Phillip H., St. Louis Park, Minn. Fishing-reel. No. 1,265,038; May 7; v. 250; p. 47.
Biggers, Lee P., Palmersville, Tenn., assignor of one-twelfth to J. M. Palmer, one-twelfth to B. J. Byars, one-twelfth to C. N. Killgore, one-twelfth to L. C. Braun, one-twelfth to C. H. Rawls, one-twelfth to W. G. McWherter, one-twelfth to W. L. Lafon, one-twelfth to W. M. Pentecost, one-twelfth to L. L. Olds, and one-twelfth to J. M. Buckley. Propeller. No. 1,267,048; May 21; v. 250; p. 662.
Biggert, Florence C., Jr., Pittsburgh, Pa. Clutch. No. 1,265,595; May 7; v. 250; p. 196.
Billings, Frank, Cleveland, Ohio. Loading-machine. No. 1,265,729; May 14; v. 250; p. 264.
Billings, Frank, Cleveland, Ohio. Loading or mining and loading machine. No. 1,265,730; May 14; v. 250; p. 264.
Billings, Frank, Cleveland, Ohio. Loading or mining and loading machine. No. 1,265,731; May 14; v. 250; p. 264.
Binder, John, *et al.* (See Mrakitsch, Anton, assignor.)
Birch, Charles. (See Price, Frederick, assignor.)
Bishop, McKendree F., Elgin, Ill. Thill-coupling. No. 1,267,501; May 28; v. 250; p. 813.
Bissell, Carl H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Pipe connection. No. 1,265,875; May 14; v. 250; p. 305.
Bissell, Carl H., and H. P. Hastings, assignors to Crouse-Hinds Company, Syracuse, N. Y. Electric service-box. No. 1,265,293; May 7; v. 250; p. 116.
Bissell, Carl H., and E. G. Smith, assignors to Crouse-Hinds Company, Syracuse, N. Y. Electrical appliance. No. 1,265,294; May 7; v. 250; p. 116.
Bisson, Theodore E., Bellingham, Wash. Calipers. No. 1,267,964; May 28; v. 250; p. 944.
Black, Arthur O. (See Plaisted and Black.)
Black, James. (See Meredith, Baumann, and Black.)
Blair, Benjamin L., Indianapolis, Ind. Projectile-rotator. No. 1,266,764; May 21; v. 250; p. 583.
Blake, Alva D., Los Angeles, Cal. Military button. No. 1,267,841; May 28; v. 250; p. 911.
Blake, Charles C., Brookline, assignor to C. C. Blake, Incorporated, Boston, Mass. Machine for operating upon casting patterns. No. 1,267,842; May 28; v. 250; p. 911.
Blake, Charles C., Brookline, assignor to C. C. Blake, Incorporated, Boston, Mass. Weft-slitting machine. No. 1,267,843; May 28; v. 250; p. 911.
Blank, Arthur M. (See Blank, Charles A., assignor.)
Blank, Charles A., assignor of one-half to A. M. Blank, Miller, Ind. Vending-machine. No. 1,267,965; May 28; v. 250; p. 944.
Blansett, John E., assignor of one-fourth to H. E. Bowles, Teton, Idaho. Swivel-hook. No. 1,266,390; May 14; v. 250; p. 447.
Blatt, William J., Hollidaysburg, Pa. Internal-combustion engine. No. 1,265,596; May 7; v. 250; p. 197.
Blaw-Knox Company. (See Knox, Luther L., assignor.)
Bledsoe, George, Clinton, N. C. Plow. No. 1,267,502; May 28; v. 250; p. 814.
Blest, Minot C., Bellevue, assignor to Pressed Steel Car Company, Pittsburgh, Pa. Discharge-door-operating mechanism. No. 1,267,363; May 28; v. 250; p. 775.
Blest, Minot C., Bellevue, assignor to Pressed Steel Car Company, Pittsburgh, Pa. Bracing and door-stop for cars. No. 1,267,364; May 28; v. 250; p. 776.
Bloch, Aaron, Brooklyn, N. Y. Lamp-shade holder. No. 1,265,167; May 7; v. 250; p. 82.
Blocher, Solomon L., Packerton, Ind. Farm-tractor. No. 1,267,503; May 28; v. 250; p. 814.
Blount Plow Works. (See Phelps, Spencer H., assignor.)
Blumenberg, Frieda, *et al.* (See Blumenberg, Henry, Jr., assignor.)
Blumenberg, Henry, Jr., assignor of one-half to F. Blumenberg, New York, N. Y., and one-half to J. J. Seeman, Los Angeles, Cal. Making a fertiliser. No. 1,266,198; May 14; v. 250; p. 398.
Blumenberg, Henry, Jr., Los Angeles, Cal., assignor to F. Blumenberg, New York, N. Y. Fertilizer and process of making same. No. 1,266,199; May 14; v. 250; p. 398.
Blumenberg, Henry, Jr., Los Angeles, Cal., assignor to F. Blumenberg, New York, N. Y. Plaster composition. No. 1,266,200; May 14; v. 250; p. 398.
Blundell, Mary R. (See Blundell, William C., assignor.)
Blundell, William C., assignor of one-half to M. E. Blundell, Los Angeles, Cal. Water-indicating means for steam-boilers. No. 1,267,622; May 28, v. 250; p. 849.
Bobroff, Bornett L., assignor to Universal Indicator Co., Milwaukee, Wis. Electrically-controlled voting-machine. No. 1,267,504; May 28; v. 250; p. 814.
Boddington, Henry D., Los Angeles, Cal. Food compound for making custard. No. 1,266,201; May 14; v. 250; p. 398.
Boddington, Henry D., Los Angeles, Cal. Food composition for making cakes and the like. No. 1,266,202; May 14; v. 250; p. 398.
Boerner, Gustav A. A., Amsterdam, Netherlands. Resilient tire for vehicle-wheels. No. 1,267,505; May 28; v. 250; p. 815.
Bohaczyk, Edward, Salem, Mass. Horse-collar. No. 1,265,992; May 14; v. 250; p. 339.
Bomberger, Moses, Cumru township, Berks county, assignor to Orr & Sembower, Inc., Reading, Pa. Spark and exhaust mechanism for explosive-engines. No. 1,265,876; May 14; v. 250; p. 306.
Bommer, Emil, Brooklyn, N. Y. Housing for spring-hinges. No. 1,265,597; May 7; v. 250; p. 197.
Bonds, William F., Tucumcari, N. Mex. Crutch. No. 1,265,993; May 14; v. 250; p. 339.
Boner, William W., Estacada, Oreg. Automobile jack and rest. No. 1,266,909; May 21; v. 250; p. 622.
Bonney, Harold H., Louisville, Ill. Lock for automobiles. No. 1,266,391; May 14; v. 250; p. 447.
Bonsleur, Le, assignor to The Garford Manufacturing Company, Elyria, Ohio. Phonograph. No. 1,265,295; May 7; v. 250; p. 116.
Boos, Orlando J., Los Angeles, Cal. Inclination-indicator. No. 1,267,049; May 21; v. 250; p. 662.
Borchert, Charles A., and M. G. O'Neil, Woodlawn, Pa. Valve. No. 1,267,365; May 28; v. 250; p. 776.
Borden Company. (See Phelps, James A., assignor.) (Reissue.)
Bore, Johan. (See Skoglund and Bore.)
Borg, Emil J., Emerson, Iowa. Saddle. No. 1,267,310; May 21; v. 250; p. 733.
Borresen, Helge A., Marquette, Mich. Watch. No. 1,265,598; May 7; v. 250; p. 197.
Bosch Magneto Company. (See Heins and Wild, assignors.)
Bosio, Giacomo, and A. Peradotto, Turin, Italy. Tanning hides. No. 1,266,203; May 14; v. 250; p. 398.
Bossert, Charles T. (See Bossert, Fred J. and C. T.)
Bossert, Fred J. and C. T., Selma, Cal. Vine-cutter. No. 1,265,296; May 7; v. 250; p. 116.
Boston Superior Petticoat Company. (See Aronson, Harry, assignor.)
Boswell, Fletcher O., Philadelphia, Pa. Automobile-lock. No. 1,265,732; May 14; v. 250; p. 265.
Boswell, Fletcher O., Philadelphia, Pa. Vehicle suspension and shock-absorber. No. 1,266,656; May 21; v. 250; p. 553.

Bosworth, Allie F., Munday, Tex. Wagon and buggy tap extension. No. 1,266,392; May 14; v. 250; p. 448.
Boufford, Joseph T., Linwood, Mass. Toy. No. 1,266,765; May 21; v. 250; p. 583.
Boulard, Henri, Paris, France. Manufacture of alcohol from grain in open vats with the employment of saccharifying mucors. No. 1,266,657; May 21; v. 250; p. 553.
Bound Brook Oil-Less Bearing Company. (See Bache, Leigh S., assignor.)
Bourke, Lambert O., Headingly, Manitoba, Canada. Windmill. No. 1,266,910; May 21; v. 250; p. 623.
Bousfield, Charlie J., assignor to The Delpheon Company, Bay City, Mich. Talking-machine stop. No. 1,265,297; May 7; v. 250; p. 117.
Bousfield, Charlie J., assignor to The Delpheon Company, Bay City, Mich. Tone-arm for talking-machines. No. 1,266,096; May 14; v. 250; p. 368.
Bousfield, Charlie J., assignor to The Delpheon Company, Bay City, Mich. Filing device for talking-machine records. No. 1,267,366; May 28; v. 250; p. 777.
Bousfield, John H. A., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Dial-scale. No. 1,267,367; May 28; v. 250; p. 777.
Bouton, Georges, Paris, France, assignor to Etablissements De Dion Bouton, Societe Anonyme, Puteaux, France. Vats for accumulators, batteries, or the like. No. 1,266,911; May 21; v. 250; p. 623.
Bovie, William T., Boston, Mass. Direct-reading potentiometer. No. 1,265,421; May 7; v. 250; p. 151.
Bowden, Charles L., Chicago, Ill. Wheel-alining gage. No. 1,265,599; May 7; v. 250; p. 197.
Bowen, Alpheus C., Des Moines, Iowa. Road drag and leveler. No. 1,267,623; May 28; v. 250; p. 849.
Bowen, George W. (See Pribil, Alexis R., assignor.)
Bowen, George W. (See Zerk, Oscar, assignor.)
Bowen, Harry F., Canon City, Colo. Electrical awakening device. No. 1,266,393; May 14; v. 250; p. 448.
Bowen, William S., New York, N. Y. Propeller device. No. 1,267,506; May 28; v. 250; p. 815.
Bower, Jacob M., assignor of two-fifths to N. Ripper Lander, Wyo. Automatic film-threader. No. 1,265,039; May 7; v. 250; p. 47.
Bowles, Edward J., and E. and H. Metz, Clinton, Ill. Beader and gutter-former. No. 1,267,368; May 28; v. 250; p. 777.
Bowles, Henry E. (See Blansett, John E., assignor.)
Bowles, William M., Shawnee, Okla. Safety-vent for oil-storage tanks. No. 1,265,877; May 14; v. 250; p. 306.
Bowman, Frederick J., Cleveland, Ohio. Drier. No. 1,265,298; May 7; v. 250; p. 117.
Bowser, Allen A., Fort Wayne, Ind. Electric fixture. No. 1,264,887; May 7; v. 250; p. 5.
Boyce, Harrison H., Forest Hills, N. Y. Signal-horn. No. 1,267,507; May 28; v. 250; p. 815.
Boyce, Harrison H., Forest Hills, N. Y. Signal-horn. No. 1,267,739; May 28; v. 250; p. 880.
Boyd, James K., Wilkinsburg, Pa. Compound rail. No. 1,265,422; May 7; v. 250; p. 151.
Boyer, George F., assignor of twenty-four and one-half one-hundredths to D. W. Dorris and twenty-four and one-half one-hundredths to E. M. Bushong, Lima, Ohio. Auxiliary valve for internal-combustion engines. No. 1,267,369; May 28; v. 250; p. 778.
Boyington, Herbert A., Newington, Conn. Envelop. No. 1,267,175; May 21; v. 250; p. 699.
Bradbury, Frederick L., assignor to The F. L. Bradbury Co., Bridgeport, Conn. Cruller-cooking. No. 1,266,912; May 21; v. 250; p. 623.
Bradley, Harry L., Milwaukee, Wis. Electric switch. No. 1,266,548; May 21; v. 250; p. 521.
Bradshaw, Richard, Montreal, Quebec, Canada. Wire-fabric bed-bottom. No. 1,266,549; May 21; v. 250; p. 521.
Braecklein, Alfred H., Baltimore, Md. Machine for covering pies. No. 1,266,913; May 21; v. 250; p. 623.
Braecklein, Alfred H., Baltimore, Md. Machine for covering pies. No. 1,266,914; May 21; v. 250; p. 624.
Brakeley, Joseph, Freehold, N. J. Apparatus for cooking canned vegetables. No. 1,266,204; May 14; v. 250; p. 398.
Brakensiek, August H., St. Louis, Mo. Automobile-fender. No. 1,265,878; May 14; v. 250; p. 306.
Brandenberger, Carl F., Fort Madison, Iowa. Drain storage-pump. No. 1,266,658; May 21; v. 250; p. 553.
Brandenberger, Jacques E., Thaon-les-Vosges, assignor to Societe Dite: La Cellophane, Paris, France. Composite cellulose film. No. 1,266,766; May 21; v. 250; p. 583.
Brandt Cashier Company. (See Brandt, Edward J., assignor.)
Brandt, Edward J., Watertown, Wis., assignor to Brandt Cashier Company, Chicago, Ill. Coin-delivering mechanism. No. 1,266,097; May 14; v. 250; p. 368.
Brandt, Edward J., Watertown, Wis., assignor to Brandt Cashier Company, Chicago, Ill. Change-maker. No. 1,266,098; May 14; v. 250; p. 368.
Brandt, Edward J., Watertown, Wis., assignor to Brandt Cashier Company, Chicago, Ill. Coin-delivery chute. No. 1,266,099; May 14; v. 250; p. 369.
Brandt, George F., assignor to The Moore Pen Company, Boston, Mass. Fountain-pen. No. 1,267,624; May 28; v. 250; p. 849.
Brann, Luther C., *et al.* (See Biggers, Lee P., assignor.)
Brannan, Samuel F., Denver, Colo. Illuminating tooth-clamp. No. 1,266,659; May 21; v. 250; p. 554.
Brass Goods Manufacturing Co. (See Cooper, Simon, assignor.)
Brassill, Frank A. (See Nilson and Brassill.)
Brayton, Grant. (See Young and Porter, assignors.)
Brecheen, Samuel H., Prosper, Tex. Harness. No. 1,265,040; May 7; v. 250; p. 47.
Brennan, Aloysius G. and J. S., Milwaukee, Wis. Portable garment-support. No. 1,267,740; May 28; v. 250; p. 880.
Brennan, John S. (See Brennan, Aloysius G. and J. S.)
Brennesen, Ernest J., New York, N. Y. Tube-injector. No. 1,266,394; May 14; v. 250; p. 448.
Brewer, John H., Silverton, Oreg. Pie-crimper. No. 1,265,600; May 7; v. 250; p. 198.
Brewer, Joseph H. (See McGehee, Burnard, assignor.)
Brewster, Percy D., East Orange, N. J. Apparatus for printing cinematographic films. No. 1,267,844; May 28; v. 250; p. 912.
Bricken, John, Chicago, Ill., assignor to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,266,660; May 21; v. 250; p. 554.
Bridgeport Brass Company. (See Clark, Walter R., assignor.)
Bridgeport Brass Company. (See Limont, Alexander W., assignor.)
Brigel, Leo A., Cheviot, assignor to Aman and Sandmann, Cincinnati, Ohio. Toy vehicle. No. 1,267,050; May 21; v. 250; p. 662.
Brindley, Walter W., Pasadena, Cal. Portable rabbit-cage. No. 1,267,625; May 28; v. 250; p. 849.
Brinton, Willard C., New York, N. Y. Jack. No. 1,267,051; May 21; v. 250; p. 663.
British America Nickel Corporation Limited. (See Gillis, Julius H., assignor.)
Britt, Alliebel R., Jackson, Miss. Nursing-bottle. No. 1,267,176; May 21; v. 250; p. 699.
Britton, Walter J., Spartanburg, S. C. Gage-box distributer. No. 1,265,168; May 7; v. 250; p. 82.
Brock, John O., Wilmington, N. C. Spark-plug. No. 1,266,205; May 14; v. 250; p. 399.
Brock, Matthias, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Lasting-machine. No. 1,267,370; May 28; v. 250; p. 778.
Brockett, Charles W., Brooklyn, assignor to W. R. Ostrander & Company, New York, N. Y. Electric switch. No. 1,266,206; May 14; v. 250; p. 399.
Brockton Heel Company. (See Woodward, William R.) (Reissue.)
Brognies, Harvey O., assignor of one-half to H. L. White, Wheeling, W. Va. Fuel-distributing mechanism for carburetors. No. 1,267,814; May 21; v. 250; p. 734.
Brommer, John, Brooklyn, N. Y. Washboard. No. 1,266,395; May 14; v. 250; p. 448.
Brooks, Charles E., Camden, N. J. Lock. No. 1,267,177; May 21; v. 250; p. 699.
Brooks, David W., assignor to Concrete Steel Company, New York, N. Y. Concrete-insert. No. 1,267,178; May 21; v. 250; p. 700.
Brooks, James W., Chicago, Ill. Desiccator. No. 1,266,915; May 21; v. 250; p. 624.
Brooks, Robert A., Chicago, Ill. Apparatus for flushing water-closets. No. 1,265,601; May 7; v. 250; p. 198.
Brosius, Edgar E., Pittsburgh, Pa. Clay-gun-operating mechanism. No. 1,265,602; May 7; v. 250; p. 198.
Brosius, Edgar E., Pittsburgh, Pa. Automatic record-shifting mechanism for phonographs. No. 1,266,767; May 21; v. 250; p. 584.
Brown, Alfred T., assignor to The Warner Elevator Mfg. Company, Cincinnati, Ohio. Dash-pot buffer. No. 1,267,626; May 28; v. 250; p. 850.
Brown, Charles A. (See Earl and Brown.)
Brown, Charles A., *et al.* (See Earl, George G., assignor.)
Brown, Clarence C. (See Larch and Brown.)
Brown, Ellis M., Roanoke, Va. Fender. No. 1,267,966; May 28; v. 250; p. 945.
Brown, Frank E., Webster City, Iowa. Ice-skate. No. 1,265,994; May 14; v. 250; p. 339.
Brown, Frank O., assignor of one-half to B. R. Anderson, Dallas, Tex. Tandem-roller attachment. No. 1,265,733; May 14; v. 250; p. 265.
Brown, George H., Wilkinsburg, Pa. Pedal-control mechanism for gearing. No. 1,267,371; May 28; v. 250; p. 778.
Brown, Hansen & Boettcher. (See Platt, Charles H., assignor.)
Brown, Harold P., New York, N. Y. Composition of matter to resist wear and antiskid device embodying the same. No. 1,266,100; May 14; v. 250; p. 369.
Brown Hoisting Machinery Company. (See Shnable, Emile R., assignor.)
Brown, James H., New York, N. Y. Lens mounting. No. 1,264,888; May 7; v. 25 ; p. 5.
Brown, John K., Belfast, Ireland. Device for cutting up carcasses. No. 1,265,603; May 7; v. 250; p. 199.
Brown, John T. S., Jr., Prospect, and L. L. Miles, Louisville, Ky. Mechanical movement. No. 1,265,041; May 7; v. 250; p. 48.
Brown, Meric M., Portland, Oreg. Can. No. 1,266,396; May 14; v. 250; p. 448.
Brown, Myer. (See Hitchcock, George E., assignor.)
Brown, Peter, assignor to Channell Chemical Company, Chicago, Ill. Mop. No. 1,267,508; May 28; v. 250; p. 815.

Browne, Harry P. C., New York, N. Y. Odometer-operating means. No. 1,265,042; May 7; v. 250; p. 48.
Brownlee, Roy H., and R. H. Uhlinger, Pittsburgh, Pa.; said Uhlinger assignor to said Brownlee. Apparatus for manufacture of hydrogen and carbon-black. No. 1,265,043; May 7; v. 250; p. 48.
Bruce, William M., Jr., Springfield, Ohio. Telegraphy. No. 1,264,889; May 7; v. 250; p. 5.
Brudick, Louis, Ralston, Pa. Envelop-opener. No. 1,267,372; May 28; v. 250; p. 779.
Bruederly, Joseph F., Philadelphia, Pa. Shade and curtain-pole fixture. No. 1,265,044; May 7; v. 250; p. 48.
Brukler, Vincent, *et al.* (See Mrakitsch, Anton, assignor.)
Brumby, Bolan G., *et al.* (See Steingruber, George, assignor.)
Brunker, William A., Salt Lake City, Utah. Classifier. No. 1,265,734; May 14; v. 250; p. 265.
Brunner, Albert H. (See Moore and Brunner.)
Brunnworth, Albert C., and C. M. Sackett, Anaheim, Cal. Traffic-guide signal. No. 1,267,967; May 28; v. 250; p. 945.
Brunsvold, Bendick E., Hatton, N. D. Spout attachment. No. 1,267,509; May 28; v. 250; p. 816.
Brunswick-Balke-Collender Company, The. (See Bersted, Martin, assignor.)
Brush, Alanson P. (See Nacker, Owen M., assignor.)
Brush, Alanson P., Detroit, Mich. Internal-combustion engine. No. 1,265,735; May 14; v. 250; p. 266.
Bruun, Louis W. (See Alexander and Bruun.)
Bryant, Peter, Cleveland, Ohio. Sash-cord holder. No. 1,266,397; May 14; v. 250; p. 449.
Bryce, James W., Brooklyn, assignor to International Time Recording Company of New York, Endicott, N. Y. Calculating-machine. No. 1,267,510; May 28; v. 250; p. 816.
Bubb, Elmer F., Chicago, Ill. Lifter for fruit, vegetables, &c. No. 1,267,336; May 21; v. 250; p. 740.
Buck, George B., New York, N. Y., assignor to The Tabulating Machine Company, Washington, D. C. Verifying-punch. No. 1,266,768; May 21; v. 250; p. 584.
Buck, Monroe, Glens Falls, N. Y. Vehicle-supporting jack. No. 1,267,741; May 28; v. 250; p. 880.
Buckham, George T. (See Dawson and Buckham.)
Buckley, J. M., *et al.* (See Biggers, Lee P., assignor.)
Buckwalter, Tracy V., assignor to The Timken Roller Bearing Company, Canton, Ohio. Bearing. No. 1,264,890; May 7; v. 250; p. 5.
Budd Wheel Corporation. (See Ledwinka, Joseph, assignor.)
Bugbee, Lucian W., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,266,207; May 14; v. 250; p. 399.
Bugbee, Lucian W., and E. D. Tillyer, assignors to American Optical Company, Southbridge, Mass. Pupillometer. No. 1,266,208; May 14; v. 250; p. 400.
Bull, George F., and E. W. Starkey; said Starkey assignor to C. H. Pugh Limited, Small Heath, Birmingham, England. Wire-cutter. No. 1,266,398; May 14; v. 250; p. 449.
Bull Tractor Company. (See White, Charles E., assignor.)
Bulla, Melbern B., El Paso, Tex. Automatic train-stop. No. 1,267,179; May 21; v. 250; p. 700.
Bulle, Adolf G., New York, N. Y. Candle-wick support. No. 1,267,968; May 28; v. 250; p. 945.
Bulley, George W., assignor to Mercury Manufacturing Company, Chicago, Ill. Regulator for draft-vehicles. No. 1,267,742; May 28; v. 250; p. 881.
Bullock, Arthur R., Cleveland, Ohio. Current-converting machine. No. 1,267,969; May 28; v. 250; p. 945.
Bullock, Fred J., assignor to Paper Machine Company, Shortsville, N. Y. Ensilage-cutting-wheel construction. No. 1,265,604; May 7; v. 250; p. 199.
Bullock, George, Grand Junction, Colo. Pencil-sharpener. No. 1,266,769; May 21; v. 250; p. 584.
Bumpus, Samuel, La Fayette, Ky. Sawing-machine. No. 1,266,916; May 21; v. 250; p. 624.
Bunnell, Sterling H., New York, and C. G. Peterson, Lockport, N. Y., assignors to The Griscom-Russell Company. Furnace-charging apparatus. No. 1,265,736; May 14; v. 250; p. 266.
Bunnell, William O., and Q. A. Gates, Wilkes-Barre, Pa. Car-replacer. No. 1,265,045; May 7; v. 250; p. 49.
Bunting, Laura F., Pocomoke City, Md. Mop. No. 1,265,737; May 14; v. 250; p. 266.
Bunyan, William J., Cleveland, Ohio. Signal device for automobiles. No. 1,266,101; May 14; v. 250; p. 369.
Bunzel, Earnest, Conshohocken, Pa. Flower-pot holder and carrier. No. 1,266,102; May 14; v. 250; p. 369.
Burch, Henry K., Miami, Ariz. Apparatus for classifying ores. No. 1,267,373; May 28; v. 250; p. 779.
Burgess, Frank, Wollaston, Mass. Pinion-wire and spur-gear cutting machine. No. 1,267,970; May 28; v. 250; p. 946.
Burk, Samuel D., *et al.* (See Johnson, Amos E., assignor.)
Burkhart, Howard A., Petersburg, Ind. Photographic developing-machine. No. 1,265,169; May 7; v. 250; p. 82.
Burkholder, Clyde, Ruth, Nev. Flexible sheave. No. 1,267,374; May 28; v. 250; p. 779.
Burnett, Fred W., Shinnston, W. Va. Truing attachment for lathes. No. 1,265,423; May 7; v. 250; p. 152.
Burnett, George M., *et al.* (See Judy, Andrew W., assignor.)
Burnett, Richard W., Chicago, Ill. Car-roof. No. 1,265,738; May 14; v. 250; p. 267.
Burnett, Richard W., Chicago, Ill. Car-roof. No. 1,265,739; May 14; v. 250; p. 267.
Burnett, William H., Mound City, Mo. Bottle-cap remover. No. 1,267,052; May 21; v. 250; p. 663.
Burnham, Chester W., assignor to Oneida Community, Limited, Oneida, N. Y. Box. No. 1,265,046; May 7; v. 250; p. 49.
Burnham, George A., Saugus, assignor to S. B. Condit, Jr., Brookline, Mass. Alternating-current solenoid. No. 1,266,917; May 21; v. 250; p. 625.
Burns, Al, Sunset, Idaho. Spark-extinguisher. No. 1,264,891; May 7; v. 250; p. 6.
Burns, John J. (See Milson, John R., assignor.)
Burns, Peter C., assignor to American Electric Company, Chicago, Ill. Horn. No. 1,265,605; May 7; v. 250; p. 199.
Burns, Thomas L., Oakland, Cal. Pressure-relieving and ventilating attachment for hats. No. 1,266,661; May 21; v. 250; p. 554.
Burnstine, Henry C. (See Beard, William G., assignor.)
Burress, Charles E., Los Angeles, Cal. Centrifugal turbine-pump. No. 1,267,180; May 21; v. 250; p. 700.
Burroughs Adding Machine Company. (See Howieson, John T., assignor.)
Burrows, Robert J., and E. B. Ross, assignors, by mesne assignments, to Clark Equipment Company, Buchanan, Mich. Wheel. No. 1,265,740; May 14; v. 250; p. 267.
Burrows, Robert J., and E. B. Ross, assignors, by mesne assignments, to Clark Equipment Company, Buchanan, Mich. Wheel. No. 1,265,741; May 14; v. 250; p. 268.
Burrows, Robert J., assignor to Clark Equipment Company, Buchanan, Mich. Axle for motor-vehicles. No. 1,265,742; May 14; v. 250; p. 268.
Burrows, William B. (See Skeith and Burrows.)
Burt, William H., assignor to Waterbury Mfg. Co., Waterbury, Conn. Tube-bending machine. No. 1,267,845; May 28; v. 250; p. 912.
Burtis, William H., Decorah, Iowa, assignor to T. F. Wallace, Minneapolis, Minn. Glare-shield. No. 1,266,399; May 14; v. 250; p. 449.
Burton, Charles S., Oak Park, Ill. Pencil-sharpener. No. 1,265,743; May 14; v. 250; p. 268.
Burton, Irwin G., Los Angeles, Cal. Flagstaff-holder for automobiles and the like. No. 1,266,770; May 21; v. 250; p. 585.
Busby, Alvin C., Ellensburg, Wash. Hobby-horse. No. 1,266,400; May 14; v. 250; p. 449.
Busch, Frederic C., assignor to Bardons and Oliver, Cleveland, Ohio. Chucking device. No. 1,265,606; May 7; v. 250; p. 199.
Busch-Sulzer Bros.-Diesel Engine Co. (See Schlaepfer, Robert, assignor.)
Bush, Dorothy. (See Bush, Eugene and D.)
Bush, Eugene and D., Washington, D. C. Valve construction. No. 1,265,170; May 7; v. 250; p. 82.
Bushong, Eugene M., *et al.* (See Boyer, George F., assignor.)
Butler, Oran G., St. Louis, Mo. Window-shade hanger. No. 1,265,299; May 7; v. 250; p. 117.
Butler, William N., Prairie Grove, Ark. Lock. No. 1,265,424; May 7; v. 250; p. 152.
Butt, John P., Jr. (See Linn and Butt.)
Byars, Ben J., *et al.* (See Biggers, Lee P., assignor.)
Bynum, Hugh R., Clarksdale, Miss. Water-heater. No. 1,265,171; May 7; v. 250; p. 83.
Byrne, David, assignor of one-third to W. M. Gore and one-third to C. T. Lawton, Toledo, Ohio. Combination terminal and fixture box. No. 1,265,879; May 14; v. 250; p. 307.
Byrne, Thomas W., Boston, Mass. Electrical ground. No. 1,266,209; May 14; v. 250; p. 400.
Byrnes, Clarence P., Sewickley, Pa. Apparatus for making vacuum-bottle blanks. No. 1,266,401; May 14; v. 250; p. 450.
C. B. Cottrell & Sons Company. (See Barber, Howard M., assignor.)
C. C. Blake, Inc. (See Blake, Charles C., assignor.)
C. C. Blake, Inc. (See Fernald, Mark E., assignor.)
C. H. Wheeler Manufacturing Company. (See Suczek, Robert, assignor.)
C. H. Wheeler Manufacturing Company. (See Suczek, Robert, assignor.)
C. & P. Electric Works. (See Curtis, Henry H., assignor.)
Cable, Clarence H., Topeka, Kans., and E. W. Jones, Kansas City, Mo. Battery-grid. No. 1,267,846; May 28; v. 250; p. 912.
Cable Company, The. (See Klugh, Paul B., assignor.)
Cadillac Motor Car Company. (See Johnson, Frank, assignor.)
Cady, William M., Edgewood Park, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Combined nut-lock and swab-holder. No. 1,266,662; May 21; v. 250; p. 554.
California Packing Corporation. (See Fraser, George L., assignor.)
Callaghan, Robert, Philadelphia, Pa. Signal device. No. 1,265,425; May 7; v. 250; p. 152.
Camatta, Frank J., Tonasket, Wash. Electric-circuit-controlling switch. No. 1,267,181; May 21; v. 250; p. 700.
Cambridge, Alonzo C., Charleston, S. C. Parachute attachment for flying-machines. No. 1,267,847; May 28; v. 250; p. 913.
Cameragraph Company, The. (See Schwab, William R., assignor.)

Campbell, Acheson M., Port Robinson, Ontario, Canada. Chuck. No. 1,264,892; May 7; v. 250; p. 6.
Campbell, Donald J., Muskegon Heights, Mich. Piston for internal-combustion engines. No. 1,264,893; May 7; v. 250; p. 6.
Campbell, Frank R., assignor to The National Malleable Castings Company, Cleveland, Ohio. Radial-draft gear. No. 1,267,053; May 21; v. 250; p. 663.
Campbell, Franklin L., Delaware, Ohio. Artificial bait. No. 1,267,627; May 28; v. 250; p. 850.
Campbell, George F. D., Bootle, near Liverpool, England. Electrically-operated winch specially applicable as an ash-hoist. No. 1,264,894; May 7; v. 250; p. 6.
Campbell, Harry E., New York, N. Y. Support for steam-radiators. No. 1,266,210; May 14; v. 250; p. 400.
Campbell, James R., Scottdale, and A. F. Hoffman, Pittsburgh, Pa. Treating mine-water. No. 1,267,971; May 28; v. 250; p. 946.
Campbell, Wilson L., La Grange, Ill., assignor, by mesne assignments, to Automatic Electric Company. Telephone system. No. 1,267,743; May 28; v. 250; p. 881.
Canda, Ferdinand E., New York, N. Y. Ball-rolling mill. No. 1,266,402; May 14; v. 250; p. 450.
Canfield, Clair C., Crafton, assignor of one-fourth to A. P. Lindsay, Pittsburgh, Pa. Wall-box for electrical apparatus. No. 1,265,744; May 14; v. 250; p. 268.
Cannon, George B., Jr. (See Howard and Cannon.)
Canova, Antonio J., Jacksonville, Fla. Gascous-fuel mixer. No. 1,265,047; May 7; v. 250; p. 49.
Can't Slip Collar Bar Company. (See Kunz, Alphonse M., assignor.)
Canton Culvert & Silo Company, The. (See Schlafly, Julius H., assignor.)
Cantrell, William, Fort Worth, Tex. Replanter. No. 1,265,290; May 7; v. 250; p. 115.
Capehart, John C. Frankfort, Ky. Lath for wall-plaster foundations. No. 1,266,211; May 14; v. 250; p. 400.
Capehart, William H., Newell, Ala. Quilting-frame. No. 1,265,880; May 14; v. 250; p. 307.
Capron, Felix, Gray's Inn Road, London, England. Production of neutral ammonium sulfate. No. 1,266,212; May 14; v. 250; p. 400.
Caracristi, Virginius Z., Bronxville, and J. E. Muhlfeld, Scarsdale, N. Y. Apparatus for burning pulverized coal. No. 1,265,172; May 7; v. 250; p. 83.
Carboni, Augusto, San Francisco, Cal. Measuring device. No. 1,267,054; May 21; v. 250; p. 664.
Carborundum Company, The. (See Hutchins, Otis, assignor.)
Cargal, William B., and W. Tankersley, Dalton, Ga. Bobbin-bearing. No. 1,265,995; May 14; v. 250; p. 340.
Caritj, Michael. (See Alberti, Caritj, and La Femina.)
Carlisle, George J., Chicago, Ill. Condiment-holder. No. 1,265,607; May 7; v. 250; p. 200.
Carlow, Philip, Seattle, Wash. Design and puzzle. No. 1,265,300; May 7; v. 250; p. 117.
Carlson, Carl J., Easthampton, Mass. Valve-adjusting device for steam-hammers. No. 1,265,173; May 7; v. 250; p. 83.
Carlsson, Carl A. V., Washington, D. C. Air-compressor. No. 1,265,048; May 7; v. 250; p. 50.
Carman, Herbert L. (See Riesenberg, Felix, assignor.) (Reissue.)
Carmichael, Allan G., Kendall, Mont. Wrench. No. 1,264,895; May 7; v. 250; p. 7.
Carnahan, Bruce H., H. M. Williams, and H. W. Bertram, Indianapolis, Ind. Automatic feeding attachment for glue-jointers. No. 1,267,511; May 28; v. 250; p. 816.
Carney, James J., Bethel, Vt. Self-lubricating axle. No. 1,264,896; May 7; v. 250; p. 7.
Caron, Frederick, Detroit, Mich. Shade-bracket. No. 1,267,182; May 21; v. 250; p. 701.
Carpenter, George L., Fort Worth, Tex. Sleeve-extractor. No. 1,265,745; May 14; v. 250; p. 269.
Carpenter, Winfred H., Muncie, Ind. Drop-hammer. No. 1,265,608; May 7; v. 250; p. 200.
Carpmill, John F., assignor to The North & Judd Manufacturing Company, New Britain, Conn. Bit. No. 1,267,972; May 28; v. 250; p. 946.
Carroll, Elbert H., assignor to Morgan Construction Company, Worcester, Mass. Wire-drawing machine. No. 1,265,049; May 7; v. 250; p. 50.
Carroll, Elbert H., assignor to Morgan Construction Company, Worcester, Mass. Clutch. No. 1,266,550; May 21; v. 250; p. 521.
Carroll, Thomas, assignor to The National Cash Register Company, Dayton, Ohio. Cash-register. No. 1,265,301; May 7; v. 250; p. 118
Carry, Charles A., Washington, D. C. Foot-rest. No. 1,265,609; May 7; v. 250; p. 200.
Carslaw, John W. D., Prospect, assignor of one-half to J. H. Loeser, Louisville, Ky. Armored interliner for tires. No. 1,267,848; May 28; v. 250; p. 913.
Carstensen, William E., Quarries, Cal. Safety device for automobiles. No. 1,266,551; May 21; v. 250; p. 522.
Carter, William D., San Jose, Cal. Hydraulic balance for centrifugal pumps. No. 1,267,512; May 28; v. 250; p. 817.
Carthouser, Arthur, West Orange, N. J. Pneumatic-tire casing. No. 1,266,403; May 14; v. 250; p. 450.
Carton Belting Company, The. (See Wilmot, Edwin F., assignor.)
Cary, Henry B., assignor of one-half to A. W. Frost, Los Angeles, Cal. Word-counting attachment for typewriting machines. No. 1,265,174; May 7; v. 250; p. 84.
Case Hardening Service Company, The. (See Abbott, Robert R., assignor.)
Case, Manna D., Chicago, Ill. Alarm-clock. No. 1,264,897; May 7; v. 250; p. 7.
Cashwell, Hosea. (See McCarty, Thomas A., assignor.)
Cass, George J., Mexico, Mo. Reel support and turner. No. 1,266,404; May 14; v. 250; p. 450.
Cassel, Edmund H., Madrid, Iowa. Device for oiling axle-spindles with hard oil. No. 1,267,628; May 28; v. 250; p. 850.
Cassel, Elmer F., New York, N. Y. Trousers presser, creaser, and hanger. No. 1,267,375; May 28; v. 250; p. 779.
Casselman, John B., Oakland, Cal. Railway signal and train-stop system. No. 1,266,405; May 14; v. 250; p. 451.
Cast Steel Locomotive Ash Pan Company. (See Pfiager, Harry M., assignor.)
Caswell, Ann E. (See Caswell, William B., assignor.)
Caswell, William B., assignor of one-fifth to A. E. Caswell, Newport, R. I. Window-shade-roller bracket. No. 1,267,312; May 21; v. 250; p. 733.
Cathcart, Robert M., Ballston, Va. Trimmer for photographic prints. No. 1,267,055; May 21; v. 250; p. 664.
Celluloid Company, The. (See Lindsay, William G., assignor.)
Central Railway Signal Company. (See Clark, George N., assignor.)
Cerny, Frank W., Mesa, Ariz. Bag-holder. No. 1,265,996; May 14; v. 250; p. 340.
Chadwick, Thomas H., Arnold, Pa. Method of and apparatus for drawing sheet-glass. No. 1,267,849; May 28; v. 250; p. 913.
Chain Belt Company. (See Shafter, Samuel, Jr., assignor.)
Chandler Development Corporation. (See Chandler, Edward F., assignor.)
Chandler, Edward F., Brooklyn, N. Y., assignor to Chandler Development Corporation. Torpedo-boat. No. 1,266,103; May 14; v. 250; p. 370.
Chaney, Lee F., Springfield, Ohio. Priming-pump for explosive-engines. No. 1,265,881; May 14; v. 250; p. 308.
Channell Chemical Company. (See Brown, Peter, assignor.)
Chantraine, Alphonse B., Marcinelle, Belgium. Heating apparatus. No. 1,265,746; May 14; v. 250; p. 269.
Chapman, Frank. (See McDade and Chapman.)
Chapman, Matthew T., assignor to The American Well Works, Aurora, Ill. Rotary deep-well pump. No. 1,266,552; May 21; v. 250; p. 522.
Chapman, Richard J., Terry, S. D. Ship-protector. No. 1,265,610; May 7; v. 250; p. 200.
Chappuis, Edward H., Marysville, Cal. Foldable roof-bracket. No. 1,267,056; May 21; v. 250; p. 664.
Chaquette, Ephraiem, assignor of one-half to J. Ratzer, Saddle River, N. J. Transmission mechanism. No. 1,265,175; May 7; v. 250; p. 84.
Charles H. Pugh Limited. (See Bull and Starkey, assignors.)
Chayes, Herman E. S., New York, N. Y. Grinding-machine. No. 1,265,050; May 7; v. 250; p. 50.
Chayes, Herman E. S., New York, N. Y. Dental drill. No. 1,267,629; May 28; v. 250; p. 850.
Cherekjian, Vahan, West Hoboken, N. J. Cigar-protector. No. 1,266,553; May 21; v. 250; p. 522.
Chernov, Abraham, H. Stein, and E. Ruben, New Haven, Conn. Head-covering. No. 1,265,426; May 7; v. 250; p. 153.
Chicago Cleveland Car Roofing Company. (See Russell, Thomas N., assignor.)
Chicago Glass Products Company. (See Schuhmann, Edwin M., assignor.)
Chicago Metal Products Co. (See Roberts, Charles F., assignor.)
Chicago Railway Equipment Company. (See Williams, Charles H., assignor.)
Chicago Steel & Wire Company. (See Green, J. Birchard, assignor.)
Child, Hal G., assignor to Child and Walton Company, Spokane, Wash. Binder. No. 1,267,630; May 28; v. 250; p. 851.
Child and Walton Company. (See Child, Hal G., assignor.)
Childe, Alberta G., New York, N. Y. Scenic mechanism. No. 1,266,213; May 14; v. 250; p. 401.
Chilson, Benn A., Covington, Ky. Automobile-puller. No. 1,267,376; May 28; v. 250; p. 780.
Chilstrom, John A., Red Wing, Minn. Display-cabinet. No. 1,267,377; May 28; v. 250; p. 780.
Chipman, Willard, Toronto, Ontario, Canada. Speed-recorder. No. 1,267,631; May 28; v. 250; p. 851.
Chmielewski, Jozef, assignor of one-fourth to J. Ratkoski, Hamtramck, Mich. Soldier's chair. No. 1,265,882; May 14; v. 250; p. 308.
Chowning Regulator Corporation. (See Newell, Hugh T., assignor.)
Chrisman, Charles S., West Chester, assignor to The United Gas Improvement Company, Philadelphia, Pa. Gas-washbox. No. 1,267,513; May 28; v. 250; p. 817.

Christoph, George W., Warehouse Point, assignor to Sterling Blower Company, Hartford, Conn. Pneumatic power-boat. No. 1,265,997; May 14; v. 250; p. 340.
Chryst, William A. (See Kettering and Chryst.)
Chubb, Lewis W., Edgewood Park, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electric-resistance device. No. 1,267,973; May 28; v. 250; p. 946.
Church, David W., San Diego, assignor, by mesne assignments, to R. A. Dallugge, Los Angeles, Cal. Ore crushing and amalgamating mill. No. 1,266,406; May 14; v. 250; p. 451.
Church, Harold D., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,265,888; May 14; v. 250; p. 308.
Cibak, Anthony L., Waterloo, Iowa. Post-hole digger. No. 1,266,663; May 21; v. 250; p. 555.
Cino Camera Company. (See Pietzsch and Nichols, assignors.)
Civita, Emil R. U., Pittsburg, Cal. Apron. No. 1,265,427; May 7; v. 250; p. 153.
Clapper, Frank D., Altus, Okla. Electric switch. No. 1,264,898; May 7; v. 250; p. 7.
Clark, Allen F., West Hanover, assignor to The National Fireworks Distributing Company, Boston, Mass. Toy torpedo. No. 1,265,701; May 7; v. 250; p. 224.
Clark, Charles H., Easton, Me. Wheel-hoe. No. 1,266,918; May 21; v. 250; p. 625.
Clark, Charles R., Plainville, Conn. Vehicle wind-shield. No. 1,265,176; May 7; v. 250; p. 85.
Clark, Daniel, Edmonton, Alberta, Canada. Car. No. 1,264,899; May 7; v. 250; p. 8.
Clark, Daniel, Edmonton, Alberta, Canada. Apparatus for controlling temperature in cars. No. 1,264,900; May 7; v. 250; p. 8.
Clark, Edward S., St. Louis, Mo. Rail-joint and making same. No. 1,265,051; May 7; v. 250; p. 51.
Clark Equipment Company. (See Burrows, Robert J., assignor.)
Clark Equipment Company. (See Burrows and Rose, assignors.)
Clark, Ernest L., St. Maries, Idaho. Box-shook machine. No. 1,265,052; May 7; v. 250; p. 51.
Clark, Frank H. (See Elvin, Fahnestock and Clark.)
Clark, George N., Needham Heights, Mass., assignor to Central Railway Signal Company, Pittsburgh, Pa. Fusee-tube-filling machine. No. 1,267,183; May 21; v. 250; p. 701.
Clark, Horace O., Chicago, Ill., Engine-starter. No 1,267,974; May 28; v. 250; p. 947.
Clark, Horace W., assignor to H. W. Clark Co., Mattoon, Ill. Meter-box. No. 1,265,053; May 7; v. 250; p. 51.
Clark, Melville, assignor to Melville Clark Piano Company, Chicago, Ill. Air-motor. No. 1,265,747; May 14; v. 250; p. 269.
Clark, Robert G., Brooklyn, N. Y. Plaiting-machine. No. 1,265,708; May 7; v. 250; p. 226.
Clark, Thomas E. (See Julian, Hovey, and Clark.)
Clark, Walter R., assignor to Bridgeport Brass Company, Bridgeport, Conn. System of control for tandem rolling-mills and the like. No. 1,267,184; May 21; v. 250; p. 701.
Clarke, Adam W. (See Harrington and Clarke.)
Clarke, Camby, Peck, Mich. Combination boiler and roaster. No. 1,265,611; May 7; v. 250; p. 201.
Clarke, Edgar W., Westmont borough, Pa. Water-cooled skewback. No. 1,267,057; May 21; v. 250; p. 665.
Clarkson, J. Paul, St. Paul, Minn. Excavating-machine. No. 1,267,058; May 21; v. 250; p. 665.
Clary Von Carlsberg, John P., Worcester, Mass. Structural joint. No. 1,266,104; May 14; v. 250; p. 370.
Clausen, Frederick W. (See Hickey, John P., assignor.)
Clauson, Bryant W., Rexford, Kans. Electrical drawer-lock. No. 1,265,054; May 7; v. 250; p. 51.
Claussen, Edward E., Hartford, Conn. Machine for making plastic articles. No. 1,267,632; May 28; v. 250; p. 851.
Clayton, George W., and J. Morrison, Sharon, Pa. Check-protector. No. 1,267,744; May 28; v. 250; p. 881.
Clayton, Ralph S., assignor of one-half to J. V. McHose, Philadelphia, Pa. Electric signaling circuit-closing alarm. No. 1,265,428; May 7; v. 250; p. 153.
Clément-Bayard, Adolphe, Levallois-Perret, France. Dirigible of the rigid type. No. 1,265,302; May 7; v. 250; p. 118.
Clement, Leonis J. F., assignor to R. S. Stokvis & Zonen Limited. Rotterdam, Netherlands. Gas-stove. No. 1,266,105; May 14; v. 250; p. 370.
Clifford, Victor, Tulsa, Okla. Sealing oil-storage tanks. No. 1,266,407; May 14; v. 250; p. 451.
Clifford, William H., San Francisco, Cal. Wind-shield cleaner. No. 1,266,919; May 21; v. 250; p. 625.
Clift, Frederic H., Barnes, London, England. Air-speed indicator for use on aeroplanes and the like. No. 1,267,633; May 28; v. 250; p. 851.
Climax Machine Co. (See Kelley, Alexander, assignor.)
Cline, Nelson T., and R. M. Long, Pittsburgh, Pa. Lubricating device. No. 1,265,748; May 14; v. 250; p. 270.
Clo-Mix Company, The. (See Clover, Harry E., assignor.)
Clover, Harry E., assignor to The Clo-Mix Company, Elkhart, Ind. Register. No. 1,265,055; May 7; v. 250; p. 51.
Cluett, Peabody & Co. (See Hurd, Hubbard F., assignor.)
Coats, Henry B., Veedersburg, Ind. Vehicle-wheel. (Reissue.) No. 14,467; May 7; v. 250; p. 231.
Coats, Henry B., Veedersburg, Ind. Vehicle-wheel. No. 1,266,408; May 14; v. 250; p. 452.
Conts, Roy N., Marshalltown, Iowa. Thermostatic fan. No. 1,267,975; May 28; v. 250; p. 947.
Cobb, Bayard G., Dawson City, Yukon, Canada, assignor to J. F. Skerrett, H. Griffin, H. M. Kidder, E. I. Barr, and E. Inescort, New York, N. Y., and Andes Exploration and Smelting Corporation. Method and apparatus for the electrical reduction of ores. No. 1,267,976; May 28; v. 250; p. 947.
Cobb, Fredrick E., et al. (See Rothenberger, Simon W., assignor.)
Cobler, Lee O., and J. E. Deandrea, Dallas, Tex. Shank-stiffener and heel-plate for shoes. No. 1,265,056; May 7; v. 250; p. 52.
Cobwell Corporation. (See Wells, Raymond, assignor.)
Cochran, William K., Springfield, Ohio. Metallic filing-case. No. 1,268,063; May 28; v. 250; p. 971.
Cocke, William A., Cartersville, Va. Stump-puller. No. 1,265,612; May 7; v. 250; p. 201.
Cockrell, Frank M., and J. M. Rockwell, Liberty, Mo. Cover for radiators. No. 1,265,429; May 7; v. 250; p. 153.
Cody, Edward P., et al. (See Schneider, Frederick E., assignor.)
Coffin, Charles L., Parks, Ga., assignor to Electric Metal Working Company, Detroit, Mich. Arc welding, heating, and the like. No. 1,265,613; May 7; v. 250; p. 201.
Coffman, Robert L., Big Sandy, Tenn. Fuel-heater for gas-engines. No. 1,267,185; May 21; v. 250; p. 702.
Cogsdill, Stuart A., assignor to Detroit Reamer Salvage Co., Detroit, Mich. Salvaging reamers or like tools. No. 1,267,514; May 28; v. 250; p. 817.
Cohen, Myer, Revere, Mass. Automatic jacking device for self-propelled vehicles. No. 1,266,409; May 14; v. 250; p. 452.
Cohen, William, Bayonne, N. J. Embroidery-machine. No. 1,265,430; May 7; v. 250; p. 154.
Colby, Frederick W., Boston, Mass. Telephone-index. No. 1,266,214; May 14; v. 250; p. 401.
Cole, Frederick W., Newton, Mass., assignor to Gamewell Fire Alarm Telegraph Co. Signal-box with local-alarm mechanism. No. 1,265,749; May 14; v. 250; p. 270.
Cole, Frederick W., Newton Highlands, Mass., assignor to Gamewell Fire Alarm Telegraph Company, New York, N. Y. Signal-box having local alarms. No. 1,266,920; May 21; v. 250; p. 626.
Cole, Otto B., assignor to Arion Manufacturing Company, Boston, Mass. Phonograph. No. 1,267,059; May 21; v. 250; p. 665.
Coleman, Benjamin R., and L. B. Taylor, Chicago, Ill. Window construction. No. 1,267,745; May 28; v. 250; p. 882.
Coleman, Benjamin R., and L. B. Taylor, Chicago, Ill. Window construction. No. 1,267,746; May 28; v. 250; p. 882.
Coleman, James H., and W. W. Dunnell, Jr., Colorado Springs, Colo. Composition-light lamp. No. 1,266,554; May 21; v. 250; p. 523.
Coleman, William W., Atkins, Ark. Receptacle. No. 1,265,177; May 7; v. 250; p. 85.
Collier, William R., Austin, Tex. Hat-pin. No. 1,265,750; May 14; v. 250; p. 270.
Collins, Charles H. (See Cooper and Collins.)
Collins, Fonzo M. (See Webb and Collins.)
Collins, Roy V., New York, N. Y. Apparatus and method for operating switches. No. 1,266,555; May 21; v. 250; p. 523.
Collinson, John, Manchester, England, assignor to Westinghouse Electric and Manufacturing Company. Electrical resistance. No. 1,267,978; May 28; v. 250; p. 948.
Colman, Howard D., assignor to Barber-Colman Company, Rockford, Ill. Winder. No. 1,267,977; May 28; v. 250; p. 947.
Combouzou, William R., Baton Rouge, La. Hedge-trimmer. No. 1,265,178; May 7; v. 250; p. 85.
Comerma, John, assignor to J. C. Forster, New York, N. Y. Tile-arch construction. No. 1,267,747; May 28; v. 250; p. 882.
Comfort, Edward W. (See Thompson and Comfort.)
Commercial Truck Company of America. (See Whitney and Melia, assignors.)
Commercial Wireless & Development Co. (See Pridham and Jensen, assignors.)
Common Sense Pile Protector Company. (See Reynolds, Alva L., assignor.)
Conant, Leon B., Boston, Mass. Fire-extinguishing apparatus. No. 1,265,614; May 7; v. 250; p. 201.
Conces, Vincent J., Sr., and V. J., Jr., East Chicago, Ind. Sled-runner. No. 1,267,186; May 21; v. 250; p. 702.
Concrete Steel Company. (See Brooks, David W., assignor.)
Condit, Sears B., Jr. (See Burnham, George A., assignor.)
Condon-Autostop Company. (See Condon, Edward T., Jr., assignor.)
Condon, Edward T., Jr., New York, N. Y., assignor to Condon-Autostop Company. Automatic brake mechanism. No. 1,267,378; May 28; v. 250; p. 790.
Coneeny, John T., and W. Young, Somerville, Mass. Buster-bar. No. 1,266,215; May 14; v. 250; p. 401.

Conklin Pen Manufacturing Company, The. (See Mooney, Frank H., assignor.)
Conkling, Samuel G., Saugerties, assignor of one-half to L. Schaffert, Brooklyn, N. Y. Train safety device. No. 1,265,615; May 7; v. 250; p. 202.
Connecticut Aircraft Company. (See Smyth, Charles F., assignor.)
Connecticut Telephone & Electric Company. (See Johnson, Joseph E., assignor.)
Connelly, Lawrence E., Cleveland, Ohio. Steam-generator. No. 1,266,664; May 21; v. 250; p. 555.
Conrad, Paul A. R., assignor to Life Saving Devices Company, Chicago, Ill. Respirating appliance. No. 1,266,410; May 14; v. 250; p. 452.
Consolidated Fireworks Company of America. (See Ziegler, Louis, assignor.)
Consolidated Liquid Gas Company. (See Peterson, Franklin P., assignor.)
Constable, John P., assignor to New Jersey Patent Company, West Orange, N. J. Phonograph or talking-machine. No. 1,265,179; May 7; v. 250; p. 86.
Conway, Roy D., Chatham, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Signaling system. No. 1,265,751; May 14; v. 250; p. 271.
Cook, Admiram J., Westerlo, N. Y. Pipe-joint. No. 1,267,313; May 21; v. 250; p. 733.
Cook, Earl L., *et al.* (See Anderson, Charles A., assignor.)
Cook, Edward O., Winchendon, Mass. Jews'-harp. No. 1,266,556; May 21; v. 250; p. 523.
Cook, George R., assignor of one-half to J. B. F. Dial, Carrollton, Ga. Road scraping, grading, and ditching machine. No. 1,265,702; May 7; v. 250; p. 225.
Cook, Howard D., Lorain, Ohio. Skelp cupping and clipping apparatus. No. 1,267,379; May 28; v. 250; p. 780.
Cook, James L., Springfield, Ill. Steering-gear-locking mechanism. No. 1,265,057; May 7; v. 250; p. 52.
Cook, Otis W., Fort Dodge, Iowa. Tent attachment for automobiles. No. 1,267,979; May 28; v. 250; p. 948.
Cooper, Fred, assignor of one-half to J. A. Cooper, Bloomfield, Mo. Guard attachment for bottle-capping machines. No. 1,265,058; May 7; v. 250; p. 52.
Cooper, John A. (See Cooper, Fred, assignor.)
Cooper, Simon, New York, assignor to Brass Goods Manufacturing Co., Brooklyn, N. Y. Buffing-machine. No. 1,267,634; May 28; v. 250; p. 852.
Cooper, Simon, New York, N. Y., assignor to Gorton-Pew Fisheries Company, Gloucester, Mass. Machine for handling fish. No. 1,267,850; May 28; v. 250; p. 914.
Cooper, William H., Amsterdam, and C. H. Collins, Albany, assignors to S. Sanford & Sons, Inc., Amsterdam, N. Y. Tapestry-loom. No. 1,265,616; May 7; v. 250; p. 202.
Coots, Edwin W., Shelbyville, Ky. Unloading apparatus. No. 1,267,187; May 21; v. 250; p. 702.
Copenhaver, Claude A. (See Belgard, William B., assignor.)
Copley Motor Devices Company. (See Waterhouse, Harold D., assignor.)
Coppé, Evence, Brussels, Belgium. Regenerative coke-oven. No. 1,267,380; May 28; v. 250; p. 781.
Corcoran-Victor Company, The. (See Ryder, Charles, assignor.)
Corkell, Thomas W., Chicago, Ill. Collapsible reel-barrel. No. 1,266,771; May 21; v. 250; p. 585.
Cornell, Zorasto P. (See Swan and Cornell.)
Cornwell, Leslie R., Dallas, Iowa. Ensilage-fork. No. 1,266,411; May 14; v. 250; p. 453.
Corona Typewriter Company. (See Latta, Emmit G., assignor.)
Cosham, David H., Chicago, Ill. Bridge-gate. No. 1,265,617; May 7; v. 250; p. 202.
Cosser, Walter F. J. (See Ross and Cosser.)
Costello, Henry O., Bridgeport, Conn. Height-cage attachment for micrometer-calipers. No. 1,265,431; May 7; v. 250; p. 154.
Coulson, John, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Film-forming electrolyte. No. 1,266,557; May 21; v. 250; p. 523.
Coulter, Henry P., Toledo, Ohio. Dust and wind guard for car-windows. No. 1,267,381; May 28; v. 250; p. 781.
Coup, Charles R., McKeesport, Pa. Toy. No. 1,266,106; May 14; v. 250; p. 370.
Courtney, James J., Brooklyn, N. Y. Bearing for propeller-shafts. No. 1,267,382; May 28; v. 250; p. 781.
Cox, Carlos, Sedro Woolley, assignor of one-half to C. A. Beaulieu, Seattle, Wash. Container. No. 1,267,635; May 28; v. 250; p. 853.
Cox, Charles N., Brockman, Cal. Traffic-signal. No. 1,267,515; May 28; v. 250; p. 817.
Cox, Warren R., Cleveland, Ohio. Lock-switch. No. 1,267,516; May 28; v. 250; p. 818.
Crady, Peter E., and F. H. Robillard, Burlington, Vt. Platform-scale. No. 1,265,618; May 7; v. 250; p. 203.
Craft, Edward B., Hackensack, N. J., and J. N. Reynolds, Greenwich, Conn., assignors, by mesne assignments, to Western Electric Company, Incorporated. Automatic telephone-exchange system. No. 1,267,980; May 28; v. 250; p. 949.
Craig, Edward, St. Joseph, Mich. Handle-machine. No. 1,264,901; May 7; v. 250; p. 8.
Crane, Flora G., Sandpoint, Idaho. Oven-tray. No. 1,266,412; May 14; v. 250; p. 453.
Cratty, Charles, Grinnell, Iowa. Dust-cap. No. 1,267,636; May 28; v. 250; p. 853.
Crawford, Lee, Spokane, Wash. Chalk-rimmer. No. 1,265,059; May 7; v. 250; p. 53.
Crawford, McGregor and Canby Company. (See Mattern, George W., assignor.)
Creighton, Elmer E. F., Schenectady, N. Y., assignor to General Electric Company. Protective device. No. 1,266,558; May 21; v. 250; p. 524.
Creighton, Robert J., Carnduff, Saskatchewan, Canada. Package-tie. No. 1,265,060; May 7; v. 250; p. 53.
Cremers, Thomas, Albany, Minn. Combination garden-tool. No. 1,266,921; May 21; v. 250; p. 626.
Cressler, Joseph B., Norfolk, Va. Torpedo-guard. No. 1,267,383; May 28; v. 250; p. 781.
Crevelling, John L., New York, N. Y., assignor to Safety Car Heating and Lighting Company. Electric regulation. No. 1,265,584; May 14; v. 250; p. 308.
Crimaudo, Leonardo New York, N. Y. Flying-boat. No. 1,267,384; May 28; v. 250; p. 782.
Crippen, Arthur J., assignor to Crippen-Rase Co. Inc., Rochester, N. Y. Cabinet for phonograph-records. No. 1,267,981; May 28; v. 250; p. 949.
Crippen-Rase Co. (See Crippen, Arthur J., assignor.)
Criswell, Robert G., Granite Falls, Wash. Door-hanger. No. 1,266,922; May 21; v. 250; p. 626.
Crocket, Ernest J., assignor, by mesne assignments, of one-half to A. M. Young, and one-half to G. J. Rittenhouse, Los Angeles, Cal. Receptacle-making machine. No. 1,266,772; May 21; v. 250; p. 585.
Crompton & Knowles Loom Works. (See Hutchins and Le Doux, assignors.)
Crompton & Knowles Loom Works. (See Regan, John, assignor.)
Crompton & Knowles Loom Works. (See Ryon, Eppa H., assignor.)
Crompton & Knowles Loom Works. (See Wheaton, John M., assignor.)
Cronk, Harrison T., assignor to Cronk-Salter Company, New York, N. Y. Toilet-compartment. No. 1,265,619; May 7; v. 250; p. 203.
Cronk-Salter Company. (See Cronk, Harrison T., assignor.)
Crooks, Oliver, Minneapolis, Minn. Sleigh. No. 1,267,385; May 28; v. 250; p. 782.
Crosby, Robert E. L., Jonesboro, Ark. Spike. No. 1,267,851; May 28; v. 250; p. 914.
Crouse, David E. (See Eidson, Davis, and Crouse.) (Reissue.)
Crouse, Fred C., Los Angeles, Cal. Sliding-door hanger for sectional bookcases. No. 1,267,188; May 21; v. 250; p. 702.
Crouse-Hinds Company. (See Bissell, Carl H., assignor.)
Crouse-Hinds Company. (See Bissell and Hastings, assignors.)
Crouse-Hinds Company. (See Bissell and Smith, assignors.)
Crouse-Hinds Company. (See Olley, Edwin A., assignor.)
Crowe, James, Philadelphia, Pa. Fluid-controlling mechanism. No. 1,267,982; May 28; v. 250; p. 949.
Crowe, Paul L., New York, N. Y. Stoker-bridge. No. 1,264,902; May 7; v. 250; p. 8.
Crowell, Charles H., Brooklyn, N. Y. Power moistening-machine. No. 1,267,517; May 28; v. 250; p. 818.
Crown Optical Company. (See Mihalyi, Frank, assignor.)
Crown Optical Company. (See Reisinger, George, assignor.)
Crown Optical Company. (See Schleinzer, John, assignor.)
Crownfield, David, Cambridge, Mass. Lighting-fixture. No. 1,265,885; May 14; v. 250; p. 308.
Crump, Armistead C., New York, N. Y. Paste-tube. No. 1,266,413; May 14; v. 250; p. 453.
Crystal Alloys Corporation. (See Hyers, Louis, assignor.)
Cubiac, Michael F., assignor for forty-eight one-hundredths to J. A. Swanson, Detroit, Mich. Clothes-line holder and fastener. No. 1,265,620; May 7; v. 250; p. 203.
Cullen, Frederick T., assignor of one-half to J. F. Cullen, Petaluma, Cal. Gas-saver and carbon-decomposer. No. 1,266,216; May 14; v. 250; p. 402.
Cullen, John F. (See Cullen, Frederick T., assignor.)
Cunningham, George T., Shreveport, La. Blow-torch. No. 1,265,621; May 7; v. 250; p. 203.
Cunningham, Henry E. (See Payne and Cunningham.)
Cunningham, Peter J., Jarbidge, Nev. Door-latch. No. 1,265,886; May 14; v. 250; p. 309.
Curnutt, John Z. (See Lloyd and Curnutt.)
Curran, Edward F., North Bend, Nebr. Wind-shield. No. 1,266,217; May 14; v. 250; p. 402.
Currey, Enos P., Toledo, Oreg. Vehicle-spring. No. 1,265,622; May 7; v. 250; p. 204.
Currey, Enos P., Toledo, Oreg. Spring connection. No. 1,265,623; May 7; v. 250; p. 204.
Currie, Otis C., and W. A. Gruenberg, Detroit, assignors to W. O. Albig, Adrian, Mich. Folding-machine. No. 1,266,218; May 14; v. 250; p. 402.
Curry, Frank, and A. F. Lewis, assignors of one-half to W. E. Mouck, Santa Barbara, Cal. Molding-machine. No. 1,267,189; May 21; v. 250; p. 702.
Curtis, George V., Springfield, Mass. Universal joint. No. 1,267,852; May 28; v. 250; p. 914.
Curtis, Henry H., assignor to C. & P. Electric Works, Springfield, Mass. Metering-panel. No. 1,265,998; May 14; v. 250; p. 340.

Curtis, James F., Pitcairn, Pa., assignor to Westinghouse Electric and Manufacturing Company. Dynamo-electric machine. No. 1,267,983; May 28; v. 250; p. 950.
Curtiss, Richard S., Pasadena, Cal. Garment-support. No. 1,266,219; May 14; v. 250; p. 403.
Cusanelli, Martin, Woodside, N. Y. Piano-seat attachment. No. 1,265,999; May 14; v. 250; p. 340.
Cutler-Hammer Mfg. Co., The. (See Barnum, Thomas E., assignor.)
Cutler-Hammer Mfg. Co., The. (See Henderson, Clark T., assignor.)
Cutler-Hammer Mfg. Co., The. (See Klein, Charles J., assignor.)
Cutler-Hammer Mfg. Co., The. (See Low, Frank S., assignor.)
Cutler-Hammer Mfg. Co., The. (See Stevens, William C., assignor.)
Cutler-Hammer Mfg. Co., The. (See Wiegand, Henry J., assignor.)
Cutler-Hammer Mfg. Co., The. (See Zimmer, Paul H., assignor.)
Cutler, Lewis F., Salem, assignor to The Turner Tanning Machinery Company, Peabody, Mass. Leather-working machine. No. 1,267,853; May 28; v. 250; p. 914.
Cutter, Edward I., Norwood, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Drying apparatus. No. 1,267,748; May 28; v. 250; p. 882.
D. H. Burrell & Company. (See Dalzell, Charles B., assignor.)
D. L. Caulk Company, The. (See Zurbrigg, Daniel A., assignor.)
D'Olier, Henry, Jr., Bridgeport, Conn. Ventilating structure for electric lamps. No. 1,267,749; May 28; v. 250; p. 883.
D'Orville, Theodore L. R., Twickenham, England. Fuel-supply system for internal-combustion engines. No. 1,266,429; May 14; v. 250; p. 457.
Dahl, Berent O., Viroqua, Wis. Tobacco-sizing machine. No. 1,265,180; May 7; v. 250; p. 86.
Dahl, Carl R., Murdock, Minn. Pulley for automobiles. No. 1,266,220; May 14; v. 250; p. 403.
Dalley, Harry S., Bellefontaine, Ohio. Combined furnace-poker and clinker-extractor. No. 1,265,303; May 7; v. 250; p. 118.
Dale, Clifford, Wabash, Ind. Concrete structure and block. No. 1,266,414; May 14; v. 250; p. 453.
Dallugge, Rudolph A. (See Church, David W., assignor.)
Dalzell, Charles B., assignor to D. H. Burrell & Company, Little Falls, N. Y. Centrifugal liquid-separator. No. 1,265,061; May 7; v. 250; p. 53.
Daniels, Thomas M., Chicago, Ill. Lock-nut. No. 1,265,752; May 14; v. 250; p. 271.
Daniels, Valentine, Geneseo, Ill. Cultivator-shovel. No. 1,267,518; May 28; v. 250; p. 818.
Danielsen, Wilhelm G., Independence, Mo. Equalizer for tractors. No. 1,266,773; May 21; v. 250; p. 585.
Darrow, Daniel, New York, N. Y. Barge-conveyer. No. 1,265,624; May 7; v. 250; p. 204.
Dart, Melvin C., New York, N. Y. Clutch. No. 1,267,190; May 21; v. 250; p. 703.
Datta, Rasiklal, Calcutta, India. Producing bromin. No. 1,267,638; May 28; v. 250; p. 853.
Dauber, Charles E., Sr., Johnsonburg, Pa. Elevating means for hides. No. 1,266,221; May 14; v. 250; p. 403.
Daudelin, Philias. (See Bartlett, Emery G., assignor.)
Daujat, John, San Martin, Cal. Combination square and bevel. No. 1,267,637; May 28; v. 250; p. 853.
Davenport, Frederic H., and H. H. Manning, Meadville, Pa. Igniter. No. 1,267,984; May 28; v. 250; p. 950.
Davenport, Ransom W., assignor to Detroit Stove Works, Detroit, Mich. Combined coal and gas range. No. 1,265,432; May 7; v. 250; p. 154.
Davenport, Ransom W., assignor to Detroit Stove Works, Detroit, Mich. Electric heating unit. No. 1,265,433; May 7; v. 250; p. 155.
Davey, Albert I. (See Leach, William W., assignor.)
Davidson, Charles J., Grand Rapids, Mich. Door-catch. No. 1,265,304; May 7; v. 250; p. 118.
Davidson, Harold R., Oakdale, Cal. Tire for motor-vehicle wheels. No. 1,267,985; May 28; v. 250; p. 950.
Davidson, Jacob A., Toronto, Ontario, Canada. Animal-trap. No. 1,265,305; May 7; v. 250; p. 119.
Davis, A. Elton, *et al.* (See McCloskey, Alfred C., assignor.)
Davis, Alma M., Mesa, Ariz. Tractor. No. 1,267,986; May 28; v. 250; p. 950.
Davis, Charles, and B. Ogram, Warren, Ohio. Shade-roller and curtain bracket. No. 1,266,559; May 21; v. 250; p. 524.
Davis, Elam H., Memphis, Tenn. Automobile-wheel rim. No. 1,265,062; May 7; v. 250; p. 53.
Davis, Henderson G., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Barrel-seam and making the same. No. 1,266,415; May 14; v. 250; p. 454.
Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Fitting for flexible hose. No. 1,266,416; May 14; v. 250; p. 454.
Davis, John B., Springfield, assignor to Gilbert & Barker Manufacturing Company, West Springfield, Mass. Meter. No. 1,266,417; May 14; v. 250; p. 454.
Davis, Lewis F., Bowie, Tex. Cistern-cleaner. No. 1,265,434; May 7; v. 250; p. 155.
Davis, Nathan, Boston, Mass. Cloth-measuring machine. No. 1,266,923; May 21; v. 250; p. 627.
Davis, Thomas. (See Eidson, Davis, and Crouse.) (Reissue.)
Davis, Thomas J., San Francisco, Cal. Can container and server. No. 1,265,435; May 7; v. 250; p. 155.
Davis, William L., Little Rock, Ark. Safety device for combustible-liquid containers. No. 1,266,665; May 21; v. 250; p. 555.
Davison, Gregory C., New London, Conn., assignor to Electric Boat Company, New York, N. Y. Apparatus for aiming and launching automobile torpedoes. No. 1,265,753; May 14; v. 250; p. 271.
Davoplane Bed Company. (See Freedman, Hyman and N. M., assignors.)
Dawson, Arthur T., and G. T. Buckham, Westminster, London, England, assignors to Vickers Limited, Westminster, England. Gun-carriage. No. 1,266,924; May 21; v. 250; p. 627.
Dawson, Arthur T., and G. T. Buckham, assignors to Vickers Limited, Westminster, London, England. Gun-mounting. No. 1,267,854; May 28; v. 250; p. 915.
Dawson, David, Elmira, N. Y. Motor-cycle supporting, balancing, and braking means. No. 1,266,418; May 14; v. 250; p. 454.
Dawson, Ernest N. (See Scofield and Dawson.)
Day, George H., assignor to American Optical Company, Southbridge, Mass. Goggles. No. 1,265,625; May 7; v. 250; p. 204.
Day, Medicus. (See Adams and Day.)
Day, George H., and H. H. Styll, assignors to American Optical Company, Southbridge, Mass. Display device. No. 1,266,222; May 14; v. 250; p. 403.
Day, George H., assignor to American Optical Company, Southbridge, Mass. Temple. No. 1,266,223; May 14; v. 250; p. 404.
Day, George H., assignor to American Optical Company, Southbridge, Mass. Trial-frame. No. 1,266,224; May 14; v. 250; p. 404.
Day, George H., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,266,225; May 14; v. 250; p. 404.
Day, Thomas M., Windfall, Ind. Check. No. 1,266,226; May 14; v. 250; p. 404.
Dayton Engineering Laboratories Company, The. (See Kettering and Chryst, assignors.)
Dayton Manufacturing Company, The. (See Eckert and Kirby, assignors.)
Dayton Manufacturing Company, The. (See Kirby, John, Jr., assignor.)
Dayton Steel Foundry Company, The. (See Leoni, Alfons M., assignor.)
De Alcala, Benjamin, New Orleans, La. Telegraph-key. No. 1,265,887; May 14; v. 250; p. 309.
De Camp, Joseph W., Elkhorn, Mont. Package-tie. No. 1,267,539; May 28; v. 250; p. 853.
De Camp and Sloan. (See Dooley, James H., assignor.)
De Chime, Paul, Youngstown, Ohio. Strainer for pump-wells. No. 1,267,315; May 21; v. 250; p. 784.
De Clamecy, Philippe, Charlestown, Mass., assignor to Remington Typewriter Company, Ilion, N. Y. Typewriting machine. No. 1,266,560; May 21; v. 250; p. 524.
De la Mota, Francisco E., San Pedro de Macoris, Dominican Republic. Egg-receptacle. No. 1,267,988; May 28; v. 250; p. 951.
De Laval Separator Company, The. (See Leitch, Meredith, assignor.)
De Long Hook and Eye Company, The. (See Galt, William J., Jr., assignor.)
De Mers, Edgar A., Seattle, Wash. Vapor-controlling valve for internal-combustion engines. No. 1,266,422; May 14; v. 250; p. 456.
De Meyer, Camiel, Blythe, Cal. Water-level indicator for irrigation-ditches and the like. No. 1,267,061; May 21; v. 250; p. 666.
De Minico, Charles, Portsmouth, Ohio, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sole-leveling machine. No. 1,266,000; May 14; v. 250; p. 341.
De Nazaris, Marcelino B., New York, N. Y. Game. No. 1,267,316; May 21; v. 250; p. 735.
De Reamer, Frank C., Schenectady, N. Y., assignor to General Electric Company. Electric switch. No. 1,266,424; May 14; v. 250; p. 456.
De Stefan, Tony, Lattimer Mines, Pa. Nail-set. No. 1,264,904; May 7; v. 250; p. 9.
De Tullio, Angelo, Albuquerque, N. Mex. Laundry-register. No. 1,266,426; May 14; v. 250; p. 457.
De Vilbiss Manufacturing Company, The. (See De Vilbiss, Thomas A., assignor.)
De Vilbiss, Thomas A., assignor to The De Vilbiss Manufacturing Company, Toledo, Ohio. Combined aspirating and vaporizing instrument. No. 1,266,228; May 14; v. 250; p. 404.
De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Tape-controlling device. No. 1,267,520; May 28; v. 250; p. 819.
De Witt, David M., Russellville, Ark. Carbureter. No. 1,265,626; May 7; v. 250; p. 204.

Dean, Dion K., Winthrop, Mass., assignor to Alberger Pump and Condenser Company, New York, N. Y. Heat-balance duplex drive. No. 1,267,886; May 28; v. 250; p. 782.
Dean, George, Alpena, Wash. Mail-transferring apparatus. No. 1,266,107; May 14; v. 250; p. 371.
Dean, William H., Chicago, Ill. Window-cleaner's bracket. No. 1,266,419; May 14; v. 250; p. 455.
Dean, William W., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill. Switch. No. 1,266,420; May 14; v. 250; p. 455.
Dean, William W., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill. Signaling device. No. 1,266,421; May 14; v. 250; p. 455.
Dean, William W., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill. Electric horn. No. 1,267,060; May 21; v. 250; p. 665.
Deandrea, Joseph E. (See Cobler and Deandrea.)
Decker, Harry R., *et al.* (See Staley, William O., assignor.)
Deem, Albert. Indianapolis, Ind. Oil-burner. No. 1,265,754; May 14; v. 250; p. 272.
Defoe, Frank M., Orange, N. J. Adjustable window-shade bracket. No. 1,266,539; May 14; v. 250; p. 489.
Degen, Lewis. Pasadena, Cal. Auxiliary signal system. No. 1,267,987; May 28; v. 250; p. 951.
Deibel, Millie M., Youngstown, Ohio. Combined match safe, wind-shield, and striker. No. 1,266,227; May 14; v. 250; p. 404.
Dell, Charles. (See Lewis, Scott, and Dell.)
Delo, Charles P., Shippensville, Pa. Tractor. No. 1,266,774; May 21; v. 250; p. 586.
Delpheon Company, The. (See Bousfield, Charlie J., assignor.)
Dempsey, Dee, Mace, Idaho. Dumping-car. No. 1,265,063; May 7; v. 250; p. 54.
Demuth, Herman J., Kiowa, Kans. Process and apparatus for deaerating water. No. 1,267,191; May 21; v. 250; p. 703.
Demuth, John A., Oberlin, Ohio. Workman's time-recording system. No. 1,267,989; May 28; v. 250; p. 951.
Denise, Cadet. (See Denise, Charles F. and C.)
Denise, Charles F. and C., Boyne Falls, Mich. Device for holding strainers over cream-separators. No. 1,266,423; May 14; v. 250; p. 456.
Dennis, William H., Exeter, N. H. Rail-bracer. No. 1,267,990; May 28; v. 250; p. 952.
Dent Hardware Company, The. (See Schrader, Thomas O., assignor.)
Denver Rock Drill Manufacturing Company, The. (See Smith, William A., assignor.)
Depew, Paul C., Chicago, Ill. Spark-plug. No. 1,266,561; May 21; v. 250; p. 525.
Depew, Paul C., Chicago, Ill. Knife-shield and gage. No. 1,266,562; May 21; v. 250; p. 525.
Depew, Thomas H., Pittsburgh, Pa. Shoe for tires. No. 1,264,903; May 7; v. 250; p. 9.
Dernell Potato Products Co. (See Moore, Elwood D., assignor.)
Derr, William R., and S. Smith, New York, N. Y. Clothes-line and locking-pin therefor. No. 1,265,436; May 7; v. 250; p. 155.
Des Jardins, Clarence B. (See Post and Des Jardins.)
Desmarais, Oscar H., Hackensack, N. J., assignor of one-half to C. W. Lockwood, New York, N. Y. Awning. No. 1,267,192; May 21; v. 250; p. 703.
Desparois, Harry A., assignor of one-half to E. S. Field, Montreal, Quebec, Canada. Saw-filing machine. No. 1,267,062; May 21; v. 250; p. 666.
Deters, John A. L., Chicago, Ill. Automatic cut-out for gas-burners. No. 1,267,519; May 28; v. 250; p. 818.
Detro, Howard I., Interlaken, N. Y. Device for supplying water to storage batteries. No. 1,266,425; May 14; v. 250; p. 456.
Detroit Pressed Steel Company. (See Putnam, Alden L., assignor.)
Detroit Reamer Salvage Co. (See Cogsdill, Stuart A., assignor.)
Detroit Stove Works. (See Davenport, Ransom W., assignor.)
Detroit Stove Works. (See Mersfelder and Radka, assignors.)
Devlyn, Arthur H., Trundle, New South Wales, Australia. Lock-nut. No. 1,265,437; May 7; v. 250; p. 155.
Dhavernas, Joseph, assignor to United States Nickel Company, New Brunswick, N. J. Separating nickel from nickel-copper alloys. No. 1,266,775; May 21; v. 250; p. 586.
Dial, James B. F. (See Cook, George R., assignor.)
Diamond State Fibre Company. (See McIntosh, James, assignor.)
Diaphone Signal Company. (See Sims, Frederick L. H., assignor.)
Dickason, Bertram L., Council Bluffs, Iowa. Drying-cage for photographic films. No. 1,266,001; May 14; v. 250; p. 341.
Dickerson, Arthur, Salt Lake City, Utah. Ignition device. No. 1,267,991; May 28; v. 250; p. 952.
Dickerson, Harry P., Sherman, Tex. Heel-attaching means. No. 1,265,755; May 14; v. 250; p. 272.
Dickey, Bernice M., Indianapolis, Ind. Marshmallow-toaster. No. 1,265,627; May 7; v. 250; p. 205.
Dickinson, Joel, Newark, N. J. Die for forging projectiles and the like. No. 1,266,925; May 21; v. 250; p. 627.
Dickinson, Sanford B., Bath, N. Y. Roadway. No. 1,265,628; May 7; v. 250; p. 205.
Dicks, Robert L. (See Fleming and Dicks.)
Dies, Charles A., assignor to C. Mark, Chicago, Ill. Making pipe-couplings. No. 1,265,709; May 7; v. 250; p. 227.
Dieterich, Hermann. (See Ach and Dieterich.)
Dietzel, Louis H., Hartford, Conn. Linotype-clamp. No. 1,266,776; May 21; v. 250; p. 586.
Dill, Cyril J., Burrwood, La. Necktie. No. 1,267,887; May 28; v. 250; p. 783.
Dillon, Laurence F., Melrose Park, Ill., assignor to American Can Company, New York, N. Y. Can-handling machine. No. 1,266,666; May 21; v. 250; p. 555.
Dixon, Ezra, Bristol, R. I. Top-roll saddle. No. 1,265,306; May 7; v. 250; p. 119.
Dixon, Ezra, Bristol, R. I. Top-roll saddle. No. 1,265,307; May 7; v. 250; p. 119.
Dixon, John W., and H. Eden, Kansas City, Mo. Batter-cake machine. No. 1,265,629; May 7; v. 250; p. 205.
Dixon, Joseph O. (See Mummert and Dixon.)
Doane, Harry C., Binghamton, N. Y. Portable electric lamp. No. 1,266,427; May 14; v. 250; p. 457.
Doble, Abner, Brookline, Mass., assignor, by mesne assignments, to Doble-Detroit Steam Motors Co., Detroit, Mich. Electric auxiliary system for steam-automobiles. No. 1,266,229; May 14; v. 250; p. 405.
Doble-Detroit Steam Motors Co. (See Doble, Abner, assignor.)
Doble, William H., Quincy, and C. M. Wheaton, deceased; G. H. Wheaton, administratrix, Newton; said Doble and said C. M. Wheaton assignors of three-fourths to said William H. Doble and one-fourth to Pneumatic Scale Corporation Limited, Quincy, Mass. Folding box or shipping-case. (Reissue.) No. 14,471; May 14; v. 250; p. 489.
Dodge, Austin R., Schenectady, N. Y., assignor to General Electric Company. Flow-meter. No. 1,266,428; May 14; v. 250; p. 457.
Dodge Manufacturing Company. (See Mix, Melville W., assignor.)
Dodson, Mary B., Geneva, Ill. Shelving arrangement and container therefor. No. 1,267,888; May 28; v. 250; p. 783.
Doehler Die Casting Company. (See Kralund, John, assignor.)
Doepken, Albert L., Wheeling, W. Va. Computing apparatus. No. 1,265,756; May 14; v. 250; p. 272.
Doering, Charles, Jr., and H. H., Chicago, Ill. Liquid cooling and dispensing apparatus. No. 1,266,667; May 21; v. 250; p. 556.
Doering, Henry H. (See Doering, Charles, Jr., and H. H.)
Dolphin, Marcelean, assignor of fifty-one one-hundredths to G. E. Strauss, New York, N. Y. Glove-supporting device. No. 1,264,905; May 7; v. 250; p. 9.
Dolyak, Joseph J., Youngstown, Ohio. Mold. No. 1,265,438; May 7; v. 250; p. 156.
Donaldson & Fisher Company. (See Fisher, Milan H., assignor.)
Donley Brothers Company, The. (See Donley, Ford, assignor.)
Donley, Ford, assignor to The Donley Brothers Company, Cleveland, Ohio. Concrete-insert. No. 1,265,064; May 7; v. 250; p. 54.
Donnelly, John F. (See Jones, Fred E., assignor.)
Donohue, Henry T., Chicago, Ill. Adjustable feed for boring devices. No. 1,265,630; May 7; v. 250; p. 205.
Dooley, James H., East Orange, assignor to De Camp and Sloan, Inc., Newark, N. J. Speed regulator and indicator for phonographs. No. 1,265,757; May 14; v. 250; p. 272.
Doran, John H., Schenectady, N. Y., assignor to General Electric Company. Gearing. No. 1,267,855; May 28; v. 250; p. 915.
Dorris, David W., *et al.* (See Boyer, George F., assignor.)
Dosch, Oliver L., Elizabeth, N. J., assignor to The Singer Manufacturing Company. Machine for preparing record-cards. No. 1,266,230; May 14; v. 250; p. 405.
Dotten, Earl W., De Graff, Minn. Ditching-machine. No. 1,264,906; May 7; v. 250; p. 9.
Dottl, Joseph, Detroit, Mich. Spring and frame supporter for motor-vehicles. No. 1,266,231; May 14; v. 250; p. 405.
Doty, Hubert A., Boston, Mass., assignor to The United Limb & Brace Co., Inc. Artificial limb. No. 1,265,308; May 7; v. 250; p. 119.
Dougherty, Terence, Brooklyn, N. Y. Automobile-fender. No. 1,266,430; May 14; v. 250; p. 458.
Douglass, Samuel F., Millerstown, Pa. Road-drag. No. 1,265,181; May 7; v. 250; p. 86.
Doul, Frank J., Green Bay, Wis. Water-meter installation. No. 1,267,389; May 21; v. 250; p. 783.
Dover, Devoe, Carbon, Tex. Shoe-dauber. No. 1,267,521; May 28; v. 250; p. 819.
Dow Wire & Iron Works. (See Marcum, Albert L., assignor.)
Downie, John, Seattle, Wash. Table. No. 1,266,232; May 14; v. 250; p. 406.
Downing, Ira S., Cleveland, Ohio, assignor to W. P. Murphy, Chicago, Ill. Sheet-metal car end. No. 1,265,665; May 7; v. 250; p. 54.

Downing, William S., Houghton, Mich. Wrapping-tool. No. 1,266,002; May 14; v. 250; p. 341.
Draper Corporation. (See Artz, Frederick T., assignor.)
Draper Corporation. (See Baker, William H., assignor.)
Draper Corporation. (See Beaverstock, Elisha F., assignor.)
Draper Corporation. (See Fairchild, Thomas H., assignor.)
Draper Corporation. (See Nutting, Charles E., assignor.)
Draper Corporation. (See Warren, Charles H., assignor.)
Draper Corporation. (See Wood, Fred, assignor.)
Dreiseerner, Henry, St. Louis, Mo. Prie-dieu. No. 1,265,703; May 7; v. 250; p. 225.
Drew, George W., Oakland, Cal. Feeder for fruit-slicing machines. No. 1,266,668; May 21; v. 250; p. 556.
Drew, Herbert H., Waterloo, Wis. Stanchion. No. 1,264,907; May 7; v. 250; p. 9.
Drocar, Paul, Tarrs, Pa. Floating raft. No. 1,265,631; May 7; v. 250; p. 205.
Drury, John J., Troy, Ohio. Oil-can. No. 1,264,908; May 7; v. 250; p. 10.
Dual Leathers Corporation. (See Moore, Frederick W., assignor.)
Duckett, Cecil H., and C. J. Fitzpatrick, Washington, D. C. Inner tube. No. 1,267,063; May 21; v. 250; p. 666.
Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,266,108; May 14; v. 250; p. 371.
Dudley, Howard M., Philadelphia, Pa. Dyeing-machine. No. 1,266,109; May 14; v. 250; p. 371.
Dudley, Howard M., Philadelphia, Pa. Fabric-treating device. No. 1,266,110; May 14; v. 250; p. 372.
Dudley, James G., Brooklyn, N. Y. Motor-vehicle. No. 1,266,431; May 14; v. 250; p. 458.
Duffy, Thomas I., Chicago, Ill. Bumper for automobiles. No. 1,265,066; May 7; v. 250; p. 55.
Dufrene, Oliver J., *et al.* (See Groh and Hansen, assignors.)
Dugar, Delano H., Elyria, Ohio. Expansible reamer. No. 1,265,888; May 14; v. 250; p. 309.
Duggan, John E., Berkeley, Cal. Automobile-locking device. No. 1,266,432; May 14; v. 250; p. 458.
Dunae, Archipp F., assignor of one-half to B. M. Wakeling, Saskatoon, Saskatchewan, Canada. Grain-bag. No. 1,267,193; May 21; v. 250; p. 704.
Dundon, Patrick F., San Francisco, Cal. Securing means for digester and retort doors. No. 1,266,926; May 21; v. 250; p. 627.
Dunham, William P., New York, N. Y. Smoker's pipe. No. 1,266,563; May 21; v. 250; p. 525.
Dunlop, Robert R., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mining-machine. No. 1,267,992; May 28; v. 250; p. 952.
Dunlop Rubber Company, The. (See Macbeth, Colin, assignor.)
Dunn, Lillian M., Camas, Wash. Extension-table. No. 1,265,067; May 7; v. 250; p. 55.
Dunne, Thomas P., Meriden, Conn. Propelling mechanism for vessels. No. 1,265,309; May 7; v. 250; p. 120.
Dunnell, William W., Jr. (See Coleman and Dunnell.)
Dunning, Thomas M., Jersey City, N. J. Switch-thawing apparatus. No. 1,265,182; May 7; v. 250; p. 87.
Duralia, John I., Punxsutawney, Pa. Pencil-sharpener. No. 1,266,433; May 14; v. 250; p. 458.
Durand, Nelson C., Roseville, assignor to New Jersey Patent Company, West Orange, N. J. Phonograph. No. 1,266,777; May 21; v. 250; p. 587.
Durham Duplex Razor Company. (See Sheehan, Thomas C., assignor.)
Dutcher, Ogden *et al.* (See Stampka, Paul, assignor.)
Dutcher, Robert, Anadarko, Okla. Cotton-planter. No. 1,265,439; May 7; v. 250; p. 156.
Dutton, John W., Jr., Stockton, Cal. Demountable rim. No. 1,265,310; May 7; v. 250; p. 120.
Dyke, Darrell F., Chicago, Ill., assignor to The Seng Company. Corner-lock for bedsteads. No. 1,267,390; May 28; v. 250; p. 783.
E. Kopriwa Company. (See Salstrom, David B., assignor.)
E. I. du Pont de Nemours Powder Company. (See Masland, Walter E., assignor.)
E. I. du Pont de Nemours Powder Company. (See Sparre, Fin, assignor.)
E. and T. Fairbanks and Company. (See Bousfield, John H. A., assignor.)
E. V. Sala Patents Company, The. (See Sala, Earl V., assignor.)
Eads, Charles W., Altus, Okla. Gin and linter saw-tooth cutter. No. 1,265,758; May 14; v. 250; p. 273.
Eagleston, Frank W., Berkeley, assignor to E. W. Beardsley, trustee, San Francisco, Cal. Writing paper, card, tablet, or the like. No. 1,267,640; May 28; v. 250; p. 854.
Eald, Clayton T., assignor of one-third to J. L. Atkins, Portland, Oreg. Hook. No. 1,267,064; May 21; v. 250; p. 666.
Earl, George G., New Orleans, La., and C. A. Brown, Lorain, Ohio, assignors of one-third to A. B. Wood, New Orleans, La. Hydraulic apparatus. No. 1,267,522; May 28; v. 250; p. 819.
Earl, George G., New Orleans, La., assignor of one-third to C. A. Brown, Lorain, Ohio, and one-third to A. B. Wood, New Orleans, La. Fluid system. No. 1,267,523; May 28; v. 250; p. 819.
Eastern Manufacturing Company. (See Taylor, Whitmore R., assignor.)
Eastman Kodak Company. (See Barnes, Frederick W., assignor.)
Eastman Kodak Company. (See Folmer, William F., assignor.)
Eastman Kodak Company. (See Kroedel, Robert, assignor.)
Eastman Kodak Company. (See Riddell, William A., assignor.)
Eastman Kodak Company. (See Ruttan and Hutchings, assignors.)
Eaton, Elmer W., Nashua, N. H. Suitcase-holder for automobiles. No. 1,267,750; May 28; v. 250; p. 883.
Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Lubricating device. No. 1,266,564; May 21; v. 250; p. 525.
Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Locomotive friction-plate. No. 1,266,565; May 21; v. 250; p. 526.
Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Dynamo-electric machine. No. 1,267,993; May 28; v. 250; p. 953.
Ebelhare, William H., and C. G. Arvidson, assignors to The Stenotype Company, Indianapolis, Ind. Stenographic type-writing machine. No. 1,264,909; May 7; v. 250; p. 10.
Eberhart, Felix, Newark, N. J., assignor to American Can Company, New York, N. Y. Coating-machine. No. 1,266,669; May 21; v. 250; p. 557.
Eberle, John A., St. Louis, Mo. Foldable bed or cradle. No. 1,266,927; May 21; v. 250; p. 628.
Eble, Frank J., New York, N. Y. Safety attachment for ranges. No. 1,265,183; May 7; v. 250; p. 87.
Ebstone, Morris L., *et al.* (See Ogle, Francis M., assignor.)
Eby, Earl E., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Barometric valve. No. 1,266,566; May 21; v. 250; p. 526.
Ecaubert, Frederic, Brooklyn, N. Y. Coupling. No. 1,265,889; May 14; v. 250; p. 310.
Eckenroth, John P., Chester, Pa. Rolling-mill for rolling angle or channel irons into different angles. No. 1,267,194; May 21; v. 250; p. 704.
Eckerson, Albert W., Portland, Oreg. Plate-lifting clamp. No. 1,266,233; May 14; v. 250; p. 406.
Eckert, Joseph, and J. Kirby, Jr., assignors to The Dayton Manufacturing Company, Dayton, Ohio. Shaft-operating mechanism. No. 1,266,234; May 14; v. 250; p. 406.
Eckert, Joseph, and J. Kirby, Jr., assignors to The Dayton Manufacturing Company, Dayton, Ohio. Car-brake-operating mechanism. No. 1,266,235; May 14; v. 250; p. 407.
Eckert, Joseph, and J. Kirby, Jr., assignors to The Dayton Manufacturing Company, Dayton, Ohio. Brake-actuating mechanism. No. 1,266,236; May 14; v. 250; p. 407.
Eckman, Florence M. (See Bennett, Louis B., assignor.)
Eclipse Phonograph Corporation. (See Selah, Howard A., assignor.)
Eddy, Nelson M. (See Ochsner, Hans L., assignor.)
Eddy, Schuyler C., Kalamazoo, Mich. Demountable rim. No. 1,266,003; May 14; v. 250; p. 342.
Eden, Henry. (See Dixon and Eden.)
Edison Storage Battery Company. (See Edison, Thomas A., assignor.)
Edison Storage Battery Company. (See Kammerhoff, Heinrich H. M., assignor.)
Edison, Thomas A., Llewellyn Park, assignor to Thomas A. Edison, Incorporated, West Orange, N. J. Making screens for projection. No. 1,266,778; May 21; v. 250; p. 587.
Edison, Thomas A., Llewellyn Park, assignor to Edison Storage Battery Company, West Orange, N. J. Electric safety-lantern. No. 1,266,779; May 21; v. 250; p. 587.
Edison, Thomas A., Llewellyn Park, assignor to Edison Storage Battery Company, West Orange, N. J. Storage battery. No. 1,266,780; May 21; v. 250; p. 587.
Edmonds, Richard W., Atlanta, Ga. Spout. No. 1,265,759; May 14; v. 250; p. 273.
Edmonds, Sterling O., Eagleville, Tenn. Traction attachment for motor-vehicles. No. 1,266,781; May 21; v. 250; p. 588.
Edmonston, Gabriel. (See Speer, Elmer E., assignor.)
Edmunds & Jones Corporation. (See Knauff, George C., assignor.)
Edward E. Caldwell & Company. (See Tizley, Arthur J., assignor.)
Edwards, Alrah B., and F. A. Feiereisel, Chicago, Ill., assignors to Shortwriter Company, Wilmington, Del. Writing-machine. No. 1,266,237; May 14; v. 250; p. 408.
Edwards, Charles S., Princeville, Oreg. Pliers. No. 1,266,567; May 21; v. 250; p. 526.
Edwards, Gladys M., Douglas, Ariz. Theft-alarm. No. 1,266,568; May 21; v. 250; p. 527.
Edwards, Gomer W., Johnstown, Pa. Can-opener. No. 1,265,760; May 14; v. 250; p. 273.
Edwardy, Frederick W., Savannah, Ga. Egg-carrier. No. 1,267,346; May 21; v. 250; p. 744.
Egan, James, Chicago, Ill. Wrecking-truck. No. 1,266,238; May 14; v. 250; p. 408.

Egan, James A., East Onondaga, N. Y. Flush-closet tank. No. 1,265,890; May 14; v. 250; p. 310.
Eggleston, Robert N., assignor to Pull-U-Out Sales Co., St. Louis, Mo. Portable crane. No. 1,266,569; May 21; v. 250; p. 527.
Egly, Georg, Berlin-Treptow, assignor to Gebrueder Siemens & Co., Berlin-Lichtenberg, Germany. Resistance-body. No. 1,267,641; May 28; v. 250; p. 854.
Egly, Georg, Berlin-Treptow, assignor to Gebr. Siemens & Co., Lichtenberg, near Berlin, Germany. Regulating resistance. No. 1,267,642; May 28; v. 250; p. 854.
Ehrenhardt, Otto C., and A. Berent, Buffalo, N. Y. Game. No. 1,265,761; May 14; v. 250; p. 273.
Ehrgott, Roberts E., Chicago, Ill. Dirigible motor-vehicle headlight. No. 1,267,994; May 28; v. 250; p. 953.
Eibye, Carl, Dorchester, assignor to Wiltbonco Manufacturing Company, Jamaica Plain, Mass. Water-gage. No. 1,267,643; May 28; v. 250; p. 854.
Eichhorn, J. Chas., *et al.*, trustees. (See Schleusselburg, George, assignor.)
Eidson, Charles G., Anniston, Ala., T. Davis, Detroit, Mich., and D. E. Crouse, Auburn, N. Y., assignors, by mesne assignments, to The John Ford Starter Company. Pneumatic starting device for internal-combustion engines. (Reissue.) No. 14,466; May 7; v. 250; p. 230.
Eimer, Walter R., New York, N. Y. Stencil-mount. No. 1,265,632; May 7; v. 250; p. 206.
Eklif, Frederick S., Detroit, Mich. Antirattling device. No. 1,265,311; May 7; v. 250; p. 120.
Electric Auto-Lite Corporation. (See Post and Des Jardins, assignors.)
Electric Boat Company. (See Anderson, John W., assignor.)
Electric Boat Company. (See Davison, Gregory C., assignor.)
Electric Metal Working Company. (See Coffin, Charles L., assignor.)
Electric Reduction Company. (See Morrison, Walter L., assignor.)
Electric Tachometer Corporation, The. (See Kolff, Petrus V., assignor.)
Elektro-Osmose Aktiengesellschaft (Graf Schwerin Gesellschaft). (See Schwerin, Botho, assignor.)
Eliel, Albert L., assignor of one-half to A. W. McDonell, Los Angeles, Cal. Vehicle-signal. No. 1,266,004; May 14; v. 250; p. 342.
Eliefsen, Edward A., Pittsburgh, Pa. Toy. No. 1,265,312; May 7; v. 250; p. 121.
Elliott, Charles H. and E. T. McCleary, assignors to The Youngstown Sheet & Tube Company, Youngstown, Ohio. Open-hearth steel process. No. 1,266,928; May 21; v. 250; p. 628.
Ellis, Carleton, Montclair, N. J. Hydrogenation. No. 1,266,782; May 21; v. 250; p. 588.
Ellis, Lewis M., Detroit, Mich., assignor, by mesne assignments, to Bessemer Gas Engine Company. Gas-engine. No. 1,265,891; May 14; v. 250; p. 310.
Ellison, Thomas J., Terrill, Ky. Animal-trap. No. 1,267,391; May 28; v. 250; p. 783.
Elsasser, William, Irvington, N. J. Center-finder. No. 1,264,910; May 7; v. 250; p. 10.
Elsey, Robert H., Prescott, Ariz. Pump. No. 1,267,856; May 28; v. 250; p. 915.
Elvin, Albert G. (See Martin, Frederick W., assignor.)
Elvin, Albert G., Flandome, A. B. Fahnestock, Great Neck, and F. H. Clark, New York, N. Y.; said Fahnestock and said Clark assignors to said Elvin. Mechanical stoker. No. 1,267,644; May 28; v. 250; p. 855.
Emerson Electric Manufacturing Company, The. (See Finch, Herbert I., assignor.)
Engel, Hans, Charlottenburg, Germany, assignor to General Electric Company. Protection against excessive voltages. No. 1,266,434; May 14; v. 250; p. 459.
Engelbrekt, Gustaf, Superior, Wis. Automatic wireless signal. No. 1,265,633; May 7; v. 250; p. 206.
English, Roy W., Victoria, British Columbia, Canada. Telephone-insulator. No. 1,266,435; May 14; v. 250; p. 459.
Enls, William S., Booneville, Miss. Table and desk. No. 1,266,929; May 21; v. 250; p. 628.
Entzminger, Michael E., *et al.* (See Glynn, Stephen A., assignor.)
Eppenstein, Otto, assignor to the Firm of C. Zeiss, Jena, Germany. Telemeter. No. 1,265,762; May 14; v. 250; p. 274.
Erickson, Charles M., Salt Lake City, Utah. Hammer-handle fastener. No. 1,267,195; May 21; v. 250; p. 704.
Erickson, Edward, Cliftondale, assignor to Victor Shoe Machinery Company, Lynn, Mass. Dash-pot. No. 1,265,634; May 7; v. 250; p. 206.
Erickson, Edward, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe-shaping machine. No. 1,267,392; May 28; v. 250; p. 784.
Erskine, John O., Steubenville, Ohio. Electric glass-furnace. No. 1,267,317; May 21; v. 250; p. 735.
Erwin, James L., assignor of one-half to P. W. Mack, Greensboro, N. C. Cotton chopper and cultivator. No. 1,266,005; May 14; v. 250; p. 342.
Escalante, Charles J., Merida, Mexico. Spring suspension for automobiles. No. 1,266,436; May 14; v. 250; p. 459.
Estell, John L., Reed, Okla. Weed-cutter. No. 1,267,645; May 28; v. 250; p. 855.
Etablissements De Dion Bouton, Societe Anonyme. (See Bouton, Georges, assignor.)
Eubank, John C., Campbellsville, Ky. Scythe. No. 1,265,635; May 7; v. 250; p. 206.
Euler, George H., Newark, N. J. Curtain-rod holder. No. 1,267,197; May 21; v. 250; p. 704.
Eustis, Frederic A., Milton, Mass. Method and apparatus for segregating and recovering gases. No. 1,265,892; May 14; v. 250; p. 311.
Eustis, Frederic A., Milton, Mass. Art of and apparatus for treatment of corrosive gases. No. 1,265,893; May 14; v. 250; p. 311.
Evans, Evan, Berlin, Germany, assignor to General Electric Company. Electric meter. No. 1,267,198; May 21; v. 250; p. 704.
Evans, Guy N., Grinnell, Iowa. Leaf-turner. No. 1,266,437; May 14; v. 250; p. 459.
Evans, Owen B., Lansdowne, assignor to The United Gas Improvement Company, Philadelphia, Pa. Burning solid fuel. No. 1,267,646; May 28; v. 250; p. 855.
Evans, Powell, assignor, by mesne assignments, to Globe Automatic Sprinkler Company, Philadelphia, Pa. Flow-retarding apparatus. No. 1,267,857; May 28; v. 250; p. 916.
Evans, Thomas A., Chicago, and L. A. Salisbury, Elgin, Ill. Photograph-enlarging apparatus. No. 1,266,111; May 14; v. 250; p. 373.
Evatte, Clay W., Columbia, S. C. Heater. No. 1,266,783; May 21; v. 250; p. 588.
Everett, Thomas L., Wellsburg, W. Va. Door-fastener. No. 1,267,647; May 28; v. 250; p. 855.
Ewart, Lewis R., Cody, Wyo. Headlight-controller for vehicles. No. 1,265,894; May 14; v. 250; p. 311.
Ewart, Lewis R., Cody, Wyo. Lamp-mounting attachment for vehicles. No. 1,266,239; May 14; v. 250; p. 408.
Ewart, Nellie E., Arlington, Mass. Portable drying apparatus. No. 1,267,524; May 28; v. 250; p. 820.
Ewbank, Herbert B., Jr., Portland, Oreg. Controlling electrical-power transmission. No. 1,265,184; May 7; v. 250; p. 87.
Ewing, Herbert O., Middleport, Ohio. Compressing-tool. No. 1,267,393; May 28; v. 250; p. 784.
Ewing, Samuel D., Sourlake, Tex. Standing-valve structure. No. 1,265,313; May 7; v. 250; p. 121.
F. L. Bradbury Co., The. (See Bradbury, Frederick L., assignor.)
Fabian, William J., Evanston, Ill. Calculating-machine. No. 1,265,440; May 7; v. 250; p. 156.
Fageol, Rollie B., New York, N. Y. Automobile-bumper. No. 1,266,240; May 14; v. 250; p. 408.
Fahnestock, Adam B. (See Elvin, Fahnestock and Clark.)
Fairchild, Harry C., Maplewood, N. J. Vehicle-signal. No. 1,267,751; May 28; v. 250; p. 883.
Fairchild, Thomas H., Jonesboro, Tenn., assignor to Draper Corporation, Hopedale, Mass. Twisting and doubling apparatus. No. 1,265,895; May 14; v. 250; p. 312.
Fajen, Otto J., Stover, Mo. Gear-shifting device. No. 1,266,438; May 14; v. 250; p. 460.
Fales, Edward D., Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Company. Automatic common-battery telephone system. No. 1,268,069; May 28; v. 250; p. 973.
Fanger Beet Harvester Co., The. (See Fanger, Joseph D., assignor.)
Fanger, Joseph D., assignor to The Fanger Beet Harvester Co., Toledo, Ohio. Front construction for beet-harvesters. No. 1,266,439; May 14; v. 250; p. 460.
Farber, Simon W., Brooklyn, N. Y. Electric-lamp fixture. No. 1,266,241; May 14; v. 250; p. 409.
Farbwerke vorm. Meister Lucius & Bruening. (See Ach and Dieterich, assignors.)
Farbwerke vorm. Meister Lucius & Bruening. (See Ach, Rothmann and Glemsa, assignors.)
Farmer, James H., Stonewall, Okla. Hog-yoke. No. 1,265,896; May 14; v. 250; p. 312.
Farnsworth, Emerson W., Buckhannon, W. Va. Adjustable ladder-foot. No. 1,265,636; May 7; v. 250; p. 207.
Farnsworth, Sidney W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Measuring device. No. 1,266,570; May 21; v. 250; p. 527.
Farquhar, Henry S., Wayne, Pa. Device for removing snow. No. 1,266,930; May 21; v. 250; p. 628.
Favorite Stove & Range Company, The. (See Turner, Walter E., assignor.)
Fawcett, Charles H., Independence, Iowa. Sectional device for demonstrating the outlines of objects. No. 1,265,897; May 14; v. 250; p. 312.
Fawick, Thomas L., Waterloo, Iowa. Tractor. No. 1,267,525; May 28; v. 250; p. 820.
Fawick, Thomas L., Waterloo, Iowa. Lubricating means for crank-shafts. No. 1,267,526; May 28; v. 250; p. 820.
Fawick, Thomas L., Waterloo, Iowa. Power-transmission device. No. 1,267,527; May 28; v. 250; p. 820.
Fawick, Thomas L., Waterloo, Iowa. Water-tube boiler. No. 1,267,528; May 28; v. 250; p. 821.
Fawkes, Wilbert C., Portland, Oreg. Package-tie. No. 1,267,648; May 28; v. 250; p. 855.
Fawn River Manufacturing Company. (See Sevison, Luther J., assignor.)
Fay, Thomas J., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Internal-combustion engine. No. 1,267,529; May 28; v. 250; p. 821.

Fay, Thomas J., Brooklyn, N. Y., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Apparatus for cambering and quenching metal. No. 1,267,530; May 28; v. 250; p. 821.
Fayer, Charles, New York, N. Y., assignor to Wappler Electric Company, Inc. Polarity-indicating mechanism for X-ray apparatus. No. 1,266,931; May 21; v. 250; p. 629.
Fegley, Thomas J., and G. O. Leopold, assignors to North Bro's Mf'g. Co., Philadelphia, Pa. Shears. No. 1,266,784; May 21; v. 250; p. 588.
Feiereisel, Frank A. (See Edwards and Feiereisel.)
Fend, Roland S., Chicago, Ill. Wheeled vehicle. No. 1,267,995; May 28; v. 250; p. 953.
Fender, William J., Silver Creek, N. Y. Dust-collector. No. 1,265,763; May 14; v. 250; p. 274.
Fenneman, Katherine, Chicago, Ill. Woman's burial-robe. No. 1,264,911; May 7; v. 250; p. 10.
Fenstermaker, Sidney E. (See Weinshank and Fenstermaker.)
Fent, Oscar, and M. Ravenscroft, Newton, Kans. Shock-absorber for automobile-trailers. No. 1,267,318; May 21; v. 250; p. 735.
Ferdon, Guy W., Cresskill, N. J. Jar-lifter. No. 1,266,112; May 14; v. 250; p. 373.
Ferdon, Guy W., Cresskill, N. J. Clothes-pounder. No. 1,267,649; May 28; v. 250; p. 856.
Ferguson, Charles V., Schenectady, N. Y., assignor to General Electric Company. Incandescent-cathode arc device. No. 1,267,199; May 21; v. 250; p. 705.
Ferguson, Charles V., Schenectady, N. Y., assignor to General Electric Company. Inclosed-arc device. No. 1,267,858; May 28; v. 250; p. 916.
Ferguson, Marie A., New Haven, Conn. Collar-protector. No. 1,267,394; May 28; v. 250; p. 784.
Ferguson, Mark. (See Ferguson, Price, assignor.)
Ferguson, Price, Tuttle, assignor to M. Ferguson, Blanchard, Okla. Cane or corn topper or header. No. 1,265,710; May 7; v. 250; p. 227.
Fernald, Mark E., Saugus, assignor to C. C. Blake, Incorporated, Boston, Mass. Making casting-patterns. No. 1,266,113; May 14; v. 250; p. 373.
Fernald, Mark E., Saugus, assignor to C. C. Blake, Incorporated, Boston, Mass. Casting-pattern. No. 1,266,242; May 14; v. 250; p. 409.
Fernald, Mark E., Saugus, assignor to C. C. Blake, Incorporated, Boston, Mass. Sole-nail retainer. No. 1,267,065; May 21; v. 250; p. 667.
Fernholtz, Emil, Los Angeles, Cal. Briquet-machine. No. 1,265,441; May 7; v. 250; p. 157.
Ferrara, Edoardo, assignor to S. Sacerdote, Milan, Italy. Shield for workmen. No. 1,265,764; May 14; v. 250; p. 274.
Ferris, Harry A., Cheyenne, Wyo. Electrothermostatic device. No. 1,265,765; May 14; v. 250; p. 275.
Feser, Edward J., and M. L. Peoples, Philadelphia, Pa. Toy gun. No. 1,266,243; May 14; v. 250; p. 409.
Fessenden, Reginald A., Brookline, Mass. Gun-sight. No. 1,265,766; May 14; v. 250; p. 275.
Fessenden, Reginald A., Brookline, Mass., assignor to Submarine Signal Company, Waterville, Me. Method and apparatus for producing alternating currents. No. 1,265,068; May 7; v. 250; p. 55.
Fetsch, William A., St. Paul, Minn. Guard for match-boxes. No. 1,265,069; May 7; v. 250; p. 55.
Feuling, Eugene J. (See Townsley, Harlie A., assignor.)
Feyzes, Henry J., assignor of one-half to The Peters Machine & Mfg. Company, Cleveland, Ohio. Pump. No. 1,265,070; May 7; v. 250; p. 56.
Fiber Barrel Machinery & Manufacturing Company. (See Herr, Henry C., assignor.)
Fiddler, George N., Pollock, S. D. Traction-wheel. No. 1,265,637; May 7; v. 250; p. 207.
Field, Allan B., Westcliff-on-Sea, England, and E. Fornander, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Coil retaining and ventilating means. No. 1,266,571; May 21; v. 250; p. 528.
Field, Allan B., West Cliff-on-Sea, England, assignor to Westinghouse Electric and Manufacturing Company. Coil-support for dynamo-electric machines. No. 1,267,996; May 28; v. 250; p. 953.
Field, Allan B., West Cliff-on-Sea, England, assignor to Westinghouse Electric and Manufacturing Company. Coil-supporting means. No. 1,267,997; May 28; v. 250; p. 954.
Field, Ewart S. (See Desparois, Harry A., assignor.)
Figg, Robert M., Le Mars, Iowa. Gold-catching dental-cuspidor attachment. No. 1,265,898; May 14; v. 250; p. 312.
Filipponi, Attie. (See Schmidt and Filipponi.)
Finch, Herbert I., assignor to The Emerson Electric Manufacturing Company, St. Louis, Mo. Revolving ventilating-fan. No. 1,267,752; May 28; v. 250; p. 883.
Finkbeiner, Charles K., Laurens, S. C., assignor to Parti-Colored Glass Bottle Company, Washington, D. C. Making glass bottles and similar articles. No. 1,266,785; May 21; v. 250; p. 589.
Finkbeiner, Charles K., Laurens, S. C., assignor to Parti-Colored Glass Bottle Company, Washington, D. C. Apparatus for manufacturing glass bottles and similar articles. No. 1,266,786; May 21; v. 250; p. 589.
Finkelstein, Morris F., New York, N. Y. Tap-connector for electric conductors. No. 1,266,440; May 14; v. 250; p. 460.
Finkelstein, Morris F., New York, N. Y. Electric connector. No. 1,266,441; May 14; v. 250; p. 461.
Finley Robertson Porter Co. (See Porter, Finley R., assignor.)
Finley, Thomas M., Westplains, Mo. Aerocruiser. No. 1,265,638; May 7; v. 250; p. 208.
Finley, Thomas M., Westplains, Mo. Plane for airships. No. 1,265,639; May 7; v. 250; p. 208.
First Trust and Savings Company, The, *et al.*, trustees. (See Sommer, William H., assignor.)
Fischel, Rudolph E. (See Rosen and Fischel.)
Fischer, William C., New York, N. Y. Spark-plug. No. 1,267,531; May 28; v. 250; p. 822.
Fiset, Antoine, Quebec, Quebec, Canada. Hay-press. No. 1,265,185; May 7; v. 250; p. 87.
Fisher, Albert H., Lincoln, Nebr. Tire-wrapping machine. No. 1,265,640; May 7; v. 250; p. 208.
Fisher, Aubrey H., assignor of one-half to A. R. Newman, Pukwana, S. D. Shoe-fastener. No. 1,267,753; May 28; v. 250; p. 884.
Fisher, Harry, London, England. Life-boat. No. 1,265,186; May 7; v. 250; p. 88.
Fisher, Henry W., Huguenot Park, New York, assignor to Standard Underground Cable Company, Pittsburgh, Pa. Cable construction. No. 1,266,006; May 14; v. 250; p. 342.
Fisher, James E. (See Scofield, Esther, assignor.)
Fisher, Milan H., assignor to Donaldson & Fisher Company, Chicago, Ill. Sprocket-chain. No. 1,266,572; May 21; v. 250; p. 528.
Fisher, Theobald G., Omro, Wis. Whey-channel for cheese-vats. No. 1,266,670; May 21; v. 250; p. 557.
Fitch, Maxwell B., Corona, Cal. Portable and knockdown storage-bin. No. 1,265,442; May 7; v. 250; p. 157.
Fitzgerald, Jeremiah C., Kilbourne, Wis. Litter-carrier. No. 1,265,314; May 7; v. 250; p. 121.
Fitzpatrick, Charles J. (See Duckett and Fitzpatrick.)
Flack, Theodore J., St. Louis, Mo. Adjustable rectal dilator. No. 1,267,066; May 21; v. 250; p. 667.
Fladeland, Olai, Poplar, Mont. Motor-sleigh. No. 1,266,442; May 14; v. 250; p. 461.
Flagg, Andrew B., North Attleboro, assignor to Merit Manufacturing Co., Attleboro, Mass. Ear attachment. No. 1,267,067; May 21; v. 250; p. 667.
Flagstad, Cornel and O. A., assignors to Folding Crate and Box Company, Minneapolis, Minn. Folding box or crate. No. 1,264,912; May 7; v. 250; p. 11.
Flagstad, Oscar A. (See Flagstad, Cornel and O. A.)
Flaherty, Bernard B., Davenport, Iowa. Loading apparatus. No. 1,267,200; May 21; v. 250; p. 705.
Fleming, George, Princeton, Tex. Shot-gun. No. 1,266,573; May 21; v. 250; p. 528.
Fleming, John M., Edmonton, Alberta, Canada. Dash-churn. No. 1,265,187; May 7; v. 250; p. 88.
Fleming, Paul J., St. Martinsville, and R. L. Dicks, Lake Charles, La. Capsule-filler. No. 1,267,201; May 21; v. 250; p. 706.
Flentje, Ernst, Cambridge, Mass. Shock-absorber. No. 1,267,532; May 28; v. 250; p. 822.
Fletcher, John R. (See Gardner, George S., assignor.)
Flexible Metal Hose Company Limited. (See Forth, Charles, assignor.)
Flick, Frederick A., New York, N. Y. Apparatus for treating articles with fluid. No. 1,267,754; May 28; v. 250; p. 884.
Flint, Charles, Spokane, Wash. Indicator for street-cars and the like. No. 1,265,071; May 7; v. 250; p. 56.
Flintkote Company, The. (See Overbury, Frederick C., assignor.)
Flocke, Robert O., Newark, N. J., assignor to The R. Neumann Hardware Co. Locking-catch for portfolios and the like. No. 1,267,650; May 28; v. 250; p. 856.
Flora, Ellsworth E., Chicago, Ill., assignor to The National Binding Machine Company, New York, N. Y. Joining metal strips and sealing the joints. No. 1,265,188; May 7; v. 250; p. 88.
Flyckt, John J., Salina, Kans. Gas-machine. No. 1,267,202; May 21; v. 250; p. 706.
Foans, Andrew B., New York, N. Y. Device for molding blocks. No. 1,266,787; May 21; v. 250; p. 589.
Foerster, Oscar, assignor of one-half to A. Jaeger, New York, N. Y. Producing printing-surfaces. No. 1,265,641; May 7; v. 250; p. 208.
Folding Crate and Box Company. (See Flagstad, Cornel and O. A., assignors.)
Folger, Harry S., and C. L. Redfield; said Folger assignor to R. D. Swisher Manufacturing Company, Chicago, Ill. Self-inking hand-stamp. No. 1,265,642; May 7; v. 250; p. 209.
Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-shutter mechanism. No. 1,266,443; May 14; v. 250; p. 461.
Ford, Ben K., Oak Park, Ill., assignor to American Can Company, New York, N. Y. Pouring-spout and container. No. 1,266,671; May 21; v. 250; p. 557.
Ford, Reid G., Brooklyn, N. Y., assignor of one-tenth to W. J. Barkley, Boston, Mass. Recorder for telegraphic messages. No. 1,267,068; May 21; v. 250; p. 667.
Ford, Shelley W., assignor of one-half to O. D. Jennings, Chicago, Ill. Shock-absorber. No. 1,267,395; May 28; v. 250; p. 784.

Ford, Silas M., St. Paul, Minn. Manufacturing prepared roofing. No. 1,265,315; May 7; v. 250; p. 121.
Ford, Silas M., St. Paul, Minn. Lath-board. No. 1,266,574; May 21; v. 250; p. 528.
Ford, William B., Birmingham, Ala. Suspending and controlling header. No. 1,267,651; May 28; v. 250; p. 856.
Forman, Paris R., assignor to National Pneumatic Company, Chicago, Ill. Door-operating mechanism. No. 1,265,316; May 7; v. 250; p. 121.
Fornander, Eric. (See Field and Fornander.)
Forster, John C. (See Comerma, John, assignor.)
Forster, John C., Pittsburgh, Pa. Fly-wheel. No. 1,265,899; May 14; v. 250; p. 313.
Forster, John C., Pittsburgh, Pa. Garnishing-tool. No. 1,266,672; May 21; v. 250; p. 557.
Fortescue, Charles L., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Transformer. (Reissue.) No. 14,473; May 21; v. 250; p. 745.
Forth, Charles, assignor to Flexible Metal Hose Company Limited, Ottawa, Ontario, Canada. Switch-lock. No. 1,267,998; May 28; v. 250; p. 954.
Fortier, Charles L., assignor to Johnson Service Company, Milwaukee, Wis. Thermostatic control device. No. 1,267,319; May 21; v. 250; p. 735.
Fortmann, Henry F., San Francisco, Cal. Grill. No. 1,266,244; May 14; v. 250; p. 409.
Fosberg, Henry C., and D. H. Strachan, assignors to Art Metal Construction Company, Jamestown, N. Y. Filing device. No. 1,266,444; May 14; v. 250; p. 461.
Foss, William A., Cleveland, Ohio. Artificial bait. No. 1,265,900; May 14; v. 250; p. 313.
Foster and Company, Charles B. (See Higinbotham, Arthur O., assignor.)
Foster, Edward, Montego Bay, Jamaica, British West Indies. Piano-strings and frame for same. No. 1,266,445; May 14; v. 250; p. 462.
Fouts, Calvin C., Middletown, Ohio. Meter-box. No. 1,265,767; May 14; v. 250; p. 275.
Fox, William N., San Antonio, Tex. Display or advertising device. No. 1,266,446; May 14; v. 250; p. 462.
Francis, Arthur E., Cleveland, Ohio. Cord-terminal. No. 1,266,114; May 14; v. 250; p. 374.
Francis, Delbert A., Columbus, Ohio. Trousers-support. No. 1,267,533; May 28; v. 250; p. 822.
Frank, Paul A., Akron, Ohio. Combined spark-plug and priming device. No. 1,267,203; May 21; v. 250; p. 706.
Frank, Richard H., Malta, Mont. Terminal connection. No. 1,266,575; May 21; v. 250; p. 529.
Frank S. Betz Company. (See Smith, Leo, assignor.)
Franklin Gas Turbine Company. (See Nance, James W., assignor.)
Fraser, Ethelbert M., Yonkers, N. Y., assignor to General Elevator Company, Jersey City, N. J. Electric elevator system. No. 1,266,576; May 21; v. 250; p. 529.
Fraser, George L., Honolulu, Hawaii, assignor to California Packing Corporation, San Francisco, Cal. Pineapple-slicer. No. 1,266,447; May 14; v. 250; p. 462.
Fraser, Richard C., Central City, assignor of one-third to W. R. Fraser, Durango, Colo. Rotary steam-engine. No. 1,265,643; May 7; v. 250; p. 209.
Fraser, Warren F., assignor to Warren F. Fraser Co., Boston, Mass. Grinder. No. 1,267,534; May 28; v. 250; p. 823.
Fraser, William R. (See Fraser, Richard C., assignor.)
Frazier, Alexander, Portland, Oreg. Attachment for rocking-chairs. No. 1,264,913; May 7; v. 250; p. 11.
Freborg, Charles, Kankakee, Ill. Motor for player-pianos. No. 1,267,535; May 28; v. 250; p. 823.
Freborg, Charles, Kankakee, Ill. Player-piano and pump therefor. No. 1,267,859; May 28; v. 250; p. 916.
Freborg, Charles, Kankakee, assignor to Price & Teeple Piano Company, Chicago, Ill. Motor-mounting for piano-players. No. 1,267,536; May 28; v. 250; p. 824.
Frederick, Harry A., New Rochelle, N. Y. Top. No. 1,265,644; May 7; v. 250; p. 209.
Frederick M. Ross Manufacturing Company, The. (See Ross, Frederick M., assignor.)
Frederick, Samuel B., Detroit, Mich. Burnishing-wheel. No. 1,266,932; May 21; v. 250; p. 629.
Frederickson, Joe, Pelican Rapids, Minn. Vehicle-spring. No. 1,265,072; May 7; v. 250; p. 56.
Freedman, Hyman and N. M., assignors to Davoplane Bed Company, Chicago, Ill. Bed structure for davenports. No. 1,265,073; May 7; v. 250; p. 56.
Freedman, Nathan M. (See Freedman, Hyman and N. M.)
Freeland, Lloyd D., Chicago, Ill., assignor to W. J. H. Strong, Beloit, Wis. Motor-driven fan. No. 1,265,189; May 7; v. 250; p. 88.
Fresh, Clara, New Bedford, Mass. Knife-rest. No. 1,264,914; May 7; v. 250; p. 11.
Fretz, Glen E., Pratt, Kans. Motor-cycle attachment. No. 1,267,999; May 28; v. 250; p. 955.
Frick, Walther, Höchst-on-the-Main, Germany, assignor to General Electric Company. Deodorizing grain. No. 1,267,204; May 21; v. 250; p. 706.
Friedland, Joseph, Brooklyn, N. Y. Safety receiving-box. No. 1,266,007; May 14; v. 250; p. 342.
Frierson, Jesse, Albany, Ga. Hat-pin guard. No. 1,267,652; May 28; v. 250; p. 857.
Fries, Francis H., assignor to Venola Company, Winston-Salem, N. C. Confection. No. 1,267,320; May 21; v. 250; p. 736.
Fries, John W., Winston-Salem, N. C. Composition for use in dyeing. No. 1,266,577; May 21; v. 250; p. 529.
Fritzsche, Hermann. (See Anderwert, Fritzsche, and Schobel.)
Frost, Arba W. (See Cary, Henry B., assignor.)
Fryman, Harry, Great Grimsby, England. Signal for vehicles. No. 1,265,317; May 7; v. 250; p. 122.
Fuel Savings Company. (See Wood, Walter D., assignor.)
Fuhr, Anita M., Azusa, Cal. Garment. No. 1,266,115; May 14; v. 250; p. 374.
Fuhrmann, Curt H., St. Louis, Mo. Kitchen-rack. No. 1,266,245; May 14; v. 250; p. 410.
Fukuda, Hazime, Arminto, Wyo. Making rice breakfast food. No. 1,266,448; May 14; v. 250; p. 468.
Fulcher Pulp Bottle Company. (See Fulcher, William H., assignor.)
Fulcher, William H., assignor to Fulcher Pulp Bottle Company, Oakland, Cal. Process of and apparatus for making pulp bottle-bodies. No. 1,266,449; May 14; v. 250; p. 463.
Fuld, Carrie A. (See Fuld, William, assignor.)
Fuld, William, assignor to C. A. Fuld, Baltimore, Md. Wheeled toy. No. 1,265,645; May 7; v. 250; p. 210.
Fuller, Eugene, assignor to B. F. Tefft, Jr., Arctic, R. I. Shock-absorber. No. 1,267,537; May 28; v. 250; p. 824.
Fuller, Joseph C., assignor of one-half to C. V. Williamson, Perth Amboy, N. J. Vaporizer-nozzle. No. 1,265,768; May 14; v. 250; p. 276.
Fullerton, Clarence A., New York, N. Y. Window-jamb. No. 1,267,205; May 21; v. 250; p. 707.
Fullerton, Clarence A., New York, N. Y. Window construction. No. 1,267,206; May 21; v. 250; p. 707.
Fullerton, Clarence A., New York, N. Y. Metallic construction. No. 1,267,207; May 21; v. 250; p. 707.
Fulton, Charles H., St. Louis, Mo., assignor to Metallurgical Laboratories, Incorporated, Chicago, Ill. Process of electrical reduction. No. 1,267,347; May 21; v. 250; p. 744.
Fulton, William B., Middletown, Ohio. Guard for screws and rods. No. 1,266,246; May 14; v. 250; p. 410.
Funck, John G., New Orleans, La. Plastic composition. No. 1,268,000; May 28; v. 250; p. 955.
Furduy, Nicholas, Philadelphia, Pa. Connecting device. No. 1,265,646; May 7; v. 250; p. 210.
Furman, Charles M., Jr., Great Falls, S. C. Measuring means for concrete and other mixers. No. 1,267,208; May 21; v. 250; p. 707.
Furman, George B., East Orange, N. J. Sectional distillation apparatus. No. 1,265,318; May 7; v. 250; p. 122.
Furnace Patent Company. (See Wedge, Utley, assignor.)
G. M. Parks Company, The. (See Thompson and Comfort, assignors.)
Gabriel, Charles R., Brooklyn, N. Y. Producing flat surfaces on the edges of stampings and drawn shells. No. 1,265,901; May 14; v. 250; p. 313.
Gade, William H., Iowa Falls, Iowa. Control mechanism for excavating-machines. No. 1,265,443; May 7; v. 250; p. 157.
Gagnon, Leo O., assignor to American Optical Company, Southbridge, Mass. Eye-protector. No. 1,265,647; May 7; v. 250; p. 210.
Gaisser, Alice R. (See Gaisser, Louis E., assignor.)
Gaisser, Louis E., Louisville, Ky. Mill. No. 1,266,247; May 14; v. 250; p. 410.
Gaisser, Louis E., assignor to A. R. Gaisser, Louisville, Ky. Corn-sheller. No. 1,266,248; May 14; v. 250; p. 410.
Galipeau, John, assignor of one-half to J. H. Garth, Montreal, Quebec, Canada. Paper-making machine. No. 1,266,673; May 21; v. 250; p. 558.
Galli, Serafino, Breezy Hill, Kans. Car-lock for mine-elevators. No. 1,268,001; May 28; v. 250; p. 955.
Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Musical-instrument reservoir-check. No. 1,265,190; May 7; v. 250; p. 88.
Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Pneumatic-diaphragm follower. No. 1,265,319; May 7; v. 250; p. 122.
Galt, William J., Jr., assignor to The De Long Hook and Eye Company, Philadelphia, Pa. Garment-fastener. No. 1,265,769; May 14; v. 250; p. 276.
Gambino, Thomas A., Boston, Mass., assignor to United Lace & Braid Manufacturing Company. Rubber lift for boots and shoes. No. 1,266,578; May 21; v. 250; p. 529.
Gamewell Fire Alarm Telegraph Co. (See Cole, Frederick W., assignor.)
Gammeter, John R., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Wire-cable ring and making the same. No. 1,267,396; May 28; v. 250; p. 785.
Gander, James S., Stratford, London, England. Apparatus for separating fluids of different specific gravities. No. 1,266,008; May 14; v. 250; p. 343.
Gannaway, Charles L., Chattanooga, Tenn. Valve and valve-spring remover. No. 1,266,788; May 21; v. 250; p. 590.
Garaca, Frank, Bessemer, Ala. Spark-plug. No. 1,266,009; May 14; v. 250; p. 343.
Garbow, George E., Pierson, Mich. Potato-seed-cutting machine. No. 1,267,397; May 28; v. 250; p. 785.

Garcelon, George H., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Pulley. No. 1,266,579; May 21; v. 250; p. 529.
Gardner, Bruce E., Doland, S. D. Invalid lifter and conveyer. No. 1,264,915; May 7; v. 250; p. 12.
Gardner, George S., Columbus, assignor to J. R. Fletcher, Dayton, Ohio. Cable-clamp. No. 1,266,933; May 21; v. 250; p. 629.
Gardner, James P., assignor to The Reducing Machine Company, Chicago, Ill. Massage-machine. No. 1,265,074; May 7; v. 250; p. 57.
Garfield, James R., trustee. (See Webster, Harry G., assignor.)
Garford Manufacturing Company, The. (See Bonsieur, Le.)
Garford Manufacturing Company, The. (See Slough, Frank M., assignor.)
Garlock, William H., and W. J. Stubbe, Seattle, Wash. Slicing-machine. No. 1,266,450; May 14; v. 250; p. 463.
Garner, Wightman W., and E. G. Beinhart, Washington, D. C. Preventing the development of black rot and other fungous and bacterial diseases in leaf-tobacco. No. 1,268,070; May 28; v. 250; p. 973.
Garrett, Thomas, *et al.* (See Karppinen, Karl, assignor.)
Garth, John H. (See Gallipeau, John, assignor.)
Gatchell, George S. (See Molyneux and Gatchell.)
Gates, Quincy A. (See Bunnell and Gates.)
Gauthier, Edwin, Mattoon, Wis. Stone-puller. No. 1,266,674; May 21; v. 250; p. 558.
Gavin, Thomas E., Minneapolis, Minn. Mop-holder. No. 1,267,398; May 28; v. 250; p. 785.
Gay, Francis M., *et al.* (See Methvin, James E., assignor.)
Gay, Hugh A., *et al.* (See Methvin, James E., assignor.)
Gay, Lee O., *et al.* (See Methvin, James E., assignor.)
Gaylord, Edwin P., Rochester, N. Y. Refilling valve mechanism for flush-tanks. No. 1,266,675; May 21; v. 250; p. 558.
Gaynor, Frederick M., Jersey City, N. J. Cork-extractor. No. 1,265,320; May 7; v. 250; p. 122.
Geiger, Frederick J., *et al.* (See McCloskey, Alfred C., assignor.)
Geissler, Franz, deceased, Cottbus; M. Geissler, trustee, Cottbus, Germany. Apparatus for dyeing wool and other fibrous substances. No. 1,267,209; May 21; v. 250; p. 708.
Geissler, Marianne, trustee. (See Geissler, Franz, assignor.)
Geist, Harry F., assignor, by mesne assignments, to Webster Electric Company, Racine, Wis. Magneto-machine. No. 1,267,755; May 28; v. 250; p. 884.
Geiatt, Philo M., La Crosse, Wis. Bulb for temperature-indicating instruments. No. 1,266,580; May 21; v. 250; p. 530.
General Chemical Company. (See Howard, Henry, assignor.)
General Eclipse Company, The. (See Kennedy, Frederick A., assignor.)
General Electric Company. (See Alexanderson, Ernst F. W., assignor.)
General Electric Company. (See Bergman, Sven R., assignor.)
General Electric Company. (See Berry, Arthur F., assignor.)
General Electric Company. (See Creighton, Elmer E. F., assignor.)
General Electric Company. (See De Reamer, Frank C., assignor.)
General Electric Company. (See Dodge, Austin R., assignor.)
General Electric Company. (See Doran, John H., assignor.)
General Electric Company. (See Engel, Hans, assignor.)
General Electric Company. (See Evans, Evan, assignor.)
General Electric Company. (See Ferguson, Charles V., assignor.)
General Electric Company. (See Frick, Walther, assignor.)
General Electric Company. (See Hall, Chester I., assignor.)
General Electric Company. (See Halvorson, Cromwell A. B., Jr., assignor.)
General Electric Company. (See Hamilton, William S. H., assignor.)
General Electric Company. (See Hayman, William C., assignor.)
General Electric Company. (See Hill, Charles H., assignor.)
General Electric Company. (See Hill, George H., assignor.)
General Electric Company. (See Hoxie, Charles A., assignor.)
General Electric Company. (See Jacoby, Richard, assignor.)
General Electric Company. (See Johannesen, Svend E., assignor.)
General Electric Company. (See Junggren, Oscar, assignor.)
General Electric Company. (See Korthals-Altes, William C., assignor.)
General Electric Company. (See McBride, William J., assignor.)
General Electric Company. (See McDonald, James D., assignor.)
General Electric Company. (See Meeker, Herbert D., assignor.)
General Electric Company. (See Meikle, George S., assignor.)
General Electric Company. (See Momota, Sadaji, assignor.)
General Electric Company. (See Moss, Sanford A., assignor.)
General Electric Company. (See Nordgren, Werner M., assignor.) (Reissue.)
General Electric Company. (See Pagel, Gustav, assignor.)
General Electric Company. (See Porter, Willard E., assignor.)
General Electric Company. (See Shand, Robert, assignor.)
General Electric Company. (See Smith, Buel, assignor.)
General Electric Company. (See Stearns and Hamilton, assignors.)
General Electric Company. (See Thomson, Elihu, assignor.)
General Electric Company. (See Tripp, Charles K., assignor.)
General Electric Company. (See Whitney, Willis R., assignor.)
General Electric Company. (See Wiard, John B., assignor.)
General Electric Company. (See Wilkinson, James, assignor.)
General Electric Company. (See Winter, Fred H., assignor.)
General Electric Company. (See Wright, Daniel K., assignor.)
General Electric Company. (See Wright, Gilbert, assignor.)
General Elevator Company. (See Fraser, Ethelbert M., assignor.)
General Motors Corporation. (See Pence, Lafe V., assignor.)
General Reduction Gas and By-Products Company. (See Hornsey, John W., assignor.)
Geneva Tractor Company, The. (See Jacobs, George S., assignor.)
Gensler, Edward J., Buffalo, N. Y. Automobile-signal. No. 1,267,538; May 28; v. 250; p. 824.
Geo. D. Bailey Co. (See Bailey, George D., assignor.)
George Cutter Company. (See Ashinger, Herman H., assignor.)
George, Ralph D., Kansas City, Mo. Transmission mechanism. No. 1,267,321; May 21; v. 250; p. 736.
George W. Prentiss & Company. (See Prentiss, William A., assignor.)
Gerhard, Karl F., Hatton, Wash. Cultivator. No. 1,265,902; May 14; v. 250; p. 313.
Germann, Henry E. (See Maupin, Malcolm M., assignor.)
Germless Paper Cup Company, The. (See Klin, John R., assignor.)
Gerner, Harry, Hitterdal, Minn. Loader. No. 1,266,451; May 14; v. 250; p. 464.
Gesellschaft für drahtlose Telegraphie m. b. H. (See Arco and Meissner, assignors.)
Gesellschaft für Elektro-Osmose m. b. H. (See Schwerin, Botho, assignor.)
Gettings, Daniel F. (See Barshaw and Gettings.)
Ghent, Alonzo, Helix, Oreg. Hoisting and handling machine. No. 1,267,756; May 28; v. 250; p. 885.
Gibbs, Edward F. G., Washington, D. C. Cutting-off tool. No. 1,266,116; May 14; v. 250; p. 374.
Gibson, Evan, Foxhome, Minn. Railway-signal. No. 1,266,452; May 14; v. 250; p. 464.
Gibson, George H. (See Bancel, Paul A., assignor.)
Gibson, George H., Montclair, N. J. Method of and apparatus for heat determination. No. 1,267,757; May 28; v. 250; p. 885.
Gibson, George H., Montclair, N. J. Method of and apparatus for heat determination. No. 1,267,758; May 28; v. 250; p. 886.
Giemsa, Gustav. (See Ach, Rothmann, and Giemsa.)
Giese, Adolph. (See Rummerfield, Joseph R., assignor.)
Giffin, Howard, *et al.* (See Cobb, Bayard G., assignor.)
Gilbert & Barker Manufacturing Company. (See Davis, Henderson G., assignor.)
Gilbert & Barker Manufacturing Company. (See Davis, John B., assignor.)
Gilbert, Frederick, Edgbaston, Birmingham, England. Bronzing apparatus. No. 1,266,453; May 14; v. 250; p. 464.
Gilbert, Samuel E., Portland, Oreg. Automobile traffic-signal. No. 1,266,454; May 14; v. 250; p. 464.
Gilday, William A., Philadelphia, Pa. Antisubmarine. No. 1,267,539; May 28; v. 250; p. 824.
Giles, Robert T., and P. W. Kinsella, Chicago, Ill. Ventilator. No. 1,265,191; May 7; v. 250; p. 89.
Gillaspy, George, Joplin, Mo. Electric-motor construction. No. 1,267,210; May 21; v. 250; p. 708.
Gillette-Vibber Co., The. (See Vibber, Wheeler H., assignor.)
Gilliland, Elijah P., Norwood, Mass. Treating leather. No. 1,265,648; May 7; v. 250; p. 210.
Gillis, Julius H., assignor to British America Nickel Corporation Limited, Toronto, Ontario, Canada. Anode-connector. No. 1,267,653; May 28; v. 250; p. 857.
Gilmer, Ludwell H., assignor to L. H. Gilmer Co., Philadelphia, Pa. Laminated fabric. No. 1,266,789; May 21; v. 250; p. 590.
Gilmore, Millard, Chicago, Ill. Elevator fire-door. No. 1,265,075; May 7; v. 250; p. 57.

Gilson, Anna K., Quechee, Vt. Hand-rake. No. 1,267,654; May 28; v. 250; p. 857.
Ginsberg, William E., Bridgeport, Conn. Tool-holder. No. 1,266,249; May 14; v. 250; p. 411.
Girard, Antoine L., Sterling Junction, assignor of one-half to D. A. Upham, Worcester, Mass. Toy. No. 1,266,790; May 21; v. 250; p. 590.
Girvan, Howard D., Beaver Falls, Pa. Internal-combustion engine. No. 1,266,676; May 21; v. 250; p. 558.
Gisser, Isidor, Brooklyn, N. Y. Lock. No. 1,267,860; May 28; v. 250; p. 917.
Gleaves, Robert G., Greenbrier, Tenn. Self-locking cover for grave-vaults. No. 1,267,759; May 28; v. 250; p. 886.
Glenn, Thomas F., Ardmore, Pa., assignor to The S. S. White Dental Manufacturing Company. Artificial tooth. No. 1,267,861; May 28; v. 250; p. 917.
Glisson, Lloyd C., Atlanta, Ga. Aeroplane. No. 1,265,770; May 14; v. 250; p. 276.
Globe Automatic Sprinkler Company. (See Evans, Powell, assignor.)
Globe Automatic Sprinkler Company. (See Rowley, Arthur C., assignor.)
Glynn, Stephen A., Antigo, assignor of one-half to W. Griffith and M. E. Entzminger, Green Bay, Wis. Garment-holder. No. 1,268,075; May 28; v. 250; p. 975.
Godfrey, Albert N., Wenatchee, Wash. Fruit-drier. No. 1,267,655; May 28; v. 250; p. 857.
Godley, Henry G., Pittsburgh, Pa. Vehicle-shield. No. 1,266,934; May 21; v. 250; p. 630.
Gold Car Heating & Lighting Company. (See Gold, Edward E., assignor.)
Gold, Edward E., assignor to Gold Car Heating & Lighting Company, New York, N. Y. Device for fastening wires to pipes. No. 1,265,903; May 14; v. 250; p. 314.
Gold, Edward E., assignor to Gold Car Heating & Lighting Company, New York, N. Y. Vapor-valve for steam-heating. No. 1,265,904; May 14; v. 250; p. 314.
Gold Furniture Company *et al.* (See Weinmann, Louis E., assignor.)
Golden, Charles F., Chill, Ind. Compass. No. 1,266,010; May 14; v. 250; p. 343.
Goldsmith, Hugo, Cincinnati, Ohio. Athletic protective harness. No. 1,264,916; May 7; v. 250; p. 12.
Goldstein, Abe, *et al.* (See Goldstein, Samuel, assignor.)
Goldstein, Isadore, *et al.* (See Goldstein, Samuel, assignor.)
Goldstein, Meyer, *et al.* (See Goldstein, Samuel, assignor.)
Goldstein, Samuel, assignor of one-fourth to I. Goldstein, one-fourth to A. Goldstein, and one-fourth to M. Goldstein, Chicago, Ill. Bed davenport or couch. No. 1,267,399; May 28; v. 250; p. 786.
Good, David D., Philadelphia, Pa. Adjustable closet-rod. No. 1,266,677; May 21; v. 250; p. 559.
Good, John, Brooklyn, N. Y. Liquid-fuel combustion. No. 1,267,760; May 28; v. 250; p. 886.
Good, Paul E., Riverton, N. J., assignor to Southwark Foundry & Machine Co., Philadelphia, Pa. Regulating apparatus for air-compressors. No. 1,265,444; May 7; v. 250; p. 158.
Good, Robert, Jr., Washington, Pa., assignor to Hazel-Atlas Glass Company, Wheeling, W. Va. Controlling mechanism for glass-furnaces. No. 1,266,011; May 14; v. 250; p. 343.
Goode, Lincoln, Pittsburg, Cal. Lumber-curing kiln. No. 1,266,791; May 21; v. 250; p. 590.
Goodfellow, Walter V., Los Angeles, Cal. Method of and apparatus for general anesthesia. No. 1,267,761; May 28; v. 250; p. 887.
Goodwin, William M., Newark, N. J. Measuring instrument. No. 1,208,002; May 28; v. 250; p. 955.
Gordon, Al C., Glens Falls, N. Y. Water-heating system. No. 1,266,455; May 14; v. 250; p. 464.
Gore, William M., *et al.* (See Byrne, David, assignor.)
Gorej, Andrew, *et al.* (See Jakab, Mike, assignor.)
Gorham Manufacturing Company. (See Jenks, Barton P., assignor.)
Gorton-Pew Fisheries Company. (See Cooper, Simon, assignor.)
Goserud, Thorwald, Sturgeon Bay, Wis. Lock-nut. No. 1,267,656; May 28; v. 250; p. 857.
Goss, Charles E. (See Goss, George W. and C. E.)
Goss, George F., deceased; L. J. Goss, administrator, Wallaceton, Pa. Pool-ball rack. No. 1,266,012; May 14; v. 250; p. 344.
Goss, George W. and C. E., Baltimore, Ohio. Gate construction. No. 1,266,581; May 21; v. 250; p. 530.
Goss, George W. and C. E., Baltimore, Ohio. Convertible wagon-bed. No. 1,266,582; May 21; v. 250; p. 530.
Goss, Harry L. (See Marshall and Goss.)
Goss, Leonard J., administrator. (See Goss, George F.)
Gossum, William I., South Fulton, Tenn. Hay-rake. No. 1,265,649; May 7; v. 250; p. 210.
Gostin, Katharine D., Macon, Ga. Amusement device. No. 1,267,211; May 21; v. 250; p. 708.
Goubert, Floris, Paris, France. Fastener. No. 1,266,583; May 21; v. 250; p. 531.
Gould & Eberhardt. (See Zimmermann, William F., assignor.)
Government of the United States. (See Teesdale and Prince, assignors.)
Grace, Edna, Hoquiam, Wash. Maternity-corset. No. 1,267,657; May 28; v. 250; p. 858.
Graemiger, Benjamin, assignor to Aktiengesellschaft der Maschinenfabriken Escher Wyss & Co., Zurich, Switzerland. Cooling device in multistage centrifugal compressors. No. 1,265,650; May 7; v. 250; p. 210.
Graham, Frank B., Lansing, Mich. Spark-gage. No. 1,265,321; May 7; v. 250; p. 123.
Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Frame for agricultural implements and the like. No. 1,265,322; May 7; v. 250; p. 123.
Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Cotton-seed-dropping mechanism. No. 1,265,323; May 7; v. 250; p. 123.
Graham, William S., assignor to Parlin & Orendorff Company, Canton, Ill. Land-marker for planters. No. 1,267,762; May 28; v. 250; p. 887.
Grahn, Henry. (See Marten, Grahn, and Andresen.)
Granlund, Oscar F., assignor to National Equipment Company, Springfield, Mass. Decorating-depositor. No. 1,268,003; May 28; v. 250; p. 955.
Granz, Josef, Plauen, assignor to Vogtländische Maschinen-Fabrik, Plauen, Germany. Embroidering-machine shuttle. No. 1,266,117; May 14; v. 250; p. 374.
Grasselli Chemical Company, The. (See Lihme, Iens P., assignor.)
Gravell, James H., Brooklyn, N. Y., assignor to Thomson Spot Welder Company, Boston, Mass. Treating electrodes for electric welding. No. 1,267,400; May 28; v. 250; p. 786.
Graves, George S., Dallas, S. D. Gate-operating mechanism. No. 1,266,250; May 14; v. 250; p. 411.
Gray, Chester E., Eureka, Cal. Process and apparatus for desiccating liquid substances. No. 1,266,013; May 14; v. 250; p. 344.
Gray, Edward E., Piano, Ill., assignor to Gray Pneumatic Gear Shift Company. Gear-shifting mechanism. No. 1,266,584; May 21; v. 250; p. 531.
Gray, Edward E., Piano, Ill., assignor to Gray Pneumatic Gear Shift Company. Gear-shifting mechanism. No. 1,266,585; May 21; v. 250; p. 531.
Gray, George. Stamford, Conn. Oil-engine. No. 1,266,118; May 14; v. 250; p. 374.
Gray, John J. Jr. (See Webster, Hyleman A., assignor.)
Gray, John J. Jr., Rockdale, Tenn. Making ferrophosphorus from iron phosphatic material. No. 1,265,076; May 7; v. 250; p. 57.
Gray Pneumatic Gear Shift Company. (See Gray, Edward E., assignor.)
Gray, Simon P., Tuscaloosa, Ala. Derrick. No. 1,266,119; May 14; v. 250; p. 375.
Great Northern Paper Company. (See Schenck, Garrett, Jr., assignor.)
Greeley, James T., Nashua, N. H. Surgical-needle holder. No. 1,266,450; May 14; v. 250; p. 465.
Green, Fred O., Lubbock, Tex. Detent mechanism for wire-stretchers. No. 1,267,540; May 28; v. 250; p. 825.
Green, Irving A., Worcester, Mass., assignor to Wire Goods Company. Strainer-holder. No. 1,264,917; May 7; v. 250; p. 12.
Green, J. Birchard, assignor to Chicago Steel & Wire Company, Chicago, Ill. Reel. No. 1,264,918; May 7; v. 250; p. 12.
Green, James C., Prairie City, Oreg. Crushing attachment for threshing-machines. No. 1,267,658; May 28; v. 250; p. 858.
Green, Walter R., Chicago, Ill. Attaching brace and support for mud-guards. No. 1,266,251; May 14; v. 250; p. 411.
Greenberg, Jacob. (See Mallove, Greenberg, and Kleves.)
Greene, Augustus A., Providence, R. I. Buckle. No. 1,265,324; May 7; v. 250; p. 123.
Greene, George A., Rogers, Tex. Incinerator-closet. No. 1,267,401; May 28; v. 250; p. 786.
Greene, Harold C. (See Moses and Greene.)
Greene, Harry S., Woonsocket, R. I. Napping-machine. No. 1,265,905; May 14; v. 250; p. 314
Greene, Harvey S., administrator. (See Moses and Greene.)
Greenfield, Simon, New York, N. Y. Duplex fountain-pen. No. 1,265,325; May 7; v. 250; p. 124.
Greenleaf, Louis A., Beverly, Mass. Speedometer. No. 1,265,077; May 7; v. 250; p. 57.
Greer, Butler F., San Francisco, Cal. Display-cabinet. No. 1,266,457; May 14; v. 250; p. 465.
Gregory, Hansford L., South Richmond, Va. Indicator for tobacco-drying machines. No. 1,268,004; May 28; v. 250; p. 956.
Gribble, James L., and G. L. Willett, Louisville, Ky. Advertising device. No. 1,266,014; May 14; v. 250; p. 344.
Griem, Otto C., assignor to Berry Brothers, Detroit, Mich. Melting varnish-gums. No. 1,265,326; May 7; v. 250; p. 124.
Gries, William, Newark, N. J. Handle for lifting and other uses. No. 1,267,659; May 28; v. 250; p. 858.
Griesinger, John, Los Angeles, Cal. Book-sewing machine. No. 1,266,793; May 21; v. 250; p. 591.
Griffin, George N. (See McFarland and Griffin.)
Griffin, Michael J., Hartford, Conn. Horseshoe-calk. No. 1,264,919; May 7; v. 250; p. 13.
Griffith, William, *et al.* (See Glynn, Stephen A., assignor.)
Grikscheit, William, Detroit, Mich. Drain-cock. No. 1,267,763; May 28; v. 250; p. 887.

Grimm, Max F., San Antonio, Tex. Locking device for steering-wheels. No. 1,266,935; May 21; v. 250; p. 630.
Grip Nut Company. (See Hibbard, Edward R., assignor.)
Grip Nut Company. (See Sharp, William E., assignor.)
Griscom-Russell Company, The. (See Bunnell and Peterson, assignors.)
Groh, Robert C., and M. A. Hansen, assignors of one-fourth to O. J. Dufrene and one-fourth to H. A. Svendsen, St. Paul, Minn. Priming-heater for automobiles. No. 1,265,192; May 7; v. 250; p. 89.
Grohmann, Arthur, Wilmington, Del. Boat-launching apparatus. No. 1,265,771; May 14; v. 250; p. 276.
Grom, Henry W., Los Angeles, and F. D. Terry, Pasadena, Cal. Electrically-controlled temperature-regulator. No. 1,267,069; May 21; v. 250; p. 668.
Gromann, Carl F., New York, N. Y. Illuminating device for vehicles. No. 1,266,678; May 21; v. 250; p. 559.
Groo, John L., Salt Lake City, Utah. Antifreezing device for water-pipes. No. 1,265,772; May 14; v. 250; p. 277.
Grote, Alfred W., Brooklyn, N. Y. Transmission for automobiles. No. 1,265,078; May 7; v. 250; p. 58.
Groves, Frank A., assignor to The Recording and Computing Machines Company, Dayton, Ohio. Collection and recording of fares. No. 1,265,079; May 7; v. 250; p. 58.
Gruenberg, Walter A. (See Currie and Gruenberg.)
Gruendler, Gustav J., St. Louis, Mo. Refrigerator. No. 1,266,679; May 21; v. 250; p. 559.
Guerrero, Jorge, Paris, France. Tire for vehicle-wheels. No. 1,265,773; May 14; v. 250; p. 277.
Guggenheim, Solomon D. (See Benjamin, Dana H., assignor.)
Guinn, James H., Long Beach, Cal. Rotary engine. No. 1,265,193; May 7; v. 250; p. 80.
Guise, Charles, Malvern, and T. J. Southall, Worcester, England. Mud-guard for vehicle-wheels. No. 1,266,120; May 14; v. 250; p. 375.
Gulf Refining Company. (See King and Roberts, assignors.)
Gundersen, Sivert, assignor to S. Karpen & Bros., Chicago, Ill. Sofa-bed. No. 1,267,541; May 28; v. 250; p. 825.
Gustafson, Carl J., assignor, by mesne assignments, to Hendee Manufacturing Company, Springfield, Mass. Side-car attachment for motor-cycles. No. 1,267,212; May 21; v. 250; p. 708.
Gustafson, Charles J., and F. C. Mock, assignors to Stromberg Motor Devices Company, Chicago, Ill. Carbureter. No. 1,265,194; May 7; v. 250; p. 89.
Gustin, Max, New York, N. Y. Slipper. No. 1,265,774; May 14; v. 250; p. 277.
Guthrie, John K. (See Henniger and Guthrie.)
Gwyer, Herbert J., New York, N. Y. Refrigerator construction. No. 1,266,794; May 21; v. 250; p. 591.
H. Lieber Company, The. (See Lieber, Carl H., assignor.)
H. & D. Company, The. (See Hawn, Andrew P., assignor.)
H. W. Clark Co. (See Clark, Horace W., assignor.)
H. W. Johns-Manville Company. (See Headson, Frank A., assignor.)
Haas, Joseph, and C. Strada, New York, N. Y. Tripping attachment for revolving steam and electric shovels. No. 1,264,920; May 7; v. 250; p. 13.
Hadaway, William S., Jr., New Rochelle, N. Y. Meter. No. 1,265,775; May 14; v. 250; p. 277.
Hadford, Louis, Carmengay, Alberta, Canada. Pump. No. 1,266,252; May 14; v. 250; p. 411.
Haefliger, Herman, Denver, Colo. Combined microscope and object-holder. No. 1,267,862; May 28; v. 250; p. 917.
Hagans, Samuel G., Coatesville, Pa. Space-retaining device for card-indexes. No. 1,266,458; May 14; v. 250; p. 465.
Hagelstein, Christian H. T., assignor to The Reece Button Hole Machine Company, Boston, Mass. Sewing-machine. No. 1,264,921; May 7; v. 250; p. 13.
Hagen, Arthur T., Rochester, N. Y., assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Valve mechanism for washing machinery. No. 1,267,403; May 28; v. 250; p. 786.
Hagen, Joseph J., St. Louis, Mo. Ball-and-socket joint. No. 1,265,445; May 7; v. 250; p. 158.
Hager, Henry F., Chicago, Ill. Bed-spring fabric. No. 1,267,764; May 28; v. 250; p. 888.
Hägg, Carl J. J., Stockholm, Sweden. Milking-machine. No. 1,266,795; May 21; v. 250; p. 591.
Haggard and Marcusson Company. (See Anderson, William B., assignor.)
Haggerty, John J., and E. D. Van Wie, Albany, N. Y. Line-space follo attachment for type-writers. No. 1,266,796; May 21; v. 250; p. 592.
Hahn, Theodore, Milwaukee, Wis. Knitting tubular articles. No. 1,266,459; May 14; v. 250; p. 466.
Haines, John S., Dowagiac, Mich. Silo. No. 1,267,863; May 28; v. 250; p. 917.
Hakanson, Ernest, Stockbridge, Mich. Floor-set. No. 1,266,253; May 14; v. 250; p. 412.
Hale, George W., assignor, by mesne assignments, to The Reliance Gauge Column Company, Cleveland, Ohio. Clutch. No. 1,265,906; May 14; v. 250; p. 315.
Halinka, George, Detroit, Mich. Valve-lock. No. 1,266,797; May 21; v. 250; p. 592.
Hall, Arthur J. (See Simmon and Hall.)
Hall, Arthur J., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,266,586; May 21; v. 250; p. 531.
Hall, C. J., trustee. (See Stalker, Carlton H., assignor.)
Hall, Chester I., Fort Wayne, Ind., assignor to General Electric Company. Demand-limiting apparatus. No. 1,267,213; May 21; v. 250; p. 708.
Hall, Chester I., Fort Wayne, Ind., assignor to General Electric Company. Position indicator or recorder. No. 1,267,214; May 21; v. 250; p. 709.
Hall, Cyrus M., Houston, Tex. Belt-buckle. No. 1,266,680; May 21; v. 250; p. 559.
Hall, Ernest C., Warren, Ohio. Removable shoe for airplane-skids. No. 1,267,864; May 28; v. 250; p. 918.
Hall, Frank A. (See McIntosh, Burtnett, assignor.)
Hall, Spencer F., Racine, Wis. Vehicle-spring snubber. No. 1,267,070; May 21; v. 250; p. 668.
Hall Switch & Signal Co. (See Taylor, Herbert B., assignor.)
Hall, Thomas M., High Point, N. C. Ironing-board. No. 1,265,080; May 7; v. 250; p. 59.
Hallock, William L., Los Angeles, Cal. Commutator. No. 1,266,798; May 21; v. 250; p. 592.
Halsey, Norman W., New York, N. Y. View-finder for cameras. No. 1,267,404; May 21; v. 250; p. 787.
Halvorson, Cromwell A. B., Jr., Lynn, Mass., assignor to General Electric Company. Light-fixture. No. 1,267,865; May 28; v. 250; p. 918.
Hamann, Wilhelm, Charlottenburg, Germany. Clasp. No. 1,267,765; May 28; v. 250; p. 888.
Hamel Shoe Machinery Company. (See Lancaster, John T., assignor.)
Hamilton, Edward A., Hawthorne, Pa. Pot-making machine. No. 1,267,215; May 21; v. 250; p. 709.
Hamilton, William S. H. (See Stearns and Hamilton.)
Hamilton, William S. H., Schenectady, N. Y., assignor to General Electric Company. Motor control. No. 1,267,216; May 21; v. 250; p. 709.
Hammer, Charles, Queens, assignor to American Metal Cap Co., Brooklyn, N. Y. Threaded jar-closure. No. 1,267,866; May 28; v. 250; p. 918.
Hammer, Peder, Chicago, Ill. Trolley-pole. No. 1,266,460; May 14; v. 250; p. 466.
Hammerstein, Arthur, New York, N. Y. Coffee-percolator. No. 1,267,405; May 28; v. 250; p. 787.
Hammond, Albert E., Portland, Oreg. Evaporator. No. 1,266,461; May 14; v. 250; p. 466.
Handler, William, Jerseyville, Ill. Non-refillable bottle. No. 1,266,121; May 14; v. 250; p. 375.
Hanlon, John H., Somerville, assignor to Hanlon Locomotive Sander Company, Winchester, Mass. Track-sander. No. 1,265,711; May 7; v. 250; p. 227.
Hanlon Locomotive Sander Company. (See Hanlon, John H., assignor.)
Hansen, Johan, Tonopah, Nev. Rail-fastener. No. 1,265,327; May 7; v. 250; p. 124.
Hansen, Martin A. (See Groh and Hansen.)
Hansen, Niels M., assignor to P. F. Reichert, Toledo, Ohio. Film-holder. No. 1,266,254; May 14; v. 250; p. 412.
Hanser, Charles A., and C. M. Van der Kloester, Rotterdam, Netherlands. Crane with hydraulic weighing device. No. 1,266,587; May 21; v. 250; p. 532.
Hanson, Bernard J., Hayward, Wis. Barrel-cover. No. 1,267,542; May 28; v. 250; p. 824.
Hanson, Frank, Dallas, Tex. Camp-cooker. No. 1,266,588; May 21; v. 250; p. 532.
Harbach, John S., assignor of forty one-hundredths to A. W. Solomon, Atlantic City, N. J. Tobacco-pipe stem. No. 1,267,766; May 28; v. 250; p. 888.
Harbour, William E. L., Eaton, Colo. Hitch for two-way plows. No. 1,266,799; May 21; v. 250; p. 593.
Hardie, James G., Canton, N. Y. Sheet-carrying machine. No. 1,266,122; May 14; v. 250; p. 375.
Hardinge Brothers Company, The. (See Hardinge, Franklin, assignor.)
Hardinge, Franklin, assignor to The Hardinge Brothers Company, Chicago, Ill. Watchman's clock. No. 1,267,406; May 28; v. 250; p. 787.
Hardy, Lawrence P., South Bend, Ind. Coupon or ticket holder. No. 1,267,071; May 21; v. 250; p. 668.
Hargis, James R., Springfield, Mo. Automatic brooder. No. 1,266,462; May 14; v. 250; p. 466.
Harley-Davidson Motor Co. (See Harley, William S., assignor.)
Harley, William S., assignor to Harley-Davidson Motor Co., Milwaukee, Wis. Motor-cycle frame. No. 1,266,589; May 21; v. 250; p. 533.
Harley, William S., assignor to Harley-Davidson Motor Company, Milwaukee, Wis. Spring-frame for motor-cycles and like vehicles. No. 1,266,800; May 21; v. 250; p. 593.
Harper, William P., Abilene, Kans. Cultivator. No. 1,265,776; May 14; v. 250; p. 277.
Harrington, Bert, and A. W. Clarke, Des Moines, Iowa. Lock for motor-vehicle steering-wheels. No. 1,266,015; May 14; v. 250; p. 345.
Harris, Allan A. (See Harris, Samuel J., and A. A.)
Harris, Benjamin M., San Francisco, Cal. Street-traffic-controlling apparatus. No. 1,267,767; May 28; v. 250; p. 888.
Harris, Hubert E., assignor of three-fourths to S., G., and D. King, Atlanta, Ga. Means for fastening railway-rails to ties. No. 1,267,543; May 28; v. 250; p. 825.
Harris, John, Lakewood, Ohio. Combination heater and muffler. No. 1,266,255; May 14; v. 250; p. 412.
Harris, Joseph, West Toronto, Ontario, Canada. Adjustable tool. No. 1,264,922; May 7; v. 250; p. 13.

Harris, Samuel J., and A. A., Randolph, Mass. Rubber article. No. 1,266,936; May 21; v. 250; p. 630.

Harrison, William E., Union City, Ind. Signal apparatus. No. 1,267,407; May 28; v. 250; p. 788.

Harsh, Howard, Oaklis, Minn. Rail-fastening means. No. 1,265,907; May 14; v. 250; p. 315.

Hart, George H., West Hartford, Conn. Switch-containing plug-connector. No. 1,266,801; May 21; v. 250; p. 598.

Hart & Hegeman Manufacturing Company, The. (See Stirling, Clarence C., assignor.)

Hart, Joseph L., Chickasha, Okla. Pneumatic elevator and distributer for cotton-gins. No. 1,265,908; May 14; v. 250; p. 315.

Hartdorn, Louis G., Brooklyn, N. Y. Alarm. No. 1,265,777; May 14; v. 250; p. 278.

Hartenstein, Robert F., *et al.*, trustees. (See Schleusselburg, George, assignor.)

Hartkopf, Carl F., assignor of twenty-four one-hundredths to A. M. Norman and twenty-four one-hundredths to P. J. Swan, Marion, Ill. Car-coupling. No. 1,267,217; May 21; v. 250; p. 710.

Hartline, William A., Penns Grove, N. J. Fastening device. No. 1,265,778; May 14; v. 250; p. 278.

Hartman, William, Mascoutah, Ill. Mine-car stop. No. 1,265,446; May 7; v. 250; p. 158.

Hartshorn, Henry A., assignor to The American Buckle Co., West Haven, Conn. Overalls-suspenders loop. No. 1,266,590; May 21; v. 250; p. 533.

Hartsough, Ralph B., Minneapolis, Minn. Tractor. No. 1,267,122; May 21; v. 250; p. 683.

Harvey, Henry D., Hillsdale, N. Y. Dirigible headlight connection. No. 1,267,218; May 21; v. 250; p. 710.

Harvey Tire and Rubber Company. (See Harvey, William L., assignor.)

Harvey, William L., assignor to Harvey Tire and Rubber Company, Chicago, Ill. Resilient tire. No. 1,265,909; May 14; v. 250; p. 316.

Harvie, Robert, Toronto, Ontario, Canada. Flag-holder. No. 1,266,681; May 21; v. 250; p. 559.

Haselwander, Charles J., Williamsport, Pa. Safety attachment for valves. No. 1,266,987; May 21; v. 250; p. 630.

Hasenjaeger, Charles W., Memphis, Tenn. Automatic seed-tester. No. 1,268,005; May 28; v. 250; p. 956.

Haskell & Barker Car Co. (See Test, Ellis W., assignor.)

Hassler, Robert H., Indianapolis, Ind. Trussed frame for vehicles. No. 1,266,938; May 21; v. 250; p. 631.

Hastings, Harold P. (See Bissell and Hastings.)

Hasty, George E., Wichita, Kans. Car truck, track, and steering mechanism. No. 1,266,591; May 21; v. 250; p. 533.

Hatfield, John, assignor to Universal Steel Cabinet Company, Inc., Brooklyn, N. Y. Follower-block for filing-cabinets. No. 1,265,081; May 7; v. 250; p. 59.

Hathaway, Thomas F., assignor to Illinois Watch Case Co., Elgin, Ill. Case or locket. No. 1,266,256; May 14; v. 250; p. 412.

Hattori, Takaji, Fellows, Cal. Traction-tire. No. 1,267,219; May 21; v. 250; p. 710.

Haubner, Robert W., Somerville, assignor, by mesne assignments, to Non Skid Company of America, Boston, Mass. Antiskid for wheels. No. 1,267,544; May 28; v. 250; p. 826.

Haug, Anton J., assignor to Improved Paper Machinery Company, Nashua, N. H. Separator and conveyer for paper-pulp machinery and other purposes. No. 1,266,257; May 14; v. 250; p. 412.

Havens, Raymond M., Kansas City, Mo. Building-block. No. 1,265,447; May 7; v. 250; p. 158.

Hawes, Henry W., Lynn, Mass. Electromechanical traffic-signal. No. 1,265,197; May 7; v. 250; p. 91.

Hawkes, William H., Central Nyack, N. Y. Sad-iron holder. No. 1,266,016; May 14; v. 250; p. 345.

Hawkins, Lloyd R., *et al.* (See Lindberg, Charles A., assignor.)

Hawley, Eugene W., Philadelphia, Pa. Trunk-lock. No. 1,266,939; May 21; v. 250; p. 631.

Hawn, Andrew P., assignor to The H. & D. Company, Goodland, Ind. Shock-absorber. No. 1,264,923; May 7; v. 250; p. 14.

Hayes, Benjamin P., Kansas City, Mo. Spring-winding machine. No. 1,267,867; May 28; v. 250; p. 918.

Hayes, George H., Hazelton, Kans. Manifold for explosive-engines. No. 1,265,779; May 14; v. 250; p. 278.

Hayes, James. (See Beale and Hayes.)

Hayes Manufacturing Company. (See Rehbein, Conrad, assignor.)

Hayford, Howard L., Whitman, Mass. Collapsible lifeboat. No. 1,265,195; May 7; v. 250; p. 90.

Hayman, William C., Schenectady, N. Y., assignor to General Electric Company. Electric conductor. No. 1,267,868; May 28; v. 250; p. 919.

Haymond, Clinton C., Los Angeles, assignor to W. A. Rowe, San Francisco, and G. J. Woodward, Los Angeles, Cal. Reversible change-speed mechanism. No. 1,265,196; May 7; v. 250; p. 90.

Haynes, Thomas J., South Boston, Mass. Direction-indicator for automobiles. No. 1,265,651; May 7; v. 250; p. 211.

Haynie, Grant N., Hamilton, Mo. Detachable petcock-controlling device for motor-vehicles. No. 1,267,545; May 28; v. 250; p. 826.

Haywood, John K., Washington, D. C. Manufacturing calcium arsenate for insecticidal use. No. 1,266,258; May 14; v. 250; p. 413.

Hazel-Atlas Glass Co. (See Good, Robert, Jr., assignor.)

Hazel-Atlas Glass Co. (See Stenhouse, Thomas, assignor.)

Heacock, Jonathan, Highlands, N. C. Reversible plow. No. 1,265,652; May 7; v. 250; p. 211.

Head, Wrightson and Company. (See Wrightson and Ringquist, assignors.)

Headson, Frank A., assignor to H. W. Johns-Manville Company, Milwaukee, Wis. Brake-band, brake-shoe, and lining therefor. No. 1,264,924; May 7; v. 250; p. 14.

Healy, Lewis E., Keystone, Iowa. Top-dresser for spreaders. No. 1,267,660; May 28; v. 250; p. 858.

Hearne, Joseph H., assignor of one-half to C. L. Williams, Sanford, N. C. Loom-shuttle. No. 1,264,925; May 7; v. 250; p. 14.

Heberlein, Eduard, Wattwil, Switzerland. Imparting a transparent appearance to cotton. No. 1,265,082; May 7; v. 250; p. 59.

Heckmann, Edward, Hermann, Mo. Game apparatus. No. 1,267,220; May 21; v. 250; p. 711.

Hedden, Clarence D., Corral, Idaho. Extension-sweep bit-brace. No. 1,266,802; May 21; v. 250; p. 593.

Hedina, Albert, Laporte, Ind. Electrical torpedo-net. No. 1,264,926; May 7; v. 250; p. 14.

Hedina, Albert, Laporte, Ind. Torpedo-net. No. 1,264,927; May 7; v. 250; p. 15.

Hedstrom, Carl O., Portland, Conn., assignor to Hendee Manufacturing Company, Springfield, Mass. Side-car construction. No. 1,267,661; May 28; v. 250; p. 859.

Heene, George W. (See Wixey, Percy J., assignor.)

Heeter, Charles M., Butler, Pa. Spudding attachment for well-drilling machines. No. 1,265,653; May 7; v. 250; p. 211.

Heffner, William, Benton Harbor, Mich. Automobile-signal. No. 1,266,940; May 21; v. 250; p. 631.

Heghinian, Garabed G., Brooklyn, N. Y. Coin-control mechanism for vending-machines. No. 1,267,662; May 28; v. 250; p. 859.

Heldbrink, Jay A., Minneapolis, Minn. Apparatus for delivering a mixture of gases. No. 1,265,910; May 14; v. 250; p. 316.

Heldenkamp, Joseph. (See Maxwell, Alexander G., assignor.)

Helm, Lewis R., assignor to The Ball and Roller Bearing Company, Danbury, Conn. Device for feeding rolls for end-grinding. No. 1,264,928; May 7; v. 250; p. 15.

Helm, Lewis R., assignor to The Ball and Roller Bearing Company, Danbury, Conn. Grinding-machine. No. 1,264,929; May 7; v. 250; p. 15.

Helm, Lewis R., assignor to The Ball and Roller Bearing Company, Danbury, Conn. Roll-grinding machine. No. 1,264,930; May 7; v. 250; p. 16.

Helmann, Albert, New York, N. Y. Internal-combustion engine. No. 1,265,654; May 7; v. 250; p. 211.

Heinen, John D. (See Miller, Bert W., assignor.)

Heins, Otto, New York, N. Y., and C. M. Wild, Springfield, Mass., assignors to Bosch Magneto Company, New York, N. Y. Magneto. No. 1,264,931; May 7; v. 250; p. 16.

Heins, Otto, New York, N. Y., C. M. and J. E. Wild, Springfield, Mass., assignors to Bosch Magneto Company, New York, N. Y. Gearing. No. 1,266,259; May 14; v. 250; p. 413.

Heinze, John O., assignor to The John O. Heinze Company, Springfield, Ohio. Starting and lighting system. No. 1,266,682; May 21; v. 250; p. 560.

Heizer, Levi L., Nichols, Iowa. Marking attachment for corn-planters. No. 1,267,546; May 28; v. 250; p. 826.

Helbronner, André. (See Henri, Helbronner, and Recklinghausen.)

Heller, Cedric E., Milwaukee, Wis. Electrical heating appliance. No. 1,266,941; May 21; v. 250; p. 632.

Heller, Eli. (See Milman, Maurice H., assignor.)

Hellmer, Ralph E., assignor to Southwark Foundry & Machine Co., Philadelphia, Pa. Condenser. No. 1,266,260; May 14; v. 250; p. 413.

Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,266,592; May 21; v. 250; p. 533.

Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system for alternating-current commutator-motors. No. 1,266,593; May 21; v. 250; p. 534.

Helms, Julius. (See Kurrell, Schneider, and Helms.)

Hely, Guy J., Fresno, Cal. Tray-stacking appliance. No. 1,267,869; May 28; v. 250; p. 919.

Hemenger, Francis R., Algonac, Mich. Traction-engine. No. 1,267,768; May 28; v. 250; p. 889.

Hendee Manufacturing Company. (See Gustafson, Carl J., assignor.)

Hendee Manufacturing Company. (See Hedstrom, Carl O., assignor.)

Hendershott, William H., Akron, assignor of one-half to R. S. Starcher, South Akron, Ohio. Bolt-cutter and shears. No. 1,267,663; May 28; v. 250; p. 859.

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Device for taking up and paying out slack. No. 1,265,328; May 7; v. 250; p. 124.

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Feeding and tensioning mechanism. No. 1,265,329; May 7; v. 250; p. 124.

Henderson, Clark T., assignor, by mesne assignments, to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Multiple-friction-disk device. No. 1,265,911; May 14; v. 250; p. 316.

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Winding mechanism. No. 1,266,942; May 21; v. 250; p. 632.

Henderson, George A., St. Albans, W. Va. Bituminous binder and making the same. No. 1,264,932; May 7; v. 250; p. 16.

Henderson, George A., St. Albans, W. Va. Fibrous composition and making the same. No. 1,265,655; May 7; v. 250; p. 212.

Henderson, George A., St. Albans, W. Va. Bituminous binder and making same from coal-tar pitch. No. 1,266,261; May 14; v. 250; p. 413.

Henderson, Sylvanus B., Sanford, Me., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Pulling-over machine. No. 1,267,408; May 28; v. 250; p. 788.

Hennessy, James J., St. Louis, Mo. Journal-lubricator. No. 1,265,198; May 7; v. 250; p. 91.

Hennessy, James J., St. Louis, Mo. Automatic journal-lubricator. No. 1,265,199; May 7; v. 250; p. 91.

Henniger, John B., and J. K. Guthrie, Perth Road, Ontario, Canada. Switch-operating means. No. 1,265,200; May 7; v. 250; p. 91.

Henri, Victor, A. Helbronner, and M. Recklinghausen, von, Paris, France, assignors, by mesne assignments, to The R. U. V. Company, Inc. Treatment of water and other liquids by ultra-violet rays. No. 1,266,803; May 21; v. 250; p. 594.

Henry, James W., Gooding, Idaho. Hydrocarbon-engine. No. 1,267,547; May 28; v. 250; p. 827.

Hensen, John H., Grand Rapids, Mich. Top and windshield connector. No. 1,266,123; May 14; v. 250; p. 376.

Herbert, Harry, assignor of one-half to B. Lebovitz, Chrome, N. J. Oil-can closure. No. 1,266,463; May 14; v. 250; p. 466.

Herbert, Michael E., Chicago, Ill. Boiler. No. 1,265,201; May 7; v. 250; p. 92.

Herl, Dragutin, La Salle, N. Y. Stretcher. No. 1,268,006; May 28; v. 250; p. 956.

Herman, Max, New York, N. Y. Cut-feather pompon. No. 1,267,548; May 28; v. 250; p. 827.

Herman Scheuer & Sons. (See Holland, Frederick W., assignor.)

Hermani, Henry, assignor to Tin Decorating Company, Baltimore, Md. Apparatus for applying hinge-pintles to box-part blanks. No. 1,267,409; May 28; v. 250; p. 788.

Heron, Robert F. (See Parsons and Heron.)

Herr, Henry C., assignor, by mesne assignments, to South Side Trust Company, trustee, Pittsburgh, Pa. Paste-applying mechanism. No. 1,265,202; May 7; v. 250; p. 92.

Herr, Henry C., assignor to Fiber Barrel Machinery & Manufacturing Company, Pittsburgh, Pa. Machine for applying chine-hoops to cylindrical bodies. No. 1,265,712; May 7; v. 250; p. 228.

Herr, Park A., Saybrook, N. J., assignor to The Singer Manufacturing Company. Feeding mechanism for sewing-machines. No. 1,265,448; May 7; v. 250; p. 159.

Herre, Alfred. (See Bauer and Herre.)

Herres, Michael P., Peola, Wash. Velocipede. No. 1,266,464; May 14; v. 250; p. 467.

Herrington, William M., Telluride, Colo. Sash-lock. No. 1,266,804; May 21; v. 250; p. 594.

Herrmann, E. F. (See Hood, Harry H., assignor.)

Hersee, Frederick C., Boston, Mass. Timer. No. 1,264,933; May 7; v. 250; p. 16.

Hert, Samuel N., Toledo, Ohio, assignor to Toledo Scale Company, Jersey City, N. J. Weighing-scale. No. 1,267,549; May 28; v. 250; p. 827.

Herz, Alfred. (See Schweitzer and Herz.)

Hess, Edward B., Brooklyn, assignor to Royal Typewriter Company, Inc., New York, N. Y. Type-writing machine. No. 1,267,769; May 28; v. 250; p. 889.

Hess, George H., La Grange Park, Ill. Apparatus for treating to an impregnating fluid, particles of non-uniform moisture content. No. 1,265,330; May 7; v. 250; p. 125.

Hester, William D. (See Utsman, George W., assignor.)

Hettrich, John, Lincoln, Nebr. Automobile driving-gear. No. 1,265,449; May 7; v. 250; p. 159.

Hettwer, Paul A., Milwaukee, Wis. Mattress and pillow rack. No. 1,266,943; May 21; v. 250; p. 632.

Hetzel, Frederic V., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Elevator. No. 1,266,262; May 14; v. 250; p. 414.

Hewitt, William R., San Francisco, Cal. Steering-gear. No. 1,266,944; May 21; v. 250; p. 632.

Hibbard, Edward R., Oak Park, assignor to Grip Nut Company, Chicago, Ill. Lock-nut. No. 1,266,263; May 14; v. 250; p. 414.

Hickerson, Elmer E., McComb, Ohio. Nut-lock. No. 1,266,594; May 21; v. 250; p. 534.

Hickey, John P., assignor of one-fourth to F. W. Clausen, San Francisco, Cal. Method of percussion and apparatus therefor. No. 1,266,945; May 21; v. 250; p. 633.

Hicks, James A., Cincinnati, Ohio. Fluid-pressure brake system. No. 1,265,450; May 7; v. 250; p. 159.

Hicks, John O., Levon, Fla. Vehicle-axle. No. 1,267,221; May 21; v. 250; p. 711.

Higginson, Joseph, and H. Arundel, Stockport, England. Machine for producing milling-cutters. No. 1,268,007; May 28; v. 250; p. 956.

Higinbotham, Arthur O., assignor to C. B. Foster and Company, Worcester, Mass. Motor-vehicle. No. 1,265,912; May 14; v. 250; p. 317.

Hilbrands, Egge T., Greene, Iowa. Mail receiving and delivering apparatus. No. 1,267,664; May 28; v. 250; p. 859.

Hiley, William W., Fort Valley, Ga. Interchangeable draft-harness. No. 1,266,264; May 14; v. 250; p. 414.

Hill, Arthur H., New York, N. Y. Folding tooth-brush. No. 1,266,465; May 14; v. 250; p. 467.

Hill, Charles H., Schenectady, N. Y., assignor to General Electric Company. Safety-stop for switches. No. 1,267,222; May 21; v. 250; p. 711.

Hill, George H., Schenectady, N. Y., assignor to General Electric Company. Protective device for telephone-circuits. No. 1,267,223; May 21; v. 250; p. 711.

Hill, George S., Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Safety device. No. 1,266,017; May 14; v. 250; p. 345.

Hill, Harry G., White Salmon, Wash. Ladder-adjusting means. No. 1,266,466; May 14; v. 250; p. 467.

Hill, Joseph, Toronto, Ontario, Canada. Internal-combustion engine. No. 1,265,913; May 14; v. 250; p. 317.

Hindley, Joseph. (See Lindberg and Hindley.)

Hines, Floyd O., and W. Mills, Milan, Ohio; said Mills assignor to said Hines. Lamp-burner. No. 1,267,072; May 21; v. 250; p. 668.

Hinman, Arthur V. and R. L., Oneida, N. Y. Milking-machine. No. 1,265,914; May 14; v. 250; p. 317.

Hinman, Ralph L. (See Hinman, Arthur V. and R. L.)

Hirth, Albert, Stuttgart-Cannstatt, Germany. Drying apparatus. No. 1,266,946; May 21; v. 250; p. 633.

Hitchcock, Edward W., Walden, Colo. Egg-shipping crate. No. 1,266,805; May 21; v. 250; p. 594.

Hitchcock Experiment Company. (See Hitchcock, Halbert K., assignor.)

Hitchcock, George E., assignor of one-third to M. Brown, Flint, Mich. Auto and screen door latch. No. 1,265,915; May 14; v. 250; p. 318.

Hitchcock, Halbert K., Pittsburgh, Pa., assignor of one-half to Hitchcock Experiment Company. Manufacture of glass plates or sheets. (Reissue.) No. 14,468; May 7; v. 250; p. 232.

Hitchcock, Joseph F., Rochester, N. Y. Stop mechanism. No. 1,268,008; May 28; v. 250; p. 957.

Hitt, Reed R., Energy, assignor to J. J. Urquhart, G. W. McClellan, and H. B. Johnson, San Saba, Tex. Boll-weevil catcher. No. 1,267,224; May 21; v. 250; p. 712.

Hjort, Vilhelm. (See Lassen and Hjort.)

Hlustik, Mike, South Brownsville, Pa. Bayonet-projector. No. 1,265,780; May 14; v. 250; p. 278.

Hoard, Halbert L., Fort Atkinson, Wis. Massage appliance. No. 1,265,083; May 7; v. 250; p. 60.

Hoch, Delton I., Columbus, Ohio. Oil-burner. No. 1,268,009; May 28; v. 250; p. 957.

Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Barrel-head seal. No. 1,265,656; May 7; v. 250; p. 212.

Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Barrel-head and seal. No. 1,265,657; May 7; v. 250; p. 212.

Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Head for barrels and the like. No. 1,265,658; May 7; v. 250; p. 213.

Hodgson, James F., Winchester, Va. Ice-cutting machine. No. 1,265,781; May 14; v. 250; p. 279.

Hoehne, Herman F., Kaukauna, Wis. Thistle-pulling machine. No. 1,267,073; May 21; v. 250; p. 669.

Hoeller, Josef, Albia, Iowa. Pencil-sharpener. No. 1,266,806; May 21; v. 250; p. 594.

Hoffman, Addison F. (See Campbell and Hoffman.)

Hoffmann, William, assignor to The Magee Carpet Co., Bloomsburg, Pa. Yarn-steamer. No. 1,266,265; May 14; v. 250; p. 414.

Hogan, George F., Chicago, Ill. Sleeve-protector. No. 1,266,266; May 14; v. 250; p. 415.

Hohlfeld, Herman L., Philadelphia, Pa. Terry-loom. No. 1,266,267; May 14; v. 250; p. 415.

Holcombe, George H., Lambertville, N. J. Burial-vault. No. 1,267,225; May 21; v. 250; p. 712.

Holland, Frederick W., assignor to Herman Scheuer & Sons, Brooklyn, N. Y. Adjustable kit. No. 1,265,331; May 7; v. 250; p. 125.

Holland, Walter J., Berkeley, Cal. Drill. No. 1,266,467; May 14; v. 250; p. 467.

Holland, William H., Bagdad, Fla. Folding ironing-table. No. 1,266,468; May 14; v. 250; p. 468.

Hollensbe, Ira J., Greensburg, assignor to The United Broom Company, Kokomo, Ind. Automatic carrier for feeding broom machinery. No. 1,266,947; May 21; v. 250; p. 633.

Hollensbe, Ira J., Greensburg, assignor to The United Broom Company, Kokomo, Ind. Broom. No. 1,267,550; May 28; v. 250; p. 827.

Holliday Chemical Company. (See Holliday, Karl J., assignor.)

Holliday, Karl J., Glen Osborne borough, assignor to Holliday Chemical Company, Neville Island, Neville township, Pa. Manufacturing surgical dressings. No. 1,268,076; May 28; v. 250; p. 975.

Holliday, Thomas C., Canton, Miss. Tire-tool. No. 1,268,071; May 28; v. 250; p. 973.

Hollis, Otis A., assignor to Hollis Sterilizing Equipment Company, Pittsburgh, Pa. Sterilizing-cabinet. No. 1,267,322; May 21; v. 250; p. 736.

Hollis Sterilizing Equipment Company. (See Hollis, Otis A., assignor.)

Hollowell, Evert, Kansas City, Kans. Hospital-bed. No. 1,266,268; May 14; v. 250; p. 415.

Holman, Franklin C., Pueblo, Colo. Power plant. No. 1,266,018; May 14; v. 250; p. 345.

Holmes, Frank A. B. (See Torgersen, Orne H., assignor.)

Holsworth, John, Evarts, Alberta, Canada. Trap. No. 1,265,659; May 7; v. 250; p. 213.

Holt, Charles L., assignor to Holt Roof Connection Co., Lawrence, Mass. Gravel-guard for roof-drains. No. 1,266,948; May 21; v. 250; p. 632.

Holt, Eugene and L., Burlington, N. C. Beam dyeing-machine. No. 1,265,332; May 7; v. 250; p. 125.

Holt, Lafayette. (See Holt, Eugene and L.)

Holt Roof Connection Co. (See Holt, Charles L., assignor.)

Holtzhouser, Jacob P., assignor to The Stanley Works, New Britain, Conn. Door-holder. No. 1,266,269; May 14; v. 250; p. 416.

Homan, Harry G., Chicago, Ill. Broom. No. 1,267,074; May 21; v. 250; p. 669.

Homrighausen, William F., assignor of one-half to A. S. Weaver, San Leandro, Cal. Tool. No. 1,266,683; May 21; v. 250; p. 560.

Hood, Harry H., Chicago, Ill., assignor to E. F. Herrmann. Internal-combustion engine. No. 1,266,124; May 14; v. 250; p. 376.

Hood, Harry H., assignor to E. F. Herrmann, Chicago, Ill. Gas-engine. No. 1,266,270; May 14; v. 250; p. 416.

Hoops, Marcus, Springvlew, Nebr. Means to prevent freezing of the water-cooling systems of automobiles. No. 1,265,782; May 14; v. 250; p. 279.

Hoover Suction Sweeper Company, The. (See Spangler, James M., assignor.)

Hornbeck, Richard E., Richmond, Cal. Ship and boat construction. No. 1,266,469; May 14; v. 250; p. 468.

Horne, Robert A., Birmingham, Ala. Power-press. No. 1,266,684; May 21; v. 250; p. 560.

Hornsey, John W., Summit, N. J., assignor to General Reduction Gas and By-Products Company. Gas-producer. No. 1,267,410; May 28; v. 250; p. 789.

Horster, Charles, Halleybury, assignor of one-half to M. Madorski, Gow-Ganda, Ontario, Canada. Resilient wheel. No. 1,265,660; May 7; v. 250; p. 213.

Hosack, James L., assignor to Standard Tube & Fence Co., Ltd., Woodstock, Ontario, Canada. Machine for forming tubes. No. 1,266,470; May 14; v. 250; p. 468.

Hosogai, Takuji, Los Angeles, Cal. Tobacco-receptacle. No. 1,265,916; May 14; v. 250; p. 318.

Hothersall, John M., Brooklyn, assignor to American Can Company, New York, N. Y. Shipping and marketing container. No. 1,266,685; May 21; v. 250; p. 561.

Hovey, Mark H. (See Julian, Hovey, and Clark.)

Howard, Frank W., New York, and George B. Cannon, Jr., Brooklyn, N. Y. Umbrella. No. 1,265,704; May 7; v. 250; p. 225.

Howard, George A., and G. L. Slater, assignors of one-half to F. S. Whitman, deceased, Buchanan, Mich.; M. D. Whitman, administratrix. Perambulator. No. 1,266,471; May 14; v. 250; p. 468.

Howard, Henry, Brookline, Mass. Liquid-feeding apparatus. No. 1,265,333; May 7; v. 250; p. 126.

Howard, Henry, Brookline, Mass., assignor to General Chemical Company. Making carbon dioxid and solid sodium sulfite. No. 1,266,595; May 21; v. 250; p. 534.

Howard, Ira T., Goshen, Ind. Planer. No. 1,264,934; May 7; v. 250; p. 17.

Howarth, Harry A. S., assignor to A. Kingsbury, Pittsburgh, Pa. Thrust-bearing. No. 1,265,334; May 7; v. 250; p. 126.

Howe, Olaf L., Missoula, Mont. Air-motor. No. 1,266,472; May 14; v. 250; p. 469.

Howell, Albert S., assignor to Bell & Howell Company, Chicago, Ill. Cinematograph or motion-picture film. No. 1,267,411; May 28; v. 250; p. 789.

Howell, Albert S., assignor to Bell & Howell Company, Chicago, Ill. Actuating mechanism for cinematographic films. No. 1,267,412; May 28; v. 250; p. 789.

Howell, Albert S., assignor to Bell & Howell Company, Chicago, Ill. Loop-forming mechanism for motion-picture apparatus. No. 1,267,413; May 28; v. 250; p. 790.

Howell, Elias W., Camden, N. J. Rope-loop. No. 1,265,661; May 7; v. 250; p. 214.

Howell, Frank B., Buffalo, N. Y., assignor to American Radiator Company, Chicago, Ill. Combined cooking-stove and hot-water heater. No. 1,266,534; May 14; v. 250; p. 487.

Howieson, John T., New York, N. Y., assignor, by meane assignments, of one-half to Burroughs Adding Machine Company, Detroit, Mich. Recording mechanism. No. 1,265,662; May 7; v. 250; p. 214.

Howorth, Lillian G., Wanganuin, New Zealand. Garment-suspender. No. 1,266,596; May 21; v. 250; p. 585.

Hoxie, Charles A., Schenectady, N. Y., assignor to General Electric Company. Electrical measuring apparatus and the method of operating the same. No. 1,266,478; May 14; v. 250; p. 469.

Hubbard, Henry E., Oak Park, Ill. Resetting device. No. 1,266,807; May 21; v. 250; p. 595.

Hubbell, Henry S., assignor to T. R. Almond Manufacturing Company, Ashburnham, Mass. Micrometer-calipers. No. 1,267,075; May 21; v. 250; p. 669.

Hubinger, George M., assignor to Star Detachable Towel-Holder Co., Milwaukee, Wis. Towel-holder. No. 1,267,414; May 28; v. 250; p. 790.

Huckestein, Norman C., Pittsburgh, Pa. Sliding-door pocket. No. 1,267,415; May 28; v. 250; p. 790.

Hudgen, Owen, Los Angeles, Cal. Optical-illusion device. No. 1,268,010; May 28; v. 250; p. 957.

Hudson, Albert E., Calgary, Alberta, Canada. Spark-arrester. No. 1,268,011; May 28; v. 250; p. 957.

Hudson, George A. (See Perry and Hudson.)

Hudson, Harry L., Brooklyn, N. Y. Closure for receptacles. No. 1,267,076; May 21; v. 250; p. 669.

Huebotter, Harry A., Davenport, Iowa, assignor to R. W. Phelps, Rock Island, Ill. Valve-operating mechanism. No. 1,267,337; May 21; v. 250; p. 741.

Huff, Hiram C., Vegreville, Alberta, Canada. Binder-truck. No. 1,267,870; May 28; v. 250; p. 910.

Hughes, Eldon C. (See Oakley and Hughes.)

Hughes, William M., Arncliffe, near Sydney, New South Wales, Australia. Carbureter. No. 1,264,935; May 7; v. 250; p. 17.

Huguelet, William P., Chicago, Ill. Envelop-making machine. No. 1,265,663; May 7; v. 250; p. 214.

Hulbrertse, Lawrence, Galien, Mich. Holdback for vehicles. No. 1,265,783; May 14; v. 250; p. 279.

Huldt, Sven, Stockholm, Sweden, assignor to Norsk Elektrisk Metalindustri Aktieselskap, Sarpsborg, Norway. Converting zinc powder into liquid zinc. No. 1,266,808; May 21; v. 250; p. 595.

Hultgren, William H. (See Rebmann and Hultgren.)

Humphrey Gas Pump Company. (See Humphrey, Herbert A., assignor.)

Humphrey, Herbert A., Westminster, London, England, assignor to Humphrey Gas Pump Company. Apparatus for raising or forcing liquids. No. 1,265,784; May 14; v. 250; p. 279.

Hundley, Harold H., Panther, W. Va. Straight-edge attachment. No. 1,267,665; May 28; v. 250; p. 860.

Hundley, Nannie L. (See Sprouse, James L., assignor.)

Hunt Brothers Company. (See Staley, Homer C., assignor.)

Hunt, Edward P., Buffalo, N. Y. Puzzle or game apparatus. No. 1,266,271; May 14; v. 250; p. 416.

Hunt, William E., assignor to Ottumwa Box Car Loader Co., Ottumwa, Iowa. Car-unloader. No. 1,266,474; May 14; v. 250; p. 470.

Hunt, William E., assignor to Ottumwa Box Car Loader Co., Ottumwa, Iowa. Car-loader. No. 1,266,475; May 14; v. 250; p. 470.

Hurd, Hubbard F., assignor to Cluett, Peabody & Co. Inc., Troy, N. Y. Fold-collar. No. 1,267,770; May 28; v. 250; p. 890.

Hurford, Ebenezer B., New York, N. Y. Theatrical apparatus. No. 1,266,476; May 14; v. 250; p. 470.

Hurst, George H., Jr., Sumter, S. C. Blood-drainer for embalming. No. 1,266,477; May 14; v. 250; p. 471.

Huseby, Albert A., Chicago, Ill. Used-needle receiver for talking-machines. No. 1,267,077; May 21; v. 250; p. 669.

Hutchings, Charles E. (See Ruttan and Hutchings.)

Hutchins, George F., and H. Le Doux, assignors to Crompton & Knowles Loom Works, Worcester, Mass. Loom for weaving double-pile fabrics. No. 1,265,084; May 7; v. 250; p. 60.

Hutchins, Otis, assignor to The Carborundum Company, Niagara Falls, N. Y. Producing silicon-carbid articles. No. 1,266,478; May 14; v. 250; p. 471.

Hutchinson, Warren B., Newark, N. J. Machine for filling match-boxes. No. 1,266,809; May 21; v. 250; p. 595.

Huth, Clarence J., North Branch, N. Y. Window attachment. No. 1,264,936; May 7; v. 250; p. 17.

Hutzelman, John, and I. Beresford, Warner Springs, Cal.; said Beresford assignor to said Hutzelman. Funnel. No. 1,266,019; May 14; v. 250; p. 346.

Hy-Watt Battery Company, The. (See Smith, Ralston F., assignor.)

Hyatt Roller Bearing Division, United Motors Corporation. (See Lockwood, Charles S., assignor.)

Hylton, John A., assignor of one-half to W. E. White, Hatcher, W. Va. Clothes-drier. No. 1,267,226; May 21; v. 250; p. 712.

I. B. Kleinert Rubber Co. (See Basch, David, assignor.)

Iligan, Carl. (See Iligan, Otto E. and C.)

Iligan, Otto E., New York, and C. Iligan, Corona, N. Y. Flying-machine. No. 1,264,937; May 7; v. 250; p. 18.

Illinois Tool Works. (See Olson, Carl G., assignor.)

Illinois Watch Case Co. (See Hathaway, Thomas F., assignor.)

Improved Paper Machinery Company. (See Haug, Anton J., assignor.)

Imus, Luther E., Atolia, Cal. Lock-nut. No. 1,265,335; May 7; v. 250; p. 126.

Individual Drinking Cup Company. (See Luellen, Lawrence W., assignor.)

Industrial Chemical Company. (See Statham, Noel, assignor.)

Industrial Controller Company. (See Van Valkenburg, Hermon L., assignor.)

Inescort, Elanie, *et al.* (See Cobb, Bayard G., assignor.)

Ingram, Alfred, Brooklyn, N. Y. Receptacle-closure. No. 1,265,451; May 7; v. 250; p. 160.

Ingram, George E., Roman, Mont. Fuel-gage. No. 1,265,336; May 7; v. 250; p. 126.

Internal Combustion Steam Engine Co. (See Mulligan, Paul C., assignor.)

International Cigar Machinery Company. (See Anderson, Gustav, assignor.)

International Cork Company. (See Alberti, Caritj and La Femina, assignors.)

International Harvester Company of New Jersey. (See Pearson, Charles, assignor.)

International Motor Company. (See Masury, Alfred F., assignor.)

International Patent Licensing Corporation. (See Peters, William A., assignor.)

International Supply Co. (See La Point, Frank L., assignor.)

International Time Recording Company of New York. (See Bryce, James W., assignor.)

Intertype Corporation. (See Armstrong, Henry A., assignor.)

Isaacs, Moses, New York, N. Y. Cloth-laying machine. No. 1,265,452; May 7; v. 250; p. 160.

Isbell, John A. (See Wood and Isbell.)

Isert, Arthur, assignor to Pacific Box Factory, San Francisco, Cal. Box-trimming machine. No. 1,265,337; May 7; v. 250; p. 127.

Ishida, Ryutaro, Los Angeles, Cal. Military game. No. 1,265,085; May 7; v. 250; p. 60.

Isnard, Maxence, Grenoble, France. Lathe. No. 1,265,785; May 14; v. 250; p. 280.

Ivory, James W., Philadelphia, Pa. Dental multiple-jaw cervix-clamp. No. 1,265,664; May 7; v. 250; p. 214.

Iwata, Yoshito, Buffalo, N. Y. Combined chair, table, and fire-escape. No. 1,265,203; May 7; v. 250; p. 92.

J. B. Carbureter Corporation. (See Abell, Rollin, assignor.)

J. B. Williams Company, The. (See Williams, Philip K., assignor.)

J. G. Wilson Corporation, The. (See Norton, John R., assignor.)

J. H. Sager Company. (See Sager, James H., assignor.)

Jackson, Frederick E., Chorlton-cum-Hardy, England. Respirator-helmet. No. 1,267,666; May 28; v. 250; p. 860.

Jacob, Thomas H., Wausau, Wis. Circulating device for automobile-cooling systems. No. 1,267,416; May 28; v. 250; p. 791.

Jacobs, George S., Pontiac, Mich., assignor to The Geneva Tractor Company, Geneva, Ohio. Attachment for automobiles. No. 1,265,086; May 7; v. 250; p. 60.

Jacobs, Louis, Chicago, Ill. Sleeping-bag. No. 1,267,551; May 28; v. 250; p. 828.

Jacobus, David S., Jersey City, assignor to The Babcock and Wilcox Company, Bayonne, N. J. Steam-boiler. No. 1,267,078; May 21; v. 250; p. 670.

Jacoby, Benjamin. (See King, Jacoby, and Roush.)

Jacoby, Richard, Berlin, Germany, assignor to General Electric Company. Leading-in conductor. No. 1,265,665; May 7; v. 250; p. 214.

Jaeger, Arthur. (See Foerster, Oscar, assignor.)

Jaeger, Herman J., Weehawken, N. J. Metallic-filament lamp and making it. No. 1,265,204; May 7; v. 250; p. 93.

Jakab, Mike, assignor of one-fourth to A. Gorej and one-fourth to J. Juhasz, Woodland, Me. Milk-receptacle. No. 1,267,552; May 28; v. 250; p. 828.

Jakubik, Jan, Windber, Pa. Ship-protector. No. 1,266,020; May 14; v. 250; p. 346.

James N. Mayhew Company. (See Mayhew, James N., assignor.)

Jameson, William A., Niagara Falls, N. Y., assignor to Wm. A. Rogers, Limited, Toronto, Ontario, Canada. Mirror and casing therefor. No. 1,264,938; May 7; v. 250; p. 18.

Jansen, Edward W., New York, N. Y., and J. Wattmann, Treptow, near Berlin, Germany, assignors to Atlantic Welding Corporation, New York, N. Y. Rail-joint. No. 1,266,597; May 21; v. 250; p. 535.

Jartti, Mieli R., Glencoe, Wyo. Sled attachment for automobiles. No. 1,267,871; May 28; v. 250; p. 919.

Jarvis, Frank, Kings Park, N. Y. Emergency-tire. No. 1,265,666; May 7; v. 250; p. 215.

Jay, Harry B., Chicago, Ill. Drum-snare. No. 1,265,917; May 14; v. 250; p. 318.

Jay, Webb, Chicago, Ill. Vacuum liquid-feed device for internal-combustion engines. No. 1,264,939; May 7; v. 250; p. 18.

Jean, William T. (See Anderson, Newton M., assignor.)

Jeavons, William R., and A. R. Whittaker, Cleveland, Ohio. Oil-stove. (Reissue.) No. 14,477; May 28; v. 250; p. 975.

Jedel, Aaron, New York, N. Y. Pyrotechnic article and making same. No. 1,265,205; May 7; v. 250; p. 93.

Jefferson, Harry H. K. (See Peebles and Jefferson.)

Jeffrey Manufacturing Company, The. (See Dunlop, Robert R., assignor.)

Jeffrey Manufacturing Company, The. (See Levin, Nils D., assignor.)

Jeffrey Manufacturing Company, The. (See Waxborn, Carl J. E., assignor.)

Jenkins, Asa M. (See Lafferty, Robert C., assignor.)

Jenkins, Charles D., assignor to Peat Coal Limited, Boston, Mass. Machine for extracting liquids from various materials. No. 1,265,206; May 7; v. 250; p. 93.

Jenks, Barton P., assignor to Gorham Manufacturing Company, Providence, R. I. Serving-dish. No. 1,265,338; May 7; v. 250; p. 127.

Jennings, Ode D. (See Ford, Shelley W., assignor.)

Jensen, George C., Oakland, Cal. Lock-controlled lever-locking mechanism. No. 1,265,667; May 7; v. 250; p. 215.

Jensen, George C., Oakland, Cal. Lever-mounting. No. 1,267,079; May 21; v. 250; p. 670.

Jensen, Peter L. (See Pridham and Jensen.)

Jensen, Vernon W., Council Bluffs, Iowa. Dust-hood for vehicle-tops. No. 1,266,598; May 21; v. 250; p. 535.

Jensen, Victor G., Chicago, Ill. Fuse. No. 1,266,479; May 14; v. 250; p. 471.

Jewett, James F., *et al.* (See Lindberg, Charles A., assignor.)

Jirouch, Bohumil L., assignor to White Sewing Machine Company, Cleveland, Ohio. Needle-clamp for sewing-machines. No. 1,268,012; May 28; v. 250; p. 958.

Johanresen, Svend E., Pittsfield, Mass., assignor to General Electric Company. Transformer. No. 1,266,480; May 14; v. 250; p. 471.

John Ford Starter Company, The. (See Eidson, Davis, and Crouse, assignors.) (Reissue.)

John O. Heinze Company, The. (See Heinze, John O., assignor.)

John Thomson Press Company. (See Thomson, John, assignor.)

Johnson, Alfred E., Denver, Colo. Cartridge-fuse. No. 1,266,599; May 21; v. 250; p. 535.

Johnson, Amos R., assignor of one-third to E. G. Van Alen and one-third to S. D. Burk, Northumberland, Pa. Lubricating apparatus. No. 1,266,272; May 14; v. 250; p. 416.

Johnson Automatic Sealer Co. (See Johnson, Harry L., assignor.)

Johnson, Frank, assignor to Cadillac Motor Car Company, Detroit, Mich. Speed-changing mechanism. No. 1,265,668; May 7; v. 250; p. 215.

Johnson, Frank, and B. M. Applebee, Brooklyn, N. Y. Folding game-table. No. 1,266,125; May 14; v. 250; p. 376.

Johnson, Frank A., University Place, Nebr. Automatic eraser for type-writers. No. 1,266,481; May 14; v. 250; p. 472.

Johnson, Harry L., assignor to Johnson Automatic Sealer Co., Ltd., Battle Creek, Mich. Wrapping and sealing machine. No. 1,266,686; May 21; v. 250; p. 561.

Johnson, Henry B., *et al.* (See Hitt, Reed R., assignor.)

Johnson, John D. A., Muskegon, Mich. Dolly for washing-machines. No. 1,264,940; May 7; v. 250; p. 18.

Johnson, John L., Seattle, Wash. Camera. No. 1,266,810; May 21; v. 250; p. 595.

Johnson & Johnson. (See Johnson, Robert W., assignor.)

Johnson, Joseph E., assignor to Connecticut Telephone & Electric Company, Inc., Meriden, Conn. Breaker-arm for igniters. No. 1,266,811; May 21; v. 250; p. 596.

Johnson, Joseph O., Coalinga, Cal. Pad for horse-collars. No. 1,266,812; May 21; v. 250; p. 596.

Johnson, Robert W., assignor to Johnson & Johnson, New Brunswick, N. J. First-aid packet. No. 1,268,064; May 28; v. 250; p. 972.

Johnson Service Company. (See Fortier, Charles L., assignor.)

Johnson, Tomlinson F., Jr., Atlanta, Ga. Boltless guy-clamp. No. 1,266,120; May 14; v. 250; p. 377.

Johnson, Wilfred G., Elyria, assignor to W. B. D. Alexander, Cleveland, Ohio. Brake mechanism for motor-cycles and the like. No. 1,265,786; May 14; v. 250; p. 280.

Johnson, William, Sioux City, Iowa. Device for moistening hot air from furnaces. No. 1,265,207; May 7; v. 250; p. 93.

Johnson, William H., Pine Bluff, Ark. Cooking-fork. No. 1,265,087; May 7; v. 250; p. 61.

Johnston, Clarence S., Glendive, Mont. Demountable rim. No. 1,265,787; May 14; v. 250; p. 280.

Johnston, Renord C., Buffalo Gap, Tex. Trousers-stretcher. No. 1,265,669; May 7; v. 250; p. 216.

Johnston, Roscoe C., St. Louis Park, assignor of one-half to E. Nelson, Minneapolis, Minn. Making phonograph-needles. No. 1,266,949; May 21; v. 250; p. 634.

Johnston, William L., Lansing, Mich. Car-unloading machine. No. 1,266,273; May 14; v. 250; p. 417.

Jones, Charles M., North Yakima, Wash. Tire-carrier. No. 1,267,227; May 21; v. 250; p. 712.

Jones, Charles M., North Yakima, Wash. Tire-carrier. Re. 1,267,228; May 21; v. 250; p. 712.

Jones, Charles R., Rossville, Ga. Strainer attachment for drinking vessels. No. 1,267,417; May 28; v. 250; p. 791.

Jones, Edward F., Indianapolis, Ind., Carbon-removing-solution holder. No. 1,266,950; May 21; v. 250; p. 634.

Jones, Elmer W. (See Cable and Jones.)

Jones, Ernest H., Canonbury, London, England. Metal electrode used in electric-arc deposition of metals. No. 1,265,453; May 7; v. 250; p. 160.

Jones, Fred E., assignor to J. F. Donnelly, Brockton, Mass. Boot and shoe. No. 1,266,535; May 14; v. 250; p. 488.

Jones, Henry, Oregon City, Oreg. Steel-tape cleaner. No. 1,265,339; May 7; v. 250; p. 127.

Jones, Paul, and R. C. Miller, Toledo, Ohio. Railway ditching-machine. No. 1,265,088; May 7; v. 250; p. 61.

Jones, Pearl N., Pittsburgh, and J. W. Welsh, Oakmont, Pa. Control of electric motors and apparatus therefor. No. 1,264,941; May 7; v. 250; p. 19.

Jones, William T. (See Andres and Jones.)

Jones, Wirt J., Phoenix, Ariz. Adjustable necktie. No. 1,267,553; May 28; v. 250; p. 829.

Judelshon, Oscar I., Brooklyn, N. Y. Strip-winding machine. No. 1,267,080; May 21; v. 250; p. 670.

Judy, Andrew W., assignor of one-third to G. M. Burnett and one-third to D. A. Lee, Centerville, Iowa. Carwheel. No. 1,266,813; May 21; v. 250; p. 596.

Juhasz, John, *et al.* (See Jakab, Mike, assignor.)

Julian-Beggs Signal Company. (See Julian, Hovey, and Clark, assignors.)

Julian, Marsena R., Cincinnati, Ohio, M. H. Hovey, Madison, Wis., and T. E. Clark, Detroit, Mich., assignors to Julian-Beggs Signal Company, Terre Haute, Ind. Block-signal system. No. 1,267,771; May 28; v. 250; p. 890.

Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company, Elastic-fluid turbine. No. 1,267,229; May 21; v. 250; p. 718.

Junggren, Oscar, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. No. 1,266,872; May 28; v. 250; p. 920.

Junghans, Arthur, Schramberg, Germany. Weight-operated mechanical time-fuse. No. 1,266,687; May 21; v. 250; p. 562.

Jurgenson, Louis F., Grand Rapids, Mich. Paper-making machine. No. 1,267,667; May 28; v. 250; p. 860.

K.-D. Carburetor Company, The (See Kingston, Frank L., assignor.)

Kabo Corset Co. (See Orewiler, Benjamin F., assignor.)

Kačer, Filip. (See Wolff and Kačer.)

Kading & Kading. (See Maresch, August J., assignor.)

Kahn, Edward C., Milwaukee, Wis. Liquid-fuel burner. No. 1,265,208; May 7; v. 250; p. 94.

Kahn, Edward C., Milwaukee, Wis. Liquid-fuel-burner head. No. 1,265,209; May 7; v. 250; p. 94.

Kahn, Edward C., Milwaukee, Wis. Fluid-fuel burner. No. 1,265,210; May 7; v. 250; p. 94.

Kahne, Michael, New York, N. Y. Stiffening device for soft collars. No. 1,266,274; May 14; v. 250; p. 417.

Kaier, Edward J., Mahanoy City, Pa. Tank-valve. No. 1,265,670; May 7; v. 250; p. 216.

Kaisling, William, assignor to Kellogg Switchboard & Supply Company, Chicago, Ill. Signaling-horn. No. 1,267,418; May 28; v. 250; p. 791.

Kaita, Kisel K., Lahaina Main, Hawaii. Sugar-refining apparatus. No. 1,267,419; May 28; v. 250; p. 791.

Kalamazoo Loose Leaf Binder Co. (See Wigginton, George P., assignor.)

Kaman, Max, assignor to M. Kaman, Rochester, N. Y. Radiator. No. 1,265,340; May 7; v. 250; p. 127.

Kaman, Minnie. (See Kaman, Max, assignor.)

Kammerhoff, Heinrich H. M., Orange, assignor to Edison Storage Battery Company, West Orange, N. J. Current-supplying apparatus. No. 1,266,814; May 21; v. 250; p. 596.

Kamrass, Harris, New York, N. Y. Air-cushion. No. 1,266,482; May 14; v. 250; p. 472.

Karatsu, Tokumitsu, Los Angeles, Cal. Combination percussion-hammer. No. 1,267,554; May 28; v. 250; p. 828.

Karppinen, Karl, Brisbane, Queensland, assignor of one-half to T. Garrett and P. J. Ure, Brisbane, Australia. Automatic protective device. No. 1,268,014; May 28; v. 250; p. 958.

Kasprzycki, Stanley, South Holland, Ill., assignor of one-fourth to B. Stankiewics and one-fourth to A. Wantor, Adena, Ohio. Automobile-wheel. No. 1,266,600; May 21; v. 250; p. 536.

Kassner, John C., Manitowoc, Wis. Arm-sling. No. 1,266,688; May 21; v. 250; p. 562.

Kaufman, Sydney L., Kittanning, Pa. Type-bar action. No. 1,267,873; May 28; v. 250; p. 920.

Kavanagh, George L., Montreal, Quebec, Canada. Tire. No. 1,266,127; May 14; v. 250; p. 377.

Kazmann, Boris, Battle Creek, Mich., assignor to Kellogg Laboratories, Incorporated. Producing alcohol from burnt or roasted starch-bearing materials, &c. No. 1,267,081; May 21; v. 250; p. 671.

Keeler Brass Company. (See Yeo and Wiesman, assignors.)

Keeley, Michael E., Chadwicks, N. Y. Swift-brace for reels. No. 1,264,942; May 7; v. 250; p. 19.

Keemer, Charles H., Buffalo, N. Y. Safety car-brake. No. 1,267,555; May 28; v. 250; p. 829.

Keffo, Albert F., assignor to Automatic Button Co., Muscatine, Iowa. Machine for counting buttons. No. 1,266,483; May 14; v. 250; p. 472.

Keim, Ivan N., Mount Holly, N. J. Resilient vehicle-tire. No. 1,267,230; May 21; v. 250; p. 713.

Keith, George, Sheridan, Ill. Tire-pump. No. 1,265,211; May 7; v. 250; p. 94.

Keith, George W. (See Tuttle and Keith.)

Keller, Audree P., Toledo, Ohio. Filet-crocheting. No. 1,266,951; May 21; v. 250; p. 634.

Keller, Charles G., Poughkeepsie, N. Y. Wrench. No. 1,265,341; May 7; v. 250; p. 128.

Keller, Leo P. (See Kremer, Alfred, assignor.)

Kelley, Alexander, assignor to Climax Machine Co., Wilmington, Del. Match-carrier. No. 1,266,952; May 21; v. 250; p. 634.

Kelley, Alexander, assignor to Climax Machine Co., Wilmington, Del. Delivery mechanism for match-machines. No. 1,266,953; May 21; v. 250; p. 635.

Kelley, Elias H., New York, N. Y. Feeding mechanism for vending-machines. No. 1,265,788; May 14; v. 250; p. 281.

Kelley, Elias H., New York, N. Y. Vending-machine. No. 1,266,021; May 14; v. 250; p. 346.

Kelley, Harry, Wilmington, Del. Feed-box for match-making machines. No. 1,266,815; May 21; v. 250; p. 597.

Kelley, James T., West Rush, N. Y. Oil-stove attachment. No. 1,268,013; May 28; v. 250; p. 958.

Kelley, Robert, Bowie, Tex. Drive-belt. No. 1,266,275; May 14; v. 250; p. 417.

Kelley, William V. (See Stevens, Burt D., assignor.)

Kellner, Gustav A. H., assignor to Bausch & Lomb Optical Company, Rochester, N. Y. Ophthalmic test-lens set. No. 1,265,671; May 7; v. 250; p. 216.

Kellogg, Charles A. (See Klingel, Edward L., assignor.)

Kellogg Laboratories. (See Kazmann, Boris, assignor.)

Kellogg Switchboard & Supply Company. (See Kaisling, William, assignor.)

Kellogg Switchboard & Supply Company. (See Reid, William, assignor.)

Kelly, Edwin W. (See Snook and Kelly.)

Kelly, Walter E., Detroit, Mich. Hanger-anchor. No. 1,266,128; May 14; v. 250; p. 377.

Kemp, James F., Manila, Philippine Islands. Vehicle-wheel. No. 1,267,082; May 21; v. 250; p. 671.

Kennedy, Charles W. (See Wright and Kennedy.)

Kennedy, Cora M. S., executrix. (See Kennedy, Frederick A.)

Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,266,022; May 14; v. 250; p. 346.

Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,266,023; May 14; v. 250; p. 347.

Kennedy, Frederick A., deceased, Danielson, Conn., C. M. S. Kennedy, executrix, assignor to The General Eclipse Company. Inkstand. No. 1,266,484; May 14; v. 250; p. 473.

Kennedy, George C., Waterloo, Iowa. Marble-shooter. No. 1,266,276; May 14; v. 250; p. 417.

Kennedy, Julian, Pittsburgh, Pa. Rolling-mill table. No. 1,267,874; May 28; v. 250; p. 920.

Kennedy, Lawrence F., St. Paul, Minn. Gun-stock. No. 1,266,024; May 14; v. 250; p. 347.

Kennedy, Thomas B., *et al.* (See Mitchell, Amos, assignor.)

Kennelly, Edward F., assignor of one-half to W. J. Sheils, Boston, Mass. Concrete ship-hull. No. 1,267,868; May 28; v. 250; p. 860.

Kensington, William O., Detroit, Mich., assignor to Remy Electric Company, Anderson, Ind. Circuit-breaker and distributer unit. No. 1,265,918; May 14; v. 250; p. 318.

Kenny, Luther T., Hawarden, Iowa. Swinging car-door and hanger. No. 1,265,672; May 7; v. 250; p. 217.

Kenyon, Otis A., New York, N. Y. Electric-arc welding. No. 1,265,342; May 7; v. 250; p. 128.

Kenzy, Oscar, Chicago, Ill. Garment. No. 1,265,089; May 7; v. 250; p. 61.

Kerekes, John. (See Kovacs, Charles, assignor.)

Kerley, Raymond A., Chicago, Ill. Automatic gas shut-off for cylinder-presses. No. 1,267,420; May 28; v. 250; p. 792.

Kerndl, Louis F., Lansing, Mich. Combined tire-valve and pressure-governor. No. 1,267,231; May 21; v. 250; p. 713.

Kettering, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. System of selective electrical distribution. No. 1,264,943; May 7; v. 250; p. 19.

Kettering, Charles F., and W. A. Chryst, Dayton, Ohio, assignors to The Dayton Engineering Laboratories Company. Ignition system. No. 1,265,454; May 7; v. 250; p. 160.

Keyes, Frederick G., Boston, Mass. Refrigerating composition. No. 1,267,772; May 28; v. 250; p. 890.

Kidder, Henry M., *et al.* (See Cobb, Bayard G., assignor.)

Kiesel, William F., Jr., Altoona, Pa. Railway-car. No. 1,267,421; May 28; v. 250; p. 792.

Kieves, Philip. (See Mallove, Greenberg, and Kieves.)

Kilgore, Frederick O., Somerville, assignor to Spray Primer Company, Boston, Mass. Primer. No. 1,265,919; May 14; v. 250; p. 319.

Killgore, Charles N., *et al.* (See Biggers, Lee P., assignor.)

Killman, Thomas A., Nashville, Tenn. Reclining swing. No. 1,266,129; May 14; v. 250; p. 377.

Kimbler, Henry R., Dallas, Tex. Air-regulating attachment. No. 1,266,130; May 14; v. 250; p. 378.

Kincade, John M., Springfield, Mass. Cemetery-car. No. 1,266,601; May 21; v. 250; p. 586.

King, Charles B., B. Jacoby, and H. E. Roush, assignors to The Marion Steam Shovel Company, Marion, Ohio. Steering device for revolving shovels and the like. No. 1,267,422; May 28; v. 250; p. 792.

King, De Witt, *et al.* (See Harris, Hubert E., assignor.)

King, George H., and G. Roberts, Port Arthur, Tex., assignors to Gulf Refining Company, Pittsburgh, Pa. Making aluminum chlorid. No. 1,268,015; May 28; v. 250; p. 958.

King, George R. (See Parnell, Charles P., assignor.)

King, Guy, *et al.* (See Harris, Hubert E., assignor.)

King, Harry O., assignor to Phenix Truck Makers Inc., Chicago, Ill. Bearing-spacer for automobile-truck axles. No. 1,265,090; May 7; v. 250; p. 62.

King, Spurgeon, *et al.* (See Harris, Hubert E., assignor.)

Kinghorn, George, Rockyhill, Conn. Pocket door-lock. No. 1,266,689; May 21; v. 250; p. 562.

Kingsbury, Albert. (See Howarth, Harry A. S., assignor.)

Kingsbury, Edward J. (See Kingsbury, Harry T. and E. J.)

Kingsbury, George P., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical casting-machine. No. 1,265,343; May 7; v. 250; p. 129.

Kingsbury, George P., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,265,344; May 7; v. 250; p. 129.

Kingsbury, Harry T. and E. J., Keene, N. H. Aquatic toy. No. 1,266,016; May 28; v. 250; p. 959.

Kingston, Frank L., assignor to The K.-D. Carburetor Company, Cleveland, Ohio. Making sheet-metal balls. No. 1,266,485; May 14; v. 250; p. 473.

Kinnard, Frank M., assignor of one-half to C. L. Sebring, Sebring, Ohio. Stove-room for potteries. No. 1,265,091; May 7; v. 250; p. 62.

Kinnie, Clarence R., Wolfville, Nova Scotia, Canada. Cooking utensil. No. 1,266,816; May 21; v. 250; p. 597.

Kinsella, Paul W. (See Giles and Kinsella.)

Kintzele, Julius H. (See Schuette and Kintzele.)

Kirby, James B., Cleveland, Ohio. Vacuum cleaning-machine. No. 1,265,789; May 14; v. 250; p. 281.

Kirby, James B., Cleveland, Ohio. Agitating device for vacuum-cleaner nozzles. No. 1,265,790; May 14; v. 250; p. 281.

Kirby, James B., Cleveland, Ohio. Vacuum cleaning-machine. No. 1,265,791; May 14; v. 250; p. 282.

Kirby John, Jr. (See Eckert and Kirby.)

Kirby, John, Jr., assignor to The Dayton Manufacturing Company, Dayton, Ohio. Shaft-operating mechanism. No. 1,266,277; May 14; v. 250; p. 418.

Kirby, John, Jr., assignor to The Dayton Manufacturing Company, Dayton, Ohio. Car-brake mechanism. No. 1,266,278; May 14; v. 250; p. 418.

Kiriyama, Hisataro, Elmonte, Cal. Automobile-jack. No. 1,266,958; May 21; v. 250; p. 636.

Kirk, Shirley C., Windsor, Ill. Internal-combustion engine. No. 1,266,954; May 21; v. 250; p. 635.

Kirley, John R., Marietta, and H. B. Walker, Lancaster, Ohio. Wire-line pumping outfit for oil-wells. No. 1,266,817; May 21; v. 250; p. 597.

Kirschbaum, John, assignor to Waterbury Mfg. Co., Waterbury, Conn. Shade-holder. No. 1,266,818; May 21; v. 250; p. 598.

Kissinger, Harry C., Polk, Wis. Roller-truck tire-saver. No. 1,266,819; May 21; v. 250; p. 598.

Kissinger, Harry C., Polk, Wis. Roller-truck tire-saver. No. 1,266,820; May 21; v. 250; p. 598.

Kittredge, Frank P., Milo, Me. Lathe attachment. No. 1,267,083; May 21; v. 250; p. 671.

Kjelstad, Ole, West Duluth, Minn. Car-loader. No. 1,265,673; May 7; v. 250; p. 217.

Kjorlien, Otto L., *et al.* (See Spangler, John H., assignor.)

Kleber, Samuel L., Pittsburgh, Pa. Trunk. No. 1,265,212; May 7; v. 250; p. 94.

Kleidman, Joseph. New York, N. Y. Geometrical instrument. No. 1,267,323; May 21; v. 250; p. 736.

Klein, Charles J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Casing for lamp-sockets and the like. No. 1,267,875; May 28; v. 250; p. 921.

Klein, Frederick, trustee. (See Terwilliger, William H., assignor.)

Klein, John, Washington, D. C. Spring-support. No. 1,268,077; May 28; v. 250; p. 975.

Kleinegris, Engelbertus, Chicago, Ill. Tool-holder. No. 1,266,486; May 14; v. 250; p. 473.

Kleopfert, Georgie, *et al.* (See Spangler, John H., assignor.)

Kliewer, Edward A., Fairview, Okla. Well casing and tool fishing device. No. 1,266,821; May 21; v. 250; p. 598.

Kiln, John R., assignor to The Germless Paper Cup Company, Dayton, Ohio. Holder for paper cups. No. 1,266,279; May 14; v. 250; p. 418.

Klingel, Edward L., St. Paul, assignor of one-half to C. A. Kellogg, Minneapolis, Minn. Train-check holder. No. 1,265,674; May 7; v. 250; p. 217.

Klock, Clinton, Middleport, Pa. Perch structure. No. 1,265,675; May 7; v. 250; p. 217.

Klugh, Paul B., assignor to The Cable Company, Chicago, Ill. Expression device for automatic musical instruments. No. 1,265,792; May 14; v. 250; p. 282.

Klump, William, East Orange, N. J. Gage. No. 1,265,676; May 7; v. 250; p. 218.

Klunk, Albert J., assignor to I. M. Walcott, Los Angeles, Cal. Oil-burner. No. 1,266,959; May 21; v. 250; p. 636.

Knack, Frederick, Hoquiam, Wash. Portable house. No. 1,266,822; May 21; v. 250; p. 599.

Knapp, William S., Kansas City, Mo. Vehicle-spring. No. 1,265,677; May 7; v. 250; p. 218.

Knauff, George C., Chicago, Ill., assignor to Edmunds & Jones Corporation, Detroit, Mich. Electric fitting. No. 1,265,455; May 7; v. 250; p. 161.

Knauss, Albert L., Sugar City, Idaho. Wheel. No. 1,266,025; May 14; v. 250; p. 347.

Kniffler, Bruno, Winchester, assignor to Vera Chemical Company, Stoneham, Mass. Waterproof composition for coating paper. No. 1,266,955; May 21; v. 250; p. 635.

Kniffler, Bruno, Winchester, assignor to Vera Chemical Company, Stoneham, Mass. Making waterproof composition for coating paper. No. 1,266,956; May 21; v. 250; p. 635.

Knight, Alice M., Tunbridge Wells, England. Saucepan. No. 1,268,017; May 28; v. 250; p. 959.

Knight, James H., Fort Worth, Tex. Carbon-brush holder. No. 1,268,018; May 28; v. 250; p. 959.

Kniseley, Leander J. and W. B., Burnsville, W. Va. Door-hanger. No. 1,267,556; May 28; v. 250; p. 829.

Kniseley, William B. (See Kniseley, Leander J. and W. B.)

Knopp, Otto A., Oakland, Cal. Electric water-heater. No. 1,265,213; May 7; v. 250; p. 95.

Knorr, Katherine, Norwalk, Conn. Skirt-gage. No. 1,266,602; May 21; v. 250; p. 536.

Knox, Luther L., Avalon, assignor to Blaw-Knox Company, Pittsburgh, Pa. Building structure. No. 1,267,084. May 21; v. 250; p. 671.

Knox, Luther L., Bellevue, assignor to Blaw-Knox Company, Pittsburgh, Pa. Water-cooled skewback for furnaces. No. 1,267,085; May 21; v. 250; p. 672.

Knudsen, Jens J. (See Smith, Milton R., assignor.)

Knudsen, Oscar C. M., Brooklyn, N. Y. Producing a hard copper alloy. No. 1,267,669; May 28; v. 250; p. 861.

Koch, George P., New Brunswick, N. J. Camera. No. 1,265,456; May 7; v. 250; p. 161.

Koch, Gotthardt, Chicago, Ill. Automobile-lock. No. 1,267,557; May 28; v. 250; p. 829.

Kocourek, Henry, Jersey City, N. J., assignor to J. B. Stewart, executrix. Spring-winding electric motor. No. 1,266,280; May 14; v. 250; p. 419.

Koenig, Joseph, Two Rivers, Wis. Internal-combustion engine. No. 1,265,092; May 7; v. 250; p. 62.

Kohler, George H. A., New York, N. Y., assignor to Tuckaway Folding Ladder Company, Inc. Collapsible step-ladder. No. 1,267,670; May 28; v. 250; p. 861.

Kohlhaas, Frank J., Calumet, Mich. Shoe-lace fastener. No. 1,266,823; May 21; v. 250; p. 599.

Kohn, Samuel, Chicago, Ill. Film-reel. No. 1,267,773; May 28; v. 250; p. 890.

Kolff, Petrus, Philadelphia, Pa., assignor, by mesne assignments, to The Electric Tachometer Corporation. Tachometer. No. 1,266,487; May 14; v. 250; p. 473.

Komorous, Joseph, assignor to Parisian Novelty Company, Chicago, Ill. Spinning-top. No. 1,267,558; May 28; v. 250; p. 829.

Koon, Elmer L., Woodward, Okla. Kafir-corn header. No. 1,267,559; May 28; v. 250; p. 830.

Korach, Louis L., Chicago, Ill. Rail anchor or anti-creeper. No. 1,265,093; May 7; v. 250; p. 63.

Korthals-Altes, Willem C., Schenectady, N. Y., assignor to General Electric Company. Motor-winding. No. 1,267,232; May 21; v. 250; p. 714.

Kost, Joseph L., assignor of one-half to J. H. Shively, Galveston, Tex. Mail-bag-delivering apparatus. No. 1,266,824; May 21; v. 250; p. 599.

Koster, John L. (See Schott, Rudolf F., assignor.)

Kostiw, William, assignor of one-half to H. Kudlak, Buffalo, N. Y. Life-saving suit. No. 1,267,086; May 21; v. 250; p. 672.

Kostudowicz, Marya, Chicago, Ill. Adjustable window-grating. No. 1,266,690; May 21; v. 250; p. 562.

Kovachich, Mfg., Pittsburgh, Pa. Rail-fastener. No. 1,266,488; May 14; v. 250; p. 474.

Kovacs, Benjamin, New York, N. Y. Safety door-lock. No. 1,265,713; May 7; v. 250; p. 228.

Kovacs, Charles, Perth Amboy, N. J., assignor of one-half to J. Kerekes, Greenpoint, N. Y. Resilient wheel. No. 1,267,876; May 28; v. 250; p. 921.

Kovar, Joseph J., Dodge Center, Minn. Spring-toothed harrow. No. 1,266,489; May 14; v. 250; p. 474.

Kralund, John, assignor to Doehler Die Casting Company, Brooklyn, N. Y. Casting-machine. No. 1,266,825; May 21; v. 250; p. 599.

Krantz, Hubert F., assignor to Krantz Manufacturing Company, Inc., Brooklyn, N. Y. Automatic motor-starter. No. 1,267,324; May 21; v. 250; p. 737.

Krantz, Joseph A., assignor to The Reeves Manufacturing Company, Canal Dover, Ohio. Plant forcer and protector. No. 1,266,131; May 14; v. 250; p. 378.

Krantz Manufacturing Company. (See Krantz, Hubert F., assignor.)

Krause, Arthur E., Jersey City, N. J. Reboiler and condensate-purifier. No. 1,265,678; May 7; v. 250; p. 218.

Krause, Max, Chicago, Ill. Chair. No. 1,266,691; May 21; v. 250; p. 562.

Kremer, Alfred, assignor of one-half to L. P. Keller, Mount Pleasant, Pa. Aeroplane. No. 1,266,490; May 14; v. 250; p. 474.

Kress, Otto, and S. D. Wells, Madison, Wis. Manufacture of wood-pulp. No. 1,266,957; May 21; v. 250; p. 635.
Kroedel, Robert, assignor to Eastman Kodak Company, Rochester, N. Y. Roll-film-developing apparatus. No. 1,266,491; May 14; v. 250; p. 474.
Kroehler Manufacturing Company *et al.* (See Weinmann, Louis E., assignor.)
Kropé, Magdalene H., New York, N. Y. Finger-ring. No. 1,265,679; May 7; v. 250; p. 218.
Krupp, Smith F., Atlanta, Ga. Cotton-gin. No. 1,266,826; May 21; v. 250; p. 600.
Krussand, Daniel Drammen, and A. Steen, Christiania, Norway. Vehicle-wheel and the like. No. 1,267,877; May 28; v. 250; p. 921.
Krzyworzycki, Stanley, Detroit, Mich. Belt-fastener. No. 1,267,329; May 21; v. 250; p. 737.
Kudlak, Harry. (See Kostiw, William, assignor.)
Kuhn, Edwin H., New York, N. Y. Device for teaching arithmetic. No. 1,267,326; May 21; v. 250; p. 737.
Kuhn, Eva H., *et al.* (See Valdes, Salvador M., assignor.)
Kuhnen, Alexander F., Dixon, assignor to American Wagon Company, Chicago, Ill. Wagon-stake. No. 1,266,692; May 21; v. 250; p. 563.
Kunkle, George R., Richmond, Ind. Spring-motor. No. 1,267,423; May 28; v. 250; p. 792.
Kunz, Alphonse M., assignor to Can't Slip Collar Bar Company, St. Louis, Mo. Collar-clasp. No. 1,265,214; May 7; v. 250; p. 95.
Kupfer, David, Chicago, Ill. Antiskid-sander for vehicles. No. 1,268,019; May 28; v. 250; p. 960.
Kurrell, Theodor, H. Schneider, and J. Helms, San Francisco, Cal. Mud-shoe. No. 1,266,492; May 14; v. 250; p. 475.
Kuyser, Jan A., Edgewood, Pa., assignor to Westinghouse Electric and Manufacturing Company. Ventilating apparatus. No. 1,268,020; May 28; v. 250; p. 960.
Kwetcher, George, *et al.* (See Mrakitsch, Anton, assignor.)
L. D. Caulk Company, The. (See Zurbrigg, Daniel A., assignor.)
L. H. Gilmer Co. (See Gilmer, Ludwell H., assignor.)
La Femina, Gaetana. (See Alberti, Carit), and La Femina.)
La Point, Frank L., assignor to International Supply Co., Kitchener, Ontario, Canada. Button. No. 1,266,961; May 21; v. 250; p. 636.
La Rock, John, Chicago, Ill. Metal-cutting machine. No. 1,265,345; May 7; v. 250; p. 129.
La Salle, Robert M., Miami, assignor to W. I. Tupman, Globe, Ariz. Steering device. No. 1,266,284; May 14; v. 250; p. 419.
La Vercombe, Harley H., Detroit, Mich. Die for re-forming reamers. No. 1,266,830; May 21; v. 250; p. 601.
Lachman Wall Bed Company. (See Beach, John C., assignor.)
Lack, Israel, Brooklyn, N. Y. Method of smocking. No. 1,265,920; May 14; v. 250; p. 319.
Lackner, Peter, New Brunswick, N. J. Universal micrometer. No. 1,266,493; May 14; v. 250; p. 475.
Laclair, Joseph A., Owendale, Mich. Milk-pail holder. No. 1,266,827; May 21; v. 250; p. 600.
Lafferty, Robert C., assignor to A. M. Jenkins, New York, N. Y. Ice-tool. No. 1,267,233; May 21; v. 250; p. 714.
Lafler, William, Lake George, Mich. Railway-tie plate. No. 1,267,234; May 21; v. 250; p. 714.
Lafon, Walter L., *et al.* (See Biggers, Lee P., assignor.)
Lafranchi, Alfred, Snohomish, Wash. Cargo-sling. No. 1,265,921; May 14; v. 250; p. 319.
Lakin, Arthur D., Latham, Ill. Amusement device. No. 1,266,494; May 14; v. 250; p. 475.
Lambert, F. B. (See Sackett, Charley E., assignor.)
Lambert, Henry M., Portland, Oreg., assignor to Lambert Multiplus Co., Phoenix, Ariz. Cushion-tire for vehicle-wheels. No. 1,268,078; May 28; v. 250; p. 975.
Lambert Multiplus Co. (See Lambert, Henry M., assignor.)
Lambert, T. A. (See Thornberg, Lee A., assignor.)
Lampert, Henry H., Chicago, Ill. Reinforcing system for concrete. No. 1,265,094; May 7; v. 250; p. 63.
Lancaster, Cecil J., Richmond, Va. Safety-shutter. No. 1,267,087; May 21; v. 250; p. 672.
Lancaster, John T., assignor to Hamel Shoe Machinery Company, Haverhill, Mass. Tack-puller. No. 1,268,021; May 28; v. 250; p. 960.
Lancaster, John T., assignor to Hamel Shoe Machinery Company, Haverhill, Mass. Tack-puller. No. 1,268,022; May 28; v. 250; p. 960.
Lancaster, Thomas W., Chicago, Ill. Puzzle. No. 1,264,944; May 7; v. 250; p. 20.
Landine, Peter N., assignor to The Rostand Manufacturing Company, Milford, Conn. Wind-shield. No. 1,265,680; May 7; v. 250; p. 219.
Landon, Jesse, and F. W. Martyn, Watford, England. Self-propelled vehicle. No. 1,266,495; May 14; v. 250; p. 475.
Lane, Floyd, Falconer, N. Y. Milk-bottle cap. No. 1,265,457; May 7; v. 250; p. 161.
Lane, Henry M., Detroit, Mich. Conveying mechanism. No. 1,266,828; May 21; v. 250; p. 600.
Lane, Major A., Paola, Kans. Automobile-tire pump. No. 1,267,088; May 21; v. 250; p. 673.
Lane, William E., Washington, D. C. Aeroplane. No. 1,266,829; May 21; v. 250; p. 601.
Lang, George L., assignor to Splitdorf Electrical Company, Newark, N. J. Timer-distributer. No. 1,267,671; May 28; v. 250; p. 861.
Lang, Jacob, Salisbury, Mo. Folding car-step. No. 1,267,878; May 28; v. 250; p. 921.
Langan, Michael L. (See Langan, Peter D. and M. L.)
Langan, Peter D. and M. L., Scranton, Pa. Lamp for automobiles. No. 1,267,235; May 21; v. 250; p. 714.
Langhammer, Frank L., Bridgeport, Conn. Garment-clasp. No. 1,266,960; May 21; v. 250; p. 636.
Langhorne, Jacob V., Englewood, assignor of one-half to S. M. Batton, Denver, Colo. Receptacle-closure. No. 1,265,095; May 7; v. 250; p. 63.
Lanier, Edward H., Newport, Ky. Combined step-ladder and rack. No. 1,265,922; May 14; v. 250; p. 320.
Lanning, Charles D., Boston, Mass. Mobile suction-cleaner apparatus. No. 1,267,348; May 21; v. 250; p. 744.
Lanning, Charles D., Boston, Mass., assignor to American Warp Drawing Machine Company. Warp-thread-holding device. No. 1,267,089; May 21; v. 250; p. 673.
Lanning, Charles D., Boston, Mass., assignor to American Warp Drawing Machine Company. Warp-leasing machine. No. 1,267,090; May 21; v. 250; p. 673.
Lanning, James K., Fall River, Mass. Spinning-ring and forming the same. No. 1,265,924; May 14; v. 250; p. 320.
Lanzetta, Anthony, New York, N. Y. Torpedo and mine deflector. No. 1,267,672; May 28; v. 250; p. 862.
Lapham, Charles C., assignor of one-half to W. S. Lapham, New York, N. Y. Motor-vehicle. No. 1,267,561; May 28; v. 250; p. 830.
Lapham, Walter S. (See Lapham, Charles C., assignor.)
Lapointe, Francis J., New London, Conn. Key-seat-broaching machine. No. 1,266,496; May 14; v. 250; p. 476.
Lapp, Clemens E., Los Angeles, Cal. Apparatus for refining mineral oils. No. 1,266,281; May 14; v. 250; p. 419.
Laramie, Alphonse W., *et al.* (See Sprague, Edward, Jr., assignor.)
Larch, Elmer E., and C. C. Brown, Boswell, Ind. Lubricator and reservoir for internal-combustion engines. No. 1,267,424; May 28; v. 250; p. 793.
Larimer, James I., Joliet, Ill. Hot-blast stove. No. 1,265,923; May 14; v. 250; p. 320.
Larkin, Miles J., and F. J. Litel, Tekamah, Nebr. Endgate. No. 1,266,026; May 14; v. 250; p. 348.
Larney, Thomas, Vancouver, British Columbia, Canada. Stone-splitting tool. No. 1,266,282; May 14; v. 250; p. 419.
Larrimore, Mabel A., Baltimore, Md. Hook and eye. No. 1,265,681; May 7; v. 250; p. 219.
Larsen, James, Green Bay, Wis. Toy hanger. No. 1,265,682; May 7; v. 250; p. 219.
Larsen, Jens M., Brooklyn, N. Y. Pencil attachment for fountain-pens. No. 1,266,283; May 14; v. 250; p. 419.
Larsen, Louis G., assignor to American Graphophone Company, Bridgeport, Conn. Split mandrel. No. 1,265,793; May 14; v. 250; p. 282.
Larson, Charles A., Lemont, Ill. Chimney-flue cover. No. 1,266,497; May 14; v. 250; p. 476.
Larson, Simon O., Pipestone, Minn. Attachment for cultivators. No. 1,267,425; May 28; v. 250; p. 793.
Lassen, Jens J., and V. F. Hjort, London, England. Apparatus for the softening and purification of water. No. 1,265,346; May 7; v. 250; p. 130.
Lassen, Jens J., and V. F. Hjort, London, England. Outlet or extraction pipe of filters. No. 1,266,132; May 14; v. 250; p. 378.
Latham, Albert, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Skiving-machine. No. 1,266,027; May 14; v. 250; p. 348.
Latta, Emmit G., Syracuse, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,264,945; May 7; v. 250; p. 20.
Lauter Company. (See Lynde, Frank G., assignor.)
Lavarack, Frederick C., Orange, N. J. Means for bonding rails. No. 1,267,673; May 28; v. 250; p. 862.
Lawhorn, John W., Maryville, Tenn. Hub. No. 1,268,023; May 28; v. 250; p. 961.
Lawlor, James M., Topeka, Kans. Ticket and hat clip. No. 1,266,962; May 21; v. 250; p. 636.
Lawrence, Leo W., Winston-Salem, N. C., assignor to Standard Tobacco Stemmer Company, New York, N. Y. Tobacco-stemming machine. No. 1,267,776; May 28; v. 250; p. 891.
Lawrence, William C., Indianapolis, Ind. Polishing composition. No. 1,267,236; May 21; v. 250; p. 715.
Lawson, Clyde H., Avoca, Mich. Hay and stock rack iron. No. 1,267,777; May 28; v. 250; p. 891.
Lawton, Charles T., *et al.* (See Byrne, David, assignor.)
Lawton, Ledra M., North Collins, N. Y. Automatic violin-player. No. 1,266,028; May 14; v. 250; p. 348.
Lay, William, Kulm, N. D. Ink-bottle. No. 1,265,683; May 7; v. 250; p. 220.
Layne, John L. (See Royal, James V., assignor.)
Layne, Mahlon E., Houston, Tex. Well-boring rod. No. 1,266,831; May 21; v. 250; p. 601.
Le Doux, Hector. (See Hutchins and Le Doux.)
Le Duc, John J., Mankato, Minn. Incubator. No. 1,267,426; May 28; v. 250; p. 793.
Leach, John T., Rochester, N. Y. Feeding mechanism for saw-tables. No. 1,265,215; May 7; v. 250; p. 95.

Leach, William W., assignor of one-half to A. I. Davey, Mansfield, Ohio. Fore-plate carriage. No. 1,265,458; May 7; v. 250; p. 161.
Leavitt, John E., Boston, Mass. Quarters for low shoes. No. 1,266,498; May 14; v. 250; p. 476.
Lebovitz, Benjamin. (See Herbert, Harry, assignor.)
Leckey, Alexander, Camden, N. J. Calendar. No. 1,266,499; May 14; v. 250; p. 477.
Lecocq, Eugène, Brussels, Belgium. Regenerator coke-oven. No. 1,265,684; May 7; v. 250; p. 220.
Ledwinka, Joseph, assignor, by mesne assignments, to Budd Wheel Corporation, Philadelphia, Pa. Detachable wheel. No. 1,265,347; May 7; v. 250; p. 130.
Lee, Albert P., assignor to Lee Loader & Body Co., Chicago, Ill. Dumping-hopper. No. 1,266,500; May 14; v. 250; p. 477.
Lee, David A., *et al.* (See Judy, Andrew W., assignor.)
Lee, Fannie L., Paducah, Ky. Reamer. No. 1,267,674; May 28; v. 250; p. 862.
Lee, John M., Spencer, Iowa. Detachable-handle construction. No. 1,266,832; May 21; v. 250; p. 601.
Lee Loader & Body Co. (See Lee, Albert P., assignor.)
Leen, Charles E., Monarda, Me. Agricultural implement. No. 1,267,778; May 28; v. 250; p. 891.
Legault, Arsène, Beauharnois, Quebec, Canada. Filter. No. 1,267,427; May 28; v. 250; p. 794.
Leggett, Clinton H., New York, N. Y. Advertising device. No. 1,264,946; May 7; v. 250; p. 20.
Leggett, Clinton H., New York, N. Y. Advertising device. No. 1,264,947; May 7; v. 250; p. 21.
Lehew, George V., Akron, Ohio. Street-sweeping machine. No. 1,265,685; May 7; v. 250; p. 220.
Lehman, Louis H., New York, N. Y. Balancing apparatus. No. 1,266,029; May 14; v. 250; p. 348.
Leiman, George W. (See Leiman, William H. and G. W.)
Leiman, William H. and G. W., Newark, N. J. Dust-collector for polishing-machines. No. 1,267,091; May 21; v. 250; p. 673.
Leitch, Meredith, Poughkeepsie, assignor to The De Laval Separator Company, New York, N. Y. Emulsifier. No. 1,266,501; May 14; v. 250; p. 477.
Lentz, Charles, *et al.* (See Pratt, Edward, assignor.)
Leonard Pump & Motor Company. (See Parkyn, Herbert A., assignor.)
Leoni, Alfonso M., assignor to The Dayton Steel Foundry Company, Dayton, Ohio. Wheel. No. 1,266,603; May 21; v. 250; p. 536.
Leopold, George O. (See Fegley and Leopold.)
Letroteur, Maurice L., Paris, France. Motor-plow. No. 1,266,502; May 14; v. 250; p. 478.
Levens, Leonard, Centralhatchee, Ga. Hay-wagon. No. 1,265,096; May 7; v. 250; p. 63.
Levin, Israel, Los Angeles, Cal. Sanitary toilet-seat protector. No. 1,268,024; May 28; v. 250; p. 961.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Supporting and adjusting mechanism for mining-machines. No. 1,267,675; May 28; v. 250; p. 862.
Levin, Nils D., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Rheostat. No. 1,267,879; May 28; v. 250; p. 922.
Levitt, Abraham. (See Moldovan, Madrias, and Levitt.)
Levy, David B. (See Abramovitz, Morris, assignor.)
Lewis, Anson F. (See Curry and Lewis.)
Lewis, Harry, W. R. Scott, and C. Dell, assignors to Pittsburgh Automatic Heat Regulator Company, Pittsburgh, Pa. Heat-regulating system. No. 1,265,927; May 14; v. 250; p. 321.
Lewis, James N., assignor to W. L. Wilson, trustee, Detroit, Mich. Apparatus for extracting metal from ores. No. 1,265,459; May 7; v. 250; p. 162.
Lewis, Robert E., Moultrie, Ga. Reinforced-cement fence-post and anchor-block for wire fences. No. 1,265,460; May 7; v. 250; p. 162.
Lichtenstein, Edwin, New York, N. Y. Feeding device for ironing-machines. No. 1,267,779; May 28; v. 250; p. 891.
Lieber, Carl H., assignor to The H. Lieber Company, Indianapolis, Ind. Picture-frame leg. No. 1,266,694; May 21; v. 250; p. 563.
Liederman, Jacob H., St. Louis, Mo. Cap for headwear. No. 1,266,503; May 14; v. 250; p. 478.
Life Saving Devices Company. (See Conrad, Paul A. R., assignor.)
Libme, Jens P., Lakewood, assignor to The Grasselli Chemical Company, Cleveland, Ohio. Manufacture of lead arsenate. No. 1,267,428; May 28; v. 250; p. 794.
Limont, Alexander W., assignor to Bridgeport Brass Company, Bridgeport, Conn. Apparatus for making projectile-bands and the like. No. 1,266,963; May 21; v. 250; p. 637.
Lindberg, Charles A., assignor of one-third to J. F. Jewett and one-third to L. R. Hawkins, Sturgis, Mich. Staple-fastener. No. 1,264,948; May 7; v. 250; p. 21.
Lindberg, Claes A., and J. Hindley, New Bedford, Mass. Stop mechanism for combing-machines. No. 1,265,794; May 14; v. 250; p. 282.
Lindberg, Isaac, Bowbells, N. D. Grain-scoop. No. 1,266,833; May 21; v. 250; p. 601.
Lindblad, Axel R., Ludvika, Sweden. Production of cyanogen compounds. No. 1,264,949; May 7; v. 250; p. 21.
Lindsay, Alexander P. (See Canfield, Clair C., assignor.)
Lindsay, William, Chicago, Ill. Agitating device. No. 1,267,562; May 28; v. 250; p. 830.
Lindsay, William G., Newark, N. J., assignor to The Celluloid Company. Acetyl cellulose and making the same. No. 1,265,216; May 7; v. 250; p. 95.
Lindsay, William G., Newark, N. J., assignor to The Celluloid Company. Compound of acetyl cellulose and process. No. 1,265,217; May 7; v. 250; p. 95.
Lindsey, William N., Claude, Tex. Drain-valve for well-pipes. No. 1,267,093; May 21; v. 250; p. 674.
Lineatime Manufacturing Company. (See Punnett, Reuben A., assignor.)
Link, Oliver L., St. Charles, Mo. Trap-door. No. 1,265,686; May 7; v. 250; p. 220.
Link-Belt Company. (See Hetzel, Frederic V., assignor.)
Link-Belt Company. (See Pratt, Howell D., assignor.)
Link-Belt Company. (See Valentine, Herbert S., assignor.)
Link-Belt Company. (See Weiss, Charles R., assignor.)
Linkhart, Earl G. and R. H., North Vernon, Ind. Separator and grader. No. 1,265,687; May 7; v. 250; p. 221.
Linkhart, Ralph H. (See Linkhart, Earl G. and R. H.)
Linn, Thomas C., Jr., Salisbury, N. C., and J. P. Butt, Jr., Gettysburg, Pa. Balanced hinged top for cabinets and other receptacles. No. 1,266,834; May 21; v. 250; p. 602.
Lins, John F., San Francisco, Cal. Extractor. No. 1,266,030; May 14; v. 250; p. 349.
Lippincott, Carrie A. (See Lippincott, John W., assignor.)
Lippincott, John W., assignor of one-half to C. A. Lippincott, Little Rock, Ark. Chain-jack. No. 1,265,461; May 7; v. 250; p. 162.
Lippincott, Samuel B. (See Miller and Lippincott.)
List, Henry J., San Francisco, Cal. Non-skid device. No. 1,267,676; May 28; v. 250; p. 862.
Litchfield, Henry L., assignor to The Litchfield Manufacturing Company, Waterloo, Iowa. Trailer for automobiles or other vehicles. No. 1,265,705; May 7; v. 250; p. 226.
Litchfield, Henry L., and C. E. Shiplet, assignors to The Litchfield Manufacturing Company, Waterloo, Iowa. Broadcast spreader. No. 1,267,563; May 28; v. 250; p. 831.
Litchfield Manufacturing Company, The. (See Litchfield, Henry L., assignor.)
Litchfield Manufacturing Company, The. (See Litchfield and Shiplet, assignors.)
Litel, Frank J. (See Larkin and Litel.)
Litinsky, George, Elkins, W. Va. Oven or furnace for baking earthenware. No. 1,265,097; May 7; v. 250; p. 64.
Little, Fred S., assignor of one-half to J. Samuelson, Fairfield, Iowa. Fly-trap. No. 1,267,237; May 21; v. 250; p. 715.
Little, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Arc-lamp. No. 1,268,025; May 28; v. 250; p. 961.
Little, George M., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Arc-lamp. No. 1,268,026; May 28; v. 250; p. 962.
Lively, James H., Republic county, Kans., assignor of one-half to L. Lively, Arcadia, Ind. Automobile-jack. No. 1,265,688; May 7; v. 250; p. 221.
Lively, L. (See Lively, James H., assignor.)
Livingston, Ira W., Bridgeport, Ohio. Salt and pepper shaker. No. 1,267,564; May 28; v. 250; p. 831.
Llewellyn, Lee, Dormont borough, assignor to Pittsburgh Coal Washer Company, Pittsburgh, Pa. Coal-washing apparatus. No. 1,267,565; May 28; v. 250; p. 831.
Lloyd, Cecil E., Pensacola, Fla. Tap. No. 1,265,348; May 7; v. 250; p. 131.
Lloyd, Cecil E., Pensacola, Fla. Brake-socket for open-mouthed bilge-pumps. No. 1,265,349; May 7; v. 250; p. 131.
Lloyd, Eldon E., and J. Z. Curnutt, Maryville, Mo. Motor-car curtain. No. 1,266,504; May 14; v. 250; p. 478.
Loadometer Company, The. (See Troll, Frederick J., assignor.) (Reissue.)
Locke, Emery A. (See West, Earl E., assignor.)
Lockhart, Andrew B., Redlands, Cal. Valve-spring compressor. No. 1,266,285; May 14; v. 250; p. 420.
Lockner, Frank, *et al.* (See Rolland, Fred, assignor.)
Lockwood, Charles S., Newark, N. J., assignor to Hyatt Roller Bearing Division, United Motors Corporation. Roller-bearing with sectional rolls. No. 1,266,286; May 14; v. 250; p. 420.
Lockwood, Charles W. (See Desmarais, Oscar H., assignor.)
Loeb, Rudolf, Jenkintown, Pa. Sewing-machine. No. 1,267,566; May 28; v. 250; p. 832.
Loeser, J. H. (See Carslaw, John W. D., assignor.)
Long, Edward, Burke, Idaho. Combination hair and hat pin. No. 1,266,505; May 14; v. 250; p. 479.
Long, John R., Akron, Ohio. Bench-vise. No. 1,265,218; May 7; v. 250; p. 96.
Long, John R., Akron, Ohio. Wrench. No. 1,265,925; May 14; v. 250; p. 321.
Long, Robert B., Dayton, Ohio. Lifting-jack. No. 1,265,219; May 7; v. 250; p. 96.
Long, Robert M. (See Cline and Long.)
Longanecker, John, and L. G. Stockberger, Hiram, Ohio., said Stockberger assignor of one-sixth of his right to said Longanecker. Trolley-wheel. No. 1,267,338; May 21; v. 250; p. 741.

Longoria, Antonio, assignor to The Rogers Electric Laboratories Company, Cleveland, Ohio. High-frequency apparatus. No. 1,266,287; May 14; v. 250; p. 420.

Loomis, Allen, assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,266,288; May 14; v. 250; p. 420.

Lopour, Edward, Marshalltown, Iowa. Hand wheel-cultivator. No. 1,266,964; May 21; v. 250; p. 637.

Lorimer, Felix, Boston, Mass. Bottle-stopper fastener. No. 1,265,795; May 14; v. 250; p. 283.

Losey, J. S. (See Scroggins, James A., assignor.)

Lother, Robert M. (See Mosby, William A., assignor.)

Louder, Joel H., Elgin, Ill. Sleeve-protector. No. 1,266,506; May 14; v. 250; p. 479.

Love, Isaac, Anchorage, Alaska. Fence-post. No. 1,267,238; May 21; v. 250; p. 715.

Love, Jordan M., Watson, W. Va. Wrap-holder for theater-chairs. No. 1,267,239; May 21; v. 250; p. 715.

Lovell, Harold M., Somerville, Mass. Rocking-chair fan. No. 1,267,094; May 21; v. 250; p. 674.

Lovell Manufacturing Company. (See Walker, Byron A., assignor.)

Low, Arthur B., Denver, Colo. Ventilated vulcanizing-pan. No. 1,265,462; May 7; v. 250; p. 162.

Low, Frank S., New York, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Matrix-mat. No. 1,265,796; May 14; v. 250; p. 283.

Loy, Banks W., Gibsonville, N. C. Cutter for looping-machines. No. 1,265,689; May 7; v. 250; p. 221.

Lucas, Paul, Friedenau, near Berlin, Germany. Wick-vaporizer. No. 1,268,027; May 28; v. 250; p. 962.

Luckett, Philip A., Salisbury, Md. Union-pajamas. No. 1,267,677; May 28; v. 250; p. 863.

Ludlam, Evelyn M., Waltham, Mass. Catnip mouse. No. 1,265,926; May 14; v. 250; p. 321.

Ludlow Typograph Company, The. (See Reade, William A., assignor.)

Ludtke, Herman, Morris, Ill. Parachute. No. 1,266,508; May 14; v. 250; p. 479.

Ludwig, Edmund B., Kansas City, Mo. Device for applying antislipping chains to pneumatic tires. No. 1,266,507; May 14; v. 250; p. 479.

Luellen, Lawrence W., assignor to Individual Drinking Cup Company, New York, N. Y. Cup-container. No. 1,264,950; May 7; v. 250; p. 21.

Luettschwager, Francis D., Tucson, Ariz. Garment-support. No. 1,268,028; May 28; v. 250; p. 962.

Lund, Carl C. P., Oakfield, Wis. Kitchen article. No. 1,266,289; May 14; v. 250; p. 421.

Lund, Thomas, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Beading-tool. No. 1,267,429; May 28; v. 250; p. 794.

Lunde, Alfred T., Union, N. D. Funnel. No. 1,267,780; May 28; v. 250; p. 892.

Lundgren, Ludvig, Youngstown, Ohio. Advertising attraction-form. No. 1,267,567; May 28; v. 250; p. 832.

Lundgren, Olof A., assignor of one-third to A. Schneider, Cleveland, Ohio. Driving-gear for motor-vehicles. No. 1,265,690; May 7; v. 250; p. 221.

Lurz, Henry, Jersey City, N. J. Kite. No. 1,265,797; May 14; v. 250; p. 283.

Lyboit, Arthur E., Kansas City, Mo. Shade-roller. No. 1,266,290; May 14; v. 250; p. 421.

Lyle, Robert W., assignor to W. J. Lyle, South River, N. J. Building construction and block therefor. No. 1,265,220; May 7; v. 250; p. 96.

Lyle, William J. (See Lyle, Robert W., assignor.)

Lynch, William H., Clayton, N. Mex. Broom-corn seeder and engine. No. 1,266,835; May 21; v. 250; p. 602.

Lynde, Frank G., assignor to Lauter Company, Newark, N. J. Pneumatic hammer-action. No. 1,266,965; May 21; v. 250; p. 637.

Lyon, Edwin R., Queen, N. Mex. Toy. No. 1,268,029; May 28; v. 250; p. 962.

Lyon, George A., Philadelphia, Pa. Supporting device for automobile-buffers. No. 1,266,836; May 21; v. 250; p. 602.

M. H. Treadwell Company. (See Astrom, Carl P., assignor.)

Maag, Max, Zurich, Switzerland. Gear-cutting machine. No. 1,266,839; May 21; v. 250; p. 603.

MacDonald, Rosa A., Los Angeles, Cal. Combination grease strainer and receptacle. No. 1,267,885; May 28; v. 250; p. 923.

MacGahan, Paul, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electrical measuring instrument. No. 1,266,604; May 21; v. 250; p. 537.

MacKay, John F., Bordentown, N. J. Vaporized-oil burner. No. 1,266,295; May 14; v. 250; p. 422.

MacLellan, Charles A., Boston, Mass. Vehicle-check. No. 1,265,929; May 14; v. 250; p. 321.

MacPherson, William, Wichita, Kans. Oil-tank. No. 1,267,434; May 28; v. 250; p. 796.

Macartney, Arthur C., assignor to Pine Tree Milking Machine Company, Chicago, Ill. Milking-machine. No. 1,266,697; May 21; v. 250; p. 564.

Macauley, Alvan, assignor to Packard Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,267,783; May 28; v. 250; p. 892.

Macbeth, Colin, Birmingham, assignor to The Dunlop Rubber Company, Limited, Westminster, England. Tire. No. 1,266,698; May 21; v. 250; p. 564.

Macdonald, Alan, assignor to San Francisco Ship Building Co., San Francisco, Cal. Concrete ship. No. 1,267,680; May 28; v. 250; p. 864.

Macdonald, Charles, South Shields, assignor to Walles, Dove & Company Limited, Newcastle-upon-Tyne, England. Securing plastic compositions. No. 1,268,033; May 28; v. 250; p. 963.

Macdonald, James, New York, N. Y. Bill-book. No. 1,267,246; May 21; v. 250; p. 717.

Machine Appliance Corporation. (See Myers, Louis, assignor.)

Mack, Paul W. (See Erwin, James L., assignor.)

Macomber, Isaac B., Portsmouth, R. I. Support for hinged covers. No. 1,265,930; May 14; v. 250; p. 322.

Maden, Lloyd H., Jonesboro, Tenn. Automobile-signal. No. 1,265,691; May 7; v. 250; p. 222.

Madero, Eduardo J. M., Buenos Aires, Argentina. Rotary engine. No. 1,266,605; May 21; v. 250; p. 537.

Madison-Kipp Lubricator Company. (See Winkley, Frank D., assignor.)

Madorski, Michael. (See Horster, Charles, assignor.)

Madriss, Abraham I. (See Moldovan, Madriss, and Levitt.)

Madsen, Chresten T., Oakland, Cal. Level. No. 1,265,468; May 7; v. 250; p. 164.

Madson, Amos, Pontiac, Ill. Shoe. No. 1,265,100; May 7; v. 250; p. 65.

Magee Carpet Co., The. (See Hoffman, William, assignor.)

Magich, Mathew, Detroit, Mich. Horseshoe. No. 1,265,931; May 14; v. 250; p. 322.

Majors, James M., Ottumwa, Iowa. Thread cutter and holder. No. 1,266,032; May 14; v. 250; p. 349.

Maki, John F. (See Niemi, Isaac, assignor.)

Mallory, John S., Henderson, Ky. Hood for automobiles. No. 1,265,469; May 7; v. 250; p. 164.

Mallove, Morris, Brooklyn, J. Greenberg and P. Kieves, New York, N. Y. Automatic pipe-threading lubricator. No. 1,265,892; May 7; v. 250; p. 222.

Maltby, Frank D., Battle Creek, Mich. Priming device for internal-combustion engines. No. 1,264,952; May 7; v. 250; p. 22.

Maltby, Frank D., Battle Creek, Mich. Priming and decarbonizing device for internal-combustion engines. No. 1,264,953; May 7; v. 250; p. 22.

Maltby, Frank D., Battle Creek, Mich. Priming device for internal-combustion engines. No. 1,264,954; May 7; v. 250; p. 22.

Maltby, Lewis C., assignor to The Stone Straw Company, Washington, D. C. Container. No. 1,265,932; May 14; v. 250. p. 322.

Malysheff, Alexander P., Tomsk, Russia. Mechanical movement. No. 1,267,886; May 28; v. 250; p. 923.

Mammen, Harry P., Springfield, Ohio. Automobile-lock. No. 1,267,587; May 28; v. 250; p. 924.

Manly, Charles M., New York, N. Y. Variable-speed gear. No. 1,266,606; May 21; v. 250; p. 538.

Manning, Coleman J., Medford, Mass. Safety-valve. No. 1,265,693; May 7; v. 250; p. 222.

Manning, Howard H. (See Davenport and Manning.)

Mapel, Lewis A., assignor to Mechanical Development Company of Missouri, St. Louis, Mo. Controlling device. No. 1,265,933; May 14; v. 250; p. 322.

Mapel, Lewis A., assignor to Mechanical Development Company of Missouri, St. Louis, Mo. Gage. No. 1,265,934; May 14; v. 250; p. 323.

Marcum, Albert L., assignor to Dow Wire & Iron Works, Louisville, Ky. Automobile-body brace. No. 1,266,528; May 14; v. 250; p. 485.

Marcus, Israel, Winthrop, Mass. Electric fuse. No. 1,265,223; May 7; v. 250; p. 97.

Mardis, Paul L., Altoona, Pa., assignor to Westinghouse Electric and Manufacturing Company. Control system. No. 1,266,607; May 21; v. 250; p. 538.

Mares, Frank C., Jr., Dwight, Nebr. Straw-spreader. No. 1,266,968; May 21; v. 250; p. 639.

Maresch, August J., Faithorn Junction, Mich., assignor of one-half to Kading & Kading, Watertown, Wis. Tractor. No. 1,268,034; May 28; v. 250; p. 963.

Marion Steam Shovel Company, The. (See King, Jacoby, and Roush, assignors.)

Mark, Bernard B., Joplin, Mo. Toy. No. 1,266,296; May 14; v. 250; p. 422.

Mark, Clayton. (See Dies, Charles A., assignor.)

Marlatt, George E., Pasadena, Cal. Linotype-machine No. 1,266,969; May 21; v. 250; p. 639.

Marlatt, George E., Pasadena, Cal. Typographical machine. No. 1,266,970; May 21; v. 250; p. 639.

Marr, Winfield S., Enid, Okla. Cigar and cigarette lighter. No. 1,265,695; May 7; v. 250; p. 222.

Marriner, James E., Portland, Me. Accelerator safety-guard. No. 1,265,801; May 14; v. 250; p. 284.

Marsden, Mark W., Philadelphia, Pa. Cotton-gin. No. 1,265,470; May 7; v. 250; p. 164.

Marsden, Mark W., assignor to Sugar Cane By-Products Company, Philadelphia, Pa. Treating bagasse for the recovery of its values. No. 1,265,694; May 7; v. 250; p. 222.

Marsh-Capron Manufacturing Company. (See Mosby, Alfred D., assignor.)

Marshall, Port R., and H. L. Goss, Horton, Kans. Hypodermic-needle sterilizer. No. 1,265,224; May 7; v. 250; p. 97.

Marten, Henry F., H. Grahn, and J. C. Andresen, San Francisco, Cal. Barrel-stave-numbering apparatus. No. 1,266,840; May 21; v. 250; p. 603.

Martenka, Steve, Stevens Point, Wis. Rail-joint. No. 1,267,096; May 21; v. 250; p. 675.

Martí, Charles, Newark, N. J., Intermittent movement. No. 1,268,035; May 28; v. 250; p. 964.

Martin, Frederick W., New York, assignor to A. G. Elvin, Plandome, N. Y. Mechanical stoker. No. 1,267,681; May 28; v. 250; p. 864.

Martin, George W., and C. Price, Worcester, Mass. Automatic shoe-shining machine. No. 1,267,435; May 28; v. 250; p. 796.

Martin, Howard, Aberdeen, Ohio. Paint-bucket hook. No. 1,265,471; May 7; v. 250; p. 164.

Martin, Louis W., New York, N. Y. Signaling device. No. 1,267,436; May 28; v. 250; p. 796.

Martin, Talbert G., assignor to Automatic Electric Company, Chicago, Ill. Semi-automatic telephone system. No. 1,265,225; May 7; v. 250; p. 97.

Martin, Talbot G., Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co. Automatic telephone system and apparatus. No. 1,267,097; May 21; v. 250; p. 675.

Martin, Talbot G., assignor to Automatic Electric Company, Chicago, Ill. Telephone system. No. 1,267,784; May 28; v. 250; p. 893.

Martin, Talbot G., Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Co. Combined selector and repeater apparatus for local-battery-telephone-exchange systems. No. 1,268,072; May 28; v. 250; p. 973.

Martin, Thomas C. (See Merrill and Martin.)

Martinez, Norberto, Cotulla, Tex. Transmission mechanism. No. 1,266,971; May 21; v. 250; p. 640.

Martyn, Frederick W. (See Landon and Martyn.)

Masland, Walter E., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Producing pyroxylin coated fabrics. No. 1,267,785; May 28; v. 250; p. 893.

Mason, Arthur J., Chicago, Ill. Treating freshly-cut crops. No. 1,264,955; May 7; v. 250; p. 23.

Mason, Charles C., Perth Amboy, N. J. Safety device. No. 1,267,682; May 28; v. 250; p. 864.

Mason, Frederick A., Providence, R. I. Condiment-container. No. 1,265,935; May 14; v. 250; p. 323.

Mason Regulator Company. (See Melcher, George S., assignor.)

Mastick, Edwin A., Cleveland, Ohio. Roofing. No. 1,265,226; May 7; v. 250; p. 97.

Masunian, James G., Brooklyn, N. Y. Toy. No. 1,268,036; May 28; v. 250; p. 964.

Masury, Alfred F., assignor to International Motor Company, New York, N. Y. Support for motor transmission-casings. No. 1,266,537; May 14; v. 250; p. 488.

Mather & Platt Limited. (See Taylor James, assignor.)

Mattern, George W., assignor to The Crawford, McGregor and Canby Company, Dayton, Ohio. Attaching handle-shafts to golf-clubs or like articles. No. 1,266,529; May 14; v. 250; p. 485.

Matthews, Archie D., Calico Rock, Ark. Soot-remover. No. 1,267,328; May 21; v. 250; p. 738.

Matthews, Carey T., Kennebec, N. C. Combined burglar or fire alarm. No. 1,265,472; May 7; v. 250; p. 164.

Mattson, Ludvig, Evanston, Ill. Safety service-holder. No. 1,267,098; May 21; v. 250; p. 675.

Mauke, Ernst A., Lancaster, Pa. Measuring instrument. No. 1,266,972; May 21; v. 250; p. 640.

Maupin, Malcolm M., assignor to himself and H. E. Germann, Cincinnati, Ohio. Means for securing artificial teeth to dental plates or the like. No. 1,267,339; May 21; v. 250; p. 741.

Maurer, Peter E. (See Snow and Maurer.)

Maxson, George D., West Edmeston, N. Y. Mechanical starter for internal-combustion engines. No. 1,264,951; May 7; v. 250; p. 21.

Maxwell, Alexander G., Springdale, assignor of one-half to J. Heidenkamp, Pittsburgh, Pa. Glass-pot-filling machine. No. 1,266,511; May 14; v. 250; p. 480.

Mayer, John, Hamilton, Ontario, Canada. Lineman's ring-pliers. No. 1,266,136; May 14; v. 250; p. 379.

Mayfield, Edwin W., deceased, Chicago, Ill., G. Mayfield, administrator. Telegraphic receiver. No. 1,266,841; May 21; v. 250; p. 603.

Mayfield, Goudy, administrator. (See Mayfield, Edwin W.)

Mayhew, James N., assignor to James N. Mayhew Company, Inc., Minneapolis, Minn. Top-tree for shoes. No. 1,266,512; May 14; v. 250; p. 480.

Mazer, Joseph, McAlester, Okla. Winding-indicator. No. 1,265,902; May 14; v. 250; p. 284.

Mazzucchelli, Celestino, Como, Italy. Method for winding silk on spools and machine for carrying out this method. No. 1,267,099; May 21; v. 250; p. 676.

McAlister, Albert W., Milan, Tenn. Metal fence-post. No. 1,267,568; May 28; v. 250; p. 832.

McArdle, Robert B. (See McArdle, William H. and R. B.)

McArdle, William H. and R. B., Camden, N. J. Practice apparatus for boxers. No. 1,267,678; May 28; v. 250; p. 863.

McBee Binder Company. (See Morton, William J., assignor.)

McBride, William J., Lynn, Mass., assignor to General Electric Company. Centrifugal compressor. No. 1,267,880; May 28; v. 250; p. 922.

McCahey, George F., Providence, R. I. Carrier for braiding-machines. No. 1,267,240; May 21; v. 250; p. 715.

McCallin, Francis R., Long Island City, N. Y. Fender. No. 1,266,536; May 14; v. 250; p. 488.

McCallum, Albert L., Spokane, Wash. Hand-brake for cars. No. 1,265,221; May 7; v. 250; p. 96.

McCarthy, Daniel M., Brooklyn, N. Y. Formaldehyde composition and the preparation thereof. No. 1,265,468; May 7; v. 250; p. 163.

McCarty, Harry C., Williamsport, Pa. Dust-guard for journal-boxes. No. 1,267,569; May 28; v. 250; p. 832.

McCarty, Thomas A., Washington, D. C., assignor of one-half to H. Cashwell, Moltonville, N. C. Combination-handle for rolling-pins and other implements. No. 1,267,327; May 21; v. 250; p. 738.

McCaskell, Jasper A., Salt Lake City, Utah. Continuous rotary pressure-filter. No. 1,266,133; May 14; v. 250; p. 378.

McCaughey, John W., Montgomery, Ala. Mixing and packing apparatus for molasses feed. No. 1,267,241; May 21; v. 250; p. 716.

McCauslin, George W., Stamford, Conn. Passenger-vehicle. No. 1,267,242; May 21; v. 250; p. 716.

McClain, Charles P., *et al.* (See Ogle, Francis M., assignor.)

McCleary, Elmer T. (See Elliott and McCleary.)

McClellan, George W., *et al.* (See Hitt, Reed R., assignor.)

McClelland, William A., Ridgewood, N. J. Bronzing-machine. No. 1,266,134; May 14; v. 250; p. 378.

McClintock, Herbert R., El Paso, Tex. Cigar or cigarette holder. No. 1,266,291; May 14; v. 250; p. 421.

McCloskey, Alfred C., assignor, by mesne assignments, of one-half to himself, one-fourth to A. E. Davis, and one-fourth to F. J. Geiger, Philadelphia, Pa. Photographic paper. No. 1,265,464; May 7; v. 250; p. 163.

McClymont, Bryce W., Detroit, Mich. Heating system and hydraulic vacuum-generator. No. 1,265,928; May 14; v. 250; p. 321.

McComb, William P., Conroe, Tex. Combination valve-cap and tool. No. 1,265,465; May 7; v. 250; p. 163.

McConnell, Scott R., Wichita Falls, Tex. Rope-socket. No. 1,267,430; May 28; v. 250; p. 794.

McCormick, Charles C., Aurora, Mo. Egg-tester. No. 1,266,695; May 21; v. 250; p. 563.

McCormick, Edmund B., Manhattan, Kans. Recorder. No. 1,266,292; May 14; v. 250; p. 421.

McCoy, James P. A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Coating process. No. 1,268,030; May 28; v. 250; p. 962.

McCoy, James P. A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Moldable material. No. 1,268,031; May 28; v. 250; p. 963.

McCoy, Walter E., New York, N. Y. Apparatus for shaping conduits. No. 1,266,293; May 14; v. 250; p. 422.

McCully, Charles H. (See McCully, Richard P., assignor.)

McCully, Richard P., assignor of one-half to C. H. McCully, Brooklyn, N. Y. Surgical-instrument shield. No. 1,266,031; May 14; v. 250; p. 349.

McDade, Clarence, Middleport, Ohio, and F. Chapman, Hartford, W. Va. Burglar-alarm door-lock. No. 1,265,222; May 7; v. 250; p. 96.

McDermott, Henry, Clinton, Mass. Card-cylinder-stripping device. No. 1,267,781; May 28; v. 250; p. 892.

McDonald, Irvin F., Baltimore, Md. Button-fastener. No. 1,267,243; May 21; v. 250; p. 716.

McDonald, James D., Lynn, Mass., assignor to General Electric Company. Projector. No. 1,267,881; May 28; v. 250; p. 922.

McDonell, Angus W. (See Eliel, Albert L., assignor.)

McEwen, Willard M., Chicago, Ill. Humidifying-fan. No. 1,266,966; May 21; v. 250; p. 638.

McFaddin, Harrison D., East Orange, N. J. Hand-lamp for therapeutic purposes. No. 1,267,882; May 28; v. 250; p. 923.

McFarland, Charley W., and G. N. Griffin, assignors of one-third to C. E. Wells, Shawnee, Okla. Automatic nut-cracking machine. No. 1,265,350; May 7; v. 250; p. 181.

McGaffee, James F., Des Moines, Iowa. Sheet-metal silo-roof. No. 1,267,679; May 28; v. 250; p. 863.

McGee, Charles K. (See Osborn, James T., assignor.)

McGehee, Burnard, assignor of one-third to J. H. Brewer, New Orleans, La. Starting mechanism for automobiles. No. 1,267,431; May 28; v. 250; p. 794.

McGowan, Chester E., Memphis, Tenn. Metallic sash-bar. No. 1,268,032; May 28; v. 250; p. 963.

McGruer, Ewing, Jr., Braeside Clynder, Scotland. Hollow body. No. 1,266,696; May 21; v. 250; p. 563.

McGuckin, John J., Brooklyn, assignor to L. Schwab, New York, N. Y. Lamp-holder for bicycles. No. 1,267,570; May 28; v. 250; p. 833.

McHose, John V. (See Clayton, Ralph S., assignor.)

McIntosh, Burtnett, Brooklyn, N. Y., assignor to F. A. Hall, Montclair, N. J. Corner-lock for beds or the like. No. 1,265,798; May 14; v. 250; p. 283.

McIntosh, James, Norristown, assignor to Diamond State Fibre Company, Bridgeport, Pa. Insulating material and making the same. No. 1,267,883; May 28; v. 250; p. 923.

McKechnie, James, Barrow-in-Furness, assignor to Vickers Limited, Westminster, England. Injection of fuel in internal-combustion engines. No. 1,265,799; May 14; v. 250; p. 284.

McKee, Arthur G., Cleveland, Ohio. Water-sealed valve. No. 1,266,509; May 14; v. 250; p. 479.

McKee, Ralph H., Ridgefield Park, N. J. Producing 1:2:4 methyl-hydroxy-isopropyl benzene. No. 1,265,800; May 14; v. 250; p. 284.
McKeever, Charles, Jersey City, N. J. Vehicle-lamp. No. 1,267,095; May 21; v. 250; p. 674.
McKeever, Charles, assignor of one-half to C. B. Mears, Jersey City, N. J. Vehicle-lamp. No. 1,267,884; May 28; v. 250; p. 923.
McKenney, Louis J. (See Reed, Fred R., assignor.)
McKenzie, Archibald F., Whytewold, Manitoba, Canada. Saw-vise. No. 1,266,135; May 14; v. 250; p. 379.
McKerahan, George, Altoona, Pa. Cutting-tool. No. 1,267,782; May 28; v. 250; p. 892.
McKiernan-Terry Drill Company. (See Sturtevant, Thomas E., assignor.)
McKinnon, Lemuel, Salt Lake City, Utah. Tire-filler. No. 1,265,466; May 7; v. 250; p. 163.
McKnight, Thomas R., assignor to Western Wheeled Scraper Company, Aurora, Ill. Grading-machine. No. 1,265,098; May 7; v. 250; p. 64.
McKnight, Thomas R., assignor to Western Wheeled Scraper Company, Aurora, Ill. Grading-machine. No. 1,265,099; May 7; v. 250; p. 64.
McLeod, Nelson W., St. Louis, Mo. Making pneumatic tires. No. 1,266,967; May 21; v. 250; p. 638.
McMeekin, Norman A., Woodsville, N. H. Tool. No. 1,266,510; May 14; v. 250; p. 480.
McMillan, Clara A., New York, N. Y. Crib attachment. No. 1,267,244; May 21; v. 250; p. 717.
McMillan, Frank P., assignor to National Tube Company, Pittsburgh, Pa. Screw-threading apparatus. No. 1,265,467; May 7; v. 250; p. 163.
McNeal, Charles A., Columbus, Ohio. Illuminated sign. No. 1,267,571; May 28; v. 250; p. 833.
McNeil, Chester, assignor to Union Special Machine Company, Chicago, Ill. Throat-plate for sewing-machines. No. 1,266,837; May 21; v. 250; p. 602.
McNeil, Chester, assignor to Union Special Machine Company, Chicago, Ill. Throat-plate for sewing-machines. No. 1,266,838; May 21; v. 250; p. 603.
McOmber, Pauline S., Hastings, Mich. Brassière. No. 1,267,432; May 28; v. 250; p. 795.
McQuarrie, James L., Montclair, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Automatic switch. No. 1,267,433; May 28; v. 250; p. 795.
McQueen, Orvin E., Oakland, Ill. Self-soaping washboard. No. 1,267,245; May 21; v. 250; p. 717.
McRae, John R., Buffalo, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,266,294; May 14; v. 250; p. 422.
McWherter, Walter G., *et al.* (See Biggers, Lee P., assignor.)
Meade, Edgar D., Olean, and H. F. Younglove, Buffalo, N. Y. Device for converting motion. No. 1,265,936; May 14; v. 250; p. 323.
Mears, Clem B. (See McKeever, Charles, assignor.)
Mechanical Development Company of Missouri. (See Mapel, Lewis A., assignor.)
Medley, William W., Terre Haute, Ind. Match striking and shielding device. No. 1,267,437; May 28; v. 250; p. 797.
Meeker, Herbert D., Niskayuna, N. Y., assignor to General Electric Company. Electric coupling. No. 1,267,247; May 21; v. 250; p. 717.
Meeker, Mary A., Winchester, Mass. Hoop. No. 1,266,699; May 21; v. 250; p. 564.
Meikle, George S., Schenectady, N. Y., assignor to General Electric Company. Rectifier. No. 1,266,517; May 14; v. 250; p. 482.
Meikle, George S., Schenectady, N. Y., assignor to General Electric Company. Incandescent-cathode device. No. 1,267,888; May 28; v. 250; p. 924.
Meissner, Alexander. (See Arco and Meissner.)
Melcher, George S., Sharon, Mass., assignor to Mason Regulator Company. Pressure-regulator. No. 1,265,937; May 14; v. 250; p. 323.
Melde, Friedrich W., Norfolk, Va., assignor to The Meldetile Corporation. Roofing-tile. No. 1,266,137; May 14; v. 250; p. 379.
Meldetile Corporation, The. (See Melde, Friedrich W., assignor.)
Meledonian, Sarkis, Detroit, Mich. Water-heater for gas-ranges. No. 1,266,608; May 21; v. 250; p. 539.
Melhuish, William J., Upper Parkstone, borough of Poole, England. Milklike food for the feeding of agricultural stock. No. 1,265,227; May 7; v. 250; p. 98.
Mella, Martin. (See Whitney and Mella.)
Mellinger, Edward A., assignor to Automatic Electric Company, Chicago, Ill. Telephone-exchange trunking system. No. 1,265,228; May 7; v. 250; p. 98.
Melville Clark Piano Company. (See Clark, Melville, assignor.)
Menier, Gaston, Paris, France. Automatic lubricating device for locks and bolts. No. 1,265,351; May 7; v. 250; p. 131.
Mentzer, Claude E., Des Moines, Iowa. Automobile-steering-wheel lock. No. 1,266,842; May 21; v. 250; p. 604.
Mercantile Corporation. (See Banzett, William H., assignor.)
Mercury Manufacturing Company. (See Bulley, George W., assignor.)
Meredith, Samuel W., L. Baumann, Sr., Philadelphia, Pa., and J. Black, Thorofare, N. J. Winding mechanism for spring-motors. No. 1,265,473; May 7; v. 250; p. 165.
Mergenthaler Linotype Company. (See Kennedy, David S., assignor.)
Mergenthaler Linotype Company. (See Kingsbury, George P., assignor.)
Mergenthaler Linotype Company. (See McRae, John R., assignor.)
Merit Manufacturing Co. (See Flagg, Andrew B., assignor.)
Merithew, Jerry J., Akron, Ohio. Vacuum-sweeper. No. 1,267,329; May 21; v. 250; p. 738.
Merrill, George W., Tulsa, Okla. Means for sealing storage-tanks. No. 1,266,843; May 21; v. 250; p. 604.
Merrill, Walter H., and T. C. Martin, Washington, D. C. Motion-picture photography. No. 1,265,352; May 7; v. 250; p. 132.
Merrill, Zachara T., Chicago, Ill. Window-display. No. 1,266,297; May 14; v. 250; p. 423.
Mersfelder, William L., and A. F. Radka, assignors to Detroit Stove Works, Detroit, Mich. Mold for hollow castings and forming the same. No. 1,266,700; May 21; v. 250; p. 565.
Mershon, Ralph D., New York, N. Y. Means for controlling the operation of electrolytic condensers. No. 1,265,353; May 7; v. 250; p. 132.
Mershon, Ralph D., New York, N. Y. Current-rectifying apparatus. No. 1,265,354; May 7; v. 250; p. 132.
Metal Specialties Manufacturing Company. (See Berg, John, assignor.)
Metallurgical Laboratories. (See Fulton, Charles H., assignor.)
Metals Extraction Corporation Limited, The. (See Sulman and Picard, assignors.)
Metcalf, Fred L., Plainfield, N. J. Rotary engine. No. 1,266,298; May 14; v. 250; p. 423.
Methvin, James E., assignor of one-third to F. M. Gay, Eufaula, Ala.; one-sixth to H. A. Gay, Georgetown, and one-sixth to L. O. Gay, Fort Gaines, Ga. Harvesting-plow. No. 1,266,701; May 21; v. 250; p. 565.
Metten, John F., Philadelphia, Pa. Nozzle construction for elastic-fluid turbines. No. 1,266,973; May 21; v. 250; p. 640.
Metz, Anthony J., Des Moines, Iowa. Internal-combustion engine. No. 1,266,033; May 14; v. 250; p. 350.
Metz, Elmer. (See Bowles and Metz.)
Metz, Herman. (See Bowles and Metz.)
Meurer, Charles A., Terrace Park, Ohio. Acrobatic toy. No. 1,265,803; May 14; v. 250; p. 285.
Meyer, August J., Chicago, Ill. Cushion-wheel for vehicles. No. 1,265,101; May 7; v. 250; p. 65.
Meyer, Conrad, New York, N. Y. Eyeglass-mount. No. 1,266,513; May 14; v. 250; p. 481.
Meyer, Frank W., East St. Louis, Ill. Rotary engine. No. 1,267,100; May 21; v. 250; p. 676.
Meyer, Louis, Milford, Ill. Door-operating mechanism. No. 1,265,229; May 7; v. 250; p. 98.
Meyer, Louis H., Lake Park, Iowa. Explosive-engine. No. 1,266,514; May 14; v. 250; p. 481.
Michaud, Joseph O., Fort Kent, Me. Auxiliary brake for automobiles. No. 1,265,938; May 14; v. 250; p. 324.
Middlesex Machine Works. (See Nilson and Brassill, assignors.)
Midland Motor Company. (See Miller, John E., assignor.)
Mihalyi, Frank, assignor to Crown Optical Company, Rochester, N. Y. Optical instrument. No. 1,267,572; May 28; v. 250; p. 834.
Mikulic, Milos N., Kansas City, Mo. Seat and back for barber-chairs. No. 1,265,474; May 7; v. 250; p. 165.
Mildner, William E., and L. Webster, Los Angeles, Cal. Furnace. No. 1,268,037; May 28; v. 250; p. 964.
Miles, Leon L. (See Brown and Miles.)
Miller, Berl W., assignor of one-half to J. D. Heinen, Boise, Idaho. Signal apparatus for automobiles. No. 1,266,702; May 21; v. 250; p. 565.
Miller, Clarence H., county of Bedford, England, assignor to Aktiebolaget Svenska Kullager Fabriken, Gottenborg, Sweden. Ball-bearing. No. 1,265,230; May 7; v. 250; p. 99.
Miller, Emma T., San Antonio, Tex. Boring-machine. No. 1,265,231; May 7; v. 250; p. 99.
Miller, Emmett S., Chicago, Ill. Mechanism for actuating and locking elevator-doors. No. 1,265,804; May 14; v. 250; p. 285.
Miller, Ephraim, assignor, by mesne assignments, to J. Bernet, Chicago, Ill. Lock for controlling-levers. No. 1,265,355; May 7; v. 250; p. 133.
Miller, Ernest W., Norwood, assignor to The American Laundry Machinery Company, Cincinnati, Ohio. Electric controlling mechanism for washing-machines. No. 1,264,956; May 7; v. 250; p. 28.
Miller, Frank B., Jefferson City, Mo. Class-room sanitary wardrobe and blackboard. No. 1,268,038; May 28; v. 250; p. 965.
Miller, Henry D., Lawton, and S. B Lippincott, Oklahoma, Okla. Automatic fire preventer and extinguisher. No. 1,266,034; May 14; v. 250; p. 350.
Miller, John E., Moline, Ill., assignor to Midland Motor Company. Pneumatic starting device for internal-combustion engines. No. 1,268,039; May 28; v. 250; p. 965.
Miller, John Z., Erie, Pa. Telephone-transmitter. No. 1,266,530; May 14; v. 250; p. 486.

Miller, Joseph S., Pittsburgh, Pa. Cheese-slicing machine. No. 1,265,232; May 7; v. 250; p. 99.
Miller, Louis A., Fresno, assignor to Schmidt Lithograph Company, San Francisco, Cal. Fruit-carton. No. 1,265,475; May 7; v. 250; p. 165.
Miller, Mary, Theresa, Wis. Seed-sprouter. No. 1,267,330; May 21; v. 250; p. 739.
Miller, Norman B., Brooklyn, N. Y. Packing. No. 1,265,233; May 7; v. 250; p. 100.
Miller, Ralph C. (See Jones and Miller.)
Miller Train Control Corporation, The. (See Murray, William B., assignor.)
Mills, Chester B., East McKeesport, Pa., assignor to Westinghouse Electric & Manufacturing Company. Flexible shaft-coupling. No. 1,266,609; May 21; v. 250; p. 539.
Mills, Walter C., Union City, Ind. Playground device. No. 1,265,476; May 7; v. 250; p. 166.
Mills, Wellington. (See Hines and Mills.)
Milman, Maurice H., Brooklyn, N. Y., assignor of one-half to E. Heller, Wilkes-Barre, Pa. Window-screen. No. 1,265,477; May 7; v. 250; p. 166.
Milmoe, Michael J., assignor to W. C. Ritchie & Company, Chicago, Ill. Box-making machine. No. 1,267,101; May 21; v. 250; p. 676.
Miln, James, Toronto, Ontario, Canada. Coated paper. No. 1,265,356; May 7; v. 250; p. 133.
Miln, James, Toronto, Ontario, Canada. Coated paper. No. 1,265,357; May 7; v. 250; p. 134.
Milne, Robert, assignor to Ward Pump Company, Rockford, Ill. Drive-gearing for pump outfits. No. 1,267,889; May 28; v. 250; p. 924.
Milne, Samuel, Edinburgh, Scotland. Apparatus for washing or similarly treating pulp. No. 1,267,683; May 28; v. 250; p. 864.
Milson, John R., Watertown, assignor of one-half to J. J. Burns, Boston, Mass. Chemical-mixing apparatus. No. 1,267,102; May 21; v. 250; p. 677.
Minar, David Q., Upland, Cal. Adjustable combined wood and coal heater. No. 1,266,138; May 14; v. 250; p. 380.
Minekime, William H., Water Valley, N. Y. Water-regulator. No. 1,267,103; May 21; v. 250; p. 677.
Miner, William H. (See O'Connor, John F., assignor.)
Minium, Abram E., Denver, Colo. Combined driving and steering mechanism. No. 1,265,358; May 7; v. 250; p. 134.
Mitchell, Amos, assignor of one-fourth to T. B. Kennedy and one-fourth to J. H. Munden, Kirksville, Mo. Pump. No. 1,266,974; May 21; v. 250; p. 640.
Mitchell, Augusta V., Washington, D. C. Combined tire and rim for wheels. No. 1,264,957; May 7; v. 250; p. 23.
Mitchell, Carl H. (See Schmidt, John H., assignor.)
Mitchell, Charles, Poughkeepsie, assignor to Willcox & Gibbs Sewing Machine Co., New York, N. Y. Power-transmitter. No. 1,265,805; May 14; v. 250; p. 285.
Mitchell, Melvin, Peoria, Ill. Road shaping and finishing machine. No. 1,266,531; May 14; v. 250; p. 486.
Mitchell, Melvin, Peoria, Ill. Road shaping and finishing machine. No. 1,266,532; May 14; v. 250; p. 486.
Mitchell, Purley C., Benton Harbor, Mich. Lubricating device. No. 1,265,806; May 14; v. 250; p. 286.
Mitchell, Robert C., Mount Vernon, N. Y. Liquid-fuel-feeding apparatus. No. 1,264,958; May 7; v. 250; p. 24.
Mitchell, William M., Louisville, Ky. Rail-anchor. No. 1,264,959; May 7; v. 250; p. 24.
Mittenthal, Aubrey, *et al.* (See Young, Daniel, assignor.)
Mittenthal, Harry E., *et al.* (See Young, Daniel, assignor.)
Mix, Melville W., assignor to Dodge Manufacturing Company, Mishawaka, Ind. Laminated motor-car frame. No. 1,265,939; May 14; v. 250; p. 324.
Mock, Frank C. (See Gustafson and Mock.)
Moe, Andrew. (See Reinhart and Moe.)
Moe, Christ, Hanska, Minn. Valve. No. 1,265,807; May 14; v. 250; p. 286.
Moerk, Frank X., Philadelphia, Pa. Perpetual calendar. No. 1,266,610; May 21; v. 250; p. 539.
Moffett, James F., West Newton, Pa. Plow attachment. No. 1,266,035; May 14; v. 250; p. 350.
Moldovan, Nathan, A. I. Madriss, and A. Levitt, Brooklyn, N. Y. Life-preserving suit. No. 1,265,234; May 7; v. 250; p. 100.
Mollan, Charles G., Chicago, Ill. Hand-lamp and signal. No. 1,268,040; May 28; v. 250; p. 965.
Molloy, Edmond, assignor to J. F. Molloy and R. T. Molloy, Philadelphia, Pa. Sign-board. No. 1,267,340; May 21; v. 250; p. 741.
Molloy, John F., *et al.* (See Molloy, Edmond, assignor.)
Molloy, Richard T., *et al.* (See Molloy, Edmond, assignor.)
Molyneux, George E., Bayonne, and G. S. Gatchell, Roselle Park, N. J., assignors to The Singer Manufacturing Company. Multiple-needle sewing-machine. No. 1,266,036; May 14; v. 250; p. 350.
Momota, Sadaji, Tokyo, Japan, assignor to General Electric Company. High-potential insulator. No. 1,266,516; May 14; v. 250; p. 481.
Monahan, Frank J., Providence, R. I. Umbrella-frame. No. 1,266,515; May 14; v. 250; p. 481.
Monday, Mileden S., Caney, Okla. Metal railway-tie. No. 1,266,139; May 14; v. 250; p. 380.
Monighan, John E., Toledo, Ohio. Signal. No. 1,267,248; May 21; v. 250; p. 718.
Monson, George S., San Francisco, Cal. Rivet-holding tool. No. 1,267,573; May 28; v. 250; p. 834.
Montgomery, John, Toronto, Ontario, Canada. Box-car door. No. 1,265,476; May 7; v. 250; p. 166.
Montgomery, Robert J., Chicago, Ill. Flue-cleaner. No. 1,266,140; May 14; v. 250; p. 380.
Montgomery, William M., Salem, W. Va. Connecting-rod attachment. No. 1,265,235; May 7; v. 250; p. 100.
Montooth, Harry M., Newark, N. J. Device for cleaning windows or windshields. No. 1,267,249; May 21; v. 250; p. 718.
Mood, Asbury F., Claremore, Okla. Well-bucket. No. 1,267,438; May 28; v. 250; p. 797.
Moomaw, Henry E., Salem, Va., assignor to J. E. Annis, Chattanoogn, Tenn. Sheet-metal bin and corn-crib. No. 1,267,684; May 28; v. 250; p. 865.
Mooney, Charles S., Detroit, Mich. Radiator. No. 1,265,940; May 14; v. 250; p. 324.
Mooney, Frank H., assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio. Presser-bar control for fountain-pens. No. 1,266,141; May 14; v. 250; p. 381.
Mooney, Frank H., assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio. Article polishing or grinding machine. No. 1,267,574; May 28; v. 250; p. 834.
Mooney, Frank H., assignor to The Conklin Pen Manufacturing Company, Toledo, Ohio. Fountain-pen clip. No. 1,267,575; May 28; v. 250; p. 835.
Moore, Albert H., Kensett, Ark. Dry closet. No. 1,267,085; May 28; v. 250; p. 865.
Moore Brothers Company. (See Moore, Lewis, assignor.)
Moore, Edgar M., Pittsburgh, Pa. Hydrant. No. 1,265,479; May 7; v. 250; p. 166.
Moore, Edmund B., Springfield, Vt. Metal-cutting tool. No. 1,265,359; May 7; v. 250; p. 134.
Moore, Elwood D., New York, N. Y., assignor to Dernell Potato Products Co., Chicago, Ill. Removing grease from fried food products. No. 1,265,236; May 7; v. 250; p. 101.
Moore, Frederick W., New York, N. Y., assignor to Dual Leathers Corporation. Leather and textile or like covering. No. 1,267,890; May 28; v. 250; p. 924.
Moore, Harvey L., assignor of one-half to W. C. Stripe, Pittsburgh, Pa. Stoking mechanism. No. 1,267,439; May 28; v. 250; p. 797.
Moore, Henry A., Burbank, and A. H. Brunner, Los Angeles, Cal. Heat-controlling device. No. 1,267,104; May 21; v. 250; p. 677.
Moore, John W. (See Moore, Otto N., assignor.)
Moore, Joseph D., Burkett, Tex. Pipe-wrench. No. 1,268,041; May 28; v. 250; p. 965.
Moore, Lewis, assignor to Moore Brothers Company, Joliet, Ill. Oven-burner for combined solid and fluid fuel ranges. No. 1,267,576; May 28; v. 250; p. 835.
Moore, Otto N., assignor of one-half to J. W. Moore, Indianapolis, Ind. Regulator for fluid flow. No. 1,267,577; May 28; v. 250; p. 835.
Moore Pen Company, The. (See Brandt, George F., assignor.)
Moore, Philip W., Evanston, assignor to The P. & M. Co., Chicago, Ill. Anticreeper. No. 1,267,786; May 28; v. 250; p. 894.
Moore, Robert, McFarlan, N. C. Vending-machine. No. 1,266,037; May 14; v. 250; p. 351.
Moore, Robert C., New York, N. Y. Pencil. No. 1,266,299; May 14; v. 250; p. 423.
Moore, William G., Miami, Fla. Steering-head hub for two-wheeled autovehicles. No. 1,266,611; May 21; v. 250; p. 540.
Moore, William G., Indianapolis, Ind. Steering-head hub for two-wheeled autovehicles. No. 1,266,612; May 21; v. 250; p. 540.
Moore, William J. P., New York, N. Y. Making wheels. No. 1,266,844; May 21; v. 250; p. 604.
Moran, Thomas M., Colton, assignor of one-half to R. E. Thomas, Los Angeles, Cal. Cotton-chopper. No. 1,268,042; May 28; v. 250; p. 966.
Morgan Construction Company. (See Carroll, Elbert H., assignor.)
Morgan, David G., San Francisco, Cal. Machine for making automobile-bumpers. No. 1,266,975; May 21; v. 250; p. 641.
Morin, Fredrick C., Kress, Va. Common rule. No. 1,266,845; May 21; v. 250; p. 604.
Morison, Donald B., Hartlepool, England. Producing low vacuum in steam-condensers. No. 1,265,480; May 7; v. 250; p. 167.
Morris, Francis, Philadelphia, Pa. Pipe-bending machine. No. 1,265,102; May 7; v. 250; p. 66.
Morris, Harold B., Glendale, Cal. Manufacture of covered frame-pieces for chairs and other articles. No. 1,265,941; May 14; v. 250; p. 325.
Morris, Robert P., Waterloo, Iowa. Litter-carrier. No. 1,266,300; May 14; v. 250; p. 423.
Morrisey, James F., Morgantown, N. C. Means for setting circular saws. No. 1,266,703; May 21; v. 250; p. 565.
Morrison, John. (See Clayton and Morrison.)
Morrison, John, Leominster, Mass. Making brushes. No. 1,265,808; May 14; v. 250; p. 286.
Morrison, Walter L., Canonsburg, Pa., assignor to Electric Reduction Company. Producing alkali metals or the like. No. 1,265,360; May 7; v. 250; p. 134.
Morrison, William, Troy, N. Y. Making brushes. No. 1,265,237; May 7; v. 250; p. 101.

Morse, William F., assignor to S. R. Parry, Rochester, N. Y. Mixing-machine. No. 1,267,578; May 28; v. 250; p. 835.
Morton, Harry E., Boston, Mass. Vacuum-breaker. No. 1,266,976; May 21; v. 250; p. 641.
Morton, William J., St. Louis, Mo., assignor, by mesne assignments, to McBee Binder Company, Athens, Ohio. Perforating and binding machine for letter-sheets. No. 1,265,238; May 7; v. 250; p. 101.
Morton, William J., New York, N. Y., assignor to McBee Binder Company, Athens, Ohio. Work-holder for letter-sheet-perforating machines. No. 1,265,696; May 7; v. 250; p. 223.
Mosby, Alfred D., assignor to Marsh-Capron Manufacturing Company, Chicago, Ill. Apparatus for distributing concrete. No. 1,267,440; May 28; v. 250; p. 797.
Mosby, William A., assignor of one-half to R. M. Lother, San Antonio, Tex. Insect-trap. No. 1,265,481; May 7; v. 250; p. 167.
Moses, Percy L., Brookline, Mass., and H. C. Greene, deceased, Cohoes, H. S. Greene, administrator, Waterford, N. Y., assignors to Asbestos Protected Metal Company, Pittsburgh, Pa. Skylight and glass-wall structure. No. 1,266,613; May 21; v. 250; p. 540.
Mosley, Noah S., Fort Worth, Tex. Head for hammers and other tools. No. 1,267,441; May 28; v. 250; p. 798.
Moss, Ernest, Christchurch, New Zealand. Pouring attachment to tins, cans, and the like. No. 1,264,960; May 7; v. 250; p. 24.
Moss, Sanford A., Lynn, Mass., assignor to General Electric Company. Governing mechanism for compressors and exhausters. No. 1,265,452; May 7; v. 250; p. 167.
Mosteller, Dosier H., Oak Park, Ill. Straw-dispenser. No. 1,267,579; May 28; v. 250; p. 836.
Motsch, Albert F., Oskaloosa, Iowa. Ledger-sheet pocket for signature-cards. No. 1,266,142; May 14; v. 250; p. 381.
Mouck, William E. (See Curry and Lewis, assignors.)
Mount, William H. H., Jr., Millington, N. J. Office-partition structure. No. 1,267,891; May 28; v. 250; p. 925.
Mowery, J. H. (See Bell, Silas D., assignor.)
Moyer, Albert W., Belmar, N. J. Furnace. No. 1,264,961; May 7; v. 250; p. 24.
Mrakitsch, Anton, assignor of one-fifth to G. Kwetcher, one-fifth to J. Binder, one-fifth to V. Brukler, and one-fifth to C. Winiger, Detroit, Mich. Horseshoe. No. 1,265,942; May 14; v. 250; p. 325.
Muchow, William M., Evanston, Ill. Artificial tooth. No. 1,267,442; May 28; v. 250; p. 798.
Mugica, Juan, San Sebastian, Spain. Apparatus for the manufacture of continuous reinforced strips of asphalt. No. 1,266,846; May 21; v. 250; p. 605.
Muhlfeld, John E. (See Carracristi and Muhlfeld.)
Mulig, Frank, assignor of one-half to J. H. Ott, Lyndora, Pa. Toy. No. 1,266,847; May 21; v. 250; p. 605.
Mulkern, Thomas A. (See Andersen, Karl A. J., assignor.)
Muller, Edward, North Bergen, N. J. Vehicle-washer. No. 1,264,962; May 7; v. 250; p. 25.
Mulligan, Paul C., assignor to Internal Combustion Steam Engine Co., Seattle, Wash. Internal-combustion device for use with turbine-engines. No. 1,267,105; May 21; v. 250; p. 678.
Mullins, Moses F., Nashville, Tenn. Comb. No. 1,266,704; May 21; v. 250; p. 566.
Mulrony, Marion A., Rendwick, near Sydney, New South Wales, Australia. Wind-power motor. No. 1,266,518; May 14; v. 250; p. 482.
Multicolor Intaglio Press Company. (See Beach, Edward S., assignor.)
Multicolor Intaglio Press Company. (See Saalburg, Charles W., assignor.)
Mumm, Edward F., Milwaukee, Wis. Duplicating mechanism for type-writers. No. 1,266,038; May 14; v. 250; p. 351.
Mummert, Ervin S., and J. O. Dixon, Hanover, Pa. Facing-tool. No. 1,265,483; May 7; v. 250; p. 167.
Munden, James H., *et al.* (See Mitchell, Amos, assignor.)
Murinaer, Emil, New York, N. Y. Burglar-alarm. No. 1,265,361; May 7; v. 250; p. 135.
Murphy, Francis P., Newport, N. H., assignor to W. H. McElwain Company. Insole. No. 1,268,065; May 28; v. 250; p. 972.
Murphy, Peter F., Milwaukee, Wis. Wrapping-machine. No. 1,266,705; May 21; v. 250; p. 566.
Murphy, Walter P. (See Downing, Ira S., assignor.)
Murphy, Walter P. (See Sisson, Vinton E., assignor.)
Murphy, Walter P., Chicago, Ill. Sheet-metal car end. No. 1,265,289; May 7; v. 250; p. 101.
Murphy, Walter P., Chicago, Ill. Sheet-metal grain-door. No. 1,266,801; May 14; v. 250; p. 423.
Murray, Joseph B. (See Murray, Thomas E. and J. B.)
Murray, Thomas E., New York, N. Y. Sheet-metal sleeve. No. 1,267,250; May 21; v. 250; p. 718.
Murray, Thomas E., New York, N. Y. Making metal rings. No. 1,267,251; May 21; v. 250; p. 718.
Murray, Thomas E., New York, N. Y. Housing for universal joints. No. 1,267,252; May 21; v. 250; p. 719.
Murray, Thomas E., New York, N. Y. Engine-cylinder. No. 1,267,253; May 21; v. 250; p. 719.
Murray, Thomas E., New York, N. Y. Apparatus for making metal chains. No. 1,267,255; May 21; v. 250; p. 719.
Murray, Thomas E., New York, N. Y. Method of and apparatus for electric welding. No. 1,267,256; May 21; v. 250; p. 720.
Murray, Thomas E., New York, N. Y. Tubular cartridge-shell. No. 1,267,257; May 21; v. 250; p. 720.
Murray, Thomas E., New York, N. Y. Electrical welding apparatus for pipe-couplings. No. 1,267,258; May 21; v. 250; p. 720.
Murray, Thomas E. and J. B., New York, N. Y. Method of and apparatus for electric welding. No. 1,267,259; May 21; v. 250; p. 720.
Murray, Thomas E., and H. R. Woodrow, New York, N. Y.; said Woodrow assignor to said Murray. Electric welding-machine for making metal rings. No. 1,267,254; May 21; v. 250; p. 719.
Murray, William B., Danville, Ill., assignor to The Miller Train Control Corporation, Staunton, Va. Pressure-operated and electrically-controlled train-control system. No. 1,265,943; May 14; v. 250; p. 326.
Myers, Albert M., Harrisburg, Pa. Pneumatic tire. No. 1,268,043; May 28; v. 250; p. 966.
Myers, Daniel E., Longview, Tex. Child's bed. No. 1,267,260; May 21; v. 250; p. 720.
Myers, Daniel M., assignor of one-half to A. W. Phillips, Jefferson, Iowa. Force air-pump. No. 1,265,240; May 7; v. 250; p. 102.
Myers, Hubert A., assignor to Toledo Scale Company, Toledo, Ohio. Automatic weighing-scale. No. 1,267,580; May 28; v. 250; p. 836.
Myers, Louis, Detroit, Mich., assignor to Machine Appliance Corporation, Brooklyn, N. Y. Eyeleting-machine. No. 1,264,963; May 7; v. 250; p. 25.
Myers, Louis, assignor to Crystal Alloys Corporation, Detroit, Mich. Comb. No. 1,265,362; May 7; v. 250; p. 135.
Myers, Walter, Bridgeport, Conn., assignor to The Singer Manufacturing Company. Ornamental-stitch sewing-machine. No. 1,267,581; May 28; v. 250; p. 837.
Mylin, Amos H. (See White, Lewis B., assignor.)
Myrick, Paul S., Tampa, Fla. Flat-iron heater. No. 1,265,241; May 7; v. 250; p. 102.
Nacker, Owen M., assignor of one-half to A. P. Brush, Detroit, Mich. Valve-operating mechanism. No. 1,265,103; May 7; v. 250; p. 66.
Nakazawa, Edna M., New York, N. Y. Bed. No. 1,266,039; May 14; v. 250; p. 351.
Nance, James W., Filer, Idaho, assignor to Franklin Gas Turbine Company, Phoenix, Ariz. Rotary-valve gas-engine. No. 1,267,787; May 28; v. 250; p. 894.
Napier, Charles, assignor to Napier Saw Works, Incorporated, Springfield, Mass. Process of and apparatus for heat treatment of metal objects. No. 1,265,944; May 14; v. 250; p. 326.
Napier Saw Works. (See Napier, Charles, assignor.)
Narmore, Missouri A., Fort Worth, Tex. Buttonless neck-band. No. 1,267,261; May 21; v. 250; p. 721.
Nash, David H., Church Road, Va. Air-mixer for gasolene engines. No. 1,265,484; May 7; v. 250; p. 168.
Nasmith, John W., Stockport, England. Wire-stitching machine. No. 1,267,892; May 28; v. 250; p. 925.
Nast, Thomas, Mamaroneck, N. Y. Collar-button. No. 1,268,044; May 28; v. 250; p. 966.
Nathusius, Hans, Friedenshütte, Kreis Beuthen, Germany. Electrical furnace. No. 1,265,485; May 7; v. 250; p. 168.
Nathusius, Hans, Friedenshütte, Kreis Beuthen, Germany. Electric furnace. No. 1,265,945; May 14; v. 250; p. 326.
National Binding Machine Company, The. (See Flora, Ellsworth E., assignor.)
National Blank Book Company. (See Schade, John, assignor.)
National Brass Manufacturing Company. (See Wray, Charles F., assignor.)
National Carbon Company. (See Williams, Ira C. and C. F., assignors.)
National Cash Register Company, The. (See Banwell and Phillips, assignors.)
National Cash Register Company, The. (See Carroll, Thomas, assignor.)
National Chain Company. (See Rosenberg, Samuel, assignor.)
National Equipment Company. (See Granlund, Oscar F., assignor.)
National Fireworks Distributing Company, The. (See Clark, Allen F., assignor.)
National Gauge & Equipment Company. (See Oeschger, Walter I., assignor.)
National Malleable Castings Company, The. (See Campbell, Frank R., assignor.)
National Pneumatic Company. (See Forman, Paris R., assignor.)
National Tube Company. (See McMillan, Frank P., assignor.)
Navarre, Bertrand A., Lyon, France. Apparatus for regenerating old paper. No. 1,265,809; May 14; v. 250; p. 286.
Naylon, Michael, Cleveland, Ohio. Resilient wheel. No. 1,267,788; May 28; v. 250; p. 894.
Neal, John Q., Bude, Miss. Chain-lock. No. 1,265,486; May 7; v. 250; p. 168.
Neely, Samuel L., Willard, Mo. Combination switch apparatus. No. 1,265,242; May 7; v. 250; p. 102.
Neff, Ignatz O. (See Schilling and Neff.)

Neikirk, John O., Lombard, Ill. Railway-car. No. 1,268,045; May 28; v. 250; p. 966.
Nelis, Frank A., Piqua, Ohio. Micrometer depth-gage. No. 1,266,977; May 21; v. 250; p. 642.
Nelson, Emil. (See Johnston, Roscoe C., assignor.)
Nelson, Harmon O., assignor to The Whitin Machine Works, Whitinsville, Mass. Comber doffer-brush. No. 1,265,810; May 14; v. 250; p. 287.
Nelson, Iver J., Wittenberg, Wis. Sleigh-runner. No. 1,267,789; May 28; v. 250; p. 895.
Nelson, James D., Cincinnati, Ohio. Sprinkler electric signal system. No. 1,266,143; May 14; v. 250; p. 381.
Nelson, James D., Cincinnati, Ohio. Electric signal system. No. 1,266,144; May 14; v. 250; p. 381.
Nervo, B. B. (See Tibbs, Clarence E., assignor.)
Nesbitt, William J., Los Angeles, Cal. Heel-cutting apparatus. No. 1,265,487; May 7; v. 250; p. 169.
Neser, Carroll E., *et al.* (See Smith, John B. R., assignor.)
Neser, Thomas D., *et al.* (See Smith, John B. R., assignor.)
Nestegard, Knut L., Knapen, Alberta, Canada. Draft-equalizer. No. 1,267,106; May 21; v. 250; p. 678.
Neuland, Alfons H., New York, N. Y. Dynamo-electric machine. No. 1,266,302; May 14; v. 250; p. 424.
Neuland, Alfons H., San Francisco, Cal. Electromagnetic power-transmitting apparatus. No. 1,266,303; May 14; v. 250; p. 424.
New Jersey Patent Company. (See Constable, John P., assignor.)
New Jersey Patent Company. (See Durand, Nelson C., assignor.)
New London Mfg. Co. (See Sandford, Ralph E., assignor.)
Newberry, Spencer B., Cleveland, Ohio. Refractory-furnace lining and making. No. 1,267,686; May 28; v. 250; p. 865.
Newcomb, Harold A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Seal. No. 1,266,614; May 21; v. 250; p. 541.
Newell, Hugh T., Pittsburgh, Pa., assignor to Chowning Regulator Corporation, Elmira, N. Y. Means for automatically regulating the blast components of producers. No. 1,267,443; May 28; v. 250; p. 798.
Newhall, Henry B. (See Pleister, Henry W., assignor.)
Newman, A. R. (See Fisher, Aubrey H., assignor.)
Newman, Isador, New York, N. Y. Tool for capping cans. No. 1,266,519; May 14; v. 250; p. 482.
Newman, Oliver, Madrid, Iowa. Molding device. No. 1,268,046; May 28; v. 250; p. 966.
Newmann, John, New York, N. Y. Ball-bearing. No. 1,266,145; May 14; v. 250; p. 381.
Newmann, John, New York, N. Y. Multiple-row ball-bearing. No. 1,266,146; May 14; v. 250; p. 382.
Nicholas Copper Company. (See Stout, Harry H., assignor.)
Nicholas, William, Southport, Conn., assignor, by mesne assignments, to United States Graphotype Company, Type-body. No. 1,264,964; May 7; v. 250; p. 25.
Nichols Copper Company. (See Rudolf, Ferdinand A., assignor.)
Nichols, Joseph R., Seattle, Wash. Device for locking motor-vehicles. No. 1,267,687; May 28; v. 250; p. 865.
Nichols, Robert P. (See Pletzsch and Nichols.)
Nichols, William F., Chicago, Ill. Globe-guard support. No. 1,267,444; May 28; v. 250; p. 798.
Nickerson Art Metal Company. (See Smith, Harry W., assignor.)
Nickle, Frank H., Detroit, Mich. Can-filling machine. No. 1,266,706; May 21; v. 250; p. 566.
Nicol, David S., assignor to The Shawinigan Water & Power Company, Montreal, Quebec, Canada. Insulator-clamp. No. 1,266,615; May 21; v. 250; p. 541.
Niemi, Isaac, assignor of one-fourth to J. F. Maki, Chatham, Mich. Multiple horse holder and releaser. No. 1,267,582; May 28; v. 250; p. 837.
Nikas, Peter D., Washington, D. C. Safety device for gas-pipes. No. 1,267,107; May 21; v. 250; p. 678.
Nilson, Andrew, assignor to Nilson Bros., Chicago, Ill. Tool-mounting. No. 1,266,520; May 14; v. 250; p. 483.
Nilson Bros. (See Nilson, Andrew, assignor.)
Nilson, Oscar W., Middletown, and F. A. Brassill, Hartford, assignors to Middlesex Machine Works, Middletown, Conn. Grinding-machine. No. 1,266,848; May 21; v. 250; p. 605.
Nixon, Charles H., Detroit, Mich. Adjustable hinge. No. 1,265,863; May 7; v. 250; p. 185.
Noah, Robert S., Annapolis, assignor to H. B. Reinhardt, trustee, Roland Park, Md. Hull for submarine vessels. No. 1,264,965; May 7; v. 250; p. 26.
Noble Heater Company, The. (See Bartholomew, Gilbert A., assignor.)
Noble, Roy E., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,266,978; May 21; v. 250; p. 642.
Nolan, Frederick T., Jacksonville, Fla. Shaft-packing. No. 1,265,488; May 7; v. 250; p. 169.
Nolan, Sarah G., Washington, D. C. Shoe-lace-fastening device. No. 1,265,946; May 14; v. 250; p. 326.
Non Skid Company of America. (See Haubner, Robert W., assignor.)
Nordgren, Werner M., Charlottenburg, Germany, assignor to General Electric Company, Mutter. (Reissue.) No. 14,409; May 7; v. 250; p. 233.
Nordstrom, Charles J., Evanston, Ill. Automobile-signal. No. 1,267,790; May 28; v. 250; p. 895.
Nordstrom, Gustave, Winnipeg, Manitoba, Canada. Automatic steering and stabilizing apparatus for aircraft. No. 1,264,966; May 7; v. 250; p. 26.
Norgate, George W., assignor to Benjamin Electric Manufacturing Company, Chicago, Ill. Plug. No. 1,266,979; May 21; v. 250; p. 643.
Norman, A. M., *et al.* (See Hartkopf, Carl F., assignor.)
Norman, Charles O., Montgomery, Ala. Dust and silencer hood for valve-in-head motors. No. 1,268,047; May 28; v. 250; p. 967.
Norman, Mack D. (See Norman, William A. and M. D.)
Norman, Orville P., Los Angeles, Cal. Mechanical movement. No. 1,268,048; May 28; v. 250; p. 967.
Norman, William A. and M. D., Saltillo, Tex. Peanut-planter. No. 1,267,583; May 28; v. 250; p. 837.
Norquist, Emanuel E. (See Smothers and Norquist.)
Norquist, Emanuel E., Kansas City, Mo. Convertible body for motor-cars. No. 1,266,521; May 14; v. 250; p. 483.
Norsk Elektrisk Metallindustri Aktieselskap. (See Huldt, Sven, assignor.)
North Bro's M'f'g. Co. (See Fegley and Leopold, assignors.)
North & Judd Manufacturing Company, The. (See Carpmill, John F., assignor.)
Norton, Henry K., Los Angeles, Cal. Motion-picture camera. No. 1,267,688; May 28; v. 250; p. 866.
Norton, Henry K., Los Angeles, Cal. Duplex stereoscopic motion-picture camera. No. 1,267,689; May 28; v. 250; p. 866.
Norton, John R., Olean, N. Y., assignor to The J. G. Wilson Corporation, Norfolk, Va. Folding partition. No. 1,266,980; May 21; v. 250; p. 643.
Norton, William C., Salem, Mass. Thermal gas-valve. No. 1,267,108; May 21; v. 250; p. 678.
Nutting, Charles E., assignor to Draper Corporation, Hopedale, Mass. Bobbin-clutching means for rotatable spindles. No. 1,265,947; May 14; v. 250; p. 326.
O'Connor, John, New York, N. Y. Valve-motion for internal-combustion engines. No. 1,267,893; May 28; v. 250; p. 925.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Recording mechanism. No. 1,265,489; May 7; v. 250; p. 169.
O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Draft-rigging for railway-cars. No. 1,265,490; May 7; v. 250; p. 170.
O'Connor, William P., *et al.* (See Stampka, Paul, assignor.)
O'Donnell, William T., Great Falls, Mont. Foot-guard. No. 1,266,304; May 14; v. 250; p. 425.
O'Gorman, William J., New York, N. Y. Spark-plug. No. 1,268,049; May 28; v. 250; p. 967.
O'Laughlin, Bartley, Coral, Mich. Mail-bag-catching device. No. 1,267,109; May 21; v. 250; p. 679.
O'Neil, Michael G. (See Borchert and O'Neil.)
O'Shaughnessy, Martin R., Cobalt, Ontario, Canada. Stamp-mill or the like. No. 1,265,848; May 14; v. 250; p. 327.
Oakley, Oliver J., Brunswick, and E. C. Hughes, Fitzroy, Melbourne, Victoria, Australia. Machine for molding roofing-tiles and the like. No. 1,267,331; May 21; v. 250; p. 739.
Obitts, Lester D., Wellington, Ohio. Soil-pulverizer. No. 1,265,491; May 7; v. 250; p. 170.
Ochsner, Hans L., assignor of one-third to N. M. Eddy, Alpena, Mich. Woman's work and sport garment. No. 1,265,492; May 7; v. 250; p. 170.
Odell, Stephen E., Bellingham, Wash. Panoramic camera. No. 1,266,616; May 21; v. 250; p. 541.
Oeschger, Walter I., Detroit, Mich., assignor, by mesne assignments, to National Gauge & Equipment Company, La Crosse, Wis. Gage. No. 1,267,584; May 28; v. 250; p. 837.
Ogden, Leroy A., Grand Rapids, Mich. Device for adjustably connecting alined rods. No. 1,265,104; May 7; v. 250; p. 66.
Ogle, Francis M., assignor of one-third to C. P. McClain and M. L. Ebstone, Cheyenne, Okla. Folding poultry-coop. No. 1,267,585; May 28; v. 250; p. 837.
Ogram, Byran. (See Davis and Ogram.)
Ohlsen, Charles M., Chicago, Ill. Door-fastening. No. 1,264,967; May 7; v. 250; p. 26.
Ohlson, Olof, Newton, assignor to Waltham Watch Company, Waltham, Mass. Composite machine element. No. 1,265,811; May 14; v. 250; p. 287.
Oldham, Richard, Jacksonville, Fla. Street-cleaning utensil. No. 1,266,522; May 14; v. 250; p. 483.
Oldroyd, John P., Ealing, England. Implement or device for use in gardening operations. No. 1,266,523; May 14; v. 250; p. 484.
Olds, Luco L., *et al.* (See Biggers, Lee P., assignor.)
Olesen, Ellsius J., Chicago, Ill. Demountable table-top. No. 1,266,981; May 21; v. 250; p. 643.
Oliver Chilled Plow Works. (See Altgelt, Rudolph J., assignor.)
Oliver Chilled Plow Works. (See Springer, William N., assignor.)
Oliver, Doctor F., Oakland, Cal. Pencil-sharpener. No. 1,267,791; May 28; v. 250; p. 895.
Oliver, Doctor F., Oakland, Cal. Seat suspension. No. 1,267,792; May 28; v. 250; p. 895.
Oliver, Doctor F., Oakland, Cal. Convertible coupé-body. No. 1,267,793; May 28; v. 250; p. 896.

Oliver, Doctor F., Oakland, Cal. Auto-door latch. No. 1,267,794; May 28; v. 250; p. 896.

Olley, Edwin A., assignor to Crouse-Hinds Company, Syracuse, N. Y. Panel-board support. No. 1,265,364; May 7; v. 250; p. 135.

Olsen, Ernest R., assignor to G. W. Olsen, Muskegon, Mich. Internal-combustion engine. No. 1,266,849; May 21; v. 250; p. 605.

Olsen, George W. (See Olsen, Ernest R., assignor.)

Olson, Carl G., assignor to Illinois Tool Works, Chicago, Ill. Wheel-dressing device. No. 1,266,707; May 21; v. 250; p. 567.

Olson, John A., *et al.* (See Anderson, Charles A., assignor.)

Olson, Karl E., Irvington, N. J. Imitation gold or colored leaf. No. 1,267,445; May 28; v. 250; p. 798.

Olson, Lars, Winnipeg, Manitoba, Canada. Lock. No. 1,267,894; May 28; v. 250; p. 925.

Olson, Ole, Jr., Avoca, Minn. Self-dumping gear for harvesters. No. 1,266,040; May 14; v. 250; p. 352.

Omerzo, Joseph, Chicago, Ill. Railway-crossing gate. No. 1,268,050; May 28; v. 250; p. 968.

Onderdonk, Lansing, New York, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Sewing-machine. No. 1,265,812; May 14; v. 250; p. 287.

Oneida Community. (See Burnham, Chester W., assignor.)

Ophuis, Fred, Brooklyn, N. Y. Apparatus for ice manufacture. No. 1,267,795; May 28; v. 250; p. 896.

Oppenheim, Simon R., Keeler, Cal. Kelp-drier. No. 1,266,041; May 14; v. 250; p. 352.

Oquist, Charles, Neosho, Mo. Plow. No. 1,268,051; May 28; v. 250; p. 968.

Oré, Ernest, Caen, France. Manufacture of ammonia. No. 1,266,147; May 14; v. 250; p. 382.

Orewiler, Benjamin F., assignor to Kabo Corset Co., Chicago, Ill. Brassière-buckle. No. 1,267,895; May 28; v. 250; p. 926.

Orr & Sembower. (See Bomberger, Moses, assignor.)

Orth, Frank, Indiana Harbor, Ind. Roof construction for furnaces. No. 1,265,493; May 7; v. 250; p. 170.

Orville Simpson Company, The. (See Simpson, Lowe E., assignor.)

Orvis, Annie D. (See Orvis, Orland D., assignor.)

Orvis, Orland D., assignor to A. D. Orvis, New York, N. Y. Smoke-consuming furnace. No. 1,267,446; May 28; v. 250; p. 799.

Osborn, James T., assignor of one-half to C. K. McGee, West Point, Miss. Concrete door-step. No. 1,265,949; May 14; v. 250; p. 327.

Osler, John B., Kenesaw, Nebr. Automobile-bed. No. 1,266,042; May 14; v. 250; p. 352.

Otis Elevator Company. (See Strang, Walter C., assignor.)

Otis, Gerald E., Buffalo, assignor to Angular Drill & Machine Corporation, New York, N. Y. Cam for square-hole drills. No. 1,266,148; May 14; v. 250; p. 382.

Ott, John H. (See Mulig, Frank, assignor.)

Ottaviani, Domenico, Dayton, Ohio. Submarine. No. 1,266,305; May 14; v. 250; p. 425.

Otte, Otho M., Jamestown, N. Y. Automobile-lamp. No. 1,266,524; May 14; v. 250; p. 484.

Otte, Otho M., Jamestown, N. Y. Portable focusing dark-room. No. 1,266,525; May 14; v. 250; p. 484.

Ottumwa Box Car Loader Co. (See Hunt, William E., assignor.)

Overbury, Frederick C., Hilladale, N. J., assignor, by mesne assignments, to The Flintkote Company, Boston, Mass. Ornamental roof. No. 1,265,105; May 7; v. 250; p. 66.

Owens, Charles, Chattanooga, Tenn. Internal-combustion engine. No. 1,264,968; May 7; v. 250; p. 26.

Ozanne, Chester I., Kenosha, Wis. Distributing-rack. No. 1,266,708; May 21; v. 250; p. 567.

P. & M. Co., The. (See Moore, Philip W., assignor.)

Paalman, John H., Grand Rapids, Mich. Serving-table. No. 1,267,896; May 28; v. 250; p. 926.

Pacific Box Factory. (See Isert, Arthur, assignor.)

Pacific Commercial Company. (See Pierce, James L., assignor.)

Packard Motor Car Company. (See Church, Harold D., assignor.)

Packard Motor Car Company. (See Loomis, Allen, assignor.)

Packard Motor Car Company. (See Macauley, Alvan, assignor.)

Packard Motor Car Company. (See Vincent, Jesse G., assignor.)

Packard, Ralph G., Brooklyn, N. Y. Gang-drill for subaqueous excavation. No. 1,265,494; May 7; v. 250; p. 170.

Pagel, Gustav, Berlin, Germany, assignor to General Electric Company. Air-pump. No. 1,267,897; May 28; v. 250; p. 926.

Pakas, Solomon L., Spuyten Duyvil, N. Y. Arch-support. No. 1,267,796; May 28; v. 250; p. 897.

Palmer, Charles S. and D., Saranac Lake, N. Y. Pencil-sharpener. No. 1,267,586; May 28; v. 250; p. 838.

Palmer, Dean. (See Palmer, Charles S. and D.)

Palmer, James M., *et al.* (See Biggers, Lee P., assignor.)

Palmer, John M., Chicago, Ill. Valve. No. 1,265,495; May 7; v. 250; p. 171.

Palmer, Winfield S., Glenburn, Pa. Combination ice saw and pick. No. 1,266,982; May 21; v. 250; p. 643.

Palo Company. (See Poetschke, Paul, assignor.)

Panoulias, Panayiotis. (See White, George, assignor.)

Pape, Herman G., New York, N. Y. Sound-reproducing appliance. No. 1,267,587; May 28; v. 250; p. 838.

Papec Machine Company. (See Bullock, Fred J., assignor.)

Paramount Hosiery Form Drying Co. (See Prosser, Joseph G., assignor.)

Paré, Arsene J., Brockton, Mass. Engine of warfare. No. 1,265,496; May 7; v. 250; p. 171.

Parish, Cornelius, Kingston-upon-Hull, England. Auxiliary air-admission valve for internal-combustion engines. No. 1,265,365; May 7; v. 250; p. 136.

Parish, Stephen, Steubenville, Ohio. Reversing-valve for gas-furnaces. No. 1,267,898; May 28; v. 250; p. 926.

Parisian Novelty Company. (See Komorous, Joseph, assignor.)

Parker, Christine R. (See Parker, George H., assignor.)

Parker, Elijah R., Rifle, Colo. Antiskidding device. No. 1,265,950; May 14; v. 250; p. 327.

Parker, George D., Riverside, Cal. Drying apparatus for fruit. No. 1,266,983; May 21; v. 250; p. 644.

Parker, George H., assignor to C. R. Parker, Stamford, Conn. Game device. No. 1,265,497; May 7; v. 250; p. 171.

Parker, Russell, assignor to Parker, Stearns & Company, Brooklyn, N. Y. Garment-supporter. No. 1,265,243; May 7; v. 250; p. 102.

Parker, Ryland H., O'Neill, Nebr. Direction-indicating apparatus for vehicles. No. 1,266,526; May 14; v. 250; p. 485.

Parker, Stearns & Company. (See Parker, Russell, assignor.)

Parkyn, Herbert A., assignor to Leonard Pump & Motor Company, Chicago, Ill. Refrigerating apparatus. No. 1,267,797; May 28; v. 250; p. 897.

Parlin & Orendorff Company. (See Graham, William S., assignor.)

Parnall, Archie E., assignor to F. W. Williams, Chicago, Ill. Talking-machine mechanism. No. 1,265,498; May 7; v. 250; p. 172.

Parnall, Archie E., assignor to F. W. Williams, Chicago, Ill. Centrifugal speed-regulator for phonographs. No. 1,266,306; May 14; v. 250; p. 425.

Parnall, Archie E., assignor to F. W. Williams, Chicago, Ill. Talking-machine mechanism. No. 1,266,307; May 14; v. 250; p. 425.

Parnell, Charles P., assignor of one-half to G. R. King, New York, N. Y. Device for bending pipes. No. 1,267,798; May 28; v. 250; p. 897.

Parrish, Alan J., Paris, Ill. Machine for making concrete pavements and the like. No. 1,265,499; May 7; v. 250; p. 172.

Parry, Samuel R. (See Morse, William F., assignor.)

Parsell, Orlando W., Bad Axe, Mich. Spray-pump. No. 1,265,366; May 7; v. 250; p. 136.

Parsons, Sidney H., and R. F. Heron, assignors of one-third to E. P. Vernon, Los Angeles, Cal. Apparatus for treating nuts. No. 1,267,110; May 21; v. 250; p. 679.

Parsons, Warren J., Huntington, W. Va. Combined lawn-trimmer and sod-cutter. No. 1,266,617; May 21; v. 250; p. 542.

Parti-Colored Glass Bottle Company. (See Finkbeiner, Charles K., assignor.)

Paterson, Edward A., Thorold, Canada. Binder for roads, &c., and making same. No. 1,266,618; May 21; v. 250; p. 542.

Patterson, George F., Baltimore, Md. Feed-water regulator. No. 1,266,619; May 21; v. 250; p. 542.

Patton, John G., Philadelphia, Pa. Lining and advertising device for finger-bowls. No. 1,267,262; May 21; v. 250; p. 721.

Paul, Abram F., and A. J. Tanner, London, England, assignors to Prepayment Car Sales Company, New York, N. Y. Passenger-vehicle. No. 1,265,367; May 7; v. 250; p. 136.

Paulson, Ernest W., Otoe, Iowa. Corn-planter-frame construction. No. 1,267,111; May 21; v. 250; p. 680.

Pavlik, Frank, Jr., Westminster, Colo. Dry-closet. No. 1,265,368; May 7; v. 250; p. 136.

Payne, John A., and H. E. Cunningham, Little Rock, Ark. Level. No. 1,265,500; May 7; v. 250; p. 172.

Payne, William L. (See Ratliff and Payne.)

Payzant, Henry H., assignor of one-half to E. M. Rogers, Everett, Wash. Cutter-head. No. 1,265,501; May 7; v. 250; p. 172.

Peabody, Charles M., South Orange, N. J. Watchman's clock. No. 1,266,620; May 21; v. 250; p. 542.

Peal, Marshall B., Brooklyn, N. Y. Phonograph. No. 1,265,502; May 7; v. 250; p. 173.

Pearson, Charles, Chicago, Ill., assignor to International Harvester Company of New Jersey. Tractor-hitch for harvesting-machines. No. 1,266,710; May 21; v. 250; p. 567.

Pearson, Charles, Chicago, Ill., assignor to International Harvester Company of New Jersey. Pitman connection for mowers. No. 1,266,984; May 21; v. 250; p. 644.

Peat Coal Limited. (See Jenkins, Charles D., assignor.)

Peheller, Paul, San Jose, Cal. Vehicle-signal device. No. 1,266,043; May 14; v. 250; p. 352.

Peck, George C., and H. B. Shields, Schenectady, N. Y. Bread-toaster. No. 1,266,308; May 14; v. 250; p. 426.

Pedersen, Rasmus, Parkersburg, Iowa. Adjustable necktie-fastener. No. 1,266,550; May 21; v. 250; p. 606.

Peebles, Florence P., and H. H. K. Jefferson, Birmingham, Ala. Gas-stove attachment. No. 1,267,263; May 21; v. 250; p. 721.

Peeling, Joseph J., Brooklyn, N. Y. Loading and unloading device. No. 1,266,851; May 21; v. 250; p. 606.

Peiter, Frederick, Cleveland, Ohio. Coke-oven. No. 1,267,332; May 21; v. 250; p. 739.

Pence, Lafe V., Flint, assignor to General Motors Corporation, Detroit, Mich. Valve-operating mechanism. No. 1,267,899; May 28; v. 250; p. 927.

Penfield, Raymond C., New York, N. Y. Brick-lifter. No. 1,265,106; May 7; v. 250; p. 66.

Penn, John M., Red Oak, Iowa. Tongue-support for vehicles. No. 1,265,503; May 7; v. 250; p. 173.

Penner, John L. (See Reimer and Penner.)

Pennlman, Anson W., Berkeley, Cal. Display-stand. No. 1,266,149; May 14; v. 250; p. 383.

Penny Package Corporation. (See Tarasch, Louis C., assignor.)

Pentecost, William M., *et al.* (See Biggers, Lee P., assignor.)

Peoples, Micheal L. (See Feser and Peoples.)

Pepin, Louis, Busby, Mont. Burglar-alarm. No. 1,265,504; May 7; v. 250; p. 173.

Pepple, John W., San Antonio, Tex. Vehicle-tire. No. 1,266,852; May 21; v. 250; p. 606.

Peradotto, Antonio. (See Bosio and Peradotto.)

Perkins Glue Company. (See Robinson, Clarence R., assignor.)

Perkins, Laurence M., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,268,052; May 28; v. 250; p. 968.

Perlman, Benjamin. (See Perlman, Max, B., and H.)

Perlman, Harry. (See Perlman, Max, B., and H.)

Perlman, Louis H., New York, N. Y. Wheel. No. 1,265,951; May 14; v. 250; p. 328.

Perlman, Louis H., New York, N. Y. Demountable rim. No. 1,267,112; May 21; v. 250; p. 680.

Perlman, Max, B., and H. Brooklyn, N. Y. Cap. No. 1,267,799; May 28; v. 250; p. 898.

Perrault, Jesse H., Detroit, Mich. Paper bottle and manufacturing same. No. 1,265,505; May 7; v. 250; p. 174.

Perrault, Jesse H., Detroit, Mich. Paper bottle. No. 1,265,506; May 7; v. 250; p. 174.

Perrault, Jesse H., Detroit, Mich. Paper bottle and opener. No. 1,265,507; May 7; v. 250; p. 174.

Perrault, Joseph E., Belmont, Mass. Demountable tire. No. 1,264,969; May 7; v. 250; p. 27.

Perry, Edward W., and G. A. Hudson, Neepawa, Manitoba, Canada. Pocket-holder. No. 1,265,107; May 7; v. 250; p. 67.

Peter, Arnold H., assignor to Royal Baking Powder Company, New York, N. Y. Baking-powder. No. 1,265,369; May 7; v. 250; p. 137.

Peterman, John C., Olney, Pa. Combination-chair. No. 1,267,800; May 28; v. 250; p. 898.

Peters, Fritz, Berlin, Germany. Composition for preserving wood. No. 1,265,870; May 7; v. 250; p. 137.

Peters Machine & Mfg. Company, The. (See Feyzes, Henry J., assignor.)

Peters, William A., assignor to International Patent Licensing Corporation, Chicago, Ill. Attachment for photographic cameras. No. 1,265,371; May 7; v. 250; p. 137.

Peterson, Charles G. (See Bunnell and Peterson.)

Peterson, Franklin P., Tulsa, Okla., assignor to Consolidated Liquid Gas Company, Chicago, Ill. Gas process. No. 1,266,621; May 21; v. 250; p. 543.

Peterson, Henry O., Clear Lake, Minn. Fish-excluder. No. 1,265,508; May 7; v. 250; p. 174.

Peterson, Jonathan, Brooklyn, N. Y. Machine for incising plug-tobacco. No. 1,266,309; May 14; v. 250; p. 426.

Peterson, Luther, Payette, Idaho. Lunch-box heater. No. 1,266,853; May 21; v. 250; p. 607.

Petree, Cuthbert G. (See Thomas and Petree.)

Petrello, Joseph, Philadelphia, Pa. Pulley. No. 1,267,833; May 21; v. 250; p. 739.

Petsonis, Nick C., Chehalis, Wash. Non-refillable bottle. No. 1,265,372; May 7; v. 250; p. 138.

Petticrew, Gibson T., Deer Lodge, Mont. Lock for freight-car doors. No. 1,267,900; May 28; v. 250; p. 927.

Pfanstiehl, Carl A., Highland Park, assignor to Pfanstiehl Company, Inc., North Chicago, Ill. Support for light cutting-wheels. No. 1,266,310; May 14; v. 250; p. 426.

Pfanstiehl, Carl A., Waukegan, assignor to Pfanstiehl Company, Inc., North Chicago, Ill. Welding tungsten ingots. No. 1,267,801; May 28; v. 250; p. 898.

Pfanstiehl Company. (See Pfanstiehl, Carl A., assignor.)

Pfeifer, Bernard R., Jessie, N. D. Scraper for grain-drills. No. 1,264,970; May 7; v. 250; p. 27.

Pfiager, Harry M., assignor to Cast Steel Locomotive Ash Pan Company, St. Louis, Mo. Locomotive ash-pan. No. 1,267,334; May 21; v. 250; p. 740.

Pharo, Gordon C., Marysville, Cal., assignor to The Pharo Manufacturing Company, Bridgeport, Conn. Combined speed-governor and lubricator. No. 1,265,813; May 14; v. 250; p. 287.

Pharo Manufacturing Company, The. (See Pharo, Gordon C., assignor.)

Phelan, Thomas N., Madison, Wis. Work guide and support for drill-presses. No. 1,267,447; May 28; v. 250; p. 799.

Phelps, Albert W., Fresno, Cal. Ventilator. No. 1,265,509; May 7; v. 250; p. 174.

Phelps, James A., Cleveland, assignor to Borden Company, Warren, Ohio. Die-stock. (Reissue.) No. 14,470; May 7; v. 250; p. 233.

Phelps, R. W. (See Huebotter, Harry A., assignor.)

Phelps, Spencer H., assignor to Blount Plow Works, Evansville, Ind. Straddle-row wheeled cultivator. No. 1,265,510; May 7; v. 250; p. 175.

Phenix Truck Makers. (See King, Harry O., assignor.)

Philip, Alexander J., Gravesend, England. Shelving. No. 1,265,373; May 7; v. 250; p. 138.

Phillips, Alvin W. (See Myers, Daniel M., assignor.)

Phillips, Benjamin F., Cairo, W. Va. Rail-brace. No. 1,266,985; May 21; v. 250; p. 644.

Phillips, Ellis J. G., assignor to Richards-Wilcox Manufacturing Company, Aurora, Ill. Trolley-track. No. 1,267,802; May 28; v. 250; p. 898.

Phillips, Frederick. (See Banwell and Phillips.)

Phinney, Willis E., Coldwater, Mich. Fish-bait. No. 1,266,311; May 14; v. 250; p. 427.

Phone Call Recorder Company. (See Richey, Charles V., assignor.)

Platt, Charles E., Berkeley, Cal., assignor to Brown, Hanson & Boettcher, Chicago, Ill. Cane-stripping machine. No. 1,265,244; May 7; v. 250; p. 102.

Platt, Joseph W., assignor to L. H. Platt, New York, N. Y. Gas-burner. No. 1,267,448; May 28; v. 250; p. 799.

Platt, L. H. (See Platt, Joseph W., assignor.)

Picard, Hugh F. K. (See Sulman and Picard.)

Pickl, Emma. (See Pickl, Paul, assignor.)

Pickl, Paul, assignor to E. Pickl, Chicago, Ill. Method of making a hard rubber substitute and the product thereof. No. 1,265,108; May 7; v. 250; p. 67.

Pickles Brothers. (See Smith, Eber, assignor.)

Pickles, Joe, Winnipeg, Manitoba, Canada. Protector for children. No. 1,264,971; May 7; v. 250; p. 27.

Pieper, Alphonse F. (See Pieper, Oscar H. and A. F.)

Pieper, Oscar H. and A. F., Rochester, N. Y. Fuse-holder. No. 1,265,245; May 7; v. 250; p. 103.

Pierce, James L., assignor to Pacific Commercial Company, Manila, Philippine Islands. Furnace. No. 1,267,264; May 21; v. 250; p. 721.

Pietzsch, Richard H., and R. P. Nichols, assignors to Cino Camera Company, Philadelphia, Pa. Motion-picture apparatus. No. 1,264,972; May 7; v. 250; p. 28.

Pigeon, Albert M., assignor to Pigeon Machine Company, Philadelphia, Pa. Circular-knitting machine. No. 1,266,044; May 14; v. 250; p. 353.

Pigeon, Albert M., assignor to Pigeon Machine Company, Philadelphia, Pa. Circular-knitting machine. No. 1,266,045; May 14; v. 250; p. 353.

Pigeon Machine Company. (See Pigeon, Albert M., assignor.)

Pignani, Lorenzo, Dilltown, Pa. Tool. No. 1,267,265; May 21; v. 250; p. 722.

Pignataro, Nicholas, Hilton, N. J. Electric signaling system for railway-trains. No. 1,266,150; May 14; v. 250; p. 383.

Pike, Jay N., *et al.* (See Rothenberger, Simon W., assignor.)

Pilcher, John A., Roanoke, Va. System of equalization for car-trucks. No. 1,265,374; May 7; v. 250; p. 138.

Piltz, John D., Toledo, Ohio. Ship-protector. No. 1,266,854; May 21; v. 250; p. 607.

Pine Tree Milking Machine Company. (See Macartney, Arthur C., assignor.)

Pinkney, Bryan D., assignor to The Triumph Manufacturing Company, Cincinnati, Ohio. Dough-mixing machine. No. 1,265,375; May 7; v. 250; p. 138.

Piper, George M., assignor to Wagner Manufacturing Company, Cedar Falls, Iowa. Door-hanger. No. 1,265,952; May 14; v. 250; p. 328.

Piperno, James, New York, N. Y. Manufacture of synthetic milk. No. 1,267,449; May 28; v. 250; p. 799.

Pipp, John M., Muncie, Ind. Auto-signal. No. 1,265,814; May 14; v. 250; p. 288.

Pitt, Edward L., and E. J. Rutman, Cincinnati, Ohio. Revolving display device. No. 1,265,376; May 7; v. 250; p. 138.

Pittman, Mordaunt E., Center, Tex. Indicating and testing apparatus. No. 1,265,953; May 14; v. 250; p. 328.

Pittsburgh Automatic Heat Regulator Company. (See Lewis, Scott, and Dell, assignors.)

Pittsburgh Coal Washer Company. (See Llewellyn, Lee, assignor.)

Plaisted, Earl H., and A. O. Black, Butler, Pa. Automatic timing device for closed circuits. No. 1,267,690; May 28; v. 250; p. 867.

Pleister, Henry W., Westfield, N. J., assignor to H. B. Newhall. Bolt-anchor. No. 1,265,246; May 7; v. 250; p. 103.

Pleister, Henry W., Westfield, N. J., assignor to H. B. Newhall. Bolt-anchor. No. 1,267,901; May 28; v. 250; p. 927.

Pleister, Henry W., Westfield, N. J., assignor to H. B. Newhall. Bolt-anchor. No. 1,267,902; May 28; v. 250; p. 928.

Pleister, Henry W. Westfield, N. J., assignor to H. B. Newhall. Bolt-anchor. No. 1,267,903; May 28; v. 250; p. 928.

Plimpton, Bentley A., Victor, N. Y. Strain-insulator. No. 1,266,711; May 21; v. 250; p. 568.

Pneumatic Scale Corporation Limited. (See Doble and Wheaton, assignors.) (Reissue.)

Poeton, Laurence, assignor to American Optical Company, Southbridge, Mass. Temple for ophthalmic mountings. No. 1,265,377; May 7; v. 250; p. 139.

Poeton, Lawrence, assignor to American Optical Company, Southbridge, Mass. Temple. No. 1,265,511; May 7; v. 250; p. 175.

Poeton, Lawrence, and J. C. Wells, assignors to American Optical Company, Southbridge, Mass. Temple for ophthalmic mountings. No. 1,267,904; May 28; v. 250; p. 928.

Poetschke, Paul, Milford, Del., assignor to Palo Company, New York, N. Y. Apparatus for the absorption of moisture and gases. No. 1,268,053; May 28; v. 250; p. 969.

Pogolski, Nicolas, Washington, D. C. Aeroplane. No. 1,266,151; May 14; v. 250; p. 383.

Pogue, George D., St. Louis, Mo. Maximum-demand instrument. No. 1,265,247; May 7; v. 250; p. 103.

Pomilio, Umberto, Turin, Italy. Oxidation of cresols. No. 1,265,378; May 7; v. 250; p. 139.

Pondelick, Leo, Chicago, Ill. Self-adjusting piston-ring. No. 1,265,109; May 7; v. 250; p. 67.

Ponfatowski, Alexander, Perth Amboy, N. J. Soldier's shield. No. 1,267,588; May 28; v. 250; p. 838.

Poole, Charles A., Jersey City, N. J. Tiltable street-post. No. 1,266,152; May 14; v. 250; p. 384.

Pope, William W., Camas, Wash. Cable-clamp. No. 1,266,312; May 14; v. 250; p. 427.

Porter, Charles W. (See Young and Porter.)

Porter, Finley R. assignor to Finley Robertson Porter Company, Inc., Port Jefferson, N. Y. Brake mechanism. No. 1,265,512; May 7; v. 250; p. 175.

Porter, Will R., Prince Bay, N. Y., assignor to The S. S. White Dental Manufacturing Company. Hose-pipe coupling. No. 1,267,335; May 21; v. 250; p. 740.

Porter, Willard E., Lynn, Mass., assignor to General Electric Company. Electrical measuring instrument. No. 1,267,266; May 21; v. 250; p. 722.

Post, Truman W., Providence, R. I., and C. B. Des Jardins, assignors to Electric Auto-Lite Corporation, Toledo, Ohio. Headlight. No. 1,267,691; May 28; v. 250; p. 867.

Powell, Winfred T., assignor to Automatic Electric Company, Chicago, Ill. Party-line telephone system. No. 1,267,113; May 21; v. 250; p. 680.

Powers, Harry W., Northwest, Va. Connector. No. 1,267,450; May 28; v. 250; p. 799.

Powers, James H., Saratoga Springs, N. Y. Tool for removing wall-paper. No. 1,264,973; May 7; v. 250; p. 28.

Pratt, Arthur D., New York, N. Y., assignor to The Babcock & Wilcox Company, Bayonne, N. J. Steam-boiler. No. 1,267,114; May 21; v. 250; p. 680.

Pratt & Cady Company. (See Reyburn, John R., assignor.)

Pratt, Edward, assignor of one-third to C. Lentz and one-third to O. J. Albers, Chehalis, Wash. Ball-bearing block. No. 1,266,855; May 21; v. 250; p. 607.

Pratt, Howell D., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Scraper. No. 1,266,158; May 14; v. 250; p. 384.

Prawat, Stanley, South Bend, Ind. Surprise or joke toy. No. 1,265,379; May 7; v. 250; p. 139.

Preatka, Joseph, New York, N. Y. Flying-machine. No. 1,266,986; May 21; v. 250; p. 644.

Preda, John G., Hurley, Wis. Planter. No. 1,267,115; May 21; v. 250; p. 681.

Preifert, Frederick C., and F. Schulz. Beaver Crossing, Nebr. Automatic jack. No. 1,266,987; May 21; v. 250; p. 644.

Prentiss, William A., assignor to George W. Prentiss & Company, trustees, Holyoke, Mass. Spool device. No. 1,265,110; May 7; v. 250; p. 67.

Prepayment Car Sales Company. (See Paul and Tanner, assignors.)

Prescott, Ford L., Elmira, N. Y. Variable-cut-off valve mechanism. No. 1,266,046; May 14; v. 250; p. 354.

Pressed Steel Car Company. (See Blest, Minot C., assignor.)

Preston, Edward S., Chicago, Ill. Dashboard lamp-socket. No. 1,265,513; May 7; v. 250; p. 175.

Prestwich, John A., Tottenham, London, England. Indicator for gaging instruments. No. 1,266,313; May 14; v. 250; p. 427.

Prettie, Richard J., Jamaica, N. Y., assignor to The Aeolian Company. Lid-prop. No. 1,267,451; May 28; v. 250; p. 800.

Prihil, Alexis R., Detroit, Mich., assignor, by mesne assignments, to G. W. Bowen, Auburn, N. Y. Forming grease-cups. No. 1,265,954; May 14; v. 250; p. 328.

Price, Charles. (See Martin and Price.)

Price, Frederick, Stechford, Birmingham, assignor of one-half to C. Birch, Walsall, England. Turret tool-holder for lathes. No. 1,265,815; May 14; v. 250; p. 288.

Price, Lloyd W., Alvado, Ohio. Mail-bag catching and delivering device. No. 1,265,111; May 7; v. 250; p. 67.

Price & Teeple Piano Company. (See Freborg, Charles, assignor.)

Pridham, Edwin S., and P. L. Jensen, Napa, assignors to Commercial Wireless & Development Co., San Francisco, Cal. Amplifying-receiver. No. 1,266,988; May 21; v. 250; p. 645.

Prime, Orton L., Milwaukee, Wis. Composite metal plug. No. 1,266,989; May 21; v. 250; p. 646.

Primrose, Oliver F., Cincinnati, Ohio. Ice-cream freezer. No. 1,266,047; May 14; v. 250; p. 354.

Prince, Louis A., Sumter, S. C. Fender-brace. No. 1,267,589; May 28; v. 250; p. 838.

Prince, Robert E. (See Teesdale and Prince.)

Prinz, Alfred. Schwiebus, Germany. Potato-separator. No. 1,267,692; May 28; v. 250; p. 867.

Pritzel, Adolph, Stillwater, Minn. Ironing-table. No. 1,267,267; May 21; v. 250; p. 722.

Process Engineering Company, The. (See Wedge, Utley, assignor.)

Prohl, Frank C., Milwaukee, Wis. Turbine. No. 1,266,154; May 14; v. 250; p. 384.

Prometheus Electric Company, The. (See Ripley, William H., assignor.)

Prosser, Joseph G., assignor to Paramount Hosiery Form Drying Co., Chicago, Ill. Hosiery-finishing apparatus. No. 1,268,066; May 28; v. 250; p. 972.

Pruett, Jack J., assignor of one-half to S. Ryno, Duke, Mo. Railway-tie. No. 1,266,048; May 14; v. 250; p. 354.

Pull-U-Out Sales Co. (See Eggleston, Robert N., assignor.)

Pullman Coach Company *et al.* (See Weinmann, Louis E., assignor.)

Punnett, Reuben A., assignor, by mesne assignments, to Lineatime Manufacturing Company, Inc., Rochester, N. Y. Copy-holder. No. 1,266,622; May 21; v. 250; p. 543.

Pure Coal Briquettes Limited. (See Sutcliffe, Edgar R., assignor.)

Putnam, Alden L., assignor to Detroit Pressed Steel Company, Detroit, Mich. Metallic wheel. No. 1,266,155; May 14; v. 250; p. 384.

Quase, Ralph L., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone signaling system. No. 1,266,628; May 21; v. 250; p. 543.

Quemore, William J., Camden, N. J. Stringed instrument. No. 1,266,314; May 14; v. 250; p. 427.

Quick, Harry C., Oakland, Cal. Gas-meter. No. 1,266,527; May 14; v. 250; p. 485.

Quimby, Eugene A., Haledon, N. J. Advertising device. No. 1,265,380; May 7; v. 250; p. 139.

Quinn, John P., *et al.* (See Smith, John B. R., assignor.)

Quiram, Emil F., Elysian, Minn. Recording-scale. No. 1,267,093; May 28; v. 250; p. 868.

R. Neumann Hardware Co., The. (See Flocke, Robert O., assignor.)

R. D. Swisher Manufacturing Company. (See Folger and Redfield, assignors.)

R. S. Stokvis & Zonen Limited. (See Clement, Leonis J. F., assignor.)

R. U. V. Company, The. (See Henri, Helbronner, and Recklinghausen, assignors.)

Racicot, Alexander N. (See Racicot, Arthur and A. N.)

Racicot, Arthur and A. N., Webster, Mass. Insole. No. 1,265,514; May 7; v. 250; p. 175.

Raddant, Walter C., Santa Lucia, Cuba. Automatic continuous liquid-tester. No. 1,266,315; May 14; v. 250; p. 428.

Radka, Adolph F. (See Mersfelder and Radka.)

Ralston, Arthur W., Sheridan, Mo. Metallic clothes-pin. No. 1,267,694; May 28; v. 250; p. 868.

Ralston Steel Car Company, The. (See Becker, Anton, assignor.)

Ramey, Thomas T., Edwardsville, Ill. Quick-emptying funnel. No. 1,265,381; May 7; v. 250; p. 140.

Ramsay, Hubert H., Tylertown, Miss. Respirator. No. 1,266,624; May 21; v. 250; p. 544.

Ramsay, Hubert H., Tylertown, Miss. Nozzle. No. 1,266,856; May 21; v. 250; p. 607.

Ramsey, Joseph D., Dorchester, Mass. Drinking-fountain. No. 1,265,955; May 14; v. 250; p. 329.

Ranger, Karl F., Detroit, and L. M. Spencer, Highland Park, Mich. Curtain for motor-vehicles. No. 1,266,990; May 21; v. 250; p. 645.

Rasmussen, Herman G., Ivanhoe, Minn. Funnel. No. 1,268,054; May 28; v. 250; p. 969.

Ratkoski, Jan. (See Chmielewski, Jozef, assignor.)

Ratliff, Stanley M., and W. L. Payne, Norwood, Ohio. Autographic register. No. 1,267,452; May 28; v. 250; p. 800.

Ratzer, John. (See Chaquette, Ephraiem, assignor.)

Rau, John, Indianapolis, Ind. Glass-tempering device. No. 1,266,625; May 21; v. 250; p. 544.

Raubitschek, William. (See Rogers, William R., assignor.)

Rauch, Charles, assignor to Twinplex Sales Company, St. Louis, Mo. Razor-blade sharpener. No. 1,265,956; May 14; v. 250; p. 329.

Ravenscroft, Mason. (See Fent and Ravenscroft.)

Rawls, Chester H., *et al.* (See Biggers, Lee P., assignor.)

Ray, Charles M., Asheville, N. C. Rack. No. 1,267,453; May 28; v. 250; p. 800.

Ray, Eugene J., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Work-holding clamp. No. 1,265,382; May 7; v. 250; p. 140.

Ray, Eugene J., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Work-clamping mechanism. No. 1,265,383; May 7; v. 250; p. 140.

Rayfield, Charles L., Chicago, Ill. Carbureter. No. 1,265,515; May 7; v. 250; p. 176.

Raymond, Joseph A., Chicago, Ill. Pedestal for caskets, tables, and the like. No. 1,266,316; May 14; v. 250; p. 428.

Reade, William A., assignor to The Ludlow Typograph Company, Cleveland, Ohio. Typograph-machine. No. 1,266,156; May 14; v. 250; p. 385.

Reagan Bale Company. (See Taft, John A., assignor.)

Reagan, Edgar U. G., San Antonio, Tex. Differential construction. No. 1,266,712; May 21; v. 250; p. 568.

Ream, Myrton E., Chicago, Ill. Child's toilet-seat. No. 1,267,590; May 28; v. 250; p. 839.

Reaves, George W., Little Rock, Ark. Harrow. No. 1,266,049; May 14; v. 250; p. 354.

Rebmann, Godfrey R., Philadelphia, Pa., and W. H. Hultgren, Roselle Park, N. J. Chair. No. 1,265,384; May 7; v. 250; p. 141.

Reck, John W., Kingsburg, Cal. Stool. No. 1,265,516; May 7; v. 250; p. 176.

Recker, Adolph C., Oakville, assignor to Waterbury Mfg. Co., Waterbury, Conn. Folding pocket game-board. No. 1,266,857; May 21; v. 250; p. 607.

Recklinghausen, Max von. (See Henri, Helbronner, and Recklinghausen.)

Recording and Computing Machines Company, The. (See Groves, Frank A., assignor.)

Redfield, Casper L. (See Folger and Redfield.)

Reducing Machine Company, The. (See Gardner, James P., assignor.)

Reece Button Hole Machine Company, The. (See Hagelstein, Christian H. T., assignor.)

Reece Shoe Machinery Company. (See Schoenky, August R., assignor.)

Reece Shoe Machinery Company. (See Zaleski, Frank, assignor.)

Reed, Andrew H., Kansas City, Mo. Power-driven farm implement. No. 1,267,803; May 28; v. 250; p. 899.

Reed, Clinton G., Pittsburgh, Pa. Cleaning compound. No. 1,266,713; May 21; v. 250; p. 568.

Reed, Fred R., assignor of one-half to L. J. McKenney, Detroit, Mich. Vehicle-lamp. No. 1,266,157; May 14; v. 250; p. 385.

Reed, Walter C., Dalton, assignor to The Telelectric Company, Pittsfield, Mass. Circuit-controller. No. 1,267,454; May 28; v. 250; p. 800.

Reeder, Joseph H., St. Louis, Mo. Vulcaniser. No. 1,264,974; May 7; v. 250; p. 28.

Reeves Manufacturing Company, The. (See Krantz, Joseph A., assignor.)

Regan, John, New Bedford, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop-motion. No. 1,265,112; May 7; v. 250; p. 68.

Regel, Carl W., Evansville, Ind. Fence-post. No. 1,267,116; May 21; v. 250; p. 681.

Rehbin, Conrad, assignor to Hayes Manufacturing Company, Detroit, Mich. Embossing-press. No. 1,267,591; May 28; v. 250; p. 839.

Reichert, Paul F. (See Hansen, Niels M., assignor.)

Reid, William, assignor to Kellogg Switchboard & Supply Company, Chicago, Ill. Railway-train-despatching circuit. No. 1,266,158; May 14; v. 250; p. 385.

Reimer, Heinrich W., Steinbach, and J. L. Penner, Winnipeg, Manitoba, Canada. Detachable ferrule. No. 1,265,113; May 7; v. 250; p. 68.

Reimers, John F., Millard, Nebr. Lever mechanism for sulky-plows. No. 1,266,317; May 14; v. 250; p. 429.

Reinhardt, Henry B., trustee. (See Noah, Robert S., assignor.)

Reinhart, Earl H., Shell Lake, Wis. Dirigible headlight for automobiles. No. 1,266,626; May 21; v. 250; p. 544.

Reinhart, Ernest, and A. Moe, Eau Claire, Wis. Trap clean-out. No. 1,265,248; May 7; v. 250; p. 103.

Reinke, Eugene A., assignor to Stromberg-Carlson Telephone Manufacturing Company, Rochester, N. Y. Device for moisture and gas proof telephone sets. No. 1,267,804; May 28; v. 250; p. 899.

Reiser, Leiser. (See Weissman and Reiser.)

Reisinger, George, assignor to Crown Optical Company, Rochester, N. Y. Optical instrument. No. 1,267,592; May 28; v. 250; p. 839.

Reliance Gauge Column Company, The. (See Hale, George W., assignor.)

Remington Arms & Ammunition Company. (See Simpson, John O., assignor.)

Remington Typewriter Company. (See Barr, John H., assignor.)

Remington Typewriter Company. (See De Clamecy, Phillippe, assignor.)

Remy Electric Company. (See Kennington, William O., assignor.)

Renne, James D., Omaha, Nebr. Pressure-indicator for internal-combustion engines. No. 1,266,627; May 21; v. 250; p. 544.

Renshaw, Charles C., Chicago, Ill. Automatic signal. No. 1,265,385; May 7; v. 250; p. 141.

Renwick, John, Emmett, Idaho. Automobile-wheel. No. 1,267,266; May 21; v. 250; p. 722.

Replogle, George, LaFayette, Ind. Lineman's chair. No. 1,264,975; May 7; v. 250; p. 29.

Repsholdt, Sören C., Omaha, Nebr. Mop-wringer. No. 1,268,055; May 28; v. 250; p. 969.

Ressler, Isidore, Detroit, Mich. Disinfectant-pad. No. 1,265,957; May 14; v. 250; p. 329.

Rettell, Joseph, Detroit, Mich. Antiskid-mat. No. 1,267,269; May 21; v. 250; p. 722.

Reyay, Stefan, Johnstown, Pa. Rail tie and fastener. No. 1,266,991; May 21; v. 250; p. 646.

Reyburn, John R., Fairfield, assignor to Pratt & Cady Company, Incorporated, Hartford, Conn. Cutting or welding blowpipe. No. 1,266,858; May 21; v. 250; p. 608.

Reynolds, Alva L., assignor to Common Sense Pile Protector Company, Long Beach, Cal. Pile-protector. No. 1,266,050; May 14; v. 250; p. 355.

Reynolds, Alva L., assignor to Common Sense Pile Protector Company, Long Beach, Cal. Pile cleaner and protector. No. 1,266,051; May 14; v. 250; p. 355.

Reynolds, George. (See Tomlinson, Clarence L., assignor.)

Reynolds, John N. (See Craft and Reynolds.)

Reynolds, Walter M., Hattiesburg, Miss. Automobile-fan-belt tightener. No. 1,266,318; May 14; v. 250; p. 429.

Rheinlander, Rudolph P., St. Louis, Mo. Vacuum-cup. No. 1,267,270; May 21; v. 250; p. 723.

Rhodes, Bert O., assignor to Acme Universal Joint Manufacturing Co., Kalamazoo, Mich. Universal joint. No. 1,264,976; May 7; v. 250; p. 29.

Ribaysen, Jacob, Chicago, Ill. Incandescent-lamp socket. No. 1,265,517; May 7; v. 250; p. 176.

Rice, Frank E. (See Bailey and Rice.)

Rice, Frederick W., East Seattle, Wash. Cereal-box. No. 1,266,992; May 21; v. 250; p. 646.

Rich, Alfred J., Jr., San Francisco, Cal. Lock-washer. No. 1,267,695; May 28; v. 250; p. 868.

Richards, Walter E. W., High Holborn, London, England. Manufacture of electric insulating materials and the like. No. 1,267,696; May 28; v. 250; p. 869.

Richards-Wilcox Manufacturing Company. (See Phillips, Ellis J. G., assignor.)

Richards, William B., Pomona, Cal. Illuminated trafficbutton. No. 1,265,386; May 7; v. 250; p. 141.

Richardson, Charles G., Springfield, Vt. Cloth-marking device. No. 1,266,628; May 21; v. 250; p. 545.

Richardson, Harold M., Chicopee Falls, Mass. Cleaning-machine. No. 1,267,905; May 28; v. 250; p. 928.

Richardson, Robert B., Electra, Tex. Measure for oil-wells. No. 1,267,271; May 21; v. 250; p. 723.

Richey, Charles V., Washington, D. C., assignor to Phone-Call Recorder Company. Telephone metering system. No. 1,266,714; May 21; v. 250; p. 568.

Richmond-Standard Manufacturing Company, The. (See Zimmerman, Albert J., assignor.)

Richter, Harry, Minneapolis, Minn. Automobile-signal. No. 1,265,958; May 14; v. 250; p. 330.

Richter, Robert C., New York, N. Y. Rotary spark-gap. No. 1,265,959; May 14; v. 250; p. 330.

Riddell, William A., assignor to Eastman Kodak Company, Rochester, N. Y. Winding-key for photographic-film cameras. No. 1,266,319; May 14; v. 250; p. 429.

Riddle, George C., Riddle, Idaho. Water-motor. No. 1,265,114; May 7; v. 250; p. 68.

Riesenberg, Felix, assignor, by mesne assignments, to Herbert L. Carman, New York, N. Y. Self-filling fountain-pen. (Reissue.) No. 14,474; May 21; v. 250; p. 749.

Rietzsch, Alfred, administrator. (See Zahn, Robert.)

Riggs, Alfred L., Ebensburg, Pa. Spark-plug. No. 1,265,518; May 7; v. 250; p. 176.

Rightmire-Berg Company. (See Rightmire and Berg, assignors.)

Rightmire, Hiram K., Chicago, and S. E. Berg, Oak Park, Ill., assignor to Rightmire-Berg Company. Printing apparatus. No. 1,265,519; May 7; v. 250; p. 177.

Riley, Winfield S., Oakhill, Kans. Auto-wheel device. No. 1,267,455; May 28; v. 250; p. 801.

Rinebold, Wilbert H., Fostoria, Ohio. Odometer. No. 1,265,960; May 14; v. 250; p. 330.

Ringquist, Justus M. (See Wrightson and Ringquist.)

Riotte, Eugene A., Douglaston, N. Y., assignor to Standard Motor Construction Company, Jersey City, N. J. Marine propeller. No. 1,267,117; May 21; v. 250; p. 681.

Rioux, Joseph F., Edgewood, R. I. Buckle. No. 1,266,629; May 21; v. 250; p. 545.

Ripley, William H., Orange, N. J., assignor to The Prometheus Electric Company. Sterilizer. No. 1,266,052; May 14; v. 250; p. 355.

Ripper, Newton. (See Bower, Jacob M., assignor.)

Risdon, F. P., *et al.* (See Staley, William O., assignor.)

Rittenhouse, G. Johnson, *et al.* (See Crockett, Ernest J., assignor.)

Rittmeyer, Louis C., St. Bernard, Ohio. Automobile-locking device. No. 1,266,159; May 14; v. 250; p. 386.

Rix, Milton H., assignor to Sheffield Car Company, Three Rivers, Mich. Air-cooled internal-combustion engine No. 1,265,249; May 7; v. 250; p. 104.

Rixson, Oscar C., New Rochelle, N. Y. Holder for swinging closures. No. 1,265,520; May 7; v. 250; p. 177.

Rixson, Oscar C., New Rochelle, N. Y. Door closer and check. No. 1,266,320; May 14; v. 250; p. 429.

Roark, Albert E., Scott, Kans. Mail-bag catcher. No. 1,267,697; May 28; v. 250; p. 869.

Roberts, Addo M., and E. G. Williamson, Greenville, Pa. Pneumatic tool. No. 1,267,698; May 29; v. 250; p. 869.

Roberts, Charles F., assignor to Chicago Metal Products Co., Chicago, Ill. Phonographic driving mechanism. No. 1,265,118; May 7; v. 250; p. 69.
Roberts, Gerald I. (See King and Roberts.)
Robertson, Andrew R., Glasgow, Scotland. Friction-clutch. No. 1,265,816; May 14; v. 250; p. 288.
Robillard, Frank H. (See Crady and Robillard.)
Robins, Samuel D., Stamford, Conn. Torpedo-shield. No. 1,266,715; May 21; v. 250; p. 569.
Robinson, Clarence R., Brooklyn, N. Y., assignor to Perkins Glue Company. Adhesive. No. 1,267,699; May 28; v. 250; p. 869.
Robson, Edward, Trenton, N. J. Water-heater. No. 1,265,387; May 7; v. 250; p. 141.
Roche, Maurice J., New York, N. Y. Vestibule-curtain coupling. No. 1,267,272; May 21; v. 250; p. 723.
Roche, Michael J., Cambridge, Mass. Spraying apparatus. No. 1,267,118; May 21; v. 250; p. 682.
Rockwell, Byrd C., Camden, Ark. Wooden building construction. No. 1,265,250; May 7; v. 250; p. 104.
Rockwell, James M. (See Cockrell and Rockwell.)
Rodgers, Harry B., Chambersburg, Pa. Sanitary shaving-brush and container therefor. No. 1,266,160; May 14; v. 250; p. 386.
Roebuck, Alvah C., assignor to Woodstock Typewriter Company, Woodstock, Ill. Type-bar rest. No. 1,266,859; May 21; v. 250; p. 608.
Roebuck, Alvah C., assignor to Woodstock Typewriter Company, Woodstock, Ill. Shipping-support. No. 1,266,860; May 21; v. 250; p. 608.
Roever, Julius, New York, assignor to M. A. Roever, Richmond Hill, N. Y. Spring-bed cover. No. 1,267,593; May 28; v. 250; p. 840.
Roever, Mary A. (See Roever, Julius, assignor.)
Rogers, Earl M. (See Payzant, Henry H., assignor.)
Rogers, Electric Laboratories Company, The. (See Longoria, Antonio, assignor.)
Rogers, Harry L., Philadelphia, Pa. Seat-indicator for theaters. No. 1,267,273; May 21; v. 250; p. 723.
Rogers, Sarah J., Richmond, Mo. Culinary implement. No. 1,265,116; May 7; v. 250; p. 69.
Rogers, Theodora W., Columbus, Ohio. Flesh-reducing garment. No. 1,264,977; May 7; v. 250; p. 29.
Rogers, Theodora W., Columbus, Ohio. Maternity-garment. No. 1,264,978; May 7; v. 250; p. 29.
Rogers, William R., Newark, N. J., assignor to W. Raubitschek, Brooklyn, N. Y. Embroidering mechanism. No. 1,267,594; May 28; v. 250; p. 840.
Rogers, William R., Newark, N. J., assignor to W. Raubitschek, Brooklyn, N. Y. Machine for making edging. No. 1,267,595; May 28; v. 250; p. 840.
Roggenkamp, Hans J., Firesteel, S. D. Wire-clamp. No. 1,265,817; May 14; v. 250; p. 289.
Rolf, Frederick G., El Paso, Tex. Torpedo-guard. No. 1,267,274; May 21; v. 250; p. 724.
Rolland, Fred, Long Island City, assignor of one-fourth to H. Schuerhoff, Corona, and one-fourth to F. Lockner, New York, N. Y. Fly-screen. No. 1,266,716; May 21; v. 250; p. 569.
Romans, Dallas, Chicago, Ill. Folding board. No. 1,266,993; May 21; v. 250; p. 646.
Rooney, Thomas P., New Bedford, Mass. Bobbin-holder. No. 1,265,521; May 7; v. 250; p. 177.
Roscoe, Henrietta J., Toledo, Ohio. Hot-air furnace. No. 1,266,994; May 21; v. 250; p. 646.
Rose, George D., Salford, Manchester, England. Making washers for joints. No. 1,267,805; May 28; v. 250; p. 899.
Roseberry, Robert E., Baltimore, Md., assignor to Universal Tool Company, Detroit, Mich. Portable machine for reboring engine-cylinders. No. 1,267,806; May 28; v. 250; p. 899.
Rosen, Maurice R., and E. Fischel, Chicago, Ill. Automobile-lock. No. 1,266,161; May 14; v. 250; p. 386.
Rosenberg, Samuel, New York, assignor to National Chain Company, College Point, N. Y. Chain-fastening. No. 1,267,119; May 21; v. 250; p. 682.
Rosin, Alexander, Great Neck, N. Y. Portable heater. No. 1,266,162; May 14; v. 250; p. 387.
Ross, Edwin B. (See Burrows and Ross.)
Ross, Frederick M., assignor to The Frederick M. Ross Manufacturing Company, Cincinnati, Ohio. Safety steering device. No. 1,265,522; May 7; v. 250; p. 178.
Ross, William, and W. F. J. Cosser, South Porcupine, Ontario, Canada. Automatic dumping transport system. No. 1,266,630; May 21; v. 250; p. 545.
Ross, William B., El Modeno, Cal. Wire stretching and twisting tool. No. 1,266,053; May 14; v. 250; p. 355.
Rossi, Carlo, Legnano, Italy. Process of producing oxids of nitrogen and apparatus therefor. No. 1,266,717; May 21; v. 250; p. 570.
Rossi, Giosuè, Morrisdale, Pa. Rail-joint. No. 1,266,718; May 21; v. 250; p. 570.
Rostand Manufacturing Company, The. (See Landine, Peter N., assignor.)
Rothenberger, Simon W., assignor of one-fifth to F. E. Cobb, one-fifth to P. R. Thomas, and two-fifths to J. N. Pike, Minneapolis, Minn. Air-moistener for internal-combustion engines. No. 1,265,117; May 7; v. 250; p. 69.
Rothmann, Albert. (See Ach, Rothmann, and Giemsa.)
Rountree, Joseph G., Beeville, Tex. Caterpillar-tractor. No. 1,265,118; May 7; v. 250; p. 69.
Roush, Herbert E. (See King, Jacoby, and Roush.)
Rowe, Walter A., *et al.* (See Haymond, Clinton C., assignor.)
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Fusible link. No. 1,267,906; May 28; v. 250; p. 929.
Rowley, Arthur C., assignor to Globe Automatic Sprinkler Company, Philadelphia, Pa. Sprinkler-head. No. 1,267,907; May 28; v. 250; p. 929.
Roy, Don G., Tulsa, Okla. Well-depth register. No. 1,266,631; May 21; v. 250; p. 546.
Royal Baking Powder Company. (See Peter, Arnold H., assignor.)
Royal, James V., Wollaston, assignor of one-half to J. L. Layne, Boston, Mass. Protective armor for pneumatic tires. No. 1,266,054; May 14; v. 250; p. 356.
Royal Typewriter Company. (See Hess, Edward B., assignor.)
Rose, Martin E., Stockton, Cal. Tractor. No. 1,265,388; May 7; v. 250; p. 142.
Ruben, Elias. (See Chernov, Stein, and Ruben.)
Rudischhauser, George, New York, N. Y. Radiator air-valve protector. No. 1,267,275; May 21; v. 250; p. 724.
Rudolf, Ferdinand A., assignor to Nichols Copper Company, New York, N. Y. Electrode. No. 1,267,120; May 21; v. 250; p. 682.
Ruether, Albert E., St. Paul, Minn. Internal-combustion engine. No. 1,268,056; May 28; v. 250; p. 969.
Ruggles, Henry B. (See Hodge and Ruggles.)
Ruinello, Henry, Jersey City, N. J. Railway-gate. No. 1,266,321; May 14; v. 250; p. 429.
Ruinello, Henry, Jersey City, N. J. Wall concrete anchor. No. 1,267,276; May 21; v. 250; p. 724.
Rumenfield, Joseph R., assignor of forty-five one-hundredths to A. Glese, Plattsmouth, Nebr. Direction-indicator. No. 1,268,057; May 28; v. 250; p. 970.
Runck, John J., Republican City, Nebr. Agricultural implement. No. 1,266,719; May 21; v. 250; p. 570.
Runge, Andrew P., Blue Island, Ill. Leveling instrument. No. 1,267,456; May 28; v. 250; p. 801.
Runyen, David, assignor to The Runyen Manufacturing Co., Grand Rapids, Mich. Grease-dispensing mechanism. No. 1,265,961; May 14; v. 250; p. 330.
Runyen Manufacturing Co., The. (See Runyen, David, assignor.)
Rush, Julia A., assignor of one-half to W. S. Rush, Waynesburg, Pa. Fish-guard. No. 1,265,251; May 7; v. 250; p. 104.
Rush, Winfield S. (See Rush, Julia A., assignor.)
Rushton, Kenneth, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Car-truck. No. 1,265,389; May 7; v. 250; p. 142.
Rusias, Gabriel, Habana, Cuba. Rear-end signal for vehicles. No. 1,267,277; May 21; v. 250; p. 724.
Russell, Frank H., Elko, Nev. Artificial tooth. No. 1,265,252; May 7; v. 250; p. 105.
Russell, George C., Poughkeepsie, N. Y. Horseshoe-blank-forming machine. No. 1,266,322; May 14; v. 250; p. 430.
Russell Mfg. Co., The. (See Achtmeyer, William, assignor.)
Russell, Thomas N., Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company. Car-roof. No. 1,265,523; May 7; v. 250; p. 178.
Russell, Thomas N., Chicago, Ill., assignor to Chicago-Cleveland Car Roofing Company. Car-roof. No. 1,267,908; May 28; v. 250; p. 929.
Russell, Thomas N., assignor to Chicago Cleveland Car Roofing Company, Chicago, Ill. Car construction. No. 1,268,058; May 28; v. 250; p. 970.
Rust, John, Kalamazoo, Mich. Adjustable bed. No. 1,265,253; May 7; v. 250; p. 105.
Ruthman, Edward J. (See Pitt and Ruthman.)
Rutledge, George A., assignor to Vassar Swiss Underwear Company, Chicago, Ill. Undergarment. No. 1,366,995; May 21; v. 250; p. 647.
Ruttan, Alfred A., and C. E. Hutchings, assignors to Eastman Kodak Company, Rochester, N. Y. Film-pack adapter for cameras. No. 1,266,323; May 14; v. 250; p. 430.
Ruzycki, Joseph E., assignor of one-fourth to C. Wolski, Holyoke, Mass. Mine and torpedo guard for vessels. No. 1,267,909; May 28; v. 250; p. 930.
Ryan, J. A. (See Akans, Walter C., assignor.)
Ryan, Walter S., New York, N. Y. Time-switch. No. 1,266,163; May 14; v. 250; p. 387.
Ryder, Charles, Covington, Ky., assignor to The Corcoran-Victor Company, Cincinnati, Ohio. Lamp. No. 1,266,164; May 14; v. 250; p. 387.
Ryzo, Sam'l. (See Fruett, Jack J., assignor.)
Ryzo, Eppa H., Waltham, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Oiling device. No. 1,265,119; May 7; v. 250; p. 70.
S. Karpen & Bros. (See Gundersen, Sivert, assignor.)
S. Sanford & Sons. (See Cooper and Collins, assignors.)
S. Sternau & Company. (See Strobl, Alexander, assignor.)
S. S. White Dental Manufacturing Company, The. (See Glenn, Thomas F., assignor.)
S. S. White Dental Manufacturing Company, The. (See Porter, Will R., assignor.)
Saalburg, Charles W., Richmond Hill, assignor to Multicolor Intaglio Press Company, New York, N. Y. Guide-marking etchable surfaces. No. 1,265,254; May 7; v. 250; p. 105.
Sacerdote, Secondo. (See Ferrara, Edvardo, assignor.)

Sachs, Gustav A., Eugene, Oreg. Extension-stock for pistols. No. 1,266,632; May 21; v. 250; p. 546.
Sachs, Gustav A., Eugene, Oreg. Extension-stock for pistols. No. 1,266,633; May 21; v. 250; p. 546.
Sachs, Joseph, Hartford, Conn. Switch-operating device. No. 1,265,255; May 7; v. 250; p. 105.
Sachs, Joseph, Hartford, Conn. Clip. No. 1,267,457; May 28; v. 250; p. 801.
Sackerman, Ernest A., Hackensack, N. J. Attachment on vehicles. No. 1,266,055; May 14; v. 250; p. 356.
Sackett, Charley E., assignor of one-third to F. B. Lambert, Minot, N. D. Cable-drive pulley. No. 1,267,278; May 21; v. 250; p. 725.
Sackett, Clarence M. (See Brunnworth and Sackett.)
Safety Car Heating and Lighting Company. (See Creveling, John L., assignor.)
Safety Patent Co. (See Beckner, Noah J., assignor.)
Sager, James H., assignor to J. H. Sager Company, Rochester, N. Y. Automobile-bumper. No. 1,267,458; May 28; v. 250; p. 801.
Sakane, Seiichi, Kyoto, Japan. Treating scales of fish. No. 1,264,979; May 7; v. 250; p. 29.
Sakowski, Max, Massillon, Ohio. Artificial limb. No. 1,267,121; May 21; v. 250; p. 682.
Sala, Earl V., assignor to The E. V. Sala Patents Company, Toledo, Ohio. Engine. No. 1,266,165; May 14; v. 250; p. 388.
Salerni, Marie-Therese E. (See Vincent, Heller A., assignor.)
Salfeld, Charles S., Milwaukee, Wis. Internal-combustion engine. No. 1,267,459; May 28; v. 250; p. 802.
Salfeld, Charles S., Milwaukee, Wis. Governing apparatus for internal-combustion engines. No. 1,267,460; May 28; v. 250; p. 802.
Salisbury, Lynn A. (See Evans and Salisbury.)
Salstrom, David B., assignor to E. Kopriwa Company, Chicago, Ill. Spindle and bearing. No. 1,266,056; May 14; v. 250; p. 356.
Samuelson, John. (See Little, Fred S., assignor.)
Samuelson, John E., Ophiem, Ill. Two-row cultivator. No. 1,265,962; May 14; v. 250; p. 331.
San Francisco Ship Building Co. (See Macdonald, Alan, assignor.)
Sandford, Ralph R., assignor of one-half to The New London Mfg. Co., New London, Ohio. Seam for rain-coats. No. 1,268,059; May 28; v. 250; p. 971.
Sandmann, Fred A., Brooklyn, assignor of one-half to H. E. Bartow, New York, N. Y. Indoor clothes-rack. No. 1,265,524; May 7; v. 250; p. 178.
Sangamo Electric Company. (See Bard, Jacob W., assignor.)
Sangers, John C., Cleveland, Ohio. Battery-cell. No. 1,266,166; May 14; v. 250; p. 388.
Sangiorgio, Vito G., Meriden, Conn. Macaroni and spaghetti machine. No. 1,266,720; May 21; v. 250; p. 570.
Sanitation Corporation, The. (See Stephens, Harry H., assignor.)
Sargent, Alson C., Des Moines, Iowa. Electric brake device. No. 1,266,057; May 14; v. 250; p. 356.
Sauer, August. (See Alexander, Milton F., assignor.)
Sauer, Frederick W., Brooklyn, N. Y. Constant-level device for sheet-feeders. No. 1,267,461; May 28; v. 250; p. 802.
Sauerman, Henry B., Chicago, Ill., assignor of one-half to J. A. Shearer, Indianapolis, Ind. Drag-line excavator. No. 1,265,963; May 14; v. 250; p. 331.
Saurusaitis, Peter P., Waterbury, Conn. Altar-bread softener. No. 1,266,721; May 21; v. 250; p. 570.
Savage, Will R., Omaha, Nebr. Radiator. No. 1,267,700; May 28; v. 250; p. 870.
Sawyer, Walter H., Kansas City, Mo. Sales-slip holder. No. 1,264,980; May 7; v. 250; p. 30.
Saxe, Walter E., Inglewood, Cal. Settling-tank. No. 1,265,256; May 7; v. 250; p. 106.
Sayre, Charles S., Albion, Wis. Packing means for silos. No. 1,266,801; May 21; v. 250; p. 609.
Scalpelli, Sylvester, Joliet, Ill. Rail-joint. No. 1,267,279; May 21; v. 250; p. 725.
Scarlett, William E., East Lynn, Mass. Heel-nailing jack. No. 1,265,525; May 7; v. 250; p. 178.
Schaad, Hermann B., Great Neck, N. Y., assignor to The Aeolian Company. Automatic musical instrument. No. 1,264,981; May 7; v. 250; p. 30.
Schacht, William F., Huntington, Ind. Washer. No. 1,266,324; May 14; v. 250; p. 430.
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Flexible chain. No. 1,266,996; May 21; v. 250; p. 647.
Schade, John, assignor to National Blank Book Company, Holyoke, Mass. Loose-leaf binder. No. 1,266,997; May 21; v. 250; p. 647.
Schaefer, Anton, Spring Grove, Ill. Ridging and pulverizing machine. No. 1,265,526; May 7; v. 250; p. 179.
Schaefer, Anton, Spring Grove, Ill. Vegetable-slicing machine. No. 1,265,527; May 7; v. 250; p. 179.
Schaefer, Anton, Spring Grove, Ill. Transplanter. No. 1,266,634; May 21; v. 250; p. 546.
Schaeffer, Charles E., Lucas, La. Stalk-cutter. No. 1,268,060; May 28; v. 250; p. 971.
Schaffer, John C., Tiffin, Ohio. Hydrator. No. 1,265,964; May 14; v. 250; p. 331.
Schaffert, Louis. (See Conkling, Samuel G., assignor.)
Schechter, Bernard, assignor of one-half to G. H. Tontrup, St. Louis, Mo. Brake-handle. No. 1,267,280; May 21; v. 250; p. 725.
Scheibel, Richard, St. Louis, Mo. Artificial limb. No. 1,265,905; May 14; v. 250; p. 332.
Schell, Paul E., and H. W. Schluter, Detroit, Mich. Upholstery fastening means. No. 1,266,862; May 21; v. 250; p. 609.
Schellinger, Lee L., McGraw, N. Y. Bed-leg. No. 1,265,257; May 7; v. 250; p. 106.
Schenck, Garrett, Jr., assignor to Great Northern Paper Company, Millinocket, Me. Apparatus for making paper. No. 1,267,701; May 28; v. 250; p. 870.
Schenkel, Frederick G., deceased, Wilmington, Del.; R. Schenkel, administratrix. Vending-machine. No. 1,266,998; May 21; v. 250; p. 648.
Schenkel, Rose, administratrix. (See Schenkel, Frederick G.)
Schiber, John P., Edwardsville, Ill. Stamp-affixing machine. No. 1,267,462; May 28; v. 250; p. 802.
Schilling, George H., and I. O. Neff, Waterloo, Ill. Engine valve-gear. No. 1,266,325; May 14; v. 250; p. 431.
Schisgall, Theodore, New York, N. Y., assignor to Travelight Mfg. Co., Philadelphia, Pa. Attachment for clocks. No. 1,267,807; May 28; v. 250; p. 900.
Schkommodau, Gustave H., Cincinnati, Ohio, assignor to Thomson Spot Welder Company, Boston, Mass. Electrode for electric welding-machines. No. 1,267,463; May 28; v. 250; p. 803.
Schlaepfer, Robert, Winterthur, Switzerland, assignor to Rusch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo. Cooling of pistons. No. 1,267,702; May 28; v. 250; p. 870.
Schlafly, Julius H., assignor to The Canton Culvert & Silo Company, Canton, Ohio. Silo. No. 1,265,966; May 14; v. 250; p. 332.
Schlehr, Joseph A., Chicago, Ill. Utensil-knob. No. 1,265,967; May 14; v. 250; p. 332.
Schleicher, Edward G., Stamford, Conn. Motor-vehicle. No. 1,266,999; May 21; v. 250; p. 648.
Schleinzer, John, assignor to Crown Optical Company, Rochester, N. Y. Optical instrument. No. 1,267,596; May 28; v. 250; p. 840.
Schleusselburg, George, Detroit, Mich., assignor to himself, R. F. Hartenstein, and J. C. Eichhorn, trustees. Alcohol-gas stove. No. 1,266,863; May 21; v. 250; p. 609.
Schloss, Harry M., Jersey City, N. J. Adjustable support for window-shades. No. 1,267,464; May 28; v. 250; p. 803.
Schluter, Herbert W. (See Schell and Schluter.)
Schmidt, Bernhard L., Davenport, Iowa. Work-holder for machines. No. 1,265,318; May 14; v. 250; p. 289.
Schmidt, Henry D., Astoria, N. Y. Gumming apparatus for ribbon-cutting machines. No. 1,266,058; May 14; v. 250; p. 357.
Schmidt, John C., Chicago, Ill. Door check and closer. No. 1,266,864; May 21; v. 250; p. 610.
Schmidt, John H., assignor of one-half to C. H. Mitchell, Detroit, Mich. Auxiliary air-inlet valve. No. 1,267,465; May 28; v. 250; p. 803.
Schmidt Lithograph Company. (See Miller, Louis A., assignor.)
Schmidt, William, and A. Filipponi, Trenton, N. J. Headlight-deflector. No. 1,265,258; May 7; v. 250; p. 106.
Schmitt, Henry, Detroit, Mich. Piston-ring. No. 1,267,703; May 28; v. 250; p. 871.
Schmitt, John O., Cleveland, Ohio. Print-washer. No. 1,265,390; May 7; v. 250; p. 142.
Schnake, August C., Centralia, Ill. Weather-strip. No. 1,266,059; May 14; v. 250; p. 357.
Schneider, A. (See Lundgren, Olof A., assignor.)
Schneider, Eugène, Paris, France. Pressure-reducing apparatus for fluids. No. 1,267,281; May 21; v. 250; p. 725.
Schneider, Frederick E., assignor of one-fourth to E. P. Cody and one-fourth to J. P. Shea, Highland, Wis. Shovel. No. 1,265,528; May 7; v. 250; p. 179.
Schneider, Heinrich. (See Kurrell, Schneider, and Helms.)
Schobel, Heinrich. (See Anderwert, Fritzsche, and Schobel.)
Schock, Clarence, Mount Joy, Pa. Receptacle. No. 1,267,910; May 28; v. 250; p. 930.
Schoenberg, Ralph A., New York, N. Y., now by judicial change of name, R. A. Belmont. Refillable plug. No. 1,265,391; May 7; v. 250; p. 142.
Schoenky, August R., Somerville, assignor to Reece Shoe Machinery Company, Boston, Mass. Driving and stopping mechanism. No. 1,265,529; May 7; v. 250; p. 179.
Scholder, Maurice, New York, N. Y. Distress-signal. No. 1,267,011; May 28; v. 250; p. 930.
Schönherr, Wilhelm. (See Tittes and Schönherr.)
Schott, Rudolf F., assignor to J. L. Koster, San Francisco, Cal. Attachment for water-supply pipes. No. 1,267,123; May 21; v. 250; p. 683.
Schrader, Thomas O., Allentown, assignor to The Dent Hardware Company, Fullerton, Pa. Latch for doors. No. 1,265,120; May 7; v. 250; p. 70.
Schram, Lily S., Chicago, Ill. Garter. No. 1,266,722 May 21; v. 250; p. 571.
Schroder, George, Berkeley, Cal. Fountain ink-bottle. No. 1,266,326; May 14; v. 250; p. 431.
Schroetter, Arnold, New York, N. Y. Necktie-fastener. No. 1,266,865; May 21; v. 250; p. 610.
Schubert, Julius J., St. Paul, Minn. Hinge for sashes. No. 1,266,327; May 14; v. 250; p. 431.
Schuerhoff, Henry, *et al.* (See Rolland, Fred, assignor.)

Schuette, August E., and J. H. Kintzele, St. Louis, Mo., assignors, by mesne assignments, to St. Louis Washing Machine Company. Gearing. No. 1,265,530; May 7; v. 250; p. 180.

Schuhmann, Edwin M., assignor to Chicago Glass Products Company, Chicago, Ill. Tube-container for medical preparations. No. 1,265,819; May 14; v. 250; p. 289.

Schulte, Anthony, Hartington, Nebr. Disk-harrow attachment. No. 1,266,326; May 14; v. 250; p. 431.

Schultes, Zeno, New Brunswick, N. J. Packing-ring. No. 1,267,124; May 21; v. 250; p. 684.

Schultz, Robert W., Cincinnati, Ohio. Spark-plug. No. 1,267,597; May 28; v. 250; p. 841.

Schulz, Ferdinand. (See Preifert and Schulz.)

Schumacher, Elmer L., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,265,531; May 7; v. 250; p. 180.

Schumacher, Elmer L., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,267,000; May 21; v. 250; p. 648.

Schutte, August E., Northboro, Mass. Pavement composition and structure. No. 1,265,259; May 7; v. 250; p. 106.

Schuttler, William, Chicago, Ill. Locomotive arch-brick. No. 1,267,912; May 28; v. 250; p. 930.

Schwab, Louis. (See McGuckin, John J., assignor.)

Schwab, William B., assignor to The Cameragraph Company, Kansas City, Mo. Photographic apparatus. No. 1,266,060; May 14; v. 250; p. 357.

Schwarz, Max, Richmond, Va. Pastry-cone holder. No. 1,265,392; May 7; v. 250; p. 143.

Schwarze, Carl J., assignor to Schwarze Electric Company, Adrian, Mich. Electric bell. No. 1,265,393; May 7; v. 250; p. 143.

Schwarze Electric Company. (See Schwarze, Carl J., assignor.)

Schwedler, Carl, Berlin-Neuköln, Germany, assignor of one-half to F. Voigt. Nordhausen, am Harz, Germany. Basket-making machine. No. 1,267,125; May 21; v. 250; p. 684.

Schweitzer, Edmund O., Chicago, Ill. Means and method for metering electricity. No. 1,264,982; May 7; v. 250; p. 30.

Schweitzer, Edmund O., and A. Herz, Chicago, Ill. Fuse device. No. 1,265,121; May 7; v. 250; p. 70.

Schwerdtle, Henry G. (See Stokes and Schwerdtle.)

Schwerin, Botho, assignor to Gesellschaft für Elektro-Osmose m. b. H., Frankfort-on-the-Main, Germany. Electro-osmotic extraction of water from animal, vegetable, and mineral substances. No. 1,266,329; May 14; v. 250; p. 432.

Schwerin, Botho, assignor to Elektro-Osmose Aktiengesellschaft (Graf Schwerin Gesellschaft), Frankfort-on-the-Main, Germany. Removing liquid from steatite. No. 1,266,330; May 14; v. 250; p. 432.

Schwinger, Conrad, Parker, S. D. Fish excluder or guard. No. 1,266,331; May 14; v. 250; p. 432.

Scofield, Esther, assignor of one-half to J. E. Fisher, Tipton, Ind. Colander. No. 1,267,466; May 28; v. 50; p. 804.

Scofield, Herman, and E. N. Dawson, Syracuse, N. Y. Vehicle running-gear. No. 1,267,467; May 28; v. 250; p. 804.

Scognamillo, Francis, New York, N. Y. Pneumatic-tire fender. No. 1,266,866; May 21; v. 250; p. 610.

Scott, Osbert M., Seattle, Wash. Race-knife. No. 1,265,532; May 7; v. 250; p. 180.

Scott, Robert W., Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated. Knit fabric having thickened wales. No. 1,267,126; May 21; v. 250; p. 685.

Scott, Robert W., Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated. Fabric having thickened mock seams. No. 1,267,127; May 21; v. 250; p. 685.

Scott, Thomas F., Patterson, La. Tailor's measure. No. 1,265,122; May 7; v. 250; p. 71.

Scott, William R. (See Lewis, Scott, and Dell.)

Scott & Williams. (See Scott, Robert W., assignor.)

Scoville, Frank F., Schenectady, N. Y. Ball-joint. No. 1,266,061; May 14; v. 250; p. 357.

Scroggins, James A., assignor of one-half to J. S. Losey, Springfield, Mo. Springless door-lock. No. 1,266,332; May 14; v. 250; p. 432.

Scully, Jessie B., Kansas City, Mo. Vacuum hand-brush. No. 1,267,282; May 21; v. 250; p. 726.

Searle, Frederick H., assignor to himself, R. P. Searle, Toledo, Ohio, and H. A. Searle, Council Bluffs, Iowa. Grease-container. No. 1,265,533; May 7; v. 250; p. 180.

Searle, Henry A., *et al.* (See Searle, Frederick H., assignor.)

Searle, Robinson P., *et al.* (See Searle, Frederick H., assignor.)

Sears, Joseph E., Custer, Okla. Scraper. No. 1,265,394; May 7; v. 250; p. 143.

Sears, Russell A., Quincy, Mass. Apparatus for washing and cooking. No. 1,266,167; May 14; v. 250; p. 388.

Sebenius, John A., Shelton, Wash. Button. No. 1,266,867; May 21; v. 250; p. 610.

Sebrd, Hélène, Brooklyn, N. Y. Clothes-pin. No. 1,265,260; May 7; v. 250; p. 107.

Sebring, Charles L. (See Kinnard, Frank M., assignor.)

Seeman, John J., *et al.* (See Blumenberg, Henry, Jr., assignor.)

Seemann, John, Gladbrook, Iowa. Transmission mechanism. No. 1,267,001; May 21; v. 250; p. 649.

Seguin, Louis L. A., assignor to Société des Moteurs Gnome, Paris, France. Four-cycle explosion-engine. No. 1,267,128; May 21; v. 250; p. 685.

Seiber, F. H., *et al.* (See Valdes, Salvador M., assignor.)

Seibert, August, New York, N. Y. Spine-protector. No. 1,267,598; May 28; v. 250; p. 841.

Seiders, Irwin A., Reading, Pa. Cylinder-cock. No. 1,267,002; May 21; v. 250; p. 649.

Seifert, Erich R., assignor to The Seifert Special Machinery Company, Hartford, Conn. Bobbin-winding machine. No. 1,267,913; May 28; v. 250; p. 930.

Seifert Special Machinery Company, The. (See Seifert, Erich R., assignor.)

Seilkop, William F., Cincinnati, Ohio. Pressure-burner. No. 1,264,983; May 7; v. 250; p. 80.

Seipp, Henry C., Pittsburgh, Pa. Sidewalk-light and other like constructions. No. 1,265,395; May 7; v. 250; p. 144.

Selah, Howard A., Newark, N. J., assignor, by mesne assignments, to Eclipse Phonograph Corporation. Electric motor for talking-machines. No. 1,266,062; May 14; v. 250; p. 358.

Self, William R., Newton, N. C. Device for ventilating hotels and office-buildings. No. 1,267,808; May 28; v. 250; p. 900.

Seng Company, The. (See Dyke, Darrell F., assignor.)

Sertner Adjustable Service Legging Co. (See Sertner, Joseph, assignor.)

Sertner, Joseph, Brooklyn, assignor to Sertner Adjustable Service Legging Co., New York, N. Y. Means for adjusting the size of leggings. No. 1,265,261; May 7; v. v. 250; p. 107.

Sevison, Luther J., assignor to Fawn River Manufacturing Company, Constantine, Mich. Magneto. No. 1,266,003; May 14; v. 250; p. 358.

Sewall, Robert H. F., New Orleans, La. Apparatus for driving piles. No. 1,267,129; May 21; v. 250; p. 685.

Sexton, James J., Columbus, Ohio. Pneumatic tire. No. 1,266,064; May 14; v. 250; p. 359.

Seybold, Charles, Dayton, Ohio. Paper-cutting machine. No. 1,267,283; May 21; v. 250; p. 726.

Seymour, Edward W., New York, N. Y. Flash-light. No. 1,265,820; May 14; v. 250; p. 289.

Seymour, James M., Jr., Newark, N. J. Torpedo. No. 1,265,262; May 7; v. 250; p. 107.

Shafer, Samuel, Jr., assignor to Chain Belt Company, Milwaukee, Wis. Conveying and distributing mechanism. No. 1,267,341; May 21; v. 250; p. 742.

Shaff, Ernest H., Grand Haven, Mich. Suitcase-lock. No. 1,265,534; May 7; v. 250; p. 181.

Shanahan, Stephen, Urbana, Ohio. Service-box. No. 1,267,284; May 21; v. 250; p. 726.

Shand, Robert, Lynn, Mass., assignor to General Electric Company. Electrical measuring instrument. No. 1,267,914; May 28; v. 250; p. 931.

Shanklin, Benjamin M., Springfield, Mass. Strip-punching apparatus. No. 1,267,596; May 28; v. 250; p. 841.

Shanklin, Urban J., Anamosa, Iowa. Releasing means. No. 1,267,285; May 21; v. 250; p. 726.

Shannon, William H., Astoria, Ill. Ratchet-wrench. No. 1,265,535; May 7; v. 250; p. 181.

Shapac, Paul, Tabasco, Colo. Stretcher. No. 1,266,728; May 21; v. 250; p. 571.

Sharp, John H., Chicago, Ill. Game. No. 1,264,984; May 7; v. 250; p. 31.

Sharp, William E., assignor to Grip Nut Company, Chicago, Ill. Lock-nut. No. 1,265,123; May 7; v. 250; p. 71.

Sharpe, Pearly, Kenora, Ontario, Canada. Bottle-stopper. No. 1,265,263; May 7; v. 250; p. 107.

Sharps, Gabriel, Karnak, N. D. Rotary tooth-brush. No. 1,265,536; May 7; v. 250; p. 181.

Shaw, Herbert C., assignor to Bauer & Black, Chicago, Ill. Suspensory sack and fabric therefor. No. 1,265,968; May 14; v. 250; p. 332.

Shawinigan Water & Power Company, The. (See Nicol, David S., assignor.)

Shea, James P., *et al.* (See Schneider, Frederick E., assignor.)

Sheahan, James H., Freeport, Ill. Jack. No. 1,265,264; May 7; v. 250; p. 108.

Shearer, Jesse A. (See Sauerman, Henry B., assignor.)

Sheehan, Thomas C., Upper Montclair, N. J., assignor to Durham Duplex Razor Company, New York, N. Y. Razor-blade. No. 1,266,868; May 21; v. 250; p. 610.

Sheffield Car Company. (See Rix, Milton H., assignor.)

Shehan, Thomas, Cleveland, Ohio. Device for cutting screw-threads. No. 1,265,821; May 14; v. 250; p. 290.

Sheils, William J. (See Kennelly, Edward F., assignor.)

Shellabarger, Robert M., West Liberty, Iowa. Handle for Shovels. No. 1,267,915; May 28; v. 250; p. 931.

Shelly, Samuel, Philadelphia, Pa. Correction device for talking-machines. No. 1,266,065; May 14; v. 250; p. 359.

Shepard, Francis H., New Rochelle, N. Y., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,267,916; May 28; v. 250; p. 931.

Shepherdson, William, Sandpoint, Idaho. Wrench. No. 1,266,869; May 21; v. 250; p. 611.

Sherman, Edward T. and E. M., Minneapolis, Minn. Direction-signal for automobiles. No. 1,265,822; May 14; v. 250; p. 290.

Sherman, Elizabeth M. (See Sherman, Edward T. and E. M.)

Sherman, John A., Worcester, Mass. Drinking-cup holder for inverted bottles. No. 1,266,066; May 14; v. 250; p. 359.

Sherman, Walter F., Elsmere, N. Y. Liquid-measure. No. 1,267,468; May 28; v. 250; p. 804.

Sherwood, Albert H., Oroville, Cal. Adjustable copy-holder. No. 1,265,396; May 7; v. 250; p. 144.

Shields, Carl E., Rock Island, Ill. Combination vise and drill. No. 1,266,724; May 21; v. 250; p. 571.

Shields, Henry B. (See Peck and Shields.)

Shimer, Stanley D., Bethlehem, Pa. Driving mechanism for vehicles. No. 1,265,265; May 7; v. 250; p. 108.

Shindel, Harry F., Glenside, assignor to T. A. Willson & Co., Inc., Reading, Pa. Spectacle-temple. No. 1,266,067; May 14; v. 250; p. 359.

Shinner, Ernest G., Chicago, Ill. Display-rack. No. 1,267,917; May 28; v. 250; p. 932.

Shiplet, Clarence E. (See Litchfield and Shiplet.)

Shirley, Samuel, Winnipeg, Manitoba, Canada. Animal-arrester. No. 1,266,068; May 14; v. 250; p. 360.

Shively, James H. (See Kost, Joseph L., assignor.)

Shnable, Emile R., Wilmette, Ill., assignor to Brown Hoisting Machinery Company, Cleveland, Ohio. Skip attachment for excavator-buckets. No. 1,266,168; May 14; v. 250; p. 389.

Shoemaker, Joseph J., San Jose, Cal. Folding automobile-rim protector. No. 1,267,286; May 21; v. 250; p. 727.

Sholley, George T., Lebanon, Pa. Necktie-holder. No. 1,266,333; May 14; v. 250; p. 432.

Shortwriter Company. (See Edwards and Feierelsel, assignors.)

Shull, Ivan R., Millville, assignor to Becton, Dickinson & Co., Rutherford, N. J. Glass syringe. No. 1,265,537; May 7; v. 250; p. 181.

Shumaker, Grover M., Marion, Ohio. Finger-cot. No. 1,265,124; May 7; v. 250; p. 71.

Shure, Nathan, Chicago, Ill. Ticket-dispensing machine. No. 1,266,069; May 14; v. 250; p. 360.

Shurtleff, Wilfred, Moline, Ill. Vacuum-valve. No. 1,267,809; May 28; v. 250; p. 900.

Sieber, Gottwalt, assignor to Vogtländische Maschinen-Fabrik, Plauen, Germany. Driving mechanism for piercing implements in embroidering-machines. No. 1,266,870; May 21; v. 250; p. 611.

Siebert, Theodore, Jr. (See Bahls and Siebert.)

Siegel, Anna. (See Siegel, Samuel, assignor.)

Siegel, Samuel, assignor to A. Siegel, New York, N. Y. Toy bank. No. 1,265,125; May 7; v. 250; p. 71.

Siemens & Co., Gebruder. (See Egly, Georg, assignor.)

Silberg, Carl T., Bellingham, Wash. Clamp. No. 1,267,918; May 28; v. 250; p. 932.

Silver, Bennett C., Chicago, Ill. Child's swing-seat. No. 1,265,126; May 7; v. 250; p. 71.

Silverman, Alexander, Pittsburgh, Pa. Illuminator for microscopes. No. 1,267,287; May 21; v. 250; p. 727.

Simmance, John F., and J. Abady, London, England. Apparatus for and actuated by gases of varying density. No. 1,264,985; May 7; v. 250; p. 31.

Simmen, Paul J., Buffalo, N. Y. Automatic moving-vehicle control. No. 1,266,871; May 21; v. 250; p. 611.

Simmon, Karl A., and A. J. Hall, Wilkinsburg, Pa., assignors to Westinghouse Electric and Manufacturing Company. Controller. No. 1,267,919; May 28; v. 250; p. 933.

Simpson, Francis W. and R., Otley, England. Press suitable for pressing cheese or meat. No. 1,267,920; May 28; v. 250; p. 933.

Simpson, John O., assignor to Remington Arms & Ammunition Company, Ilion, N. Y. Sight for firearms. No. 1,265,266; May 7; v. 250; p. 108.

Simpson, Lowe E., assignor to The Orville Simpson Company, Cincinnati, Ohio. Sifting-machine. No. 1,265,267; May 7; v. 250; p. 109.

Simpson, Robert. (See Simpson, Francis W. and R.)

Sims, Frederick L. H., assignor to The Diaphone Signal Company, Limited, Toronto, Ontario, Canada. Keybolt. No. 1,266,334; May 14; v. 250; p. 433.

Sinclair, Edward T., Oklahoma, Okla. Attachment for internal-combustion engines. No. 1,265,268; May 7; v. 250; p. 109.

Singer, Lazar, New York, N. Y. Cigarette-case. No. 1,265,538; May 7; v. 250; p. 182.

Singer Manufacturing Company. (See De Voe, Albert H., assignor.)

Singer Manufacturing Company, The. (See Dosch, Olive L., assignor.)

Singer Manufacturing Company, The. (See Herr, Park A., assignor.)

Singer Manufacturing Company, The. (See Molyneux and Gatchell, assignors.)

Singer Manufacturing Company, The. (See Myers, Walter, assignor.)

Singer Manufacturing Company, The. (See Ströbeck, Frans T., assignor.)

Singleton, Stephen G., Burke, Idaho. Tray. No. 1,267,810; May 28; v. 250; p. 901.

Sipp, Grant, Paterson, N. J. Automatic feed mechanism for drill-presses. No. 1,265,269; May 7; v. 250; p. 109.

Sippel, Erwin W., Seattle, Wash. Check-protector. No. 1,266,872; May 21; v. 250; p. 612.

Siskin, Harry, Los Angeles, Cal. Phonograph-cabinet library-table. No. 1,266,169; May 14; v. 250; p. 389.

Sisson, Vinton E., assignor to W. P. Murphy, Chicago, Ill. Pressed-steel car end. No. 1,265,714; May 7; v. 250; p. 228.

Skeels, Ray M., Buffalo, N. Y. Device for wrapping or forming cigarettes. No. 1,266,725; May 21; v. 250; p. 571.

Skeith, Isaac L., and W. B. Burrows, Vancouver, British Columbia, Canada, assignors to Sumner Iron Works, Everett, Wash. Power lifting mechanism for saw-trimmers. No. 1,267,130; May 21; v. 250; p. 686.

Skelton, L. S. (See Westbury, William, assignor.)

Skerrett, John F., *et al.* (See Cobb, Bayard G., assignor.)

Skjonsbye, Axel J., Bourkes, Ontario, Canada. Level. No. 1,265,823; May 14; v. 250; p. 290.

Skoglund, Albert, and J. Rore, Gottenborg, Sweden. Boiler-cleaner. No. 1,267,003; May 21; v. 250; p. 949.

Skrukrud, Olaf O., Lanesboro, Minn. Countersink. No. 1,267,704; May 28; v. 250; p. 871.

Skublin, Charles P., assignor to W. A. Adams, Detroit, Mich. Tire-pump. No. 1,264,986; May 7; v. 250; p. 31.

Sladden, Sidney C., New York, N. Y. Tire-valve. No. 1,267,600; May 28; v. 250; p. 842.

Slater, George L. (See Howard and Slater.)

Slater, Mabel H., Webster, Mass. Scout-blanket. No. 1,265,539; May 7; v. 250; p. 182.

Sleeper, Frank H., assignor to Sleeper & Hartley, Inc., Worcester, Mass. Spring-coiling machine. No. 1,266,070; May 14; v. 250; p. 360.

Sleeper & Hartley. (See Sleeper, Frank H., assignor.)

Sleeper, Joseph J., Moores, Pa. Wrapper-pasting device. No. 1,265,127; May 7; v. 250; p. 72.

Slick, Edwin E., Westmont borough, Pa. Blast-furnace. No. 1,267,004; May 21; v. 250; p. 650.

Slick, Edwin E., Westmont borough, Pa. Blast-furnace operation. No. 1,267,005; May 21; v. 250; p. 650.

Sloan, Harry E., and G. A. Wiedemann, Philadelphia, Pa. Newspaper-file. No. 1,266,635; May 21; v. 250; p. 546.

Slough, Frank M., assignor to The Garford Manufacturing Company, Elyria, Ohio. Signaling system. No. 1,267,469; May 28; v. 250; p. 804.

Slough, Frank M., Elyria, Ohio, assignor, by mesne assignments, to Stromberg-Carlson Telephone Mfg. Co., Rochester, N. Y. Ringer. No. 1,267,470; May 28; v. 250; p. 805.

Slye, Edward A., assignor to The Veeder Manufacturing Company, Hartford, Conn. Tachometer. No. 1,265,128; May 7; v. 250; p. 72.

Small, Ralph B. (See Whitaker and Small.)

Small, Ralph B. (See Whitaker, Samuel T., assignor.)

Smedegaard, Mogens C. A., Hörning, Denmark. Oil-burner. No. 1,267,811; May 28; v. 250; p. 901.

Smith, Albert H., Darby, Pa. Safety-guard for eyeglass-cases, wallets, &c. No. 1,265,824; May 14; v. 250; p. 291.

Smith, Arthur B., Evanston, assignor to Automatic Electric Company, Chicago, Ill. Automatic or semi-automatic telephone system. No. 1,267,131; May 21; v. 250; p. 686.

Smith, Augustus, Roselle, assignor to Bergen Point Iron Works, Bayonne, N. J. Car. No. 1,267,921; May 28; v. 250; p. 933.

Smith, Buel, Glens Falls, N. Y., assignor to General Electric Company. Process of coating by means of emulsions. No. 1,266,335; May 14; v. 250; p. 433.

Smith, Charles A., Buffalo, N. Y. Valve for gas-fixtures, &c. No. 1,266,170; May 14; v. 250; p. 389.

Smith, Eber, Nelson, assignor to Pickles Brothers, Limited, Brierfield, near Burnley, England. Change-box mechanism for looms. No. 1,266,171; May 14; v. 250; p. 389.

Smith, Elda G. (See Bissell and Smith.)

Smith, Ernest C., assignor to Walter A. Wood Mowing and Reaping Machine Co., Hoosick Falls, N. Y. Hay-loader. No. 1,265,969; May 14; v. 250; p. 332.

Smith, Eugene F., Ashtabula, Ohio. Automobile-heater. No. 1,266,873; May 21; v. 250; p. 612.

Smith, Eugene H. H. (See Smith, Henry V., assignor.)

Smith, George A., South Hill, Va. Box-shook-edge-trimming mechanism. No. 1,267,922; May 28; v. 250; p. 933.

Smith, George H., Bridgeport, Conn. Shade-roller bracket. No. 1,266,336; May 14; v. 250; p. 433.

Smith, Harry E., Indianapolis, Ind. Adjustable arch-span and beam form. No. 1,267,471; May 28; v. 250; p. 806.

Smothers, Harry F., and E. E. Norquist, Kansas City, Mo. Apparatus for supplying gasolene and compressed air. No. 1,266,337; May 14; v. 250; p. 433.

Smith, Harry W., Pawtucket, assignor to Nickerson Art Metal Company, Providence, R. I. Wire-forming machine. No. 1,267,132; May 21; v. 250; p. 687.

Smith, Henry V., assignor of one-half to E. H. H. Smith, Bridgeport, Conn. Pliers. No. 1,267,133; May 21; v. 250; p. 687.

Smith, John B. R., Hamilton, assignor of one-fourth to J. P. Quinn, one-fourth to C. E. Neser, and one-fourth to T. D. Neser, Baltimore, Md. Flushing apparatus for water-closets. No. 1,267,923; May 28; v. 250; p. 934.

Smith, John W., *et al.* (See Titus, Claud L., assignor.)

Smith, Leo, assignor to Frank S. Betz Company, Hammond, Ind. Surgical operating-table. No. 1,267,812; May 28; v. 250; p. 901.

Smith, Milton R., assignor of two-fifths to J. J. Knudsen, Dwight, Ill. Vaporizer for engines. No. 1,267,924; May 28; v. 250; p. 934.

Smith, Ralston F., assignor to The Hy-Watt Battery Company, Cleveland, Ohio. Dry-cell battery. No. 1,267,349; May 21; v. 250; p. 745.
Smith, Reverdy P., New Haven, Conn. Toy. No. 1,266,874; May 21; v. 250; p. 612.
Smith, Samuel. (See Derr and Smith.)
Smith, Truman A., Mobile, Ala. Steering-wheel lock. No. 1,265,540; May 7; v. 250; p. 182.
Smith, Walter L., New York, N. Y. Tire-chain. No. 1,267,925; May 28; v. 250; p. 935.
Smith & Wesson. (See Wesson, Joseph H., assignor.)
Smith, Wheeler E., Pueblo, Colo. Window-sash. No. 1,265,541; May 7; v. 250; p. 182.
Smith, William A., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo. Rock-drill. No. 1,267,705; May 28; v. 250; p. 871.
Smith, William J., assigner to Waterbury Clock Co., Waterbury, Conn. Clock-hammer. No. 1,266,875; May 21; v. 250; p. 612.
Smyth, Charles F., assignor to Connecticut Aircraft Company, New Haven, Conn. Balloon-valve. No. 1,266,338; May 14; v. 250; p. 434.
Snavely, Frank B., and A. J. Ulvestad, Lake City, Iowa. Check-row attachment for corn-planters. No. 1,267,006; May 21; v. 250; p. 650.
Snickers, Edward, Matlock, Wash. Automatic gate. No. 1,267,134; May 21; v. 250; p. 687.
Snively, Howard V., Kansas City, Mo. Traveling hoist. No. 1,266,636; May 21; v. 250; p. 547.
Snook, Homer C., Oak Park, and E. W. Kelly, Chicago, Ill. Vacuum regulation. No. 1,267,706; May 28; v. 250; p. 871.
Snow, Francis T., and P. E. Maurer, San Jose, Cal. Automobile-clutch lock. No. 1,267,926; May 28; v. 250; p. 935.
Snow, Joseph A. (See Wolfe and Snow.)
Snyder, Charles W., Altoona, Pa. Tank inlet-valve. No. 1,266,637; May 21; v. 250; p. 547.
Snyder, David W., Chicago, Ill. Machine for making paper bags. No. 1,265,270; May 7; v. 250; p. 110.
Snyder, Parke T., assignor of one-half to R. J. Beatty, Chicago, Ill. Cooling-fan and controlling means. No. 1,265,271; May 7; v. 250; p. 110.
Société Anonyme Des Etablissements Nieuport. (See Bazaine, Léon, assignor.)
Société des Moteurs Gnome. (See Seguin, Louis L. A., assignor.)
Société Dite: La Cellophane. (See Brandenberger, Jacques E., assignor.)
Societe du Carburateur Zenith. (See Baverey, François, assignor.)
Society of Chemical Industry in Basle. (See Anderwert, Fritzsche, and Schobel, assignors.)
Söderlund, Carl G., Gottenborg, Sweden. Ball-bearing with a single row of balls. No. 1,266,071; May 14; v. 250; p. 361.
Soemer, Joseph C., Newark, N. J. Compound centrifugal pump. No. 1,266,072; May 14; v. 250; p. 361.
Solleau, Louis C. (See Bailey and Solleau.)
Solar Metal Products Company, The. (See Baxter, Oscar L., assignor.)
Solomon, A. W. (See Harbach, John S., assignor.)
Sommer, William H., Peoria, Ill., assignor, by mesne assignments, to The First Trust and Savings Company, Cleveland, Ohio, and W. E. Stone, Peoria, Ill., trustees. Wire-working machine. No. 1,264,987; May 7; v. 250; p. 32.
Sommer, William H., Peoria, Ill., assignor, by mesne assignments, to The First Trust & Savings Company, Cleveland, Ohio, and W. E. Stone, Peoria, Ill., trustees. Clamp. No. 1,265,397; May 7; v. 250; p. 144.
Sorrenti, Sandy S., San Francisco, Cal. Door-operating mechanism. No. 1,267,137; May 21; v. 250; p. 688.
Sound-O-Photoplay Co. (See Andres and Jones, assignors.)
South Side Trust Company, trustee. (See Herr, Henry C., assignor.)
Southall, Thomas J. (See Guise and Southall.)
Southwark Foundry & Machine Co. (See Good, Paul E., assignor.)
Southwark Foundry & Machine Co. (See Hellmer, Ralph E., assignor.)
Sowell, Ernest E. and J. A., Sacramento, Cal. Ball-bearing lock-nut. No. 1,267,927; May 28; v. 250; p. 935.
Sowell, John A. (See Sowell, Ernest E. and J. A.)
Spacie, Thomas, De Kalb, Ill. Driving and steering device for motor-vehicles. (Reissue.) No. 14,472; May 14; v. 250; p. 491.
Spangler, James M., Canton, assignor to The Hoover Suction Sweeper Company, New Berlin, Ohio. Suction carpet-sweeper. No. 1,266,638; May 21; v. 250; p. 548.
Spangler, John H., assignor of ten-thirtieths to O. I. Kjorlien and one-fifth to G. Kleopfert, Minneapolis, Minn. Wheel. No. 1,264,988; May 7; v. 250; p. 32.
Spängler, Ludwig, Vienna, Austria. Scarf-holder. No. 1,265,542; May 7; v. 250; p. 182.
Spanos, Ernest, New York, N. Y. Automatic sanitary toilet-seat protector. No. 1,265,272; May 7; v. 250; p. 110.
Sparre, Fin, assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Pyroxylin composition. No. 1,266,073; May 14; v. 250; p. 361.
Sparrow, Henry C., Clapham Junction, London, England. Crutch. No. 1,266,074; May 14; v. 250; p. 361.
Spear, Graham H. (See Spear, John G. and G. B.)
Spear, John G. and G. B., Springfield, Mass. Pump. No. 1,266,876; May 21; v. 250; p. 612.
Speegle, Emanuel A., Washington, D. C. Current water-motor. No. 1,267,928; May 28; v. 250; p. 935.
Speehr, Otto, Brooklyn, N. Y. Washing apparatus. No. 1,265,826; May 14; v. 250; p. 291.
Speer, Elmer E., Ballston, Va., assignor to G. Edmonston, Washington, D. C. Binding device for molds, &c. No. 1,268,061; May 28; v. 250; p. 971.
Spence, Garfield A., Aldine, Tex. Oil-burner. No. 1,267,813; May 28; v. 250; p. 902.
Spencer, Louis M. (See Ranger and Spencer.)
Spitz, Fannie S., Albuquerque, N. Mex. Nut shelling and separating machine. No. 1,266,075; May 14; v. 250; p. 362.
Splitdorf Electrical Company. (See Lang, George L., assignor.)
Splitdorf Electrical Company. (See Van Deventer, Harry R., assignor.)
Splitdorf Electrical Company. (See Wilson, James M., assignor.)
Spotswood, Frank D., Lexington, Ky. Mouth-mask. No. 1,265,128; May 7; v. 250; p. 72.
Sprague, Edward, Jr., Oak Park, assignor of one-third to A. W. Laramie and one-third to C. R. Wood, Chicago, Ill. Toy aeroplane. No. 1,267,135; May 21; v. 250; p. 687.
Sprague, Frank N., Sedgwick, Colo. Adjustable shackle-supporting clip for vehicle-springs. No. 1,265,825; May 14; v. 250; p. 291.
Spray Primer Company. (See Kilgore, Frederick O., assignor.)
Springer, William N., Peoria, Ill., assignor to Oliver Chilled Plow Works, South Bend, Ind. Gang-plow. No. 1,266,877; May 21; v. 250; p. 613.
Sprouse, James L., assignor of one-half to N. L. Hundley, Comanche, Okla. Automobile attachment. No. 1,267,136; May 21; v. 250; p. 687.
Spry, Jesse B., Coinjock, N. C. Harvester. No. 1,267,138; May 21; v. 250; p. 688.
Sramcik, Vendel, Senecaville, Ohio. Pneumatic attachment for rocking-chairs. No. 1,267,814; May 28; v. 250; p. 902.
St. Louis Washing Machine Company. (See Schuette and Kintzele, assignors.)
Stack, James R., Duluth, Minn. Emergency repair-link for antiskid-chains. No. 1,265,543; May 7; v. 250; p. 183.
Stake, Herman, Worcester, Mass. Automatic feed mechanism for labeling-machines. No. 1,266,172; May 14; v. 250; p. 390.
Staley, Homer C., Hayward, assignor to Hunt Brothers Company, San Francisco, Cal. Curing olives. No. 1,265,130; May 7; v. 250; p. 72.
Staley, William O., Houston, assignor of forty-five one-hundredths to H. R. Decker and ten one-hundredths to F. P. Risdon, Harris county, Tex. Protector for paper-rolls. No. 1,267,815; May 28; v. 250; p. 903.
Stalker, Carlton H., Ann Arbor, assignor of one-half to C. J. Hall, trustee, Grand Rapids, Mich. Furnace-regulator. No. 1,267,601; May 28; v. 250; p. 842.
Stamp, Hugo O., Milwaukee, Wis. Loading-machine for concrete-mixers and the like. No. 1,265,131; May 7; v. 250; p. 73.
Stampka, Paul, assignor of one-tenth to O. Dutcher, one-twentieth to W. P. O'Connor, and one-twentieth to A. L. Anderson, Nampa, Idaho. Priming device for gasolene-engines. No. 1,267,007; May 21; v. 250; p. 651.
Standard Motor Construction Company. (See Riotte, Eugene A., assignor.)
Standard Parts Company, The. (See Fay, Thomas J., assignor.)
Standard Tobacco Stemmer Company. (See Lawrence, Leo W., assignor.)
Standard Tube & Fence Co. (See Hosack, James L., assignor.)
Standard Underground Cable Company. (See Fisher, Henry W., assignor.)
Stanford, Arthur L., Chicago, Ill. Rail-anchor. No. 1,267,602; May 28; v. 250; p. 842.
Stankiewicz, Bolesław, *et al.* (See Kasprzycki, Stanley, assignor.)
Stanley Works, The. (See Holtzhouser, Jacob P., assignor.)
Stansbury, Joseph A., Los Angeles, Cal. Crutch. No. 1,267,008; May 21; v. 250; p. 651.
Star Detachable Towel-Holder Co. (See Hubinger, George M., assignor.)
Starcher, Ruby S. (See Hendershott, William H., assignor.)
Stark, John R., assignor, by mesne assignments, to The Webster Electric Company, Racine, Wis. Interrupter mechanism. No. 1,267,816; May 28; v. 250; p. 903.
Starkey, Ernest W. (See Bull and Starkey.)
Statham, Noel, Hastings-on-Hudson, assignor to Industrial Chemical Company, New York, N. Y. Making light precipitated chalk. No. 1,266,339; May 14; v. 250; p. 434.
Stearn, Louis J., Cleveland, Ohio. Lamp-remover. No. 1,267,009; May 21; v. 250; p. 651.

Stearns, Ray, and W. S. H. Hamilton, Schenectady, N. Y., assignors to General Electric Company. System of control. No. 1,267,817; May 28; v. 250; p. 903.
Stecker, Alfred J., assignor to F. Wardell, Detroit, Mich. Vacuum-cleaner dust-bag and holder therefor. No. 1,264,989; May 7; v. 250; p. 32.
Stedman, Ashley U., Warsaw, N. Y. Test-tube reader. No. 1,265,544; May 7; v. 250; p. 183.
Steele, William M., Worcester, Mass. Antislipping device for vehicle-wheels. No. 1,266,076; May 14; v. 250; p. 362.
Steen, Arne. (See Krussand and Steen.)
Stein, Hyman. (See Chernov, Stein and Ruben.)
Stein, William C., Buffalo, N. Y. Resilient tire. No. 1,267,707; May 28; v. 250; p. 871.
Steingruber, George, assignor of two-thirds to M. B. Steingruber, Hazlehurst, Miss.; said M. B. Steingruber assignor of one-third to B. G. Brumby, Marietta, Ga. Vaporizing attachment for explosive-engines. No. 1,266,077; May 14; v. 250; p. 362.
Steingruber, Minnie B., *et al.* (See Steingruber, George, assignor.)
Steinke, Jacob J., Flint, Mich. Electric sign. No. 1,267,708; May 28; v. 250; p. 872.
Stenhouse, Thomas, Washington, Pa., assignor to Hazel-Atlas Glass Co., Wheeling, W. Va. Mechanism for making glass articles. No. 1,265,827; May 14; v. 250; p. 291.
Stenotype Company, The. (See Ebelhare and Arvidson, assignors.)
Stephens, Harry H., Philadelphia, Pa., assignor to The Sanitation Corporation, New York, N. Y. Sewage-treating apparatus. No. 1,264,990; May 7; v. 250; p. 33.
Stephens, William M., Equinunk, Pa. Ax. No. 1,265,276; May 7; v. 250; p. 111.
Stephenson, Thomas B., Forestville, Conn. Pinion-filling machine. No. 1,267,818; May 28; v. 250; p. 903.
Sterling Blower Company. (See Christoph, George W., assignor.)
Steutermann, Francis J., Webster, Mass. Funnel. No. 1,267,139; May 21; v. 250; p. 689.
Stevens, Alfred H., Brooklyn, assignor to Stevens Brothers, New York, N. Y. Anilin-reducer. No. 1,267,819; May 28; v. 250; p. 904.
Stevens, Alton E., Providence, R. I. Automatic telephone central-station apparatus. No. 1,265,398; May 7; v. 250; p. 145.
Stevens Brothers. (See Stevens, Alfred H., assignor.)
Stevens, Burt D., Evanston, assignor of three-fourths to W. V. Kelley, Chicago, Ill. V-type engine. No. 1,267,929; May 28; v. 250; p. 936.
Stevens, Frank W., Albion, Iowa. Heat-distributing device. No. 1,265,828; May 14; v. 250; p. 292.
Stevens, Frederick A., Providence, R. I. Lens-post sleeve and forming the same. No. 1,267,472; May 28; v. 250; p. 806.
Stevens, Solomon M., Sulphur, Okla. Shade and curtain hanger. No. 1,266,078; May 14; v. 250; p. 363.
Stevens, William C., Summit, N. J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Hoisting system. No. 1,267,820; May 28; v. 250; p. 904.
Stewart, Gertrude F. (See Stewart, Peres M., assignor.)
Stewart, Julia B., executrix. (See Kocourek, Henry, assignor.)
Stewart, Perez M., assignor to G. F. Stewart, New York, N. Y. Building construction. No. 1,264,991; May 7; v. 250; p. 33.
Stewart-Warner Speedometer Corporation. (See Berg, Joseph, assignor.)
Stewart, William Y., Denver, Colo. Expansion-control device for elastic valves. No. 1,266,340; May 14; v. 250; p. 434.
Stiffey, James J., Conemaugh, Pa. Portière, shade, and curtain holder. No. 1,266,079; May 14; v. 250; p. 363.
Stilley, Wirt W., Newport News, Va. Ironing-board. No. 1,265,970; May 14; v. 250; p. 333.
Stirling, Clarence C., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Electric snap-switch. No. 1,267,803; May 28; v. 250; p. 843.
Stirling, Clarence C., assignor to The Hart & Hegeman Manufacturing Company, Hartford, Conn. Snap-switch. No. 1,267,604; May 28; v. 250; p. 843.
Stitzer, Charles E., Denver, Colo. Gravity-stabilizer for aeroplanes. No. 1,266,341; May 14; v. 250; p. 434.
Stockberger, Louie G. (See Longanecker and Stockberger.)
Stockman, James S., South Shields, England. Buoyant garment. No. 1,267,140; May 21; v. 250; p. 689.
Stokes, Henry W., Philadelphia, Pa. Moldable paper-board for closures, containers, and the like. No. 1,265,132; May 7; v. 250; p. 73.
Stokes, John S., Moorestown, N. J., and H. G. Schwerdtle, Philadelphia, assignors to Stokes & Smith Company, Summerdale, Pa. Box-blank. No. 1,265,273; May 7; v. 250; p. 111.
Stokes & Smith Company. (See Stokes and Schwerdtle, assignors.)
Stone, John, Brooklyn, N. Y. Envelop-sealing machine. No. 1,266,342; May 14; v. 250; p. 435.
Stone Straw Company, The. (See Maltby, Lewis C., assignor.)
Stone, William E., et al., trustees. (See Sommer, William H., assignor.)
Stoppani, Ermenegildo, Bologna, and V. Volpato, Milan, Italy. New soluble and assimilable phosphate manure and making it. No. 1,267,473; May 28; v. 250; p. 806.
Storer, Norman W., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. Electric locomotive. No. 1,267,930; May 28; v. 250; p. 936.
Stout, Harry H., assignor to Nicholas Copper Company, New York, N. Y. Totally-submerged electrode. No. 1,267,141; May 21; v. 250; p. 689.
Stowe, Charles B., Lakewood, Ohio. Refractory material and making same. No. 1,265,545; May 7; v. 250; p. 183.
Stowe, John F., Lincoln, Nebr. Automobile starting mechanism. No. 1,267,605; May 28; v. 250; p. 843.
Stowers, Jessie A. and J. Basant, New York, N. Y. Arm-support. No. 1,267,142; May 21; v. 250; p. 689.
Strachan, Douglas H. (See Fosberg and Strachan.)
Strada, Charles. (See Haas and Strada.)
Strane, Archibald J., Tamaqua, Pa., assignor to Atlas Powder Company, Wilmington, Del. Fuse-igniting device. No. 1,267,474; May 28; v. 250; p. 806.
Strang, Walter C., Yonkers, assignor to Otis Elevator Company, New York, N. Y. Motor control. No. 1,264,992; May 7; v. 250; p. 33.
Straus, Alexander L., Baltimore, Md. Non-alcoholic beverage. No. 1,265,274; May 7; v. 250; p. 111.
Straus, Alexander L., assignor to Baltimore Process Company, Baltimore, Md. Non-alcoholic beverage and producing the same. No. 1,265,275; May 7; v. 250; p. 111.
Straus, Alexander L., assignor to Baltimore Process Company, Baltimore, Md. Distilling apparatus. No. 1,267,709; May 28; v. 250; p. 872.
Strauss, Ferdinand. (See Abern, Frank T., assignor.)
Strauss, Gustavus E. (See Dolphin, Marcelean, assignor.)
Strickland, William H., Bristol, Va. Saw-set. No. 1,265,277; May 7; v. 250; p. 112.
Stripe, William C. (See Moore, Harvey L., assignor.)
Ströbeck, Frans T., Beachmont, Mass., assignor to The Singer Manufacturing Company. Machine for stitching tape to innersoles. No. 1,265,399; May 7; v. 250; p. 145.
Strobbart, Helen E., Chicago, Ill. Dish-mop. No. 1,266,878; May 21; v. 250; p. 613.
Strobl, Alexander, New York, N. Y., assignor to S. Sternau & Company, Inc. Solid alcohol and producing same. No. 1,266,080; May 14; v. 250; p. 363.
Strobl, Alexander, New York, N. Y., assignor to S. Sternau & Company, Inc. Solid-alcohol burner. No. 1,267,475; May 28; v. 250; p. 806.
Strohacker, Edward. (See Strohacker, Louis, and E.)
Strohacker, Louis, and E., Freeport, Ill. Wire-driving tool. No. 1,264,993; May 7; v. 250; p. 34.
Stromberg-Carlson Telephone Manufacturing Company. (See Reinke, Eugene A., assignor.)
Stromberg-Carlson Telephone Mfg. Co. (See Slough, Frank M., assignor.)
Stromberg Motor Devices Company. (See Gustafson and Mock, assignors.)
Strong, William J. H. (See Freeland, Lloyd D., assignor.)
Strozier, H. N. (See Williams, French B., assignor.)
Stuart, John, St. Kilda, Melbourne, Victoria, Australia. Resilient wheel. No. 1,266,343; May 14; v. 250; p. 435.
Stuart, Kenneth E., Philadelphia, Pa. Electric-railway system. No. 1,265,829; May 14; v. 250; p. 292.
Stubbe, William J. (See Garlock and Stubbe.)
Sturtevant, Thomas E., assignor to McKiernan-Terry Drill Company, Dover, N. J. Rock-drill. No. 1,265,133; May 7; v. 250; p. 73.
Styll, Harry H. (See Day and Styll.)
Styll, Harry H., Southbridge, Mass. Goggles. No. 1,265,546; May 7; v. 250; p. 183.
Styll, Harry H., Southbridge, Mass. Lens. No. 1,267,821; May 28; v. 250; p. 904.
Submarine Signal Company. (See Fessenden, Reginald A., assignor.)
Suczek, Robert, assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Condensate and air removing apparatus. No. 1,266,344; May 14; v. 250; p. 435.
Suczek, Robert, assignor to C. H. Wheeler Manufacturing Company, Philadelphia, Pa. Condensate and air removing apparatus. No. 1,266,726; May 21; v. 250; p. 572.
Sugar Cane By-Product Company. (See Marsden, Mark W., assignor.)
Sullivan, Charles B., Rosedale, Kans. Rerailing-frog. No. 1,266,727; May 21; v. 250; p. 572.
Sullivan, John, Peru, Ind. Securing the ends of boiler-flues in flue-sheets. No. 1,267,143; May 21; v. 250; p. 690.
Sullivan, Leonard J., North Sydney, New South Wales, Australia. Belt-lacing fastener. No. 1,267,710; May 28; v. 250; p. 872.
Sulman, Henry L., and H. F. K. Picard, assignors to The Metals Extraction Corporation Limited, London, England. Extraction of lead from its ores or lead-containing materials. No. 1,265,547; May 7; v. 250; p. 183.
Summers, Frank E., near Memphis, Mo. Electric switch. No. 1,265,697; May 7; v. 250; p. 223.
Summers, Frank E., Memphis, Mo. Electrical signaling apparatus. No. 1,265,698; May 7; v. 250; p. 223.

Sumner, Henry W., Winslow, Wash. Air starting mechanism for internal-combustion engines. No. 1,264,994; May 7; v. 250; p. 34.
Sumner Iron Works. (See Skeith and Burrows, assignors.)
Sundh, August, Hastings-upon-Hudson, N. Y. Block for automatic blocking mechanism for strip-mills. No. 1,265,400; May 7; v. 250; p. 145.
Sundt, Carlos A., Santiago, Chile. Governor and regulator for engines, motors, &c. No. 1,265,134; May 7; v. 250; p. 73.
Sushko, Stefan, Allentown, Pa. Bolt fastener or lock. No. 1,266,081; May 14; v. 250; p. 363.
Sutcliffe, Edgar R., Leigh, England, assignor to Pure Coal Briquettes Limited, Cardiff, Wales. Manufacture of fuel blocks or briquets. No. 1,267,711; May 28; v. 250; p. 873.
Suter, Eugene F., London, England. Electrical heating apparatus for permanently waving hair. No. 1,266,879; May 21; v. 250; p. 613.
Suter, Eugene F., London, England. Hair curler or roller. No. 1,266,880; May 21; v. 250; p. 614.
Svendsen, Hans A., *et al.* (See Groh and Hansen, assignors.)
Swan, Harry W., Everett, Wash. Device to attach to a penholder to assist in the practice of penmanship. No. 1,266,630; May 21; v. 250; p. 540.
Swan, John B., and Z. P. Cornell, Gladstone, Mich. Adjustable wedge. No. 1,266,073; May 28; v. 250; p. 974.
Swan, P. J., *et al.* (See Hartkopf, Carl F., assignor.)
Swanson, Andrew W., Bellingham, assignor to Swanson Exhaust Box Company, Seattle, Wash. Exhaust-box. No. 1,267,010; May 21; v. 250; p. 651.
Swanson Exhaust Box Company. (See Swanson, Andrew W., assignor.)
Swanson, John A. (See Cubiac, Michael F., assignor.)
Swanson, Theodore, Lynn Center, Ill. Carpenter's workbench. No. 1,266,173; May 14; v. 250; p. 390.
Sweykus, John C., and A. Tkacz, Lackawanna, N. Y. Blower. No. 1,264,995; May 7; v. 250; p. 34.
Swift, Willard E., Worcester, assignor to United States Envelope Company, Springfield, Mass. Machine for attaching flap-securing means to envelops. No. 1,265,135; May 7; v. 250; p. 74.
Swoboda, Adolph R., Montclair, N. J., assignor, by mesne assignments, to Western Electric Company, Incorporated. Polarized repeating sounder. No. 1,265,330; May 14; v. 250; p. 293.
Swope, Luther R., Hanover, Pa. Antiskid device for motor-vehicles. No. 1,266,345; May 14; v. 250; p. 436.
Synthetic Patents Co. (See Bauer and Herre, assignors.)
Szafranski, Casey, South Chicago, Ill. Wire-cutting bayonet. No. 1,266,640; May 21; v. 250; p. 548.
Szekely, Otto E., Rock Island, assignor to Velie Motors Corporation, Moline, Ill. Clarifier. No. 1,267,606; May 28; v. 250; p. 844.
Szydlowski, Paul, Hamtramck, Mich. Steering-wheel lock for motor-driven vehicles. No. 1,267,476; May 28; v. 250; p. 806.
T. A. Willson & Co. (See Shindel, Harry F., assignor.)
T. B. Toy Company. (See Baker, Alfred Z., assignor.)
T. R. Almond Manufacturing Company. (See Hubbell, Henry S., assignor.)
Taber, George H., Binghamton, N. Y. Cut-out valve. No. 1,265,971; May 14; v. 250; p. 333.
Tabler, John H., Lanham, Md. Buckle. No. 1,264,996; May 7; v. 250; p. 35.
Tabulating Machine Company, The. (See Buck, George B., assignor.)
Taft, John A., assignor to Reagan Bale Company, San Antonio, Tex. Method and apparatus for baling cotton and the like. No. 1,265,972; May 14; v. 250; p. 334.
Taliaferro, Edward E., Colorado Springs, Colo. Shoe-blacking machine. No. 1,266,082; May 14; v. 250; p. 363.
Talkington, Brant, Harrington, Wash. Clevis. No. 1,267,477; May 28; v. 250; p. 807.
Tanabe, Hakulyo C., Marysville, Cal. Amusement device. No. 1,267,931; May 28; v. 250; p. 936.
Tanimura, Tagiro, Rock Springs, Wyo. Fountain-pen. No. 1,267,288; May 21; v. 250; p. 727.
Tankersley, Winston. (See Cargal and Tankersley.)
Tanner, Arnold J. (See Paul and Tanner.)
Tarasch, Louis C., assignor to Penny Package Corporation, New York, N. Y. Vending-machine. No. 1,265,831; May 14; v. 250; p. 293.
Tate, Samuel G., assignor to Union Special Machine Company, Chicago, Ill. Presser-foot for sewing-machines. No. 1,265,278; May 7; v. 250; p. 112.
Tavza, George, Eureka, Cal. Combination-padlock. No. 1,265,136; May 7; v. 250; p. 74.
Taylor, James L., Owensville, Mo. Windmill. No. 1,265,137; May 7; v. 250; p. 74.
Taylor, Charles E., Hillsboro, Ill. Briquet-molding machine. No. 1,265,138; May 7; v. 250; p. 75.
Taylor, David O., West Point, Miss. Scoop. No. 1,266,881; May 21; v. 250; p. 614.
Taylor, Herbert B., Westfield, N. J., assignor to Hall Switch & Signal Co. Semaphore-blade grip. No. 1,266,346; May 14; v. 250; p. 436.
Taylor, James, Hornwich Junction, near Bolton, assignor to Mather & Platt Limited, Manchester, England. Appliance for humidifying warps. No. 1,266,522; May 28; v. 250; p. 905.
Taylor, Leroy B. (See Coleman and Taylor.)
Taylor, Whilmore R., Germantown, assignor to Eastern Manufacturing Company, Philadelphia, Pa. Fruit and vegetable evaporator. No. 1,267,144; May 21; v. 250; p. 690.
Teel, Lloyd C., Mentone, Ind. Chicken-brooder. No. 1,265,548; May 7; v. 250; p. 184.
Teesdale, Clyde H., Madison, Wis., and R. E. Prince, Elgin, Ill.; dedicated, by mesne assignments, to the Government of the United States. Fireproofing wood. No. 1,265,549; May 7; v. 250; p. 184.
Tefft, Benjamin F., Jr. (See Fuller, Eugene, assignor.)
Telelectric Company, The. (See Reed, Walter C., assignor.)
Teller, William F., Columbus, Ohio. Hot-plate. No. 1,267,932; May 28; v. 250; p. 936.
Teltzrow, Robert J. F., Beaver Dam, Wis. Manure-loader. No. 1,266,174; May 14; v. 250; p. 390.
Tench, James D. L., Gainesville, Fla. Dental-investment compound. No. 1,264,997; May 7; v. 250; p. 35.
Terry, Fred D. (See Grom and Terry.)
Terwilliger, William H., Amsterdam, N. Y., assignor to F. Klein, trustee. Take-up for sewing-machines. No. 1,267,011; May 21; v. 250; p. 652.
Tesla, Nikola, New York, N. Y. Lightning-protector. No. 1,266,175; May 14; v. 250; p. 391.
Test, Ellis W., Michigan City, Ind., assignor to Haskell & Barker Car Co. Inc. Car-bolster. No. 1,265,401; May 7; v. 250; p. 146.
Thame, James, London, England. Manufacture of paper yarn. No. 1,264,998; May 7; v. 250; p. 35.
Thermalene Company, The. (See Wolf, Linus, assignor.)
Thiele, Ludwig A., Columbus, Ohio. Method of and apparatus for making sulfuric acid. No. 1,267,012; May 21; v. 250; p. 652.
Thoens, Burchard, New York, N. Y. Flushing-valve. No. 1,265,832; May 14; v. 250; p. 293.
Thomas, Charles A., Wilkinsburg, Pa. Dough-cutting device. No. 1,267,478; May 28; v. 250; p. 807.
Thomas E. Wilson & Company. (See Bendelow, Tom, assignor.)
Thomas, Nehemiah M., Pymble, near Sydney, New South Wales, and C. G. Petree, Bundaberg, Queensland, Australia. Manufacturing cane-sugar. No. 1,266,882; May 21; v. 250; p. 614.
Thomas Oberkirch Company. (See Thomas, William M., assignor.)
Thomas, Phillip R., *et al.* (See Rothenberger, Simon W., assignor.)
Thomas, R. E. (See Moran, Thomas M., assignor.)
Thomas, William M., assignor to Thomas Oberkirch Company, Limited, New York, N. Y. Camera. No. 1,265,699; May 7; v. 250; p. 223.
Thomas, William R., Des Moines, Iowa. Car-ticket case. No. 1,266,176; May 14; v. 250; p. 391.
Thomasson, Henry A. W., Bellingham, Wash. Boat-propeller. No. 1,267,712; May 28; v. 250; p. 873.
Thompson, Albert W., Fitchburg, and R. W. Comfort, Winchester, assignors to The G. M. Parks Company, Fitchburg, Mass. Humidifier. No. 1,265,550; May 7; v. 250; p. 184.
Thompson, Frank, assignor to J. W. Walker, Shawnee, Okla. Feller attachment. No. 1,266,883; May 21; v. 250; p. 615.
Thompson, Jasper L., Hurlock, Md. Check-row transplanter. No. 1,267,713; May 28; v. 250; p. 873.
Thompson, Reuben B., Cohoes, N. Y., assignor to Union Special Machine Company, Chicago, Ill. Sewing and edging machine. No. 1,266,884; May 21; v. 250; p. 615.
Thompson, William G., Newark, Ohio, assignor to The United States Graphite Company, Saginaw, Mich. Graphite-feeding lubricator. No. 1,264,999; May 7; v. 250; p. 35.
Thompson, William I., Stoneham, Mass. Target apparatus. No. 1,266,348; May 14; v. 250; p. 437.
Thomson, Charles H., Maryville, Tenn. Electrolytic apparatus. No. 1,265,551; May 7; v. 250; p. 184.
Thomson Electric Welding Company. (See Von Henke, Edmund J., assignor.)
Thomson, Elihu, Swampscott, Mass., assignor to General Electric Company. Electric meter. No. 1,266,847; May 14; v. 250; p. 436.
Thomson, John, New York, N. Y., assignor to John Thomson Press Company, Jersey City, N. J. Electric zinc-distilling furnace and condenser. No. 1,265,973; May 14; v. 250; p. 334.
Thomson Spot Welder Company. (See Gravell, James H., assignor.)
Thomson Spot Welder Company. (See Schkommodau, Gustave H., assignor.)
Thomson Spot Welder Company. (See Von Henke, Edmund J., assignor.)
Thordarson, Chester H., Chicago, Ill. Transformer. No. 1,267,013; May 21; v. 250; p. 652.
Thornburg, Lee A., assignor of one-fourth to T. A. Lambert, Odenville, Ala. Safety mechanism for automatically applying air-brakes. No. 1,265,974; May 14; v. 250; p. 334.
Thorp, William T., Hillsboro, Ill. Tatting-shuttle. No. 1,266,728; May 21; v. 250; p. 572.
Tibbs, Clarence E., assignor of one-third to B. B. Nervo, Seattle, Wash. Mirror-holder. No. 1,267,965; May 28; v. 250; p. 937.
Tillyer, Edgar D. (See Bugbee and Tillyer.)

Tillyer, Edgar D., assignor to American Optical Company, Southbridge, Mass. Lens. No. 1,267,014; May 21; v. 250; p. 652.
Timken Roller Bearing Company, The. (See Buckwalter, Tracy V., assignor.)
Timmis, Edgar W., London, England. Spring and manufacturing the same. No. 1,266,349; May 14; v. 250; p. 437.
Timmons, Robert F., Coshocton, Ohio. License-tag. No. 1,267,015; May 21; v. 250; p. 652.
Timpano, Giuseppe L., Northfield, Vt. Stone-sawing machine. No. 1,266,350; May 14; v. 250; p. 437.
Tin Decorating Company. (See Hermani, Henry, assignor.)
Tittes, Paul, and W. Schönherr, assignors to Vogtländische Maschinen-Fabrik, Plauen, Germany. Embroidering-machine. No. 1,266,083; May 14; v. 250; p. 364.
Tittle, Leonidas L., Jr., Dayton, Ohio. Clothes-pin. No. 1,265,139; May 7; v. 250; p. 75.
Titus, Claud L., Nymore, assignor of one-fourth to J. W. Smith and one-fourth to H. E. Titus, Bemidji, Minn. Attachment for feed-water injectors. No. 1,265,402; May 7; v. 250; p. 146.
Titus, Harry E., *et al.* (See Titus, Claud L., assignor.)
Tizley, Arthur J., Brooklyn, assignor to Edward P. Caldwell & Company, New York, N. Y. Fixture-support. No. 1,267,934; May 28; v. 250; p. 937.
Tkacz, Alex. (See Swaykus and Tkacz.)
Todd, Thomas W., Bend, Oreg. Lock-pin grip. No. 1,265,140; May 7; v. 250; p. 75.
Toledo Scale Company. (See Hert, Samuel N., assignor.)
Toledo Scale Company. (See Myers, Hubert A., assignor.)
Toll, Rensselaer H., Berkeley, Cal. Combined book pull and marker. No. 1,266,885; May 21; v. 250; p. 615.
Tomlinson, Clarence L., New York, N. Y., assignor to G. Reynolds, Los Angeles, Cal. Moving-picture machine. No. 1,265,715; May 7; v. 250; p. 229.
Tontrup, George H. (See Schechter, Bernard, assignor.)
Tooke, William A., Montreal, Quebec, Canada. Machine for ironing the yokes of shirts. No. 1,267,823; May 28; v. 250; p. 905.
Toomey, Alfred E., Edmore, N. D. Grease-cup. No. 1,266,351; May 14; v. 250; p. 437.
Torgersen, Orne H., assignor of one-half to F. A. B. Holmes, Chicago, Ill. Electric controller. No. 1,267,714; May 28; v. 250; p. 874.
Torjesen, John, West New York, N. J. Pile-driver. No. 1,266,352; May 14; v. 250; p. 438.
Townsend, Isaac W., Galveston, Tex. Roll-calendar. No. 1,267,935; May 28; v. 250; p. 937.
Townsley, Harlie A., assignor of one-half to E. J. Feuling, New Hampton, Iowa. Package-tie. No. 1,265,279; May 7; v. 250; p. 112.
Tracy, Wellington, Winthrop, Mass. Steering-gear attachment for motor-vehicles. No. 1,267,289; May 21; v. 250; p. 727.
Traer, Glenn W., Chicago, Ill. Coal-carrier for retorts. No. 1,267,479; May 28; v. 250; p. 807.
Tranthan, Clyde A., Kansas City, Mo. Film-fire extinguisher. No. 1,266,353; May 14; v. 250; p. 438.
Trautman, Burl N., Conesville, Iowa. Seed-extracting machine. No. 1,266,641; May 21; v. 250; p. 548.
Travelight Mfg. Co. (See Schlegall, Theodore, assignor.)
Treanor, James, New York, N. Y. Vehicle spring suspension. No. 1,267,145; May 21; v. 250; p. 690.
Treese, William, Silverton, Oreg. Blasting-powder. No. 1,265,975; May 14; v. 250; p. 334.
Tremain, Charles. (See Becker, Robert A., assignor.)
Trembley, Ulysse N., Lawrence, Mass. Shuttle. No. 1,267,824; May 28; v. 250; p. 905.
Tribbey, George W., Marshfield, Oreg. Ice-cutter. No. 1,265,976; May 14; v. 250; p. 335.
Trigwell, Alfred J., San Jose, Cal. Tractor. No. 1,267,825; May 28; v. 250; p. 906.
Tripp, Charles K., Lynn, Mass., assignor to General Electric Company. Mandrel and the like. No. 1,267,146; May 21; v. 250; p. 690.
Tripp, George F., Flint, Mich. Refrigerator. No. 1,265,552; May 7; v. 250; p. 185.
Trippe, William, Holstein, Mo. Clamping-tool. No. 1,265,141; May 7; v. 250; p. 75.
Triumph Manufacturing Company, The. (See Pinkney, Bryan D., assignor.)
Troast, William F., assignor of one-half to F. B. Trout, Lancaster, Pa. Vehicle-wheel tire. No. 1,267,147; May 21; v. 250; p. 690.
Troll, Frederick J., assignor to The Loadometer Company, Baltimore, Md. Load-indicator for motor-trucks. (Reissue.) No. 14,475; May 21; v. 250; p. 749.
Tromlitz, Oscar, Indianhead, Md. Surface-gage. No. 1,266,177; May 14; v. 250; p. 391.
Trout, Frank B. (See Troast, William F., assignor.)
Tubbs, Frank M., San Francisco, Cal. Seat. No. 1,267,290; May 21; v. 250; p. 728.
Tuch, Christian C., Honolulu, Hawaii. Hydraulic air-compressor and motor. No. 1,267,936; May 28; v. 250; p. 937.
Tuckaway Folding Ladder Company. (See Kohler, George H. A., assignor.)
Tucker, Clarence E., Herndon, Va. Slicing-machine. No. 1,265,833; May 14; v. 250; p. 294.
Tunnell, Raymond W., Philadelphia, Pa. Vegetable glue or adhesive. No. 1,266,354; May 14; v. 250; p. 438.
Tupman, William I. (See La Salle, Robert M., assignor.)
Turbayne, William A., assignor, by mesne assignments, to U. S. Light & Heat Corporation, Niagara Falls, N. Y. Electrical system of distribution. No. 1,265,000; May 7; v. 250; p. 35.
Turner, Frank R., Dorchester, Mass. Cross-chain for tires. No. 1,265,403; May 7; v. 250; p. 146.
Turner, James J., Pittsburgh, Pa. Railway signaling system. No. 1,265,142; May 7; v. 250; p. 76.
Turner Tanning Machinery Company, The. (See Cutler, Lewis F., assignor.)
Turner, Walter E., assignor to The Favorite Stove & Range Co., Piqua, Ohio. Automatic oven-heat regulator. No. 1,266,886; May 21; v. 250; p. 615.
Turner, Walter V., Edgewood, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Empty and load brake. No. 1,265,001; May 7; v. 250; p. 36.
Turner, Walter V., assignor to The Westinghouse Air Brake Company, Wilkinsburg, Pa. Fluid-pressure brake. No. 1,265,002; May 7; v. 250; p. 36.
Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. No. 1,265,003; May 7; v. 250; p. 36.
Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Brake-cylinder-pressure regulator. No. 1,265,004; May 7; v. 250; p. 37.
Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Safety car-control equipment. No. 1,265,005; May 7; v. 250; p. 37.
Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Fluid-pressure brake. No. 1,265,006; May 7; v. 250; p. 37.
Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Combined nut-lock and swab-protector. No. 1,265,007; May 7; v. 250; p. 38.
Turner, Walter V., Wilkinsburg, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Combined swab-holder and nut-lock. No. 1,266,729; May 21; v. 250; p. 573.
Tuteur, Siegfried F., Sacramento, Cal. Speed-arrester for vehicles. No. 1,265,404; May 7; v. 250; p. 146.
Tuttle, Daniel M., assignor to S. S. Tuttle, Canastota, N. Y. Accounting means. No. 1,265,008; May 7; v. 250; p. 38.
Tuttle, Edward, and G. W. Keith, Seneca, Mich. Vehicle-trailer-pole hook. No. 1,265,143; May 7; v. 250; p. 76.
Tuttle, Henry A., Taunton, Mass. Clutch mechanism. No. 1,266,178; May 14; v. 250; p. 391.
Tuttle, Stella S. (See Tuttle, Daniel M., assignor.)
Tutwiler, Caswell E., Clay Center, Kans. Dust collector and separator. No. 1,267,715; May 28; v. 250; p. 874.
Tweedie, Charles, Jefferson City, Mo. Boot-top. No. 1,265,280; May 7; v. 250; p. 112.
Tweedie, Charles, Jefferson City, Mo. Shoe-tongue. No. 1,265,281; May 7; v. 250; p. 113.
Twinplex Sales Company. (See Rauch, Charles, assignor.)
Tyler, Frank, East Highlands, Cal. Paper-holder. No. 1,265,553; May 7; v. 250; p. 185.
Tyler, William J., Westmont, N. J. Combined pipe-union and check-valve. No. 1,266,179; May 14; v. 250; p. 392.
U. S. Light & Heat Corporation. (See Turbayne, William A., assignor.)
U. S. Slicing Machine Company. (See Van Berkel, Wilhelmus A., assignor.)
Ufford, Charles A., Boston, Mass. Dress-form. No. 1,267,937; May 28; v. 250; p. 938.
Uhlinger, Roy H. (See Brownlee and Uhlinger.)
Ulvestad, Albert J. (See Snavely and Ulvestad.)
Underhill, George H., Boston, Mass. Phonograph. No. 1,265,009; May 7; v. 250; p. 38.
Underwood Computing Machine Company. (See Wright, Walter, assignor.)
Underwood, Thomas J., Kokomo, Ind. Window-shade fixture. No. 1,267,016; May 21; v. 250; p. 653.
Underwood Typewriter Company. (See Yates, Harry, assignor.)
Underwood, Weeden B., assignor to Wilmot Castle Company, Rochester, N. Y. Sterilizer. No. 1,267,716; May 28; v. 250; p. 874.
Union Special Machine Company. (See Berger, Joseph, Jr., assignor.)
Union Special Machine Company. (See McNeil, Chester, assignor.)
Union Special Machine Company. (See Onderdonk, Lansing, assignor.)
Union Special Machine Company. (See Tate, Samuel G., assignor.)
Union Special Machine Company. (See Thompson, Reuben B., assignor.)
United Broom Company, The. (See Hollensbe, Ira J., assignor.)
United Gas Improvement Company, The. (See Chrisman, Charles S., assignor.)
United Gas Improvement Company, The (See Evans, Owen B., assignor.)
United Lace & Braid Manufacturing Company. (See Gambino, Thomas A., assignor.)
United Limb & Brace Co., The. (See Doty, Hubert A., assignor.)
United Shoe Machinery Corporation. (See Ashworth, Fred, assignor.)

United Shoe Machinery Corporation. (See Brock, Matthias, assignor.)
United Shoe Machinery Corporation. (See De Minico, Charles, assignor.)
United Shoe Machinery Corporation. (See Erickson, Edward, assignor.)
United Shoe Machinery Corporation. (See Henderson, Sylvanus B., assignor.)
United Shoe Machinery Corporation. (See Hill, George S., assignor.)
United Shoe Machinery Corporation. (See Latham, Albert, assignor.)
United Shoe Machinery Corporation. (See Lund, Thomas, assignor.)
United Shoe Machinery Corporation. (See Ray, Eugene J., assignor.)
United States Envelope Company. (See Swift, Willard E., assignor.)
United States Graphite Company, The. (See Thompson, William G., assignor.)
United States Graphotype Company. (See Nicholas, William, assignor.)
United States Nickel Company. (See Dhavernas, Joseph, assignor.)
United States Spring Bed Company, The. (See Wheeler, Ernest J., assignor.)
Universal Indicator Co. (See Bobroff, Bornett L., assignor.)
Universal Machine Company, The. (See Urschel, Bertis H., assignor.)
Universal Steel Cabinet Company. (See Hatfield, John, assignor.)
Universal Tool Company. (See Roseberry, Robert E., assignor.)
Upham, David A. (See Girard, Antoine L., assignor.)
Urbanski, Theodore, Holland, Ohio. Wood-sawing machine. No. 1,266,355; May 14; v. 250; p. 438.
Ure, Paul J., *et al.* (See Karppinen, Karl, assignor.)
Urquhart, John J., *et al.* (See Hitt, Reed R., assignor.)
Urschel, Bertis H., assignor to The Universal Machine Company, Bowling Green, Ohio. Universal joint. No. 1,265,834; May 14; v. 250; p. 295.
Utley, Thomas, West Derby, Liverpool, England. Ship's light. No. 1,266,356; May 14; v. 250; p. 439.
Utsman, George W., West Durham, assignor to W. D. Hester, Durham, N. C. Machine for making cigarette-paper books. No. 1,265,835; May 14; v. 250; p. 295.
Valdes, Salvador M., San Antonio, Tex., assignor of one-half to F. H. Selber and E. H. Kuhn. Electric water-heater. No. 1,265,554; May 7; v. 250; p. 185.
Valentine, Herbert S., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Electric controller. No. 1,266,180; May 14; v. 250; p. 392.
Van Alen, Edmund G., *et al.* (See Johnson, Amos E., assignor.)
Van Berkel, Wilhelmus A., Rotterdam, Netherlands, assignor to U. S. Slicing Machine Company, Chicago, Ill. Slicing-machine. No. 1,267,607; May 28; v. 250; p. 844.
Van der Klooster, Cornelis M. (See Hanser and Van der Klooster.)
Van Deventer, Harry R., Sumter, S. C., assignor to Splitdorf Electrical Company, Newark, N. J. Combined generator, lamp, horn, and speedometer. No. 1,265,282; May 7; v. 250; p. 118.
Van Deventer, Harry R., Sumter, S. C., assignor, by mesne assignments, to Splitdorf Electrical Company, Newark, N. J. Ignition mechanism for internal-combustion engines. No. 1,267,148; May 21; v. 250; p. 691.
Van Heusen, John M., Jamaica Plain, Mass. Bound collar. No. 1,267,291; May 21; v. 250; p. 728.
Van Horn, Charles B., Philadelphia, Pa. Vehicle-wheel. No. 1,266,357; May 14; v. 250; p. 439.
Van Nortwick, George W., Denver, Colo. Attachment for phonographs. No. 1,266,181; May 14; v. 250; p. 392.
Van Sickle, Frank M., Layton, N. J. Wrench. No. 1,265,144; May 7; v. 250; p. 76.
Van Valkenburg, Burt R., Oakland, assignor to American Photo Player Company, Berkeley, Cal. Control-chest. No. 1,267,719; May 28; v. 250; p. 875.
Van Valkenburg, Hermon L., assignor to Industrial Controller Company, Milwaukee, Wis. Automatic motor-starter. No. 1,266,642; May 21; v. 250; p. 548.
Van Wie, Ernest D. (See Haggerty and Van Wie.)
Van Zante, Teunis W., Pella, Iowa. Shock-binder. No. 1,267,938; May 28; v. 250; p. 938.
Van Zile, Harry L. (See Wade and Van Zile.)
Van Zile Ventilating Corporation. (See Wade and Van Zile, assignors.)
Vance, Newton E., Red Oak, Iowa. Container. No. 1,267,717; May 28; v. 250; p. 875.
Vanderlip, Washington B., New York, N. Y. Collision and torpedo mat and apparatus for manipulating same. No. 1,265,555; May 7; v. 250; p. 185.
Vanstrom, Adelina J., Jamestown, N. Y. Milk-bottle case. No. 1,267,292; May 21; v. 250; p. 728.
Varley, Thomas W., New York, N. Y., assignor to Westinghouse Electric and Manufacturing Company. Current-collecting device. No. 1,267,342; May 21; v. 250; p. 742.
Varner, William I., Athens, Ga. Interchangeable tire-tread. No. 1,265,556; May 7; v. 250; p. 186.
Vassar Swiss Underwear Company. (See Rutledge, George A., assignor.)
Vaughan, Thomas M., Battle Creek, Mich., assignor to American Flyer Manufacturing Company. Mechanical toy. No. 1,267,608; May 28; v. 250; p. 844.
Vaughn, John M., Indian Mound, Tenn. Cultivator. No. 1,267,149; May 21; v. 250; p. 691.
Veeder Manufacturing Company, The. (See Slye, Edward A., assignor.)
Velie Motors Corporation. (See Szekely, Otto E., assignor.)
Venola Company. (See Fries, Francis H., assignor.)
Vera Chemical Company. (See Kniffler, Bruno, assignor.)
Vermont Farm Machine Company, The. (See Bennett, Samuel L., assignor.)
Vernon, Ellery P. (See Parsons and Heron, assignors.)
Veteto, James G., Amity, Ark. Gun. No. 1,267,293; May 21; v. 250; p. 729.
Vibber, Wheeler H., assignor of one-half to The Gillette-Vibber Co., New London, Conn. Conduit-cap for electric installation. No. 1,266,887; May 21; v. 250; p. 616.
Vickers, James W., London, England. Package for cinematograph-films. No. 1,267,017; May 21; v. 250; p. 653.
Vickers Limited. (See Dawson and Buckham, assignors.)
Vickers Limited. (See McKechnie, James, assignor.)
Victor Shoe Machinery Company. (See Erickson, Edward, assignor.)
Vidal, Raymond, Asnières, France. Preparing blue coloring materials. No. 1,265,836; May 14; v. 250; p. 295.
Vidal, Raymond, Asnières, France. Preparing direct-dyeing black coloring materials. No. 1,265,837; May 14; v. 250; p. 295.
Videgaray, Federico, Mexico, Mexico. Garment-supporting form and presser for wardrobe-trunks. No. 1,266,858; May 14; v. 250; p. 439.
Vidette, George A., Chicago, Ill. Shirt-sleeve. No. 1,266,182; May 14; v. 250; p. 393.
Vigneri, Leonard A., Pittsburgh, Pa. Hydraulic-pump unloader. No. 1,267,720; May 28; v. 250; p. 875.
Vincent, Harry S., Ridgewood, N. J. Locomotive-boiler superheater. No. 1,266,184; May 14; v. 250; p. 393.
Vincent, Harry S., Ridgewood, N. J. Locomotive-feed-water heater. No. 1,266,185; May 14; v. 250; p. 393.
Vincent, Heller A., assignor, by mesne assignments, to M. E. Salerni (nee Couci), Sydenham Hill, London, England. Device for sharpening safety-razor blades. No. 1,266,183; May 14; v. 250; p. 393.
Vincent, Jesse G., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,265,145; May 7; v. 250; p. 76.
Vincent, Joseph E., Cambridge, Mass. Petal-former. No. 1,267,939; May 28; v. 250; p. 938.
Vining, Albert E., Springfield, Mass. Cushion. No. 1,266,359; May 14; v. 250; p. 440.
Visscher, Charles R. H., Norwich, Conn., assignor to American Thermos Bottle Company, New York, N. Y. Lunch-box. No. 1,267,940; May 28; v. 250; p. 938.
Vogtländische Maschinen-Fabrik. (See Grans, Josef, assignor.)
Vogtländische Maschinen-Fabrik. (See Sieber, Gottwalt, assignor.)
Vogtländische Maschinen-Fabrik. (See Tittes and Schönherr, assignors.)
Voigt, Friedrich. (See Schwedler, Carl, assignor.)
Voight, George F., San Francisco, Cal. Spring suspension for road-vehicles. No. 1,267,609; May 28; v. 250; p. 845.
Vokalek, Jaroslaus, Savannah, Ga. Deodorizing attachment for fans. No. 1,267,826; May 28; v. 250; p. 906.
Volpato, Vittorio. (See Stoppani and Volpato.)
Von Glahn, John, Brooklyn, N. Y. Aging alcoholic liquids. No. 1,265,838; May 14; v. 250; p. 295.
Von Hagel, Gerhard, Akron, Iowa. Oil-can. No. 1,267,721; May 28; v. 250; p. 876.
Von Hagen, Arnold C., Kansas City, Mo. Treating wheat and other grains. No. 1,265,700; May 7; v. 250; p. 224.
Von Henke, Edmund J., assignor to Thomson Electric Welding Company, Lynn, Mass. Electric-welding machine. No. 1,266,084; May 14; v. 250; p. 364.
Von Henke, Edmund J., Lynn, assignor to Thomson Spot Welder Company, Boston, Mass. Electric welding apparatus. No. 1,267,480; May 28; v. 250; p. 807.
Von Henke, Edmund J., assignor to Thomson Electric Welding Company, Lynn, Mass. Automatic switching or circuit-breaking device for electric welding or other metal-working apparatus. No. 1,267,481; May 28; v. 250; p. 808.
Vordermark, George, Indianapolis, Ind. Chair and table combined. No. 1,265,977; May 14; v. 250; p. 335.
W. C. Ritchie & Company. (See Milmoe, Michael J., assignor.)
W. H. McElwain Company. (See Murphy, Francis P., assignor.)
W. R. Ostrander & Company. (See Brockett, Charles W., assignor.)
Wade, Arthur, and H. L. Van Zile, assignors to Van Zile Ventilating Corporation, New York, N. Y. Ventilator. No. 1,265,978; May 14; v. 250; p. 335.
Wade, Martin L., Marlow, Okla. Broom-corn tabler. No. 1,267,019; May 21; v. 250; p. 653.
Wagner, Charles R., Jr., Burlington, Wis. Calf-weaner. No. 1,267,482; May 28; v. 250; p. 808.
Wagner Manufacturing Company. (See Piper, George M., assignor.)

Wagner, Paul R., New York, N. Y. Flying-machine. No. 1,266,888; May 21; v. 250; p. 616.
Wahl Company, The. (See Bricken, John, assignor.)
Wailes, Dove & Company Limited. (See Macdonald, Charles, assignor.)
Wait, Henry H., Chicago, Ill. Wheel for steam-turbines. No. 1,266,889; May 21; v. 250; p. 616.
Wakefield, Harry U., Darks Mill, Tenn. Harrow. No. 1,265,979; May 14; v. 250; p. 335.
Wakefield, Samuel J., Abbeville, S. C. Cotton-gin. No. 1,266,643; May 21; v. 250; p. 549.
Wakeling, Bertram M. (See Dunae, Archipp F., assignor.)
Walcott, Ines M. (See Klunk, Albert J., assignor.)
Walda, William C., Fort Wayne, Ind. Molding-machine. No. 1,265,405; May 7; v. 250; p. 147.
Walden, John W., Oklahoma, Okla. Indicator. No. 1,265,839; May 14; v. 250; p. 295.
Walker & Bennett Manufacturing Company. (See Bennett, Frederick, assignor.)
Walker Brothers Company. (See Walker, Willard R., assignor.)
Walker, Byron A., assignor to Lovell Manufacturing Company, Erie, Pa. Clothes-wringer. No. 1,265,840; May 14; v. 250; p. 296.
Walker, Enos L., St. Louis, Mo. Wood fabric. No. 1,265,841; May 14; v. 250; p. 296.
Walker, Henry B. (See Kirley and Walker.)
Walker, Hugh L., Guelph, Ontario, Canada. Pattern-vibrator for molders. No. 1,266,890; May 21; v. 250; p. 617.
Walker, James W., Sioux City, Iowa. Staple-pliers. No. 1,265,842; May 14; v. 250; p. 296.
Walker, John W. (See Thompson, Frank, assignor.)
Walker, Willard R., assignor to Walker Brothers Company, Syracuse, N. Y. Mechanical dish-washer. No. 1,265,010; May 7; v. 250; p. 88.
Walker, Willard R., assignor to Walker Brothers Company, Syracuse, N. Y. Mechanical dish-washer. No. 1,265,843; May 14; v. 250; p. 296.
Walkos, Michael. Detroit, Mich. Cigarette. No. 1,265,557; May 7; v. 250; p. 186.
Wallace, David A., Charles City, Iowa. Traction-wheel. No. 1,265,406; May 7; v. 250; p. 147.
Wallace, Thomas F. (See Burtis, William H., assignor.)
Wallerstedt, Charles P., St. Louis, Mo. Machine for rounding the edges of leather belts and the like. No. 1,266,891; May 21; v. 250; p. 617.
Walley, Kenneth M., Chicago, Ill. Electric controller. No. 1,267,483; May 28; v. 250; p. 808.
Wallin, Van A., Grand Rapids, Mich. Skinning animals. No. 1,265,407; May 7; v. 250; p. 147.
Walter A. Wood Mowing and Reaping Machine Co. (See Smith, Ernest C., assignor.)
Walter, Mathew, Easton, Pa. Target. No. 1,267,722; May 28; v. 250; p. 876.
Walters, John F., Battle Creek, Mich. Wall-paper-cleaning device. No. 1,266,360; May 14; v. 250; p. 440.
Walters, Robert N., Avalon, Wis. Poultry trap-nest. No. 1,267,020; May 21; v. 250; p. 654.
Waltham Watch Company. (See Ohlson, Olof, assignor.)
Waltz, Anton F., New York, N. Y. Toilet outfit. No. 1,267,941; May 28; v. 250; p. 939.
Walvatne, John W., Sherman, S. D. Liquid-fuel burner. No. 1,267,942; May 28; v. 250; p. 939.
Wantor, Albert, *et al.* (See Kasprzycki, Stanley, assignor.)
Wappler Electric Company. (See Fayer, Charles, assignor.)
Ward Pump Company. (See Milne, Robert, assignor.)
Wardell, Fred. (See Stecker, Alfred J., assignor.)
Wardwell Braiding Machine Company. (See Wardwell, Simon W., assignor.)
Wardwell, Simon W., Providence, R. I., assignor to Wardwell Braiding Machine Company, Portland, Me. Supply-carrier for braiding or other textile machines. No. 1,265,146; May 7; v. 250; p. 77.
Warner Elevator Mfg. Company, The. (See Brown, Alfred T., assignor.)
Warner, James L., Girard, Kans. Violin-piano. No. 1,265,147; May 7; v. 250; p. 77.
Warnke, Fredrick L., Coopersville, Mich. Knife. No. 1,266,186; May 14; v. 250; p. 394.
Warren, Charles H., Atlanta, Ga., assignor to Draper Corporation, Hopedale, Mass. Filling-end-withdrawing means for weft-replenishing looms. No. 1,265,558; May 7; v. 250; p. 186.
Warren, Emmet J., Detroit, Mich. Odorless garbage-receptacle. No. 1,265,148; May 7; v. 250; p. 77.
Warren F. Fraser Co. (See Fraser, Warren F., assignor.)
Washburn, Samuel D., Dorchester, Mass. Machine for making paper cups. No. 1,266,644; May 21; v. 250; p. 549.
Washburne, James V., Fulton, N. Y. Machine for opening envelops. No. 1,265,844; May 14; v. 250; p. 296.
Washburne, James V., Fulton, N. Y. Lubricating attachment. No. 1,267,610; May 28; v. 250; p. 845.
Waterbury Clock Co. (See Smith, William J., assignor.)
Waterbury Mfg. Co. (See Burt, William H., assignor.)
Waterbury Mfg. Co. (See Kirschbaum, John, assignor.)
Waterbury Mfg. Co. (See Recker, Adolph C., assignor.)
Waterhouse, Harold D., Wollaston, assignor to Copley Motor Devices Company, Boston, Mass. Primer for gasolene-engines. No. 1,265,011; May 7; v. 250; p. 39.
Waters, Samuel S., Washington, D. C. Combined automatic musical instrument. No. 1,265,559; May 7; v. 250; p. 186.
Watson, Thomas R., Monterey, Cal. Box-strapping machine. No. 1,265,560; May 7; v. 250; p. 187.
Watson, William T., Vancouver, British Columbia, Canada. Wheel for toys. No. 1,267,724; May 28; v. 250; p. 876.
Wattmann, John. (See Jansen and Wattmann.)
Watts, John A., Milford, Pa. Silent policeman. No. 1,267,021; May 21; v. 250; p. 654.
Waxbom, Carl J. E., Westerville, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Mining apparatus. No. 1,267,943; May 28; v. 250; p. 939.
Wayne, Herbert N., Los Angeles, Cal. Tire. No. 1,266,351; May 14; v. 250; p. 440.
Weaver, A. S. (See Homrighausen, William F., assignor.)
Weaver, Homer E., Knox, Pa. Rope-cutting device. No. 1,265,561; May 7; v. 250; p. 187.
Webb, Ellen M. H., New York, N. Y. Convertible garment. No. 1,267,944; May 28; v. 250; p. 940.
Webb, James, and F. M. Collins, Camp Verde, Ariz. Ball-bearing knuckle for automobile front axles. No. 1,267,150; May 21; v. 250; p. 691.
Webb, Walter H., Denver, Colo. Shoe-heel. No. 1,266,892; May 21; v. 250; p. 617.
Webster Electric Company. (See Geist, Harry F., assignor.)
Webster Electric Company, The. (See Stark, John R., assignor.)
Webster, Harry G., Chicago, Ill., assignor, by mesne assignments, to J. R. Garfield, trustee, Cleveland, Ohio. Telephone-exchange system. No. 1,266,645; May 21; v. 250; p. 549.
Webster, Hyleman A., Columbia, Tenn. Concentrating phosphatic material. No. 1,266,780; May 21; v. 250; p. 573.
Webster, Hyleman A., Columbia, assignor to J. J. Gray, Jr., Rockdale, Tenn. Producing ferrophosphorus in rotary furnaces. No. 1,265,149; May 7; v. 250; p. 77.
Webster, Hyleman A., Columbia, assignor to J. J. Gray, Jr., Rockdale, Tenn. Producing phosphor-copper compounds. No. 1,265,150; May 7; v. 250; p. 77.
Webster, Lee. (See Mildner and Webster.)
Wedge, Utley, Ardmore, assignor, by mesne assignments, to Furnace Patent Company, Philadelphia, Pa. Slag-heated steam-generator. No. 1,267,022; May 21; v. 250; p. 654.
Wedge, Utley, Ardmore, assignor to The Process Engineering Company, Philadelphia, Pa. Dust-collector. No. 1,267,023; May 21; v. 250; p. 655.
Wedge, Utley, Ardmore, assignor to The Process Engineering Company, Philadelphia, Pa. Device for separating matter from a fluid containing the same. No. 1,267,024; May 21; v. 250; p. 655.
Welkly, James N., Jersey City, N. J. Safety device. No. 1,265,845; May 14; v. 250; p. 297.
Weinhelm, Emil, New York, N. Y. Method of producing a reinforced resilient material and the article of manufacture produced thereby. No. 1,267,025; May 21; v. 250; p. 655.
Weinmann, Ernest W., Chicago, Ill. Removing battery-terminals. No. 1,265,980; May 14; v. 250; p. 336.
Weinmann, Louis E., Chicago, Ill., assignor of one-third to Gold Furniture Company, one-third to Kroehler Manufacturing Company, and one-third to Pullman Coach Company. Sofa-bed. No. 1,265,012; May 7; v. 250; p. 39.
Weinshank, Theodore, and S. E. Fenstermaker, Indianapolis, Ind. Sectional adjustable ventilator-casing. No. 1,265,013; May 7; v. 250; p. 39.
Weiss, Charles R., Philadelphia, Pa., assignor to Link-Belt Company, Chicago, Ill. Casing for drive-chains. No. 1,266,187; May 14; v. 250; p. 394.
Weissman, David, Brooklyn, and L. Reiser, New York, N. Y. Safety pocket-lock. No. 1,266,893; May 21; v. 250; p. 617.
Welin, Axel, London, England. Crane. No. 1,266,646; May 21; v. 250; p. 550.
Wellman, Frederick L., Walpole, N. H. Hoof-spreader. No. 1,267,151; May 21; v. 250; p. 692.
Wells, Arthur F., assignor to Adjustable Wrapping Machine Company, San Francisco, Cal. Package-wrapping machine. No. 1,266,085; May 14; v. 250; p. 364.
Wells, Charles E. (See McFarland and Griffin, assignors.)
Wells, Frank R., Springfield, Ohio. Detachable duplex vessel. No. 1,266,362; May 14; v. 250; p. 440.
Wells, Joel C. (See Poeton and Wells.)
Wells, Raymond, Homer, N. Y., assignor to Cobwell Corporation, Cleveland, Ohio. Extracting oils and the like. No. 1,267,611; May 28; v. 250; p. 845.
Wells, Sidney D. (See Kress and Wells.)
Welsh, James W. (See Jones and Welsh.)
Wenk, Henry L. C., Brooklyn, N. Y. Seal. No. 1,267,725; May 28; v. 250; p. 876.
Wentz, Jere L., Passaic, N. J. Belt conveyer. No. 1,266,363; May 14; v. 250; p. 440.
Wesolowski, Peter J., Detroit, Mich. Latch. No. 1,266,086; May 14; v. 250; p. 365.
Wessel, Louis J., Terre Haute, Ind. Condiment-holder. No. 1,265,562; May 7; v. 250; p. 187.
Wesson, Joseph H., assignor to Smith & Wesson, Springfield, Mass. Clip-loading machine. No. 1,267,026; May 21; v. 250; p. 656.

West, Earl E., assignor of one-half to H. A. Locke, Bridgeport, Ill. Steering mechanism. No. 1,265,563; May 7; v. 250; p. 188.
West, James T., Rockingham, N. C. Cotton-seed linter. No. 1,265,014; May 7; v. 250; p. 40.
West, Leonidas D., Denver, Colo. Fuel-saver and smoke-consumer. No. 1,267,295; May 21; v. 250; p. 729.
West, Leonidas D., Denver, Colo. Fuel-saver and smoke-consumer. No. 1,267,296; May 21; v. 250; p. 729.
West, Leonidas D., Denver, Colo. Fuel-saving and smoke-consuming device. No. 1,267,297; May 21; v. 250; p. 730.
West, Leonidas D., Denver, Colo. Furnace-door attachment. No. 1,267,298; May 21; v. 250; p. 730.
West, Leonidas D., Denver, Colo. Stop for furnace-doors. No. 1,267,299; May 21; v. 250; p. 730.
West, Robert, Port Huron, Mich. Pin-guard. No. 1,267,300; May 21; v. 250; p. 730.
Westbury, William, assignor to L. S. Skelton, Okmulgee, Okla. Drawing-ring. No. 1,267,945; May 28; v. 250; p. 940.
Westby, George C., Ludwig, Nev., assignor to Western Process Company. Process and apparatus for utilizing sulfurous gases with treatment of metalliferous materials. No. 1,266,731; May 21; v. 250; p. 573.
Westby, George C., Ludwig, Nev., assignor to Western Process Company. Process and apparatus for sulfatizing metalliferous ores. No. 1,266,732; May 21; v. 250; p. 573.
Wester, Emerick, Philadelphia, Pa. Micrometer. No. 1,267,946; May 28; v. 250; p. 940.
Western Electric Company. (See Adams, Arthur H., assignor.)
Western Electric Company. (See Bell, John H., assignor.)
Western Electric Company. (See Conway, Roy D., assignor.)
Western Electric Company. (See Craft and Reynolds, assignors.)
Western Electric Company. (See McQuarrie, James L., assignor.)
Western Electric Company. (See Noble, Roy E., assignor.)
Western Electric Company. (See Quass, Ralph L., assignor.)
Western Electric Company. (See Swoboda, Adolph R., assignor.)
Western Process Company. (See Westby, George C., assignor.)
Western Wheeled Scraper Company. (See McKnight, Thomas R., assignor.)
Westinghouse Air Brake Company, The. (See Cady, William M., assignor.)
Westinghouse Air Brake Company, The. (See Turner, Walter V., assignor.)
Westinghouse Air Brake Company, The. (See Woernley, Harry F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Alden, Carroll B., assignor.)
Westinghouse Electric and Manufacturing Company. (See Chubb, Lewis W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Collinson, John, assignor.)
Westinghouse Electric and Manufacturing Company. (See Coulson, John, assignor.)
Westinghouse Electric and Manufacturing Company. (See Curtis, James F., assignor.)
Westinghouse Electric and Manufacturing Company. (See Eaton, George M., assignor.)
Westinghouse Electric and Manufacturing Company. (See Eby, Earl E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Farnsworth, Sidney W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Field, Allan B., assignor.)
Westinghouse Electric and Manufacturing Company. (See Field and Fornander, assignors.)
Westinghouse Electric and Manufacturing Company. (See Fortescue, Charles L., assignor.) (Reissue.)
Westinghouse Electric and Manufacturing Company. (See Garceion, George H., assignor.)
Westinghouse Electric and Manufacturing Company. (See Hall, Arthur J., assignor.)
Westinghouse Electric and Manufacturing Company. (See Hellmund, Rudolf E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Kuyser, Jan A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Little, George M., assignor.)
Westinghouse Electric and Manufacturing Company. (See MacGahan, Paul, assignor.)
Westinghouse Electric and Manufacturing Company. (See Mardis, Paul L., assignor.)
Westinghouse Electric and Manufacturing Company. (See McCoy, James P. A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Mills, Chester B., assignor.)
Westinghouse Electric and Manufacturing Company. (See Newcomb, Harold A., assignor.)
Westinghouse Electric and Manufacturing Company. (See Perkins, Laurence M., assignor.)
Westinghouse Electric and Manufacturing Company. (See Shepard, Francis H., assignor.)
Westinghouse Electric and Manufacturing Company. (See Simmon and Hall, assignors.)
Westinghouse Electric and Manufacturing Company. (See Storer, Norman W., assignor.)
Westinghouse Electric and Manufacturing Company. (See Varley, Thomas W., assignor.)
Wetherall, Leonard U., Chicago, Ill. Sighting means for aeroplanes. No. 1,266,738; May 21; v. 250; p. 574.
Weymer, August F., assignor to The A. F. Weymer Co., Syracuse, and American Broom and Brush Co., Amsterdam, N. Y. Broom-corn seeding and sorting machine. No. 1,265,846; May 14; v. 250; p. 297.
Wharrad, Lionel A., Redditch, England. Needle scouring and polishing machine. No. 1,265,564; May 7; v. 250; p. 188.
Wheary, George H., Racine, Wis. Trunk-trimming. No. 1,265,847; May 14; v. 250; p. 298.
Wheaton, Carl M. (See Doble and Wheaton.) (Reissue.)
Wheaton, Grace H., administratrix. (See Doble and Wheaton.) (Reissue.)
Wheaton, John M., South Royalston, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Shuttle-check. No. 1,265,015; May 7; v. 250; p. 40.
Wheeler, Ernest J., assignor to The United States Spring Bed Company, Springfield, Mass. Folding cot. No. 1,265,848; May 14; v. 250; p. 298.
Wheeler, Marion B., New York, N. Y. Tire-building machine. No. 1,266,864; May 14; v. 250; p. 440.
Wheelock, Jesse F., Dobbins, Cal. Electric water-heater. No. 1,265,849; May 14; v. 250; p. 298.
Whistler, David B., assignor to The American Railways Equipment Company, Dayton, Ohio. Coin-ticket-registering fare-box. No. 1,267,343; May 21; v. 250; p. 742.
Whitaker, Samuel T., and R. B. Small, Columbus, Ga. Bottle-cap remover. No. 1,267,155; May 21; v. 250; p. 692.
Whitaker, Samuel T., assignor of fifty-one one-hundredths to R. B. Small, Columbus, Ga. Crimped-bottle-cap remover. No. 1,267,152; May 21; v. 250; p. 692.
Whitaker, Samuel T., assignor of fifty-one one-hundredths to R. B. Small, Columbus, Ga. Crimped-bottle-cap remover. No. 1,267,153; May 21; v. 250; p. 692.
Whitaker, Samuel T., assignor of fifty-one one-hundredths to R. B. Small, Columbus, Ga. Cap-remover. No. 1,267,154; May 21; v. 250; p. 692.
White, Charles E., Buleton, Kans., assignor to Bull Tractor Company, Minneapolis, Minn. Tractor-coupling device. No. 1,267,027; May 24; v. 250; p. 656.
White, George, assignor to P. Fanoulias, Jersey City, N. J. Conveying or supplying mechanism. No. 1,266,784; May 21; v. 250; p. 574.
White, Harry L. (See Brognies, Harvey O., assignor.)
White, Isaac N., Chicago, Ill. Demountable wheel. No. 1,265,565; May 7; v. 250; p. 188.
White, John F., Chicago, Ill. Machine for heating coated fabric. No. 1,266,735; May 21; v. 250; p. 574.
White, Lewis B., Manson, N. C., assignor of one-half to A. H. Mylin, Lancaster, Pa. Kerosene-vaporizer. No. 1,267,484; May 28; v. 250; p. 808.
White Sewing Machine Company. (See Jirouch, Bohumil L., assignor.)
White, William E. (See Hylton, John A., assignor.)
Whiteside, William C., Knoxville, Tenn. Puzzle. No. 1,267,947; May 28; v. 250; p. 940.
Whitin Machine Works, The. (See Nelson, Harmon O., assignor.)
Whitman, Frank S. (See Howard and Slater, assignors.)
Whitman, May D., administratrix. (See Howard and Slater.)
Whitnell, Charles O., Kingsley, Iowa. Window construction. No. 1,267,612; May 28; v. 250; p. 846.
Whitney, Frank E., and M. Mella, assignors to Commercial Truck Company of America, Philadelphia, Pa. Means for holding battery elements. No. 1,267,613; May 28; v. 250; p. 846.
Whitney, Willis R., Niskayuna, N. Y., assignor to General Electric Company. Electric discharge device. No. 1,267,827; May 28; v. 250; p. 906.
Whittaker, Arnold R. (See Jeavons and Whittaker.) (Reissue.)
Whittaker, Cyrus A., Freeburg, Ill. Key-ring. No. 1,266,365; May 14; v. 250; p. 441.
Whittemore, George A., Ludington, Mich. Tractor. No. 1,267,028; May 21; v. 250; p. 656.
Wiaid, John B., Lynn, Mass., assignor to General Electric Company. Dynamo-electric machine. No. 1,267,828; May 28; v. 250; p. 907.
Wichman, Ferdinand T. (See Barva and Wichman.)
Wickberg, Victor G., Kenyon, Minn. Trick-case. No. 1,266,647; May 21; v. 250; p. 550.
Widdup, William R., Spartanburg, S. C. Bushing. No. 1,267,485; May 28; v. 250; p. 809.
Wiedeke, Gustav. (See Wiedeke, Otto, assignor.)
Wiedeke, Otto, assignor of one-half to G. Wiedeke, Dayton, Ohio. Boiler-tube expander. No. 1,265,283; May 7; v. 250; p. 118.
Wiedemann, Gustave A. (See Sloan and Wiedemann.)
Wiederholt, Charles B., Hastings, Minn. Cattle-yoke. No. 1,267,294; May 21; v. 250; p. 729.
Wieberg, William F., Checktowaga, N. Y. Expansion-joint holder. No. 1,267,301; May 21; v. 250; p. 730.
Wiegand, Henry J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Rheostat. No. 1,267,726; May 28; v. 250; p. 876.

Wierazewska, Anna, Weirton, W. Va. Furniture-caster. No. 1,265,850; May 14; v. 250; p. 298.
Wiesman, William A. (See Yeo and Wiesman.)
Wigginton, George P., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Binder device. No. 1,266,648; May 21; v. 250; p. 550.
Wigginton, George P., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Binder device. No. 1,267,829; May 28; v. 250; p. 907.
Wigginton, George P., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Binder device. No. 1,267,830; May 28; v. 250; p. 908.
Wigginton, George P., assignor to Kalamazoo Loose Leaf Binder Company, Kalamazoo, Mich. Binder device. No. 1,267,831; May 28; v. 250; p. 908.
Wilcsek, Edmond, Muskegon, Mich. Wire-cutter for bayonets. No. 1,265,151; May 7; v. 250; p. 78.
Wild, Charles M. (See Helms and Wild.)
Wild, Julius E. (See Helms and Wild.)
Wiley, Jesse O., Lemongrove, Cal. Trunk-handle. No. 1,267,948; May 28; v. 250; p. 941.
Wilkey, William M., Kingman, Ind. Planter. No. 1,265,566; May 7; v. 250; p. 189.
Wilkinson, James, Pittsfield, Mass., assignor to General Electric Company. Filled cable and fluid-stop. No. 1,267,832; May 28; v. 250; p. 908.
Willcox & Gibbs Sewing Machine Co. (See Mitchell, Charles, assignor.)
Willett, Guy L. (See Gribble and Willett.)
Williams, Anna P., Scranton, Pa. Frying-pan. No. 1,267,029; May 21; v. 250; p. 657.
Williams, Charles F. (See Williams, Ira C. and C. F.)
Williams, Charles H., assignor to Chicago Railway Equipment Company, Chicago, Ill. Release mechanism for brake-beams. No. 1,266,895; May 21; v. 250; p. 618.
Williams, Clawson L. (See Hearne, Joseph H., assignor.)
Williams, Edward T., New York, N. Y. Gas-compressing apparatus. No. 1,265,983; May 14; v. 250; p. 336.
Williams, Frank W. (See Parnall, Archie E., assignor.)
Williams, French B., assignor of one-half to H. N. Stroiier, Little Rock, Ark. Cotton gin or linter saw-gumming machine. No. 1,265,567; May 7; v. 250; p. 189.
Williams, George M., Marshalltown, Iowa. Display-stand. No. 1,265,016; May 7; v. 250; p. 41.
Williams, Harry C., Irvington, N. J., assignor to American Telephone and Telegraph Company. Mechanism for installing transmission line-wires. No. 1,265,851; May 14; v. 250; p. 299.
Williams, Henry C., Ravine, Miss. Peanut-harvester. No. 1,267,614; May 28; v. 250; p. 846.
Williams, Henry M. (See Carnahan, Williams, and Bertram.)
Williams, Ira C. and C. F., Muncie, Ind., assignors to National Carbon Company, Inc. Separator for storage batteries. No. 1,265,284; May 7; v. 250; p. 112.
Williams, Mattie E., Louisburg, N. C. Bed-spring cover. No. 1,265,152; May 7; v. 250; p. 78.
Williams, Milton F., assignor to Williams Patent Crusher and Pulverizer Company, St. Louis, Mo. Hammer for rotary mills. No. 1,266,894; May 21; v. 250; p. 618.
Williams Patent Crusher and Pulverizer Company. (See Williams, Milton F., assignor.)
Williams, Philip K., assignor to the J. B. Williams Company, Glastonbury, Conn. Soap cake. No. 1,267,949; May 28; v. 250; p. 941.
Williams, Richard, Cleveland, Ohio. Sleeve-bolt. No. 1,267,030; May 21; v. 250; p. 657.
Williams, Richard M., Shawnee, Okla. Gun attachment. No. 1,266,087; May 14; v. 250; p. 365.
Williams, Tom, Marysville, Kans. Music-leaf turner. No. 1,265,568; May 7; v. 250; p. 189.
Williamson, Clifford V. (See Fuller, Joseph C., assignor.)
Williamson, Edwin G. (See Roberts and Williamson.)
Willis, Bernard D., assignor to Automatic Electric Company, Chicago, Ill. Telephone trunk-circuits. No. 1,267,031; May 21; v. 250; p. 657.
Willis, Bernard D., assignor to Automatic Electric Company, Chicago, Ill. Automatic manual telephone system. No. 1,268,068; May 28; v. 250; p. 972.
Willis, Bertie G., Avoca, N. C. Torpedo-guard. No. 1,267,032; May 21; v. 250; p. 657.
Willis, James W., Walkerville, Ontario, Canada. Portable hat and coat hook. No. 1,265,569; May 7; v. 250; p. 189.
Wilson, John F., Tampa, Fla. Canning device. No. 1,267,486; May 28; v. 250; p. 809.
Wilmot Castle Company. (See Underwood, Weeden B., assignor.)
Wilmot, Edwin F., assignor to The Carton Belting Company, Allston, Mass. Shuttle. No. 1,265,570; May 7; v. 250; p. 190.
Wilmot, William G. (See Alexander, Verne P., assignor.)
Wilson, Carl F., Bay City, Mich. Walking-machine. No. 1,267,033; May 21; v. 250; p. 658.
Wilson, Charles P., Chicago, Ill. Fluid-actuated vibrator. No. 1,267,833; May 28; v. 250; p. 909.
Wilson, Cora E., Centralia, Wash. Can-opener. No. 1,267,615; May 28; v. 250; p. 847.
Wilson, Emery J., Cleveland, Ohio. Hoisting and conveying apparatus. No. 1,267,727; May 28; v. 250; p. 877.
Wilson, George H., Minneapolis, Minn. Steering device for automobiles. No. 1,265,982; May 14; v. 250; p. 336.
Wilson, Halsey W., Minneapolis, Minn. Printer's chase. No. 1,266,366; May 14; v. 250; p. 441.
Wilson, Ira H., Fredonia, Kans. Adjustable support or rest. No. 1,266,367; May 14; v. 250; p. 441.
Wilson, James F., Wichita Falls, Tex. Support for telegraph line-wires and the like. No. 1,266,736; May 21; v. 250; p. 575.
Wilson, James M., assignor to Splitdorf Electrical Company, Newark, N. J. Push-button switch. No. 1,265,017; May 7; v. 250; p. 41.
Wilson, John O., Chicago, Ill. Trailer-truck. No. 1,267,487; May 28; v. 250; p. 809.
Wilson, Lydell L., East Randolph, N. Y. Combination railway-tie. No. 1,265,571; May 7; v. 250; p. 190.
Wilson, Merit E., Watertown, S. D. Attachment for automobiles. No. 1,265,408; May 7; v. 250; p. 148.
Wilson, William L., trustee. (See Lewis, James N., assignor.)
Wiltbonco Manufacturing Company. (See Eibye, Carl, assignor.)
Winfield, William N., Detroit, Mich. Letter-head. No. 1,267,034; May 21; v. 250; p. 658.
Wing, Harry B., Crested Butte, Colo. Handle attachment. No. 1,266,852; May 14; v. 250; p. 299.
Winiger, Casper, et al. (See Mrakitsch, Anton, assignor.)
Winkley, Frank D., assignor to Madison-Kipp Lubricator Company, Madison, Wis. Lubricator. No. 1,267,302; May 21; v. 250; p. 731.
Winning, Morris, Ottawa, Ontario, Canada. Switch. No. 1,267,950; May 28; v. 250; p. 941.
Winning, Morris, Ottawa, Ontario, Canada. Switch. No. 1,267,951; May 28; v. 250; p. 941.
Winsor, Paul, Weston, Mass. Valve. No. 1,265,153; May 7; v. 250; p. 78.
Winter, Fred H., Schenectady, N. Y., assignor to General Electric Company. Contact-making voltmeter. No. 1,267,156; May 21; v. 250; p. 693.
Winters, Marshall G., Everett, Pa. Railway-tie. No. 1,265,572; May 7; v. 250; p. 190.
Winton, Alexander, Lakewood, Ohio. Fuel-feeding mechanism. No. 1,267,728; May 28; v. 250; p. 877.
Winton, Walter W., Scranton, Pa. Bank-check protector. No. 1,266,868; May 14; v. 250; p. 441.
Wire Goods Company. (See Green, Irving A., assignor.)
Wirth, John, New York, N. Y. Soap-holder. No. 1,265,409; May 7; v. 250; p. 148.
Wiseman, William E., Palacios, Tex. Machine for making lunch-rolls. No. 1,265,853; May 14; v. 250; p. 299.
Wisner, James T., New York, N. Y. Molding apparatus. No. 1,267,488; May 28; v. 250; p. 810.
Wisnom, Samuel A., San Mateo, Cal. Water-heating system. No. 1,267,729; May 28; v. 250; p. 877.
Wixey, Percy J., assignor of one-half to G. W. Heene, Cleveland, Ohio. Machine for making doughnuts, &c. No. 1,265,854; May 14; v. 250; p. 300.
Wm. A. Rogers, Limited. (See Jameson, William A., assignor.)
Woernley, Harry F., Pittsburgh, assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Draw-bar attachment. No. 1,265,018; May 7; v. 250; p. 41.
Wolf, Linus, assignor to The Thermalene Company, Chicago Heights, Ill. Hydrocarbon gas and producing the same. No. 1,265,573; May 7; v. 250; p. 190.
Wolf, Linus, assignor to The Thermalene Company, Chicago Heights, Ill. Hydrocarbon-gas cartridge. No. 1,265,574; May 7; v. 250; p. 191.
Wolfe, Ira T., Seattle, Wash. Automatic vending-machine. No. 1,267,730; May 28; v. 250; p. 877.
Wolfe, John W., and J. A. Snow, Shenandoah, Iowa. Piano-hoist. No. 1,267,952; May 28; v. 250; p. 941.
Wolff, August, Corona, N. Y. Gaiter. No. 1,265,963; May 14; v. 250; p. 336.
Wolff, Hugo, and F. Kacer, Mannheim, assignors to Badische Anilin & Soda Fabrik, Ludwigshafen-on-the-Rhine, Germany. Anthracene dyes and making them. No. 1,266,896; May 21; v. 250; p. 618.
Wolken, Arthur R., Gilman, Iowa. Fruit-picker. No. 1,265,410; May 7; v. 250; p. 148.
Wollensak, Andrew, assignor to Wollensak Optical Company, Rochester, N. Y. Retarder for photographic shutters. No. 1,266,649; May 21; v. 250; p. 561.
Wollensak Optical Company. (See Wollensak, Andrew, assignor.)
Wolski, Constant. (See Rusycki, Joseph E., assignor.)
Wood, Albert B. (See Earl and Brown, assignors.)
Wood, Albert B., et al. (See Earl, George G., assignor.)
Wood, Charles B., Charleston, W. Va. Plastic composition. No. 1,265,855; May 14; v. 250; p. 300.
Wood, Charles R., et al. (See Sprague, Edward, Jr., assignor.)
Wood Equipment Company. (See Allen, Andrews, assignor.)
Wood, Fred, Taunton, assignor to Draper Corporation, Hopedale, Mass. Warper leasing-indicating means. No. 1,266,369; May 14; v. 250; p. 442.
Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Bundling delivery for folders. No. 1,266,736; May 21; v. 250; p. 575.
Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Multiple-stereotype-plate-casting machine. No. 1,266,739; May 21; v. 250; p. 576.

Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Mold for stereotyping and means for supplying metal thereto. No. 1,266,740; May 21; v. 250; p. 576.

Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Method of delivering folded sheets. No. 1,266,741; May 21; v. 250; p. 577.

Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Apparatus for delivering folded sheets. No. 1,266,742; May 21; v. 250; p. 577.

Wood, Henry A. W., New York, and J. A. Isbell, Middletown, assignors, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Pulsating-fan delivery. No. 1,266,787; May 21; v. 250; p. 575.

Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)

Wood Newspaper Machinery Corporation. (See Wood and Isbell, assignors.)

Wood, Richard W., Portland, Oreg. Wind-shield for automobiles. No. 1,267,808; May 21; v. 250; p. 781.

Wood, Walter D., New York, N. Y., assignor to Fuel Savings Company, Allentown, Pa. Firing-chamber for powdered fuel. No. 1,266,088; May 14; v. 250; p. 365.

Woodard, William E., Schenectady, N. Y. Locomotive driving-box. No. 1,265,856; May 14; v. 250; p. 300.

Woodbridge, Joseph L., Philadelphia, Pa. Suspension for axle-lighting dynamos. No. 1,265,154; May 7; v. 250; p. 78.

Woodhead, Daniel, Evanston, Ill. Lamp-socket. No. 1,265,285; May 7; v. 250; p. 114.

Woodrow, Harry R. (See Murray and Woodrow.)

Woodstock Typewriter Company. (See Roebuck, Alvah C., assignor.)

Woodward, Gideon J., *et al.* (See Haymond, Clinton C., assignor.)

Woodward, William R., assignor, by mesne assignments, to Brockton Heel Company, Brockton, Mass. Link-mat. (Reissue.) No. 14,476; May 21; v. 250; p. 751.

Woolston, Japhet B., Trenton, N. J. Flag-pole support. No. 1,265,411; May 7; v. 250; p. 148.

Worthington, Albert P., and R. C. Austin, Los Angeles, Cal., said Austin assignor to said Worthington. Crank-case oil-gage. No. 1,266,743; May 21; v. 250; p. 577.

Worsalla, John S., Stevens Point, Wis. Swing. No. 1,266,744; May 21; v. 250; p. 577.

Wray, Charles F., assignor to National Brass Manufacturing Company, Rochester, N. Y. Faucet. No. 1,267,489; May 28; v. 250; p. 810.

Wray, Lloyd H., Reedsville, Pa. Collapsible rim. No. 1,265,412; May 7; v. 250; p. 148.

Wright, Daniel K., Paterson, N. J., assignor to General Electric Company. Shaping filaments. No. 1,265,575; May 7; v. 250; p. 191.

Wright, Gilbert, Schenectady, N. Y., assignor to General Electric Company. Electric cut-out. No. 1,265,576; May 7; v. 250; p. 191.

Wright, Herbert A., and C. W. Kennedy, Clarence, Mo. Direction-indicator. No. 1,267,035; May 21; v. 250; p. 658.

Wright, Kirk K., assignor of one-half to R. G. Wright, Buffalo, N. Y. Washing and sterilising apparatus. No. 1,265,418; May 7; v. 250; p. 149.

Wright, Ralph G. (See Wright, Kirk K., assignor.)

Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,265,155; May 7; v. 250; p. 78.

Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,265,577; May 7; v. 250; p. 191.

Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,266,188; May 14; v. 250; p. 394.

Wright, William J., Oakland, Cal. Wrench. No. 1,267,731; May 28; v. 250; p. 878.

Wrightson, Thomas G., and J. M. Ringquist, assignors to Head, Wrightson and Company, Limited, Thornaby-on-Tees, England. Blast-furnace and the like. No. 1,267,732; May 28; v. 250; p. 878.

Wundrack, Otto, Maywood, Ill. Non-collapsible flat arch for furnaces. No. 1,266,745; May 21; v. 250; p. 578.

Wurts, John W., Elyria, Ohio. Heating system. No. 1,267,490; May 28; v. 250; p. 810.

Wyant, Guy E., Springfield, Ohio. Cow-shackle. No. 1,266,370; May 14; v. 250; p. 442.

Wygodsky, Leon, assignor to Baltimore Oil Engine Company, Baltimore, Md. Internal-combustion engine and burning fuel-oil therein. No. 1,265,857; May 14; v. 250; p. 30.

Yager, Harvey J., Seattle, Wash. Movable rail-crossing. No. 1,266,371; May 14; v. 250; p. 442.

Yanochowski, George A., assignor to Automatic Electric Company, Chicago, Ill. Measured-service telephone system. No. 1,265,716; May 7; v. 250; p. 229.

Yarrow, Harold E., Glasgow, Scotland. Liquid-fuel furnace. No. 1,266,372; May 14; v. 250; p. 443.

Yates, Harry, Hapeville, Ga., assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,266,062; May 28; v. 250; p. 971.

Yeo, Edward T., and W. A. Wiesman, assignors to Keeler Brass Company, Grand Rapids, Mich. Safety-guard for machines. No. 1,265,019; May 7; v. 250; p. 41.

Yocum, Harry E., Hancock, Md. Lining for preserving vessels. No. 1,265,858; May 14; v. 250; p. 301.

Yost, Winfield H., Montreal, Quebec, Canada. Draft-rigging for railway-cars. No. 1,265,414; May 7; v. 250; p. 149.

Yost, Winfield H., Montreal, Quebec, Canada. Car side construction. No. 1,267,884; May 28; v. 250; p. 909.

Young, A. M., *et al.* (See Crockett, Ernest J., assignor.)

Young, Charles D., Columbus, Ohio, assignor, by mesne assignments, to American Steam Gauge & Valve Manufacturing Company, Boston, Mass. Pressure-recorder. No. 1,265,156; May 7; v. 250; p. 79.

Young, Daniel, Brooklyn, assignor of fifty-one one-hundredths to H. E. and A. Mittenthal, New York, N. Y. Apparatus for treating and forming weighted or loaded sheet fabrics. No. 1,266,878; May 14; v. 250; p. 443.

Young, Daniel H., and C. W. Porter; said Porter assignor of one-half of his right to G. Brayton, Manchester, Iowa. Humidifier. No. 1,267,491; May 28; v. 250; p. 811.

Young, James E., Minneapolis, Kans. Knockdown crate. No. 1,265,415; May 7; v. 250; p. 149.

Young, John, Chillicothe, Ohio. Press. No. 1,267,492; May 28; v. 250; p. 811.

Young, Lewis G., New York, N. Y. Aeroplane. No. 1,266,746; May 21; v. 250; p. 578.

Young, Lewis T., Marion, Ohio. Direction-indicator for automobiles. No. 1,265,859; May 14; v. 250; p. 301.

Young, Philip E., Fairhaven, Mass., assignor to Acushnet Process Company of New York, Inc. Washmill. No. 1,267,493; May 28; v. 250; p. 812.

Young, Wilfred. (See Comeeny and Young.)

Younglove, Herbert F. (See Meade and Younglove.)

Youngstown Sheet & Tube Company, The. (See Elliott and McCleary, assignors.)

Younie, Lewis E., Portland, Oreg. Friction-clutch. No. 1,266,189; May 14; v. 250; p. 395.

Zabriskie, Walter, Pagosa Junction, Colo. Rotary engine. No. 1,267,157; May 21; v. 250; p. 693.

Zahn, Robert, deceased, Plauen, Germany; A. Rietzsch, administrator. Automatic embroidering-machine. No. 1,266,747; May 21; v. 250; p. 579.

Zaleski, Frank, Somerville, assignor to Reece Shoe Machinery Company, Boston, Mass. Folding sheet material. No. 1,265,578; May 7; v. 250; p. 192.

Zaleski, Frank, assignor to Reece Shoe Machinery Company, Boston, Mass. Machine for making composite insoles. No. 1,265,579; May 7; v. 250; p. 192.

Zapplie, Paolo, New York, N. Y. Cornice-mold. No. 1,265,860; May 14; v. 250; p. 302.

Zeiss, Firm of Carl. (See Eppenstein, Otto, assignor.)

Zerk, Oscar, Cleveland, Ohio, assignor, by mesne assignments, to G. W. Bowen, Auburn, N. Y. Grease-cup. No. 1,265,861; May 14; v. 250; p. 302.

Ziegler, Ellen, Gregory, S. D. Back-rest. No. 1,266,374; May 14; v. 250; p. 443.

Ziegler, Louis, Lyndhurst, N. J. Practice-gun. No. 1,265,984; May 14; v. 250; p. 336.

Ziegler, Louis, Irvington, N. J., assignor to Consolidated Fireworks Company of America, New York, N. Y. Toy pistol. No. 1,265,862; May 14; v. 250; p. 302.

Zimmer, Paul H., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Circuit-controller. No. 1,266,897; May 21; v. 250; p. 619.

Zimmerman, Albert J., Dayton, Ohio, assignor, by mesne assignments, to The Richmond-Standard Manufacturing Company, Richmond, Ind. Weighing-scale. No. 1,267,844; May 21; v. 250; p. 743.

Zimmerman, Walter H., Chicago, Ill. Dam construction. No. 1,266,748; May 21; v. 250; p. 579.

Zimmermann, William F., assignor to Gould & Eberhardt, Newark, N. J. Shaping-machine. No. 1,267,158; May 21; v. 250; p. 694.

Zipp, Arthur J., Central Lake, Mich. Logging grapple or tongs. No. 1,266,650; May 21; v. 250; p. 551.

Zofchak, Michael, Pittsburgh, Pa. Animal life-preserver. No. 1,265,580; May 7; v. 250; p. 192.

Zofsak, John J., Greensburg, Pa. Child's cot for vehicles. No. 1,265,157; May 7; v. 250; p. 79.

Zolp, Sylvester A., Eustis, Nebr. Portable seat. No. 1,267,953; May 28; v. 250; p. 942.

Zublin, Wilhelm, Winterthur, Switzerland. Hot-water heating installation. No. 1,265,020; May 7; v. 250; p. 42.

Zuckerman, Samuel G., New York, N. Y. Photographic-plate holder. No. 1,267,159; May 21; v. 250; p. 694.

Zumwalt, Arthur B., Fulton, Cal. Shock-absorber for automobiles. No. 1,265,021; May 7; v. 250; p. 42.

Zurbrigg, Daniel A., assignor to The L. D. Caulk Company, Milford, Del. Forming and applying tooth-facings. No. 1,265,022; May 7; v. 250; p. 42.

Zurbrigg, Daniel A., assignor to The D. L. Caulk Company, Milford, Del. Matrix for use in tooth restoration. No. 1,265,581; May 7; v. 250; p. 192.

Zwicker, Julius G., Berkeley, Cal. Reinforcing-coil for concrete pipes. No. 1,267,835; May 28; v. 250; p. 909.

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Adam, Harry C., St. Louis, Mo. Semi-indirect lighting-fixture reflector. No. 52,001; May 7; v. 250; p. 235.

Altenberg, George P., assignor to The Icy-Hot Bottle Company, Cincinnati, Ohio. Casing for vacuum-insulated pitchers. No. 52,002; May 7; v. 250; p. 235.

Arnold, William A., Lowell, Mass. Monument. No. 52,015; May 7; v. 250; p. 237.

Baird, Leonard B., and B. H. Harper, assignors of one-third to D. F. McCullar, Townley, Ala. Spike-bar. No. 52,052; May 28; v. 250; p. 977.

Beiswanger, John, assignor to Gill Brothers Company, Steubenville, Ohio. Shade-bowl. No. 52,003; May 7; v. 250; p. 235.

Beiswanger, John, assignor to Gill Brothers Company, Steubenville, Ohio. Baking-dish. No. 52,016; May 7; v. 250; p. 237.

Belmont, Ralph A., New York, N. Y. Casing for a feed-through switch. No. 52,049; May 21; v. 250; p. 752.

Benko, John, New York, N. Y. Picture-frame. Nos. 52,017–18; May 7; v. 250; p. 237.

Bienkowski, Alexander B., Wilmington, Del. Boat-hull. No. 52,033; May 14; v. 250; p. 491.

Blette, Henry C., Pittsburgh, Pa. Coffee-brewing pot. No. 52,019; May 7; v. 250; p. 238.

Bland, Perry. (See Creech and Bland.)

Brocklebank, Robert, Toronto, Ontario, Canada. Gameboard. No. 52,034; May 14; v. 250; p. 491.

Bruckman, Ernest C., New York, N. Y. Casing for automobile-radiators. No. 52,053; May 28; v. 250; p. 977.

Cairo-Salto Nut Company. (See Franklin, Joseph A., assignor.)

Central Brass & Fixture Company. (See Crabill and Turner, assignors.)

Chicago Pneumatic Tool Company. (See De Schaum, Robert, assignor.)

Cohn & Rosenberger. (See Marcher, Royal, assignor.)

Cole, John C. Springfield, Mass., assignor to The Dreadnaught Tire & Rubber Company, Orangeville, Md. Pneumatic tire. No. 52,054; May 28; v. 250; p. 978.

Coyan, Edward T., Pittsburgh, Pa. Flag. No. 52,020; May 7; v. 250; p. 238.

Crabill, Pearl P., and J. Turner, assignors to The Central Brass & Fixture Company, Springfield, Ohio. Bracket for automobile-bumpers. No. 52,035; May 14; v. 250; p. 492.

Creech, Samuel E., and P. Bland, Sullivan, Ill. Hair-pin. No. 52,036; May 14; v. 250; p. 492.

Curtiss, George E., assignor to Landers, Frary & Clark, New Britain, Conn. Scabbard. No. 52,037; May 14; v. 250; p. 492.

Daniel, Warren G., Boone, Iowa. Badge or emblem. No. 52,004; May 7; v. 250; p. 235.

De Schaum, Robert, assignor of one-half to Chicago Pneumatic Tool Company, Chicago, Ill. Automobile-radiator. No. 52,038; May 14; v. 250; p. 492.

Decker, Charles G., Brooklyn, N. Y. Set of playing-cards. No. 52,005; May 7; v. 250; p. 235.

Drayton, Grace G., New York, N. Y. Figure toy. Nos. 52,021–5; May 7; v. 250; pp. 238–9.

Dreadnaught Tire & Rubber Company, The. (See Cole, John C., assignor.)

Duff, John S., Philadelphia, Pa. Flag. No. 52,039; May 14; v. 250; p. 492.

Edmunds, Ida B., Kansas City, Mo. Card-holder. No. 52,006; May 7; v. 250; p. 235.

Erickson, Ellis E., Irvington, assignor to Newark Sign Company, Newark, N. J. Outdoor sign. Nos. 52,007–8; May 7; v. 250; p. 236.

Fisk Rubber Company, The. (See Lewis, George H., assignor.)

Forsberg, Oscar F., Yonkers, N. Y., assignor, by mesne assignments, to Western Electric Company. Calling device. No. 52,009; May 7; v. 250; p. 236.

Forsberg, Oscar F., Yonkers, N. Y., assignor, by mesne assignments, to Western Electric Company. Desk telephone-stand. No. 52,010; May 7; v. 250; p. 236.

Franklin, Joseph A., assignor to Celro-Salto Nut Company, Chicago, Ill. Dispensing-urn. No. 52,011; May 7; v. 250; p. 236.

Froehlich, Jesse, New York, N. Y. Automobile-tire. No. 52,026; May 7; v. 250; p. 239.

Gates, Theresa B., Richmond, Cal. Thread-cutting thimble. No. 52,012; May 7; v. 250; p. 236.

Gill Brothers Company. (See Beiswanger, John, assignor.)

Goetz, Henry F., assignor to Waterbury Mfg. Co., Waterbury, Conn. Overflow and waste fixture. No. 52,040; May 14; v. 250; p. 492.

Greenspan, Marius. (See McDevitt and Greenspan.)

H. G. Felterolf Co. (See Rorheimer, Louis, assignor.)

Hale, Frank M., and F. C. McLaughlin, Kent, Ohio. Tire. No. 52,055; May 28; v. 250; p. 978.

Harper, Bascum H. (See Baird and Harper.)

Henry Hyman & Co. (See Rothenberg, Walter, assignor.)

Icy-Hot Bottle Company, The. (See Altenberg, George P., assignor.)

Incandescent Supply Company. (See Jankelson, Samuel, assignor.)

Incandescent Supply Company. (See Newland, Barnet, assignor.)

Jankelson, Samuel, Rockaway Beach, assignor to Incandescent Supply Company, New York, N. Y. Lamp-canopy. No. 52,056; May 28; v. 250; p. 978.

Jankelson, Samuel, Rockaway Beach, assignor to Incandescent Supply Company, New York, N. Y. Lamp-socket cover. No. 52,057; May 28; v. 250; p. 978.

Jenks, Barton P., Providence, R. I., assignor to Wm. B. Durgin Co., Concord, N. H. Fork, spoon, or similar article. No. 52,050; May 21; v. 250; p. 752.

Kendall, William G., Newark, N. J. Rouge-container. Nos. 52,041–2; May 14; v. 250; p. 493.

Klein, Edward S., Meriden, Conn. Burial-casket handle. No. 52,043; May 14; v. 250; p. 493.

Landers, Frary & Clark. (See Curtiss, George E., assignor.)

Lawson, Lindley S., assignor to Lawson Manufacturing Company, Pittsburgh, Pa. Heating-stove. No. 52,058; May 28; v. 250; p. 978.

Lawson Manufacturing Company. (See Lawson, Lindley S., assignor.)

Lewis, George H., assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Tire. No. 52,027; May 7; v. 250; p. 239.

Lukomski, Anthony. (See Lukomski, John B. and A.)

Lukomski, John B. and A., Detroit, Mich. Water-closet-bowl floor-plate. No. 52,059; May 28; v. 250; p. 978.

Maers, Frederick K., assignor to The Scott-Ullman Company, Cleveland, Ohio. Lamp-stand. No. 52,044; May 14; v. 250; p. 493.

Marcher, Royal, assignor to Cohn & Rosenberger, Inc., New York, N. Y. Hair-ribbon holder. No. 52,051; May 21; v. 250; p. 752.

Mathewson, Helen, Los Angeles, Cal. Combined door and door-grille. No. 52,060; May 28; v. 250; p. 979.

Mathewson, Helen, Los Angeles, Cal. Window. No. 52,061; May 28; v. 250; p. 979.

Mathieson, Thomas T., Madrone, Cal. Combined knife and fork. No. 52,045; May 14; v. 250; p. 493.

McCullar, David F. (See Baird and Harper, assignors.)

McDevitt, James B., and M. Greenspan, Chicago, Ill. Automobile-tire. No. 52,062; May 28; v. 250; p. 979.

McLaughlin, Floyd C. (See Hale and McLaughlin.)

Newark Sign Company. (See Erickson, Ellis E., assignor.)

Newland, Barnet, assignor to Incandescent Supply Company, New York, N. Y. Commercial unit for nitrogen-lamps. No. 52,063; May 28; v. 250; p. 979.

Packard Motor Car Company. (See Stout, William B., assignor.)

Pasznicki, Piotr, West Toronto, Ontario, Canada. Watch-holder. No. 52,064; May 28; v. 250; p. 980.

Pfeiffer, Otto G., St. Louis, Mo., assignor, by mesne assignments, to St. Louis Washing Machine Company. Casing for washing-machines. No. 52,065; May 28; v. 250; p. 980.

Rorheimer, Louis, Cleveland, Ohio, assignor to H. G. Felterolf Co., Philadelphia, Pa. Carpet, rug, or similar article. No. 52,013; May 7; v. 250; p. 237.

Rothenberg, Walter, Brooklyn, assignor to Henry Hyman & Co. Inc., Manhattan, N. Y. Emblem. No. 52,046; May 14; v. 250; p. 493.

Scott-Ullman Company, The. (See Maerz, Frederick K., assignor.)

Sonora Phonograph Corporation. (See Wolff, Joseph, assignor.)

Spencer, Charles H., Chicago, Ill. Finger-ring or similar article of jewelry. No. 52,028; May 7; v. 250; p. 240.

Spencer, Charles H., Chicago, Ill. Finger-ring or similar article of jewelry. No. 52,047; May 14; v. 250; p. 493.

St. Louis Washing Machine Company. (See Pfeiffer, Otto G., assignor.)

Stout, William B., assignor to Packard Motor Car Company, Detroit, Mich. Aircraft-fuselage or similar device. No. 52,066; May 28; v. 250; p. 980.

Swetland, Esther H., North Tonawanda, N. Y. Toy. No. 52,048; May 14; v. 250; p. 493.

Tenney, John, Jr., Plainfield, N. J. Tire. No. 52,067; May 28; v. 250; p. 980.

Turner, James. (See Crabill and Turner.)

Waterbury Mfg. Co. (See Goetz, Henry F., assignor.)

Weeks, Frank A., Plainfield, N. J. Inkstand. No. 52,029; May 7; v. 250; p. 240.

Weeks, Frank A., Plainfield, N. J. Cover for an inkstand. No. 52,030; May 7; v. 250; p. 240.

Western Electric Company. (See Forsberg, Oscar F., assignor.)

Whitehouse Brothers. (See Whitehouse, Joseph C., assignor.)

Whitehouse, Joseph C., assignor to Whitehouse Brothers, Cincinnati, Ohio. Ring. No. 52,014; May 7; v. 250; p. 237.

Wm. B. Durgin Co. (See Jenks, Barton P., assignor.)

Wolff, Joseph, Brooklyn, N. Y., assignor to Sonora Phonograph Corporation. Phonograph-cabinet. Nos. 52,031–2; May 7; v. 250; p. 240.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

Albany Coca-Cola Bottling Company, Albany, Ga. Ginger-ale, grape-juice, root-beer, and soda-water. No. 121,741; May 28; v. 250; p. 993.

Albany Perforated Wrapping Paper Company, Albany, N. Y. Toilet-paper and paper towels. No. 121,742; May 28; v. 250; p. 993.

Albert H. Weinbrenner Co., Milwaukee, Wis. Shoes made of leather, canvas, rubber, and a combination of said materials. No. 121,840; May 28; v. 250; p. 996.

American Chicle Company, New York, N. Y. Candy breath-deodorizers. No. 121,743; May 28; v. 250; p. 993.

American Optical Company, Southbridge, Mass. Certain named measuring and scientific appliances. No. 121,573; May 14; v. 250; p. 509.

American Sugar Refining Company, The, Jersey City, N. J., and New York, N. Y. Molasses. No. 121,536; May 7; v. 250; p. 251.

American Sugar Refining Company, Jersey City, N. J., and New York, N. Y. Syrup for use as a food. No. 121,537; May 7; v. 250; p. 251.

American Textile Export Corporation, New York, N. Y. Cotton, cotton and silk, and cotton and artificial-silk piece goods. No. 121,744; May 28; v. 250; p. 993.

American Vulcanized Fibre Company, Wilmington, Del. Vulcanized fiber. No. 121,745; May 28; v. 250; p. 993.

Amo Food Company, Steckport, N. Y. Baking-powder. No. 121,690; May 21; v. 250; p. 763.

Amoskeag Manufacturing Company, Manchester, N. H. Ginghams. No. 121,746; May 28; v. 250; p. 993.

Appleton Company, Lowell, Mass. Cotton piece goods. No. 121,747; May 28; v. 250; p. 993.

Arnold, Emanuel, Herried, S. D. Medicine used in treating certain named diseases. No. 121,748; May 28; v. 250; p. 993.

Ault Printing Ink Company, Brooklyn, N. Y., and Newark, N. J. Printing-inks and dry colors. No. 121,574; May 14; v. 250; p. 509.

Aultman & Taylor Machinery Co., The, Mansfield, Ohio. Threshing-machines. No. 121,575; May 14; v. 250; p. 509.

Aultman & Taylor Machinery Co., The, Mansfield, Ohio. Steam and internal-combustion engines. No. 121,576; May 14; v. 250; p. 509.

Automatic Carbon Eliminator Co., Inc., The, New York, N. Y. Carbon-eliminators for internal-combustion engines. No. 121,577; May 14; v. 250; p. 509.

Autopower Company, Detroit, Mich. Power-transmission attachments for motor-vehicles. No. 121,578; May 14; v. 250; p. 509.

Ayllon, Adrien J., Boston, Mass. Pharmaceutical preparation for shampoo and hair-cleanser. No. 121,579; May 14; v. 250; p. 509.

Baer and Wilde Co., The, Attleboro, Mass. Cuff-buttons. No. 121,749; May 28; v. 250; p. 993.

Baker, John W., Stamford, Conn. Game-boards and pieces to be used therewith. No. 121,580; May 14; v. 250; p. 509.

Bals, George A., Rahway, N. J. Refractory cement. No. 121,533; May 7; v. 250; p. 251.

Bankers Supply Company, The, Denver, Colo., and Chicago, Ill. Certain named paper and stationery. No. 121,750; May 28; v. 250; p. 993.

Batavia Rubber Co., The, Batavia, N. Y. Pneumatic rubber tires. No. 121,751; May 28; v. 250; p. 993.

Beau-Site Company, The, New York, N. Y. Wines and champagnes. No. 121,691; May 21; v. 250; p. 763.

Beaufort Truck Growers Association, Beaufort, S. C. Fresh potatoes. No. 121,539; May 7; v. 250; p. 251.

Bentley & Twohey Silk Co., New York, N. Y. Silk piece goods. No. 121,752; May 28; v. 250; p. 993.

Block & Kuhl Company, Peoria, Ill. Certain named toilet preparations. No. 121,692; May 21; v. 250; p. 763.

Bosca & Company, Inc., New York, N. Y. Sparkling wines. No. 121,693; May 21; v. 250; p. 763.

Boston Snap Fastener Co., Boston, Mass. Snap-fasteners, hooks, eyes, and snap-fastening buttons. No. 121,753; May 28; v. 250; p. 993.

Braun Bros. & Co., Pittsburgh, Pa. Bread. No. 121,541; May 7; v. 250; p. 251.

Brown, Boland W., Lincoln, Nebr. Card games. No. 121,542; May 7; v. 250; p. 251.

Brownell, Harry F., assignor to Green Dragon Company, Sioux Falls, S. D. Spark-plugs. No. 121,584; May 14; v. 250; p. 509.

Bryant Electric Company, The, Bridgeport, Conn. Certain named electrical apparatus, machines, and supplies. Nos. 121,585–6; May 14; v. 250; p. 509.

Burnett, Tom B., Dallas, Tex. Certain named furniture and upholstery. Nos. 121,695–8; May 21; v. 250; p. 763.

Butcher Polish Company, Boston, Mass. Finish and polish for floors and other woodwork. Nos. 121,587–9; May 14; v. 250; p. 509.

Butler Brothers, Chicago, Ill. Hosiery. No. 121,754; May 28; v. 250; p. 993.

Buzby, Augustus C., Philadelphia, Pa. Lubricants consisting of oils and greases. No. 121,591; May 14; v. 250; p. 509.

C. E. Coe Coffee Co., Memphis, Tenn. Coffee. No. 121,703; May 21; v. 250; p. 763.

California Associated Raisin Co., Fresno, Cal. Dried raisins and fruits. No. 121,592; May 14; v. 250; p. 509.

California Packing Corporation, San Francisco, Cal. Canned salmon. No. 121,699; May 21; v. 250; p. 763.

California Packing Corporation, San Francisco, Cal. Canned fruits and vegetables. No. 121,700; May 21; v. 250; p. 763.

California Prune and Apricot Growers, Inc., San Jose, Cal. Dried apricots and prunes. No. 121,593; May 14; v. 250; p. 509.

Calima Canning Company, Los Angeles, Cal. Canned beets and tomatoes. No. 121,755; May 28; v. 250; p. 993.

Calima Canning Company, Los Angeles, Cal. Canned beet-tops, tomatoes, and string-beans. No. 121,756; May 28; v. 250; p. 993.

Calypto Company, Springfield, Mass. Medicated dental cream. No. 121,604; May 14; v. 250; p. 510.

Carr Fastener Company, Cambridge, Mass. Snap-fasteners. No. 121,544; May 7; v. 250; p. 251.

Cascade Packing Company, Anacortes, Wash. Canned salmon. No. 121,594; May 14; v. 250; p. 509.

Casement Hardware Co., The, Chicago, Ill. Casement-sash adjusters. No. 121,595; May 14; v. 250; p. 509.

Castle Brothers, San Francisco, Cal. Prunes, dried fruits, raisins, pitted plums. No. 121,543; May 7; v. 250; p. 251.

Celluloid Company, The, New York, N. Y. Hand knitting-needles. No. 121,757; May 28; v. 250; p. 993.

Champion Fibre Company, The, Canton, N. C. Extract to be used as a core-binder in the manufacture of iron castings. No. 121,545; May 7; v. 250; p. 251.

Charles H. Buettner Company, The, Cincinnati, Ohio. Spark-plugs. No. 121,596; May 14; v. 250; p. 509.

Chicago Tube & Iron Company, Chicago, Ill. Certain named hardware and plumbing and steam-fitting supplies. No. 121,687; May 14; v. 250; p. 512.

Chipman Knitting Mills, Easton and Selinsgrove, Pa. Hosiery. No. 121,758; May 28; v. 250; p. 993.

Cobb and Doflemyer, Exeter, Cal. Oranges, lemons, grapefruit. No. 121,598; May 14; v. 250; p. 509.

Continuous Reaction Company Limited, London, England. High-speed tool-steel in ingot form. No. 121,599; May 14; v. 250; p. 509.

Converse Rubber Shoe Co., Malden, Mass. Boots and shoes made of or containing rubber. No. 121,760; May 28; v. 250; p. 993.

Corning, Louis A., Elmira, N. Y. Ice-cream. No. 121,540; May 7; v. 250; p. 251.

Crafton, Bernard, Malabar, Fla. Fresh fruits, including citrus fruits, and fresh vegetables. No. 121,702; May 21; v. 250; p. 763.

Credit Clearing House, The, New York, N. Y. Trade and credit publications issued monthly and semi-annually. No. 121,599; May 14; v. 250; p. 509.

Cresca Company, New York, N. Y. Certain named foods. No. 121,704; May 21; v. 250; p. 763.

Crescent City Carbonate Company, New Orleans, La. Fruit syrups, flavors, and colors for use in making soft drinks and non-alcoholic beverages. No. 121,600; May 14; v. 250; p. 509.

Crescent Garter Company, New York, N. Y. Men's garters. No. 121,761; May 28; v. 250; p. 993.

Cupples Company Manufacturers, St. Louis, Mo. Rubber tires. No. 121,762; May 28; v. 250; p. 993.

Davis Chemical Manufacturing Co., Inc., Boston, Mass. Textile material for cleaning and polishing automobile windows and wind-shields. No. 121,601; May 14; v. 250; p. 510.

De Vilbiss Manufacturing Company, The, Toledo, Ohio. Atomizers or spraying instruments for medical and surgical purposes. No. 121,547; May 7; v. 250; p. 251.

Derryvale Linen Company, New York, N. Y. Certain named knitted, netted, and textile fabrics. No. 121,763; May 28; v. 250; p. 993.

Detroit Soluble Oil Co., Detroit, Mich. Lubricating-oils. No. 121,602; May 14; v. 250; p. 510.

Dexter Yarn Company, Pawtucket, R. I. Yarns and threads made of cotton, silk, wool, &c. No. 121,603; May 14; v. 250; p. 510.

Dieffenbacher, Bemper L., Los Angeles, Cal. Dental cream. No. 121,548; May 7; v. 250; p. 251.

Drum, Margaret, Baltimore, Md. Stomach, nerve, and liver tonic. No. 121,706; May 21; v. 250; p. 763.

Dubois Watch Case Company, Brooklyn, N. Y. Watches. Nos. 121,764–5; May 28; v. 250; p. 993.

E. Greenfield's Sons, New York, N. Y. Chocolates and candies. No. 121,552; May 7; v. 250; p. 251.

E. H. Hamlin Co., Seattle, Wash. Canned salmon. No. 121,617; May 14; v. 250; p. 510.

Eagle, Peter, Bridgeport, Conn. Preparation for consumption, rheumatism, weakness, and kidney trouble. No. 121,766; May 28; v. 250; p. 993.

Eastern Tablet Company, Albany, N. Y. Writing-tablets, printing and writing paper. No. 121,605; May 14; v. 250; p. 510.

Eastman Kodak Company, Rochester, N. Y. Photographic paper. No. 121,606; May 14; v. 250; p. 510.

Eckstein, Max, New York, N. Y. Ladies' hats. No. 121,767; May 28; v. 250; p. 993.

Edgar-Morgan Company, Memphis, Tenn. Stock feed. No. 121,637; May 14; v. 250; p. 511.

Edson Manufacturing Co., Boston, Mass. Rubber suction-hose and diaphragms. No. 121,607; May 14; v. 250; p. 510.

Elberta Crate Company, Bainbridge, Ga. Fruit and vegetable crates. No. 121,608; May 14; v. 250; p. 510.

En-Zo Company, Denmark, Wis. Compound of evaporated skimmed milk and vegetable fat as a milk substitute. No. 121,535; May 7; v. 250; p. 251.

Enderes Incorporated, Albert Lea, Minn. Certain named cutlery, machinery, and tools, and parts thereof. No. 121,609; May 14; v. 250; p. 510.

Everett, Heaney & Company, Inc., New York, N. Y. Cotton goods in the piece. No. 121,768; May 28; v. 250; p. 993.

Fairchild Bros. & Foster, New York, N. Y. Food product of certain named ingredients. No. 121,707; May 21; v. 250; p. 763.

Fairchild Bros. & Foster, New York, N. Y. Desiccated food obtained from whole-wheat berry, beef, maltose, and milk. No. 121,708; May 21; v. 250; p. 763.

Federal Underwear Co., New York, N. Y. Bath-robes. No. 121,770; May 28; v. 250; p. 994.

Flather & Company, (Inc.,) Nashua, N. H. Metal-working machines—namely, lathes. No. 121,610; May 14; v. 250; p. 510.

Fleischaker & Baum, New York, N. Y. Dolls and doll-dresses. No. 121,710; May 21; v. 250; p. 763.

Flood & Conklin Co., Newark, N. J. Paint-surfacer. No. 121,611; May 14; v. 250; p. 510.

Fordom Textile Company, Inc., New York, N. Y. Underwear—namely, shirts and drawers made of knitted material. Nos. 121,771–2; May 28; v. 250; p. 994.

Fox River Butter Company, Chicago, Ill. Butter. No. 121,773; May 28; v. 250; p. 994.

Frank W. Winne & Son, Incorporated, Philadelphia, Pa. Twines, cordage, ropes. No. 121,572; May 7; v. 250; p. 252.

Frankel Display Fixture Company, New York, N. Y. Store and display fixtures. No. 121,551; May 7; v. 250; p. 251.

French & Ward, New York, N. Y. Knitted and woven woolen piece goods. No. 121,774; May 28; v. 250; p. 994.

Ft. Wayne Drug Company, Fort Wayne, Ind. Preparation for the treatment of certain named diseases. No. 121,612; May 14; v. 250; p. 510.

Gardenside Bookshop, Boston, Mass. Certain named prints and publications. No. 121,583; May 14; v. 250; p. 509.

Gem Hammock & Fly Net Co., Milwaukee, Wis. Sheep-skin-lined and blanket-lined coats, sportsmen's and Mackinaw coats, overcoats. No. 121,775; May 28; v. 250; p. 994.

Geo. A. Bohrer Brewing Co., The, La Fayette, Ind. Ginger-ale. No. 121,693; May 21; v. 250; p. 763.

Gilmore, Robert B., Morrow, Ohio. Preparation for the treatment of nasal catarrh, head noises and colds, &c. No. 121,711; May 21; v. 250; p. 763.

Gold Cross Remedy Company, Kansas City, Mo. Nerve-tonic, also a medical preparation taken internally for skin diseases. No. 121,776; May 28; v. 250; p. 994.

Grand Rapids Brewing Co., Grand Rapids, Mich. Non-intoxicating malt beverage. No. 121,712; May 21; v. 250; p. 763.

Green Dragon Company. (See Brownell, Harry F., assignor.)

Guittard Company, San Francisco, Cal. Ground and cake chocolate, tea, cocoa, mustard, &c. No. 121,713; May 21; v. 250; p. 763.

H. Jevne Co., Los Angeles, Cal. Coffee-flavored taffy. No. 121,557; May 7; v. 250; p. 251.

H. C. Cole Milling Co., Chester, Ill. Wheat-flour. No. 121,597; May 14; v. 250; p. 509.

Hakim & Co., J. H., New York, N. Y. Olive, corn salad and salad peanut oils, salad-oil pressed from cotton-seed. No. 121,553; May 7; v. 250; p. 251.

Hall & Rackel, New York, N. Y. Face-powder. No. 121,714; May 21; v. 250; p. 763.

Hall, Walter F., Philadelphia, Pa. Galvanised, black, and corrugated-metal sheets, tin-plate. No. 121,615; May 14; v. 250; p. 510.

Hamburger, Jacob, Fairmont, W. Va. Liniment for the treatment of certain named ailments. No. 121,616; May 14; v. 250; p. 510.

Hartman, Fred H., Ottumwa, Iowa. Wheat-flour. No. 121,618; May 14; v. 250; p. 510.

Hedges-Buck Company, Stockton, Cal. Tea. No. 121,554; May 7; v. 250; p. 251.

Hirth-Krause Company, Rockford, Mich. Leather. No. 121,619; May 14; v. 250; p. 510.

Hoffay Talking Machine Company, Inc., New York, N. Y. Phonographs and their parts. No. 121,778; May 28; v. 250; p. 994.

Holden-Leonard Co., New York, N. Y. Fabric woven of woolen and worsted yarns and silk. No. 121,777; May 28; v. 250; p. 994.

Holstein-Friesian World, Inc., Syracuse, N. Y. Monthly magazine. No. 121,621; May 14; v. 250; p. 510.

Holton, Charles J., Detroit, Mich. Cigars, cheroots, and little cigars. No. 121,779; May 28; v. 250; p. 994.

Huron Furnace Company, The, Huron, S. D. Furnaces. No. 121,780; May 28; v. 250; p. 994.

Hutton, John T. D., Liverpool, England. Tool-holders and parts thereof, all being parts of machinery. No. 121,622; May 14; v. 250; p. 510.

I. B. Kleinert Rubber Company, New York, N. Y. Dress-shields. No. 121,788; May 28; v. 250; p. 994.

Innis, Speiden & Co., Inc., New York, N. Y. Certain named chemicals suitable for tanning, alone or in combination. No. 121,716; May 21; v. 250; p. 763.

International Mailing Tube and Wrapper Co., Brooklyn, N. Y. Mailing tubes, bags, boxes, bolders, and wrappers. No. 121,717; May 21; v. 250; p. 763.

Iron Cat Co., Sioux City, Iowa. Mouse and rat traps. No. 121,624; May 14; v. 250; p. 510.

J. Geo. Leyner Engineering Works Company, The, Littleton, Colo. Mining machinery, rock and hammer drills, and drill-sharpeners. No. 121,634; May 14; v. 250; p. 511.

J. C. Blair Company, Huntingdon, Pa. Certain named paper and stationery. No. 121,581; May 14; v. 250; p. 509.

J. S. Hoffman Company, Chicago, Ill. Cheese. No. 121,555; May 7; v. 250; p. 251.

J. S. Hoffman Company, Chicago, Ill. Cheese. No. 121,620; May 14; v. 250; p. 510.

J. T. Fargason Company, Memphis, Tenn. Mustard, spices, flavoring extracts. No. 121,549; May 7; v. 250; p. 251.

Jacob House & Sons, Inc., Buffalo, N. Y. Food preparation of certain named ingredients. No. 121,715; May 21; v. 250; p. 763.

Jameson, Hevener Co., St. Paul, Minn. Wheat-flour. No. 121,718; May 21; v. 250; p. 764.

Jarrett & Co., H. H., New York, N. Y. Heat-resisting compound for coating crucibles, fire-brick, ladles, and saggars. No. 121,556; May 7; v. 250; p. 251.

Jerome, Charles J., Chicago, Ill. Preparation for alleviation of affections of the throat and bronchial tubes. No. 121,625; May 14; v. 250; p. 510.

John F. Campbell Co., Chicago, Ill. Certain named foods. No. 121,701; May 21; v. 250; p. 763.

John Graf Company, Milwaukee, Wis. Spring-water. No. 121,614; May 14; v. 250; p. 510.

John Wanamaker, New York, New York, N. Y. Sewing kit. No. 121,838; May 28; v. 250; p. 996.

Johnson, Cowdin & Co., New York, N. Y. Satin ribbon. No. 121,781; May 28; v. 250; p. 994.

Johnson, Fred, De Ridder, La. Bread and cake. No. 121,626; May 14; v. 250; p. 510.

Joseph Fallert Brewing Co. Ltd., Brooklyn, N. Y. Malt beverage. No. 121,709; May 21; v. 250; p. 763.

Joseph P. Manning Co., Boston, Mass. Cigars. No. 121,795; May 28; v. 250; p. 994.

Joy, Russell T., Brooklyn, N. Y. Medicinal spring-water. No. 121,627; May 14; v. 250; p. 510.

Julius Kayser & Co., New York, N. Y. Knitted union-suits, vests, chemises, camisoles. No. 121,784; May 28; v. 250; p. 994.

Julius Schmid, Incorporated, New York, N. Y. Pacifiers. No. 121,661; May 14; v. 250; p. 511.

Julius Schmid, Incorporated, New York, N. Y. Household rubber gloves. No. 121,827; May 28; v. 250; p. 995.

Julius Schmid, Incorporated, New York, N. Y. Surgeons' rubber gloves. No. 121,662; May 14; v. 250; p. 511.

Kahan, Gabriel, Lowell, Mass. Certain named foods. No. 121,782; May 28; v. 250; p. 994.

Katz & Sons, K., Baltimore, Md. Overcoats. No. 121,783; May 28; v. 250; p. 994.

Kellogg Products Inc., Buffalo, N. Y. Nut butter, margarin, cooking-fats, salad-oils. Nos. 121,785–7; May 28; v. 250; p. 994.

Killinger, William E., Oklahoma, Okla. Brooms. No. 121,558; May 7; v. 250; p. 251.

Kingstone, Rose L., New York, N. Y. Composition of matter for removing superfluous hair. No. 121,628; May 14; v. 250; p. 510.

Kittle & Watson, Evans Mills, N. Y. Chilli-con-carne. No. 121,789; May 28; v. 250; p. 994.

Knoxville Excelsior & Mattress Co., Knoxville, Tenn. Mattresses. No. 121,629; May 14; v. 250; p. 510.

Kny-Scheerer Corporation, The, New York, N. Y. Certain named electromedical apparatus. No. 121,719; May 21; v. 250; p. 764.

Kops Bros., New York, N. Y. Corsets, brassières, ladies' underwaists. No. 121,790; May 28; v. 250; p. 994.
Lake Winola Products Company, Scranton, Pa. Certain named foods. No. 121,630; May 14; v. 250; v. 510.
Lanham Cotton Cultivator Company, Rome, Ga. Cotton choppers and cultivators. No. 121,631; May 14; v. 250; p. 510.
Lash's Bitters Co., New York, N. Y. Tonic bitters to be used as a tonic and appetizer. No. 121,632; May 14; v. 250; p. 510.
Leavy, William L., Brooklyn, N. Y. Children's dresses. No. 121,791; May 28; v. 250; p. 994.
Levy, Cecilia, New York, N. Y. Women's hats. No. 121,792; May 28; v. 250; p. 994.
Leyland & Birmingham Rubber Co., Ltd., The, Leyland, England. Certain named articles made of india-rubber. No. 121,633; May 14; v. 250; p. 510.
Libby, McNeill & Libby, Chicago, Ill. Canned beef. No. 121,559; May 7; v. 250; p. 251.
Lorient-Cartier, Incorporated, New York, N. Y. Candy. No. 121,720; May 21; v. 250; p. 764.
Louis Pfaelzer & Sons, Chicago, Ill. Hams, bacon, lard, sausage. No. 121,565; May 7; v. 250; p. 252.
Lowell Lamb & Company, Inc., New York, N. Y. Furs. No. 121,793; May 28; v. 250; p. 994.
M. E. Smith & Co., Inc., Omaha, Nebr. Bleached muslin piece goods. No. 121,883; May 28; v. 250; p. 995.
Macgregor Instrument Company, Boston, Mass. Certain named dental, medical, and surgical appliances. Nl. 121,560; May 7; v. 250; p. 251.
Macy & Co., R. H., New York, N. Y. Handkerchiefs. No. 121,794; May 28; v. 250; p. 994.
Majestic Motion Picture Company, New York, N. Y. Motion-picture films. No. 121,635; May 14; v. 250; p. 511.
Manor & Co., J. D., New Market, Va. Wheat-flour. No. 121,796; May 28; v. 250; p. 994.
Manhattan Rubber Mfg. Co., The, New York, N. Y. Belting made partly of fabric and partly of rubber. No. 121,797; May 28; v. 250; p. 994.
Marshall Field & Company, Chicago, Ill. Cotton-batting. No. 121,798; May 28; v. 250; p. 994.
Martin, Albert R., Dallas, N. C. Hen feed. No. 121,799; May 28; v. 250; p. 994.
Marvel Accessories Manufacturing Company, The, Cleveland, Ohio. Tire-vulcanizers and tire-vulcanizing outfits. No. 121,636; May 14; v. 250; p. 511.
Master Starter Mfg. Company. (See Puckett, Charles N., assignor.)
McKenna, John L., New York, N. Y. Anilin colors and dyestuffs. No. 121,721; May 21; v. 250; p. 764.
Meritas Mills, North Highland, near Columbus, Ga. Cotton piece goods. No. 121,801; May 28; v. 250; p. 994.
Migel, J. A., New York, N. Y. Bread silks in the piece. No. 121,800; May 28; v. 250; p. 994.
Milton Bradley Co., Springfield, Mass. Games and outfits of toy soldiers and pistols. No. 121,540; May 7; v. 250; p. 251.
Mittelstaedt, Emma T., New York, N. Y. Hair-nets. Nos. 121,802–4; May 28; v. 250; pp. 994–5.
Mittelstaedt, Emma T., New York, N. Y. Hair-nets. No. 121,807; May 28; v. 250; p. 995.
Modern Typewriter Supply Co., St. Louis, Mo. Carbon-paper. No. 121,808; May 28; v. 250; p. 995.
Mohawk Rubber Co., The, Akron, Ohio. Rubber tires. No. 121,805; May 28; v. 250; p. 995.
Moore Push Pin Company, Philadelphia, Pa. Push-pins and thumb-tacks. No. 121,638; May 14; v. 250; p. 511.
Moore Sons, Edward J., New York, N. Y. Capsules for diseases of the urinary organs and bladder. No. 121,561; May 7; v. 250; p. 251.
Moray, George E., New York, N. Y. Powder for sore, tired, aching feet. No. 121,722; May 21; v. 250; p. 764.
Mount Vernon-Woodberry Mills, Incorporated, Baltimore, Md. Cotton duck. No. 121,806; May 28; v. 250; p. 995.
Mueller Brothers Art and Manufacturing Company, Chicago, Ill. Framed pictures, art and novelty calendars, pictures. No. 121,639; May 14; v. 250; p. 511.
N. K. Fairbank Company, The, Union township, near Guttenberg, N. J., and Chicago, Ill. Vegetable-oil product for salads and cooking. No. 121,769; May 28; v. 250; p. 993.
National Carbon Company, Inc., Cleveland, Ohio. Electric batteries. No. 121,640; May 14; v. 250; p. 511.
National Fruit Product Company, Inc., Alexandria, Va. Apple cider. No. 121,723; May 21; v. 250; p. 764.
National Paint & Varnish Company, Cleveland, Ohio. Interior paints. No. 121,641; May 14; v. 250; p. 511.
National Supply Company, The, Toledo, Ohio. Certain named metals and metal castings and forgings. No. 121,642; May 14; v. 250; p. 511.
National Wire Wheel Works, Inc., Geneva, N. Y. Load-carrying wheels for vehicles. No. 121,809; May 28; v. 250; p. 995.
Nelson, Carl W., Chicago, Ill. Butter. No. 121,810; May 28; v. 250; p. 995.
New Orleans Coffee Co. Ltd., New Orleans, La. Molasses, sorghums, cane and maple syrups, and compounds thereof. No. 121,643; May 14; v. 250; p. 511.
New York Gas & Electric Appliance Co., New York, N. Y. Certain named electrical apparatus, machines, and supplies. No. 121,644; May 14; v. 250; p. 511.
North Manchester Milling Co., North Manchester, Ind. Wheat-flour. No. 121,645; May 14; v. 250; p. 511.
Northern Fruit Company, Wenatchee, Wash. Fresh apples. No. 121,811; May 28; v. 250; p. 995.
Novelty Candy Co., Chicago, Ill. Candy. No. 121,562; May 7; v. 250; p. 252.
Oak City Drug Company, Inc., Tuscaloosa, Ala. Remedy for chills, fever, ague, malaria, &c. No. 121,812; May 28; v. 250; p. 995.
Oriental Drug Co. Inc., New York, N. Y. Tonic digestive tablets. No. 121,646; May 14; v. 250; p. 511.
Oriental Oil Company, Dallas, Tex. Gasolene. No. 121,647; May 14; v. 250; p. 511.
Orton, Charles H. L., Pittsburgh, Pa. Cough-drops. No. 121,724; May 21; v. 250; p. 764.
Owen Canning Co., Owen, Wis. Canned peas. Nos. 121,727–8; May 21; v. 250; p. 764.
Pacific Mills, Lawrence and Boston, Mass. Cotton piece goods. No. 121,813; May 28; v. 250; p. 995.
Package Confectionery Co., Boston, Mass. Candy. No. 121,648; May 14; v. 250; p. 511.
Page, Louise A., Slaterville Springs, N. Y. Mineral water. No. 121,563; May 7; v. 250; p. 252.
Palette, Elizabeth, Flushing, N. Y. Complexion-lotion. No. 121,819; May 28; v. 250; p. 995.
Parker Cup & Specialty Works, Inc., Parkers Landing, Pa. Valve-cups formed of rubberized fabric. No. 121,814; May 28; v. 250; p. 995.
Parker, Willard, Philadelphia, Pa. Automatic machine-screw-cutting oil. No. 121,649; May 14; v. 250; p. 511.
Pearl, Eugene, New York, N. Y. Certain named rubber goods. No. 121,564; May 7; v. 250; p. 252.
Pennsylvania Linseed Products Company, Pittsburgh, Pa. Linseed-oil substitute. No. 121,650; May 14; v. 250; p. 511.
Pernicisaro, Andrea, Brooklyn, N. Y. Medicinal compound for the treatment of hemorrhoids. No. 121,725; May 21; v. 250; p. 764.
Peter A. Frasse & Co., Inc., New York, N. Y. Steel rods and bars, cold-rolled sheet and strip steel, steel wire. No. 121,613; May 14; v. 250; p. 510.
Petersburg Packing Co., Seattle, Wash., and Petersburg, Alaska. Canned salmon. Nos. 121,815–17; May 28; v. 250; p. 995.
Phoenix Packing Co., San Francisco, Cal. Raisins and dried peaches. No. 121,651; May 14; v. 250; p. 511.
Pittsburg Elevator Company, Pittsburg, Kans. Cornmeal and corn-chops, whole-wheat flour, hen and chick feeds, alfalfa, &c., seeds. No. 121,726; May 21; v. 250; p. 764.
Planters Nut & Chocolate Co., Wilkes-Barre, Pa. Salted peanuts and peanut bars. No. 121,818; May 28; v. 250; p. 995.
Planchenault, Alexander G., Coytesville, N. J. Clasps for wrist-bracelets, lockets, necklaces, &c. No. 121,820; May 28; v. 250; p. 995.
Porter, Herbert G., Malden, Mass. Dehydrated eggs. No. 121,821; May 28; v. 250; p. 995.
Pringle Electrical Mfg. Company, Philadelphia, Pa. Electric switch-locking devices. No. 121,566; May 7; v. 250; p. 252.
Puckett, Charles N., assignor to Master Starter Mfg. Company, Los Angeles, Cal. Mechanical starters for automobiles. No. 121,652; May 14; v. 250; p. 511.
Pyrotol Chemical Co., Beaumont, Tex. Dental cream. No. 121,822; May 28; v. 250; p. 995.
Rainier Products Company, Seattle, Wash. Certain named non-alcoholic beverages. No. 121,653; May 14; v. 250; p. 511.
Rainville, Joseph A., Lewiston, Me. Certain named dental, medical, and surgical appliances. No. 121,654; May 14; v. 250; p. 511.
Ralston Iron Works, Inc., San Francisco, Cal. Automobile attachments for converting them into trucks. No. 121,823; May 28; v. 250; p. 995.
Recepting Register Co., The, Cincinnati, Ohio. Receipting-registers. No. 121,655; May 14; v. 250; p. 511.
Reichert Chemical & Mfg. Co., The, Granton, Wis. Polish for pianos, woodwork, furniture, automobiles, and other vehicles. No. 121,656; May 14; v. 250; p. 511.
Rice-Stix Dry Goods Company, St. Louis, Mo. Men's outer shirts. No. 121,824; May 28; v. 250; p. 995.
Ridgeour-Baker Grocery Co., Kansas City, Mo. Canned foods and candy. No. 121,657; May 14; v. 250; p. 511.
Riverside Review Company, Inc., New York, N. Y. Newspapers published weekly. No. 121,658; May 14; v. 250; p. 511.
Safepack Paper Mills, Brockton, Mass. Certain named paper and stationery. No. 121,825; May 28; v. 250; p. 995.
Sauquoit Toilet Paper Co., New Hartford, N. Y. Toilet-paper. No. 121,826; May 28; v. 250; p. 995.
Savannah Soap Co., Savannah, Ga. Soap. No. 121,660; May 14; v. 250; p. 511.
Schneider, Stefan, Chicago, Ill. Ball-bearings. No. 121,664; May 14; v. 250; p. 511.
Schroeder & Tremayne, St. Louis, Mo. Cuban sheepswool sponges. No. 121,663; May 14; v. 250; p. 511.
Scott & Company, Limited, Boston, Mass. Coats. No. 121,831; May 28; v. 250; p. 995.
Shoecraft Shop, The, Inc., New York, N. Y. Ladies' and misses' leather boots and shoes. No. 121,832; May 28; v. 250; p. 995.

Siegel, Samuel, Brooklyn, N. Y. Sheet-music. No. 121,686; May 14; v. 250; p. 512.
Smith, Charles A., Windsor, Ontario, Canada. Automobile-trucks. No. 121,665; May 14; v. 250; p. 511.
Smith & Horton Co., Limited, Warren, Pa. Certain named foods. No. 121,660; May 14; v. 250; p. 512.
Smith, William H., Newark, N. J. Traveling hand-bags. No. 121,729; May 21; v. 250; p. 764.
Sobrinos de Esquiaga, San Juan, Porto Rico. Fertilizers. No. 121,705; May 21; v. 250; p. 763.
Società Anonima Fiuggi, Rome, Italy. Natural mineral water. No. 121,730; May 21; v. 250; p. 764.
Southern Colorado Lumber Co., Trinidad, Colo. Alfalfa, alfalfa-meal, pinto-beans. No. 121,568; May 7; v. 250; p. 252.
Southern Feed Company, Inc., Newport News, Va. Poultry feeds. No. 121,731; May 21; v. 250; p. 764.
Southern Feed Company, Inc., Newport News, Va. Stock feeds. No. 121,732; May 21; v. 250; p. 764.
Sperry Flour Company, San Francisco, Cal. Wheat-flour. No. 121,734; May 21; v. 250; p. 764.
Stafford, George A., New York, N. Y. Woven cotton fabrics in the piece. No. 121,820; May 28; v. 250; p. 995.
Stirn, L. & E., New York, N. Y. Cotton piece goods. No. 121,830; May 28; v. 250; p. 995.
Summit Thread Company, East Hampton, Conn. Cotton thread. No. 121,667; May 14; v. 250; p. 512.
Superior Products Company, St. Louis, Mo. Baking compound used as a shortening. No. 121,733; May 21; v. 250; p. 764.
Sussman Wormser & Co., San Francisco, Cal. Certain named foods. No. 121,735; May 21; v. 250; p. 764.
T. A. Shaw and Co., New York, N. Y., and Chicago, Ill. Cotton duck, sheetings, drills, and osnaburgs. No. 121,828; May 28; v. 250; p. 995.
Talbot Manufacturing Co., New York, N. Y. Indian vegetable gum used as a constituent for ice-cream. No. 121,835; May 28; v. 250; p. 995.
Taplex Corporation. (See Tapley Specialty Co., The.)
Tapley Specialty Co., The, New York, N. Y., assignor to Taplex Corporation. Pocket-stoves using charcoal as a fuel. No. 121,683; May 14; v. 250; p. 512.
Taunton Pearl Works, Inc., Taunton, Mass. Certain-named jewelry and precious-metal ware. No. 121,834; May 28; v. 250; p. 995.
Thos. H. Ince Corporation, The, Los Angeles, Cal. Motion-picture films. No. 121,623; May 14; v. 250; p. 510.
Titus Blatter & Company, New York, N. Y. Artificial and imitation leather. No. 121,582; May 14; v. 250; p. 509.
Tower Varnish & Dryer Company, Dayton, Ohio. Varnishes, driers, japans, paints, enamels. No. 121,668; May 14; v. 250; p. 512.
Tryon, Charley I., Little Rock, Ark. Certain named chemicals, medicines, and pharmaceutical preparations. No. 121,736; May 21; v. 250; p. 764.
Uhlemann Optical Co., Chicago, Ill. Mountings for eye-glass-lenses. No. 121,669; May 14; v. 250; p. 512.
Union Drawn Steel Company, Beaver Falls, Pa. Bright-finished steel. No. 121,670; May 14; v. 250; p. 512.
Union Twist Drill Co., Athol, Mass. Cutter, reamer, and drill cases, drill-case bases, and drill-blocks. No. 121,569; May 7; v. 250; p. 252.
Union Twist Drill Co., Athol, Mass. Certain named measuring and scientific appliances. Nos. 121,671–2; May 14; v. 250; p. 512.
United Liquid Sulphur Co., New York, N. Y. Chemicals, &c., used in the extermination of vermin and insects from trees, vegetables, &c. No. 121,737; May 21; v. 250; p. 764.
United Optical Company, Webster, Mass. Eyeglass-frames. No. 121,673; May 14; v. 250; p. 512.
United States Cabinet Bed Co., New York, N. Y. Folding beds and cots. No. 121,674; May 14; v. 250; p. 512.
Van Landingham Co., C. E., Los Angeles, Cal. Canned tuna fish. No. 121,675; May 14; v. 250; p. 512.
Van Sicien, Arthur, New York, N. Y. Dried fruits. No. 121,676; May 14; v. 250; p. 512.
Van Sicien, Arthur, New York, N. Y. Dried fruits. No. 121,688; May 14; v. 250; p. 512.
W. S. Forbes & Co. Inc., Richmond, Va. Ham, bacon, shoulder, lard, sausage. No. 121,550; May 7; v. 250; p. 251.
Walcott, Philip, New York, N. Y. Boys' outer clothing. No. 121,836; May 28; v. 250; p. 995.
Walker, Jessie, Waco, Tex. Preparation for rheumatism, asthma, and appendicitis. No. 121,837; May 28; v. 250; p. 996.
Waltham Bag & Paper Company, Waltham, Mass. Paper bags and boxes. No. 121,739; May 21; v. 250; p. 764.
Ward Baking Company, New York, N. Y. Bread. Nos. 121,677–8; May 14; v. 250; p. 512.
Warner, Moore & Co., Richmond, Va. Flour made from wheat. No. 121,570; May 7; v. 250; p. 252.
Weppner, Augustus F., Buffalo, N. Y. Coffee substitute. No. 121,685; May 14; v. 250; p. 512.
Western Grocer Company, Oskaloosa, Iowa. Certain named foods. No. 121,679; May 14; v. 250; p. 512.
Western Refining Co., The, Wichita, Kans. Gasolene refined from crude oil or petroleum. No. 121,738; May 21; v. 250; p. 764.
White Star Canning Co., East San Pedro and Los Angeles, Cal. Canned tuna fish. No. 121,839; May 28; v. 250; p. 996.
Widemann Goat-Milk Co., King City and San Francisco, Cal. Canned evaporated goat-milk. No. 121,680; May 14; v. 250; p. 512.
Willard, Charles E., Chicago, Ill. Axles for cars, railroad rolling-stock. No. 121,689; May 14; v. 250; p. 512.
Willard Storage Battery Company, Cleveland, Ohio. Storage batteries. No. 121,681; May 14; v. 250; p. 512.
William Read & Sons, Inc., Boston, Mass. Certain named games, toys, and sporting goods. No. 121,567; May 7; v. 250; p. 252.
Williams Bros. Chemical Co., St. Louis, Mo. Medicine for preventing and relieving certain named diseases. No. 121,571; May 7; v. 250; p. 252.
Winder Manufacturing Company, The, Winder, Ga. Overalls, coats, work-shirts, and pants. No. 121,841; May 28; v. 250; p. 996.
Windsor Broom Co., Hamburg, Pa. Brooms. No. 121,684; May 14; v. 250; p. 512.
Witwer Tate Grocery Co., Centralia, Ill. Canned tomatoes, corn, peas, and kraut. No. 121,740; May 21; v. 250; p. 764.
Wm. C. Robinson & Son Co., Baltimore, Md. Transmission and motor oils, lubricating-greases, gasolene. No. 121,659; May 14; v. 250; p. 511.
Yardley & Co. Limited, London, England. Toilet soap. No. 121,682; May 14; v. 250; p. 512.
Ziegel, Eisman & Company, Newark, N. J. Tanned and finished leathers. No. 121,842; May 28; v. 250; p. 996.

ALPHABETICAL LIST OF REGISTRANTS OF LABELS.

Allen, George H., Clinton, N. Y. "Aunt Martha's Plum Pudding." (For Plum Pudding.) No. 20,612; May 21; v. 250; p. 765.
Allen, George H., Clinton, N. Y. "Aunt Martha's Hulled Corn." (For Hulled Corn.) No. 20,613; May 21; v. 250; p. 765.
Arabadjian, Kevork, New York, N. Y. "Pyramid." (For Coffee.) No. 20,635; May 28; v. 250; p. 997.
Baer and Wilde Co., The, Attleboro, Mass. "Kum-A-Part." (For Cuff-Buttons.) No. 20,614; May 21; v. 250; p. 765.
Berry, Andrew H., New York, N. Y. "Niagara Luminator." (For Dry Batteries.) No. 20,615; May 21; v. 250; p. 765.
Berry, Andrew H., New York, N. Y. "Niagara Fire Pot." (For Dry Batteries.) No. 20,616; May 21; v. 250; p. 765.
Berry, Andrew H., Montclair, N. J. "Niagara Signal." (For Dry Batteries.) No. 20,636; May 28; v. 250; p. 997.
Brawley Bros., Litchfield, Ill. "Sabnor." (For Cigars.) No. 20,637; May 28; v. 250; p. 997.
Cagle, Matthew J., San Francisco, Cal. "Chief of all Patches." (For Self-Vulcanizing Patches.) No. 20,638; May 28; v. 250; p. 997.
California Bakers Specialty Co., Los Angeles, Cal. "Fig-Orang." (For a Preparation for Cake, Candy, and Ice-Cream Topping.) No. 20,639; May 28; v. 250; p. 997.
California Growers Association, Los Angeles, Cal. "California Growers." (For Canned Apricots.) No. 20,640; May 28; v. 250; p. 997.
California Growers Association, Los Angeles, Cal. "California Producers." (For Canned Pears.) No. 20,641; May 28; v. 250; p. 997.
Crutchfield & Woolfolk, Pittsburgh, Pa. "Poppy Brand." (For Melons.) No. 20,617; May 21; v. 250; p. 765.
D'Amico, Gaetano, Chicago Heights, Ill. "Gaetano D'Amico." (For Macaroni.) No. 20,642; May 28; v. 250; p. 997.
Dennis, Kimball & Pope, Inc., New York, N. Y. "White Maltese Cross." (For Apples.) No. 20,618; May 21; v. 250; p. 765.
Dennis, Kimball & Pope, Inc., New York, N. Y. "Blue Maltese Cross." (For Apples.) No. 20,619; May 21; v. 250; p. 765.
Dupar & Company, Des Moines, Iowa. "Vegetable Compound With Viburnum." (For a Medicine.) No. 20,610; May 7; v. 250; p. 253.
Eggoe Company, The, Marshalltown, Iowa. "Eggoe." (For Egg Substitute.) No. 20,621; May 21; v. 250; p. 765.
Eldred, A. B., Chicago, Ill. "Kil-Odor." (For Deodorants.) No. 20,643; May 28; v. 250; p. 997.
Eldred Chemical Co., The, Chicago, Ill. "Kil-Odor." (For Deodorants.) No. 20,644; May 28; v. 250; p. 997.

Frazier Packing Co., The, Elwood, Ind. "Fraziers Green Checkered Brand." (For Beans With Pork.) No. 20,622; May 21; v. 250; p. 765.

French Sardine Company, San Pedro, Cal. "Sphinx." (For Canned Sardines.) No. 20,645; May 28; v. 250; p. 997.

Glass, Edward, Troy, N. Y. "Ed's Rochell Salts in Tablets." (For Rochelle Salts.) No. 20,646; May 28; v. 250; p. 997.

Glassheim, Abraham, New York, N. Y. "Coronet." (For Snap-Fasteners.) No. 20,647; May 28; v. 250; p. 997.

Indian Refining Company, New York, N. Y. "For Tired Wheels." (For Containers of Axle-Grease.) No. 20,623; May 21; v. 250; p. 765.

J. C. Ainsley Packing Co., Campbell, Cal. "Campbell." (For Canned Apricots.) No. 20,634; May 28; v. 250; p. 997.

Johnston, John W., Rochester, N. Y. "Snow White." (For Water-Color Fluid.) No. 20,624; May 21; v. 250; p. 765.

Manila Commercial Co., Manila, Philippine Islands. "Aromas." (For Cigars.) No. 20,611; May 7; v. 250; p. 253.

Mary and Tuma, Washington and New Orleans, La. "Mary's Pure Ribbon Cane Syrup." (For Table-Syrups.) No. 20,625; May 21; v. 250; p. 765.

Naes, Louis, St. Louis, Mo. "Real American." (For Cigars.) No. 20,648; May 28; v. 250; p. 997.

Niles, W. C., Oklahoma, Okla. "Luster Auto Klean." (For Auto-Polish.) No. 20,626; May 21; v. 250; p. 765.

Pacific Novelty Company, New York, N. Y. "Winifred Clark Twin-Plex Knitting Needle." (For Knitting-Needles.) No. 20,627; May 21; v. 250; p. 765.

Packard Dressing Co., Stoughton, Mass. "Packard Shoe Polishes." (For Shoe-Dressing.) No. 20,649; May 28; v. 250; p. 997.

Pennsylvania Chocolate Company, Pittsburgh, Pa. "Zatek (The Economical Cocoa)." (For Cocoa.) No. 20,650; May 28; v. 250; p. 997.

Pratt Olive Oil Company, Los Angeles, Cal. "Dr. Chas. Pratt's Lemon Olive Cream." (For a Cream.) No. 20,651; May 28; v. 250; p. 997.

Premier Packing Co., San Diego, Cal. "Steele's Premium." (For Canned Sardines.) No. 20,628; May 21; v. 250; p. 765.

Pyrotol Chemical Company, Beaumont, Tex. "Pyrotol." (For Dental Preparations.) No. 20,629; May 21; v. 250; p. 765.

Richards, Lawrence, Hancock, Mich. "La Nelda." (For Cigars.) No. 20,630; May 21; v. 250; p. 765.

Rivas Manufacturing Co., New York, N. Y. "Creme De Vie." (For Tonic Beverages.) No. 20,652; May 28; v. 250; p. 997.

Rush, Grace A., Cincinnati, Ohio. "Martha-Ann." (For Fruit Cake.) No. 20,653; May 28; v. 250; p. 997.

Russell Milling Company, The, Russell, Kans. "American Special." (For Wheat-Flour.) No. 20,608; May 7; v. 250; p. 253.

Russian Candy Co., Chicago, Ill. "Russian Style Fruit Karamel." (For Candy.) No. 20,654; May 28; v. 250; p. 997.

Sachsel, Oscar, Chicago, Ill. "Caritas." (For Cigars.) No. 20,631; May 21; v. 250; p. 765.

Saiant & Saiant, New York, N. Y. "Trench." (For Shirts.) No. 20,632; May 21; v. 250; p. 765.

Sunderland Manufacturing Co., Chicago, Ill. "Sunderland Tire Pump." (For Tire-Pumps.) No. 20,655; May 28; v. 250; p. 997.

Valiant Sales Company, Kansas City, Kans. "Valiantine." (For Liniment.) No. 20,633; May 21; v. 250; p. 765.

Van Camp Sea Food Co., San Pedro, Cal. "Van Camp's." (For Canned Sardine Paste.) No. 20,656; May 28; v. 250; p. 997.

W. H. Dyer Company, Evansville, Ind. "W. H. Dyer's Own Pack." (For String-Beans.) No. 20,620; May 21; v. 250; p. 765.

Wausau Manufacturing Company, Wausau, Wis. "Ivripic." (For Toothpicks.) No. 20,609; May 7; v. 250; p. 253.

PRINTS.

Black Cat Textiles Company, Kenosha, Wis. "Cooper's Original Spring Needle Underwear." (For Underwear.) No. 4,889; May 21; v. 250; p. 765.

Davis, Jacob, Philadelphia, Pa. "Thais Fettpuder." (For Face-Powder.) No. 4,892; May 28; v. 250; p. 997.

Eldred Chemical Co., Chicago, Ill. "Kil-Odorite." (For Deodorants.) No. 4,893; May 28; v. 250; p. 997.

Iroquois Brewing Company, Buffalo, N. Y. "Iroquois Indian Head." (For Beer.) No. 4,894; May 28; v. 250; p. 997.

K. F. & C. Tire & Rubber Corporation, Roanoke, Va. "Built to Go Around the World." (For Rubber Tires.) No. 4,896; May 28; v. 250; p. 997.

Kramer, Louis W., Denver, Colo. "The Pipe Smokers Delight." (For Compound for Use by Smokers.) No. 4,890; May 21; v. 250; p. 765.

Magnolia Provision Company, Houston, Tex. "Pindapan Peanut Shortening." (For Shortening for Use in Cooking.) No. 4,897; May 28; v. 250; p. 997.

May, Chas. F., Lakeport, Cal. "Playing Multo-Devo As Partners." (For Card Game.) No. 4,895; May 28; v. 250; p. 997.

R. L. Watkins Co., The, Cleveland, Ohio. "Group of Children's Photographs." (For Cocoanut-Oil.) No. 4,898; May 28; v. 250; p. 997.

R. L. Watkins Co., The, Cleveland, Ohio. "Woman Drying Hair With Fan." (For Cocoanut-Oil.) No. 4,899; May 28; v. 250; p. 997.

Robertson Paper Company, Bellows Falls, Vt. "Liberty Bread." (For Bread.) No. 4,891; May 21; v. 250; p. 765.

DISCLAIMERS.

London, Jacob, Tunnelton, Pa.; disclaimer filed by assignee, The Jeffrey Manufacturing Company. No. 1,205,097; disclaimer filed June 3, 1918; v. 250; p. 517.

Sundstrand, Gustaf D., Rockford, Ill.; disclaimer filed by assignee, Rockford Milling Machine Company. (Reissue.) No. 14,237; disclaimer filed Dec. 26, 1916; v. 250; p. 517.

Taylor, Henry D., Rochester, N. Y.; disclaimer filed by assignee, The Bircher Company, Inc. Envelop-opening machine. No. 1,150,905; disclaimer filed May 29, 1918; v. 250; p. 517.

White, Harold E., Schenectady, N. Y.; disclaimer filed by assignee, General Electric Company. Control of electrically-operated switches. No. 969,738; disclaimer filed May 17, 1918; v. 250; p. 259.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED DURING THE MONTH OF MAY, 1918.

Accelerator safety-guard. J. E. Marriner. No. 1,265,801; May 14; v. 250; p. 284.

Accounting means. D. M. Tuttle. No. 1,265,008; May 7; v. 250; p. 38.

Acetyl cellulose and making the same. W. G. Lindsay. No. 1,265,216; May 7; v. 250; p. 95.

Acetyl cellulose and process, Compound of. W. G. Lindsay. No. 1,265,217; May 7; v. 250; p. 95.

Adhesive. C. R. Robinson. No. 1,267,699; May 28; v. 250; p. 869.

Advertising attraction-form. L. Lundgren. No. 1,266,567; May 28; v. 250; p. 832.

Advertising device. J. L. Gribble and G. L. Willett. No. 1,266,014; May 14; v. 250; p. 344.

Advertising device. C. H. Leggett. No. 1,264,946; May 7; v. 250; p. 20.

Advertising device. C. H. Leggett. No. 1,264,947; May 7; v. 250; p. 21.

Advertising device. E. A. Quimby. No. 1,265,380; May 7; v. 250; p. 139.

Aerocruiser. T. M. Finley. No. 1,265,638; May 7; v. 250; p. 208.

Aeroplane. L. C. Glisson. No. 1,265,770; May 14; v. 250; p. 276.

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Aeroplane. L. G. Young. No. 1,266,746; May 21; v. 250; p. 578.

Aeroplanes and the like, Air speed-indicator for use on. F. H. Clift. No. 1,267,633; May 28; v. 250; p. 851.

Aeroplanes, Automatic ignition-cut-out switch for. J. S. Bennett. No. 1,267,962; May 28; v. 250; p. 944.

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Aeroplanes, Sighting means for. L. U. Wetherall. No. 1,266,733; May 21; v. 250; p. 574.

Agitating device. W. Lindsay. No. 1,267,562; May 28; v. 250; p. 830.

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Agricultural implement. J. J. Runck. No. 1,266,719; May 21; v. 250; p. 570.

Agricultural implements and the like, Frame for. W. S. Graham. No. 1,265,322; May 7; v. 250; p. 123.

Air-brakes, Safety mechanism for automatically applying. L. A. Thornburg. No. 1,265,974; May 14; v. 250; p. 334.

Air-compressor. C. A. V. Carlsson. No. 1,265,048; May 7; v. 250; p. 50.

Air-compressor and motor, Hydraulic. C. C. Tuch. No. 1,267,926; May 28; v. 250; p. 937.

Air-compressors, Regulating apparatus for. P. E. Good. No. 1,265,444; May 7; v. 250; p. 158.

Air-cooling system. G. E. Albin. No. 1,267,160; May 21; v. 250; p. 695.

Air-cushion. H. Kamrass. No. 1,266,482; May 14; v. 250; p. 472.

Air from furnaces, Device for moistening hot. W. Johnson. No. 1,266,207; May 7; v. 250; p. 93.

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Airships, Plane for. T. M. Finley. No. 1,265,639; May 7; v. 250; p. 208.

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Burglar-alarm. Circuit-closing alarm.
Burglar or fire alarm. Theft-alarm.

Alarm. L. G. Hartdorn. No. 1,265,777; May 14; v. 250; p. 278.

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Alcohol burner, Solid-. A. Strobl. No. 1,267,475; May 28; v. 250; p. 806.

Alcohol from burnt or roasted starch-bearing materials, &c., Producing. B. Kazmann. No. 1,267,081; May 21; v. 250; p. 671.

Alcohol from grain in open vats with the employment of saccharifying mucors, Manufacture of. H. Boulard. No. 1,266,657; May 21; v. 250; p. 553.

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Alined rods, Device for adjustably connecting. L. A. Ogden. No. 1,265,104; May 7; v. 250; p. 66.

Alkali metals or the like, Producing. W. L. Morrison. No. 1,265,360; May 7; v. 250; p. 134.

Alloy, Producing a hard copper. O. C. M. Knudsen. No. 1,267,669; May 28; v. 250; p. 861.

Aluminum chlorid, Making. G. H. King and G. I. Roberts. No. 1,268,015; May 28; v. 250; p. 959.

Ammonia, Manufacture of. E. Ore. No. 1,266,147; May 14; v. 250; p. 382.

Ammonium sulfate, Production of neutral. F. Capron. No. 1,266,212; May 14; v. 250; p. 400.

Amusement device. K. D. Gostin. No. 1,267,211; May 21; v. 250; p. 708.

Amusement device. A. D. Lakin. No. 1,266,494; May 14; v. 250; p. 475.

Amusement device. H. C. Tanabe. No. 1,267,931; May 28; v. 250; p. 936.

Anesthesia, Method of and apparatus for general. W. V. Goodfellow. No. 1,267,761; May 28; v. 250; p. 887.

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Animal-arrester. S. Shirley. No. 1,266,068; May 14; v. 250; p. 360.

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Animals, Skinning. V. A. Wallin. No. 1,265,407; May 7; v. 250; p. 147.

Annealing-furnace. J. D. Adams. No. 1,266,750; May 21; v. 250; p. 579.

Anode-connector. J. H. Gillis. No. 1,267,653; May 28; v. 250; p. 857.

Anticreeper. P. W. Moore. No. 1,267,786; May 28; v. 250; p. 894.

Antirattling device. F. S. Ekliff. No. 1,265,311; May 7; v. 250; p. 120.

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Antiskid device for motor-vehicles. L. R. Swope. No. 1,266,345; May 14; v. 250; p. 436.

Antiskid for wheels. R. W. Haubner. No. 1,267,544; May 28; v. 250; p. 826.

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Antiskid sander for vehicles. D. Kupfer. No. 1,268,019; May 28; v. 250; p. 960.

Antiskidding device. E. R. Parker. No. 1,265,950; May 14; v. 250; p. 327.

Antislipping device for vehicle-wheels. W. M. Steele. No. 1,266,076; May 14; v. 250; p. 362.

Antisubmarine. W. A. Gilday. No. 1,267,539; May 28; v. 250; p. 824.

Apron. E. R. U. Civita. No. 1,265,427; May 7; v. 250; p. 153.

Arc device, Inclosed-. C. V. Ferguson. No. 1,267,858; May 28; v. 250; p. 916.

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Aspirating and vaporizing instrument, Combined. T. A. De Vilbiss. No. 1,266,228; May 14; v. 250; p. 404.

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Auto-signal. J. M. Pipp. No. 1,265,814; May 14; v. 250; p. 288.
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Automatic gate. E. Snickers. No. 1,267,134; May 21; v. 250; p. 687.
Automatic jack. F. C. Preifert and F. Schulz. No. 1,266,987; May 21; v. 250; p. 644.
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Automobile attachment. J. L. Sprouse. No. 1,267,136; May 21; v. 250; p. 687.
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Automobile-bumper. T. I. Duffy. No. 1,265,066; May 7; v. 250; p. 55.
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Automobile-clutch lock. F. T. Snow and P. E. Maurer. No. 1,267,926; May 28; v. 250; p. 935.
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Automobile-fender. A. H. Brakensiek. No. 1,265,878; May 14; v. 250; p. 306.
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Automobile-lock. F. O. Boswell. No. 1,265,732; May 14; v. 250; p. 265.
Automobile-lock. G. Koch. No. 1,267,557; May 28; v. 250; p. 829.
Automobile-lock. H. P. Mammen. No. 1,267,887; May 28; v. 250; p. 924.
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Automobile-signal. H. Richter. No. 1,265,958; May 14; v. 250; p. 330.
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Autovehicles, Steering-head hub for two-wheeled. W. G. Moore. No. 1,266,612; May 21; v. 250; p. 540.
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Sleeping-bag.
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Barrel-head seal. A. J. Hodge and H. B. Ruggles. No. 1,265,656; May 7; v. 250; p. 212.
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Dry-cell battery.
Batteries, Device for supplying water to storage. H. I. Detro. No. 1,266,425; May 14; v. 250; p. 456.
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Batteries, Separator for storage. I. C. and C. F. Williams. No. 1,265,284; May 7; v. 250; p. 113.
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Bearing. G. D. Bailey. No. 1,265,871; May 14; v. 250; p. 304.
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Bed, Folding. J. C. Beach. No. 1,267,045; May 21; v. 250; p. 661.
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Bedstead corner-lock. D. F. Dyke. No. 1,267,390; May 28; v. 250; p. 783.
Beet-topping machine. K. A. J. Andersen. No. 1,266,878; May 14; v. 250; p. 444.
Bell, Electric. C. J. Schwarze. No. 1,265,393; May 7; v. 250; p. 143.
Belt, Drive-. R. Kelley. No. 1,266,275; May 14; v. 250; p. 417.
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Carpenter's work-bench.
Benzene, Producing 1:2:4-methyl-hydroxy-isopropyl. B. H. McKee. No. 1,265,800; May 14; v. 250; p. 284.
Beverage and producing the same, Non-alcoholic. A. L. Straus. No. 1,265,275; May 7; v. 250; p. 111.
Beverage, Non-alcoholic. A. L. Straus. No. 1,265,274; May 7; v. 250; p. 111.
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Binder and making the same, Bituminous. G. A. Henderson. No. 1,264,932; May 7; v. 250; p. 16.
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Blast-furnace. E. E. Slick. No. 1,267,004; May 21; v. 250; p. 650.
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Blast-furnace operation. E. E. Slick. No. 1,267,005; May 21; v. 250; p. 650.
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Block-molding device. A. B. Foans. No. 1,266,787; May 21; v. 250; p. 589.
Block-signal system. M. R. Julian, M. H. Hovey, and T. E. Clark. No. 1,267,771; May 28; v. 250; p. 890.
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Bolt-anchor. H. W. Pleister. No. 1,267,903; May 28; v. 250; p. 928.
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Car-wheel. A. W. Judy. No. 1,266,813; May 21; v. 250; p. 596.
Car-windows, Dust and wind guard for. H. P. Coulter. No. 1,267,381; May 28; v. 250; p. 781.
Cars and the like, Indicator for street-. C. Flint. No. 1,265,071; May 7; v. 250; p. 56.
Cars, Apparatus for controlling temperature in. D. Clark. No. 1,264,900; May 7; v. 250; p. 8.
Cars, Bracing and door-stock for. M. C. Biest. No. 1,267,364; May 28; v. 250; p. 776.
Cars, Convertible body for motor-. E. E. Norquist. No. 1,266,521; May 14; v. 250; p. 483.
Carbon-brush holder. J. H. Knight. No. 1,268,018; May 28; v. 250; p. 959.
Carbon dioxid and solid sodium sulfite, Making. H. Howard. No. 1,266,595; May 21; v. 250; p. 534.
Carbon-removing-solution holder. E. F. Jones. No. 1,266,950; May 21; v. 250; p. 634.
Carbureter. R. Abell. No. 1,265,024; May 7; v. 250; p. 43.
Carbureter. D. M. De Witt. No. 1,265,626; May 7; v. 250; p. 204.

Carburetor. C. J. Gustafson and F. C. Mock. No. 1,266,194; May 7; v. 250; p. 89.
Carbureter. W. M. Hughes. No. 1,264,935; May 7; v. 250; p. 17.
Carbureter. C. L. Rayfield. No. 1,265,515; May 7; v. 250; p. 176.
Carbureter for explosive-motors. F. Baverey. No. 1,266,568; May 7; v. 250; p. 194.
Carbureters, Fuel distributing mechanism for. H. O. Brognier. No. 1,267,314; May 21; v. 250; p. 734.
Carbureters, Means to supply heated air to. V. P. Alexander. No. 1,266,900; May 21; v. 250; p. 620.
Carcasses, Device for cutting up. J. K. Brown. No. 1,265,603; May 7; v. 250; p. 199.
Card-cylinder-stripping device. H. McDermott. No. 1,267,781; May 28; v. 250; p. 892.
Cards, Machine for preparing record-. O. L. Dosch. No. 1,266,280; May 14; v. 250; p. 405.
Carpenter's work-bench. T. Swanson. No. 1,266,178; May 14; v. 250; p. 390.
Carpet-sweeper, Suction. J. M. Spangler. No. 1,266,688; May 21; v. 250; p. 548.
Carriage, Fore-plate. W. W. Leach. No. 1,265,458; May 7; v. 250; p. 161.
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Braiding-machine carrier. Litter-carrier.
Coal-carrier. Match-carrier.
Egg-carrier. Tire-carrier.
Carrying-case, Folding. D. Basch. No. 1,266,091; May 14; v. 250; p. 366.
Carton, Fruit-. L. A. Miller. No. 1,265,475; May 7; v. 250; p. 165.
Cartridge-shell, Tubular. T. E. Murray. No. 1,267,257; May 21; v. 250; p. 720.
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Bottle-case. Filing-case.
Brush-case. Ticket-case.
Carrying-case. Trick-case.
Cigarette-case.
Case or locket. T. F. Hathaway. No. 1,266,256; May 14; v. 250; p. 412.
Cash-register. T. Carroll. No. 1,265,301; May 7; v. 250; p. 118.
Caster, Furniture-. A. Wierzewska. No. 1,265,850; May 14; v. 250; p. 298.
Casting-machine. J. Kralund. No. 1,266,825; May 21; v. 250; p. 599.
Casting-pattern. M. E. Fernald. No. 1,266,242; May 14; v. 250; p. 409.
Casting-patterns, Machine for operating upon. C. C. Blake. No. 1,267,842; May 28; v. 250; p. 911.
Casting-patterns, Making. M. E. Fernald. No. 1,266,113; May 14; v. 250; p. 373.
Castings and forming the same, Mold for hollow. W. L. Merrifelder and A. F. Radka. No. 1,266,700; May 21; v. 250; p. 565.
Catnip mouse. E. M. Ludlam. No. 1,265,926; May 14; v. 250; p. 321.
Cement-sacks, Tie-wire for. N. Askeland. No. 1,266,902; May 21; v. 250; p. 620.
Center-finder. W. Elsasser. No. 1,264,910; May 7; v. 250; p. 10.
Cereal-box. F. W. Rice. No. 1,266,992; May 21; v. 250; p. 646.
Chain-fastening. S. Rosenberg. No. 1,267,119; May 21; v. 250; p. 682.
Chain, Flexible. J. Schade. No. 1,266,996; May 21; v. 250; p. 647.
Chain jack. J. W. Lippincott. No. 1,265,461; May 7; v. 250; p. 162.
Chain-lock. J. Q. Neal. No. 1,265,486; May 7; v. 250; p. 168.
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Lineman's chair.
Chair. M. Krause. No. 1,266,691; May 21; v. 250; p. 562.
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Chairs and other articles, Manufacture of covered frame-pieces for. H. B. Morris. No. 1,265,941; May 14; v. 250; p. 325.
Chairs, Pneumatic attachment for rocking-. V. Sramcik. No. 1,267,814; May 28; v. 250; p. 902.
Chairs, Wrap-holder for theater-. J. M. Love. No. 1,267,229; May 21; v. 250; p. 715.
Chalk-rimmer. L. Crawford. No. 1,265,059; May 7; v. 250; p. 53.
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Chuck, Drill-. N. G. Berglund. No. 1,265,707; May 7; v. 250; p. 226.
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Cigar or cigarette holder. H. R. McClintock. No. 1,266,291; May 14; v. 250; p. 421.
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Cigarette. M. Walkos. No. 1,265,557; May 7; v. 250; p. 186.
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Cigarette wrapping or forming device. E. M. Skeels. No. 1,266,725; May 21; v. 250; p. 571.
Cinematograph-films, Package for. J. W. Vickers. No. 1,267,017; May 21; v. 250; p. 653.
Cinematograph or motion-picture film. A. S. Howell. No. 1,267,411; May 28; v. 250; p. 789.
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Boltless guy-clamp. Plate-lifting clamp.
Cable-clamp. Sewing-machine needle-clamp.
Dental multiple-jaw cervix-clamp. Tooth-clamp.
Hose-clamp. Wire-clamp.
Insulator-clamp. Work-holding clamp.
Linotype-clamp.
Clamp. J. B. Anfuldish. No. 1,265,287; May 7; v. 250; p. 114.
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Clasp. W. Hamann. No. 1,267,765; May 28; v. 250; p. 888.

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Boiler-cleaner. Steel-tape cleaner.
Cistern-cleaner. Wind-shield cleaner.
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Clip. J. Sachs. No. 1,267,457; May 28; v. 250; p. 801.
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Clock attachment. T. Schisgall. No. 1,267,807; May 28; v. 250; p. 900.
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Closet-rod, Adjustable. D. D. Good. No. 1,266,677; May 21; v. 250; p. 559.
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Clothes-line and locking-pin therefor. W. R. Derr and S. Smith. No. 1,265,436; May 7; v. 250; p. 155.
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Cooking, Cruller-. F. L. Bradbury. No. 1,266,912; May 21; v. 250; p. 628.
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Coop, Folding poultry-. F. M. Ogle. No. 1,267,585; May 28; v. 250; p. 837.
Copy-holder. G. C. Beidler. No. 1,267,358; May 28; v. 250; p. 774.
Copy-holder. R. A. Punnett. No. 1,266,622; May 21; v. 250; p. 542.
Copy-holder, Adjustable. A. H. Sherwood. No. 1,265,896; May 7; v. 250; p. 144.
Cord-terminal. A. E. Francis. No. 1,266,114; May 14; v. 250; p. 374.
Cork-blocking machine. E. Alberti, M. Caritj, and G. La Femina. No. 1,267,811; May 21; v. 250; p. 733.
Cork-extractor. F. M. Gaynor. No. 1,265,320; May 7; v. 250; p. 122.
Corn header, Kafir-. E. L. Koon. No. 1,267,559; May 28; v. 250; p. 830.
Corn-sheller. L. E. Gaisser. No. 1,266,248; May 14; v. 250; p. 410.
Corner-lock for beds or the like. B. McIntosh. No. 1,265,798; May 14; v. 250; p. 283.
Cornice-mold. P. Zappile. No. 1,265,869; May 14; v. 250; p. 302.
Corset, Maternity-. E. Grace. No. 1,267,657; May 28; v. 250; p. 858.
Cot, Folding. E. J. Wheeler. No. 1,265,848; May 14; v. 250; p. 293.
Cot for vehicles Child's. J. J. Zofsak. No. 1,265,157; May 7; v. 250; p. 79.
Cotton-chopper. T. M. Moran. No. 1,268,042; May 28; v. 250; p. 966.
Cotton chopper and cultivator. J. L. Erwin. No. 1,266,005; May 14; v. 250; p. 342.
Cotton-gin. S. F. Krupp. No. 1,266,826; May 21; v. 250; p. 600.
Cotton-gin. M. W. Marsden. No. 1,265,470; May 7; v. 250; p. 164.
Cotton-gin. S. J. Wakefield. No. 1,266,643; May 21; v. 250; p. 549.
Cotton gin or linter saw-gumming machine. F. B. Williams. No. 1,265,567; May 7; v. 250; p. 189.
Cotton, Imparting a transparent appearance to. E. Heberlein. No. 1,265,082; May 7; v. 250; p. 59.
Counter-ink. O. O. Shrubrad. No. 1,267,704; May 28; v. 250; p. 871.
Count-body, Convertible. D. F. Oliver. No. 1,267,798; May 28; v. 250; p. 896.
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Car-coupling. Rod-coupling.
Curtain-coupling. Shaft-coupling.
Electric coupling. Thill-coupling.
Pipe-coupling.
Coupling. F. Ecaubert. No. 1,265,889; May 14; v. 250; p. 310.
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Crank-shaft-lubricating means. T. L. Fawick. No. 1,267,526; May 28; v. 250; p. 820.
Crate, Egg-shipping. E. W. Hitchcock. No. 1,266,805; May 21; v. 250; p. 594.
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Cream-separators, Device for holding strainers over. C. F. and C. Denise. No. 1,266,423; May 14; v. 250; p. 456.
Cresols, Oxidation of. U. Pomilio. No. 1,265,878; May 7; v. 250; p. 139.
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Crops, Treating freshly-cut. A. J. Mason. No. 1,264,955; May 7; v. 250; p. 28.
Cross-head. D. Allidread. No. 1,265,027; May 7; v. 250; p. 44.
Crutch. W. F. Bonds. No. 1,265,998; May 14; v. 250; p. 339.
Crutch. H. C. Sparrow. No. 1,266,074; May 14; v. 250; p. 361.
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Cup-container. L. W. Luellen. No. 1,264,950; May 7; v. 250; p. 21.
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Current-rectifying apparatus. R. D. Mershon. No. 1,265,354; May 7; v. 250; p. 132.
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Cushion. A. E. Vining. No. 1,266,359; May 14; v. 250; p. 440.
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Fuel-saver and smoke-consumer. L. D. West. No 1,267,295; May 21; v. 250; p. 729.
Fuel-saver and smoke-consumer. L. D. West. No. 1,267,296; May 21; v. 250; p. 729.
Fuel-saving and smoke-consuming device. L. D. West. No. 1,267,297; May 21; v. 250; p. 730.
Fumigator. P. S. Bauer. No. 1,265,166; May 7; v. 250; p. 81.
Funnel. J. Hutzelman and I. Beresford. No. 1,266,019; May 14; v. 250; p. 346.
Funnel. A. T. Lunde. No. 1,267,780; May 28; v. 250; p. 892.
Funnel. H. G. Rasmussen. No. 1,268,054; May 28; v. 250; p. 969.
Funnel. F. J. Steutermann. No. 1,267,139; May 21; v. 250; p. 689.
Funnel, Quick-emptying. T. T. Ramey. No. 1,265,381; May 7; v. 250; p. 140.
Furnace: *See*—
Annealing-furnace. Glass-furnace.
Blast-furnace. Hot-air furnace.
Distilling-furnace. Liquid-fuel furnace.
Electric furnace. Smoke-consuming furnace.
Electrical furnace.
Furnace. W. E. Mildner and L. Webster. No. 1,268,087; May 28; v. 250; p. 964.
Furnace. A. W. Moyer. No. 1,264,961; May 7; v. 250; p. 24.
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Furnace-charging apparatus. S. H. Bunnell and C. G. Peterson. No. 1,265,736; May 14; v. 250; p. 266.
Furnace-door attachment. L. D. West. No. 1,267,293; May 21; v. 250; p. 730.
Furnace-door stop. L. D. West. No. 1,267,294; May 21; v. 250; p. 730.
Furnace-grate. A. W. Bennis. No. 1,267,173; May 21; v. 250; p. 696.
Furnace-lining and making, Refractory. S. B. Newberry. No. 1,267,686; May 28; v. 250; p. 865.
Furnace-poker and clinker-extractor, Combined. H. S. Dailey. No. 1,265,503; May 7; v. 250; p. 118.

Furnace-regulator. C. H. Stalker. No. 1,267,601; May 28; v. 250; p. 842.
Furnace roof construction. F. Orth. No. 1,265,493; May 7; v. 250; p. 170.
Furnaces, Draft-collecting installation for boiler-. R. Agar. No. 1,267,037; May 21; v. 250; p. 659.
Furnaces, Non-collapsible flat arch for. O. Wundrack. No. 1,266,745; May 21; v. 250; p. 578.
Fuse. V. G. Jensen. No. 1,266,479; May 14; v. 250; p. 471.
Fuse-cartridge. A. H. Johnson. No. 1,266,899; May 21; v. 250; p. 585.
Fuse device. E. O. Schweitzer and A. Herz. No. 1,265,121; May 7; v. 250; p. 70.
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Fuse-holder. O. H. and A. F. Pieper. No. 1,265,245; May 7; v. 250; p. 103.
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Micrometer depth-gage. Surface-gage.
Oil-gage. Water-gage.
Skirt-gage. Wheel-aligning gage.
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Gage. L. A. Mapel. No. 1,265,934; May 14; v 250; p. 323.
Gage. W. I. Oeschger. No. 1,267,584; May 28; v. 250; p. 837.
Gage-box distributer. W. J. Britton. No. 1,265,168; May 7; v. 250; p. 82.
Gaiter. A. Wolff. No. 1,265,983; May 14; v. 250; p. 336.
Gambrel. F. C. Baars. No. 1,265,722; May 14; v. 250; p. 261.
Game. M. B. De Nasaria. No. 1,267,316; May 21; v. 250; p. 735.
Game. O. C. Ehrenhardt and A. Berent. No. 1,265,761; May 14; v. 250; p. 273.
Game. J. H. Sharp. No. 1,264,984; May 7; v. 250; p. 31.
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Garment. O. Kenzy. No. 1,265,089; May 7; v. 250; p. 61.
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Grinding-machine. L. R. Heim. No. 1,264,929; May 7; v. 250; p. 15.
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Automobile exhaust-heater. Portable heater.
Automobile priming-heater. Water-heater.
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Headlight. Sidewalk-light.
Light-fixture. C. A. B. Halvorson, Jr. No. 1,267,865; May 28; v. 250; p. 918.
Lighting-fixture. D. Crownfield. No. 1,265,885; May 14; v. 250; p. 308.
Lighting socket and holder. H. H. Ashinger. No. 1,266,651; May 21; v. 250; p. 551.
Lightning-protector. N. Tesla. No. 1,266,175; May 14; v. 250; p. 391.
Limb, Artificial. H. A. Doty. No. 1,265,806; May 7; v. 250; p. 119.
Limb, Artificial. M. Sakowski. No. 1,267,121; May 21; v. 250; p. 682.
Limb, Artificial. R. Scheibel. No. 1,265,965; May 14; v. 250; p. 332.
Lineman's chair. G. Replogle. No. 1,264,975; May 7; v. 250; p. 29.
Linen, woolen, cotton, and other goods, Cleansing of. F. L. Bartelt. No. 1,267,737; May 28; v. 250; p. 880.
Link, Fusible. A. C. Rowley. No. 1,267,906; May 28; v. 250; p. 929.
Link mat. W. R. Woodward. (Reissue.) No. 14,476; May 21; v. 250; p. 751.
Linotype-clamp. L. H. Dietzel. No. 1,266,776; May 21; v. 250; p. 586.
Linotype-machine. G. E. Mariatt. No. 1,266,969; May 21; v. 250; p. 639.
Liquid-container indicator. W. W. Balcom. No. 1,265,724; May 14; v. 250; p. 262.
Liquid cooling and dispensing apparatus. C., Jr., and H. H. Doering. No. 1,266,667; May 21; v. 250; p. 556.
Liquid-containers, Safety device for combustible. W. L. Davis. No. 1,266,665; May 21; v. 250; p. 555.
Liquid-feeding apparatus. H. Howard. No. 1,265,823; May 7; v. 250; p. 126.
Liquid from steatite, Removing. B. Schwerin. No. 1,266,330; May 14; v. 250; p. 432.
Liquid-fuel burner. E. C. Kahn. No. 1,265,208; May 7; v. 250; p. 94.
Liquid-fuel burner. J. W. Walvatne. No. 1,267,942; May 28; v. 250; p. 939.
Liquid-fuel-burner head. E. C. Kahn. No. 1,265,209; May 7; v. 250; p. 94.
Liquid-fuel combustion. J. Good. No. 1,267,760; May 28; v. 250; p. 886.
Liquid-fuel-feeding apparatus. R. C. Mitchell. No. 1,264,958; May 7; v. 250; p. 24.
Liquid-fuel furnace. H. E. Yarrow. No. 1,266,372; May 14; v. 250; p. 443.
Liquid raising or forcing apparatus. H. A. Humphrey. No. 1,265,784; May 14; v. 250; p. 279.
Liquid-separator, Centrifugal. C. B. Dalsell. No. 1,265,061; May 7; v. 250; p. 53.
Liquid-tester, Automatic continuous. W. C. Raddant. No. 1,266,315; May 14; v. 250; p. 428.
Liquids from various materials, Machine for extracting. C. D. Jenkins. No. 1,265,200; May 7; v. 250; p. 93.
Litter-carrier. J. C. Fitzgerald. No. 1,265,814; May 7; v. 250; p. 121.
Litter-carrier. R. P. Morris. No. 1,266,300; May 14; v. 250; p. 423.
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Loading-machine. F. Billings. No. 1,265,729; May 14; v. 250; p. 264.
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Loading or mining and loading machine. F. Billings. No. 1,265,731; May 14; v. 250; p. 264.
Lock: *See*—
Automobile-clutch lock. Lever-lock.
Automobile-lock. Nut-lock.
Bedstead corner-lock. Pocket-lock.
Burglar-alarm door-lock. Sash-lock.
Car-door lock. Steering-wheel lock.
Chain-lock. Suitcase-lock.
Corner-lock. Switch-lock.
Door-lock. Trunk-lock.
Drawer-lock. Valve-lock.
Hood-lock.
Lock. C. E. Brooks. No. 1,267,177; May 21; v. 250; p. 699.
Lock. W. N. Butler. No. 1,265,424; May 7; v. 250; p. 152.
Lock. I. Gisser. No. 1,267,860; May 28; v. 250; p. 917.
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Lock-pin grip. T. W. Todd. No. 1,265,140; May 7; v. 250; p. 75.
Lock-switch. W. R. Cox. No. 1,267,516; May 28; v. 250; p. 818.
Lock-washer. A. J. Rich, Jr. No. 1,267,695; May 28; v. 250; p. 868.
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Locomotive arch-brick. W. Schuttler. No. 1,267,912; May 28; v. 250; p. 930.
Locomotive ash-pan. H. M. Pflager. No. 1,267,334; May 21; v. 250; p. 740.
Locomotive driving-box. W. E. Woodard. No. 1,265,856; May 14; v. 250; p. 300.
Locomotive, Electric. N. W. Storer. No. 1,267,930; May 28; v. 250; p. 936.
Locomotive friction-plate. G. M. Eaton. No. 1,266,565; May 21; v. 250; p. 526.
Locomotive-tender coal-pit. E. G. Bartlett. No. 1,267,170; May 21; v. 250; p. 698.
Logging grapple or tongs. A. J. Zipp. No. 1,266,650; May 21; v. 250; p. 551.
Loom, Automatic filling-replenishing. F. T. Artz. No. 1,265,584; May 7; v. 250; p. 193.
Loom, Filling-replenishing. W. H. Baker. No. 1,267,168; May 21; v. 250; p. 697.
Loom for weaving double-pile fabrics. G. F. Hutchins and H. Le Doux. No. 1,265,084; May 7; v. 250; p. 60.
Loom picker-check. J. S. Adams and M. Day. No. 1,265,985; May 14; v. 250; p. 337.
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Looms, Weft clamping and parting mechanism for. E. F. Beaverstock. No. 1,265,591; May 7; v. 250; p. 195.
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Lubricating attachment. J. V. Washburne. No. 1,267,610; May 28; v. 250; p. 845.
Lubricating device. N. T. Cline and R. M. Long. No. 1,265,748; May 14; v. 250; p. 270.
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Lubricating device. P. C. Mitchell. No. 1,265,806; May 14; v. 250; p. 286.
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Graphite-feeding lubricator.
Lubricator. F. D. Winkley. No. 1,267,302; May 21; v. 250; p. 731.
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Mail-bag catching and delivering device. L. W. Price. No. 1,265,111; May 7; v. 250; p. 67.
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Oil-burner. D. I. Hoch. No. 1,268,009; May 28; v. 250; p. 957.
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Plug-connector, Switch-containing. G. H. Hart. No. 1,266,801; May 21; v. 250; p. 593.
Plug, Expansion-. W. S. Barlow. No. 1,266,658; May 21; v. 250; p. 552.
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Pneumatic power-boat. G. W. Christoph. No. 1,265,997; May 14; v. 250; p. 340.
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Polishing composition. W. C. Lawrence. No. 1,267,226; May 21; v. 250; p. 715.
Polishing-machines, Dust-collector for. W. H. and G. W. Leiman. No. 1,267,091; May 21; v. 250; p. 672.
Polishing or grinding machine, Article. F. H. Mooney. No. 1,267,574; May 28; v. 250; p. 834.
Pompon, Cut-feather. M. Herman. No. 1,267,548; May 28; v. 250; p. 827.
Pool-ball rack. G. F. Goss. No. 1,266,012; May 14; v. 250; p. 344.

Portable heater. A. Rosin. No. 1,266,162; May 14; v. 250; p. 387.
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Portfolios and the like, Locking-catch for. R. O. Flocke. No. 1,267,650; May 28; v. 250; p. 856.
Portière, shade, and curtain holder. J. J. Stiffey. No. 1,266,079; May 14; v. 250; p. 363.
Position indicator or recorder. C. I. Hall. No. 1,267,214; May 21; v. 250; p. 709.
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Fence-post. Street-post.
Post-hole digger. A. L. Cihak. No. 1,266,663; May 21; v. 250; p. 555.
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Pot-making machine. E. A. Hamilton. No. 1,267,215; May 21; v. 250; p. 709.
Potato-digger. F. F. Alexander and L. W. Bruun. No. 1,266,376; May 14; v. 250; p. 443.
Potato-seed-cutting machine. G. E. Garbow. No. 1,267,897; May 28; v. 250; p. 785.
Potato-separator. A. Prinz. No. 1,267,692; May 28; v. 250; p. 867.
Potentiometer, Direct-reading. W. T. Bovie. No. 1,265,421; May 7; v. 250; p. 151.
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Power plant. F. C. Holman. No. 1,266,018; May 14; v. 250; p. 345.
Power-press. R. A. Horne. No. 1,266,684; May 21; v. 250; p. 560.
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Power-transmitter. C. Mitchell. No. 1,265,805; May 14; v. 250; p. 285.
Power-transmitting apparatus, Electromagnetic. A. H. Neuland. No. 1,266,303; May 14; v. 250; p. 424.
Precipitated chalk, Making light. N. Statham. No. 1,266,339; May 14; v. 250; p. 434.
Preserving vessels, Lining for. H. E. Yocum. No. 1,265,858; May 14; v. 250; p. 301.
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Embossing-press. Power-press.
Press. J. Young. No. 1,267,492; May 28; v. 250; p. 811.
Press-button. M. F. Alexander. No. 1,267,494; May 28; v. 250; p. 812.
Pressure-burner. W. F. Seilkop. No. 1,264,983; May 7; v. 250; p. 30.
Pressure-recorder. C. D. Young. No. 1,265,156; May 7; v. 250; p. 79.
Pressure-regulator. G. S. Melcher. No. 1,265,937; May 14; v. 250; p. 323.
Pressure regulator, Brake-cylinder-. W. V. Turner. No. 1,265,004; May 7; v. 250; p. 37.
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Printing-surfaces, Producing. O. Foerster. No. 1,265,641; May 7; v. 250; p. 208.
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Projector. J. D. McDonald. No. 1,267,881; May 28; v. 250; p. 922.
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Sewing-machine presser-foot. J. Berger, Jr. No. 1,267,621; May 28; v. 250; p. 848.
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Soap-powder dispenser. J. W. Beckmann. No. 1,266,195; May 14; v. 250; p. 397.
Soldier's chair. J. Chmielewski. No. 1,265,882; May 14; v. 250; p. 308.
Sole-leveling machine. C. De Minico. No. 1,266,000; May 14; v. 250; p. 341.
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Spring and manufacturing the same. E. W. Timmis. No. 1,266,349; May 14; v. 250; p. 437.
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Umbrella-frame. F. J. Monahan. No. 1,266,515; May 14; v. 250; p. 481.
Undergarment. G. A. Rutledge. No. 1,266,995; May 21; v. 250; p. 647.

Universal joint. G. V Curtis. No. 1,267,852; May 28; v. 250; p. 914.
Universal joint. B. O. Rhodes. No. 1,264,976; May 7; v. 250; p. 29.
Universal joint. B. H. Urschel. No. 1,265,834; May 14; v. 250; p. 295.
Unloading apparatus. E. W. Coats. No. 1,267,187; May 21; v. 250; p. 702.
Upholstery-fastening means. P. E. Schell and H. W. Schluter. No. 1,266,862; May 21; v. 250; p. 609.
V-type engine. B. D. Stevens. No. 1,267,929; May 28; v. 250; p. 936.
Vacuum-breaker. H. E. Morton. No. 1,266,976; May 21; v. 250; p. 641.
Vacuum-cleaner dust-bag and holder therefor. A. J. Stecker. No. 1,264,989; May 7; v. 250; p. 82.
Vacuum-cleaner nozzles, Agitating device for. J. B. Kirby. No. 1,265,790; May 14; v. 250; p. 281.
Vacuum cleaning-machine. J. B. Kirby. No. 1,265,789; May 14; v. 250; p. 281.
Vacuum cleaning-machine. J. B. Kirby. No. 1,265,791; May 14; v. 250; p. 282.
Vacuum-cup. R. P. Rheinlander. No. 1,267,270; May 21; v. 250; p. 723.
Vacuum regulation. H. C. Snook and E. W. Kelly. No. 1,267,706; May 28; v. 250; p. 871.
Vacuum-sweeper. J. J. Merithew. No. 1,267,329; May 21; v. 250; p. 738.
Valve. C. A. Borchert and M. G. O'Neil. No. 1,267,365; May 28; v. 250; p. 776.
Valve. C. Moe. No. 1,265,807; May 14; v. 250; p. 286.
Valve. J. M. Palmer. No. 1,265,495; May 7; v. 250; p. 171.
Valve. P. Winsor. No. 1,265,153; May 7; v. 250; p. 78.
Valve and valve-spring remover. C. L. Gannaway. No. 1,266,788; May 21; v. 250; p. 590.
Valve, Auxiliary air-inlet. J. H. Schmidt. No. 1,267,465; May 28; v. 250; p. 803.
Valve, Balloon-. C. F. Smyth. No. 1,266,338; May 14; v. 250; p. 434.
Valve, Barometric. E. E. Eby. No. 1,266,566; May 21; v. 250; p. 526.
Valve-cap and tool, Combination-. W. P. McComb. No. 1,265,465; May 7; v. 250; p. 163.
Valve construction. E. and D. Bush. No. 1,265,170; May 7; v. 250; p. 82.
Valve, Cut-out. G. H. Taber. No. 1,265,971; May 14; v. 250; p. 333.
Valve, Flushing-. B. Thoens. No. 1,265,832; May 14; v. 250; p. 293.
Valve for gas-fixtures, &c. C. A. Smith. No. 1,266,170; May 14; v. 250; p. 389.
Valve for gas-furnaces, Reversing-. S. Parish. No. 1,267,898; May 28; v. 250; p. 926.
Valve for internal-combustion engines, Auxiliary. G. F. Boyer. No. 1,267,369; May 28; v. 250; p. 778.
Valve for internal-combustion engines, Auxiliary air-admission. C. Parish. No. 1,265,865; May 7; v. 250; p. 136.
Valve for internal-combustion engines, Vapor-controlling. E. A. De Mers. No. 1,266,422; May 14; v. 250; p. 456.
Valve for steam-heating, Vapor-. E. E. Gold. No. 1,265,904; May 14; v. 250; p. 314.
Valve for water-heaters, Regulating-. A. Beler. No. 1,265,593; May 7; v. 250; p. 196.
Valve-gear Engine. G. H. Schilling and I. O. Neff. No. 1,266,325; May 14; v. 250; p. 431.
Valve-lock. G. Halinka. No. 1,266,797; May 21; v. 250; p. 592.
Valve mechanism for flush-tanks, Refilling. E. P. Gaylord. No. 1,266,675; May 21; v. 250; p. 558.
Valve mechanism for washing machinery. A. T. Hagen. No. 1,267,403; May 28; v. 250; p. 786.
Valve mechanism, Variable-cut-off. F. L. Prescott. No. 1,266,046; May 14; v. 250; p. 354.
Valve-motion for internal-combustion engines. J. O'Connor. No. 1,267,893; May 28; v. 250; p. 925.
Valve-operating mechanism. H. A. Huebatter. No. 1,267,337; May 21; v. 250; p. 741.
Valve-operating mechanism. O. M. Nacker. No. 1,265,103; May 7; v. 250; p. 66.
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Valve, Safety-. C. J. Manning. No. 1,265,693; May 7; v. 250; p. 222.
Valve-setting gear for Diesel engines. J. W. Anderson. No. 1,265,029; May 7; v. 250; p. 44.
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Valve, Thermal gas-. W. C. Norton. No. 1,267,108; May 21; v. 250; p. 678.
Valve, Triple. H. F. Bickel. No. 1,267,362; May 28; v. 250; p. 775.
Valve, Vacuum-. W. Shurtleff. No. 1,267,809; May 28; v. 250; p. 900.
Valve, Water-sealed. A. G. McKee. No. 1,266,509; May 14; v. 250; p. 478.
Valves, Expansion-control device for elastic. W. Y. Stewart. No. 1,266,340; May 14; v. 250; p. 434.
Valves, Safety attachment for. C. J. Haselwander. No. 1,266,937; May 21; v. 250; p. 630.
Vaporiser, Wick-. P. Lucas. No. 1,268,027; May 28; v. 250; p. 962.
Variable-speed mechanism. J. Arnott. No. 1,267,619; May 28; v. 250; p. 848.
Varnish-gums, Melting. O. C. Griem. No. 1,265,326; May 7; v. 250; p. 124.
Vat for accumulators, batteries, or the like. G. Bouton. No. 1,266,911; May 21; v. 250; p. 628.
Vault, Burial-. G. G. Babich. No. 1,267,495; May 28; v. 250; p. 812.
Vault, Burial-. G. H. Holcombe. No. 1,267,225; May 21; v. 250; p. 712.
Vaults, Self-locking cover for grave-. R. G. Gleaves. No. 1,267,759; May 28; v. 250; p. 886.
Vehicle attachment. E. A. Sackerman. No. 1,266,055; May 14; v. 250; p. 356.
Vehicle-check. C. A. MacLellan. No. 1,265,929; May 14; v. 250; p. 321.
Vehicle control, Automatic moving-. P. J. Simmen. No. 1,266,871; May 21; v. 250; p. 611.
Vehicle curtain, Motor-. K. F. Ranger and L. M. Spencer. No. 1,266,990; May 21; v. 250; p. 645.
Vehicle-direction-indicating apparatus. R. H. Parker. No. 1,266,526; May 14; v. 250; p. 485.
Vehicle driving and steering device, Motor-. T. Spacie. (Reissue.) No. 14,472; May 14; v. 250; p. 491.
Vehicle driving-gear, Motor-. O. A. Lundgren. No. 1,265,690. May 7; v. 250; p. 221.
Vehicle-driving mechanism. S. D. Shimer. No. 1,265,265; May 7; v. 250; p. 108.
Vehicle-holdback. L. Hulbregtse. No. 1,265,783; May 14; v. 250; p. 279.
Vehicle-illuminating device. C. F. Gromann. No. 1,266,678; May 21; v. 250; p. 559.
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Vehicle, Motor-. J. G. Dudley. No. 1,266,431; May 14; v. 250; p. 458.
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Vehicle, Motor-. A. Macauley. No. 1,267,783; May 28; v. 250; p. 892.
Vehicle, Motor-. E. G. Schleicher. No. 1,266,999; May 21; v. 250; p. 648.
Vehicle, Passenger-. G. W. McCaualin. No. 1,267,242; May 21; v. 250; p. 716.
Vehicle, Passenger-. A. F. Paul and A. J. Tanner. No. 1,265,367; May 7; v. 250; p. 136.
Vehicle-rear-end signal. G. Rusias. No. 1,267,277; May 21; v. 250; p. 724.
Vehicle regulator, Draft-. G. W. Bulley. No. 1,267,742; May 28; v. 250; p. 881.
Vehicle running-gear. H. Scofield and E. N. Dawson. No. 1,267,467; May 28; v. 250; p. 804.
Vehicle, Self-propelled. J. Landon and F. W. Martyn. No. 1,266,495; May 14; v. 250; p. 475.
Vehicle-shield. H. G. Godley. No. 1,266,934; May 21; v. 250; p. 630.
Vehicle-signal. A. L. Eliel. No. 1,266,004; May 14; v. 250; p. 342.
Vehicle-signal. H. C. Fairchild. No. 1,267,751; May 28; v. 250; p. 888.
Vehicle-signal. H. Fryman. No. 1,265,317; May 7; v. 250; p. 122.
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Vehicle speed-arrester. S. F. Tuteur. No. 1,265,404; May 7; v. 250; p. 146.
Vehicle-spring. E. P. Currey. No. 1,265,622; May 7; v. 250; p. 204.
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Vehicle spring and frame supporter, Motor-. J. Dotti. No. 1,266,281; May 14; v. 250; p. 405.
Vehicle-spring snubber. S. F. Hall. No. 1,267,070; May 21; v. 250; p. 668.
Vehicle-spring suspension. J. Treanor. No. 1,267,145; May 21; v. 250; p. 690.
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Vehicle-springs, Adjustable shackle-supporting clip for. F. N. Sprague. No. 1,265,825; May 14; v. 250; p. 291.
Vehicle-steering-gear attachment. W. Tracy. No. 1,267,289; May 21; v. 250; p. 727.
Vehicle-supporting jack. M. Buck. No. 1,267,741; May 28; v. 250; p. 880.
Vehicle suspension and shock-absorber. F. O. Boswell. No. 1,266,656; May 21; v. 250; p. 553.
Vehicle-tops contracted at rear, Bow-top holder for. C. L. Bair. No. 1,267,736; May 28; v. 250; p. 879.
Vehicle-tops, Dust-hood for. V. W. Jensen. No. 1,266,598; May 21; v. 250; p. 535.
Vehicle-trailer-pole hook. E. Tuttle and G. W. Keith. No. 1,265,143; May 7; v. 250; p. 76.
Vehicle trussed frame. R. H. Hassler. No. 1,266,938; May 21; v. 250; p. 631.
Vehicle-washer. E. Muller. No. 1,264,962; May 7; v. 250; p. 25.

Vehicle-wheel. R. Amodio. No. 1,266,089; May 14; v. 250; p. 366.
Vehicle-wheel. J. C. Beale and J. Hayes. No. 1,266,654; May 21; v. 250; p. 552.
Vehicle-wheel. H. B. Coats. (Reissue.) No. 14,467; May 7; v. 250; p. 231.
Vehicle-wheel. H. B. Coats. No. 1,266,408; May 14; v. 250; p. 452.
Vehicle-wheel. J. F. Kemp. No. 1,267,082; May 21; v. 250; p. 671.
Vehicle-wheel. C. B. Van Horn. No. 1,266,357; May 14; v. 250; p. 439.
Vehicle-wheel and the like. D. Krussand and A. Steen. No. 1,267,877; May 28; v. 250; p. 921.
Vehicle, Wheeled. R. S. Fend. No. 1,267,995; May 28; v. 250; p. 953.
Vehicles, Compensating driving mechanism for motor-. J. D. Allen. No. 1,265,160; May 7; v. 250; p. 80.
Vehicles, Safety device for the starting-cranks of motor-. H. O. Barton. No. 1,267,497; May 28; v. 250; p. 812.
Vehicles, Traction attachment for motor-. S. O. Edmonds. No. 1,266,781; May 21; v. 250; p. 588.
Velocipede. M. P. Herres. No. 1,266,464; May 14; v. 250; p. 467.
Vending-machine. C. A. Blank. No. 1,267,965; May 28; v. 250; p. 944.
Vending-machine. E. H. Kelley. No. 1,266,021; May 14; v. 250; p. 346.
Vending-machine. R. Moore. No. 1,266,037; May 14; v. 250; p. 351.
Vending-machine. F. G. Schenkel. No. 1,266,998; May 21; v. 250; p. 648.
Vending-machine. L. C. Tarasch. No. 1,265,831; May 14; v. 250; p. 293.
Vending-machine, Automatic. I. T. Wolfe. No. 1,267,780; May 28; v. 250; p. 877.
Vending-machine-feeding mechanism. E. H. Kelley. No. 1,265,788; May 14; v. 250; p. 281.
Vending-machines, Coin-control mechanism for. G. G. Heghinian. No. 1,267,662; May 28; v. 250; p. 859.
Ventilating apparatus. J. A. Kuyser. No. 1,268,020; May 28; v. 250; p. 960.
Ventilating hotels and office-buildings, Device for. W. R. Self. No. 1,267,808; May 28; v. 250; p. 900.
Ventilator. R. T. Giles and P. W. Kinsella. No. 1,265,191; May 7; v. 250; p. 89.
Ventilator. A. W. Phelps. No. 1,265,509; May 7; v. 250; p. 174.
Ventilator. A. Wade and H. L. Vanzile. No. 1,265,978; May 14; v. 250; p. 335.
Ventilator-casing, Sectional adjustable. T. Weinshank and S. E. Fenstermaker. No. 1,265,013; May 7; v. 250; p. 39.
Vessel, Detachable duplex. F. R. Wells. No. 1,266,362; May 14; v. 250; p. 440.
Vessel, Marine. E. C. Baeck. No. 1,267,956; May 28; v. 250; p. 943.
Vibrator, Fluid-actuated. C. P. Wilson. No. 1,267,833; May 28; v. 250; p. 909.
Vine-cutter. F. J. and C. T. Bossert. No. 1,265,296; May 7; v. 250; p. 116.
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Voltmeter, Contact-making. F. H. Winter. No. 1,267,156; May 21; v. 250; p. 693.
Voting-machine, Electrically-controlled. B. L. Bobroff. No. 1,267,504; May 28; v. 250; p. 814.
Vulcanizer. N. M. Anderson. No. 1,266,901; May 21; v. 250; p. 620.
Vulcanizer. J. H. Reeder. No. 1,264,974; May 7; v. 250; p. 28.
Vulcanizing-pan, Ventilated. A. B. Low. No. 1,265,462; May 7; v. 250; p. 162.
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Wagon-bed, Convertible. G. W. and C. E. Goss. No. 1,266,582; May 21; v. 250; p. 530.
Wagon, Hay-. L. Levens. No. 1,265,096; May 7; v. 250; p. 63.
Wagon-rack bracket. F. E. Anderson. No. 1,267,162; May 21; v. 250; p. 695.
Wagon-stake. A. F. Kuhnen. No. 1,266,692; May 21; v. 250; p. 563.
Walking-machine. C. F. Wilson. No. 1,267,033; May 21; v. 250; p. 655.
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Wall-receptacle. S. D. Baker. No. 1,267,853; May 28; v. 250; p. 778.
Wardrobe and blackboard, Class-room sanitary. F. B. Miller. No. 1,268,038; May 28; v. 250; p. 965.
Warfare, Engine of. A. J. Paré. No. 1,265,496; May 7; v. 250; p. 171.
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Warp-leasing machine. C. D. Lanning. No. 1,267,090; May 21; v. 250; p. 673.
Warp stop-motion. J. Regan. No. 1,265,112; May 7; v. 250; p. 68.
Warp-thread-holding device. C. D. Lanning. No. 1,267,089; May 21; v. 250; p. 673.
Warper leasing-indicating means. F. Wood. No. 1,266,369; May 14; v. 250; p. 442.
Warping-beam. E. L. Besse. No. 1,265,292; May 7; v. 250; p. 116.
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Lock-washer.
Print-washer.
Vehicle-washer.
Washer. W. F. Schacht. No. 1,266,824; May 14; v. 250; p. 430.
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Washing-machine dolly. J. D. A. Johnson. No. 1,264,940; May 7; v. 250; p. 18.
Washing-machine gearing. D. H. Benjamin. No. 1,265,289; May 7; v. 250; p. 115.
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Water-motor. G. C. Riddle. No. 1,265,114; May 7; v. 250; p. 68.
Water-motor, Current. E. A. Speegle. No. 1,267,928; May 28; v. 250; p. 935.
Water-pipes, Antifreezing device for. J. L. Groo. No. 1,265,772; May 14; v. 250; p. 277.
Water-purifier, Electric. E. M. Barnes. No. 1,267,044; May 21; v. 250; p. 661.
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Water, Treating mine-. J. R. Campbell and A. F. Hoffman. No. 1,267,971; May 28; v. 250; p. 948.
Water-tube boiler. T. L. Fawick. No. 1,267,528; May 28; v. 250; p. 821.
Water-tube boiler, Vertical. J. E. Bell. No. 1,266,906; May 21; v. 250; p. 621.
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Waterproof composition for coating paper, Making. B. Kniffer. No. 1,266,956; May 21; v. 250; p. 635.
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Weaving garter-pads. W. Achtmeyer. No. 1,267,954; May 28; v. 250; p. 942.
Wedge, Adjustable. J. B. Swan and Z. P. Cornell. No. 1,268,073; May 28; v. 250; p. 974.
Weed-cutter. J. L. Estell. No. 1,267,645; May 28; v. 250; p. 855.
Welding apparatus, Electric. E. J. Von Henke. No. 1,267,480; May 28; v. 250; p. 807.

Welding apparatus for pipe-couplings, Electrical. T. E. Murray. No. 1,267,258; May 21; v. 250; p. 720.
Welding, Electric-arc. O. A. Kenyon. No. 1,265,342; May 7; v. 250; p. 128.
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Welding-machine, Electric. E. J. Von Henke. No. 1,266,084; May 14; v. 250; p. 364.
Welding-machine for making metal rings, Electric. T. E. Murray and H. R. Woodrow. No. 1,267,254; May 21; v. 250; p. 719.
Welding, Method of and apparatus for electric. T. E. Murray. No. 1,267,256; May 21; v. 250; p. 720.
Welding, Method of and apparatus for electric. T. E. and J. B. Murray. No. 1,267,259; May 21; v. 250; p. 720.
Welding or other metal-working apparatus, Automatic switching or circuit-breaking device for electric. E. J. Von Henke. No. 1,267,481; May 28; v. 250; p. 808.
Welding, tungsten ingots. C. A. Pfanstiehl. No. 1,267,801; May 28; v. 250; p. 898.
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Well casing and tool fishing device. E. A. Kliewer. No. 1,266,821; May 21; v. 250; p. 598.
Well-depth register. D. G. Roy. No. 1,266,631; May 21; v. 250; p. 546.
Well-drilling machines, Spudding attachment for. C. M. Heeter. No. 1,265,553; May 7; v. 250; p. 211.
Well-pipes, Drain-valve for. W. N. Lindsey. No. 1,267,093; May 21; v. 250; p. 674.
Well strainer, Pump-. P. De Chime. No. 1,267,315; May 21; v. 250; p. 734.
Wells, Measure for oil-. R. B. Richardson. No. 1,267,271; May 21; v. 250; p. 723.
Wells, Wire-line pumping outfit for oil-. J. R. Kirley and H. B. Walker. No. 1,266,817; May 21; v. 250; p. 597.
Welt-slitting machine. C. C. Blake. No. 1,267,843; May 28; v. 250; p. 911.
Wheat and other grains, Treating. A. C. Von Hagen. No. 1,265,700; May 7; v. 250; p. 224.
Wheel: *See*—
Automobile-wheel.
Burnishing-wheel.
Car-wheel.
Cushion-wheel.
Demountable wheel.
Detachable wheel.
Fly-wheel.
Metallic wheel.
Resilient wheel.
Traction-wheel.
Trolley-wheel.
Turbine-wheel.
Vehicle-wheel.
Wheel. R. J. Burrows and E. B. Ross. No. 1,265,740; May 14; v. 250; p. 267.
Wheel. R. J. Burrows and E. B. Ross. No. 1,265,741; May 14; v. 250; p. 268.
Wheel. A. L. Knauss. No. 1,266,025; May 14; v. 250; p. 347.
Wheel. A. M. Leoni. No. 1,266,603; May 21; v. 250; p. 536.
Wheel. L. H. Perlman. No. 1,265,951; May 14; v. 250; p. 328.
Wheel. J. H. Spangler. No. 1,264,988; May 7; v. 250; p. 32.
Wheel-aligning gage. C. L. Bowden. No. 1,265,599; May 7; v. 250; p. 197.
Wheel device, Auto-. W. S. Riley. No. 1,267,455; May 28; v. 250; p. 801.
Wheel-dressing device. C. G. Olson. No. 1,266,707; May 21; v. 250; p. 567.
Wheel mud-guard, Vehicle-. C. Guise and T. J. Southall. No. 1,266,120; May 14; v. 250; p. 375.
Wheel rim, Automobile-. E. H. Davis. No. 1,265,062; May 7; v. 250; p. 53.
Wheels, Making. W. J. P. Moore. No. 1,266,844; May 21; v. 250; p. 604.
Wheels, Support for light cutting-. C. A. Pfanstiehl. No. 1,266,810; May 14; v. 250; p. 426.
Wick support, Candle-. A. G. Bulle. No. 1,267,968; May 28; v. 250; p. 945.
Winch specially applicable as an ash-hoist, Electrically-operated. G. F. D. Campbell. No. 1,264,894; May 7; v. 250; p. 6.
Wind-power motor. M. A. Mulrony. No. 1,266,518; May 14; v. 250; p. 482.
Wind-shield. E. F. Curran. No. 1,266,217; May 14; v. 250; p. 402.
Wind-shield. P. N. Landine. No. 1,265,680; May 7; v. 250; p. 219.
Wind-shield cleaner. W. H. Clifford. No. 1,266,919; May 21; v. 250; p. 625.
Wind-shield, Vehicle. C. R. Clark. No. 1,265,176; May 7; v. 250; p. 85.
Winder. H. D. Colman. No. 1,267,977; May 28; v. 250; p. 947.
Winding-indicator. J. Mazer. No. 1,265,802; May 14; v. 250; p. 284.
Winding mechanism. C. T. Henderson. No. 1,266,942; May 21; v. 250; p. 632.
Winding silk on spools, Method and machine for. C. Mazzucchelli. No. 1,267,099; May 21; v. 250; p. 676.
Windmill. L. O. Bourke. No. 1,266,910; May 21; v. 250; p. 623.
Windmill. J. L. Tayloe. No. 1,265,137; May 7; v. 250; p. 74.
Window and wind-shield cleaning device. H. M. Montooth. No. 1,267,249; May 21; v. 250; p. 718.
Window attachment. C. J. Huth. No. 1,264,936; May 7; v. 250; p. 17.
Window-cleaner's bracket. W. H. Dean. No. 1,266,419; May 14; v. 250; p. 455.
Window construction. B. R. Coleman and L. B. Taylor. No. 1,267,745; May 28; v. 250; p. 882.
Window construction. B. R. Coleman and L. B. Taylor. No. 1,267,746; May 28; v. 250; p. 882.
Window construction. C. A. Fullerton. No. 1,267,206; May 21; v. 250; p. 707.
Window construction. C. O. Whitnell. No. 1,267,612; May 28; v. 250; p. 846.
Window-grating, Adjustable. M. Kostudowicz. No. 1,266,690; May 21; v. 250; p. 562.
Window-jamb. C. A. Fullerton. No. 1,267,205; May 21; v. 250; p. 717.
Window-screen. M. H. Milman. No. 1,265,477; May 7; v. 250; p. 166.
Wire-clamp. H. J. Roggenkamp. No. 1,265,817; May 14; v. 250; p. 289.
Wire-cutter. G. F. Bull and E. W. Starkey. No. 1,266,398; May 14; v. 250; p. 449.
Wire-cutting bayonet. C. Szafranski. No. 1,266,640; May 21; v. 250; p. 548.
Wire-drawing machine. E. H. Carroll. No. 1,265,049; May 7; v. 250; p. 50.
Wire-driving tool. L. and E. Strohacker. No. 1,264,993; May 7; v. 250; p. 34.
Wire-forming machine. H. W. Smith. No. 1,267,182; May 21; v. 250; p. 687.
Wire-stretcher. W. B. Belgard. No. 1,267,308; May 21; v. 250; p. 732.
Wire-stretchers, Detent mechanism for. F. O. Green. No. 1,267,540; May 28; v. 250; p. 825.
Wire stretching and twisting tool. W. B. Ross. No. 1,266,053; May 14; v. 250; p. 355.
Wire-working machine. W. H. Sommer. No. 1,264,987; May 7; v. 250; p. 32.
Wires, Mechanism for installing transmission line-. H. C. Williams. No. 1,265,851; May 14; v. 250; p. 299.
Wires to pipes, Device for fastening. E. E. Gold. No. 1,265,903; May 14; v. 250; p. 314.
Wireless apparatus for preventing collisions, Automatic. H. D. Betz. No. 1,266,389; May 14; v. 250; p. 447.
Wireless signal, Automatic. G. Engelbrekt. No. 1,265,633; May 7; v. 250; p. 206.
Wood and coal heater, Adjustable combined. D. Q. Minar. No. 1,266,138; May 14; v. 250; p. 380.
Wood fabric. E. L. Walker. No. 1,265,841; May 14; v. 250; p. 296.
Wood-preserving composition. F. Peters. No. 1,265,870; May 7; v. 250; p. 137.
Work-clamping mechanism. E. J. Ray. No. 1,265,383; May 7; v. 250; p. 140.
Work-holder for machines. B. L. Schmidt. No. 1,265,818; May 14; v. 250; p. 289.
Work-holding clamp. E. J. Ray. No. 1,265,382; May 7; v. 250; p. 140.
Wrapping and sealing machine. H. L. Johnson. No. 1,266,686; May 21; v. 250; p. 561.
Wrapping-machine. P. F. Murphy. No. 1,266,705; May 21; v. 250; p. 566.
Wrapping-tool. W. S. Downing. No. 1,266,002; May 14; v. 250; p. 341.
Wrench: *See*—
Pipe-wrench.
Ratchet-wrench.
Wrench. A. G. Carmichael. No. 1,264,895; May 7; v. 250; p. 7.
Wrench. C. G. Keller. No. 1,265,341; May 7; v. 250; p. 128.
Wrench. J. R. Long. No. 1,265,925; May 14; v. 250; p. 321.
Wrench. W. Shepherdson. No. 1,266,869; May 21; v. 250; p. 611.
Wrench. F. M. Van Sickle. No. 1,265,144; May 7; v. 250; p. 76.
Wrench. W. J. Wright. No. 1,267,731; May 28; v. 250; p. 878.
Wringer: *See*—
Clothes-wringer.
Mop-wringer.
Writing-machine. A. B. Edwards and F. A. Feierelsel. No. 1,266,237; May 14; v. 250; p. 408.
X-ray apparatus, Polarity-indicating mechanism for. C. Fayer. No. 1,266,931; May 21; v. 250; p. 629.
Yoke, Cattle-. C. B. Wiederholt. No. 1,267,294; May 21; v. 250; p. 729.
Yoke, Hog-. J. H. Farmer. No. 1,265,896; May 14; v. 250; p. 312.
Zinc powder into liquid zinc, Converting. S. Huldt. No. 1,266,808; May 21; v. 250; p. 595.

ALPHABETICAL LIST OF DESIGNS.

Aircraft-fuselage or similar device. W. B. Stout. No. 52,066; May 28; v. 250; p. 980.
Automobile-bumper bracket. P. P. Crabill and J. Turner. No. 52,035; May 14; v. 250; p. 492.
Automobile-radiator casing. E. C. Bruckman. No. 52,053; May 28; v. 250; p. 977.
Badge or emblem. W. G. Daniel. No. 52,004; May 7; v. 250; p. 235.
Boat-hull. A. B. Bienkowski. No. 52,033; May 14; v. 250; p. 491.
Calling device. O. F. Forsberg. No. 52,009; May 7; v. 250; p. 236.
Card-holder. I. B. Edmunds. No. 52,006; May 7; v. 250; p. 235.
Cards, Set of playing. C. G. Decker. No. 52,005; May 7; v. 250; p. 235.
Carpet, rug, or similar article. L. Borheimer. No. 52,018; May 7; v. 250; p. 237.
Casket handle, Burial-. E. S. Klein. No. 52,043; May 14; v. 250; p. 493.
Coffee-brewing pot. H. C. Biette. No. 52,019; May 7; v. 250; p. 238.
Dish, Baking-. J. Beiswanger. No. 52,016; May 7; v. 250; p. 237.
Door and door-grille, Combined. H. Mathewson. No. 52,060; May 28; v. 250; p. 979.
Emblem. W. Rothenberg. No. 52,046; May 14; v. 250; p. 493.
Feed-trough-switch casing. R. A. Belmont. No. 52,049; May 21; v. 250; p. 752.
Flag. E. T. Coyan. No. 52,020; May 7; v. 250; p. 238.
Flag. J. S. Duff. No. 52,039; May 14; v. 250; p. 492.
Fork, spoon, or similar article. B. P. Jenks. No. 52,050; May 21; v. 250; p. 752.
Game-board. R. Brocklebank. No. 52,034; May 14; v. 250; p. 491.
Hair-pin. S. E. Creech and P. Bland. No. 52,036; May 14; v. 250; p. 492.
Inkstand. F. A. Weeks. No. 52,029; May 7; v. 250; p. 240.
Inkstand-cover. F. A. Weeks. No. 52,030; May 7; v. 250; p. 240.
Knife and fork, Combined. T. T. Mathieson. No. 52,045; May 14; v. 250; p. 493.
Lamp-chimney. S. Jankelson. No. 52,056; May 28; v. 250; p. 978.
Lamp-socket cover. S. Jankelson. No. 52,057; May 28; v. 250; p. 978.
Lamp-stand. F. K. Maerz. No. 52,044; May 14; v. 250; p. 493.
Lamps, Commercial unit for nitrogen-. B. Newland. No. 52,063; May 28; v. 250; p. 979.
Lighting-fixture reflector, Semi-indirect. H. C. Adam. No. 52,001; May 7; v. 250; p. 235.
Monument. W. A. Arnold. No. 52,015; May 7; v. 250; p. 237.
Overflow and waste fixture. H. F. Goetz. No. 52,040; May 14; v. 250; p. 492.
Phonograph-cabinet. J. Wolff. Nos. 52,031–2; May 7; v. 250; p. 240.
Picture-frame. J. Benko. Nos. 52,017–18; May 7; v. 250; p. 237.
Pitchers, Casing for vacuum-insulated. G. P. Altenberg. No. 52,002; May 7; v. 250; p. 235.
Radiator, Automobile-. R. De Schaum. No. 52,038; May 14; v. 250; p. 492.
Ribbon holder, Hair-. R. Marcher. No. 52,051; May 21; v. 250; p. 752.
Ring. J. C. Whitehouse. No. 52,014; May 7; v. 250; p. 237.
Ring or similar article of jewelry, Finger-. C. H. Spencer. No. 52,028; May 7; v. 250; p. 240.
Ring or similar article of jewelry, Finger-. C. H. Spencer. No. 52,047; May 14; v. 250; p. 493.
Rouge-container. W. G. Kendall. Nos. 52,041–2; May 14; v. 250; p. 493.
Scabbard. G. E. Curtiss. No. 52,037; May 14; v. 250; p. 492.
Shade-bowl. J. Beiswanger. No. 52,003; May 7; v. 250; p. 235.
Sign, Outdoor. E. E. Erickson. Nos. 52,007–8; May 7; v. 250; p. 236.
Spike-bar. L. B. Baird and B. H. Harper. No. 52,052; May 28; v. 250; p. 977.
Stove, Heating-. L. S. Lawson. No. 52,058; May 28; v. 250; p. 978.
Telephone-stand, Desk. O. F. Forsberg. No. 52,010; May 7; v. 250; p. 236.
Thimble, Thread-cutting. T. B. Gates. No. 52,012; May 7; v. 250; p. 236.
Tire. F. M. Hale and F. C. McLaughlin. No. 52,055; May 28; v. 250; p. 978.
Tire. G. H. Lewis. No. 52,027; May 7; v. 250; p. 239.
Tire. J. Tenney, Jr. No. 52,067; May 28; v. 250; p. 980.
Tire, Automobile-. J. Froehlich. No. 52,026; May 7; v. 250; p. 239.
Tire, Automobile-. J. B. McDevitt and M. Greenspan. No. 52,062; May 28; v. 250; p. 979.
Tire, Pneumatic. J. C. Cole. No. 52,054; May 28; v. 250; p. 978.
Toy. E. H. Swetland. No. 52,048; May 14; v. 250; p. 493.
Toy, Figure. G. G. Drayton. Nos. 52,021–5; May 7; v. 250; pp. 238–9.
Urn, Dispensing-. J. A. Franklin. No. 52,011; May 7; v. 250; p. 236.
Washing-machine casing. O. G. Pfeiffer. No. 52,065; May 28; v. 250; p. 980.
Watch-holder. P. Pasznicki. No. 52,064; May 28; v. 250; p. 980.
Water-closet-bowl floor-plate. J. B. and A. Lukomski. No. 52,059; May 28; v. 250; p. 978.
Window. H. Mathewson. No. 52,061; May 28; v. 250; p. 979.

ALPHABETICAL LIST OF TRADE-MARKS.

Alfalfa, alfalfa-meal, pinto-beans. Southern Colorado Lumber Co. No. 121,568; May 7; v. 250; p. 252.
Apples, Fresh. Northern Fruit Company. No. 121,811; May 28; v. 250; p. 995.
Apricots and prunes, Dried. California Prune and Apricot Growers. No. 121,593; May 14; v. 250; p. 509.
Atomizers or spraying instruments for medical and surgical purposes. The De Vilbiss Manufacturing Company. No. 121,547; May 7; v. 250; p. 251.
Automobile attachments for converting them into trucks. Ralston Iron Works. No. 121,823; May 28; v. 250; p. 995.
Automobile-starters, Mechanical. C. N. Puckett. No. 121,652; May 14; v. 250; p. 511.
Axles for cars, (railroad rolling-stock.) C. E. Willard. No. 121,689; May 14; v. 250; p. 512.
Bags, Traveling hand-. W. H. Smith. No. 121,729; May 21; v. 250; p. 764.
Baking-powder. Amo Food Company. No. 121,690; May 21; v. 250; p. 763.
Bath-robes. Federal Underwear Co. No. 121,770; May 28; v. 250; p. 994.
Batteries, Electric. National Carbon Company. No. 121,640; May 14; v. 250; p. 511.
Batteries, Storage. Willard Storage Battery Company. No. 121,681; May 14; v. 250; p. 512.
Bearings, Ball-. S. Schneider. No. 121,664; May 14; v. 250; p. 511.
Beds and cots, Folding. United States Cabinet Bed Co. No. 121,674; May 14; v. 250; p. 512.
Belting made of rubber and fabric. The Manhattan Rubber Mfg. Co. No. 121,797; May 28; v. 250; p. 994.
Beverage, Malt. Joseph Fallert Brewing Co. No. 121,709; May 21; v. 250; p. 763.
Beverage, Non-intoxicating malt. Grand Rapids Brewing Co. No. 121,712; May 21; v. 250; p. 763.
Beverages, Certain named non-alcoholic. Rainier Products Company. No. 121,653; May 14; v. 250; p. 511.
Bitters, Tonic. Lash's Bitters Co. No. 121,632; May 14; v. 250; p. 510.
Boots and shoes, Ladies and misses' leather. The Shoecraft Shop. No. 121,832; May 28; v. 250; p. 995.
Boots and shoes made of or containing rubber. Converse Rubber Shoe Co. No. 121,760; May 28; v. 250; p. 993.
Bracelet, locket, necklace, &c., clasps. A. G. Planchenault. No. 121,820; May 28; v. 250; p. 995.
Bread. Braun Bros. & Co. No. 121,541; May 7; v. 250; p. 251.
Bread. Ward Baking Company. Nos. 121,677–8; May 14; v. 250; p. 512.
Bread and cake. F. Johnson. No. 121,626; May 14; v. 250; p. 510.
Breath-deodorizers, Candy. American Chicle Company. No. 121,743; May 28; v. 250; p. 993.
Brooms. W. E. Killinger. No. 121,558; May 7; v. 250; p. 251.
Brooms. Windsor Broom Co. No. 121,684; May 14; v. 250; p. 512.
Butter. The Fox River Butter Company. No. 151,773; May 28; v. 250; p. 994.

Butter. C. W. Nelson. No. 121,810; May 28; v. 250; p. 995.
Buttons, Cuff-. The Baer and Wilde Co. No. 121,749; May 28; v. 250; p. 993.
Candy. Lorient-Cartier. No. 121,720; May 21; v. 250; p. 764.
Candy. Novelty Candy Co. No. 121,562; May 7; v. 250; p. 252.
Candy. Package Confectionery Co. No. 121,648; May 14; v. 250; p. 511.
Canned beef. Libby, McNeill & Libby. No. 121,559; May 7; v. 250; p. 251.
Canned beet-tops, tomatoes, and string-beans. Calima Canning Company. No. 121,756; May 28; v. 250; p. 993.
Canned beets and tomatoes. Calima Canning Company. No. 121,755; May 28; v. 250; p. 993.
Canned evaporated goat-milk. Widemann Goat Milk Co. No. 121,650; May 14; v. 250; p. 512.
Canned foods. John F. Campbell Co. No. 121,701; May 21; v. 250; p. 763.
Canned foods and candy. Ridenour-Baker Grocery Co. No. 121,657; May 14; v. 250; p. 511.
Canned fruits and vegetables. California Packing Corporation. No. 121,760; May 21; v. 250; p. 760.
Canned peas. Owen Canning Co. Nos. 121,727–8; May 21; v. 250; p. 764.
Canned salmon. California Packing Corporation. No. 121,699; May 21; v. 250; p. 763.
Canned salmon. Cascade Packing Company. No. 121,594; May 14; v. 250; p. 509.
Canned salmon. E. H. Hamlin Co. No. 121,617; May 14; v. 250; p. 510.
Canned salmon. Petersburg Packing Co. Nos. 121,815–17; May 28; v. 250; p. 995.
Canned tomatoes, peas, and corn. Witwer Tate Grocery Co. No. 121,740; May 21; v. 250; p. 764.
Canned tuna fish. C. E. Van Landingham Co. No. 121,675; May 14; v. 250; p. 512.
Canned tuna fish. White Star Canning Co. No. 121,839; May 28; v. 250; p. 996.
Capsules for diseases of the urinary organs and bladder. E. J. Moore Sons. No. 121,561; May 7; v. 250; p. 251.
Carbon-eliminators for internal-combustion engines. The Automatic Carbon Eliminator Co. No. 121,577; May 14; v. 250; p. 509.
Carbon-paper. Modern Typewriter Supply Co. No. 121,808; May 28; v. 250; p. 995.
Casement-sash adjusters. The Casement Hardware Co. No. 121,595; May 14; v. 250; p. 509.
Cement, Refractory. G. A. Balz. No. 121,538; May 7; v. 250; p. 251.
Cheese. J. S. Hoffman Company. No. 121,555; May 7; v. 250; p. 251.
Cheese. J. S. Hoffman Company. No. 121,620; May 14; v. 250; p. 510.
Chemicals, medicines, and pharmaceutical preparations, Certain named. C. I. Tryon. No. 121,786; May 21; v. 250; p. 764.
Chilli-con-carne. Kittle & Watson. No. 121,789; May 28; v. 250; p. 994.
Chocolate, tea, cocoa, pepper, &c. Guittard Company. No. 121,718; May 21; v. 250; p. 763.
Chocolates and candies. E. Greenfield's Sons. No. 121,552; May 7; v. 250; p. 251.
Cider, Apple. National Fruit Product Company. No. 121,723; May 21; v. 250; p. 764.
Cigars. Joseph P. Manning Co. No. 121,795; May 28; v. 250; p. 994.
Cigars, cheroots, and little cigars. C. J. Holton. No. 121,779; May 28; v. 250; p. 994.
Cleaning and polishing material for automobile-windows and wind-shields. Davis Chemical Manufacturing Co. No. 121,601; May 14; v. 250; p. 510.
Clothing, Boys' outer. P. Walcoff. No. 121,836; May 28; v. 250; p. 995.
Coating for crucibles, fire-brick, ladles, and saggars, Heat-resisting. H. H. Jarrett & Co. No. 121,556; May 7; v. 250; p. 251.
Coats. Scott & Company. No. 121,831; May 28; v. 250; p. 995.
Coats and overcoats. Gem Hammock & Fly Net Co. No. 121,775; May 28; v. 250; p. 994.
Coffee. C. E. Coe Coffee Co. No. 121,703; May 21; v. 250; p. 763.
Coffee substitute. A. F. Weppner. No. 121,685; May 14; v. 250; p. 512.
Colors and dyestuffs, Anilin. J. L. McKenna. No. 121,721; May 21; v. 250; p. 764.
Core-binder in the manufacture of iron castings, Extract to be used as a. The Champion Fibre Company. No. 121,545; May 7; v. 250; p. 251.
Cornmeal, corn-chops, whole-wheat flour, hen feed, &c. Pittsburg Elevator Company. No. 121,726; May 21; v. 250; p. 764.
Corsets, brassières, and ladies' underwaists. Kops Bros. No. 121,790; May 28; v. 250; p. 994.
Cotton-batting. Marshall Field & Company. No. 121,798; May 28; v. 250; p. 994.
Cotton choppers and cultivators. Lanham Cotton Cultivator Company. No. 121,681; May 14; v. 250; p. 510.
Cotton, cotton and silk, and cotton and artificial-silk piece goods. American Textile Export Corporation. No. 121,744; May 28; v. 250; p. 993.
Cotton fabrics in the piece, Woven. G. A. Stafford. No. 121,829; May 28; v. 250; p. 995.
Cotton goods in the piece. Everett, Heaney & Company. No. 121,768; May 28; v. 250; p. 993.
Cotton piece goods. Appleton Company. No. 121,747; May 28; v. 250; p. 993.
Cotton piece goods. Meritas Mills. No. 121,801; May 28; v. 250; p. 994.
Cotton piece goods. Pacific Mills. No. 121,813; May 28; v. 250; p. 995.
Cotton piece goods. L. & E. Stirn. No. 121,830; May 28; v. 250; p. 995.
Cough-drops. C. H. L. Orton. No. 121,724; May 21; v. 250; p. 764.
Crates, Fruit and vegetable. Elberta Crate Company. No. 121,608; May 14; v. 250; p. 510.
Cutlery, machinery, and tools, and parts thereof, Certain named. Enderes Incorporated. No. 121,609; May 14; v. 250; p. 510.
Cutter, reamer, and drill cases, drill-case bases, drill-blocks. Union Twist Drill Co. No. 121,569; May 7; v. 250; p. 252.
Dental cream. B. L. Dieffenbacher. No. 121,548; May 7; v. 250; p. 251.
Dental cream. Pyrotol Chemical Co. No. 121,822; May 28; v. 250; p. 995.
Dental cream, Medicated. Calypto Company. No. 121,604; May 14; v. 250; p. 510.
Dental, medical, and surgical appliances, Certain named. J. A. Rainville. No. 121,654; May 14; v. 250; p. 511.
Dolls and doll-dresses. Fleischaker & Baum. No. 121,710; May 21; v. 250; p. 763.
Dress-shields. I. B. Kleinert Rubber Company. No. 121,788; May 28; v. 250; p. 994.
Dresses, Children's. W. L. Leavy. No. 121,791; May 28; v. 250; p. 994.
Duck, Cotton. Mount Vernon-Woodberry Mills. No. 121,806; May 28; v. 250; p. 995.
Duck sheetings, drills, osnaburgs, Cotton. T. A. Shaw and Co. No. 121,828; May 28; v. 250; p. 995.
Eggs, Dehydrated. H. G. Porter. No. 121,821; May 28; v. 250; p. 995.
Electric switch-locking devices. Pringle Electrical Mfg. Company. No. 121,566; May 7; v. 250; p. 252.
Electrical apparatus, machines, and supplies, Certain named. The Bryant Electric Company. Nos. 121,585–6; May 14; v. 250; p. 509.
Electrical apparatus, machines, and supplies, Certain named. New York Gas & Electric Appliance Co. No. 121,644; May 14; v. 250; p. 511.
Electromedical apparatus, Certain named. The Kny-Scheerer Corporation. No. 121,719; May 21; v. 250; p. 764.
Eyeglass-frames. United Optical Company. No. 121,673; May 14; v. 250; p. 512.
Eyeglass-lens mountings. Uhlemann Optical Co. No. 121,669; May 14; v. 250; p. 512.
Fabric woven of woolen and worsted yarns and silk. Holden-Leonard Co. No. 121,777; May 28; v. 250; p. 994.
Feed, Hen. A. R. Martin. No. 121,799; May 28; v. 250; p. 994.
Feed, Stock. Edgar-Morgan Company. No. 121,637; May 14; v. 250; p. 511.
Feeds, Poultry. Southern Feed Company. No. 121,731; May 21; v. 250; p. 764.
Feeds, Stock. Southern Feed Company. No. 121,732; May 21; v. 250; p. 764.
Fertilizers. Sobrinos de Ezquiaga. No. 121,705; May 21; v. 250; p. 763.
Finish and polish for floors, &c. Butcher Polish Company. Nos. 121,587–9; May 14; v. 250; p. 509.
Flour made from wheat. Warner, Moore & Co. No. 121,570; May 7; v. 250; p. 252.
Flour, Wheat-. H. C. Cole Milling Co. No. 121,597; May 14; v. 250; p. 509.
Flour, Wheat-. F. H. Hartman. No. 121,618; May 14; v. 250; p. 510.
Flour, Wheat-. Jameson, Hevener Co. No. 121,718; May 21; v. 250; p. 764.
Flour, Wheat-. J. D. Manor & Co. No. 121,796; May 28; v. 250; p. 994.
Flour, Wheat-. North Manchester Milling Co. No. 121,645; May 14; v. 250; p. 511.
Flour, Wheat-. Sperry Flour Company. No. 121,734; May 21; v. 250; p. 764.
Food, Desiccated. Fairchild Bros. & Foster. No. 121,708; May 21; v. 250; p. 763.
Food preparation of certain named ingredients. Jacob House & Sons. No. 121,715; May 21; v. 250; p. 763.
Food product of certain named ingredients. Fairchild Bros. & Foster. No. 121,707; May 21; v. 250; p. 763.
Foods, Certain named. Cresca Company. No. 121,704; May 21; v. 250; p. 763.
Foods, Certain named. Lake Winola Products Company. No. 121,630; May 14; v. 250; p. 510.
Foods, Certain named. Marston & Martin. No. 121,782; May 28; v. 250; p. 994.
Foods, Certain named. Smith & Horton Co. No. 121,666; May 14; v. 250; p. 512.
Foods, Certain named. Sussman, Wormser & Co. No. 121,735; May 21; v. 250; p. 764.
Foods, Certain named. Western Grocer Company. No. 121,679; May 14; v. 250; p. 512.

Fruit syrups, flavors and colors for making soft drinks. Crescent City Carbonate Company. No. 121,600; May 14; v. 250; p. 509.
Fruits, Dried. A. Van Siclen. No. 121,676; May 14; v. 250; p. 512.
Fruits, Dried. A. Van Siclen. No. 121,688; May 14; v. 250; p. 512.
Fruits, including citrus fruits, and vegetables, Fresh. B. Crafton. No. 121,702; May 21; v. 250; p. 763.
Furnaces. The Huron Furnace Company. No. 121,780; May 28; v. 250; p. 994.
Furs. Lowell Lamb Company. No. 121,793; May 28; v. 250; p. 994.
Galvanized, black, and corrugated-metal sheets, tin-plate. W. F. Hall. No. 121,615; May 14; v. 250; p. 510.
Game-boards and pieces to be used therewith. J. W. Baker. No. 121,580; May 14; v. 250; p. 509.
Games and outfits of toy soldiers and pistols. Milton Bradley Co. No. 121,540; May 7; v. 250; p. 251.
Games, Card. R. W. Brown. No. 121,542; May 7; v. 250; p. 251.
Games, toys, and sporting goods, Certain named. William Read & Sons. No. 121,567; May 7; v. 250; p. 252.
Garters, Men's. Crescent Garter Company. No. 121,761; May 28; v. 250; p. 993.
Gasolene. Oriental Oil Company. No. 121,647; May 14; v. 250; p. 511.
Gasolene refined from crude oil or petroleum. The Western Refining Co. No. 121,738; May 21; v. 250; p. 764.
Ginger-ale. The Geo. A. Bohrer Brewing Co. No. 121,693; May 21; v. 250; p. 763.
Ginger-ale, grape-juice, &c. Albany Coca-Cola Bottling Company. No. 121,741; May 28; v. 250; p. 993.
Ginghams. Amoskeag Manufacturing Company. No. 121,746; May 28; v. 250; p. 993.
Gum used as a constituent of ice-cream, Vegetable. Talbot Manufacturing Co. No. 121,835; May 28; v. 250; p. 995.
Hair, Composition of matter for removing superfluous. R. L. Kingstone. No. 121,628; May 14; v. 250; p. 510.
Hair-nets. E. T. Mittelstaedt. Nos. 121,802–4; May 28; v. 250; pp. 994–5.
Hair-nets. E. T. Mittelstaedt. No. 121,807; May 28; v. 250; p. 995.
Ham, bacon, shoulder, lard, sausage. W. S. Forbes & Co. No. 121,550; May 7; v. 250; p. 251.
Hams, bacon, lard, sausage. Louis Pfaelzer & Sons. No. 121,565; May 7; v. 250; p. 252.
Handkerchiefs. R. H. Macy & Co. No. 121,794; May 28; v. 250; p. 994.
Hardware and plumbing and steam-fitting supplies, Certain named. Chicago Tube and Iron Company. No. 121,687; May 14; v. 250; p. 512.
Hats, Ladies'. M. Ekstein. No. 121,767; May 28; v. 250; p. 993.
Hats, Women's. C. Levy. No. 121,792; May 28; v. 250; p. 994.
Hosiery. Butler Brothers. No. 121,754; May 28; v. 250; p. 993.
Hosiery. Chipman Knitting Mills. No. 121,758; May 28; v. 250; p. 993.
Ice-cream. L. A. Corning. No. 121,546; May 7; v. 250; p. 251.
Inks and dry colors, Printing-. Ault Printing Ink Company. No. 121,574; May 14; v. 250; p. 509.
Jewelry and precious-metal ware, Certain named. Taunton Pearl Works. No. 121,834; May 28; v. 250; p. 995.
Knitted and woven woolen piece goods. French & Ward. No. 121,774; May 28; v. 250; p. 994.
Knitted, netted, and textile fabrics, Certain named. Derryvale Linen Company. No. 121,763; May 28; v. 250; p. 993.
Knitted union-suits, vests, chemises, camisoles. Julius Kayser & Co. No. 121,784; May 28; v. 250; p. 994.
Knitting-needles, Hand. The Celluloid Company. No. 121,757; May 28; v. 250; p. 993.
Lathes. Flather & Company. No. 121,610; May 14; v. 250; p. 510.
Leather. Hirth-Kramer Company. No. 121,619; May 14; v. 250; p. 510.
Leather, Artificial and imitation. Titus Blatter & Company. No. 121,582; May 14; v. 250; p. 509.
Leathers, Tanned and finished. Ziegel, Elsman & Company. No. 121,842; May 28; v. 250; p. 996.
Liniment for the treatment of certain named ailments. J. Hamburger. No. 121,616; May 14; v. 250; p. 510.
Lotion, Complexion-. E. Palette. No. 121,819; May 28; v. 250; p. 995.
Lubricants consisting of oil and greases. A. C. Buzby. No. 121,591; May 14; v. 250; p. 509.
Magazine, Monthly. Holstein-Friesian World. No. 121,621; May 14; v. 250; p. 510.
Mailing tubes, bags, boxes, &c. International Mailing Tube and Wrapper Co. No. 121,717; May 21; v. 250; p. 763.
Mattresses. Knoxville Excelsior & Mattress Co. No. 121,629; May 14; v. 250; p. 510.
Mattresses, cots, bed-springs, couches, &c. T. B. Burnett. Nos. 121,695–8; May 21; v. 250; p. 763.
Measuring and scientific appliances, Certain named. American Optical Company. No. 121,573; May 14; v. 250; p. 509.
Measuring and scientific appliances, Certain named. Union Twist Drill Co. Nos. 121,671–2; May 14; v. 250; p. 512.
Medicinal compound for hemorrhoids. A. Perniciaro. No. 121,725; May 21; v. 250; p. 764.
Medicine. E. Arnold. No. 121,748; May 28; v. 250; p. 993.
Medicine for vaginitis, cervicitis, &c. Williams Bros. Chemical Co. No. 121,571; May 7; v. 250; p. 252.
Metals and metal castings and forgings, Certain named. The National Supply Company. No. 121,642; May 14; v. 250; p. 511.
Milk and vegetable fat, Compound of evaporated skimmed. En-Zo Company. No. 121,535; May 7; v. 250; p. 251.
Mining machinery, rock and hammer drills, drill-sharpeners. The J. Geo. Leyner Engineering Works Company. No. 121,634; May 14; v. 250; p. 511.
Molasses. The American Sugar Refining Company. No. 121,536; May 7; v. 250; p. 251.
Molasses, sorghums, cane and maple syrups, and compounds thereof. New Orleans Coffee Co. No. 121,643; May 14; v. 250; p. 511.
Music, Sheet-. S. Siegel. No. 121,686; May 14; v. 250; p. 512.
Muslin piece goods, Bleached. M. E. Smith & Co. No. 121,833; May 28; v. 250; p. 995.
Mustard, spices, flavoring extracts. J. T. Fargason Company. No. 121,549; May 7; v. 250; p. 251.
Newspapers, Weekly. Riverside Review Company. No. 121,668; May 14; v. 250; p. 511.
Nut butter, margarin, cooking-fats, salad-oils. Kellogg Products Inc. Nos. 121,785–7; May 28; v. 250; p. 994.
Oil, Automatic machine-screw-cutting. W. Parker. No. 121,649; May 14; v. 250; p. 511.
Oil product for salads and cooking, Vegetable-. The N. K. Fairbank Company. No. 121,769; May 28; v. 250; p. 993.
Oil substitute, Linseed-. Pennsylvania Linseed Products Company. No. 121,650; May 14; v. 250; p. 511.
Oils, Lubricating-. Detroit Soluble Oil Co. No. 121,602; May 14; v. 250; p. 510.
Oils, lubricating-greases, gasolene, Transmission and motor. Wm. C. Robinson & Son Co. No. 121,659; May 14; v. 250; p. 511.
Oils, Olive, &c. J. H. Hakim & Co. No. 121,553; May 7; v. 250; p. 251.
Oranges, lemons, grape-fruit. Cobb and Doflemyer. No. 121,596; May 14; v. 250; p. 509.
Overalls, coats, work-shirts, and pants. The Winder Manufacturing Co. No. 121,841; May 28; v. 250; p. 996.
Overcoats. K. Katz & Sons. No. 121,783; May 28; v. 250; p. 994.
Pacifiers. Julius Schmid, Incorporated. No. 121,661; May 14; v. 250; p. 511.
Paint-surfacer. Flood & Conklin Co. No. 121,611; May 14; v. 250; p. 510.
Paints, Interior. The National Paint & Varnish Company. No. 121,641; May 14; v. 250; p. 511.
Paper and paper towels, Toilet-. Albany Perforated Wrapping Paper Company. No. 121,742; May 28; v. 250; p. 993.
Paper and stationery, Certain named. The Bankers Supply Company. No. 121,750; May 28; v. 250; p. 993.
Paper and stationery, Certain named. J. C. Blair Company. No. 121,581; May 14; v. 250; p. 509.
Paper and stationery, Certain named. Safepack Paper Mills. No. 121,825; May 28; v. 250; p. 995.
Paper bags and boxes. Waltham Bag & Paper Company. No. 121,739; May 21; v. 250; p. 764.
Paper, Toilet-. Sauquoit Toilet Paper Co. No. 121,826; May 28; v. 250; p. 995.
Peanuts and peanut-bars, Salted. Planters Nut & Chocolate Co. No. 121,818; May 28; v. 250; p. 995.
Phonographs and their parts. Hoffay Talking Machine Company. No. 121,775; May 28; v. 250; p. 994.
Photographic paper. Eastman Kodak Company. No. 121,606; May 14; v. 250; p. 510.
Piano, woodwork, furniture, automobile, &c., polish. The Reichert Chemical & Mfg. Co. No. 121,658; May 14; v. 250; p. 511.
Picture films, Motion-. Majestic Motion Picture Company. No. 121,635; May 14; v. 250; p. 511.
Picture films, Motion-. The Thos. H. Ince Corporation. No. 121,623; May 14; v. 250; p. 510.
Pictures, art and novelty calendars. Mueller Brothers Art and Manufacturing Company. No. 121,639; May 14; v. 250; p. 511.
Pins and thumb-tacks, Push-. Moore Push Pin Company. No. 121,638; May 14; v. 250; p. 511.
Potatoes, Fresh. Beaufort Truck Growers Association. No. 121,539; May 7; v. 250; p. 251.
Powder, Face-. Hall & Ruckel. No. 121,714; May 21; v. 250; p. 763.
Powder, Foot-. G. E. Moray. No. 121,722; May 21; v. 250; p. 764.
Power-transmission attachments for motor-vehicles. Autopower Company. No. 121,578; May 14; v. 250; p. 509.
Preparation for alleviation of affections of the throat and bronchial tubes. C. J. Jerome. No. 121,625; May 14; v. 250; p. 510.

Preparation for consumption, rheumatism, weakness, and kidney trouble. P. Eagle. No. 121,766; May 28; v. 250; p. 993.
Preparation for rheumatism, asthma, and appendicitis. J. Walker. No. 121,837; May 28; v. 250; p. 996.
Preparation for the treatment of certain named diseases. Ft. Wayne Drug Company. No. 121,612; May 14; v. 250; p. 510.
Preparation for the treatment of nasal catarrh, head noises and colds, &c. R. B. Gilmore. No. 121,711; May 21; v. 250; p. 763.
Prints, printed books, newspapers, &c. Gardenside Bookshop. No. 121,583; May 14; v. 250; p. 509.
Prunes, dried peaches, apricots, &c., raisins, &c. Castle Brothers. No. 121,543; May 7; v. 250; p. 251.
Publications, Trade and credit. The Credit Clearing House. No. 121,599; May 14; v. 250; p. 509.
Raisins and dried peaches. Phoenix Packing Co. No. 121,651; May 14; v. 250; p. 511.
Raisins and fruits, Dried. California Associated Raisin Co. No. 121,592; May 14; v. 250; p. 509.
Receipting-registers. The Receipting Register Co. No. 121,655; May 14; v. 250; p. 511.
Remedy for chills, fever, ague, malaria, &c. Oak City Drug Company. No. 121,812; May 28; v. 250; p. 995.
Ribbon, Satin. Johnson, Cowdin & Co. No. 121,781; May 28; v. 250; p. 994.
Rubber, Certain named articles made of india-. The Leyland & Birmingham Rubber Co. No. 121,633; May 14; v. 250; p. 510.
Rubber gloves, Household. Julius Schmid, Incorporated. No. 121,827; May 28; v. 250; p. 995.
Rubber gloves, Surgeons'. Julius Schmid, Incorporated. No. 121,662; May 14; v. 250; p. 511.
Rubber goods, Certain named. E. Pearl. No. 121,564; May 7; v. 250; p. 252.
Rubber suction-hose and diaphragms. Edson Manufacturing Co. No. 121,607; May 14; v. 250; p. 510.
Sewing kit. John Wanamaker, New York. No. 121,838; May 28; v. 250; p. 996.
Shampoo and hair-cleanser. A. J. Aylies. No. 121,579; May 14; v. 250; p. 509.
Shirts, Men's outer. Rice-Stix Dry Goods Company. No. 121,824; May 28; v. 250; p. 995.
Shoes made of leather, canvas, rubber, and a combination of said materials. Albert H. Weinbrenner Co. No. 121,840; May 28; v. 250; p. 996.
Shortening. Superior Products Company. No. 121,733; May 21; v. 250; p. 764.
Silk piece goods. Bentley & Twohey Silk Co. No. 121,752; May 28; v. 250; p. 993.
Silks in the piece, Broad. J. A. Nigel. No. 121,800; May 28; v. 250; p. 994.
Snap-fasteners. Carr Fastener Company. No. 121,544; May 7; v. 250; p. 251.
Snap fasteners, hooks, eyes, &c. Boston Snap Fastener Co. No. 121,753; May 28; v. 250; p. 993.
Soap. Savannah Soap Co. No. 121,660; May 14; v. 250; p. 511.
Soap, Toilet. Yardley & Co. No. 121,682; May 14; v. 250; p. 512.
Spark-plugs. H. F. Brownell. No. 121,584; May 14; v. 250; p. 509.
Spark-plugs. The Charles H. Buettner Company. No. 151,590; May 14; v. 250; p. 509.
Sponges, Cuban sheepswool. Schroeder & Tremayne. No. 121,663; May 14; v. 250; p. 511.
Steam and internal-combustion engines. The Aultman & Taylor Machinery Co. No. 121,576; May 14; v. 250; p. 509.
Steel, Bright-finished. Union Drawn Steel Company. No. 121,670; May 14; v. 250; p. 512.
Steel, High-speed tool-. Continuous Reaction Company. No. 121,598; May 14; v. 250; p. 509.
Steel rods and bars, cold-rolled sheet and strip steel, steel wire. Peter A. Frasse & Co. No. 121,618; May 14; v. 250; p. 510.
Store and display fixtures. Frankel Display Fixture Company. No. 121,551; May 7; v. 250; p. 251.
Stoves, Pocket-. The Tapley Specialty Co. No. 121,683; May 14; v. 250; p. 512.
Syringes, serum-containers, clinical thermometers, &c. Macgregor Instrument Company. No. 121,560; May 7; v. 250; p. 251.
Syrup for use as food. The American Sugar Refining Company. No. 121,537; May 7; v. 250; p. 251.
Tablets and paper. Eastern Tablet Company. No. 121,605; May 14; v. 250; p. 510.
Tablets, Tonic digestive. Oriental Drug Co. No. 121,646; May 14; v. 250; p. 511.
Taffy, Coffee-flavored. H. Jevne Co. No. 121,557; May 7; v. 250; p. 251.
Tanning, Certain named chemicals suitable for. Innis, Speiden & Co. No. 121,716; May 21; v. 250; p. 763.
Tea. Hedges-Buck Company. No. 121,554; May 7; v. 250; p. 251.
Thread, Cotton. Summit Thread Company. No. 121,667; May 14; v. 250; p. 512.
Threshing-machines. The Aultman & Taylor Machinery Co. No. 121,575; May 14; v. 250; p. 509.
Tire-vulcanizers and tire-vulcanizing patches. The Marvel Accessories Manufacturing Company. No. 121,636; May 14; v. 250; p. 511.
Tires, Pneumatic rubber. The Batavia Rubber Co. No. 121,751; May 28; v. 250; p. 993.
Tires, Rubber. Cupples Company Manufacturers. No. 121,762; May 28; v. 250; p. 993.
Tires, Rubber. The Mohawk Rubber Co. No. 121,805; May 28; v. 250; p. 995.
Toilet preparations, Certain named. Block & Kuhl Company. No. 121,692; May 21; v. 250; p. 763.
Tonic, also a medical preparation for skin diseases, Nerve-. Gold Cross Remedy Company. No. 121,776; May 28; v. 250; p. 994.
Tonic, Stomach, nerve, and liver. M. Drum. No. 121,706; May 21; v. 250; p. 763.
Tool-holders and parts thereof, all being parts of machinery. J. T. D. Hutton. No. 121,622; May 14; v. 250; p. 510.
Traps, Mouse and rat. Iron Cat Co. No. 121,624; May 14; v. 250; p. 510.
Trucks, Automobile-. C. A. Smith. No. 121,665; May 14; v. 250; p. 511.
Twines, cordage, ropes. Frank W. Winne & Son. No. 121,572; May 7; v. 250; p. 252.
Underwear, Fordom Textile Company. Nos. 121,771–2; May 28; v. 250; p. 994.
Valve-cups formed of rubberized fabric. Parker Cup & Specialty Works. No. 121,814; May 28; v. 250; p. 995.
Varnishes, driers, japans, paints, enamels. The Tower Varnish & Dryer Company. No. 121,668; May 14; v. 250; p. 512.
Vermin and insect exterminator used on trees, vegetables, &c. United Liquid Sulphur Co. No. 121,737; May 21; v. 250; p. 764.
Vulcanized fiber. American Vulcanized Fibre Company. No. 121,745; May 28; v. 250; p. 993.
Watches. Dubois Watch Case Company. Nos. 121,704–5; May 28; v. 250; p. 993.
Water, Medicinal spring-. R. T. Joy. No. 121,627; May 14; v. 250; p. 510.
Water, Mineral. L. A. Page. No. 121,563; May 7; v. 250; p. 252.
Water, Natural mineral. Societá Anonima Fiuggi. No. 121,730; May 21; v. 250; p. 764.
Water, Spring-. John Graf Company. No. 121,614; May 14; v. 250; p. 510.
Wheels for vehicles, Load-carrying. National Wire Wheel Works. No. 121,809; May 28; v. 250; p. 995.
Wines, champagnes. Beau-Site Company. No. 121,691; May 21; v. 250; p. 763.
Wines, Sparkling. Bosco & Company. No. 121,694; May 21; v. 250; p. 763.
Yarns and threads. Dexter Yarn Company. No. 121,603; May 14; v. 250; p. 510.

ALPHABETICAL LIST OF LABELS.

"American Special." (For Wheat-Flour.) The Russell Milling Company. No. 20,608; May 7; v. 250; p. 253.
"Aromas." (For Cigars.) Manila Commercial Co. No. 20,611; May 7; v. 250; p. 253.
"Aunt Martha's Hulled Corn." (For Hulled Corn.) G. H. Allen. No. 20,613; Mar. 21; v. 250; p. 765.
"Aunt Martha's Plum Pudding." (For Plum Pudding.) G. H. Allen. No. 20,612; May 21; v. 250; p. 765.
"Blue Maltese Cross." (For Apples.) Dennis, Kimball & Pope. No. 20,619; May 21; v. 250; p. 765.
"California Growers." (For Canned Apricots.) California Growers Association. No. 20,640; May 28; v. 250; p. 997.
"California Producers." (For Canned Pears.) California Growers Association. No. 20,641; May 28; v. 250; p. 997.
"Campbell." (For Canned Apricots.) J. C. Ainsley Packing Co. No. 20,634; May 28; v. 250; p. 997.
"Caritas." (For Cigars.) O. Sachsel. No. 20,631; May 21; v. 250; p. 765.
"Chief of all Patches." (For Self-Vulcanizing Patches.) M. J. Cagle. No. 20,638; May 28; v. 250; p. 997.
"Coronet." (For Snap-Fasteners.) A. Glassheim. No. 20,647; May 28; v. 250; p. 997.
"Creme De Vie." (For Tonic Beverages.) Rivas Manufacturing Co. No. 20,652; May 28; v. 250; p. 997.
"Dr. Chas. Pratts Lemon Olive Cream." (For a Cream.) Pratt Olive Company. No. 20,651; May 28; v. 250; p. 997.
"Ed's Rochell Salts in Tablets." (For Rochelle Salts.) E. Glass. No. 20,646; May 28; v. 250; p. 997.
"Eggoe." (For Egg Substitute.) The Eggoe Company. No. 20,621; May 21; v. 250; p. 765.
"Fig-Orang." (For a Preparation for Cake, Candy, and Ice-Cream Topping.) California Bakers Specialty Co. No. 20,639; May 28; v. 250; p. 997.

"For Tired Wheels." (For Containers of Axle-Grease.) Indian Refining Company. No. 20,623; May 21; v. 250; p. 765.
"Frazier's Green Checkered Brand." (For Beans with Pork.) The Frasier Packing Co. No. 20,622; May 21; v. 250; p. 765.
"Gaetano D'Amico." (For Macaroni.) G. D'Amico. No. 20,642; May 28; v. 250; p. 997.
"Ivripic." (For Toothpicks.) Wausau Manufacturing Company. No. 20,609; May 7; v. 250; p. 253.
"Kil-Odor." (For Deodorants.) A. B. Eldred. No. 20,643; May 28; v. 250; p. 997.
"Kil-Odor." (For Deodorants.) The Eldred Chemical Co. No. 20,644; May 28; v. 251; p. 997.
"Kum-A-Part." (For Cuff-Buttons.) The Baer and Wilde Co. No. 20,614; May 21; v. 250; p. 765.
"La Nelda." (For Cigars.) L. Richards. No. 20,630; May 21; v. 250; p. 765.
"Luster Auto Klean." (For Auto-Polish.) W. C. Niles. No. 20,626; May 21; v. 250; p. 765.
"Martha-Ann." (For Fruit Cake.) G. A. Rush. No. 20,653; May 28; v. 250; p. 997.
"Mary's Pure Ribbon Cane Syrup." (For Table-Syrups.) Mary and Tuma. No. 20,625; May 21; v. 250; p. 765.
"Niagara Fire Pot." (For Dry Batteries.) A. H. Berry. No. 20,616; May 21; v. 250; p. 765.
"Niagara Luminator." (For Dry Batteries.) A. H. Berry. No. 20,615; May 21; v. 250; p. 765.
"Niagara Signal." (For Dry Batteries.) A. H. Berry. No. 20,636; May 28; v. 250; p. 997.
"Packard Shoe Polishes." (For Shoe-Dressing.) Packard Dressing Co. No. 20,649; May 28; v. 250; p. 997.
"Poppy Brand." (For Melons.) Crutchfield & Woolfolk. No. 20,617; May 21; v. 250; p. 765.
"Pyramid." (For Coffee.) K. Arabadjian. No. 20,635; May 28; v. 250; p. 997.
"Pyrotol." (For Dental Preparations.) Pyrotol Chemical Company. No. 20,629; May 21; v. 250; p. 765.
"Real American." (For Cigars.) L. Naes. No. 20,648; May 28; v. 250; p. 997.
"Russian Style Fruit Karamel." (For Candy.) Russian Candy Co. No. 20,654; May 28; v. 250; p. 997.
"Sabnor." (For Cigars.) Brawley Brothers. No. 20,637; May 28; v. 250; p. 997.
"Snow White." (For Water-Color Fluid.) J. W. Johnston. No. 20,624; May 21; v. 250; p. 765.
"Sphinx." (For Canned Sardines.) French Sardine Company. No. 20,645; May 28; v. 250; p. 997.
"Steele's Premium." (For Canned Sardines.) Premier Packing Co. No. 20,628; May 21; v. 250; p. 765.
"Sunderland Tire Pump." (For Tire-Pumps.) Sunderland Manufacturing Co. No. 20,655; May 28; v. 250; p. 997.
"Trench." (For Shirts.) Salant & Salant. No. 20,632; May 21; v. 250; p. 765.
"Vallantine." (For Liniment.) Valiant Sales Company. No. 20,633; May 21; v. 250; p. 765.
"Van Camps." (For Canned Sardine Paste.) Van Camp Sea Food Co. No. 20,656; May 28; v. 250; p. 997.
"Vegetable Compound With Viburnum." (For a Medicine.) Dupar & Company. No. 20,610; May 7; v. 250; p. 253.
"W. H. Dyer's Own Pack." (For String-Beans.) W. H. Dyer Company. No. 20,620; May 21; v. 250; p. 765.
"White Maltese Cross." (For Apples.) Dennis, Kimball & Pope. No. 20,618; May 21; v. 250; p. 765.
"Winifred Clark Twin-Plex Knitting Needle." (For Knitting-Needles.) Pacific Novelty Company. No. 20,627; May 21; v. 250; p. 765.
"Zatek (The Economical Cocoa)." (For Cocoa.) Pennsylvania Chocolate Company. No. 20,650; May 28; v. 250; p. 997.

PRINTS.

"Built to Go Around the World." (For Rubber Tires.) K. F. & C. Tire & Rubber Corporation. No. 4,896; May 28; v. 250; p. 997.
"Cooper's Original Spring Needle Underwear." (For Underwear.) Black Cat Textiles Company. No. 4,889; May 21; v. 250; p. 765.
"Group of Children's Photographs." (For Cocoanut-Oil.) The R. L. Watkins Co. No. 4,898; May 28; v. 250; p. 997.
"Iroquois Indian Head." (For Beer.) Iroquois Brewing Company. No. 4,894; May 28; v. 250; p. 997.
"Kil-Odorite." (For Deodorants.) The Eldred Chemical Co. No. 4,893; May 28; v. 250; p. 997.
"Liberty Bread." (For Bread.) Robertson Paper Company. No. 4,891; May 21; v. 250; p. 765.
"Pindapan Peanut Shortening." (For Shortening for Use in Cooking.) Magnolia Provision Company. No. 4,897; May 28; v. 250; p. 997.
"Playing Multo-Devo as Partners." (For Card Game.) C. F. May. No. 4,895; May 28; v. 250; p. 997.
"Thais Fettpuder." (For Face-Powder.) J. Davis. No. 4,892; May 28; v. 250; p. 997.
"The Pipe Smokers Delight." (For Compound for Use by Smokers.) L. W. Kramer. No. 4,890; May 21; v. 250; p. 765.
"Woman Drying Hair with Fan." (For Cocoanut-Oil.) The R. L. Watkins Co. No. 4,899; May 28; v. 250; p. 997.

DISCLAIMERS.

Adding and listing machine. G. D. Sundstrand. (Reissue.) No. 14,237; date of patent Dec. 26, 1916; disclaimer filed June 7, 1918; v. 250; p. 517.
Envelop-opening machine. H. D. Taylor. No. 1,150,905; date of patent Aug. 24, 1915; disclaimer filed May 29, 1918; v. 250; p. 517.
Mining-machine and truck. J. London. No. 1,205,097; date of patent Nov. 14, 1916; disclaimer filed June 8, 1918; v. 250; p. 517.
Switches, Control of electrically-operated. General Electric Company. No. 969,738; date of patent Sept. 6, 1910; disclaimer filed May 17, 1918; v. 250; p. 259.

CLASSIFICATION OF PATENTS

MAY, 1918.

NOTE.—First number—class, second number—subclass, third number—patent number.

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ERRATA.

1,269,232, page 346, in heading, assignment, name of assignee, for "Lacey Manufacturing Corporation" read *Lucey Manufacturing Corporation.*

1,269,636, page 489, in heading, assignment, name of assignee, for Schlosinger Radium Co., read *Schlesinger Radium Co.*

1,269,965, page 578, strike out first claim and insert in lieu thereof the following:

1. The combination, with a sound-box, of a stylus-wire, and a rotatable part on which the wire is wound and by which it is adjustable, the rotatable part having a spiral groove wherein the wire is located.

1,270,041, page 598, in heading, assignment, after the word "assignor" insert the words *of one-half.*

1,270,456, page 737, in heading, Christian name of patentee, for "Charlis" read *Charles.*

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THE OFFICIAL GAZETTE

OF THE

United States Patent Office.

Vol. 251—No. 1. TUESDAY, JUNE 4, 1918. Price—$5 per year.
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Patents	730—No. 1,268,079 to No.	1,268,808,	inclusive.
Designs	25—No. 52,068 to No.	52,092,	inclusive.
Trade-Marks	None.		
Labels	None.		
Prints	None.		
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Total	758		

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 25, 1918.

Norton & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Ulysses Grant Holley, Laramie, Wyo., for registration of a trade-mark and trade-mark registered October 16, 1894, No. 25,868, to Norton & Co., of 811 and 812 Royal Insurance Building, Chicago, Ill., and a notice of such declaration sent by registered mail to said Norton & Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Norton & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 21, 1918.

Eso Manufacturing Company, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Lawrence Chemical Co., of 532 Sixth street, Marietta, Ohio, for registration of a trade-mark and trade-mark registered June 17, 1902, No. 38,485, to Eso Manufacturing Company, of 200 West South street, Akron, Ohio, and a notice of such declaration sent by registered mail to said Eso Manufacturing Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Eso Manufacturing Company, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 1, 1918.

Hercules Cement Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Hercules Cement Corporation, of Stockertown, Pa., for registration of a trade-mark and trade-mark registered May 5, 1896, No. 28,215, to Hercules Cement Company, of Catasauqua and Philadelphia, Pa., and a notice of such declaration sent by registered mail to said Hercules Cement Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Hercules Cement Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 1, 1918.

The Universal Pasting Machine Company, its assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Albert G. Prior, of 126 Liberty street, New York, N. Y., for registration of a trade-mark and trade-mark registered December 20, 1904, No. 43,906, to The Universal Pasting Machine Company, of Jersey City, N. J., and a notice of such declaration sent by registered mail to The Universal Pasting Machine Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless The Universal Pasting Machine Company, its assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., May 31, 1918.

Lyman F. Palmer, his assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Frank B. McCrary, Knoxville, Tenn., for registration of a trade-mark and trade-mark registered January 22, 1889, No. 16,212, to Lyman F. Palmer, 1029 Kansas avenue, Topeka, Kans., and a notice of such declaration sent by registered mail to said Lyman F. Palmer at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Lyman F. Palmer, his assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

12520

APPLICATIONS UNDER EXAMINATION.

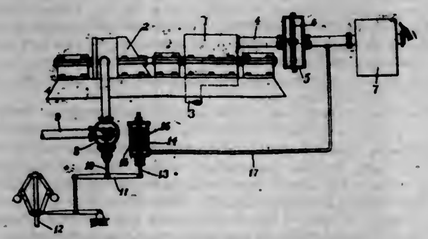
Condition at Close of Business May 31, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	Apr. 27	May 6	161
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 11	Mar. 30	265
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 20	Apr. 6	164
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Apr. 10	May 11	192
167	5. Bookbinding; Harvesters; Jewelry; Music	Mar. 13	Apr. 3	226
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Dec. 11	Feb. 7	370
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Jan. 21	Mar. 5	355
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 8	May 1	298
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Dec. 22	Apr. 8	422
235	10. Carriages and Wagons; Motor Vehicles	Feb. 2	Apr. 16	621
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Mar. 5	May 3	214
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Feb. 14	Apr. 3	667
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 14	Apr. 14	533
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Forgery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 21	Apr. 11	164
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	May 2	May 2	225
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Jan. 21	Mar. 11	539
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 6	Apr. 22	114
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam Engines; Steam-Engine Valves.	Apr. 1	Mar. 16	343
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Jan. 21	Mar. 2	404
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	Apr. 13	May 1	178
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 23	Apr. 18	221
249	22. Aeronautics; Firearms; Ordnance	Mar. 1	Apr. 25	273
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Mar. 14	Apr. 4	266
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	Apr. 18	Apr. 18	200
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	Apr. 19	Apr. 13	159
105	26. Electricity, Generation; Motive Power	Nov. 30	Apr. 1	
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Mar. 14	Apr. 4	314
226	28. Internal-Combustion Engines	Feb. 23	Apr. 1	434
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Jan. 12	Apr. 12	434
182	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Feb. 25	Apr. 27	376
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 6	Mar. 4	220
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Dec. 4	Apr. 22	666
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 3	Apr. 17	204
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	May 13	May 9	70
87	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Jan. 8	Jan. 26	535
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Mar. 29	Apr. 25	494
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Dec. 27	Jan. 10	607
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	May 9	Apr. 16	128
220	39. Water Distribution; Multiple Valves	Jan. 22	Mar. 16	365
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 1	Mar. 16	481
135	41. Railway Draft Appliances; Resilient Tires and Wheels	Mar. 1	Mar. 8	311
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 2	Jan. 17	659
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Jan. 3	Apr. 16	231
338	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Apr. 4	Apr. 8	185
379	45. Clutches; Lubrication; Motors; Railway Brakes	Feb. 13	Feb. 16	358
	Oldest new case, Nov. 20; oldest amended, Jan. 17.			
	Total number of applications awaiting action			15,262
166	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
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	Labels and Prints	May 8	May 8	156

PATENTS

GRANTED JUNE 4, 1918.

1,268,079. REGULATING MECHANISM FOR CENTRIFUGAL COMPRESSORS. OTTO BANNER, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 30, 1914. Serial No. 848,146. (Cl. 230—24.)



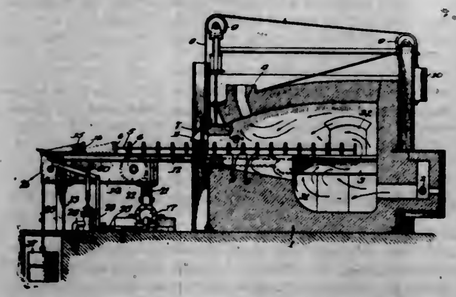
4. In combination, a centrifugal compressor, a driving engine therefor, a discharge line for said compressor, a check valve in said discharge line, a combined speed and discharge line pressure governor for said engine, said governor being arranged to regulate said engine and compressor when operating below the pumping limit of said compressor.

5. In combination, a centrifugal compressor, a driving engine therefor, a discharge line for said compressor, a check valve in said discharge line, and means for regulating said engine to drive said compressor at a total capacity below its pumping limit.

7. In combination, a centrifugal compressor a driving engine therefor, a discharge line for said compressor, a check valve in said discharge line, a combined speed and discharge line pressure governor for said engine, said governor being arranged to regulate said engine while said compressor is operating below the pumping limit and during the pumping period of said compressor.

[Claims 1 to 3 and 6 not printed in the Gazette.]

1,268,080. HEATING-FURNACE. ALBERT J. BATES, Chicago, Ill., assignor to Bates Expanded Steel Truss Co., Wilmington, Del., a Corporation of Delaware. Filed Dec. 22, 1915. Serial No. 68,147. (Cl. 263—6.)

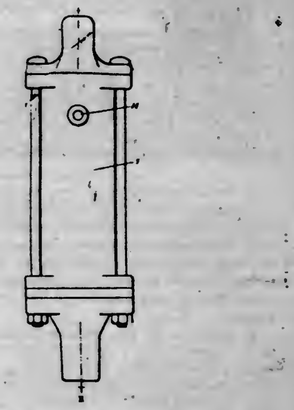


1. A heating furnace comprising an elongated chamber, a skeleton hearth within said chamber for supporting members to be heated, whereby said members form a baffle, means for directing heating gases into said chamber beneath said skeleton hearth, means for partially protecting members at one side of said chamber from the heat of said gases, means above said hearth to allow said gases to leave said chamber, a support for said members outside said chamber in substantially the plane of said skeleton hearth, and means for simultaneously advancing all of the members on said support and skeleton hearth.

2. A heating furnace comprising a chamber, means within said chamber to support a plurality of members to be heated whereby they form a continuous baffle extending from the rear to a point short of the front thereof, means in the front of the chamber to direct the flame toward the rear thereof, and means in said chamber to deflect the flame toward the front along one side of the members being heated, around the forward end thereof, and toward the rear and along the other side of the members.

[Claim 3 not printed in the Gazette.]

1,268,081. FLUID-OPERATED PERCUSSIVE TOOL. LEWIS C. BAYLES, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J., a Corporation of New Jersey. Filed Jan. 14, 1914. Serial No. 811,986. (Cl. 121—20.)



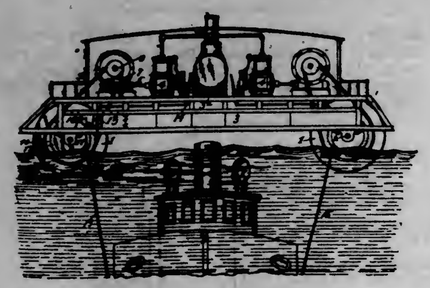
1. In a fluid operated percussive tool, a cylinder, a piston in said cylinder having two pressure areas for driving it forward and a pressure area for driving it rearward, fluid passages arranged to admit fluid pressure constantly to one of said forwardly operating pressure areas, and alternately to the other of said forwardly operating pressure areas, and to said rearwardly operating pressure area, passages from said cylinder for alternately exhausting the fluid pressure from said alternately supplied pressure areas, and valve mechanism for controlling said exhaust passages.

16. In a fluid operated percussive tool, a cylinder having a forward bore and a rearward bore of smaller diameter joining and meeting the forward bore and thereby forming a direct continuation of said forward bore, a differential piston in said cylinder having a head reciprocating in the forward bore, and a shank reciprocating in the smaller rearward bore, a reduced neck connecting the said shank and head, the rear faces of the head and shank forming pressure areas for driving the piston

forward, and the forward surface of the head forming an opposing pressure area for driving the piston rearward, the stroke of the piston being sufficiently long to permit the forward portion of said shank to overrun the point of junction of the forward and rearward bores and extend for a substantial distance into the larger forward bore of the cylinder on the working stroke, fluid passages arranged to constantly admit fluid pressure directly to a rearward portion of one of the cylinder portions to exert pressure on one of said forwardly operating pressure areas, and alternately admit fluid pressure directly to the rearward portion of the other cylinder bore and to the forward portion of the larger bore to exert operating pressure on the other of said forwardly operating pressure areas and said rearwardly operating pressure area, passages from said cylinder for alternately exhausting fluid pressure from said alternately supplied cylinder portions and a valve for controlling said exhaust passages, said valve having opposed operating pressure areas in communication with said alternately supplied cylinder portions.

[Claims 2 to 15 not printed in the Gazette.]

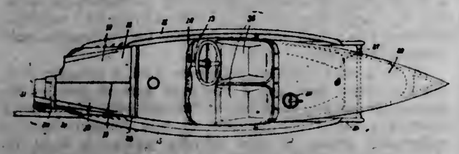
1,268,082. APPARATUS FOR RAISING SUNKEN VESSELS. WALTER C. BECKWITH, Fostoria, Ohio. Filed Oct. 19, 1917. Serial No. 197,392. (Cl. 114—51.)



1. In an apparatus of the character described, a pair of elongated cylindrical pontoons having protruding axial shafts, a superstructure carried by said shafts and which holds said pontoons in parallel separated relation, drums on said protruding shafts, cables on the drums, driving means carried by the superstructure and connections between the driving means and the drums for actuating the drums.

2. A device of the described character which includes in its construction a pair of cylindrical pontoons, a superstructure carried by the pontoons and which holds the pontoons in separated parallel relation, drums secured to and co-axial with the pontoons, cables upon the drums, and means carried by the superstructure for rotating the pontoons.

1,268,083. MOTOR-VEHICLE. EDWARD H. BELDEN, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Sept. 14, 1916. Serial No. 120,109. (Cl. 180—89.)



1. In a motor vehicle, in combination, a vehicle frame, and a two part body mounted thereon and comprising a lower part having sides secured to the frame and an upper part secured to the lower part and having seats adapted to drop down between the sides of the lower part.

3. In a motor vehicle, in combination, a vehicle frame, a cowl mounted on the frame, a lower body part mounted on the frame at the rear of the cowl and connected to the latter and an upper body part mounted on the lower body part and connected to both the cowl and the lower body part.

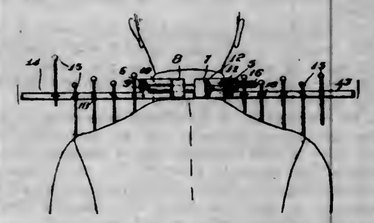
6. In a motor vehicle, in combination, a vehicle frame, a lower body part secured to the frame, a fuel tank mounted on the frame between the sides of the lower body part, an upper body part resting on the lower body part and covering said tank, and means detachably connecting said body parts.

8. In a motor vehicle, in combination, a vehicle frame, a radiator and cowl mounted on the frame in spaced relation, a motor bonnet arranged between the radiator and cowl, said bonnet comprising a lower section secured to the frame and an upper section mounted on the radiator and cowl and detachably secured to the lower section, and an exhaust pipe extending through the bonnet at the joint between said sections.

9. In a motor vehicle, in combination, a vehicle frame, a radiator and cowl mounted on the frame in spaced relation, a motor bonnet arranged between the radiator and cowl, said bonnet comprising a lower section detachably secured to the frame and to the radiator and cowl and an upper section mounted on the radiator and cowl and detachably secured to the lower section and a motor exhaust pipe extending between the edges of the bonnet sections.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,268,084. SHOULDER-YOKE. EDWARD C. BURTMAN, Chicago, Ill. Filed June 27, 1917. Serial No. 177,213. (Cl. 33—2.)



1. In a device of the character described, the combination of a pair of rounded arms adapted to partially surround the collar of an individual, and means for relatively adjusting said arms to determine the width of the collar, including parallel projecting portions on said arms, guiding pins on one of said portions projecting into openings in the other and a screw connecting said portions.

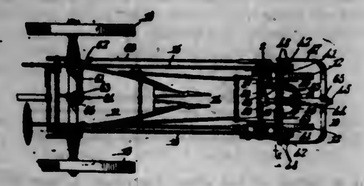
5. In a device of the character described, the combination of a pair of curved arms adapted to embrace the collar of an individual, a screw for relatively adjusting said arms to determine the width of the collar, laterally projecting wings secured to said arms, and separately adjustable pins mounted in spaced relation in said wings and adapted to be moved into engagement with the shoulders of the individual to indicate the slope thereof.

[Claims 2 to 4 not printed in the Gazette.]

1,268,085. BEET-HARVESTER. ALFRED G. BIMSON, Berthoud, Colo. Filed Sept. 12, 1917. Serial No. 191,022. (Cl. 21—183.)

1. In a device of the class described, a vehicle comprising front and rear laterally movable frames connected together at their rear and front ends respectively, and means for shifting one of said frames.

3. In a device of the class described, a vehicle comprising front and rear running gear frames connected together at their rear and front ends respectively, the said frames being capable of being moved laterally relative to each other, a bell crank lever pivoted upon one of said frames, a link connecting one arm of said lever with the other of said frames, a hand operated lever on one of said frames, and a connection between said hand operated lever and said bell crank.



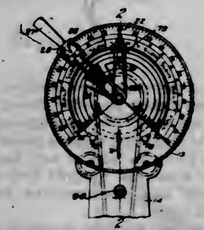
5. In a device of the class described, a vehicle comprising front and rear frames, laterally disposed plates at the rear and front ends of said frames respectively, supports on the front frame inclosing the plate of the rear frame, rollers carried by said supports for bearing said rear frame plate, and means on said rear frame for shifting the same laterally.

10. In a device of the class described, a vehicle comprising front and rear frames having their adjacent ends abutting, brackets secured to said front frame and loosely inclosing the forward end of the rear frame, rollers in said brackets supporting the forward end of said rear frame, a bell crank lever pivoted upon one of said brackets and being capable of swinging horizontally, a link connecting one arm of the said bell crank with the forward end of said rear frame, a hand lever on said rear frame, and a link connecting the said hand lever with the other arm of said bell crank lever.

12. In a device of the class described, a vehicle comprising front and rear frames having adjacent rear and front laterally disposed plates, a fifth wheel on said front frame, supporting brackets depending from said fifth wheel in the rear of the said plates, rollers carried by the lower ends of said brackets and supporting the said plates, and means for moving the said rear frames laterally.

[Claims 2, 4, 6 to 9, and 11 not printed in the Gazette.]

1,268,086. SHIP'S ENGINE-ROOM SIGNAL. OLE K. BOGSTRAND, Brooklyn, N. Y. Filed Apr. 15, 1915. Serial No. 21,544. (Cl. 116—31.)



1. A signal as characterized, comprising a rotary driven member; means for connecting said member with the propeller shaft of a vessel; a plurality of paddle members mounted on said member and radially extended therefrom; a rotary casing surrounding said driven member and having a plurality of resistance members disposed in juxtaposed relation to said paddle members; and a liquid charge filling said casing.

2. A signal as characterized, comprising a rotary driven member; means for connecting said member with the propeller shaft of a vessel; a plurality of paddle members mounted on said member and radially extended therefrom; a rotary casing surrounding said driven member and having a plurality of resistance members disposed in juxtaposed relation to said paddle members; a liquid charge filling said casing; and means for adjusting said resistance members to vary the resistance thereof.

3. A signal as characterized, comprising a rotary driven member; means for connecting said member with the propeller shaft of a vessel; a plurality of paddle members mounted on said driven member and radially extended therefrom; a rotary casing surrounding said driven member and having a plurality of resistance members disposed in juxtaposed relation to said paddle members; a liquid charge filling said casing; means for adjusting said resistance members to vary the resistance thereof; and a plurality of brake shoes, each pivotally mounted on said driven member, said shoes being arranged to be rocked into frictional engagement with said casing by the resistance of said liquid charge.

4. A signal as characterized, comprising a rotary driven member, means for connecting said member with the propeller shaft of a vessel; a plurality of paddle members mounted on said driven member and radially extended therefrom; a rotary casing surrounding said driven member and having a plurality of resistance members disposed in juxtaposed relation to said paddle members; a liquid charge filling said casing; means for adjusting said resistance members to vary the resistance thereof; and a plurality of brake shoes, each pivotally mounted on said driven member, said shoes being arranged to be rocked into frictional engagement with said casing by the resistance of said liquid charge, said brake shoes having each an elongated head for engaging said casing when rocked by said charge.

5. A signal as characterized, comprising a rotary driven member, means for connecting said member with the propeller shaft of a vessel; a plurality of paddle members mounted on said driven member and radially extended therefrom; a rotary casing surrounding said driven member and having a plurality of resistance members disposed in juxtaposed relation to said paddle members; a liquid charge filling said casing; means for adjusting said resistance members, to vary the resistance thereof; a plurality of brake shoes, each pivotally mounted on said driven member, said shoes being arranged to be rocked into frictional engagement with said casing by the resistance of said liquid charge, said brake shoes having each an elongated head for engaging said casing when rocked by said charge; and means embodying a by-pass in said casing for permitting the liquid charge to evade said shoes and said resistance members.

1,268,087. GUARD-RAIL STRUCTURE. ROBERT S. BOHANNAN, Ensley, Ala., assignor to National Steel Products Company, a Corporation. Filed Aug. 25, 1917. Serial No. 188,153. (Cl. 239—17.)



1. A guard rail having an integral base plate, means to clamp said plate to a traffic rail resting thereon, and a thin replaceable wear plate mounted in the face of the guard rail opposite the traffic rail head.

5. In a device of the character described, a plurality of spaced base plates adapted to extend under a traffic rail, arch shaped webs integral with said plates, vertical and horizontal webs integral with the arch webs and forming respectively a guard rail and a foot guard, the guard rail having its inner face inclined away from the traffic rail and curved with its convex face toward the traffic rail, and a replaceable wear plate covering the intermediate convex surface of the guard rail, substantially as described.

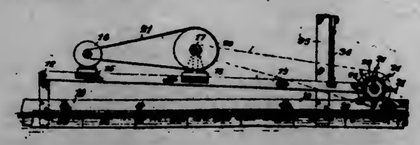
7. In combination, a traffic rail, a tie, a curved guard rail disposed with its convex face toward the traffic rail and adapted at its center only to engage the base of the

latter, a central base plate integral with the guard rail and adapted to project under the traffic rail and between it and a tie, adjustable wedge means mounted on said base plate and adapted to clamp the traffic rail against the guard rail, means to secure the wedge means in adjusted position, and means to brace the guard rail.

12. In combination with a guard rail and traffic rail, a base plate connected to the guard rail and projecting under the traffic rail, a cross tie supporting said plate, an undercut shoulder on said base plate beyond the traffic rail, a wedge key adapted to be driven under said shoulder and between it and the traffic rail, said key having lugs adapted to engage over and under the base of the traffic rail, the overhanging lug standing over the base plate and tie while the underhanging lug stands clear of the base plate and tie, there being a slot in the base plate and a notch in the key opposite the overhanging lug, and a spike adapted to be driven through the notch and slot to secure the traffic rail, wedge key and base plate to the tie.

[Claims 2 to 4, 6, 8 to 11, and 13 to 16 not printed in the Gazette.]

1,268,088. ICE-HARVESTING MACHINERY. EDGAR M. BOND, Worcester, Mass. Filed Apr. 13, 1914. Serial No. 831,479. (Cl. 193—1.)



1. In a device of the class described, means for conducting floating ice in a predetermined path, and a plurality of spaced hook shaped members arranged above said path adapted to successively have their outer extremities forced into the top face of the ice as such ice is fed thereto and to cause said ice to be propelled along said path by the advance of such members.

[Claim 2 not printed in the Gazette.]

1,268,089. DETACHABLE UTENSIL-HANDLE. ANTON A. BONASS, Sheboygan, Wis., assignor of one-half to George Pirc, Sheboygan, Wis. Filed Dec. 7, 1917. Serial No. 205,989. (Cl. 53—7.)

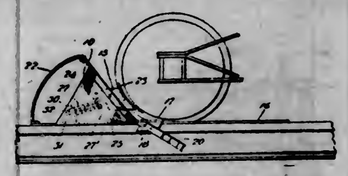


1. The combination with an ear having a slot, of a detachable handle having one end off-set with respect to the other part to form a shoulder, said offset portion being disposed through the slot and engaged with the under side of the ear, the shoulder engaging one wall of the slot with the portion of the handle adjacent said shoulder in contact with the upper side of the ear, a shouldered keeper plate carried by the handle, the shoulder of said plate being engaged with the end of the ear and the free end portion with the under side of the latter, and means for moving the keeper plate into such engagement.

8. A detachable handle of the class described having one end portion offset with respect to the other part, the free end of said offset portion being turned laterally, the part of the handle adjacent said offset portion having a longitudinal slot, a keeper plate slidably engaged with one side of said handle, a finger piece having a shank extending through said slot and engaged with said keeper plate, and means for holding said keeper plate in one position.

[Claim 2 not printed in the Gazette.]

1,268,090. PORTABLE CAR-BUMPER. JOHN BOTSKO, East Akron, Ohio. Filed Sept. 28, 1917. Serial No. 193,883. (Cl. 104—230.)



1. In a device of the class described, a base portion for contacting with the tread of a rail, a supporting member carried by the base and including a plate portion extending transversely of said base, and provided with an opening therein, a bumper operating within said opening, and means connected with the base for engaging the web of the rail and including a plurality of offset members passing around the head of the rail.

3. In a device of the class described, a base portion, a plurality of resilient members extending downwardly from said base portion, a plurality of members extending upwardly from the base and constituting the side members of a frame, a transversely extending plate connected with the base and with the side members, said plate being provided with an opening, a transversely mounted stop plate, a bumper operating within the opening, a plurality of rods carried by the bumper and extending through said stop plate, and resilient devices carried by the rods and engaging said plate last named.

[Claim 2 not printed in the Gazette.]

1,268,091. BURIAL-CASKET. JACOB R. BURKHARDT, Springfield, Ohio, assignor to The Springfield Metallic Casket Company, Springfield, Ohio, a Corporation of Ohio. Filed Apr. 12, 1917. Serial No. 161,478. (Cl. 27—7.)



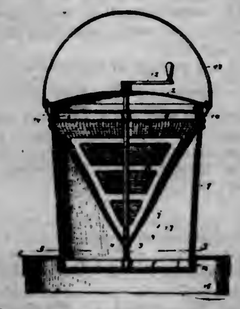
1. In a structure of the character described, a top provided with an opening, a glass plate for closing said opening, the edge of the top about the opening overlying said glass plate, a series of apertured keepers projecting downwardly from said top along the edge of said plate with the apertures beneath the same, and resilient devices arranged to be inserted through said apertures and bear against the under side of said plate.

2. In a structure of the character described, a top having an opening, a glass plate for closing said opening, the edge of the top about said opening having a cement receiving channel on the underside thereof which overlies said plate, a series of keepers projecting downwardly from said top with the apertures thereof beneath the plate, and a series of resilient devices insertible in said apertures and bearing against said plate to hold the same against said channel.

3. In a structure of the character described, a top provided with an opening, a glass plate for closing said opening, the edge of the top about the opening overlying said glass plate, a series of apertured keepers projecting downwardly from said top with the apertures extended below said plate, and a series of flat springs insertible through said apertures and bearing against the under surface of said glass plate, said springs being so formed as to prevent displacement thereof.

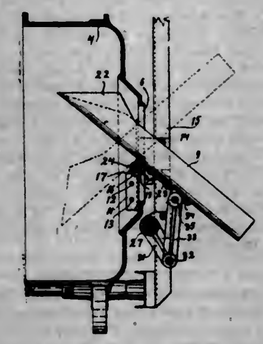
4. In a structure of the character described, a top provided with an opening, a glass plate for closing said opening, the edge of the top about the opening overlying said glass plate, a series of apertured keepers projecting downwardly from said top with the apertures extended below said plate, and a series of flat springs insertible through said apertures and bearing against the under surface of said glass plate, each of said springs being bent back at each end with the extreme ends thereof lying in close proximity to the corresponding keeper.

1,268,092. ASH-SIFTER. HIRSH BURNSTONE, Brooklyn, N. Y., assignor of one-half to Herman Grubin, Brooklyn, N. Y. Filed May 5, 1917. Serial No. 166,530. (Cl. 83—60.)



An ash sifter comprising a shell, an upper strap and a lower strap extending across the same, a band carrying the upper strap and extending along the inner side of the shell, a shaft journaled in the straps, a screen confined at its upper end between the shell and band, a bearing on the lower end of the screen that engages the shaft, and a stirrer mounted on the shaft within the screen.

1,268,093. MIXING-MACHINE. CHARLES A. BUSH, Oshkosh, Wis., assignor to Oshkosh Manufacturing Company, Oshkosh, Wis., a Corporation of Wisconsin. Filed Feb. 6, 1915, Serial No. 6,463. Renewed Apr. 8, 1918. Serial No. 227,390. (Cl. 83—78.)

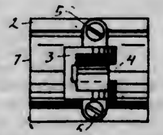


1. In a mixing machine, the combination of a chamber having an opening therein, a slop-guard fitted to the opening and provided with a recess extending downwardly from its upper edge for a desired distance to form a space, and said slop guard also provided on its inner side with bearing sockets alined horizontally with respect to each other, the outer ends of said sockets being closed, and said slop guard also provided with a horizontally-extending curved bearing surface, means for supporting the slop guard within the opening of the chamber, a pivot pin having its opposite ends fitting in the sockets of the slop guard, a chute extending through the space of the slop guard, bearing portions connected to the under side of the chute, said bearing portions being oppositely curved with respect to each other and fitting around the pivot pin and received in and bearing upon the horizontally-extending bearing surfaces, and means for turning the chute on its pivot.

2. In a mixing machine, the combination of a chamber having an opening therein, a slop guard fitting the opening and consisting of two plates, the inner edges of said plates from a medial portion thereof upwardly to the upper ends thereof being recessed to form a space and the inner meeting edges of the plates below the recessed portions thereof being connected together and each plate provided with horizontally-extending concave bearing members, and said plates each provided on its inner side with a socket, the sockets being alined horizontally with respect to each other, and each socket having its outer end closed, means for supporting the slop guard plates within the opening of the chamber, a pivot pin having its opposite end fitting in the sockets of the slop guard plates, a chute extending through the space formed by the recessed portions of the slop guard plates, bearing portions connected to the under side of the chute, said bearing portions being oppositely curved with respect to each other, said oppositely curved bearing portions fitting around the pivot pin, and received in and bearing upon the horizontally extending bearing surfaces, and means for turning the chute upon its pivot.

3. In a mixing machine, the combination of a chamber having an opening therein, a slop guard having means for supporting it to said opening and provided with a central recess, a pair of alined oppositely disposed sockets having closed outer ends, and a horizontally disposed bearing surface extending between said sockets and curved in cross-section, a pivot pin having its ends supported in said sockets, and a chute positioned in said recess and provided with a bearing portion mounted upon said pin between said sockets in engagement with the bearing surface on the guard.

1,268,094. ELEVATOR-LOCK. ALGERNON E. CLARKE, Grand Rapids, Mich. Filed Nov. 27, 1917. Serial No. 204,289. (Cl. 24—134.)



1. In an elevator lock, a base secured to the elevator, a cap secured to said base and forming therewith an opening for the free passage of the control cable of the elevator, a supporting standard integral with said cap, a lever pivotally mounted in said standard, an eccentrically mounted arm integral with said lever, and a clamping block having a mortise through it adapted to be actuated by said arm to firmly clamp the control cable of the elevator to release the same when desired.

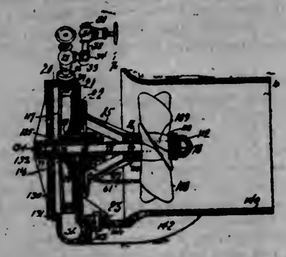
[Claim 2 not printed in the Gazette.]

1,268,095. TURBINE FAN-BLOWER. CHARLES T. COX, Kearney, N. J. Filed June 22, 1914. Serial No. 846,604. (Cl. 230—11.)

1. In an apparatus, the combination of a casing for a turbine, a stuffing box in said casing, a vacuum chamber coacting with said stuffing box, a shaft for the turbine extending through said stuffing box and a fan wheel connected to the shaft coacting with said vacuum chamber.

4. In an apparatus of the character described, the combination of a turbine, a casing for the turbine, with an opening in the wall thereof, a journal bearing formed with

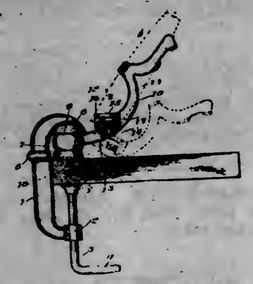
said wall, a bracket having a journal bearing bolted to said wall, a shaft journaled in said bearings, a fan on one end of said shaft, and an impeller on the other end of said shaft within the casing, and means to turn said impeller.



9. In an apparatus of the character described the combination of a casing for a turbine, a shaft for the turbine extending through the casing, a chamber leading to the opening for the shaft in said casing, a pipe with one end connected to said chamber and a fan wheel at the other end of said pipe to remove leakage from the opening in said casing and from said chamber.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,268,096. FISHING-ROD SUPPORT. HENRY F. CRANDALL, Racine, Wis. Filed Mar. 16, 1917. Serial No. 155,201. (Cl. 248—37.)



1. In a device of the class indicated, in combination, a supporting bracket, a rod receiving socket, a connection between said bracket and said socket and means carried by one end of said bracket for simultaneously clamping said bracket to a support and said socket to said bracket.

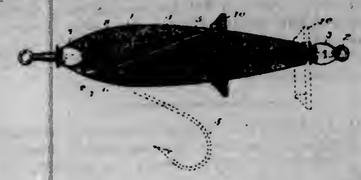
4. A fishing rod support including, in combination, a U-shaped bracket member, a clamping device carried by one end of said bracket, the opposite end of said bracket being provided with a fixed cup-shaped bearing member, a movable cup-shaped bearing member mounted upon said bracket and opposing said clamping device, a rod carrying socket, and a spherical bearing member carried by said socket and adapted to be adjustably received between said cup-shaped bearing members.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,268,097. FISH-LURE. HENRY F. CRANDALL, Racine, Wis. Filed Mar. 16, 1917. Serial No. 155,202. (Cl. 43—31.)

1. An article of the character described including, in combination, a body, a spring-pressed hook connected with said body, and a collar slidably mounted upon said body and adapted to releasably retain said hook in a concealed position within said body.

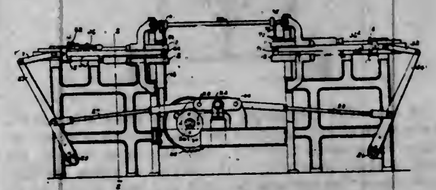
5. An article of the class described including, in combination, an elongated body having a longitudinally and diametrically disposed kerf therein, a hook adapted to be received within said kerf, a shank member secured to one end of said hook, a pin carried by the side walls of said kerf and having said shank pivotally mounted thereon, a coiled spring encircling said pin, and reactive to swing said hook outward, said shank being provided with an extension adapted to engage with the bottom wall of said



kerf in a manner to limit the degree of an outward swing of said hook, and a collar slidably mounted upon said body and adapted to releasably retain said hook in a concealed position within said kerf.

[Claims 2 to 4 not printed in the Gazette.]

1,268,098. POSITIVE SHUTTLE-MOTION FOR LOOMS. GEORGE CROSSLAND, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 20, 1917. Serial No. 156,178. (Cl. 139—49.)



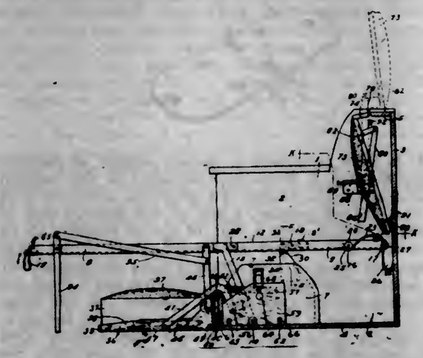
1. A positive shuttle motion for looms comprising rods mounted at opposite sides of the loom and adapted to be alternately connected to the shuttle, and means to reciprocate said rods simultaneously in opposite directions, said means comprising a driven shaft, a mutilated gear loose on said shaft, a pinion intermittently rotatable by said gear, crank pins rotatable by said pinion, connections from said pin to said rods, and means to secure said mutilated gear to said driven shaft in adjusted angular position, said means comprising a toothed disk tight on said shaft, a notched plate detachably secured in fixed position on said gear and effective to engage any desired portion of said toothed disk, and means to clamp said gear to said disk.

2. A positive shuttle motion for looms comprising rods mounted in pairs at opposite sides of the loom, means to reciprocate said rods simultaneously in opposite directions, means to attach said rods to the shuttles, and means to release the rods from the shuttles as the shuttles reach their central position, said means comprising releasing rods mounted in pairs at each side of the loom, and means to reciprocate said rods alternately, whereby the upper releasing rod of one pair and the lower rod of the opposite pair will be simultaneously advanced to operative position or retracted therefrom.

1,268,099. SOFA-BED. FRED M. DAVIS, Chicago, Ill., assignor, by direct and mesne assignments, of one-third to Pullman Conch Company, Chicago, Ill., a Corporation of Illinois, one-third to Gold Furniture Company, a Corporation of Illinois, and one-third to Kroehler Manufacturing Company, a Corporation of Illinois. Filed Feb. 18, 1915. Serial No. 9,086. (Cl. 5—48.)

1. In a device of the class described, a frame in combination with a foldable bed bottom comprising a section having legs rigidly fixed thereto adjacent to its rear corners respectively (as disposed in bed position), said legs at their lower ends being mounted turnably on said frame, a seat swingable downwardly in front of said frame and

having a pair of supporting links pivoted to each side, said links each having a stationary pivotal support in the lower part of said frame, connecting link means arranged for swinging the seat with said section, said means having substantially direct pivotal relation to said seat and said section respectively and a plurality of rearward sections arranged to fold and unfold automatically.



3. A sofa bed comprising a mounting, in combination with a bed bottom member normally disposed uprightly in the back of said mounting, legs fixed at their upper ends to the lower or rear part of said member and having their opposite ends carried turnably on the lower front pat of said mounting, a seat device disposed normally opposite the middle part of said member, said seat device comprising a seat proper and a support on which said seat is tiltably mounted, links connecting said mounting and support and arranged to swing said seat device in a substantially ever level position to and from its bed position in front of said mounting and beneath said bottom member.

5. In a device of the class described, a tiltable seat in combination with a swingably mounted support frame accessory to and correspondingly formed to fit under said seat, said frame including end bars and connecting bars at the front and back, and links each pivoted at its front end to one of said end bars and at its rear end to the rear part of said seat, the latter being held normally in said frame which is formed to fit thereon.

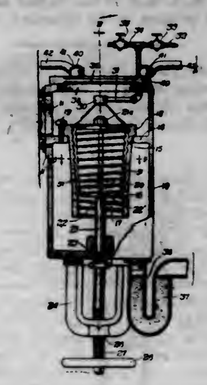
7. A sofa bed comprising a seat and a sofa frame having a panel mounted pivotally at its lower edge beneath the front of said seat, links pivoted to the seat and to the forward part of said frame independently of and spaced back of said panel, said seat being swingable forward and downward in front of said frame, and yielding means coacting between said panel and frame and urging said panel toward its normal closed position, said panel being swingable forward and downward by the corresponding movement of said seat and links as the latter swing forward and impinge against the back of said panel.

13. In combination, a frame, a back the upper part of which is turnably connected to said frame, a brace turnably connected to said back, a fastening on said frame adapted for securing said brace in a definite position with respect to said frame and back, resilient means adapted for urging said brace laterally into engagement with said fastening, and yielding means operable manually to disengage said brace from said fastening.

[Claims 2, 4, 6, and 8 to 12 not printed in the Gazette.]

1,268,100. GAS-WASHER. HENRY A. DREFFEIN, Chicago, Ill. Filed May 3, 1913. Serial No. 765,274. (Cl. 261—75.)

1. In a device of the class described, a pair of members having adjacent spaced apart concentric surfaces affording a tortuous passage for gas traveling therethrough, said surfaces being corrugated, said corrugations being complementary the one set with respect to the other, and means to vary the distance between said surfaces.



2. In a device of the class described, a pair of members having adjacent spaced apart concentric surfaces affording a tortuous passage for gas traveling therethrough, said surfaces being corrugated, said corrugations being complementary the one set with respect to the other, and means to positively clean one of said surfaces.

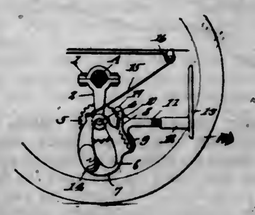
3. In a device of the class described, a sleeve having an interior corrugated surface, and a plug concentrically mounted in said sleeve and having a corrugated outer surface, said sleeve and plug being tapered.

4. In a device of the class described, a sleeve having a tapered bore, the surface of said bore being provided with a helical corrugation, and a plug concentrically mounted in said bore and tapered to correspond thereto, said plug being provided with a helical corrugation complementary to that of said sleeve.

7. In a device of the class described, a sleeve having a tapered bore, the surface of said bore being provided with a helical corrugation, a plug concentrically mounted in said bore and tapered to correspond thereto, said plug being provided with a helical corrugation complementary to that of said sleeve, and means to supply fluid to said corrugated surfaces, said means comprising a jet, and said jet being in communication with a steam supply and with a water supply.

[Claims 5, 6, and 8 to 20 not printed in the Gazette.]

1,268,101. LIFTING ATTACHMENT FOR AUTOMOBILES. JAMES C. DREW, New Orleans, La. Filed Dec. 4, 1917. Serial No. 205,366. (Cl. 254—86.)



1. A lifting attachment for automobiles, including a freely revoluble gear, means for connecting the same to the axle of a motor vehicle, a base, a head connected thereto and having a rack including an inclined end portion, slotted wings, pivotally and slidably mounted relative to the gear, said rack being constantly engaged by the gear, the wings constituting weights for holding the base normally elevated out of contact with the ground, and means under control of the driver for swinging the

base against the action of the weights to position said base upon the ground and under the gear with the inclined portion of the rack back of but in the path of the gear.

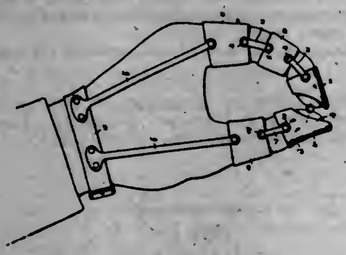
[Claim 2 not printed in the Gazette.]

1,268,102. ELECTRIC-LIGHT-EXTENSION DEVICE. JOHN B. DRUMM, Winslow, Ariz., assignor of forty-nine one-hundredths to George L. Drumm, Barstow, Cal. Filed Aug. 31, 1914. Serial No. 859,470. (Cl. 173—367.)



An electric wire extension device comprising a bracket including spaced arms, a shaft carried by said arms, a drum mounted on the shaft, contact rings mounted on the shaft at the sides of the drum, contact rings carried by the drum in contact with the first-named rings, wires leading from the drum contact rings, wires leading from the first-named contact rings, and an inner and outer bearing-ring disposed between the drum and each bracket-arm and secured to said drum and bracket arm respectively, insulations disposed between the outer bearing-rings and the first-named contact rings, insulations disposed between the inner bearing rings and the drum bearing contact rings, and insulation plates between the first-named contact rings and the bracket-arms, the peripheries of said rings lying inwardly of the edges of the bracket-arms.

1,268,103. FINGER-ARMOR. NATHANIEL C. FLEMING, Coldwater, Kans. Filed Aug. 16, 1917. Serial No. 186,444. (Cl. 2—104.)



Finger armor comprising thumb bands, means for pivotally connecting said thumb bands together, forefinger bands, means for pivotally connecting said forefinger bands together, the thumb tip band and the forefinger tip band having portions of their fronts cut away to expose portions of the thumb and forefinger, a wrist band, and means for connecting said thumb and forefinger bands to said wrist band.

1,268,104. HINGE. WILLIAM S. FLICK and GEORGE A. LAMBERT, Anderson, Ind. Filed Mar. 8, 1917, Serial No. 153,249. Renewed Jan. 22, 1918. Serial No. 213,271. (Cl. 16—109.)

1. A hinge comprising a channel member, a hinge block arranged in the channel member, a pair of leaf sections formed with a pair of spaced knuckles positioned on opposite sides of the hinge block, and a hinge pin passing through each pair of knuckles and said hinge block, said knuckles being so positioned within the channel member that the leaf section may be folded together until their co-engaging surfaces occupy the same plane.



4. A hinge comprising a channel member of substantially U-shape, a hinge block arranged in and integral with the channel member and projecting above the sides of said channel member, a pair of leaf sections each of which is formed with a pair of spaced knuckles at its inner end and disposed on opposite sides of the hinge block, said knuckles being arranged below and tangentially to the upper surface of each leaf section, and a hinge pin extending through each pair of knuckles and said hinge block to pivotally support the knuckles within the channel member in juxtaposition to each other whereby when the leaf sections are opened into the same plane the opposite longitudinal side edges of the channel member will support and maintain the hinge sections in the same plane.

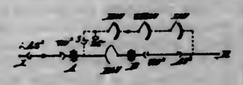
[Claims 2 and 3 not printed in the Gazette.]

1,268,105. METHOD OF MANUFACTURING PREPARED ROOFING. SILAS M. FORD, St. Paul, Minn. Original application filed Feb. 3, 1916, Serial No. 76,050. Divided and application filed Oct. 6, 1916, Serial No. 124,185. Divided and this application filed Sept. 17, 1917. Serial No. 191,884. (Cl. 154—38.)

1. The method of making prepared roofing, comprising the making of a sheet of water-proof material by depositing on heat resisting endless belts, water-proof compound of different colors, scraping them to the desired thickness, freeing the sheets so formed from the belts, slitting the sheets so formed into strips, joining parts of the strips from each sheet onto a sheet of separately prepared foundation stock so as to form therewith a striped roofing design, the edges of the strips so joined being amalgamated in the process of joining.

[Claims 2 and 3 not printed in the Gazette.]

1,268,106. TELEPHONE SYSTEM. ADOLF FRANKE, Grunewald, near Berlin, Germany, assignor to Siemens & Halske, A. G., Berlin, Germany, a Corporation of Germany. Filed Sept. 3, 1913. Serial No. 787,913. (Cl. 179—18.)



1. A telephone exchange system, comprising subscribers' stations, subscribers' lines, trunk lines, selectors for establishing a preliminary connection between a calling station and a called station, a plurality of switches in series for establishing a talking connection replacing said preliminary connection, some of said switches being arranged for automatic selection some for selection by number impulses.

2. A telephone exchange system comprising subscribers' stations, subscribers' lines, trunk lines, selectors controlled by a calling station for establishing a preliminary connection between a calling station and a called station, a first multiple field with contacts less numerous than the number of subscribers' lines, a second similar multiple field, automatically operating switches for connecting a calling subscriber's line with said first multiple field, automatically operating switches for connecting a called subscriber's line with said second multiple field, switches for interconnecting the contacts of said multiple fields, and means for releasing said selectors of the preliminary connection.

14. A telephone exchange system comprising subscribers' stations, subscribers' lines, trunk lines, multiple fields with contacts less numerous than said subscribers' lines, automatically operating switches connecting said subscribers' lines when calling or called with said multiple fields, selectors controlled by a calling station to establish a preliminary connection with the desired subscribers' line, a set of switches to establish a talking connection between the contacts of said multiple fields, an impulse generating device associated with said contacts of said multiple fields, said switches establishing said talking connection being controlled by impulses generated by said impulse generating device, said impulses being transmitted over said preliminary connection, said preliminary connection consisting of two leads and associated contact arms and operating relays.

15. A telephone exchange system comprising subscribers' stations, subscribers' lines, trunk lines, selectors controlled by a calling station for establishing a preliminary connection between a calling station and a called station, a first multiple field with contacts less numerous than the number of subscribers' lines, a second similar multiple field, automatically operating switches for connecting a calling subscriber's station with said first multiple field, automatically operating switches for connecting a called subscriber's line with said second multiple field, switches for interconnecting the contacts of said multiple fields, said switches and the corresponding trunk lines being arranged for control over two wires separately, and means for releasing said switches of the preliminary connection.

[Claims 3 to 13 not printed in the Gazette.]

1,268,107. MEANS FOR FORMING PAPER BAGS. HERMANN FRENKEL, Lübeck, Germany. Filed Aug. 17, 1917. Serial No. 186,738. (Cl. 93—12.)



1. In a device for the purpose described, a reciprocatory piston, three pairs of coöperating opposed springs, channel-forming surfaces within one set of springs, the surface of one spring being deeper than the surface of the other, said springs arranged to act in successive order.

4. In a device for the purpose described, a reciprocatory piston, three pairs of coöperating opposed springs, channel-forming surfaces within one set of springs, the surface on one spring being deeper than the surface on the other, said springs arranged to act in successive order, the one surface arranged to operate upon the material prior to the operation of the other surface, and a frame having a channel beneath the lowermost springs into which the completed article is pressed by the piston after passing through said springs.

[Claims 2 and 3 not printed in the Gazette.]

1,268,108. WINDOW-FRAME. CLARENCE A. FULLERTON, New York, N. Y. Filed Mar. 27, 1915. Serial No. 17,510. (Cl. 189—69.)



1. In a structure of the class described, a composite bar formed of continuous rails maintained in spaced relation, each of said rails having flanges formed along the edges thereof to produce a channel structure in cross-section, said flanges having the outer faces thereof provided with continuous undercut slots, said rails having the adjacent faces thereof provided with continuous undercut slots formed centrally therealong, side plates carried by some of said flanges along portions of the length of said rail, said side plates having continuous enlarged beads formed thereon to engage in the undercut slotted portion of said flanges, said side plates having the free edges thereof adapted to contact with the exposed faces of the flanges of the opposite rails, central sealing bars carried by said rails having enlarged beads to engage in the continuous central slots formed along said rails, and said side plates and said central sealing bars being reversibly carried in the slotted portions of said rails.

2. In a structure of the class described, a bar of composite formation comprising rails maintained in spaced relation, having one of said rails movable with respect to the other, flanges formed along the edges of said rails, said flanges having continuous undercut slots formed in the outer faces thereof, said rails having a central undercut slot in each of the adjacent faces, side plates carried by some of said flanges, enlarged continuous beads formed along said side plates adjacent to one edge thereof, said enlarged beads engaging in some of the portions of said undercut slots in the flanges of the spaced rails, said side plates having the free edges thereof disposed to contact with the outer faces of the unused flanges of the opposite rail, said side plates being reversibly connected to said rails, said rails having central undercut slots formed therein, central sealing bars reversibly carried by said rails in said undercut slots, having beads formed thereon to engage in said central undercut slot and said central sealing bars having contacting faces formed thereon so that when said rails are disposed in parallel relation, the side plates carried by each member contact with portions of the other rail to form a series of contacting sealing faces between the separable parts of the composite bar.

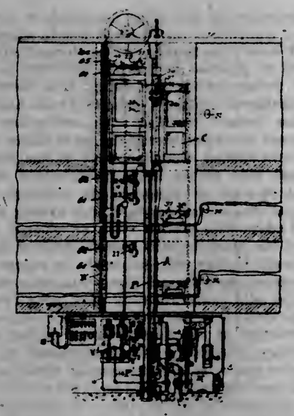
1,268,109. ELEVATOR-CONTROLLING SYSTEM. FLOYD C. FURLOW, Montclair, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 5, 1915. Serial No. 59,736. (Cl. 187—29.)

1. In an elevator, the combination of the car, hydraulic hoisting motor therefor, mechanism to control the motor to raise and lower the car, means independent of the car to actuate the said mechanism, and means controlled automatically by the car, to control the said actuating means to cause the latter to actuate the said mechanism to control the hoisting motor to raise and lower the car.

3. In an elevator, the combination of the car, a hydraulic hoisting motor therefor, a main valve and an auxiliary valve to control the motor, means to operate the main valve, means to open the auxiliary valve to cause the motor to move the car to a level with the desired landing, comprising an electro-magnet, an electric circuit therefor, including a switch, means to close the switch automatically by the movement of the car to the desired landing.

14. In a hydraulic elevator, a car, a hydraulic hoisting motor therefor, a main valve to control the motor, an

electric motor to open the valve, a circuit to the electric motor, a switch in the circuit, front and back contacts on the switch, the front contacts forming a part of the said circuit, an auxiliary valve further to control the hydraulic motor to bring the car floor to a level with the floor of the desired landing, electric means operable to open the auxiliary valve, an electric circuit for the said electric means, including the said back contacts, and means to close and open the said circuit by the movement of the car to a desired landing.



17. In an elevator, the combination with the car, motive means for the car, push button controller apparatus to control the motive means and means under the control of the said push button controlled apparatus to level the car with the landing, independently of the said apparatus.

19. In a hydraulic elevator, the combination of the car, a hydraulic motor, a main valve, a motor for actuating the valve, an automatic push button system of electrical circuits and a floor controller apparatus comprising a switch at each floor operable by the car to control the motor, an electrically controlled by-pass valve, and means comprising a coacting cam and switch dependent on the car overrunning or underrunning the desired landing, automatically to control the by-passing means to effect an exact car landing.

[Claims 2, 4 to 13, 15, 16, 18, 20, and 21 not printed in the Gazette.]

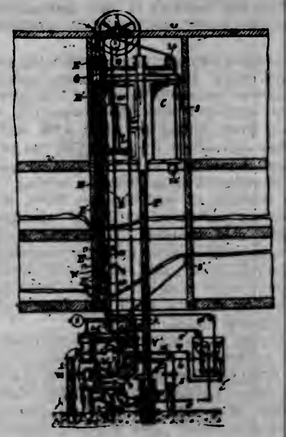
1,268,110. HYDRAULIC ELEVATOR. FLOYD C. FURLOW, Montclair, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 5, 1915. Serial No. 59,737. (Cl. 187—28.)

1. In a hydraulic elevator, the combination of a car, motive means for the car, controlling mechanism for the motive means, and means positioned at predetermined points in the path of travel of the car, engageable by the car automatically to effect operation of the controlling mechanism to control the motive means to raise and lower the car.

3. In a hydraulic elevator, the combination of a car, motive means for the car, controlling mechanism for the motive means, means positioned at predetermined points in the travel of the car, operatively connected to the controlling mechanism, and a cam operable by movement of the car to actuate the said means to effect operation of the controlling mechanism to control the motive means to raise and lower the car.

4. In a hydraulic elevator, the combination with the car, a hydraulic motor, and controlling mechanism controlled from each landing automatically to control the hydraulic motor to raise or lower the car level with the landing.

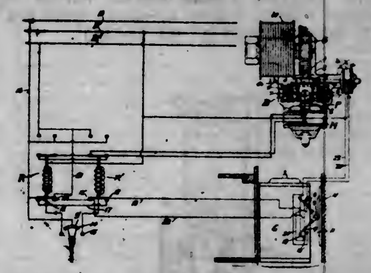
10. In a hydraulic elevator, the combination of the car, a hydraulic motor, a main valve, an auxiliary valve, a standing cable connected to the auxiliary valve, a car



lever, and means controlled thereby for actuating the cable.

[Claims 2, 5 to 9 and 11 to 28 not printed in the Gazette.]

1,268,111. SYSTEM OF CONTROL FOR ELECTRIC ELEVATORS. FLOYD C. FURLOW, Montclair, N. J., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed Nov. 5, 1915. Serial No. 59,738. (Cl. 172—152.)



1. In an electric elevator, the combination of the car, an electric hoisting motor, and electric means to control the motor, automatically controllable by the movement of the car, to cause the motor to operate to bring the car to a level with a desired landing whether the car over-runs or under-runs the said landing.

3. In an electric elevator, the combination of the car, an electric main hoisting motor and an auxiliary electric hoisting motor to operate the car, an automatically operable electric means, controllable by the movement of the car, and operable by the movement of the car whether the car over-runs or under-runs a desired landing, automatically to control the operation of the auxiliary motor to level the car with the landing.

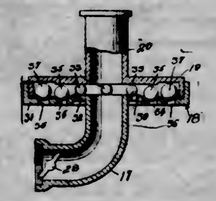
4. In an elevator, the combination of the car, an electric hoisting motor mechanism, electric means to control the hoisting motor mechanism, automatically operable by the movement of the car, at a landing, to cause the hoisting motor mechanism to operate to maintain in effect the car level with the landing, in loading and unloading.

7. In an elevator, the combination of a car, main and auxiliary electric hoisting motors, a car switch for controlling the main motor, and means controllable by centering the car switch to the off position, to enable the auxiliary motor to be operated to level the car automatically with a landing whether the car over-runs or under-runs the landing.

8. In an elevator, the combination of a main electric hoisting motor, a controlling mechanism therefor, an auxiliary electric hoisting motor, an operating circuit therefor, a controlling mechanism for the auxiliary motor including a switch and means controllable by the controlling mechanism for the main motor, to cause the operating circuit for the auxiliary motor to close, automatically to level the car with a landing whether the car over-runs or under-runs the landing when the main motor is not in operation in hoisting.

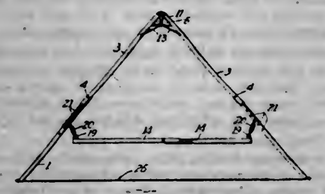
[Claims 2, 5, 6, and 9 to 11 not printed in the Gazette.]

1,268,112. AUXILIARY AIR-SUPPLY DEVICE FOR INTERNAL-COMBUSTION ENGINES. WALTER GROLD, Milwaukee, Wis. Filed July 9, 1914. Serial No. 850,037. (Cl. 137—32.)



An auxiliary air inlet for carbureters, comprising in combination, a pipe section terminating at its upper end in a horizontal plate having a marginal upstanding flange and including a central elevated portion surrounding the mouth of the pipe section, said elevated portion having a series of small ports formed therethrough and the main portion having a plurality of series of ports of graduated size, the ports increasing in size from the center, a second pipe section, a plate on the lower end thereof having a marginal downwturned flange threaded into the upstanding flange, and balls of graduated size corresponding to and seated over the ports of the several series.

1,268,113. OUTDOOR BED. ALTON E. GOSSO, Chicago, Ill. Filed July 8, 1915. Serial No. 38,647. (Cl. 5—5.)



2. In a device of the kind described and in combination, a frame consisting of two U-shaped frame parts arranged together with the free ends of the sides of one part adjacent the ends of the other, the sides of said parts each consisting of a plurality of parts pivotally secured together, and the relative pivotal movement of the parts being limited, and a pair of plates, one plate pivotally secured to the upper end of one of the sides of one of the U-shaped parts, and to the adjacent end of one side of the other U-shaped part, and the other plate similarly pivotally secured to the ends of the other adjacent sides of said frame parts, said plates arranged to engage with the frame parts and limit the movement thereof, a bed frame consisting of a pair of U-shaped parts pivotally secured together at the ends of the sides of the parts, said adjacent side parts arranged to engage with each other to limit the pivotal movement thereof, and means for suspending said bed part from the sides of one U-shaped frame between its base and the free ends of the side parts thereof.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,268,114. SAFETY DEVICE. OTTO GRUNER, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J., a Corporation of New Jersey. Filed June 6, 1914. Serial No. 843,341. (Cl. 187—91.)



1. An elevator safety device comprising clamp jaws adapted to co-act with a stationary member, means for effecting an engagement between said jaws and member tending to separate the jaws, and an elastic medium opposing said separation of the jaws.

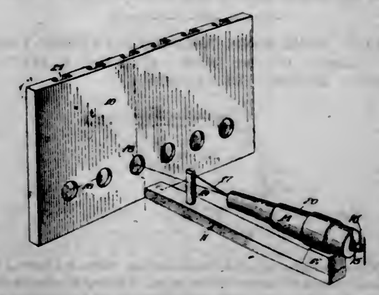
8. In an elevator safety device, the combination of a car and its guide rails, of pivoted jaws on the car adapted to clamp a guide rail, a self aliining roller adapted to be wedged between one of the jaws and a guide rail tending to separate the jaws, and a spring opposing the separation of the jaws.

11. In an elevator safety device, the combination of a car and its guide rails, of pivoted jaws on the car adapted to clamp a guide rail, a self-alining member adapted to be wedged between one of the jaws and a guide rail so as to move said jaw away from the rail, and yielding means for communicating the movement of one jaw to the other jaw.

19. In an elevator safety device, the combination with a car and its guide rails, of a pair of clamp jaws pivoted to the car and normally out of contact with a guide rail, said jaws being movable as a unit about said pivot, and means comprising a spring for maintaining the jaws in normal position with respect to a guide rail.

[Claims 2 to 7, 9, 10, 12 to 18, and 20 to 28 not printed in the Gazette.]

1,268,115. TOY. GEORGE T. HAINES and BURTON W. SMITH, Rochester, N. Y., assignors to Multikraft Inc., Rochester, N. Y., a Corporation of New York. Filed Oct. 2, 1917. Serial No. 194,373. (Cl. 46—59.)



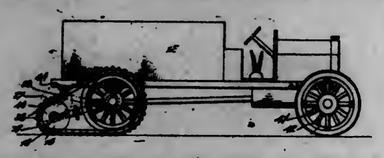
1. A toy comprising a projectile guide having a guideway throughout its length and an opening extending from the guideway through its outer wall, a projectile, and elastic means for impelling the projectile adapted to enter the guideway through said opening when the projectile is placed in the guideway.

7. A toy comprising a target holder having a plurality of superimposed targets mounted thereon, a projectile guide movably mounted in spaced relation with respect to the targets and a tension member arranged to impel a projectile upon the guide in the direction of the targets, the

striking of the lowermost target by the projectile serving to release the same to permit the next succeeding target to assume the position of the one last released.

[Claims 2 to 6 and 8 to 11 not printed in the Gazette.]

1,268,116. TRACTOR ATTACHMENT FOR MOTOR-TRUCKS. JOHN SANFORD HARGER, Nyack, N. Y. Filed June 29, 1917. Serial No. 177,643. (Cl. 21—150.)



1. A tractor attachment consisting of a framework adapted for securement, at one end thereof, to a motor-vehicle, and wheels carried by the framework at the opposite end thereof, said framework being connected intermediate the ends thereof to form a toggle.

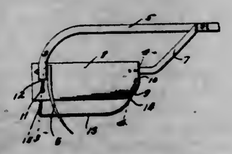
2. A tractor attachment consisting of a framework adapted for securement, at one end thereof, to a motor-vehicle, and wheels carried by the framework at the opposite end thereof, said framework consisting of a plurality of rotatably connected members.

3. A tractor attachment consisting of a framework adapted for securement, at one end thereof, to a motor-vehicle, an axle pivotally connected to the outer end of each frame-member, and means to lock the frame-members and axle together to form a rigid structure when the tractor is in use.

4. The combination of a motor-vehicle, a tractor attachment consisting of a plurality of supplemental wheels carried by a frame consisting of a plurality of members connected by a swivel joint, each frame-member being pivotally attached to the vehicle, and a traction-belt arranged for attachment to the wheels of the vehicle and the wheels carried by said frame.

5. In combination with a vehicle, a tractor attachment consisting of a plurality of wheels, a pivoted frame to support said wheels upon the vehicle, said frame consisting of a plurality of members connected by a swivel joint intermediate the ends thereof to form a toggle connection, a traction device consisting of a belt adapted for attachment to said wheels and the wheels of the vehicle, and means to retain the belt in position upon the wheels.

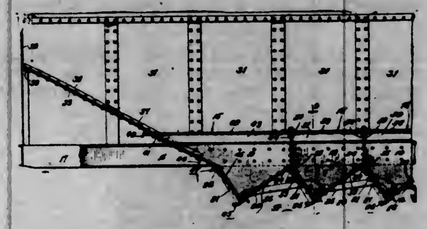
1,268,117. SHIELD FOR CORN-CULTIVATORS. THOMAS O. HARSTAD, Windom, Minn. Filed Dec. 3, 1917. Serial No. 205,126. (Cl. 97—13.)



1. In a cultivator, the combination with a shovel, of a shield disposed adjacent thereto and having openings adjacent the forward and rear ends thereof, and a runner having its forward end extended through the openings in the forward end of the shield whereby said end of the runner will bind against the edges of said openings, the rear end of said runner being passed through one of the openings adjacent the rear end of the shield and then extended through the other adjacent opening and having its extremity bent about the runner adjacent the last named opening.

2. A cultivator shield having openings adjacent the front and rear ends thereof, a runner having its forward end secured in the openings at the front of said shield, and its intermediate portion spaced from the bottom thereof, the rear end of said runner being extended through one of the openings at the rear end of the shield from one side thereof and then projecting along the other side and extended through the other adjacent opening, the extremity of the runner being bent to provide a loop for encircling the portion thereof adjacent the last named opening.

1,268,118. HOPPER-CAR. EDWARD D. HILLMAN, Larchmont, N. Y., assignor to Benjamin A. Hegeman, Jr., North Plainfield, N. J. Filed Aug. 8, 1917. Serial No. 184,997. (Cl. 105—185.)



1. A hopper-car having sides, ends, center and side sills, a plurality of hoppers extending downwardly below said side and center sills with the floor of the hoppers below said sills inclined in the same direction, hinged downwardly extending doors for the discharge ends of said hoppers, and means for simultaneously operating said doors, said hoppers being arranged in transverse pairs, with their inner hopper sheets formed of frames connected together in series and extending over the center sills and secured thereto and their outer hopper sheets secured to the side sills and connected together in series and said inner and outer hopper sheets also being secured to the hopper-bottoms.

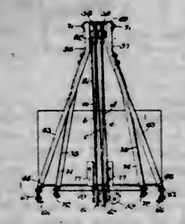
2. A hopper-car having sides, ends, center and side sills, a plurality of hoppers extending downwardly below said side and center sills with the floors of the hoppers below said sills inclined in the same direction, hinged downwardly extending doors for the discharge ends of said hoppers, and means for simultaneously operating said doors, said hoppers being arranged in transverse pairs with their inner hopper sheets formed of frames having right angle flanges at their edges and secured together in series at said flanges and extending over the center sills to form a hood thereover and secured to said center sills, and the outer hopper sheets of said hoppers being secured to the side sills and having right angle flanges at their edges at which they are secured together in series, and said inner and outer hopper sheets also being secured to the hopper-bottoms and affording flanges against which the hopper doors may abut.

3. A hopper-car having sides, ends, center and side sills, a plurality of hoppers extending downwardly below said side and center sills, with the floors of the hoppers below said sills inclined in the same direction, hinged downwardly extending doors for the discharge ends of said hoppers, and means for simultaneously operating said doors, said hoppers being arranged in transverse pairs with their inner hopper sheets secured to the center sills and having right angle flanges at which said sheets are secured together in series, and the outer hopper sheets of said hoppers being secured to the side sills and having right angle flanges at their edges at which they are secured together in series, and said inner and outer hopper sheets also being secured to the hopper-bottoms, and affording flanges or jambs against which the hopper-doors may abut.

4. A hopper-car having sides, ends, center and side sills, downwardly and inwardly inclined end floorings, a plurality of hoppers extending downwardly below said side and center sills, with the floors of the several hoppers below said sills inclined in the same direction, hinged downwardly extending doors for the discharge sides of said hoppers, and means for simultaneously operating said doors, said hoppers being arranged in transverse pairs with their inner hopper sheets formed of frames extending over the center sills and secured thereto and having end flanges at which they are secured together and to said end floorings and also flanges to which the hopper bottoms are secured and additional flanges affording jambs against which the hopper doors may abut, and the outer hopper sheets being secured to the side sills and also secured together in series and to said end floorings, and affording flanges against which the outer edges of the hopper doors may abut.

[Claims 6 to 11 not printed in the Gazette.]

1,268,119. POWER PLANT FOR AUTOTRUCKS AND THE LIKE. CLARENCE J. HOGEBOOM, Boston, Mass., assignor to Samuel W. Prussian, Brookline, Mass. Filed Mar. 2, 1917. Serial No. 151,955. (Cl. 21—20.)



1. A power-plant for auto-trucks and the like comprising a source of power, change-speed transmission gearing, shafting for connecting the source of power to the propelling wheels through said transmission gearing, a clutch-member for interrupting said shafting intermediate said transmission gearing and wheels, auxiliary transmission means, and coöperating gears on said shafting and auxiliary transmission means respectively for connecting and disconnecting the auxiliary transmission means to and from said shafting intermediate said gearing and said clutch-member, the gear on said shafting being arranged to be moved into and out of coöperative relationship with the other of said gears and being connected to said clutch-member so that the gears may be thrown into engagement when the clutch-member is moved into inoperative position.

2. In a power-plant for auto-trucks and the like comprising a source of power arranged to supply power to the propelling wheels through variable-speed transmission gearing and associated clutch, the combination of shafting for transmitting power from the gearing to the propelling wheels, a clutch-member disposed in said shafting for operatively dividing the shafting into two portions and thereby disconnecting the gearing from the wheels, auxiliary transmission means for transmitting power to auxiliary apparatus, and means for connecting and disconnecting the auxiliary transmission means to and from the said portion of shafting connected to the transmission gearing, whereby the auxiliary apparatus and propelling wheels may be supplied with power independently of each other, the last said means including a gear wheel non-rotatably associated with said clutch member.

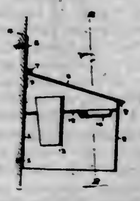
3. In a power-plant for auto-trucks and the like, the combination of a power shaft, a connecting shaft, a driving shaft, the said shafts being collinearly arranged, means for connecting the power shaft to the connecting shaft so that the two shafts may move longitudinally but not angularly with relation to each other, a clutch member arranged to rotate with but to slide longitudinally of the driving shaft, and a second clutch member mounted to slide longitudinally of but to rotate with the connecting shaft, the two clutch members being arranged to be thrown into or out of power-transmitting engagement by sliding the second clutch member backwardly or forwardly along the connecting shaft.

5. In a power-plant for auto-trucks and the like, the combination of two collinear shafts, a circular member concentrically disposed between the shafts for operatively connecting the shafts together, each shaft having a portion telescoping with the circular member so as to permit limited longitudinal movement of the shafts relatively to the member, and a bearing for the circular member arranged to prevent endwise movement of the member, whereby both of said shafts are supported by said member and are permitted to move a limited amount longitudinally of the member.

8. In a power-plant for auto-trucks having tiltable beds, the combination of a source of power, change-speed transmission gearing of the planetary type, shafting for connecting the source of power to the propelling wheels through said planetary gearing, a clutch-member for interrupting said shafting intermediate said planetary gearing and said wheels, an auxiliary shaft disposed in parallelism with said shafting, a drum mounted on said auxiliary shaft, a pulley mounted on the free end of the tiltable bed, a pulley mounted on the truck above said pulley, a cable extending around said pulleys and drum so that the bed is tilted when the cable is wound upon the drum, and means for connecting and disconnecting the auxiliary shaft to and from said shafting intermediate said planetary gearing and said clutch-member.

[Claims 4, 6, and 7 not printed in the Gazette.]

1,268,120. COMMUNION-SERVICE CABINET. JEWELL HOWARD, Stratford, Tex. Filed Feb. 10, 1917. Serial No. 147,919. (Cl. 65—58.)

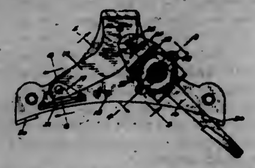


As a new article of manufacture, a communion service cabinet comprising a box, a shelf disposed horizontally within said box and formed adjacent to its rear wall with a series of openings to receive wine glasses, said shelf being also provided with a series of indentations corresponding in number with the wine glass openings and in positions in front thereof, and a cover for said box.

1,268,121. STOPPING ATTACHMENT FOR TALKING-MACHINES. HARVEY HUBBELL, Bridgeport, Conn. Filed June 27, 1916. Serial No. 106,133. (Cl. 74—46.)

1. A stopping attachment for talking machines having a turntable and a tone arm, comprising a bell crank brake lever having long and short arms and pivoted to swing on its short arm, a brake shoe pivoted to the free end of said lever and adapted to contact with the turntable, an

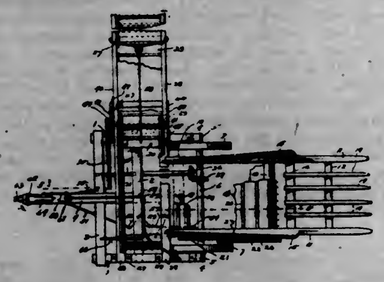
operating member having pivotal connection with the brake lever, and a stopping arm having frictional connection with the operating member and a head in the path of movement of the tone arm, the pivotal points of the operating member and of the brake shoe to the brake lever lying on opposite sides of a line longitudinal to the short arm of said lever, substantially as described, for the purpose set forth.



4. An attachment of the character described, comprising a bell crank brake lever pivoted to swing on one arm, a brake shoe pivoted to the other arm and adapted to contact with a turntable and an operating member having pivotal connection with the brake lever, the pivotal points of the operating member and of the brake shoe to the brake lever lying on opposite sides of a line longitudinal to the pivoted arm of said lever.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

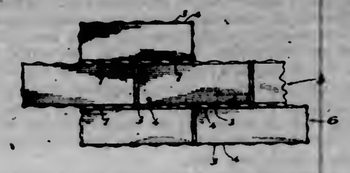
1,268,122. HAY AND BUNDLE LOADER. MERRILL F. HUTCHINSON and FRANCIS G. HUTCHINSON, Clearwater, Kans. Filed Sept. 19, 1916. Serial No. 121,007. (Cl. 56—61.)



1. A loading machine, comprising in combination, a frame work including a pair of longitudinal side beams, having forward projections, an axle journaled on the ends of said projections, traction wheels fixed on said axle, a frame swinging on said axle and extending forwardly from the main frame, a set of rake teeth mounted between the sides of the swinging frame, a conveyer also mounted on said swinging frame and extending rearwardly from said rake teeth to overlie the axle, a transverse conveyer on the main frame and fed by the conveyer on said swinging frame, a laterally projecting conveyer pivoted on said main frame and extending from said transverse conveyer, a gear connection between the axle and one of the rollers of the conveyer on the swinging frame and a countershaft geared to the axle to drive the transverse and laterally pivoted conveyers.

2. A loading machine, comprising in combination, a main frame having a pair of forwardly extending elements, an axle journaled in the forward extremities of said elements, traction wheels on said axle mounted between said elements, a frame journaled on said axle also between said elements, rake teeth and a conveyer associated therewith carried by said journaled frame said conveyer extending rearwardly over the axle, a transverse conveyer on the main frame, fed by the first mentioned conveyer, a laterally extending pivoted conveyer associated with said transverse conveyer, means for driving all of said conveyers from said axle, and means for raising and lowering said journaled frame and said pivoted conveyer.

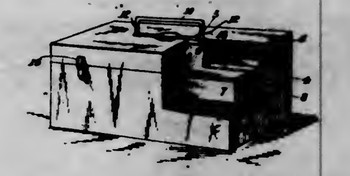
1,268,123. WOOD PAVING-BLOCK AND PAVEMENT. HARRY C. INNES, Cincinnati, Ohio. Filed July 15, 1916. Serial No. 109,582. (Cl. 94—8.)



1. Wood paving comprising blocks having fluted sides running with the grain, said blocks placed so that the curves do not entirely intermesh, whereby a sliding movement will be allowed of the blocks into further mesh without buckling the pavement or crushing the blocks.

2. A wood paving comprising blocks of substantially rectangular shape, and having a horizontal flat upper surface cut across the grain and vertical sides cut in complementary curves and reverse curves with the grain of the wood, whereby the space between like blocks in laying the same will be possible of regulation to allow for expansion and contraction, while the blocks will abut each other at all times.

1,268,124. TOOL-CHEST. ARCHER B. JENNINGS, Meriden, Conn. Filed Apr. 3, 1917. Serial No. 159,418. (Cl. 206—16.)



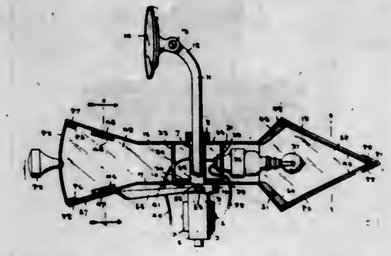
1. A tool container, comprising a chest provided with ledges on its inside walls and a hinged lid having a central opening, a tray adapted to seat on the ledges and against the upper part of which the lid, when closed, bears, a handle frictionally held in the central part of and adapted to slide in the tray, so as to lie wholly within the upper surface of the lid when in depressed position and, when raised, to extend above the lid to afford a carrying means for the chest with the tray inclosed therein and for the tray alone when removed from the chest.

4. In a tool container, in combination, a chest, a detachable tray of less width than the inside of the chest, adapted to be supported in the upper part of the chest and provided with a central partition against which the lid of the chest, when closed, bears, an opening through the lid of the chest, vertical holes formed through the partition, a handle comprising a gripping bar, adapted to lie in and pass through the lid opening, and downwardly extending branches spaced apart to pass through the holes with frictional sliding contact and stops at the lower ends of the handle branches.

[Claims 2 and 3 not printed in the Gazette.]

1,268,125. INDICATOR. JOSEPH M. JOHNSON, Reading, Pa., assignor of one-half to Samuel S. Johnson, Harrisburg, Pa. Filed Oct. 7, 1915, Serial No. 54,687. Renewed Jan. 22, 1918. Serial No. 213,270. (Cl. 116—31.)

An indicator device of the class described, comprising a support, a supporting sleeve carried by one end of said support, a translucent indicator arm rotatably mounted on said sleeve, a U shaped bracket arranged within the indicator arm and rotatably mounted on said sleeve, the arms of said bracket being each apertured and disposed transversely of the indicator arm, the vertical side edge being cut away to provide light emitting openings, illuminating means attached to and in the aperture of one of said bracket arms and projecting within one end of the indicator arm, the light thereof



radiating through between said bracket arms and the sides of the indicator arms to the opposite end of the indicator arm, and means carried by the supporting sleeve adapted to coöperate with the indicator arm to hold the said indicator arm in adjusted position.

1,268,126. SOAP TABLET. CHESNEY L. JONES, Oakland, N. J. Filed June 9, 1916. Serial No. 102,612. (Cl. 87—23.)



1. An individual tablet of soap adapted to be used for a single washing and having a central chamber surrounded by a wall of solid soap sufficiently thin to permit the same to be easily crushed by the hands of the user, and a liquid having high cleansing qualities, inclosed in said chamber and adapted to mingle with the solid soap when the tablet is crushed and form in connection therewith a cleansing solution.

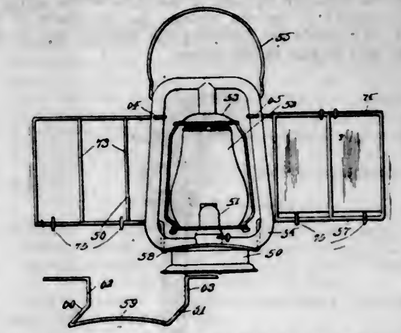
2. An individual tablet of soap adapted to be used for a single washing and having a central chamber surrounded by a wall of solid soap sufficiently thin to permit the same to be easily crushed by the hands of the user, a protecting lining for said chamber impervious to liquids and capable of being crushed by the hands of the user, and a liquid having high cleansing qualities, inclosed in said chamber and adapted to mingle with the solid soap when the tablet is crushed and form in connection therewith a cleansing solution.

3. A tablet of soap having a central chamber filled with a liquid having high cleansing qualities, said tablet being also provided with a weakened wall or portion whereby it may be easily ruptured or broken.

4. A tablet of soap having a chamber, a container mounted in said chamber, said container being filled with a liquid having high cleansing qualities, and means to facilitate the discharge of said liquid from said tablet.

1,268,127. INSECT-CATCHER. FRANK KEIPER, Rochester, N. Y., assignor of one-half to George R. Van Orden, Morton, N. Y. Filed June 14, 1917. Serial No. 174,772. (Cl. 43—22.)

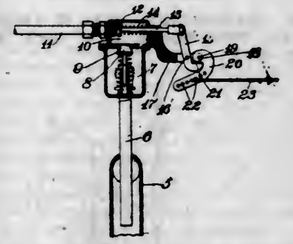
2. A detachable frame for a lantern having a central portion thereof offset at one end and formed with a bridge extending parallel to the frame, said bridge being adapted to engage on side of the framework of the lantern with the frame in either horizontal or vertical position, said frame engaging the opposite end of the lantern framework when raised to vertical position and being thereby locked to the lantern, and means for engaging the opposite end of said frame with the framework of the lantern and locking it thereto, wings connected to said frame, extending radially from the lantern, said frame and its wings being supported by the lantern.



3. A detachable frame for a lantern having a central portion thereof offset at one end and formed with a bridge extending parallel to the frame, said bridge and said frame being adapted to engage the framework of the lantern between them and lock one end of the frame thereto, means for fastening the opposite end of said frame to the frame work of the lantern, wings connected to said frame, extending radially from the lantern, said frame and its wings being supported by the lantern.

[Claims 1, 4, and 5 not printed in the Gazette.]

1,268,128. MEANS FOR SUPPLYING AIR TO GAS-ENGINES. CHARLES L. KUBTZ, Columbus, Ohio. Filed Dec. 20, 1917. Serial No. 208,041. (Cl. 123—124.)



2. The combination with a gas engine and a gas supply control therefor, of an auxiliary air supply means including a valve, and means actuated by the gas supply control for increasing the supply of auxiliary air within a predetermined limit and beyond said limit reducing the said air supply.

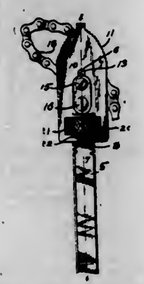
5. The combination with a gas engine and gas supply control therefor, of an air supply for the gas, means including a valve, means for reciprocating said valve including a spring and a cam, said cam movable in one direction for causing the movement of the valve in opposite directions and means connecting the cam with the gas supply control for actuating the cam, substantially as described.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,268,129. ADJUSTABLE CHAIN WRENCH. HARRY C. LARICK and SAMUEL M. STOUGH, Frankfort, Ind. Filed Sept. 15, 1917. Serial No. 191,570. (Cl. 81—65.)

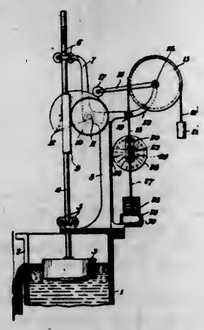
1. An adjustable chain wrench comprising a head including spaced connected plates having jaw faces at one end, said plates being provided with openings and with longitudinal slots between their ends, a stock disposed

at one end between the plates and extending beyond the latter at their opposite ends from the jaw faces, said stock being bifurcated at its end between the plates, an adjusting nut threaded on the stock and arranged to work in the openings of the plates, a pin engaged through the stock and lying at its ends in the slots of the plates, a chain secured at one end between the furcations of the stock, and means for fastening the opposite end of the chain with respect to the plates.



2. An adjustable chain wrench comprising a head consisting of spaced plates having jaw faces at one end, a stock disposed between the plates, lugs carried by the stock, said plates having recesses in their inner faces in which the lugs are slidably engaged, said plates having also slots communicating with the recesses, a bolt engaged though the stock and lying with portions in the slots for sliding movement therein, a chain connected with the bolt and arranged for coaction with the jaw faces, means for anchoring the chain to the plates, means for holding the plates against disengagement from the bolt and means for moving the head with respect to the stock and the bolt.

1,268,130. **FLUID-METER.** JOHN W. LEDOUX, Swarthmore, Pa. Filed Sept. 4, 1917. Serial No. 189,576. (Cl. 73—167.)

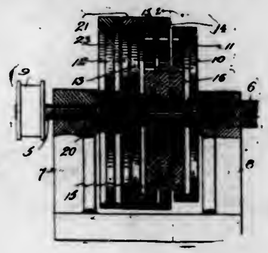


1. In a meter, the combination of means comprising a rotary cam operated by changes in head of the flowing fluid, means movable by contact with said cam, and integrating mechanism comprising means supported and controlled by said means second named for indicating the flow due to said head.

3. In a meter, the combination with a fluid container, of a float movable by variations of the level of fluid in said container, means comprising a rotary cam operated by the movements of said float with changes in said level, oscillating means comprising a device operated by contact with said cam, registering mechanism supported and movable by said device, and a constantly revolving device for operating said registering mechanism.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,268,131. **TRANSMISSION-GEARING.** JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 21, 1913. Serial No. 796,376. (Cl. 74—35.)



1. In a transmission gearing, a drive shaft, an externally toothed gear member loosely mounted eccentrically thereon, a driven shaft, an internally toothed annular gear member carried thereby and rotating therewith, and loosely journaled internally toothed annular gear members of equal internal diamter with each other and with said first named internally toothed annular gear member, said externally toothed gear member meshing with all of said internally toothed gear members, said gear members having their gear teeth formed on the same pitch line but varying from each other in the relative numbers of their teeth, and means for locking one or the other of said loosely journaled gear members.

2. In a transmission gearing, a drive and a driven shaft, intermediate gear members therebetween including annular internally toothed gears of equal internal diameters, and an externally toothed eccentrically mounted gear, all of said gears having gear teeth formed on the same pitch line but with relatively varying numbers of teeth, and means for independently locking one of said intermediate annular gear members.

7. In a transmission gearing, a drive shaft, a spur gear eccentrically mounted thereon, a member having an extended hub loosely sleeved upon said shaft, and carrying an internal annular gear, a member loosely journaled upon said hub and having an overhanging cylindrical portion to encompass the first mentioned member, and carrying an internal gear, a brake wheel keyed upon said hub, a driven shaft having an internal gear, all of said internal gears being of equal internal diameters and meshing with said eccentric gear, said first mentioned gears having respectively a greater and a smaller number of gear teeth than the gear on the driven shaft, and means to independently restrain said brake wheel and overhanging carrier against rotation.

[Claims 3 to 6 not printed in the Gazette.]

1,268,132. **FASTENER OR TIE DEVICE.** JOHN LENZEN, Paterson, N. J. Filed Dec. 17, 1917. Serial No. 207,465. (Cl. 24—131.)

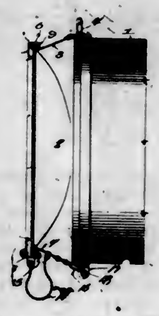


3. A flexible-line fastener formed of a single piece of wire including a tautening head-piece having loops at its end portions, one adapted to have an end of the line attached thereto and the other being an open loop and

affording a running hitch-hold for the line, and a shank extending from the head-piece and having at its free end convergent portions forming a line clamp, the line between adapted to be wrapped around said shank between the head-piece and clamp.

[Claims 1 and 2 not printed in the Gazette.]

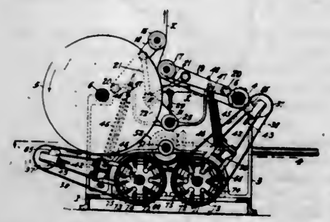
1,268,133. **HEADLIGHT-COVER.** ABRAHAM N. LUCAS, Milwaukee, Wis. Filed Feb. 19, 1918. Serial No. 218,077. (Cl. 240—41.)



1. A headlight casing, a circular cover adapted to fit the casing and provided with a rectangular housing for holding a glass, grooves at three sides of the housing, a slot in one side of the housing for the reception of the glass, flanges formed at the side of the slot, and a clip engaging the flanges and slidably mounted thereon for locking the glass in place.

2. A headlight casing, a cover attached thereto, comprising a shell cylindrical in shape at its attaching end and rectangularly shaped at its outer end, grooves formed at three sides of its outer end, a face plate adapted to fit over the grooves and having a bead formed at one of its edges, a flange formed at the corresponding edge of the shell, and a clip adapted to engage said bead and flange.

1,268,134. **WEB-FEEDING MECHANISM.** BRUCE CLARK WHITE, Woonsocket, R. I., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed Aug. 9, 1912. Serial No. 714,161. (Cl. 242—58.)



2. The combination with two sets of web roll bearings, of a pair of web guide rollers, and means for moving the web guide rollers in one direction to bring one of them toward and against a web roll in one set of bearings to carry a running web against said roll, and then in the opposite direction to bring the other of the guide rollers toward and against a web roll in the other set of bearings to carry a running web against said roll for web renewal.

18. The combination with two sets of web roll bearings, of guide rollers on opposite sides of the running web, each of said guide rollers being mounted to swing in a path approximately concentric with one of the bearings, and means for moving the guide rollers in opposite directions to bring a web running from an expiring roll in either set of bearings into pasting contact with a fresh roll in the other set of bearings for roll renewing.

29. The combination with fixed bearings for two web rolls, of guide rollers carried by arms pivoted at fixed points, and connections between said arms for moving them simultaneously to shift the web in opposite directions.

30. The combination of means for supporting two rolls adjacent to each other for feeding the webs alternately therefrom, means for rotating either roll at substantially the same surface speed as that of the web fed from the other roll, and means for pressing the web running from either roll against the adjacent rotating roll for causing said running web to pick up the gummed end of the web of the other roll.

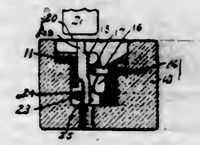
[Claims 1, 3 to 17, 19 to 28, and 31 not printed in the Gazette.]

1,268,135. **HYGROSCOPIC COMPOSITION.** KARL P. MCELROY, Washington, D. C., assignor to Chemical Development Company, a Corporation of Maine. Filed July 19, 1917. Serial No. 181,639. (Cl. 252.)

3. A hygroscopic composition comprising a glycol and a water soluble carbohydrate.

[Claims 1, 2, and 4 to 6 not printed in the Gazette.]

1,268,136. **LOOM-SHUTTLE.** BENJAMIN F. MCGUINESS, Saundersville, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 7, 1917. Serial No. 153,016. (Cl. 139—46.)

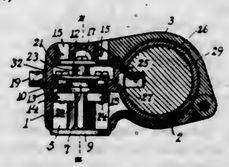


2. In a loom, a shuttle having a shuttle eye formed with a thread passage therein, an arm pivoted in said shuttle eye and normally closing the upper side of said passage, a spring effective to retain said arm yieldingly in normal position, transfer mechanism, and means operative in timed relation therewith to move said arm to inoperative position, said means comprising a pinion movable with said arm, a plunger slidable in said shuttle eye and having rack teeth thereon engaging said pinion, a member positioned to engage and depress the upper end of said plunger to thereby raise said arm, and means to move said member in timed relation to the transfer mechanism.

5. In a loom, transfer mechanism, a shuttle having a shuttle eye formed with a thread passage therein, a closure for said passage, a thread cutter in said shuttle, a plunger, rack and pinion connections from said plunger to said closure and to said cutter, and means associated with said transfer mechanism for actuating said plunger.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,268,137. **AUTO-LOCK.** FRANK W. MAILLOUX, Wellesley Hills, Mass. Filed June 2, 1917. Serial No. 172,531. (Cl. 70—90.)



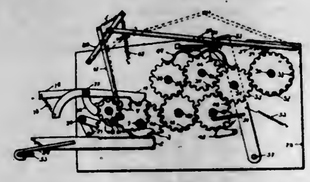
1. A lock for the steering post of a motor vehicle, comprising a body having a cylindrical cavity therein open at one end, and an arm rigid therewith, an arm hinged to the

outer end of the first-named arm and having its free end seated on the body exterior to the bottom of said cavity, a screw adapted to be introduced through said cavity-bottom from within the cavity into engagement with the free end of the hinged arm, a lock adapted to be fastened within said cavity and thereby to close all access to said screw, and a bolt controlled by said lock.

2. A lock comprising a body having a cavity open at one end and having spaced holes through its bottom, a slidable bolt, a locking means removably inclosed in said cavity, a shielding disk turning with said locking means and having holes corresponding with those through the bottom of said cavity, whereby when the locking means is unlocked, the holes through said disk will be in alinement with those through the bottom, but when locked, said holes will be out of line, and screws adapted to fasten said locking means in said cavity, the parts being disposed to permit said screws to be manipulated by a screw driver inserted through said spaced holes when the locking means is unlocked.

[Claims 3 and 4 not printed in the Gazette.]

1,268,138. COMPUTING-MACHINE. FRED F. MAIN, Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed May 5, 1911. Serial No. 625,409. (Cl. 235—60.)



1. The combination with a primary set of wheels, of a set of computing wheels adapted to add or subtract, means to enable the rotation of one of said sets from the other of said sets in either direction, a single set of carry-over teeth on the computing wheels, and carry-over devices controlled by said teeth, and always effective on the primary wheels in the same direction.

10. The combination with computing wheels and a general operator therefor, of carry-over devices normally tending to be effective, a toggle joint normally holding each carry-over device ineffective, and a carry-over tooth on each computing wheel adapted to break its toggle joint.

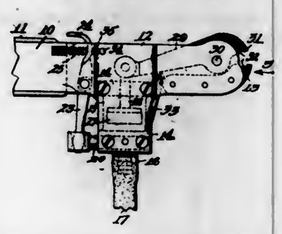
18. The combination with a series of primary wheels, of a series of computing wheels, means to selectively enable the rotation of one series of wheels from the other series in either direction, a single set of carry-over teeth on the computing wheels, and carry-over devices controlled by said teeth and always effective on the primary wheels in the same direction.

[Claims 2 to 9, 11 to 17, and 19 not printed in the Gazette.]

1,268,139. POWER-OPERATED WIRE-WORKING TOOL. ALBERT W. MARTIN, Worcester, Mass., assignor to Wire Goods Company, a Corporation of Massachusetts. Filed Aug. 13, 1917. Serial No. 185,831. (Cl. 153—39.)

1. In a wire working tool, the combination of a body having a handle projecting therefrom and provided with a jaw having a transverse recess, a lever pivoted on said body and having a jaw also provided with a transverse recess and adapted to register with the first named recess when the lever is turned to bring the jaws together, and a power cylinder fixedly mounted on said body adapted to be connected with an external source of power for operating said lever.

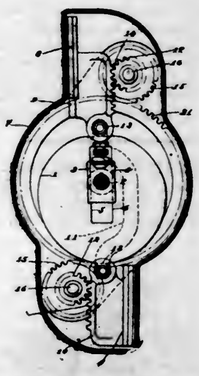
6. In a wire working tool, the combination of a body provided with a jaw, a lever pivotally mounted on said body and having a jaw adapted to coöperate with the first named jaw for bending the wire, means on said body for connecting said lever with an external source of power for operating the lever, a slide valve for controlling said means, a trip finger on said body, a lever on which said trip finger is located for operating said slide valve, and a spring for holding the lever in a position to close the valve.



7. In a wire working tool, the combination of a body comprising two sheet metal members, a handle extending between them and projecting from them, said members being fixed to said handle and being spaced apart thereby, a pair of jaws located between said members at the end opposite the handle and in alinement with it, and means located transversely between the handle and jaws and also between said members for operating the jaws by external power.

[Claims 2 to 5 not printed in the Gazette.]

1,268,140. CHANGE-SPEED GEAR. THEODORE NAGEL, Arlington, Md. Filed Oct. 25, 1917. Serial No. 198,426. (Cl. 74—53.)

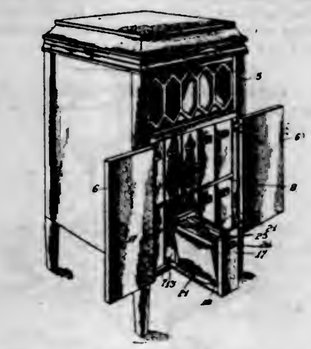


1. A change speed gear operating to transmit rotary motion from a driving to a driven shaft and to vary the speed ratio at the will of the operator consisting of a cam on the driving shaft, means for varying the throw of the cam gradually while the driving shaft rotates, a plurality of followers engaging the cam, means for transforming the reciprocating motion of each follower to rotary impulses in a single direction, and means for combining the impulses to apply a continuous direct torque to the driven shaft.

2. A device for transmitting rotary motion from a rotating driving member to a driven member and varying the speed ratio at the will of the operator, consisting of a plurality of reciprocating elements, means for imparting reciprocating motion at a uniform speed throughout the path of said motion to said elements from said rotary member, means for varying the extent of the path of reciprocation at will, means for transforming the reciprocating motion of each such reciprocating element to rotary impulses in a single direction, and means for combining or adding the impulses imparted by the plurality of reciprocating members together to apply continuous torque to the driven shaft.

[Claims 3 to 14 not printed in the Gazette.]

1,268,141. VERTICAL FILE FOR TALKING-MACHINES. MARTIN NYSTROM, Chicago, Ill., assignor to the Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed May 31, 1917. Serial No. 171,894. (Cl. 129—16.)



1. A file for talking machine records comprising a fixed support, a frame slidable on said support including a bottom and end members, said bottom member having recesses and loose side walls between said end members, having extensions disposed in said recesses, said recesses being substantially equal in width to the thickness of said extensions and the inner walls of said recess being shaped to permit said side walls to swing laterally about axes substantially coincident with their bottom edges.

2. A file for talking machine records comprising a fixed support, a frame slidable on said support including a bottom and end members, said bottom member having recesses and loose side walls between said end members having extensions disposed in said recesses, said recesses being substantially equal in width to the thickness of said extensions and the inner walls of said recesses sloping inwardly and downwardly whereby said side walls are permitted to swing a limited distance laterally about axes substantially coincident with their lower edges.

3. A file for talking machine records comprising a frame having a bottom and end members, said bottom member having recesses adjacent its lateral edges, said recesses being wider at their bottoms than at their tops and loose side walls between said end members having extensions disposed in said recesses.

4. A file for talking machine records comprising a frame having bottom and end members, said bottom member having recesses adjacent its lateral edges, said recesses gradually increasing in width from top to bottom, and loose side walls between said end members having extensions disposed in said recesses.

5. A file for talking machine records comprising a frame having bottom and end members, said bottom member having a plurality of recesses adjacent each of its lateral edges, loose side walls having extensions at their bottom edges, said recesses being substantially equal in width at their tops to the thickness of said extensions and wider at their bottoms.

1,268,142. CARBON-PIGMENT BASE AND PROCESS OF MAKING SAME. DAVID J. OGILVY, Cincinnati, Ohio. Filed July 21, 1916. Serial No. 110,604. (Cl. 134—60.)

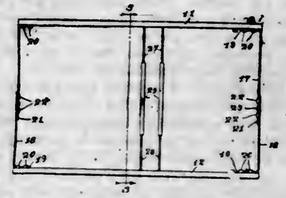
1. The process of producing carbon pigments, which consists in impinging a carbonaceous flame against an oily surface.

4. The process of producing carbon pigments, which consists in impinging a carbonaceous flame against a relatively cool, high fire test, oily surface.

10. A new product as a base for printing inks, paints and the like, comprising an oily material mixed with carbon derived from an impinging flame upon the oily material until charged therewith.

[Claims 2, 3, 5 to 9, and 11 not printed in the Gazette.]

1,268,143. FILING DEVICE. CARL A. PALMGREN, Chicago, Ill. Filed May 31, 1917. Serial No. 171,954. (Cl. 129—16.)



1. In a filing device, the combination of two oppositely-disposed rail members, and adjustable cross-bars connecting said rail members for holding them in position upon a cabinet.

2. In a filing device, the combination of two rails adapted to rest upon the sides of a cabinet, and adjustable cross-bars connecting the ends of said rails and bearing against the ends of the cabinet for holding the rails in position.

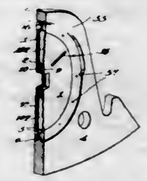
3. In a filing device, the combination of two rails adapted to rest upon the sides of a cabinet and having portions adapted to extend downward along the inner faces of the sides, and adjustable cross-bars extending between and connecting said rails for holding them snugly in position.

4. In a filing device, the combination of two rails adapted to rest upon the sides of a cabinet, and connections between said rails comprising two members extending inwardly from said rails and adjustably connected together for holding said rails in position.

12. In a filing device, the combination of two oppositely-disposed rail members, and a plurality of cross-bars slidably mounted at their ends upon said rails, each cross-bar comprising an intermediate sleeve and two end members slidably mounted in said sleeve, each of said end members being held against withdrawal from the sleeve by means of a protuberance pressed from one face of one of the elements engaging a slot in the other element.

[Claims 5 to 11 not printed in the Gazette.]

1,268,144. BOBBIN AND CARRIAGE OF TWIST-LACE MACHINES. FREDERICK WILLIAM PARE, Nottingham, and ALBERT HENRY CLARK, Lincoln, England; said Clark assignor of one-half of the whole to said Pare. Filed Aug. 17, 1912. Serial No. 715,614. (Cl. 66—6.)



5. In combination, a carriage for twist lace machines having a cage, a mounting device fitting removably within the cage, and a bobbin mounted rotatably in the said mounting device.

9. In combination, a bobbin carriage for twist lace machines having a cage, a bobbin rotatably mounted within the cage and comprising independently movable side

plates disposed so as to provide a yarn space therebetween, the said bobbin being provided with a drawing-off opening and having openings in its side plates for the reception of a winding spindle, and means for forming a central hub to receive the yarn supply during winding, the said means being adapted to be rendered inoperative during unwinding to afford a substantially unobstructed drawing-off space within the center of the yarn supply, the bobbin being adapted to remain stationary in the carriage during unwinding.

13. A bobbin and carriage for twist lace machines, the bobbin consisting of two independent circular plates rotatably mounted in the carriage, a plate located intermediately of the bobbin plates and arranged so that the thread may—during withdrawal—pass between said plate and one of the bobbin plates, and means for varying the tension or pressure applied to the drawing off thread between the middle plate and bobbin side.

15. In combination, a bobbin carriage for twist lace machines having a cage, a bobbin rotatably mounted within the cage and comprising independently movable side plates disposed so as to provide a yarn space therebetween and to permit the thread to be drawn-off from the center of the supply, and said plates being adapted to remain stationary during drawing-off, and engaging portions provided interiorly upon the said plates throughout the yarn-supply space for engagement with the coils of wound yarn to sustain the same and to prevent internal collapse during drawing-off.

[1 to 4, 6 to 8, 10 to 12, 14, and 16 not printed in the Gazette.]

1,268,145. LAMP-SCREEN. HAROLD C. PEASE, Schenectady, N. Y. Filed Nov. 28, 1916. Serial No. 133,848. (Cl. 240—48.4.)

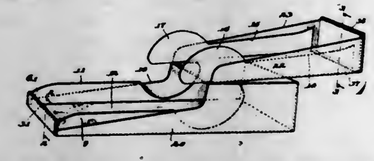


1. A lamp screen consisting of a translucent support and a plurality of strands of a fibrous material impregnated to increase their translucence, said strands being mounted on the support and spaced apart so as to permit a portion of the parallel rays from the light source to pass undeflected between them while other rays are reflected by the strands; substantially as described.

3. A lamp screen consisting of a pane of glass, two groups of translucent strands mounted thereon, the strands of each group being spaced apart and those of one group crossing those of the other, and a translucent filling in the spaces between strands; substantially as described.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,268,146. BOX. EDWARD E. PINKERTON, Chicago, Ill., assignor of one-half to Charles Harker Hudson, Chicago, Ill. Filed Jan. 11, 1916. Serial No. 71,442. (Cl. 229—17.)

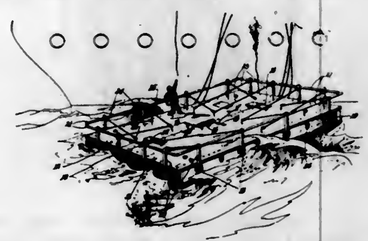


1. A folding box comprising a bottom member; a member at one edge of said bottom member and foldable over said bottom member to form three consecutive walls of the box and a double bottom member; a second member at the opposite edge of said bottom member and foldable over the walls formed by said first mentioned member; means at one end of said members for closing the corresponding end of the box; and a drop cover member for the other end of said box formed from the corresponding portions of said folded members, substantially as described.

5. A box comprising a bottom member; a member at one edge of said bottom member and foldable over said bottom member to form three consecutive walls of the box and a double bottom member; a second member at the opposite edge, of said bottom member and foldable over the walls formed by said first mentioned member; means at one end of said members for closing the corresponding end of the box; a drop cover member for the other end of said box formed from the corresponding portions of said foldable members; and guide lips on said cover member operating within the box, substantially as described.

[Claims 2 to 4 not printed in the Gazette.]

1,268,147. LIFE-SAVING RAFT. MICHAEL PIOSECKI, Baltimore, Md. Filed Mar. 23, 1918. Serial No. 224,173. (Cl. 9—11.)

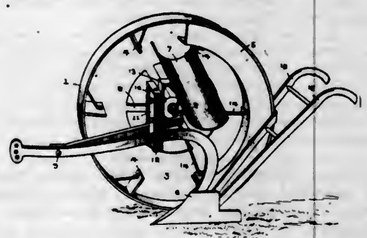


1. A life-raft comprising a pair of elongated rectangular water tight tanks hingedly joined along their longitudinal edge upon which they are capable of folding, means for normally maintaining said tanks in an unfolded position, railings carried by the exterior edges of said tanks and means for supporting said railings in operative position.

4. A life-saving raft comprising a pair of elongated rectangular tanks having arcuate bottoms adapted to rest upon the surface of water and a level upper surface, said tanks being watertight, of hinged connections between said pair of tanks, a spring having arms extending over the upper surface of said tanks adapted to hold the same extended horizontally outward, a plurality of brackets engaged upon the ends and sides of said tanks, levers pivotally engaged with said brackets, eyes formed at the upper ends of said levers, other eyes secured at the upper surface of said tank, flexible connections extending between said eyes whereby said levers may be held in a raised operative position, hand rails fixed in the outer ends of said levers, said rails inclosing the upper surface of said tanks, and other eyes formed upon the surface and edges of said tank whereby said raft may be secured.

[Claims 2 and 3 not printed in the Gazette.]

1,268,148. DITCHING ATTACHMENT FOR TURNING-PLOWS. SENECA A. PITTMAN, Center, Ga., assignor of one-half to Oliver H. Arnold, Jr., Athens, Ga. Filed July 20, 1917. Serial No. 181,900. (Cl. 37—17.)

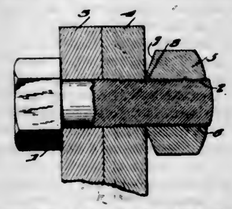


1. A ditching attachment for turning plows comprising an axle having its rear end formed with a right angular

extension and its forward end pivoted to the plow stock whereby the rear end can have free vertical movement, a vertically disposed wheel journaled on said axle extension, a semi-circular chute supported concentrically within the rear portion of the wheel, conveyers carried by the wheel rim and adapted to revolve through said chute, and a trough disposed below and laterally of the upper end of the chute.

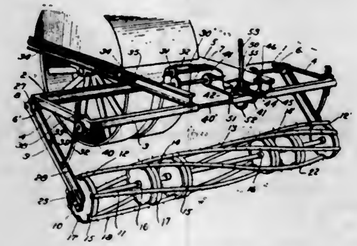
[Claims 2 and 3 not printed in the Gazette.]

1,268,149. LOCK-NUT. DUANE C. PRATT, Edgerton, Wis. Filed Oct. 25, 1916. Serial No. 127,662. (Cl. 151—21.)



A lock nut comprising a blank shaped to the desired form and provided with a central screw-threaded opening, said blank being shaped on its inner bearing face to have a substantially truncated cone shape in which a gradual slope is given from a comparatively sharp edge around the screw-threaded central opening to the peripheral edge of the blank.

1,268,150. HARROW. ANDREW H. REED, Kansas City, Mo. Filed Apr. 11, 1917. Serial No. 161,154. (Cl. 97—63.)



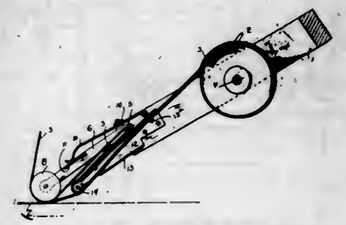
1. In combination with spaced supporting devices, a shaft carried by said devices, a series of ground working implements revolubly mounted on said shaft and comprising interlocking tool carrying members fixed on the separate implements in a continuous and spiral relation relative to the said shaft.

3. In combination with spaced supporting devices, a shaft carried by said devices, a series of ground working implements, each having a hollow axle rotatably mounted on said shaft and wheels fixed on the ends of the axle, tubular tool carrying members fixed to the wheels of each implement, and plugs in the ends of corresponding devices on adjacent implements to key the implements together and effect synchronous operation thereof.

5. In combination with spaced shaft carrying members, a shaft carried by said members, a plurality of ground working implements, each having a hollow axle rotatably mounted on said shaft, wheels fixed to the ends of each axle having spirally arranged, peripheral grooves adapted for registration with corresponding grooves in other implement wheels to receive and seat a spiral tool carrying device, a tool carrying device seated in wheel grooves of each implement, means connecting the tool carrying devices of adjacent implements to key the implements together and effect synchronous operation thereof, and a sprocket wheel on the outer wheel of the implement at each end of the shaft, for the purpose set forth.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,268,151. STRIP-APPLYING DEVICE. JOSEPH RETTELL, Detroit, Mich., assignor to Morgan & Wright, a Corporation of Michigan. Filed May 18, 1916. Serial No. 98,260. (Cl. 216—20.)



1. In a hand-tool for applying adhesive material, in combination, a handle, means mounted in said handle for supporting a roll of adhesive material, and applying-means secured to said handle and adapted to yield in a direction substantially transverse thereof to take up a portion of the pressure exerted by the hand of the operator upon said tool.

2. In a hand-tool for applying adhesive material, in combination, a handle, means mounted in said handle for supporting a roll of adhesive material, a tensioning device adapted to regulate the feed of said material, and applying-means secured to said handle and adapted to yield in a direction substantially transverse thereof to take up a portion of the pressure exerted by the hand of the operator upon said tool.

3. In a hand-tool applying device, in combination, a source of supply of adhesive and liner-strips, an applying member adapted to press upon said strips and to apply them to a surface, and means to separate said adherent strip from one part of said liner-strip and to bring it in contact with another part of said liner-strip just prior to its application to said surface.

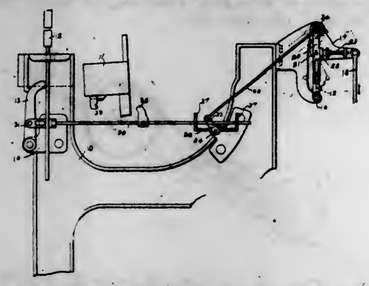
4. In a hand-tool applying device, in combination, a source of supply of combined adhesive and liner-strips, an applying member adapted to press upon said strips and to apply them to a surface, and a combined tensioning and strip-separating means adapted to regulate the feed of said strips and to separate said adherent strip from one part of said liner-strip and to bring it in contact with another part of said liner-strip just prior to its application to said surface.

5. In a hand-tool applying device, in combination, a source of supply of combined rubber and liner-strips, an applying roller adapted to press upon said strips and to apply them to a surface, and a combined tensioning and strip-separating device comprising a tensioning roller positioned adjacent said applying-roller, and a tensioning member located remote therefrom, said combined rubber and liner-strip being adapted to pass over said tensioning roller and to be separated immediately thereafter, said rubber strip being adapted to pass directly to a position below said applying-roller and to contact there with another portion of said liner-strip previously passed around said tensioning member and to a position between said applying-roller and said rubber strip.

1,268,152. WARP STOP-MOTION. OSCAR W. RICHARDSON, Worcester, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Filed Mar. 8, 1917. Serial No. 153,418. (Cl. 139—92.)

1. A warp stop motion having, in combination, an actuator, a loom stopping device, an actuating rod connected thereto, a member engaging and supporting said rod, a fixed supporting bearing for said member, and warp controlled means to move said member in either direction from normal position, said member remaining unmoved and holding said actuating rod in normal inoperative position during the regular operation of the loom and being effective when moved from normal position in either direction by said warp controlled means on the breaking

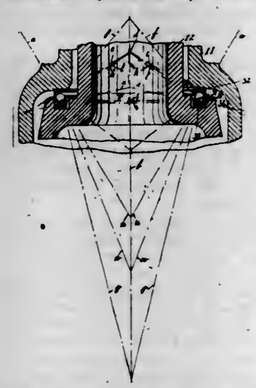
of a warp thread to move said actuating rod into position for operative engagement by said actuator.



3. In a loom, a lay, a bunter on said lay, a loom-stopping device, an actuating rod connected thereto and having a projection thereon for engagement by said bunter, a rocking support for said rod, a fixed pivot for said support, and warp-controlled means to rock said support, said support engaging said rod at separated points on opposite sides of its pivot, whereby movement of said support in either direction from normal position will raise said rod and position said projection in the path of said bunter.

[Claim 2 not printed in the Gazette.]

1,268,153. BALL-BEARING. ALBERT E. ROBINSON and AUGUSTUS M. SOSA, Cincinnati, Ohio, assignors to The American Tool Works Company, Cincinnati, Ohio, a Corporation of West Virginia. Filed June 29, 1917. Serial No. 177,726. (Cl. 64—49.)



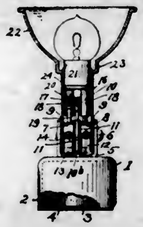
1. In a column bearing, the combination with the column, of a support upon which said column is arranged to turn, a race for said column, races for said support, and bearing balls between said races, said first-named race having a right circular frusto-conical bearing surface coacting with said balls the slant of the elements whereof is at an acute angle of more than forty-five degrees to the axes of said races, said second-named races respectively having right circular frusto-conical bearing surfaces the slants of the elements whereof are respectively at an acute angle of more than forty-five degrees and at an acute angle of less than forty-five degrees to said axes, and said first-named angle being more acute than said second-named angle.

4. In a column bearing, the combination with the column, of a post about which said column is arranged to turn, and bearing balls between the lower portions of said column and said support, said column provided with a right circular frusto-conical bearing surface the slant of the elements whereof is at an acute angle of more than forty-five degrees to its axis, said support provided with a pair of right circular frusto-conical bearing surfaces the slant of the elements of one of said last-named bearing surfaces being at an acute angle of more than forty-five degrees to said axis and more acute than said first-named acute angle, the slant of the elements of the other of said last-named bearing surfaces being at an acute angle of less than forty-five degrees to said axes, said bearing balls located between said races, and a radial ball bearing between the upper portions of said column and post.

10. In a ball bearing, the combination of a pair of bearing members, and bearing balls between said members, said members respectively provided with right frusto-conical bearing surfaces whose lateral surfaces slant relatively to form superposed cones, when extended, coacting with said bearing balls to relatively center said members, and one of said members provided with an additional right frusto-conical bearing surface the lateral surface whereof slants obtusely to one and acutely to the other of said first-named bearing surfaces for confining said bearing balls between said first-named bearing surfaces.

[Claims 2, 3, 5 to 9, and 11 not printed in the Gazette.]

1,268,154. HANDY LAMP. RALPH R. ROOT, Cleveland, Ohio. Filed May 4, 1914. Serial No. 836,045. (Cl. 240—81.)



1. A handy lamp comprising a base member, a lamp socket member, means for pivotally mounting the socket member upon the base, arcuate contact pieces having peripheral contact portions carried by one of said members, means for insulating the said arcuate contact pieces from the member which carries them and from the pivotal mounting of the lamp socket, the radius of curvature of said contact pieces being concentric with the pivotal axis of the socket member, and contact pieces carried by the other of said members which slidably engage with the peripheral contact portions of the arcuate contact pieces, whereby the lamp socket may be moved.

3. A handy lamp comprising a base, a lamp socket, a plate secured in said socket, a pair of arcuate contact pieces, insulating material separating the plate and the said contact pieces, the said plate being pivotally mounted upon the base, contact pieces carried by the lamp socket and bearing upon the arcuate contact pieces.

5. A handy lamp comprising a base, a pair of arcuate contact members supported from the said base and insulated therefrom, a plate pivotally mounted upon the said base, the axis of the plate coinciding with the axes of the arcuate contact members, a lamp socket having an insulated head therein, the said plate being secured in the said insulated head, openings through the insulated head, contact pieces extending through said openings and bearing upon the arcuate pieces, said contact pieces being adapted to engage a lamp carried by the socket.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,268,155. ANNEALING APPARATUS AND PROCESS. WILLIAM S. ROWLAND, New Britain, Conn., assignor to The Stanley Works, New Britain, Conn., a Corporation of Connecticut. Filed June 26, 1917. Serial No. 177,132. (Cl. 266—4.)

1. In an apparatus for annealing metals, a chamber provided with heating and cooling sections, the cross-sectional

shape of said heating chamber being so related to the cross-sectional shape of the strip continuously passing therethrough so that said strip shall be supported within said chamber by the contact of its edges with the inner wall of said chamber.

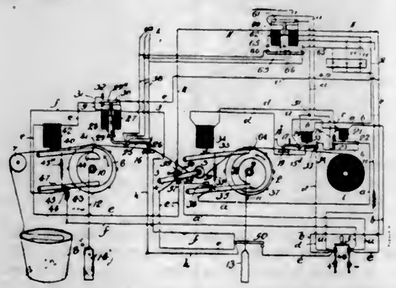


6. In an apparatus for annealing metals by passing a strip continuously through an annealing chamber, an annealing chamber comprising heating and cooling sections in open communication with one another, a non-oxidizing atmosphere within said chamber, and an auxiliary supply of non-oxidizing gas at the entrance to and exit from said chamber to constitute a gas seal at said points.

7. In an apparatus for annealing metals by passing a strip continuously through an annealing chamber, an annealing chamber comprising heating and cooling sections in open communication with one another, a substantially non-flowing, non-oxidizing gas filling said chamber, and a gas seal at the entrance to and the exit from said chamber.

[Claims 2 to 5 not printed in the Gazette.]

1,268,156. CONTROL MECHANISM FOR AUTOMATICALLY-OPERATING APPARATUS. HAROLD ROWNTREE, Kenilworth, Ill., assignor to National Pneumatic Company, New York, N. Y., a Corporation of West Virginia. Filed Sept. 29, 1913. Serial No. 792,392. (Cl. 172—152.)



2. In a control system for automatic apparatus and in combination with selectively controlled differentiated devices for recording calls for the operation of the automatic apparatus, of an automatic apparatus, correspondingly differentiated means for inaugurating successive operations of the automatic apparatus only after the completion of previously inaugurated operations thereof, a record made by said differentiated devices, said correspondingly differentiated means being controlled by said record.

6. In a control system for automatic apparatus, a call record strip, feeding mechanism therefor, selectively controlled devices for recording the calls on said strip, devices controlled by the record strip for inaugurating the operation of the automatic apparatus, and means controlled by the record strip feeding mechanism whereby said selectively controlled devices control directly the automatic apparatus.

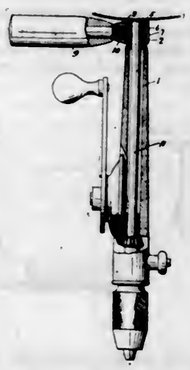
9. The combination with electrically controlled devices to be operated, of means for making and receiving calls for the operation of said devices, means for recording the calls in the order they are received, means controlled by the record made by each call in the order it is recorded for inaugurating the action of said devices to be operated and electrically operated means independent of said record for preventing the inauguration by the record made of a call of the action of said devices to be operated until said devices have completed the previously inaugurated action thereof.

15. In a control system for elevators, an elevator, selectively controlled differentiated devices for recording calls made at will for the operation of said elevator, and means controlled by the record made of the calls for successively inaugurating the operation of said elevator.

20. In a control system for automatic apparatus, and in combination with a record strip, and selectively controlled devices for perforating the same at will, of a feed mechanism for said strip, a stop device therefor, an electric circuit for controlling said stop device, and means controlled by the perforating devices for closing said circuit, and means controlled by the perforations in said strip for successively inaugurating the operation of the automatic apparatus.

[Claims 1, 3 to 5, 7, 8, 10 to 14, 16 to 19, 21, and 22 not printed in the Gazette.]

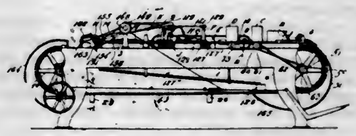
1,268,157. BREAST-DRILL. JOSEPH H. RUSBY, Nutley, N. J. Filed June 1, 1917. Serial No. 172,166. (Cl. 145—67.)



1. In a drill the combination of a tubular frame provided with a collar seat, a breast plate having a shank turnably mounted in the frame, a collar mounted for rotation and not for end movement on said seat and adapted to engage and disengage said shank, and a handle screwable radially through the collar into engagement with the frame to cause the collar to clamp and unclamp the parts.

[Claim 2 not printed in the Gazette.]

1,268,158. LEATHER-WORKING MACHINE. FRANK K. RUSSELL, Dallas, Tex. Filed Aug. 15, 1911. Serial No. 644,223. (Cl. 69—17.)



1. In a leather strap finishing machine, edge trimming devices, feeders for drawing straps through the trimming devices; a pair of scrap pans arranged on opposite sides of and adjacent to the passage of said feeders and a yieldingly mounted bar connected to each pan holding the scraps above the feeders.

2. A leather strap finishing machine having a pair of edge blacking devices comprising a trough on each side of the passage of the strap, a rotary shaft projected into each trough, a rotary brush mounted on each shaft, means for driving said brushes, and a tank for supplying blacking to each trough having a spout projecting from the tank down into the trough and having a portion of one side of the spout cut away.

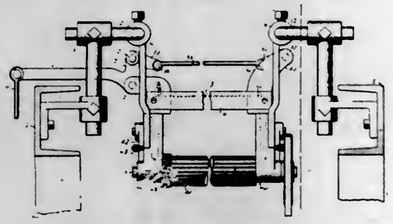
5. In a leather strap finishing machine, bottom blacking devices comprising a pair of troughs, each trough having a deep portion and a shallow portion, rotary brushes mounted in the deep portions of said troughs, stationary brushes mounted in the shallow portions of said troughs and coöperating with said rotary brushes, and means for supplying said troughs with blacking.

8. In a leather strap finishing machine, creasing rolls, means yielding vertically and actuated automatically by passing straps to permit the opening of said rolls proportionately to the thickness of approaching straps, and gearing for driving said rolls at different vertical adjustments.

10. In a leather strap finishing machine, edge burnishing devices comprising oppositely disposed vertical shafts and pairs of vertically yielding disks having intermeshing pressing surfaces forming grooves to receive the edges of straps and having upwardly projecting sleeves about said shafts.

[Claims 3, 4, 6, 7, 9, and 11 to 49 not printed in the Gazette.]

1,268,159. WARP STOP-MOTION. EPPA H. RYON, Waltham, Mass., assignor to Crompton & Knowles Loom Works, Worcester, Mass., a Corporation of Massachusetts. Filed July 2, 1917. Serial No. 178,114. (Cl. 139—92.)



1. A warp stop motion comprising drop wires, an indicating bar for each bank of drop wires, depressible by downward movement of any one of said drop wires, devices mounted beneath said drop wires effective to engage and draw downward a fallen drop wire, and loom stopping mechanism controlled through said indicating bar, said devices being effective through said fallen drop wire to draw downward said indicating bar and thereby render said loom stopping mechanism operative.

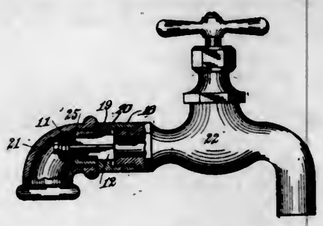
3. A warp stop motion comprising drop wires, a movable indicating bar for each bank of drop wires, depressible by downward movement of any one of said drop wires, power-actuated devices effective to draw downward a fallen drop wire, thereby directly depressing said indicating bar, and loom stopping devices controlled through said indicating bar.

5. A warp stop motion comprising a bank of drop wires, a depressible indicating bar for said drop wires, a pair of rollers mounted beneath said drop wires and effective to engage and draw downward a fallen drop wire, thereby depressing said bar, means to rotate said rollers continuously, and loom stopping devices controlled through said indicating bar.

[Claims 2, 4, and 6 to 11 not printed in the Gazette.]

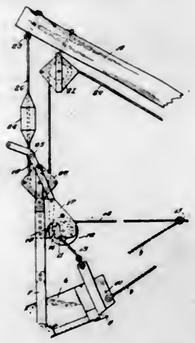
1,268,160. AUTOMATIC CUT-OFF VALVE AND FAUCET MECHANISM. THOMAS A. SAMMONS, Dayton, Ohio. Filed Feb. 21, 1917. Serial No. 150,032. (Cl. 137—4.)

A faucet having a valve therein controlling the outlet therefrom, a coupling member receiving the inlet end of said faucet and having an inwardly extending flange forming a valve seat, a puppet valve carried by said coupling member having a series of elongated guide extensions which are reduced in diameter for a portion of their length, a spring mounted on the reduced portions of said guide extensions between the shoulder thereon and said flange, said guide extensions being adapted to be engaged by the coupled end of the faucet and to be main-



tained in a position to hold the valve open, and said spring being adapted to exert a force to close said valve when disengaged by the coupled end of the faucet.

1,268,161. EXCAVATING-SHOVEL. HENRY B. SAUERMAN, Chicago, Ill. Filed Apr. 15, 1915. Serial No. 21,493. (Cl. 37—55.)

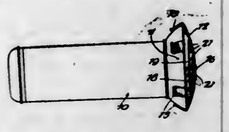


1. In apparatus of the class described, the combination with a support flexibly mounted for vertical reciprocation; a shovel pivoted at one end to the support; means attached to the other end for positively raising it, comprising a differential drum; and latching means comprising a holding lever for the drum engaging by raising the support to disengage the shovel.

4. In apparatus of the class described, the combination with a vertically raisable support, of a shovel hinged therein for dumping, a differential drum rotatable in said support, flexible means attached to said drum and shovel to slowly and positively right the shovel and draw it laterally when the means is pulled, and means for holding the drum as the shovel is raised and until the support is bodily raised a predetermined amount whereupon the drum is disengaged.

[Claims 2 and 3 not printed in the Gazette.]

1,268,162. SIGNAL. OSCAR L. SCALBOM, Chicago, Ill. Filed Feb. 2, 1917. Serial No. 146,052. (Cl. 240—11.)



1. In combination, a flash light embodying a light opening, a signal device arranged to extend across said opening, and spring fingers connected with the signal and

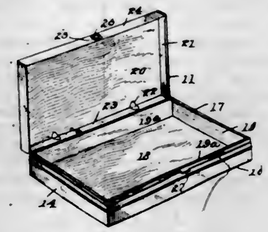
adapted to removably and frictionally secure the signal in position, said signal device embodying means whereby the signal may be varied at will.

2. In combination, a flash light embodying a light opening, a signal device of a size slightly larger than the said opening, and yielding clamping means removably securing the signal in position, said signal device embodying means whereby the signal may be changed at will.

9. In combination, a flash light embodying a lens, a signal device arranged adjacent the lens, and means for detachably securing the signal device in front of the lens, the said signal device embodying a body having one or more openings therein and through which the light rays pass, and a shutter movably connected with the body and adapted to be moved to open or close one or more of the said openings, said body having a spring portion extending over the periphery of the lens for detachbly securing the signal in position.

[Claims 3 to 8 and 10 not printed in the Gazette.]

1,268,163. LINED CIGAR-BOX. ANTHONY SCHNEIDER, Whippany, N. J., assignor to Seidenberg & Co. (Inc.), New York, N. Y., a Corporation of New Jersey. Filed Sept. 14, 1915. Serial No. 50,598. (Cl. 131—11.)



1. A cigar box and humidor, comprising an outer metal casing and cover therefor, and an inner lining formed of a bottom and side pieces of cedar wood loosely placed in the casing, and a top lining also of cedar in the cover, the whole being so arranged that the closing of the cover will bring the top lining against the side pieces forcing the side pieces together and against the bottom to form a substantially air tight inclosure.

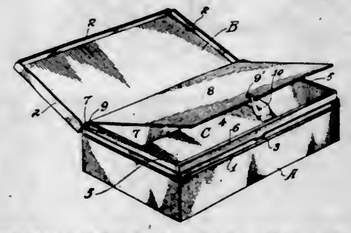
3. A cigar box and humidor, comprising an outer metal casing and cover therefor, and an inner lining formed of a bottom and side pieces of cedar wood loosely placed in the casing, with the upper edges of the side pieces projecting above the edges of the casing, and a top lining also of cedar in the cover, the whole being so arranged that the closing of the cover will bring the top lining against the side pieces forcing the side pieces together and against the bottom to form a substantially air tight inclosure, and interlocking means between the cover flange and the upper edge of the casing to hold the cover closed.

[Claims 2 and 4 not printed in the Gazette.]

1,268,164. CIGAR-BOX. ANTHONY SCHNEIDER, Whippany, N. J. Filed May 29, 1916. Serial No. 100,543. (Cl. 131—11.)

1. A composite cigar box comprising an outer metallic case and an inner wooden shell, the vertical walls of said wooden shell being higher than the adjacent vertical walls of the metallic case, said wooden shell having a cover hinged to its rear wall and adapted to lie substantially flush with the top edges of the remaining vertical walls of such shell when the cover is closed, said metallic case including a hinged cover having depending flanges adapted to overlie the portions of the walls of the shell which project above the adjacent walls of the metallic case, and means atached to the cover of the inner shell for simultaneously lifting or opening both covers and for holding both covers closed.

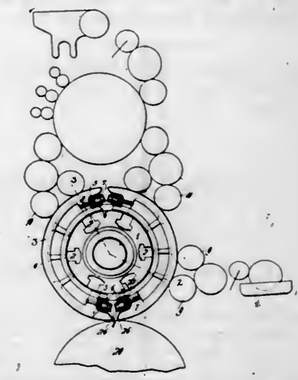
4. A composite cigar box comprising an outer metal case having a flanged cover hinged thereto, and a removable lining for the case comprising a bottom, lid and side members, the upper edges of the side members extending above the marginal edges of the metal case, the said cover flange being of sufficient depth to embrace, when closed, the said



extending edges of the side members and overlie the marginal edges of the case, and a flexible tab secured at one end to the said lid and having its other end externally accessible when the case cover is closed to permit concurrent lifting of both the cover and the lid.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,268,165. PLATE-PRINTING MACHINE. WALTER CHARLES SCOTT, Plainfield, N. J., assignor to Isabella Scott and David J. Scott, executors of Walter Scott, deceased. Filed July 30, 1914. Serial No. 854,081. (Cl. 101—375.)

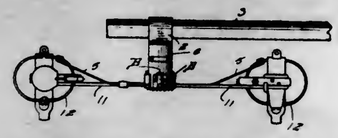


1. In a printing machine, a form carrying cylinder, a plurality of removable form carrying jackets, arranged circumferentially with respect to each other, each jacket having an undercut groove at each end circumferentially to form overhanging end portions, the end portions of adjoining jackets being closely adjacent to provide narrow margins, a flexible printing plate carried by each jacket and extending over the overhanging portions into the undercut groove at each end, and means in said undercut grooves in each jacket for straining the plate.

4. In a printing machine, a form carrying cylinder, a plurality of groups of jackets arranged circumferentially, each group consisting of a plurality of side-by-side jackets and each jacket having an undercut groove at each end circumferentially to form overhanging end portions, the end portions of adjoining jackets being closely adjacent to provide narrow margins, a flexible printing plate carried by each jacket and extending over the overhanging portions into the undercut groove at each end, means in said undercut grooves in each jacket for straining the plate, and means for adjusting the jackets lengthwise and circumferentially of the cylinder.

[Claims 2 and 3 not printed in the Gazette.]

1,268,166. ANIMAL-TRAP. THOMAS B. SHEFFER, Ashton, Idaho. Filed Aug. 15, 1917. Serial No. 186,402. (Cl. 43—28.)



1. A device for trapping animals, comprising a member anchored in fixed position, a spring-pressed member rotatably carried thereon, a plurality of animal traps carried on said rotatable member, and means for tripping said rotatable member connected with each of said traps for successively positioning said traps in operative positions.

3. A device for trapping animals, comprising a cylindrical member anchored in fixed position, a plurality of notches in the outer edge thereof, a spring pressed cylindrical member telescoping said fixed member, a plurality of animal traps radially carried on said outer member on removable arms, a tripping rod connected with each animal trap at one end and engaging said notches at the opposite end adapted to hold its respective trap in operative position when set and permit the rotation of the outer cylindrical member when sprung to place a succeeding trap in operative position, substantially as described.

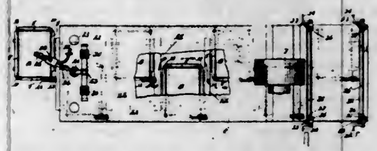
[Claim 2 not printed in the Gazette.]

1,268,167. FENCE-POST. LEON W. SHOECRAFT, Raymond, S. D. Filed Nov. 1, 1916. Serial No. 128,981. (Cl. 189—28.)



In a fence post, the combination of a base section having a sharpened lower portion, said base section having an internal pocket communicating with the upper end thereof, said base section having openings formed therethrough and communicating with said pockets, a body section being of substantially the same shape as said pocket, thus allowing said body section to be projected into said pocket and be held against side movement, said body section having a plurality of longitudinally extending grooves formed therein and communicating with its lower end, flat springs fitting within said grooves and projecting below the lower end of said body portion, means for holding said springs against accidental displacement from said grooves, engaging portions formed upon said springs adjacent their lower ends, said engaging portions being adapted to fit within the openings of said base section, thus causing the body section to be held against accidental movement in either direction, and the fitting of the lower end of said body section within the pocket of said base section holding said springs within said grooves and relieving the supporting strain from the securing means of the springs and imparting the same directly from the body section to said base section.

1,268,168. APPARATUS FOR MANUFACTURING ICE. ROSCOE C. SINKES, Chicago, Ill. Filed Feb. 16, 1917. Serial No. 149,078. (Cl. 62—110.)



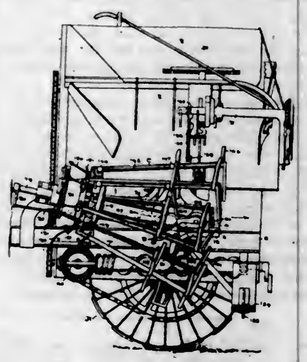
1. Apparatus for freezing water into cakes of ice comprising an elongated closed chamber; a plurality of open receptacles adapted for travel through said chamber; means for forcing air into one end of said chamber; means for the exhaust of the air from the other end of said chamber; and a pair of independently operable closures at the first mentioned end of said chamber having a space between the same sufficient to accommodate one of said receptacles, substantially as described.

4. Apparatus for freezing water into cakes of ice comprising an elongated closed chamber; a plurality of open receptacles adapted for travel through said chamber; means for maintaining said receptacles in staggered relation in the travel of the same through said chamber; and means for holding said receptacles in spaced relation with each other in the travel of the same through said chamber, substantially as described.

5. Apparatus for freezing water into cakes of ice comprising an elongated closed chamber; a plurality of open receptacles adapted for travel through said chamber; skids on which said receptacles are mounted for conveying of the same through said chamber; and means for forcing a current of cold air through said chamber from one end of the same to the other, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,268,169. GRAIN-SHOCKING MECHANISM. GUY W. SMITH and LUTHER DINSMOOR, Paonia, Colo. Filed Oct. 25, 1916. Serial No. 127,614. (Cl. 56—121.)



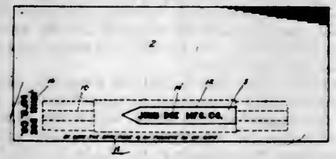
1. The combination with a self binding harvester, of shocking mechanism comprising a reciprocal carriage, a shock former rotatably mounted and supported by the carriage, said shock former consisting of a plurality of compartments, means for rotating the shock former around the longitudinal axis, and means for moving the carriage forward and backward of the binder.

2. The combination with a self binding harvester, of shocking mechanism embodying a longitudinally movable carriage, a shock former rotatably mounted and supported by the carriage, said shock former consisting of a plurality of compartments, means for rotating the shock former step by step while disposed in a horizontal shock receiving position, and means for moving the carriage from a horizontal shock receiving position to a vertical shock discharging position.

23. In a shock former, the combination with a rotatable hood, of a head block disposed within said hood, radially extending shock former arms pivotally mounted in the head block, said arms when disposed in closed position forming an oblong circular cage, certain of said shock former arms being offset laterally and diagonally radially opposite to one another to provide a double bundle receiving space therebetween, and to provide a single bundle receiving space between said offset arms and the remaining arms.

[Claims 3 to 22 and 24 to 32 not printed in the Gazette.]

1,268,170. DISPLAY-CARD. SHELBY C. SPARKS, Kansas City, Mo. Filed Mar. 17, 1917. Serial No. 155,565. (Cl. 211—34.)



1. An article-holding display card comprising, in combination, a card, an article provided with a printed device adapted to be attached to said card, said card having a portion thereof slit to form a finger for engagement with said printed device to support said article on one face of the card, said slit portion also forming a window whereby the printed matter on said device is displayed upon the opposite face of the card.

2. An article-holding display card comprising, in combination, a card, an article provided with a printed device adapted to be attached to said card, said card having a portion thereof slit to form a pointed finger for engagement with said printed device to support said article on one face of the card, said slit portion also forming a window in the form of a pointer or index through which the printed matter on said device is displayed upon the opposite face of the card, said opposite face of the card having printed matter in line with the pointer or index formed by said window in convenient position for comparison with the printed matter on said device.

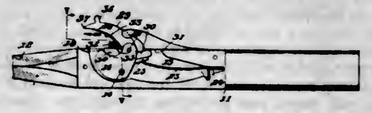
1,268,171. ATTACHMENT FOR DENTAL ENGINES. ROY L. SPAULDING, Helena, Mont. Filed Apr. 14, 1917. Serial No. 162,031. (Cl. 29—119.)



The mandrel herein described provided with a central bore extending longitudinally therethrough from end to end and having an enlarged, externally threaded portion terminating in a conical end, the enlarged portion, including the conical end, being radially slotted, a sleeve nut having a threaded bore to fit upon the threads of the mandrel with its bore reduced from the screw-threaded portion to its outer end forming said outer end into a frusto-conical sleeve to bear on the split conical outer end of the mandrel, the longitudinal bore being adapted to receive a tool at its inner end to be projected out beyond its outer end and gripped by the radially slotted head, and means at the inner end of the mandrel to secure it to the hand piece of a dental engine.

1,268,172. WIRE-CUTTING ATTACHMENT FOR BAYONETS. JOSEPH STANISLAWSKI, Hammond, Ind. Filed Feb. 19, 1918. Serial No. 218,037. (Cl. 42—90.)

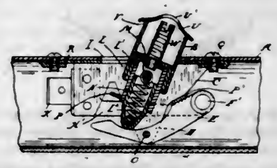
1. In combination with a bayonet having a chamber, pivotally connected cutters pivotally mounted within the chamber, resilient means adapted for normally positioning one of the cutter members exteriorly of the chamber, and an abutment overlying the said last-named cutter member for engagement therewith during the movement of the cutter members toward each other in the cutting operation.



4. In combination with a bayonet having a shank formed with a chamber with a side opening for the chamber, a block pivoted in said chamber having a slot upon one side thereof and with a cutting edge formed upon the portion of the block on one side of the slot, a knife pivoted to said block having a sharpened edge for coöperating with the aforementioned cutting edge in the cutting operation, resilient means engaging the said block adapted for normally maintaining the knife projected through the said opening, an abutment upon the shank in contact with the adjacent side of the knife during the retraction of the knife within the chamber whereby the knife is shifted into seating reception within said slot during the traversing of said cutting portions when the device is in operation, the shank being arranged with a keeper-notch at the front end of the chamber adapted for receiving the free end of the knife in its inoperative position, a hand hold knob upon the outer edge of the knife, and a heel at the opposite end of the knife adapted for slidably engaging the bottom of said abutment during the shifting of the block.

[Claims 2 and 3 not printed in the Gazette.]

1,268,173. ELECTRIC SWITCH. ALFRED J. STECKER, Detroit, Mich., assignor to Fred Wardell, Detroit, Mich. Filed Jan. 18, 1917. Serial No. 143,151. (Cl. 175—287.)



1. In an electric switch, the combination with a slotted tubular casing, of switch mechanism proportioned for insertion into said tubular casing through the end thereof and comprising a bifurcated frame, a rockable contact lever pivotally mounted therein and a transversely-extending telescopic operating lever provided with a spring for yieldably extending the same, the inner end of said lever bearing against said rockable contact lever and shiftable to opposite sides of the fulcrum thereof, and an extension of said operating lever operatively engageable with the lever body by insertion through the slot in said tubular casing.

3. In an electric switch, a sheet-metal frame having substantially parallel side portions and a connecting web portion centrally cut away, a rockable contact member pivotally mounted in said parallel side portions, an operating lever extending transversely to said rockable contact lever and through the central cut-away portion of said frame, being also pivoted in the side portions thereof, said operating lever being formed of hollow telescopically-engaged sections, the inner section bearing against said rockable contact member and shiftable to opposite sides of the fulcrum thereof, and a spring housed within said telescopic sections for yieldably and resiliently extending the same.

4. In an electric switch, the combination with a tubular casing having a slot in the side thereof, of a frame rigidly secured to said casing within the same formed with an

opening registering with said slot, a rockable contact member pivotally mounted upon said frame within the casing, and an actuating member for said lever pivoted upon said frame and extending outwardly through said opening in the frame and slot in the casing, the portion of said lever exterior to the casing being detachable.

6. In an electric switch, the combination with a tubular casing having a slot in the side thereof, of a frame rigidly secured within said casing and formed with an opening registering with said slot, switch mechanism carried by said frame, an actuating lever for said mechanism pivoted upon said frame and projecting through the opening in the frame and through said slot in the casing.

[Claims 2 and 5 not printed in the Gazette.]

1,268,174. WINDING DEVICE. LAVINIA STEPHENS, Englewood, N. J. Filed Feb. 6, 1918. Serial No. 215,685. (Cl. 242—96.)



3. In a device of the character described, a body provided at one end with a reduced neck and a head carried thereby, said head being provided with a plurality of peripheral teeth providing notches for receiving loops of the thread passed about the head when thread is wound upon the body so as to form bridge members passing across the annular groove intermediate the inner face of said head and the adjacent end of the body.

[Claims 1 and 2 not printed in the Gazette.]

1,268,175. STOVE-LOCK. ANNIE L. STEWART, South Auburn, Nebr. Filed Apr. 16, 1917. Serial No. 162,368. (Cl. 126—196.)

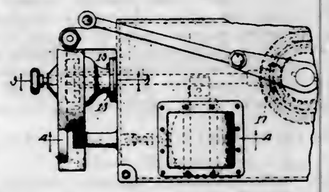


In combination with a part having an opening and a door for closing the said opening, keepers on the inner face of the door near opposite edges thereof, said door having a slot in line with the keepers, a locking bar slidable in the keepers, and having its ends adapted to project and engage the part having the door opening at opposite sides of the latter, a chocking bar, a key-operated stud secured to the chocking bar and journaled in the locking bar and operable in the slot of the door, said chocking bar being engageable with one of the keepers to limit the movement of the locking bar in one direction, the stud limiting the movement of the locking bar in the opposite direction by engaging a closed end of the slot in the door, and a keeper to engage and hold the chocking bar in operative position.

1,268,176. POWER MECHANISM FOR SLICING-MACHINES. HENDRIK STUKART, Laporte, Ind., assignor to U. S. Slicing Machine Company, Laporte, Ind., a Corporation of Illinois. Filed Nov. 29, 1916. Serial No. 134,036. (Cl. 74—7.)

1. In combination with the operating parts of a slicing machine, driving mechanism therefor comprising a rotary member arranged to be rotated manually, a power device for rotating said member, and a friction clutch for operatively connecting and disconnecting said rotary member with said slicing machine parts while said member continues to rotate.

3. In combination with the operating parts of a slicing machine, a shaft for driving said parts, a fly wheel for operating said shaft, means for rotating said fly wheel manually, power mechanism for rotating said fly wheel, and a clutch for connecting and disconnecting said fly wheel with said shaft to permit starting and stopping of said slicing machine parts independently of change in the rotation of said fly wheel.

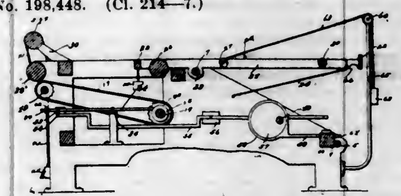


7. In combination with the operating parts of a slicing machine, a shaft for driving said parts, a fly wheel, a friction clutch for connecting said shaft to said fly wheel, a motor, driving connection between said motor and said fly wheel, and a handle for rotating said fly wheel without interfering with the driving connection between said fly wheel and said motor.

9. Driving mechanism for slicing machines, said mechanism embodying a drive shaft, a supporting base, a motor, means for supporting the motor within the base of the machine, means for connecting the motor and said shaft, and provision for actuating the shaft by hand power while the motor and shaft remain in operative connection with one another.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,268,177. DOOR-STACKING MACHINE. JOHN C. STUTZ, McCleary, Wash. Filed Oct. 25, 1917. Serial No. 198,448. (Cl. 214—7.)

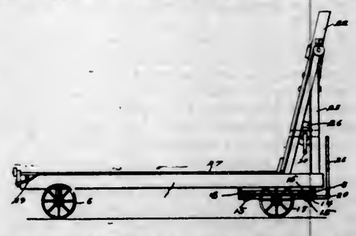


6. A door stacking machine, comprising in combination, a door receiving frame, a means pivotally supporting said door receiving frame in receiving position, means for actuating said supporting means to move the frame into discharging position to deposit the door, and means to act on the door to remove the latter from the frame.

7. A door stacking machine, comprising in combination, a door receiving frame, means supporting said frame, means to raise the supporting means to carry the frame into discharging position, and means actuated by the frame under influence of the weight of a door to cause the raising means to operate.

[Claims 1 to 5 not printed in the Gazette.]

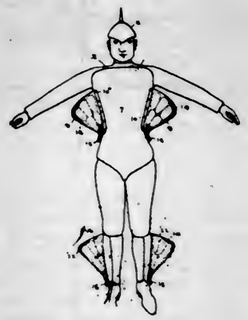
1,268,178. TRUCK. JOHN C. STUTZ, McCleary, Wash. Filed Oct. 29, 1917. Serial No. 199,129. (Cl. 24—1.5.)



1. A truck, comprising in combination, a truck body, supporting wheels therefor, standards rising from the forward end of the truck, a drum mounted on said standards transversely of said truck, and a cable having its ends secured to the drum and having its bight passed rearwardly around the edges of the truck in position to be lifted around a load on the truck and tightened by means of said drum.

[Claims 2 and 3 not printed in the Gazette.]

1,268,179. FLOATING EQUIPMENT. CARL R. SWANSON, Marshall, Minn. Filed Oct. 9, 1917. Serial No. 195,545. (Cl. 9—20.)

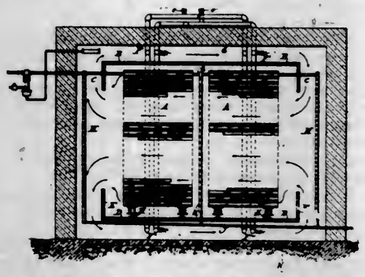


1. An equipment for soldiers comprising a suitable breast plate, of material proof against injury by water, secured to the breast, and inflatable bags secured to the sides of the breast plate.

7. An inflatable bag provided with a neck, a cap closing said neck, a valve in said cap for inflating said bag, a plurality of bags or balls positioned within said first bag, corresponding valves in said cap, and tubes connecting said last named valves with said last named bags or balls.

[Claims 2 to 6 not printed in the Gazette.]

1,268,180. DRY-KILN. HARRY DONALD TIEMANN, Madison, Wis. Filed Feb. 20, 1917. Serial No. 149,972. (Cl. 34—19.) (Dedicated to the public.)

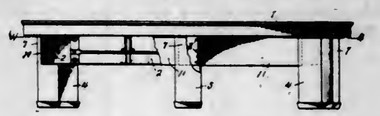


1. In a dry kiln for receiving piles of flat piled lumber, shields above and below the piles forming passageways, steam jets in these passageways for forcing the circulation, heating pipes near the side walls of the kiln, heating pipes between the piles of lumber, and a vent for escape of excess vapor.

2. In a dry kiln for receiving piles of flat piled lumber; shields above and below the piles forming passageways, steam jets in these passageways for forcing the circulation in one direction; other steam jets in the same passageways for forcing the circulation in the opposite direction, heating pipes placed near the side walls, and a vent for the escape of excess vapor.

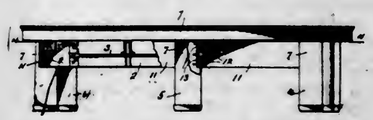
[Claims 3 to 5 not printed in the Gazette.]

1,268,181. TABLE. THEODORE R. TREIBER, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 21, 1916. Serial No. 73,364. (Cl. 45—48.)



In a table, a frame adapted to support a table top, a leg supporting the frame, means invisible from the exterior of the table for securing the leg to the frame, and a finishing plate applied to the exterior of the frame and held between the leg and frame.

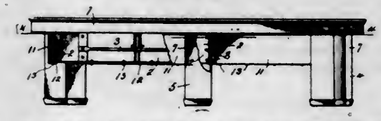
1,268,182. METAL TABLE. THEODORE R. TREIBER, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 21, 1916. Serial No. 73,365. (Cl. 45—48.)



1. In a table, a frame adapted to support a table top, a leg secured thereto, a finishing plate applied to the exterior of the frame and having a recess, and a bolt supported by the frame and extending into the recess for supporting the finishing plate, the leg serving to cover the bolt and to retain the plate engaged therewith.

2. In a table, a frame adapted to support a table top, two legs secured thereto, a finishing plate applied to the exterior of the frame and extending between the frame and said legs and provided with two recesses respectively covered by said legs, and two securing devices supported by the frame and respectively extending into said recesses for supporting the finishing plate.

1,268,183. METALLIC TABLE. THEODORE R. TREIBER, Chicago, Ill., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill., a Corporation of Delaware. Filed Jan. 21, 1916. Serial No. 73,366. (Cl. 45—48.)



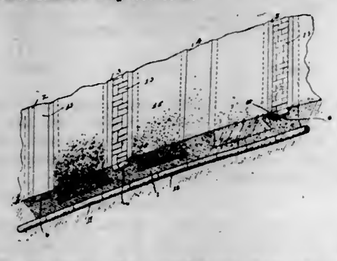
1. In a table, a frame adapted to support a table top, a leg supporting the frame, a finishing plate applied to the exterior of the frame and extending between the legs and frame and having at its lower edge an inwardly extending longitudinal flange secured to the frame, and means invisible from the exterior of the table for securing the leg to the frame.

2. In a table, a frame adapted to support a table top, two legs supporting the frame, means invisible from the exterior of the table for securing the legs to the frame, and a finishing plate applied to the exterior of the frame and extending from one leg to the other leg, and having an inwardly extending longitudinal flange at its lower edge secured to the frame.

1,268,184. PAVEMENT. EMORY E. TROWBRIDGE, Kansas City, Mo. Filed Feb. 12, 1917. Serial No. 148,108. (Cl. 104—178.)

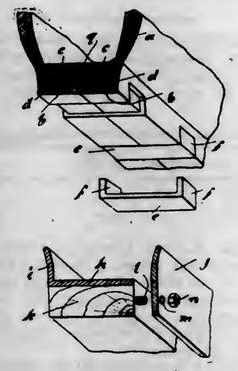
1. In a pavement, the combination with two pair of longitudinally extending grooved headers, each having a

wearing surface, the wearing surfaces of the inner headers inclining downwardly toward the adjacent outer header, each header having a rib projecting above the wearing surface at one side and a rib substantially flush with the wearing surface at the other side, and transversely extending interlocking units for securing the headers against lateral displacement.



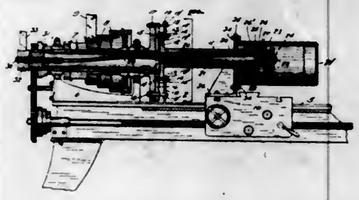
2. In a pavement, the combination with two pair of longitudinally extending grooved headers, each having a wearing surface, the wearing surfaces of the inner headers inclining downwardly toward the adjacent outer header, each header having a rib projecting above the wearing surface at one side and a rib substantially flushed with the wearing surface at the other side, transversely extending interlocking units for securing the headers against lateral displacement, and means for draining the surface below the headers comprising longitudinally and transversely extending drain pipes and vertical conduits extending from the face of the headers downwardly to the pipes.

1,268,185. MODE OF AND MEANS FOR ASSEMBLING PNEUMATIC OR ELASTIC TIRES IN RELATION TO RIMS OR WHEELS. HARRY WILLIAM VAN MEETEREN, Birmingham, England, assignor of one-third to Amos Edwards and one-third to Henry Headley, Birmingham, England. Filed Sept. 21, 1915. Serial No. 51,812. (Cl. 152—13.)



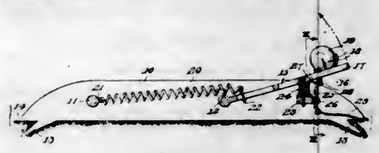
A pneumatic or elastic tire cover having solid block-like base portions composed essentially of non-metallic material and extending in uninterrupted continuity around the entire circumference of the tire, a continuous, endless and uninterrupted circumferential metallic reinforcing member of elongated cross-section incorporated within each block-like base portion, permanently and completely embedded throughout its entire circumference within the interior of the block-like base portion for guarding the latter against lateral bending, and quickly releasable connecting means adapted to couple the base portions together prior to the assemblage of the cover in its carrier rim, said connecting means being adapted when in engagement to permit of the block-like base portions being gripped or clamped between the separable parts of a divisible carrier rim.

1,268,186. GRINDING ATTACHMENT FOR LATHES. DANIEL VANDEWATER, Riverton, Wash. Filed Apr. 12, 1915. Serial No. 20,663. (Cl. 51—4.)



In a device of the class described, the combination with the head-stock spindle, of a hollow mandrel adapted to be revolubly carried by said spindle, means to regulate the position of the mandrel radially of said spindle, a shaft extending through the spindle and the mandrel, said shaft comprising a stub element rotatable in a bearing provided in the spindle, an arbor element rotatable in the mandrel, and an intermediate flexible element, an abrasive wheel mounted on the shaft arbor element, means to rotate the shaft from its stub element, and means to drive the spindle to revolubly carry the wheel while the same is rotating about the axis thereof.

1,268,187. BOMB-THROWING MACHINE. MIKE VELK, Boswell, Pa. Filed Apr. 5, 1918. Serial No. 226,867. (Cl. 124—1.)



1. A throwing device comprising a mounting means, parallel rollers carried thereby, a missile-supporting arm carried by one of the rollers, an operating spring secured to the other rollers and adjustably connected to the said arm whereby the tension of the spring is adapted for regulation when the arm is in its set arrangement prior to the operation of the device.

4. A missile thrower comprising opposite parallel sides, anchoring toes inclined in opposite directions from the lower edges of said sides, transverse rollers journaled in spaced relations in the said sides, a missile hurling arm radially projecting centrally of the rearmost roller having an enlarged head portion at its free end with a socket in its forward face, missile-seating prongs carried by said head adjacent the socket, an I-bolt carried by the arm adjustably arranged longitudinally of the arm, an operating spring connected between the other roller and the said I-bolt, a transverse bar arranged between the sides adjacent the rear end of the device, a vertically positioned coil spring arranged upon the bar upon which the said arm is adapted to seat when the device is set, a keeper upon said head substantially opposite the socket thereof, a hook-shaped trigger pivoted to the bar adapted for engaging said keeper when the arm is in its depressed rear position, and a releasing cord for the trigger attached to the lower end thereof and extending a distance rearwardly of the device.

[Claims 2 and 3 not printed in the Gazette.]

1,268,188. RAILWAY-RAIL. GEORGE VOLK, Buffalo, N. Y., assignor to Volk-Guild Company, Inc., Buffalo, N. Y., a Corporation of New York. Filed Nov. 2, 1917. Serial No. 199,805. (Cl. 239—16.)



1. A rail comprising two like longitudinal sections each of which is provided on its inner sides with a longitudinal groove an upper bearing face above said groove and a lower bearing face at a distance below said groove, and that part of the inner side of each rail section between said groove and lower bearing face receding relative to the upper and lower bearing faces thereof, said rail sections being assembled with their corresponding upper and lower bearing faces engaging each other, a key arranged in both grooves of said rail sections, and a bolt connecting said rail sections between said grooves and lower bearing faces.

2. A rail comprising two like longitudinal sections each of which is provided on its inner side with a longitudinal groove, an upper bearing face above said groove and a lower bearing face at a distance below said groove, and that part of the inner side of each rail section between said groove and lower bearing face receding relative to the upper and lower bearing faces thereof, said rail sections being assembled with their corresponding upper and lower bearing faces engaging each other, a key arranged in both grooves of said rail sections, and a bolt connecting said rail sections between said grooves and lower bearing faces, the combined depth of said grooves being greater than the diameter of said key.

3. A rail comprising two like longitudinal sections each of which is provided on its inner side with a longitudinal groove, an upper bearing face above said groove and a lower bearing face at a distance below said groove, and that part of the inner side of each rail section between said groove and lower bearing face receding relative to the upper and lower bearing faces thereof, said rail sections being assembled with their corresponding upper and lower bearing faces engaging each other, a key arranged in both grooves of said rail sections, and a bolt connecting said rail sections between said groove and lower bearing faces, said rail sections being provided with corresponding longitudinal slots, and each of said bolts having a circular part engaging one of a pair of corresponding slots and an elongated part engaging the companion slots of said part.

4. A rail comprising two like longitudinal sections each of which has an upright web section, a head section at the upper edge of the web section, a base section at the lower edge of the web section, a longitudinal groove on the inner side of said head section, an upper bearing face on the inner side of each rail section above said groove and a lower bearing face on the inner side of each rail section adjacent to the base section thereof, the inner side of each rail section between said groove and lower bearing face receding relative to said upper and lower bearing faces, said rail sections being assembled with their corresponding upper and lower bearing faces engaging each other while those parts of their inner sides intermediate of said upper and lower bearing faces are disengaged from each other, a key arranged in the grooves of both of said rail sections, and a bolt connecting the web sections of said rail sections between the grooves and the lower bearing faces thereof.

1,268,189. MEANS FOR SECURING SHIPS'-HATCH TARPAULINS OR SIMILAR FLEXIBLE COVERINGS. EDWARD ELIAS VON TELL, Gottenborg, Sweden. Filed Dec. 11, 1917. Serial No. 206,647. (Cl. 114—203.)

1. Means for securing ships' hatch tarpaulins or similar flexible coverings comprising batten bars capable of a combined longitudinal and lateral movement relative to the weather sides of the hatch coaming by means of crank members pivotally mounted in brackets on the sides of the hatch coaming as well as in bearing blocks on the batten bars.



3. In means for securing hatch coverings the combination of batten bars capable of a combined longitudinal and lateral movement relative to the weather side of the hatch coaming, pivotally mounted crank members supporting said batten bars and means for positively pushing said batten bars in their longitudinal direction so as to cause the combined longitudinal and lateral movement with guidance of the pivotal crank members.

5. A device for securing a hatch covering comprising cranks mounted on the weatherside of the hatch coaming, a batten bar mounted on said cranks, and means for imparting longitudinal movement to said batten bar in either direction whereby said cranks will cause said batten bar to move in a horizontal plane and into or out of engagement with said coaming.

6. A device for securing a hatch covering comprising cranks mounted on the weatherside of the hatch coaming, a batten bar mounted on said cranks, a threaded bolt fixed to said batten bar, a bracket secured to the latch coaming and formed with an elongated slot to loosely receive the threaded end of said bolt and permit lateral movement thereof, and a nut on said bolt and abutting said bracket whereby when said nut is rotated in one direction or the other said screw is advanced or retracted to cause said batten bar to move into or out of engagement with the hatch coaming.

7. A device for securing a hatch covering comprising cranks mounted on the weatherside of the hatch coaming, a batten bar mounted on said cranks, a bolt fixed to said batten bar, a bracket secured to the hatch coaming and formed with an elongated slot to loosely receive the threaded end of said bolt, and a nut on said bolt and abutting said bracket whereby when said nut is rotated in one direction or the other said screw is advanced or retracted to cause said batten bar to move longitudinally in one direction or the other whereby said crank will move said bar in a horizontal plane and into or out of engagement with the hatch coaming.

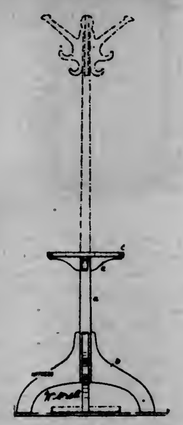
[Claims 2 and 4 not printed in the Gazette.]

1,268,190. UMBRELLA AND SIMILAR STAND. ALBERT WANNER, Jr., New York, N. Y. Original application filed June 17, 1916, Serial No. 104,149. Divided and this application filed Apr. 5, 1917. Serial No. 159,859. (Cl. 45—33.)

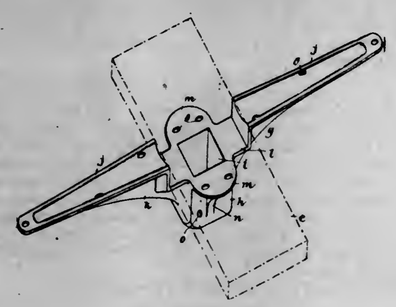
1. In combination, a columnar upright and a horizontal supporting structure fitted over the upright and including a horizontal support proper formed of horizontal layers of sheet-material cemented together, said support proper including a peripheral continuous marginal portion and radial portions together forming openings for the article to be received.

2. In combination, a columnar upright and a horizontal supporting structure fitted over the upright and including a horizontal support proper and radial brackets each bearing inwardly against the upright, said support proper including a peripheral continuous marginal portion and radial portions together forming openings for the articles to be received and each bracket being secured to one such radial portion.

3. In combination, a columnar upright and a horizontal supporting structure fitted over the upright and including a horizontal support proper and radial brackets each bearing inwardly against the upright, said support proper including a peripheral continuous marginal portion and radial portions together forming openings for the articles to be received and each bracket having a dove-tail-joint connection with one such radial portion.



1,268,191. TABLE, STAND, AND THE LIKE. EDWIN P. WANNER, New York, N. Y. Filed Apr. 16, 1917. Serial No. 162,361. (Cl. 45—117.)



1. In a table or stand, the combination of a pillar structure, a top arranged thereabove and a top-supporting structure, one of said structures having a socket receiving and forming a rigid joint with the other and said top-supporting structure including two crossed members, one being a batten secured flat against the under face of the top and the other having a recess on top at their intersection receiving the batten member and also bearing against the underface of said top both sides of said recess.

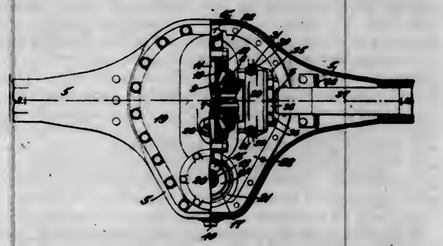
2. In a table or stand, the combination of a pillar, a top arranged thereabove and a top-supporting structure having a socket receiving and forming a rigid joint with the upper end of the pillar and including two crossed members, one being a batten secured flat against the under face of the top and the other having a recess on top at their intersection receiving the batten member and also bearing against the under face of said top both sides of said recess.

3. In a table or stand, the combination of a pillar having its upper end angular in cross-section, a top arranged thereabove and a top-supporting structure having a socket receiving the upper end of the pillar and including two crossed members, one being a batten secured flat against the under face of the top and the other having a recess on top at their intersection receiving the batten member and also bearing against the under face of said top both sides of said recess, said socket being shaped to fit and snugly fitting said angular upper end of the pillar.

4. In a table or stand, the combination of a pillar, a top arranged thereabove, and a top-supporting structure arranged on the upper end of the pillar and including two crossed members, one being a batten secured flat against the under face of the top and the other an integral metallic element formed at its place of intersection with the batten member with a socket receiving the upper end of the pillar and also with a recess on top receiving the batten member, top surfaces of the second-named member both sides of its recess bearing against the under face of said top.

5. In a table or stand, the combination of a pillar, a top arranged thereabove, and a top-supporting structure arranged on the upper end of the pillar and including two crossed members, one being a batten secured flat against the under face of the top and the other an integral metallic element formed at its place of intersection with the batten member with a socket receiving the upper end of the pillar and also with a recess on top receiving the batten member and with lateral projecting batten-supporting cheeks, top surfaces of the second-named member both sides of its recess bearing against the under face of said top.

1,268,192. WORM-DRIVE REAR AXLE. ROBERT B. WEAVER, Detroit, Mich., assignor to The Timken-Detroit Axle Company, Detroit, Mich., a Corporation of Ohio. Filed Nov. 12, 1917. Serial No. 201,458. (Cl. 74—99.)



1. A driving axle comprising an axle casing having an enlarged middle portion provided with alined openings, driving axle sections arranged in said axle casing, a cap removably secured to one side of said axle casing and adapted to close one of said openings, a gear carrier removably secured to the other side of said axle casing and adapted to close the other of said openings, said gear carrier having two journal boxes projecting into said casing in alinement wih the driving axle sections, a differential gear case journaled in said journal boxes, a worm driving gear secured to said gear case, a worm drive shaft meshing with said worm gear, bearings for said worm shaft, one of said bearings being journaled in the gear carrier and the other of said bearings being journaled in the cap secured to the axle casing.

2. A driving axle comprising an axle casing having alined openings at its middle, driving axle sections arranged in said axle casing, a cap secured to one side of said axle casing and adapted to close one of said openings, a gear carrier secured to the opposite side of said axle axle casing and adapted to close the other of said openings, a differential gear case removably supported in the axle casing, the gears in said gear case being operatively connected to the driving axle sections, a worm gear secured to said differential gear case, a worm drive shaft for driving said worm gear, and bearings for said differential gear case and worm drive shaft, the gear carrier having journal-boxes for supporting the bearings for the differential gear case and a journal-box for supporting one of the bearings for the worm shaft, the other of said bearings for said shaft being journaled in a journal box formed in the cap and being adjustable so as to take up the wear in both of the worm shaft bearings.

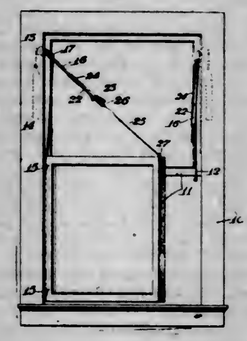
6. A driving axle comprising an axle casing having an enlarged middle portion with openings in its front and rear wall, axle sections arranged in said axle casing, a rear cap for closing the opening in the rear wall of the axle casing, a gear carrier secured to the front wall of the axle casing and adapted to close the openings therein, said gear carrier having journal-boxes projecting into said axle casing, means for supporting the journal-boxes from the cap secured to the rear of the axle casing, a differential case arranged between said journal-boxes and having hubs journaled therein, an oil filling thimble located in the cap secured to the rear of the axle casing, the level of the oil in the enlarged portion of the axle casing being controlled by the height of the filling thimble, and a stopper threaded into the bottom of the axle casing, whereby the oil may be drained.

[Claims 3 to 5 not printed in the Gazette.]

1,268,193. MANUFACTURE OF PAPER-PULP. SIDNEY D. WELLS, Madison, Wis.; dedicated, by mesne assignments, to the Government of the United States and to the people of the United States. Filed Apr. 2, 1918. Serial No. 226,518. (Cl. 92—7.) (Dedicated to the public.)

A process of cooking wood or other fibrous material for the production of paper pulp in which the concentration of active chemicals during the cook is reduced to the desired degree by the introduction of spent lyes while the cook is proceeding whereby the cellulose is protected to a marked degree from the action of the cooking liquors while their action on the incrusting matter is in no way diminished.

1,268,194. SASH-CORD HOLDER. LOUIS J. WESTNESS, Milwaukee, Wis. Filed Feb. 23, 1918. Serial No. 218,762. (Cl. 16—16.)



1. A sash cord clamp, comprising a handle member, a hook member thereon of a U-shape in cross section and having a V-shaped notch to fit over the sash cord, a shoulder on the hook member, a crank pin on the handle member having a crank portion to clamp the sash cord between it and the shoulder of the hook member, a spring-actuated connecting rod connected with the crank pin, and a lever on the handle connected with the connecting rod.

2. A sash cord holder, comprising a handle member, a metal blade secured thereto and having a groove formed therein with a notch at its end, said notch being adapted to be engaged with the sash cord near its pulley, and a clamping member on the handle having means for moving it with spring pressure toward the blade to clamp the sash cord therebetween.

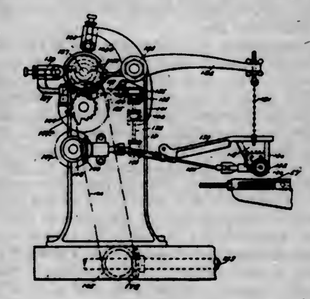
3. A sash cord holder, comprising a handle, a blade secured to one end of the handle and bent to form a channel with a notch in its end to receive the sash cord near the pulley, a crank pin on the handle having a bent end coöperating with the blade to form a clamp therewith, a lever on the other end of the handle, and a connecting rod connecting the lever with the crank pin.

4. A sash cord holder, comprising a handle, a blade secured to one end thereof and bent to form a trough, a shoulder in the bottom of the trough, a crank pin having a bent portion adapted to enter the trough and form a clamp therewith for engaging the sash cord, and an operating means connected with the crank pin for turning it to its clamping position.

5. A sash cord holder, comprising a handle, a sheet metal blade secured to one end thereof and bent to form a channel with a notch formed at one end by means of a pair of converging slits, the tongue of metal between the slits being bent into the channel and secured thereto and forming a shoulder at its end, a clamping member mounted on the handle and adapted to engage the sash cord between it and the shoulder, and means for operating the clamping member.

[Claims 6 to 8 not printed in the Gazette.]

1,268,195. APPARATUS FOR DECORATING CONFECTIONERY AND THE LIKE. GEORGE WHITE, Jersey City, N. J., and GEORGE SAMUEL BAKER and GEORGE RALPH BAKER, London, England, assignors to Panayiotis D. Panoulias, Jersey City, N. J. Original application filed Apr. 20, 1916, Serial No. 92,339. Divided and this application filed Sept. 15, 1916. Serial No. 120,236. (Cl. 107—27.)



1. A decorating device for confectionery comprising a decorating element, means for supply of decorating material thereto, and a plurality of cams adapted to respectively impart to said element positive vertical, lateral and longitudinal movements and combinations of said movements in relation to the goods.

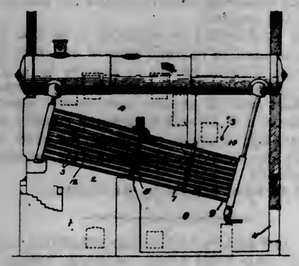
7. A decorating device for confectionery, comprising, in combination, a receptacle adapted to contain decorating material and to discharge such material upon the goods from above, means for imparting vertical movements to said receptacle in relation to the goods, comprising a double-armed lever, a cam adapted to operate one arm of said lever, and a chain interposed between the other arm of the lever and the receptacle, means for imparting lateral movement to said receptacle in relation to the goods, said means comprising rods connected to said receptacle, ball-and-socket joints at the ends of said rods, a transversely-movable bar in connection with said rods and a cam acting on said bar, and means for imparting longitudinal movements to said receptacle in relation to the goods, said means including the rods and ball-and-socket joints aforesaid, and in addition thereto, flexible connections intermediate the ends of said rods, and a cam acting on said connections.

9. A decorating device for confectionery, comprising a decorating element, and a plurality of control mechanisms

adapted to respectively impart to said element positive vertical, lateral, and longitudinal movements and combinations of such movements, in relation to the goods.

[Claims 2 to 6, 8, and 10 not printed in the Gazette.]

1,268,196. HEAT-RATIO INDICATOR. IRVEN H. WILSEY and WALTER H. GREEN, Chicago, Ill., assignors, by direct and mesne assignments, of one-half to said Green and one-half to Frank A. Adkins, Chicago, Ill. Filed Aug. 18, 1915. Serial No. 45,886. (Cl. 73—184.)



1. The combination of a boiler, hollow vessels positioned in the hot gas passageway of said boiler, gas in each of said vessels, a pressure operable indicating device, and tubes operatively connecting each of said vessels with said device, the composition of the gas in said devices being substantially similar to the composition of ordinary boiler flue gas.

6. The combination of a boiler and means for indicating the relative amounts of heat energy in the gases at two points of said boiler; said means comprising a closed vessel located at each of said points, gases contained in said vessels, relative pressure operable indicating apparatus, tubes operatively connecting each of said vessels with said apparatus, and means for varying the relative pressure effects of said contained gases according to the relative specific heats of the gases surrounding said vessels.

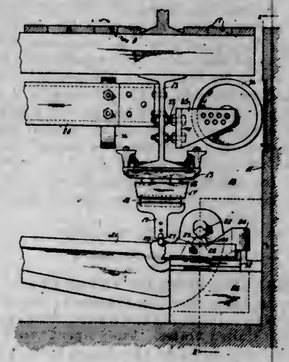
14. The combination of a boiler, and means for indicating the relative temperatures of the gases in said boilers; said means comprising a plurality of vessels located in the hot gas passageways of said boiler, a plurality of vessels outside of said boiler, tubes operatively connecting each of said internal vessels with one of said external vessels, pressure operable indicating apparatus, and tubes connecting each of said external vessels with said apparatus.

22. A heat ratio indicating apparatus comprising two hollow systems, each system comprising two closed vessels and a connecting tube, a gas contained in each system, a relative pressure operable indicating device, a tube connecting each system with said device, and means for varying the relative pressure effects of said systems on said device proportional to the respective products of the temperatures and the specific heats of the fluids surrounding one of said vessels in each of said systems.

27. The combination of a boiler; a closed system comprising a tube positioned adjacent the furnace of said boiler, a vessel outside of said boiler, and a pipe operatively connecting said tube with said vessel; a second closed system comprising a second tube positioned adjacent the uptake of said boiler, a second vessel outside of said boiler, and a pipe operatively connecting said second tube with said second vessel; a differential pressure indicating device; a tube operatively connecting each of said systems with said device; and gas contained in said systems and tubes; the differences in pressures of the gases in said systems being substantially proportional to the ratios of the heat energy per unit mass in the hot gases passing through said boiler when said boiler is in operation, and the said pressures being approximately equal to the pressures of the gases in said boiler under average operating conditions.

[Claims 2 to 5, 7 to 13, 15 to 21, and 23 to 26 not printed in the Gazette.]

1,268,197. TRACK-SCALE. MARLON H. WINSLOW, Terre Haute, Ind. Filed Jan. 28, 1915. Serial No. 4,884. (Cl. 265—71.)



1. A track weighing scale including walls forming a pit, a platform, a structure supporting the platform and having I beams parallel with the walls of the pit, brackets extending from said I beams toward the walls of the pit, means for mounting the brackets in the I beams so that they may be adjusted toward or away from the pit walls, and rollers in said brackets adapted to bear against the walls of the pit, substantially as set forth.

2. A weighing scale including a load supporting platform, an I-beam for supporting the same, an upper bearing member secured to the lower flange of the I-beam, an intermediate bearing member below said upper bearing member, rollers between the upper and intermediate bearing members, said members having parallel recesses in their meeting faces to receive said rollers, a lower bearing member, a roller between the intermediate and lower bearing members which extends transversely of the rollers between the upper and intermediate bearing members, said intermediate and lower bearing members having recesses in their meeting faces to receive said last roller, a platform supporting lever extending parallel with one set of said rollers, a knife edge on said lever extending parallel with the other set of said rollers and supporting said lower bearing member, a knife edge extending from each side of said lever and located above the top of the lever, a bearing block at each side of said lever for supporting said knife edges, a substantially U-shaped frame having its ends on opposite sides of the lever, and ribs on said U-shaped frame upon which said blocks are adapted to rest, said ribs extending at right angle to the knife edge on the lever.

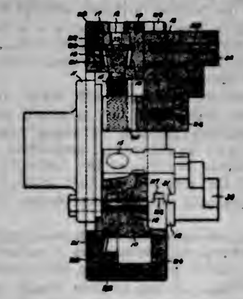
1,268,198. LATHE-CHUCK. CLARENCE FREDERIC WOODFORD, Windsor Locks, and OLIN S. ROCKWELL, Warehouse Point, Conn., assignors to E. Horton & Son Company, Windsor Locks, Conn., a Corporation of Connecticut. Filed Dec. 30, 1914. Serial No. 879,784. (Cl. 279—113.)

1. A chuck having a peripheral embossment provided with means permitting radial jaw movement but preventing other movement.

3. In a chuck, jaws, actuating screws therefor, and screw actuating pinions provided with annular thrust bearings and free to turn therewith.

5. In a chuck, work engaging means, actuating means therefor including a pinion adapted to carry an end thrust receiving means revoluble therewith.

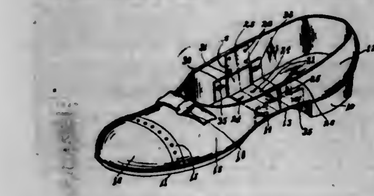
7. In a chuck, work holding means, a radially disposed tongued way in which said means may travel, an enlargement of said way, and a projection integral with said



work holding means adapted to be inserted through said enlargement and to be retained beneath the tongue of said way, as and for the purposes set forth.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,268,199. ALUMINUM SHOE. MAXIM ZAVARKIN, East Brimfield, Mass. Filed Jan. 2, 1918. Serial No. 209,934. (Cl. 36—1.)



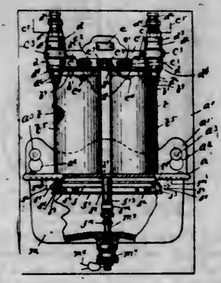
1. In a metallic shoe, comprised of a heel and toe section, of a flexible elastic connecting element engaged therebetween upon opposite sides to the sole and the instep thereof, and forming a hinged joint therebetween, extensions of said elastic element, secured along their margin to said front and rear section, said elastic element being adapted to cover openings between adjacent edges of said sections, a pair of oppositely disposed metallic plates having longitudinal slots formed therethrough arranged interiorly of said sections, whereby they are joined together, and an engaging means fixed in said section operating through said slots, said plate being adapted to retain said sections against lateral motion.

[Claim 2 not printed in the Gazette.]

1,268,200. ELECTROMAGNET. ALFRED A. ZIEGLER, Boston, Mass., assignor to United Electric Apparatus Company, Boston, Mass., a Corporation of Massachusetts. Original application filed Sept. 14, 1908, Serial No. 452,846. Divided and this application filed Dec. 27, 1909, Serial No. 534,932. Renewed Mar. 29, 1918. Serial No. 225,583. (Cl. 175—281.)

1. In an electro-magnet, a base, magnet cores extending from and secured at their lower ends to the base, magnet coils including spools on which the coils are wound removably arranged on said cores beyond the base, means engaging the cores for normally holding the coils against removal from the cores, a bridge carried by said means and having binding posts for respectively receiving the leading-in wires, the magnet wires, and the connecting wires for the coils, said connections being shiftable to admit of the cutting out of either coil, said means supporting all of said connections and being movable to permit removal of either coil without interfering with the operation of the relay.

4. In an electro-magnet, a horisontally arranged base having holes through it, upright magnet-cores fixedly connected with the base, the lower ends of which project through the holes therein, enlarged pole-pieces on the lower ends of said cores below the base, removable magnet-coils arranged on said upright cores which rest on the base, a back-piece attached to the upper ends of said cores above the coils, and means connected with said back-piece and arranged to exert a downward pressure on said coils to hold them in position on the base, substantially as described.

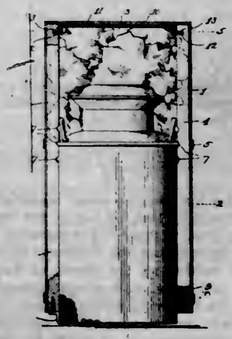


7. In an electro-magnet, a stationarily supported pair of magnet-cores, magnet-coils removably placed thereon, hollow shields removably placed on said coils, a back-piece connected to said cores, and a spring-plate attached to the under side of said back-piece, the ends of which bear upon the ends of said shields, and act to hold said shields and the coils inclosed thereby, in place, substantially as described.

11. In an electro-magnet, a pair of magnets having a back-piece, a bridge attached to said back-piece, binding-posts supported by said bridge to which the magnet-wires and leading-in wires are respectively connected, connecting-wires between the coils of the magnets, a metallic support on said bridge, and means thereon to detachably engage the ends of said connecting-wires and electrically connect them together, substantially as described.

[Claims 2, 3, 5, 6, 8 to 10, and 12 to 18 not printed in the Gazette.]

1,268,201. CHIPPING-JACKET. WILSON H. ALEXANDER, Philadelphia, Pa. Filed Oct. 14, 1914. Serial No. 866,561. (Cl. 220—138.)

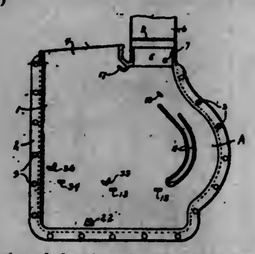


1. In a shipping jacket, a removable flexible casing of heavy sheet fabric or like material shaped so that it can be wrapped around cans of different dimensions to form a temporary covering for the contained vessel, vertical battens secured to the inner face of the flexible casing to bear against the wall of the contained vessel, said

battens being spaced apart to form air-spaces between the casing and the wall of the contained vessel, and fastening means for temporarily securing the casing around the contained vessel.

[Claims 2 and 3 not printed in the Gazette.]

1,268,202. TANK-HEATER. MARTIN E. ANDERSON, De Kalb, Ill., assignor to Jacob Haish Company, De Kalb, Ill. Filed Apr. 6, 1917. Serial No. 160,141. (Cl. 126—367.)

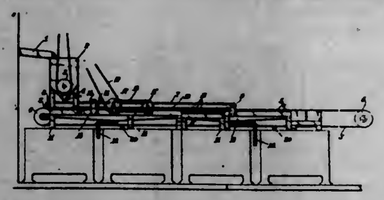


2. In a device of the class described, a receptacle having an air inlet and air outlet; a central fire-box disposed to form a passage way from said air inlet to said air outlet and comprising a grate, an auxiliary grate adapted to be supported to form an extension of said first named grate, a rear wall spaced apart from the rear wall of said receptacle, and a front wall adapted for use with said first named grate alone or with both of said grates when used in conjunction.

4. In a device of the class described, a receptacle having an air inlet and air outlet, and a fire-box centrally mounted therein, so as to provide a passage from said air inlet to said air outlet beneath said fire-box, and comprised of a grate, an auxiliary grate hingedly mounted at the front edge thereof, a rear wall formed of a plurality of sections, and a front wall adapted to be swingingly supported with relation to said first named grate or with reference to said auxiliary grate.

[Claims 1 and 3 not printed in the Gazette.]

1,268,206. APPARATUS AND PROCESS FOR MAKING SHEETS, SLABS, AND SIMILAR ARTICLES. ROBERT H. ANDERSON, Ambler, Pa., assignor to Asbestos Shingle, Slate & Sheathing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1913. Serial No. 798,160. (Cl. 25—42.)



1. In a machine for treating moist material, the combination with a traveling belt, of means for depositing the material on the belt, a table for supporting the belt, a leveling means determining the thickness of the material on the belt and backing up the excess of water onto the material above said table, and means subsequent to said leveling means for removing moisture from the material.

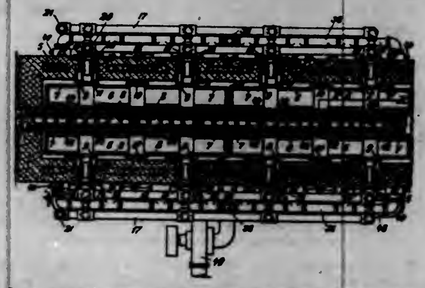
2. In a machine for treating moist material, the combination with a traveling belt, of means for depositing the material on the belt, a leveling means determining the thickness of the material on the belt and backing up the excess water onto the material in front of it so that the material at this point is thoroughly wetted, and means for subsequently further flattening the material into a sheet.

3. In a machine of the character described, the combination of an endless belt of porous material, deckles at the sides thereof, means for flowing the material to be worked upon said belt, a leveling device adapted to level the material to the desired thickness without compressing the material and to distribute the excess of water thereon, and a suction device adapted to remove water from said material after it has passed the leveling devices and before it has been compressed or set.

4. The process for making sheets, slabs, or the like, which comprises moistening the material, passing the material continuously through flattening means, which squeezes out a part of the water, permitting the excess water to accumulate in front of the flattening means to thoroughly wet the material at this point, and subsequently hardening said material into sheets, slabs, or the like.

5. The process of making sheets, slabs or the like, which comprises depositing the material on a support, leveling the material to flatten it, permitting the excess water to accumulate in front of the leveling means to wet the material at this point, and subsequently hardening the material into sheets, slabs or the like.

1,268,204. CONTINUOUS TUNNEL-KILN. GEORGE HILLARD BENJAMIN, New York, N. Y. Filed May 24, 1916, Serial No. 99,540. Renewed Nov. 10, 1917. Serial No. 201,223. (Cl. 25—142.)



1. A tunnel oven of the type described, comprising a main chamber, a plurality of heating chambers in which combustion may be effected without discharging the products of combustion into the main chamber and arranged longitudinally in line on each side of the main chamber, means for feeding gas and air under pressure into each of said heating chambers, and means for conveying the products of combustion from each of said heating chambers.

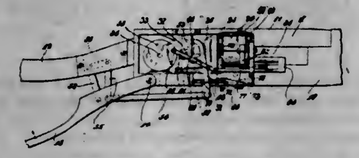
11. A tunnel oven of the type described, comprising a main chamber, a plurality of substantially closed heating chambers, means for feeding gas and air into said heating chambers, means for conveying the products of combustion from said heating chambers without passing through the main chamber, an air heater through which the products of combustion pass, means for conveying the air from the air heater through and around the material in the main chamber under treatment, and means for exhausting the air from the main chamber.

20. A tunnel oven of the type described, comprising a main chamber, a plurality of substantially closed heating chambers arranged in line and in pairs on opposite sides of the main chamber and along its length, means for setting free heat in the interior of the chambers, means for regulating the temperature radiated from the exterior walls of said chambers, and means for conveying the products of combustion from the interior of the chambers.

[Claims 2 to 10 and 12 to 19 not printed in the Gazette.]

1,268,205. WEAPON. MAXIM M. BEIT, West Moose Jaw, Saskatchewan, Canada. Filed Jan. 29, 1918. Serial No. 214,292. (Cl. 42—53.)

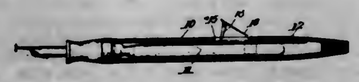
3. In a gun mechanism, the combination with a body, a cylinder revolubly mounted therein, and a guard lever hingedly connected to said body, of means actuated by said guard lever for seating, expelling and detonating cartridges, means for rotating said cylinder and means for holding said cylinder when in operative position, all of said means being actuated by said guard lever.



4. In a small arm, the combination with a body, having a fixed blade, and a fixed barrel, of a cylinder revolubly mounted in said body, a guard hingedly engaged with said body, said guard extending rearwardly coincident with the handle of said body, means for normally extending said guard, a gear train mounted in said body, said gear train being operated by said guard, means actuated by said gear train for seating cartridges to said cylinder, means for expelling spent cartridges coincidently with the entrance of fresh cartridges, means for rotating said cylinder actuated by said guard, means for locking said cylinder when in an operative position, and means for detonating a cartridge in said cylinder.

[Claims 1 and 2 not printed in the Gazette.]

1,268,206. SELF-FILLING FOUNTAIN-PEN. MARTIN BORBECK, Sioux City, Iowa, assignor of one-half to Henry A. Meyer and E. A. Burgess, Sioux City, Iowa. Filed Jan. 6, 1917. Serial No. 141,015. (Cl. 120—46.)



1. A self filling fountain pen comprising a barrel formed with an aperture in its side walls, a collapsible ink receptacle therein, a compressor bar, an operating member movably mounted on said barrel, and means interposed between said bar and member operative through said aperture and actuated by movement of said member in one direction to cause said compressor bar to successively collapse the receptacle and then allow it to expand.

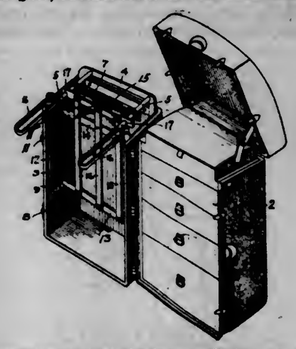
5. A self filling fountain pen comprising a barrel, a collapsible ink receptacle therein, said barrel formed with a slot, means for collapsing the receptacle comprising a member pivoted in the wall of the barrel and operative through the slot and adapted to nest in said slot when in closed position, said member formed with a cam surface at said pivoted end adapted to yieldingly hold the member in open or closed position.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,268,207. WARDROBE-TRUNK. ABRAM H. BOYD, Aspinwall, Pa., assignor to B. B. & B. Trunk Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed June 24, 1914. Serial No. 847,047. (Cl. 190—18.)

1. A wardrobe trunk comprising a clothes compartment, a retaining gate, said compartment having over-topped notches in its inner walls with which the lower end of said gate engages, ratchet-teeth on the inner walls of said compartment with which the upper portion of said gate engages, the depth of said notches being greater than the depth of said ratchet teeth.

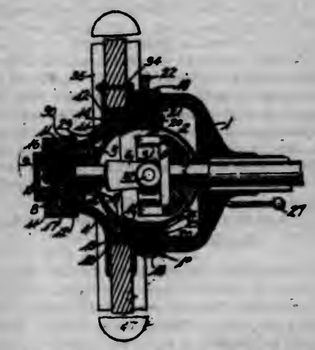
3. A wardrobe trunk comprising a clothes compartment, a retaining gate having a lower cross-bar, an upper cross-bar and an intermediate cross-bar, said compartment having notches on the inner walls engaged by the lower cross-bar of said gate, ratchet-teeth on the inner walls of said



compartment engaged by the intermediate cross-bar, and a lid on said compartment engaging the upper cross-bar.

[Claim 2 not printed in the Gazette.]

1,268,208. AXLE-DRIVE. HARRY MELVIN BOYD, Fort Myers, Fla. Filed Nov. 2, 1916. Serial No. 129,070. (Cl. 74—108.)



1. A wheel having a hub, a universally jointed axle having a squared portion within said hub, a jointed axle housing having a reduced portion journaled within the hub, a disk having a squared socket fitted over the squared axle housing, a bolt screwed into the end of the axle and extending through the disk, a collar on the bolt between the disk and axle end, a nut screwed on the bolt against the disk, and a cap covering the nut and disk and screwed to the disk and hub.

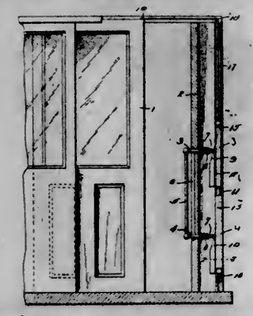
2. A wheel having a hub, a universally jointed axle fixed to the hub, an axle housing having a vertical yoke and inner and outer globular joint sections within the yoke, vertical flanged bushings in the outer globular joint section, pivot pins passing through the yoke arms, the bushings and the inner globular joint section, and anti-friction bearings between the bushing flanges and the yoke arms.

1,268,209. HAND-RAIL. JAMES M. BRADY, New York, N. Y. Filed Oct. 12, 1917. Serial No. 196,205. (Cl. 105—31.)

1. The combination with a door frame; of a projectable member normally housed therein, a door, and means operable on the opening of the door to project said member.

5. The combination with a door frame having a hollow jamb, a door movable toward and away from said jamb, a hand rail disposed outside said jamb and having an arm extending transversely thereinto, a slide mounted to move in said jamb, guides in said jamb with which said slide is engaged, yieldable means normally holding said slide in

retracted position, out of engagement with said arm, and a flexible element connecting said slide and said door whereby on the opening of the door the cam is moved into engagement with the arm and said rail projected.



8. The combination with a door frame having a hollow jamb provided on its inner face with a longitudinally extending groove, the inner wall of said groove having longitudinally spaced apertures therein communicating with the interior of the jamb, a hand rail adapted to lie in said groove when in inoperative position and provided with laterally extending arms slidably mounted in said apertures, springs connected with said arms for normally forcing the rail inward, a slide mounted to move longitudinally in said jamb and having longitudinally spaced cams positioned for engagement with the arms of said rail when in one position, rollers on the ends of said arms bearing on said cams, recesses at the ends of said cams to receive said arms when the slide is in another position, a door, and a connection between said door and slide whereby the cams are moved into contact with said arms on the opening of the door thereby forcing the rail into projected operative position.

[Claims 2, 3, 4, 6, and 7 not printed in the Gazette.]

1,268,210. RIM FOR VEHICLE-WHEELS. RICHARD S. BRYANT, Akron, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed May 4, 1911. Serial No. 625,079. (Cl. 152—21.)

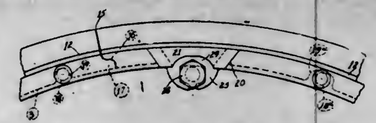


1. The combination with a transversely split tire-supporting rim for vehicle wheels; of a member projecting radially inwardly from a point on said rim adjacent its ends, said member being held against longitudinal movement relatively to said rim; a second member longitudinally adjustable along said first member; and links connecting said second member with the ends of said rim and forming a toggle.

[Claims 2 to 19 not printed in the Gazette.]

1,268,211. RIM FOR VEHICLE-WHEELS. RICHARD S. BRYANT, Cleveland, Ohio, assignor, by mesne assignments, to the Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 2, 1913. Serial No. 787,786. (Cl. 152—21.)

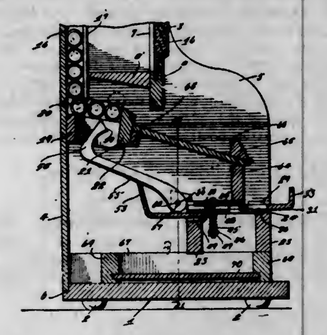
1. In a device of the character described, the combination with a tire-supporting rim having a circumferential groove adjacent one edge and a transverse abutment in said groove; of a split side-flange adapted to seat in such groove the ends of said flange being formed so that one shall radially overlie the other, the underlying end having a notch on its inner edge adapted to engage said abutment and the overlying end of said flange having a portion adapted to project through such groove; and a mov-



able wedge member carried by said rim and adapted to slidably engage the projecting portion of said flange and secure the same in place.

[Claims 2 to 8 not printed in the Gazette.]

1,268,212. VENDING-MACHINE. WILLIAM B. BURGET, Kansas City, Mo. Filed Mar. 10, 1917. Serial No. 153,957. (Cl. 194—79.)



In a device of the class described, the combination of a casing, dispensing means carried thereby, a slide reciprocally mounted upon said casing, said slide comprising a body having parallel arms projecting therefrom, lugs formed upon the inner ends of said arms, said body having a coin opening formed therein and a slot projecting from the coin opening, one of said arms having an elongated notch formed upon its outer side, thereby forming abutment shoulders, a pin carried by said casing and projecting into said notch, whereby the movement of said slide will be limited, a trigger comprising a body having a slotted shank extending therefrom, outwardly extending ears formed upon said body, said shank extending into said slot of said slide, a pin carried by said casing and projecting through the slot of said shank, whereby said trigger will be held against side movement, said casing having a coin discharge opening, said slide being adapted to receive a coin within said coin opening, whereby as said slide is pushed inwardly the coin will engage said shank for forcing said trigger into engagement with said dispensing means, thereby causing said dispensing means to be operated, the coin opening of said slide then registering with the coin discharge opening in said casing, whereby the coin will move from engagement with said slide, said slide then being adapted to be pulled to its normal position, whereby said lugs will engage said ears for moving said trigger from engagement with said dispensing means.

1,268,213. BOTTLE-STOPPER. THOMAS WILLIAM CAMERON, Hora Hora Valley, Whangarei, New Zealand. Filed July 7, 1916. Serial No. 107,971. (Cl. 215—72.)

1. The combination with a bottle neck provided with verbal means to indicate one condition of the bottle, when the bottle has been disturbed and for assisting in indicating a different condition when the bottle has not been disturbed, a stopper, and stopper locking means in-

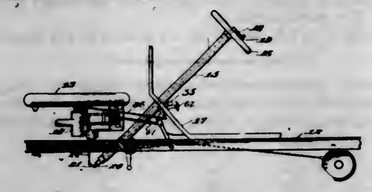
capable of returning to its original position when once disturbed and provided with verbal means coöperating with the first named verbal means to indicate one condition of the bottle when the parts are in their original position.



3. The combination with a bottle neck having a recess, of a member rotatably mounted on said neck, a stopper, and a locking resilient member carried by the rotatable member and adapted to enter said recess when the rotatable member has been moved to a position to permit the opening of the bottle.

[Claims 2 and 4 not printed in the Gazette.]

1,268,214. GAS CONTROL FOR AUTOS. FRANK H. CARROLL, Los Angeles, Cal. Filed Dec. 13, 1915, Serial No. 66,626. Renewed Aug. 30, 1917. Serial No. 189,043. (Cl. 74—46.)



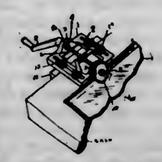
1. The combination with a gas feed valve, and a brake lever of an automobile, of means connected to the brake lever to move the valve toward its closed position when open, and means for regulating the extent of closure of the valve by the brake lever operating means.

2. The combination with a gas feed valve, a throttle lever for opening and closing the same, and a brake lever of an automobile, of means connected to the brake lever operable independent of the throttle lever to move the valve toward its closed position when open, irrespective of the position of the throttle lever, and means for regulating the extent of closure of the valve by the brake lever operating means.

10. The combination with a gas feed valve, a throttle lever for controlling said valve and a brake lever, of a brake lever actuating mechanism whereby the fuel valve may be operated, adjustable means for limiting the opening of said valve by the brake lever, other adjustable means for limiting the closing movement of the feed valve by said brake lever, both of which limiting means act without restricting the movement of the brake lever, and means whereby the feed valve is adapted to be controlled by the throttle lever and unrestricted by the brake lever mechanism.

[Claims 3 to 9 not printed in the Gazette.]

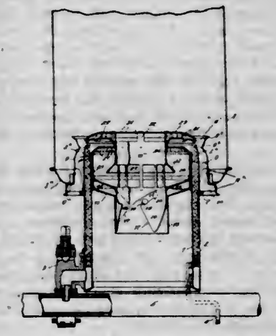
1,268,215. SASH-TOOL. WILLIAM P. CASEY, Oshkosh, Wis. Filed Sept. 24, 1917. Serial No. 193,049. (Cl. 90—12.)



1. A sash tool comprising a frame, a guiding attachment adjustably fitted to the frame, a revolvable shaft journaled in the frame and having toothed cutters removably attached thereto, and means for laterally adjusting the axis of the shaft within the frame comprising eccentric bushings fitted between the shaft and frame.

[Claims 2 and 3 not printed in the Gazette.]

1,268,216. SAFETY-BURNER. LEE S. CHADWICK, East Cleveland, Ohio, assignor to The Cleveland Metal Products Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 30, 1914. Serial No. 874,700. (Cl. 158—94.)

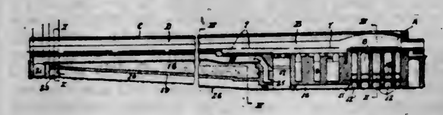


1. In a burner of the character described, the combination of inner and outer wick tubes, a spanner plate extending inwardly from the inner wick tube, said spanner plate having a depending neck, an air distributing collar adapted to be supported by the spanner plate and within the upper portion of the inner wick tube, a central draft tube connected to the last mentioned collar and extending above said collar, and a pair of vertically spaced spreaders carried by said draft tube and extending above the top of the wick, the space between said spreaders communicating with the draft tube.

2. In a burner of the character described, the combination of inner and outer wick tubes, a wick therebetween, a spanner plate extending inwardly from the inner wick tube, said spanner plate having a depending neck, an air distributing collar adapted to be supported by the spanner plate and within the upper portion of the inner wick tube, a spanner plate extending inwardly from the last mentioned collar, a central tube to which the inner end of the last mentioned spanner plate is secured, said tube extending upwardly from the neck, and a pair of vertically spaced spreaders carried by said central tube and extending above the wick, the space between said spreaders communicating with said tube.

[Claims 3 to 49 not printed in the Gazette.]

1,268,217. LEER. WILLIAM L. CLAUSS, Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company, a Corporation of Pennsylvania. Filed June 15, 1912. Serial No. 703,777. (Cl. 49—46.)



1. A leer comprising a leer chamber for the glass having a bottom wall supported above the ground by a plurality of vertical walls resting upon the ground spaced apart to permit the passage of air between them, conduits beneath the bottom wall for heating the leer chamber and a heat storing element beneath the conduit having its thickest portion adjacent the front end of the leer cham-

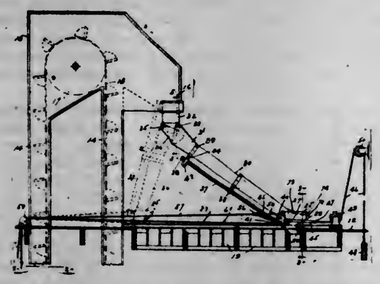
ber and gradually diminishing in thickness toward the rear or discharge end of the leer chamber.

2. A leer comprising a leer chamber for the glass having a bottom wall supported above the ground by a plurality of vertical walls resting upon the ground spaced apart to permit the passage of air between them, conduits beneath the bottom wall for heating the leer chamber and a heat storing element beneath the conduits and spaced from the ground, having its thickest portion adjacent the front end of the leer chamber and gradually diminishing in thickness toward the rear or discharge end of the leer chamber.

3. A leer comprising a leer chamber for the glass having conduits beneath the bottom wall thereof for conducting heated gases, means for supporting the leer chamber above the ground and a heat absorbing element between the ground and the conduits spaced from the ground to provide passages for cool air beneath the heat absorbing element, the said element having its greatest thickness adjacent the front end of the leer and gradually diminishing in thickness toward the rear or discharge end of the leer.

4. A leer comprising a leer chamber for the glass having a substantially horizontal bottom supported above the ground, conduits beneath and parallel with the bottom for conducting heated gases, a heat absorbing element beneath the conduits having its greatest thickness adjacent the front end of the leer and diminishing in thickness toward the rear or discharge end of the leer, and means for supporting the said element above the ground to provide a space for cooled air to pass beneath the element and in contact with the ground.

1,268,218. DISTRIBUTING-SPOUT. FRED W. COOLEY, Minneapolis, Minn., assignor to James J. Gerber, Minneapolis, Minn. Filed Jan. 29, 1917. Serial No. 145,048. (Cl. 198—29.)



1. The combination with two supply receptacles, of a row of spout openings extending away from said receptacles on substantially a straight line and having reversely offset and overlapping receiving ends, and two substantially parallel distributing spouts arranged to receive from said receptacles and having their delivery ends arranged to be independently brought into registration with the same or any one of said spout openings.

3. The combination with a supply receptacle, of a plurality of spout openings spaced, one in advance of the other on substantially a straight line extending from said receptacle, a longitudinally extensible and contractible distributing spout having its receiving end arranged to receive from said receptacle and mounted for movement in a vertical plane to carry its delivery end into registration with any one of said spout openings, and yielding means under strain to extend said spout and carry its delivery end successively into registration with the spout openings.

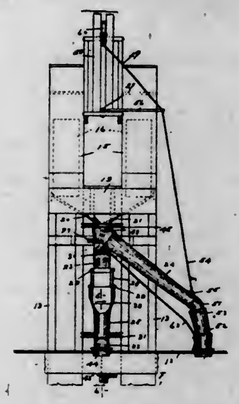
4. The combination with a supply receptacle, of a plurality of spout openings spaced, one in advance of the other with respect to said receptacle, a telescopic distributing spout leading from said receptacle and mounted for movement in a vertical plane, an open bottom hopper on the delivery end of said spout and mounted for traveling movement over the spout openings, a stop for holding the hopper in registration with any one of the spout openings, and means for imparting traveling movement to the hopper and for rendering said stop inoperative, at will.

6. The combination with a supply receptacle, of a plurality of spout openings spaced, one in advance of the other with respect to said receptacle, a telescopic distributing spout leading from said receptacle and mounted for movement in a vertical plane, an open bottom hopper pivoted to the delivery end of said spout for vertical tilting movement and mounted for traveling movement over the spout openings, a stop on the hopper for holding the same in registration with any one of the spout openings, yielding means tending to move the hopper away from said receptacle, and a connection for rearwardly tilting said hopper to render said stop inoperative and for moving the hopper toward said receptacle.

15. The combination with two supply receptacles, of a row of spout openings extending away from said receptacles on substantially a straight line, and having at their receiving ends inclined aprons, the positions of which are alternately changed, and two substantially parallel distributing spouts arranged to receive from the receptacles and having their delivery ends arranged to be independently brought into registration with same or any one of the spout openings.

[Claims 2, 5, 7 to 14 and 16 not printed in the Gazette.]

1,268,219. DISTRIBUTING-SPOUT. FRED W. COOLEY, Minneapolis, Minn., assignor to James J. Gerber, Minneapolis, Minn. Filed Mar. 6, 1917. Serial No. 152,696. (Cl. 198—39.)



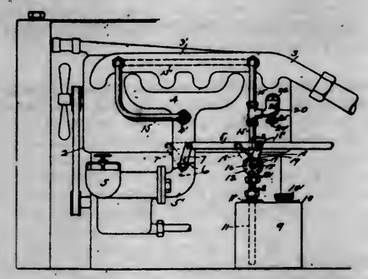
1. The combination with supply receptacles, of two delivery spouts connected thereto by offset swivels, one of said spouts being radially adjustable, and means for causing the delivery end of said radially adjustable spout to swing on the arc of the same circle with the delivery end of the other of said spouts.

4. The combination with supply receptacles, of two distributing spouts connected thereto by offset swivels, a single row of spout openings arranged on the arc of a circle on which the delivery end of one of said spouts swings, the other of said spouts having a radially and vertically adjustable delivery end, a connection for causing said radially and vertically adjustable delivery end to swing on the arc of the spout openings, and a connection for vertically moving said adjustable delivery end to pass the delivery end of the other of said spouts.

5. The combination with several supply receptacles, of a corresponding number of distributing spouts connected to said supply receptacles by swivels that are laterally offset, the one from the other, a common row of spout openings arranged on the arc of a circle, the center of which is located at the axis of one of the spout swivels, one of said spouts having a movable delivery end, and a radius rod pivoted at the center of the arc of said spout openings and connected to the said movable spout end to cause the same to move on the arc of the said spout openings.

[Claims 2, 3, 6, and 7 not printed in the Gazette.]

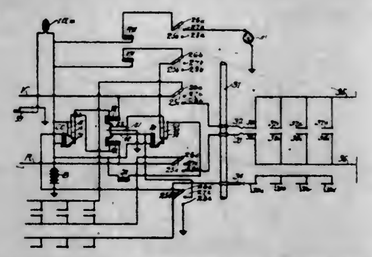
1,268,220. STEAM-INJECTOR FOR INTERNAL-COMBUSTION ENGINES. JAMES S. DOUGLASS, Jr., Canandaigua, N. Y. Filed July 11, 1917. Serial No. 179,990. (Cl. 123—25.)



1. The combination with the exhaust and intake manifolds and the throttle operating means, of a water supply, conduits for conducting the water from said supply into the exhaust manifold, means for conducting the steam generated in the exhaust manifold into the intake manifold, a valve controlling the flow of water through said conduits, and a lever and a perforated dial for operating said valve, said lever operatively connected to the throttle operating means.

2. The combination with the exhaust and intake manifolds and the throttle-operating means, of a water supply, conduits for conducting the water from said supply into the exhaust manifold, means for conducting the steam generated in the exhaust manifold into the intake manifold, a valve controlling the flow of water from said supply, a lever and a perforated dial for operating said valve, said lever operatively connected to the throttle-operating means, and means admitting an air supply to one of said conduits.

1,268,221. AUTOMATIC TELEPHONE-EXCHANGE SYSTEM. BERT G. DUNHAM, Chicago, Ill., assignor, by mesne assignments, to Western Electric Company, Incorporated, a Corporation of New York. Filed Oct. 5, 1904. Serial No. 227,286. (Cl. 179—16.)



1. In a telephone system, a metallic circuit line extending from a central station to a substation, selecting switches at the central station for extending the circuit of said line through the central office, a source of current at the central station, controlling magnets for each selecting switch contained in bridge paths across said metallic circuit when said line is extended through the central office, a third conductor, and means at the substation for energizing said controlling magnets over a limb of the said metallic circuit and said third conductor, substantially as described.

2. In a telephone system, a metallic circuit line extending from a central station to a substation, a plurality of selecting switches at the central station having series contacts for extending the circuit of said line, a source of current at the central station, a plurality of controlling magnets, one for each of said selecting switches, connected in parallel between one limb of said metallic circuit and a terminal of said source of current when said switches are connected in series, another controlling magnet for each of said selecting switches connected between the other limb of the line and the same terminal of said source of current when said switches are connected in series, and a return path for the other terminal of said source, of current, substantially as described.

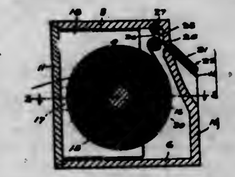
3. In an automatic telephone system, a metallic circuit subscriber's line, a selecting switch in which said line terminates, a metallic circuit trunk line which said selecting switch is adapted to connect to said subscriber's line, a pair of controlling magnets for said switch bridged across the limbs of the talking circuit formed by said subscriber's line and the connected trunk line, a source of current adapted to supply current to the limbs of said subscriber's line through the coils of said magnets, and means at the substation for controlling the circuit through said magnets for causing the operation of said switch, substantially as described.

4. In a telephone system, a central station, two substations, selecting switches in said central station, a metallic talking circuit joining said substations through said central station, a source of current, magnets controlling said selecting switches and connected in bridge across said metallic circuit, means at one of said substations adapted to effect the energization of said magnets by said source of current, and two condensers in said central station, one serially connected in each of the conductors of said metallic circuit, substantially as described.

5. In a telephone system, a pair of metallic circuit subscribers' lines leading to a central office, selecting switches at said central office, trunk lines controlled by said selecting switches for connecting said pair of lines together, a pair of controlling magnets at each of said selecting switches simultaneously bridged across the talking circuit between said two stations, a source of current adapted to supply current to the limbs of said line through said magnets, and means at one of the subscribers' stations for closing the circuit through said magnets for the operation of said switches, substantially as described.

[Claims 6 to 41 not printed in the Gazette.]

1,268,222. DEVICE FOR DISPENSING TICKETS. JOSEPH F. DWYER, Seattle, Wash. Filed Jan. 28, 1918. Serial No. 214,182. (Cl. 211—87.)

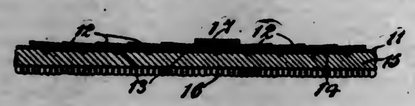


1. A device for dispensing tickets from a ticket roll comprising a receptacle having grooves through which the tickets may be withdrawn, said receptacle being provided in each end wall with slots that extend from the rear side thereof forwardly; a shaft whereon ticket rolls may be placed, said shaft being adapted to be inserted in said slots; a removable back wall for said receptacle and guide members fixedly secured to said removable back wall adapted to be inserted between the ticket rolls on said shaft to hold said ticket rolls in spaced apart relation

said guide members having slots that fit over said shaft and coöperative with said slots in the end walls of said receptacle to form a support for said shaft.

[Claim 2 not printed in the Gazette.]

1,268,223. BULLET-PROOF GARMENT. WILLIAM EIMER, New York, N. Y. Filed Mar. 30, 1918. Serial No. 225,630. (Cl. 89—36.)



1. A bullet proof fabric consisting of a layer of overlapping sheet metal elements, a continuous layer of woven wire springs and an intermediate layer of fibrous material between said outer layers.

[Claims 2 and 3 not printed in the Gazette.]

1,268,224. PENHOLDER-RECEPTACLE. JOSEPH C. FAWCETT, Ben Lomond, Ark. Filed May 26, 1917. Serial No. 171,146. (Cl. 120—23.)

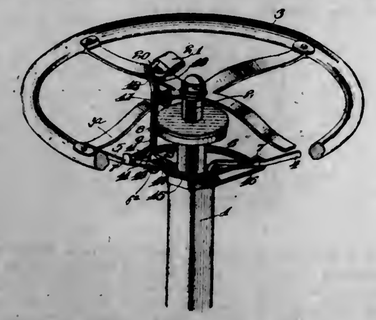


1. In a pen holder receptacle of the class described, the combination of a casing, a cover hingedly mounted thereon, said casing having a depressed groove formed therein, an ink well having a reservoir tube extending therefrom, said reservoir tube fitting within said groove, and means for holding said tube within said groove, whereby said ink well will be held in a set position, and said means also holding a pen holder in a set position within said casing.

4. In a pen-holder receptacle of the class described, the combination of a casing having a depressed groove, an ink-well having a reservoir tube projecting therefrom, said tube fitting within said groove, and a resilient strip carried by said casing and bearing upon said tube, whereby said groove and strip will releasably hold said ink-well and tube in a set position within said casing.

[Claims 2 and 3 not printed in the Gazette.]

1,268,225. AUTOMOBILE-LOCK. FERDINAND J. FLACK, East Chicago, Ind. Filed July 28, 1916. Serial No. 111,848. (Cl. 70—90.)

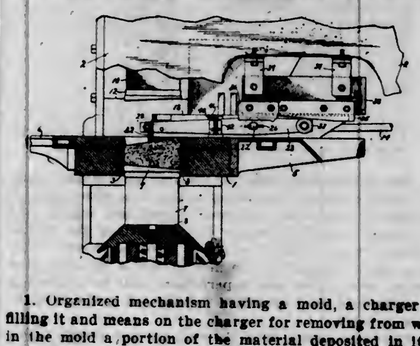


1. An automobile lock comprising a pair of complementary members pivotally connected at one end, and locking means applied to the other ends of the members, between which members one of the spokes of the steering wheel and one of the control levers are held, and a locking means engageable with the other control lever and having a connection with one of the aforesaid members.

2. An automobile lock comprising a pair of complementary members pivotally connected at one end, and locking means applied to the other ends of the members, between which members one of the spokes of the steering wheel and one of the control levers are held, and a link straddling the other control lever and having a connection with one of the aforesaid members.

3. In an automobile lock, the combination with a steering wheel and spark and throttle levers, of a shackle adapted to engage said spark lever, other shackles connected therewith adapted to engage the throttle lever and one arm of the steering wheel, and means whereby said last named shackles may be locked to render both levers and the steering wheel immovable.

1,268,226. BRICK-PRESS. HARRY J. FLOOD, Chicago, Ill. Filed Sept. 28, 1917. Serial No. 193,634. (Cl. 25—104.)

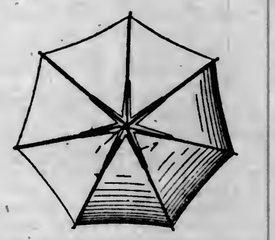


1. Organized mechanism having a mold, a charger for filling it and means on the charger for removing from within the mold a portion of the material deposited in it by the charger.

10. A brick press having an open top mold, means for compressing the material in the mold, a charger traveling across the mold, side arms mounted on the charger and movable relatively thereto, means for moving the side arms relatively to the charger, and a scraper carried by the side arms for excavating a portion of the material from the mold, said scraper being yieldable in one direction and non-yieldable in the other whereby it is rendered non-active when traveling in one direction across the mold and active when traveling in the other direction across the mold.

[Claims 2 to 9 not printed in the Gazette.]

1,268,227. UMBRELLA-REPAIR CAP. OLIN O. FOSTER, Oxford, Mass. Filed Aug. 17, 1917. Serial No. 186,740. (Cl. 135—33.)

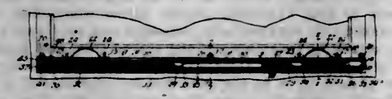


1. A repair device for umbrellas, comprising a flexible cap adapted to fit over the end of an umbrella rod and overlie the ribs thereof, and fasteners carried by the cap in position to be secured around the ribs.

4. A repair device for umbrellas, comprising a flexible cap adapted to fit over the end of an umbrella rod and having radiating arms to correspond with and overlie the ribs of the umbrella, means for securing the arms to the ribs, and a supplemental cap for concealing the first mentioned cap.

[Claims 2 and 3 not printed in the Gazette.]

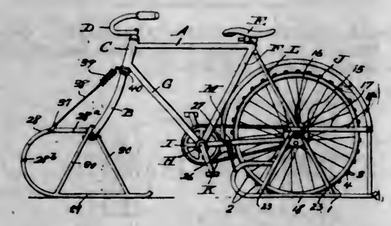
1,268,228. VENTILATING-CLOSURE FOR WINDOW-OPENINGS AND THE LIKE. CATHERINE A. FOX, Chicago, Ill. Filed Sept. 17, 1917. Serial No. 191,854. (Cl. 156—39.)



3. In combination, a pair of substantially trough-shaped casing members adapted to interfit with each other telescopically whereby the casing is adjustable as to its length, means for holding said casing in fixed relation to a window part, a roller adjustable as to its length pivotally mounted in one end of said casing, spring means in said roller for rotating the roller in one direction, a lever at the opposite end of said roller connected to said spring means for holding the roller upon the casing and for putting the spring means under tension, means on the casing for holding said lever in readily releasable relation thereto, whereby releasing the lever releases the roller from the casing, and a screen or the like upon said roller.

[Claims 1 and 2 not printed in the Gazette.]

1,268,229. BICYCLE-SLED. FRANCIS X. FRANK, Walkerton, Ontario, Canada. Filed Jan. 29, 1918. Serial No. 214,355. (Cl. 208—162.)



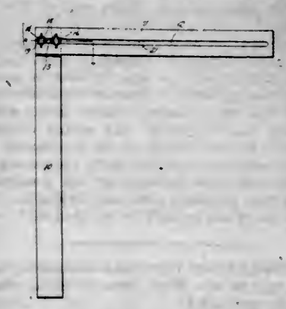
1. In a bicycle sled, a frame provided with a front fork and a downwardly and rearwardly inclined back fork, brace bars extending rearwardly of the frame and secured at their rearward ends to the lower ends of the bars of the rear fork, clamps secured to the adjacent end portions of the bars of the fork and said brace bars, said clamps being provided with openings in alinement transversely of the fork, a drive wheel rotatably mounted in the rear fork, a rear runner rockably mounted on the rear fork, and a runner rockably mounted in the front fork.

[Claim 2 not printed in the Gazette.]

1,268,230. SQUARE. SAMUEL D. FRAZIER, Carrizo Springs, Tex. Filed Apr. 16, 1917. Serial No. 162,422. (Cl. 33—102.)

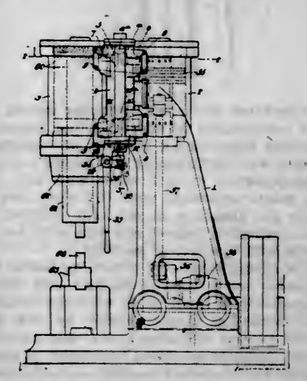
1. A square comprising two blades each having parallel longitudinal edges, one of which blades is centrally slotted from end to end and the other formed with a series of holes arranged in one end thereof transversely of the blade in a line perpendicular to the longitudinal edges thereof, bolts adapted to pass through the outermost perforations and the slot, and nuts on said bolts for rigidly connecting the blades in perpendicular relation.

2. A square comprising a blade having a series of perforations at one end arranged transversely of the blade in a line perpendicular to the longitudinal edges of the blade, one of said openings being located centrally with respect to the others, a scale being formed on one side of said blade partly surrounding said central opening, the markings of said scale being tangential to said central opening, a second blade having a central longitudinal slot therein, a bolt adapted to be passed through one of said



perforations in the first named blade and through the slot in the second blade to permit the latter blade to swing and be adjusted at various angles to the first blade, a thumb nut for said bolt, and a second bolt with thumb nut adapted to pass through another of said perforations and the slot to lock the blades when they have been arranged perpendicular to each other.

1,268,231. FLUID-POWER HAMMER. EDWARD J. FRITSCH and RALPH W. NAZEL, Philadelphia, Pa., assignors to John Nazel, Philadelphia, Pa. Filed Dec. 26, 1916. Serial No. 138,769. (Cl. 78—42.)



1. The combination with cylinders and pistons therein, of a valve and passages connecting said cylinders under control of said valve, said valve being adjustable and having means for simultaneously connecting the corresponding ends of said cylinders so that each stroke of one of said pistons will actuate the other of said pistons in the opposite direction, and means for simultaneously turning said valve and moving it longitudinally to change the connections betwen said cylinders.

2. The combination with cylinders and pistons therein, of a valve, passages connecting said cylinders under control of said valve, said valve being adjustable and having means for connecting both ends of one of said cylinders with one end of the other of said cylinders, and non-return valves disposed in passages leading to said valve from opposite ends of one of said cylinders.

3. The combination with cylinders and pistons therein, of a valve and passages connecting said cylinders under control of said valve, said valve being adjustable and hav-

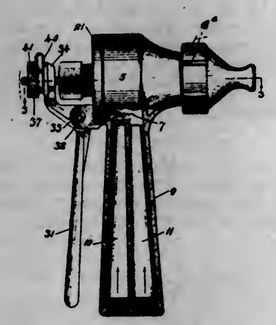
ing means for connecting both ends of one with either end of the other of said cylinders.

4. The combination with cylinders and pistons therein, of a cylindrical valve, means for turning said valve and moving it longitudinally, and passages controlled by said valve to connect the ends of one of said cylinders with the respective ends or with either end of the other of said cylinders.

5. The combination of a compressor cylinder, a piston movable in said cylinder, a passage communicating with each end of said cylinder, a ram cylinder, a piston movable in said ram cylinder, a passage communicating with each end of said ram cylinder, a valve casing with which said passages are connected, and means comprising a valve movable in said casing so as to connect the passages of the compressor cylinder with the passages of the ram cylinder and both passages of the compressor cylinder with either passage of the ram cylinder.

[Claims 6 to 11 not printed in the Gazette.]

1,268,232. SPRAYING DEVICE. GEORGE B. FURMAN, East Orange, N. J. Filed Feb. 3, 1915. Serial No. 5,851. (Cl. 137—80.)



1. In a spraying device, an atomizing means, a handle forming a continuation of and extending transversely to said atomizing means and a plurality of conduits extending interiorly and lengthwise of said handle and communicating independently of each other with said atomizing means at points coincident with the connection between said handle and atomizing means, said conduits being arranged for connection respectively with a source of air or the like and with a source of material.

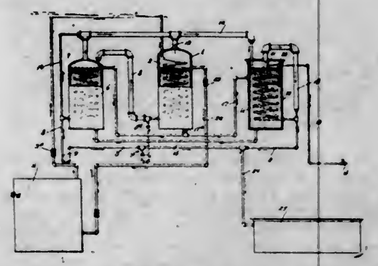
2. In a spraying device, an atomizing means including an air chamber and a material chamber each communicating independently of each other with the outlet of said atomizing means, a handle carried by and extending transversely to said atomizing means and provided with independent channels extending lengthwise of said handle and adapted for connection respectively with a source of fluid supply and with a source of material, said channels communicating respectively with said air chamber and said material chamber, valves for controlling the communication between said chambers and said outlet and a pivoted lever located in coöperative relation to said handle and operated by pressure relatively thereto for actuating said valves.

3. In a spraying device, an atomizing means including an air chamber and a material chamber, each communicating independently of each other with the outlet of said atomizing means, a handle carried by and extending transversely to said atomizing means and provided with independent channels extending lengthwise of said handle and adapted for connection respectively with a source of fluid supply and with a source of material, said channels communicating respectively with said air chamber and said material chamber, valves for controlling the communication between said chambers and said outlet, a pivoted lever extending transversely to said atomizing means in spaced relation to said handle and adapted to abut against the same under a pressure relatively to said handle whereby the movement of said lever in one direction is arrested and independently adjustable connections between said lever and each of said valves whereby the latter are concurrently or successively operated according to adjustment.

4. In a spraying device, an atomizing means including an air chamber and a material chamber each communicating independently of each other with the outlet of said atomizing means, a handle carried by and extending transversely to said atomizing means, valves controlling the communication between said chambers and said outlet, a lever extending lengthwise of and spaced from said handle and arranged to abut against the same whereby the movement of said lever in one direction is arrested and independently adjustable connections between said lever and each of said valves whereby the latter are concurrently or successively operated according to adjustment.

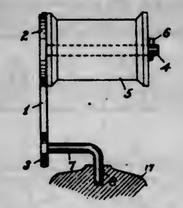
5. A spraying device comprising a casing provided with two separate chambers, a tubular extension forming an air space in front of said casing in communication with one of said chambers, a tube communicating with the other chamber and extending into said air space, a nozzle on said tube, a cap on said tubular extension, a spraying spout carried by said cap and projecting in the same direction as said nozzle, said cap being provided with a surface converging toward said spout, a handle connected with said casing and provided with interior channels communicating with said chambers, said channels being arranged for connection respectively with an air supply and with a source of material to be atomized, a valve controlling the connection between one of said chambers and said air space, a second valve controlling the connection between the other chamber and said tube, a pivoted lever extending lengthwise of said handle and arms extending from said lever and operatively connected with said valves.

1,268,233. WATER-DISTILLING APPARATUS. GEORGE B. FURMAN, East Orange, N. J. Filed Aug. 25, 1915. Serial No. 47,308. (Cl. 203—5.)



In an apparatus for distilling water, a main tank, a first auxiliary tank, a second auxiliary tank, means for conducting water to one of said auxiliary tanks, a connection between all of said tanks whereby water is conducted thereto, means for automatically controlling said water conducting means whereby the level of the water in all of said tanks is maintained at a substantially constant level, a steam boiler, a main condensing coil in said main tank connected with said boiler, an auxiliary condensing coil in said first auxiliary tank connected with said main condensing coil, a pipe connected with said auxiliary coil for conducting the condensate of the steam therefrom, a connection between said pipe and said main coil for conducting the condensate therefrom, a third coil in said second auxiliary tank, a connection between said third coil and said main and first auxiliary tanks for conducting vaporized water to said third coil to condense same, and a connection from said third coil to said pipe whereby the condensate of the vaporized water is added to the condensate of the steam.

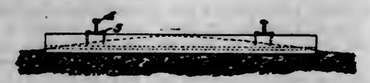
1,268,234. SPOOL-HOLDER FOR SEWING-MACHINES. HERMAN GOODMAN, Cleveland, Ohio, assignor of one-half to George E. Dunstan, Cleveland, Ohio. Filed Aug. 1, 1917. Serial No. 183,973. (Cl. 242—134.)



1. A spool holder for supporting a spool of thread transversely of the arm of a sewing machine, comprising a vertical plate, a horizontal pin carried by the plate for supporting a spool of thread, a horizontal rod supporting the plate and being on the same side thereof as the pin, the rod having a vertical leg for fitting tightly into a hole of a sewing machine arm whereby the leg will not rotate therein but is removable therefrom, and the leg being arranged in alinement with the transverse center of said pin, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,268,235. RAILROAD-TIE. AUGUSTUS WARREN GOULD, Seattle, Wash. Filed Jan. 22, 1917. Serial No. 143,661. (Cl. 238—3.)



1. A railroad tie composed of a tufaceous breccia reinforced with iron.

2. A railroad tie composed of a cellular mineral mass having reinforcing bars embedded therein.

3. A railroad tie comprising a body composed of a naturally consolidated mineral mass having holes produced therein and reinforcing bars placed in said holes and secured by cementing.

4. A railroad tie composed of a tufaceous breccia having holes extending lengthwise thereof, reinforcing bars in said holes and a cementing mass securing the rods in their holes.

1,268,236. CONCRETE AGGREGATE AND PROCESS OF PREPARING THE SAME. AUGUSTUS WARREN GOULD, Seattle, Wash. Filed Jan. 21, 1918. Serial No. 213,037. (Cl. 106—24.)

1. The method of treating an andesitic tufaceous breccia for use as an aggregate, which consists in crushing and then sintering it.

2. An aggregate for use in making concrete consisting of a sintered, andesitic tufaceous breccia.

1,268,237. CLEANING METALS. JAMES H. GRAVELL, New York, N. Y. Filed Aug. 21, 1917. Serial No. 187,470. (Cl. 148—41.)

4. The method of cleaning steel which consists in subjecting it to the action of an alcoholic solution of phosphoric acid in the presence of calcium phosphate, substantially as described.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,268,238. AIR-GUN. WILLIAM B. GREENLEAF and ERNEST S. ROE, Plymouth, Mich., assignors to The Markham Air Rifle Company, Plymouth, Mich., a Corporation of Michigan. Filed July 17, 1916. Serial No. 109,775. (Cl. 124—10.)

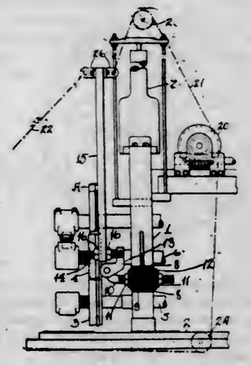
1. In an air gun, the combination with two sections pivoted together, of a longitudinally-adjustable member within one of said sections, the end of said member being projectable into the other of said sections, and a spring pressed abutment in the last mentioned section for engaging the end of said member when in its projected position.



5. In an air gun, the combination with two sections, of relatively movable abutments, one of which is spring-pressed against the other to form a tight joint when the sections are locked in shooting position.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,268,239. FLANGE-ROLLING MECHANISM. CHARLES W. GRESSLE, Cleveland, Ohio, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio, a Corporation of Ohio. Filed June 19, 1915. Serial No. 35,151. (Cl. 153—31.)



1. In a machine of the character described, the combination with a suitable frame; of two coöperative rolls mounted therein one above the other with parallel, approximately horizontal axes; blocks secured in said frame on a line transverse of the axes of said rolls, said blocks being adjustable along such line; hinge-supports threaded in said blocks so as to be adjustable on lines parallel with the axes of said rolls; lock-nuts adapted to simultaneously secure said blocks in adjusted position in said frame and said supports in said blocks; and a plate pivotally mounted on said supports, said plate being normally supported in a substantially vertical position and movable into a substantially horizontal position.

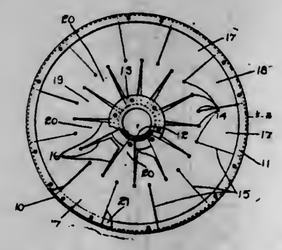
2. In a machine of the character described, the combination with a suitable frame; of two coöperative rolls mounted therein one above the other with parallel, approximately horizontal axes; blocks secured in said frame on a line transverse of the axes of said rolls, said blocks being adjustable along such line; hinge-supports threaded in said blocks so as to be adjustable on lines parallel with the axes of said rolls; lock-nuts adapted to simultaneously secure said blocks in adjusted position in said frame and said supports in said blocks; hinges pivotally mounted on said supports and carrying threaded studs disposed to lie in the same plane as said supports; and a plate adjustably secured to said studs, said plate being normally supported in a substantially vertical position and removable into a substantially horizontal position.

1,268,240. MANUFACTURE OF METAL NITROGEN COMPOUNDS. RICHARD GRULICH, Ludwigshafen-on-the-Rhine, Germany, and HERBERT LICKFETT, Rjukan, Telemarken, Norway, assignors to the Firm of Gebrüder Giulini, G. M. B. H., Ludwigshafen-on-the-Rhine, Germany. Filed Nov. 28, 1913. Serial No. 803,572. (Cl. 23—13.)

1. In the manufacture of nitrogen compounds of metals, the step which consists in heating a mixture of compounds of the metal with substances accelerating the absorption of nitrogen thereby, in a carbon lined vessel, in the presence of nitrogenous gases, and to a temperature below the sintering temperature of the mixture.

2. In the manufacture of nitrogen compounds of metals in a carbon lined vessel, mixing the initial compound of the metal with such amount of substances accelerating the absorption of nitrogen that a deleterious slagging would result if the retort were not carbon lined; conducting the mixture into such a vessel; and heating the mixture while therein, by exteriorly heating said vessel, to a temperature below the sintering temperature of the mixture, and in the presence of nitrogenous gases.

1,268,241. WHEEL. RALPH R. GRIFFITH, Minneapolis, Minn. Filed May 25, 1916. Serial No. 99,743. (Cl. 64—17.)



1. A wheel comprising a rim, a hub and a sheet metal member connecting said rim and hub, alternate inner portions of said member being secured to opposite sides of said hub and alternate outer portions of said member being secured to opposite sides of said rim.

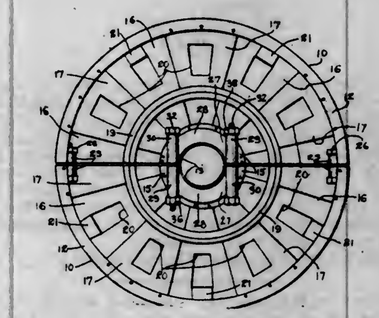
3. A wheel comprising a rim, a hub and a sheet metal member connecting said rim and hub, said member having a plurality of inner sections defined by cuts extending from the hub toward the rim with alternate sections bent in opposite directions and secured to said hub, and said member also having a plurality of outer sections defined by cuts extending from the rim toward the hub with alternate sections bent in opposite directions and secured to opposite sides of said rim.

6. A wheel comprising a flanged rim, a flanged hub, and a central member formed out of an annular disk of sheet metal by cutting the sheet in a number of radial lines from the circumference half-way into the disk and without loss of material and alternately bending outward in opposite directions the arms thus formed and securing them to the flanges of the rim and by cutting the sheet in a number of radial lines from the inner margin halfway in to the disk in staggered relation to said first-named cuts without loss of material and alternately bending the arms thus formed outwardly in opposite directions and securing them to the flanges of the hub.

8. A pulley wheel comprising a rim and hub and a central member consisting of a disk of sheet metal having arms formed by cutting the sheet in a number of radial lines from both the outer and the inner margin of the disk to points on a circle midway therebetween, said arms being bent alternately in opposite directions along said circle and being secured at their ends to the hub and rim, respectively, said hub being cut on opposite sides along a set of inner radial lines of cleavage, said rim being cut along the adjacent outer radial lines of cleavage, and the disk being cut to join the said outer and inner radial lines of cleavage, and means for securing the pulley sections together.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,268,242. SPLIT PULLEY. RALPH R. GRIFFITH, Minneapolis, Minn. Filed Dec. 22, 1916. Serial No. 138,326. (Cl. 64—18.)



2. A pulley comprising a rim of sheet metal having its edges turned inwardly to form inclined flanges, a hub provided with a pair of inwardly-inclined flanges, and a central web member having arms alternately secured to the flanges at opposite sides of said rim and hub in crossed relation to each other, said arms having an inclination corresponding to the inclination of said rim and hub flanges.

5. A split pulley having a split hub, a detachable clamp mounted upon the hub for clamping the pulley sections upon the shaft, said clamp including a bolt-receiving boss externally threaded at one end thereof, a nut having a threaded bore of two diameters adapted to screw upon said threaded boss at one of said diameters, and a bolt adapted to pass through said boss and screw into said nut at the other diameter thereof.

6. A pulley having a rim and a hub, a plurality of arms alternately secured to opposite sides of said rim and hub in crossed relation to each other, and a member rigidly securing all of said arms together at the points of crossing thereof.

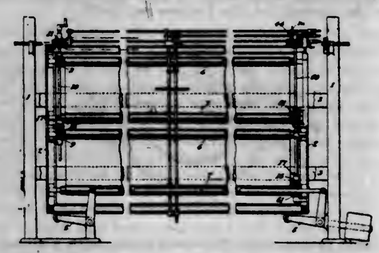
10. A pulley having a rim, a hub and a plurality of arms formed of sheet metal and secured to said rim and hub in crossed relation to one another, said arms having ears formed from the body of the metal of each of said arms and bent inwardly and secured to the rim of the wheel for bracing the same.

[Claims 1, 3, 4, and 7 to 9 not printed in the Gazette.]

1,268,243. EMBROIDERING-MACHINE. JOSEPH A. GROEBLI, New York, N. Y. Filed May 25, 1917. Serial No. 170,814. (Cl. 112—7.)

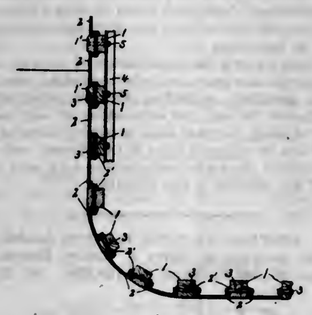
1. In an embroidering machine of the class mentioned, the embodiment of a tambour frame, a plurality of fabric-holding and transferring rollers, common means for actuating all the fabric rollers simultaneously in either direction, independent means for actuating the same separately in either direction, and readily operable means for optionally establishing and discontinuing operative relation between the common means and the fabric rollers.

7. In an embroidering machine of the class mentioned, the embodiment of a tambour frame, a plurality of fabric-holding and transferring rollers, common means for actuating the fabric rollers simultaneously, independent means for actuating the same separately, and readily operable means, embodying bearing shifting mechanism, having controlling cam-levers, for optionally establishing and discontinuing operative relation between the common means and the fabric rollers.



[Claims 2 to 6 not printed in the Gazette.]

1,268,244. SIDING FOR BOAT-HULLS. LOUIS HENLEY, Rome, N. Y. Filed Mar. 18, 1918. Serial No. 228,046. (Cl. 114—79.)



5. Siding for boat-hulls comprising metal channel plates and wooden bars arranged edge to edge in alternate relation, and means for separately clamping each wooden bar to adjacent flanges of the plates.

6. Siding for boat-hulls comprising metal units in spaced relation one above the other and having inturned flanges along their lower and upper edges in combination with non-metallic fillers between and secured to said flanged edges.

7. Siding for boat-hulls comprising a channel iron composed of sections arranged end to end, the adjacent ends of the flanges being cut away some distance beyond the abutting ends of the webs, and a coupling plate bolted to the webs of both sections and provided with flanges filling the cut-away portions of the first-named flanges, the base of the coupling plate being extended some distance beyond the ends of its flanges.

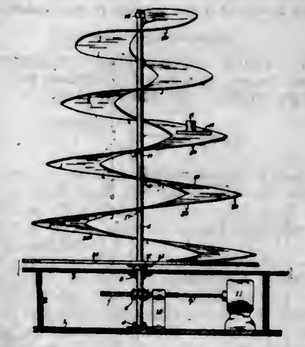
8. Siding for boat-hulls comprising longitudinally extending metal units and parallel wood units, said units being arranged edge to edge in alternate relation and secured to each other, the outer face of one of the wood units projecting beyond the corresponding face of the metal units to form a buffer.

[Claims 1 to 4, 9, and 10 not printed in the Gazette.]

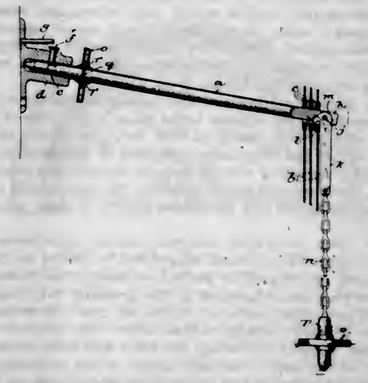
1,268,245. DISPLAY-RACK. ALBERT HOILAND, Fargo, N. D. Filed June 13, 1917. Serial No. 174,637. (Cl. 211—20.)

1. A display rack consisting of a rotatable mast, a spiral-shaped shelf arranged about and secured to the mast, and means for rotating the mast.

2. A display rack consisting of a rotatable mast, a spiral-shaped shelf arranged about and secured to the mast, and means for rotating the mast, said spiral shelf having its upper side provided with radial cleats.



1,268,246. TOWEL-DISPENSING DEVICE. GEORGE M. HUBINGER, Milwaukee, Wis., assignor to Star Detachable Towel-Holder Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 8, 1916. Serial No. 102,408. (Cl. 45—32.)



1. In a towel dispensing device the combination of a hanger rod, a stop and releasing member connected with one end of the rod and adapted to prevent the removal therefrom of more than one towel at a time, and a transfer holder connected with said stop and releasing member and adapted to receive towels withdrawn from said rod.

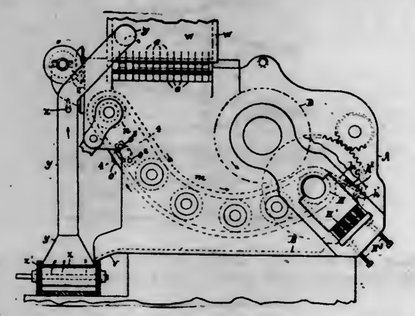
3. In a towel dispensing device the combination of a hanger rod adapted to be detachably fastened at one end to a fixture and supported thereby in working position, a lock stop removably secured on said rod adjacent to its suported end, a stop and releasing member connected with the free end of said rod and adapted to permit the withdrawal therefrom of but one towel at a time, and a flexible transfer holder connected at one end with said member and provided at the other end with a removable lock stop.

6. In a towel dispensing device the combination of a hanger rod adapted to be supported at one end in working position and formed at the other end with a recess and stop shoulder, a stop and releasing arm pivoted at one end to said rod in the recess therein and provided with a lateral downwardly inclined spur adapted when said arm is turned from its normal pendant position into approximate alinement with the rod to separate and release the outer

towel from others suspended on said rod, and a flexible transfer holder connected at one end with said member and adapted to receive towels therefrom.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,268,247. JUICE-EXTRACTING MACHINE. JOHN WESLEY HYATT, Orange, N. J. Filed Feb. 11, 1916. Serial No. 77,617. (Cl. 100—87.)



1. A juice extracting machine having side-cheeks to form a hopper, and a pressing roll rotated in the space between the cheeks, a belt-carrying drum opposed to the pressing roll, a belt carried over the said drum to propel the material beneath the pressing roll and filling the space between the cheeks, such belt being formed of a series of separate parallel endless chains with interspaces between the opposed sides of the chains, and means operating upon the opposed sides of the chains to clear any deposit from the interspaces and thus maintain a constant outlet for the escape of the juice.

3. A juice-extracting machine having a pressing-roll, a belt-carrying drum opposed to the same, a belt formed of a series of separate chains carried over the drum, and a series of flat clearing-blades sustained in the path of the belt and penetrating the interspaces between the separate chains, with spacing-blocks between the blades, and bolts holding the blocks and the blades rigidly in their working position.

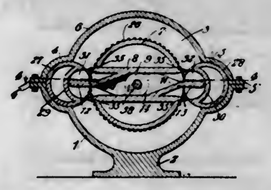
4. A juice extracting machine having side-cheeks to form a hopper and a trough-shaped bed to receive the juice, a pressing roll rotated in the space between the cheeks, a belt-carrying drum opposed to the pressing roll, and an endless permeable chain-belt driven by the said drum, an endless pervious strainer-apron below the level of the said bed, a spout delivering the juice and fiber from the trough of the bed to the said apron, a pan receiving the juice from the apron and delivering it where required, and an exhausted pipe having a funnel applied to the top of the strainer-apron, and a connection from the exhausted pipe to the hopper of the machine, whereby air pressure below the apron lifts up the material strained from the juice by the apron and delivers it into the hopper.

6. A juice extracting machine having side-cheeks to form a hopper, a pressing roll rotated in the space between the cheeks, a belt-carrying drum opposed to the pressing roll and longitudinally grooved at regular intervals, a chain-belt filling the space between the side-cheeks and formed of a series of separate interspaced chains with the edges of the chains adjacent, and each separate chain having its links provided with teeth adapted to engage the grooves in the said drum, whereby the drum propels all of the separate chains at the same speed.

[Claims 2 and 5 not printed in the Gazette.]

1,268,248. ROTARY PUMP. CHARLES W. JACKMAN and MILES M. JACKMAN, Waterloo, Ind. Filed June 12, 1916. Serial No. 103,200. (Cl. 103—44.)

1. The combination of a rotary pump having a rotor provided with pistons and oppositely extending radial ducts spirally twisted to present oppositely directed openings on each side of said piston, a plurality of rotatable abutments having recesses adapted to be positioned at times to receive the pistons for the purpose set forth.

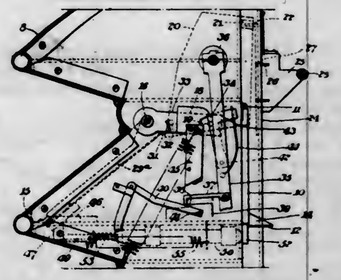


3. In a rotary pump the combination with a stator casing formed in two detachable sections provided with complementally arranged enlargements, rotatable abutments receivable in said enlargements, said abutments having recesses, of a rotor mounted in said casing of drum like form having a diametrically extending tube, a partition in said tube twisted adjacent its free extremities to form pistons for engagement in the recesses in said abutments, said rotor receiving fluid axially thereof and discharging the same peripherally thereof during rotary motion and gear teeth on said rotor and said abutments whereby to transmit movement from said rotor to said abutments in order to cause the latter to co-act with said pistons when said rotor is operating.

4. In a rotary pump the combination of a stator, a rotor operable therein having a radially extending tube therethrough, a partition, extending through said tube and twisted adjacent its end, the extremities of said partition forming projecting pistons, said partition forming outlet and inlet ducts on opposite sides of the pistons, and revolving abutments in the stator coöperating with said pistons.

[Claim 2 not printed in the Gazette.]

1,268,249. DISPENSING DEVICE. OTTO JAEGER, Elkins Park, Pa., assignor to Harry S. Kelsey, Boston, Mass. Filed Mar. 23, 1917. Serial No. 156,888. (Cl. 232—1.)



1. In a dispensing device, the combination of a casing having a front door and a rear door each being movable to open and closed positions and affording access to the interior of the casing, means operative to lock the front door in the closed position when it is moved thereto and the rear door is away from its closed position, and means controlled by the rear door to prevent the operation of the first named means when the rear door is in the closed position.

2. In a dispensing device, the combination of a casing having a front door and a rear door each being movable to open and closed positions and affording access to the interior of the casing, means operative to lock the front door in the closed position when it is moved thereto and the rear door is away from its closed position, a part movable into and from an operative position, said part preventing the operation of said means when in the operative position and permitting the operation of said means when in the inoperative position, and means controlled by the rear door to automatically move said part to the inoperative position when the rear door is moved from its closed position.

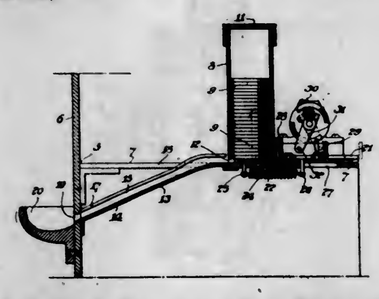
3. In a dispensing device, the combination of a casing having a front door and a rear door each being movable to open and closed positions and affording access to the interior of the casing, a block slidable on and guided by a part of the casing, said rear door and said block having coöperating parts causing said block to move in one direction when said rear door is moved to its open position, means operative to move said block in the reverse direction, and means operated by said block when it is moved by said rear door to move the front door to its closed position.

4. In a dispensing device, the combination of a casing having a front door and a rear door each being movable to open and closed positions and affording access to the interior of the casing, a part adapted to engage the front door and movable into and from an operative position preventing the front door from being moved to its closed position, and means to automatically move said part from its operative position when the rear door is moved to its open position.

5. In a dispensing device, the combination of a casing having a front door and a rear door each being movable to open and closed positions and affording access to the interior of the casing, a part adapted to engage the front door and movable into and from an operative position preventing the front door from being moved to its closed position, means to automatically move said part from its operative position when the rear door is moved to its open position, and means to automatically move said part to its operative position when the front door is moved from its closed position.

[Claims 6 to 22 not printed in the Gazette.]

1,268,250. DISK-DISPENSING DEVICE. OTTO JAEGER, Elkins Park, Pa., assignor to Harry S. Kelsey, Boston, Mass. Filed Mar. 23, 1917. Serial No. 156,840. (Cl. 133—5.)

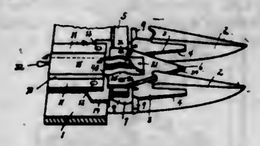


1. In a device of the character described, the combination of a support, a container adapted to receive a plurality of disks and hold them in position one above another and having a discharge opening therein permitting the disks to be ejected therefrom, an ejector movable to eject disks through said opening, a pin projecting from said support, a pin projecting from said ejector, and tensioning means operative in the line of the path of movement of said ejector and connecting said pins to hold said ejector normally in a position extending into said container, whereby when said ejector is moved from within the container against the action of said spring away from the opening in said container and then released said spring will operate the ejector to eject a disk from the container.

[Claims 2 and 3 not printed in the Gazette.]

1,268,251. KNIFE-CLIP. CHARLES S. JOHNSON, Marcy, N. Y. Filed Feb. 21, 1914. Serial No. 820,829. (Cl. 56—44.)

1. In a mowing machine having a cutter bar, a plate to be mounted on a finger bar, having a recess, removable means mounted in said recess for holding said cutter bar in position, and spring means for holding said removable means in place.

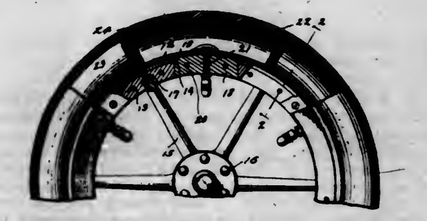


4. In a mowing machine having a cutter bar, a plate, to be mounted on a finger bar, having a recess, two arms pivoted together, teeth in said arms, other teeth in said plate, and spring means, whereby to hold said arms within the recess in said plate.

6. In a mowing machine having a cutter bar, a plate, to be mounted on a finger bar, having a recess, teeth formed in said plate, two arms pivoted at the front of the plate and extending downwardly upon the cutter bar, teeth formed on the opposite ends of said arms, whereby to engage with the teeth formed in said plate, and a wedge shaped member, having a handle, located in the recess in said plate, and spring means for holding said teeth on said arms in mesh with the teeth formed in said plate.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,268,252. VEHICLE-WHEEL. KRIKOR KAFAFIAN and GARABED ESMARIAN, Paterson, N. J. Filed Mar. 5, 1918. Serial No. 220,574. (Cl. 152—22.)



4. In a vehicle wheel, a flange, a plurality of arcuate lugs, extending laterally from one side face of the flange in circumferentially spaced relation, said lugs being less in thickness than the width of the flange, an arcuate block applied to the inner face of each lug, said block being spaced slightly inward at their ends from the ends of the lugs to define shoulders, removable blocks inserted between the first mentioned blocks, each removable block being notched at each end to receive the shoulders, means for securing both sets of blocks to the flange, a clamping flange applied to the blocks, means for securing both flanges together, a hub section, and spokes radiating from said hub section and connected to the first mentioned block.

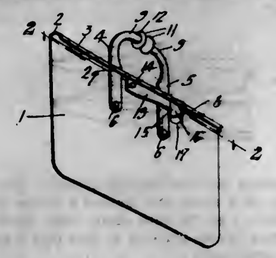
[Claims 1 to 3 not printed in the Gazette.]

1,268,253. CALF-WEANER. FREDERICK DANIEL KEES, Beatrice, Nebr., assignor to F. D. Kees Manufacturing Company, Beatrice, Nebr. Filed May 18, 1917. Serial No. 169,587. (Cl. 119—132.)

1. A weaning device embodying a shield having an upper flange, arms connected to the shield below said flange and extending upwardly therethrough, the flange having an elongated slot for one arm permitting it to swing toward and away from the other arm, and a catch carried by the shield for engaging the swingable arm when it is swung into position toward the other arm.

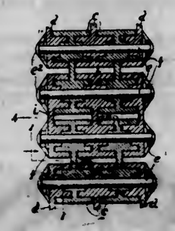
2. A weaning device embodying a shield having an upper flange, arms connected to the shield below said flange and extending upwardly therethrough, the flange having an elongated slot for one arm permitting it to swing toward and away fom the other arm, and a catch

carried by the shield for engaging the swingable arm when it is swung into position toward the other arm, said



flange having a lip for limiting the movement of the catch away from the shield to release the swingable arm.

1,268,234. CHAIN. HEBRON BERNARD LAYMAN, New York, N. Y., assignor of one-fourth to F. E. Lonas, New York, N. Y. Filed May 26, 1916, Serial No. 99,931. Renewed Dec. 15, 1917. Serial No. 207,359. (Cl. 74—32.)



1. A drive chain composed of central or intermediate links and side links comprising flat body or web portions having pin holes in their opposite ends, the central or intermediate links being provided with bushing bearings which project on the opposite sides thereof, and inwardly of said bushing bearings with supplemental arc-shaped bearings, and outwardly of said bushing bearings with supplemental arc-shaped bearings between which and the bushing bearings are arc-shaped grooves, both the inward and outward arc-shaped bearings being wider in transverse section than the bushing bearings, and the side links being provided on one side thereof with similar bushing bearings and arc-shaped bearings.

7. In a driving chain, a link having a laterally projecting end constituting a gear face and an arc-shaped bearing, a second bearing in one end portion of said link, a supplementary arc-shaped bearing concentric therewith, and an arc-shaped groove between said laterally projecting end and said second bearing, both said bearings projecting outwardly beyond the link web.

12. In a driving chain, a link having a pin hole, a laterally projecting end constituting a gear face and an arc-shaped bearing, a second bearing in one end portion of said link, a supplementary arc-shaped bearing concentric therewith, and an arc-shaped groove between said laterally projecting end and said second bearing, both said bearings projecting outwardly beyond the link web.

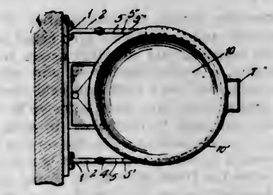
14. In a driving chain, a link having in one end portion thereof a bearing, and two oppositely disposed concentric arc-shaped bearings.

20. In a chain, a link having a projecting bearing in one end portion, and an arc-shaped bearing concentric therewith and spaced therefrom by an arc-shaped groove, the said arc-shaped bearing being of less than 180° arc length.

[Claims 2 to 6, 8 to 11, 13, and 15 to 27 not printed in the Gazette.]

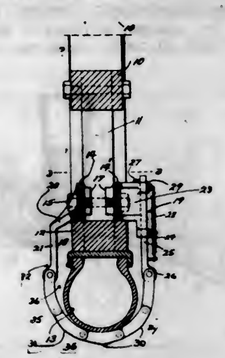
1,268,255. [WITHDRAWN.]

1,268,256. WASHBASIN-BRACKET. HENRY LEYH, Bertha, Minn. Filed Jan. 14, 1916. Serial No. 72,180. (Cl. 45—38.)



As a new article of manufacture, a wash basin bracket comprising a support, a receptacle supporting arm, formed from a blank strip of material and being bent to form a substantially U-shaped structure, the ends of said strip being pivotally mounted upon said support, said supporting arm having a pair of notches formed in its top edge, said notches being in transverse alinement with each other, said arm having an even upper edge throughout its entire length, said notches having abutment shoulders at their ends, said arm being adapted to support a basin, thus causing the arm to engage the basin at a point under the usual flange thereof, said notches receiving the flange of the basin, thus evenly supporting the same and said shoulders holding said basin against shifting along said arm when said arm is swung.

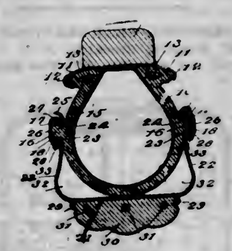
1,268,257. DETACHABLE NON-SKID DEVICE FOR VEHICLE-WHEELS. JOSEPH LUEBBERT and LUDWIG STEPHANY, Philadelphia, Pa. Filed Aug. 22, 1917. Serial No. 187,623. (Cl. 152—14.)



1. In a non-skid device the combination of a vehicle wheel, oppositely disposed supports clamped with respect to the spokes of the wheel of which one support is provided with a fixed extension and of which the other support is provided with a guideway upon its outer face, a resiliently sustained slide for said guide-way, means to limit the outward movement of said slide and a tread-device fitted over the tread portion of said wheel and secured to said fixed extension and said slide respectively.

2. In a non-skid device the combination of a vehicle wheel, oppositely disposed supports clamped with respect to the spokes of the wheel of which the inner support is provided with a fixed extension and of which the outer support is provided with a guide-way, a slide for said guide-way, a coiled spring interposed between the innermost end of the outer support and outermost end of said slide, means upon said slide for abutting against the outer support to limit the outward movement of said slide and a tread-device fitted over the tread portion of said wheel and secured to said fixed extension and slide respectively.

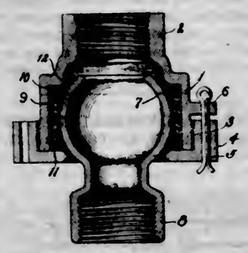
1,268,258. ARMOR FOR PNEUMATIC TIRES. WILLIAM H. MANUEL, Terre Haute, Ind., assignor of one-half to James A. Chandler, Terre Haute, Ind. Filed Dec. 31, 1917. Serial No. 209,659. (Cl. 152—33.)



1. A tire casing having annular holding ribs provided with projecting beads, an annular shield bearing over said casing and having outturned edges respectively engaging said beads, and annular holding members having inwardly turned edges respectively engaging over the beads of the holding ribs and the outturned edges of the shield.

2. A tire casing having annular holding ribs provided with projecting beads, an annular shield bearing over said casing and having outturned edges respectively engaging said beads, annular locking members each having a lip engaging one of said beads and having a bearing portion and annular holding members having inwardly turned edges respectively engaging the lips of the locking member and the outturned edges of the shield.

1,268,259. BALL-AND-SOCKET JOINT. FREDERICK W. MARTIN, Bayside, N. Y., assignor to Franklin Railway Supply Company, New York, N. Y., a Corporation of Delaware. Filed May 12, 1917. Serial No. 168,085. (Cl. 285—95.)



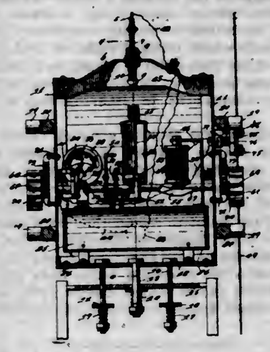
2. A ball and socket joint, comprising a body portion forming a cylindric socket having an internal annular shoulder with a beveled edge at the inner end of said socket, a ball portion of less diameter than the socket and extended within the latter to a point inwardly beyond said shoulder, an adjustable cap movably retaining the ball portion within the socket, rings resting against the shoulder and cap, respectively, a packing within the socket and confined between the rings, and an annular substantially conoidally-shaped bearing extension on the shoulder engaging ring to engage with the ball portion a distance inwardly beyond said shoulder and be compressed between the beveled edge of the latter and said ball portion on adjustment of the cap.

[Claim 1 not printed in the Gazette.]

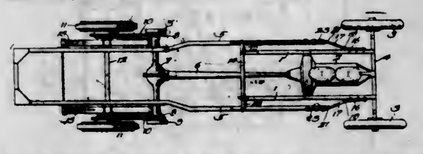
1,268,260. SAFETY MINE-CAGE DEVICE. JOSEPH MATTHEWS, Plymouth, Pa. Filed Apr. 14, 1916. Serial No. 91,160. (Cl. 187—80.)

1. A mechanism of the class described comprising a casing, a reservoir carried thereby, gripping devices carried by said casing, a plunger housing carried by said casing, a plunger working therein, means connecting said reservoir to said plunger housing, a valve for controlling the passage of air from said reservoir to said plunger housing, an armature arm engaging said valve and adapted to open said valve as said armature arm is swung to an operative position, electro-magnetic means placed adjacent said armature arm for normally holding said armature arm in engagement therewith and in an inactive position whereby said valve will be normally held in a closed position, and means coöperating with said plunger for throwing of said gripping devices to an operative position.

[Claims 2 to 4 not printed in the Gazette.]



1,268,261. MOTOR-VEHICLE. LLOYD L. MELTON, Chicago, Ill., assignor, by direct and mesne assignments, to Dearborn Truck Co., Chicago, Ill., a Corporation of Illinois. Filed July 9, 1917. Serial No. 179,808. (Cl. 180—16.)



1. An attachment for forming a motor vehicle comprising propelling vehicle wheels; and a frame supported thereon and extending forwardly therefrom, this frame having side rails whose forward ends are both adjustable transversely of the frame and in hinged connection with the balance of the frame to render the frame adaptable for attachment to other frames of differing widths.

2. An attachment for forming a motor vehicle comprising propelling vehicle wheels; and a frame supported thereon and extending forwardly therefrom, this frame having side rails whose forward ends are both adjustable transversely of the frame and in hinged connection with the balance of the frame to render the frame adaptable for attachment to other frames of differing widths, the first aforesaid frame also having additional frame sections that intervene between the aforesaid frame ends and the balance of this frame and in hinged connection with the aforesaid frame ends and the balance of the frame.

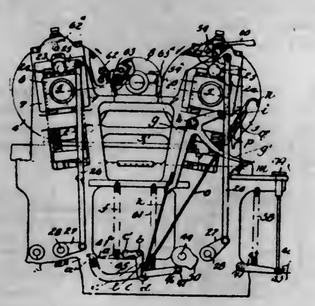
3. An attachment for forming a motor vehicle comprising propelling vehicle wheels; a frame supported thereon and extending forwardly therefrom, this frame having side rails whose forward ends are both adjustable transversely of the frame and in hinged connection with the balance of the frame to render the frame adaptable for attachment to other frames of differing widths, the first aforesaid frame also having additional frame sections that intervene between the aforesaid frame ends and the balance of this frame and in hinged connection with the aforesaid frame ends and the balance of the frame; clamping means for

holding these frame sections in rigid connection with the frame ends and the balance of the first aforesaid frame, said clamping means being inclusive of the pintles of the hinges that are in the form of clamping bolts; and clamping elements upon the parts united by said bolts and held in clamped engagement by said bolts.

4. An attachment for forming a motor vehicle comprising a propeller vehicle wheels; and a frame supported thereon and extending forwardly therefrom, this frame having side rails whose forward ends are both adjustable transversely of the frame and in hinged and clamping connection with the balance of the frame to render the frame adaptable for attachment to other frames of differing widths.

5. An attachment for forming a motor vehicle comprising propelling vehicle wheels; and a frame supported thereon, and extending forwardly therefrom, this frame having side rails whose forward ends are both adjustable transversely of the frame and in hinged connection with the balance of the frame to render the frame adaptable for attachment to other frames of differing widths, the first aforesaid frame also having additional frame sections that intervene between the aforesaid frame ends and the balance of this frame and in hinged and clamping connection with the aforesaid frame ends and the balance of the frame.

1,268,262. TRIPPING MECHANISM FOR PRINTING-PRESSES. ROBERT MIEHLE, Chicago, Ill. Filed Feb. 5, 1917. Serial No. 146,579. (Cl. 101—192.)

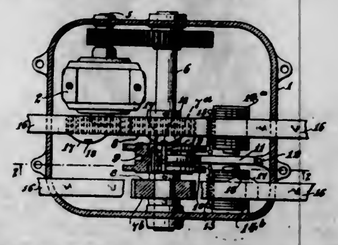


1. A printing press including a pair of printing couples, each printing couple including a movable element adapted to be moved into and out of printing position, tripping mechanism controlling the movable element of one of said couples, press driven means for rendering said tripping mechanism effective, a couple member included in said press driven means adapted to be moved to render said press driven means ineffective, means having operative connection with the movable element of the other couple and said couple member and adapted to move said couple member to render said press driven means ineffective when said movable element of said other printing couple is moved to printing position, and tripping mechanism controlling the movable element of said other couple.

6. A printing press including a pair of printing couples, each printing couple including a movable element adapted to be moved into and out of printing position, tripping mechanism controlling the movable element of one of said couples, press driven means for rendering said tripping mechanism effective, a couple member included in said press driven means adapted to be moved to render said press driven means ineffective, a connecting member abutting the movable element of said other printing couple and engaging said couple member and adapted to move said couple member to render said press driven means ineffective when said movable element of said other printing couple is moved to printing position, yieldable means for retaining said connecting member in engagement with said movable element of said other couple, and a second tripping mechanism controlling the movable member of said other couple.

[Claims 2 to 5 and 7 to 20 not printed in the Gazette.]

1,268,263. ELECTRIC GEAR-SHIFTING MECHANISM. HOWARD J. MURRAY, Brooklyn, N. Y. Filed July 15, 1914. Serial No. 851,063. (Cl. 74—38.)



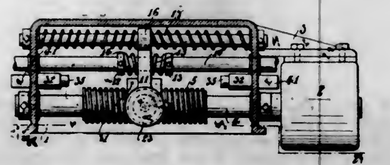
1. In a gear shifting mechanism, the combination with a gear shift rod, of a motor operatively connected therewith to move the same in opposite directions from a neutral position, a clutch between the shift rod and motor, a single control lever for the motor and the clutch, and means for automatically returning the shift rod to its neutral position independently of the motor.

2. In a gear shifting mechanism, the combination with a gear shift rod, of a driving pinion operatively connected with said rod, a reversible electric motor connected with said pinion to drive the same and the rod in contrary directions, a clutch between said pinion and motor, and electrically controlled means for actuating said clutch and separate means for automatically returning the clutch to its initial position.

3. In a gear shifting mechanism, the combination with a reversible motor, a shift rod, means operatively connecting said shift rod to the motor comprising a clutch, a magnet controlling said clutch, a source of power and a contact device comprising a single lever controlling the supply of power to the magnet and to the motor.

[Claims 4 to 22 not printed in the Gazette.]

1,268,264. SAFETY CONTROLLING DEVICE. HOWARD J. MURRAY, Brooklyn, N. Y. Filed Aug. 21, 1914. Serial No. 857,838. (Cl. 74—58.)



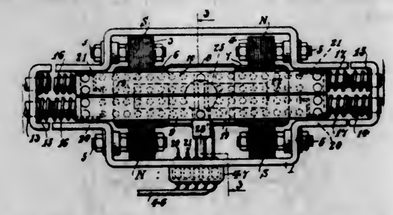
2. In a device of the class described, the combination with a rotating feed screw, of a gear shifting rod, a clutch operatively connected to said rod to move therewith and adapted to engage said screw whereby said rod may be shifted longitudinally by the rotating of the screw, means tending to maintain said clutch disengaged from the screw, and electrically energized mechanism for moving said clutch into position to engage the screw, a switch for completing the electric circuit through said mechanism and means acting on said rod tending to return the same to its initial position when the clutch is disengaged from the screw.

7. In a device of the class described, the combination with an element of a gear shifting mechanism, of a power shaft for actuating said element, a clutch connection between said element and shaft, means for controlling said clutch connection to connect said element and shaft so that the movement of one will be transmitted to the other said clutch connection including resilient means permitting relative movement between said element and shaft when operatively connected.

11. In a gear shifting mechanism, the combination with a power shaft having an enlarged portion provided with a feed screw, a gear shifting rod paralleling said power shaft, a clutch mechanism carried by said rod and adapted to engage said feed screw to be moved thereby to the end of the enlarged portion of the shaft, a spring tending to resist this movement of the rod and means for projecting an element of the clutch toward the shaft at the end of the feed screw, and said spring adapted to hold the clutch in locked position against the end of the enlarged portion of the shaft.

[Claims 1, 3 to 6, 8 to 10, and 12 to 21 not printed in the Gazette.]

1,268,265. RECIPROCATING MOTOR. HOWARD J. MURRAY, Brooklyn, N. Y. Filed Sept. 15, 1914. Serial No. 861,807. (Cl. 172—290.)



1. A gear shifting device comprising a casing, a pair of parallelly disposed horseshoe magnets mounted in said casing, windings on said magnets arranged to form electromagnetic fields of force with oppositely disposed polarity, a pair of armatures extending between the poles of said magnets, rods extending from said armatures through said casing, mounting the armatures for reciprocatory movement relative to the fields of force, each armature having a uniplanar winding extending transversely of the lines in the electromagnetic fields of force, an electrically actuated locking mechanism for holding either armature at the limit of its movement in either reciprocatory direction and selective means for completing a circuit through said locking mechanism, through said magnet windings and through the windings of either of said armatures.

2. A gear shifting device comprising a casing, a pair of parallelly disposed horseshoe magnets mounted in said casing, windings on said magnets arranged to form electromagnetic fields of force with oppositely disposed polarity, a pair of armatures extending between the poles of said magnets, rods extending from said armatures through said casing mounting the armatures for reciprocatory movement relative to the fields of force, an electrically actuated locking mechanism for holding either armature at the limit of its movement in either reciprocatory direction, selective means for completing a circuit through said locking mechanism through said magnet windings and through the windings of either of said armatures and a circuit breaker coacting with said locking mechanism for interrupting the circuit through said windings.

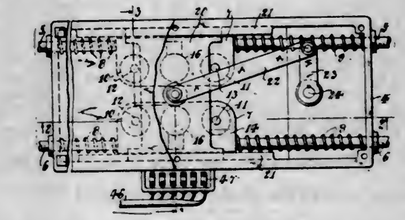
5. In a device of the class described, the combination with an electrically energized mechanism capable of generating a relatively stationary electromagnetic field of force, of an armature mounted for reciprocatory movement centrally across said field, said armature being wound with certain of its coils disposed in a plane parallel to the line of movement of the armature and disposed to cross the lines of force and coöperatively arranged relative to said field whereby the armature will be moved in one direction when a current is passed therethrough, and a source of electric energy connected directly with said armature.

17. A gear shifting device comprising a casing, a pair of parallelly disposed horseshoe magnets mounted in said casing, windings on said magnets arranged to form electromagnetic fields of force with oppositely disposed polarity, a pair of armatures extending between the poles of said magnets, rods extending from said armatures through said casing, mounting the armatures for reciprocatory movement relative to the fields of force, each armature having a uniplanar winding extending transversely of the lines in the electromagnetic fields of force, an electrically actuated locking mechanism for holding either armature at the limit of its movement in either reciprocatory direction, selective means for completing a circuit through said locking mechanism, through said magnet windings and through the windings of either of said armatures and resilient means acting on said armatures tending to return the same to their normal position when disengaged from the locking mechanism.

18. In a device of the class described, the combination with an electrically energized mechanism capable of generating a relatively stationary electromagnetic field of force, of an armature mounted for reciprocatory movement in said field, said armature being wound with certain of its coils disposed to cross the lines of force and coöperatively arranged relative to said field whereby the armature will be moved in one direction when a current is passed therethrough, a circuit breaker actuated by the movement of said armature into a preset position for automatically intercepting the current therethrough and through the mechanism, a locking means for holding said armature in place after it has moved a preset distance under the influence of the magnetic field and the lines of force generated by the current through said armature and resilient means acting on said armature tending to return the same to its initial position when disengaged from the locking means.

[Claims 3, 4, and 6 to 16 not printed in the Gazette.]

1,268,266. GEAR-SHIFTING DEVICE. HOWARD J. MURRAY, Brooklyn, N. Y. Filed Nov. 11, 1914. Serial No. 871,439. (Cl. 74—58.)



2. In a device of the class described, the combination of a mechanism actuating rod, a stop carried by said rod, electromagnetic means controlled from a distance for moving said stop to and from an operative position, a reciprocating power member movable parallel to the length of said rod and adapted to engage said stop when in operative position thereby to shift the rod longitudinally into an operative position, means for automatically locking said rod in its shifted position and means engaging said rod tending to return the same to its normal inoperative position when unlocked.

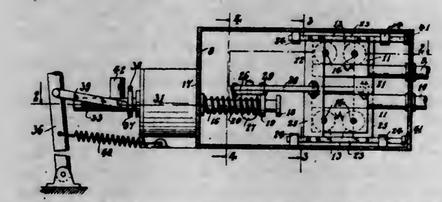
5. In a device of the class described, the combination of a mechanism actuating rod mounted for longitudinal movement in either direction from a normal position, a pair of spaced apart stops carried by said rod, a power member mounted for reciprocatory movement parallel to said rod and selective means for positioning either one of said stops in the path of movement of said power member thereby to shift the rod in the direction of movement of said member engaging the stop.

6. In a device of the class described, the combination of a mechanism actuating rod, a mechanically actuated

member, means engaging said member designed to move the same for a distance greater than the maximum distance necessary to effect the actuation of the rod, and electrically controlled means carried by said rod adapted to form a connection between said member and rod whereby said rod is shifted by the movement of said member and locking means for holding said rod in its shifted position.

[Claims 1, 3, 4, and 7 to 16 not printed in the Gazette.]

1,268,267. AUTOMATIC ELECTRIC GEAR-SHIFT. HOWARD J. MURRAY, Brooklyn, N. Y. Filed Jan. 18, 1915. Serial No. 2,951. (Cl. 74—58.)



1. In a device of the class described, a controlling member, an actuator rod normally disengaged from the controlling member, a spring for moving said rod in one direction, magnetically controlled means for moving said rod in the other direction to place the spring under tension, said magnetically controlled means acting through the rod to shift said controlling member and move the same into a predetermined position.

2. In a device of the class described, a pair of controlling members, an actuator rod adapted to be connected at will to operate either one of said members, a spring for moving said rod in one direction, magnetically controlled means for moving said rod in the other direction to place the spring under tension, said magnetically controlled means acting through the rod to shift one of said controlling members into a predetermined position and means connecting said rod and member thereby to move said member under the released force of said tensioned spring.

3. In a device of the class described, a controlling member, an actuator rod, a spring for moving said rod in one direction, magnetically controlled means for moving said rod in the other direction to place the spring under tension, said magnetically controlled means acting through the rod to engage said controlling member and move the same into a set position and a magnetically controlled connection for uniting said rod and member thereby to move said member under the force of said tensioned spring.

[Claims 4 to 40 not printed in the Gazette.]

1,268,268. SAFETY CONTROLLING DEVICE. HOWARD J. MURRAY, New York, N. Y. Filed Apr. 28, 1915. Serial No. 23,438. (Cl. 74—58.)



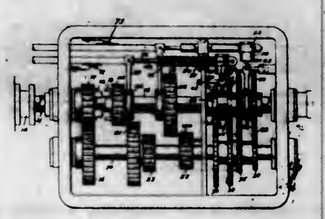
4. In a device of the class described, the combination of a shaft mounted for rotary movement, a control rod mounted for reciprocatory movement, a two position clutch member carried by said rod, means co-acting with said member in one of its positions connecting said shaft and rod to throw the rod in one direction and means co-acting with said member in the other of its positions connecting said shaft and rod to throw the rod back into its initial position and means moving said clutch member into one of said positions.

7. In a device of the class described, the combination with a power member mounted for rotary movement and provided with a cam bearing surface, of an actuated-member, a clutch fixed to the member and designed to engage said cam surface whereby the rotary movement of the power member is transferred into a shifting movement of said member and electrically actuated means for controlling said clutch.

10. In a device of the class described, the combination of a cam faced disk mounted for rotary movement about a fixed axis, a control member extending across the face of said disk, a clutch member carried by the control member and electrically controlled means for moving said clutch member into engagement with the cam on the face of the disk whereby the revolving cam will shift the control rod.

[Claims 1 to 3, 5, 6, 8, 9, and 11 to 22 not printed in the Gazette.]

1,268,269. GEAR-SYNCHRONIZER. HOWARD J. MURRAY, Brooklyn, N. Y., and WALTER S. RUGG, Pittsburgh, Pa. Filed June 11, 1917. Serial No. 174,609. (Cl. 74—58.)



1. In a device of the class described, the combination of two gear sets each having approximately the same speed ratio, one set including a driving member and a member adapted to mesh therewith to constitute a driven member, means including the other gear set for causing the two members to approach the same rotary speed before they are meshed and means coactively associated with the driving and driven member for moving said last named means into an inoperative position when said driving and driven members have been moved by said last named means into a preset relative position.

2. In a device of the class described, the combination of a driving and a driven element, means for moving the same into inter-engaging position, means for causing the speed of rotation of one element to approach that of the other as they are moved into inter-engaging position and means controlled by the approach of the elements into their inter-engaging position for automatically causing said last named means to become inoperative.

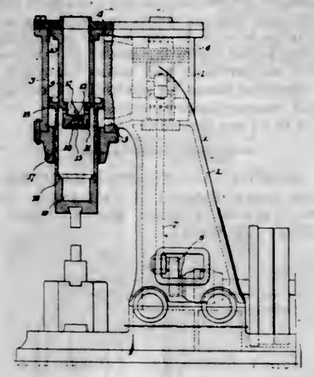
5. In a device of the class described, the combination of a pair of gears one of which is adapted to be shifted into a driving engagement with the other gear, speed means for causing one of the gears to revolve at a speed approximately that of the speed of the other gear, a control means for moving said speed means into operative position and for shifting said shiftable gear, resilient means for placing said control means under tension, and mechanism for releasing the engagement of said control means with said speed means, and for permitting said tensioned control means to move said shiftable gear into driving engagement with said other gear.

26. In a device of the class described, the combination of two pairs of gears, one pair permanently in mesh and the other pair adapted to be shifted relative to each other to and from a meshing position, an element of a friction clutch carried by one of the permanently meshed gears and a driving connection between the other of the permanently meshed gears and one of the relatively shiftable gears, the other of said relatively shiftable gears constituting a power member, a coacting clutch element adapted to engage said gear carried clutch element to form a driving connection therewith and means operable simultaneously with the meshing of the gears for causing said clutch element to become inoperative.

35. In a device of the class described, a control rod provided with an extension constituting a plunger piston, a casing constituting the cylinder of said piston, a spring inclosed in said cylinder and bearing on said piston, to center the cylinder, a clutch carried by said casing, a shiftable friction clutch element adapted to be engaged by said clutch to shift the same by a movement of said control rod and a power gear shifter actuated from said control rod.

[Claims 3, 4, 6 to 25, 27 to 34, and 36 to 48 not printed in the Gazette.]

1,268,270. FLUID-POWER HAMMER. RALPH W. NAZEL, Philadelphia, Pa., assignor to John Nazel, Philadelphia, Pa. Filed July 7, 1917. Serial No. 179,150. (Cl. 78—42.)



1. In a fluid power hammer, a work cylinder and a guide cylinder having an end fixed in said work cylinder, said guide cylinder having a free reduced end in said work cylinder and a port in said reduced end, in combination with a hollow ram movable in said work cylinder on said guide cylinder and having a reduced end recess adapted to be closed by said reduced end and thereby cut off from communication with said port.

2. In a fluid power hammer, a work cylinder and a hollow guide cylinder therein, said guide cylinder having a reduced end containing a lateral port communicating freely with the atmosphere, in combination with a hollow ram movable in said work cylinder on said guide cylinder and having an end recess adapted to communicate with said port, to fit said reduced end, and to be cut off from communication with said port by said reduced end.

3. In a fluid power hammer, a work cylinder, a hollow guide cylinder therein, said guide cylinder having ports communicating with the atmosphere and a check valve for controlling one of said ports, in combination with a hollow ram movable in said work cylinder and on said guide cylinder, said ram having a recess adapted to communicate with said ports, to fit said reduced end and to be cut off from communication with one of said ports by said reduced end.

1,268,271. MOP. AUGUST NELSON, Minneapolis, Minn. Filed Jan. 25, 1917. Serial No. 144,348. (Cl. 15—44.)

1. In a mop, the combination with a cylinder and piston working therein, of a mop head connected to the head end of the cylinder and having a water port, and a scraper blade attached to the mop head and having a water port, said scraper blade arranged to draw away from the mop head during the movement thereof in one direction and to fold thereunder during a reverse movement of said mop head, said two water ports, when the scraper blade is folded under the mop head, being in registration, the one with the other.

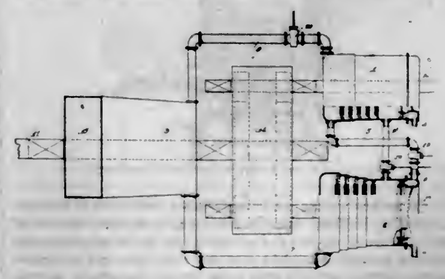
3. In a mop, the combination with a cylinder and piston working therein, of a mop head connected to the head end of said cylinder and having transverse water ports, a scraper blade attached to said head and having water ports adapted to register with the water ports of said mop head, the said cylinder having a projecting tubular stem affording a handle, and said piston having a rod projecting through said tubular stem, so that its outer end may be engaged to operate said piston.



5. In a mop, the combination with a cylinder and a piston working therein, said cylinder having a tubular stem affording a handle and said piston having a rod extending through said stem so that it may be engaged to operate said piston, a tubular mop head intermediately attached to the head end of said cylinder and in communication with the interior thereof, said head having transversely spaced water ports, a rubber scraper blade attached to the top of said mop head at its upper edge and having water ports adapted to register with the water ports of said mop head, and a flexible auxiliary scraper blade attached at its upper edge to the upper edge of the main scraper blade, terminating in its lower edge short of the lower edge of said main blade, and having relatively large water ports that register with the water ports of said main blade, whereby, water collected by said two scraper blades may be drawn into the cylinder, said two scraper blades adapted to fold, the one upon the other and upon the tubular mop head.

[Claims 2 and 4 not printed in the Gazette.]

1,268,272. ELASTIC-FLUID TURBINE. EARLE R. NEWTON, New York, N. Y., assignor to International Curtis Marine Turbine Company, New York, N. Y., a Corporation of West Virginia. Filed Mar. 9, 1917. Serial No. 153,593. (Cl. 121—58.)

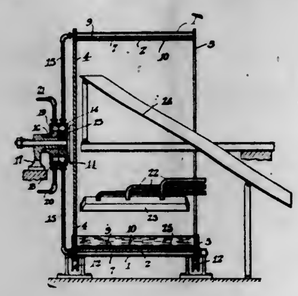


1. A steam turbine comprising a plurality of stages or rows of blades arranged in groups, means whereby, at

reduced power, all of the steam will flow in series through all of the stages or rows of blades of these groups, means whereby, at high power, part of the steam will be admitted to each group and flow in parallel through the first stages or rows of blades, and means whereby the steam will be subdivided and flow, still in parallel but in changed proportions through the remaining stages or rows of blades of these groups.

[Claims 2 to 8 not printed in the Gazette.]

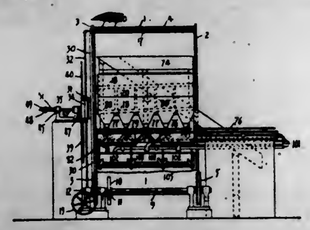
1,268,273. PROCESS OF SEPARATING LIQUIDS FROM SOLIDS. ASKIN MORRISON NICHOLAS, Torrington, Bismuth, via Deepwater, New South Wales, Australia. Filed Nov. 24, 1916. Serial No. 133,116. (Cl. 210—14.)



1. A process of separating liquid from solids consisting in delivering the mixture into a container having a filtering medium spaced from the walls of said container, abstracting the liquid from the mixture by means of suction acting through the said medium, inverting the container and maintaining the suction during the inverting thereof to hold the solids against the medium, discontinuing the suction, and subjecting the medium to a fluid blast to free it of the solids.

2. A process of separating liquid from solids consisting in applying a layer of granulated material upon a filter, delivering a mixture of liquid and solids upon said layer, abstracting the liquid from the mixture by means of suction acting through said filter and said layer of granulated material, discontinuing the suction, and treating the filter with a cleansing medium.

1,268,274. APPARATUS FOR SEPARATING LIQUIDS FROM SOLIDS. ASKIN MORRISON NICHOLAS, Torrington, Bismuth, via Deepwater, New South Wales, Australia. Filed Nov. 24, 1916. Serial No. 133,117. (Cl. 210—14.)



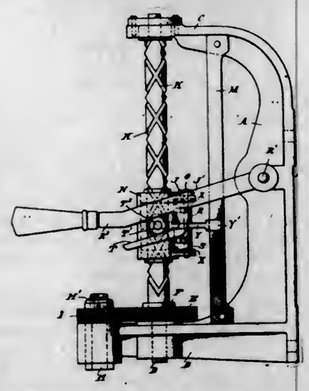
1. A rotary separator, comprising a rotatable container, a filtering medium spaced from the interior surface of said container, means for dividing the space between said interior surface and said medium into separate compartments, means for bringing said compartments in succession under the action of suction and cutting off said compartments in succession from said suction after a predetermined period, and means for thereafter subjecting said compartments in succession to the action of a sudden fluid blast.

2. A rotary separator, comprising a rotatable container having a peripheral series of separate compartments each having apertures in the inner wall thereof, a filtering medium spaced from the inner wall of each compartment, means for delivering a mixture of liquid and solids upon said filtering medium, means for bringing said compartments in succession under the action of suction and cutting off said compartments in succession from said suction after a predetermined period, and means for thereafter subjecting said compartments in succession to the action of a sudden blast.

3. A rotary separator, comprising a rotatable container, a filtering medium spaced from the interior surface of said container, means for dividing the space between said interior surface and said medium into separate compartments, means for delivering a mixture of liquid and solids onto said filtering medium, means for subjecting said compartments in succession to the action of suction for a predetermined period, operating means on said container, one for each compartment, and means controlled by the successive operating means for suddenly admitting a fluid blast to said compartments in succession.

[Claims 4 to 14 not printed in the Gazette.]

1,268,275. RATCHET-NUT-TURNING MACHINE. CLIFFORD OTIS POOLE, Balcom, Ill. Filed Aug. 11, 1916, Serial No. 114,439. Renewed Mar. 25, 1918. Serial No. 224,674. (Cl. 81—57.)

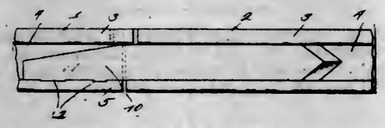


1. A nut loosening and tightening apparatus comprising a frame, a rotary shaft journaled therein, a nut socket, gear connections from said socket to said shaft, the latter being provided with intersecting spiral grooves, a movable casing through which said shaft passes, reversely arranged, rotatable ratchet nuts mounted within said casing, each nut having a lug projecting from the bore thereof and engaging one of said spiral grooves, a rock shaft mounted upon said casing, pawls fixed to said rock shaft and each adapted to engage the teeth upon one of said ratchet nuts, means for rocking the shaft, a lever pivoted to the frame and connected to said casing, forming means whereby, as the lever is swung upon its pivot, the casing may be raised and lowered.

[Claim 2 not printed in the Gazette.]

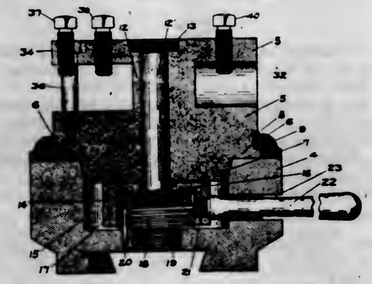
1,268,276. RAIL CONNECTION. ADOLF J. RABENSHIFNER, Olmitz, Kans. Filed May 15, 1917. Serial No. 168,777. (Cl. 239—8.)

The combination of a pair of meeting rail ends, each having a base, web, and ball, a notched ball at each rail end providing an extension of a portion of the ball beyond the web and base for the interfitting of the abutting rail ends with each other, plates formed on the webs of the rail ends at opposite sides thereof to extend over the bases of said rail ends, each base of the rail ends being formed with slots of different sizes with respect to each other, and



lugs on the lower edges of the plates for engagement in the slots respectively, the plates each being of a depth adjacent the extremity of the rail end corresponding to the space between the base and ball thereof to snugly fit said space.

1,268,277. LATHE-TURRET. HARRY W. RANSDALL, Indianapolis, Ind., assignor of one-third to Theodore A. Meyer and one-third to Louis H. Knue, Indianapolis, Ind. Filed Dec. 1, 1916. Serial No. 134,412. (Cl. 29—49.)



1. A lathe turret made of an integral body of metal and having an opening therein with a tool supporting base lying in a horizontal plane and of sufficient radial depth to receive the shank of a tool so mounted as to project longitudinally from the central part of the turret, said opening being elongated in horizontal planes beyond the width of the tool shank across the line of the depth of the opening to permit of the angular adjustment of the tool or the use of tools of different sizes, and clamping means for the tool exerting pressure in a vertical line.

9. A lathe turret having a head portion provided with round sockets and having a portion provided with a continuous cutaway horizontal slot adapted to receive rectangular tools, an outer series of clamping screws around the border of said slotted portion, said screws being closely adjacent one another, and a smaller number of inner concentric clamping screws at said slotted portion whereby a rectangular tool may be engaged with anyone of said outer screws and with an adjacent inner screw to fix the tool at any desired angle.

13. In combination with a lathe turret, a slide on which said turret is mounted for rotatable movement, a gib fixed to the slide and having a running fit with the turret to prevent upward movement of the latter, a bolt extending through said turret, a threaded clamping gib below said turret and engaging the head of said bolt, a screw fixed to the slide and engaging said threaded gib, a tapered seat between the turret and slide and a reciprocating handle secured to the threaded gib for operating the same.

[Claims 2 to 8, 10 to 12, and 14 not printed in the Gazette.]

1,268,278. GARMENT-FASTENER. CHARLES READ, Richmond Hill, N. Y. Filed June 3, 1916. Serial No. 101,487. (Cl. 24—218.)

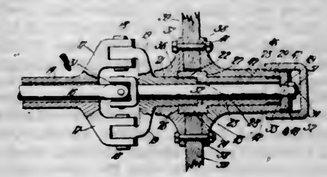
1. A garment fastener comprising a plurality of disks, one of which supports a post, and the other of which is provided with a perforation, a spring having a substantially closed loop overlying a portion of said perforation,



and adapted to engage said post, bends in said spring adapted to follow the contour of said disk.

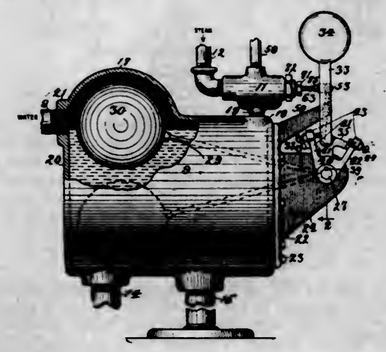
[Claims 2 to 4 not printed in the Gazette.]

1,268,279. FOUR-WHEEL DRIVE FOR MOTOR-VEHICLES. ERNEST A. REICHELT, Lorquon, Victoria, Australia. Filed Nov. 12, 1917. Serial No. 201,507. (Cl. 64—81.)



In a device of the character described, the combination of a sleeve having an externally-threaded outer end; a bush disposed in endwise axial alinement with said sleeve and having an internally-threaded, enlarged inner end in which the threaded outer end of said sleeve is engaged; an outer hub member surrounding said bush; an inner hub member surrounding said sleeve, said hub members adapted to receive a wheel between them and having annular recesses to accommodate the enlarged end of the bush; and a member extending through said sleeve and bush and connected to positively drive the outer hub member.

1,268,280. DIRECT-RETURN VALVE FOR STEAM-HEATING SYSTEMS. WILLIAM S. ROATH, Akron, Ohio. Filed May 28, 1917. Serial No. 171,470. (Cl. 137—101.)

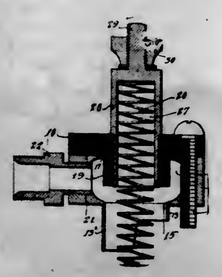


1. A direct return valve for a steam heating system comprising a reservoir connected with the drainage pipe of said system and provided with a pipe leading to the boiler, a valve casing in open communication with said reservoir, said valve casing provided with an inlet for steam under pressure and a vent, a hollow bracket projecting from said reservoir and in open communication with the interior thereof, a rotatable member mounted in the outer end of said bracket, a float in said reservoir,

a stem on said float connected with said rotatable member, a weighted arm loosely mounted on said rotatable member, a V-shaped tappet rigidly mounted on said rotatable member and disposed so that the furcations thereof alternately engage said arm for oscillating the same in direct response to the vertical oscillations of said float, a valve stem mounted in said valve casing, valves on said stem for alternately closing the steam inlet and vent opening whereby when one is closed the other is open, a second bracket on said reservoir, a lever fulcrumed on said bracket, one end of said lever pivotally connected with said valve stem and the other end positioned in the path of movement of the arms carried by said weighted arm and arranged to be alternately engaged thereby, whereby when said weighted lever is oscillated by the movement of said float, said lever is shifted in a reverse direction.

2. A direct return valve for a steam heating system comprising a reservoir connected with the drainage pipe of said system and provided with a pipe leading to the boiler, a valve casing in open communication with said reservoir, said valve casing provided with an inlet for steam under pressure and a vent, a hollow bracket projecting from said reservoir and in open communication with the interior thereof, a rotatable member mounted in the outer end of said bracket, a float in said reservoir, a stem on said float connected with said rotatable member, a weighted arm loosely mounted on said rotatable member, a V-shaped tappet rigidly mounted on said rotatable member and disposed so that the furcations thereof alternately engage said arm for oscillating the same in direct response to the vertical oscillations of said float, a valve stem mounted in said valve casing, valves on said stem for alternately closing the steam inlet and vent opening whereby when one is closed the other is open, a pair of oppositely disposed arms on said counter-weighted arm, a second bracket on said reservoir, a lever fulcrumed on said bracket, one end of said lever pivotally connected with said valve stem and the other end positioned in the path of movement of the arms carried by said weighted arm and arranged to be alternately engaged thereby, whereby when said weighted arm is oscillated by the movement of said float, said lever is shifted in a reverse direction.

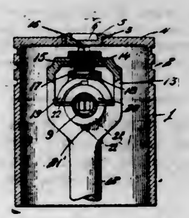
1,268,281. OILING DEVICE. CHARLES E. ROBINSON, Orange, Cal. Filed Oct. 6, 1917. Serial No. 195,183. (Cl. 184—11.)



1. In combination, an engine having a housing and having rotary magnets in the housing and having a magnet support provided with magnets, there being an electric contact on the support, a hollow body mounted on the housing and provided with a port, an oil catching member projecting from the port into the housing, a chambered contact member electrically insulated from the hollow body, a spring having one end accommodated in the contact member and having its other end resting on the electric contact of the support, and a pipe connected at one end with the hollow body and having its other end discharging adjacent one of the engine bearings.

2. In an oiling device, a hollow body provided with a port, an electrical contact member on the hollow body and electrically insulated therefrom, an oil catching member projecting from the port, and a spring engaging the electrical contact member and projecting beyond the outer end of the oil catching member.

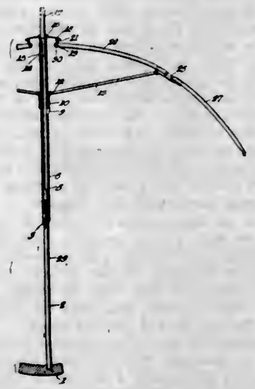
1,268,282. ADJUSTABLE WRIST-PIN AND BEARING THEREFOR. WILLIAM B. ROYER, Baltimore, Md., assignor of one-half to Eugene B. Link, Baltimore, Md. Filed Mar. 15, 1917. Serial No. 155,034. (Cl. 74—85.)



1. In combination, a hollow piston having a central opening in the head thereof, a wrist pin connecting the inner walls thereof, a connecting rod connected to the wrist pin, a stationary and a movable bearing member carried by the connecting rod, and means for moving the movable bearing member into engagement with the wrist pin to compensate for wear, said means being accessible through the central opening.

[Claims 2 to 4 not printed in the Gazette.]

1,268,283. UMBRELLA. IVAR L. RUDOLPH, Washington, D. C. Filed Dec. 27, 1917. Serial No. 209,082. (Cl. 135—25.)

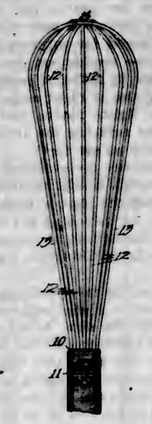


1. In a folding umbrella a hollow upper staff section a detachable tip means for locking the tip to the staff a lower staff section, slidable within the upper staff section said lower section adapted in collapsing within the upper section to disengage said tip locking means.

3. In a folding umbrella an upper hollow staff section a tip detachably engaged within said section a catch on the tip to engage said section a lower staff section slidably engaged within the upper section the upper end of the lower section being formed to disengage the catch and eject the tip when the lower section is collapsed within the upper section.

[Claims 2 and 4 not printed in the Gazette.]

1,268,284. EGG-WHIP. EUGENE H. RYERSON, Worcester, Mass., assignor to Hamblin & Russell Manufacturing Company, Worcester, Mass., a Corporation of Massachusetts. Filed Mar. 16, 1918. Serial No. 222,803. (Cl. 259—144.)



1. As an article of manufacture, an egg whip comprising a blade or bowl with a depressed center and its sides substantially in a plane raised from said center, made up of a plurality of wires, the wires located between the side ones being connected with the side ones at one end to form a handle, and having their outer ends secured to the outer side of the outer wire at the loop end thereof in contact with each other along its outer surface.

2. As an article of manufacture, an egg whip consisting of a handle and a plurality of wires extending from the end thereof, their opposite ends all being connected together at one point, said wires being straight throughout most of their length, separated at intermediate points and curved so as to constitute a blade or bowl of concave form, and by reason of their long straight portions being sufficiently flexible to constitute an efficient egg whip.

5. As an article of manufacture, an egg whip comprising a blade or bowl made up of a plurality of wires, one extending from the handle on one side around the blade to form a loop and back to the handle on the other side, its two ends being brought into parallel position and spaced apart and the other wires each having one end located in a plane between the two ends of the first named wire and permanently secured thereto, their outer ends being secured to the first named wire at the loop end thereof, in contact with each other along the outer surface of the loop, all the wires being curved to bring the blade into concave form near the end.

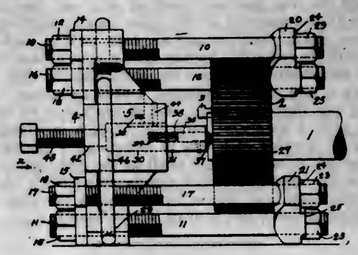
6. As an article of manufacture, an egg and batter whip comprising a concave blade made up of a plurality of wires curved near their ends to produce a concave bowl form and having their shanks substantially straight and brought together into a plane at the handle end.

7. As an article of manufacture, an egg and batter whip comprising a concave blade made up of a plurality of wires curved near their ends to produce a concave bowl form and having their shanks substantially straight and brought together into a plane at the handle end to form a flat handle, a sheet metal member surrounding the ends of said shanks and fastened to them, and a wire wound around the sheet metal member to furnish the gripping surface for said handle.

[Claims 3 and 4 not printed in the Gazette.]

1,268,285. DEVICE FOR REMOVING GEAR-WHEELS, &c. GEORGE W. SCHILLING, Philadelphia, Pa. Filed Oct. 19, 1917. Serial No. 197,385. (Cl. 29—85.)

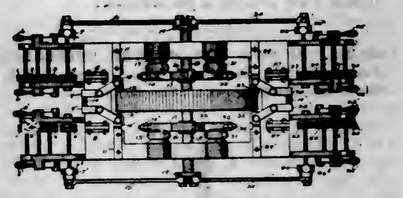
1. A device of the character described including a head; clamping bolts carried by the head; and a cross lever carried by said bolts, said head and said cross lever being movable relatively to each other through the medium of said clamping bolts, substantially as described.



15. A device, adapted to remove an article from a shaft, including a head having a hub and arms projecting from the hub; means carried by said head for abutting an end of said shaft; clamping bolts supported by certain of said arms and extending substantially in the direction of the length of said shaft; links pivoted on each of said clamping bolts; other bolts carried by said links; the other of said arms being adapted to be slidably engaged by said links and having guiding surfaces for said latter mentioned bolts; and cross levers carried jointly by respective bolts on said first mentioned arms and said links, said cross levers being adapted to engage a surface of said article remote from said end of the shaft; said second mentioned arms having recesses therein providing pockets for the second mentioned bolts and thereby limiting the pivotal movement of said links in one direction, substantially as described.

[Claims 2 to 14, 16, and 17 not printed in the Gazette.]

1,268,286. WIRE-NAIL MACHINE. SAMUEL J. SCHWERIN, Willamette, Oreg. Filed Feb. 26, 1917. Serial No. 150,902. (Cl. 10—49.)



1. In a machine of the character described, the combination of four feeding mechanisms, four gripping dies, four headers, four cut-off devices, and a heavy central disk, two complete units of each mechanism being located at each end of the machine and all of their movements being actuated by and correlated to the oscillations of the central disk.

3. In a nail making machine, four top cut-off devices, a central disk on which the top cut-off devices are mounted, two on each side, four bottom cut-off devices attached to the frame of the machine, two at each end, two cut-off bars actuated by the central disk which engage respectively two of the bottom cut-off devices, one at each end of the machine, imparting to them an up and down movement so that they will coöperate with their corresponding top cut off devices.

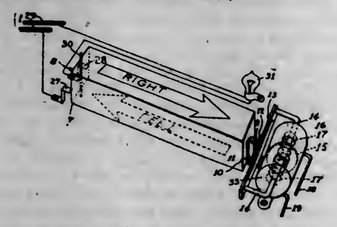
4. In a nail making machine, a bottom cut-off device which consists of a grooved bracket, a knife holder which is free to move up and down in the groove, a bottom lug on the knife holder, a cut-off bar with a raised part on its top edge, a spring which keeps the bottom lug of the knife holder in engagement with the cut-off bar, a disk which actuates the cut-off bar and causes the knife holder to move up and down at proper intervals, when engaged by the said raised part.

5. In a nail making machine, feeding means consisting of two sets of two grooved wheels on each side of the machine, a ratchet wheel, a ratchet pawl and a lever controlling the top grooved wheel of each set, two slotted rocker arms connected to the outer ends respectively of a common shaft, four connecting rods linking each lever arm with its respective rocker arm, a central disk mounted on said shaft, and means for oscillating the disk.

7. In a nail making machine, a heading means consisting of two upsetting tools, one on each side of the machine with a header at each end of each upsetting tool, means for keeping each tool in alinement, a central disk, two eccentrics on the same shaft as the disk, one on each side of the machine, which engage respectively the two upsetting tools, and means for oscillating the disk.

[Claims 2 and 6 not printed in the Gazette.]

1,268,287. MOTOR-VEHICLE SIGNALING DEVICE. BERT A. SEBRING, Arvada, Colo. Filed June 21, 1915. Serial No. 35,347. (Cl. 40—39.)



1. In a device of the class described, indicating mechanism, a fluid pressure cylinder, means for supplying motive fluid thereto, a double acting piston in said cylinder, connections from said piston to said indicating mechanism for actuating the same in two directions, and means for returning said piston to intermediate position when said motive fluid has been cut off.

[Claim 2 not printed in the Gazette.]

1,268,288. SIGNAL FOR STREET INTERSECTIONS. JAMES W. SEE, Hamilton, Ohio. Filed July 8, 1914. Serial No. 849,660. (Cl. 177—337.)



1. A signal device for use at the intersection of two streets comprising, a column, a shaft mounted for rotation on a vertical axis on the column, a sign carried by the shaft, a motor and a connection therefrom to the shaft for rotating the latter, devices for arresting and locking the sign in different angular positions, electrical means for controlling the rotation and locking of the sign, and clockwork mechanism for controlling the electrical means, combined substantially as set forth.

2. A signal device for use at the intersection of two streets comprising, a column, a shaft mounted for rotation on a vertical axis on the column, a sign carried by the shaft, a motor and a connection therefrom to the shaft for rotating the latter, devices for arresting and locking the sign in different angular positions, and clockwork mechanism for controlling the rotation and locking of the sign, combined substantially as set forth.

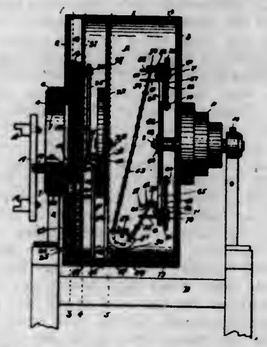
9. A signal device for use at the intersection of two streets comprising, a column, a pair of lights supported by the column and arranged for rotation in a common horizontal plane, operative mechanism for turning and locking the pair of lights in different positions, a shield disposed in a vertical plane at right angles to the horizontal plane in which the lights rotate and between the two lights, and means for rotating the shield with the lights, combined substantially as set forth.

13. In signaling means for crossings and the like, the combination of a column, a sign rotatably mounted thereon, a positive lock for the sign, a motor connected to rotate the sign, means for releasing the lock and energizing the motor to rotate the sign, lights mounted to rotate with the sign, and means for blinking the lights during the rotation of the sign.

14. In signaling means for crossings and the like, the combination of a column, a sign rotatably mounted thereon, a positive lock for the sign, a motor connected to rotate the sign, means for releasing the lock and energizing the motor to rotate the sign, two lights carried by the sign and a shield between the lights to obscure the view of one of them at a time from certain positions.

[Claims 3 to 8, 10 to 12, and 15 to 18 not printed in the Gazette.]

1,268,289. MECHANICAL MOVEMENT. EIRIKUR HJALMAR SIGURDSON, Winnipeg, Manitoba, Canada. Filed Dec. 14, 1916. Serial No. 136,944. (Cl. 74—14.)



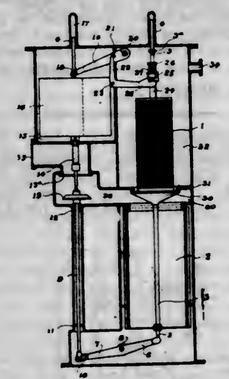
1. A device of the kind described comprising a rigid member, a flexible member having its ends spaced apart and connected with the rigid member to form a loop, a yieldingly supported rotatable member adapted to travel in the loop as a guide and to maintain the said loop under tension, and means to revolve the rotatable member in a plane parallel with that of the rigid member whereby the rotatable member is constrained to follow a path delimited by the slackness in the loop.

3. A device of the kind described comprising a rigid member, a flexible member having its ends spaced apart to form a loop and adjustably connected with the rigid member at opposite sides of the center thereof; a rotatable member adapted to travel in the loop as a guide; a reciprocable member with which the rotatable member is connected, and resilient means opposed to the movement of the rotatable member in the loop in one direction and cooperative therewith to complete the movement of the said reciprocable member, and means to revolve the reciprocable member and its connections around the center line of the rigid member.

7. A device of the kind described comprising two members, one of which is mounted to rotate in a plane parallel with that of the other, a loop having its ends secured to one of the said members at diametrically opposite points, and a wheel positioned off center from the other member and yieldingly carried therefrom, adapted to travel in the loop as a guide.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,268,290. AUTOMATICALLY OPERATED AND CONTROLLED GAS-GENERATOR. DAVID J. SMITH, Finsbury Park, London, and CHARLES TOWL, Forest Gate, England. Filed Aug. 4, 1916. Serial No. 113,119. (Cl. 48—88.)

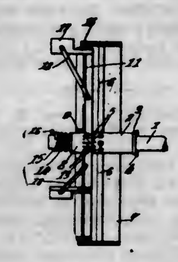


1. In an automatically operated gas generator, the combination of a water tank supported for movement and adapted to move downward when a predetermined quantity of water is received therein, a carbid holder movable relatively to the water tank and adapted to normally occupy a position outside of the water tank and to move into the water tank, trip mechanism for supporting the carbid holder in normal position outside of the water tank, and means operatively connected with the water tank and adapted upon downward movement of the water tank to release said trip mechanism and permit the carbid holder to move into the water tank.

7. In an automatically operated gas generator, the combination of a water tank, and carbid feeding mechanism including carbid holding means, trip mechanism operably associated therewith and operable by the weight of the water in the water tank to release the carbid holding means and permit carbid to fall into the water in the water tank.

[Claims 2 to 6 and 8 not printed in the Gazette.]

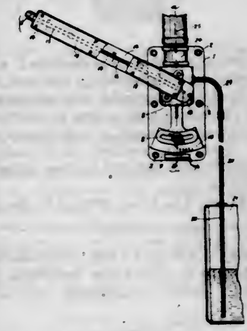
1,268,291. CHECK-ROW-PLANTER ATTACHMENT. ELZO EUSTACE SNEDIGAR, Sioux Pass., Mont., assignor of one-half to Albert W. Wells, Sioux Pass., Mont. Filed Aug. 29, 1917. Serial No. 188,806. (Cl. 111—33.)



1. A check row planter attachment, comprising in combination with a planter and its axle, a supporting wheel, including a hub, loosely mounted on the axle, teeth on the hub, a marker wheel sliding on the axle, a hub for the marker wheel, teeth on the hub and adapted to engage the before mentioned teeth, and resilient means for retaining the teeth in engagement, whereby the supporting wheel and marker wheel will travel in unison when the planter advances, and the supporting wheel alone will rotate when the planter is backing.

2. A check row planter attachment, comprising in combination with a planter and its axle, a supporting wheel, including a hub loosely mounted on the axle, teeth on the hub, a marker wheel sliding on the axle and normally lying within the supporting wheel, a hub for the marker wheel, teeth on the hub and adapted to engage the before mentioned teeth, marker arms secured to the marker wheel, and resilient means for retaining the teeth in engagement.

1,268,292. INDICATOR. CECIL WHEATLEY STANCLIFFE, Toronto, Ontario, Canada, assignor to Milton A. Fesler, Oakland, Cal. Filed July 15, 1915. Serial No. 40,087. (Cl. 73—54.)



6. In a device of the class described, the combination with a tank of liquid, of a chamber supported for angular adjustment and containing suitable liquid, said chamber having an inlet opening and an extension the lower end of which is provided with an arc-shaped slot concentric with the center of swing of the chamber, a suitably supported graduated scale with which the slotted portion of the said extension co-acts, means for securing said chamber in any position to which it may be swung, a tube extending outwardly from the chamber, means connected to the inlet opening of the chamber, for creating air pressure in the chamber above the surface of the said liquid, and a tubular connection extending from the chamber to below the surface of the liquid in the tank.

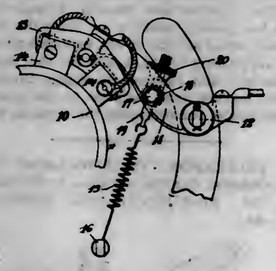
8. In a device of the class described, the combination with a tank of liquid, of a pivotally adjustable chamber containing suitable liquid and having a scale tube extending outwardly therefrom, said chamber being provided with a flexible tubular connection above the liquid therein the lower end of which extends below the surface of the liquid in the tank, means for creating air pressure in the chamber above the surface of the liquid therein, and means for holding the chamber in various pivotally adjusted positions.

[Claims 1 to 5 and 7 not printed in the Gazette.]

1,268,293. BRUSH-HOLDER. ROBERT W. STANLEY, Cleveland, Ohio, assignor to Entz Motor Car Corporation, a Corporation of New York. Filed Oct. 18, 1915. Serial No. 56,434. (Cl. 200—24.)

1. In a device of the character described, a lever pivoted at one end, a brush supporting arm pivotally connected intermediate its ends to the other end of said lever, brushes supported one at each end of said arm and spring means connected to said lever intermediate its ends and tending to turn the lever about its pivot.

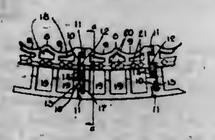
3. In a device of the character described, a pair of substantially parallel levers pivoted at one end, a brush supporting arm pivotally connected intermediate its ends to the other end of each of said levers, a brush supported at each end of said arms, and common spring means connected to both of said levers intermediate their ends and tending to turn the levers about their pivots, but permitting independent movement thereof with respect to each other.



5. In a device of the character described, a pair of substantially parallel levers pivoted at one end, a brush supporting arm pivotally connected intermediate its ends to the other end of each of said levers, a brush supported at each end of each of said arms, a rod loosely connected to both of said levers intermediate their ends and spring means connected to said rod and tending to turn the levers about their pivots.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,268,294. BLOCK OF CLAY OR CONCRETE FOR SEWERS, &c. ALBERT O. STENWICK, Red Wing, Minn. Filed Mar. 15, 1917. Serial No. 155,087. (Cl. 72—51.)

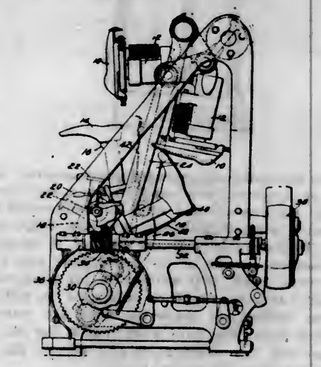


1. Building blocks adapted to be fitted together in a structure, said blocks having each an outer and an inner main face and adjoining faces to form joints, said adjoining faces having each a pair of spaced parallel ribs, each with a longitudinal groove near the block, whereby a lateral ridge is formed on each rib, said ridges arranged in opposite directions on the adjoining faces of the blocks so as to engage with the ridges of one block in the grooves of the ribs on the other block, and when so engaged to form an angular space between the ungrooved sides of the two ribs about midway between the inner and outer main face of each block, and a series of overlapping double-edged wedges adapted to be driven into said space so as to hold the ribs with the ridges firmly engaged in the grooves.

2. Building blocks adapted to be fitted together in a structure, said blocks having each an outer and an inner main face and adjoining faces to form joints, said adjoining faces having each a pair of spaced parallel ribs, each with a longitudinal groove near the block, whereby a lateral ridge is formed on each rib, said ridges arranged in opposite directions on the adjoining faces of the blocks so as to engage with the ridges of one block in the grooves of the ribs on the other block, and when so engaged to form an angular space between the ungrooved sides of the two ribs about midway between the inner and outer main face of each block, and a series of overlapping double-edged wedges adapted to be driven into said space so as to hold the ribs with the ridges firmly engaged in the grooves, said grooves and ridges fitting therein having inclined adjacent faces whereby to draw the blocks together.

3. Building blocks adapted to be fitted together in a structure, said blocks having each an outer and an inner main face and adjoining faces to form joints, said adjoining faces having each a pair of spaced parallel ribs, each with a longitudinal groove near the block, whereby a lateral ridge is formed on each rib said ridges arranged in opposite directions on the adjoining faces of the blocks so as to engage with the ridges of one block in the grooves of the ribs on the other block, and when so engaged to form an angular space between the ungrooved sides of the two ribs about midway between the inner and outer main face of each block, and a series of overlapping double-edged wedges adapted to be driven into said space so as to hold the ribs with the ridges firmly engaged in the grooves, said grooves and ridges fitting therein having inclined adjacent faces whereby to draw the blocks together, said blocks being curved so as to form when put together an arched or even cylindrical structure.

1,268,295. SOLE-LEVELING MACHINE. WILLIAM C. STEWART, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Mar. 23, 1917. Serial No. 156,827. (Cl. 12—35.)



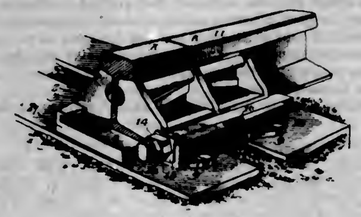
1. A sole pressing machine, having in combination, a pivotally-mounted last post, a last on said post, a cooperating sole pressing form, means for relatively oscillating the last and form to level the sole of a shoe, a heel clamp supported on said post, and means, controlled by the movement of the last, to swing the clamp into engagement with the end of the shoe on the last while maintaining said clamp beyond the surface of the sole and to longitudinally draw the clamp into contact therewith after the clamp engages the end of the shoe.

5. A sole pressing machine comprising a shoe supporting member, a lever fulcrumed upon the shoe supporting member, a heel clamp pivotally mounted upon the lever, means for oscillating the lever, and means for causing the heel clamp to rock about the outer end of the lever to move the heel clamp toward and from a shoe when the lever is oscillated.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

1,268,296. RAIL-JOINT. JACOB H. STULL, Fremont, Ohio. Filed Oct. 3, 1917. Serial No. 194,523. (Cl. 239—6.)

1. A rail joint comprising a horizontal base plate having an L-shaped fish plate formed integrally with one of its edges, said base plate and the horizontal flange of the fish plate having vertically alined openings with which openings in the rail bases are adapted to register, tapered pins for passage through said alined openings, lugs rising from the horizontal flange of said fish plate, and locking pins passing horizontally through said lugs and overlying said tapered pins; together with a second and detachable fish plate operatively associated with said base plate for holding the rails in place.

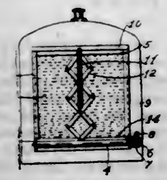


2. A rail clamp comprising a horizontal base plate having an integral fish plate on one edge to abut one side of the rail, the upper side of said base plate, near the other edge thereof, having sockets, a second and L-shaped fish plate whose horizontal flange overlies the last named edge portion of said base plate, lugs depending from said flange into said sockets and adapted for reception in notches in the rail bases, said lugs having notches to receive the edges of said bases; together with means for securing said second fish plate in respect to said base plate.

3. A rail clamp comprising a horizontal base plate having an L-shaped fish plate formed integrally with one of its edges, said base plate and the horizontal flange of said fish plate having vertically alined openings with which openings in the rail bases are adapted to register, fasteners for passage through said alined openings, a detachable L-shaped fish plate whose horizontal flange overlies the edge of the base plate opposite the first named fish plate, said base plate having sockets in its upper side and located adjacent said last named edge, lugs depending from said detachable fish plate into said sockets and adapted for passage through notches in the rail bases, the inner ends of said lugs having notches into which the bases are adapted to extend, and means for securing said detachable fish plate in operative position.

4. A rail clamp comprising a horizontal base plate having an L-shaped fish plate formed integrally with one of its edges and a longitudinal rib formed integrally with and rising from its other edge, said base plate and the horizontal flange of said fish plate having vertically alined openings with which openings in the rail bases are adapted to register, fasteners for passage through said alined openings, a detachable L-shaped fish plate whose horizontal flange overlies said base plate between the rails and said longitudinal rib, said base plates having sockets in its upper side located beneath said detachable fish plate, lugs depending from said detachable fish plate into said sockets and adapted for passage through notches in the rail bases, said lugs having notches into which the edges of said bases are adapted to extend, a wedge driven between said rib and said detachable fish plate, and a horizontal flange on said wedge overlying said rib, said flange and rib having openings for registration to receive a driven fastener.

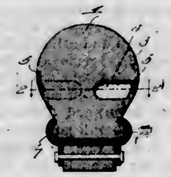
1,268,297. ACTUATING MEANS FOR RADIATOR-PROTECTORS. WILLIS J. SUTCLIFFE, Waterloo, Iowa.



Filed July 2, 1917. Serial No. 178,300. (Cl. 156—28.)

In a device of the character described, an apron, a fixed support, a yieldable resilient connection between said support and said apron adapted to shift the apron in one direction, a lazy-tongs also connected between said fixed support and said apron, and actuating-means connected to said apron adapted to move it in a deverse direction while placing said resilient connection under tension and collapsing said lazy-tongs.

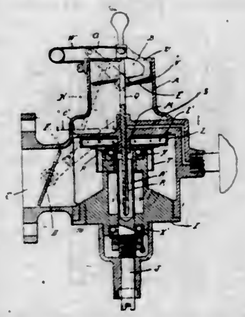
1,268,298. CUSHION-TIRE AND PROCESS OF PRODUCING THE SAME. JOHN L. SWARTZ, Akron, Ohio. Filed July 19, 1917. Serial No. 181,597. (Cl. 154—12.)



1. A one piece cushion tire comprising a tire body molded from rubber, said body having a shallow circumferential channel in each of its sides and transverse air pockets opening into said channels, and flat rubber rings filling said channels and vulcanized to the entire area of the sides and bottoms thereof to seal the outer ends of said pockets.

2. The method of constructing a one piece cushion tire having sealed transverse air pockets, consisting in so molding the tire body from rubber as to provide said body with shallow circumferential channels in its sides and with transverse air pockets opening into said channels, inserting flat rubber rings in the channels, and vulcanizing said rings to the entire area of the bottoms and edges of said channels.

1,268,299. CARBURETER. ALFRED THOMPSON, Detroit, Mich., assignor of fifty-one one-hundredths to Lora E. Beaman, Chicago, Ill. Filed Aug. 14, 1916. Serial No. 114,767. (Cl. 261—49.)



1. In a carbureter, the combination of a casing having an air inlet at the upper end thereof and a lateral outlet for connection with the suction conduit of an engine, a partition extending horizontally across said casing between said inlet and outlet and having a peripheral slot therein, a liquid fuel passage extending through said partition and discharging centrally downward, a revoluble hollow disk having peripheral discharge apertures adjacent to said peripheral slot and a central opening for communication with the downward discharge of said liquid fuel, a revoluble shaft on which said disk is mounted, and a removable head for the lower end of said casing having a journal bearing for said revoluble shaft.

2. In a carbureter, the combination with a casing having an air inlet at the upper end and a laterally-extending

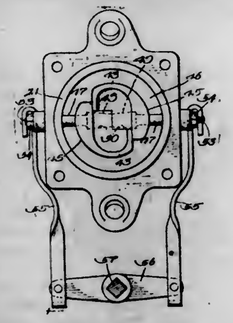
outlet, of a partition extending horizontally across said casing between said inlet and outlet, provided with a peripheral slot and a liquid fuel inlet discharging centrally downward, a revoluble hollow disk arranged adjacent to said partition centrally apertured to receive the downward discharge of liquid fuel and having peripheral jet apertures for the centrifugal discharge of the liquid across the slot in said partition, a shaft on which said disk is mounted, a journal bearing for said shaft within said casing, a throttle-valve, and metering means for the liquid fuel cooperating with said throttle-valve.

3. In a carbureter, the combination of a casing having an air inlet at its upper end and a laterally-extending outlet, a partition extending horizontally across said casing between said inlet and outlet, said partition having a peripheral slot therethrough and a liquid fuel inlet discharging centrally downward, a removable head at the lower end of said casing, a revoluble shaft journaled in said head, a hollow disk mounted on said shaft centrally communicating with the downward discharge of liquid fuel and provided with peripheral jet apertures for the centrifugal discharge of said fuel, a throttle-valve for controlling the flow of air through said casing, a metering pin for controlling the flow of liquid fuel, and connecting mechanism between said throttle-valve and metering pin and causing a simultaneous and corresponding operation thereof.

7. In a carbureter, the combination with a casing having an air passage therethrough, of a horizontally arranged partition extending across said passage and provided with a peripheral slot, a head detachably engaging the lower end of said casing, said head having spaced journals respectively at its opposite ends, a vertical shaft mounted in said journals at a plurality of points, a hollow disk mounted on said shaft arranged adjacent to said partition and provided with peripheral jet apertures, and means for feeding liquid fuel centrally into said hollow disk.

[Claims 4 to 6 and 8 not printed in the Gazette.]

1,268,300. DRAFT-REGULATING DEVICE FOR LOCOMOTIVES. JAMES TROTTER, Chicago, Ill. Filed July 27, 1916. Serial No. 111,548. (Cl. 110—152.)



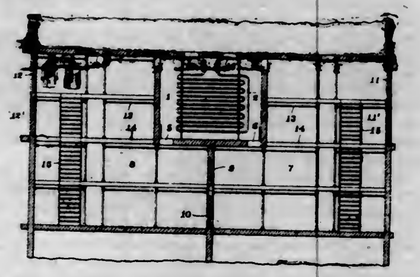
1. An exhaust nozzle embodying a hollow body, and an expansible and contractible deflector for the steam arranged in the nozzle below the top of the nozzle and spaced from the wall thereof to form an annular passage for the steam, said deflector embodying coöperating pivotally mounted sections, said sections being shaped to maintain a substantially continuous circumferential outer face, the space between the parts of the deflector being maintained closed against the passage of steam therethrough, in any position of the parts with respect to each other.

7. An exhaust nozzle embodying a hollow body, and an adjustably mounted inverted frusto-conical shaped deflector for the steam arranged within the nozzle, said deflector embodying complementary sections pivotally connected for relative adjustment.

11. An exhaust nozzle embodying a hollow body, an adjustable inverted conically shaped deflector for the steam arranged within the nozzle, said deflector embodying complementary sections mounted for pivotal movement with respect to each other, a separate shaft detachably engaging each of said sections, a bearing for each of the shafts, means for tying the shafts and sections together, and means for rocking the shafts to move the sections in opposition to each other.

[Claims 2 to 6, 8 to 10, and 12 not printed in the Gazette.]

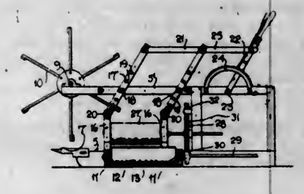
1,268,301. COLD-STORAGE INSTALLATION. WILSON HATCH TUCKER, Montclair, N. J., assignor to Lord & Taylor, a Corporation of New York. Filed Aug. 17, 1914. Serial No. 857,191. (Cl. 62—95.)



1. In a cold storage installation, the combination of a plurality of adjacent communicating storage compartments having a common side wall provided with means for putting the said compartments into communication, a single refrigerating chamber located partially within each of said compartments adjacent the tops thereof and provided adjacent its bottom with a plurality of outlet openings, one of which communicates with one of said compartments, and, adjacent its top, with a pair of inlet openings one of which communicates with one of said compartments, and a closure for each of said openings, whereby each compartment may be independently supplied with cold air through its corresponding outlet opening, or a single compartment may be supplied with cold air through both of said outlet openings, as desired.

[Claim 2 not printed in the Gazette.]

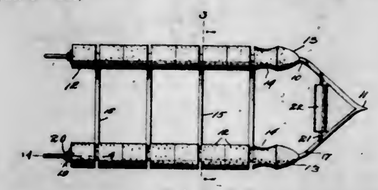
1,268,302. ATTACHMENT FOR HARVESTER-HEADERS. WILLIAM J. WALKER, Lacrosse, Wash. Filed June 6, 1917. Serial No. 173,191. (Cl. 56—89.)



1. The combination with a header frame having a grain receiving platform and a reel mounted upon said frame, of an apron mounted at one side of the header frame, a second apron disposed above the platform, a pair of levers fulcrumed intermediate of their ends upon each side of the header frame and pivotally connected to the relatively opposite ends of the frame for the latter apron, means for adjusting said levers vertically upon the header frame, manually operable means connected to each pair of levers to position the latter apron with respect to the reel, and means for moving said aprons in relatively opposite directions to discharge the straw and weeds at a common point.

2. The combination with a header frame having a platform and a reel mounted upon said frame, of an endless apron mounted at one side of the frame, an apron frame disposed above said platform, spaced levers fulcrumed upon each side of the header frame and pivotally connected at their lower ends to the respective ends of said apron frame, means for vertically adjusting said levers to raise or lower the apron frame, links connecting the spaced levers to each other, manually operable means for each pair of levers, whereby the apron frame may be adjustably positioned with respect to the reel, a vertically inclined apron arranged at one end of said first named apron and means for moving the aprons in relatively opposite directions to discharge the straw and weeds from the machine at a common point.

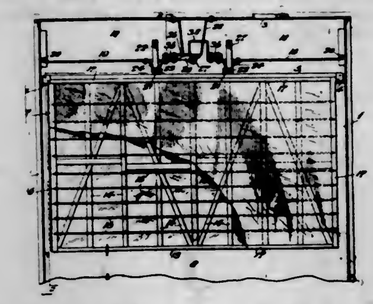
1,268,303. SWIMMING DEVICE. JOHN WANAT, Pittsburgh, Pa. Filed Apr. 30, 1917. Serial No. 165,527. (Cl. 9—11.)



1. In combination, a frame including a pair of parallel side members, floats mounted on said side members, transverse body supporting bars connecting said side members, converging forward ends on said side members, and a chin rest supported on said converging forward ends.

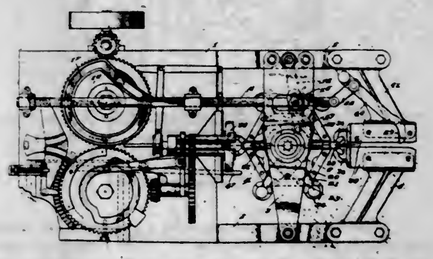
2. In combination, a frame including a pair of parallel side members, floats strung on said side members, downwardly bowed body supporting bars connecting said side members, converging forward ends on said side members, a chin rest supported across said converging forward ends, and hollow runners fixed beneath said side members and parallel thereto and constituting keels for the device.

1,268,304. DUST-COLLECTOR. AMBROSE G. WARREN, Beverly, N. J. Filed Apr. 3, 1916. Serial No. 88,470. (Cl. 183—58.)



In apparatus of the character described, a casing, a plurality of depending screens arranged within the casing, a pair of spaced bars extending transversely of the screens and contacting with the upper ends thereof, a horizontal shaft extending transversely of the screens and arranged above the same and at a point substantially equidistantly spaced from the ends thereof, sets of hammer bars arranged upon opposite sides of said shaft and provided near their inner ends with weights, means to pivotally connect the outer ends of the hammer bars with the casing to swing in a substantially vertical plane, U-shaped guides substantially vertically arranged and secured to the pair of spaced transverse bars and receiving the hammer bars therein, a set of substantially straight trips secured to the inner ends of one set of hammer bars, inverted U-shaped trips secured to the inner ends of the other set of hammer bars, cams rigidly secured to the horizontal shaft and having lifting faces extending in the same direction and adapted to contact with the straight trips and the U-shaped trips, means to rotate the shaft, and air supply means connected with the lower end of the casing.

1,268,305. FEED DEVICE FOR MACHINES FOR TYING OBJECTS WITH WIRE. ROGERS M. WARWICK and EDWIN V. NESSLING, Chicago, Ill., assignors to General Wire Tie Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 19, 1915. Serial No. 22,374. (Cl. 140—93.)



2. In a machine of the kind specified, the combination with means for passing one end portion of a long strand of wire under predetermined tension successively around objects to form loops about the same, and mechanism for twisting the end portions of each loop about each other to tie the same, of means for supporting the object, the latter and said tying mechanism including means for permitting yielding relative movement of said parts toward each other whereby to compensate for the shortening of the end portions of the loop due to twisting the same about each other.

3. Mechanism for tying objects with wire, including means for twisting the end portions of a loop of wire disposed about the object about each other to tie said loop, said means including means whereby said twisting begins at a predetermined point in the loop and continues outwardly therefrom whereby to prevent contraction of the loop during the twisting operation.

8. In a machine for tying objects with wire, a carrier for the objects to be tied, a plurality of pairs of clamps each adapted to engage an object at two points at different elevations, and mechanism for bringing each of said pairs of clamps successively in position relative to the mechine to enable the object carried thereby to be tied.

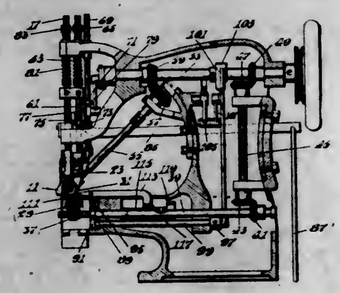
13. In a carrier of the kind specified, a traveling member, a plurality of movable elements carried thereby, object-engaging means carried by said elements, mechanism for effecting opening and closing movement of said means as said elements are moved in respectively opposite directions, means for forcing objects into said means and effecting forced movement of said elements to close said means, means for retaining said elements in position to maintain said means closed about the objects, and means for effecting reverse movement of said elements to effect release of said objects.

19. In a carrier of the kind specified, a traveling member, a plurality of reciprocable plungers carried thereby, object-engaging mechanism mounted on each plunger, means for holding such plunger at the inner and outer limits of its movement respectively, means for forcing each plunger to the inner limit of its movement through the agency of the object, mechanism whereby the object-engaging mechanism is forced into engagement with the

object as said plunger is so moved, said means for holding said plunger at the inner limit of its movement permitting a slight movement of said plunger toward object-releasing position without effecting release of the object, and means for forcing the plunger to the outer limit of its movement to effect release of the object.

[Claims 1, 4 to 7, 9 to 12, and 14 to 18 not printed in the Gazette.]

1,268,306. FOLDING-MACHINE. PEARL J. WENTWORTH, Fort Thomas, Ky., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 7, 1916. Serial No. 130,059. (Cl. 12—55.)



1. A machine for operating upon a piece of work which consists of a piece of material to which a strip of binding is attached, having, in combination, a bed for supporting the work, and means for drawing the free portion of the binding about the attached portion thereof and about the edge of the material and for laying the free edge of said binding down upon the margin of the material.

6. A machine for operating upon a piece of work which consists of a piece of material to which a strip of binding is attached, having, in combination, a bed for supporting the work, means for feeding the work over the bed, a brush located beneath the work, a second brush located above the work, and means for operating said brushes to turn back the binding and then bend it forwardly about the edge of the piece of material.

33. A machine for operating upon a piece of work which consists of a piece of material to which a strip of binding has been attached, having, in combination, means for feeding the work, a gage arranged to engage the edge of the material, a brush arranged in the rear of the gage and adapted to draw the free portion of the binding about the edge of the material, and means for rotating said brush.

37. A machine for operating upon a piece of work which consists of a piece of material to which a strip of binding is attached having, in combination, means for feeding the work, a binding-engaging member and means for causing said member to pull a portion of the binding over that portion of itself which is attached to the material.

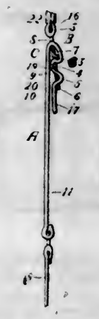
[Claims 2 to 5, 7 to 32, 34 to 36, and 38 to 42 not printed in the Gazette.]

1,268,307. FIREPROOF FLOOR. JAMES A. WHEELER, Somerset county, N. J. Filed Oct. 11, 1912, Serial No. 725,281. Renewed Sept. 25, 1917. Serial No. 193,195. (Cl. 72—18.)



An improved fireproof floor surfacing, comprising a cementitious base, a top surface formed of a plurality of sections each consisting entirely of a solidified fireproof and non-fragile composition which is rigid and of low heat conductivity and undeformable by heat and each of said sections being formed of a plurality of slabs or strips compositely secured together, and a plurality of sections intermediate of said top-surface sections and said cementitious base and each consisting of a solidified fireproof and non-fragile composition which is rigid and of low heat conductivity and undeformable by heat, each of said intermediate sections having an area underlying a plurality of the slabs or strips which compositely form the respective top-surface sections and being secured to the under surface thereof and provided with means for securing an interlocking connection with the cementitious base.

1,268,308. GARMENT-SUPPORTER. BIRDORA H. WHITE, Chicago, Ill. Filed May 8, 1916. Serial No. 96,187. (Cl. 24—194.)



2. A buckle comprising a rectangular frame consisting of vertical side members, horizontal members connecting the upper and lower ends thereof, a plurality of suitably separated bars connecting said side members having teeth projecting downward from their lower edges, and a horizontally disposed vertically movable clamping bar the ends of which are slidably connected to said side members and which has a tongue projecting downwardly and rearwardly from its lower edge.

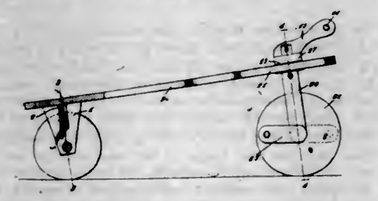
[Claims 1 and 3 not printed in the Gazette.]

1,268,309. VALVE-GRINDING TOOL. EBER B. WHITE, South Bend, Ind. Filed July 26, 1916. Serial No. 111,510. (Cl. 51—12.)



The valve grinding tool comprising a spiral shaft having an operating sleeve mounted thereon for turning the said shaft, a hollow casing mounted on the lower ends of the shaft and including a substantially rectangular member having both ends open the bottom wall of the casing being provided with a longitudinal slot having the lower end of said shaft extended therethrough, the upper wall of the casing also having a slot of relatively less length than the lower slot, studs mounted in the ends of the said lower slot, the interior of said casing being provided with a pair of nuts of a width equal to the width of the said casing whereby the said nuts will be prevented from turning, the said studs having screw threaded ends adapted to be received in the said nuts, the said elongated slot in the lower portion of the casing permitting longitudinal adjustment of the studs toward and away from each other.

1,268,310. CHILD'S VEHICLE. RANDOLPH N. WILKINSON, Huntington, W. Va. Filed Mar. 16, 1918. Serial No. 222,880. (Cl. 208—83.)



2. A child's vehicle including a forwardly and upwardly inclined body for supporting the body of the user in a prone but inclined position, a combined steering and propelling wheel supporting the front of the body, a bolster connected to the rear portion of the body and including spaced bearing blocks, an axle mounted for rotation in the blocks, wheels fitted on and extending across the ends of the axle, and combined fastening and reinforcing devices extending through the wheels and into the axle past the bearing blocks.

[Claim 1 not printed in the Gazette.]

1,268,311. MAIL-CATCHER. SAMUEL M. WILSON, East Durham, N. C. Filed Jan. 13, 1916. Serial No. 71,935. (Cl. 258—20.)



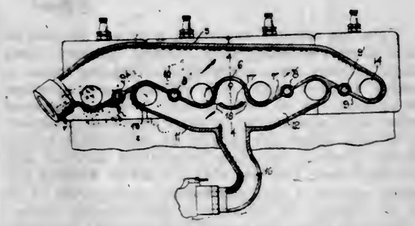
1. A mail catcher, comprising a support, a pair of sleeves rotatably mounted on said support and placed one above the other, said lower sleeve having pockets formed in the top thereof, said upper sleeve having a flange formed on its lower end and provided with openings registering with said pockets, a pin adapted to be passed through said openings for engagement with said pockets, a receptacle carried by said lower sleeve and mail engaging means connected to said upper sleeve and positioned above said receptacle.

3. A mail catcher comprising a supporting post a rotatable sleeve surrounding the lower part of said post, a receptacle secured to said sleeve, a second sleeve surrounding the upper part of post and rotatably supported on said first sleeve, mail engaging means connected to said second sleeve and adapted to be positioned above said receptacle, and means for locking said sleeves together so as to cause the same to revolve in unison about said support.

4. A mail catcher comprising a support having vertically spaced grooved and sockets formed adjacent the grooves, a receptacle, arms secured to the receptacle and encircling the support in the grooves, said arms provided with openings adapted to register with the sockets, a pin adapted to be received in the openings and sockets, a flange formed on the top of the support and having sockets therein, a sleeve rotatably mounted upon the support, a flange formed on the sleeve and provided with openings, a pin adapted to pass through the openings in the flange and be received in the sockets in the flange on the support, arms hingedly connected to the sleeve, springs connected to the sleeve and arms, eyes secured to one of the arms, and rods secured to the opposite arm and adapted to pass through the eyes.

[Claim 2 not printed in the Gazette.]

1,268,312. ENGINE-MANIFOLD. FRANKLIN E. ARNDT, Galion, Ohio, assignor of one-half to David C. Boyd, Galion, Ohio. Filed July 30, 1917. Serial No. 183,465. (Cl. 257—241.)

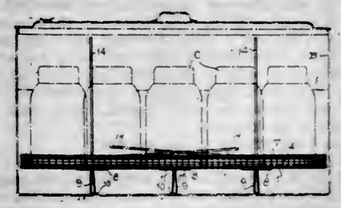


3. An engine manifold having intake and exhaust passages and a transverse partition wall separating said passages, said wall being formed to provide a pocket in the intake passage, a cup-shaped web integrally connecting the opposed manifold walls at the lower side of said pocket adapted to receive a priming charge, and means for introducing the priming charge into said pocket.

4. An engine manifold having intake and exhause passages, a transverse partition wall separating said passages from each other and formed to provide a pocket in the intake passage, one of the side walls of said pocket being provided with air inlet openings, and manually operable means for regulating the admission of atmospheric air through said openings into said pocket.

[Claims 1, 2, 5, and 6 not printed in the Gazette.]

1,268,313. RACK. MORRIS A. BARR, Ardmore, Pa. Filed Oct. 8, 1917. Serial No. 195,442. (Cl. 53—1.)



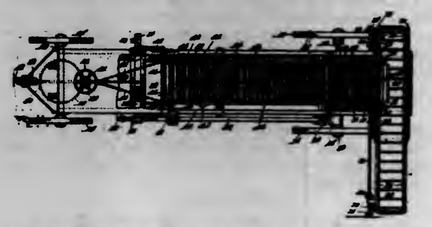
1. A rack of the character described comprising two frames of similar configuration and dimensions and in

predetermined spaced relation, a reticulated fabric disposed across one of the frames and having its marginal portions angularly disposed and engaged with the second frame and transversely disposed strips secured to the first named frame and the reticulated fabric, each of said strips having its transverse central portion flexed to afford an outstanding supporting member, the outer portion of said supporting member being rounded.

3. A rack of the character described including a bottom of reticulated fabric and strips carried by the rack and underlying the fabric, each of said strips having its transverse central portion flexed to afford an outstanding supporting member.

[Claim 2 not printed in the Gazette.]

1,268,314. GRADING-MACHINE. HENRY L. BARTON, Gary, Ind., assignor of one-third to John B. Green and one-third to George M. McRoberts, Gary, Ind. Filed Oct. 11, 1915. Serial No. 55,168. (Cl. 37—25.)



1. A grading machine comprising a frame; an elevator on said frame; a transversely movable conveyer frame arranged to slide transversely of said grading frame in operative relation with said elevator; an operating shaft at each end of said conveyer frame; a conveyer traveling over said shafts; a shaft extending longitudinally of said frame and capable of longitudinal motion relatively thereto; operative connections between said longitudinal shaft and said conveyer shafts whereby longitudinal motion of said longitudinal shaft serves to reverse the direction of operation of said conveyer shafts; and automatic means for effecting longitudinal movement of said longitudinal shaft upon transverse movement of said conveyer frame to effect reversing of said conveyer, substantially as described.

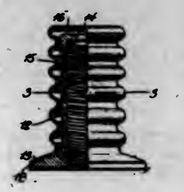
2. A grading machine comprising a wheeled frame; a plow on said frame; an inclined elevator coöperating with said plow and arranged longitudinally in said frame; a transversely movable conveyer frame arranged to slide transversely of said frame in operative relation with said elevator; an operating shaft at each end of said conveyer frame; a conveyer traveling over said shafts; a shaft extending longitudinally of said frame and capable of longitudinal motion relatively thereto; bevel gears on said conveyer shafts; bevel gears on said longitudinal shaft arranged to mesh alternately with the bevel gears on said conveyer shaft upon longitudinal movements of said longitudinal shaft; means for moving said conveyer frame transversely; and automatic means for effecting longitudinal movement of said longitudinal shaft upon each transverse movement of said conveyer frame to effect reversing of said conveyer, substantially as described.

3. In a machine of the class described, the combination with an elevator of a scoop arranged to direct material thereto; and means located under said scoop and adjacent said elevator in position to receive any material falling between said scoop and elevator and operating to discharge said falling material laterally from said scoop, substantially as described.

[Claim 4 not printed in the Gazette.]

1,268,315. INSULATOR-THIMBLE. RAYMOND A. BECKER and THOMAS E. MADDEN, Hillsboro, Ill. Filed June 6, 1917. Serial No. 173,162. (Cl. 173—321.)

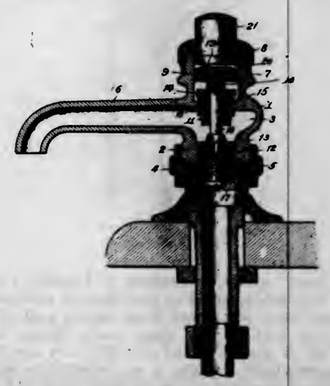
1. In an insulator thimble, the combination of an inner cylindrical section having internal threads and an outstanding base flange, and an outer shell section of greater internal diameter than the external diameter of the inner section and provided with a base flange engaging about the base flange of the inner section to hold the sections in concentric spaced-apart relation, said outer section being provided with annular corrugations and being of greater length than the inner section.



2. In an insulator thimble, the combination of an inner section of cylindrical form closed at one end and provided with a base flange at its opposite end, said inner section having internal threads adapted to detachably engage a supporting pin, and an outer section of tubular form fitting over the inner section and provided with a closed end and an outwardly flaring flange at its opposite end adapted to be turned over the base flange of the inner section for uniting said inner and outer sections, the outer section being also provided with annular corrugations extending from end to end of the outer section to provide peripheral beads adapted to be secured in the opening of an insulator body, and adapted to absorb mechanical stresses transmitted to the thimble by the supporting pin.

3. In an insulator thimble, the combination of a pair of concentric spaced-apart sections, the inner section having internal threads adapted for detachable engagement over a supporting pin, the outer section being provided with annular corrugations forming alternately arranged beads and grooves extending from end to end of the outer section, and adapted to absorb mechanical stresses incident to the contraction and expansion of the inner section and supporting pin, said sections being closed at one end and the outer section being of greater length than the inner section to accommodate the longitudinal expansion and contraction of the sections, and said sections being provided at their opposite ends with interlocking base flanges adapted to unite the same.

1,268,316. UNIVERSAL FAUCET. WILLIAM J. BERGENS, Muskegon, Mich., assignor to Universal Faucet Company, Muskegon, Mich., a Corporation of Michigan. Filed Aug. 20, 1917. Serial No. 187,299. (Cl. 137—4.)

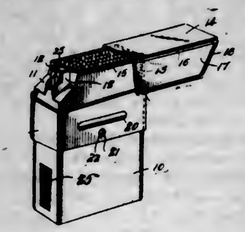


1. In a faucet of the type described, the combination of a casing having an outlet chamber a wall of which is formed with a central orifice, a valve seat or bushing fitted in said orifice and removable through the outlet chamber, a valve head closing against the underside of said valve seat and having a valve stem extending through the outlet chamber, an adjustable head having screw-threaded connection with one end of said valve stem and provided with a diametric groove in its upper end, a spring locking pin arranged in said groove, the end of the valve stem having a transverse groove for engagement with said pin, and manually actuated means engaging said head and adapted to effect an opening movement of said valve head, substantially as set forth.

4. In a faucet of the type described, the combination of a casing having an outlet chamber and a guide neck formed with a cylindrical guide bore ending at its lower end with a screw-threaded orifice communicating with the outlet chamber aforesaid, a wall of the outlet chamber having a central orifice, a bushing fitted in said central orifice, a valve head closing against the underside of said bushing and having a valve stem extending through the outlet chamber and into the guide neck aforesaid, manually actuated means for imparting an opening movement to the valve head, an adjustable bushing fitting the screw-threaded orifice of the aforesaid cylindrical bore and having an open top cavity in its upper end, a packing washer disposed in said cavity and surrounding the valve stem and a spring adapted to hold said washer in place, substantially as set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,268,317. SINGLE-DELIVERY MATCH-SAFE. LINCOLN BLAKE, Hayward, Cal. Filed Feb. 24, 1917. Serial No. 150,710. (Cl. 206—33.)



1. A match box comprising a body adapted to receive a plurality of matches and having a restricted outlet corner adapted to receive the matches one at a time, a cap slidably fitting over the end of the box and adapted to normally cover said outlet corner, and a slide mounted exteriorly on said body and having connection with the cap to actuate the same for uncovering said outlet corner and releasing a match upon movement of the slide.

2. In a match box, the combination of a body provided with an open top and having a restricted outlet corner at its forward edge, a cap slidably fitting over said open top of the box and adapted to normally close said outlet corner, a sleeve surrounding said box and adapted to slide toward and from the open end thereof, and a connecting pin engaging said sleeve, said cap and the body to secure the same in assembled relation, said cap and body having inclined and vertical guideways respectively for said pin to actuate said cap upon the sliding of the sleeve for uncovering said outlet corner to enable the removal of the matches one at a time.

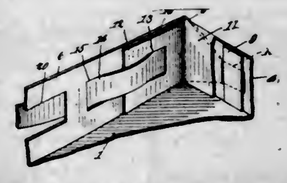
3. In a match box, the combination of a relatively flat, deep body adapted to receive a plurality of matches therein and provided with a diagonally extending slotted wall at its upper forward corner adapted to receive therein said matches in a single line, a cap slidably fitting over the upper open end of the box and adapted to normally overhang said slot, a sleeve slidably mounted on said body, and a connection between said sleeve and said cap for moving the latter backwardly to uncover the outer end of said slot upon the downward movement of said sleeve.

4. In a match box, the combination of a hollow body open at its upper end and provided with a diagonally extending closure wall at its forward upper corner, said wall being longitudinally slotted for the reception of matches therein in a single row and provided with upstanding flanges at the opposite sides of the slot to guide and inclose the matches, said flanges being cut away at their forward edges to expose the outermost match, a U-shaped cap fitting over the open end of the box and provided with diagonally extending slots in its opposed flanges, a sleeve slidably mounted on said body, and a pin carried by said sleeve and engaging in said inclined slots of the cap whereby vertical movement of the sleeve is adapted to slide said cap back and forth upon the open end of the body to alternately expose and close in said outermost match.

8. In a match box, the combination of a hollow body having an open top and contracted flanges at one corner of the top to receive matches in a single line, said flanges being interrupted at their outer ends to expose the first match, a bridge-piece arranged between the upper edges of the flanges for housing and retaining several of the succeeding matches, a cover slidably mounted on the body to normally cover all of said matches, and means on the body for moving the cover to expose said first match.

[Claims 5 to 7 not printed in the Gazette.]

1,268,318. BOX. GEORGE F. BROWN, Helena, Mont. Filed Aug. 28, 1917. Serial No. 188,617. (Cl. 229—52.)

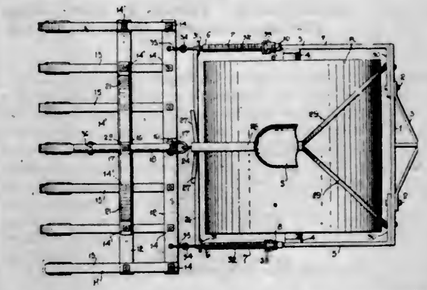


1. A box having top and end walls, said end walls having portions underlapping the top wall, and a handle strap engaging through said top wall and anchored to said portions.

7. A box embodying sections hinged together and adapted for telescopic engagement, top and end walls for each section, end walls of one section having portions underlapping the top wall thereof, a handle strap passing through the top wall and anchored to said portions, and an element secured to the other section for holding the sections in telescopic engagement.

[Claims 2 to 6 not printed in the Gazette.]

1,268,319. COMBINED ROLLER AND HARROW. DOMER A. BURNS, Miller, Ark. Filed Dec. 22, 1917. Serial No. 208,371. (Cl. 55—12.)



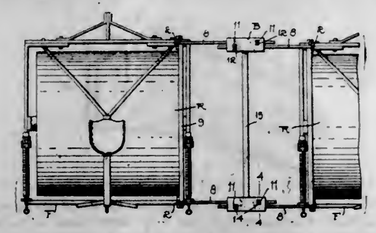
1. A device of the character described comprising a frame, a harrow structure positioned rearwardly of the frame, slidable members engaged with the side members of the frame and having substantially rectilinear movement, and connections between said slidable members and the opposite end portions of the harrow structure.

6. A device of the character described comprising a frame, a harrow structure positioned rearwardly of the frame, slidable members engaged with the frame, connections between said slidable members and the opposite end portions of the harrow structure, a member extending rearwardly from the frame and overlying the harrow structure and mounted for movement in a vertical plane, and connection between said member and harrow structure whereby said harrow structure may be raised or lowered.

10. A device of the character described comprising a frame, members secured to the side members of the frame and provided with racks, members surrounding said last named members and the side members of the frame and mounted for sliding movement, a latch mechanism carried by each of the sliding members and coacting with the adjacent rack for holding said sliding member normally against movement, a harrow structure positioned rearwardly of the frame, and connections between the sliding members and the opposite end portions of the harrow structure.

[Claims 2 to 5, 7 to 9, 11, and 12 not printed in the Gazette.]

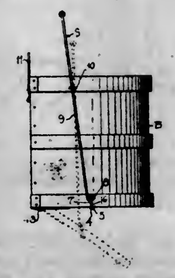
1,268,320. COUPLING ATTACHMENT. DOMER A. BURNS, Miller, Ark. Filed Jan. 26, 1918. Serial No. 213,916. (Cl. 55—6.)



2. In combination with bodies arranged side by side in spaced relation, a coupling attachment for adjacent bodies comprising two substantially duplicate sections, each of said sections consisting of elongated members pivotally engaged at their lower extremities with a frame, the opposite extremities of the members being provided with laterally directed extensions, the extensions of one section overlapping the extensions of the adjacent section, a rigid member connecting the extensions of each of the sections, blocks through which the extensions of the sections are adjustably disposed, and means for holding said extensions against movement relative to the blocks.

[Claims 1 and 3 not printed in the Gazette.]

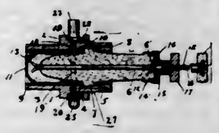
1,268,321. RECEPTACLE. JOSEPH E. BYRD, Mount Olive, N. C. Filed Sept. 12, 1917. Serial No. 191,018. (Cl. 56—99.)



2. In combination with a receptacle and a swinging bottom therefor, a rod extending across the bottom at substantially the center thereof and disposed beyond the opposite sides of the receptacle, guide members carried by opposite side portions of the receptacle, a bail including side arms slidably engaged with the guide members and operatively engaged with the extended portions of the rod, and a hand grasp carried by the upper portion of the receptacle.

[Claim 1 not printed in the Gazette.]

1,268,322. IGNITER FOR INTERNAL-COMBUSTION ENGINES. WILLETT F. CLARK, Phoenix, Ariz. Filed Feb. 9, 1914, Serial No. 817,565. Renewed Aug. 10, 1917. Serial No. 185,633. (Cl. 123—169.)



1. An igniter comprising an insulator having a bore, an adjustably mounted conductor in said bore, and a cap receiving one end of the insulator, the adjacent end of the bore being enlarged to receive packing to be compressed against the inside of the cap.

2. An igniter comprising a casing having an opening or passage to admit a cleaning or a motive agent, a band surrounding the casing and inclosing a passage communicating at its inner end with the opening, and a valve in the passage in the band, the said passage extending downward adjacent the opening when the igniter is mounted, and having a seat beyond the valve, whereby the valve can be actuated by gravity to close the passage.

3. An igniter comprising a casing having a plurality of openings leading therethrough from the outside to the inside thereof, a groove on the outside of the casing communicating with said openings and means engaging the casing and covering the groove, and having an opening or passage leading to the groove.

[Claims 4 to 9 not printed in the Gazette.]

1,268,323. PROCESS OF TREATING ORES. HAROLD EDWIN CLEAVES and FREDERICK W. HORTON, Washington, D. C. Filed Mar. 14, 1917. Serial No. 154,759. (Cl. 75—17.)

1. The process of treating ores or compounds which contain one or more of the metals copper, lead, and zinc, associated with undesirable substances, which comprises treating such ores or compounds with a gaseous reagent capable of reacting with said metals under non-oxidizing conditions to form volatile metal compounds, while maintaining such ores or compounds at a temperature at which one or more of the metal compounds thus formed will be volatilized.

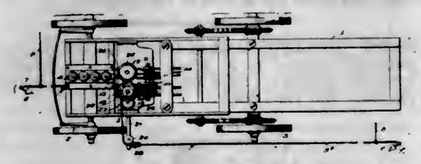
2. The process of treating ores or compounds which contain one or more of the metals lead and zinc, which comprises treating such ores or compounds with a gas containing hydrogen chlorid, while maintaining the ores or compounds at a temperature at which one or more metal chlorids will be formed and volatilized.

3. The process of treating ores or compounds which contain one or more of the metals lead and zinc, which comprises treating such ores or compounds with a gas containing hydrogen chlorid, while maintaining the ores or compounds at a temperature of from 800 to 1100° C.

4. The process of treating ores containing lead and zinc sulfids which comprises passing hydrogen chlorid in contact with the ore, while maintaining the latter at a temperature at which lead and zinc chlorids and hydrogen sulfid will be formed and at least one of said substances volatilized.

5. The process of treating material containing lead and zinc sulfids which comprises passing a stream of hydrogen chlorid over said material while maintaining the latter at a temperature of about 1000° C., leading off the resulting gas containing lead and zinc chlorids and separating said chlorids from the gas.

1,268,324. TRACTOR. JOSEPH COCHRAN, New Orleans, La. Filed Mar. 1, 1915, Serial No. 11,812. Renewed Dec. 3, 1917. Serial No. 205,237. (Cl. 104—92.)



1. In a tractor, draft mechanism comprising a chain, a draft pocket sheave having pockets and intervening channels, and a take-off sheave, said sheaves coöperating with the chain, and means for driving the said sheaves at the same speed.

3. In a tractor, draft mechanism comprising a chain, a draft pocket sheave having pockets and intervening channels, and independent take-off pocket sheaves each having pockets and intervening channels, said take-off sheaves being arranged to direct the chain to opposite sides of the tractor and said pocket sheave engaging the chain for draft purposes and said chain being adapted to be passed over either one of the take-off pocket sheaves according as it is desired to take off the chain to one side or the other, and idlers respectively adapted for the passage of the chain thereover according to which of the take-off sheaves is employed.

6. In a tractor, draft mechanism comprising a chain, a draft pocket sheave having pockets and intervening channels, and take-off means for the chain comprising a sheave mounted to be moved inwardly or outwardly to different positions of lateral adjustment in relation to the tractor and draft pocket sheave for the purpose of laying the chain at different points in relation thereto.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,268,325. REINFORCED-CONCRETE POLE-BASE. PHILIP H. COLE, Shanghai, China, assignor to W. Roy McCanne, trustee, Rochester, N. Y. Filed Aug. 25, 1916. Serial No. 116,848. (Cl. 72—84.)

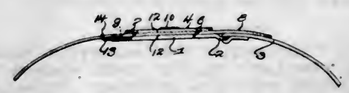


1. In combination, a concrete base having its major portion adapted to be disposed below the surface of the ground, a plurality of angle bars symmetrically disposed in said base and forming reinforcing means for the base, the bars being disposed with their concave sides facing inwardly and projecting from the concrete to form a socket for receiving the shaft of a wooden pole, and circumferentially extending bracing means securing together and bracing the top of said angle bars with respect to each other, said bracing means lying wholly outside of the socket.

2. In combination, a hollow concrete base having its major portion adapted to be disposed below the surface of the ground, a plurality of angle bars symmetrically disposed in said hollow base and forming reinforcing means for said base, said bars projecting from said concrete to form a socket, reinforcing angles for reinforcing said first angle bars where they emerge from said concrete base, bracing means comprising circumferential and diagonal braces for securing the upper ends of said first angle bars together above the concrete and a round wooden pole having its lower end encircled and supported by said bars and braces.

[Claims 3 to 8 not printed in the Gazette.]

1,268,326. BELT-BUCKLE. GEORGE W. CONLEY, Wheaton, Ill. Filed May 26, 1917. Serial No. 171,272. (Cl. 24—166.)

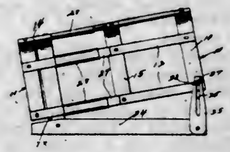


1. A belt buckle comprising a pair of superposed plates having teeth on their opposed faces for biting engagement with the belt, links connecting said plates, one of said links having an extension projecting beyond the inner plate and adapted to be engaged by the body of the wearer to hold said plates united, said links being positioned at oblique angles to the plates when in operative position.

3. A belt buckle comprising a pair of superposed plates, links connecting said plates and adapted to be obliquely disposed relatively thereto when in closed operative position and to extend at right angles when in inoperative position, one of said plates being longer than the other, a catch pivoted at one end on the longer plate and having its free end adapted to engage the shorter plate when in operative position to hold said plates against longitudinal movement relatively to each other.

[Claim 2 not printed in the Gazette.]

1,268,327. ADJUSTABLE CRADLE. LEONARD CONRAD, Pasadena, Cal. Filed Oct. 3, 1917. Serial No. 194,534. (Cl. 5—41.)



5. A surgical cradle of the class described comprising a main frame including a central bar, transverse ribs adjustable laterally relative thereto, longitudinal ribs secured to said transverse ribs, means associated with said central bar for securing said transverse ribs in adjusted positions, guide members carried by said longitudinal ribs, an auxiliary frame including longitudinal ribs slidably mounted in the last named guide members, said auxiliary frame including sections adjustable laterally relative to each other, and means for securing said sections in adjusted positions.

[Claims 1 to 4 not printed in the Gazette.]

1,268,328. RAIL-BOND. LAWRENCE P. CRECELIUS, Cleveland, Ohio. Filed July 24, 1916. Serial No. 110,857. (Cl. 173—278.)

1. As an article of manufacture, a rail bond adapted to be attached to the adjoining ends of two rails, and com-

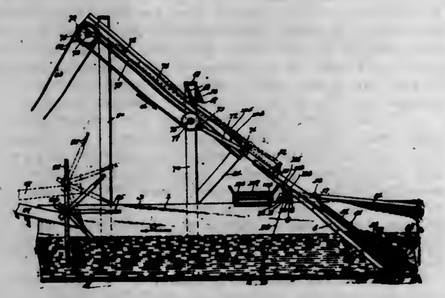
prising a conductor having a terminal part and a sleeve intimately attached to such terminal part, said sleeve having a portion which only partly surrounds said part of the conductor leaving exposed through the sleeve one face of the conductor which is designed to be attached to the rail, and having another portion which substantially entirely and relatively loosely surrounds the conductor.



3. As an article of manufacture, a rail bond comprising a conductor having a terminal sleeve which loosely and entirely surrounds the conductor at one point and which is intimately attached and only partially surrounds the conductor at other points, one face or side of the conductor being thus exposed.

[Claims 2 and 4 not printed in the Gazette.]

1,268,329. APPARATUS FOR REMOVING DEBRIS FROM STREAMS. FRANCIS CUTTLE, Riverside, Cal. Filed June 26, 1917. Serial No. 176,980. (Cl. 210—16.)



1. The combination with a channel for water, of a screen collapsibly inserted in said channel to catch debris, means to hold the screen against collapsing, means operative by raising of the water to a predetermined level to release the screen-holding means, and means operating to move the debris from the screen and to discharge it outside of said channel.

2. The combination with a channel for water, of a screen collapsibly mounted in said channel, means to hold the screen against collapsing, and means operative by raising of the water to a predetermined level to release the screen-holding means to allow the screen to collapse.

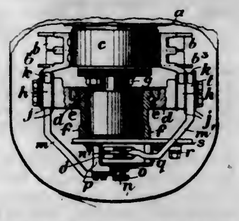
3. The combination with a channel for water, of a screen collapsibly mounted in said channel to catch debris, means to hold the screen against collapsing, means operating to move the debris from the screen and to discharge it outside of the channel, and means operative by raising of the water to a predetermined level to release the screen-holding means to allow the screen to collapse.

4. The combination with a channel for water, of a screen collapsibly mounted in said channel to catch debris, means to hold the screen against collapsing, means operative by raising of the water to a predetermined level to release the screen holding means, a conveyer extending from adjacent one end of the screen to one side of the channel, means to operate the conveyer, and means to move debris from the screen to the conveyer.

5. The combination with a channel for water, of a screen collapsibly mounted on said channel, means to hold the screen in uncollapsed position to catch debris, a conveyer extending from adjacent the screen when said screen is in uncollapsed position to one side of the channel, means to operate the conveyer, means to move debris from the screen to the conveyer, and means operative by raising of the water to a predetermined level to release the screen-holding means to allow the screen to collapse.

[Claims 6 to 22 not printed in the Gazette.]

1,268,330. DYNAMO. ALFRED HENRY DARKER, London, England, assignor to J. Stone & Company Limited, Deptford, England. Filed Oct. 10, 1917. Serial No. 195,694. (Cl. 171—318.)



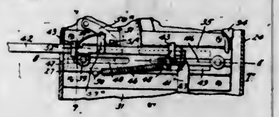
1. Rocking terminal contact mechanism for dynamo electric machines comprising a rocking member, contact members mounted on said rocking member and extending toward the center of revolution, and fixedly mounted contacts adapted to engage the inner end of said contact members in such manner as to permit of the desired rocking movement thereof.

8. In a dynamo electric machine and in combination a rocking brush holder support, conductor arms connected with respective holders and extending toward the center of revolution, disk shaped contact pieces on the ends of said arms, and fixedly supported central contacts engaging with respective disks in such manner as to permit rocking movement thereof around said axis.

12. Brush reversing and switching gear for dynamo electric machines comprising a rocking support, brush holders thereon, an arm extending from one of said holders and toward the center of revolution, said arm being formed at its inner end with a flattened disk portion, an off-set contact disk in two parts secured concentrically to said disk portion one of said parts being completely insulated, a fixed contact engaging the disk portion of the arm, and a plurality of contacts around the periphery of the two part disk substantially as set forth.

[Claims 2 to 7 and 9 to 11 not printed in the Gazette.]

1,268,331. VENDING-MACHINE. THERON W. DE MOTT, Oxford, Wis. Filed Aug. 25, 1917. Serial No. 188,213. (Cl. 194—80.)



1. In a vending machine, the combination of an article delivery slide, a coin receiving chute, coöperating slides between which the coin is delivered from the chute and by which it is carried to the discharge duct, means for manually operating said slides in one direction, resilient means for independently returning each slide to normal position, and means for locking said article delivery slide in the normal position of the machine and during the movement of the coin slides.

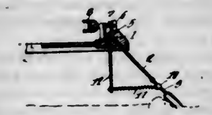
6. In a vending machine, the combination with a coin delivery slide comprising two alined independent members of the same thickness as a proper coin having depressions in their adjacent ends which together form an opening of the exact size to receive the coin, manual operating means connected to one of said slide members for moving both slides in one direction, a spring connected to each of said members for returning them to normal position, a coin receiving chute for directing the coin between said slides, a coin discharge duct, and means adapted to engage one of said slide members or the coin for preventing the complete movement of said slides when a coin of other than proper thickness and diameter has been received between the members thereof.

9. In a vending machine, the combination of a manually operable article delivery slide, a coin slide comprising two alined members having depressions in their adjacent ends which together forms an opening of the exact size of the coin which operates the machine, manually operable means connected to one of said slide members for moving both slides in one direction, a spring connected to each of said members for returning them to normal position, and locking means to prevent movement of the article delivery slide actuated by means connected to the coin delivery slide during the complete movement thereof.

12. In a vending machine, a coin slide therefor comprising two endwise alined coöperating members normally separated but adapted to abut and of a thickness equal to the operating coin, each of said members having a depression in its abutting end that together form an opening to receive a coin of the exact diameter of the coin for operating the machine, means attached to one of said slides for moving both of them in one direction to deliver the coin to the machine, and an independent resilient means acting on each slide member to return said members to normal position.

[Claims 2 to 5, 7, 8, 10, 11, and 13 to 16 not printed in the Gazette.]

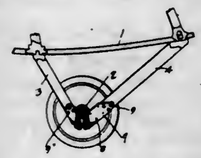
1,268,332. CORN-CULTIVATOR. GEORGE DUNAVAN, Mount City, Kans. Filed Dec. 27, 1917. Serial No. 209,118. (Cl. 97—25.)



1. A cultivator comprising a support, a rotatable cultivator arm carried by said support, said cultivator arm provided with a swinging lower end, agitating fingers carried by said swinging lower end of said cultivator arm, and means for yieldably holding said swinging lower end of said arm in engagement with the ground over which said arms travel.

[Claims 2 and 3 not printed in the Gazette.]

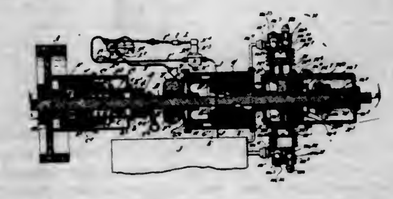
1,268,333. LANDING-GEAR CONSTRUCTION OF AEROPLANES. FRITHIOF GUSTAF ERICSON, Toronto, Ontario, Canada. Filed Jan. 25, 1918. Serial No. 213,773. (Cl. 244—2.)



In combination with the downwardly converging front and rear struts of an aeroplane landing gear, a block having a knee form providing portions upwardly diverging from near the center of the block, said portions having their end faces inclined and convergent upwardly to form butt joints with the ends of the struts, plates extending along the sides of the block and beyond the same with means for securing said plates to the block and to the ends of the struts, substantially as described.

1,268,334. POWER TRANSMISSION. ARTHUR C. EVERETT, Boston, Mass. Filed Aug. 16, 1913. Serial No. 785,013. (Cl. 74—46.)

1. In a transmission mechanism, a power shaft, a transmission shaft, a sleeve mounted to slide longitudinally on said transmission shaft and to rotate therewith, means for connecting said power shaft and said transmission shaft to cause the rotation thereof, located at one end of said sleeve, and means for disconnecting said power shaft and said transmission shaft located at the other end of said sleeve, and means for moving said sleeve whereby said transmission shaft may be rotated or stopped, said means comprising a piston and spring and connections between said piston and spring and said sleeve, and means whereby compressed air may be supplied to said piston to operate it.



2. In a transmission mechanism, a power shaft, a transmission shaft, a sleeve mounted to slide longitudinally on said transmission shaft and to rotate therewith, means for connecting said power shaft and said transmission shaft to cause the rotation thereof, located at one end of said sleeve, and means for disconnecting said power shaft and said transmission shaft located at the other end of said sleeve, and means for moving said sleeve whereby said transmission shaft may be rotated or stopped, said means comprising a piston and spring and connections between said piston and spring and said sleeve, and means whereby compressed air may be supplied to said piston to operate it, said last-named means comprising an air pump, a clutch one member of which is connected to said transmission shaft to rotate therewith and the other member of which is slidably mounted on said transmission shaft, means for holding said members normally in contact, an air tank and means connected thereto and operated by high pressure therein whereby said two members may be separated and said air pump stopped.

3. In combination with a source of power, a shaft, a clutch and brake mechanism mounted thereon to operate in inverse relation substantially as described, a clutch-controlled air pump operated by said shaft, an air tank connected thereto, connections between said tank and said clutch and brake mechanism whereby the operation thereof may be controlled, and connections between said tank and said pump to control the air pressure in said tank.

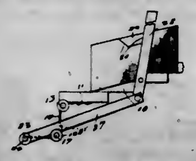
4. In a device of the kind described, in combination with a source of power, a shaft, a spring-controlled clutch mounted on said shaft normally in connecting relation thereto, a compressed air tank, means connected with said tank and said clutch whereby the air pressure of said tank will release said clutch, a brake also mounted on said shaft connected to said clutch and operable inversely upon the release of said clutch, means operated by said shaft to control the supply of air pressure in said tank, and means whereby the action of air pressure upon said clutch and brake mechanism will be definitely controlled.

5. In a device of the kind described, in combination with a source of power, a shaft, a clutch and brake mechanism mounted thereon to operate in inverse relation substantially as described, an air tank, pneumatic means connecting said mechanism and said tank, an automatic check valve located in said pneumatic connection, and means operable by hand whereby the movement of said valve may be adjusted and the amount of pressure to be used will be definitely controlled.

1,268,335. FOLDING VEHICLE-STEP. SAMUEL P. FAIRCHILD, Sheridan, Mont. Filed Oct. 12, 1917. Serial No. 196,227. (Cl. 105—86.)

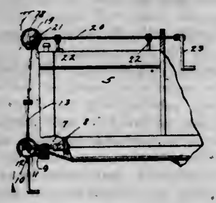
1. In a device of the class described, the combination, with a plurality of stationary steps; of a foldable step in-

cluding a riser section pivoted to one of the stationary steps, a tread section pivoted to said riser section and having the ends of the pivot therefor extending beyond the ends of said sections, a hanger pivoted to another of said stationary steps, and links connecting said hanger with said tread section and adapted to engage the projecting ends of the pivot for said riser and tread sections when the same are in their operative positions.



2. In a device of the class described, the combination with a plurality of stationary steps; of a foldable step including a riser section having its upper edge pivoted to the lowermost stationary step at its outer edge to provide a bearing, a tread section for the foldable step having its rear edge provided with bearings engageable on each side of the bearing of said riser section, a pivot rod extending through said bearings and having its ends projecting beyond the ends of said sections, links pivoted to the forward edge of said tread section and engageable with the projecting ends of said pivot rod when the foldable step is not in operative position, a hanger pivoted to said stationary steps and pivotally connected to said links, and a level secured to said hanger and operated to swing the same about its pivot whereby to adjust said foldable step to operative and inoperative positions.

1,268,336. AUTOMOBILE CRANKING DEVICE. SAMUEL P. FAIRCHILD, Sheridan, Mont. Filed Oct. 12, 1917. Serial No. 196,228. (Cl. 74—54.)



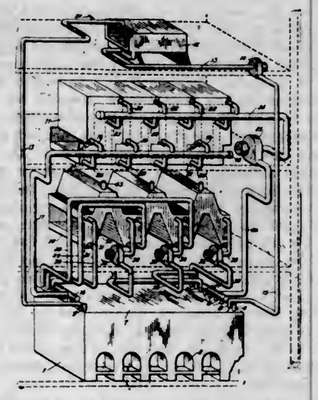
1. In a cranking device for motor vehicles, the combination with the crank shaft; a gear carried thereby, an oscillatory and a rotatable shaft associated with said crank shaft and having a gear thereon adapted to mesh with the first named gear, another gear carried by said oscillatory and rotatable shaft, a slidable rod pivotally connected to the last named shaft and having a gear thereon meshing with the last named gear, and means for sliding and rotating said rod whereby to oscillate the last named shaft and operate said gears to rotate the crank shaft.

[Claim 2 not printed in the Gazette.]

1,268,337. HEATING MEANS FOR BAKING-OVENS. WILLIAM F. L. FISCH, Birmingham, Ala. Filed Aug. 16, 1915. Serial No. 45,708. (Cl. 107—63.)

1. In combination, a plurality of baking chambers, a common furnace for heating said chambers, a piping system comprising multiple circuits to circulate a heat distributing medium from said furnace to the several chambers, and instrumentalities, including blowers and valves to positively induce and to independently control each of said circulations.

2. In a baking apparatus, a plurality of baking units, a closed passage in each unit through which a heating medium is passed, a separate piping circuit to each unit, a furnace to heat the medium in each circuit, blower means in the circuit to each unit to positively induce and regulate its respective circulation, and valve means in each circuit.



5. In a baking apparatus, a plurality of separate baking chambers, a closed circuit piping system connected with each baking chamber and adapted to heat the same, blower and valve means to independently control the heat for each baking chamber by controlling the circulation of air through the piping system leading thereto, and a common hot air furnace for the piping system, substantially as described.

6. In a baking apparatus, a plurality of baking chambers, independently controllable means to heat each chamber, said means comprising hollow chamber walls, a furnace, and a closed piping circuit leading through the furnace and connected to each chamber, the several pipe circuits where they pass through the furnace being disposed transversely to the flow of the products of combustion and arranged to form staggered baffles about which the products of combustion flow with a circuitous course, substantially as described.

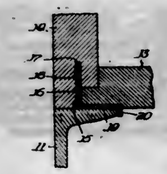
[Claims 3 and 4 not printed in the Gazette.]

1,268,338. NECKTIE-HOLDER. DANIEL FORSBERG, Brooklyn, N. Y. Filed Sept. 12, 1917. Serial No. 190,914. (Cl. 2—84.)



A necktie holder of the character described, comprising a front member constituting a former for a four-in-hand tie and a rearward member coöperating with the front member to provide a clamp for the tie, said rearward member being spaced from and hingedly connected to the front member so as to provide transversely of the holder, between the front member and the axial portion of the rearward momber, a space through which the ends of the tie may be vertically drawn, said rearward member having adjacent to and movable with the hinge connection a clamping portion which by actuation of the rearward member on its axis may be swung across said space and into clamping or releasing relation with the front member, as desired, thereby clamping or releasing the interposed ends of the tie, said rearward member having also means for attachment to a collar button.

1,268,339. CAR-FLOOR CONSTRUCTION. WILLIAM E. FOWLER, Sr., Chicago, Ill., assignor to The Fowler Car Company, Chicago, Ill., a Corporation of Illinois. Filed May 22, 1915. Serial No. 29,794. (Cl. 105—15.)



1. In a railway car, the combination of floor and side boards, the lowermost side board having a saw cut between its edges and located substantially midway between its sides, a Z-shaped metallic member, a vertical leg of which occupies said saw cut, a horizontal leg of which lies upon a frame member of the car and the other vertical leg of which lies alongside of said frame member, and a floor board resting upon said horizontal leg, one end of said floor board underlying the lowermost side board, substantially as described.

2. In a railway car, the combination of a side sill, floor and side boards, said boards being rabbeted and said side board being provided with a kerf in the plane of the end of the floor board, and a metallic angle resting upon and having a portion hooked around said side sill, a leg of said angle projecting into the kerf of said side board, substantially as described.

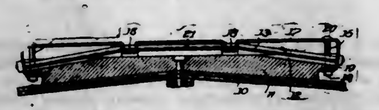
3. In a railway car, the combination of a side board having a vertical kerf intermediate the edges thereof, a floor board having a notch in its end, the end of the board lying in the plane of the said kerf, and an angular member of substantial Z-shape resting upon a frame member of the car underlying said floor board and having a leg projecting into said kerf, substantially as described.

4. In a railway car, the combination of a side sill having a horizontal flange, a side board having a vertical kerf and a floor board rabbeted into said side board, a substantially Z-shaped member having a horizontal leg resting upon said horizontal flange and a vertical leg lying alongside said flange, the other vertical leg of said member projecting into said kerf, substantially as described.

5. In a railway car, the combination of a side wall, the lower board of which is rabbeted and kerfed in the vertical plane of the rabbet, a floor, the outer edge of which projects into said rabbet, and an angle resting on the side sill member of the car, one leg of the angle being bent at substantially right angles so as to engage and interlock with the inner edge of the side sill, the other leg of the angle projecting up into the said kerf, substantially as described.

[Claims 6 and 7 not printed in the Gazette.]

1,268,340. RUNNING-BOARD. WILLIAM E. FOWLER, Sr., Chicago, Ill., assignor to The Fowler Car Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 10, 1917. Serial No. 206,374. (Cl. 105—194.)



1. In a running board construction, the combination of a saddle, boards the ends of which terminate at the saddle, a strap, means for spacing apart the boards, and a transverse bolt engaging and serving to exert a downward pull on said spacing means, substantially as described.

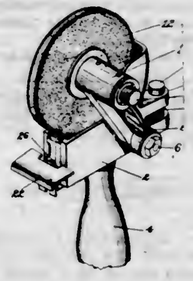
5. In a construction of the class described, the combination of a saddle, boards the ends of which rest thereon, a strap overlying the abutting ends of the boards, the ends of the strap being bent downwardly and backwardly, means for fastening down the ends of the strap, and a bent rod extending transversely of the running board, said rod engaging the strap near its middle portion and at its having a bearing on the backwardly bent portions of the strap, and means for exerting a pull tending to straighten said rod, substantially as described.

10. A running board saddle comprising a wooden base and a metallic clamp, and a vertical bolt engaging said clamp and passing through the part of said base lying outside of the outer edge of the running board, substantially as described.

12. A running board saddle comprising a wooden base and a metallic clamp, the wooden base being grooved on its upper edge and reduced in thickness at its ends, and vertical bolts engaging said clamp and passing through the reduced end portions of the wooden base, substantially as described.

[Claims 2 to 4, 6 to 9, and 11 not printed in the Gazette.]

1,268,341. GRINDING-MACHINE. JOHN J. GILLESPIE, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 6, 1914. Serial No. 870,690. (Cl. 51—7.)



1. In a machine for grinding cutting dies or the like, the combination with a grinding member, of positioning means for the die to be ground constructed and arranged for engagement with the blunt edge and the lateral surface of the die blade to determine the position of the cutting edge with reference to the grinding member, the machine being constructed to permit relative movement between the die on the one hand and said positioning means and grinding member together on the other to cause the grinding member to engage successively different portions of the cutting edge of the die.

3. In a machine for grinding cutting dies or the like, the combination with a grinding member, of guiding means upon which to position the blunt edge of the die and with relation to which the die is movable to present different portions of its cutting edge to the grinding member, said means being constructed and arranged to maintain the cutting edge of the die blade in the same angular relation to the grinding member, and a guide for the lateral surface of the blade having a narrow edge portion so arranged with reference to said first named guiding means as to engage the blade on a line substantially perpendicular to the edges of the blade.

5. In a machine for grinding cutting dies or the like, the combination with a grinding member of a guide constructed to engage an extended portion of the blunt edge of the die blade to position the cutting edge in proper angular relation to the grinding member, and a guide for the lateral surface of the blade having a die engaging edge substantially perpendicular to the die engaging portion of said first named guide.

13. A machine of the class described having, in combination, a portable frame, a handle whereby the frame may be supported, a grinding wheel carried by the frame, a connection for applying power to the wheel, and means on the frame arranged with reference to the grinding

wheel to position a die blade or the like with its cutting edge in engagement with the periphery of the wheel.

14. In a grinding apparatus, the combination with a grinding member, of a guide member having a narrow edge to engage the lateral surface of a blade to be ground, the guide edge extending transversely of the blade and said guide and blade being movable relatively to one another in the grinding operation, the narrowness of the guide tending to insure an invariable lateral position of the blade at the point of grinding irrespective of its curvature.

[Claims 2, 4, 6 to 12, and 15 not printed in the Gazette.]

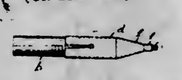
1,268,342. SAFETY COLLAR-BUTTON. MAX GONICK, New York, N. Y. Filed Sept. 10, 1917. Serial No. 190,617. (Cl. 24—90.5.)



3. In a collar button, a rigid post with a base plate and a head on its ends, said post having a groove lengthwise thereof and having a notch at one end of the groove, and a rod of spring metal disposed in the groove crosswise of the notch as well as having one end held to the post for being sprung inwardly and outwardly of the groove whereby a clamp may be operatively retained on the post, substantially as set forth.

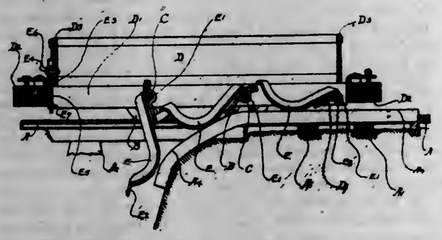
[Claims 1 and 2 not printed in the Gazette.]

1,268,343. CLEANING DEVICE. JAMES WALTER GREENBOWE, West Hoboken, N. J. Filed Dec. 14, 1914. Serial No. 877,068. (Cl. 120—36.)



As an article of manufacture, an erasing device comprising a core composed of a plurality of strands permanently embraced and secured in a holder of destructible material, and immovable relatively thereto, said holder adapted to have one end progressively shortened to expose the operative end of the core as the latter becomes worn through use, and a tapering sleeve removably secured upon the holder and adapted to confine and support the strands of the core and to follow up the same as it is worn and the holder progressively shortened.

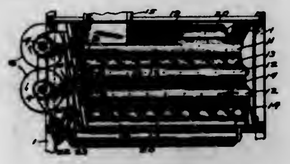
1,268,344. RAILWAY. CHARLES A. GRIFFITH, Park City, Tenn. Filed Sept. 13, 1916. Serial No. 119,908. (Cl. 214—63.)



1. The combination of a body, axles carrying said body, wheels carrying said axles, a bottom door hinged to and extending to both sides of one of said axles, latch mechanism supporting one of the edges of said door which is parallel to said axle, and a second door hinged to the other of said axles and having one edge resting on the edge of the latch-controlled door opposite said latch when said doors are in the closed position, substantially as described.

[Claim 2 not printed in the Gazette.]

1,268,345. CORN-HUSKER. HERMAN J. HAHN, Napoleon, Ohio. Filed Feb. 25, 1916. Serial No. 80,527. (Cl. 130—5.)

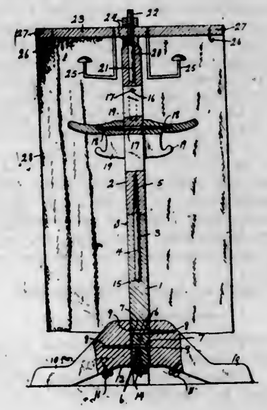


1. In a corn husker, a bank of husking rollers arranged in pairs, each successive pair being located on a higher plane and parallel with the adjacent pair, and the rollers of the several pairs longitudinally inclined.

2. In a corn husker, a bank of husking rollers arranged in pairs, each successive pair on a higher plane and parallel with the adjacent pair and the plane of each pair of rollers inclined in direction transverse the bank of rollers and the rollers of the several pairs longitudinally inclined.

3. In a corn husker, a bank of husking rollers arranged in pairs, each successive pair on a higher plane, one of each pair of rollers having husk engaging prongs and the other of each pair of rollers having husk bars, the rollers having husk engaging prongs located in one plane and the rollers having the husking bars located in another plane parallel to the plane in which the rollers having the husking engaging prongs are located, the rollers of the several pairs being longitudinally inclined.

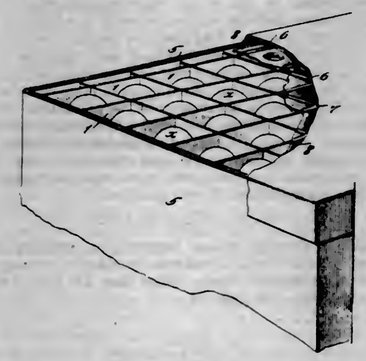
1,268,346. COMBINED COSTUMER AND WARDROBE. ADAM H. HANEY, Chillicothe, Ohio. Filed Sept. 29, 1917. Serial No. 194,003. (Cl. 45—118.)



2. A device of the character described comprising a supporting member, the lower end portion of the supporting member being provided with angularly related openings disposed therethrough, headed shanks insertible through said openings and extending beyond the supporting member, the extended portions of the shank being of screw formation, legs engageable with the extended portions of the shanks, and straps detachably engaged with the legs and with the adjacent portion of the supporting member, said shanks being arranged in pairs, the shanks of each pair being reversely directed, each leg overlying the head of the shank extending in a direction opposite to the shank with which the leg is engaged.

[Claim 1 not printed in the Gazette.]

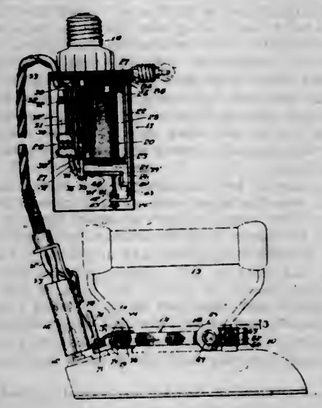
1,268,347. EGG-SHIPPING PACKAGE. JESSE M. HARR, Washington, D. C. Filed June 5, 1917. Serial No. 172,999. (Cl. 229—42.)



1. An improved dividing and cushioning member for an egg case of the type indicated, the same consisting of an elastic plate having openings with surrounding elastic fingers, hollow ribs intersecting each other at right angles, and conical protuberances struck up from the body of the plate and located at the intersections of said ribs and projecting above the plane of the ribs, as shown and described.

2. In an egg case of the type indicated the combination with a series of superposed cell structures formed of partitions intersecting at right angles, of dividing and cushioning members consisting of an elastic plate having a series of registering openings with surrounding elastic fingers, and intersecting hollow ribs extending around the openings and provided at their angles with struck-up protuberances that project from the plane of the ribs, as described.

1,268,348. MEANS FOR CONTROLLING ELECTRIC CURRENT. VARIAN M. HARRIS, Chicago, Ill. Filed Oct. 12, 1916. Serial No. 125,295. (Cl. 219—20.)



1. In combination with an electro-thermic device arranged to be heated by an electric current; a double-pole switch in circuit with said device; an electro-magnet for operating said switch; a heat-responsive switch, within the influence of the thermic device, for deënergizing said electro-magnet upon an abnormal increase of temperature of said thermic device and an attaching plug for supporting said magnet and double-pole switch when inserted in a plug receptacle.

2. In combination with an electro-thermic device arranged to be heated by an electric current; a double-pole switch in circuit with said device; an electro-magnet for operating said switch; a signal lamp in circuit with said electro-magnet; a heat-responsive switch located above but within the heat influence of said thermic device, for deënergizing said magnet upon abnormal increase of temperature of said thermic device, and an attaching plug for supporting said magnet, signal lamp and double-pole switch when inserted in a suitable receptacle.

3. In combination with an electro-thermic device having a pair of projecting terminals; a plug having terminals whereby to connect said device with a source of current-supply by engagement with said terminals of the thermic device; a heat-responsive device detachably secured to said thermic device, having a pair of similar terminals and a pair of spring pressed terminals on said plug to engage the terminals of said responsive device.

4. In combination with an electro-thermic device, to be heated by electric current, and having a pair of projecting terminals; a plug having terminals whereby to connect said device with a source of current-supply by engagement with the terminals of the thermic device; a heat-responsive device secured to said thermic device, having a pair of similar terminals; a pair of spring-pressed terminals on said plug to engage the terminals of said responsive device; an automatic switch adapted and arranged in the heating circuit to be automatically closed when said thermic device is connected to said source of current-supply, and a closed circuit connecting said heat-responsive device and said switch to open the latter when the heat of said thermic device is increased beyond a predetermined degree.

1,268,349. SEPARABLE FASTENER. SOLOMON S. HECHT, New York, N. Y., assignor of one-half to Nathaniel A. Tonkonogy, New York, N. Y. Filed Sept. 15, 1916. Serial No. 120,363. (Cl. 24—224.)



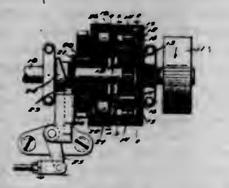
1. A separable fastener comprising a member having a substantially key hole shaped socket opening through the top thereof, a second member adapted to coöperate with said first member and having a headed stud carried thereby to be fitted through the enlarged end of the socket opening and brought to a relation that the stem thereof is in the restricted end of the opening where the head holds the second mentioned member against separation from said first member, and a spring mounted in conjunction with the first mentioned member extending with a part of the body thereof transversely disposed across the enlarged end of the key hole shaped socket opening to thus act to force the headed stud to a position that the stem thereof is in the restricted end of the opening and to hold the stud against movement to a position that the head may be withdrawn through the enlarged end of the opening.

[Claims 2 and 3 not printed in the Gazette.]

1,268,350. CLUTCH. FERDINAND G. HENRY, Philadelphia, Pa., assignor to Burkhart Corporation, Buffalo, N. Y., a Corporation of New York. Filed Oct. 11, 1915. Serial No. 55,278. (Cl. 192—1.)

1. The combination of a rapidly rotating part embodying a gear, an internal gear normally stationary, a planetary gear revolving about such first mentioned gear at a slower rate of speed and intergeared with the internal gear, a member journaling the planetary gears and

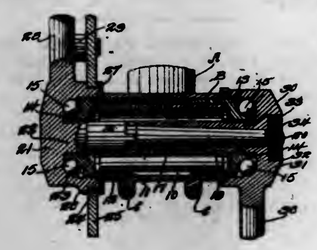
carrying a clutch face and a clutch member adapted to engage the clutch face of the gear journaling member and lock all into a unitary structure.



4. The combination with a rapidly rotating shaft and a gear thereon, of a housing surrounding the gear and provided with an internal gear in plane with the gear of the shaft, a spider surrounding the shaft and free to rotate relative thereto and to the housing, and carrying a clutch face, planetary gears journaled upon the spider and inter-geared with and free to rotate between the gear of the shaft and the internal gear, a clutch member slidable relative to the housing but held against rotation relative thereto and adapted to engage the clutch face of the spider, a roller clutch member adapted to take motion from the housing and means to take power from the roller clutch member.

[Claims 2 and 3 not printed in the Gazette.]

1,268,351. CRANK-HANGER. HOMER E. HOGUE, Venice, Cal. Filed Nov. 12, 1917. Serial No. 201,568. (Cl. 208—68.)



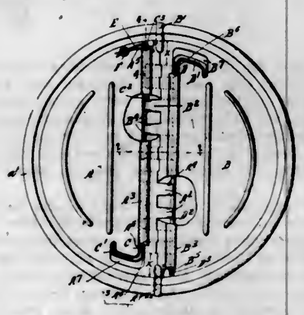
1. In a crank hanger, the combination of a spacer, cones mounted on the opposite ends of the spacer and being adjustable toward and from each other, a two-part interlocked crank shaft adapted to be fitted in the opposite ends of the spacer and through said cones and provided with integral caps upon their outer ends adapted to engage over the spacer and over said cones, bearings carried between the cones and the caps, one part of the crank shaft having a tapering spindle and the other part having a correspondingly tapered bore adapted to receive the spindle, and adjustable means for binding the parts together.

2. In a crank hanger, the combination of a spacer, cones mounted on the opposite ends of the spacer and being adjustable toward and from each other, a two-part interlocked crank shaft adapted to be fitted in the opposite ends of the spacer and through said cones and provided with integral caps upon their outer ends adapted to engage over the spacer and over said cones, and bearings arranged between the cones and the caps, said parts of the crank shaft being reduced in diameter opposite the cones to admit free vibration of the crank shaft upon undue wear and lack of proper adjustment of the bearings and raceways for preventing injury to the cones by direct contact of the crank shaft.

4. In a crank hanger, the combination of a spacer, cones threaded upon the opposite ends of the spacer and adapted to fit therewith into the bracket of a bicycle frame, a pair of crank shaft sections projecting into the opposite ends of the spacer and provided with integral caps upon their outer ends adapted to close the ends of the spacer and to engage over the ends of the brackets, a shaft section carried by one of the caps and provided with a tapering inner end and clutch piece at the base of said tapering end, a second shaft section carried by the other cap and provided with a tapering bore adapted to receive the tapering end of the first section and having notches for the reception of said clutch piece, said second cap provided with a depression in its onter side for the reception of the reduced end of the first shaft section, a locking nut arranged upon said reduced end of the first shaft section and seated in said depression and crank arms projecting in opposite direction from said caps.

[Claim 3 not printed in the Gazette.]

1,268,352. CONNECTING DEVICE, PARTICULARLY FOR SECTIONAL BARREL-HEADS. HENRY A. HOUSE, Bridgeport, Conn. Filed Mar. 23, 1917. Serial No. 156,843. (Cl. 220—4.)



1. A device for connecting two parts, comprising spaced tongues projected from each of said parts toward the other part, at their meeting edges the tongues of one part fitting into the spaces between the tongues of the other part, and a locking device carried by one of said parts and adapted for engagement with the tongues of the other part.

2. A device for connecting two parts, comprising tongues projected from each of said parts toward the other part, at their joint, and locking rods extending parallel to said joint, mounted to turn on the respective parts, and each adapted for engagement with the tongues of the other part, said rods being also slidable lengthwise, and the rods and the parts on which they are mounted, being formed with mating surfaces which are adapted to leave the rods free to turn when they are in one position, but to lock them against turning when they are slid into the other position.

12. A device for connecting two parts, comprising tongues projected from each of said parts toward the other at their joint, sockets arranged on one of said parts at a distance from the joint, with the axes of said sockets parallel to the joint, and a locking rod arranged to turn and slide in said sockets and provided with a longitudinal recess to receive the ends of the tongues of the other part, said rod being provided at one end with a handle, and at the other end with a flattened portion adapted to be slid into engagement with a surface on the part carrying said rod to lock the rod against turning.

[Claims 3 to 11, 13, and 14 not printed in the Gazette.]

1,268,353. UMBRELLA-RUNNER. FRANK W. HOWARD and HOWARD M. BROWN, New York, N. Y. Filed Sept. 17, 1914. Serial No. 862,161. (Cl. 135—38.)

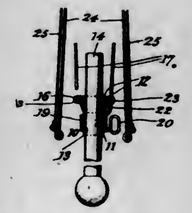
1. In an umbrella, in combination, a stick, a runner encircling the stick and comprising an oval sleeve, and means mounted on said sleeve to move about an axis extending longitudinally of said sleeve for jamming said stick against said sleeve at one end of the oval thereof.



3. In an umbrella, the combination of a stick, a locking member lying loosely against the side of the stick and unattached to the stick, a runner having a substantially oval-shaped opening, the wall whereof encircles the stick and the locking member, said runner operating to retain the locking member in the space at one end of the oval opening of the runner between the side of the stick and the wall of the runner, said locking member being rotatable on a longitudinal axis extending longitudinally of the stick, and having different dimensions in different radial planes from its axis of rotation, whereby it will jam the runner on the stick in one position of the locking member and permit the free movement of the runner along the stick in another position of said locking member.

[Claim 2 not printed in the Gazette.]

1,268,354. UMBRELLA-RUNNER. FRANK W. HOWARD, New York, N. Y. Filed Sept. 28, 1914. Serial No. 863,868. (Cl. 135—38.)

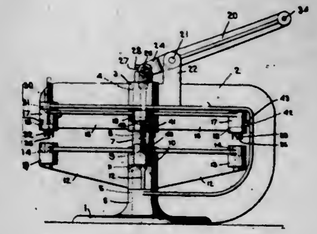


1. An umbrella runner consisting of a collapsible sleeve having a collar adjacent one end thereof to coöperate in effecting connection with the umbrella stretchers, and a clamping sleeve formed of wraps of wire forming a helical coil surrounding said collapsible sleeve normally exerting a constricting force thereupon to clamp the collapsible sleeve against the stick, said clamping sleeve having an extension from a wrap at one end of the clamping sleeve constituting a finger piece, and having a wrap at the other end of said clamping sleeve extending circumferentially around the axis of said sleeve and past said finger piece, said last named wrap having an extension constituting a finger piece, said finger pieces disposed opposite to each other and operating when pressed toward each other, to enlarge said clamping sleeve to permit the collapsible sleeve to run freely on the stick.

[Claims 2 and 3 not printed in the Gazette.]

1,268,355. FASTENER-ATTACHING MACHINE. SAMUEL B. JACKSON, Atlantic, Mass., assignor to Boston Fastener Company, Boston, Mass., a Corporation of Maine. Filed June 3, 1916. Serial No. 101,606. (Cl. 1—4.)

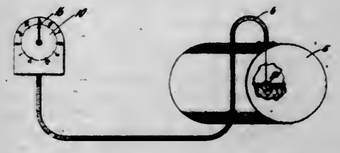
1. A device of the class described comprising a frame having a base and a U-shaped overhanging arm, a shaft rotatably mounted in said base and arm, a female die and fastener supporting member secured to said shaft and having a plurality of dies adapted selectively to be positioned beneath the free end of said overhanging arm, a male die and fastener supporting member slidably mounted upon said shaft and having dies complementary to those of the female member, yieldable means for normally separating said die supporting members and holding the male die supporting member against said overhanging arm and means for raising the female die supporting member toward the male die supporting member to cause coöperation of said dies.



3. A device of the class described comprising a frame having a base and a U-shaped overhanging arm, a shaft rotatably mounted in said frame and having a longitudinal slot, a spring in said slot, a die and fastener supporting member having a plurality of radial arms rigidly secured to said shaft, dies carried by said arms adapted to be positioned beneath the free end of said overhanging arm, a male die and fastener supporting member slidably mounted in said shaft and being unengaged by said spring whereby the die supporting members are normally separated and the male die supporting member held in engagement with said overhanging arm, means mounted on said overhanging arm engaging said shaft and operable to raise the female die supporting member to effect coöperation of said dies, means for locking said members from rotation consisting of a spring actuated pin carried by the free end of said overhanging arm and adapted to engage a socket in said male die supporting member.

[Claims 2 and 4 not printed in the Gazette.]

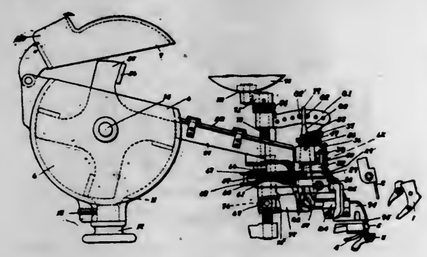
1,268,356. LIQUID-GAGE. CLARENCE S. JENSEN, Vienna, S. D. Filed Sept. 18, 1917. Serial No. 191,994. (Cl. 73—82.)



1. An indicator including a casing, a shaft extending transversely through said casing, an indicator mounted on said shaft within said casing, a grooved pulley wheel mounted on said shaft exteriorly of said casing, a plurality of stop pins projecting from said casing, a stop pin carried by said pulley wheel and engageable with said first mentioned stop pins, a cable having one end thereof secured to said pulley wheel, and a float carried by the opposite end of said cable.

2. An indicator including a casing, a shaft extending transversely through said casing, an indicator mounted on said shaft within said casing, a grooved wheel mounted on said shaft exteriorly of said casing, a spring surrounding said shaft and having its opposite ends connecting respectively to said pulley wheel and casing, a stop pin formed on the periphery of said pulley wheel, a plurality of stop pins projecting laterally from the adjacent face of said casing and engageable with said first mentioned stop pin to limit the movement of the pulley wheel in either direction, a hollow pipe connection leading from said casing, a flexible connection movable in said pipe and connected at one end to the grooved portion of said pulley wheel, and a float carried by the opposite end of said flexible connection.

1,268,357. TACKING MECHANISM. ARTHUR ERNEST JERRAM and FRANK BYCROFT KEALL, Leicester, England, assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan. 4, 1916. Serial No. 70,169. (Cl. 1—18.)



4. In a fastening inserting machine, the combination with means for driving fastenings into the work, of a plurality of fastening separators, means for supplying fastenings of different kinds to said separators, selecting means operative to cause one separator only to be effective during a given cycle of operations of the machine, said driving, selecting and separating means being timed to cause the machine to separate a fastening from a supply and drive the fastening so separated into the work during a single cycle of operations, means constructed and arranged to bear on the work into which the fastenings are being inserted, and connections between said work engaging means and said supplying means whereby a predetermined change in the position of said work engaging means is operative through said connections to change the kind of fastening delivered to said driving means.

11. In a fastening inserting machine, the combination with means for driving fastenings into the work, of a plurality of fastening separators, means for supplying fastenings of different kinds, respectively, to said separators, selecting means arranged to control the operation of said separators, fastening conveying ducts leading from said separators to said driving means, and means for supplying compressed air to said ducts to impel therethrough the fastenings delivered to them by the separators, said separators being constructed and arranged to control the delivery of compressed air to said ducts.

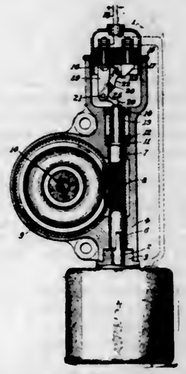
21. In a fastening inserting machine, the combination with mechanism for driving fastenings into the work and means for supplying fastenings to said driving mechanism, of a bunter operative to engage the work during the fastening inserting operation, connections whereby a predetermined change in the position of said bunter is operative to modify the fastening inserting operation, automatic mechanism for moving said bunter constructed and arranged to advance and retract the bunter in successive operations, and a member located adjacent to the position occupied by the work while the machine is inserting fastenings therein and connected with said automatic mechanism to control its action.

28. In a fastening inserting machine, the combination of a plurality of fastening conveying ducts, means for delivering fastenings to said ducts, a common duct into which the other ducts lead, and means for forcing air under adiabatic compression through said ducts at predetermined times to impel therethrough the fastenings delivered to them.

36. In a fastening inserting machine, the combination with a driver and means for supplying fastenings to said driver, of a device operative to engage the work during the fastening inserting operation, and means connected with said device and arranged to be rendered operative or inoperative at will for causing a predetermined change in the position of said device to effect a change in the stroke of said driver.

[Claims 1 to 3, 5 to 10, 12 to 20, 22 to 27, 29 to 35, 37, and 38 not printed in the Gazette.]

1,268,358. WINDING DEVICE FOR SPRING-MOTORS. JOSEPH W. JONES, Pelham, N. Y., assignor to Jones Motrola, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 26, 1915. Serial No. 4,551. (Cl. 185—40.)



1. A winding attachment for the spring motor of a talking machine comprising a casing adapted to be mounted on the talking machine, a shaft carried thereby and adapted to be connected with the winding arbor of said motor, a winding motor in said casing, gearing between said winding motor and said shaft including a worm gear and a longitudinally movable worm, and means operated by the longitudinal movement of said worm for starting and stopping said winding motor.

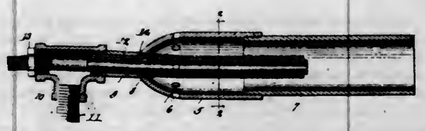
3. A winding attachment for the spring motor of a talking machine comprising a casing adapted to be mounted on the talking machine, a shaft carried thereby and adapted to be connected with the winding arbor of said motor, an electric motor in said casing connected with said shaft and adapted to rotate the same, a switch for starting and stopping said motor, and means operated by predetermined changes of tension of the spring-motor spring for opening and closing said switch.

12. A winding attachment for the spring motor of a talking machine comprising a casing adapted to be mounted on the talking machine adjacent the winding arbor of the spring motor, a shaft carried by said casing and adapted to be directly connected to said winding arbor, a winding motor in said casing connected with said shaft and adapted to rotate the same, and means carried by said casing to start and stop said winding motor.

26. A winding device for spring motors comprising an electric motor having a rotary-armature shaft, gearing between said shaft and the winding arbor of the spring motor including a worm wheel and a worm coaxial with said shaft and adapted to be moved longitudinally by the tension of the spring-motor spring, and a switch in the circuit of the electric motor operated by the movement of said worm.

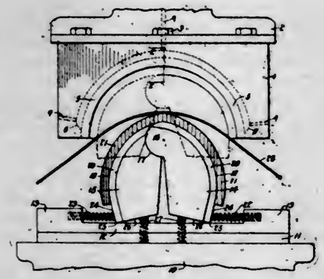
[Claims 2, 4 to 11, 13 to 25, 27, and 28 not printed in the Gazette.]

1,268,359. OIL-BURNER. ALCAN C. JORDAN and WILL R. BEAL, Arkansas City, Kans. Filed Nov. 5, 1917. Serial No. 200,384. (Cl. 158—74.)



In an oil burner, a T-coupling, a steam pipe secured in one end thereof, an oil pipe within the said steam pipe and in spaced relation therewith, a collar in the opposite end of the T-coupling adapted to receive one end of the oil pipe for supporting said pipe in spaced relation with the steam pipe, external threads on the said steam pipe intermediate its ends, a burner casing having a threaded aperture therein to engage the intermediate threads on the steam pipe, and an extension supported by said burner casing.

1,268,360. EMBOSSING-PRESS. JOHN T. KIMBALL, Detroit, Mich., assignor to Hayes Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Apr. 6, 1914. Serial No. 829,751. (Cl. 113—48.)

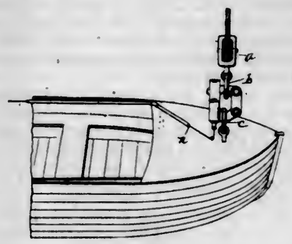


1. A press comprising a female die having an opening therein curved in longitudinal cross-section and also curved in transverse cross-section, a support, one of said members being movable toward and from the other, an inwardly extending rib on the female die along each edge of the curved opening, a collapsible male die carried by the support and adapted to be received in the opening in the female die, said male die comprising two members having coöperating bearing surfaces at the end nearest the female die whereby they are operatively joined, and having outer surfaces curved to correspond to the longitudinal curvature of the boundary of the opening in the female die, said male members also having shoulders adapted to form a close joint with the ribs on the female die, a sheet of resilient material upon the surface of the male die between the shoulders, each of the members of the male die being provided with an edge along which it normally contacts with the support, said edges being so positioned as to cause the ends of the members of the male die opposite the ends on which the bearing surfaces are formed to separate when pressure is applied to the last mentioned end of the male die by the female die, and each of said members being also provided with a surface that comes into engagement with the support and limits the distance the ends of the members may separate, whereby wedging of the male die in the female die is avoided.

3. A press comprising a female die having an opening therein curved in longitudinal cross-section and also curved in transverse cross-section, a collapsible male die adapted to be received in the opening in the female die, one of said dies being movable toward and from the other, said male die comprising two members having coöperating bearing surfaces at the end nearest the female die whereby they are operatively joined, and having outer surfaces curved to correspond to the longitudinal curvature of the boundary of the opening in the female die, a sheet of resilient material upon the surface of the male die, means for causing the other ends of the members of the male die to spread apart as the movable die approaches the other die, and means for limiting the spreading of said other ends of the members of the male die whereby wedging of the male die in the female die is avoided, said female die having passages therein for allowing the escape of air from between it and the sheet of resilient material as the movable die approaches the other die.

[Claim 2 not printed in the Gazette.]

1,268,361. RELEASING-HOOK FOR LIFE-BOATS. EDWARD THOMAS KLIPPERT, Detroit, Mich. Filed July 13, 1917. Serial No. 180,316. (Cl. 9—23.)

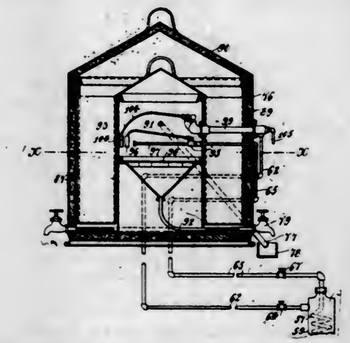


1. A releasing hook for life-boats, comprising a pair of elbows jointed together, one provided with a bill fitting into the recess of the other, said bill also provided with a bolt recess, the shank of the other elbow being bored for a guide and a spring housing, a sliding bolt, and a spring contained in the housing adapted to project the bolt into the bolt recess.

4. A releasing hook for life-boats, comprising a pair of elbows, one of which is provided at its top with a cross recess and the other with a bill horizontally disposed in said cross recess when the hook is in service, the said elbows having their opposed upper and lower inner surfaces cut on arcs the centers of which are arranged so that the upper center is in advance of the lower center in the direction of separation of the parts, and means for releasably holding the said bill in the said cross slot.

[Claims 2 and 3 not printed in the Gazette.]

1,268,362. WATER-COOLING DEVICE. GERTRUDE M. KREMELBERG, Pittsfield, Mass. Original application filed Aug. 14, 1912, Serial No. 715,017. Divided and this application filed Apr. 17, 1914. Serial No. 832,423. (Cl. 62—147.)



1. An ice box of cylindrical form having heat insulating walls, an inner compartment and an outer compartment surrounding said inner compartment and adapted to contain a plurality of removable ice containing receptacles, a funnel forming the bottom of said inner compartment, coils disposed in said outer compartment adjacent the bottom thereof, positioned below the ice receptacles and leading from said funnel, a filter covering the opening to said funnel, a spraying device above said filter, a conduit leading to said inner compartment, a valve controlling the passage of liquid through said conduit, a float in said inner compartment operatively connected to said valve to shut off the supply of liquid to said spraying device when the liquid in the inner chamber has reached a definite level.

3. A device for cooling liquid in two stages, comprising a cooler having a circulating cooling medium therefor adapted to give the liquid a preliminary cooling, an ice box constituting a device distinct from the cooler and spaced therefrom, a connection for conveying the partially cooled liquid from the cooler to said ice box for a further cooling, valvular means controlled by the liquid level in said ice box for regulating the passage of the cooling medium through said cooler.

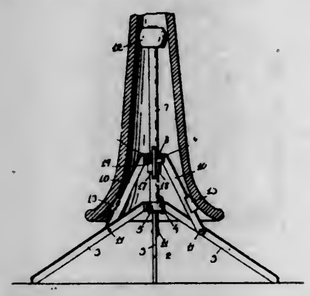
4. An open top ice box having heat insulating walls and having an inner liquid containing compartment, and an outer compartment adapted to contain a plurality of removable ice receptacles, means for leading liquid to said inner compartment through a side thereof, a cover for the upper end of said inner compartment, a funnel forming the bottom of said inner compartment, a cooling coil positioned adjacent the bottom of said outer compartment and below said funnel and ice receptacle connected to receive the liquid from said funnel and means for drawing the cooled liquid from said coil.

5. In a device of the class described, a receptacle designed to receive a liquid, means for supplying liquid to said receptacle, means for cooling said liquid, and float controlled means in said receptacle for simultaneously intercepting the operation of said supply means and said cooling means, said float controlled means operable on a raise from a predetermined level of the liquid in said receptacle whereby the level in the receptacle controls the duration of both the inflowing liquid and the cooling operation.

7. In a device of the class described, a receptacle, designed to receive a limited quantity of liquid, means spaced from the receptacle for cooling said liquid prior to its introduction into said receptacle, a conduit connecting said means with said receptacle and means within the conduit and controlled by the raise in level of liquid in said receptacle for inaugurating the action of said cooling means and means for preventing an abnormal rise of level of the liquid in said receptacle.

[Claims 2, 6, and 8 not printed in the Gazette.]

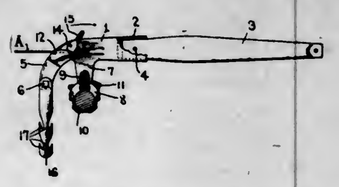
1,268,363. STAND FOR MUSICAL INSTRUMENTS. JAMES H. LAMONT, Beloit, Wis. Filed Aug. 9, 1917. Serial No. 185,374. (Cl. 248—41.)



A stand for musical instruments of the wind type, comprising an upright rod, an annular centering head carried by said rod at the upper end thereof, inclined legs connected to and supporting said rod, and cushion blocks carried by said legs intermediately of the lengths thereof, said head having a rounded peripheral surface for engagement with the throat of the horn of the instrument and said blocks having inclined outer surfaces for engagement with the mouth portion of said horn.

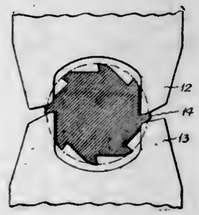
1,268,364. WIRE-STRETCHER. ANTON S. LARSON, Ibapah, Utah, assignor of one-half to Charles R. Felt, Ibapah, Utah. Filed May 12, 1917. Serial No. 168,200. (Cl. 254—77.)

A fence wire stretcher comprising a shank having a curved bill formed at one end, a lever attached to the opposite end, each side of the said bill being provided with raised shoulders each having a channel formed therein, a locking dog pivotally mounted, and operable in the said



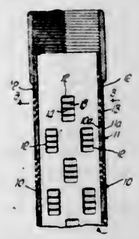
channel to engage the fence wire for retaining the latter in the channel, and means mounted on the shank to engage a fence post for providing a fulcrum for the shank when the lever is actuated.

1,268,365. METHOD OF RE-FORMING REAMERS. HARLEY H. LA VERCOMBE, Detroit, Mich. Filed Apr. 25, 1917. Serial No. 164,346. (Cl. 76—101.)



A method of reforming reamers which consists first, in heating a reamer and then locally compressing each of the several teeth thereof separately between the cutting edge and the root whereby the cutting edges are forced out to the desired diameter of the finished tool.

1,268,366. SEPARATOR FOR WELLS. OLLYN A. LAYNE, Los Angeles, Cal. Filed Sept. 17, 1917. Serial No. 191,678. (Cl. 166—5.)

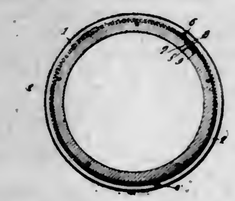


1. A well separator, embodying the combination of two tubular members in nesting relation, one of said members having openings in its walls, and the other having openings formed therein by displacement of parts, said parts being displaced into the openings in the first mentioned member.

8. A well separator, embodying an inner pipe and an outer sheathing, the pipe having openings through its walls, and the sheathing having openings formed by horizontal slitting and displacement of parts between the slits, over the pipe openings, said displaced parts being displaced inwardly into said pipe openings, and said displaced parts lying wholly between the inner surface of the pipe and the outer surface of the sheathing.

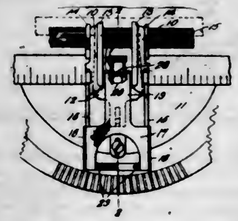
[Claims 2 to 7 not printed in the Gazette.]

1,268,367. DEMOUNTABLE RIM. BENJIMAN R. LEE, Chattanooga, Tenn. Filed Sept. 10, 1917. Serial No. 190,625. (Cl. 152—21.)



A demountable rim including a pair of rim members hingedly connected together and so shaped that when fitted to a casing the ends thereof will be brought to an abutting relation, one of said rim members being cut out in the body portion at the free end, and a securing member having an offset therein mounted within the opening formed by cutting out the rim member and so shaped that when the free end of the remaining rim member is caught within the offset thereof and this securing member is swung to be received in the cut out of the first mentioned rim member and lie in line with the body thereof the end of the rim member caught by the offset will be lined up and brought into an abutting relation with the rim member having the securing member carried thereby.

1,268,368. TYPE-WRITER ATTACHMENT. BENJIMAN R. LEE, Chattanooga, Tenn. Filed Nov. 2, 1917. Serial No. 199,929. (Cl. 197—113.)



1. In a typewriting machine, the combination of an underscoring device including a vertically movable plate, a horizontal-rod carried by said plate, a type holder carrying an underscoring type pivotally mounted on said rod, a spring engaging the type holder to retain the same normally in an outward position, means for limiting such outward movement, and means for elevating the plate to locate the type holder in a position to be engaged by each type bar to underscore each letter struck.

2. In a typewriting machine, the combination of an underscoring device including a vertically movable plate, a horizontal rod carried by the upper end of said plate, a type holder carrying an underscoring type, said holder being in the form of an inverted U-shaped member having its terminals apertured to receive a rod, a coil spring encircling said rod, having one terminal engaging the holder and the other the plate to retain the holder in a normally outward position, an extension on one of the arms of said type holder to engage the plate to limit the outward movement of the type holder, and means for elevating the plate to be engaged by each type bar to underscore each letter struck.

[Claims 3 and 4 not printed in the Gazette.]

1,268,369. ELECTROLYTIC PROCESS OF MAKING ALKALI PERBORATES. OTTO LIEBKNECHT, Frankfort-on-the-Main, Germany, assignor to The Roessler & Hasslacher Chemical Co., New York, N. Y., a Corporation of New York. Filed Oct. 23, 1915. Serial No. 57,396. (Cl. 204—9.)

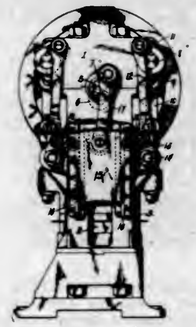
1. The process of making alkali perborates, consisting in electrolyzing a solution of an alkali carbonate in the presence of a solid alkali borate.

13. The process of making sodium perborate, consisting in electrolyzing a solution of soda in the presence of solid borax.

21. The process of making sodium perborate, consisting in preparing a solution of soda, maintaining solid granulated borax suspended in said solution and electrolyzing the solution in the presence of a mixture of sodium bicarbonate and sodium perborate to accelerate the reaction.

[Claims 2 to 12 and 14 to 20 not printed in the Gazette.]

1,268,370. DRAWING-PRESS. BROR J. LINDGREN, Toledo, Ohio, assignor to The Toledo Machine & Tool Company, Toledo, Ohio, a Corporation of Ohio. Filed Mar. 7, 1917. Serial No. 153,099. (Cl. 113—46.)

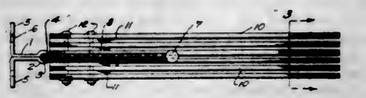


1. In a drawing press, a frame, a slide-block, a blank-holder and a die-carrying plunger mounted for relative parallel reciprocatory movements in said frame, a main crank-shaft in said frame, separate means connecting said crank-shaft and said block and plunger to impart opposed reciprocatory movements thereto from a rotation of the shaft, a double armed lever fulcrumed in said frame for vertical rocking movements, connection between one arm of said lever and the blank-holder, a rocker-arm carried by the frame at one side of the slide-block, a link connecting the free end of said rocker-arm and the other arm of said lever, and a link connecting said slide-block and rocker-arm and pivoted to the latter between its axis and free end.

4. In a drawing press, a frame, a slide-block, a blank-holder and a die-carrying plunger mounted for relative parallel reciprocatory movements in said frame, a crank-shaft mounted in said frame, means connecting said shaft and both said slide-block and plunger for imparting predetermined reciprocation thereto from a rotation of said shaft, rocker-arms mounted for vertical rocking movements at opposite sides of said block, link connection between each arm intermediate its ends and said block for rocking the arms when the block is reciprocated, the arms standing upright when the block is at the upper end of its stroke and link and lever connection between the free end of each rocker-arm and the blank-holder for imparting reciprocation to the latter from rocking movements of the former.

[Claims 2 and 3 not printed in the Gazette.]

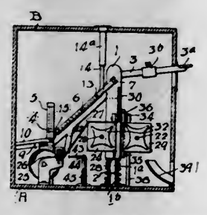
1,268,371. COMBINED HAT, COAT, AND TROUSERS RACK. GEORGE F. MCDONALD, St. Louis, Mo. Filed Aug. 27, 1917. Serial No. 188,516. (Cl. 45—13.)



An improved hat, coat and trousers rack, consisting of a suitable supporting-bracket having vertically-alined

pintle-bearings and means whereby said bracket may be secured to a wall or other object; a hinge member having a perforated knuckle and located between said pintle-bearings of said bracket; a series of flexible arms; blocks placed between said arms to space same apart at like ends; bolts for clamping said blocks and said arms together; and an S-shaped combined pintle and garment hanger-arm, having its pintle passed through said vertically-alined bearings of said bracket and through the perforation of the said hinge-member, to hingedly connect said hinge-member to the said bracket, while the horizontal portion of the said arm extends above the plane of said flexible arms, to act as a swinging hat hanger or as a hanger for other articles.

1,268,372. STAMP-VENDING MACHINE. JOHN D. MADDEN, Fall River, Mass. Filed June 26, 1917. Serial No. 177,050. (Cl. 211—33.)



1. A stamp vending machine including a vertically reciprocating plunger, means for operating the plunger, a pair of horizontally disposed shafts arranged adjacent the plunger, a stamp feeding block on one of the shafts, a complemental stamp ejecting block on the other shaft, means for guiding a strip of stamps to the feeding block, means actuated by the downward movement of the plunger to turn the feeding block and move the end of the stamp strip over upon the ejecting block, cutting means for severing the end of the stamp strip, and means actuated by the return movement of the plunger for turning the discharge block to eject the severed stamp.

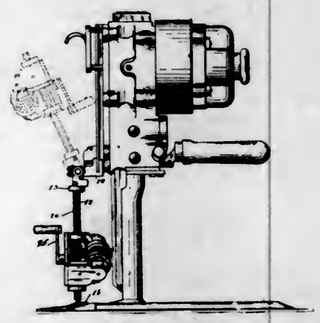
2. A stamp vending machine including a vertically reciprocating plunger, means for operating the plunger, a pair of horizontally disposed shafts arranged adjacent the plunger, a stamp feeding block on one of the shafts, a complemental stamp ejecting block on the other shaft, means for guiding a strip of stamps to the feeding block, ratchets upon the respective shafts, a pawl carried by the plunger for engagement with one of the ratchets to rotate the shaft of the stamp feeding block and move the end of the stamp strip over upon the ejecting block on the downward movement of the plunger, cutting means for severing the end of the stamp strip, a second pawl carried by the plunger for engagement with the other ratchet on the return movement of the plunger to rotate the ejecting block and discharge the severed stamp.

3. A stamp vending machine including a vertically reciprocating plunger, means for operating the plunger, a pair of horizontally disposed shafts arranged adjacent the plunger, a stamp feeding block on one of the shafts, a complemental stamp ejecting block on the other shaft, said blocks being formed with square faces to receive the stamps, means for guiding a strip of stamps to the feeding block, means actuated by the downward movement of the plunger to turn the feeding block and move the end of the stamp strip over upon the ejecting block, presser means carried by the plunger and mounted to be brought into engagement with the stamps to hold them against the faces of the blocks, cutting means actunted by the plunger for severing the end of the stamp strip while it is clamped in position by the presser means, and means actuated by the return movement of the plunger for turning the ejecting block to discharge the severed stamp.

6. A stamp vending machine including a vertically reciprocating plunger, means for operating the plunger, a pair of horizontally disposed and parallel shafts arranged on opposite sides of the plunger, a stamp feeding block on one of the shafts, a complemental stamp ejecting block on the other shaft, means for guiding a strip of stamps to the feeding block, means actuated by the downward movement of the plunger to turn the feeding block and move the end of the stamp strip over upon the ejecting block, a third shaft extending transversely of the parallel shafts, a swinging knife blade mounted upon the third shaft and arranged to swing between the two blocks to sever the end of the stamp strip, a link connection between the knife blade and the plunger for actuating the knife blade after the feed block has been turned, and means actuated by the return movement of the plunger for rotating the ejecting block to discharge the severed stamp.

[Claims 4, 5, and 7 not printed in the Gazette.]

1,268,373. KNIFE-SHARPENER FOR CLOTH-CUTTING MACHINES. HYMAN MAIMIN and HENRY B. BATJER, New York, N. Y., assignors to H. Maimin Co., Inc., a Corporation of New York. Filed Feb. 14, 1917. Serial No. 148,536. (Cl. 51—7.)



1. A knife sharpening device comprising a guide, positioning means for the guide comprising coacting parts carried by the machine and the guide whereby the guide may be first angularly moved from an out of the way inoperative position to a position where the guide is arranged parallel with the edge of the knife to be sharpened and then bodily moved in parallelism with the knife toward the same, a carrier reciprocable on the guide and carrying grindstones arranged to make simultaneous contact with the two sides of the edge of the knife, and cooperating driving elements on the guide and grindstones making driving engagement to rotate the grindstones in contact with the edge of the knife as the carrier is reciprocated on the guide.

2. A knife-sharpening device comprising a guide, positioning means for the guide comprising coacting parts carried by the machine and the guide whereby the guide may be first angularly moved from an out of the way inoperative position to a position where the guide is arranged parallel with the edge of the knife to be sharpened and then bodily moved in parallelism with the knife toward the same, a carrier reciprocable on the guide and carrying grindstones arranged to make simultaneous contact with the two sides of the edge of the knife, coöperating driving elements on the guide and grindstones making driving engagement to rotate the grindstones in contact with the edge of the knife as the carrier is reciprocated on the guide, the element on the guide being a rack, and operative connections between said driving elements comprising a gear on the carrier meshing with the rack and multiplying gearing interposed between said gear and the stones whereby the stones may be rotated a great number of times during a single lengthwise movement of the stones along the knife edge from top to bottom thereof.

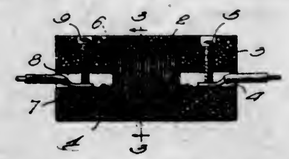
3. A knife-sharpening device comprising a guide, positioning means for the guide comprising coacting parts carried by the machine and the guide whereby the guide may be first angularly moved from an out of the way inoperative position to a position where the guide is arranged parallel with the edge of the knife to be sharpened and then bodily moved in parallelism with the knife toward the same, a carrier reciprocable on the guide and carrying grindstones arranged to make simultaneous contact with the two sides of the edge of the knife, and coöperating driving elements on the guide and grindstones making driving engagement to rotate the grindstones in contact with the edge of the knife as the carrier is reciprocated on the guide, the element on the guide being a rack, operative connections between said driving elements comprising a gear on the carrier meshing with the rack and multiplying gearing interposed between said gear and the stones whereby the stones may be rotated a great number of times during a single lengthwise movement of the stones along the knife edge from top to bottom thereof, and spring means associated with the grindstones for yieldingly urging the stones against the knife during rotation of the stones.

4. A knife-sharpening device comprising a guide adapted to be positioned in substantial parallelism with the edge of the knife to be sharpened, a carrier reciprocable on the guide and carrying grindstones arranged to make simultaneous contact with the two sides of the edge of the knife, coöperating driving elements on the guide and grindstones making driving engagement to rotate the grindstones in contact with the edge of the knife as the carrier is reciprocated on the guide, the element on the guide being a rack, and operative connections between the said driving elements comprising a pinion meshing with the rack, the rack and pinion being readily removable so that substitutes of a different pitch may be incorporated in the grinder without dismounting any of the other working parts of the grinder.

5. A knife-sharpening device comprising a guide adapted to be positioned in substantial parallelism with the edge of the knife to be sharpened, a carrier reciprocable on the guide and carrying grindstones arranged to make simultaneous contact with the two sides of the edge of the knife, and coöperating driving elements on the guide and grindstones making driving engagement to rotate the grindstones in contact with the edge of the knife as the carrier is reciprocated on the guide, the carrier having associated therewith an angularly adjustable support on which the stones are revolubly mounted whereby the support may be adjusted to bring the grinding surfaces of the stones into the most effective sharpening relation to the knife edge.

[Claims 6 to 11 not printed in the Gazette.]

1,268,374. RESISTANCE-COIL. ISRAEL MARCUS, Winthrop, Mass. Filed Sept. 17, 1917. Serial No. 191,831. (Cl. 219—67.)



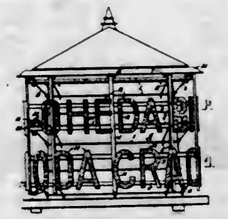
1. A device as described comprising a cylindrical casing, a resistance coil disposed therein, a plug removably engaged in one end of said casing to retain the coil therein, connector bushings in said casing and plug, connection between the terminals of said coil and bushings, bushing retaining means in the casing, said means serving also to hold the plug in engaged position.

2. In a device as described, a hollow substantially cylindrical insulating casing, a desistance coil having a hollow core disposed therein, a removable plug in one end of the casing, and circuit terminal receiving bushings extending through said casing and plug in communication with the core of said coil to permit circulation of air therethrough and preventing overheating of the coil, and connections between said bushings and the terminals of said coil.

3. A device as described, comprising a hollow substantially cylindrical insulating casing having an open end, the other end of said casing being provided with an aperture, a resistance coil disposed in the interior of said casing, a plug detachably mounted in the open end of the casing, connector bushings in said closed end of the casing and through said plug in connection with the terminals of said coil, wire retaining members in the casing and extending into said bushings to prevent displacement thereof, one of said members extending through said casing into said plug connector bushing to engage and retain said plug.

4. In a device as described, a hollow substantially cylindrical casing having an open end, the other end of said casing being provided with an aperture, a resistance coil having an open cylindrical fiber core disposed in said casing through said open end, an insulating plug to be removably engaged in said open end to retain the coil in said casing, said plug being provided with an opening, metal tubes extending longitudinally in said openings in said casing and plug respectively and communicating with the core of said coil thereby permitting air to circulate therethrough, connection between said tubes and terminals of said coils, set screws extending laterally through said casing and into said tubes for clamping circuit terminals therein and holding said tubes in position and one of said screws extending through the casing plug and adjacent tube whereby to hold the said plug in engagement.

1,268,375. REVOLVING ILLUMINATED SIGN FOR WATER-TANKS, &c. FREDERICK WILLIAM MEYER, Jersey City, N. J. Filed Feb. 14, 1917. Serial No. 148,535. (Cl. 40—33.)



1. The combination of a supporting structure, a rotatable frame thereon, sign letters on the frame and including lamps, a conductor ring or trolley track mounted on and insulated from the frame and connected with the lamps of the sign letters, and a contact mounted on the structure and engaging the trolley track to supply current to the lamps.

2. The combination of a supporting structure including bands on the outside thereof, brackets supported by the bands, an upper channel carried by the upper brackets and the channel opening upward, a channel track carried by the lower brackets and having its channel opening laterally, a framework surrounding the support and including rollers engaging in the channels, whereby the latter support and steady the framework, illuminated letters on the framework, conductor rings or trolley tracks mounted on and insulated from the framework and connected with the lamps of the letters, a contact for supplying current to the conductors, said brackets supporting the contacts on the said structure, and an electric motor supported on the structure and geared to the framework for rotating the same.

1,268,376. ELECTRIC MUSIC-CHART. BENJAMIN FRANKLIN MIESSNER, West Lafayette, Ind., and WILLIAM OTTO MIESSNER, Wilwaukee, Wis. Filed Nov. 3, 1915. Serial No. 59,349. (Cl. 84—85.)

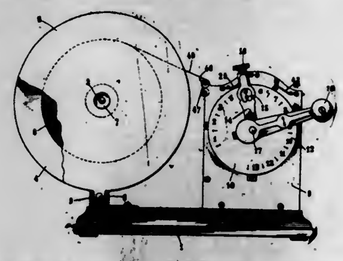
1. A music chart comprising a staff, a note-carrying sheet disposed behind said staff and relatively immovable, and means for selectively displaying the notes on said sheet upon the staff in varying combinations to form different note groups.

6. A music chart comprising a casing, a changeable signature bearing portion and a fixed transparent portion having a staff thereon, a member having a plurality of transparent portions, the transparent portions being arranged in a plurality of rows, each of the transparent portions in each of the rows being located to appear as a note on the staff, and means for simultaneously illuminating a selected group of transparent portions to indicate notes upon the staff.



[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,268,377. PACKAGE-SEALING DEVICE. CHARLES GREENOUGH MORTIMER, East Orange, N. J. Filed Jan. 7, 1911, Serial No. 601,451. Renewed Oct. 5, 1917. Serial No. 194,988. (Cl. 91—14.5.)



1. A device for delivering strips of moistened adhesive tape comprising means for supporting a supply of tape, means for drawing strips therefrom, including a main shaft, feeding rollers, a sleeve loosely mounted on the main shaft and having a ratchet and a gear operatively connected with said feeding rollers, means fixed on the main shaft for carrying a pawl rotatable continuously in one direction and adapted to engage the ratchet and adjustable means for causing said pawl to engage and disengage said ratchet during continued rotation of the main shaft, and means for moistening and severing the strip.

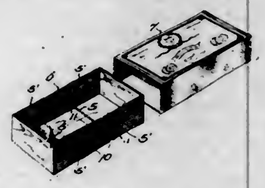
2. A device for delivering strips of moistened adhesive tape comprising means for supporting a supply of tape, means for drawing strips therefrom, means for severing said strips, including a fixed blade disposed above the path of the unmoistened tape, a movable blade adapted to cooperate with said fixed blade and pivoted to rest normally below the path of the tape, a main shaft, and a cam fixed on said main shaft and adapted to engage and actuate said movable blade to sever a strip, and means for moistening the strip.

3. A device for delivering strips of moistened adhesive tape comprising means for supporting a supply of gummed tape, means for drawing strips therefrom, strip severing means, and means for rendering said strip adhesive, including a container for water, a moistening roller rotatable therein, a presser roller located above the moistening roller and to one side of the vertical center thereof, and means for breaking the dry gum coating on the tape before contact with said roller.

9. In a machine for delivering strips of adhesive tape in various predeterminable lengths for application to a box, package, or the like, the combination of a tape support, strip feeding means, and strip feed controlling means including a rotatable pawl carrying member having a pawl for engaging the strip feeding means and a pawl engaging trigger, means for releasing said trigger to disengage said pawl whereby the latter may actuate the strip feeding means, and pawl engaging means rotatably adjustable in the path of said pawl and adapted to provide a trip whereby the pawl may be released from the strip feeding means to terminate the strip feeding operation.

[Claims 4 to 8, 10, and 11 not printed in the Gazette.]

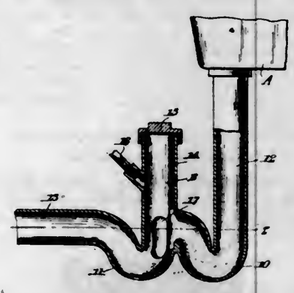
1,268,378. MATCH-BOX. EDWARD HARRY MUELLER, Hartford, Wis. Filed Apr. 20, 1917. Serial No. 163,346. (Cl. 206—31.)



2. As an article of manufacture, a container having perforations extending transversely across the bottom and near the end thereof, the sides of the container being cut in line with the perforations, said cuts terminating a spaced distance from said bottom to form an unbroken portion intermediate said perforations and cuts for retaining the rigidity of the container, and a reinforcing strip adjacent the cuts and perforations to prevent the destruction of the container when one end is being detached therefrom substantially as described.

[Claim 1 not printed in the Gazette.]

1,268,379. SANITARY TRAP. ROBERT NICHOLAS MURPHY, Ottawa, Ontario, Canada. Filed Mar. 26, 1917, Serial No. 157,536. Renewed Apr. 16, 1918. Serial No. 228,970. (Cl. 182—12.)



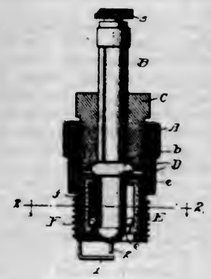
1. A trap of the class described comprising a pair of water seals arranged in alinement with a continuous bore of uniform cross section throughout, a clean flush out chamber intermediate of the two water seals provided with a recess extending from below to above the normal water level therein and an angularly disposed vent operatively connected to the chamber.

2. A trap of the class described comprising a pair of water seals arranged in alinement with a continuous bore of uniform cross section throughout, an air vent operatively connected to the trap and means for flushing each of the water seals and the air vent individually from the water main.

3. A trap of the class described comprising a pair of water seals arranged in alinement with a continuous bore of uniform cross section throughout, an air vent operatively connected to the trap and a hollow removable plug adapted to be inserted into the trap and permit of the water seal and air vent being individually flushed from the water main.

[Claims 4 and 5 not printed in the Gazette.]

1,268,380. SPARK-PLUG. HUBERT A. MYERS, Toledo, Ohio. Filed May 7, 1917. Serial No. 166,859. (Cl. 123—169.)



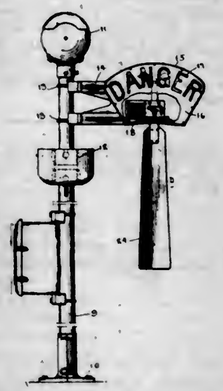
1. A spark plug for internal combustion engines, having movable means operated by the action of the engine and including one or more elements formed to roll around and turn and move bodily in various directions on the surface of the plug, to prevent the accumulation of carbon around the inner end-portion of the plug, and stationary electrodes forming a spark gap and provisions to prevent said means from getting into the path of the spark.

3. In a spark plug, movable means operated by the action of the engine to prevent the accumulation of carbon around the inner end portion of the plug, and a removable cylindric member of insulating material, with an annular space surrounding the inner end-portion of said member, said means comprising a plurality of elements which are movable up and down in said space by the explosions and vibrations of the engine.

4. In a spark plug, movable means operated by the action of the engine to prevent the accumulation of carbon around the inner end portion of the plug, and a cylindric porcelain insulator and a metal socket-piece in which said insulator is held, said means comprising a plurality of cleaning balls which are freely movable up and down in said socket-piece in contact with the cylindric sides of said insulator.

[Claims 2 and 5 to 8 not printed in the Gazette.]

1,268,381. RAILROAD-CROSSING SIGNAL. WILL C. NEAME, Denver, Colo., assignor to The Protective Signal Manufacturing Company, Denver, Colo., a Corporation of Colorado. Filed June 13, 1916. Serial No. 103,451. (Cl. 177—329.)

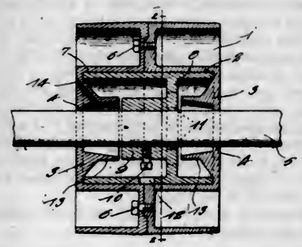


1. In a signal of the character set forth, the combination with a casing having a perforated display face, of a swinging arm having one end located within the casing and the other end projecting therefrom, means for swinging the arm, and a lamp carried by the portion of the arm within the casing.

7. In a signal of the character described, the combination with a pivot, of a signal arm and a cam independently mounted on the pivot, an electro-magnet for actuating the arm and cam, a circuit controller for the electro-magnet operated by the cam, and a connection between the signal arm and cam at one side of the pivot for operating one from the other, said connection having a limited lost motion.

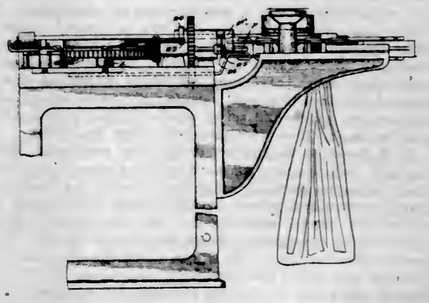
[Claims 2 to 6 not printed in the Gazette.]

1,268,382. LOOSE PULLEY. ARTHUR W. NELSON, Williamsport, Pa. Filed May 3, 1917. Serial No. 166,226. (Cl. 64—26.)



A self-lubricating loose pulley comprising a hollow cylindrical hub, closures on the ends of said hub having openings to receive a pulley shaft, a hollow open-ended cylindrical bearing positioned in said hub in running contact with the wall thereof, said bearing having a hub adapted to be attached to said shaft, a web extending between said bearing and its hub, a pair of inwardly extending flanges formed integral with said closures and surrounding said shaft in spaced relation thereto, said flanges increasing in diameter toward their inner ends, the inner ends of said flanges being disposed in closely spaced relation with said bearing hub and one of said closures having an oil hole extending through its flange, said flanges providing means for preventing the oil from escaping out along the shaft.

1,268,383. MACHINE FOR TYING OBJECTS WITH WIRE. EDWIN V. NESSLING, Chicago, Ill., assignor to General Wire Tie Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 19, 1915. Serial No. 22,395. (Cl. 140—93.)



1. In a machine for tying objects with wire, having means for feeding wire longitudinally, and wire guides comprising separable members, means for effecting separation of said wire guides and simultaneously throwing the same out of the plane in which they coact to perform their function.

6. In a machine substantially as described, a pair of separable wire guide members each comprising a pair of separable elements adapted to separate as said members are separated, and a means on a rigid part of the machine disposed in engaging relation to one of said elements of each member for effecting closure thereof as said members approach each other.

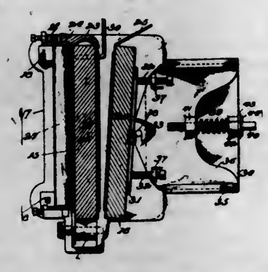
8. In a machine substantially as described, a pair of separable wire guide members each comprising a pair of separable elements adapted to separate as said members are separated, and coacting means on a rigid part of the machine and on one of said elements of each member disposed in engaging relation to each other to effect closure of each member as it approaches its active position.

16. In a machine of the kind specified, the combination with the tying mechanism and a carrier for objects to be tied, of means disposed in the path of and adapted to be engaged by an object disposed on said carrier as the same is moved into position to be tied, for throwing said tying mechanism automatically into action to tie said object.

25. In a machine of the kind specified, a carrier for objects to be tied, mechanism for forming and securing a tie around each object on said carrier, gearing for synchronizing the operations of said carrier and said mechanism, and means associated with the latter and controlled by the objects to be tied for rendering the same operative to perform its function as each object becomes positioned relatively thereto to be tied.

[Claims 2 to 5, 7, 9 to 15, 17 to 24, 26, and 27 not printed in the Gazette.]

1,268,384. HUSKING APPARATUS. WILLIAM J. OSBORNE, Walla Walla, Wash. Filed Sept. 10, 1917. Serial No. 190,521. (Cl. 83—35.)



1. A husking mechanism comprising resiliently yielding and reciprocatory plates which are spaced and have their opposite surfaces roughened, means for operating the reciprocatory plate, feeding means discharging between the plates, supports for the resiliently yielding plate having outstanding wings between which said plate seats, slides to which the plate is pivotally connected, said slides being carried by the wings, adjusting screws carried by the slides and engaging the plate on opposite sides of the pivot, and screw shafts carried by the wings and having a threaded engagement with the slides.

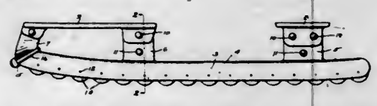
2. A husking mechanism comprising resiliently yielding and reciprocatory plates which are spaced and have their opposite surfaces roughened, means for operating the reciprocatory plate, feeding means discharging between the plates, supports for the resiliently yielding plate having outstanding wings between which said plate seats, slides carried by the wings, a detachable connection between the slides and the plate, and screw shafts carried by the wings and having a threaded engagement with the slides.

3. A husking mechanism comprising resiliently yielding and reciprocatory plates which are spaced and have their opposite surfaces roughened, means for operating the reciprocatory plate, feeding means discharging between the plates, supports for the resiliently yielding plate having outstanding wings between which said plate seats, slides carried by the wings, a detachable connection between the slides and the plate, and holding means carried by the wings and engageable with the slides and adjustable for carrying the plate toward and from the reciprocatory plate.

4. A husking mechanism comprising resiliently yielding and reciprocatory plates which are spaced and have their opposite surfaces roughened, means for operating the reciprocatory plate, feeding means discharging between the plates, supports for the resiliently yielding plate having outstanding wings between which said plate seats, slides to which the plate is pivotally connected, said slides being carried by the wings, adjusting screws carried by the slides and engaging the plate on opposite sides of the pivot, and holding means carried by the wings and engageable with the slides and adjustable for carrying the plate toward and from the reciprocatory plate.

5. A husking mechanism comprising resiliently yielding and reciprocatory plates which are spaced and have their opposite surfaces roughened, means for operating the reciprocatory plate, feeding means discharging between the plates, supports for the resiliently yielding plate having outstanding wings between which the plate seats, slides extending from the plate and carried by the wings, and screw shafts yieldingly connected to the wings and having a threaded engagement with the slides.

1,268,385. ROLLER-SKATE. HARRY PAULSEN, New York, N. Y. Filed Jan. 13, 1917. Serial No. 142,153. (Cl. 46—51.)

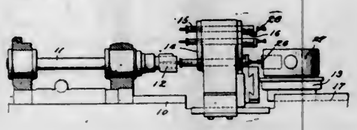


1. A roller skate having a runner comprising parallel laterally spaced members provided with upward contacting extensions forming supports for toe and heel plates, and a plurality of narrow cylindrical rolls arranged in tandem between the members and projecting only at their lower portions beyond the lower edge of said members.

2. A roller skate having a runner comprising parallel laterally spaced members provided with upward contacting extensions forming supports for toe and heel plates, and a plurality of narrow cylindrical rolls arranged in tandem between the members and projecting only at their lower portions beyond the lower edge of said members, and a tip for a pirouetting axis being carried by the running members in advance of the foremost roller.

3. A roller-skate having laterally spaced members, and a plurality of interposed rollers arranged in tandem, each roller having a fixed body portion secured to the members of the runner, and an annular rim encircling the body portion, and a series of antifriction balls interposed between the rim and body portion and housed between the runner members.

1,268,386. TURRET-LATHE. JAMES C. POTTER, Pawtucket, R. I. Filed July 1, 1914. Serial No. 848,414. (Cl. 29—41.)

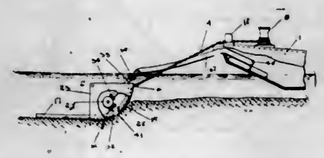


1. In a metal working machine, the combination of a single work spindle, a series of tools arranged for successive action upon the same piece of work carried by the spindle, a carrier for said tools movable to place the same into and out of position to operate on a piece on the work spindle, a support for the tools that is stationary during the movement of the tools, and means to move the tools different distances.

6. In a metal working machine, the combination of a single work spindle a series of similar tools arranged for successive action upon the same piece of work carried by the spindle, a carrier for said tools movable to place the same into and out of position to operate on a piece on the work spindle, a support for the tools that is stationary during the movement of the tools, and means to move the tools different distances, consisting of a slide having a fixed range of travel, and tool carriers having slide engaging points situated at graduated distances with reference to the limit of travel of the slide.

[Claims 2 to 5 not printed in the Gazette.]

1,268,387. DREDGING APPARATUS. WILLIAM H. REED, Portland, Oreg. Filed Nov. 17, 1913. Serial No. 801,494. (Cl. 37—13.)

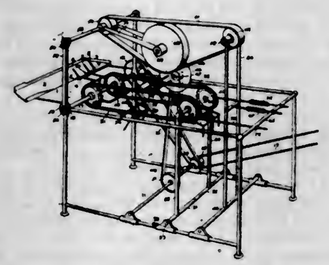


1. The combination with a dredge frame provided with a hood, and a counterbalance, of a discharge member within the hood.

3. The combination with a pair of runner irons curved at one end, united by a breast plate, and provided with cheek plates to form a hood, of a cross head discharge member secured within the hood between said cheek plates and adapted to make operative discharge through the breast plate.

[Claim 2 not printed in the Gazette.]

1,268,388. BEET-TOPPER. CHARLES F. RUKES, Palo Alto, Cal. Filed July 18, 1917. Serial No. 181,257. (Cl. 193—2.)



1. In a beet topping machine, a stationary frame for supporting the beets in succession, endless chains, conveyer frames carried thereby, adapted to lift the beets from the stationary frame, and an endless belt and roller supported by said belt, and capable of, and restricted to an oscillating and approximately vertical movement, and depressing said belt upon said beets in succession in said conveyer frames.

2. In a beet topper, the combination of endless belts, conveyer frames carried thereby, means for varying the tension of one of said belts, and resilient means for varying the tension of the other belt with the variation of the load imposed thereon.

3. In a beet topping machine, the combination of endless belts, conveyer frames for the beets carried thereby, one of said belts when in operation being under a uniform tension, and means for varying the tension of the other belt to conform to the variation of the load thereon.

4. In a beet topping machine, the combination of endless belts and conveyer frames carried thereby, sprocket wheels around which said belts pass, a movable frame for supporting one wheel of each chain, means attached to one of said frames for varying the tension of the chain thereon, a spring attached to the other movable frame for automatically varying the tension of the chain around the wheel carried thereby with the load thereon, an endless belt above said chains traveling along a path which approaches that traveled by the beets in said conveyer frames, and a roller on said endless belt for pressing the beets into the conveyer frames.

5. In a beet topping machine, the combination of endless belts and conveyer frames carried thereby, sprocket wheels around which said belts pass, a movable frame for supporting one wheel of each chain, means attached to one of said frames for varying the tension of the chain thereon, a spring attached to the other movable frame for automatically varying the tension of the chain around the wheel carried thereby with the load thereon, an endless belt above said chains traveling along a path which approaches that traveled by the beets in said conveyer frames, a roller on said endless belt for pressing the beets into the conveyer frames, a pulley around which said endless belt travels, a movable frame carrying said pulley and a spring attached to said frame and arranged to extend said belt against the weight of said roller.

1,268,389. FLASH-IGNITER AND SIMMERER. JULIUS F. RUTZ and FRANK A. GAUGER, Milwaukee, Wis. Filed Aug. 3, 1917. Serial No. 184,258. (Cl. 158—115.)



1. In a structure of the class described, a control valve including a bored valve casing, said casing having a single inlet and two outlets, said inlet and outlets communicating with the bore of said casing, a valve-head in said bore for controlling the passage of fluid from the inlet through one of said outlets, a passage leading from said inlet, and means carried by said valve head and independent thereof for connecting said passage and the other of said outlets.

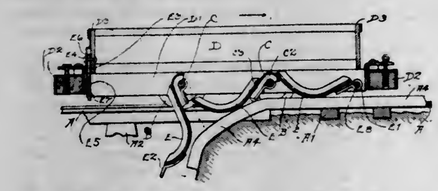
5. A combined simmerer and flash igniter comprising a hood member adapted to be stamped from a single sheet of material, said hood member having openings in its top wall to provide a simmering burner and a series of openings in the side wall, a partition near the closed end of said hood member below said first mentioned spring openings therein, said partition having an opening, a lateral flange formed on the peripheral edge of said partition and engaging the inner wall of the hood member, a flange surrounding said opening in said partition, a nipple engaging the last mentioned flange, a spray nozzle projecting into said nipple and having an air passage surrounding the same, a flash igniter disposed in the hood member beneath the partition and having a series of jet openings therein alining with the series of openings in the side wall of the hood member, a supply pipe for the flash igniter, a supply pipe for said spray nozzle, and a valve for controlling both of said supply pipes.

[Claims 2 to 4 not printed in the Gazette.]

1,268,390. RAILWAY. HUGH W. SANFORD, Knoxville, Tenn. Filed Nov. 26, 1917. Serial No. 204,078. (Cl. 214—63.)

1. The combination of a car body, axles supporting said body for maintaining horizontal position and movement of said body, wheels carrying said axles, a first bottom door hinged near its forward edge on a line which is horizontal and transverse to the length of the car body, the rear up-

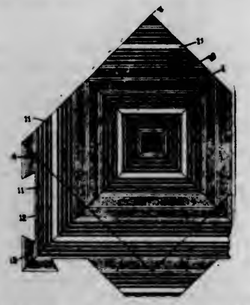
per face of said door being curved substantially concentric to its hinge line, releasable means for supporting the opposite edge of said door when the latter is in closed position, and a second bottom door forward of said first door and hinged at its forward part on a line parallel to the hinge line of the first bottom door and having its rear edge normally resting upon said curved upper face of said first door, substantially as described.



4. The combination of a car body, axles carrying said body, wheels carrying said axles, two bottom doors one hinged to one and the other to the other of said axles and each extending to both sides of its axles, a third bottom door hinged on a line which is parallel to said axles, latch mechanism at one end of the car body, two of said doors having an edge resting upon the edge of an adjacent door and the third door having an edge supported by said latch mechanism when the doors are in the closed position, the doors which are hinged to said axles having their forward parts curved to make them approximately concentric to the axles to which they are hinged, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,268,391. DECORATIVE BLOCKS. LINDSLEY SCHEPMOES, Hasbrouck Heights, N. J. Filed Jan. 29, 1917. Serial No. 145,061. (Cl. 35—12.)



1. As an article of manufacture, a decorative medium having two straight, uninterrupted and equal edges converging to an angle, and a third edge, connecting said two edges, having means for interlocking with another medium.

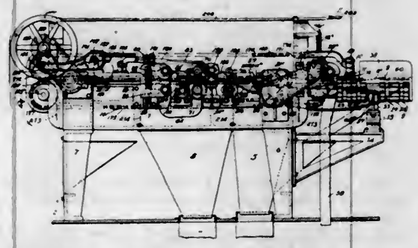
8. A decorative block in the form of a right-angle triangle the perpendiculars of which are straight and uninterrupted, said block having a tongue projecting from its hypotenuse, in combination with a block of similar size in the form of a right-angle triangle the perpendiculars of which are straight and uninterrupted, said block having a groove in its hypotenuse, said tongue and groove having characteristics whereby the two blocks may be interlocked and intimately juxtaposed.

12. In combination, a plurality of blocks of substantially similar form having means whereby they may be interlocked and intimately associated to produce any predetermined structure; each of said blocks being provided with substantially similar surface ornamentation, the characteristics of which are such as to produce a continuity of the respective design lines or characteristics from one block to the other throughout the area of the structure.

16. As an article of manufacture, a decorative medium having one of its surfaces provided with a plurality of different ornamental motifs, elements of which latter are arranged so as to have a different relation to different edges of said medium, and which elements are arranged to terminate substantially at one or more edges of said medium so that said elements may be carried over from medium to medium of a juxtaposed group of the latter and vary the ornamental composition according to the arrangement of said media, substantially as described.

[Claims 2 to 7, 9 to 11, 13 to 15, and 17 to 21 not printed in the Gazette.]

1,268,392. TOBACCO-STEMMING MACHINE. FREDERICK C. SCHOFIELD, Washington, D. C., assignor to The Tobacco Stemming Machine Company, Baltimore, Md., a Corporation of Delaware. Filed Aug. 2, 1915. Serial No. 43,227. (Cl. 131—57.)



1. In a tobacco stemming machine main srtipping rolls to receive the tobacco leaves in groups, a conveyer to feed the leaves to said rolls in groups and in a direction transverse to the axis of said rolls, preliminary stripping means to clear the butts of the stems of leaf blade portions and a table intermediate the main conveyer and the preliminary stripping means for receiving the partially stemmed leaves from the preliminary stripping means, said preliminary stripping means acting upon the leaves substantially *seriatim* and feeding them toward and discharging them upon the intermediate table in a position substantially conforming to the position necessary for being taken by the first mentioned conveyer substantially as described.

7. In a tobacco stemming machine and in combination, companion stripping rolls, a leaf-conveyer associated therewith, and a supplemental conveyer or binder coacting with the first named conveyer and including a member provided with an unyielding endless track, having curved end portions and an endless band of compressible material movable about said track, and anti-friction means between said band and track.

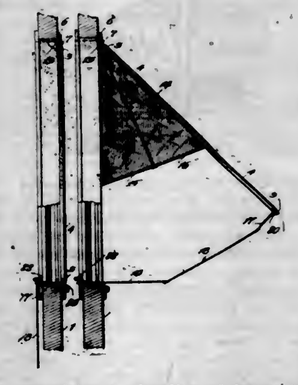
15. In a tobacco stemming machine and in combination, a pair of stripping rolls, leaf conveying means associated therewith and including an endless carrier having its leaf-engaging run located in advance of the rolls and moving in the direction of the longitudinal axes thereof, an endless supplemental conveyer or binder also located in advance of the rolls and having a part thereof directly in advance of the same running in parallelism with the leaf-engaging run of the first-named conveyer, and a table associated with the conveyer and forming a support for portions thereof and for the leaves being fed thereby, a main table arranged with its side adjacent the discharge end of the first-named table, a second set of stripping rolls, and a leaf conveyer associated therewith for conveying the leaves from the second-named table to and through the second set of rolls, substantially as described.

31. In a tobacco stemming machine and in combination, leaf feeding means comprising gripping bars and carriers for advancing the same, a pair of stripping rolls between which the leaves are carried by the bars, said rolls being movable from each other to permit of the passage of the bars, and toward each other for engaging with the leaves, and means for supporting and interconnecting the rolls and for imparting substantially equal movements to both of the rolls in the aforesaid movements thereof away from and toward each other, substantially as described.

68. In a tobacco stemming machine, a stripping roll comprising a sectional shell having internal ribs, truncated conical expanders within the shell coöperating with the ribs, a strip of card clothing wound about the shell, head plates having means for the connection thereto of the ends of the card clothing strip, and means for adjusting the expanders interposed between the same and the head plates most remote therefrom, substantially as described.

[Claims 2 to 6, 8 to 14, 16 to 30, 32 to 67, and 69 to 75 not printed in the Gazette.]

1,268,393. HINGE. BERNARD J. SCHWAB, Miami, Ariz. Filed Mar. 20, 1917. Serial No. 156,019. (Cl. 16—11.)



A hinge comprising a plurality of leaves hinged together, one of the leaves being of greater width than the other and having slots at its extended edge, said narrow leaf being adapted for connection with one element, holding plates for connecting the other leaf to the other element, one of the said plates being adapted for attachment to the other element and having overlying flanges for engaging the ends of the said wider leaf, the second holding plate having hooks for engaging the slots and being adapted for connection with the inner face of the said other element.

1,268,394. ROTARY CUTTER. LESTER B. SHAMBLEN, Omaha, Nebr., assignor to M. C. Peters Mill Co., Omaha, Nebr., a Corporation of Nebraska. Filed Dec. 10, 1917. Serial No. 206,535. (Cl. 146—29.)



1. A rotary cutter, having a spider-head provided with a rabbeted seat, a plate removably secured to said seat, a cutting-blade adjustably mounted on said plate and having slots near the sides, and means for securing the plate and cutting-blades to the spider, said plate having projections at its sides adapted to abut the sides of the blades and to reinforce the side portions thereof between the slots and side edges of said plate.

2. A rotary cutter head, having a plurality of arms with spider-heads at the outer ends thereof, said heads having rabbeted outer faces, a plate fitting the rabbeted face of each of said heads, means for removably securing the plate to said head, a cutting-blade seated upon the plate and having slots near the sides, said plate having projections along its sides adapted to reinforce the side portions of the blade between the slots and side edges, and bolts engaging said slots and passing through the plate and spider-head and thereby securing the blade and plate to the spider-head.

3. A rotary cutter, having a spider-head with a rabbeted face, a removable plate secured to said rabbeted face, a cutting-blade adjustably mounted on the plate having slots through it near the sides, said plate having flanges at its ends embracing and reinforcing the portions of the blade between the slots and side edges, and means adjustably securing the blade to the spider-head and said plate.

4. A rotary cutter, having a spider-head rabbeted on its forward face, a cutting-blade adjustably secured to another face of the spider-head, and a removable wear-plate secured to the rabbeted front face of said head just under the cutting surface of the blade.

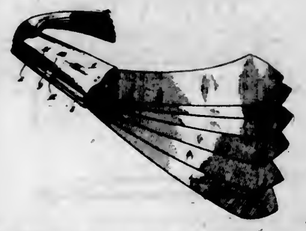
5. A rotary cutter, having a spider-head rabbeted on its forward face, a cutting-blade adjustably secured to another face of the spider-head, a separate wear-plate secured to the rabbeted front face of said head just under the cutting surface of the blade, and a securing bolt extending through said plate and spider-head for securing this plate in place.

1,268,395. POWER MANURE-LOADER. JAMES W. SHEA, Sr., Hankinson, N. D. Filed Apr. 2, 1917. Serial No. 159,101. (Cl. 198—S.)



In a loader, a horizontally disposed conveyer having a floor with an elongated opening in it, an endless skeleton apron operating over the floor, and a slidable shutter below the opening, and capable of covering said opening, or a portion at either end thereof; the space below the conveyer being substantially unobstructed.

1,268,396. NECKTIE-HOLDER. LOUIS SIDERMAN, Detroit, Mich. Filed Nov. 13, 1917. Serial No. 201,888. (Cl. 24—248.)

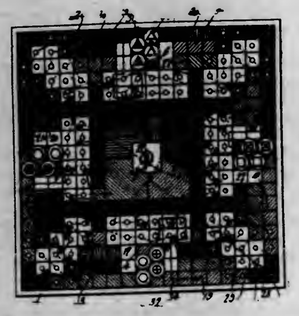


A necktie holder comprising tapering channel members having side walls hingedly connected together so that said members may be closed to form a casing rectangular in cross section with the ends thereof open and from which neckties are adapted to project, a retaining member disposed longitudinally on the inner side of one of said channel members and adapted to bring pressure to bear on neckties in said holder, and means carried by the other side walls of said channel members adapted for holding said members in a closed position.

1,268,397. GAME-BOARD. CHARLES B. SIGLER, Knightstown, Ind., assignor of one-third to Harry E. Johnson, Knightstown, Ind. Filed May 21, 1917. Serial No. 169,985. (Cl. 46—64.)

2. A game board having a danger zone, elements movable on the board, and means for providing a signal when said elements make false moves or contact at certain points in the danger zone.

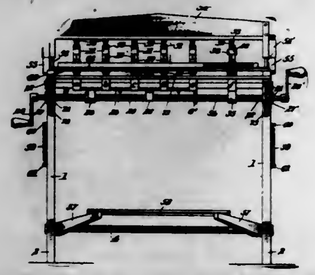
5. A game board having a danger zone and electrical contacts in said zone, an electrical circuit connected to said contacts and including a signal, and elements movable on the board and adapted to touch each other when disposed over adjoining contacts, the electrical connections being such that when said elements touch at certain points of the board, the circuit is closed.



9. A game board having a danger zone divided into squares, contacts in said squares, an electrical circuit connected to said contacts, and including a signal, and elements movable on the board and of a size to contact when occupying adjacent squares to close the circuit at certain points in the danger zone, some of the elements being adapted to electrically bridge the contacts in moving from one square to another, and the others being so constructed as not to electrically bridge the contacts.

[Claims 1, 3, 4, and 6 to 8 not printed in the Gazette.]

1,268,398. BUTTONHOLE-CUTTING MACHINE. HARRY SILVERBERG and CLARENCE W. BURGER, Washington, D. C., assignors of one-fourth to said Burger and three-fourths to said Silverberg. Filed June 15, 1916. Serial No. 103,752. (Cl. 164—92.)



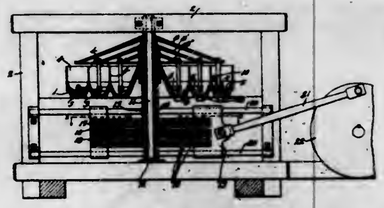
1. In a buttonhole cutting machine, the combination with a fixed supporting frame, of a series of carriers slidably mounted thereon, cutting mechanism comprising an independent anvil and associated die mounted on each carrier, said dies being set in arms pivotally secured to said carriers and disposed above said anvils, means for simultaneously shifting said carriers bodily along the frame so that each carrier is moved to an extent proportional to its distance from the end of the series, a common actuating bar extending above said series of carriers and mechanically independent thereof, said bar adapted to engage said pivoted arms and thus operate the dies, and means for reciprocating said bar.

4. In a buttonhole-cutting machine, the combination with a supporting frame, of a plurality of cutting devices mounted thereon, each comprising an arm, a common actuator for said devices, and a resilient cushioning element interposed between said actuator and the arm of each cutting device.

8. In a buttonhole-cutting machine, the combination with a series of cutters, of a work table disposed adjacent thereto, and a gage mounted on said table in position to be engaged by the work, said gage comprising a bar laterally adjustable on said table for determining the distance of the buttonholes from the edge of the garment, and a bracket adjustable on said bar for determining the distance of the last buttonhole from the end of the garment.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,268,399. AMALGAMATING APPARATUS. FRANK S. SKIFF, Portland, Oreg. Filed Mar. 9, 1917. Serial No. 153,634. (Cl. 83—67.)



1. In apparatus of the class described, the combination of an amalgamating bowl provided with a plurality of concentric amalgamating compartments each adapted to contain a body of liquid to receive the material to be treated, said compartments embodying means to prevent passage of the concentrates from one compartment to the other, and means operating at uniform relatively slow speed in all the compartments for agitating the material in said compartments and provided with rubbing instrumentalities to effect separation of the concentrates therefrom while permitting precipitation of the same.

3. In apparatus of the class described, the combination of an amalgamating bowl having a series of separate independent compartments adapted to receive material to be completely treated, means rotative in each compartment for operating upon the material therein, and differentially operated actuating means common to all the operating means for actuating the latter at the same linear speed.

6. In apparatus of the class described, the combination of a stationary amalgamating pan, a plurality of separably operable concentrically arranged frame members each movable relatively of the other, means on said frame members for operating upon the contents of the pan, and operating means common to all of said frame members.

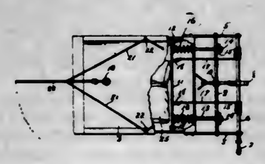
7. In apparatus of the class described, the combination of an amalgamating pan, a plurality of concentrically arranged independent frame members, separate operative connections for each member, rubbing instrumentalities mounted on said frame members, and means common to said connections for actuating the frames simultaneously at substantially the same linear speed.

10. In apparatus of the class described, the combination of an amalgamating bowl having its bottom rising in the center and provided with an opening, a plurality of mullers arranged in said bowl, a series of muller carrying frames nested one above the other and disposed over the bowl, independently operating members extending through the central opening and sustaining the frames, and means for actuating said supporting members.

[Claims 2, 4, 5, 8, 9, and 11 to 13 not printed in the Gazette.]

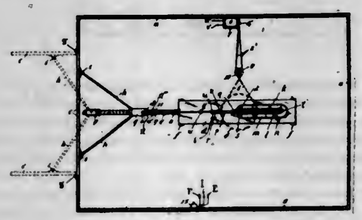
1,268,400. MAIL-DELIVERING APPARATUS. ORIN W. SMIAL, Wilsey, Kans. Filed Nov. 19, 1914. Serial No. 872,987. (Cl. 258—7.)

1. In a mail delivery apparatus, a receptacle carried by a car, and having a plunger operating in the receptacle, rollers mounted on the plunger and engageable with the top and bottom of the receptacle to maintain the plunger in movable position in the center of the receptacle, rods secured to the plunger and passing through the receptacle and having springs interposed between the plunger and receptacle, a rod secured to the receptacle, the said rod and plunger having cables connecting them together, means for rotating the rod, means for holding the rod against rotation, and means for releasing the rod.



2. In a mail bag delivering apparatus, the receptacle carried by a car, a plunger operating in the said receptacle and provided with rods passing through the end of the receptacle, said rods having springs interposed between the plunger and the said receptacle, the latter being provided with brackets, a rod rotatably mounted in the bracket and carrying a ratchet wheel, cables secured to the plunger and coiled about the said rod, a pawl secured to the brackets and engageable with the ratchet wheel, and an arm pivotally connected to the receptacles, the said arm and pawl having means for releasing said rod.

1,268,401. MECHANISM FOR OPENING AND CLOSING DOORS. CLAUDE V. SMOCK, Portland, Oreg. Filed Aug. 21, 1916. Serial No. 116,088. (Cl. 268—9.)

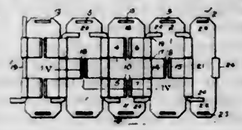


1. In combination, a pendant stub shaft, a driving gear secured to the lower end of said shaft, a supporting plate, a mangle rack slidably held upon said supporting plate comprising two parallel portions provided with teeth connected by means of two semicircular toothed end portions an upstanding flange surrounding said teeth and held in spaced relation thereto, said gear being in mesh with said teeth and contacting with said upstanding flange, a connecting rod secured at one end to said mangle rack, a guide arm extending from said supporting plate, a sleeve g slidably mounted upon said arm, and connected with said connecting rod, a link pivotally secured to said sleeve g having its outer end pivotally secured to a door, and means to rotate said driving gear.

4. A door opening and closing device including in combination, a pendant shaft, a driving gear secured to the lower end of said shaft, a mangle rack in mesh with said gear, means for slidably supporting said mangle rack, a tubular member pivotally secured to said rack having a lengthwise extending slot and a terminal collar, a connecting rod having one end telescoping within said tubular member, a pin carried by said connecting rod and extending through the slot within said tubular member, a guide arm, a sleeve slidably held upon said guide arm, means for connecting said sleeve to said connecting rod, a link extending from said sleeve having its outer end secured to a door, a spring interposed between said collar and pin, a second collar secured to said tubular member intermediate of its ends, and a second spring interposed between said second collar and said pin whereby said rod is yieldingly connected to said tubular member.

[Claims 2 and 3 not printed in the Gazette.]

1,268,402. ARMOR FOR PNEUMATIC TIRES. JAMES J. SNIGO, Pittsburgh, Pa. Filed Dec. 13, 1916. Serial No. 136,584. (Cl. 152—16.)

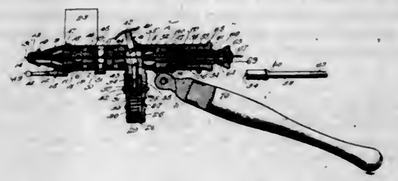


2. An armor for pneumatic tires consisting of an annulus comprising a series of tread elements having arms bent to provide barrels, each of said barrels consisting of an inner and outer cylinder, the barrels of one element alining with the barrels of an adjacent element, and coupling members extending through the alining barrels for hinging said elements together, said arms extended from the barrels, the arms of one element resting upon the upper face of an adjacent element and bent at right angles to provide anti-skidding projections.

5. An armor for penumatic tires consisting of an annulus comprising two sets of tread elements, each of the elements of one set provided with a pair of arms projecting from each longitudinal edge, each of the elements of the other set provided with an arm projecting from each longitudinal edge, the tread elements of one set being alternately disposed with respect to the tread elements of the other set, each of said arms bent to provide barrels, each consisting of an inner and outer cylinder in close contact, the barrels of one element alining with the barrels of the other element, and coupling members extending through the alining barrels for hinging the tread elements together, and filling members interposed between certain of said tread elements and hinged therewith.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,268,403. AIR-BRUSH. ERNEST C. STACKER, Philadelphia, Pa., assignor of one-half to Alexander Chambley, Philadelphia, Pa. Filed Mar. 28, 1916. Serial No. 87,306. (Cl. 91—45.)



An air brush of the character described, the combination with a barrel, an air-admitting valve, a source of pigment supply and a color ejecting nozzle, a needle operable to regulate the flow of pigment through said nozzle, a trigger for simultaneously adjusting the valve and needle to open and closed positions, of means for exteriorly effecting the adjustments of said needle with regard to said nozzle, irrespective of the trigger adjustments, said means consisting of a spring-pressed sleeve, normally movable in unison with said trigger, and having a bore formed therein for the reception of said needle, a casing threaded to said sleeve, yieldable fingers formed with said casing and having portions thereof threaded and substantially inclined, a nut located exteriorly of said barrel adapted to engage the inclined and threaded fingers to clamp said needle to the casing, whereby upon the removal of said nut said needle will be capable of being manually adjusted within said barrel and a guiding sleeve operatively engaging the barrel interposed between the spring pressed sleeve and the casing for removably securing the parts in position.

1,268,404. COMPOSITION OF MATTER. WILLIAM ST. JOHN, New York, N. Y. Filed Dec. 27, 1917. Serial No. 209,055. (Cl. 167—3.)

1. A medicament for local application comprising a limpid, colorless, volatile liquid obtained as a by-product of Pintsch gas subjected to a pressure of approximately fifteen atmospheres, and filtered.

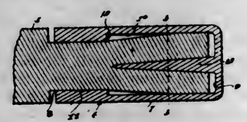
2. A medicament for local application comprising a limpid, colorless, volatile liquid obtained as a by-product of Pintsch gas at comparatively low pressure, and an aromatic oil acting as a deodorant and also having the property of holding the said liquid in solution indefinitely.

3. A medicament for local application comprising a limpid, colorless, volatile liquid obtained as a by-product of Pintsch gas at comparatively low pressure, and an oil having the property of softening the skin and opening the pores and of holding the liquid in solution indefinitely.

4. A medicament consisting of three parts Pintsch hydrocarbon and one part of oil of wintergreen.

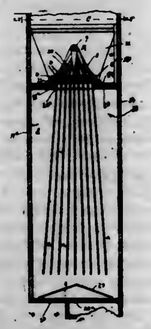
5. The process for producing a medicament for local application comprising subjecting Pintsch gas to comparatively low pressure to produce hydrocarbon as a by-product, subjecting said hydrocarbon to filtration, and mixing with said filtered hydrocarbon an oil having characteristics enabling it to indefinitely hold the hydrocarbon in solution and neutralize its odor.

1,268,405. SHAFT-TIP. RICHARD A. STOUTE, Branksmere, Barbados, British West Indies. Filed Aug. 3, 1917. Serial No. 184,307. (Cl. 21—79.)



A shaft tip consisting of a shell open at one end and closed at its other end, the bore of the shell being reduced in its cross dimensions from its open end for a portion of its length whereby an abrupt shoulder is provided, and a wedge member carried by the closed end of the shell extending longitudinally within the latter whereby when the shell is driven upon a thill end said wedge member will enter and expand the latter into frictional contact with the wall of the bore while said shoulder will be caused to bite into the shaft.

1,268,406. APPARATUS FOR TREATING PHOTOGRAPHIC PRINTS AND THE LIKE. WILLIAM E. SWALM and ARTHUR E. SEXTON, Los Angeles, Cal. Filed Oct. 12, 1915. Serial No. 55,388. (Cl. 95—98.)



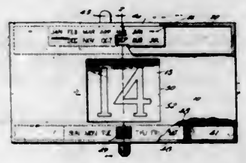
1. In apparatus of the character disclosed, means for holding a plurality of prints or the like by only one edge of each and with each edge held in spaced relation to one edge of the next adjacent print, said means being constructed to allow fluid to flow therethrough and over the surfaces of the prints, and means for so supplying a flowing fluid.

4. In apparatus of the character disclosed, a print-receiving tank having an upper chamber and a lower chamber, a print-holding device in the upper chamber for holding a plurality of prints in the lower chamber by one of their edges only and each with the edge so held in spaced relation to the edge of the next adjacent print, and means for supplying a fluid to said upper chamber.

8. In apparatus of the character disclosed, a tank, a holder adapted to be positioned in said tank and comprising spaced members adapted for engagement with one edge only of prints or the like and adapted to permit the flow of fluid between said spaced members whereby a circulating fluid may wash the surfaces of the prints so held and during such washing action cause the divergence of the free ends thereof, and means for supplying a fluid between the spacer members.

[Claims 2, 3, 5 to 7, and 9 not printed in the Gazette.]

1,268,407. CALENDAR. TAMME RENKEN TAMMEN, Parkersburg, Iowa. Filed Sept. 18, 1915. Serial No. 51,485. (Cl. 40—117.)

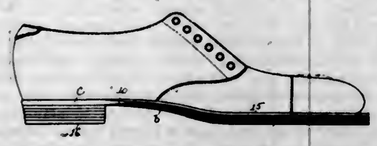


1. A calendar comprising a casing having sight openings therein and pockets extending longitudinally thereof, slides adjustably mounted in said pockets and containing indicia representing the days of the week and months of the year, and a chart for vertical and horizontal adjustment in said casing.

4. In a calendar comprising a casing having sight openings therein arranged one above the other, a frame adjustable horizontally in said casing and comprising vertical side members having their ends disconnected, a horizontal cross piece journaled to said side members intermediate the ends thereof, U-shaped bearings fitting over the upper and lower ends of said side members, the lower bearings being provided with alined notches in the bottoms thereof, a guide member in the lower end of said casing and engaging in said notches whereby to guide said frame during its adjustment, an upper roller mounted in said upper bearings, a pair of rollers mounted between said lower bearings, a chart carried by said rollers and containing indicia representing the months of the years and days of the months and visible through said sight openings, and a mat secured to said cross piece and adjacent said sight openings and adapted to have said chart interposed therebetween.

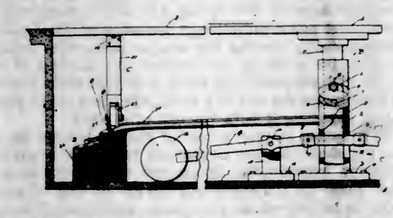
[Claims 2 and 3 not printed in the Gazette.]

1,268,408. COMPOSITE OUTER-SOLE. WARREN TIRRELL, Brockton, Mass. Filed Mar. 11, 1916. Serial No. 83,652. (Cl. 36—25.)



A boot or shoe having a composite sole composed of an integral toe, tread and shank portion of rubber, said shank portion having its upper surface beveled toward the rear end thereof, and a leather heel portion projecting beyond the front edge of the heel proper to a point of the shank adjacent to the heel proper, and having its under surface beveled from the said edge of the heel proper and overlapping the said beveled portion of the shank to form a joint within the shank and near the heel portion of the composite sole with the upper surface of the leather heel portion substantially flush with the upper surface of the rubber shank.

1,268,409. TURN-TABLE. HARRY RINZO TSUTSUI, Los Angeles, Cal. Filed Jan. 31, 1918. Serial No. 214,641. (Cl. 104—211.)



1. In improvements of the character disclosed, a revoluble platform, a central shaft depending from said platform, a tubular upright bearing slidably and revolubly receiving the shaft, said bearing having a spirally-arranged slot therein, a member carried by said shaft and engaging in said slot, means for returning the shaft and table to normal position, rollers connected with the table adjacent the periphery thereof, and a runway upon which said rollers engage, said runway having a pitch corresponding to that of the slot in the tubular bearing.

3. In improvements of the character disclosed, a revoluble table, a shaft secured to and depending from the center of said table, an upright bearing slidably and revolubly receiving the shaft, said tubular bearing having oppositely arranged spiral slots therein, members fixed to the shaft and engaged in said slots, means for returning the shaft and table to normal position, rollers connected with the table adjacent to the periphery thereof, oppositely inclined rails upon which said rollers ride, said rails being inclined in correspondence to the pitch of the slots, said means for returning the table and shaft to normal position comprising a link vertically slidably mounted within the tubular bearing and engaged with the lower end of the shaft, levers pivoted intermediate their ends and disposed upon opposite sides of the tubular bearing, said levers having their inner ends connected with the link, and weights secured to the outer ends of the levers.

5. In improvements of the character disclosed, a revoluble platform, means centrally supporting said table and which acts under the weight of a load placed upon the table to rotate the table, means cooperating with the last named means to return the table to normal position, and further means supporting the table adjacent to the periphery thereof and which acts under the weight of a load upon the table to cause rotation of the table; said further means comprising supports depending from the table, rollers carried upon the supports, and independent rails upon which the rollers ride, said rails being inclined in opposite directions.

[Claims 2 and 4 not printed in the Gazette.]

1,268,410. LIFTING-JACK. RALPH B. WEBER, St. Charles, Mo., assignor to L. A. Schoenberg, St. Charles, Mo. Filed July 27, 1917. Serial No. 183,083. (Cl. 254—1.)

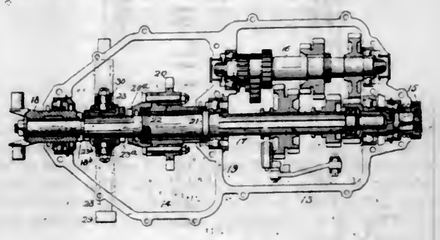
1. A lifting jack, comprising a base composed of a supporting part having a transverse slot provided with oppositely inclined end walls, said part having a recess whose bottom wall is in alinement with the bottom wall of said slot, a removable part mounted on the supporting part and having a recess in axial alinement with and of the same diameter as the recess in the supporting part, and an element removably binding the removable part upon the supporting part; a pedestal extending into said slot and being movable in opposite directions into contact with the inclined end walls of said slot, respectively;



two axially alined cylindrical arms integral with and at right angles to said pedestal journaled in said recesses and arranged to rock therein as the pedestal is oscillated in said slot; and lifting mechanism in connection with said pedestal.

[Claim 2 not printed in the Gazette.]

1,268,411. MOTOR-VEHICLE. ROLLIN H. WHITE, Cleveland Heights Village, Ohio, assignor, by mesne assignments, to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Feb. 24, 1913. Serial No. 750,174. (Cl. 74—58.)



2. In a motor vehicle, the combination of a vehicle frame, a transmission gear case secured thereto which comprises a main gear case and a supplemental gear case behind the main gear case and separated therefrom by a partition, transmission mechanism in the main gear case having a terminal driven member which is extended rearward across the supplemental gear case, a bearing in the partition between said gear cases in which said shaft is rotatably mounted, a tubular universal joint member rotatably mounted in the rear end of the supplemental gear case, and serving as a bearing for the rear end of said driven shaft, a power transmission member rotatably mounted on said driven shaft within the supplemental gear case, a clutch within the supplemental gear case adapted to connect either said power transmission member or the universal joint member with said driven shaft, vehicle propelling mechanism operatively connected with the universal joint member, a utility shaft mounted on the vehicle frame, and mechanism transmitting motion thereto from the power transmitting member on said driven shaft.

[Claim 1 not printed in the Gazette.]

1,268,412. BUCKLE. EDWARD H. WHEELER, Hartford, Conn. Filed June 22, 1917. Serial No. 176,372. (Cl. 24—206.)

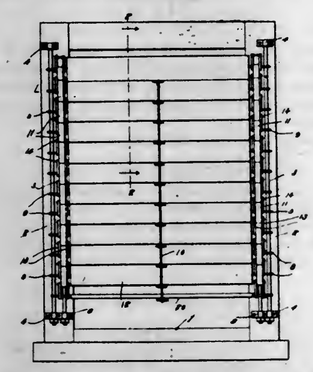


1. A buckle comprising a base member adapted to support a holding strap having longitudinally directed lands at the sides and a plurality of transverse bars in spaced relation between the lands, and a clasp device including a body having longitudinally directed clefts to produce a plurality of resilient tongues and a locking member rotatably engaging said body member and including projec-

tions engaging said tongues and a hook engaging one of said bars, another holding strap being adapted to be connected to said clasp device.

[Claims 2 to 4 not printed in the Gazette.]

1,268,413. WINDOW-BLIND. THOMAS H. WHETTON, Hamilton, Ontario, Canada. Filed July 24, 1917. Serial No. 182,453. (Cl. 156—17.)

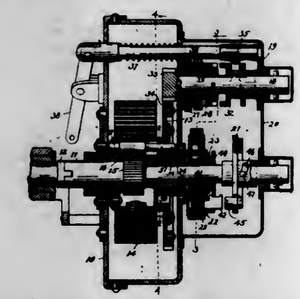


1. In a blind of the class described, a pair of guide bars attached to the stiles of a window, slats positioned between the guide bars, shanks extending longitudinally from the slats, and having eyes on the ends thereof which surround the guide bars to prevent the blind from being blown about, links on the shanks to facilitate in the folding of the blind and means controlling the raising and lowering of the blind.

4. A blind comprising a pair of guide rails attached to the stiles of a window casing, shanks having eyes on one end which surround said guide rails, slats pivotally mounted on the adjacent ends of the shanks, links pivotally mounted on the shanks, guide bars attached to the stiles of the window casing immediately behind the links and forming bearings for the links to facilitate the raising and lowering of the blind by engagement with the slats, and means for raising and lowering the blind.

[Claims 2 and 3 not printed in the Gazette.]

1,268,414. STARTER. JOSEPH A. WILLIAMS, Cleveland, Ohio, assignor to The K. W. Ignition Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 30, 1914. Serial No. 835,358. (Cl. 123—187.)



1. In a spring starter, a starter shaft, a spring for rotating the shaft, means for establishing driving connection between the spring and shaft comprising ratchet mechanism including a ratchet wheel and a plurality of sets of pawls, and means for operating each set of pawls by which when one of said sets of pawls is in driving engagement with the teeth of the ratchet, the other is ineffective for driving, but becomes effective if the first set of pawls becomes ineffective.

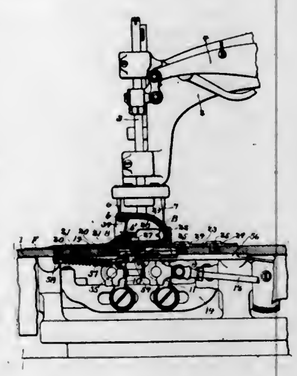
2. In a spring starter, a starter shaft, a spring for rotating the shaft, ratchet mechanism for effecting driving relationship between the spring and shaft comprising a ratchet wheel, and a plurality of sets of pawls, and means for independently controlling the movement of the sets of pawls so that when one of the sets of pawls is moved into driving engagement with the teeth of the ratchet a second set of pawls is ineffective for driving, and if the first becomes disengaged from the teeth the second set of pawls is moved into driving engagement with the teeth.

3. In a spring starter, a starter shaft, a spring for rotating the shaft, ratchet mechanism for effecting driving relationship between the spring and shaft comprising a ratchet wheel and a plurality of sets of pawls, and means for independently moving the sets of pawls into engagement with the teeth of the ratchet, the spacing of the pawls of each set and teeth being such that when one set of pawls engages the end of a tooth, the other set of pawls is out of engagement with the end of a tooth.

4. In a spring starter, a starter shaft, a spring for rotating the shaft, ratchet mechanism for effecting driving relationship between the spring and shaft comprising a ratchet wheel on the shaft, a plurality of sets of pawls adapted to be rotated by the spring, and separate means for positively moving each of the sets of pawls into and out of engagement with the teeth of the ratchet.

[Claims 5 to 9 not printed in the Gazette.]

1,268,415. FOLDER FOR SEWING-MACHINES. HARRY L. WILLIS, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 11, 1916. Serial No. 108,617. (Cl. 270—35.)

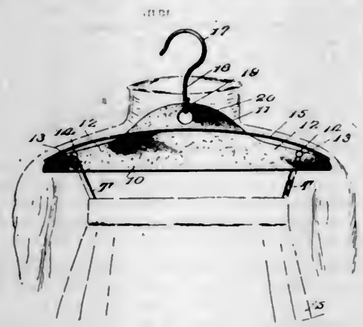


1. The combination of stitch forming mechanism including a needle, means for guiding fabric sections to the stitch forming mechanism, including a sectional band guide for directing a band to the stitching mechanism, and means under the control of the operator for shifting one of the sections of said band guide relative to the other section for withdrawing the edge guided thereby from the path of the needle at the will of the operator.

5. The combination of stitch forming mechanism including a needle, means for guiding fabric sections to the stitch forming mechanism, including a band guide having a fixed section and a movable section, means for pivotally supporting said movable section on said fixed section, a lever pivoted to the fixed section and the movable section for shifting said movable section, a sliding plate, means for connecting said lever to said sliding plate, a spring for moving said sliding plate in one direction, and devices under the control of the operator for moving said sliding plate in the other direction.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

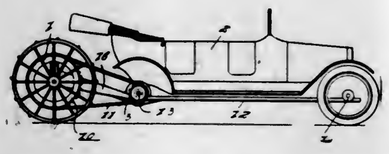
1,268,416. SHIRT-WAIST AND SKIRT HANGER. GEORGE WORDINGHAM, Milwaukee, Wis. Filed Nov. 7, 1917. Serial No. 200,802. (Cl. 211—13.)



4. A device of the character described including a hanger body provided with supporting arms, and a shoulder strip connected intermediate of its ends with the body and rigidly supported thereon above the arms with its extremities overlying the said arms in spaced relation thereto and adapted to be fixed to rest against the said arms.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,268,417. AUTOMOBILE TRACTION-WHEEL ATTACHMENT. CLARENCE A. ALTVATER, Ogden, Alberta, Canada. Filed May 23, 1917. Serial No. 170,468. (Cl. 180—16.)

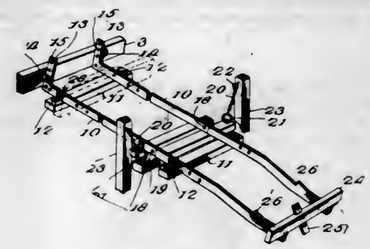


A tractor attachment for motor vehicles comprising an inverted U-shaped yoke, the free ends of said yoke being thickened in width, an axle carried by the free ends of said yoke, tractor wheels mounted on said axle, forwardly projecting beams formed on said yoke, means connecting the beams with the motor vehicle, said beams being inclined upwardly from the rear end of the vehicle to said yoke, said inclined portions being gradually thickened in width and height to strengthen the same, the thickened portions of the yoke and frame also forming an additional weight on the traction wheels, and means operatively connecting the tractor wheels with the driving mechanism of a vehicle.

1,268,418. TRACK FOR HAY-DISTRIBUTERS. CALVERT E. ANDERSON, Rockport, Ind. Original application filed May 26, 1917. Serial No. 171,265. Divided and this application filed Sept. 11, 1917. Serial No. 190,808. (Cl. 104—45.)

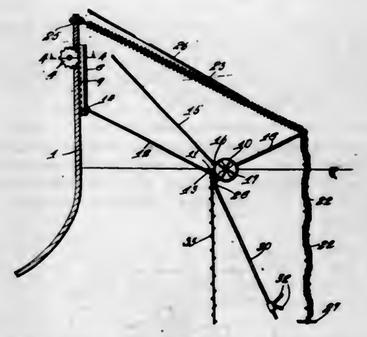
1. A track for hay distributers consisting of inclined rails having their upper ends upturned and provided with a plurality of perforations, brackets secured rigidly to a fixed support adjacent the sides of the upturned ends of the rails, and fastening devices inserted through said brackets and through perforations in the upturned ends of the rails whereby said ends will be adjustably supported.

2. A track for hay distributers comprising rails, a supporting beam passing under the rails, and suspending de-



vices having their lower ends attached to said supporting beam and their upper portions adjustably connected with fixed supports at the sides of the rails.

1,268,419. TORPEDO TRAP OR GUARD. LOUIS E. ARMSTRONG, Pensacola, Fla. Filed July 25, 1917. Serial No. 182,759. (Cl. 114—240.)



1. In a torpedo trap or guard, the combination of a tank, an arm extending from said tank, a net carried upon said arm, a second arm projecting from said tank and being normally spaced from said net, and said last mentioned arm being adapted to limit the swinging movement of said net, when the same is struck by a torpedo.

2. In a torpedo trap or guard, the combination of a tank, means for supporting said tank at a spaced distance from the hull of a ship, an arm projecting from said tank, a net carried upon said arm, a second arm projecting from said tank, fingers formed upon said last mentioned arm, and said fingers being adapted to engage said net, when said net is swinging in one direction, whereby the swinging movement of the net in one direction may be limited.

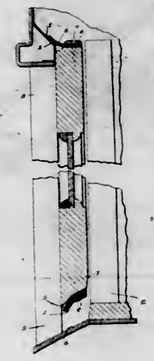
5. In a torpedo trap or guard, the combination of floating means, means for supporting said floating means upon a ship, a sectional net carried upon said floating means, and a cable interwoven through said sectional net, whereby said cable may be drawn so as to fold said net when so desired.

[Claims 3 and 4 not printed in the Gazette.]

1,268,420. WEATHER-STRIP. ROY T. AXE, Syracuse, N. Y., assignor to Oliver M. Edwards, Syracuse, N. Y. Filed Aug. 18, 1913. Serial No. 785,326. (Cl. 20—69.)

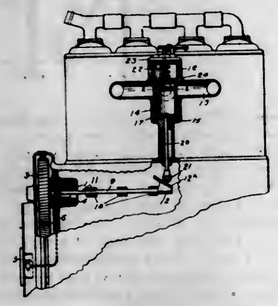
A weather strip comprising a flexible strip and a flexible resilient metal backing strip, the strips lying one upon the other and being fixed together at corresponding margins and adapted to be secured to a supporting member at

said margins and having their other margins free from each other and the contiguous surface of the supporting member, said free margins when the weather strip assumes operative engagement with another member, having



the outer parts of their opposing faces slidable crosswise of each other, and being bendable as a whole or independently of each other in a direction at an angle to that of the sliding movement of said outer parts, substantially as and for the purpose described.

1,268,421. PRESSURE-GOVERNOR. CHARLES BALOUGH, Springfield, Ohio, assignor to The Hercules Motor Manufacturing Company, Canton, Ohio, a Corporation of Ohio. Filed Apr. 20, 1916. Serial No. 92,501. (Cl. 264—12.)

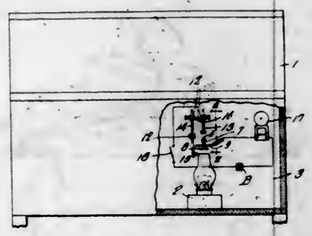


1. In a governing mechanism for a motor, a source of motive energy for said motor together with driven devices, a source of lubricating fluid pressure controlled by the motor, a piston located near the center of one of the driven devices arranged to be acted upon by said fluid, a valve for the motive energy comprising a slidable ported sleeve, and a connection between said piston and said sleeve.

4. In a governor for internal combustion engines, a source of fuel together with an intake manifold for the same, a source of fluid under pressure controlled by said motor, a piston in communication with said fluid, a piston rod connected with said piston having an inclined surface, a fuel valve arranged in said manifold consisting of two ported sleeves, one of which is movable with respect to the other, a valve stem connected to one of said sleeves, coöperating with said inclined surface to move said sleeve in one direction, and a spring for moving said sleeve in the opposite direction.

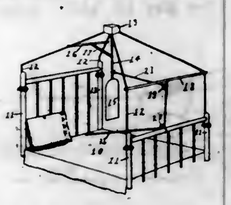
[Claims 2, 3, and 5 not printed in the Gazette.]

1,268,422. AUTOMATIC ALARM. GEORGE E. BEACH, Glenrock, Wyo. Filed Mar. 26, 1917. Serial No. 157,495. (Cl. 200—27.)



An automatic alarm for incubators comprising a heating unit provided with a chimney, a balancing beam pivotally supported and having a hook arranged at one end and a weight at opposite end, the said hook carrying a pair of disks of different diameters, the smaller disk being disposed below the larger disk, and adapted to extend into the chimney when the said beam is moved on its pivot whereby the said upper disk will rest upon the top of the said chimney and extend beyond the marginal edge thereof, an electric circuit normally open, and having one terminal connected with the said larger disk, and means arranged in the path of movement of the said larger disk to contact therewith for closing the said circuit when the smaller disk is extended into the said chimney.

1,268,423. FAN. JOHN BECHTEL, Sr., Earlham, Iowa. Filed Aug. 6, 1917. Serial No. 184,632. (Cl. 230—7.)

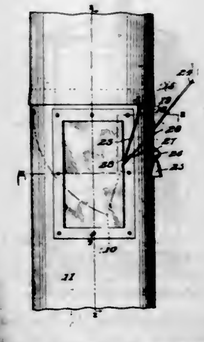


1. In a device of the class described, a frame, means for securing said frame to a bed, said means being capable of adjustment whereby the frame may be brought to a desired height relative to the bed, a fan secured to the frame, said fan being pivotally mounted at its upper end and having its lower end extended to position above the central portion of the bed, a flexible device secured to said fan and a spring having one end secured to said fan and having the other end secured to said frame, said flexible device and said spring being so arranged that the flexible device may be pulled to move the fan in one direction while the spring moves it in the other direction.

2. In a device of the class described, a bed, a frame supported thereby, a casing supported by said frame, a lever pivotally mounted in the bottom of said casing intermediate of its ends, a fan secured to the lower end of said lever, a shaft journaled in said casing above the upper end of said lever, a wheel mounted on said shaft above said lever, a plurality of pins being adapted to extend into the path of travel of the upper end of said lever, a latch device adapted to extend into the path of travel of said pins and of said lever, said latch device being adapted to be pushed aside by the impact of the upper end of the lever thereagainst, means for revolving said wheel whereby the pins thereon may be coacted with the upper end of said lever to move said ends in one direction, a spring having one end secured to said lever and the other end secured to the frame whereby the lever may be moved in the opposite direction and a flexible device secured to said lever and adapted when pulled to move the lever against the pressure of the spring.

3. In a device of the class described, a bed, a frame supported thereby, means for adjusting said frame vertically, a casing supported by said frame, a lever pivotally mounted in the bottom of said casing intermediate of its ends, a fan secured to the lower end of said lever, a shaft journaled in said casing above the upper end of said lever, a wheel mounted on said shaft above said lever, a plurality of pins extended radially from the surface of said wheel, said pins being adapted to extend into the path of travel of the upper end of said lever, a latch device adapted to extend into the path of travel of said pins and of said lever, and said latch device being adapted to be pushed aside by the impact of the upper end of the lever thereagainst, means for revolving said wheel whereby the pins thereon may coact with the upper end of said lever to move said ends in one direction, a spring having one end secured to the frame whereby the lever may be moved in the opposite direction, and a flexible device secured to said lever and adapted when pulled to move the lever against the pressure of the spring.

1,268,424. AUTOMATIC DRAFT-REGULATOR FOR HEATERS. FLOYD J. BEERS and CLARENCE E. STAMP, Lowman, N. Y. Filed Feb. 6, 1918. Serial No. 215,605. (Cl. 236—2.)



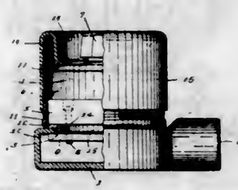
1. An automatic controller comprising in combination with a flue, an ovate damper arranged therein having a contracted end, a trunnion member journaled through the flue and attached adjacent the contracted end of the damper with a looped stop-portion at the edge of the damper projecting at right angles to the damper adapted for engaging the inner surface of the flue when the damper is swung to its transverse position therein.

2. An automatic controller comprising in combination with a flue, an ovate damper arranged therein having a contracted end, a trunnion member journaled through the flue and attached adjacent the contracted end of the damper with a looped stop portion at the edge of the damper projecting at right angles to the plane of the damper adapted for engaging the inner surface of the flue when the damper is swung to its transverse position therein, a crank upon said trunnion member exterior of the flue having its inner side in the same plane as the damper and its outer side arranged in a different plane and a counterbalanced weight adjustably slidably mounted upon the said outer side of the crank.

3. An automatic controller comprising in combination with a flue, an ovate damper arranged therein having a contracted end, a trunnion member journaled through the flue and attached adjacent the contracted end of the damper with a looped stop portion at the edge of the damper projecting at right angles to the plane of the damper adapted for engaging the inner surface of the flue when the damper is swung to its transverse position therein, a crank upon said trunnion member exterior of the flue having its inner side in the same plane as the damper and its outer side arranged in a different plane, a resilient V-shaped clamp having looped ends slidably positioned upon the outer side of the crank and arranged with a central resilient coil and a counterbalancing weight swingingly attached to the coil of the said clamp, whereby the damper is normally arranged in its adjusted position.

[Claim 4 not printed in the Gazette.]

1,268,425. CASING FOR ELECTRICAL APPLIANCES. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Jan. 13, 1913. Serial No. 741,784. (Cl. 247—5.)



2. The combination with an outlet box having an opening through one wall thereof and an electrical appliance associated therewith, of a casing for the appliance comprising a base member having a part interposed between the bottom of the appliance and said wall of the box, and retaining means for securing the appliance to the box and clamping said appliance on the interposed part of the base member, substantially as and for the purpose set forth.

5. The combination with an outlet box having an opening through one wall thereof, and an electrical appliance, of a casing comprising a base member having a bottom wall seated upon said side wall of the box and having the appliance seated upon the inner face thereof, and provided with an opening registering with that in the outlet box, and a peripheral wall having a threaded portion, and a cap member threaded at one end for engaging the threaded part of the base member, and means for clamping the appliance to the base member and the latter to the box including a plate held in the box and screws extending from the base of the appliance and engaging said plate, substantially as and for the purpose specified.

7. The combination with an outlet box having an opening through one side wall thereof, and an electrical appliance secured to said wall, of a casing comprising a base member mounted in said box and having a peripheral wall, and a cap member threading on the base member and inclosing the appliance and extending above the same and having its upper portion extending downwardly and inwardly and engaging at its lower edge with the upper face of the appliance, substantially as and for the purpose set forth.

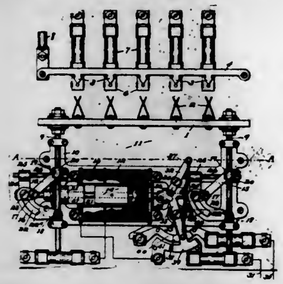
9. The combination with a conduit outlet box having an opening and an electrical appliance mounted above said opening and held in position by means located within the box, of a casing for the appliance including a base having a portion extending between the base of the appliance and the margin of the wall of the conduit outlet box around the opening, substantially as and for the purpose described.

11. The combination with a conduit outlet box having an opening in one side thereof, of an electrical appliance mounted over said opening, fastening screws associated therewith, a casing for the appliance including a cup-like base having an opening in its bottom alined with the opening of said box and having at its bottom interposed between the base of the appliance and the upper surface of the margin of the wall around the opening of the box, and a cap threading on the base, and means in the box and adapted to coact with the fastening screws of the appliance for clamping the appliance and base of the casing therefor in position, the cap of the casing projecting above the appliance and having a wall encircling and spaced apart from the axis of the appliance forming a recess in which a por-

tion of the appliance is exposed, the cap also having a surface engaging an upper face of the appliance, substantially as and for the purpose set forth.

[Claims 1, 3, 4, 6, 8, and 10 not printed in the Gazette.]

1,268,426. AUTOMATIC SWITCH. CARL H. BISSELL, Syracuse, N. Y., assignor to Crouse-Hinds Company, Syracuse, N. Y., a Corporation of New York. Filed Dec. 3, 1913. Serial No. 804,538. (Cl. 175—281.)



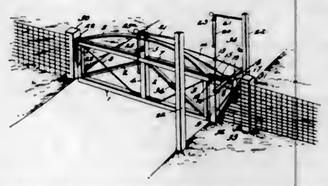
1. An automatic switch comprising a movable switch member, two solenoids arranged in axial alinement and designed to be alternately energized, a core common to both solenoids and arranged to be acted on in opposite directions by the solenoids, means for transmitting the movement of the core to the switch member including a toggle, the joint of which is movable into the dead center line of the toggle, a rod connecting the core and the toggle, the rod having a head thereon, and a core located within one solenoid and arranged to be actuated thereby to strike the head and move the rod to shift the toggle to carry the joint thereof out of the dead center line of the toggle, substantially as and for the purpose set forth.

2. An automatic switch comprising a movable switch member, two solenoids arranged in axial alinement and designed to be alternately energized, a core common to both solenoids and arranged to be acted on in opposite directions by the solenoids, means for transmitting the movement of the core to the switch member including a toggle, the joint of which is movable into the dead center line of the toggle, a rod connecting the core and the toggle, the rod having a head thereon, the rod being connected to one of the links of the toggle by a pin-and-slot connection, and a core located within one solenoid and arranged to be actuated thereby to strike the head and move the rod to shift the toggle to carry the joint thereof out of the dead center line of the toggle, substantially as and for the purpose described.

3. An automatic switch comprising a movable switch member, two solenoids arranged in axial alinement and designed to be alternately energized, a core common to both solenoids and movable thereby in opposite directions, means for transmitting the movement of the core to the member including a pair of toggles located beyond opposite ends of the core, the joints of the toggles being movable into the dead center lines of the toggles, and a rod upon which the core is mounted, connected to the toggles, a core located within one of the solenoids and slidable on the rod, and a head mounted on the rod and fixed thereto and arranged to receive the impact of the sliding core to move the joints of the toggles out of the dead center lines of the toggles, substantially as and for the purpose set forth.

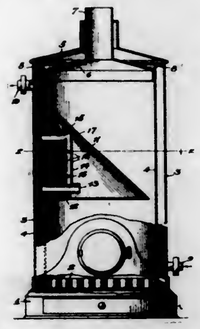
1,268,427. GATE. ARTHUR E. BLUNT, Wendell, Idaho. Filed Nov. 5, 1915. Serial No. 59,865. (Cl. 39—87.)

A gate comprising upper and lower rails, an extension formed on the rear end of the upper rail, means connecting the upper and lower rails together, an upright bar secured to the central portion of the upper rail and extending upwardly therefrom, a truss bar connected to the opposite ends of the upper rail and passing through said upright, a pivot carried by the extension, a pivot carried by the lower portion of the gate, and means for adjusting the



gate including a turn-buckle and oppositely disposed rods, one of said rods being connected to the upright and the other being connected to the rear end of the extension, as and for the purpose specified.

1,268,428. DOMESTIC HEATER. HENRIETTE BOURSIER, New York, N. Y. Filed Apr. 12, 1918. Serial No. 228,111. (Cl. 122—165.)

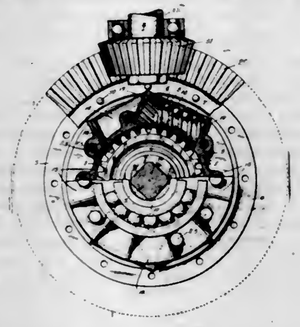


A water heater, comprising, in combination, a base; a grate secured thereto; a water jacket mounted on said base and encircling said grate; a water supply pipe opening into the lower portion of the jacket; a discharge pipe for the heated water leading from the top of the jacket; a heating cone disposed within the jacket above the water supply pipe and having its base directly overhanging the grate and of a diameter which is appreciably less than that of the inner wall of the jacket to provide an annular channel between said inner wall and said base, thereby to enable the flame and products of combustion to completely envelop the cone, said cone having its axis inclined toward said inner shell; inlet and outlet pipes projecting outwardly from the interior of the cone adjacent the base and vertex thereof, respectively, into the interior of said jacket, the inlet pipe having its free end open to permit water to flow therethrough into the cone, and the outlet pipe having an opening in its inner end to admit the water thereinto; and a vertical pipe within the cone connecting said inlet and outlet pipes and through which a portion of the water passing through the inlet pipe is caused to flow, provided with a plurality of ejection openings for delivering jets of water into the interior of the cone to set up a whirling motion of the water in the cone.

1,268,429. COMPENSATING GEARING. ALEXANDER T. BROWN, Syracuse, N. Y., assignor to The Brown-Lipe Gear Company, Syracuse, N. Y., a Corporation of New York. Filed Aug. 24, 1910. Serial No. 578,652. (Cl. 74—99.)

6. A compensating gearing including worm gears, and compensating members formed with intermeshing portions and with worms meshing respectively with the worm gears, substantially as and for the purpose set forth.

10. A compensating gearing including worm gears, and compensating members formed with worms meshing respectively with the worm gears, said members extending in opposite directions and being arranged at an angle to each other and with their axes parallel to planes substantially tangential to the worm gears respectively, and said members having their ends lapping and provided with intermeshing spiral gears, substantially as and for the purpose set forth.



25. In combination, shaft sections arranged end to end, worm gears mounted on the opposing ends of the shaft sections, a driving element comprising cheek pieces mounted concentric with the shaft sections on opposite sides of the worm gears and a circumferential wall supported between the cheek pieces, the cheek pieces and the circumferential wall being united by an annular mortise and tenon joint on opposite sides of said wall, the circumferential wall being composed of transverse separable sections arranged end to end, one section being formed with recesses arranged with their axes inclining in opposite directions and extending parallel to planes tangent to the worm gears, inner end portions of the walls of the recesses extending side by side and having a connecting passage therethrough, and the outer ends of the recesses being open, compensating members located in the recesses and abutting against the inner faces of the walls at the closed ends of the recesses and bearing on inner faces of the side walls of the recesses, the compensating members being formed with worms meshing with the worm gears respectively, and also formed with spiral gears meshing with each other through said passage, and the sections of the circumferential wall contiguous to the recessed section closing the ends of the recesses and holding the compensating members from endwise movement, and fastening members extending transversely through the cheek pieces and into the sections of the circumferential wall, the fastening members extending through the mortise and tenon joints, substantially as and for the purpose described.

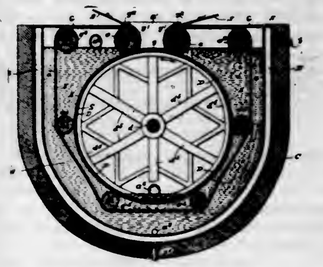
[Claims 1 to 5, 7 to 9, and 11 to 24 not printed in the Gazette.]

1,268,430. SATURATION OF POROUS FABRICS. ELISHA JESSE CADY, Chicago, Ill. Filed Apr. 2, 1917. Serial No. 159,120. (Cl. 91—68.)

1. The method of saturating porous fabrics with liquid solutions which consists in subjecting one surface of a traveling length of the stock to the weight of a body of the solution, and maintaining the opposite surface of the stock free from direct contact with the solution.

2. The method of saturating paperboard with asphalt which consists in subjecting one surface of a steadily traveling length of paperboard to the weight of a body of asphalt solution, and maintaining its opposite surface free from direct contact with the solution.

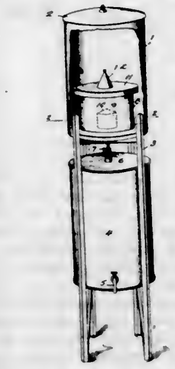
3. The method of saturating paperboard with asphalt which consists in effecting the continuous travel of a length of paperboard in the presence of a body of asphalt solution, subjecting one surface of the stock to the weight of the solution, maintaining its opposite surface free from



direct contact with the solution, and reducing the air pressure on said opposite surface.

[Claims 4 and 5 not printed in the Gazette.]

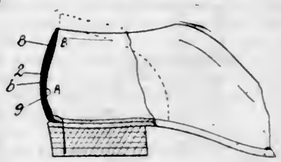
1,268,431. GASOLENE AND OIL FILTER. GEORGE CAEN, Sr., San Antonio, Tex. Filed Aug. 28, 1917. Serial No. 188,677. (Cl. 210—11.)



1. A device of the character specified, comprising a casing, and a filter in the casing, said filter comprising inner and outer cylinders of porous carbon, the top of the inner cylinder being closed, and a disk for closing the top of the outer cylinder.

[Claims 2 and 3 not printed in the Gazette.]

1,268,432. SHOE. JAMES CAVANAGH, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 23, 1914. Serial No. 863,122. (Cl. 36—68.)



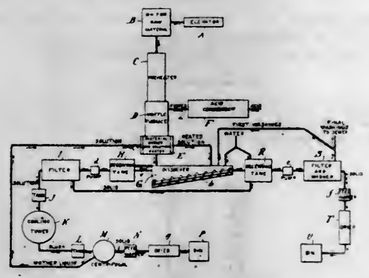
2. A heel stiffener for boots and shoes consisting of a stiff body portion molded to the required shape, and a layer of sponge rubber secured to the inner surface of said stiff body portion, said rubber being of sufficient thickness to allow the ball of the heel of the wearer's foot to embed itself therein.

5. In a shoe the combination with an innersole, an upper, a heel stiffener and a lining which extends from

the top of the shoe downwardly under the innersole, of a cushion located between the lining and the stiffener at the back of the heel and extending from near the innersole upwardly above the ball of the heel of the wearer, said cushion being adapted normally to reduce the heel receiving space required by the heel and to be displaced into conformation with the heel upon the insertion of the foot in the shoe.

[Claims 1, 3, and 4 not printed in the Gazette.]

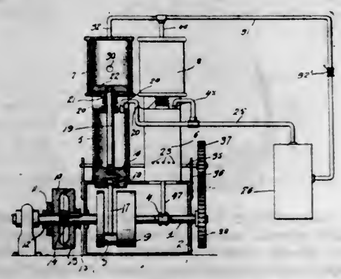
1,268,433. METHOD OF RECOVERING POTASSIUM SULFATE AND ALUMINA FROM ALUNITE. HOWARD F. CHAPPELL, New York, N. Y., assignor to Mineral Products Corporation, New York, N. Y., a Corporation of Maine. Filed July 23, 1913. Serial No. 780,665. (Cl. 23—13.)



1. The process of producing potassium sulfate and alumina from alunite, which comprises introducing hot, calcined alunite into an aqueous solvent, thereby raising the temperature of the solvent and increasing its capacity to dissolve potassium sulfate, removing the hot solution of potassium sulfate from the undissolved alumina, cooling the said hot solution, and recovering the potassium sulfate which separates out when the solution is cooled; substantially as described.

2. The process of producing potassium sulfate and alumina from alunite, which comprises passing the calcined alunite, while still hot from the heat of calcining, into an aqueous solvent, lixiviating out the potash salts thereby, filtering the solution, conducting the filtered solution through a cooling tower, thereby precipitating potash salts therefrom, removing the mother liquor from the separated salts and returning the filtered condensed mother liquor to the dissolver to lixiviate a further portion of calcined alunite; substantially as described.

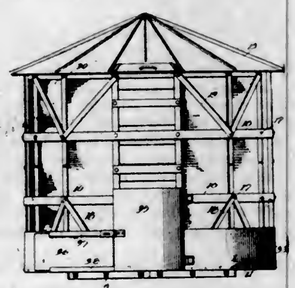
1,268,434. PNEUMATIC ENGINE-STARTER. BARNEY CHRISTIANSEN, Slater, Iowa. Filed Feb. 9, 1916. Serial No. 77,317. (Cl. 230—37.)



2. An engine starter comprising a crank case, a crank shaft mounted in said crank case and provided with a pair of crank arms spaced apart on approximately the quarter turn, compressing cylinders mounted in alinement with said crank arms, power cylinders alined with the compression cylinders, pistons mounted in each of said cylinders, piston rods connected between the pistons of each pair of cylinders, air supply passages to the compression cylinders above the lower end of the stroke of the pistons thereof, air outlet check valves connected at the opposite ends of the cylinders, an air storage reservoir to which the air passing from the compression cylinders is supplied, compressed air chests connected with the power cylinders, passages led from said chests to the opposite ends of the power cylinders, valves mounted in said chests to be given reciprocatory movement to consecutively close and open said passages, a fluid supply from said compressed air storage reservoir to the compressed air chest, a clutch member loosely mounted on the crank shaft and adapted to be connected in a driving relation to the engine shaft, a cone clutch member splined on the crank shaft to be moved into frictional engagement with the clutch member to permit the crank shaft to transmit movement from and to the engine shaft, a control valve mounted in the supply to the compressed air chest, a cam shaft having cams thereon to transmit movement to the slide valve mounted within the chest, and a driving connection arranged from the crank shaft to the cam shaft to cause turning thereof to actuate the valve, all of said parts being so arranged that during the normal operation of the engine the clutch may be thrown into mesh to cause the device to be actuated to supply compressed air to the compressed air storage reservoir and when the engine is idle the valve supplying to the compressed air chests can be opened to permit the actuntion of the pistons mounted in the power cylinders to cause the crank shaft to be rotated and to consequently transmit starting movement to the engine.

[Claim 1 not printed in the Gazette.]

1,268,435. CORN-CRIB. COLUMBUS C. CHRISTOPHER, GILBERT L. KEITH, JOHN E. ALLSTEADT, and EPHRAIM D. EINSEL, Hastings, and CHARLES G. PELANDER, Holdrege, Nebr., assignors to Hastings Equity Grain Bin Manufacturing Co., Hastings, Nebr. Filed Nov. 21, 1916. Serial No. 132,708. (Cl. 189—3.)



1. A corn crib provided in its wall with a doorway, a door for closing the lower portion of the doorway, guides mounted at the opposite sides of the upper portion of the doorway, and closure sections removably disposed one above another with their ends seating in the said guides, one of the said guides having its inwardly presented portion open at an intermediate point in its length for the introduction of the said closure sections.

2. In a structure of the class described, a floor, angle iron uprights supported upon the floor, a foraminous wall extending circumferentially of the crib and resting against the said uprights, means connecting the upper ends of the uprights, plates disposed against the said foraminous wall opposite the uprights, and bolts secured through the said plates and through the wings of the uprights.

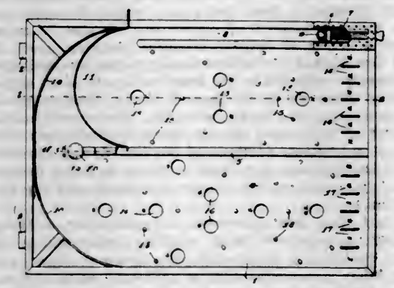
3. A corn crib including a wall having an imperforate lower surrounding portion, the wall of the crib having a

door opening therein extending into the said portion, a door movable into and out of position to close the door opening, spaced guides upon the said imperforate portion of the wall at one side of the door opening and exterior to the crib, and an auxiliary door slidably mounted at its upper and lower edges in said guides and movable circumferentially of the wall into and out of position to close the lower portion of the said doorway whereby the lower portion of the doorway may be guarded when the main door is open, the said auxiliary door constituting, in its closed position, a continuation of the imperforate portion of the crib wall.

4. A corn crib having a doorway formed in its wall, a door hinged at one side of the doorway and movable into and out of position to close the doorway, upper and lower guide flanges upon the exterior of the wall at the opposite side of the doorway, the lower flange extending across the bottom of the doorway, and an auxiliary imperforate door slidably mounted at its upper and lower edges in said guide flanges and movable to position to close and guard the lower portion of the doorway when the main door is in open position.

[Claims 5 and 6 not printed in the Gazette.]

1,268,436. BASE-BALL-GAME DEVICE. FREDERICK J. CLARK, Syracuse, N. Y. Filed Oct. 14, 1916. Serial No. 125,591. (Cl. 46—61.)



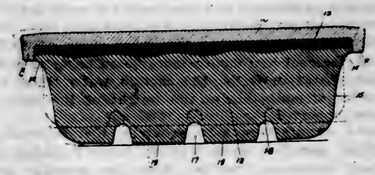
1. A base ball game device comprising a board provided with two fields, one field having positions indicating the result of the "out" team's defensive play and the other having positions indicating the result of the "in" team's offensive play, means for impelling a ball onto said fields, and means for guiding the balls to the respective fields, substantially as and for the purpose set forth.

9. A base ball game device comprising a board having two fields arranged side by side, a barrier separating the fields, the barrier having a passage therethrough for dividing the fields, one field having positions indicating the result if the "out" team's defensive play and the other field having positions indicating the result of the "in" team's offensive play, a ball chute extending alongside one of the fields, means for directing the ball from the chute to the respective fields, one of the directing means being displaceable and when in operative position being arranged to prevent the passing of the ball to the other directing means, one of the positions of the "in" field being located in the passage at the end of the barrier, and means for impelling the ball along the chute onto the fields, substantially as and for the purpose specified.

[Claims 2 to 8 and 10 not printed in the Gazette.]

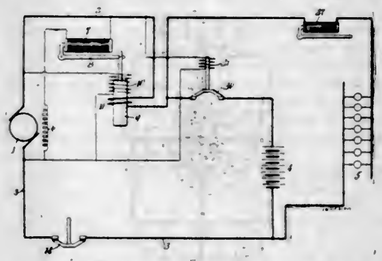
1,268,437. SOLID TIRE. LEE CLOUGH, Akron, Ohio, assignor to The Firestone Tire & Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Dec. 4, 1916. Serial No. 134,822. (Cl. 152—1.)

A single type tire consisting of a ring of rubber of greater width than depth in cross section and having a broad tread which is substantially flat transversely and provided with a shallow ventilating and non-skid circumferential groove of a depth substantially one-fourth that of the cross section of the tire, that portion of the tire between the back of the groove and the inner periphery of the tire being of such volume and elastic condition as to



permit flow of the rubber from any portion of the tread at one side of the groove through the cross section of the tire to the opposite side thereof, whereby a dual tire is obviated and the single type tire is preserved.

1,268,438. ELECTRICAL SYSTEM OF DISTRIBUTION. GORHAM CROSBY, Glen Ridge, N. J., assignor to Gould Coupler Company, a Corporation of New York. Filed Sept. 1, 1915. Serial No. 48,427. (Cl. 171—313.)



3. An electrical system of distribution having in combination a generator, a storage battery and work circuit fed thereby, a voltage coil and a current coil coacting to regulate the generator to limit its voltage and current, a switch in circuit between the generator and battery, and means opening said switch when the battery has become substantially charged without affecting the connection between the generator and work circuit and a third coil coacting in the regulation of the generator when the circuit to the battery is opened, to compensate for the decrease in current in said current coil upon the opening of said switch.

8. The combination in a system having a variable speed generator, a storage battery and a work circuit, of regulating means for said generator including current and voltage coils cumulatively acting on said means, and means acting when the battery reaches a given state of charge for acting upon the battery circuit and acting upon the regulator to assist the action of the voltage coil thereof.

10. The combination in an electrical system of distribution having a variable speed generator, a storage battery and a work circuit, of regulating means for said generator including a normally effective voltage coil and a current coil traversed by battery current and a normally ineffective coil of means electroresponsive to the state of charge of the battery for acting upon the battery branch of the system to reduce the battery current and for rendering the last named coil effective to act cumulatively with said normally effective coil.

[Claim 1, 2, 4 to 7, and 9 not printed in the Gazette.]

1,268,439. DWELLING-HOUSE. EDWIN SHEBRILL DODGE, Boston, Mass. Filed Mar. 21, 1918. Serial No. 223,834. (Cl. 20—1.1.)

1. As a manufacture, a house having therein cruciform separation and pier walls, a roof resting upon said walls and curtain walls inclosing the living space covered by the roof.

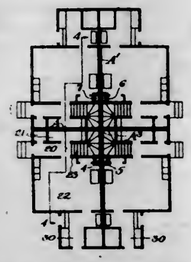
2. As a manufacture, a house having therein unbroken cruciform separation and pier walls, a roof resting upon said walls, and curtain walls inclosing separated living spaces covered by the roof.

3. As a manufacture, a house having therein cruciform separation and pier walls, a roof resting upon said walls, and curtain walls inclosing the living space covered by the roof, the roof and one or more floors being supported by said separation walls, the curtain walls being independent of stresses due to the weight of the roof and floors so supported.

4. As a manufacture, a house having therein cruciform separation and pier walls, curtain walls inclosing said cruciform walls and forming therewith separate living spaces, and a roof common to all of said living spaces.

5. As a manufacture, a house having therein unbroken cruciform separation and pier walls, curtain walls inclosing said cruciform walls and forming therewith separate living spaces, and a roof common to all of said living spaces.

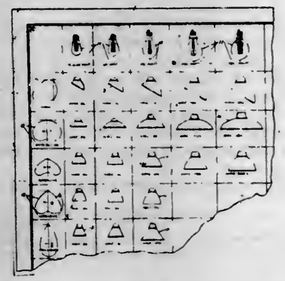
1,268,440. LIGHT-DISTRIBUTION CHART. HENRY D'OLIER, Jr., Bridgeport, Conn. Filed Aug. 14, 1916. Serial No. 114,672. (Cl. 35—12.)



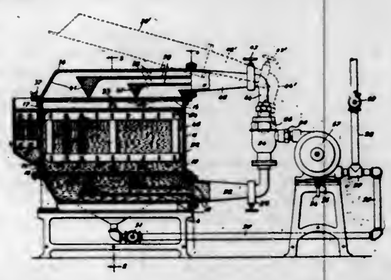
1. A chart of the character described comprising a set of indications of different fixed light concentrations, a set of indications of different fixed light intensities, and a plurality of indications of devices for obtaining the various indicated light concentrations when employed with the different indicated light intensities, said indications of devices being so arranged that a device capable of producing a selected light concentration will be indicated at the intersection of right angularly disposed imaginary lines leading from any of the indicated light intensities and the selected indication of light concentration.

[Claims 2 to 6 not printed in the Gazette.]

1,268,441. SKEIN-DYEING MACHINE. HOWARD M. DUDLEY, Philadelphia, Pa. Filed June 28, 1917. Serial No. 177,457. (Cl. 8—19.)



1. In a fiber treating device, in combination, a dyeing chamber, a removable fiber carrying frame within the dyeing chamber, a foraminous plate below the fiber carrying frame, a removable foraminous plate above the fiber carrying frame, a second dyeing chamber adjacent to the first dyeing chamber, a fiber carrying frame within the second dyeing chamber, means whereby the upper and lower portions of the second dyeing chamber are connected respectively with the upper and lower portions of the first dyeing chamber to allow of the flow of a liquid therethrough and means whereby a liquid may be passed in opposite directions through the plates and the dyeing chamber.



4. In a fiber treating device, in combination, a dyeing chamber, a removable skein carrying frame within the dyeing chamber, a foraminous plate below the skein carrying frame, a foraminous plate above the skein carrying frame, a series of tubular members abutting upon the outer face of each of the foraminous plates, a second dyeing chamber adjacent to the first dyeing chamber, a fiber carrying frame within the second dyeing chamber, means for the passage of a liquid connecting the top and bottom portions of the second dyeing chamber respectively with the top and bottom portions of the first dyeing chamber, and means for passing a liquid in either direction through the tubular members, the foraminous plates and the dyeing chamber.

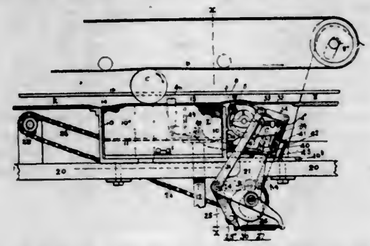
5. In a fiber treating device, in combination, a dyeing chamber, a removable skein carrying frame within the dyeing chamber, a foraminous plate below the skein carrying frame, a foraminous plate above the skein carrying frame, the foraminous plates having extended diverging members with openings between them, a series of tubular members abutting upon the outer face of each of the foraminous plates and means for passing a liquid in either direction through the tubular members, the foraminous plates and the dyeing chamber.

6. In a fiber treating device, in combination, a dyeing chamber, a removable skein carrying frame within the dyeing chamber, a foraminous plate below the skein carrying frame, a foraminous plate above the skein carrying frame, a series of tubular members abutting upon the outer face of each of the foraminous plates, a series of divergent elements within the tubular members adjacent to the foraminous plates, and means for passing a liquid in either direction through the tubular members, the foraminous plates and the dyeing chamber.

[Claims 2 and 3 not printed in the Gazette.]

1,268,442. CAN-LABELING MACHINE. ARVID P. EKVALL and HERMAN STAKE, Worcester, Mass., assignors to Economic Machinery Company, Worcester, Mass., a Corporation of Massachusetts. Filed Nov. 5, 1917. Serial No. 200,229. (Cl. 216—47.)

1. In a can labeling machine of the class specified, in combination with the label supply box, means for directing and feeding cans or the like along the opening to said label supply, gum supply devices, including a gum reservoir, a gum delivering roll therein, and a transfer-roll adjacent to the end wall of the label-box; a gum-applier plate adapted for contact with said transfer-roll and for impressing gum upon the end portion of the top-most label within said label-box, including a transversely disposed horizontally pivoted support-bar having a forwardly projecting gum-applier member thereon, means for imparting forward and backward movement to said support-bar and gum-applier member, and means for effecting a tilting action thereof on its pivotal axis.



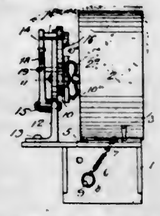
4. In a label-gumming mechanism for the purpose set forth, a gum reservoir supported in connection with the label holder, a gum-delivering roll mounted thereon, a transfer roll adjacent to the upper rear corner of said label-holder and receiving gum from the delivery roll, a gum-applier element, supporting means therefor adapted to have forward and backward movement for carrying said applier alternately over the ends of the label-box and against the transfer-roll, means for tilting said gum-applier, means for controlling the tilting action, and means for reciprocally operating the applier-supporting members.

10. In a can labeling machine, in combination with a label-supply means, and can-feeding mechanism for advancing cans to receive labels from said supply, a gum-applier comprising a transverse horizontal pivoted bar having a forwardly projecting member comprising a transverse gum-carrying portion and a back portion united thereto by narrow slightly elevated extended arms, said back portion detachably secured upon the pivoted bar, means for supporting said gum-applier, and means for imparting reciprocal and rocking action thereto.

14. In a can-labeling machine comprising a runway for cans, can propelling belts, a label-box for supporting a pack of labels with the top of the pack approximately at the level of the runway, a backwardly and forwardly movable tiltable gum-applier, means for operating said gum-applier; and gum-supply means including a gum-transfer roll adjacent the end of the label-box and below said gum-applier, the top of the rear end wall of said label-box being lower than the normal top level of the pack of labels.

[Claims 2, 3, 5 to 9, 11 to 13, and 15 to 20 not printed in the Gazette.]

1,268,443. DAMPER-CONTROLLER. FRANK E. ETZEL, Montclair, N. J. Filed Sept. 27, 1917. Serial No. 193,439. (Cl. 161—8.)



1. A controller of the class described comprising a lever, a trigger to retain the lever set, a rotary member to control the trigger to cause it to retain or release the lever, said member having spaced projections to receive a clock key therebetween, and a clock having a key cooperative with said projections to operate the member for causing the trigger to release the lever, a supporting for the clock to retain its alarm key opposing said member, and a spring connecting the clock with the support to retain the clock thereon and resiliently urge said key toward said member.

2. A controller of the class described comprising a lever, a trigger to retain the lever, a rotary member having a portion coactive with the trigger to cause it to retain the lever set, and having another portion coöperative with the trigger to permit it to release the lever, said member having spaced projections on one side to receive a clock key, and a clock having a key coöperative with said projections of said member to operate the latter to cause the trigger to release the lever, a support for the clock to retain its alarm key opposing said member, and a spring connecting the clock with the support to retain the clock thereon and resiliently urge said key toward said member.

3. A controller of the class described comprising a lever, a trigger to retain the lever set, a rotary member having a surface coöperative with the trigger to cause the latter to retain the lever and having a recess coöperative with the trigger to cause the latter to release the lever and to stop rotation of said member, and a clock having a key cooperative with the member to operate it to cause the trigger to release the lever and to lock said member and key from further rotation.

4. A controller of the class described comprising a lever, a trigger coöperative therewith to retain the lever set, said trigger having a projection, a rotary member having a peripheral surface to coöperate with the projection to cause the trigger to retain the lever and having a notch to receive said projection to cause the trigger to release the lever and to stop rotation of said member, and a clock having a key coöperative with the member to rotate it relatively to the trigger to present said recess in position to receive said projection and to stop further rotation of said member and the key.

5. A controller of the class described comprising a frame adapted to support a clock and having a support, a lever and a trigger pivotally carried by the support, said lever and trigger having coöperative means to retain the lever by the trigger, and a rotary member carried by said support and having a portion to coöperate with the trigger to cause it to retain the lever and also having a portion coöperative with the trigger to cause it to release the lever and to stop further rotation of the member, said member having means to coöperate with the clock key for rotation of the member, and a spring connecting the clock with the frame to retain the clock thereon and resiliently urge the key toward the member.

[Claims 6 to 9 not printed in the Gazette.]

1,268,444. BLOCK AND TYING MECHANISM FOR BALING-PRESSES. UBERTO D. EZELL, Kimball, Tex. Original application filed Dec. 11, 1916, Serial No. 136,143. Divided and this application filed Aug. 17, 1917. Serial No. 186,668. (Cl. 100—20.)



1. In a device of the character described, the combination with the baling chamber of a press, of a hollow block movable longitudinally of the chamber, wire twisting mechanism mounted in the block, and reciprocating members mounted on the chamber to traverse the block transversely and arranged for carrying baling wire to the twisting means of the blocks.

2. In a device of the character described, the combination with the baling chamber of a press, of a hollow block movable longitudinally of the chamber, a wire twisting device mounted in the block, a wire cutting device also mounted in the block, and reciprocating wire carrying

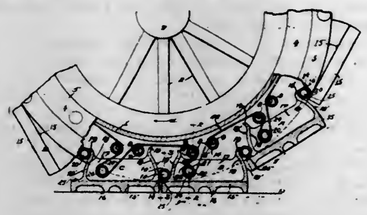
members mounted on the chamber to enter the block and coöperate with the twisting and cutting devices.

3. In a device of the character described, the combination with the baling chamber of a press, and transversely reciprocating wire carrying members, of a hollow block mounted to travel longitudinally of the chamber and having wire twisting mechanism within itself.

4. The combination with the baling chamber of a press, of transversely reciprocating needles mounted on the chamber, gears for driving the needles into the chamber, means for retracting the needles, a hollow block traveling longitudinally of the chamber and having gear racks engaging the driving gears for operating the same, and a wire twisting device mounted in the block, said needles entering the block.

5. The combination with the baling chamber of a press, of transversely reciprocating needles mounted on the chamber, gears for driving the needles into the chamber, means for retracting the needles, a hollow block traveling longitudinally of the chamber and having gear racks engaging the driving gears carried by the block for operating the same, a wire twisting device mounted in the block, means for operating the twisting device carried by the block, and an operating device mounted on the chamber and engaged by said last named means for operating the latter.

1,268,445. TREAD FOR TRACTOR-WHEELS. ROLLIE B. FAGEOL, Oakland, and CHARLES A. SMITH, San Francisco, Cal. Filed Apr. 16, 1917. Serial No. 162,269. (Cl. 21—150.)



1. A detachable traction tread for wheels and for removably positioning over the tire thereof comprising a pair of laterally spaced flanges forming a peripheral rim carried by the wheel, a plurality of spaced transversely disposed bearing members between said flanges, a series of tread shoes carried one between each two adjacent bearing members and movable thereupon, a flexible connection between said tread shoes and said flanges adapted to permit a plurality of said tread shoes to have simultaneous contact with the ground, and a pair of annular locking flanges coöperating with said rim flanges and the wheel tire for retaining the tread thereon.

2. A tread for traction wheels comprising a rim carried by the wheel, a series of tread shoes peripherally disposed about said rim and movable with respect thereto and an endless flexible member associated with said rim for retaining said tread shoes in operative relation therewith.

3. A tread for traction wheels comprising a rim carried by the wheels, a plurality of guide members carried by said rim, a series of tread shoes peripherally disposed about said rim, a guide member carried by each tread shoe, and an endless flexible member passing under the guide members of said rim and over the guide members of said tread shoes for retaining said tread shoes in operative relation with said rim.

4. A tread for traction wheels, comprising a rim carried by the wheel, a series of tread shoes peripherally disposed about said rim and adapted for rocking movement with respect thereto in the plane of the wheel, and an endless flexible member associated with said rim and said tread shoes for retaining the latter in position and permitting a plurality of said tread shoes to have simultaneous contact with the ground.

5. A tread for traction wheels comprising a pair of laterally spaced annular flanges forming a peripheral rim carried by the wheel, a series of tread shoes peripherally disposed about said flanges, each tread shoe having an inner portion adapted to lie between said flanges and an outer portion adapted to contact with the ground, said outer portion having lateral shoulders upon which the flanges of said rim are adapted to ride, coöperating members carried by said flanges and the inner portions of said tread shoes for permitting said shoes to have rocking movement with respect to said flanges in the plane of the wheel, and flexible means for connecting said tread shoes with said flanges to permit a plurality of said tread shoes to have simultaneous contact with the ground.

[Claim 6 not printed in the Gazette.]

1,268,446. PROCESS OF TREATING FIBROUS MATERIALS. GEORGE E. FERGUSON, New York, N. Y., assignor to William E. Silverthorne, New York, N. Y. Filed Apr. 9, 1913, Serial No. 759,930. Renewed Oct. 27, 1917. Serial No. 198,878. (Cl. 91—70.)

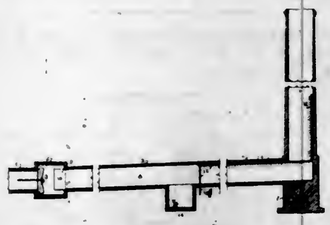
1. The process of treating fibrous substances which consists of, first, submerging the substance in a liquid, raising the temperature of the liquid to a degree to partly destroy the fibers of the substance while the substance is submerged, and causing the submerging liquid to form a substitute for the destroyed fibers.

3. The process of treating fibrous substances for rendering said substances moisture proof which consists of, first, submerging the substance in a liquefied moisture repellent solid, withdrawing at least a portion of the air, beyond normal penetration of the liquid, from the interstices of the fibrous substance, raising the temperature of the submerging liquid to increase its fluidity and to partly destroy the fibers of the substance, forcing a portion of the fluid under pressure into the interstices of the substance, withdrawing the substance from the liquid while the liquid is yet heated, and allowing the substance to cool to solidify the liquid to form a substitute for the destroyed portion of the fibers of the substance.

6. The herein described process of treating carbonaceous substances, which consists in charring said substance, and simultaneously applying an impregnating material to said substance.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

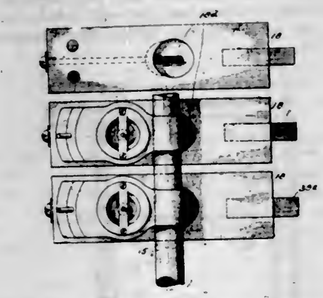
1,268,447. FUME-ARRESTER FOR SMELTING PLANTS. ANTONIO FERRARI, Collinsville, Ill. Filed Sept. 1, 1917. Serial No. 189,424. (Cl. 261—17.)



1. An improved fume and smoke arrester for smelting-plants, consisting of a horizontal condensing-passage into which the fumes pass from the furnace; a smoke-stack to which one end of said passage is connected; a horizontal perforated-pipe for spraying the interior of said horizontal passage; and a vertical perforated-pipe extending a considerable distance upwardly within said stack, and arranged thereat to drop spray-water upon the fumes, at and above the point where the fumes change their direction of movement from a horizontal to a vertical path.

[Claim 2 not printed in the Gazette.]

1,268,448. PLAYER-PIANO CONSTRUCTION. CHARLES FREBORG, Kankakee, Ill. Filed Nov. 24, 1913. Serial No. 802,796. (Cl. 84—178.)



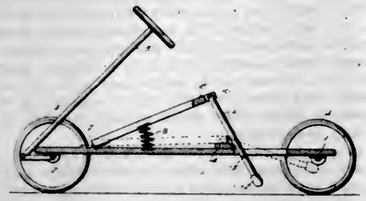
1. In a device of the class described, a supporting member, a plurality of individual air-controlling members mounted on said supporting member, and a plurality of individual pneumatic members, means to secure said pneumatic members to said air-controlling members, said means being also constructed to secure said air-controlling members to the supporting members.

3. In a device of the class described, an air conduit, an air controlling member adjustably mounted thereon, said conduit being provided with an aperture, said air controlling member being provided with an enlarged slot or aperture permitting communication of said member with said conduit in any of a number of adjusted positions, and means to adjust and hold in adjusted position on said conduit said air controlling member.

5. In a device of the class described, a combined supporting and air-conducting member, said member being provided with apertures, a plurality of individual air-controlling members adjustably mounted on said supporting member, said air-controlling members each having passages therein to register and communicate with the apertures in said first-named member.

[Claims 2, 4, and 6 to 12 not printed in the Gazette.]

1,268,449. CHILD'S COASTER. LORNE EDWIN GARTLEY, Coffeyville, Kans. Filed Dec. 31, 1917. Serial No. 209,705. (Cl. 208—158.)

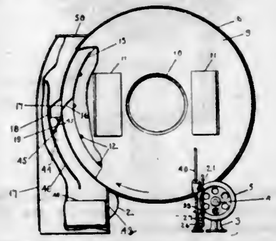


1. A vehicle having means for guiding the same, and provided with propelling means for engaging the ground to push the vehicle and controlled by the occupant, said propelling means comprising a plate hinged to the body of the vehicle at the forward end of the plate, a pushing bar hinged to the free end of the plate, said vehicle body having a slot through which the bar extends to engage the ground, a spring normally pressing the plate upward, and a stop block for engagement by the free end of the plate to limit the downward movement thereof and to move the bar rearwardly at its free end, said bar having at its free end a shoe of rubber.

2. A vehicle having means for guiding the same, and provided with propelling means for engaging the ground to push the vehicle and controlled by the occupant, said propelling means comprising a plate hinged to the body of the vehicle at the forward end of the plate, a pushing bar hinged to the free end of the plate, said vehicle body having a slot through which the bar extends to engage the ground, a spring normally pressing the plate upward, and a stop block for engagement by the free end of the plate to limit the downward movement thereof and to move the bar rearwardly at its free end.

3. In a vehicle, propelling means for engaging the ground to push the vehicle and controlled by the occupant, said propelling means comprising a pushing bar adapted to engage the ground at one end, a plate hinged to the body at the forward end of the plate and hinged to the pushing bar at its rear end, a spring normally pressing the plate upwardly, and a stop block for engaging the free end of the plate to limit the downward movement thereof and in position to engage the push bar to move the said bar rearwardly as the plate engages the block.

1,268,450. BAG-CLEANER. FOREST G. GAUNTT, Fort Wayne, Ind., assignor to W. J. Savage Company, Knoxville, Tenn., a Corporation of Tennessee. Filed Oct. 20, 1915. Serial No. 56,876. (Cl. 130—16.)



1. A movable housing embodying a material receiving chamber having inwardly projecting arms, a collection chamber supplied from said receiving chamber, and a discharge device for the collection chamber including a pocket carried by the chamber and means for opening said pocket.

3. A movable housing comprising receiving and collection chambers, and an intermittently operable discharge device therefor including a guide coacting in one direction of travel for removing material from the discharge device.

7. A movable housing embodying a material receiving chamber having beaters therein, a collection chamber supplied from said receiving chamber, and a discharge device for the collection chamber including a valve controlled device movable with the housing, said housing being peripherally imperforate except for the valve controlled device.

9. An alternating rotary imperforate housing embodying a material receiving chamber therein comprising an annular series of parallel slats and mesh work thereover, a collection chamber supplied through said mesh work from the receiving chamber, and a discharge device for the collection chamber including a pocket rotatable with the housing, and a stationary guide for opening the pocket.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

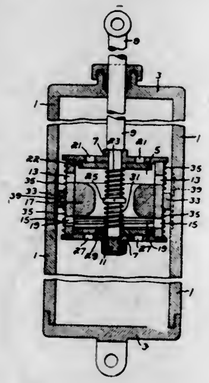
1,268,451. BELT-FASTENER. CAMILLE A. J. GINACA, Hornitos, Cal. Filed Feb. 13, 1918. Serial No. 216,917. (Cl. 24—31.)



In a belt fastener, a pair of substantially T-shaped members, the heads of said members being flat and formed to lie flat against the under side faces of the belt ends, the legs of said members being disposed at an angle to the plane of the heads thereof and extending through the respective belt ends and having their end portions extending in a direction opposite to the direction in which the heads extend and substantially parallel to the respective belt ends whereby to provide an approximately Z-

formation in side elevation, said ends of the legs of the members being perforated, and a link secured in said perforations of the legs, said ends of the legs being spaced from the outer faces of the belt ends a distance approximately equal to the thickness of the link.

1,268,452. SHOCK-ABSORBER. WATSON E. GOODYEAR, Philadelphia, Pa. Filed Sept. 19, 1913. Serial No. 790,774. (Cl. 21—105.)



1. A shock absorber comprising two movable elements, and means governed solely by one of the elements for checking abnormal movement thereof.

2. A shock absorber comprising two movable elements, and means governed solely by one of the elements for checking abnormal movement thereof in opposite directions.

3. A shock absorber comprising two movable elements, and means governed solely by the movement of one of said elements, for checking abnormal movement thereof toward and from the companion element.

5. A shock absorber comprising two movable elements, one consisting of a cylinder and the other of a piston, the cylinder having means therein for the circulation of liquid on the relative movement of said elements, and means governed solely by one of the elements for checking said circulation on the relative movement of the elements, the other element being inactive upon the checking means.

13. In a shock absorber, a fluid-containing casing and a member working therein, said parts being arranged for independent movement of one relative to the other, there being provision for flow of fluid between opposite sides of said member, and means responsive to acceleration of one only of said parts to throttle the flow of fluid.

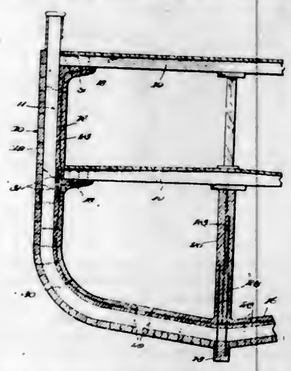
[Claims 4, 6 to 12, and 14 to 22 not printed in the Gazette.]

1,268,453. COMPOSITE VESSEL. THOMAS L. GRAY, Marshfield, Oreg. Filed Dec. 3, 1917. Serial No. 205,058. (Cl. 114—65.)

1. A structure for the purpose set forth comprising a wooden shell, an inner frame supporting the shell, a cementitious monolithic ceiling on the inner side of the frame, and fastening devices securing the shell to the frame and extending into the ceiling to reinforce the same.

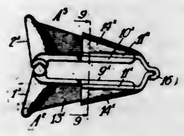
2. A structure for the purpose set forth comprising a wooden shell, an inner frame supporting the shell, an impervious covering for the inner side of the frame, a monolithic cementitious ceiling upon and coextensive with said covering, and fastenings extending through the shell, the frame, and the covering into the ceiling.

3. A structure for the purpose set forth comprising a wooden shell, an inner frame supporting the shell, a cementitious monolith secured to the inner side of the frame and sealing the same, said monolith having inwardly projecting knees on the inner surfaces of its side portions, bulkheads connecting said side portions, bulkheads connecting its end portions, and beds in its lower portion, and reinforcements within the monolith and



comprising a member extending through the entire length and width of the same, other members shaped to and extending through the angles of the monolith, and other members extending longitudinally of the side portions of the monolith at the junctions of the same and the bulkheads.

1,268,454. FIRE-EXTINGUISHER. WILLIAM GRIMSHAW, Glenellyn, Ill. Filed Nov. 20, 1917. Serial No. 202,912. (Cl. 169—5.)



1. In a fusible member for the purpose specified, toggle members comprising articulated strut portions and arms thereon, a plate soldered to one of said toggle arms, and connection between said plate and the other toggle arm, the toggle arm to which said plate is soldered having a rib on the side thereof to which said plate is soldered, and said plate being shaped to form a groove to receive the portion of said rib which extends beneath it, substantially as described.

2. In a fusible member for the purpose specified, toggle members comprising articulated strut portions and arms thereon, a plate soldered to one of said toggle arms, and connection between said plate and the other toggle arm, the toggle arm to which said plate is soldered having a rib on the side thereof to which said plate is soldered, and said plate being shaped to form a groove to receive the portion of said rib which extends beneath it and the sides of said rib and groove being soldered together, substantially as described.

[Claims 3 and 4 not printed in the Gazette.]

1,268,455. CONDENSATION PRODUCT OF GALLOCYANIN DYESTUFFS WITH AMINS AND PROCESS OF MAKING SAME. ARMIN GROB and JAKOB WÜRGLER, Basel, Switzerland, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Filed July 7, 1917. Serial No. 179,285. (Cl. 8—1.)

1. The herein described process for the manufacture of condensation products of gallocyanin-dyestuffs with amins.

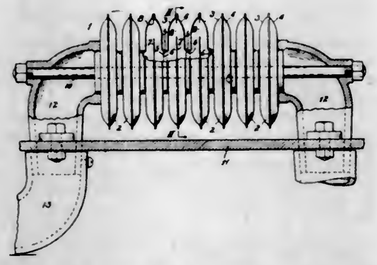
consisting in reacting with the amins on the gallocyanin dyestuffs in presence of a peroxycompound.

5. The herein described process for the manufacture of leucoderivatives of the condensation products derived from gallocyanin dyestuffs and aromatic amins, consisting in reacting on the gallocyanin dyestuffs with aromatic amins, which contain in their molecule besides the free amino-group still an acidylaminogroup, in presence of a diluent and of a peroxycompound, and treating the resulting condensation products suspended in an acid watery medium with reducing agents.

10. As a new article of manufacture the herein described leucoderivative of the condensation product derived from paraamino-acetanilid and the gallocyanin dyestuffs resulting from the condensation of nitrosodiethylaniliin hydrochlorid with gallamic acid, which constitutes a green-gray powder, soluble in dilute organic acids with a pale coloration and in concentrated sulfuric acid with a yellow coloration turning afterward to red, and gives vivid green-blue prints and dyeings, when applied on the textile fibers according to the methods usually employed for the dyestuffs printed with chromium mordants.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,268,456. HEATER. JOHN HARRIS, Lakewood, Ohio. Filed Jan. 17, 1917. Serial No. 142,823. (Cl. 257—167.)



In heaters, a plurality of elements each comprising a casing formed of two oppositely disposed perforated sections providing a radiating surface, and a perforated plate disposed within said casing, one of said casing sections being formed with a peripheral flange and the other of said casing sections being formed with a peripheral member having three sides forming a recess within which the peripheral flange of said first section is secured, the outer edge of said plate being rigidly secured in said recess intermediately the casing sections, the perforations of said sections and said plate being staggered relatively to each other, means providing communication between adjacent elements, and means for connecting said elements.

1,268,457. GROUND-CLAMP. HOWARD H. HAYNES, Bridgeport, and TONJES A. BOTH, Stratford, Conn., assignors to The Connecticut Electric Manufacturing Company, a Corporation of Connecticut. Continuation of application Serial No. 180,726, filed July 16, 1917. This application filed Jan. 14, 1918. Serial No. 211,775. (Cl. 173—273.)



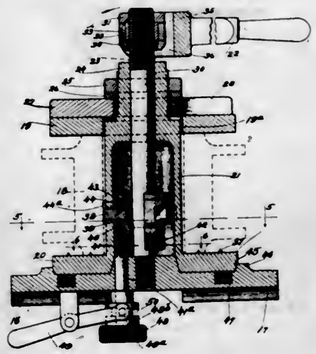
1. A ground clamp comprising a strip of metal having a plurality of holes and at one end means for the attachment of a conductor, a screw loosely secured to the strip, and a slide having a threaded hole adapted to register with any of the holes in the strip and to be engaged by the screw to clamp the strip about a ground connection.

3. A ground clamp comprising a strip of metal having a plurality of holes and at one end a socket for the attachment of a conductor, a slide on the strip having a threaded hub adapted to register with any of said holes, a screw having a reduced neck, and a clip having a hole with the metal surrounding said hole punched through a hole in the strip to form a flange which coöperates with the neck to loosely secure the screw to the strip.

5. A ground clamp comprising a strip of metal having a plurality of holes and at one end means for the attachment of a conductor, a screw loosely secured to the strip, a slide having a threaded hole adapted to register with any of the holes in the strip, and means for retaining the slide on the strip.

[Claims 2 to 4 not printed in the Gazette.]

1,268,458. CENTERING AND SQUARING CHUCK. TOBIAS R. HELLGREN, Aurora, Ill. Filed Aug. 28, 1916 Serial No. 117,316. (Cl. 90—60.)



1. In a device of the character described, a rotary work-holding member having a polygonal positioning element, a supporting member engageable with said element and preventing rotation of said holding member when in engagement therewith, and means having a single movement under the control of the operator for moving one of said members from unlocked to locked position with relation to the other.

3. In a device of the character described, a rotary work-holding member, having a polygonal positioning element, a supporting member engageable with said element and preventing rotation of said holding member when in engagement therewith, means having a single movement under the control of the operator for locking said members in engagement, automatic means for disengaging said members when unlocked to permit rotation of said holding-member to new positions, means for centering said work about the axis of rotation of said holding-member before said work is clamped thereon, means for clamping work rigidly in place after centering, and blocking means between said clamping means and said work removable upon the loosening of said clamping means.

5. In a device of the character described, a rotary work-holding member, having a polygonal positioning element, a supporting member engageable with said element and preventing rotation of said holding member when in engagement therewith, means having a single movement under the control of the operator for locking said members in engagement, automatic means for disengaging said members when unlocked to permit rotation of said holding member to new positions, means for centering said work about the axis of rotation of said holding member before said work is clamped thereon, a clamping nut threaded to a reduced portion of said holding means, a ring encircling said holding means and transmitting the pressure of said nut to the work and having an aperture permitting its re-

moval over said nut, and a blocking element open on one side and transmitting pressure from said nut to said ring.

12. In a device of the character described, a rotary work-holding member having a polygonal positioning element, a supporting member engageable with said element to prevent rotation of said holding member, means held by gravity in position to lock said members in engagement, and means for disengaging said members when said last-named means is raised from its locking position.

[Claims 2, 4, and 6 to 11 not printed in the Gazette.]

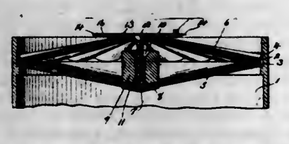
1,268,459. ANCHORING DEVICE. MARTIN M. HJERMSTAD, Kenyon, Minn. Filed July 23, 1917. Serial No. 182,122. (Cl. 189—90.)



1. An anchoring device comprising a stake adapted to be driven into the ground and having a pair of longitudinally spaced shoulders, and a link swiveled on the stake between its shoulders for angular movement, whereby the link may be moved from an operative position wherein it engages the two shoulders on opposite sides of the stake to an inoperative position in which the link is folded onto the stake.

[Claims 2 and 3 not printed in the Gazette.]

1,268,460. HEAD FOR BARRELS AND THE LIKE. ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Filed Apr. 10, 1915. Serial No. 20,453. (Cl. 217—78.)



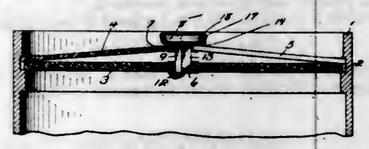
1. A removable receptacle closing head of convexo-convex form and composed of a pair of disks capable of being sprung inwardly and having their edges engaged and their central portions spaced apart, and means for drawing together the central portions of said disks to force outwardly the edges of the same and make a tight-closing joint therewith.

5. The combination with a receptacle having a croze formed therein; of a sectional hollow head loosely positioned in said croze, a tightening member for drawing together the sections of said head and forcing the outer edges of said sections into binding engagement with the wall of said croze to prevent movement or withdrawal of said head, a sealing plate carried by said head, said tightening member being extended through said plate, the ends of said plate being adapted to be folded over one another above the head of said tightening member, and a sealing rivet carried by one end of said plate and adapted to be secured through the remaining end of said plate to secure said ends in folded position.

6. The combination with a receptacle having a croze formed therein; of a head removably engaged in said croze, said head being hollow and having its upper half corrugated radially, tightening means for drawing the upper half of said head toward the lower half thereof and forcing the outer edge of the head into binding engagement with the wall of the croze, means for limiting movement of the upper half of said head toward the lower half thereof, and means for sealing the head in expanded position within said croze.

[Claims 2 to 4 not printed in the Gazette.]

1,268,461. BARREL-HEAD SEAL. ARTHUR J. HODGE and HENRY B. RUGGLES, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Filed Aug. 7, 1915. Serial No. 44,237. (Cl. 217—78.)

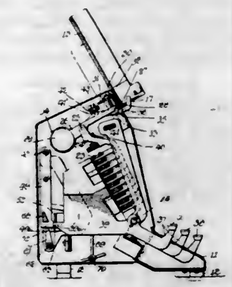


1. A barrel head seal comprising main and auxiliary seal members having body portions provided with beveled edges, and a sealing ring engaged around said body portions and inclosing said beveled edges.

7. A barrel head seal including a main seal member and an auxiliary seal member having depending portions for engagement through said head, pressure on said main seal member adapting it to expand and secure the head in position within the receptacle; said main and auxiliary seal members having outer flat portions engaged one in the other and provided with an outer circular beveled edge, and a sealing ring clamped around said outer circular beveled edge and bent over and under said outer flat portions to lock together and prevent withdrawal of said main and auxiliary seal members and thereby seal the receptacle head in position.

[Claims 2 to 6 not printed in the Gazette.]

1,268,462. COIN-DELIVERING MACHINE. BENJAMIN C. HOEFER, Kansas City, Mo. Filed June 4, 1914. Serial No. 842,833. (Cl. 133—4.)



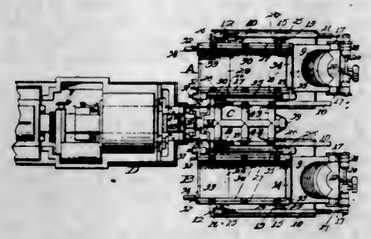
1. In a change making machine a plurality of coin magazines, an ejector for each magazine, a keyboard containing keys each for operating one or more of said ejectors, means for locking any of said ejectors when the corresponding magazine is substantially empty and means for releasing said locking means, there being two keys for each coin denomination, one for ejecting a coin of such denomination and one for ejecting the amount of the denomination in change.

3. In a change-making machine, a plurality of coin magazines, an ejector for each magazine, means for operating said ejectors, automatic devices for locking any of said ejectors when the corresponding magazine is not filled, and a bar for simultaneously releasing all of said devices.

5. In a change-making machine, a plurality of coin magazines, a reciprocating ejector for each magazine, a locking bar moving with said ejector and extending into the bottom of the magazine, a hook on said bar adapted to engage a stationary part to prevent movement of the bar and ejector, the weight of the coins holding said bar out of said engagement, and a rotatable releasing rod for moving said bar out of its locking position.

[Claims 2 and 4 not printed in the Gazette.]

1,268,463. MACHINE FOR MAKING STEREOTYPE PRINTING-PLATES. CHARLES E. HOPKINS, Taunton, Mass. Filed Feb. 23, 1912. Serial No. 679,358. (Cl. 22—3.)



1. In a stereotype plate making machine, the combination of a plurality of casting boxes arranged parallel with each other, a common means parallel with said boxes for receiving plates therefrom, and a single finishing mechanism arranged in position to receive the plates directly from said receiving means.

3. In a stereotype plate making plant, the combination of a plurality of casting boxes, a receiver arranged in position to receive plates laterally from each of said casting boxes, and a finishing machine in position to receive plates longitudinally from said receiver.

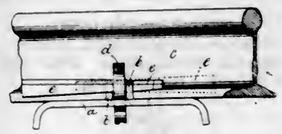
14. In a stereotype plate casting machine, the combination of a pair of casting boxes arranged parallel with each other, a receiver located between the casting boxes and mounted to swing on a longitudinal axis, each casting box having a plate delivery frame adapted to swing over into position to deposit a plate on said receiver, and each having means for engaging the receiver and tilting it toward itself as the frame moves toward the receiver.

16. In a stereotype plate casting machine, the combination with a casting box, of a concave frame therein having side bars and semi-circular end bars for supporting a semi-cylindrical plate therein, said frame being mounted to swing on a longitudinal axis at one side of the casting box, and a receiver mounted alongside the casting box adjacent to said axis for receiving a plate directly from said frame as the frame swings away from the casting box, said frame being provided with means for tilting the receiver toward itself as the frame moves outwardly from the casting box.

22. In a stereotype plate casting apparatus, the combination with the casting box, of a receiver alongside thereof having a series of freely rotatable rolls thereon for receiving the edges of a plate, said rolls being located on an incline, said receiver being adapted to tilt from the inclined position in which it receives a plate to a neutral position, and a fixed stop for preventing the plate from rolling down the incline while the receiver is out of neutral position, said stop being located in a position to be out of registration with the plate when the receiver is in neutral position.

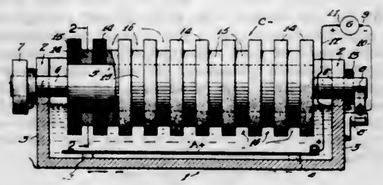
[Claims 2, 4 to 13, 15, 17 to 21, and 23 to 26 not printed in the Gazette.]

1,268,464. FASTENING OF RAILWAY-RAILS TO SLEEPERS. EDWARD HUDSON, Leeds, England, assignor to Edward Hudson and Walter Skelton Hudson, Leeds, England. Filed Dec. 20, 1917. Serial No. 208,016. (Cl. 238—4.)



Means for fastening rails to sleepers comprising a sleeper with pairs of holes formed by turning up out of the metal of the sleeper tongues between which the rails are laid and the rails being fastened in position by clips inserted in the holes so as to overlap the rail feet and wedges driven between the feet of the rails and the overlapping limbs of the clips, substantially as described.

1,268,465. PROCESS AND APPARATUS FOR ELECTRODEPOSITION. NATHANIEL HUGGINS, New York, N. Y., assignor, by mesne assignments, to Copper Products Company, a Corporation of Maine. Filed Apr. 18, 1916. Serial No. 91,866. (Cl. 204—8.)



1. The hereinbefore described process for the formation of metallic articles which consists of the following steps:—(1) forming a conducting mold-blank; (2) positioning such mold-blank upon, and in contact with a cathode; (3) positioning insulation upon the cathode to wall such mold-bank to form a molding-cavity outward of such mold-blank; (4) immersing the cathode in an electrolytic bath; (5) electrolytically depositing upon the face of the conducting-mold-blank, the required quantity of deposition to form the article desired to be produced; (6) removing the conducting-mold-blank and article from the cathode; and (7) separating the mold-blank from the article.

4. In a device of the class described, an electrolytic bath tank or receptacle adapted to contain electrolytic fluid; an electric-cathode located in the tank; an electric-anode also located in the tank; a conducting mold-blank or blanks positioned on and in contact with the cathode; and walls of insulating material adjacent to the mold-blank or blanks also mounted on the cathode extending beyond the mold-blank or blanks to form a deposition cavity or cavities wherein the article or articles required to be produced may be electrolytically deposited.

5. In a device of the class described, a receptacle adapted to receive an electrolytic fluid having journal-slots in the walls; a cathode having end-journals fitting in the journal-slots of the receptacle, adapted to be removably inserted in the receptacle so as to dip into the bath; an anode in the receptacle; a source of electric-supply connected with the cathode, and the anode; and means for rotating the cathode.

6. In a device of the class described, a tank or receptacle for holding an electrolytic depositing bath; a cathode located in such receptacle removably and revolubly mounted in such receptacle; an annular conducting mold-blank-ring or rings, or a plurality thereof, located upon and in contact with the periphery of the cathode; insulating rings also mounted upon the cathode, and ex-

tending beyond the outer peripheral surface of such conducting mold-blank ring or rings so as to leave a cavity or cavities of the form of the ring or rings to be deposited; a source of electrical supply connected with the cathode and anode; and means for rotating the cathode.

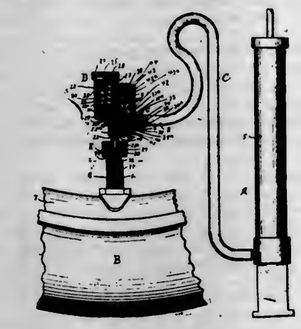
[Claims 2 and 3 not printed in the Gazette.]

1,268,466. WIRE-FASTENER FOR POSTS. WILLIAM FRANCIS HUNTER, Blaine, Kans. Filed July 3, 1916. Serial No. 107,407. (Cl. 256—54.)



A device for fastening wires to metallic posts comprising, in combination with a post having an oval-shaped slot formed in the wall thereof, a button provided with a tapering portion and having an oblong portion in cross section conforming to the shape of said oblong slot in the post, said button having a square-outlined head with a slot in the end thereof, the walls of said slot provided with registering apertures, a pin engaging said apertures, the inner ends of said tapering portion terminating in oppositely disposed shoulders, the shank portion of the button intermediate said shoulders and the shoulders formed at the inner end of the head being cylindrical in outline and adapted to contact with the opposite edges of the post adjacent the oval-shaped slot when the button is turned.

1,268,467. PRESSURE CONNECTION AND GAGE. CARL I. JACOBSON and ALFRED L. FOWLER, Los Angeles, Cal. Filed Aug. 24, 1914. Serial No. 858,232. (Cl. 137—28.)



1. A device of the character disclosed, comprising a hollow body adapted to be applied to a device to be inflated, a check valve for the hollow body preventing the passage of air therethrough in one direction, and automatic cutoff means for cutting off the supply of air; said automatic cutoff means comprising a cutoff valve adapted to be moved transversely above an air supply passage provided in said body, means urging said valve in the direction to cut off the air supply, and yielding means resisting said urging means and adapted to be overcome by the air pressure in said body when a predetermined pressure is reached, whereby seating of said cutoff valve is permitted.

2. A device of the character disclosed, comprising a hollow body divided into separate cylinders having parallel axes, said body having an air inlet communicating with both of said cylinders and adapted to receive air from the source of supply, said body having an outlet communicating with both cylinders to the inlet, a valve for controlling the passage of air from the inlet to the cylinders and outlet and being normally held open, means tending to close said valve, means within one of the cylinders for controlling the movement of said valve being in turn controlled by back pressure of air in said cylinder, and a gage means in the other cylinder.

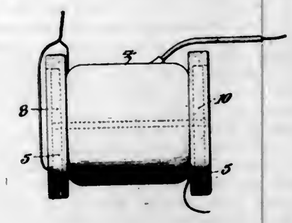
3. A pressure connection and gage, comprising a single housing having an air inlet and an air outlet, a cut-off device within the housing and a gage within the housing, said gage and cut-off devices having parallel axes.

4. A device of the character disclosed, comprising a hollow body having an air intake and an air outlet and being divided into separate cylinders having parallel axes, conduits communicating the cylinders with one another and with the inlet and outlet respectively, said inlet adapted to be connected with a source of supply, said outlet adapted to be connected with a device to be inflated, means within one cylinder for indicating the pressure of air within a device which is being inflated, and means within the other cylinder for controlling, under the influence of said pressure, the amount of air passing through the conduits from the intake to the outlet.

5. A device of the character disclosed, comprising a hollow body having an air intake and an air outlet and being divided into separate cylinders, conduits communicating the cylinders with one another and with the inlet and outlet respectively, said inlet adapted to be connected with a source of supply, said outlet adapted to be connected with a device to be inflated, means within one cylinder for indicating the pressure of air within a device which is being inflated, and means within the other cylinder for controlling, under the influence of said pressure, the amount of air passing through the conduits from the intake to the outlet.

[Claim 6 not printed in the Gazette.]

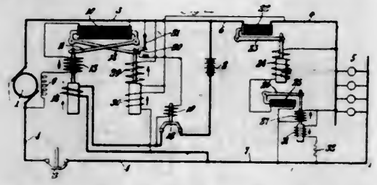
1,268,468. INDUCTION-COIL. EDWARD B. JACOBSON, Pittsfield, Mass., assignor to Hendee Manufacturing Company, Springfield, Mass., a Corporation of Massachusetts. Filed Dec. 3, 1913. Serial No. 804,532. (Cl. 175—359.)



1. An induction coil comprising a core, a primary coil and a secondary coil extending about said core, an insulating disk at each end of the core, each disk having a recess formed therein, a magnetic plate located in each recess and extending so as to cover the primary coil and overlap the secondary coil, each of said magnetic plates having a recessed engagement with said coil, and means for connecting said magnetic plates.

2. An induction coil comprising a core, a primary coil and a secondary coil extending about said core, an insulating disk at each end of the core, each disk having a recess formed therein, a magnetic plate located in each recess and extending so as to cover the primary coil and overlap the secondary coil, each of said magnetic plates having a recessed engagement with said coil, and a rod extending centrally through said core and threaded into said magnetic plates.

1,268,469. ELECTRICAL SYSTEM OF DISTRIBUTION. JOHN W. JEPSON, Buffalo, N. Y., assignor to Gould Coupler Company, a Corporation of New York. Filed Aug. 24, 1915. Serial No. 47,030. (Cl. 171—313.)



2. In an electrical system of distribution the combination of a generator, a storage battery and work circuit fed thereby and means for substantially disconnecting the battery from the generator when the battery has become substantially charged whereby with the generator feeding the work circuit, the charging current will be substantially eliminated, said means acting to connect the battery to feed the work circuit when the generator stops.

6. In an electrical system of distribution the combination of a generator driven at variable speed, a storage battery and work circuit supplied thereby, a coil serially connected between the generator and battery regulating the voltage of the generator, a switch serially connected with the battery, a coil acting to cause said switch to open when the battery becomes substantially charged to stop the charging of the battery and means whereby the generator voltage is regulated, responsive to generator voltage changes, after said switch is opened; said switch being automatically closed when the generator voltage is insufficient to supply the work circuit.

7. In an electrical system of distribution, the combination of a generator, current controlled means for regulating the generator voltage, voltage controlled means for regulating the generator voltage adapted to operate when there is a given voltage of the system, a switch in the battery circuit, a voltage coil controlling said switch to open the switch when the battery is charged, and a switch controlling the circuit of said last named voltage coil and operated by said voltage controlled means.

[Claims 1 and 3 to 5 not printed in the Gazette.]

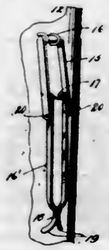
1,268,470. DEVICE FOR TEETHING INFANTS. CHARLES L. JOHNSON, San Jose, Cal. Filed Jan. 28, 1918. Serial No. 214,200. (Cl. 128—28.)



A device of the character described, made of pliable rubber of the required resiliency, consisting of a plurality of projections, cylindrical in shape, the outer ends of which are convex in contour; the inner ends of these projections being integral, one with the other; each projection being diametrically opposite another projection, and all projections extending from a common center, in a plurality of planes, as the radii of a sphere, any one of these projections being adapted to enter the infant's mouth or to be grasped by the infant's hands, as and for the purpose described.

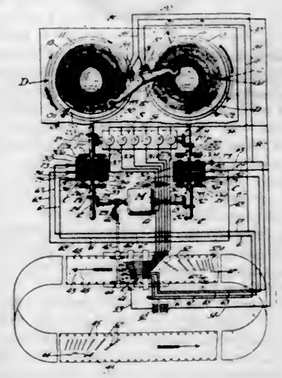
1,268,471. WIRE-GATE FASTENER AND TIGHTENER. CABLE B. JONES, Whitewood, S. D. Filed Nov. 2, 1914. Serial No. 865,880. (Cl. 70—121.)

A wire gate fastener comprising a link including spaced arms and a connecting bight portion, the latter having means for pivotally connecting it with a fence post to permit of swinging of the opposite ends of the arms toward and away from the post and a second link comprising arms having spaced parallel portions and a connecting reëntrant bight portion at one end, the arms at the opposite end constituting a wire-engaging fork, the second link being disposed between the free end portions of the arms of the first link to which they are pivoted at points



adjacent to the bight of the second link, whereby a gate post disposed between the arms of the first link will be engaged by said reëntrant bight and urged in the direction of the bight portion of the first link when the second link is pivotally moved to receive in its fork a wire attached to said post.

1,268,472. CONTINUOUS PHONOGRAPH, KINETOGRAPH, OR THE LIKE. ORLANDO E. KELLUM, Los Angeles, Cal. Filed Mar. 16, 1914, Serial No. 824,909. Renewed Nov. 1, 1917. Serial No. 199,773. (Cl. 274—10.)



1. In combination, a pair of independent record driving means, a constantly running motor, a record starting motor, means operated in synchronism with a record being driven by the constantly running motor to energize the starting motor, and means for connecting the starting motor with either record driving means and for connecting the constantly running motor with either record driving means.

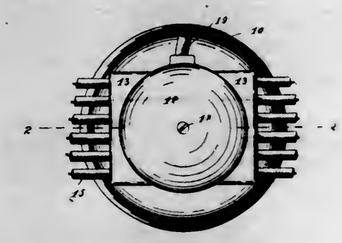
25. In combination, a pair of independent record driving means, a constantly running motor, an electro-magnetic record starting motor capable of being controllably operated by successive electrical impulses, means for connecting either the starting motor or the constantly running motor with either of the record drivers, energizing means for the starting motor including means for intermittently and at progressively decreasing intervals supplying current to said starting motor so as to gradually increase its speed so that a record driven by the starting motor will be brought up to speed equal to that of a record being driven by the constantly running motor, electro-magnetic means coöperating with said energizing

means for operating said connection means for making and breaking driving connection between the two motors and the two record drivers, a mechanism adapted to cooperate with a record on each of the driving means, and electro-magnetic means coöperating with said electro-magnetic connection operating means for making said mechanism effective or ineffective with respect to either record.

40. In combination, a pair of record drivers, a constantly running motor, means whereby said motor may drive either of said record drivers, and means operated by said constantly running motor for positively starting the other of said record drivers and for then driving it synchronously with the first mentioned record driver independently of the constantly running motor.

[Claims 2 to 24 and 26 to 39 not printed in the Gazette.]

1,268,473. DISTRIBUTER-CAP FOR IGNITION APPARATUS. WILLIAM O. KENNINGTON, Detroit, Mich., assignor to Remy Electric Company, Anderson, Ind., a Corporation of Indiana. Filed Apr. 19, 1916. Serial No. 92,330. (Cl. 123—167.)



1. A distributer cap provided on the interior with an annular series of spaced terminals, and provided with two rows or groups of openings for secondary conductors, the two groups of openings facing different directions.

2. A distributer cap of insulating material having on the interior thereof a series of spaced terminals and provided adjacent said terminals with an inner chambered portion from which extend outwardly two groups of openings for two groups of secondary conductors designed to be connected to the terminals.

13. A distributer cap for ignition apparatus, comprising a body portion of insulating material, having two groups of openings facing in different directions, at one end to receive a plurality of conductors, an insulating partition dividing the cap substantially into two compartments, a plurality of concentrically disposed distributing elements to which the conductors are to be connected in one compartment and which have terminal projections extending through into the other compartment.

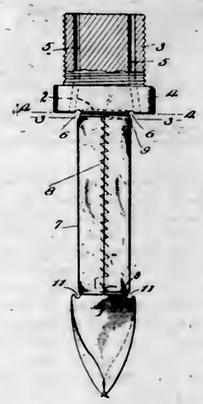
14. A distributer cap for ignition apparatus, comprising a body portion of insulating material, having in one end two rows of openings facing in different directions to receive a plurality of conductors, an insulating partition detachably attached to the end of the cap and dividing the same substantially into two compartments, one constituting a containing chamber for the conductors, which are confined by said partition, and a plurality of concentrically disposed distributing elements to which the conductors are to be connected in the distributing chamber and which have terminal projections extending into the other compartment.

[Claims 3 to 12 not printed in the Gazette.]

1,268,474. DRILL-BIT. JOHN G. KILGORE, Dayton, Tex. Filed Mar. 26, 1918. Serial No. 224,813. (Cl. 255—61.)

1. A drill bit having an absorbent lubricant carrier secured thereabout.

5. A drill bit comprising a point, a body and a reduced neck connecting the point and the body, the said neck being provided at its ends with external grooves merging into the adjacent surfaces of the point and the body respectively and being further provided with transverse openings communicating with the said grooves, a flexible absorbent lubricant carrier wrapped about the neck, means



for joining the meeting edges of said carrier, and means passing about the ends of the carrier and through the transverse openings in the neck to secure the ends of the carrier in the said grooves and to the neck.

[Claims 2 to 4 not printed in the Gazette.]

1,268,475. [WITHDRAWN.]

1,268,476. MEANS OF EXCHANGE. JOHN E. LEAVITT, Boston, Mass. Filed Oct. 16, 1915. Serial No. 56,314. (Cl. 11—13.)

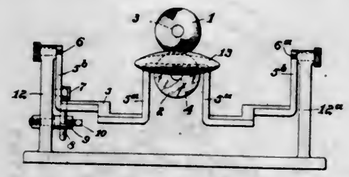


1. A trading sheet having thereon a suitably designated space to receive an order for a commodity, a suitably designated space to receive a stamp or stamps equaling the cost of the commodity, and a suitably designated space to receive the signature of the purchaser of the commodity.

2. A trading sheet having thereon a suitably designated space to receive an order for a commodity, a suitably designated space to receive a stamp or stamps equaling the cost of the commodity each having a certificate of deposit thereon, and a suitably designated space to receive the signature of the purchaser of the commodity.

3. A trading sheet having thereon a suitably designated space to receive an order for a commodity, a suitably designated space to receive a stamp or stamps equaling the cost of the commodity, a suitably designated space to receive the address of the vender of the commodity, and a suitably designated space to receive the signature of the purchaser of the commodity.

1,268,477. HEEL-TRIMMER. WILLIAM G. LERCH and CHAUNCEY P. WHISLER, Akron, Ohio, assignors to The Miller Rubber Company, Akron, Ohio, a Corporation of Ohio. Filed Nov. 6, 1917. Serial No. 200,583. (Cl. 164—63.)



1. In a device of the class described a pair of co-acting cutters, a table having a smooth unobstructed surface curved slightly in all directions, over which an article having a corresponding face may be freely moved in all directions, and means for adjustably supporting said table and maintaining its edge in close proximity to the meeting point of said cutters.

3. In a device of the class described a pair of co-acting rotary cutters, a frame having arms pivoted on an axis coincident with the meeting point of the cutters, a supporting table carried by said frame having a curved surface terminating in proximity to said meeting point, a rod pivotally connected to said frame, and a stationary part to which said rod is adjustably connected.

4. In a device of the class described, a pair of superposed rotary coacting cutters, a frame pivoted on an axis coincident with the meeting point of the cutters, said frame comprising arms depending from their pivots and horizontal portions and a portion of inverted U-shape supported by the horizontal portions, said inverted U-shaped portion being of greater width than and in alinement with the lower cutter and a table supported by said inverted U-shaped portion.

[Claim 2 not printed in the Gazette.]

1,268,478. WIRE-CLAMP. GAIL B. LEWIS, Notus, Idaho. Filed May 28, 1917. Serial No. 171,535. (Cl. 254—83.)

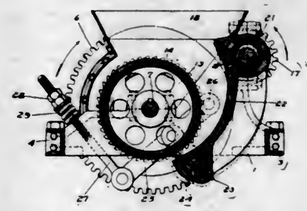


1. In a clamp of the character described a pair of pivoted members adapted for clamping engagement with wire strands, a latch pivotally mounted on one of the members and having its ends offset from each other, a hook formed upon the lower end of said latch, an eye also mounted on this clamping member and loosely receiving the hook end of the latch, and a flexible element carried by one of said clamping members and operatively engaged with the upper end of the latch.

[Claims 2 and 3 not printed in the Gazette.]

1,268,479. CRUSHER. WILLIAM K. LIGGETT, Columbus, Ohio, assignor to The Jeffrey Manufacturing Company, Columbus, Ohio, a Corporation of Ohio. Filed July 28, 1914. Serial No. 853,586. (Cl. 83—33.)

2. In a crushing apparatus, the combination of a revolving crusher roll, a gyrating breaker plate having an operative concave surface extending from a horizontal plane below the roll upward to a horizontal plane above the roll, a pivotal support for the lower part of the plate, resilient means for yieldingly holding the pivotal support and the lower part of the plate in operative position against the pressure of the material being crushed, and means connected to the upper part of the plate for positively driving said plate downward, inward, outward and upward.



3. In a crushing apparatus, the combination with a revolving crusher roll, of a gyrating breaker plate having an operative concave surface extending from a horizontal plane below the roll to a horizontal plane above the roll, its lower end being mounted to move vertically and to move radially relatively to the roll, and a power shaft having its axis in a horizontal plane below the second mentioned horizontal plane and adapted to positively impart power to the plate during the entirety of each revolution.

4. In a crushing apparatus, the combination with a supporting frame, of a crushing roll, a hopper having a chamber or passage through which material is guided toward the roll, a concaved breaker plate adjacent the roll and formed at its upper end with a coal crushing and agitating projection rigid with the breaker plate and extending into the said passage or chamber, a driving shaft, and power transmitting devices between the shaft and the breaker plate adapted to move the said projection bodily inward and outward while immovable relatively to the plate and cause it to coöperate with the roll in crushing the coal and in advancing the material.

5. In a crushing apparatus, the combination with a supporting frame, of a crushing roll in the frame, a concave breaker plate adjacent the roll, a hopper or passageway through which material is guided toward the roll, a concave breaker plate having its lower end supported near the operative surface of the roll and having a projection integral with its upper end and extending into the said passage, the concave breaking surface of the plate including the surface of the said projection, a power shaft, and power transmitting devices positively engaging with the plate throughout the entirety of each revolution of the shaft and causing the said projection to move inward and outward in the passage and advance material toward the roll and to move downward toward the roll to crush the said material supplemental to the crushing action of the plate caused by its motion inward toward the roll.

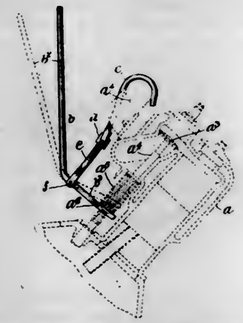
6. In a crushing apparatus, the combination of a supporting frame, a crusher roll, an upright breaker plate having a concave working surface adjacent the crusher roll, means for pivotally supporting the lower part of the crusher plate, and means for moving the upper part of the plate inward and outward and upward and downward, the said pivotal supporting means for the lower part of the plate being adapted to permit the plate to yield outward from the roll independently of the movement of the upper part of the plate.

[Claim 1 not printed in the Gazette.]

1,268,480. TOOL FOR DETACHING PUPPET-VALVES OF MOTORS. VERNON G. LOCKWOOD, Saugerties, N. Y. Filed May 14, 1917. Serial No. 168,355. (Cl. 29—87.1.)

1. A tool of the class described, comprising a handle portion provided with a jaw member having a forked

head, said jaw member being arranged at an angle to the handle portion, a rod adjustably pivoted to the jaw member adjacent to the point where it connects with the handle portion, a block adjustable on said rod and a hook device pivoted to said block.



3. A tool of the class described, comprising a handle portion provided with a jaw portion, said jaw portion being arranged at an angle to the handle portion, a threaded rod provided with a forked end which is adjustably connected with said jaw portion adjacent to the point where it connects with the handle portion, a block adjustably mounted on the threaded portion of said rod and a hook device provided with a forked end which is adapted to be pivoted to said block.

[Claim 2 not printed in the Gazette.]

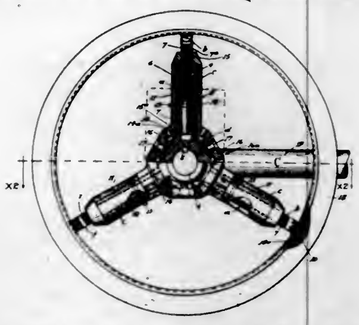
1,268,481. NUT-LOCK. ISAIAH METCALFE, Lancaster, Ky., assignor of one-fifth to John R. Sebastian, one-fifth to Lafe Duerson, and one-fifth to La Rue Duerson, Richmond, Ky. Filed Aug. 12, 1916. Serial No. 114,558. (Cl. 151—28.)



A nut lock comprising a bolt, a nut threaded to said bolt and having a recess in its outer end, a pair of oppositely disposed series of teeth formed on the wall of said recess, a washer in the recess and secured to the bolt, teeth formed on the washer and in mesh with the teeth of the wall of said recess, pairs of oppositely disposed ears formed on the outer end of the nut and apertured, locking elements extending through the apertures of the pairs of ears and overlying the washer, and web portions connecting the pairs of ears and spaced from the outer end of the nut to form spaces for receiving a tool capable of dislodging the washer from the recess when the fastening elements are removed.

1,268,482. TIRE-CARCASS-SUPPORTING MEANS. HOWARD I. MORRIS, San Diego, Cal., assignor to The Savage Tire Company, San Diego, Cal., a Corporation of California. Filed Oct. 13, 1916. Serial No. 125,527. (Cl. 154—9.)

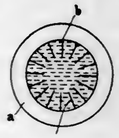
12. In a device of the character disclosed, a suitable support, a hub having a plurality of radially extending arms and being rotatably mounted on said support, a non-rotatable extensible threaded member mounted in each of said arms and adapted to engage a core when extended, a core adapted to be engaged by said extensible members, a plurality of directly manually operable sleeves each rotatably mounted on one of said arms and having a threaded engagement with the respective threaded member in said arm, means for preventing radial movement of said rotatable members, and means of operative connection whereby all of said rotatable members are jointly rotated upon rotation of one of said original members to



cause simultaneous extension of all of said non-rotatable members and engagement of said non-rotatable members with the core, including pinions housed in recesses in said hub.

[Claims 1 to 11 not printed in the Gazette.]

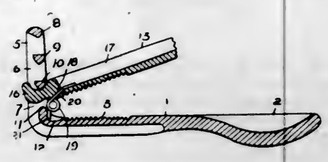
1,268,483. ELECTRODE FOR USE IN ELECTRIC FURNACES AND FOR OTHER PURPOSES. HANS NATHUSIUS, Friedenschütte, Kreis Beuthen, Germany. Filed July 19, 1916. Serial No. 110,052. (Cl. 204—65.)



1. A process for manufacturing electrodes from conductors of the second order consisting in inserting metal into dolomite, adding suitable binders and substances containing carbon, stamping the mass in molds, baking it and melting the metal insertions by means of electric current.

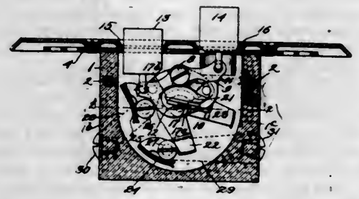
2. An electrode consisting of a conductor of the second order, comprising dolomite and a binder, and containing metal disseminated within its mass.

1,268,484. NUTCRACKER. JOZSEF OLASZ, Aliquippa, Pa. Filed Nov. 20, 1917. Serial No. 202,925. (Cl. 146—3.)



A nut cracker comprising an angle shaped element provided with a plurality of superposed openings forming abutments and fulcrums, an adjustable element having one end provided with a protuberance capable of extending through one of said openings whereby said element can be adjustably and detachably connected to the stationary element, said protuberance when extending through an opening bearing against the fulcrum, and a spring connected to the adjustable element and having one end extended adapted to bear against the abutment when the protuberance is extended through an opening.

1,268,485. DUPLEX SWITCH. HERMAN G. PAPE, New York, N. Y., assignor to Ralph A. Schoenberg, now by judicial change of name Ralph A. Belmont, New York, N. Y. Filed July 3, 1917. Serial No. 178,486. (Cl. 175—293.)

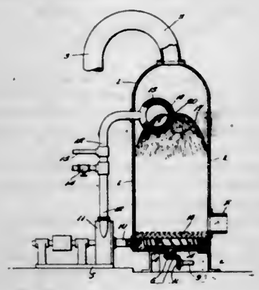


1. In an electric switch in combination an oscillating contact member provided with two contact arms of different lengths and two stationary contacts with which said oscillating contact members coöperate, said stationary contact members being located at different distances from the pivot of said oscillating member corresponding in position each with the length of one of said arms so as to be engaged only by said one arm, the angular movement of the oscillating member being not less than the angular distance apart of the stationary contacts; and means for actuating said oscillating member, said actuating means, said oscillating member and said fixed contacts being all alined in substantially the same plane.

3. An electric switch comprising an actuating member; a contact-carrying member; a bow spring having a hooked connection with one of said members and an operative connection with the other of said members, said spring being twisted on its axis by the actuating member and when twisted actuating the contact-carrying member; and a fixed contact coöperating with the contact-carrying member.

[Claims 2, 4, and 5 not printed in the Gazette.]

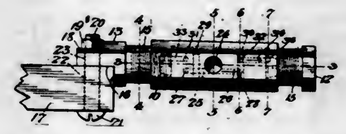
1,268,486. PROCESS OF REMOVING SUSPENDED SOLIDS IN GASES. SAMUEL PEACOCK, Philadelphia, Pa., assignor to Haslup & Peacock, Inc., New York, N. Y., a Corporation of New York. Filed Jan. 26, 1916. Serial No. 74,432. (Cl. 183—114.)



1. The process of removing a finely divided suspended solid from gases carrying the same, which consists in subjecting such gases to the action of a solvent for said solid in the form of a spray; and causing any undissolved portions of said solid to be further and repeatedly circulated by and subjected to a grinding action in opposing streams of said solvent while fresh streams of said gases are subjected to its action, thereby causing said solid to be further subdivided and facilitating its solution, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,268,487. METHOD OF MAKING VIBRATOR-BODIES. GEORGE B. PICKOP, New Haven, Conn., assignor to The Malleable Iron Fittings Company, Branford, Conn., a Corporation of Connecticut. Original application filed Aug. 21, 1915, Serial No. 46,711. Divided and this application filed Dec. 21, 1916. Serial No. 138,210. (Cl. 29—148.)

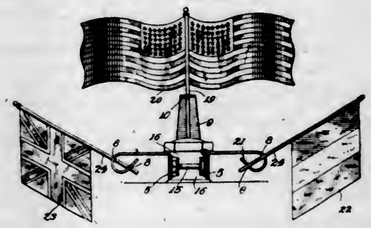


5. The method of making a vibrator body, which comprises cutting a length of metal from a commercial bar of uniform cross-section, reducing the diameter of the end portions of such length of metal so as to form shoulders, drilling a longitudinal bore through such length of metal from end to end, drilling inlet passages in the wall of the body at one side, from the aforesaid shoulders, and drilling an intermediate inlet socket with which said passages communicate; substantially as described.

7. The method of making vibrator bodies, which comprises reducing a polygonal bar at different points in its length to create eccentric rounded portions therein, dividing the bar into a plurality of lengths by cutting through each of said eccentric rounded portions so that a plurality of polygonal bodies are formed having reduced rounded ends, drilling a longitudinal bore through each body concentrically with the eccentric rounded ends, drilling inlet passages in the thicker wall of the bore, and drilling exhaust passages in the thinner wall of the bore; substantially as described.

[Claims 1 to 4, 6, and 8 not printed in the Gazette.]

1,268,488. DISPLAY DEVICE FOR FLAGS. RAYMOND R. PULLEN, Oceanic, N. J. Filed July 10, 1917. Serial No. 179,707. (Cl. 248—37.)



1. A display device, comprising a clamp for securing the device to a support in operative position, an extension having holes adapted to act as bearings for the vertical shaft of a rotatable object and a tongue cut from the base of the extension and formed to act as a step bearing for the vertical shaft and lateral branches or bars each provided at its end with means for holding the staff of a flag.

3. A display device, comprising a clamp for securing the device to a support in operative position, an extension having holes adapted to act as bearings for the vertical shaft of a rotatable object and a tongue cut from the base of the extension and formed to act as a step bearing for the vertical shaft, and lateral branches or bars each having at its end a resilient bend provided with holes adapted to grip and firmly hold the staff of a flag by the resiliency of the bend.

[Claims 2 and 4 not printed in the Gazette.]

1,268,489. CARD-INDEX. JAMES H. RAND, Jr., North Tonawanda, New York. Filed Oct. 4, 1915. Serial No. 53,885. (Cl. 129—16.)

1. In a card index system, a frame having guides, a series of card-supporting and spacing members, each remov-

ably mounted in the frame and having laterally enlarged parts located in said guides whereby said members are prevented from movement past each other in the guides, and a series of cards having hinge connections with said members, said cards being removable from their respective supporting and spacing members without removing the latter from the frame.



3. The combination of a frame having guides, a series of card-supporting and spacing members, each comprising a thin bar removably mounted in the frame and having laterally bent ends forming enlarged end parts located in said guides, and a series of cards having hinge connections with said parts, said cards being removable from their respective supporting and spacing bars without removing the latter from the frame.

4. In a card index system, a frame, a series of card-supporting and spacing members, each comprising a bar having a hinge socket at each end, and a series of cards each having a pair of trunnions projecting beyond its sides detachably engaging said sockets, said cards being removable from their respective supporting and spacing bars.

6. In a card system, a frame having inwardly facing guide channels, a series of card-supporting and spacing members, each comprising a bar having forwardly projecting heads at its ends engaging said guide channels, each head having a hinge member, and a series of cards each having a pair of complementary hinge members removably engaging the hinge members of the bar.

10. A card system, comprising a series of card-supporting and spaced members, and a series of cards held by said card-supporting and spacing members, and removable therefrom, said card-supporting and spacing members being adapted to support the cards one in front of another with their edges exposed, and a signal on each removable card normally concealed behind the exposed portion of the next adjacent overlying card, whereby the absence of any card from its place will be visually indicated by the exposure of the underlying signal.

[Claims 2, 5, and 7 to 9 not printed in the Gazette.]

1,268,490. PORCH-SHADE. HENRY E. RATHBUN, Worcester, Mass. Filed Nov. 15, 1917. Serial No. 202,220. (Cl. 156—16.)



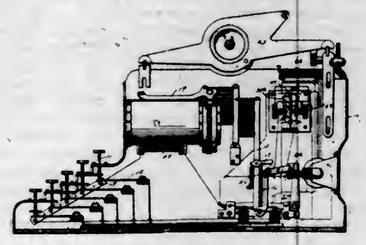
1. A porch shade or blind having the top edge and the bottom edge comprising a plurality of strips or slats, of a different thickness, which are woven in with the strips or slats forming the body of the shade or blind.

2. A porch shade or blind having the top edge, or the bottom edge, or both the top and bottom edges, comprising a plurality of strips or slats, one or more of which is thicker than the strips or slats in the body of the shade or blind, and which are woven in with said strips or slats forming the body of the shade or blind.

3. An improved method of making the top edge, or the bottom edge, or both the top and bottom edges of a porch shade or blind, which consists in weaving in with the relatively thin strips forming the body of the shade, thicker strips in adjacent pairs, then folding the thicker strips upon each other, with an intervening thin strip, and then separating the pairs of folded strips from each other by severing the warp cords of the fabric.

4. A porch shade or blind having a top or bottom edge, or both top and bottom edges, comprising strips or slats which are thicker than the strips or slats in the body of the shade or blind and which are connected with the said strips or slats forming the body of the shade or blind by the same warp cords which connect the body strips together, said top or top and bottom edge strips being nailed together, one of said thicker strips or slats being flat and the other having one flat face and one curved or rounded face.

1,268,491. ELECTRICALLY-OPERATED TYPEWRITER. PAUL C. RAWLS, Kansas City, Mo., assignor to Ernest Hausberg, Charles City, Iowa. Filed Jan. 8, 1914. Serial No. 811,103. (Cl. 197—14.)

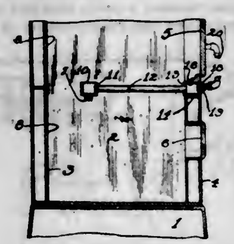


1. In an electrically operated typewriter, the combination of keys, type bars, selective magnets, means for establishing an electric circuit through a selective magnet upon the depression of a corresponding key, a type bar operating device for each type bar, means actuated by a selective magnet, upon the completion of a circuit through it, for moving a corresponding type bar operating device to operative position, a power magnet, an armature therefor, means operated by said armature for actuating a type bar operating device when the latter has been moved to operative position, a universal magnet energized upon and by the completion of a circuit through any selective magnet, an armature therefor, means operated by said armature for closing a circuit through the power magnet, and means operated upon and by the moving of the power armature toward its magnet for establishing a circuit to cause the armature of the said universal magnet to break the circuit for the power magnet.

21. In an electrically operated typewriter, the combination of keys, a power magnet, a circuit therefor, an armature for the power magnet, type bars adapted to be operatively connected with the said armature, means actuated upon the depression of a key for operatively connecting a corresponding type bar with the said armature, a universal magnet, an armature therefor, means operatively connected with the armature of the universal magnet for closing and breaking the circuit of the power magnet, means also operated upon the depression of a key for effecting a movement of said armature to close the circuit of the power magnet, and means operated by a movement of the power armature for effecting a movement of the armature of the said universal magnet to break the circuit of the power magnet irrespective of the release of the key.

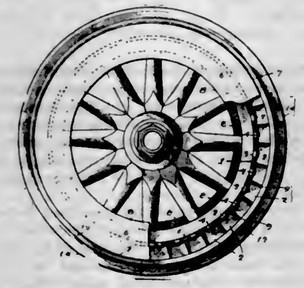
[Claims 2 to 20 and 22 not printed in the Gazette.]

1,268,492. GRATE FOR GARBAGE-BURNERS. JAMES A. ROAS, Chicago, Ill. Filed Mar. 17, 1917. Serial No. 155,414. (Cl. 122—2.)



The combination with a garbage burner and hot water heater, of a grate removably mounted therein comprising a rear tube disposed transversely across the burner and spaced from the rear wall of the burner to afford an opening, a chambered front tube, pipes connecting said tubes to form the grate, means connected with said front tube for permitting water to circulate through said grate, removable means in said front tube to permit cleaning of said pipes without removing the grate from its mounting or dismembering the same, said grate adapted to permit unburned garbage remaining thereon to be pushed over the rear end thereof through the opening between the rear tube and the rear wall of the burner into the burner fire box to be burned with the fuel.

1,268,493. TRACTOR-WHEEL. FRANK J. ROTH, San Francisco, Cal. Filed June 25, 1917. Serial No. 178,274. (Cl. 21—218.)



1. A tractor wheel comprising a suitable rim; a series of lateral pockets arranged around the periphery of the rim; and a suitable valve within each pocket to admit atmosphere to said pocket from the interior of the rim only.

2. A tractor wheel comprising a suitable rim; a series of lateral pockets arranged in pairs around the periphery of the rim; and a suitable valve within each pocket to admit atmosphere into said pocket from the interior of the rim only.

3. A tractor wheel comprising a suitable rim; a series of air-tight pockets arranged around the rim to retain air and tend to thereby prevent mud from entering said pockets when said wheel is running through mud; and means within each pocket for admitting air to the pocket to facilitate the releasing of the mud therefrom when said pocket is being pulled from the mud by the rotation of the wheel.

4. A tractor wheel comprising a suitable rim; a series of air-tight pockets arranged around the rim to retain air and tend to thereby prevent mud from entering said pockets when said wheel is running through mud; means within each pocket for admitting air to the pocket to facilitate the releasing of the mud therefrom when said pocket is being pulled from the mud by the rotation of the wheel; and a solid rubber tire mounted upon the rim and beyond the pockets.

5. A tractor wheel comprising a suitable rim; a series of lateral pockets arranged around the periphery of the rim to retain air and thereby tend to prevent mud from entering said pockets when the wheel is running through mud; a suitable valve within each pocket to admit air to said pocket from the interior of the rim only to facilitate the releasing of the mud from the pocket during the rotation of the wheel; and a pair of side plates arranged on the sides of the pockets and rim and extending inwardly from the rim to prevent the entrance of mud to the pockets through the valves when said pockets are submerged.

1,268,494. AIRSHIP. AUGUST C. RUTZEN, Cleveland, Ohio. Filed July 30, 1917. Serial No. 183,413. (Cl. 244—18.)



1. An aerial machine as described having a rigid frame and a pair of flight tubes side by side in the upper portion of said frame and propeller wheels therein and a basket suspended beneath the middle of said frame and relatively beneath said tubes, in combination with an engine in said basket, power connections from said engine to said propellers, a vertically disposed shaft operatively engaged with the engine and extending upward between said tubes, and a horizontally positioned balance wheel on the end of said shaft above said tubes.

4. A machine as described, comprising a rigid frame, a set of flight tubes and propeller blades therein and an engine in driving connection with said blades, in combination with a horizontally positioned balance wheel centrally over said tubes and planes at the ends of said tubes.

[Claims 2 and 3 not printed in the Gazette.]

1,268,495. METAL COMPOSITION. HENRY K. SANDELL, Chicago, Ill., assignor to Herbert S. Mills, Chicago, Ill. Filed Mar. 23, 1917. Serial No. 156,973. (Cl. 75—1.)

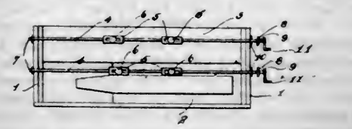
1. A metal composition comprising substantially an alloy of more than 50 per cent. of nickel and less than 50 per cent. of tungsten carrying upward of 3 per cent. of uncombined carbon.

3. A metal composition comprising substantially an alloy of four parts of nickel and one part of tungsten carrying upward of 3 per cent. of uncombined carbon.

6. A cast metal composition comprising substantially an alloy of upward of 50 per cent. of nickel and less than 50 per cent. of tungsten carrying upward of 3 per cent. of graphitic carbon.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,268,496. ROD FOR END-GATES. JUEL SANDER, Oldham, S. D. Filed Oct. 22, 1917. Serial No. 197,917. (Cl. 21—21.)



An end gate for wagons, comprising in combination with an end gate, an end gate rod having a plurality of elongated loops formed in its length, bolts extended from the

end gate and permanently engaged with said loops, a hook upon one end of the rod engaged over a wagon body side board, and a screw carried by the other end and adapted to be turned against the end of a wagon body side board at the opposite side of the body.

1,268,497. GAGE. ARTHUR EDWIN LEIGH SCANES, Ashton-on-Mersey, England. Filed July 14, 1915. Serial No. 39,784. (Cl. 73—31.)



1. In a gage for indicating the efficiency of a steam condenser, the combination of a tube having one end closed and exhausted of air and containing water and the other end open and adapted to be connected with the vacuum space of the condenser, a mercury column separating the water in the sealed end of said tube from the open end thereof, means for maintaining the water in the sealed end of the tube at a temperature determined by the condenser, and means for passing an electric current through the water in the closed end of said tube.

2. An indicating gage comprising a U-shaped tube having one end closed and exhausted of air and containing water and the other end open and adapted to be connected with a receptacle the pressure in which is to be indicated, and means for passing an electric current through the water in the closed end of said tube.

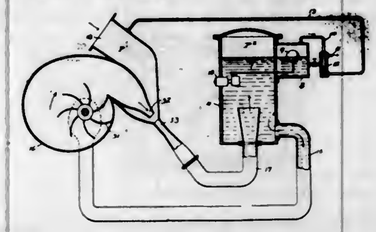
3. An indicating gage comprising a U-shaped tube having one end closed and exhausted of air and containing water and the other end open and adapted to be connected with a receptacle the pressure in which is to be indicated, a column of mercury separating the water in the closed end of the tube from the open end thereof, and means for passing an electric current through the water in the closed end of said tube.

4. An indicating gage, comprising a U-shaped tube having one end closed and exhausted of air and containing an electrolytic liquid, and the other end open and adapted to be connected with a receptacle, the pressure in which is to be indicated, and means for occasioning electrolysis in the electrolytic liquid.

1,268,498. PUMP OR COMPRESSOR. ARTHUR EDWIN LEIGH SCANES, Ashton-on-Mersey, England, assignor to The British Westinghouse Electric & Manufacturing Company, Limited, London, England. Filed May 3, 1916. Serial No. 95,151. (Cl. 230—14.)

1. In combination with a fluid-ejecting device with liquid as working medium and having a suction inlet for gas or air, a seal tank having a gas and vapor outlet and connections whereby said device receives its actuating liquid from said tank and delivers liquid and gaseous fluid thereto, a make-up-liquid inlet to said tank and means whereby the effective area of said gas and vapor outlet is automatically varied in accordance with the difference in pressures between that in the seal tank and that at the air or gas suction inlet of said ejecting device.

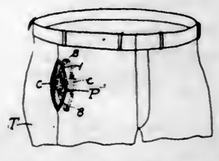
4. In combination with a fluid-ejecting device with liquid as working medium and having a suction inlet for gas or air, a seal tank having a gas and vapor outlet and a water over-flow, connections whereby said device receives its actuating liquid from said tank and delivers liquid and gaseous fluids thereto, a make-up-water inlet to said tank, means controlling the effective area of said water-



over-flow, the operation of which is dependent upon the difference in pressure between that in the seal tank and that at the air or gas inlet of said ejecting device, and means whereby the effective area of said gas and vapor outlet is dependent upon the water level in said tank.

[Claims 2 and 3 not printed in the Gazette.]

1,268,499. SAFETY ATTACHMENT FOR GARMENT-POCKETS. JOHN J. SCHAAB, St. Louis, Mo. Filed Sept. 17, 1917. Serial No. 191,784. (Cl. 2—151.)



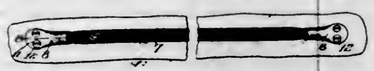
1. A safety attachment for pockets comprising a frame composed of pairs of terminal toggle links, a pair of intermediate links pivotally and slidingly jointed to the toggle links, slides on the toggle links operating to fold the links together with a movement of the slides toward the intermediate links, and to allow the toggle links to open with a movement of the slides away from the intermediate links.

3. In a device of the character described terminating in toggle links, a hinge pin at the joint between the links projecting at either end beyond the sides of the links, and a slide on the links provided at one end with recesses or notches, to receive the projecting ends of the pin.

4. In a device of the character described, a link having fork terminals provided with portions folded against the body of the link from which the fork members spring, the free terminals of the folded portions being provided with offsets engaging the link whereby a slot is formed in each fork member disposed in the general plane of the link, a cooperating link and a pin carried thereby and traversing the slot aforesaid.

[Claim 2 not printed in the Gazette.]

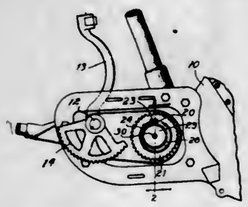
1,268,500. ROBE-STRAP. CHARLES P. SCHLEGEL, Rochester, N. Y., assignor to Schlegel Manufacturing Co., Rochester, N. Y., a Corporation of New York. Filed Jan. 2, 1917. Serial No. 140,058. (Cl. 45—13.)



2. In a strap, the combination with an attaching member, and a body of flexible material connected thereto, of a cover extending over the body and attaching member and having an end extending beyond and folded back upon the attaching member, means for securing the folded end, and a finishing member covering the attaching member and having a portion extending over the edge of said member.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,268,501. KICK-STARTER MECHANISM. FRANK W. SCHWINN, Chicago, Ill. Filed Feb. 6, 1918. Serial No. 215,596. (Cl. 74—29.)



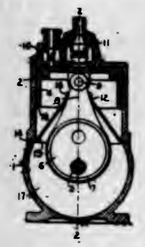
1. In mechanism of the class described, the combination with a sector-gear of a starter-gear with which the same is adapted to mesh and comprising a toothed member and a power-transmitting member, the toothed member having a limited movement in the direction of its normal action independently of the power-transmitting member, whereby engagement of the sector-gear with the toothed member may be effected before the latter assumes its load.

3. In mechanism of the class described, the combination with a sector-gear of a starter-gear with which the former is adapted to mesh and comprising an outer toothed annulus, and an inner hub portion having a limited angular movement with reference thereto, said hub member serving as a power transmission element of the starter-gear.

5. A starter-gear comprising an outer toothed annulus, a central hub portion having a bearing in the annulus for movement therein, a key secured to one of said members and cooperating with a keyway of greater angular width than the other member, and a spring connecting the said members and yieldingly taking up the lost motion between them.

[Claims 2 and 4 not printed in the Gazette.]

1,268,502. OIL-GUARD FOR PUMPS, ENGINES, &c. HOWARD O. SHARP, Troy, N. Y., assignor to West Side Foundry Company, Troy, N. Y., a Corporation of New York. Filed Aug. 24, 1917. Serial No. 188,042. (Cl. 184—27.)



1. The combination with a casing having an eccentric-receiving chamber and a cylinder, of a piston in a cylinder, a shaft, an eccentric thereon operating in said eccentric-receiving chamber and provided with an eccentric arm connected to the piston, and a flexible oil guard of porous material having its peripheral edge secured to the wall of the casing and secured centrally to said connecting arm.

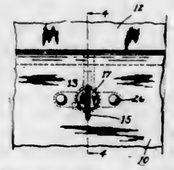
2. In a device of the class described, the combination with a casing provided with an eccentric-receiving chamber and a cylinder, of a piston in the cylinder, a shaft, an eccentric thereon operating in said eccentric-receiving chamber, an eccentric strap encircling said eccentric and having an arm connected to the piston, and an oil guard of porous material connected both to said eccentric arm and the casing and forming a partition across said casing between the piston and the eccentric-receiving chamber.

3. In a device of the class described, the combination with a casing provided with an eccentric-receiving chamber and a cylinder, of a piston in the cylinder, a shaft, an eccentric thereon operating in said eccentric-receiving chamber, an eccentric strap encircling said eccentric and having an arm connected to the piston, and an oil guard of porous material connected both to said eccentric arm and the casing and forming a partition across said casing between the piston and the eccentric-receiving chamber, the point of connection between the oil guard and casing being so situated that at the end of the suction stroke the lower edge of the piston will be brought in contact with the oil guard.

5. In a device of the class described, the combination with a casing having a cylinder, of a piston in the cylinder, a shaft, a connecting rod connecting said shaft to said piston, and an oil guard of flexible porous material having its peripheral edge secured to the wall of the casing and provided centrally with an aperture through which the connecting rod extends, and means to secure the central portion of said oil guard to said connecting rod.

[Claim 4 not printed in the Gazette.]

1,268,503. LOCK. JOHN H. SHAW, New Haven, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Dec. 10, 1917. Serial No. 206,475. (Cl. 70—46.)



1. In a locker or the like, the combination of sheet metal door and frame members having oppositely beveled edge portions in overlapped relation, and a cylinder lock for interlocking said edge portions.

15. In combination with a door, a lock having a casing and a key-plug located at the rear of said door, the main portion of the casing being spaced rearwardly from the door, and a door locking cam operatively secured to said key-plug between the door and the main part of the casing and confined between the rear face of the door and the front face of the lock casing.

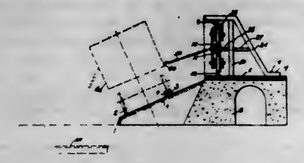
22. In combination with a door, a lock having a casing, forwardly projecting securing lugs upon said casing, a key-plug having a forwardly projecting end positioned between said lugs, and a locking arm for locking the door in its closed position, operatively secured to the forwardly projecting end of said key-plug.

[Claims 2 to 14 and 16 to 21 not printed in the Gazette.]

1,268,504. APPARATUS FOR UNLOADING RAILROAD-CARS. JOAQUIN FERNANDEZ SILVA, Central Lutgardita, Cuba. Filed Judy 20, 1917. Serial No. 181,802. (Cl. 105—233.)

1. A trolley device for maintaining cars in unloading position on a dumping platform, comprising a plurality of parallel horizontal rails arranged in pairs, the rails in each pair being superposed with respect to each other and the pairs also being superposed with respect to each other,

and a retaining device movably carried on said rails and detachably connected with the car to be unloaded.

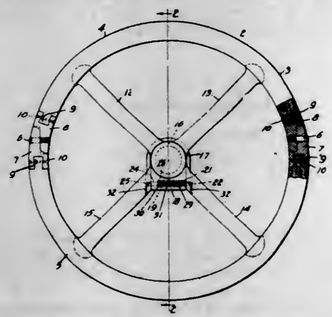


2. A trolley device for maintaining cars in unloading position on a dumping platform, including two superposed pairs of rails, a truck provided with wheels, some of the wheels of the truck being in permanent engagement with the rails of the upper pair, and others of the truck being in permanent engagement with the rails of the lower pair, and means for connecting the truck with the car to be unloaded on the dumping platform.

3. A trolley device for maintaining cars in inclined position on an unloading platform, including a plurality of rails spaced vertically from each other and supported horizontally in parallel relation to the top edge of the unloading platform, a pair of posts supporting the ends of said rails, intermediary posts, brackets secured to said intermediary posts, said brackets holding said rails intermediate the ends thereof, a truck movably carried by said rails, and flexible connections between said truck and the car to be unloaded on said platform.

[Claims 4 to 6 not printed in the Gazette.]

1,268,505. FOLDING STEERING-WHEEL. ANTONIO C. SINCARE, Winthrop, Mass. Filed Dec. 14, 1917. Serial No. 207,025. (Cl. 74—33.)



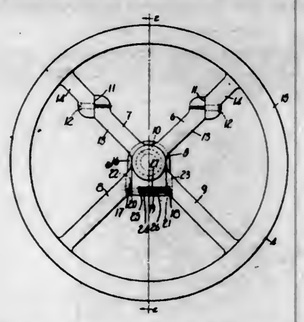
1. A steering wheel embodying in its construction a rim formed in two parts, means for pivotally securing one of said parts to the other part to swing about an axis disposed in the central plane of rotation of said rim, and means for detachably securing the pivotal part of said rim in its operative position.

[Claims 2 to 4 not printed in the Gazette.]

1,268,506. PIVOTED STEERING-WHEEL. ANTONIO C. SINCARE, Winthrop, Mass. Filed Jan. 5, 1918. Serial No. 210,421. (Cl. 74—33.)

1. In combination, a steering post, a shaft rotatably arranged in said post, a collar secured to the upper end of said shaft, a pair of spokes extending radially from said collar, each of said spokes being formed in two parts pivotally united along parallel planes, the pivots for said spoke parts being arranged with their axes coinciding, a wheel rim secured to the pivotal portions of said spokes, and means for supporting said rim in its operative position relatively to said steering post.

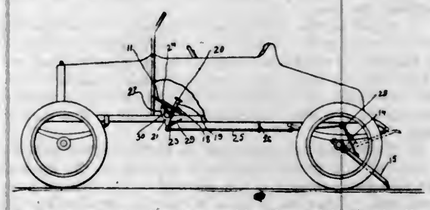
3. A steering wheel having, in combination, a supporting collar, a plurality of spokes, two of said spokes being formed integral with said collar and in two parts pivotally united near the outer ends thereof, the axes of the pivots for said spokes coinciding, a solid rim secured to the outer ends of said spokes, and means for detachably securing the



inner portions of the others of said spokes to said supporting collar to maintain said wheel rim in its operative position with respect to said steering wheel.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,268,507. BRAKE. MORTON M. SPAULDING, North Adams, Mass. Filed Nov. 20, 1917. Serial No. 202,997. (Cl. 21—8.)



In a motor vehicle, the combination with the inclined foot board of a slotted plate mounted thereon having a depending ear, a lever having one end bifurcated to form a pair of members of different lengths, means pivotally connecting the lower member to the ear, a bar provided with a pair of notches pivotally connected to the shorter member and extended through the slotted plate, a sprag brake, and a link connecting said lever to the brake.

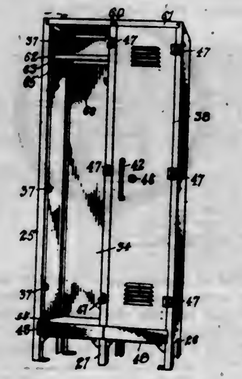
1,268,508. PROCESS OF TREATING POTASSIUM-BEARING SILICATES TO OBTAIN POTASSIUM SULFATE. GUY STERLING, Salt Lake City, Utah. Filed Sept. 17, 1917. Serial No. 191,847. (Cl. 23—22.)

2. The process of extracting potassium from silicates containing potassium in an insoluble form; consisting of heating, while stirring, a finely ground mixture of potassium bearing silicate, limestone and sodium sulfate, to a temperature just below that at which vitrification of the mixture would take place, thereby converting the potassium of the potassium bearing silicate into the soluble potassium sulfate, subliming the latter by the high heat employed, and condensing, and saving the sublimed potassium sulfate.

3. The process of extracting potassium from silicates containing potassium in an insoluble form, consisting in mixing finely ground silicate, limestone and sodium sulfate in approximately the proportions of three parts silicate, two parts limestone and one part sodium sulfate, heating the mixture to a temperature just below that at which vitrification would take place, subliming the potassium sulfate formed during the heating of the mixture, and condensing the sublimed potassium sulfate.

[Claim 1 and 4 not printed in the Gazette.]

1,268,509. KNOCKDOWN SHEET-METAL LOCKER. JOHN N. STONE, Gowanda, N. Y. Filed Aug. 6, 1917. Serial No. 184,589. (Cl. 45—118.)



1. In a knock-down locker, a body, a shelf having a downturned flange formed with a lengthwise rib, a member borne by the body and having a part offset to receive the flange of the shelf, and substantially circular blisters struck-out from the offset part of the member below the top thereof to engage over the ribs.

2. A knock-down locker comprising channeled sheet metal corner posts, connective end plates having lengthwise flanges spot welded within said corner posts to thereby form end uprights, a back plate, spaced hooked lugs along each lengthwise edge of said back plate, the rear channel posts having spaced slots therein to receive said spaced hooked lugs in holding engagement, locking wedges one to each edge of said back plate to hold said hooks in said slots and bolted to said back plate, a front base plate having hook and slot connection to the front channel posts, said base plate having a channeled flanged upper edge, the bottom shelf engaging in said flanged upper edge and having downwardly flanged edges with ribs thereon, lugs on said end uprights having blisters engaging over said ribs, an upper shelf having downwardly extending flanged edges, ribs on said flanged edges and blister lugs on said uprights engaging said ribs, a top removably attached to said uprights and back plate, a door hinged to one of the front channel posts, spaced hooked stops on the other channel post to receive said door, and a latch bar on the inner side of said door having spaced lugs thereon to engage said spaced hooked stops in latching engagement.

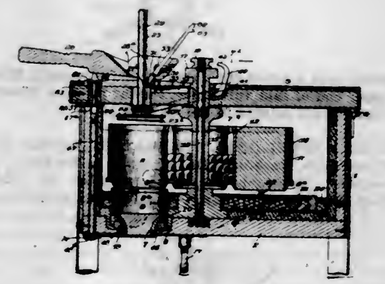
3. A knock-down locker including end members each composed of a pair of U-shaped channeled corner posts, a metal plate having its sides flanged and the latter secured to the inner faces of the bottoms of the channels of the corner posts at points between and spaced from the free edges of the sides of the channels, a back plate, and hooked lugs on the back plate, the rear corner posts having their inner sides formed with openings to receive said hooked lugs in the space between the metal plate and said inner sides of the channels.

5. In a knock-down locker, end members having corner posts provided with openings, a back plate connecting the end members, hooked lugs on the back plate engaging in said openings, wedge plates engaging on top of the hooked lugs and with the top end walls of the openings, and screws to removably secure the wedge plates against movement; and to hold same onto the back plate during knock-down position of the parts.

6. In a knock-down locker, end members having channeled corner posts, a metal plate secured to said posts in spaced relation to the inner sides of the channels of the corner posts, hooked-lug bearing members secured to the inner faces of the inner sides of the channels of the front corner posts and in said space between said sides and the metal plate and with the hooked lugs extending on the outer faces of said inner sides of the channels, a door, a back connecting the end members and locking means on the door engaging said hooked lugs.

[Claims 4 and 7 to 11 not printed in the Gazette.]

1,268,510. BUTTER-SERVER. BENNETT D. STRAIGHT, Rochester, N. Y., assignor, by mesne assignments, to Butter Serving Machine Company, Inc., Rochester, N. Y., a Corporation of New York. Filed July 3, 1915. Serial No. 38,011. (Cl. 31—65.)



1. In a butter dispenser, the combination with a fixed discharge nozzle, of a carriage comprising a plurality of butter containers adjustable to successively position said containers in alinement with said nozzle, and means for expelling the material from a container through said nozzle.

17. In a butter dispensing apparatus, the combination with a vertical nozzle having a body portion, of a vertically adjustable and revoluble carriage comprising a plurality of tubular containers disposed in a plane above the nozzle, the upper edge of the body of the nozzle and the adjacent ends of the container tubes being arranged to fit one within the other.

24. The combination with a casing adapted to contain a cooling medium and also to hold a plurality of containers in spaced relationship, of a discharge nozzle having a body portion fixed in the bottom of said casing, means for alining successive containers with said discharge nozzle, and means for forcing the contents of said containers through said discharge nozzle.

35. In a dispensing apparatus, the combination with a container and an ejector therein having a piston rod, of an oscillating operating member, mechanism actuated by the movement of the member in one direction to advance the ejector in the container and means adapted to be set to render said mechanism inoperative and when so set serving to retract the ejector upon movement of the member in the other direction.

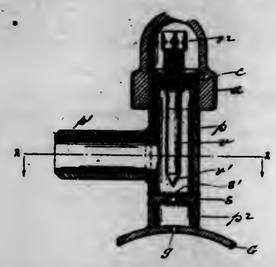
49. In a butter dispensing apparatus, the combination with a container having a discharge opening and means for expelling its contents, of a cutter, means for moving it across the opening, a stop arranged at one side of the opening, a cleaning member movable upon the stop, and means for operating said member.

[Claims 2 to 16, 18 to 23, 25 to 34, 36 to 48, and 50 to 78 not printed in the Gazette.]

1,268,511. SERVICE TAP-VALVE FOR GAS-MAINS. JOSEPH S. STRING, East Orange, N. J. Filed Jan. 19, 1918. Serial No. 212,633. (Cl. 137—4.)

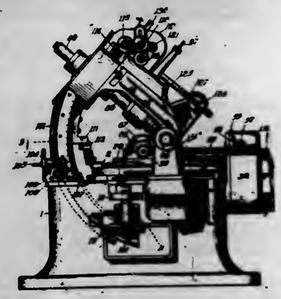
2. A service tap valve of the character designated, comprising a valve pipe and a lateral service branch pipe welded thereto, a main, a valve seat disk welded to the valve pipe, a bottom extension of the valve pipe welded to said disk and to the main, a closure nut disk welded to the upper end of said valve pipe, and a threaded valve

stem engaging with said closure nut disk and adapted to close the port in the valve seat disk in case of emergency,



together with a screw cap engaging the externally threaded upper end of said valve pipe, for the purpose described.
[Claim 1 not printed in the Gazette.]

1,268,512. BEVEL-GEAR GENERATOR. GUSTAF DAVID SUNDSTRAND, Rockford, Ill., assignor to Rockford Tool Company, Rockford, Ill., a Corporation of Illinois. Filed May 21, 1917. Serial No. 169,842. (Cl. 90—5.)



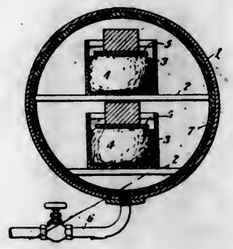
1. A machine for generating bevel gears having, in combination, a base, a support mounted thereon, a bearing on said support, a second bearing axially alined with said first mentioned bearing and slidable longitudinally with respect to said axis upon said support, and means for longitudinally adjusting said bearings with respect to each other, said means comprising a screw rod carried by said second mentioned bearing, a nut for said rod rotatably mounted on said support, and means for turning said nut to advance or retract said screw rod and said second mentioned bearing.

3. A bevel gear generator having, in combination, a base, a table mounted on said base for oscillation upon a vertical axis, a support pivoted to said base for adjustment upon a horizontal axis intersecting the axis of the table, means for adjusting and locking said support, a work spindle rotatably mounted upon said support, the axis of said spindle intersecting the axes of the table and the support, a gear case mounted on the spindle, a gear segment fixed to the lower portion of said gear case, a gear segment fixed to the rear portion of the table and meshing with the other gear segment, index gearing connected to the spindle and carried by the gear case, means for automatically actuating said gearing to index the spindle, cutting means carried by the table, and means to actuate the cutting means and oscillate the table.
[Claims 2 and 4 to 8 not printed in the Gazette.]

1,268,513. PROCESS OF DEGUMMING SILK, SILK WASTE, AND THE LIKE. KICHIZO TANAKA, Nakashima Gun, Aichi Ken, Japan. Filed Dec. 8, 1916. Serial No. 135,874. (Cl. 8—2.)

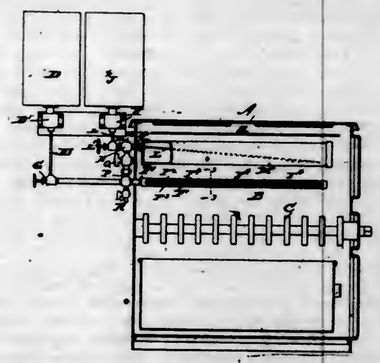
1. A process of degumming silk which consists in treating the silk with a degumming fluid and with steam under pressure.

2. A process of degumming silk which consists in immersing the silk in a degumming fluid, and then subjecting the fluid to steam under a pressure of fifteen to twenty pounds.



4. A process of degumming silk which consists in treating the silk with a mixed solution of soap and sodium bicarbonate, and heating the solution by means of steam under steam pressure.
[Claims 3 and 5 not printed in the Gazette.]

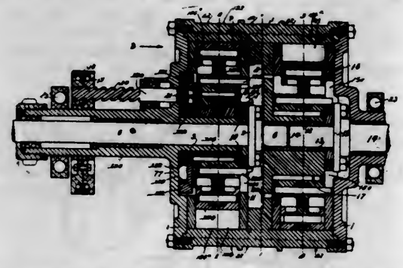
1,268,514. OIL-BURNER. ALBERT E. VAN ASSCHE, Dearborn, Mich. Filed Jan. 18, 1918. Serial No. 212,381. (Cl. 158—56.)



1. In a device of the character described, a burner, a mixing chamber connected with the burner, a fuel supply tank, a pipe for conducting fuel from the fuel supply tank to the mixing chamber, a valve for controlling the delivery of fuel through said pipe, a boiler located above the burner consisting of a relatively large pipe closed at one end, a water supply tank, a pipe for the delivery of water from the tank extending into the boiler, said pipe within the boiler being of relatively small diameter, whereby a restricted volume of water is delivered into the boiler that it may be instantly converted into steam when discharged therein, a valve for controlling the delivery of water to the boiler, means for conducting steam from the boiler to the mixing chamber, and a valve for controlling the delivery of steam to the mixing chamber.
[Claims 2 and 3 not printed in the Gazette.]

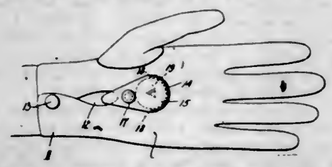
1,268,515. ROTARY HYDRAULIC APPARATUS. WILLIAM JOHN VINCENT, Cardiff, Wales. Filed Aug. 14, 1914. Serial No. 856,844. (Cl. 138—22.)

1. A rotary transmission gear comprising in combination a pump structure having suction and delivery chambers, radially disposed partitions between said chambers, a rotor radiating within the casing in contact with said partition, said rotor having radial cylinders therein open at their outer ends in communication with the suction and delivery chambers of the casing, pistons reciprocating in the said cylinders and closing the inner ends of said cylinders, a rotatable ring or strap mounted eccentrically relative to the rotor body, an eccentric stationary relative to the strap or ring and rotor body, said eccentric being located within said strap or ring, connections between the inner ends of the pistons and the eccentric strap or



ring, means for insuring the rotation of the eccentric ring in company with the rotor, and a hydraulic motor mounted in the same casing as the pump structure but separated from it by a dividing diaphragm through which the liquid delivered by the pump circulates.
[Claim 2 not printed in the Gazette.]

1,268,516. GLOVE. MAX VON BALDASS, New York, N. Y. Filed Mar. 14, 1918. Serial No. 222,437. (Cl. 2—9.)



1. A glove, a pocket upon the palm portion of said glove consisting of an oblong piece partly secured by a line of stitches to the outer face of said palm portion, the attached section of said piece being adapted to cover substantially one-half of the coin to be inserted into said pocket and the unattached section of said piece forming a tab, and separable fastening means upon the palm portion of said glove and said tab, said fastening means being disposed intermediate the ends of said tab.

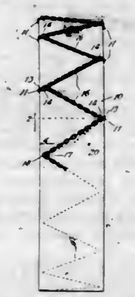
5. A glove having a pocket upon its outer face, said pocket consisting of a separate piece partly secured to said glove, the attached section of said piece being adapted to cover part of the coin to be inserted into said pocket and the unattached section of said piece forming a tab extending in the plane of the attached section of said piece, and separable fastening means upon said glove and said tab, said fastening means being disposed intermediate the ends of said tab.
[Claims 2 to 4 not printed in the Gazette.]

1,268,517. TRACTION-TREAD DEVICE FOR TRACTOR-WHEELS. HARRY C. WAITE, Piqua, Ohio, assignor, by mesne assignments, to Elgin Tractor Corporation, a Corporation of New York. Filed Jan. 25, 1915, Serial No. 4,169. Renewed Nov. 14, 1917. Serial No. 202,069. (Cl. 21—214.)

1. The combination with a wheel rim, of a plurality of securing means slidable along opposite edges of the rim, and a chain laced backward and forward from a securing means on one side to the opposite side and around the periphery of the wheel.

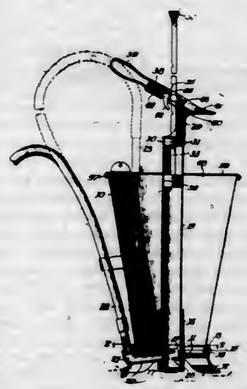
2. The combination with a wheel rim, of a plurality of U-shaped hooks loosely embracing the opposite edges of the rim and slidable therealong, and a chain laced backward and forward across the face of the rim and from a hook on one edge to a hook on the opposite edge and around the periphery of the wheel.

3. The combination with a wheel rim, of a plurality of hooks embracing and slidable along opposite edges of the rim and a chain laced backwardly and forwardly across the tread surface of the rim and from a hook on one edge to a hook on the opposite edge and around the periphery of the wheel, and means for securing the two ends of the chain to one another and to the wheel.



4. The combination with a tractor wheel having a flat tread surface, of a plurality of U-shaped hooks embracing opposite edges of the tread portion and slidable therealong, each hook having a chain-securing loop on its outer leg, a chain having some of its links secured in the said loops and laced backwardly and forwardly across the tread surface of the wheel and from a hook on one edge to a hook on the opposite edge and around the periphery of the wheel, and means for securing the two ends of the chain to one another and to the wheel.

1,268,518. BUCKET PUMP. IRA A. WEAVER, Springfield, Ill., assignor to The Weaver Manufacturing Company, Springfield, Ill., a Corporation of Illinois. Filed Dec. 31, 1915. Serial No. 69,557. (Cl. 221—100.)



1. In an appliance of the character described, the combination of a bucket-body, a bottom therefor composed of a single casting having a socket, a passage leading from the interior of the bucket to the interior of the socket, and a passage from the interior of the socket to the outside of the bucket adapted to have a hose connected thereto, a pump-barrel adjustable in said socket and having a port adapted to be brought into register with either of said passages, a pump-plunger in said barrel, and means to reciprocate said plunger, substantially as described.

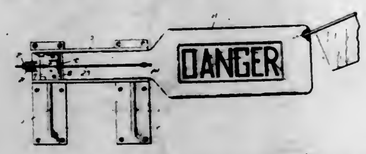
2. In an appliance of the character described, the combination of a bucket-body, a bottom therefor composed of a single casting having a depressed socket, a passage leading from the interior of the bucket to the interior of the socket, and a passage from the interior of the socket

to the outside of the bucket adapted to have a hose connected thereto, a pump-barrel rotarily adjustable in said socket having a port adapted to be brought into register with either of said passages, a pump plunger in said barrel, means to reciprocate said plunger, said depressed socket having an aperture in its wall beneath the bottom-wall of said casting, and a stop in said socket aperture coöperating with said barrel to limit the rotary movement thereof, substantially as described.

3. In an appliance of the character described, the combination of a bucket, a pump-barrel associated therewith, a pump-plunger slidable in said barrel, a notched bar connected to said plunger, a lever, a pawl mounted on said lever and adapted to co-act with the notches of said bar to depress said plunger during oscillation of said lever, a spring carried by said lever and acting to press said pawl toward the notched bar, and an abutment with which the pawl is adapted to coöperate near the upper end of the stroke of the lever, whereby the pawl is held retracted from the notched bar by the abutment and the pawl maintains the lever in elevated position, substantially as described.

4. In an appliance of the character described, the combination of a bucket-body, a bottom therefor composed of a single casting having a socket, a passage leading from the interior of the bucket to the interior of the socket, and a passage from the interior of the socket to the outside of the bucket adapted to have a hose connected thereto, a pump-barrel rotarily adjustable in said socket having a port adapted to be brought into register with either of said passages, a pump-plunger in said barrel, a bracket-member mounted on the top of said barrel, a notched bar connected to said plunger, a lever fulcrumed on said member, and a pawl mounted on said lever and adapted to co-act with the notches of said bar to depress said plunger during oscillation of the lever, substantially as described.

1,268,519. AUTOMOBILE-SIGNAL. JESSE THOMAS WEAVER, Jackson, Mich. Filed Oct. 8, 1917. Serial No. 195,376. (Cl. 116—31.)



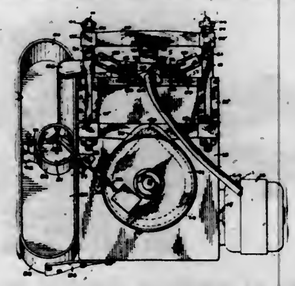
2. An automobile signal comprising a bracket including a channel iron having its bottom wall disposed vertically, a hinge including a pair of leaves pivotally connected together, the said hinge having a coil spring normally maintaining the leaves in open position, one of the said leaves being fixed in the said channel, a signal arm including a restricted portion projecting into the channel and having its terminal fixed to the other leaf, a cable attached to the said arm, and means attached to one end of the cable for pulling the same to impart a swinging movement to the said arm whereby the said hinge leaves may be moved into contact and the said arm projected from the said channel.

[Claim 1 not printed in the Gazette.]

1,268,520. MACHINE FOR FORMING FUDGE-BLOCKS. FENNER HALE WEBB, Los Angeles, Cal., assignor to William Randolph Hearst, New York, N. Y. Filed Mar. 9, 1916. Serial No. 83,042. (Cl. 199—47.)

1. A machine such as described including separable side bars, a mold base adjacent the separable side bars, a movable matrix in juxtaposition with said base and side bars, and means for synchronously moving said matrix and causing the separable bars to approach each other preparatory to making a cast.

2. A machine such as described including a mold having separable side bars with lug recesses therein; a base adjacent said side bars; a matrix in juxtaposition with said base and said side bars movable from said base and side bars; and means connecting the matrix and side bars whereby the matrix moves from the side bars synchronously with the lateral movement of the side bars.



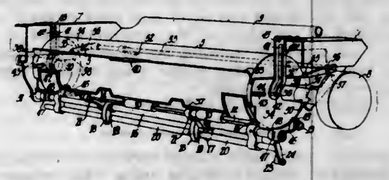
3. In a machine of the character described, a mold having a base block; movable side bars having lug recesses therein adjacent each side of said base block, a matrix frame movable in juxtaposition to said base block and side bars; and means for moving said side bars synchronously with a moving of the matrix frame.

18. In a device of the character disclosed in combination with a base block having a bead thereon of a matrix frame in juxtaposition therewith; of laterally slidable mold bars adjacent each side of the base block having recesses in the opposing faces thereof, whereby a slug having projections on the opposite sides and a slot in the bottom thereof can be cast, and mechanism for raising the matrix frame synchronously with a lateral movement of the side bars to release the cast slug.

19. In a device of the character disclosed in combination with a base block; a matrix frame in juxtaposition therewith; of laterally slidable mold bars, adjacent each side of the base block, having recesses in the opposing faces thereof, whereby a slug having projections on the opposite sides thereof can be cast; and mechanism for raising the matrix frame synchronously with a lateral movement of the side bars to release the cast slug.

[Claims 4 to 17 not printed in the Gazette.]

1,268,521. TYPE-WRITING MACHINE. LESTER A. WEBNERY, Brooklyn, N. Y., assignor to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Oct. 27, 1915. Serial No. 58,095. Cl. 197—127.)



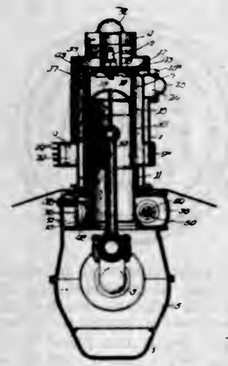
1. In a typewriting machine, a cylindrical platen, means for guiding a work-piece onto and around the platen in direction of line-space feed thereof, type bars adapted to strike the work-piece at a fixed line on the path of movement of the work-piece around the platen, and means shiftable around the platen, across said printing line, adapted, when across the printing line, to guide the work-piece to printing position on the platen in direction reverse to the direction of the line-space feed of the work-piece.

2. In a typewriting machine, a cylindrical platen, means for guiding a work-piece onto and around the platen in direction of line-space feed thereof, type bars adapted to strike the work-piece at a fixed line on the path of movement of the work-piece around the platen, and a continuous plate shiftable around the platen, across said printing line, adapted, when across the printing line, to guide the work-piece to printing position on the platen in direction reverse to the direction of the line-space feed of the work-piece.

5. In a typewriting machine having front strike types, a platen, and means interposable between the types and platen for guiding a work-piece into the platen in counter-line-space direction.

[Claims 3, 4, and 6 to 32 not printed in the Gazette.]

1,268,522. GAS-ENGINE. MARTIN L. WILLIAMS, South Bend, Ind., and SAMUEL E. WITT, Chicago, Ill., assignors, by mesne assignments, to American Sleeve-Valve Motor Company, a Corporation of Delaware. Filed Aug. 6, 1914. Serial No. 855,458. (Cl. 123—59.)



1. In a gas engine, the combination with a casting having a cylinder opening, of a slab head for said casting, a shock absorbing bushing inserted in said cylinder opening, a ported rotary valve sleeve in said bushing, and means for conducting lubricant to said valve sleeve, comprising conduits formed by open faced recesses formed in the cylinder casting, the open recesses being closed by the outer wall of the inserted bushing.

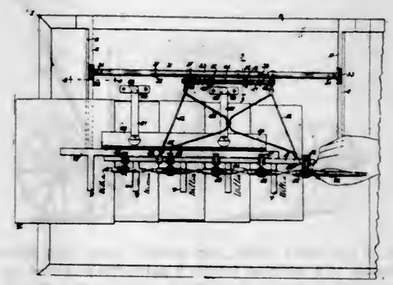
3. In a gas engine, the combination with a cylinder construction consisting of a casting having a cylinder opening, a shock absorbing bushing inserted in said cylinder opening, a rotary valve sleeve in said bushing, said bushing and sleeve extending throughout substantially the entire length of the cylinder opening, a slab head for closing the open end of said casting, a cap inserted in said cylinder opening below said head engaging the upper end of said bushing but spaced a slight distance from the upper end of said sleeve, and means for furnishing lubricant to said sleeve.

5. In a gas engine, the combination with a plurality of cylinder constructions, formed from a unitary casting, and having a series of open faced conduits, of a ported shock absorbing bushing inserted in said cylinder inclosing said conduits, said bushing having near its upper end a plurality of inlet ports and a plurality of exhaust ports, and at its lower end a plurality of exhaust ports, a ported rotary valve sleeve in said bushing controlling the inlet and exhaust ports, said upper exhaust ports being connected to the lower exhaust ports by said conduits.

8. In a gas engine, the combination with cylinder construction, consisting of a casing having a series of open faced conduits arranged equidistantly around the vertical wall of the cylinder and forming a plurality of inlet and a plurality of exhaust ports, of a stationary shock absorbing bushing having laterally arranged ports coöperating with said conduits, said bushing serving to close the conduits, a ported rotary valve sleeve in said bushing and a piston in said sleeve.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,268,523. MULTIPLE-SIGNATURE MACHINE. WILLIAM FRANK WILLIAMS, Miami, Ariz. Filed June 19, 1917. Serial No. 175,615. (Cl. 38—28.)



1. In a multiple signature machine, the combination with a base having a pair of parallel slots formed therein, a pair of track ways in each slot and arranged in a vertical plane, a carrier frame lying in a vertical plane perpendicular to the planes of the track ways aforesaid, a carriage rigidly connected to each end of the carrier frame and mounted for anti-friction reciprocation in the adjacent pair of track ways providing for free movement of the carrier frame bodily laterally, carrier devices mounted for anti-friction reciprocation longitudinally of the carrier frame as well as laterally with the carrier frame, and a plurality of pens carried by the carrier and adapted for simultaneous and similar manipulation.

3. In a multiple signature machine, the combination of a main carrier frame comprising upper and lower parallel bars and means connecting the ends of one bar to the ends of the other bar, means supporting the carrier frame to maintain it positively in a vertical plane to permit free movement thereof laterally of said plane in either direction, a pen bar, a plurality of pens carried by the pen bar in fixed relation to one another, and supporting means for the pen bar carried within the carrier frame and movable freely longitudinally thereof.

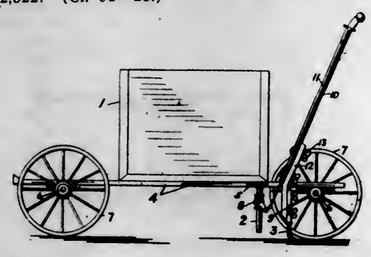
10. In a multiple signature machine, the combination with a series of pens and a pen bar for holding all of them, of a series of pen brackets for the respective pens, each pen bracket comprising a clamp for connection to the bar and a member having a hole through which the pen projects, and means coöperating with each pen serving to determine the up and down adjustment of such pen with respect to the bracket.

11. In a multiple signature machine, the combination of a base, a series of pens and supporting means for the pens serving to hold the same in definite relation to one another for universal movement over the base, of combined guiding and clamping means coöperating with the documents to be signed by the several pens, said combined means including a guide bar, adjustable means connecting the same to the base and serving to hold it always parallel to itself, and a series of parallel fingers, one for each pen, and serving to hold the documents flat and in fixed relative positions upon the base adjacent to the field of operation of the several pens.

12. In a multiple signature machine, the combination of a base, a carrier frame, means coöperating with the base to hold the carrier frame in a vertical plane and providing all movements of the frame in directions lateral in either direction to said plane, a carrier mounted for anti-friction reciprocatory movement lengthwise of the frame, said carrier including a pair of heads and a pair of shafts carried by the heads on opposite sides of and parallel to the plane of the carrier frame, pen supporting means connected to the rock shafts and movable upwardly from the base around the axes of the shafts, and means coupling the shafts together for simultaneous rotation in opposite directions.

[Claims 2 and 4 to 9 not printed in the Gazette.]

1,268,524. PAVEMENT-PAINTER. SAMUEL R. WILSON, Philadelphia, Pa. Filed Sept. 27, 1916. Serial No. 122,522. (Cl. 91—25.)

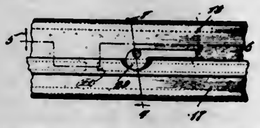


2. A pavement traffic line painter comprising the combination of a wheeled frame, a paint tank carried by the frame and having a regulatable paint nozzle within the wheel base and toward the rear end of the frame, and laterally unrestrained brush bristles depending below all parts of the tank and frame and disposed in rear of and spaced from the nozzle and within the wheel base, substantially as described.

4. A pavement traffic line painter comprising the combination of a wheeled tank having a handle and a downwardly discharging nozzle, a valve for the nozzle, a rod for operating the valve movably connected with the handle, an angular brush holder connected with the handle, and a brush body connected with the holder and provided with bristles disposed in rear of and spaced from the nozzle and laterally free, substantially as described.

[Claims 1 and 3 not printed in the Gazette.]

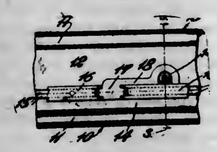
1,268,525. SEPARABLE DEMOUNTABLE RIM. WILLIAM M. WIRTH, St. Louis, Mo., assignor to St. Louis Welding & Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed Feb. 12, 1914. Serial No. 818,313. (Cl. 152—21.)



1. A separable rim consisting of two rings, one of which is endless and the other is open, said rings having means along their outer edges for securing a tire, the inner edges of said rings being provided with mating grooves and flanges, the flange of the open ring fitting within the groove of the other ring, and locking means adapted to lap across the meeting ends of the flanged edge of the open ring and secure them in the groove in the other ring.

[Claim 2 not printed in the Gazette.]

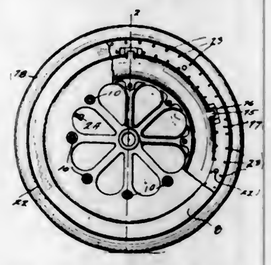
1,268,526. DEMOUNTABLE RIM FOR WHEELS. WILLIAM M. WIRTH, St. Louis, Mo., assignor to St. Louis Welding and Manufacturing Company, St. Louis, Mo., a Corporation of Missouri. Filed June 8, 1916. Serial No. 102,379. (Cl. 152—21.)



1. A demountable rim comprising complementary circumferential sections for receiving a pneumatic tire, said sections being provided with inwardly projecting flanges along their meeting edges, one of said sections having a hole for the stem of the tire valve, a split locking ring of channel shape adapted to embrace said flanges, a link connecting the ends of said split locking ring for expanding it, said link being provided with a handle and said link and handle being curved to fit snugly inside of the inner periphery of said circumferential sections, and said handle having a notch adapted to embrace the stem of the tire valve whereby it is locked in expanding position when the tire is inflated.

[Claims 2 to 5 not printed in the Gazette.]

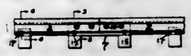
1,268,527. RESILIENT TIRE. SAMUEL J. WOODS, Newport, R. I., and JOHAN POLAR, Cleveland, Ohio. Filed Nov. 13, 1916. Serial No. 131,021. (Cl. 152—35.)



1. A resilient wheel, comprising in combination, a pair of interfitting wheel sections including hub, felly, and spoke elements, said felly elements forming an annular chamber therebetween, a pneumatic element seated in said chamber and having ribs locked between the felly elements, bearing flanges formed upon the outer edges of said wheel sections, a rim movable between said flanges and having inwardly extending flanges, bearing blocks seated upon said pneumatic element and carrying said flanges, said blocks also forming locking devices for limiting the relative annular movement of the rim and a tread mounted upon the rim.

2. A resilient wheel, comprising in combination, a pair of interfitting wheel sections including hub, felly, and spoke elements, said felly elements forming an annular chamber therebetween, a pneumatic element seated in said chamber and having ribs locked between the felly elements, bearing flanges formed upon the outer edges of said wheel sections, a rim movable between said flanges and having inwardly extending flanges, bearing blocks seated upon said pneumatic element and carrying said flanges, said blocks also forming locking devices for limiting the relative annular movement of the rim, and a tread mounted upon the rim, said tread having inwardly extending elements overlying the bearing flanges to exclude dirt from the interior of the wheel.

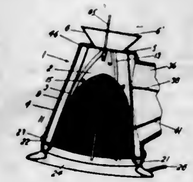
1,268,528. RAILWAY CONSTRUCTION. WILLIAM H. WOOD, Media, Pa. Filed Sept. 13, 1917. Serial No. 191,119. (Cl. 239—14.)



1. In a railway rail structure, the combination of abutting rails, each comprising a head and two downwardly extending webs therefrom said webs flanged outwardly at the bottom and providing a groove open at the bottom and extending upwardly between the webs to the head, with a fish plate structure comprising a bridging base plate having a longitudinal upwardly extending web in its middle fitting into the grooved portions of the abutting rails and the base plate on each side of its web grooved to receive the flanged portions of the rail, bolts extending through the webs of the abutting rails and the web of the fish plate structure, cross ties upon part of which the bridging base plate rests, spikes driven into the cross ties and having their heads overlapping the bridging base plate and rail flanges for holding them to the ties, a plurality of tie plates under the rails and resting upon the remaining cross ties and each having a web fitting into the groove in the rail and flanges for retaining the rail flanges against spreading, and spikes driven into the cross ties and fitting to the tie plates and also having their heads extending over the rail flanges to hold them and the tie plates in position upon the cross ties.

2. In a railway, the combination of two rolled girder rails abutting end to end and having a uniform cross section, said section of inverted U-shape, providing a head and two flanged web portions extending down from the head, the webs spaced apart to provide a longitudinal groove and the flanged portions of the webs extending laterally to provide base flanges for the rail, combined with a plurality of cross ties, a long fish plate structure adjustably secured upon adjacent cross ties and comprising a bridging base plate having a longitudinal upwardly extending web from its middle fitting into the grooved portions of the abutting rails approximately to the top thereof, and the base plate receiving the flanged portions of the webs of the rails, bolts extending through the web portions of the rails and the web of the fish plate structure, a plurality of short tie plates each arranged under the rails and upon the cross ties, said plates comprising a base having a central high web of a shape to fit into the lower portion of the groove of the rails so as to extend approximately half way up and also having side shallow flanges between which and the central web the base flanges of the rail webs fit, and spikes for holding the rail and tie plates securely to the cross ties and with the heads extending over the tie plates and base flanges of the rails.

1,268,529. ELECTROTHERMAL HYDRO-ETHER CONE. THOMAS C. YOUNG, Glendale, Cal. Filed June 7, 1917. Serial No. 173,262. (Cl. 128—13.)



1. Means for application of mixed vapors of water and ether, comprising an outer casing, an inner casing mounted therein by means of upper and lower transverse wall portions extending between said casings so as to form a closed space between said casings and said walls, electric heating means mounted in said space, a lateral projection on said outer casing having a compartment therein communicating with said closed space, a thermostat mounted within said compartment and connected to control said electric heating means, a body of absorbent material and means for supporting such absorbent material within said inner casing, and means at the upper portion of said inner casing for supplying water and ether onto said absorbent material.

2. In means for application of mixed vapors of water and ether, a casing, a dome-shaped frame mounted on said casing and extending upwardly therein, an absorbent cloth supported on said frame, an ether supply funnel having an opening adapted to deliver ether onto said absorbent cloth, a water supply funnel, and a plurality of tubes communicating with said water supply funnel and adapted to receive water therefrom and to distribute it to different parts of said absorbent cloth.

1,268,530. CANDLE-MOLDING MACHINE. FREDERICK F. ZIMMER, Syracuse, N. Y., assignor to The Will & Baumer Co., Syracuse, N. Y., a Corporation of New York. Filed Oct. 19, 1915. Serial No. 56,776. (Cl. 18—27.)

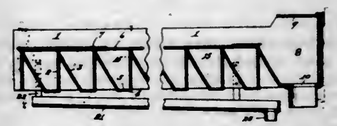


1. A candle molding machine comprising a gang of dies, a core member and a stripper member movable in each die and having stems extending outside of the die, an actuator common to the stems of the core members, an actuator common to the stems of the stripper members, each actuator having a lengthwise keyway into which the companion atems extend, and a key extending lengthwise of the keyway of each actuator and through the companion stems for coupling the stems to the actuator, substantially as and for the purpose specified.

9. A candle molding machine comprising a gang of dies, a core member and a stripper member movable reciprocally in each die and having stems extending outside of the die and arranged in concentric relation, one stem being longer than, and projecting beyond, the other, the longer stems being provided with lengthwise slots, a common actuator for the shorter stems, a common actuator for the longer stems, said actuators being each formed with a lengthwise keyway, both sets of stems extending transversely through the keyway of the actuator for the shorter stems and the longer stems extending transversely into the keyway of the actuator for said longer stems, a key extending lengthwise of the keyway of the first-mentioned actuator through the shorter stems and through the slots of the longer stems, and a key extending lengthwise of the actuator for the longer stems and through said longer stems, substantially as and for the purpose described.

[Claims 2 to 8 not printed in the Gazette.]

1,268,531. COAL-WASHING TROUGH. GRANT E. ALLMAN, Shoemakersville, Pa. Filed Aug. 25, 1917. Serial No. 188,098. (Cl. 83—89.)



A washing trough consisting of an inclined screen-bottomed trough, pockets below the trough, said pockets having inclined rear and vertical forward walls whose upper edges reach to the screen, said pockets having restricted discharge openings in the bottoms thereof, and means for feeding material suspended in liquid to the higher end of the trough.

1,268,532. PROCESS OF MAKING ALUMINOUS ABRASIVES. THOMAS B. ALLEN, Toronto, Canada, assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Nov. 11, 1916. Serial No. 130,788. (Cl. 252.)

1. The process of making crystalline aluminous abrasives, which comprises subjecting an aluminous ore, the major portion of which consists of alumina and which contains fifteen per cent. or more of iron oxid and silica, to fuel heat in a reducing atmosphere and of a character to fuse the material, substantially as described.

2. The process of making crystalline aluminous abrasives, which comprises the steps of subjecting a mixture, the major portion of which consists of alumina and which contains fifteen per cent. or more of iron oxid and silica, to a high temperature produced by fuel heat under strong reducing conditions sufficient to cause the mixture to fuse, and then allowing the fused mass to cool and crystallize, substantially as described.

6. The process of making crystalline aluminous abrasives, which consists in preheating an aluminous material, consisting mainly of alumina containing fifteen per cent. or more of iron oxid or silica, fusing the preheated mixture by fuel heat, and allowing the fused mass to cool and crystallize, substantially as described.

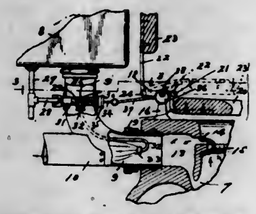
[Claims 3 to 5 and 7 not printed in the Gazette.]

1,268,533. ALUMINOUS ABRASIVE. THOMAS B. ALLEN, Toronto, Canada, assignor to The Carborundum Company, Niagara Falls, N. Y., a Corporation of Pennsylvania. Filed Aug. 7, 1917. Serial No. 184,983. (Cl. 51—1.)

1. As a new article of manufacture, crystalline fused aluminous abrasive material, containing more than 60% of crystalline alumina, the major portion of the alumina crystals having an average diameter of less than one-hundredth of a millimeter.

2. As a new article of manufacture, crystalline fused aluminous abrasive material, containing at least 60% of crystalline alumia and more than 10 per cent. of silica and oxids of iron and titanium, the major portion of the alumina crystals having an average diameter of less than one-hundredth of a millimeter.

1,268,534. VENTILATED WATER-CLOSET BOWL. WILLIAM M. ANDERSON, Minneapolis, Minn., assignor to The Hydro Ventilator Company, Minneapolis, Minn., a Common Law Company of Minnesota. Filed Sept. 1, 1917. Serial No. 189,253. (Cl. 4—21.)

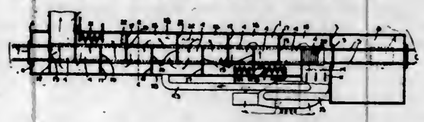


1. The combination with a closet bowl, a water supply, a ventilating stack and a single connection between the closet bowl, water supply and ventilating stack, of a spraying nozzle connected to the water supply, located in said connection and arranged to direct a spray of water toward the ventilating stack.

2. The combination with a closet bowl, a water supply, a ventilating stack and a single connection between the closet bowl, water supply and ventilating stack, of a water pipe leading from the water supply and having a spraying nozzle located in said connection and arranged to direct a spray of water toward the ventilating stack, a valve interposed in the water pipe and incorporated in said connection, and means for opening and closing the valve.

3. The combination with a closet bowl, a water tank, a water supply pipe leading to the water tank, a ventilating stack, and a flushing bend connecting the water tank and closet bowl, said bend having an extension connecting the delivery end thereof with the ventilating stack, of a valve casing interposed in the flushing bend at its receiving end and connected to the water supply pipe, a normally closed valve in said casing, a water tube leading from the valve casing and having a spraying nozzle located in the delivery end of the flushing bend, and means for opening said valve.

1,268,535. APPARATUS FOR DRYING MATERIAL. BERNARD RUSSELL ANDREWS, Braintree, Mass. Filed Aug. 5, 1916. Serial No. 113,349. (Cl. 34—46.)

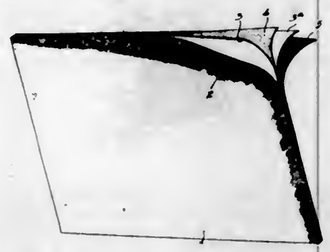


1. In a drying apparatus, the combination with a drying tunnel having provision for conveying therethrough the material to be dried, of means to cause a drying current of air to pass through the tunnel, regulatable heating devices located at various points in the tunnel, and regulatable spray devices also located at various points in the tunnel whereby the humidity and the temperature of the air in the tunnel may be independently controlled.

3. In a drying apparatus, the combination with a drying tunnel having provision for conveying therethrough the material to be dried, of means to cause a current of air to pass through the tunnel, a chamber communicating with the discharge end of the tunnel and into which the material is discharged from the tunnel, and means to maintain approximately the same air pressure in said chamber as exists at the discharge end of the tunnel.

[Claims 2 and 4 not printed in the Gazette.]

1,268,536. TIRE-PATCH. HARRY C. ATWOOD, Minneapolis, Minn., assignor to Durkee-Atwood Co., Minneapolis, Minn., a Corporation. Filed Nov. 6, 1916. Serial No. 129,725. (Cl. 152—26.)

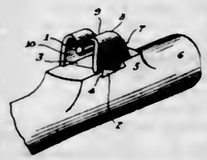


1. A repair patch for the outer surface of a tire tube comprising a sheet of fabric forming the outer surface of the patch for contact with the shoe, a sheet of raw or unvulcanized rubber adjacent to said fabric, a second sheet of unvulcanized rubber and a sheet of vulcanized rubber interposed between said unvulcanized sheets and forming a backing and support for each sheet and preventing the leakage of air therethrough, one of said unvulcanized sheets having a fabric covering therefor which is removed when the patch is used for contact of such unvulcanized sheet with the surface to be repaired.

[Claims 2 to 4 not printed in the Gazette.]

1,268,537. FRONT SIGHT FOR FIREARMS. GUSTAV A. BADER, Rochester, N. Y. Filed Feb. 15, 1917. Serial No. 148,813. (Cl. 33—47.)

1. A front sight for firearms comprising a sighting device, and supporting means therefor formed with an opening below the sighting device and a crotch above the sighting device.



2. A front sight for firearms comprising a sighting device, and supporting means therefor formed with a crotch above the sighting device and an opening below the sighting device having its lower wall straight.

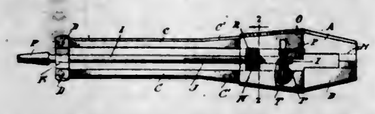
4. A front sight for firearms comprising a sighting device, and supporting means therefor formed with a crotch above the sighting device, and with an opening extending below the sighting device and also on opposite sides thereof.

5. A front sight for firearms comprising a sighting device, and two supporting members therefor, spaced apart below the sighting device, and having portions intermediate the sighting device and their lower ends extended upwardly on opposite sides of the sighting device, to extend the space below the sighting device upwardly on opposite sides of the sighting device, and to provide a crotch above the sighting point.

7. A front sight for firearms comprising a sighting device, and a supporting member for the bead connected, at one end, to the firearm and at its other end to the sighting device above the horizontal and to one side of the vertical axial plane, the intermediate portions of the member being spaced from the under side of the sighting device and also from the sides of the sighting device.

[Claims 3 and 6 not printed in the Gazette.]

1,268,538. WRENCH. JAMES BUNYAN BAILEY, Knoxville, Tenn. Filed Aug. 29, 1917. Serial No. 188,793. (Cl. 81—113.)

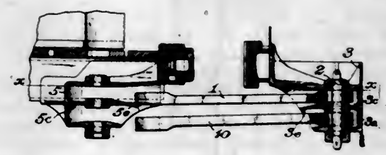


1. A wrench comprising a member, two jaws having shank portions pivoted thereto, a threaded rod fixed to and projecting from said member intermediate the shank portions of the jaws, a sleeve with openings therein and mounted over the shank portions of the jaws, a nut mounted upon the threaded portion of said rod and extending through said opening in the sleeve, means for guiding the jaws as they open and close, and a spring for separating the jaws as the sleeve is moved in one direction.

2. A wrench, comprising a member having a shank portion adapted to engage a bit socket, two jaws having shank portions pivoted to said member, portions of the outer faces of the two shank portions of the jaws being inclined, a sleeve having opposite sides inclined and engaging over the inclined portions of the shanks of the jaws, the opposite faces of the sleeve being provided with openings, a threaded apertured rod fixed to said member and positioned between the shank portions of the jaws, a nut fitted upon the threaded portion of the rod and engaging said openings, a pin passing through the aperture of the rod and engaging holes in the inner faces of the shank portions of the jaws, and springs upon the pin bearing between the rod and the jaws.

1,268,539. LOCOMOTIVE AND TENDER CONNECTION. HERMAN F. BALL, Englewood, N. J., assignor to Franklin Railway Supply Company, Wilmington, Del., a Corporation of Delaware. Filed Feb. 9, 1918. Serial No. 216,400. (Cl. 213—42.)

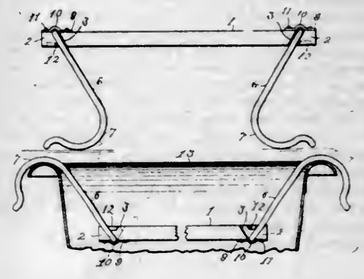
1. In a locomotive and tender connection comprising a draw casting on each vehicle, an upper main draw bar, a lower safety draw bar, and means for detachably connecting said draw bars to the draw castings, the combination, with one of said draw castings, of supplemental means fixed thereon for contacting with the free end of the main draw bar and supporting said bar, independently of the safety draw bar, in the operation of coupling the two vehicles.



2. In a locomotive and tender connection, the combination of two coupling pins; draw castings upon the adjoining ends of a locomotive and tender, adapted to receive said coupling pins; a main draw bar and a safety draw bar; each having end eyes to engage said coupling pins; and supplemental means, fixed to the draw casting of one of the vehicles, for supporting the free end of the main draw bar, in its movement while coupling said vehicles.

[Claim 3 not printed in the Gazette.]

1,268,540. CONVERTIBLE BENCH. THEOPHILE BAYARD, Chicago, Ill. Filed Mar. 18, 1918. Serial No. 223,143. (Cl. 155—32.)

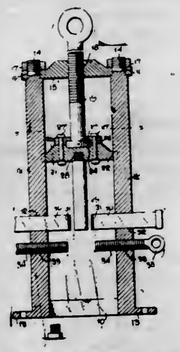


2. A device of the class described, comprising in combination, a slab-like body member cut away upon opposite sides at the respective ends to form abutments, the abutments at one end being arranged in a plane oblique to that of said body member while those at the end are in a plane of like obliquity but reversed with respect to their fellows, legs at opposite ends of said body journaled upon transverse axes substantially in the plane of the upper surface of said body and in position to engage said abutments to support said body while standing in oppositely inclined positions.

5. A device of the class described, comprising, in combination, a slab-like body member cut away upon opposite sides at the respective ends to form leg-supporting abutments, the cut-away portions upon opposite sides being parallel to each other, legs at opposite ends of said body, said legs having pivotal portions arranged transversely of said body, the main or supporting portions of said legs being bent at substantially right angles thereto and in engaging relation to said abutments and laterally projecting lugs upon said cut-away portions for engaging said legs when in supporting positions to yieldingly hold them against said abutments, said legs being formed of resilient material to permit them to spread and pass over said abutments when force is applied thereto.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,268,541. PUNCH-PRESS FOR REMOVING AX AND HAMMER HANDLES. ADELBERT R. BENEDICT, South Tacoma, Wash. Filed Dec. 12, 1917. Serial No. 206,813. (Cl. 29—85.)

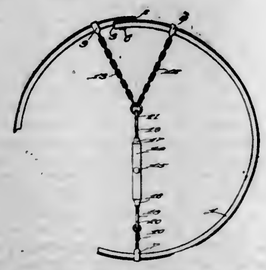


1. A machine of the character described comprising a base having uprights, a press head movable between and guided by the uprights, a cross bar carried by the upper ends of the uprights and having a screw-threaded central opening, a screw passing through this opening having swiveled engagement with the press head, the under face of the press head having a screw-threaded socket, and a punch having a screw-threaded terminal end engaging in this socket.

5. A device of the character described comprising a rectangular base having attaching lugs, uprights carried by the base and reduced at their upper ends, the reduced portions being screw-threaded, a cross bar resting upon the uprights and through which the screw-threaded portions of the uprights pass, nuts holding the cross bar in place, a screw plunger having screw-threaded engagement with the cross bar and having a head in its lower end, the press head being formed with a central countersink to receive said head, a cap plate mounted upon the press head and extending over the head of the plunger, means disposed below the press head for resisting upward movement of the tool being acted on, and set screws disposed below said means for holding the tool head in position to be acted on.

[Claims 2 to 4 not printed in the Gazette.]

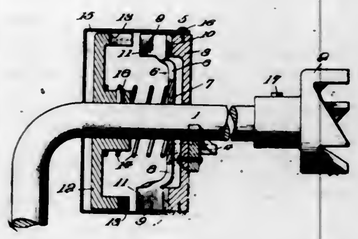
1,268,542. TIRE-RIM-REDUCING DEVICE. CISCO BULLIVANT, Spokane, Wash., assignor of one-half to Walter W. Zent, Spokane, Wash. Filed Sept. 19, 1916. Serial No. 121,022. (Cl. 157—1.)



1. As a means for releasing or facilitating application of a tire to a split rim, a single set of grips for engagement with opposite marginal edges of said rim substantially diametrically of opposite the split portion thereof, terminal sets of grips for engagement with opposite margins of each split terminal of said rim, a contracting means, tension lines connecting said contracting means with said single set of grips, one set of said terminal sets being connected with said means by lines of relatively short lengths and the other set of said terminal grips being connected with said means by lines of a greater length than the lines connecting the remaining set of said terminal grips whereby actuation of said means will differentially operate on the split terminals to first radially separate and then circumferentially telescope the same, substantially as described.

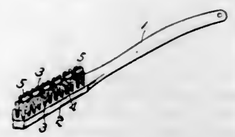
[Claim 2 not printed in the Gazette.]

1,268,543. SAFETY CRANKING DEVICE FOR MOTOR-VEHICLES. JOSEPH PRESTON CARSON, Richmond, Va., assignor to Carson Manufacturing Corporation, Richmond, Va., a Corporation of Virginia. Original application filed Dec. 23, 1915, Serial No. 68,385. Divided and this application filed Jan. 26, 1917. Serial No. 144,696. (Cl. 123—185.)



The combination with an internal combustion engine and its shaft, of a crank provided with a detachable clutch for engaging said shaft, a stationary ratchet member in which said crank turns, teeth provided on the forward face of said ratchet member, a collar loosely mounted on said crank and provided with radial arms terminating in pawls having small teeth for engaging the teeth of the ratchet member, and a ratchet wheel rigidly mounted on said crank and having teeth which are adapted to engage said pawls for moving the same over the teeth of the ratchet member when the crank is turned in one direction and ride off of said pawls when the crank is turned in the opposite direction and the pawls lock on said ratchet member.

1,268,544. TOOTH-BRUSH. LORWIN N. CATES, St. Louis, Mo. Filed Dec. 18, 1916, Serial No. 137,653. Renewed Apr. 12, 1918. Serial No. 228,283. (Cl. 15—39.)

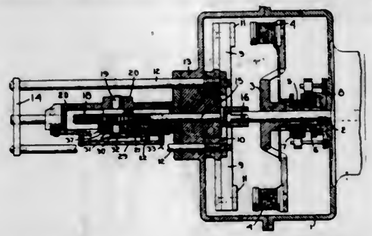


1. A brush of the character described comprising a handle, said handle having a terminal provided with a medially disposed row of sucker cups, and side rows of bristles bounding the cups.

2. A tooth-brush comprising a handle terminating in a suitable brush-support, a series of flexible stems disposed medially of said support, sucker cups terminating the free ends of the stems, bristles disposed on the sides and outer end of the series of stems and cups, the parts operating substantially as set forth.

3. In a brush of the character described, a handle, a row of flexible stems carried thereby, a sucker terminating each stem, and teeth cleansing bristles protecting said stems.

1,268,545. SINUSOIDAL-WAVE GENERATOR. RALPH W. CHAPMAN, Oldtown, Me., assignor to T. M. Chapman's Sons' Company, Oldtown, Me., a Corporation of Maine. Filed Mar. 10, 1917. Serial No. 153,993. (Cl. 171—252.)



1. In a device of the class described, the combination of a plurality of coils, a plurality of magnets, means to rotate the coils and magnets relative to each other thereby to induce a current in the coils, and means to move the coils and magnets toward and from each other at regular time intervals.

2. In a device of the class described, the combination of a rotor, a plurality of coils carried thereby, a plurality of stationary magnets having their pole pieces adjacent said coils, means to give rotary movement to the rotor whereby current will be induced in the coils and means to move the coils and magnets toward and from each other periodically.

3. In a device of the class described, the combination of a rotor, a plurality of coils carried thereby, a plurality of stationary magnets having their pole pieces adjacent said coils, means to give rotary movement to the rotor whereby current will be induced in the coils, and means to move the magnets toward and from the coils periodically.

12. In a device of the class described, the combination of a casing, a shaft rotatably mounted therein, a plurality of connected coils supported on and rotating with said shaft, a carrier slidably mounted in the casing, a plurality of magnets thereon, a worm wheel journaled in the casing, means to rotate said worm wheel from said shaft, a cam rotatable with the worm wheel, a lever actuated by said cam and connected to said carrier for moving the carrier in one direction, and a spring acting on the carrier for moving it in the opposite direction.

[Claims 4 to 11 not printed in the Gazette.]

1,268,546. ARTIFICIAL HAND. DANIEL P. CHRISTMANN, Delta, Ohio. Filed Jan. 31, 1918. Serial No. 214,631. (Cl. 3—12.)



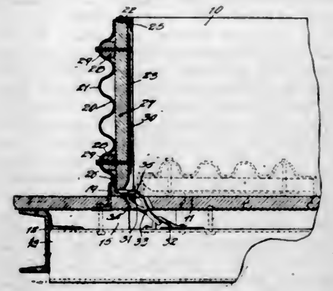
1. An artificial hand including a stock adapted to be attached to the wrist stump and provided at its outer end with a fixed circular plate, a pair of rigid arms projecting from the fixed circular plate on opposite sides of the axis of the stock, one arm being provided with a forwardly extending claw, a second circular plate fitted rotatably against the fixed plate, a pivot bolt connecting the two plates, a pair of rigid arms projecting from the rotatable plate, one of which extends between the arms of the fixed plate and is provided with a forwardly extending claw adapted to be swung toward the before mentioned claw to grip an article to be lifted, the rear face of the arm having an opposed relation to the other arm of the fixed plate for coöperation therewith to grip an article when the rotatable plate is moved in the opposite direction, the other arm of the rotatable plate being hooked for coöperation with the first mentioned arm of the fixed plate to grasp a round object, and an operating rod connected to one of the arms of the rotatable plate.

2. An artificial hand including a stock adapted to be attached to a wrist stump and provided at its outer end with a fixed circular plate, a pair of rigid arms projecting from the fixed circular plate on opposite sides of the axis of the stock, one arm being provided with a forwardly extending claw, while the other arm has a radially extending forward face which is longitudinally grooved, a second circular plate fitted rotatably against the fixed plate, a pivot bolt connecting the two plates, a pair of rigid arms projecting from the rotatable plate, one of which extends between the arms of the fixed plate and is provided with a forwardly extending claw adapted to be swung toward the before mentioned claw to grip an article to be lifted, the rear face of the arm being radially disposed and provided with a longitudinal groove adapted to coöperate with the before mentioned longitudinal groove of the second mentioned arm of the fixed plate to receive a pencil, the other arm of the rotatable plate being hooked forwardly for coöperation with the back of the first mentioned arm of the fixed plate to grasp a round object, and an operating rod connected to one of the arms of the rotatable plate.

4. An artificial hand including a stock adapted to be attached to a wrist stump and provided at its outer end with a fixed circular plate, rigid arms projecting from the fixed circular plate, a second circular plate fitted rotatably against the fixed plate, a pivot bolt connecting the two plates, arms projecting from the pivot plate and adapted to be swung back and forth into coöperative relation with the arms of the fixed plate, an operating rod connected to one of the arms of the rotatable plate, a plunger at the end of the operating rod, a tubular casing receiving the plunger, and coil springs arranged within the tubular casing and engaging opposite sides of the plunger to provide for relative movement between the operating rod and casing in either direction against the action of one of the springs.

[Claim 3 not printed in the Gazette.]

1,268,547. DROP-END GONDOLA CAR. CLARENCE W. COURT, Chicago, Ill., assignor to Walter P. Murphy, Chicago, Ill. Filed Aug. 1, 1917. Serial No. 183,877. (Cl. 105—15.)



1. In a drop end gondola car, the combination with the under frame of the car, of a drop end gate, and means for flexibly connecting said gate to the under frame at points inwardly and below the lower edge of the gate whereby the lower edge of the gate is held down against the tendency of the gate to bulge.

2. In a drop end gondola car, the combination with the longitudinal sills of the car, of a drip end gate, and means for flexibly connecting said gate directly to said longitudinal sills.

3. In a drop end gondola car, the combination with the under-framing of the car, of a drop end gate for the car,

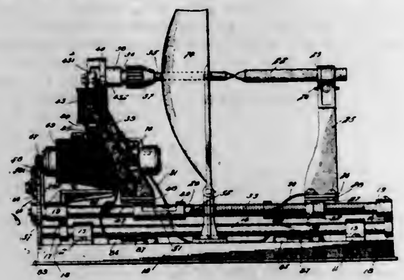
and means for flexibly connecting said gate to the said under-framing, comprising a link secured to the gate and to the under-framing so as to transmit stresses, due to cargo thrusts against the gate, to said under-framing.

4. In a drop end gondola car, the combination with the under-framing of the car, of a drop end gate for the car, and means for flexibly connecting said gate to the said under-framing, comprising a link secured to the lower edge of the gate and to the under-framing so as to transmit stresses, due to cargo thrust against the gate, to said under-framing.

5. In a drop end gondola car, the combination with the under-framing of the car, of a drop end gate for the car, and means for flexibly connecting said gate to the said under-framing, comprising a link secured to the gate near the vertical center of the end, and to the under-framing so as to transmit stresses, due to cargo thrusts against the gate, to said under-framing.

[Claims 6 to 14 not printed in the Gazette.]

1,268,548. ARC-LAMP REGULATION FOR HEADLIGHTS. RAY P. DEARDORFF, Buffalo, N. Y. Filed Dec. 2, 1913. Serial No. 804,236. (Cl. 176—51.)



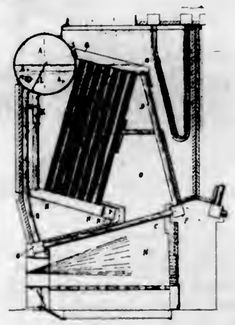
1. In an electric lamp, the combination of two relatively movable electrodes, a screw shaft adapted to effect relative movement between the electrodes, a normally inactive reversible electric motor included in a circuit with the electrodes and adapted to rotate said shaft, said motor being automatically rendered active to turn in one direction and rotate said shaft when the electrodes are separated a predetermined distance and the direction of rotation of the motor being automatically reversed when the electrodes are restored to proper relation, and means for checking such reverse movement prior to its actuating the shaft.

3. In an electric arc lamp, the combination of two relatively movable electrodes, a screw adapted to effect relative movement between the electrodes, a ratchet wheel secured to the shaft, a normally inactive reversible electric motor included in a circuit with the electrodes, a pawl cooperating with the ratchet wheel and adapted to be recip rocated by the motor, the latter being rendered active to turn in one direction when the electrodes are separated a predetermined distance and the direction of rotation of the motor being automatically reversed when the electrodes are restored to proper relation, and a stop device adapted to prevent such reverse movement from effecting an actuation of the pawl sufficient to turn the ratchet wheel.

5. In an arc lamp, the combination of two electrode holders, electrodes carried by said holders, means for separating said electrodes to strike an arc between them, means for feeding said electrodes toward one another, said means comprising an electric motor having a differentially wound field adapted to rotate the armature of the motor when the voltage between said electrodes reaches a predetermined value, a ratchet wheel rotatable in one direction only, a reciprocating member for actuating said ratchet wheel, a device rotatable by said motor armature and adapted to reciprocate said member, and means to prevent said motor from rotating said device in one direction, whereby said reciprocating member is only actuated when said differentially wound field becomes unbalanced in one direction.

[Claims 2 and 4 not printed in the Gazette.]

1,268,549. STEAM-BOILER. EMILIO DE STERNS, Gazzada, Italy. Filed Mar. 10, 1914. Serial No. 823,747. (Cl. 122—332.)



2. In a steam generating system, the combination of a furnace, a main steam and water drum, a tube system adapted to take water from the said drum and return it to the said drum at approximately the critical temperature, and a second tube system connected to the said drum in parallel with the first tube system and adapted to take from the drum water at approximately the critical temperature and deliver it to the said drum as steam; a partition fitted inside the drum and dividing same into two portions, respectively connected to one of said tube systems, the said second tube system being surrounded by the first tube system whereby the hot gases from the furnace come in contact with the first tube system before reaching the second tube system.

4. In a steam generating system, the combination of a furnace, a main steam and water drum, two distinct tube systems connected in parallel to the said drum, a partition fitted inside the drum and dividing same into two portions, respectively connected to one of said tube systems, one of the said tube systems being surrounded by the other, the inner tube system comprising a series of parallel bundles of tubes of equal lengths; the tubes of each bundle terminating at both ends in common tube plates, the tube plates of the entire series of bundles being arranged in staggered relation to one another with respect to their longitudinal axes, each header having free spaces to temporarily accommodate the ends of the tubes of the adjacent bundles, whereby the individual tubes may be replaced transversely from the side instead of longitudinally through the tube plates.

5. In a steam generating system, the combination of a furnace, a main steam and water drum, two distinct tube systems connected in parallel to the said drum, a partition fitted inside the drum and dividing same into two portions, respectively connected to one of said tube systems, one of the said tube systems being surrounded by the other, the inner tube system comprising a series of parallel bundles of tubes of equal lengths; the corresponding ends of the tubes of each bundle being connected by common headers, the said headers being arranged in staggered relation to one another with respect to their longitudinal axes, each header having free spaces to temporarily accommodate the ends of the tubes of the adjacent bundles, whereby individual tubes may be replaced transversely from the side instead of longitudinally through the headers.

[Claims 1 and 3 not printed in the Gazette.]

1,268,550. REMOVABLE-HEAD STEEL BARREL. HERBERT E. DUNLAP, Wheeling, W. Va. Filed Apr. 17, 1917. Serial No. 162,806. (Cl. 220—64.)

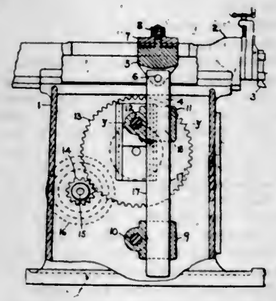
1. The combination with a sheet-metal barrel, of a head supported thereby, a reinforcing chime of relatively heavier material conformably embracing the barrel adjacent to the marginal edge of the latter and having a portion flanged over and disposed interiorly of said edge in parallelism with its body and terminating at its lower edge in non-engaging relation to said head, and an expansible ring having its body portion seated upon said head and a circumferential projecting portion interlocked with the terminal edge of said chime.



12. In a barrel, a body having an offset marginal edge, a head seated within said body and having an upright flange terminating adjacent to the offset, a fixed chime ring conformably embracing said edge and terminating interiorly of the latter at a distance above said offset thereby to form an intervening channel, and an expansible locking ring disposed in expanding relation to said flange and having a circumferential rib seated in said channel and presenting an inclined surface to said chime.

[Claims 2 to 11 and 13 to 25 not printed in the Gazette.]

1,268,551. MECHANICAL MOVEMENT. HENRY E. EBERHARDT, Newark, N. J., assignor to Newark Gear Cutting Machine Co., Newark, N. J., a Corporation of New Jersey. Filed Apr. 25, 1913. Serial No. 763,498. (Cl. 74—14.)



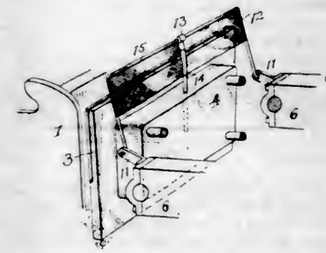
1. In combination: a frame, a carrier mounted to reciprocate therein, a lever to actuate said carrier and of substantially rectangular cross-section, a circumscribing block acting upon the peripheral ways of said lever, and means to actuate said block.

2. In combination: a frame, a carrier mounted to reciprocate therein, a lever to actuate said carrier, one end being fulcrumed to the frame and the other pivotally attached to said carrier, and the said lever being of substantially rectangular cross-section, a circumscribing block acting upon the peripheral ways of said lever, and means to actuate said block.

1,268,552. SAFETY DEVICE FOR PRINTING-PRESSES. GEORGE A. EDDY, Cleveland, Ohio. Filed Sept. 26, 1914. Serial No. 863,611. (Cl. 74—105.)

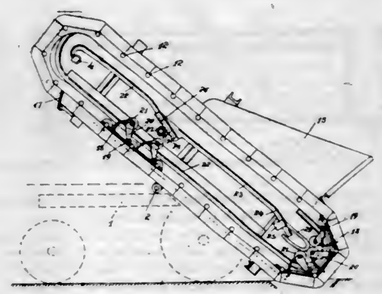
1. The combination with a movable platen of a printing press, of a guard comprising a frame said frame being pivotally mounted upon a non-moving part of the press, a member having a sliding connection with the platen said member also having a pivoted connection with the frame whereby the guard is moved adjacent to and above the upper edge of the movable platen when the same is moved to printing position.

2. The combination with a movable platen of a printing press, of a guard comprising a frame having side members and a connecting member which is parallel with the top



of the platen, the ends of the side members being pivotally mounted upon a non-moving part of the press, a guide upon the platen, a member slidable in such guide, said last mentioned member being pivotally connected to the frame.

1,268,553. MEASURING AND CONVEYING DEVICE FOR CONCRETE AND OTHER MATERIAL. LUDWIG EIRICH and JOSEPH EIRICH, Hardheim, Germany, assignors to the Firm of Maschinenfabrik Gustav Eirich, Hardheim, Germany. Filed May 27, 1915. Serial No. 30,814. (Cl. 193—6.)



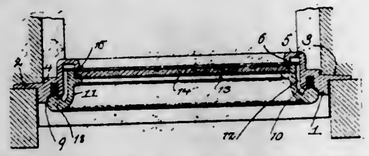
1. In conveyers of the character described, a continuous trough comprising segments, said segments being pivotally joined together, in combination with a plurality of movable walls adapted to coöperate with said segments so as to constitute a plurality of receptacles and adjusting means for the movable walls whereby the capacity of the receptacles may be varied.

6. In conveyers of the character described, a continuous trough comprising segments, said segments being pivotally joined together and having openings in combination with a plurality of movable walls adapted to coöperate with said segments so as to constitute a plurality of receptacles, a sector secured to said segments, a rotatable member connecting said segments and said movable wall, a roller for said rotatable member, guide means coöperating with said roller and a rack to adjust said means to vary the capacity of the receptacles.

8. In conveyers of the class described, a continuous movable trough comprising segments pivotally joined together, transverse walls at the ends of the segments two of which have a single wall in common, the height of said walls with reference to the bottom of the trough being variable whereby a plurality of receptacles of variable capacity may be constituted, and means fixed with reference to but coöperating with the trough as it moves so as to control said wall height.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,268,554. CASEMENT-WINDOW. IRVING H. ELLIOTT, New York, N. Y., assignor to Campbell Architectural Iron Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 9, 1917. Serial No. 201,028. (Cl. 189—69.)

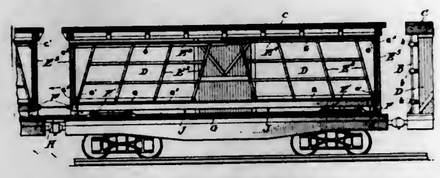


1. A casement window, comprising a fixed frame and a swinging sash frame entering said fixed frame, the said sash frame having at its outer edge a bead, and the said fixed frame having in its outer face a groove receiving said bead, there being a clearance in rear of said bead surrounding said sash frame and between said sash frame and said fixed frame.

3. A casement window, as in claim 1, and a hinge for supporting said window, one leaf of said hinge being secured to said fixed frame, the other leaf being secured to said sash frame, and the knuckle of said hinge being received in a recess in said bead and registering in cross section with said bead.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,268,555. RAILWAY FREIGHT-CAR. HYMAN EPSTEIN, New York, N. Y. Filed Nov. 8, 1917. Serial No. 200,990. (Cl. 105—1.5.)



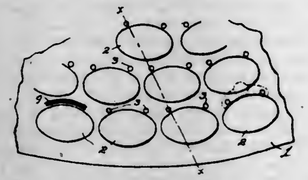
6. A freight car comprising a box structure having a removable liner therein and removable ends.

10. The combination with a freight car comprising a box like structure having side openings and removable ends, of a removable goods receiving cage of a size to fit inside of the car and movable lengthwise thereof, said cage having side openings registering with the openings in the side of the car.

11. The combination with a freight car of the box type, of a collapsible and removable goods receiving cage fitted to the inside of the car and movable longitudinally thereof.

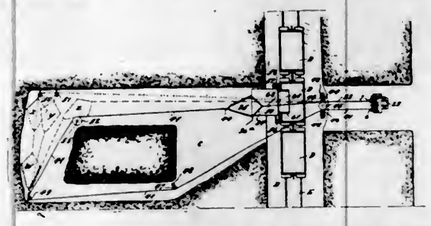
[Claims 1 to 5 and 7 to 9 not printed in the Gazette.]

1,268,556. LENS-BLOCK. WILLIAM W. ESSICK, Reading, Pa. Continuation of application Serial No. 86,182, filed Mar. 23, 1916. This application filed Nov. 20, 1916. Serial No. 132,348. (Cl. 33—185.)



A lens block having facets and a plurality of contact walls in fixed relation to each facet, and a lens blank positioning device having members adapted to seat against said walls and having a contact surface adapted to engage a lens blank.

1,268,557. MEANS FOR TRANSFERRING LOOSE MATERIAL. CADWALLADER EVANS, Jr., Scranton, Pa. Filed Aug. 4, 1917. Serial No. 184,383. (Cl. 37—19.)



1. In a mining apparatus for transferring loose material to a gallery from a chamber communicating therewith, the combination of a scraper, drag and outhaul lines connected to the forward and rear ends thereof respectively, and means for causing the scraper to move from a given point along the working face of the chamber and then turn toward the gallery, and to return approximately to said point by a different path, comprising a fixed guide detachably engaged by the drag line during the first forward movement and a fixed guide engaged by the outhaul line, said guides being located adjacent the said working face, forwardly of the turning point and rearwardly of the starting point, respectively, and a buffer guide located rearwardly of the turning point, considering the first direction of forward movement and forwardly of the drag line guide, considering the second direction of forward movement, so that the scraper will pass between the drag line and buffer guides on its forward movement, after the drag line has been detached from the drag line guide, and the buffer guide will be engaged by the outhaul line, scraper, and drag line, successively, on the return movement of the scraper.

2. In a mining apparatus for transferring loose material to a gallery from a chamber communicating therewith, the combination of a scraper, a drag line connected to the forward end of the scraper, a drum for operating said drag line, guide means whereby pull on the drag line pulls the scraper forward first in one direction and then in a different direction from a starting point, said means comprising a guide adapted to be engaged by said drag line during the first direction of movement and detached therefrom when the direction of forward movement of the scraper changes, and a buffer guide so positioned that the scraper will be pulled into engagement with the same, and swung partly thereabout, when the guide line is detached from said drag line guide.

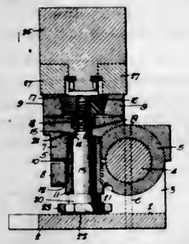
[Claims 3 to 5 not printed in the Gazette.]

1,268,558. COMBINATION-TOOL. JOHN FAIX and SAMUEL FAIX, San Francisco, Cal. Filed Dec. 11, 1916. Serial No. 136,346. (Cl. 7—11.)



In combination, a case formed of a single piece of sheet metal having a trough-shaped form, the sides of the case at one end extending in contact with each other and at the other end extending nearer together than in the main body of the case and having a pivot pin therethrough, a pair of tweezers formed of a single piece of spring sheet metal doubled in the middle and pivoted on said pivot pin between the sides of the case, and a pricker pivoted on said pivot pin between the two halves of the tweezers and frictionally engaging said halves when said halves are within the case.

1,268,559. VISE. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignor to North Bro's. M'f'g. Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 28, 1917. Serial No. 183,287. (Cl. 81—41.)

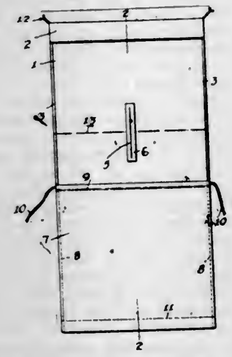


1. The combination in a vise, of a base having uprights spaced apart; a transverse bar secured to the uprights; a split carrier mounted on the bar; means engaging the two parts of the carrier for clamping it to the bar; a vertical bolt mounted on the carrier; a body portion adjustably clamped to the bolt so as to turn on the carrier; and vise jaws mounted on the body portion.

5. The combination of a base; a round bar secured to the base; a carrier mounted on the bar and having two jaws; a tubular bolt extending through one jaw and into the threaded opening in the other jaw; a head on the lower portion of the bolt; a body portion mounted on the carrier; a tapered nut adapted to a tapered opening in the body portion and having a projection adapted to a recess in the carrier so that the nut will be held from turning on the carrier; a bolt extending through the tubular bolt and having a portion adapted to the nut and having a shoulder, the two bolts having heads; and a handle having a wrench portion adapted to fit the heads and loosely arranged on said last mentioned screw so that the wrench can be shifted to either head in order to operate either screw.

[Claims 2 to 4 not printed in the Gazette.]

1,268,560. CONVERTIBLE GARMENT-FORM. STELLA S. FLEISHEL, New York, N. Y. Filed Jan. 5, 1918. Serial No. 210,543. (Cl. 2—145.)

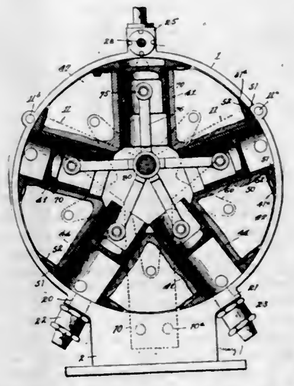


3. A garment-form composed of an oblong strip of material of sufficient length to form the back of the skirt and entire body portion of a garment; and a second strip of material, less than half the length of the first-named strip, permanently secured along its sides to the sides of the first-named strip, so as to form a tube open at both ends and complete the skirt portion of the garment; in combination with means for gathering the two strips about the waist of the wearer; and the first-named strip having a slit therein through which the head of the wearer may be extended so as to cause the said body portion to drape loosely over the shoulders of the wearer.

6. A garment-form comprising a single ply portion and a double ply, tubular portion open at both ends, the single ply portion having applied to different parts thereof weights or media for causing the said single ply portion to properly drape upon the form of the wearer and take the form of a garment.

[Claims 1, 2, 4, 5, and 7 not printed in the Gazette.]

1,268,561. ROTARY GAS-ENGINE. HENRY JAMES GAUTHIER, Plainfield, N. J., assignor to Gauthier and Clarke, a Copartnership consisting of said Gauthier and Frank B. Clarke, Plainfield, N. J. Filed Dec. 12, 1916. Serial No. 136,439. (Cl. 123—44.)



5. In a rotary explosive engine of the four cycle type, the combination of a cylindrical casing formed with circumferentially disposed gas inlets and main and auxiliary exhaust ports, check valves controlling the gas inlet and main exhaust ports, a controlling valve in the auxiliary exhaust port operating mechanism for said controlling valve for alternately opening and closing it, a rotary series of an uneven number of open ended cylinders operating within said casing, pistons operating in said cylinders, a crank pin formed with supporting crank arms and stub shafts, the stub shafts of which are mounted in the axis of rotation of said cylinders, means for securing said crank pin in the desired position, pitmen connecting said pistons with said crank pin and suitable ignition devices.

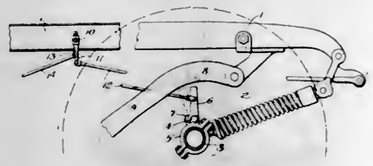
7. In a rotary explosive engine of the four cycle type, the combination of a cylindrical casing having gas inlet and main and auxiliary exhaust ports, a rotary series of open-ended cylinders operating in said casing, pistons operating in said cylinders, a stationary eccentrically mounted crank pin, pitmen connecting said pistons with said crank pin, a series of spark plugs carried by said cylinders, a controlling valve in said auxiliary exhaust and an ignition controlling brush supported adjacent to said controlling valve in position to electrically contact with the successive spark plugs, substantially as described.

8. In a rotary explosive engine of the four cycle type, the combination of a cylindrical casing having gas inlet and main and auxiliary exhaust ports, a rotor having an uneven number of radially extending cylindrical openings, cylindrical shells mounted in said radial openings and formed with open outer ends and oppositely projecting segmental flanges which contact with the inner cylindrical surface of said casing, pistons operating in said shell cylinders, a stationary crank pin, pitmen connecting said pistons with said crank pin, and suitable ignition devices.

14. In a rotary explosive engine of the four cycle type, the combination of a cylindrical casing having gas inlet and main and auxiliary exhaust ports, a rotary series of open-ended cylinders operating in said casing, oppositely projecting segmental flanges carried by the outer ends of said cylinders in working engagement with said casing, said flanges being of greater width circumferentially than the casing ports, pistons operating in said cylinders, a stationary crank pin, pitmen connecting said pistons with said crank pin and suitable ignition devices.

[Claims 1 to 4, 6, and 9 to 13 not printed in the Gazette.]

1,268,562. ABUTMENT FOR VEHICLE-SPRINGS. JOHN F. GOODWIN, Charlestown, Mass. Filed Aug. 2, 1917. Serial No. 184,035. (Cl. 180—82.)



1. In an automobile, a foot pedal, and a hand lever, operated in connecting and disconnecting the motor shaft from the driven mechanism; an abutment movably mounted between the automobile body and one of its axles; a lever operatively connected therewith; the forward movement of the pedal moving said lever and causing said abutment to move out of position to be engaged by said body; a spring operated lock bolt to engage said lever and hold it and said abutment out of operative position; and means whereby a movement of the hand lever will release said lock bolt, and permit it to engage said lever and hold said abutment out of operative position; and a movement of the hand lever through normal position, will withdraw said bolt from said lever, and permit the latter to return to normal position, and thereby move the abutment into operative position whenever the driving shaft and the driven mechanism become disconnected, that is whenever the automobile stops.

2. In an automobile, a foot pedal, and a hand lever operated in connecting and disconnecting the motor shaft from the driven mechanism; an abutment movably mounted between the automobile body and one of its axles; a lever operatively connected therewith; the forward movement of the pedal moving said lever and causing said abutment to move out of position to be engaged by said body; a spring operated lock bolt lever; a lock bolt pivoted to said lock bolt lever to engage said lever and hold it and said abutment out of operative position; a dog flexibly mounted on the free end of said lock bolt lever; and a finger fixed to the hand lever to engage said dog to move the lock bolt lever in one direction to withdraw the bolt; whereby a movement of the hand lever will release said lock bolt, and permit it to engage said lever and hold said abutment out of operative position; and a movement of the hand lever through normal position, will withdraw said bolt from said lever, and permit the latter to return to normal position, and thereby move the abutment into operative position whenever the driving shaft and the driven mechanism become disconnected, that is whenever the automobile stops.

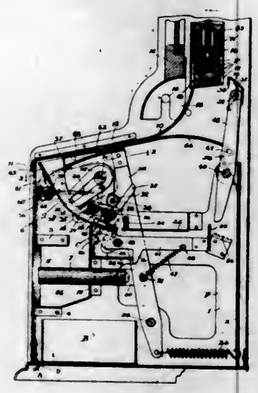
1,268,563. PROCESS OF TREATING ORGANIC MATTER FOR FERTILIZER PURPOSES. ADOLF J. GRINBERG, New York, N. Y., and BERNARD FIELD, Plymouth, Mass.; said Adolf J. Grinberg now by judicial change of name, Adolf Justus Grinnell. Filed Apr. 27, 1917. Serial No. 164,958. (Cl. 71—10.)

1. The process of treating organic matter which consists in adding to the organic matter, acid producing and denitrifying bacteria, and allowing the whole to work by the growth of bacteria.

8. A new product consisting of organic matter, to which has been added acid producing and denitrifying bacteria, a phosphate compound and a potash compound, the whole having been allowed to work by the growth of bacteria and the resultant mass having been dried.

[Claims 2 to 7 not printed in the Gazette.]

1,268,564. COIN-CONTROLLED VENDING-MACHINE. ALBERT D. GROVER, New York, N. Y., assignor to Autosales Gum & Chocolate Company, a Corporation of New York. Filed Aug. 10, 1916. Serial No. 114,092. (Cl. 194—91.)



2. In a coin-controlled vending machine, a movable support, a coin-carrier pivotally mounted on said support, a pivoted member carried by said support, a coin-testing finger pivoted on said member and adapted to engage the coin or check in said carrier, whereby said coin-carrier is rocked, and a fixed member for ejecting the coin or check from said coin-carrier, said finger swinging about its pivot to permit the ejection of the coin or check, whether said coin or check be a solid disk or a washer.

6. In a coin-controlled vending machine, a coin-carrier, a pivoted member, a finger pivoted on said member and adapted to enter the hole of a washer in said coin-carrier, and means for ejecting the deposited token from said coin-carrier, said finger being adapted to swing about its pivot to permit ejection of said token, whether the same be a solid or a perforated disk.

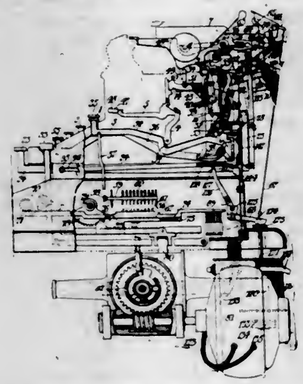
11. In a coin-controlled vending machine, a slidable carriage, an actuating member and a coin-carrier both pivotally and slidably mounted on said carriage, said member being controlled by said coin-carrier and having a normally inoperative path of travel, an arm also pivotally and slidably mounted on said carriage, a finger pivoted on said arm and adapted to engage the token in said coin-carrier at or near the center thereof, means on said slidable carriage for engaging said arm to move the same toward said coin-carrier, whereby the latter is rocked through the medium of the coin therein to position said member into an operative path of travel, said finger being adapted to enter the hole of a washer in said coin-carrier and thereby prevent operative movement thereof, and fixed means to eject the deposited token from said coin-carrier, said finger swinging about its pivot to permit ejection of said token, whether the same be a solid or a perforated disk.

16. In a coin-controlled vending machine, a slidable carriage adapted to be operated by hand from the outside of the machine, a coin-carrier pivotally and slidably mounted on said carriage, and a coin-testing finger also pivotally and slidably mounted on said carriage and adapted to engage the coin in said coin-carrier.

30. In a coin-controlled vending machine, a casing having a coin-entrance slot and coin refunding passage, a hand-operable coin-carrier, and movable means for receiving and guiding the deposited coin into said coin-carrier when the latter is in normal position, said means being automatically moved into position to receive and guide the deposited coin into said refunding passage when said coin-carrier is out of normal position.

[Claims 1, 3 to 5, 7 to 10, 12 to 15, and 17 to 29 not printed in the Gazette.]

1,268,565. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WILLIAM L. GUMPRECHT, Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Sept. 3, 1913. Serial No. 787,844. (Cl. 235—62.)



1. The combination with a computing mechanism, of a typewriting mechanism including a traveling carriage, a tappet carried by said carriage for according the denominations as computed with the denominations as typewritten by said typewriting mechanism, said tappet being movable between effective and ineffective positions, means for shifting said tappet, and means brought into action by any return movement of said carriage for rendering said last-mentioned means ineffective.

3. The combination, with a computing mechanism; of a typewriting mechanism including a traveling carriage; selecting means for according the denominations as computed by said computing mechanism with the denominations as typewritten by said typewriting mechanism, said selecting means including a movable operating element; a controlling device movable into and out of position to maintain said operating element effective; and magnetic means operated from said carriage for governing the movement of said controlling device.

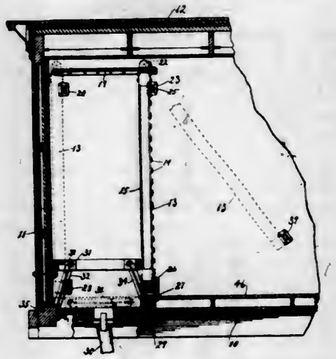
18. The combination with a computing mechanism, of a typewriting mechanism including a traveling carriage and means for driving said carriage, to afford movements thereof, zone-controlling means coöperating with said carriage during the traveling movement thereof for determining the periods of activity of said computing mechanism to correspond with the computing zones or columns as determined by said carriage, and means controlled from said driving means for silencing said zone-controlling means.

26. The combination with a computing mechanism, of a typewriting mechanism including a traveling carriage and case-shifting mechanism, controlling means coöperating with said carriage to determine the active periods of said computing mechanism, means for shifting said controlling means, a spring for returning said controlling means after the action of said shifting means has ceased, and connections from said case-shifting mechanism for also shifting said controlling means, said case-shifting mechanism acting to shift said controlling means between effective and ineffective positions while said spring remains in its collapsed condition.

29. The combination with a computing mechanism, of a typewriting mechanism including a traveling carriage and case-shifting mechanism, controlling means coöperating with said carriage to determine the active periods of said computing mechanism, a spring for maintaining said controlingling means in a certain definite condition, shifting means for moving said controlling means and concomitantly placing said spring under tension, and connections from said case-shifting mechanism for shifting said controlling means between effective and ineffective positions, said case-shifting mechanism acting positively on said controlling means while said spring remains collapsed in both effective and ineffective positions of said controlling means.

[Claims 2, 4 to 17, 19 to 25, 27, 28, and 30 to 44 not printed in the Gazette.]

1,268,566. REFRIGERATOR-CAR. WILLIAM B. HALL, Chicago, Ill., assignor to Union Railway Equipment Co., a Corporation of South Dakota. Filed Jan. 15, 1917. Serial No. 142,439. (Cl. 62—19.)



1. In a refrigerator car, in combination, a body comprising an end and side walls, a floor and roof, a bulkhead for forming the inner wall of an ice bunker and movable against and parallel with the end wall of the car body, and a grid having folding legs attached thereto adjacent each edge and adapted to rest bodily on the floor of the car when its legs are folded upwardly.

2. The combination with a car body, of a rail fixed transversely to the car floor and forming the front wall of a drip well for an ice bunker, a bulkhead movable from a position immediately above the rail to a position against and parallel with the end wall of the car, a vertically adjustable grid adapted to lie between the rail and the end wall of the car when in its lower position and folding legs for supporting the grid in elevated position and engaging the same adjacent each edge and being inclined outwardly with reference to the grid when in service.

4. In a convertible refrigerator car having an icing opening, a bulkhead movable in a vertical position from the end wall of the car forwardly to form the front wall of an ice bunker, and a screen hinged to the car adjacent the inner margin of the ice opening and back of the service position of the bulkhead, such screen being adapted to be swung upwardly by the bulkhead in its movement toward the car end, and to extend across the opening.

5. The combination with a car body, of a rail fixed transversely to the car floor and forming the front wall of a drip well for an ice bunker, a false floor forward of and approximately flush with the upper face of the rail, a bulkhead movable from a position immediately above the rail to a position against and parallel with the end

wall of the car, and a vertically adjustable grid adapted to lie between the rail and the end wall of the car when in its lower position, its upper surface when so disposed being approximately flush with the upper surface of the rail.

[Claim 3 not printed in the Gazette.]

1,268,567. BINDER FOR LENSES. WILLIAM S. HAMM, Hubbard Woods, Ill., assignor to The Adams & Westlake Co., a Corporation of Illinois. Filed Oct. 9, 1917. Serial No. 195,550. (Cl. 240—41.)



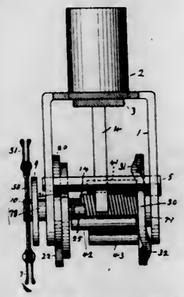
1. A binder for lenses or like plates comprising a band of pliable material having a longitudinal series of apertures.

2. A binder for lenses or like plates comprising a band of pliable material having a longitudinal series of elongated apertures.

3. A binder for lenses or like plates comprising an endless band of pliable material of slightly less diameter than the lens to which it is to be applied, and being provided with an annular series of apertures.

[Claims 4 to 6 not printed in the Gazette.]

1,268,568. ELECTRIC SWITCH. HERMAN HANSEN, New York, N. Y., assignor to Francis Keil and Son, New York, N. Y. Filed Mar. 14, 1917. Serial No. 154,846. (Cl. 175—291.)



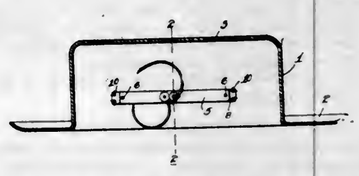
1. In a device of the class described, push button mechanism, a member formed with a plurality of cams actuated *seriatim* by the push button mechanism with a step by step movement, a spring controlled duplex disk formed by oppositely disposed shoulders projecting alternately from each side of the said disk, a stop moved by the cam to alternately release the said disk and afterward to hold the parts in a stationary relation, a movable contact member moved by said disk synchronously with the termination of each step movement of the cam member, and a stationary contact member engaged by the movable contact member.

3. In a device of the class described, a member formed with a plurality of cams and having an engaging device, push button mechanism to advance the cam member with a step by step movement, a spring controlled member having a device to engage the one first named and made with slots formed by oppositely disposed shoulders projecting from each side of the same, a movable contact member actuated by the spring controlled member, a stationary contact member, and a stop to hold the parts in a stationary relation after each movement.

7. In a device of the class described, a spring controlled member having slots formed by oppositely disposed shoulders projecting from each side thereof, a push button, intermediate mechanism to actuate said member, a movable contact member, a stationary contact member to engage the spring controlled member and a stop to hold the parts in a stationary relation after each movement.

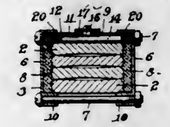
[Claims 2 and 4 to 6 not printed in the Gazette.]

1,268,569. HAT-FASTENER. JOHN HART, Brunnerton, Greymouth, New Zealand. Filed June 15, 1915. Serial No. 34,309. (Cl. 132—25.)



In a device of the class described, the combination of a plurality of spaced plates, curved prongs pivotally mounted upon said plates and when in an open position extending from opposite sides of said plates, said prongs being adapted to be swung to a closed position so as to cause the ends thereof to be received between said plates, thus shielding the ends of the prongs to prevent the same from injuring the head of the user, and also reinforcing the prongs at their ends, as well as the pivot portions, thus preventing a side springing of the prongs which might allow the hair gripped thereby to be accidentally disengaged.

1,268,570. SPRING-OILING DEVICE. GEORGE W. HAUGHTON, Philadelphia, Pa., assignor of two-fifths to Joseph T. Riday, Philadelphia, Pa. Filed June 6, 1917. Serial No. 173,118. (Cl. 184—1.)



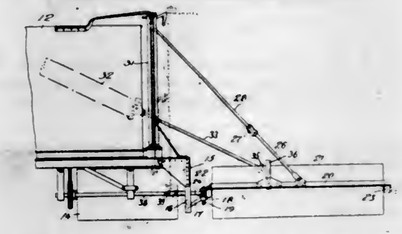
1. An oiling device for leaf springs comprising two hollow members adapted to be applied to the sides of a spring, oiling pads within said members and adapted to engage the sides of a spring, a part adapted to contain oil and extending between said pads and into the upper portions of said members and having open ends for the discharge of oil, said part permitting said members to move relatively to it and to each other, and means to draw the upper portions of said members toward each other to clamp said pads between the ends of said part and said members and to clamp a spring between said members.

2. An oiling device for leaf springs comprising two hollow members adapted to be applied to the sides of a spring, oiling pads within said members and adapted to engage the sides of a spring, a part adapted to contain oil and extending between and into the upper portions of said members and having open ends for the discharge of oil, said part having a top wall, side walls and a bottom wall shorter than the top wall and extending between said pads, and means to draw the upper portions of said members toward each other to clamp said pads between the ends of said bottom wall and said members and to clamp a spring between said members.

5. An oiling device for leaf springs comprising two hollow side members adapted to be applied to the sides of a spring, oiling pads within said hollow members and adapted to engage the sides of a spring, means to draw said members toward each other to clamp a spring between them, and a part adapted to contain oil and extending between and into said members, and having a top wall, a bottom wall, side walls and open ends communicating with said members, the central portions of the ends of the bottom wall of said part having cut out portions permitting oil to flow from said part to the central portions of said pads.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,268,571. STREET-SWEEPING APPARATUS. FRANK HEDLEY, Yonkers, and JAMES S. DOYLE, Mount Vernon, N. Y. Filed Oct. 14, 1914. Serial No. 866,608. (Cl. 15—17.)



1. In a street sweeping apparatus, a vehicle, an auxiliary frame extended laterally therefrom, a sweeper frame pivotally mounted thereon to swing vertically and extending rearwardly therefrom, a sweeper mounted in said sweeper frame, and a motor connected to said sweeper frame to swing the same.

2. In a street sweeping apparatus, a vehicle, an auxiliary frame located at the end thereof and extending laterally therefrom, a sweeper frame extending rearwardly from said auxiliary frame when in horizontal position, and pivotally mounted upon said laterally extending frame to rock vertically thereon, and means for rocking said sweeper frame.

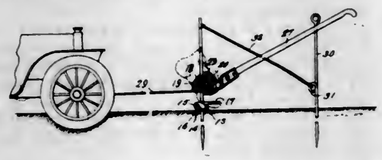
3. In a street sweeping apparatus, a vehicle, a sweeper carried thereby and extending transversely across and beneath the same, an auxiliary sweeper pivotally mounted upon the vehicle to extend laterally and rearwardly therefrom, and means for operating said sweepers.

9. In a street sweeping apparatus, a vehicle, a frame extending laterally therefrom, vertical guides carried thereby, a sweeper frame pivotally connected at one end to said frame, brace rods for suspending the other end of said sweeper frame, said brace rods having sliding connection with the upper ends of said vertical guides, and means for rocking said sweeper frame into and out of horizontal position for use.

13. In a street sweeping apparatus, a vehicle, a carrier frame extending laterally therefrom, a sweeper frame including side and end members, said sweeper frame pivotally supported at one end upon the carrier frame, a bail strap connecting the side members of the sweeper frame, a motor having pivotal connection with said bail strap for rocking the sweeper frame, and brace rods connected to said side members for suspending the same in a rearwardly extending horizontal position for use.

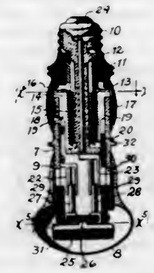
[Claims 4 to 8, 10 to 12, and 14 not printed in the Gazette.]

1,268,572. AUTOMOBILE-PULLER. BENJAMIN O. HEUER, Donnelly, Minn. Filed Nov. 24, 1917. Serial No. 203,743. (Cl. 254—186.)



In a device of the character described, a pair of stakes in the form of rods adapted to be driven perpendicularly into the ground, having eyes formed upon their upper ends, a third stake in the form of a rod adapted to be driven perpendicularly into the ground at a point between and in advance of the pair of stakes, an eye formed at an intermediate part of the second stake, a cable passed through the eye and having its ends connected to the eyes of the pair of stakes, a collar slidably mounted on each one of said pair of stakes, a set screw in each collar to engage the stakes, and a bearing member on each collar to support a horizontal shaft, said collars being adjustable vertically on the stakes whereby when strain is applied to the shaft it may be taken up by the pairs of stakes at a point between the ground and the point of connection of the stakes with the cable offering the greatest resistance.

1,268,573. MASSAGE DEVICE. HYAKUTARO HIROTA, Los Angeles, Cal. Filed Apr. 16, 1917. Serial No. 162,505. (Cl. 128—16.)



1. A massage device, comprising manual frictional means, thermo-electric means within the limits of the friction means, means to shift the heating means relatively to the friction means, and means for regulating the heating means.

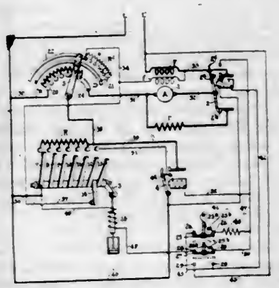
2. A massage device, comprising a casing, a friction bulb thereon, and thermo-electric heating means within the casing, and means to vary the temperature and relative position of the heating means.

3. A massage device, comprising a casing, a massage bulb thereon, a heating coil within the casing, means for adjusting the heating coil relative to the bulb, and means for energizing the coil.

4. The combination with a casing having two oppositely disposed slots, of a massage bulb rotatably mounted on the casing and extending over the slots, a frame sliding in said casing, racks on said frame extending through said slots and having screw-threaded engagement with the bulb, and thermo-electric elements carried by said frame.

[Claim 5 not printed in the Gazette.]

1,268,574. MOTOR-CONTROLLER. ALBERT J. HORTON, White Plains, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 4, 1915. Serial No. 32,078. (Cl. 172—179.)



1. In a motor controller, in combination, electro-responsive starting and accelerating means for the motor and a push button control switch therefor operable to effect

starting and acceleration of the motor and also subsequently operable to effect deceleration of the motor but only to a predetermined accelerated speed.

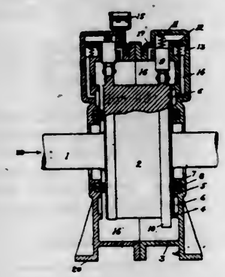
3. In a motor controller, in combination, electro-responsive means to start and accelerate the motor and a push button control switch for said means operable to effect starting and acceleration of the motor and subsequently operable to effect deceleration of the motor, said means after response being partially independent of said switch to maintain at least a predetermined accelerated speed of the motor irrespective of subsequent operation of said switch.

5. In combination, a motor, electro-responsive means for completing the motor circuit and accelerating the motor by progressively regulating the armature and field circuits thereof, and a push button control switch for said means operable to effect starting and acceleration of the motor by both armature and field regulation, said switch being thereafter operable to effect deceleration but only by field regulation of the motor.

15. In combination, a motor, electro-responsive means controlling the continuity of the motor circuit, armature and field resistances for the motor, a common electro-responsive control device for said resistances and means controlling the aforesaid means to start, accelerate and decelerate the motor and a relay associated with said control device to govern alternative control circuits for one of said resistances whereby the decelerating action of said control means is limited to regulation of said field resistance.

[Claims 2, 4, and 6 to 14 not printed in the Gazette.]

1,268,575. HYDRAULIC THRUST-BEARING. ANATOL DAVID ISKOLS, Schenectady, N. Y. Filed Feb. 12, 1916. Serial No. 77,970. (Cl. 64—47.)



1. In a hydraulic thrust bearing, the combination of a rotating shaft that is alternately subjected to end thrust in opposite directions, an annular thrust member rigidly mounted thereon, an inclosing casing, chambers located between the sides of the member and the adjacent side walls of the casing to which fluid under pressure is admitted, walls on opposite sides of the member that alternately cooperate with the casing wall to restrict the outward escape of fluid from the chambers, packing rings that are situated between said chambers and the shaft, follow the axial movements of the member and prevent the inward escape of liquid from the chambers, an exhaust chamber within the casing which surrounds said member, pump means within the casing which receive fluid from the exhaust chamber and deliver it to the pressure chambers, and means actuated by the member for driving the pump means.

[Claim 2 not printed in the Gazette.]

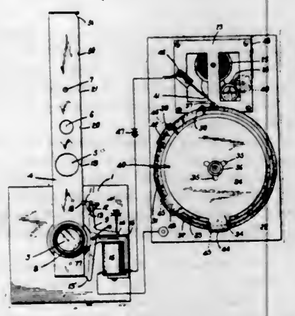
1,268,576. DILATOR. HANS JENSEN, Kansas City, Mo., assignor to The Jensen-Salsbery Laboratories, Inc., Kansas City, Mo., a Corporation of Missouri. Filed Nov. 30, 1917. Serial No. 204,581. (Cl. 128—28.)

A dilator comprising a conical head portion, formed with lengthwise extending corrugations on its face, the grooves of which start at the point of the cone and increase in depth from the point to the base of the cone, the



ridges of the corrugations gradually merging into the grooves at the pointed end to leave no abrupt portions thereat, substantially as and for the purpose set forth.

1,268,577. AUTOMATIC SHUTTER DEVICE. HARRY C. JONES, Larchmont, N. Y. Filed May 20, 1915. Serial No. 29,258. (Cl. 95—53.)



1. In a device of the character described, the combination of a shutter proper having a plurality of stop openings of different effective sizes and adapted to expose a sensitized surface through said stop openings, and mechanism for operating the same to cause the sensitized surface to be exposed through one and then through another of said stop openings during the exposure operation.

2. In a device of the character described, the combination of a shutter device proper having a plurality of openings of different effective sizes and adapted to expose a sensitized surface through said openings, mechanism for automatically shifting said shutter to bring one and then another of said stop openings in position to expose the sensitized surface during the exposure operation, and means for varying the intervals of time at which the stop openings are shifted.

3. In a device of the character described, the combination of a shutter proper having a plurality of stop openings of different effective sizes and adapted to expose a sensitized surface through said stop openings, mechanism for automatically shifting said shutter during the exposure operation to bring one and then another of said stop openings in position to expose the surface, said mechanism being responsive to the lapse of time during the exposures, and means for varying the intervals of time at which the stop openings are shifted.

4. In apparatus of the character described, the combination of a shutter proper having openings of different effective sizes and adapted to expose a sensitized surface through said openings, and means operating said shutter to cause a series of exposures to be made through said openings, each being made through a different stop opening and continuing through each different stop opening for a definite length of time.

1,268,578. TYPE OR MATRIX. DAVID S. KENNEDY, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed June 28, 1915. Serial No. 36,618. (Cl. 199—64.)

1. A set or font of type or matrices, some formed at their upper ends with separating slots or notches, the said notches being of uniform extent throughout the font.

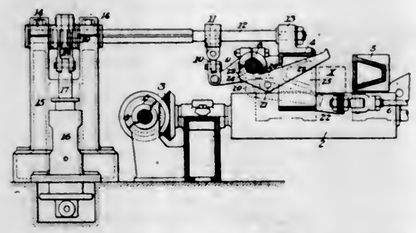
4. A set or font of type or matrices, some formed at their upper ends with separating slots or notches, the said notches throughout the font being of uniform extent equal



approximately to the distance the type or matrices are raised by the lifting finger of a distributer box in a linotype machine.

[Claims 2 and 3 not printed in the Gazette.]

1,268,579. MANIPULATOR FOR ROLLING-MILLS. JULIAN KENNEDY, Pittsburgh, Pa. Original application filed Mar. 13, 1916, Serial No. 83,699. Divided and this application filed Jan. 17, 1917. Serial No. 142,784. (Cl. 80—48.)



1. In a manipulator for rolling mills, the combination with a guide, of a rocking manipulator shaft journaled on said guide and having a plurality of crank arms, a manipulator finger pivoted to each of said crank arms and having a fulcrum engagement at its heel portion with the manipulator shaft, and means for actuating said shaft, substantially as described.

6. A manipulator comprising a laterally movable guide, a rock shaft journaled thereon and having a crank member, a manipulator finger pivoted to the crank member and having a heel portion contacting with said shaft, a second rock shaft having an actuating connection with the first named shaft, and means for actuating the second named rock shaft, said shafts and actuating means being arranged to permit of lateral movement of said guide, substantially as described.

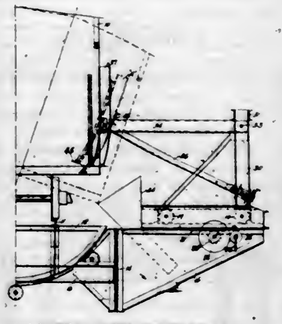
[Claims 2 to 5 and 7 not printed in the Gazette.]

1,268,580. GRAIN-CAR-DOOR-OPENING MECHANISM. ELWIN H. KIDDER, Chicago, Ill. Filed June 7, 1916, Serial No. 102,168. Renewed Feb. 11, 1918. Serial No. 216,649. (Cl. 214—52.)

1. In mechanism of the character described, the combination with a member provided with rails and means for tilting a car laterally while on said rails and immovable with respect thereto, of a relatively stationary device located to one side of the car for forcing a side grain door of the car inwardly while the car is being tilted laterally toward said device.

7. In combination with means for tilting a car sidewise, a door pry-off member mounted on a relatively fixed support, said member being curved on its inner face and adapted to engage the grain door of a car, said curved face causing different portions of the grain door to be pried off in succession.

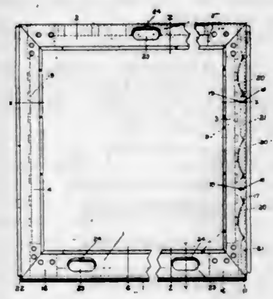
15. In mechanism of the character described, the combination with a tiltable table having a cradle rockably mounted thereon, the latter being adapted to support a car and tilt the latter to one side, of supporting elements rigidly fixed to said table, a frame adjustable inwardly and outwardly relatively to the car when on said cradle, means for locking said frame in adjusted position, thrust members carried by said frame, and a pry-off member pivotally mounted on said thrust member and arranged to engage the grain door of a car when the latter is tilted to one side to thereby pry off the door as the car is being tilted, said pry-off member being curved inwardly at its lower edge to thereby engage the lowermost boards of the door first and pry the boards of the door off in succession as the car is tilted.



17. The combination with mechanism for unloading a car filled with material in bulk, of means in juxtaposition with respect to said mechanism, said means being adjustable vertically and laterally to thereby operate on cars of different dimensions, said means having a member arranged to engage the door from top to bottom and thereby adapted to pry off the entire door of the car at one operation when the car is on said mechanism.

[Claims 2 to 6, 8 to 14, and 16 not printed in the Gazette.]

1,268,581. METAL SASH. JOHN KIRBY, Jr., Dayton, and TERANCE SCULLIN, Cleveland, Ohio, assignors to The Dayton Manufacturing Company, Dayton, Ohio, a Corporation of Ohio. Filed May 25, 1916. Serial No. 99,899. (Cl. 189—76.)



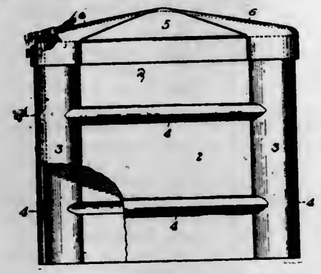
1. In a metal window sash a pair of vertical rails and top and bottom rails rigidly connected one with the other at the respective corners of said sash; each of said rails comprising two substantially parallel rigid members spaced apart and rigidly connected one with the other along a line spaced from the inner edge thereof, thereby forming a channel along the inner edge of said rail; each rail also having one member thereof projecting inwardly beyond the inner edge of the other member of that rail to form a support for a pane of glass; filler strips mounted in said channels and adapted to receive the fastening devices for the glass-retaining strips; the line of connection between the parallel members of one of said vertical rails being also spaced from the outer edge thereof

to form a channel along said outer edge, and a frame engaging member mounted in said channel.

2. In a metal window sash, a pair of vertical rails and top and bottom rails rigidly connected to said vertical rails at the respective corners of said sash; each of said rails comprising two substantially parallel rigid members spaced apart and rigidly connected one to the other along a line spaced from the inner edge thereof, thereby forming a channel along the inner edge of said rail, each rail also having one member thereof projecting inwardly beyond the inner edge of the other member to form a support for a pane of glass; filler strips mounted in said channels and adapted to receive the fastening devices for the glass retaining strips; the connections between the parallel members of said vertical rails being also spaced from the outer edges thereof to form channels along said outer edges of the respective rails, and frame engaging members mounted in the respective outer channels.

[Claims 3 and 4 not printed in the Gazette.]

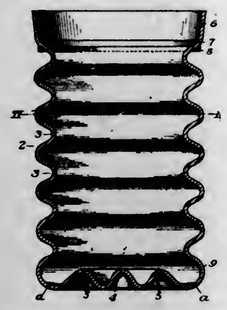
1,268,582. ANNEALING-BOX. LUTHER L. KNOX, Bellevue, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 31, 1917. Serial No. 209,636. (Cl. 263—49.)



1. An annealing box comprising a body portion and a separately formed top portion, both portions being shaped from sheet metal, the body portion having concavo-convex swells pressed outwardly at its corners and the top member having a depending flange formed with corresponding swells and fitting over the upper portion of the body of the box, including the swells thereof, and secured thereto, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

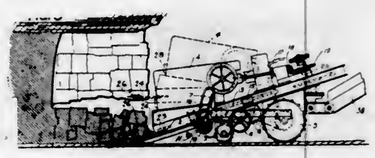
1,268,583. ANNEALING-POT. LUTHER L. KNOX, Bellevue, Pa., assignor to Blaw-Knox Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Dec. 31, 1917. Serial No. 209,637. (Cl. 263—49.)



4. A sheet metal annealing pot having its body and bottom portions formed with a plurality of corrugations, the bottom and body portions being connected by a convex bend of relatively large radius, substantially as described.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

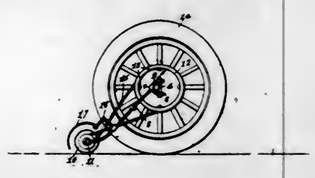
1,268,584. METHOD OF MINING COAL. HARRY A. KUHN, Pittsburgh, Pa. Filed Aug. 14, 1914. Serial No. 856,850. (Cl. 125—20.)



1. The method of mining coal consisting in undercutting the mass of coal, expanding by explosive action the coal at a point above the undercut, thereby moving the coal below said point of expansion into the undercut and at the same time separating the coal above the point of expansion along its lines of cleavage by the expansion action, making a kerf in the upper mass of coal at an angle to the lines of the original undercut, and removing the coal.

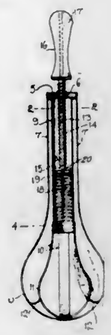
[Claims 2 to 5 not printed in the Gazette.]

1,268,585. SWEEPER ATTACHMENT FOR MOTOR-VEHICLES. ABRAHAM LAPEDES, New York, N. Y. Filed June 27, 1917. Serial No. 177,386. (Cl. 208—151.)



A sweeper attachment for motor vehicles, comprising a plate attachable to the vehicle, an arm pivoted to the plate and formed with an angled outer end, a brush journaled on the angled end, an angle bracket extending laterally from the arm, a guard on the bracket arm and overlying the brush, and means for rotating the brush.

1,268,586. EGG-BEATER. JASON LEE LAWTON, Buffalo, N. Y. Filed Apr. 13, 1918. Serial No. 228,414. (Cl. 259—128.)



1. A beater of the character described including a head plate, a housing fixed at one end to the head plate, beater members fixed to said housing and the head plate, and means for rotating the housing and the head plate, said means being operatively arranged within the housing.

2. A beater of the character described including a head plate, a housing fixed at one end to the head plate, beater members fixed to said housing and the head plate, and means for alternately rotating the housing and the head plate and the beater members connected thereto as a unit in opposite directions, said means being operatively arranged within the housing.

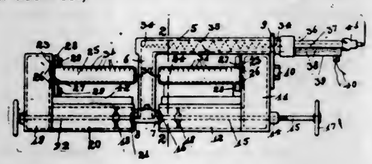
3. A beater of the character described including a head plate, a housing fixed at one end to the head plate, beater members fixed to said housing and the head plate, means for alternately rotating the housing and the head plate and the beater members connected thereto as a unit in opposite directions, said means including a member axially movable within the housing and operatively engaged with the head plate to rotate the latter, and a spring arranged within the housing and resisting the movement of said member in one direction.

4. A beater of the character described including a head plate, a housing fixed at one end to the head plate, beater members fixed to said housing and the head plate, a rod axially movable within the housing and operatively engaged with the head plate to rotate said plate in reverse directions in the reverse axial movements of said rod, and means arranged within the housing and rotatable therewith to resist the axial movement of said operating rod in one direction.

5. A beater of the character described including a head plate, a housing fixed at one end to the head plate, beater members fixed to said housing and the head plate, a rod axially movable within the housing and operatively engaged with the head plate to rotate said plate in reverse directions in the reverse axial movements of said rod, a coil spring arranged within said housing and rotatable therewith, said spring resisting the axial movement of the rod in one direction, and means on one end of the spring rotatably engaged with the end of said rod.

[Claim 6 not printed in the Gazette.]

1,268,587. OIL-BURNER. PAUL R. H. LENZ, Los Angeles, Cal. Filed Jan. 16, 1918. Serial No. 212,067. (Cl. 158—65.)



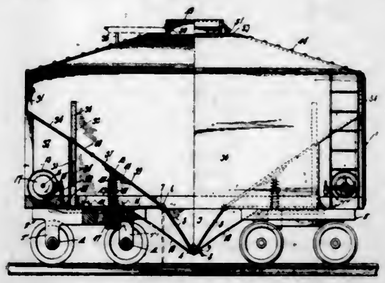
1. In a burner of the class described two burner tubes arranged in practically horizontal and parallel position having a suitable number of orfices, a mixing chamber arranged below the burner tubes in its horizontal part having also a practically vertical part, the horizontal part terminating in an open end while the vertical part has communicating openings for the burner tubes, the vertical part is also provided with circular recesses near the communicating openings, the burner tubes being closed on one end while the other end is provided with a flange turnably fitting in the circular recesses of the mixing chamber, and suitable means provided for movably holding the burner tubes engaged within the recesses of the mixing chambers with the orifices in the burner tubes in the desired position.

2. In a burner of the class described a mixing chamber, burner tubes having communication with the mixing chamber, a fuel supply pipe disposed above the burner tubes, and a primary burner provided on the mixing chamber between two of the burner tubes and below the supply pipe, the primary burner comprising a pan provided on the mixing chamber, a wick disposed in the pan, and a wick carrier having a suitably formed part for holding the wick in a position below the supply pipe.

3. In a burner of the class described in combination with a mixing chamber, burner tubes having communication with the mixing chamber, a fuel supply pipe disposed above the burner tubes, and a primary burner provided on the mixing chamber below the supply pipe; an electrically operated heating and vaporizing means disposed in the supply line at a suitable place before the supply pipe passes over the burner tubes.

[Claim 4 not printed in the Gazette.]

1,268,588. DUMPING-CAR. ALEXANDER LICHTENSTEIN, Brooklyn, N. Y. Filed Mar. 21, 1917. Serial No. 156,354. (Cl. 105—184.)



1. A car of the class described, closed throughout with a filling opening in its top and a discharge opening in its bottom, hinged closures for said openings, resilient means for automatically closing said bottom closure and holding it in closed position, means under the control of the operator for opening said closure against the tension of its closing means, and resilient means for locking said opening means to hold the closure in open position.

2. A car of the class described, closed throughout with a filling opening in its top and a discharge opening in its bottom, hinged closures for said openings, resilient means for automatically closing said bottom closure and holding it in closed position, means under the control of the operator for opening said closure against the tension of its closing means, resilient means for locking said opening means to hold the closure in open position, and means for releasing said resilient locking means to permit the closure to automatically close under the action of its resilient closing means.

3. A car of the class described having a discharge opening in its bottom, a downwardly opening closure for said opening, a rotatable shaft carried by said car, a rod mounted parallel with said shaft to slide longitudinally, coöperating elements carried by said shaft and rod, and means for moving said rod to disengage said element.

4. A car of the class described having a discharge opening in its bottom, a downwardly opening closure for said opening, a rotatable shaft carried by said car, a sprocket wheel fixed to said shaft, a ratchet carried by said sprocket wheel, a rod mounted parallel with said shaft, a dog carried by said rod in position to engage said ratchet, said rod being mounted to slide longitudinally to disengage the dog from the ratchet, and a coiled spring mounted on said rod for returning the dog to operative position.

5. The combination with a car, of a skid hinged at one end to the bottom thereof and normally held in lowered position by the contents of the car, and means for automatically raising said skid on the partial emptying of the car.

[Claims 6 to 10 not printed in the Gazette.]

1,268,589. FLASH-CANDLE. JOSEPH V. MCADAMS, Tablerock, Wyo. Filed Oct. 24, 1917. Serial No. 198,350. (Cl. 102—20.)

1. In a slow burning candle, the combination with an outer sheath of a supporting member extending through the length of said candle between the said outer sheath and the body of the candle.

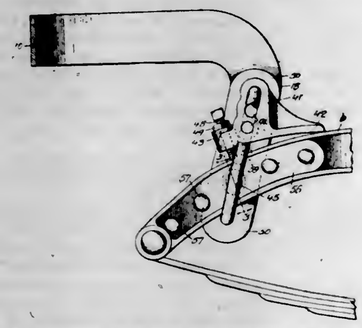
3. In a slow burning candle composed of cotton and sulfur, the combination with flash charges embedded therein at intervals, of a suitable hanger, and an outer sheath of oiled paper enveloping said supporting hanger and candle throughout the length of the candle.



5. In a slow burning candle the combination with an outer sheath of a supporting member, said supporting member being secured between the body of the candle and the outer sheath, and having oppositely arranged hooked ends, one of which engages the lowermost edge of the outer sheath.

[Claims 2 and 4 not printed in the Gazette.]

1,268,590. AUTOMOBILE-BUMPER. ALLAN L. MCGREGOR, Chicago, Ill. Original application filed Aug. 10, 1916, Serial No. 114,089. Divided and this application filed Sept. 8, 1917, Serial No. 190,293. Renewed Apr. 19, 1918. Serial No. 229,663. (Cl. 293—55.)

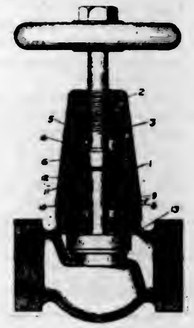


1. In a bumper structure for vehicles, the combination of a bumper front having rearwardly extending side arms whose inner ends are deflected downwardly, said downwardly deflected ends having upper and lower holes therethrough, fittings for engaging the tops of the vehicle side beams and said fittings having transverse holes registering with the holes in the bumper structure ends, clamp structures for engaging through said fitting holes and through the upper and lower holes in said ends and for receiving the vehicle side beams, and jack screws on said fittings for adjusting the distances between the front ends of the fittings and the vehicle side beams.

4. The combination with the front vertically curved ends of vehicle side beams, of a bumper structure comprising a front part and rearwardly extending arms having their inner ends extended downwardly and said ends being provided with upper and lower bolt holes, said ends extending alongside of the curved ends of the beams, plates interposed between said ends and said beams, fittings resting on the curved tops of said side beams, said fittings and plates having bolt holes for registering with the upper bolt holes of said ends and said plates having bolt holes for registering with the lower bolt holes in said ends, U-bolts receiving said side beam ends and extending through the lower holes in said ends and plates and through the upper holes of said ends and plates and the registering holes in said fittings to clamp said ends, plates and fittings to said side beams, and jack screws on said fittings for engaging the tops of said side beams to adjust the seating angle of said fittings with said beams and thereby adjust the position of the front part of the bumper structure.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,268,591. BEARING-CASING FOR VALVE-STEMS AND SIMILAR MOVABLE PARTS. JOHN L. MCKENZIE, Beech Grove, Ind., assignor, by direct and mesne assignments, to The M. T. R. Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Nov. 6, 1916. Serial No. 129,787. (Cl. 286—1.)



1. Fluid excluding bearing means for movable stems or rods connected to heads which receive fluid pressure, said means including a casing having an expansible closure member located between the stem or rod and the casing and made of a metal which is different from that of the movable stem or rod and which has a higher coefficient of expansion, the said member having alternate spaced and tight-fitting surfaces on its inner and outer circumferences adjacent to the movable stem or rod and said casing, respectively.

2. Fluid excluding bearing means for reciprocable stems and rods, including a casing and having a metallic closure member between the stem and casing which is made of a metal having a higher co-efficient of expansion than the metal of the stem or rod, and which comprises two sections of different diameters providing a broken joint between said member and the casing, one of said sections having a clearance from the casing and a tight fit against the stem and the other section having a clearance from the stem and a tight fit against the casing.

3. In means of the class described including a casing and a movable stem or rod, a split expansible ring fixed on the stem or rod near one end of the casing in combination with a closure member fixed to the casing at the other end and made of expansible metal and mounted to permit radial expansion.

4. In combination with a movable stem or rod and a casing therefor, a closure member surrounding the stem or rod and clamped to the casing, said member being made of expansible metal and having two concentric sections of different diameters providing broken joints between them and the casing.

8. In combination with a movable rod or stem, a casing, a smooth contact bearing and closure member surrounding said stem or rod and clamped to the casing near one end of the latter, a closure member having a similar contact against the casing and fixed on the stem or rod adjacent the other end of the casing and movable with said stem or rod, said closure members forming a closed chamber between them, and a joint closing fluid composition in said chamber.

[Claims 5 to 7 not printed in the Gazette.]

1,268,592. AGITATOR AND RIPENER. WILLIAM J. MCLAUGHLIN and WILLIAM R. NICOLL, Owatonna, Minn., assignors to Minnetonna Company, Owatonna, Minn., a Corporation of Minnesota. Filed July 29, 1916. Serial No. 111,976. (Cl. 259—113.)



1. In apparatus of the class described, the combination with a fluid receptacle, of a loose-fitting agitator movable therein, and means for reciprocating the agitator having a separable connection with the agitator and a hinge connection by means of which the said reciprocating means can be rotated free from the agitator in more than one direction when it is disconnected therefrom.

4. In apparatus of the class described, the combination with an upright fluid receptacle, of an agitator movable therein, and means connected to the agitator adjacent the center of the receptacle pivoted at the side of the receptacle to swing laterally and upwardly therefrom at the center.

8. The combination with a fluid receptacle, of an agitator having a central shaft and movable therein, means for moving the agitator, and a plate for supporting said means extending across the top of the receptacle and recessed to fit around one side of the shaft and a pivotal mounting at right angles to the shaft at the side of the receptacle.

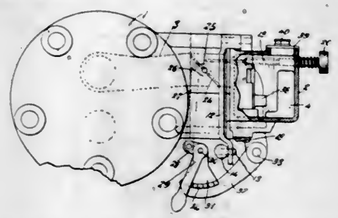
11. The combination with a receptacle, of an agitator therefor, means for moving the agitator, a support therefor comprising a plate having a pivotal mounting at the side of the receptacle comprising a pivot for swinging the plate upwardly clear of the receptacle, and two removable pins spaced apart about either one of which the plate can be swung laterally clear of the top of the receptacle when the other pin is removed.

14. The combination with an upright fluid receptacle, of a vertically movable agitator therefor, operating means for the agitator, and two vertically removable pivots about one of which the operating means can be swung in one direction when the other pivot is removed.

[Claims 2, 3, 5 to 7, 9, 10, 12, and 13 not printed in the Gazette.]

1,268,593. INTERNAL-COMBUSTION ENGINE. VINCENT E. MCMULLEN and WAYLAND E. WOODRUFF, Evansville, Ind., assignors to The Hercules Gas Engine Company, Evansville, Ind., a Corporation of Indiana. Filed Apr. 29, 1916. Serial No. 94,345. (Cl. 123—30.)

1. In a device of the character specified, a reservoir for the liquid fuel, an inlet passageway for the mixture from the reservoir to the engine cylinder, a throttle valve in said passageway, and governor connection for said valve to subject same to automatic governor control, comprising rock shafts and crank arms for the throttle valve and governor connection respectively, with means for adjusting the angle of the crank arms to each other whereby the throw of the governor rock shaft will be varied without stopping the engine.



2. In a device of the character specified, a reservoir for the liquid fuel, an inlet passageway for the mixture from the reservoir to the engine cylinder, a throttle valve in said passageway, and governor connection for said valve to subject same to automatic governor control, comprising rock shafts and crank arms for the throttle valve and governor connection respectively, with a bell crank lever pivotally mounted on the governor rock shaft arm, and an intermediate bar connecting the bell crank lever to the throttle valve crank, with means for adjusting the throw of the bell crank lever, whereby the throw of the governor rock shaft may be adjusted without stopping the engine.

3. In a device of the character specified, a reservoir for the liquid fuel, an inlet passageway for the mixture from the reservoir to the engine cylinder, a throttle valve in said passageway, and governor connection for said valve to subject same to automatic governor control, comprising rock shafts and crank arms for the throttle valve and governor connection respectively, an upwardly projecting plate on the crank arm of the governor rock shaft, a bell crank lever pivotally mounted on said upwardly projecting plate, an intermediate bar connecting one arm of said bell crank lever to the throttle valve crank arm, with the other arm of said bell crank lever serving as a handle to vary the position of the bell crank lever and the throw of the governor rock shaft as specified without stopping the engine, and means for locking the bell crank in adjusted position.

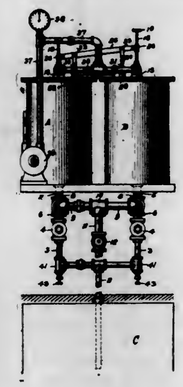
4. In a device of the character described, a reservoir for liquid fuel, a pump therefor mounted in the reservoir casing, an overflow outlet pipe from said reservoir to maintain the fuel at a constant level, a discharge outlet in the bottom of said reservoir, with connection therefor to the outlet pipe, and a manually operated valve to control said discharge outlet whereby the fuel reservoir may be used for different classes of fuel, as specified.

1,268,594. APPARATUS FOR ELEVATING LIQUID. JAMES A. MACKENZIE, Rochester, Pa., assignor to Guarantee Liquid Measure Company, Rochester, Pa., a Corporation of Delaware. Filed Feb. 17, 1917. Serial No. 149,240. (Cl. 103—S.)

1. In combination with a containing vessel having a fluid supply and discharge connection; an air suction conduit opening into the upper portion of the vessel provided with a valve seat, a float within the vessel having a threaded stem extending upwardly through said conduit and provided with a relatively adjustable tubular stem, a valve on said tubular stem, a clevis engaging said stem, and a lever arm pivotally engaging said clevis, substantially as set forth.

3. An apparatus for elevating liquid comprising a pair of receiving vessels each having an inflow conduit provided with a check-valve and connected with a common supply pipe, a return flow conduit leading from each of said inflow conduits above said check-valves and each being provided with a check-valve and connected with a sin-

gle delivery conduit, in combination with a means for inducing flow into said vessels, said means comprising an air suction conduit opening into said vessels, a valve adapted to close said air suction conduit, and a float adapted to operate said valve, said float and valve being adjustable relative to each other and to said air conduit.



9. An apparatus for elevating liquid comprising a pair of vessels having individual conduits provided with check-valves and connected with a main supply conduit, a return flow conduit leading from each of said individual conduits above the check-valve and each of said return flow conduits being provided with check-valves, lifting stems for said check-valves in said individual supply conduits adapted to positively open said check-valves, means for inducing a flow into said vessels, said means comprising an air suction conduit opening into said vessels, a valve adapted to close said air suction conduit, and a float adapted to operate said valve, said float and valve being adjustable relative to each other and to said air conduit.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,268,595. SOAP-HOLDER. CHARLES E. MANLEY, Maricopa, Cal. Filed Dec. 23, 1916. Serial No. 138,641. (Cl. 45—28.)

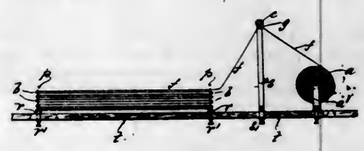


1. In combination with a support, a rod secured at its opposite end portions to said support, the central portion of said rod being offset, a container comprising a base plate provided along one margin with an upstanding wall, said wall at substantially its transverse center being pivotally engaged with the offset portion of the rod, longitudinally spaced depending flanges carried by the opposite margin of the plate and adapted for contact with the support, the marginal portion of the plate intermediate said depending flanges being cut away.

2. In combination with a support, a rod secured at its opposite end portions to said support, the central portion of said rod being offset, a container comprising a base plate provided along one margin with an upstanding wall, said wall at substantially its transverse center being pivotally engaged with the offset portion of the rod, a depending flange carried by the opposite margin of the plate and arranged for contact with the support, said plate and wall being perforate, and a spring carried by the offset portion of the rod and co-acting with the wall for normally maintaining the depending flange of the base plate in contact with the support.

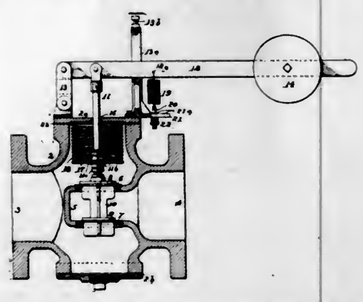
[Claim 3 not printed in the Gazette.]

1,268,596. APPARATUS FOR FOLDING GAUZE FOR SURGICAL DRESSINGS, &c. LULU H. MILLER, Brooklyn, N. Y. Filed Apr. 5, 1918. Serial No. 226,916. (Cl. 270—61.)



In gauze folding apparatus of the character designated, the combination of a supporting table formed with coincident scales on opposite sides thereof, a guide roller mounted upon and above said table, and transverse pin racks adjustably mounted upon said table, for the purpose described.

1,268,597. CONSERVING-VALVE. FRANCIS H. MONTREUIL, Chicago, Ill., assignor to Warren Webster & Company, a Corporation of New Jersey. Filed Sept. 6, 1916. Serial No. 118,663. (Cl. 137—53.)



1. In a device of the character stated, the combination of a body having inlet and outlet ports and a thoroughfare between them, a valve to control the thoroughfare having a stem extending to the outside of the case, an expansible member having one part connected with the valve stem to move with it and the other part connected with the body and subjected on one side to the pressure of the atmosphere and on the other side to the pressure within the body on the inlet side to open the valve, and a weighted lever connected to the body and operating upon the valve stem to close the valve against the inlet pressure acting upon the expansible member.

3. In a device of the character stated, the combination of a body having inlet and outlet ports and a thoroughfare between them, a valve to control the thoroughfare having a stem extending to the outside of the case, an expansible member having one part connected with the valve stem to move with it and the other part connected with the body and subjected on one side to the pressure of the atmosphere and on the other side to the pressure within the body on the inlet side to open the valve, a weighted lever connected to the body and operating upon the valve stem to close the valve against the inlet pressure acting upon the expansible member, and a spring connected with the lever and coöperating with the weight thereof for closing the valve.

5. In a device of the character stated, the combination of a body having inlet and outlet ports and a thoroughfare between them, a valve to control the thoroughfare having a stem extending to the outside of the case, an expansible member having one part connected with the valve stem to move with it and the other part connected with the body and subjected on one side to the pressure of the atmosphere and on the other side to the pressure within the body on the inlet side to open the valve, a weighted lever connected to the body and operating upon the valve stem to close the valve against the inlet pressure acting upon the expansible member, a spring connected with the lever and coöperating with the weight thereof for closing the valve, and means to change the point of connection of the spring with the lever.

9. In a device of the character stated, the combination of a body having inlet and outlet ports, and a thoroughfare between them, a substantially balanced valve device controlling the thoroughfare, a valve stem for operating the valve device extending to the outside of the body, a disk secured to the stem, a bellows structure having one end secured to the disk and the other end to the body and its interior in communication with the outside atmosphere said disk and bellows acted upon by the inlet pressure to operate the valve and stem in opening the valve, mechanically applied pressure devices exterior to the body for applying pressure upon the stem to close the valve in opposition to the pressure upon the bellows to open it, and means to adjust the mechanically applied pressure comprising a weighted lever and a spring device connected with the lever and coöperating with the weight thereof.

[Claims 2, 4, 6 to 8, 10, and 11 not printed in the Gazette.]

1,268,598. DUMP-WAGON. EDWIN A. MOORE, Philadelphia, Pa., assignor of one-half to Henry S. Palm, Reading, Pa. Filed Oct. 29, 1915. Serial No. 58,626. (Cl. 21—20.)

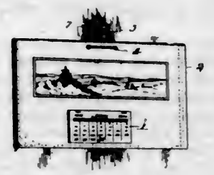
1. The combination in a dump wagon of a frame; a shaft extending transversely of the frame; bearings for the shaft having removable caps; a body; means for transmitting movement from the shaft to the body; means including gearing for driving the shaft; with a casing inclosing said gearing and made in two parts separable to permit of the removal of the shaft when the caps are removed from the bearings.

2. The combination in a dump wagon of a frame having two downwardly extending arms at its opposite sides; a body mounted on the frame; two links respectively pivoted to the lower ends of said arms and the forward portions of the body; a shaft rotatably mounted on the frame; a gear on the shaft; a rack fixed to the body in position to engage said gear; with means for turning the shaft to cause said links to turn on their pivots to lift the forward end of the body.

3. The combination of a frame having longitudinally extending sills on its opposite sides; flat structures extending respectively over each sill and under the adjacent part of the frame; bolts extending under the frame and over the sill for clamping each of said structures in position; an arm extending downwardly from each of said structures; a wagon body; rods extending from said arms to the forward end of the body; and means for moving said body rearwardly to cause its forward end to be elevated.

4. In combination with the running-gear sills and relatively movable body of a dumping wagon, a transverse operating shaft at the rear of the sills provided with body supporting rollers and fixed pinions, guard tracks and racks fixed to the bottom of the body said racks being engaged by said pinions, lifting arms pivotally connected at their opposite ends to depending brackets on the rearward portion of said sills and to the forward portion of the body respectively, and stops for limiting the rearward swing of the body and lifting arms; the center of gravity of the body when in determined dumping position being approximately vertically above the rollered operating shaft.

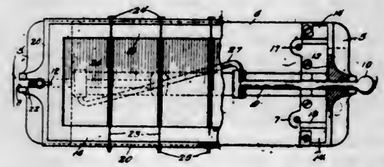
1,268,599. READY-REFERENCE CALENDAR. WILLIAM E. NEAL, St. Paul, Minn., assignor to Brown & Bigelow, St. Paul, Minn., a Corporation of Minnesota. Filed May 25, 1914. Serial No. 840,738. (Cl. 40—107.)



1. A device of the character described, comprising a book, a memorandum calendar within said book, said memorandum calendar comprising designations for the days of the month, lines adjacent said designations to provide suitable writing spaces adjacent the said designations for the purpose of receiving memorandum notes, a backing covering and concealing the memorandum calendar, means to suspend said book with the back thereof upward and the free edges downward, and a calendar pad mounted upon the said cover and normally not concealed, said calendar pad being provided with designations for the days of the week.

2. As an article of manufacture, a booklet, a memorandum calender within said booklet, a cover for said booklet, means to suspend said booklet to normally conceal the memorandum calendar, and a normally exposed calendar mounted upon the cover and arranged to be readable when said booklet is suspended.

1,268,600. BUTTER-PRINTER. WILLIAM R. NICOLL, Owatonna, Minn., assignor to Davis Watkins Dairymen's Manufacturing Company, a Corporation of Delaware. Filed Jan. 29, 1916. Serial No. 74,991. (Cl. 31—65.)



1. A butter printer comprising a fixed frame open at top and bottom, a bottom plate movable therein, and a plurality of supporting levers unconnected thereto one of which has a handle for manually moving the plate through the frame.

3. In a butter printer, the combination with a supporting base, of end pieces spaced apart thereon, a frame supported by and securable to the end pieces, a plate movable through the frame, guiding means for said plate extending through said end pieces, and a dividing frame removably attached at the top of the other frame.

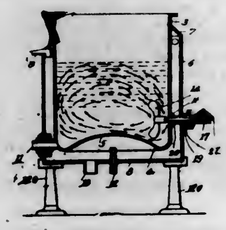
4. In a butter printer, the combination with a pair of rigidly connected end pieces, a frame supported at the corners by said end pieces, releasable means for securing the frame to the end pieces, a plate movable through the frame in such fixed position, the end pieces having guide openings, and guide posts secured to the plate extending through said openings to direct the plate in its movement through the frame.

6. In a butter printer, the combination with a pair of end members, of a base rigidly secured to the members for spacing them apart, a frame supported by the members, a dividing frame adjacent the upper side of the other frame with dividers extending across it, means for detachably connecting the two frames to the end members, a plate movable through the first mentioned frame for discharging butter from it, a plurality of removable pads supported by the plate, and means for moving the plate through the said frame comprising a pair of levers one of which is provided with an operating arm both pivoted below the plate supporting and engaging it but not connected thereto.

7. In a butter printer, the combination with a fixed frame for containing butter and dividing means in connection therewith, a plate movable through the frame for discharging butter therefrom and dividing it into a predetermined number of smaller quantities, a pair of connected levers for moving the plate and a separate removable pad loosely supported by the plate for each of the divided portions of the butter whereby the said divided portions may each be separately removed from the printer with its pad.

[Claims 2 and 5 not printed in the Gazette.]

1,268,601. AGITATOR. NIELS D. NIELSEN, Elyria, Ohio. Filed Sept. 4, 1917. Serial No. 189,712. (Cl. 259—109.)



1. In a device of the class described, the combination of a tank having inclined side walls and an inwardly projecting upwardly inclined bottom, a propeller positioned closely adjacent a meeting place of the bottom and side of said tank, a shaft upon which the propeller is mounted extending through a side wall of the tank and adapted when operated to drive the contents of the tank against the inclined part of the bottom and thence against the oppositely inclined side walls of the tank.

4. In a device of the class described, the combination of a tank having an inclined projection in the bottom thereof and a propeller in the tank mounted upon a horizontal shaft passing through the wall of the tank for driving the liquid contents of the tank against the inclined wall of said projection.

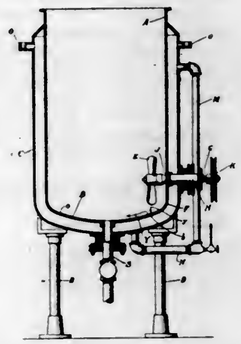
7. In a device of the class described, the combination of means for projecting liquid in a solid stream, an inclination for deflecting the liquid vertically from its course, inclined walls in a tank against which the liquid is deflected and which in turn causes it to flow some to the right and some to the left back to the propelling means.

10. In a device of the class described, the combination of means for projecting liquid in a solid stream, second means for drawing said stream of liquid away from the first means, an inclination for deflecting the stream projected by the first named means and drawn by the second named means from its course, inclined walls of a tank against which the deflected stream of liquid impinges and which in turn causes it to flow some to the right and some to the left back to the first named propelling means.

13. In a device of the class described, the combination of a tank having walls diverging in three directions from a position closely adjacent the meeting of the bottom and side walls of the tank, and a propeller in said tank adjacent said position, adapted when operated to drive the contents of the tank against such walls simultaneously.

[Claims 2, 3, 5, 6, 8, 9, 11, 12, 14, and 15 not printed in the Gazette.]

1,268,602. AGITATING MEANS. NIELS D. NIELSEN, Elyria, Ohio. Original application filed Sept. 25, 1916, Serial No. 122,017. Divided and this application filed Jan. 9, 1918. Serial No. 210,974. (Cl. 259—109.)



1. In a device of the class described, the combination of a tank provided with side walls and a bottom, a propeller in said tank on a shaft passing through a side wall of said tank near the junction of the bottom and such side wall, the side walls being inclined away and the bottom being inclined downwardly from said propeller, such walls and bottom adapted to deflect liquid hurled radially from said propeller thereagainst toward the portion of the walls of the tank opposite the propeller, the walls opposite the propeller being inclined back toward the propeller and adapted to cause liquid driven thereagainst by the propeller to return to the propeller.

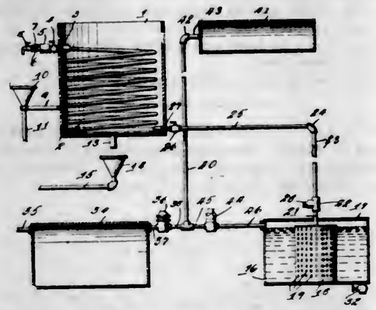
3. In a device of the class described, the combination of a tank having side walls and a bottom, portions of said side walls being inclined away from a position adjacent the juncture of such side wall portions and the bottom wall, the bottom being inclined downwardly from such position when the tank is set vertically, a second portion of the bottom wall of the tank inclined upwardly toward the portions of the side walls opposite said position, and a propeller having blades substantially straight radially located at such position for hurling the liquid contents of the tank in a vertical or substantially vertical plane against such inclined portions of such walls and bottom of the tank, and for driving contents of said tank against the portions of the side walls opposite said position and said second portion of the bottom wall.

5. In fluid agitating mechanism, the combination of a tank provided with cylindrical side walls and a saucer-shaped bottom, said side walls being provided with an opening through which a propeller shaft extends into said tank and terminates therein, said opening being near the junction of the bottom and side wall of the tank, a propeller on said shaft and adjacent the end thereof in said tank located near the junction of the bottom and side walls thereof, the side walls and bottom being inclined away from said propeller and adapted to deflect liquid hurled radially from said propeller thereagainst toward the portion of the walls of the tank opposite the propeller, the walls opposite the propeller being inclined back toward the propeller and adapted to cause liquid driven thereagainst by the propeller to return to the propeller, said propeller being located so low in said tank as to remain submerged as long as an appreciable amount of liquid remains therein, the blades of the propeller being

substantially straight radially, a pulley or like device on the other end of the shaft through which the same is driven.

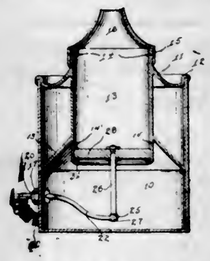
[Claims 2, 4, and 6 not printed in the Gazette.]

1,268,603. DRINKING-WATER APPARATUS FOR RAILROAD-TRAINS. BENJAMIN F. NIXON and JOHN SATELS, Winnipeg, Canada. Filed June 8, 1916. Serial No. 102,557. (Cl. 137—79.)



In an apparatus of the class described, the combination of a water-tank, a cooling-drum, a pipe connecting said water-tank and cooling-drum, an air-tank, a pipe connecting said water-tank and air-tank, a pair of reducing-valves mounted upon said last-mentioned pipe, a storage-tank, and a pipe connected to said storage-tank and connected to said last named pipe between said reducing-valves, substantially as shown and described.

1,268,604. OIL-CAN. JAMES B. O'HARA, Elkton, S. D. Filed Nov. 8, 1915. Serial No. 60,324. (Cl. 221—51.)



An oil can, comprising a body, a chamber within the upper part of the body and having a flange sloping outwardly and downwardly and having its marginal portion embracing the upper edge of the body, the lower end of the chamber being inturned and provided in its sides a short distance above the inturned end with lateral openings, a flange between the chamber and walls of the body and disposed adjacent and above the lateral openings, a piston within the chamber, means for operating the piston exterior to the body, and a tube at the outer end of the chamber.

1,268,605. COMBINED TYPE-WRITING AND COMPUTING MACHINE. OSMOND W. OLMSTED, Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Oct. 3, 1912. Serial No. 723,677. (Cl. 235—60.)

1. The combination with a carrier, of a digit-representing element on said carrier settable from normal to indexing position and having a cut-out portion, and a member on said carrier having a projection engaging in such portion to hold said element against rotation, and to limit its movement in one direction.

4. The combination with a member, of a digit-representing element mounted on said member and settable from normal to indexing position, and a linkage having a cam surface thereon arranged to engage said element to set the same.

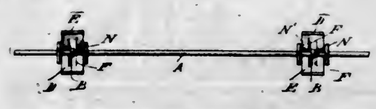


9. The combination with a setting linkage, of a series of parallel bars extending transversely of said linkage, a series of pins movably mounted on each of said bars, so as to be settable from a passive to a determinative position, and means for actuating said linkage, said linkage having a series of teeth thereon arranged to engage corresponding pins on said bars.

22. The combination with a series of denominational bars arranged side by side, a series of pins settable on said bars and arranged in rows and means for raising any bar, of a camming member universal to all of the pins of a row and arranged to set up from normal to indexing position any one which happens to be raised above its fellows, by a motion transverse to the direction in which said bars extend and to the direction of setting movement of the pin set, and guides for holding the bar, whereon the set pin is mounted, against transverse movement during the setting operation.

[Claims 2, 3, 5 to 8, and 10 to 21 not printed in the Gazette.]

1,268,606. CLOTHES LINE AND FASTENING DEVICE. CHARLES A. OLSEN and LEWIS C. MAPES, Sioux Falls, S. D. Filed Sept. 25, 1917. Serial No. 193,164. (Cl. 68—3.)



1. A combination clothes line and clothes fastening device comprising a line with collars arranged thereon at intervals, clothes pins comprising clamping jaws mounted upon said wire said pins being held spaced apart by said collars.

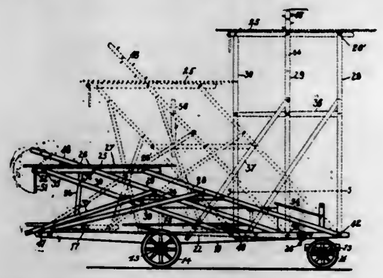
2. In combination with a clothes line having integral collars thereon, clamping jaws pivotally mounted upon said line and the jaws having upon their inner faces longitudinal recesses to receive said collars to hold the pins spaced apart.

1,268,607. PORTABLE FOLDING SCAFFOLD. JOHN H. PETTIS, Jamestown, N. Y. Filed Dec. 3, 1917. Serial No. 205,031. (Cl. 227—20.)

1. A folding scaffolding comprising a supporting means, an element slidably mounted on said supporting means to move back and forth thereon, a scaffolding comprising standards hinged to said supporting means at their lower ends and a platform hinged to their upper ends, braces detachably and pivotally attached to said slidably mounted element to come and go therewith and to said standards to raise and lower said standards by the movement of said element, means on the supporting means with which said braces may be engaged to hold the scaffolding operative, and means for moving said element.

11. A folding scaffold comprising a support, a foldable scaffolding comprising spaced forward and rearward standards, the forward standards being pivoted to the support, transverse braces pivotally connecting the rearward standards to the forward standards for swinging in a vertical plane, a platform carried by the upper ends of the standards and tiltable to an inclined position upon

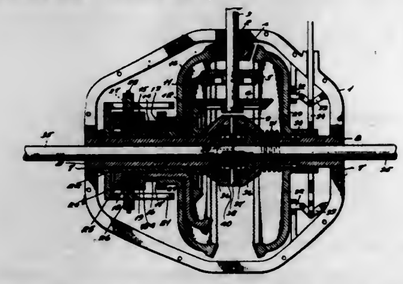
vertically moving the rear standards relative to the forward standards, said platform being usable as a ladder when inclined, a slide member mounted on guides on the support, means for operating the slide member, braces connecting the latter to the rear standards for raising the scaffolding and tilting the platform, other braces connecting the forward standards to the slide member and



detachable from the latter for engagement with the support to hold the forward standards operative, said platform having a slot formed therein, an upright passing through the platform slot and provided with foot pins above the latter, and brace arms extending from the platform for supporting the latter from an adjacent wall.

[Claims 2 to 10 not printed in the Gazette.]

1,268,608. TRANSMISSION-GEARING. NEWTON R. PILCHER, Amarillo, Tex. Filed Apr. 16, 1917. Serial No. 162,499. (Cl. 74—59.)

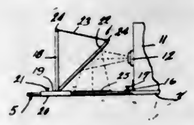


1. In transmission gearing of the character described, the combination with a driving shaft, of a driven shaft, a plurality of different speed driving gears rigidly secured to the driving shaft, a corresponding number of different speed driven gears rotatably mounted upon the driven shaft and provided with tubular hubs which telescope and have their ends arranged in stepped relation, clutch-gears rigidly connected with the tubular hubs, a disk rigidly connected with the driven shaft and carrying a plurality of arms extending substantially parallel with the driven shaft, an annular shiftable clutch-gear mounted to slide upon the arms and adapted for movement into engagement with a selected one of the clutch-gears, and means to shift the annular shiftable clutch-gear.

3. In transmission gearing of the character described, the combination with a differential gear comprising a gear casing, sleeves connected with the gear casing and arranged upon opposite sides thereof, shaft sections extending through the sleeves into the gear casing, gears arranged within the gear casing and connected with the shaft sections, planetary gears pivotally connected with the gear casing and engaging the first named gears, a driving shaft arranged at approximately a right angle to the sleeves in proximity to the differential gear, a plurality of different speed driving gears rigidly secured to the driving shaft, a corresponding number of different speed driven gears rotatably mounted upon one of the sleeves and provided with tubular hubs which telescope and have their ends arranged in stepped relation, a clutch gear rigidly connected with the ends of the tubular hubs, a disk rigidly connected with the driven shaft and carrying a plurality of arms extending substantially parallel with the driven shaft, an annular shiftable clutch-gear carried by the arms to move longitudinally thereof into engagement with a selected one of the clutch-gears, means to shift the annular shiftable clutch-gear, a reverse gear splined upon the other sleeve and arranged upon the opposite side of the driving gears with respect to the driven gears and adapted for movement into and out of engagement with and from one driving gear, and means to shift the reverse gear.

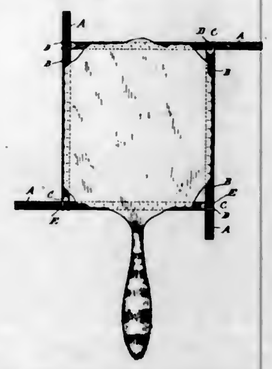
[Claim 2 not printed in the Gazette.]

1,268,609. PHOTOGRAPHIC-PRINTING DEVICE. JAMES R. POWELL, Glasgow, Ky., assignor of one-half to Christopher T. Grinstead, Glasgow, Ky. Filed July 12, 1916. Serial No. 108,902. (Cl. 88—24.)



A photographic printing device comprising a flat base; a casing resting directly on the base; a paper-holder in the rear end of the casing; a lens in the forward end of the casing; a slide mounted to reciprocate on the base in front of the lens; a standard fixed to the slide and defining an angle therewith; a reflector inclined toward the lens and having its lower edge seated in said angle; and an adjustable connection between the upper edge of the reflector and the standard, that part of the base which lies beneath the reflector and between the slide and the casing forming a negative support.

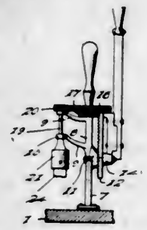
1,268,610. DEVICE FOR STRETCHING COON-SKINS. HERMANN C. PRANGE, Crocketts Bluff, Ark., and FRANK D. SMITH, Jackson, Mo. Filed Sept. 10, 1917. Serial No. 190,666. (Cl. 149—21.)



1. A device for stretching skins, comprising four strips of material, metallic members fitted over each strip and having integral parallel loops projecting beyond the ends of the strips and adapted to receive a strip held at right angles to said loops, each strip provided with a series of pins projecting therefrom in staggered relation, and over which the skins to be stretched are adapted to be caught.

2. A device for stretching skins, comprising four strips, a metallic member having a clevis shaped portion adapted to fit over the end of the strip and fastened to the latter, portions of said member formed into loops which are parallel to each other and which project beyond the end of the strip upon which the member is mounted, and through which loops one of the strips is held at right angles to the strip upon which the member is mounted, pins positioned at inclinations and projecting from the strip and arranged in staggered relation to one another.

1,268,611. OPERATING MECHANISM FOR CHURNS. MILTON E. PURDY, South Carrollton, Ky. Filed Nov. 27, 1915. Serial No. 63,818. (Cl. 74—50.)



A churn dasher operating mechanism in combination with a churn lid, a supporting frame mounted on the churn lid, a segmental gear pivoted to said supporting frame, an operating lever secured to said gear, a pinion rotatably mounted at right angles to the gear, a gear wheel formed integral with said pinion, arms carried by the supporting frame and formed substantially at right angles to same, said arms being formed with openings in their outer ends, said openings being in alinement with the opening in the churn lid for the reception of the churn dasher, a shaft rotatably mounted in the openings formed in the outer ends of the arms, and a pinion placed on the upper end of said shaft and adapted to mesh with the gear carried by the supporting frame for rotating the churn dasher.

1,268,612. METHOD OF WEAVING. ALBERT T. QUANTZ, Rock Hill, S. C. Filed Aug. 22, 1917. Serial No. 187,634. (Cl. 139—81.)

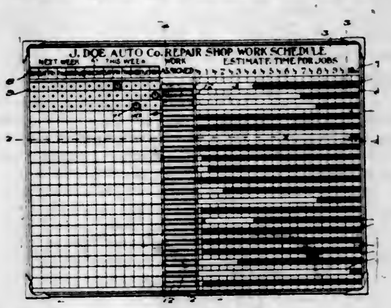
1. The method of weaving fabrics of a single thickness having patterns therein formed by arranging and grouping different kinds of warp threads, which consists in winding substantially equal lengths of each kind of warp thread upon a single beam, drawing the threads simultaneously from the beam, separating the two kinds as they leave the beam and maintaining them separated until they are grouped to form the pattern.

3. The method of weaving fabrics having patterns therein formed by arranging and grouping warp threads of at least two different plies the threads having the lesser plies being sized, which consists in winding substantially equal lengths of the sized and unsized threads upon a single beam, drawing the threads simultaneously from the beam, separating the different kinds as they leave the beam and maintaining them separated until they are grouped to form the pattern.

[Claim 2 not printed in the Gazette.]

1,268,613. WORK-SCHEDULING APPARATUS. GUSTAV H. RADEBAUGH, Urbana, Ill. Filed May 16, 1917. Serial No. 169,032. (Cl. 116—48.)

1. A work scheduling apparatus comprising a chart having a portion bearing legible characters indicating estimated time for jobs to be done; sub-divisions under said characters dividing a portion of the chart into portions of a day; another portion of said chart bearing indications representing days of the week; sub-divisions under said days of the week; and slide members in alinement with said sub-divisions and adapted to be moved longitudinally under the sub-divisions of the estimated time for jobs.



3. A work scheduling apparatus comprising a chart having a portion bearing legible characters indicating estimated time for jobs; sub-divisions under said characters dividing a portion of the chart into portions of a day; another portion of said chart bearing indications representing days of the week; sub-divisions under said days of the week; slide members in alinement with said weekly divisions and adapted to be moved longitudinally under the sub-divisions of the estimated time for jobs; and a space disposed between the estimated time for jobs and the weekly subdivisions, said space bearing characters indicating references to work assigned.

5. A repair shop work scheduling apparatus comprising a base member; said base member having members forming a border around said member; a chart disposed upon the face of said base member and comprising a portion bearing indications representing estimated time for jobs; a portion bearing indications representing days of the week juxtaposed to said estimated time for jobs; said indications under estimated time for jobs dividing the spaces thereunder into hour and one-half sub-divisions; a plurality of slide members adapted to be moved across the spaces under the hourly and one-half hourly sub-divisions; said slide members being in spaced relation; a plurality of graduated members disposed between said slide members and carrying graduations corresponding to the hourly and one-half hourly sub-divisions; a plurality of blocks disposed under the weekly indications and in alinement with said slide members; said blocks being provided with openings; a time plug bearing thereon a clock face, and having a hand movable in relation thereto, adapted to be disposed in the openings in said blocks; a space disposed between said weekly divisions and "estimated time for jobs" portion, said space bearing indications representing "work assigned"; a plurality of card retaining elements disposed beneath said "work assigned" space and a plurality of pockets disposed on said chart back of said card retaining members.

[Claims 2 and 4 not printed in the Gazette.]

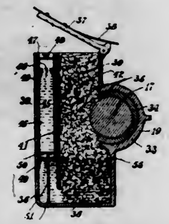
1,268,614. CAP. JUNE B. RAND, Los Angeles, Cal. Filed July 7, 1917. Serial No. 179,162. (Cl. 2—118.)



A cap construction, comprising two substantially rectangular flat portions formed from a fabric, said portions

being secured together at substantially right angles to each other to form a T shaped figure, a button secured in each of the corners of the free end of one of said portions adapted to engage button holes in the corners formed by the rear and side edges of the other of said portions, whereby when the two portions are secured together ventilating openings will be formed on either side of the cap construction.

1,268,615. RAILWAY-MOTOR LUBRICATION. HENRY N. RANSOM, New York, N. Y. Filed Mar. 20, 1914. Serial No. 825,949. (Cl. 64—24.)



5. A device for lubricating motor journals for car trucks and the like, comprising a shaft bearing provided with a window on one side thereof, a substantially vertical waste box comprising a chamber into which said window leads, said waste box extending below said bearing to provide a cup for receiving and holding lubricating oil, in combination with a removable closed oil container, means for supporting the oil container adjacent said waste box, and means to open the lower end of said oil container when in position adjacent said waste box whereby the oil in said container may be automatically fed into the cup to maintain a substantially predetermined level of oil in said waste box and below the said window.

8. In a device of the character described, a motor bearing provided with a window, a waste box adjacent to and inclosing said window and constructed to form an oil receptacle beneath said window, an oil cartridge pocket in open communication with said waste box and being adjacent thereto, in combination with a removable oil cartridge having a valve in one end thereof and having the other end sealed, and means for automatically opening said valve when said cartridge is inserted in said oil cartridge pocket.

[Claims 1 to 4, 6, 7, and 9 not printed in the Gazette.]

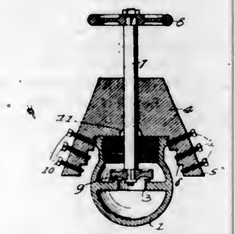
1,268,616. DEVICE FOR FASTENING OVERSHOES OR RUBBERS TO SHOES. GEORGE F. RAUCH, Bijou Hills, S. D. Filed Feb. 12, 1917. Serial No. 148,161. (Cl. 36—58.5.)



The combination with an over shoe or rubber having at its rear end a flexible strap extending upwardly above the upper edge of the body of the over shoe or rubber, of an inverted U shaped hook located wholly at the inner side of the strap and having one of its arms embedded in the strap, the latter having an extension above the hook which serves as a finger hold, and an eye adapted to be fastened to a shoe and to be releasably engaged by the other arm of the hook.

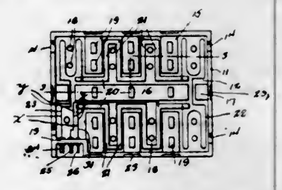
1,268,617. VALVE-GRINDER. EDWIN E. REED, Guthrie, Okla. Filed May 15, 1917. Serial No. 168,711. (Cl. 51—4.)

1. In a means for grinding valve seats, the combination with a valve housing, of a support for the valve grinding means engaging said housing, diverging legs on said support for embracing the valve housing, steps on said legs for adjusting the support to various sizes of valve housings, and means carried by said legs for binding the support to the housing.



2. A valve seat grinder comprising a relatively narrow support adapted to be straddled over a valve housing, legs depending from the support, steps on the legs for adjusting the support to various sizes of valve housings, means mounted on the legs for binding the support to a valve housing, a vertically movable rotatable shaft in the support, an abrasive element mounted on the shaft, means for operating the shaft, and the support being provided with a recess on its under face to facilitate inspection of the valve seat during operation of the grinder.

1,268,618. EMBOSSING ATTACHMENT FOR PRINTING-PRESSES. FREDERICK WILLIAM REED, South Bend, Ind. Filed Oct. 1, 1914. Serial No. 864,492. (Cl. 219—37.)



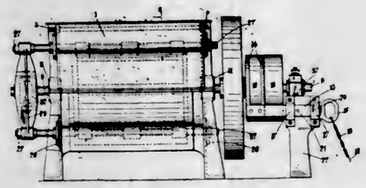
2. An electric heater of the type described comprising a metal plate provided with a marginal flange, opposite sets of transverse ribs arranged on each side of the plate within said flange, the ribs of each set being spaced from one another and at their inner ends terminating short of the opposite set, a longitudinally disposed rib arranged between the sets of transverse ribs and spaced therefrom, electric conductors arranged one on each side of the longitudinal rib, each conductor having looped portions extending outwardly and lying between the transverse ribs, electrical connections between the said conductors, and means whereby an electric current may be supplied to said electric connections to heat the plate.

3. An electric heater of the type described comprising a metal plate provided with a marginal flange, electric conductors adjacent the plate within said marginal flange, said conductors having projecting looped portions, electric connections between said conductors, means whereby current may be supplied to said electric connections to heat the plate and said marginal flange having recesses to provide passages for the escape of heat from under the plate.

4. An electric heater of the type described, a metal plate provided with a marginal flange having an inwardly directed off-set, opposite sets of transverse ribs arranged on the underside of the plate within said flange, the ribs of each set being spaced from one another and at their inner ends terminating short of the ribs of the opposite set, a longitudinally disposed rib arranged between the sets of transverse ribs and spaced therefrom, electric conductors arranged adjacent the longitudinal rib, each having looped portions extending between the transverse ribs, electrical connections between the said conductors, terminals mounted in the offset of the marginal flange, and an insulator-block adapted to fit in said off-set and carrying terminals for electrical connection with the aforesaid terminals.

[Claim 1 not printed in the Gazette.]

1,268,619. GRATING, DEFIBRATING, OR PULPING MACHINE. HERBERT KEMPSON REEVES, London, England. Filed Mar. 25, 1918. Serial No. 224,607. (Cl. 146—9.)



1. In a machine for grating, defibrating, pulping and breaking-up the cellular tissues of cocoanut or other oil-bearing nuts the combination of a cylindrical grating drum, a grating plate adapted to coöperate therewith, an inclosing casing, prepared working faces on the rear surface of the said grating plate, correspondingly prepared working faces on the inclosing casing against which the prepared faces on the said plate are adapted to bear, means for imparting a rotary motion to the aforesaid drum, a cam associated with the said rotary means, pull rods arranged in the grating plate, a saddle or sector piece straddling said rods and rollers on said saddle or sector piece for engaging the cam and imparting a reciprocatory motion to the grating plate during the grating, defibrating, pulping or breaking-up operation.

2. In a machine for grating, defibrating, pulping and breaking-up the cellular tissues of cocoanut or other oil-bearing nuts the combination of a cylindrical grating drum, a grating plate adapted to operate therewith an inclosing casing, prepared working faces on the rear surface of the said grating plate, correspondingly prepared working faces in the inclosing casing against which the said prepared faces on the grating plate are adapted to bear, a shaft arranged centrally in relation to the aforesaid cylindrical grating drum, fast and loose pulleys on said shaft, striking gear for said pulleys, means for operating said striking gear, a cam on the aforesaid shaft, pull rods arranged in the grating plate, a saddle or sector piece straddling said rods and rollers on said saddle or sector piece for engaging said cam and imparting a reciprocatory motion to the grating plate during the grating, defibrating, pulping or breaking-up operation.

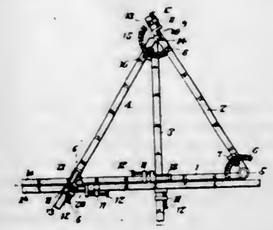
3. In a machine for grating, defibrating, pulping and breaking-up the cellular tissues of cocoanut or other oil-bearing nuts the combination of a cylindrical grating drum, a grating plate adapted to coöperate therewith, an inclosing casing, a feed opening in said casing, prepared working faces on the rear surface of the grating surface of the grating plate, correspondingly prepared working faces in the inclosing casing against which the prepared faces on the grating plate are adapted to bear, means for imparting a rotary motion to the aforesaid drum, a sprinkler device in the feed opening, a shield or guiding plate also in said feed opening and means for imparting a reciprocatory motion to the grating plate during the grating, defibrating, or breaking-up operation.

4. In a machine for grating, defibrating, pulping and breaking-up the cellular tissues of cocoanut or other oil-bearing nuts the combination of a cylindrical grating drum, a grating plate adapted to coöperate therewith, an inclosing casing, a feed opening in said casing, prepared working faces on the rear surface of the grating plate, correspondingly prepared working faces in the inclosing casing against which the prepared faces on the grating plate are adapted to bear, a shaft arranged centrally in relation to the aforesaid cylindrical grating drum, fast and loose pulleys on said shaft, striking gear for said pulleys, means for operating said striking gear, a cam on the aforesaid shaft, pull rods in the grating plate, a saddle or sector piece straddling the said rods, rollers on said saddle or sector piece for engaging said cam and imparting a reciprocatory motion to the grating plate during the grating, defibrating, pulping or breaking-up operation, a sprinkler device in the feed opening, a shield or guiding plate also in the said feed opening and means comprising slidable bearings for varying the distance of separation of the acting surfaces of the rotary and reciprocatory grating elements.

5. In a machine for grating, defibrating, pulping, and breaking-up the cellular tissues of cocoanut or other oil-bearing nuts, the combination of a cylindrical grating drum, a grating plate adapted to coöperate therewith, an inclosing casing, prepared working faces on the rear surface of the said grating plate, correspondingly prepared working faces in the inclosing casing against which the prepared faces on the said plate are adapted to bear, a shaft on which the cylindrical grating drum is mounted, a cam on said shaft, pull rods arranged in the grating plate, a saddle piece straddling said rods, rollers on said saddle piece for engaging said cam and imparting a reciprocatory motion to the grating plate during the rotation of the drums and slidable bearings for supporting the shaft and varying the distance of separation of the acting surfaces of the rotary and reciprocatory grating elements.

[Claim 6 not printed in the Gazette.]

1,268,620. MEASURING INSTRUMENT. EDWARD L. RENSTROM, Gulch, Colo. Filed Apr. 4, 1917, Serial No. 159,750. Renewed Apr. 10, 1918. Serial No. 227,820. (Cl. 33—98.)



1. An instrument of the class described comprising three scale beams arranged in triangulating relation and movably connected, and a fourth beam movably connected at the apex of the triangularly related beams, said fourth beam and one of the first-named beams having independent and non-interfering slidable connection on and with another of the first-named beams.

2. An instrument of the class described comprising a main beam, a pair of other beams pivotally connected at one end to each other, and one of said pair of beams being pivotally connected at its opposite end to the main beam, a slidable pivotal connection between the other end of the other of said pair of beams and the main beam, and a fourth beam pivoted at the angle of intersection of the pair of beams and slidably and pivotally connected with the main beam, said slidable connections being arranged to pass each other without interference.

3. An instrument of the character described comprising a base beam composed of longitudinally spaced portions, a second beam pivoted at one end to one end of one of said portions, a third beam pivotally and slidably connected at one end with the opposite end of the second beam and pivotally and slidably connected at its opposite end with the other section of the main beam, and a fourth beam pivoted at one end at the angle of intersection of the second and third beams and slidably con-

nected with the first-named section of the main beam, the said slidable connections between the third and fourth beams and the main beam being movable past each other without interference.

1,268,621. ADJUSTABLE ROPE-CLUTCH. JOHN H. REPP, Albany, N. Y. Filed June 11, 1915. Serial No. 33,564. (Cl. 24—133.)



A rope clutch comprising a link having a pivot bar at one end and a clamping bar at its other end, said clamping bar having angular inner corners and a clamp connected to said pivot bar and having a rope receiving opening and an arm extending through the link in the direction of said clamping bar, the free end of said arm being curved with its concaved side in opposition to one of said angular corners of the clamping bar whereby to effectively clamp a rope between itself and said corners, said rope also engaging said other angular corner of the clamping bar, and said corners biting into said rope to prevent relative movement thereof.

1,268,622. SEARCH-LIGHT HOLDER. EDWARD C. REYNOLDS, New York, N. Y. Filed Dec. 4, 1917. Serial No. 205,362. (Cl. 24—81.)



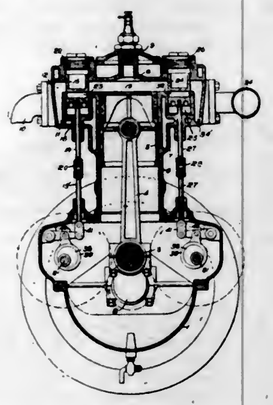
4. A flashlight holder including a clamp presenting resilient arms adapted to be sprung onto the arm of the user, a separate smaller clamp presenting resilient arms to receive a flashlight and reversible relatively to the first clamp to nest within said first clamp or be positioned with the clamps oppositely disposed, back to back, and means on one clamp adapted to yieldingly and detachably receive the back of the other of said clamps either with the clamps in nested relation or back to back, said means including a base swiveled to one clamp and a resilient element connected at one side with said base and disposed laterally of the clamp on which it is carried, said base and resilient element being adapted to detachably receive therebetween the back of said other clamp and being engageable and disengageable by a lateral sliding movement to separate or connect the clamps.

[Claims 1 to 3 not printed in the Gazette.]

1,268,623. INTERNAL-COMBUSTION ENGINE. ANDREW L. RIKER, Bridgeport, Conn., assignor to The "Locomobile" Company of America, New York, N. Y., a Corporation of West Virginia. Filed Mar. 28, 1910. Serial No. 551,844. (Cl. 123—86.)

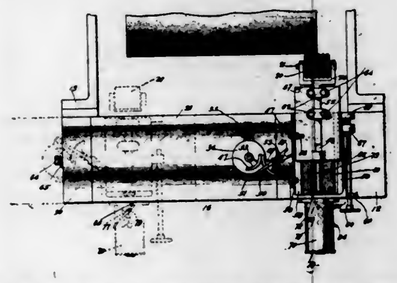
1. An internal combustion engine comprising, in combination, a cylinder, a piston, crank shaft and connecting rod, valve chambers on the side of the cylinder, cylindrical piston slide valves working in said chambers, said valves including an admission valve and an exhaust valve, lateral ports opening from said chambers into said cylinder, intake and exhaust passages alined with said ports, said valves having straight openings therethrough constructed and arranged to be in alinement with said ports and passages when the valves are open, and means for actuating said valves to open said ports in alternation each once for two revolutions of the engine shaft.

2. An internal combustion engine having a cylinder, a piston, crank shaft and connecting rod, transversely arranged admission and exhaust ports opening into said cylinder at the rear end thereof, a cylindrical piston slide valve at the side of the cylinder for controlling each port, said valves having diametrical ports therethrough adapted to register with said admission and exhaust ports re-



spectively, means for actuating said exhaust valve to open the exhaust port once for each two revolutions of the crank shaft, and means alternately for actuating the admission valve to open the admission port also once for each two revolutions of the crank shaft.

1,268,624. AUTOMATIC GRINDSTONE-DRESSER. FRED E. RILEY, Livermore Falls, Me. Filed Mar. 28, 1918. Serial No. 224,306. (Cl. 125—6.)



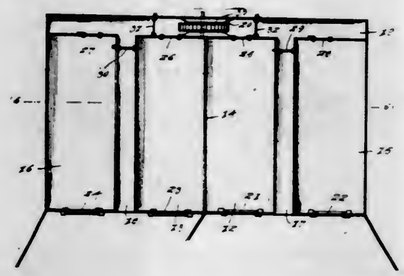
1. In an automatic grindstone dresser, the combination of a main carriage, means to reciprocate the carriage parallel to the face of the stone, a bur, a support for the bur movably mounted upon the main carriage, and automatic means to move said support and bur in a direction perpendicular to the direction of movement of the main carriage.

5. In an automatic grindstone dresser, the combination of a main carriage, a fixed base supporting the same, a stop member connected to the base, a motor acting upon the main carriage to reciprocate it parallel to the face of the stone, reversing means for the motor to cause the automatic return of the main carriage after making one reciprocation, a bur, an auxiliary carriage constituting a support for the bur and mounted upon and movable across the main carriage in directions perpendicular to the direction of movement of the main carriage, an auxiliary motor acting upon the auxiliary carriage and bur and acting in one direction to hold the bur against the stone, controlling devices for the auxiliary motor coöperating with said stop to automatically reverse the auxiliary motor and so withdraw the bur from the stone at a predetermined time, and means actuated by the auxiliary motor in said withdrawing action to reverse the main motor.

8. In an automatic grindstone dresser, the combination of a stationary trough-shaped base having a vertical strut extending across one end and a pair of spaced parallel guide rails extending from the strut end, a piston within the trough, a fixed rod secured at one end to the piston and at the other end to said strut, a carriage mounted on said rails for reciprocations to and fro along the base, said carriage including a cylinder embracing and coöperating with said piston, means to admit power fluid into the opposite ends of the cylinder in alternation to act against said piston and cause the several reciprocations of the carriage, means to reverse said fluid pressure means either automatically or by hand, and a dressing tool carried by said carriage.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,268,625. TIDAL HYDRAULIC-POWER PLANT. THOMAS M. RIVERS, Kissimmee, Fla. Filed May 18, 1916. Serial No. 98,391. (Cl. 138—21.)

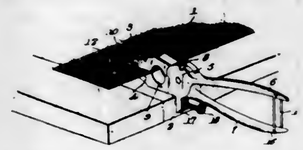


1. A tidal hydraulic plant comprising a body, a central partition extending across the body ani dividing the same into an accumulating reservoir and a discharge reservoir, said accumulating reservoir being of less depth than the discharge reservoir, the partition ending short of the rear wall of the body, a flume located in the space between the partition and the rear wall of the body and establishing a communication between the reservoirs, a gate located at one end of the flume, a water wheel located centrally within the flume, outswinging gates connected to the discharge reservoir, and inwardly swinging gates carried by the accumulating reservoir.

2. A tidal hydraulic plant comprising a pair of accumulating reservoirs, a canal located between the reservoirs, a pair of discharge reservoirs, a canal located between the discharge reservoirs, said canals having their forward ends opening out to the sea, a third canal at the rear end of the reservoir and establishing a communication between the reservoir and the first mentioned canals, a flume located within the third canal, a water wheel in the flume, independently operated means for establishing a communication between each of the reservoirs and the third canal, and independently operated means for establishing a communication between the first and second mentioned canals with the third canal, and gates regulating the flow of water from each of the reservoirs, as and for the purpose specified.

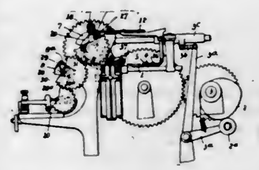
1,268,626. STRETCHING-PLIERS. GEORGE P. ROBERTSON, Bethesda, Md. Filed Nov. 14, 1916. Serial No. 131,296. (Cl. 140—109.)

In a tool designed for stretching unsecured sides or ends of a screen from a frame in an opposite direction from that end or side which has been secured to the frame, a pair of pivoted jaws having handle extensions and means for locking the handles to retain the jaws closed, an angular finger formed on one of said members adjacent the pivot thereof, and a thumb screw threaded through said



finger and adapted to contact with one edge of the frame to lock the tool on the frame and to serve as a fulcrum member for said tool.

1,268,627. SHEET FEEDING AND GUMMING APPARATUS. WILLIAM ROSE, Gainsborough, England. Filed Sept. 20, 1916. Serial No. 121,326. (Cl. 91—18.)



1. In sheet feeding and gumming apparatus, the combination of a reciprocatable slider to pass under the top sheet of a pile of sheets, means on said slider for gripping the lifted sheet and holding it while it is shifted to position to be seized, independent means for gripping the thus shifted sheet, movable segments carrying the last named gripping means and over which segments the sheet lies, means for applying adhesive to the sheet as it passes over the segments and means for delivering and conveying the gummed sheet to position for subsequent operation thereon.

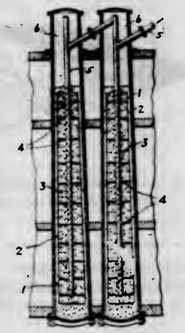
2. In sheet feeding and gumming apparatus, a support for the sheet, said support being recessed at the point at which adhesive is to be applied to the sheet, means for applying adhesive to a portion of the sheet, a piece which normally forms a continuation of the supporting surface for the sheet, and a finger resting upon the sheet when the latter is in position and serving to hold said piece in supporting position, together with means for moving said piece to position beneath said surface when no sheet is in position upon it to shift said piece out of the path of the adhesive applying device.

1,268,628. MANUFACTURE OF GAS. JOHN M. RUSBY and OWEN BROOKE EVANS, Philadelphia, Pa., assignors to The United Gas Improvement Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 11, 1913. Serial No. 794,585. (Cl. 48—210.)

1. In the process of making gas by the distillation of coal or the like the improvement which consists in providing layers or bodies of porous non-melting material traversing the charge of coal from its heated face to its cooler portion and extending through the intermediate layer of melted coal, and leading off the gas from the hotter to the cooler portions of the charge by way of said layers or bodies.

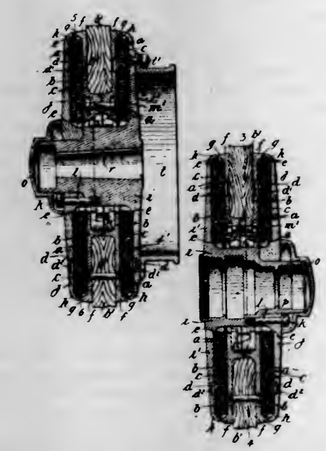
2. In the process of making gas by the distillation of coal or the like, the improvement which consists in heating the charge in a retort, providing an offtake passage out of direct communication with the hotter surface of the charge and in direct communication with the cooler surface of the charge, providing layers or bodies of porous non-melting material traversing the charge and extending through the layer of melted coal from the hotter surface of the charge to the offtake passage at the cooler surface,

and leading gas by way of said layers or bodies from the hotter to the cooler part of the charge.



3. In the manufacture of gas by the distillation of coal that improvement which consists in subjecting the gas to a sufficient pressure to overcome the resistance of the layer of melted coal and thereby forcing the gas to pass through said layer from the hotter to the cooler portions of the charge, and leading off the gas from and through the cooler portion of the charge, substantially as described.

1,268,629. HUB OF VEHICLE-WHEELS. ALBERT EDWARD RUSSELL, Windsor, and WALTER GEORGE CHARLEY, Melbourne, Victoria, Australia. Filed Oct. 29, 1915. Serial No. 58,704. (Cl. 152—43.)



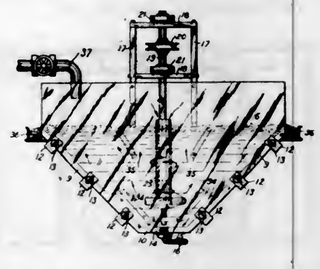
5. A vehicle wheel, comprising in combination, a pair of members associated with the hub of the wheel, a central member associated with the rim of the wheel and arranged between said hub members, an annular cushioning element interposed between said central member and each of said hub members, each cushioning element consisting of an annular disk of resilient material arranged between and united to a pair of annular disks of unresilient material, and means for preventing relative radial and rotational movement between the hub and central members and the adjacent unresilient annular disks.

9. A vehicle wheel, comprising in combination, a member associated with the hub of the wheel, a member associated with the rim of the wheel, an annular cushioning element interposed between said members and prevented from radial movement relatively thereto, said element consisting of an annular disk of resilient material arranged between and united to a pair of annular disks of unresilient material, and projections on each of said unresilient disks, engaging apertures in the adjacent member to prevent relative rotational movement between said disk and member.

10. A vehicle wheel, comprising in combination, a member associated with the hub of the wheel, a member associated with the rim of the wheel, an annular cushioning element interposed between said members and consisting of an annular disk of rubber arranged between and vulcanized to a pair of annular disks of unresilient material, and means for preventing relative radial movement between each of the last mentioned disks and the adjacent one of said members.

[Claims 1 to 4, 6 to 8, and 11 to 14 not printed in the Gazette.]

1,268,630. AERATING DEVICE. JOSEPH P. RUTH, Jr., Denver, Colo. Filed May 31, 1917. Serial No. 171,891. (Cl. 261—93.)



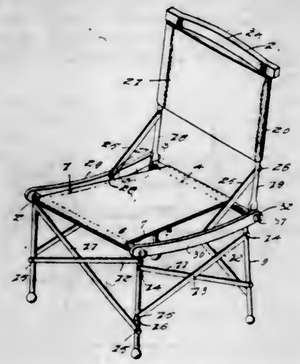
1. Aerating apparatus including a tank, a rotary member located therein and provided with a set of passages extending from its central portion toward its periphery, and a hollow member through which said passages are in communication with the atmosphere above the liquid which the tank is adapted to contain, and another set of similar passages having both ends of each passage in communication with the liquid in the tank.

6. Aerating apparatus including a tank, a member mounted to rotate thereon and composed of a head having a number of passages extending from its central portion outwardly to its periphery, a tubular member connected with the head and extending above the liquid in the tank, said tubular member being open to the atmosphere at its upper extremity and in communication at its lower extremity with the passages of the head, the rotary member having a depending conduit open at its lower extremity to allow the liquid of the tank to enter, the rotary member having a number of passages in communication with the said liquid-receiving conduit, said last named passages being open-ended and extending from the central portion of the rotary member to its periphery.

[Claims 2 to 5 and 7 to 14 not printed in the Gazette.]

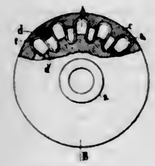
1,268,631. FOLDING CHAIR. CALVIN A. SCHAEFFER, Brentwood, Md. Filed Apr. 3, 1917. Serial No. 159,454. (Cl. 155—8.)

A folding chair comprising a folding frame consisting of front and back supports having reduced ends, said ends being threaded, a flexible seat connecting the front and rear supports, a pair of legs hingedly connected to each of the supports, side supports having notches formed therein adjacent each end to hook over the reduced ends of the front and back supports to hold the same in their extended position, a folding back frame consisting of a pair of back supports, flexible means connecting the back supports, the lower ends of said supports being bifurcated to fit over the reduced ends of the rear support of the seat frame, and means threaded on the reduced ends of the front and rear supports of the seat frame for holding the side bars and the back supports of the back frame in



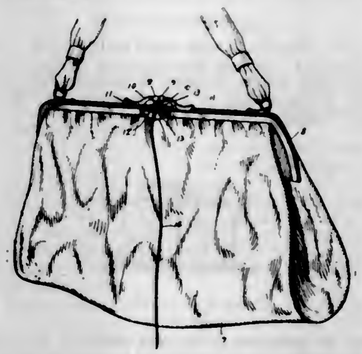
position on the reduced ends of the front and rear supports of the seat frame, as and for the purpose specified.

1,268,632. FLEXIBLE COUPLING. EMILE SCHAUFFELBERGER, Putney, London, England. Filed Sept. 19, 1916. Serial No. 121,048. (Cl. 64—96.)



In a flexible coupling, the combination with two concentric annular members spaced apart and each provided with oppositely-disposed radial grooves, and a resilient band projecting into said grooves and forming a series of U-shaped loops connecting said members, substantially as and for the purposes described.

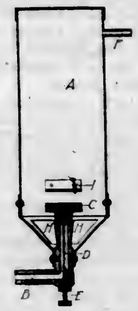
1,268,633. HAND-BAG. ALWIN JOSEPH SCHEUER, New York, N. Y. Filed Jan. 8, 1918. Serial No. 210,869. (Cl. 150—34.)



1. A hand bag comprising a flexible, top-opening bag portion; a rigid closure frame therefor, said frame embodying coöperating pivotally-connected sections; means for freely drawing a strand of thread between said sections, said means embodying a plurality of offset portions of said frame, coöperating to form a delivery passage for a strand of thread of a supply held in said bag; and a fastener for said frame for maintaining the same in closed relation, said fastener extending above and in juxtaposed relation to said offset portions and the passage formed thereby.

[Claims 2 and 3 not printed in the Gazette.]

1,268,634. AUTOMATIC EXPLODER. ERNEST HERMAN SCHRAGA, Salt Lake City, Utah, assignor to Automatic Exploder Company, Salt Lake City, Utah, a Corporation of Utah. Filed Dec. 27, 1915. Serial No. 68,939. (Cl. 116—13.)



1. In a signal device of the class described, for automatically producing periodic explosion, the combination of an explosion chamber, means including an inlet for supplying an explosive medium to said chamber under pressure, and valve means in the chamber coöperating with the inlet and normally held open by the explosive medium, said valve means being exposed to the explosive action and operable incident to the explosion to close the inlet and maintain it closed until the pressure in the chamber becomes normal, and the pressure of the medium becomes operative whereby to prevent pilot-lighting of the explosive supply.

5. In combination, an explosion chamber, an inlet at one end for the supply of an explosive medium, an outlet at the other end, a check valve controlling the inlet yieldable under pressure of the medium to automatically supply the same to the chamber until the latter is full, regulatable tension means connected to said valve for controlling the pressure under which the medium enters the chamber, and ignition means adjacent to the outlet for igniting the medium when it begins to escape from the outlet.

6. In combination, an explosion chamber, an inlet for the supply of an explosive medium, a spring tensioned valve coöperating with the inlet yieldable under pressure of the medium to automatically supply the same to the chamber and operable by the explosion to close the inlet, and means for adjusting the tension on said valve to thereby control the pressure under which the medium enters the chamber and the time required to fill the chamber, whereby frequency of explosion is regulated.

7. In an apparatus for automatically producing audible signals periodically, comprising an explosion chamber, a nozzle at its base for supplying an explosive medium thereto, said chamber having an air inlet adjacent to the nozzle whereby an explosive mixture is obtainable, an outlet at the other end of the chamber, a valve disposed on said nozzle, an adjusting member operably connected to the valve for controlling the action thereof under pressure of the explosive medium, and ignition means adjacent to the chamber outlet for exploding the admixture.

[Claims 2 to 4 not printed in the Gazette.]

1,268,635. ARTIFICIAL BAIT KNOWN AS PLUGS OR WOOD MINNOWS. WILLIAM H. SHUFF, Kansas City, Mo. Filed July 19, 1917. Serial No. 181,569. (Cl. 43—30.)



2. An artificial bait, comprising a buoyant body having its forward portion beveled, and wedge shaped water deflecting means formed integral with the upper portion of said body and extending to a point adjacent the upper end of the beveled forward portion for imparting vibration to the body upon movement of the same through water.

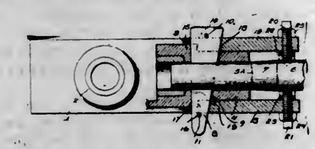
4. An artificial bait comprising a buoyant body having the forward portion thereof beveled, said beveled portion having a tapering recess formed therein, and a wedge shaped water deflecting element formed integral with the upper portion of the body extending to a point adjacent the beveled forward portion.

5. An artificial bait comprising a buoyant body having its forward portion beveled and dished, the forward upper portion of said body being flattened, and a wedge shaped water deflecting element formed integral with the upper portion of the body and extending onto the flattened upper portion of the same.

8. An artificial bait comprising a buoyant tapered body circular in cross section having its forward end beveled and dished, the upper forward portion of the body being flattened, a substantially V-shaped element formed integral with the upper portion of the body and extending onto the flattened portion to a point adjacent the beveled end, the under side of the forward end of said body being recessed.

[Claims 1, 3, 6, and 7 not printed in the Gazette.]

1,268,636. VALVE-ROD CLAMP. CHARLES F. SINSABAUGH, South Waverly, Pa., assignor of one-third to Cecil A. Taylor, Sayre, Ind. Filed June 7, 1917. Serial No. 173,338. (Cl. 74—8.)



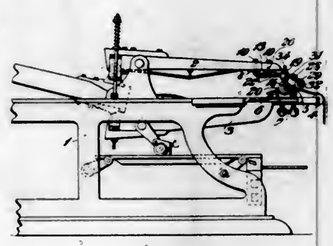
1. In clamping means, spaced clamping plates each provided at one end with an abutment adapted to engage the cross-bar of a cross-head, opposed gripping jaws carried at the other end of said plates adapted to fit about and grip tightly a rod inserted between the same, and means for forcing said plates toward each other.

4. In clamping means, spaced clamping plates each provided at one end with an abutment adapted to engage the cross-bar of a cross-head, opposed arcuate gripping jaws carried at the other end of said plates adapted to fit about and grip tightly a rod inserted between the same, said jaws being of approximately V-shape in cross-section and having their apexes directed inwardly to provide gripping edges for biting into and gripping tightly a rod positioned between said jaws, set screws threaded through said plates and into said jaws for adjusting the jaws toward and away from each other, and means for forcing said plates toward each other.

[Claims 3 and 5 not printed in the Gazette.]

1,268,637. LEATHER-STAKING MACHINE. FRANK F. SLOCOMB, Philadelphia, Pa. Filed Mar. 27, 1912. Serial No. 686,687. (Cl. 149—20.)

1. In a leather staking machine, a lower jaw, a plurality of transverse staking blades upon said jaw, means for relatively adjusting the same longitudinally to said jaw, an opposed upper jaw, transverse staking members upon said upper jaw and arranged to alternate with said blades, a single adjusting member to effect the relative vertical adjustment of the upper jaw staking members, and means for relatively and longitudinally adjusting each of said staking members longitudinally to said upper jaw.



3. In a leather staking machine, a jaw, a T-shaped bracket formed with longitudinal slots in its shank and with slots in the ends of its cross-head and having perforated ears on the sides of its shank, bolts passed through the jaw and through the slots in the shank of said bracket and having means for clamping the latter to said jaw, bearings movable on the ends of the cross-head of said jaw, bolts passed through the slots in the cross-head and engaging said bearings, a roller having its journals in said bearings, a bracket having a forked shank formed with longitudinal slots in its arms and a downwardly curved forward end formed with an inclined cross-head having slots in its ends, a bolt passed through the slots in the arms of said bracket and through the ears of said former bracket and having means for clamping said parts in adjusted position, bearings movable on the ends of the inclined cross-head, bolts passed through the slots in said cross-head and engaging said bearings, and a staking device having its journals in said bearings.

16. In a leather staking machine, a staking jaw, a bracket thereon having laterally extending guides, journals adjustable in said guides, a roller mounted in said journals, a second bracket having its inner end forked and adjustably connected with said first bracket, and having a cross head inclined to the vertical and provided at its forward end with lateral guides, journals adjustable in said cross head guides, a roller mounted in said last named journals, and an adjustable abutment carried by one bracket and bearing against the other bracket.

[Claims 2 and 4 to 15 not printed in the Gazette.]

1,268,638. PROCESS AND APPARATUS FOR TREATING LATEX. EDWARD MARK SLOCUM, Medan, Sumatra, Dutch East Indies, assignor to General Rubber Company, a Corporation of New Jersey. Filed Feb. 23, 1917. Serial No. 150,355. (Cl. 18—2.)



2. In an apparatus of the kind described, in combination, a chamber for coagulating latex, and means cooperating with a wall of said chamber to provide a substantially spiral strip of coagulum.

25. A process of the kind described which comprises introducing latex adapted to expand upon coagulation into a chamber containing a spiral partition, coagulating the latex in the chamber about the partition, fixing the volume of the resultant coagulum and adding a vulcanizing agent thereto.

[Claims 1 and 3 to 24 not printed in the Gazette.]

1,268,639. PROCESS FOR TREATING LATEX AND PRODUCTS OBTAINED THEREBY. EDWARD MARK SLOCUM, Medan, Sumatra, Dutch East Indies, assignor to General Rubber Company, a Corporation of New Jersey. Filed Feb. 23, 1917. Serial No. 150,357. (Cl. 18—50.)

2. A process for treating a mass containing rubber or similar material which comprises combining with the mass an enzym adapted to react with said mass, causing a reaction to take place between said mass and said enzym and adding a vulcanizing agent to the so-treated mass.

22. A mass containing rubber derived from latex to which coagulase has been added.

[Claims 1 and 3 to 21 not printed in the Gazette.]

1,268,640. INSECT-DESTROYER. WILLIAM F. STEARNS, Exeter, N. H. Filed June 2, 1914. Serial No. 842,396. (Cl. 43—1.)



1. In an insect destroyer, a perforate flexible body portion comprising a plurality of superposed reticulate metallic sheets, the meshes of each of said sheets being out of alinement with those of the sheets next adjacent thereto and flexible means embedding and uniting the entire peripheral portions of said sheets.

3. An insect destroyer comprising a rigid handle and a flexible body portion, said body portion comprising a plurality of superposed reticulate thin metallic meshes, with meshes of said disks being angularly disposed with respect to the meshes of the disks superposed thereon and flexible means embedding and uniting the peripheral portions of said disks and connecting the handle with the body portion.

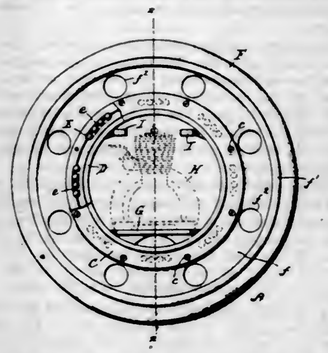
5. An insect destroyer comprising a rigid handle and a flexible body portion, said body portion consisting of a plurality of woven wire sheets and a flexible frame in which said sheets are secured, some of said wires being arranged parallel with and some diagonally to the axis of the handle, the rigidity of the said diagonally disposed wires being greater than that of the wires disposed parallel to said handle and said handle being rigidly secured to said frame.

[Claims 2 and 4 not printed in the Gazette.]

1,268,641. WHEEL FOR MOTOR-CYCLES. LEONARD D. STEPHENSON, New York, N. Y., assignor of one-third to Edward T. Paull, New York, N. Y. Filed Feb. 12, 1917. Serial No. 147,974. (Cl. 180—10.)

1. In a structure of the class described, the combination of a wheel provided with an interior channel and with a permanent flange bounding one wall of said channel, a removable flange bounding the other wall of said channel, an annular member positioned partly within the channel and between the wheel flanges, and bearing balls coöperating with the annular member and the wheel, said annular member being provided with means for mounting a motor or engine.

2. In a structure of the class described, the combination of an annular member provided interiorly thereof with means for supporting an engine or motor, a wheel provided with a channel internally thereof, within which channel the annular member is positioned for the wheel to rotate freely with respect to said member, and means for effecting an overlapping relation intermediate said wheel and the inner marginal portions of said annular member.

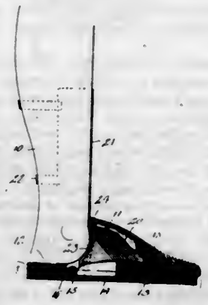


3. In a structure of the class described, the combination of an annular member provided interiorly thereof with means for supporting an engine or motor, a wheel provided with a channel internally thereof, within which channel the annular member is positioned for the wheel to rotate freely with respect to said member, and marginal flanges extending from the wheel at the respective sides of the channel therein, said marginal flanges having overlapping contact with the inner marginal portion of said annular member.

4. In a structure of the class described, the combination with a wheel provided with an internal channel, of an annular member having motor-carrying means positioned within the open space thereof, said annular member being provided with grooves in the side edges at the inner marginal portion thereof, and flanges unitary with the wheel, said flanges being positioned to enter said grooves at the inner marginal portion of the annular member.

5. In a structure of the class described, the combination of a wheel provided at the respective sides thereof with flanges positioned to form an annular recess, an annular member provided in the open space thereof with means for supporting a motor, said annular member being positioned between said flanges and within the annular recess, means for effecting an overlapping relation between the flanges and the inner marginal portion of the annular member, and bearing balls in contact with the exterior marginal portion of the annular member and with the inner surface of the annular recess of the wheel.

1,268,642. ARTIFICIAL LIMB. EDWARD SWEENEY, Norristown, Pa. Filed July 10, 1917. Serial No. 179,716. (Cl. 3—7.)



1. In a device of the character described, the combination with a flexible sole portion, of a toe casing attached

to the sole portion, a cushion in the toe casing, an arch pivoted to the sole portion and extending into the toe casing to coöperate with the cushion therein, an attaching member formed with the arch, and a cushioned heel portion.

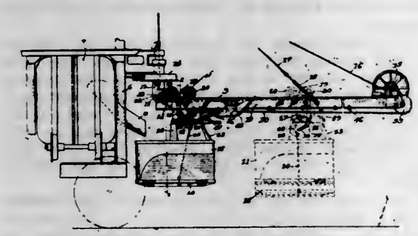
2. In a device of the character described, the combination with a flexible sole portion, of an underlying cushion sole, a toe casing attached to the sole portion, an arch pivoted to the sole portion, an attaching member projecting upwardly from the arch, means for permitting of a bending movement between the attaching member and arch, and a cushion in the toe casing and having the arch associated therewith.

3. In a device of the character described, a flexible ribbed sole portion, a toe casing therefor, a combined arch and attaching plate pivoted to the sole portion, a cushion in the toe casing and engaging by the arch, and a heel cushion on the rear end of said sole portion.

4. In a device of the character described, the combination with a flexible sole portion, of a toe casing attached thereto, an arch pivoted to the sole portion and projecting into the toe casing, and a cushion in the toe casing and having one portion engaged by the forward part of the arch, and the other portion projecting beyond the front end of the toe casing.

[Claim 5 not printed in the Gazette.]

1,268,643. CONCRETE-DISTRIBUTING MACHINE. WALTER F. TESCHAN, Milwaukee, Wis. Filed Nov. 27, 1917. Serial No. 204,158. (Cl. 214—59.)



1. In a concrete distributing apparatus, the combination, with a boom and a carriage movable back and forth along the same, of a dumpable bucket carried by the carriage, and means inoperable on the forward movement of the carriage and engaging the boom on the backward movement of the carriage to dump said bucket.

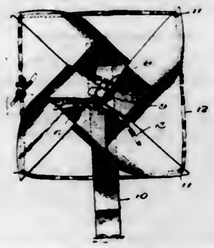
4. In a concrete distributing apparatus, the combination, with a boom and a carriage movable back and forth along the same, of a bottom dump bucket, means for opening and closing the bottom of said bucket including a rotatable shaft, and automatic trip means including a two-part crank arm carried by said shaft, the parts of said crank being movable with respect to each other, one part of said crank engaging the boom on the backward movement of the carriage to turn said shaft to discharge the bucket.

6. In a concrete distributing machine, the combination, with a boom and a carriage movable back and forth along the same, of a bucket provided with dumping bottom doors, door operating means comprising a shaft, a crank and linkage connecting said crank with said doors, and automatic trip means for the door operating means comprising a crank secured to said shaft, an arm yieldingly pivotally connected to said crank and adapted to engage the boom to trip the door operating means to discharge the bucket.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,268,644. PINWHEEL. OWEN K. TRUITT, Garrett Park, Md. Filed June 21, 1917. Serial No. 176,070. (Cl. 46—14.)

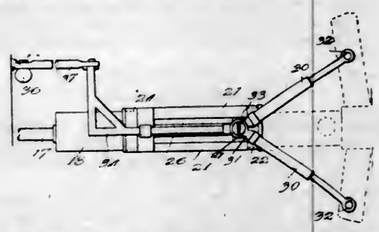
1. A pin wheel comprising a face element; a back element foldable from the outer edges inwardly over the face element; means for securing the folded portions of the back-element together at a point intermediate the outer edges of the face-element; and a blank disposed upon the face-element and embraced by the folded portions of the back-element when they are secured together.



2. As an article of manufacture, a pin wheel or the like comprising a face portion of one color; a back portion of a different color; said portions being cut from their corners toward their center and provided centrally and on the corners with openings adapted to be brought into register; said corners being folded over, perforations therein being in alinement with the opening of the center of the portions; a handle member; means for securing the corners with their perforations in approximate alinement to said handle member whereby the color of the back portion will be imposed upon the color of the face portion; and a blank provided with a perforation disposed upon said face portion and embraced by said corners when folded into position and secured to said handle.

3. As an article of manufacture, a pin wheel or the like comprising a face portion of one color; a back portion of a different color; said portions being cut from their corners toward their center and provided centrally and on the corners with openings adapted to be brought into register; certain of said corners being folded over, the free outer corners forming vanes, perforations therein being in alinement with the opening of the center of the portions; a handle member; means for securing the corner members with their perforations in alinement to said handle member whereby the color of the back portion will be imposed upon the color of the face portion; and a bracing member secured to the free outer edges of each vane and connecting the vanes one with the other.

1,268,645. MOTOR-CYCLE COURSE-INDICATOR. UMBERTINO UMBERTO, Ottawa, Ill. Filed July 7, 1917. Serial No. 179,157. (Cl. 116—31.)

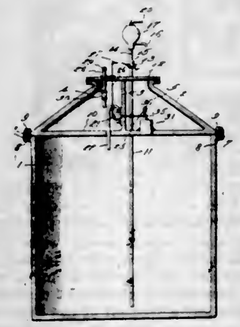


2. In a device of the character described, the combination with the clutch lever and steering gear of a motorcycle, of a signal arranged thereon, air compressing means communicating with said signal, means connected with the steering gear and the piston of said air compressing means for imparting motion thereto, and other means connected with said clutch lever and the piston of the air compressing means for operating the same independently of the steering gear.

5. In a device of the character described, the combination with the clutch lever and steering gear of a motorcycle, of an air compressing pump arranged on the motorcycle, a plurality of laterally extending guides carried by the pump, a cross head secured to the piston of the pump slidable within said guide, telescopic conecting rods pivotally engaged with said cross head and the steering gear, an angle arm engaged with the clutch lever and having pivotal connection with said cross head, a signal, and air conducting means communicating with the pump and signal for operating same.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,268,646. LIQUID-FOUNTAIN. ADOLF P. C. URBIN, Jr., Mount Vernon, N. Y. Filed July 9, 1917. Serial No. 179,443. (Cl. 225—18.)



1. In a liquid dispenser, the combination with the container divided into compartments constituting a tank for the liquid and a chamber for gas, a liquid outlet pipe leading from the bottom of said tank upward, and a faucet whose stem has a coupling removably attached to said pipe; of a gas valve in said chamber, the inlet end of its casing opening into the chamber and the outlet end thereof communicating with said tank, means for actuating said valve manually from the exterior of the dispenser, a regulator actuated by the pressure within said tank, and connections between the regulator and valve for opening the latter when the pressure falls.

2. In a liquid dispenser, the combination with the container divided into compartments constituting a tank for the liquid and a chamber for gas, a liquid outlet pipe leading from the bottom of said tank upward, and a faucet whose stem has a coupling removably attached to said pipe; of a gas valve in said chamber, the inlet end of its casing opening into said chamber and the outlet end thereof communicating with said tank, means for actuating said valve manually from the exterior of the dispenser, a cup communicating with the upper portion of the tank, a piston therein, a spring for moving said piston downward against the pressure within the tank, a piston rod rising from the piston through the upper end of the cup, a lever on the stem of said valve, and connections between said lever and rod, for the purpose set forth.

3. In a liquid dispenser, the combination with the container divided into compartments constituting a tank for the liquid and a chamber for gas, a liquid outlet pipe leading from the bottom of said tank upward, and a faucet whose stem has a coupling removably attached to said pipe; of a gas valve in said chamber, the inlet end of its casing opening into the chamber and the outlet end thereof communicating with said tank, a gas feed pipe to said chamber, a check valve in said pipe, a cup communicating with the upper portion of the tank, a bridge across the interior of the cup, a piston movable in the cup beneath the bridge, an expansive spring between the bridge and piston, a rod leading from the piston up through the spring and bridge, a lever on the stem of said valve, and connections between said lever and rod, for the purpose set forth.

4. In a liquid dispenser, the combination with a container comprising an open-topped body constituting a tank, a hollow cover whose bottom plate closes the top of said tank, and means for connecting these elements in an air-tight manner, a liquid outlet pipe leading from a point near the bottom of said tank upward through the cover and having a coupling above the top plate of the latter, and a faucet whose stem has a companion coupling; of a partition within the cover dividing it into a gas chamber and a regulator chamber, a gas valve whose casing is mounted on said partition with its inlet end opening into the gas chamber and its outlet end communicating through the bottom plate of said cover with the interior of the tank, means for supplying gas under pressure to the gas chamber, the stem of said gas valve leading through said partition, a lever fast on said stem, and a pressure-actuated regulator within the regulator chamber communicating through the bottom plate of the cover with the interior of the tank and connected with the other end of said lever, for the purpose set forth.

1,268,647. LEADING-IN CONDUCTOR. WILLIAM LLOYD VAN KEUREN, North Bergen, N. J., assignor to General Electric Company, a Corporation of New York. Filed Dec. 29, 1913, Serial No. 809,208. Renewed Feb. 7, 1918. Serial No. 215,926. (Cl. 91—70.)

1. The method of improving the seal forming property of a leading-in conductor other than platinum which consists in the formation on the surface thereof of a moisture free coating of a borate.

2. The method of improving the seal forming property of a leading-in conductor other than platinum which consists in the formation on the surface thereof of a baked-on coating of a borate.

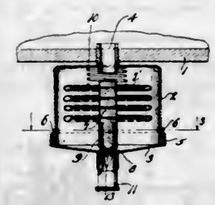
8. The method of imparting to an electrical conductor of a base metal or metals having a film of oxid on its surface, the property of platinum, of readily forming a persistent air-tight joint with glass which consists in the formation on the surface thereof of a baked-on coating of a borate.

10. A leading-in conductor composed of a base metal or metals and having a baked-on coating of borate.

22. A leading-in conductor consisting of a core of an alloy of nickel and iron and a copper sheath having a moisture free coating of a borate.

[Claims 3 to 7, 9, and 11 to 21 not printed in the Gazette.]

1,268,648. THERMOSTATIC SAFETY-VALVE. JOHN N. VAN METER, Norton, Kans., assignor of one-third to Frank W. Kidder and one-third to Fred S. Hazelton, Norton, Kans. Filed June 26, 1917. Serial No. 177,047. (Cl. 137—35.)



6. In a device of the class described, an expansion member adapted to be subjected to the temperature of surrounding fluid, and drainage means for said fluid automatically controlled by said member, said drainage means being adjustable to render the automatic control inoperative to permit drainage of the fluid at will.

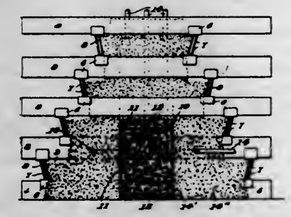
7. In a device of the class described, an expansion member adapted to be subjected to the temperature of surrounding fluid, manually operable drainage means including a discharge port normally maintained closed by the expansion member, and a yieldable mounting for said expansion member whereby to permit the latter to yield

upon operation of the drainage means to render the expansion member inoperative and simultaneously effect drainage of the fluid.

8. In a device of the class described, the combination with a water system, of a thermostatic safety valve therefor comprising a casing provided with attaching means and an inlet for the fluid, a draining member for said casing provided with a valve seat, an expansion device disposed in said casing and subjected to the temperature of the contents thereof, said device having a valve controlling the discharge of the contents through said draining member, said draining member having an auxiliary discharge outlet normally closed when the expansion member is operable, said auxiliary discharge being rendered operative when the expansion member is rendered inoperative.

[Claims 1 to 5 and 9 to 12 not printed in the Gazette.]

1,268,649. GARDENING-FRAME. ERNEST A. VELDE, Cedar Rapids, Iowa. Filed Feb. 18, 1918. Serial No. 217,806. (Cl. 47—27.)



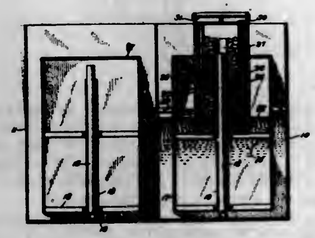
1. A gardening frame including crossed pairs of side and end boards arranged in rectangular form and alternately superimposed one above the other in edgewise relation, and corner pieces in the form of clips, each having means engaging and holding a side and an end board outwardly inclined and substantially at right angles to each other.

4. A gardening frame including alternately superimposed pairs of side and end boards arranged in crossed edgewise relation substantially at right angles to each other and in stepped rectangular form, and means to retain said side and end boards in operative position.

7. The combination with a gardening frame of the class described, of a combined fertilizing and irrigating device therefor including a box having perforated sides and divided into superimposed fertilizer containing compartments by horizontal partitions, and means to supply water to said compartments.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,268,650. ACETYLENE-GAS GENERATOR. ARTHUR L. WALL, Boonville, N. C. Filed Oct. 11, 1916. Serial No. 125,037. (Cl. 48—41.)



1. In a gas generator the combination with a tank having a supply pipe arranged vertically therein, of a vertically movable gas receiving bell arranged within said tank, spaced superimposed spiders arranged in said bell, a hollow tubular member connecting said spiders and projecting an appreciable distance above the uppermost spider, said tubular member slidably mounted upon said supply pipe, whereby the latter constitutes a guide for the bell, and a carbid container partly disposed within the bell and supported upon the uppermost spider.

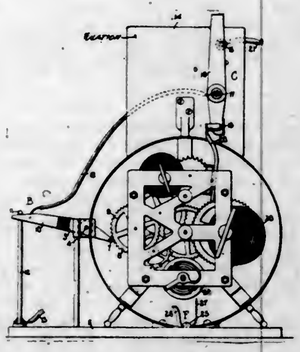
[Claims 2 to 4 not printed in the Gazette.]

1,268,651. CASTER. HENRY WALTER, Sanders, Idaho. Filed Dec. 2, 1916. Serial No. 134,638. (Cl. 16—165.)



In combination with a stove leg provided in the front face thereof with a vertically extending channel, and a hollow base provided on and beyond the lower end of the leg having a slot communicating with the channel, a caster plate movably supported in said base, an operating lever of T-form in cross section having a reduced shank and pivotally supported in the slot of the base for causing a downward vertical movement of the caster-plate, the reduced shank of the operating lever being curved throughout its length to conform with the contour of the leg and adapted to rest in the vertically extending channel with the head thereof contacting with the front face of the leg at points to opposite sides of said channel when the lever is in caster engaging position, and a roller rotatably mounted in the lower end of the operating lever, substantially as and for the purpose specified.

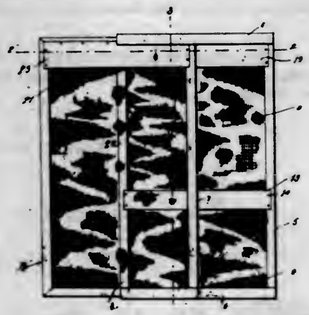
1,268,652. ELECTRIC FLASHER. JAMES WALTON, Phoenicia, N. Y. Filed June 13, 1917. Serial No. 174,487. (Cl. 161—27.)



1. The combination of two unitary, self-contained devices, one device being an alarm clock including a casing having an opening, and the other device being a circuit make and break attachment comprising a base on which the clock is mounted, a support on the base, a lever fulcrumed on the support and having an extremity extending into the opening and engaging a gear wheel of the clock whereby the latter oscillates the lever, a contact on the lever, a contact on the base and engageable by the contact on the lever, and a lamp circuit controlled by the contacts.

[Claim 2 not printed in the Gazette.]

1,268,653. WINDOW OR DOOR SCREEN. ALFRED WHETSTONE, Mount Carmel, Pa. Filed July 12, 1917. Serial No. 180,130. (Cl. 156—37.)

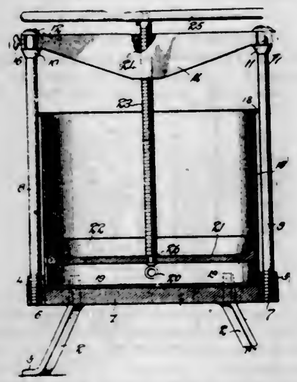


1. A screen structure including a frame, a screen section secured in the frame, said screen structure having an exit opening therein, the screen wires at the edge of the opening being bent laterally to provide guards, and a plate secured to the frame at the side of the opening opposite the guards and having the surface adjacent the opening darkened.

2. A screen structure including a frame, screen sections secured to the frame and arranged in spaced relation to provide an exit opening, a plate secured to the frame laterally of the exit opening and provided with an angular edge directed outwardly toward the screen sections, and a clamping member carried by the forwardly directed edge of the plate receiving the lower edge of the upper screen section.

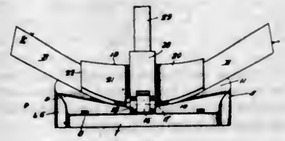
3. A screen structure including a frame, supporting flanges carried by the frame, a relatively movable frame supported in the flanges, screen sections secured in the frames and having exit openings in the upper portions thereof, and plates secured to the upper portions of the two frames inwardly of the exit openings and arranged in spaced relation to the screen sections to provide a circuitous passage between the exit openings.

1,268,654. GREASE-GUN. JAMES L. WHITE and STUART C. BAKER, Southampton, N. Y. Filed July 7, 1916. Serial No. 107,956. (Cl. 221—79.)



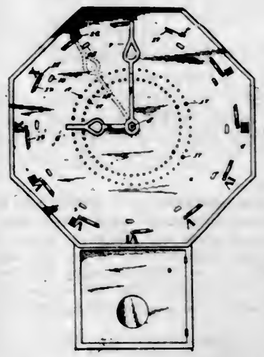
A grease gun including a base, a pair of diametrically opposed upstanding enlargements on the marginal edge of said base, said enlargements having threaded openings therein, upstanding lugs on the edge of said base, a receptacle mounted on the base and held in position by said lugs and enlargements, said receptacle having an outlet therein adjacent its bottom, a pair of standards having their lower ends threaded for engagement with the enlargements, an outwardly flared upper edge on said receptacle engaging the standards to steady the receptacle, annular shoulders formed on the standards adjacent their free ends, head portions formed on the free ends, a transverse supporting frame, hook members formed on the ends of the supporting frame adapted to detachably engage the standards between said heads and shoulders, a piston mounted within said receptacle, and means associated with the piston and supporting frame to actuate the same.

1,268,655. PRESS FOR PLOW-SCRAPERS. ROBERT P. WILLIAMS, Winder, Ga. Filed June 5, 1917. Serial No. 172,940. (Cl. 153—15.)



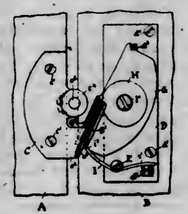
A press for bending farming implements comprising a base plate, an angularly arranged table formed contiguous therewith, a block on said table and centrally provided with a projection, a movable member connected with the base plate for vertical swinging movement and formed on the under face and centrally thereof with a depression having an opening through which the said projection passes, a convexed lip formed on one edge of the movable member and adapted to engage with one edge of the block upon the closing of the movable member to clamping position, substantially as and for the purpose specified.

1,268,656. CALL-BELL CLOCK. JACOB V. WILLIFORD, Mount Vernon, Ill. Filed Nov. 6, 1915. Serial No. 60,053. (Cl. 161—3.)



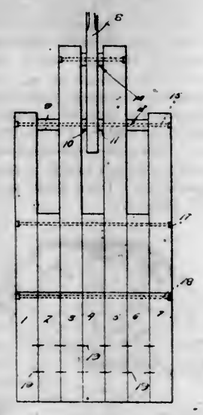
In an automatic call clock comprising a dial provided with a plurality of circumferentially arranged contacts engageable by the hands and in circuit with a source of current and a signal device; means for prolonging the duration of the circuit through a selected contact, comprising a series of conducting plates arranged in circumferential alinement with said contacts in advance thereof and in the path of travel of a hand, each of said plates being provided with longitudinal slots, and screws passing through said slots and into the dial, whereby selected ones of said plates may be moved into contact with and serve as a continuation of the adjacent contact.

1,268,657. SCREEN-DOOR CATCH. RUDOLPH G. WINTER, Milwaukee, Wis. Filed Dec. 13, 1915. Serial No. 66,520. (Cl. 70—119.)



In a screen door catch, two parts comprising a door and its casing, a stationary member on one of said parts, a pivotally movable member on the side of the other of said parts nearest said first part when the door is open, said pivoted member having a cam ear with oppositely sloping cam surfaces aimed to be conctable with the stationary member, and one of said surfaces being of gradual slope to retard the closing of the door and the other being of steep slope to retard the opening of the door, and means assisting said pivoted member to a position where it may be engaged by said stationary member.

1,268,658. BAKER'S PEEL. ALBERT H. WOOLLEY, San Francisco, Cal. Filed May 6, 1916. Serial No. 95,943. (Cl. 107—67.)



A baker's peel consisting of a plurality of tapered flat strips of several lengths of wood, the strips being arranged alternately short and long with two of the longest strips on opposite edges of one of the shortest strips at the center, bolts for securing the strips together, a handle bolted to the two longest strips, one of the bolts passing through the handle also passing through the intermediate length strips.

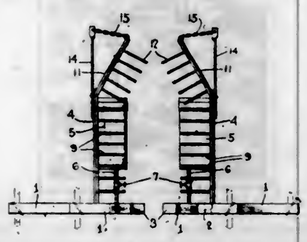
1,268,659. GAME AND GAME APPARATUS. JOHN LLOYD WRIGHT, Chicago, Ill. Filed Sept. 25, 1916. Serial No. 121,972. (Cl. 46—64.)



2. Player pieces for checker boards comprising a hobby-horse and a man, said horse consisting of a flat piece notched to represent a body and head and having legs secured thereto, said man being a piece of material of general cylindrical shape having its lower end slotted longitudinally to form legs and having flanges at the lower ends of the legs, said flanges enabling the man to stand alone and said slot enabling the man to be placed astride the horse whereby said man and horse can be used either separately or as a single unit.

[Claim 1 not printed in the Gazette.]

1,268,660. BOLL-WEEVIL DESTROYER. TROY W. YOUNG, Hamilton, Tex. Filed Jan. 5, 1918. Serial No. 210,486. (Cl. 43—1.)



1. A weevil destroyer comprising a tray, means for attaching the same to a support, a burner located in the tray, a panel mounted upon the tray and carrying teeth, and a second panel hingedly connected with the first mentioned panel and also carrying teeth.

[Claim 2 not printed in the Gazette.]

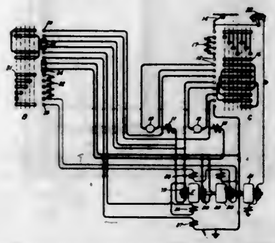
1,268,661. TORPEDO-GUARD. MARCIN ZAJAC, Chicopee, Mass. Filed Dec. 8, 1917. Serial No. 206,246. (Cl. 114—240.)



1. A torpedo guard comprising hangers, outwardly disposed arms carried by the hangers, rail sections attached to the hangers, rail sections attached to the arms, the said rail sections constituting complete rails which surround the hull and which are spaced from each other and vertically disposed pickets passing loosely through both sets of rail sections.

[Claim 2 not printed in the Gazette.]

1,268,662. ELECTRICAL SYSTEM OF POWER TRANSMISSION. ERNST F. W. ALEXANDERSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 22, 1916. Serial No. 92,860. (Cl. 172—179.)



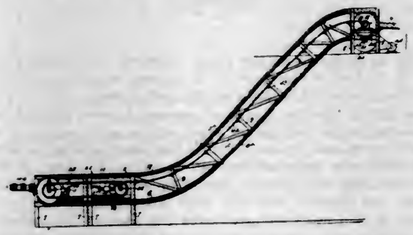
1. A regenerating braking system, comprising a series traction motor, an exciter arranged to control the excitation of the field winding of said motor, a shunt circuit around said field winding, and a reactance in said shunt circuit comprising a field winding for said exciter.

2. In combination, a dynamo-electric machine having a field winding in series with its armature, an exciter armature and a field winding therefor connected in series with each other, and a local circuit comprising said first mentioned field winding and said exciter armature with its series field.

3. In a regenerating braking system, the combination with a dynamo-electric machine, having a field winding and adapted to operate alternatively as a motor or as a generator, of an exciter arranged to control the excitation of said dynamo-electric machine, said exciter having a field winding which is so arranged and connected that it carries the sum of the currents in the armature and field winding of said dynamo-electric machine during the generator operation thereof.

[Claims 4 to 7 not printed in the Gazette.]

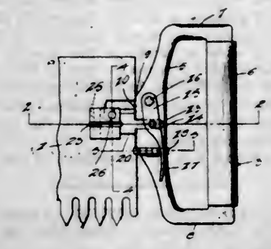
1,268,663. CONVEYER. JOHN M. ALVEY, Louisville, Ky., assignor to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio, a Corporation of Ohio. Filed Feb. 15, 1918. Serial No. 217,423. (Cl. 193—8.)



1. An elevator comprising a substantially horizontal receiving end portion and an inclined portion, said elevator embodying a transverse shaft at its entrance end, sprocket wheels upon said shaft, chains passing over said sprocket wheels, transverse flights carried by said chains, a bed over which articles are propelled by said flights, said bed terminating short of said shaft, a conveyer apron extending from the termination of said bed to the entrance end of the elevator and means carried by the aforesaid shaft over which said apron passes and by which the apron is driven.

[Claims 2 to 5 not printed in the Gazette.]

1,268,664. HANDLE FOR CROSSCUT-SAWS. AMUND AMUNDSON, Bellingham, Wash. Filed Dec. 15, 1915. Serial No. 66,971. (Cl. 145—111.)



The combination with a saw blade having an approximately L-shaped slot, of a plunger consisting of a head having saw-blade receiving slots arranged at right angles, and a round outer portion, pins extending across the slots of the head for engaging the slot of the saw blade, a handle composed of an inner attaching portion and an outer grip portion connected at its ends to the attaching portion, the latter having a central opening to receive the round portion of the plunger and provided with a saw blade receiving groove and, said attaching portion being also provided with a central slot at one side of the opening, a projection carried by the plunger and operating in the slot of the said ataching portion of the handle, a lever extending along the said attaching portion and crossing the slot and provided thereat with an opening receiving said projection, said lever being pivoted at one side of the slot, and a ratchet bar mounted on the said attaching portion at the opposite side of the slot and engaged by the said lever.

1,268,665. STUD-AND-SOCKET FASTENER. ANDREW G. ANDERSON, Boston, Mass., assignor to Carr Fastener Company, Cambridge, Mass., a Corporation of Maine. Filed June 26, 1916. Serial No. 105,822. (Cl. 24—218.)

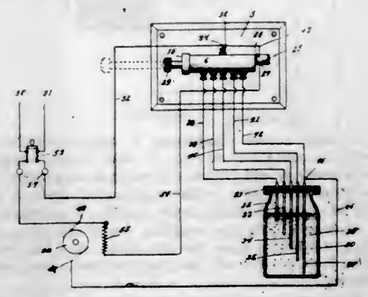


1. A fastener having, in combination, a socket member including an apertured holder and resilient jaws located within said holder and exposed in the aperture thereof, and a stud adapted to be inserted in said holder between said jaws and to oppositely displace the latter, and having an inwardly facing shoulder adapted to engage said jaws, the stud and jaws being formed to coöperate in opposing displacement of the jaws by strain tending to cause a rectilinear outward movement of the socket member, and in causing displacement of the jaws by strain tending to tip the socket member in a predetermined direction, and the holder being provided with means permitting inward flexure of the jaws and positively locking the jaws when they are thus flexed.

13. A fastener having, in combination, a holder provided with an apertnre, a resilient member arranged within said holder and normally movable transversely of said aperture, a stud adapted to be inserted in said aperture, said stud having a shoulder constructed and arranged to be engaged by said resilient member, and means on said holder arranged outside of the normal path of movement of said resilient member adapted to be engaged by said resilient member to prevent the disengagement of said resilient member from said shoulder.

[Claims 2 to 12, 14, and 15 not printed in the Gazette.]

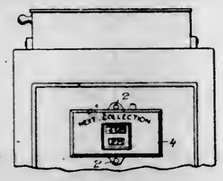
1,268,666. ALL-WATER RHEOSTAT. WILLIAM A. ARCHIBALD and HAROLD W. THOM, Tyler, Pa.; said Thom assignor to said Archibald. Filed Sept. 11, 1917. Serial No. 190,837. (Cl. 219—57.)



1. A rheostat comprising a receptacle containing a liquid, a plurality of electrodes of varying sizes immersed in said liquid, an operating member having a plurality of terminals thereon, means for connecting each terminal with one of the electrodes, and a circuit closer adapted to have step by step engagement with said terminals.

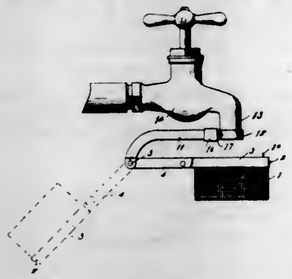
2. A rheostat comprising a receptacle having a liquid therein, a plurality of electrodes of varying sizes immersed in said liquid, an operating device comprising a hollow body, a plurality of terminals on said body, means for connecting each terminal with an electrode, a sliding member in said body, a contact thereon adapted to have step by step engagement with said terminals and a terminal in permanent contact with said sliding device and connected with the circuit.

1,268,667. TIME-INDICATOR FOR MAIL-BOXES. WILLIAM A. BARNEY and WILLIAM J. BARNEY, Detroit, Mich. Filed Jan. 7, 1914. Serial No. 810,903. (Cl. 40—70.)



In a time indicator for mail boxes, a box wall, a nut rotatable in said wall and having the inner end thereof flanged and spaced from the inner side of said wall, a hollow knurled button on said nut confronting said wall and secured to and inclosing the flange of said nut, a screw mounted in said nut and protruding from the outer end thereof, a disk on said screw against the head thereof, a nut on said screw against the outer end of said rotatable nut retaining said disk against the head of said screw, and a flat detent engaging the facet of said nut and exerting a pressure against the facet of said nut to hold both of said nuts against accidental rotation relative to said front wall.

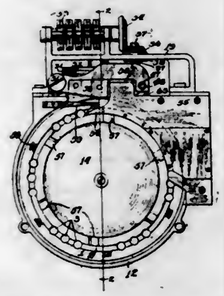
1,268,668. SOAP-HOLDING ATTACHMENT FOR FAUCETS. ROBERT B. BARRÈRE, Berkeley, Cal. Filed Apr. 13, 1917. Serial No. 161,884. (Cl. 45—28.)



1. A soap holder comprising a supporting frame, a foraminous container carried by said frame, supporting arms formed on said frame, attaching arms pivoted to the supporting arms and being constructed from a single length of material, said single length of material being bent to form a loop for receiving the nozzle of a spigot, and a cuff slidable upon the attaching arms for contracting the loop portion of the material upon the spout of the spigot.

2. A faucet soap holder comprising an arm, means adapted to secure one end of the arm to the nozzle of a faucet with the arm extending rearwardly from the nozzle in a horizontal position, the rear end of the arm being curved downwardly and rearwardly, a second arm, a container secured to one end of the second arm, and a friction pivot connecting the other end of the second arm to the lower rear end of the first arm to permit the second arm to support the receptacle horizontally below the nozzle or rearwardly beyond the nozzle.

1,268,669. FARE-REGISTER. HUGO J. BAUR, Chicago, Ill., assignor, by mesne assignments, to William P. Butler, Berwyn, Ill. Filed Feb. 6, 1915. Serial No. 6,435. (Cl. 235—32.)



1. In a device of the class described the combination with an inclined coin carrying element, of a bevel driving pinion connected on the rear thereof, a crank, a bevel pinion driven thereby, a pair of connected bevel pinions one meshing with said latter bevel pinion and connected to said crank and the other with the bevel pinion mounted on said coin carrying element to drive the same, a mutilated gear and grooved cam element mounted co-axially with one another and with said latter pair of bevel pinions, a coin lever mounted over the face of the element, a register, and mechanism operated into engagement with said cam and by said cam moved into position to entrain said register and said mutilated gear to effect registration of a coin on said coin carrying element.

4. In a device of the class described, a coin carrying element, a register, a slide shaft connected with the register, a cam element having a plurality of cam grooves, a pin on said slide shaft normally engaged in one of said grooves to prevent actuation of the register, a lever contacted by the coins on said carrying element for adjusting the pin to engage in any of the other grooves in the cam element, mutilated gears and a pinion movable with said pin to engage one of the mutilated gears for driving the register.

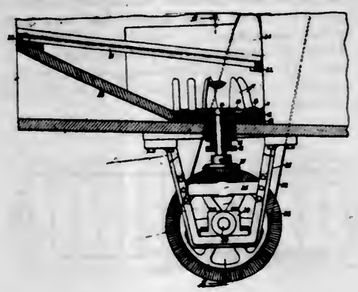
11. In a device of the class described, a register, a coin carrying element, a mechanism normally out of gear adapted to actuate the register, a lever shifted by the coin for adjusting the mechanism into gear, a cam element provided with a continuous groove and a plurality of interrupted grooves, a member engaged in the continuous groove to prevent accidental actuation of the register and shifted by each actuation of the lever to engage in one of the interrupted grooves to thereby hold the mechanism in mesh until the coin has been registered, said cam adapted to force the lever back to normal after the value of the coin is registered and to force the member back into the continuous groove.

[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,268,670. GOLD-SAVING DEVICE. ARTHUR BAYTON, Manilla, Philippine Islands. Filed Sept. 26, 1917. Serial No. 193,332. (Cl. 83—6.)

1. In an apparatus of the class described, a sluice box, and a disintegrating wheel disposed in the box and extending across the same, forming part of the bottom surface thereof, over which the material may flow across the face of the wheel from one side to the other.

2. In an apparatus of the class described, a disintegrating wheel, means to mount the same in a sluice box to range transversely across the same at the bottom and form part of the bottom surface, and disintegrating elements disposed about the upper face of the wheel and projecting upwardly therefrom perpendicularly to the flow of material passing through the sluice box to intercept and break up the material directed to the wheel.

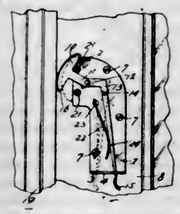


3. The combination with a sluice box, of a disintegrating wheel turning approximately horizontally therein on the bottom thereof, means to drive said wheel, and spaced protective bars disposed above the wheel and extending from a point beyond the front thereof to the opposite side of the wheel to carry rocks past the latter to prevent damage to the wheel.

4. The combination with a sluice box, of a drop chute therein, a disintegrating wheel in the sluice box at the bottom and disposed across the same at the lower end of the said drop chute, means to drive the said disintegrating wheel, and spaced protective bars mounted in the sluice box longitudinally thereof above the said disintegrating wheel.

5. An apparatus of the class described, including a sluice box, and a disintegrating wheel mounted in the sluice box and extending transversely across the same at the bottom to constitute a portion of the bottom surface of the sluice and over which the material will be required to flow in passing said wheel, said wheel having disintegrating elements projecting from its upper surface perpendicular to the direction of the path of flow of the material passing through the sluice box, and means to revolve said wheel to cause the disintegrating elements to be moved in opposite directions across the flowing material as the latter passes over the surface of the wheel from one side thereof to the other.

1,268,671. HOLDER FOR SLIDING DOORS AND WINDOWS. JAROME F. BENSON, Lorenzo, Tex. Filed Apr. 30, 1917. Serial No. 165,508. (Cl. 16—19.)



1. A stop of the character described including a casing embodying a substantially L-shaped base plate having flanges on the lower end of the long portion and on the upper side edge of the short portion thereof, the lower flange being provided with a slot, and a cover plate removably connected to the flanges, a clutch member including a head and a shank, a bell crank lever pivotally connected to the base plate and having the outer end pivotally connected to the shank, the handle portion of the bell crank lever being arranged through the slot in the flange and limited in its movement thereby, resilient means mounted on the base plate and bearing against the lever to normally hold the clutch member in frictional engagement with an object, and limiting means mounted on the base plate and coöperating with the shank for holding the clutch head in frictional engagement with an object.

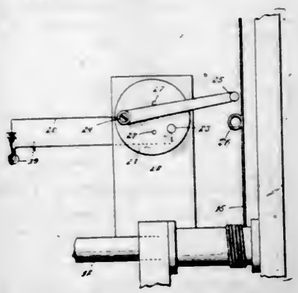
2. A stop of the character described including a substantially inverted L-shaped base plate having flanges on the lower end of the long portion and on the upper side edge of the short portion thereof, the lower flange being provided with a slot, a correspondingly shaped cover plate removably connected to the flanges, a clutch member including a head and a shank, means mounted on the head for aiding frictional engagement of the head, a bell crank lever pivotally mounted on the base plate and having the outer end of the short outer portion pivotally connected to the shank, the handle portion of the bell crank lever being arranged through the slot in the lower flange and limited in excessive movement thereby, a leaf spring having one end rigidly connected to the base plate and the opposite end bearing against the handle portion of the lever to consequently normally tension the clutch member, and limiting members mounted on the outer faces of the short portion of the base and adjacent the outer edge thereof and arranged upon opposite sides of the shank to the clutch member so as to be contacted by the shank to hold the head in frictional engagement with an object.

1,268,672. COMPOSITION OF MATTER TO BE USED FOR THE MANUFACTURE OF ENVELOPS AND THE GUMMING OF PAPER. VICTOR G. BLOEDE, Baltimore, Md. Filed Apr. 19, 1916, Serial No. 92,225. Renewed Mar. 25, 1918. Serial No. 224,652. (Cl. 87—17.)

1. The composition herein described consisting of a starch gum dissolved in water containing sulfurous acid sufficient in amount to correspond to from one-half to five per cent. of bisulfite of soda, substantially in the manner and for the purpose specified.

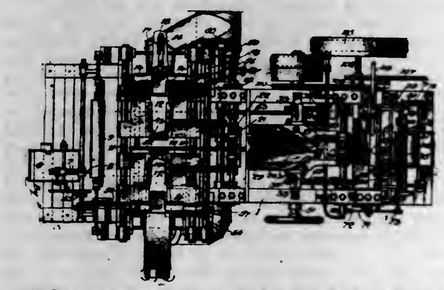
2. The composition herein described consisting of a starch gum dissolved in water containing from one-half to five per cent. of bisulfite of soda substantially in the manner and for the purpose specified.

1,268,673. DIRECTION-SIGNAL. JESSE BOYER, Massillon, Ohio, assignor of one-third to Harmon Drage, Massillon, Ohio. Filed June 1, 1917. Serial No. 172,318. (Cl. 177—329.)



A direction signal for vehicles embodying an arm mounted for vertical swinging movement, a rotatable shaft, an electric lamp carried by the arm and connected in circuit, a switch including a fixed contact and movable contact, said movable contact having an off-set extremity, a flexible element having one end connected to the arm and its opposite end to the shaft, means for rotating the shaft to wind the element thereabout and elevate said arm, said element being formed with a loop to surround said offset extremity of the movable contact, whereby the latter is operated to energize the lamp simultaneously with the elevation of said arm, and said loop being separable from said movable contact, to permit the arm to be actuated independently of the switch.

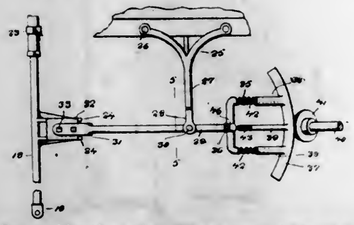
1,268,674. ENVELOP-MACHINE. CLAUDE F. BROWN, Chicago, Ill., assignor to Heco Envelope and Paper Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 2, 1915. Serial No. 53,830. (Cl. 93—63.)



1. In a machine of the character described, feeding and sealing rolls, means for forming an envelop and delivering it above said rolls with an open flap at the advance end, a paste-covered roll lying above and parallel with the aforesaid rolls, a blade having its lower edge parallel with the axes of said rolls, a longitudinal rib projecting from said blade on the side toward the paste roll and at some distance from said edge, and means for operating said blade so as to shift it from a position in which said rib engages with said paste roll to a position in which it engages with said flap at the line of junction between it and the envelop and presses it between said feeding and sealing rolls.

2. In a machine of the character described, mechanism for feeding a strip continuously, cutting mechanism including members constructed and arranged to remove sections at intervals from the sides of the strip without producing any feeding action on the strip, means acting on the sides of the strip to fold them inwardly, creasing mechanism adapted to act on said strip to form creases therein without acting to feed the strip, and driving connections for said mechanisms including easily removable gears which may be replaced by other gears to permit the feeding mechanism to operate at various speeds relatively to the speeds of the other of the aforesaid mechanisms according to the length of envelop desired.

1,268,675. DIRIGIBLE HEADLIGHT. GEORGE N. BRUNKER, Pocatello, Idaho. Filed Aug. 25, 1917. Serial No. 188,152. (Cl. 240—62.)

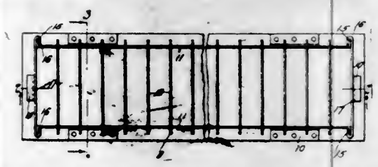


1. In combination with the steering shaft of an automobile and pivotally mounted headlights, a connecting rod between the headlights to cause them to turn in unison, a lever provided with a segment gear at one end and having the opposite end directly connected to said connecting rod, and a pinion on the steering shaft for engagement by said segment gear.

[Claims 2 to 4 not printed in the Gazette.]

1,268,676. BRICK-MOLD. FRANK PERCY BUNKER, North Manchester, Ind. Filed Mar. 22, 1918. Serial No. 223,924. (Cl. 25—121.)

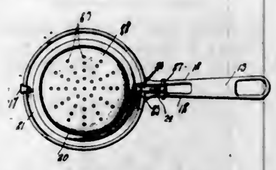
1. A collapsible brick mold comprising an elongated bottom having parallelly-spaced slots disposed transversely of the bottom, lugs near the side edges of the bottom, side walls on the bottom having outwardly-directed flanges at the vertical edges, end walls having enfolded vertical edges for engaging the flanges of the side walls, said end walls having extensions adapted to engage the slots of the bottom, and partitions adapted to be disposed transversely of the bottom between the side walls and adapted to maintain said side walls against the lugs, said partitions having extensions for engaging slots in the bottom and notches for engaging the parallel edges of the side walls, said side walls having also notches in the upper edges adapted to engage the partitions at the notches in the partitions.



2. A collapsible brick mold comprising an elongated bottom, lugs near the side edges of the bottom, partitions adapted to be disposed transversely of the bottom between the side walls to maintain said side walls against the lugs, said partitions having means for detachably engaging the bottom and side walls, said side walls having their vertical edges bent outwardly, and end walls having their vertical edges folded over so as to engage said outwardly bent ends of the side walls.

3. A collapsible brick mold comprising an elongated bottom having parallelly-spaced slots disposed transversely of the bottom, lugs near the side edges of the bottom, side walls on the bottom, end walls detachably engaging the vertical edges of said side walls, and partitions adapted to be disposed transversely of the bottom between the side walls for maintaining said side walls against the lugs, said partitions having extensions for engaging the slots in the bottom, said extensions being narrower than the partitions so that said partitions have portions thereof resting on the bottom, said partitions having also edges near the top for engaging the top edges of the side walls, and said side walls having notches to engage the partitions at the notches in the partitions.

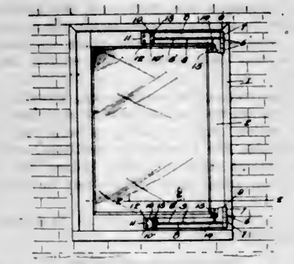
1,268,677. COOKING UTENSIL. PERL H. BUTLER, Weatogue, Conn. Filed May 2, 1917. Serial No. 166,017. (Cl. 53—7.)



In a cooking utensil, a pan, a handle therefor, comprising a pair of spaced bars, one bar having a notch, the other bar having a perforated enlargement, a hook shaped element secured to the pan at a point opposite the point of attachment thereto of the handle, a perforated cover having a marginal flange adapted to be secured beneath the hook shaped element, and an arm rigidly secured to the flange at one end and having an apertured enlargement formed at its other end, and a pin secured in said apertured enlargement adapted to be inserted in the apertured enlargement of the handle and in the notch, to retain the cover in place.

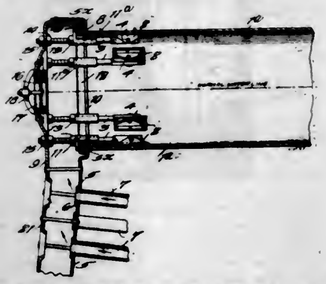
1,268,678. HINGE FOR CASEMENT-WINDOWS. ANDREW BYE, Butte, Mont. Filed Nov. 1, 1917. Serial No. 199,707. (Cl. 16—106.)

A window sash hinge comprising an L-shaped arm having a short vertical reach adapted to extend along one vertical rail of the sash and a long horizontal reach to extend along one horizontal rail of said sash, a plate adapted to be secured to the horizontal rail of the sash and hinged on a vertical axis to the free end of said long reach, a second plate adapted to be secured to the window frame and hinged to said short reach along the



outer edge of the latter, a horizontal shaft adapted to pass through the sash in the angle between said short and long reaches, a laterally extending rigid finger on the outer end of said shaft adapted for contact with the outer surface of either reach of said arm to hold the latter against the sash, and a handle on the inner end of said shaft.

1,268,679. BOILER. WILLIAM H. CAHALL, Racine, Wis. Filed Mar. 3, 1915. Serial No. 11,753. (Cl. 122—365.)



1. In a boiler construction, a steam drum having an open end, a header having an inner and an outer header plate, and common means for securing said inner header plate to the open end of the steam drum and for bracing the outer header plate.

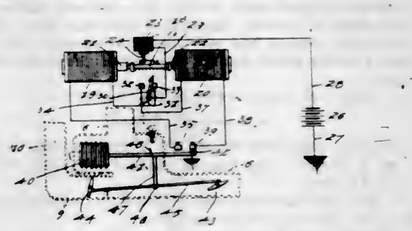
3. In a boiler construction, a steam drum having an open end, a header having an inner and an outer header plate, common means for securing said inner header plate to the open end of the steam drum and for bracing the outer header plate, said common means comprising a series of bolts secured to the interior of the drum, adjustable members carried by said bolts and arranged to engage a portion of the inner header, and means for securing the outer header to the bolts.

6. The combination with a cylindrical steam drum, of a header plate having a circular groove arranged to receive the end of the steam drum, an L-shaped gasket disposed in said groove between the end of the drum and the bottom of the groove, a portion of said L-shaped gasket extending between the outer wall of the steam drum and the outer side wall of the groove whereby the gasket may be upset to fill the space between the outer wall of the steam drum and the outer wall of the groove.

7. The combination with a cylindrical steam drum, of a header plate having a circular groove arranged to receive the end of the steam drum, an L-shaped gasket disposed in said groove between the end of the drum and the bottom of the groove, a portion of said L-shaped gasket extending between the outer wall of the steam drum and the outer side wall of the groove whereby the gasket may be upset to fill the space between the outer wall of the steam drum and the outer wall of the groove, an outer header plate, and common means for clamping said inner header plate to the end of the steam drum and for spacing said header plates apart and retaining them in their spaced relation.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,268,680. CARBURETER-CONTROLLING MECHANISM. DAFFORD DALE CATES, Memphis, Tenn. Filed Sept. 11, 1917. Serial No. 190,809. (Cl. 123—127.)



2. In combination, a double carbureter adapted to utilize various grades of liquid fuel, a valve for controlling the admission of the various grades of fuel to the carbureter, an electrical circuit, means in said circuit for automatically controlling the valve, means in said circuit for locking the controlling means in alternate positions, and thermosensitive means for controlling the circuits.

[Claim 1 not printed in the Gazette.]

1,268,681. SAW-SET. THOMAS W. CHALENDER, Garwood, Idaho. Filed May 17, 1917. Serial No. 169,299. (Cl. 76—79.)



1. A saw set comprising a casing, a swaging block mounted within said casing, means bearing against said swage block for adjusting it vertically, means for adjusting said swage block transversely, a plunger rod slidably mounted within the casing and projecting from one end thereof, a swage head carried by the lower end of said plunger rod, and resilient means to return said plunger rod to its normal position immediately after an impact has been delivered to said plunger rod.

[Claims 2 to 4 not printed in the Gazette.]

1,268,682. MOLD. MINOR E. CHAMBERLAIN, St. Louis, Mo. Filed Dec. 13, 1917. Serial No. 206,877. (Cl. 25—121.)

4. In a mold, a mold receptacle, a base for supporting the mold receptacle having grooves therein near one end of the receptacle, a plate rigidly secured to the base and having slots above the grooves of narrower width than the grooves in the base, an end wall for the mold recep-

tacle supported by the base, a movable plate arranged to bear against the end wall, projections on the movable plate extending through said slots in said rigid plate and into the grooves in the base, lateral extensions on said projections within said grooves, extending under the rigid



plate on opposite sides of said slots whereby said movable plate is held in connection with the base, and a device for forcing said movable plate against said end wall and the latter against the end of the mold receptacle.

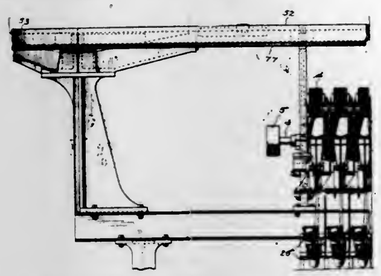
[Claims 1 to 3 not printed in the Gazette.]

1,268,683. PROCESS OF MAKING FERTILIZER. DANIEL E. CLARK, Lynn, Mass. Filed July 18, 1917. Serial No. 181,393. (Cl. 71—6.)

3. The fertilizing material produced by treating leather with the liquor known as dunder.

[Claims 1 and 2 not printed in the Gazette.]

1,268,684. WINDER. HOWARD D. COLMAN, Rockford, Ill., assignor to Howard D. Colman, Luther L. Miller, and Harry A. Severson, Copartners trading as Barber-Colman Company, Rockford, Ill. Filed Dec. 31, 1913. Serial No. 809,797. (Cl. 242—44.)



3. A winder-tending mechanism comprising a carriage; means for causing the carriage to travel; a cheese-rotating roll on said carriage; a suction device arranged adjacent to the rear end of the roll; a second cheese-rotating roll arranged rearwardly of the suction device; a down-take arm arranged to swing in the space between the suction device and the second roll; a third roll arranged rearwardly of the second roll; a slack-take-up roll arranged rearwardly of the third roll; means for driving said rolls, the slack-take-up roll being driven in the direction opposite to the direction of rotation of the other rolls, and the third roll being driven at a higher peripheral speed than the other two rolls to furnish slack to the take-down-arm; and means for raising and lowering the third roll to lift the cheese off the second roll and lower the cheese onto the slack-take-up roll.

5. In a winder-tending mechanism; a suction air tube having a mouth and a notch in its side adjacent to said mouth; a shear blade reciprocable across the mouth of said tube, said blade being located within the tube and being spaced away from the notch; and a stationary blade coöperating with said reciprocable shear blade.

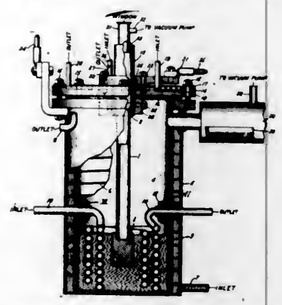
15. In a winder, a series of winder units, a winder-tending mechanism arranged to travel along said series, said mechanism comprising means for tying a reserve thread to an exhausted thread, and means traveling with the winder-tending mechanism for detecting the presence of the united threads.

20. In combination, a knotter; means for carrying a bight of a thread to a point adjacent to the knotter; means for carrying a strand of said bight into the knotter; a stripper normally adjacent to the path of said carrying means for stripping the thread from the carrying means upon the return movement of the latter; means for supporting a reserve thread, the first mentioned four elements being arranged to travel past the reserve-thread-supporting means, means for preventing the reserve thread from being engaged by the knot-tying mechanism, and means for moving said stripper out of the way of the reserve thread.

35. A winder having, in combination, a series of winder units and a winder-tending mechanism arranged to travel along said series and including means for detecting whether the units are in running condition, said winder-tending mechanism also including means for throwing out of operation such units as are not in running condition.

[Claims 1, 2, 4, 6 to 14, 16 to 19, 21 to 34, and 36 not printed in the Gazette.]

1,268,685. ELECTRIC-RESISTANCE FURNACE. WILLIAM D. COOLIDGE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Dec. 16, 1916. Serial No. 137,354. (Cl. 219—36.)



1. An electric furnace comprising a heater tube consisting of a refractory material, a plug of metal of good heat and electrical conductivity molecularly joined to and closing one end of said tube, an inclosing metal tank spaced apart from said heater tube, a yielding electrical connection between said inclosed end of the heater tube and the tank, an insulating seal between the opposite end of the heater tube and said tank, and electrical connections respectively for said tank, and for the end of the heater tube opposite the end in electrical contact with said tank.

3. An electric furnace comprising a substantially gas-tight heater tube of refractory material, means for removing or introducing gas to said tube, means for conducting a heating current thereto, and a sealed inclosing envelop spaced apart from said heater tube and adapted to be separately evacuated or filled with gas.

9. An electric furnace comprising a gas-impervious refractory conducting tube sealed at one end, means for introducing and withdrawing a charge into the opposite end thereof, a gas-tight casing surrounding said tube and spaced away therefrom, a yielding electrical connection between the closed end of said tube and said casing, an electrical connection to the opposite end of said tube and means for evacuating the space between said tube and said casing independently of the space within said tube.

[Claims 2 and 4 to 8 not printed in the Gazette.]

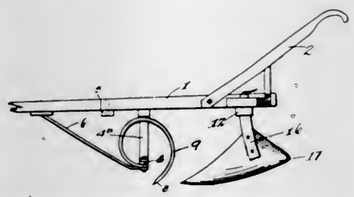
1,268,686. GRAPPLE FOR WELL-BUCKETS. WORDIE CRAIG, Ione, Ark. Filed Dec. 15, 1915. Serial No. 67,049. (Cl. 57—9.)

1. A grappling device for well buckets including a body provided with a transverse opening and having upwardly extending supporting projections located at opposite sides of the opening at the lower end thereof, said body being also provided at the top of the opening with inclined stop faces located at the sides of the opening, a pair of bucket engaging members adjustably mounted at their inner ends on a common pivot in the lower portion of the opening, the inner ends of the members being adapted to extend downwardly between the supporting projections in the operation of the said members, and springs located at opposite sides of the said body and extending longitudinally of the same, the lower ends of the springs being connected to the body below the said opening and the upper ends of the springs being connected with the members between the ends thereof for maintaining the said members in engagement with the supporting projections and also for causing the said members to engage the interior of the bucket.



2. A well bucket grappling device including a body comprising a bar having a tapered lower end presenting inclined stop faces, an end plate spaced from the bar and recessed at its upper end to provide upwardly extending spaced supporting projections located at opposite sides of the body, and side plates secured to the bar and the lower end plate or tip and maintaining the said parts in spaced relation and forming a transverse opening, bucket engaging members pivotally mounted in the opening between the spaced projections and mounted on a common pivot and normally supported by the said projections of the end plate or tip, the latter being tapered downwardly, and longitudinally disposed side springs secured at their ower ends to the tapered portion of the end plate or tip at a point intermediate of the ends thereof and connected at their upper ends to the said members between the terminals of the same for maintaining the said members in contact with the supporting projections and also for causing the said members to engage the interior of a bucket.

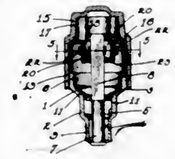
1,268,687. POTATO-CULTIVATOR. FIRMIN DAIGLE, Daigle, Me., assignor to Elizabeth Daigle, Millinocket, Me. Filed May 7, 1914. Serial No. 836,999. (Cl. 97—24.)



In a straddle row cultivator as set forth, the combination, of a beam, an arched cross bar attached to said beam and provided with horizontal laterally extending end portions, a plurality of resilient dirt loosening members carried by said horizontal end portions, and a plurality of dirt ridging members adjustably carried by said beam rearwardly of said dirt loosening members for ridging the dirt loosened by said dirt loosening members.

1,268,688. GREASE-CUP. SIDNEY DAWSON, Chicago, Ill., assignor of one-half to William Robertson, Chicago, Ill. Filed May 31, 1917. Serial No. 171,882. (Cl. 184—38.)

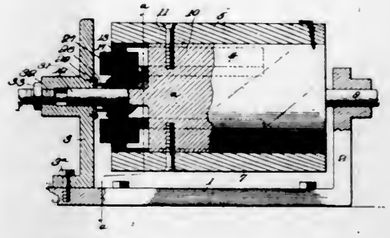
1. A grease cup comprising interfitting grease containers, a square stem secured to one container, apertured means secured to the other container, and a plurality of leaf springs supported by said means and projecting therethrough to contact opposite sides of the square stem.



4. A grease cup comprising a base cup having a restricted passage, a guide member in the passage through which the grease is adapted to be forced, a stem secured to the guide member, a cup adapted to be threaded onto the base, a cylindrical member secured thereto to receive the stem therethrough, and resilient bands secured to the cylindrical member and frictionally contacting the stem.

[Claims 2 and 3 not printed in the Gazette.]

1,268,689. MAGNETO-ELECTRIC MACHINE. WILLIAM WARREN DEAN, Stamford, Conn., assignor to Splitdorf Electrical Company, Newark, N. J., a Corporation of New Jersey. Filed Aug. 24, 1916. Serial No. 116,665. (Cl. 171—252.)



1. A magneto electric machine comprising a multipolar permanent magnet rotor the body portion of which is formed from an integral steel cylinder cut-away to provide parallel projecting prongs serving as the poles of the rotor and a plurality of stationary current generating coils disposed within the path of travel of the prongs.

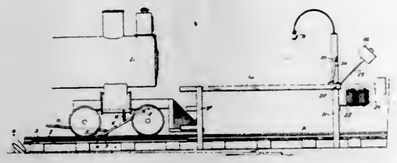
2. A magneto electric machine comprising a multipolar permanent magnet rotor the body portion of which is formed from an integral steel cylinder cut-away to provide parallel projecting prongs serving as the poles of the rotor and a plurality of stationary current generating coils disposed within the path of travel of the prongs, a non-magnetic block fitting within and secured to said prongs and carrying one end of the shaft for the rotor.

3. A magneto electric machine comprising a multipolar permanent magnet rotor having a plurality of projecting prongs parallel with the axis of the rotor, a plurality of stationary current generating coils disposed within the path of travel of the prongs of the rotor, a shaft for said rotor, supporting brackets in which said shaft rotates and means for supporting said stationary current generating

coils on one of said brackets whereby the coils may be adjusted angularly about the axis of the rotor.

4. A magneto electric machine comprising a multipolar permanent magnet rotor having a plurality of projecting prongs parallel with the axis of the rotor, a plurality of stationary current generating coils disposed within the path of travel of the prongs of the rotor, a shaft for said rotor, supporting brackets in which said shaft rotates and means for supporting said stationary current generating coils on one of said brackets whereby the coils may be adjusted angularly about the axis of the rotor, and adjustable means carried by the bracket and bearing against the end of the shaft for determining the position of the rotor relative to the coils.

1,268,690. RAILWAY-GATE. JOHN DEARINGER, Versailles, Ind. Filed Feb. 6, 1917. Serial No. 146,954. (Cl. 269—3.)



In a railway crossing gate, the combination with a gate standing normally closed, an armature thereon, an electromagnet adjacent the armature, a battery, and a circuit from the battery to the magnet; of spaced ramp rails along the track respectively connected with the wires of said circuit at points between the battery and the magnet, a circuit closer adapted to be mounted on a train for bridging the ramp rails and short-circuiting the magnet, means holding said circuit closer normally in position to contact with the ramp rails, and means on the train for raising the circuit closer at will.

1,268,691. [WITHDRAWN.]

1,268,692. PREPARATION AND PRODUCTION OF CATALYSTS. JAMES DEWAR, London, and ADOLF LIEBMANN, Weybridge, England, assignors to The Procter and Gamble Company, Cincinnati, Ohio, a Corporation of Ohio. Filed June 2, 1914. Serial No. 842,537. (Cl. 23—28.)

1. For use in the hydrogenation of fats and oils, a mixed catalyst containing a plurality of heavy metal catalysts and a noble metal catalyst.

2. For use in the hydrogenation of fats and oils, a mixed catalyst containing a plurality of heavy metal catalysts.

3. For use in the hydrogenation of fats and oils, a mixed catalyst containing nickel and copper.

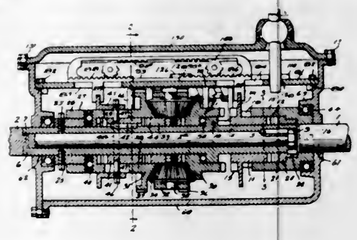
6. The hereindescribed method of preparing a mixed catalyst, which consists in subjecting a mixture of compounds of catalytic metals, one of which belongs to the nickel group, to reduction by hydrogen, at a sufficiently low temperature to avoid producing new molecular aggregates of the finely-divided metals.

8. The herein described method of preparing a mixed catalyst, which consists in subjecting a mixture of compounds of nickel and copper to reduction by hydrogen at a sufficiently low temperature to avoid producing new molecular aggregates of the finely-divided metals.

[Claims 4, 5, and 7 not printed in the Gazette.]

1,268,693. GEARING. AARON F. DICKEY, Somerset, Pa. Filed May 31, 1917. Serial No. 171,863. (Cl. 74—59.)

1. In mechanism of the character set forth, the combination of a driving and a driven element, a clutch member non-rotatable with respect to the driving element, a planetary gear set, one of the opposed members whereof is provided with a clutch face for engagement by one face of the clutch member, the second opposed member and the intermediate member of said set having opposed clutch faces, a second clutch member non-rotatable with respect to the driven element for coöperation with one or the other of the last mentioned clutch faces, means for shifting the clutch members, and further means through which certain rotating relations may be established between the second opposed and the intermediate members of the planetary gear set.



6. In mechanism of the character set forth, the combination of a driving and a driven element arranged in axial alinement, a socketed driving head carried by the driving member and receiving the adjacent end of the driven element, a clutch ring secured to the driven element within the driving head, a clutch member slidable upon the driven element and having a sliding but non-rotating connection with the driving head, said clutch member having a clutch face at each end, a planetary gear set mounted upon the driven element adjacent the clutch member, one of the opposed members whereof is provided with a clutch face for engagement by the adjacent face of the clutch member, the second opposed member of said set and the intermediate member thereof having opposed clutch faces, a second clutch member slidable upon the driven element between said clutch faces, means for shifting the clutch members, and further means through which the second opposed and intermediate members of the planetary gear set are caused to rotate in opposite directions or through which one of said members may be locked against rotation.

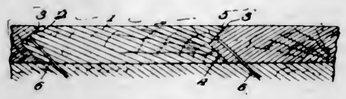
13. In mechanism of the character set forth, the combination of a driving and a driven element, the driven element having a shoulder, an abutment secured to the driven element and spaced from the shoulder, an adjusting ring screw threaded upon said abutment, and a gear set mounted upon the driven element between the adjusting ring and shoulder and through which the driving and driven elements may be coupled together at variable speeds.

15. In mechanism of the character set forth, the combination of a driven and a driving element, transmission gearing through which power is transmitted from one to the other of said elements, clutches through which various relative speeds of the driving and driven elements are attained, a rack having operative connection with each of the clutches, pinions meshing with said racks, and slides having rack sections movable into and out of mesh with said pinions thereby to rotate the pinions and shift the racks in the actuation of said clutches.

19. In transmission gearing, the combination of a plurality of shiftable members, racks having operative connection with certain of said members, a pinion meshing with each rack, a plate having a rack section and operatively connected to another of the aforesaid shiftable members, a slide having rack sections for coöperation with said pinions, a shifter pivotally supported adjacent the aforesaid plate and having a gear segment for coöperation with the rack section thereof, said shifter having a forked end overhanging the aforesaid slide, an abutment carried by the slide for engagement within the forked end of the shifter, and means for actuating the slide.

[Claims 2 to 5, 7 to 12, 14, 16 to 18, and 20 not printed in the Gazette.]

1,268,694. FLOORING. ELMER C. DITTMAR, Williamsport, Pa. Filed July 12, 1916. Serial No. 108,892. (Cl. 20—6.)



As a new article of manufacture, a flooring strip having one of its longitudinal edges formed with beveled faces to provide a tongue of substantially V-shape in cross section, of a width equal to the thickness of the strip, said strip having its beveled faces rounded at the junction of the beveled faces with the face of the strip, and the other longitudinal edge grooved to form a substantially V-shaped groove of a width substantially the thickness of the strip, the edges of the groove being rounded.

1,268,695. SIGNAL. HALLEY C. DOLAN, Detroit, Mich., assignor of one-half to Malcolm J. McLeod, Detroit, Mich. Filed Mar. 31, 1917. Serial No. 158,798. (Cl. 40—52.)



1. In a signal, a casing having a display opening, a rotary sign member in said casing adapted to display a sign at said display opening, gearing adapted to move said sign member, a reciprocable rod adapted to actuate said gearing, electrical devices adapted for moving said rod predetermined distances to position said sign member to display a sign, and means actuated by said devices adapted to define the position of said rotary sign member.

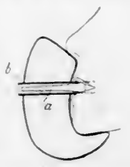
2. In a signal, a casing having a display opening, a rotary sign member in said casing adapted to be moved to display a sign at the opening of said casing, gearing adapted to move said sign member, independent electrical devices in said casing and adapted to be energized to operate said gearing, and means actuated by said electrical devices adapted to control and regulate the movement of said sign member by said gearing.

4. In a signal, a casing having a display opening, a rotary sign member in said casing adapted to display a sign at said display opening, gearing adapted to move said sign member, a bell crank adapted to actuate said gearing, an electrically actuated reciprocable rod adapted for moving said bell crank, and means on said rod adapted to restore said sign member to normal position, and means actuated in synchronism with said rod for controlling the movement of said sign member.

[Claims 3 and 5 not printed in the Gazette.]

1,268,696. RESPIRATOR OR INHALER. ROBERT DONALD, London, England. Filed Feb. 6, 1918. Serial No. 215,728. (Cl. 128—13.)

1. In a respirator or inhaler a non-return exhalation valve in the form of a cylindrical collapsible tube made of such air-proof material as oiled silk, or india rubber, which material is of such thin and flexible nature that the tube will readily open and distend to its full cylindrical form to allow exhaled air to pass therethrough in one direction, and will readily collapse and fold upon itself to prevent air passing in the opposite direction, and means for securing the tube at one end only to the respirator.

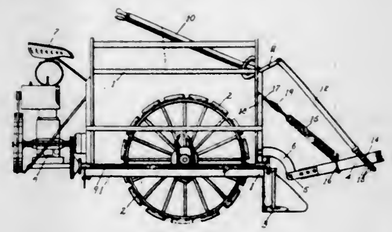


3. A respirator comprising a body with inner and outer walls, an outer tube passed through the walls and having one end constructed to form a mouthpiece, and a cylindrical collapsible tube contained within the outer tube.

[Claim 2 not printed in the Gazette.]

1,268,697. [WITHDRAWN.]

1,268,698. ADJUSTING DEVICE FOR HARVESTING-MACHINES AND THE LIKE. WILLIAM DRUMMOND, Manteno, Ill., assignor to The "New-Way" Motor Company, Lansing, Mich. Filed June 5, 1916. Serial No. 101,779. (Cl. 56—32.)



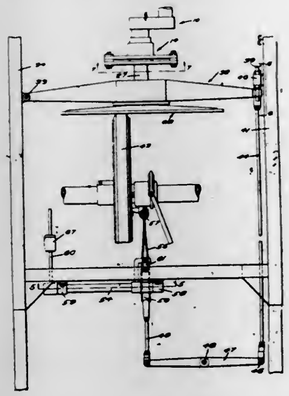
1. The combination in a grain harvester of the class wherein the main frame is mounted for tilting adjustment on a centrally disposed carrying wheel and is provided with an operator's seat and an engine on the rear thereof, of a tilting means comprising a tongue pivotally connected to the front of the frame, a lever pivotally mounted on the frame and connected to said tongue by a link, a coiled tension spring, a clip adjustably connecting one end of said spring to said tongue, and a hook connecting the other end of said spring to said frame, so that the spring tends to tilt the frame forwardly, said hook being provided with a turn buckle whereby the tension of the spring may be adjusted.

2. The combination in a grain harvester of the class wherein the main frame is mounted for tilting adjustment on a centrally disposed carrying wheel and is provided with an operator's seat on the rear thereof, of a tilting means comprising a tongue pivotally connected to the front of the frame, a lever pivotally mounted on the frame and connected to said tongue by a link, and a counter-balancing spring connected at one end to said tongue and at the other end to said frame so that the spring tends to tilt the frame forwardly.

1,268,699. TRANSMISSION CONTROL. CHARLES A. F. DUCONRON, Los Angeles, Cal., assignor to Homer Laughlin Engineers Corporation, Los Angeles, Cal., a Corporation of California. Filed Feb. 12, 1917. Serial No. 148,164. (Cl. 74—26.)

4. In a transmission control, the combination with a rotatable driving shaft, of a friction disk adapted to be ro-

tated thereby, yieldable coupling means connecting the shaft and disk and allowing longitudinal movement of the disk, a friction wheel mounted to peripherally engage the face of the friction disk and be driven thereby, a swinging bearing within which the shaft of the friction disk is supported, an actuating mechanism adapted to act upon



the swinging bearing to exert given pressures upon the periphery of the friction wheel by the friction disk, a control lever adapted to set said actuating mechanism and means whereby a given movement of the control lever will act to cause the actuating mechanism to produce a predetermined pressure between the friction disk and friction wheel.

6. In a transmission control, the combination with a rotatable driving shaft, of a friction disk adapted to be rotated thereby, a flexible coupling adapted to connect the shaft and disk in a yieldable manner and whereby rotation may be imparted to the disk, a swinging bearing within which the disk is rotatably mounted, a control lever adapted to be set at predetermined points, an eccentric sheave adapted to be swung by the control lever, a control mechanism disposed to operate the swinging bearing and a friction disk supported thereby, means whereby movement of the eccentric sheave will cause said control mechanism to produce a predetermined pressure between the disk and the wheel, and means whereby the control lever may be moved to swing the eccentric sheave and produce an increased predetermined pressure between the friction disk and the friction wheel.

[Claims 1 to 3 and 5 not printed in the Gazette.]

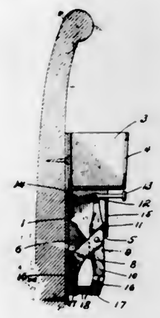
1,268,700. NUT-LOCK. JAMES ALLEN DUNKLEY, Luxora, Ark. Filed July 9, 1917. Serial No. 179,484. (Cl. 151—12.)



1. In combination with a grooved bolt and nut therefor, said nut having one of its sides channeled longitudinally and provided with an opening communicating with the bore thereof, a pivoted dog in the said opening designed to engage with one of the grooves of the bolt, a block for closing the channel, an angular spring member carried by the block designed to contact with the dog to retain the same in bolt engaging position to also contact with one of the walls of the opening to retain the block against longitudinal movement in one direction with respect to the channel.

2. In combination with a grooved bolt and a nut screwed upon the bolt, said nut having one of its sides channeled longitudinally, and the said channel being of two dimensions, the opposite walls provided by the channels being grooved longitudinally, said nut having an opening between the shallow and deep walls of the channel which communicates with the bore of the nut, a dog having an outer rounded face pivoted within the said opening and designed to engage with one of the grooves of the bolt, a block for filling the channel having tongues to engage with the grooves in the channel, an angularly disposed spring member secured to the under face of the block and designed to contact with the dog to retain the dog in bolt engaging position and to be also arranged in the path of contact with one of the end walls provided by the opening whereby to retain the block in the channel and the dog in bolt engaging position.

1,268,701. COMBINED BOOK AND HAT HOLDER. FREDERICK HERMAN EHRHARDT, Wichita, Kans. Filed May 12, 1916. Serial No. 97,126. (Cl. 24—252.)



A device of the character described comprising a vertical base plate, side plates and a top plate secured thereto and forming a rectangular casing open at its lower end, a front plate secured on said side plates and terminating short of the bottom edges thereof, a block secured upon said base plate within said casing engaging said side plates and extending below the open end of the casing, a forwardly extending bracket secured within a bifurcation in said block and having its forward end partially cut away, a vertically disposed lever having its intermediate portion partially cut away and pivoted upon the forward end of said bracket and alining therewith, a spring urging the upper end of said lever outwardly, a plunger rod pivoted upon the upper end of said lever and extending forwardly through a slot in the upper portion of said front plate, and resilient jaws secured upon the lower ends of said block and said lever and coöperating with each other in gripping relation, pressure on said plunger releasing the engagement of said jaws.

1,268,702. FIGURE TOY. WALTER E. EMMONS, Hudson, N. H. Filed Mar. 9, 1917. Serial No. 153,719. (Cl. 46—45.)

1. A figure toy including a supporting frame embodying spaced parallel side bars and an inverted V-shaped cross bar having its ends secured to the inner surface of the side bars and intermediate the ends of the side bars and formed with spaced upright ears at its vertex, a body disposed above the frame, front and rear legs pivoted on opposite sides of the body, a clip secured to the under surface of the body, an ear depending from the clip and pivoted between the ears at the vertex of the cross bar, crank axles

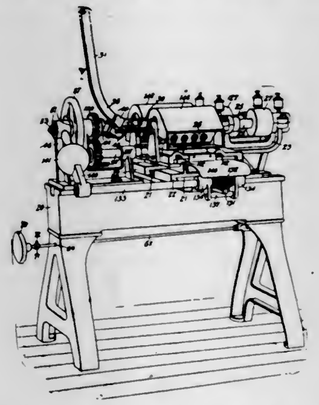
journaled in the front and rear ends of the side bars and having the outer ends of the legs operably connected



thereto, and wheels rotatable with the outer ends of the axles.

[Claim 2 not printed in the Gazette.]

1,268,703. BOW-TURNING MACHINE. GEORGE A. ENSIGN, Defiance, Ohio, assignor to Defiance Machine Works, Defiance, Ohio, a Corporation of Ohio. Filed June 29, 1917. Serial No. 177,714. (Cl. 142—13.)



1. In a turning machine for turning the side member of a bow, revoluble cutter heads adapted to engage opposite sides of the side member of a bow, cutter head carriers on which the said cutter heads are journaled, transversely movable slides on which the said cutter head carriers are mounted to turn in a horizontal plane, manually controlled means moving the said slides toward and from each other, a revoluble pattern holder carrying a pattern adapted to be engaged on opposite sides by the said cutter head carriers, a bow holder adapted to carry the bow and to hold one end thereof between the said cutter heads, and a gearing connecting the said bow holder with the said pattern holder to turn the latter on imparting a swinging motion to the bow with the axis of the bow holder as the fulcrum.

5. In a bow end turning machine, a rectangular supporting frame, cutters disposed longitudinally of the frame and adapted to receive the end of the bow introduced from the head of the frame, a bow clamping and centering device adjustable from the head of the frame, a tail stock spindle, a saddle projectable beyond the tail stock spindle to support the end of the bow preliminary to centering on said tail stock spindle, and actuating devices for the saddle, including a plunger with a head actuated at the head of the frame.

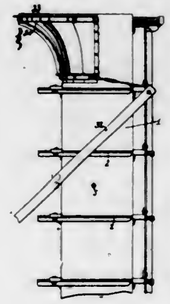
8. In a bow end turning machine, a supporting frame, transversely arranged guides on the frame, a pattern, slides movable upon the guides toward the pattern, cutter head carriers supported on the slides, feeler pins carried by each cutter head carrier for engaging the pattern and positioning said carrier accordingly, and articulated connections between said carriers and the respective slides permitting said carriers to swing in a horizontal plane, whereby said carriers are adapted to the pattern.

11. In a bow end turning machine, the combination of a pattern non-circular in cross section, slides movable toward and from said pattern, cutter head carriers mounted upon the slides with limited arcuate movement, revoluble cutter heads carried by said carriers, feeler pins mounted upon said carriers and adapted to contact the pattern at points opposite the axis of arcuate movement of said carriers and adjust said carriers with respect to the slides, and adjusting means engaging said pins.

20. In a bow end turning machine, a revoluble pattern support for supporting one end of a pattern, a relatively broad gear fixed on said support, cutters revoluble in a plane above said pattern, a clamp having movable jaws for clamping a bow and supporting the end between the cutters, a revoluble clamp support, a gear carried by said clamp support in mesh with the pattern support gear, the pattern support being revolved upon manual operation of the bow, and a hand wheel and screw connection with the revoluble clamp support for advancing the clamp, the clamp support gear being slidable upon the relatively broad pattern support gear.

[Claims 2 to 4, 6, 7, 9, 10, and 12 to 19 not printed in the Gazette.]

1,268,704. CONCRETE-MOLD. ARTHUR FAGERLUND and EMIL SUNILA, Brooklyn, N. Y. Filed Aug. 21, 1917. Serial No. 187,344. (Cl. 25—131.)



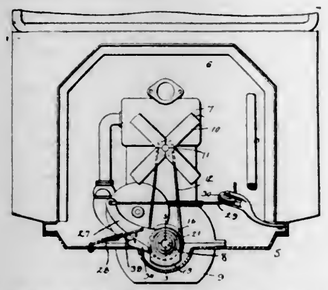
5. In a mold of the character described, a form for receiving concrete, a diagonal brace for holding the form in an upright position, means connecting the diagonal brace and form, said means comprising a member pivotally mounted to the form and loosely connected with the brace, and an adjusting member on the form engaging said pivotally mounted member so as to shift the form back and forth in either of two directions for causing the form to assume a perfectly upright position.

[Claims 1 to 4, 6, and 7 not printed in the Gazette.]

1,268,705. ENGINE-STARTER. OSCAR FALKENWALDE, Baltimore, Md. Filed Jan. 13, 1916. Serial No. 71,950. (Cl. 123—185.)

2. An engine starter including a sleeve adapted to be secured to the crank shaft of an internal combustion engine, relatively stationary and rotatable clutch members mounted upon said sleeve, a starter arm carried by the relatively rotatable clutch member, a plurality of clutch balls arranged between said clutch members, means rotatable with relation to said clutch members to move said balls to inoperative position to release said clutch members, means to return the starter arm to initial position subsequent to an operation thereof, and object-engaging

means carried by the releasing means operable during the return movement of the starter arm to move the clutch balls to inoperative position.



7. An engine starter including a sleeve adapted to be secured to the crank shaft of an internal combustion engine, relatively stationary and rotatable clutch members arranged upon said sleeve, clutch balls interposed between said clutch members, an invertible lubricant containing cup carried by and movable with the rotatable member, and a washer interposed between said clutch members and depending into and closing the rear of said cup.

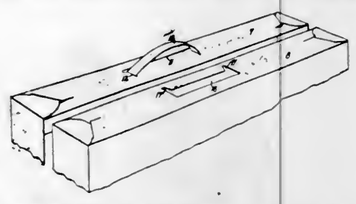
10. In combination, a motor vehicle including a chassis and an engine supported therein, an engine starter including a sleeve non-rotatably secured to the forward end of the crank shaft of the engine, relatively stationary and rotatable clutch members mounted upon said sleeve, clutch balls interposed between said clutch members, an operating arm carried by the rotatable clutch member, means for actuating said operating arm, means for returning said operating arm to initial position, releasing means for moving said balls to inoperative position to permit independent movement of said clutch members, an arm carried by said releasing means adapted to engage a part of the chassis of said vehicle to automatically move said balls to inoperative position, and means connecting the first and second mentioned arms to normally retain said releasing means in inoperative position.

12. In a device of the character described, in combination with an engine shaft, an annular member sleeved upon the shaft, having a ratchet-faced end adapted to be engaged by an operating crank, a pulley sleeved upon the annular member having a projecting flange, a transverse pin projecting through the shaft, the annular member and into the pulley that they may operate together, an annular collar provided with an arm and formed with a plurality of slots to severally receive a rolling element adapted to be forced into impinging relation with the flange of the pulley, an annular hub sleeved within the collar, having cam-ways formed by recessing the hub wall and with an operating arm for rotating the hub, a plurality of rolling elements severally lodged in the slots of the annular collar, means for manually operating the arm of the hub, resilient means connecting the operating arm of the hub with the arm of the annular collar, and a spring adapted to return the hub to its initial position.

[Claims 1, 3 to 6, 8, 9, and 11 not printed in the Gazette.]

1,268,706. PAPER-BOX HANDLE. CARL J. FREESE, Elyria, Ohio. Filed June 12, 1917. Serial No. 174,225. (Cl. 229—52.)

1. In a paper box, a body section, a tongue in one of the sides of the body section having an enlarged portion at the head thereof adapted to fit tightly into the side in which the tongue is formed, said side of body portion having slots at the sides of the tongue, and a flexible handle adapted to be fitted into the slots when the tongue is forced out of engagement with the side, said handle having means adapted to engage the tongue and side of body section and whereby when pull is exerted on the flexible member the tongue is drawn into engagement with the side substantially as and for the purpose set forth.

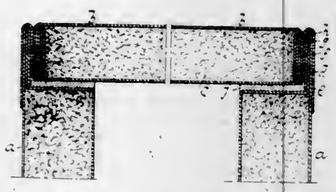


2. In a paper box, a body section, a tongue in one of the sides of the body section having a head at the free end thereof adapted to fit tightly into the side in which it is formed, said side of body portion having slots at the sides of the tongue beyond the head which are adapted to accommodate a handle, a flexible member adapted to be fitted into said slots when said tongue is forced out from its engagement with the side of the body section, and washers associated with the ends of said flexible member and adapted to engage the side and the tongue whereby when a pull is exerted on said flexible member the tongue is forced into engagement with the side, thereby locking said flexible member in the slots and preventing lateral movement of the flexible member in the slots.

3. In a paper box, a body section, a tongue in one of the sides of the body section, lateral projections at the free end of the tongue, said side of body section having slots extending from the base of the tongue to the lateral projections, said end of tongue and lateral projections adapted to fit tightly into the side in which the tongue is formed, a handle having a flexible member adapted to be engaged with the slots, and washers associated with the ends of said flexible member adapted to engage the inner surface of the side in which the tongue is formed.

4. In a paper box, a body section, a tongue formed in one of the sides of the body section, lateral projections at the free end of the tongue, the side in which the tongue is formed having slots extending from the base of the tongue to the lateral projections, the free end of tongue, with the lateral projections, fitting tightly into the side in which the tongue in formed, a tape adapted to engage the slots of the side of the body section when the tongue is disengaged from the side, washers associated with the ends of the tape, the ends of the tape projecting through the apertures of the washers, and means securing the extremities of the tape to the washers so that the unsecured parts of the washers face each other, whereby when the flexible member is in engagement with the slots and a pull in exerted thereupon the unsecured parts of the washers are adapted to engage the side and tongue and force the free end of the tongue with the lateral projections into engagement with the side, thereby locking the tape in the slots, substantially as and for the purpose set forth.

1,268,707. WALL CONNECTION FOR OVENS. HERMANN GEHNRICH, Brooklyn, N. Y., assignor to Gehnrich Indirect Heat Oven Company, Brooklyn, N. Y., a Corporation of New York. Filed June 14, 1917. Serial No. 174,797. (Cl. 189—36.)

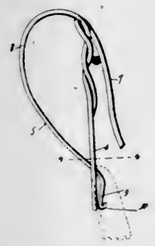


1. A sheet metal joint comprising a wall section having an extension, a hook member formed with a doubled return bent portion fitted on to the extension, said member including a return bent end, and a wall section provided with a flange for coaction with the return bent end.

2. A sheet metal joint comprising a side wall section having an extension, a hook member formed with a doubled return bent portion fitted on to the extension, said member including a return bent end, and a top wall section having a depending flange for coaction with the return bent end.

[Claim 3 not printed in the Gazette.]

1,268,708. CLOTHES-PIN. HENRY F. GILBERT, Delhi, N. Y. Filed July 28, 1916. Serial No. 111,913. (Cl. 24—261.)



A clothes pin formed of a single strand of wire bent upon itself to provide an elongated loop forming one leg of the pin, the wire being twisted upon itself at the upper end of the first leg, one end of the wire being curved and away from and then brought back toward and extended through the first mentioned leg and directed downwardly to form the first leg of the pin, and coöperated with the first leg in clamping an article suspended from said pin, the opposite end of the wire being curved away from the twisted portion of the wire in a direction opposite to that of the first mentioned end of the wire for the purpose of forming a clamping arm to coöperate with the twisted portion of the wire in securing the pin upon the clothes line.

1,268,709. SPRAY-POLE. WILLIS H. GILL, Grandview, Wash. Filed Dec. 20, 1917. Serial No. 208,106. (Cl. 137—86.)



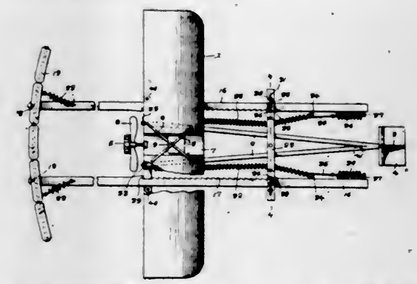
1. In combination, a spray pole, a chambered member at the end of said pole, a nozzle connected to said chambered member and disposed obliquely of same, and a tubular member housing said chambered member and pole and connected to said nozzle to revolve therewith, whereby said nozzle may be revolved by manipulating the lower end of said tubular member.

2. In combination with a spray pole, a sleeve fitting tightly to the upper end of said pole, a cap threaded on to said sleeve over an end of the pole, a cup in said cap having an extension out of said cap, said cup being revoluble in said cap, a tubular member housing the cap, sleeve and the major part of said pole, means connecting said tubular member to the extension of the cup so as to revolve the same, and a nozzle connected to the extension and constrained to revolve therewith.

3. In combination, a spray pole, a sleeve fitted tightly on to the pole in proximity of its upper end, a cap threaded to said sleeve over an end of the pole, a cup in said cap having an extension out of the cap, said extension alining with the pole, said cup being revoluble in said cap, a tubular member housing the cap, sleeve and the major part of the pole, said extension above said cap being of angular cross section, a ferrule at the upper end of said tubular member engaging the extension so as to revolve the same, a ferrule at the lower end of said tubular member adapted to center said tubular member on the pole, and a nozzle secured to the extension of the cup so as to revolve therewith, said nozzle being fitted obliquely on the said extension so as to deviate the flow from the extension to the nozzle substantially as and for the purpose set forth.

4. In combination, a spray pole, a tubular member revolubly mounted on the pole, and a nozzle revoluble with the tubular member and engaging the spray pole.

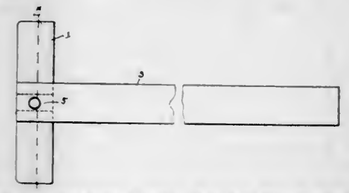
1,268,710. AIRPLANE SAFETY DEVICE. JAMES T. GREGORY, Washington, D. C. Filed Jan. 5, 1918. Serial No. 210,468. (Cl. 244—2.)



7. The combination with an airplane, of landing gear comprising a plurality of arcuate flexible bumpers arranged in front of the airplane structure, guide rails having their forward ends pivotally connected with said bumpers, yieldable braces interposed between said guide rails and bumpers, yieldable centering means connecting said bumpers with said guide rails, said guide rails extending in rear of the supporting surface of the airplane, a traveler carried by the frame of the airplane and slidable along said guide rails, yieldable means interposed between said guide rails and the airplane for resisting the movement of the latter toward the bumpers, and means for normally sustaining the airplane at the rearward limit of its movement with respect to the landing gear.

[Claims 1 to 6 and 8 not printed in the Gazette.]

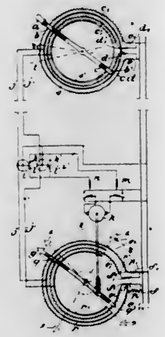
1,268,711. T-SQUARE. DANIEL GRIFFITHS, Pittsburgh, Pa. Filed May 25, 1917. Serial No. 170,933. (Cl. 33—100.)



T-square comprising a head having a slot a blade of a width greater than the width of the slot and having cen-

trally located upon one side a rib of a width equal to the width of slot and adapted to be seated in said slot in a predetermined position of the blade and a securing element passing through the blade, rib and head.

1,268,712. MECHANISM FOR CONTROLLING MOVEMENT. FRÉDÉRIC AUGUSTE HENRI HARLÉ, Paris, France. Filed July 21, 1914. Serial No. 852,161. (Cl. 172—239.)



1. In control apparatus, Wheatstone bridge mechanism comprising resistances at a control station, resistances at a controlled station, a plurality of balance circuits between said sets of resistances, movable contacts in electrical connection with said first-named resistances and said balance circuits for varying the resistances at the control station, movable contacts in electrical connection with said last-named resistances and said balance circuits for varying the resistances at the controlled station, a motor for moving said last-named contacts, and relay mechanism controlled by said balance circuits for controlling the operation of said motor.

6. In control apparatus, Wheatstone bridge mechanism comprising resistances at a control station, resistances at a controlled station, a plurality of balance circuits between said sets of resistances, movable circumferentially-spaced contacts in electrical connection with said first-named resistances and said balance circuits for varying the resistances at the control station, movable circumferentially-spaced contacts in electrical connection with said last-named resistances and said balance circuits for varying the resistances at the controlled station, a motor for moving said last-named contacts, and relay mechanism controlled by said balance circuits for controlling the operation of said motor.

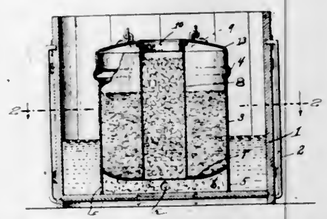
10. In control apparatus, Wheatstone bridge mechanism comprising resistances at a control station, resistances at a controlled station, a plurality of contact bars at the control station, a plurality of contact bars at the controlled station, movable circumferentially-spaced contacts at the control station for connecting the resistances to the respective contact bars at said station, movable circumferentially-spaced contacts at the controlled station for connecting the resistances to the respective bars at said station, a plurality of balance circuits connecting the contact bars at the two stations, each of said contact bars of one set being broken whereby the corresponding movable contacts predeterminately cut out each of said balance circuits, a motor for moving said last-named contacts, and relay mechanism controlled by said balance circuits for controlling the operation of said motor.

16. In control apparatus, a plurality of Wheatstone bridge circuits, means for varying the resistances of said circuits, said circuits and resistance-varying means being so related that the dead-points of the respective circuits are non-coincident, means for cutting out one of said circuits while another of said circuits is closed, and relay mechanism controlled by the balance circuits of said bridge circuits.

19. In control apparatus, a plurality of parallel Wheatstone bridge circuits each comprising resistances at a control station, resistances at a controlled station and a balance circuit connecting said sets of resistances, movable contacts at each of said stations in electrical connection with the respective resistances and balance circuits for varying the respective resistances at the two stations, said circuits and resistance-varying means being so related that the dead-points of the respective circuits are non-coincident, means for cutting out each of said circuits as a resistance-varying means thereof reaches or approaches a dead-point therein, and relay mechanism controlled by the balance circuits of said bridge circuits.

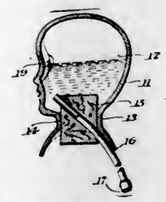
[Claims 2 to 5, 7 to 9, 11 to 15, 17, 18, and 20 to 26 not printed in the Gazette.]

1,268,713. ICE-CREAM FREEZER. JEROME HIRSCH, New Orleans, La. Filed July 23, 1917. Serial No. 182,293. (Cl. 220—147.)



An ice cream freezer, comprising a body having a central vertical tube, and a chamber surrounding the tube; the chamber being closed at its lower end and open at its upper end, and the tube being open at its upper and lower ends, and the bottom of the chamber and the lower end of the tube being arranged above the support on which the body is arranged to permit the passage of water below the chamber, and a removable cover common to the chamber and the tube; the said cover having a flange for tightly closing the chamber and also having a central vertical tube that tightly fits in the tube of the body and is open at its lower and upper ends.

1,268,714. WEEPING DOLL. GEORGE JOHN HOEFLER, Stapleton, N. Y. Filed Dec. 29, 1916. Serial No. 139,586. (Cl. 46—40.)

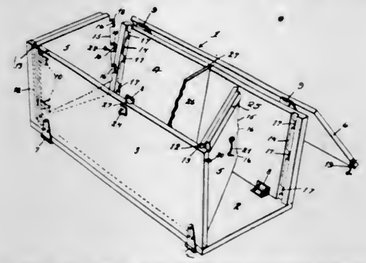


2. A doll having a hollow head to provide a reservoir and having openings in the face and neck portion thereof, a closure for the opening in the neck portion and a tube carried by said closure and extending into said head.

[Claims 1 and 3 not printed in the Gazette.]

1,268,715. FOLDING CRATE. CLEMENCE HOFFMAN, Newport, Mich. Filed May 11, 1917. Serial No 167,979. (Cl. 217—14.)

In a folding box, a bottom, a rear wall hinged to the bottom and formed adjacent each end with a transverse channel and with openings coinciding with said channels, a top hinged to the rear wall, a front wall hinged to the bottom, said front wall formed adjacent each end with a transverse channel, end walls having front edges adapted to engage in said channels of the front wall and rear edges adapted to engage in said channels of the rear wall, projections on said rear edges adapted to extend through said openings of the rear wall, and clamps pivoted to said projections and adapted to be engaged against the outer sur



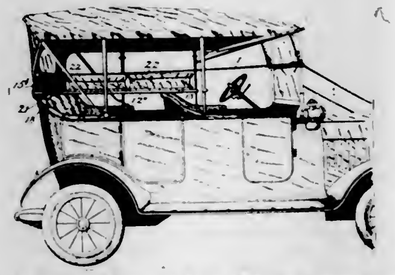
face of said rear wall, and hinge connections between the front wall and the end walls, said hinge conections attached to the end walls at points inwardly from the front edges of the end walls so that in the erected condition of the box the front edges of the end walls will be engaged in said channels of the front wall.

1,268,716. CURRENT DISTRIBUTER AND TIMER. CLARENCE E. HOLLIDAY, Duncan, Nebr. Filed Jan. 4, 1916. Serial No. 70,277. (Cl. 123—167.)



An ignition timer for internal combustion engines, comprising the usual shell, insulated contacts and rotary brush, a cam within the shell and connected with the brush to rotate therewith and having cam elements corresponding in number with the insulated contacts, opposed insulated elements mounted within the shell, a contact adjustable on one of the insulated elements, an arm hinged to the other insulated contact, a spring contact on the arm disposed to co-act with the adjustable contact, a spring pressing the free end of the arm inward, and a roller adjustable on the said arms and co-acting with the said cam.

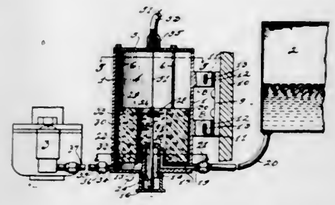
1,268,717. FOLDING BED FOR AUTOMOBILES. JOHN EDGAR HOWARD, Davenport, Wash. Filed Oct. 31, 1917. Serial No. 199,539. (Cl. 21—43.)



1. A device of the character described, comprising a lower portion designed to be supported on the backs of the automobile seats, and formed of slats hinged together laterally to permit the slats to be rolled up into a roll when not in use; an upper portion formed of flexible material; a folding support interposed between said upper and lower portions, said support being hinged at its lower end to said lower portion with the hinge arranged to fold inward, and adapted at its free upper end to detachably connect with said upper portion and arranged to rigidly hold the same sufficiently spaced from each other for the reception of the automobile cushions between them.

[Claims 2 and 3 not printed in the Gazette.]

1,268,718. FUEL-INDICATOR FOR INTERNAL-COMBUSTION ENGINES. BENJAMIN W. HURD, Sierra Madre, Cal., assignor of one-third to George E. Mesecar, Sierra Madre, Cal. Filed June 27, 1917. Serial No. 178,304. (Cl. 73—167.)



1. An indicating mechanism comprising a fluid receptacle having a main chamber provided with an outlet, a valve chamber between said inlet and outlet, an inlet passage to said valve chamber out of communication with said main chamber and communicating with the interior of said receptacle, a spring retracted indicator, a float in said receptacle connected with and for operating said indicator, and a valve in said chamber supported on said float for regulating the flow of the liquid.

6. An indicating mechanism comprising in combination an indicator, a receptacle having a fluid chamber therein, a valve chamber centrally formed below said liquid chamber and having a valve port for affording communication between said chambers, an inlet passage leading from the exterior of said receptacle to and in communication with said valve chamber and disconnected from said fluid chamber, a float mounted within said fluid chamber and adapted to rise and fall, respectively, with the rise and fall of the liquid therein, a needle valve supported on said float and extending through said port into said valve chamber for regulating the flow of the liquid from said valve chamber into said fluid chamber, a rigid tube connecting said indicator and said receptacle, and a cable for connecting said indicator and said valve, and adapted to be incased by said tube.

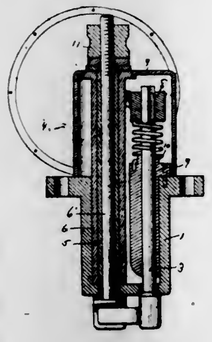
11. In a device of the character described, the combination with mechanism for indicating the rate of flow of the liquid, of a fluid receptacle having a main liquid chamber and an inlet chamber formed in the bottom of said main chamber and communicating therewith, a float movably disposed in said main chamber, a conical valve seated in said inlet chamber and attached to said float, and means for connecting said valve and said float with said indicating mechanism, said float being adapted to raise said valve and restrict the opening between said main chamber and said inlet chamber when the liquid rises in said main chamber.

[Claims 2 to 5, 7 to 10, and 12 not printed in the Gazette.]

1,268,719. VACUUM-ENERGIZED MAKE-AND-BREAK SPARK-PLUG. HERBERT GLEN IRWIN, Spur, Tex. Filed July 26, 1917. Serial No. 182,939. (Cl. 123—153.)

1. A vacuum energized make and break ignition device, comprising a cylindrrical hollow plug, a stationary elec-

trode mounted in suitable insulation, and an oscillating electrode suitably mounted within the plug, a vacuum actuated diaphragm, connections to cause the electrodes to contact with each other, a spring fastened to the oscillating electrode and adapted to return the same to its normal position.



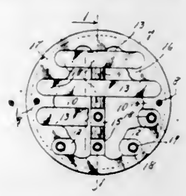
2. A vacuum energized make and break ignition device, comprising a cylindrical hollow plug, a stationary electrode mounted in suitable insulation and an oscillating electrode suitably mounted within the plug, a vacuum actuated diaphragm, a link connected to the diaphragm, an arm movable with the oscillating electrode and pivotally connected to said link, a spring fastened at one end to said arm and its other end held stationary, as set forth.

3. A vacuum energized make and break ignition device, comprising a hollow cylindrical plug with openings in the bottom thereof, an insulating member mounted within the plug, a stationary electrode mounted in said tube and passing through one of the apertures in the plug, an oscillating electrode, and guide within the plug in which the same is mounted, said oscillating electrode having a laterally projecting portion, an arm fixed to said oscillating electrode, a spring fastened at one end to said arm and its other end to said guide, a vacuum casing, a diaphragm mounted therein, and a link fastened to said diaphragm and having a pivotal connection to said arm, a flexible tube fastened in an opening in the casing, as set forth.

4. A vacuum energized make and break ignition device, comprising a hollow cylindrical plug with openings in the bottom thereof, an insulating member mounted within the plug, a stationary electrode mounted in said tube and passing through one of the apertures in the plug, an oscillating electrode, and guide within the plug in which the same is mounted, said oscillating electrode having a laterally projecting portion, an arm fixed to said oscillating electrode, a spring fastened at one end to said arm and its other end to said guide, a vacuum casing, a diaphragm mounted therein, and a link fastened to said diaphragm and having a pivotal connection to said arm, a flexible tube fastened in an opening in the casing, and a housing fitted over the electrodes and through which the stationary electrode passes, as set forth.

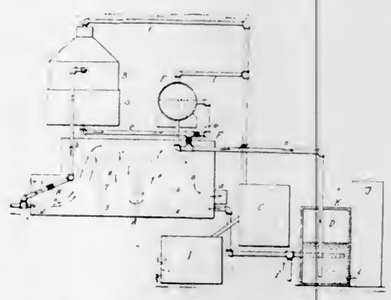
1,268,720. CHECK-VALVE. HENRY O. JACKSON, Denver, Colo., assignor to The Jackson Compressor Company, Denver, Colo. Filed Nov. 20, 1916. Serial No. 132,261. (Cl. 103—66.)

A check valve comprising a two-part casing, one part having inlet passages separated by a partition, the other part having outlet passages separated by a partition arranged at right angles to the partition of the first named part, recesses transversely arranged in the inner faces of the partition and lateral portions of the second named part, and flat valve pieces arranged in said recesses to extend at right angles to said partition of the second named part and adapted to cover said inlet passages, whereby



the outlet side of intermediate portions of the valves are exposed.

1,268,721. PROCESS OF AND APPARATUS FOR PREPARING CRUDE OIL FOR DISTILLATION. JENS O. JENSEN, New York, N. Y. Filed Feb. 24, 1917. Serial No. 150,662. (Cl. 196—25.)



1. The process of preparing crude oil for distillation, which consists in heating said oil to a temperature above 400° Fahr., removing the water and low boiling fractions therefrom, and delivering said oil to the still at a temperature above 212° Fahr.

3. The process of preparing crude oil for distillation, which consists in, first, subjecting a current of crude oil to a temperature above the boiling point of water, second, evaporating water and low boiling fractions from said heated oil, third, accumulating said oil at a temperature above the boiling point of water in a receptacle, and, fourth, cooling said accumulated oil by temperature exchange with a current of cold oil until the temperature of said oil while still above the boiling point of water is reduced below the flashing temperature of said oil.

5. An apparatus for preparing crude oil for distillation, comprising means for heating said oil, means for evaporating water and low boiling fractions from said heated oil, a tank receiving said oil from said evaporating means, and means for maintaining said oil in said tank at a temperature above the boiling point of water.

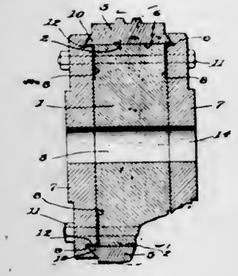
11. An apparatus for preparing crude oil for distillation, comprising a conduit for oil circulation, a heater for said oil receiving said oil from said conduit, an evaporator for removing water and low boiling fractions from said heated oil, a tank receiving said oil from said evaporator, a plurality of ducts within said tank connected to said conduit for circulating cold oil through said accumulated oil to cool the same, and means for directing the flow of said cold oil through one or more of said ducts.

[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

1,268,722. CUTTER-HEAD. ALEX J. JOHNSON, Nicolet Island, Minneapolis, Minn. Filed Apr. 18, 1917. Serial No. 162,875. (Cl. 144—231.)

1. A cutter head of the class described including a solid central body portion provided with peripheral cutter

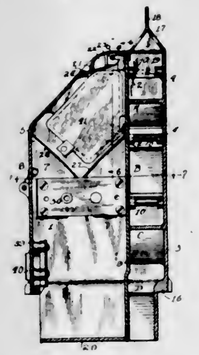
receiving faces arranged concentric with the axis of the cutter head, knives or cutters arranged upon the peripheral faces of the said body and being of substantially uniform width with the same, said knives or cutters having laterally projecting ribs or portions extending beyond the side faces of the said central body portion of the cutter head and provided with outer faces arranged at an angle or inclination to the axis of the cutter head, and annular side plates adjustably secured to the body portion of the



cutter head and provided with grooves having inclined outer walls fitting the ribs or projecting portions of the knives or cutters, said grooves being also provided with inner walls spaced from the ribs or projecting portions to enable the side plates to draw the knives or cutters inward radially of the cutter head to clamp the knives or cutters tightly against the body portion of the cutter head.

[Claim 2 not printed in the Gazette.]

1,268,723. TICKET AND COIN FARE-BOX. JAY M. JOHNSON, Chicago, Ill., assignor to William P. Butler, Berwyn, Ill. Filed May 28, 1914. Serial No. 841,685. (Cl. 232—8.)



1. In a device of the class described, a casing having a ticket slot therein, coacting members for preventing the insertion of a coin through the ticket slot, a ticket inspection compartment below the slot converging to a discharge aperture and ticket cutting and mutilating rollers below the compartment positioned to have the tickets fall thereon through the aperture.

2. In a device of the class described, a casing having a ticket slot therein, coacting members for preventing the insertion of a coin through the ticket slot, a ticket inspection compartment below the slot converging to a discharge aperture, ticket cutting and mutilating rollers below the compartment positioned to have the tickets fall thereon through the aperture and spring stripper fingers for each roller and adapted to strip the tickets therefrom.

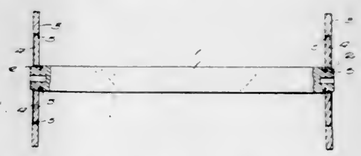
3. A device of the class described embracing a casing, a vertical partition therein affording on one side thereof a coin fare chute, and on the other side of the same a ticket inspection compartment, coacting mutilating devices one face of each of which is flat and adapted to contact against a corresponding flat face of the other device, said devices adapted to receive the ticket from said ticket-inspection compartment, a ticket collection compartment beneath the mutilating devices, a ticket slot in the front wall of said casing, and means for preventing the insertion of coin or the like through the ticket slot.

4. In a device of the class described, a casing, a wall dividing the same forming a ticket and a coin compartment, a ticket slot in the wall of the casing opening into the ticket compartment, ribs on the casing projecting into the slot, means coacting with the ribs to prevent objects other than tickets from passing therethrough, mutilating devices comprising coacting revolving scissor pointed cutting arms and means for actuating the same to perforate the tickets.

5. In a device of the class described, a casing, a wall dividing the same forming a ticket and a coin compartment, a ticket slot in the wall of the casing opening into the ticket compartment, ribs on the casing projecting into the slot, means coacting with the ribs to prevent objects other than tickets from passing therethrough, mutilating devices comprising coacting revolving scissor pointed cutting arms, means for actuating the same to perforate the tickets, means for stripping the tickets from the cutting arms and a compartment for receiving the mutilated tickets.

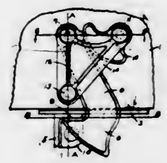
[Claim 6 not printed in the Gazette.]

1,268,724. FILM-HOLDING SPOOL. RICHARD JOHNSON, Proctor, Vt. Filed Sept. 17, 1917. Serial No. 191,762. (Cl. 242—70.)



A film spool including a core, circular end pieces formed of paper or other suitable material arranged on the opposite end extremities of said core, bracing elements having barbed ends arranged diametrically of the end pieces, each element having a barb engaged in the end pieces and a barb engaged in the core, the barb engaged in the end pieces being upset against the inner side of the same.

1,268,725. RAILWAY-CAR. BYERS W. KADEL, Roanoke county, and JOHN A. PILCHER, Roanoke, Va. Filed May 9, 1917. Serial No. 167,598. (Cl. 105—14.)



1. A railway car having a pair of adjacent hinged doors disposed with their pintles along their remote edges and adapted to swing toward each other into closed position, projections on the doors and hooks pivoted on the car and adapted to engage the said projections, the hooks being turned in opposite directions and each hook being pivoted in such manner as to swing by gravity into en-

gaged position, said hooks being disposed so as to swing toward the pinties of their respective doors for disengagement with the projections.

4. A railway car having a hinged door, a flat locking face on said door, a hook pivoted to the said car and having a locking face formed to engage and conform to the locking face on the said door, the pivot point of the said hook being so disposed that a plane through the axis thereof and erected normal to the plane of the locking faces will intersect the said locking faces, the stem of the said hook extending in a path at an acute angle with the plane of the locking faces.

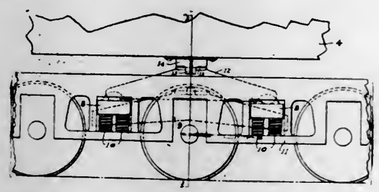
5. A railway car having a movable door, a hook pivoted to the car and adapted to engage said door and to hold the same in closed position, a cam also pivoted to the car and adapted to hold the said hook in engaged relationship with the door, and a bracket having three holes therein, the same being affixed to the said car and embracing the said hook and the cam, two of the holes thereof being coincident with the pivot points of the said hook and cam, the said bracket being affixed to the car at all of the said holes thereof.

9. A railway car having a body and a movable door, a hook pivoted to the car body and adapted to engage said door and to hold the same in closed position, a cam also pivoted to the car body and adapted to hold said hook in engaged relationship with the door, and a spring adapted to hold the said cam against said hook.

11. A railway car having sides and a hinged door extending transversely of the car from one side to the other, hooks pivoted to the car and adapted to engage the said door when the latter is drawn into closed position, and means for closing the door, said means embodying a lever extending outside of the line of one of the car sides and removably attached to the door, and means on the door for the removable attachment thereto of the lever.

[Claims 2, 3, 6, 7, 8, and 10 not printed in the Gazette.]

1,268,726. RAILWAY-CAR. BYERS W. KADEL, Roanoke county, Va. Filed Oct. 6, 1917. Serial No. 195,038. (Cl. 105—115.)

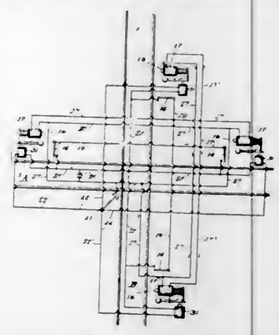


1. A railway car having a load-delivering center plate, a supporting truck therefor having a coöperating load-receiving center plate, a side-bearing member loosely supported upon the truck and a coöperating one rigidly supported upon the body, and means attached to one of said side-bearing members and engaging the other for holding the truck side-bearing member in vertical alinement.

[Claims 2 and 3 not printed in the Gazette.]

1,268,727. AUTOMATIC TRAIN-STOPPING APPARATUS. HAGOP H. KHOURESSERIAN, Boston, Mass. Filed Aug. 30, 1916. Serial No. 117,752. (Cl. 246—59.)

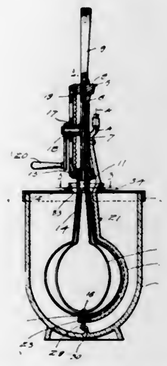
2. In automatic train stopping apparatus, the combination with intersecting lines of tracks, of a pair of solenoids spaced apart along each trackway, the solenoids of each pair being located on opposite sides of the point of intersection of the tracks, plungers for said solenoids, said plungers adapted for movement from an inoperative to an operative position, means for retaining said plungers in the operative position, and electro-magnetic releasing devices for said retaining means, a pair of switches spaced apart along each trackway and disposed on opposite sides of the point of intersection of the tracks, circuit connections between each switch and the solenoids of the intersecting lines of tracks, car-carried mechanism under the control of said plungers, a switch at the point of intersection of the tracks, circuit connections between the last-mentioned switch and said releasing device, car-carried means for actuating the first-mentioned switches, and car-carried means for actuating the last-mentioned switch.



4. In automatic train stopping apparatus, the combination with intersecting lines of tracks, of electro-responsive devices arranged above each trackway at both sides of the point of intersection of the rails, a switch adjacent to each electro-responsive device, circuit connections between each switch and the electro-responsive devices of the intersecting line of rails whereby upon the operation of the switch, said devices may be rendered active, plungers under the control of said electro-responsive devices respectively, electro-responsive means adapted to restore said plunger to normal position, car carried mechanism under the control of said plungers, a switch at the point of intersection of the trackways, circuit connections between said switch and said electro-responsive means, and car carried mechanism for operating the said switch to energize said electro-responsive means to restore said plungers to normal position.

[Claims 1 and 3 not printed in the Gazette.]

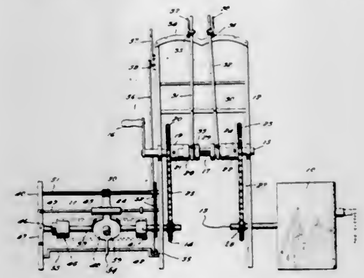
1,268,728. CHURN. JOSEPHINE KING, Iron River, Mich., assignor of one-fourth to August J. Waffen, Iron River, Mich. Filed Oct. 31, 1917. Serial No. 199,537. (Cl. 257—106.)



1. In combination, a bowl, an agitator, heating means secured to the agitator, and means carried by the heating means to removably secure the agitator and heating means in the bowl, as and for the purpose specified.

2. A device of the class described including the combination with a bowl, a hook formed integrally with the interior of the bottom of the bowl, an agitating device, a heating pipe secured to the frame of the agitating pipe and having one end open, a bearing eye carried by the lower end of the heating pipe and adapted to be removably arranged over the hook of the bowl to facilitate the holding of the agitating device and pipe within the bowl, as and for the purpose specified.

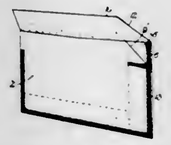
1,268,729. COMBINATION MOTION-PICTURE AND SOUND-REPRODUCING MECHANISM. ABRAHAM L. KIRKWOOD, Blocker, Tex. Filed Apr. 11, 1916. Serial No. 90,382. (Cl. 88—16.2.)



1. The combination with the operating shaft of a motion picture projector and the operating shaft of a sound reproducing machine, of a main frame having the operating shafts journaled therein, a main drive shaft journaled in the main frame, sprocket wheels loosely mounted on the main drive shaft, stationary clutch members carried by the sprocket wheels, other sprocket wheels on the operating shafts, chains operating about the sprocket wheels for transmitting motion from the main drive shaft to the motion picture projector and to the sound reproducing machine, movable clutch members slidably mounted on the main drive shaft and arranged to engage the corresponding stationary clutch members, levers pivotally mounted on the main frame and having their yoked ends operatively arranged about the movable clutch members whereby both of the machines may be operated in unison or independently of each other, pivotally mounted pawls operatively mounted on the handle ends of the lever and engageable with the frame whereby to consequently hold the movable clutch members in a set position, and means for rotating the main drive shaft.

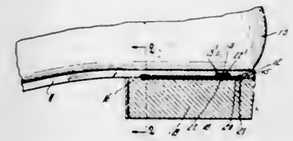
[Claims 2 and 3 not printed in the Gazette.]

1,268,730. ENVELOP. HENRY K. KISO, New York, N. Y. Filed Nov. 14, 1916. Serial No. 131,256. (Cl. 229—79.)



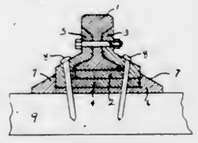
An envelop consisting of a body portion forming the back thereof and having independent flaps along its lower edge and one end, said body having an extension at its opposite end of substantially the dimensions of, and foldable on, the body, to form the front of the envelop, and externally lapping the said lower and end flaps, and a closing flap along the upper edge of the body externally lapping the upper portion of the said front extension continuously therealong, said closing flap and said extension having portions thereof cut away on an angle of approximately 45° to a line drawn centrally through said closing flap and centrally through said front extension to respectively expose portions of the extension and the said end flap within a rectangular area adjacent one corner of the envelop, for the purpose described.

1,268,731. DETACHABLE HEEL. ULRICH KORNSTEIN, New York, N. Y., assignor of one-half to James S. Friedman, New York, N. Y. Filed June 22, 1917. Serial No. 176,308. (Cl. 36—42.)



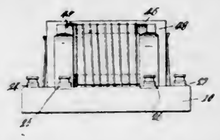
The combination with the heel portion of a shoe-sole, of a plate fastened thereto having a plurality of apertures and an arc-shaped slot merging into each aperture, a detachable heel section, a plate attached to said heel section provided with headed studs rising from its upper face, said studs being adapted to be inserted into said apertures and to be seated in said slots when said heel is turned, after the insertion of the heads of said studs into said apertures, in the proper direction, and coacting shoulders upon said plate and said heel section for preventing a turning movement of said heel section on said plate when once brought into the proper position, the shoulders on each plate extending toward the other plate and being formed to leave the opposite face of the respective plate smooth.

1,268,732. RAILWAY-RAIL JOINT. JOHN HENRY KOSSMANN, St. Louis, Mo. Filed Mar. 18, 1918. Serial No. 223,129. (Cl. 239—6.)



An improved railway-rail joint, comprising two opposite fish-plates having integral base-flanges at their lower edges; the abutting ends of two rails, located upon and supported by the said base-flanges; two solid separate unyielding tie-plates having opposite abutments which are high enough to prevent spreading of the base-flanges and form bearings against which the outer edges of said base-flanges rest; and spikes passing through registering apertures formed in the superposed base-parts of the fish-plates and the tie-plates.

1,268,733. LIGHTNING-ARRESTER. GARRETT W. KOTTS, Hope, N. D. Filed Nov. 30, 1917. Serial No. 204,757. (Cl. 175—30.)



1. A lightning arrester, which comprises a base formed of insulating material, and having terminals thereon, L-shaped clips connected with said terminals, a conducting plate having a negative resistance coefficient adapted to receive static discharges, said plate being engageable

by oppositely positioned clips, and a plurality of wire wound grooved plates having suitable terminals that are adapted to engage with the remaining clips when positioned upon each side of the conducting plate, said wire wound plates being in contact with the conducting plate and the grooves serving to space the wire from contact with said conductor plate.

3. A lightning arrester, which comprises a base formed of insulating material, clips mounted thereon, said clips including terminals, a conducting plate serving as a static plate having its ends adapted to be engaged with two of the clips, said plate being arranged longitudinally of the base, a pair of insulating members having wire wound thereon, said wire being connected with suitable terminals that are adapted to form contacts, one face of each of the members being grooved transversely and the grooves slightly displaced so that the wire will be wound in an approximately helical form and the convolutions will be insulated and spaced from each other, each of said members being provided on the side opposite to the transverse grooves with a longitudinal groove that is adapted to receive a conducting plate, suitable insulating material mounted on said plate to lie flush in said latter groove, and suitable insulating material disposed over said other insulating material, the clips and terminals mounted upon the sides of the base, being adapted to receive line wires so that the wire on the members will be inserted therewith, and the terminals connected with the conducting plate serving as ground terminals.

[Claims 2 and 4 to 6 not printed in the Gazette.]

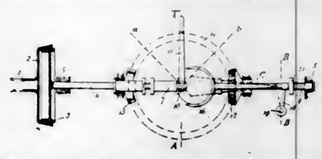
1,268,734. BRUSH. WILLIAM C. LAY, Nacogdoches, Tex. Filed July 11, 1917. Serial No. 179,946. (Cl. 15—24.)



A brush having an extension formed with a slot, said slot extending lengthwise the brush and of a length approximating the length of the brush, and a handle made up of separable sections and adapted for relative angular adjustments, said handle including a connection adapted for sliding and locking connection with the slot formation of the brush, and for a rotary locking connection with the handle proper, whereby the handle proper may be arranged so that its sections may have any angular adjustment either to the width, length, or intermediate position of the brush and at either end or any intermediate length of the brush.

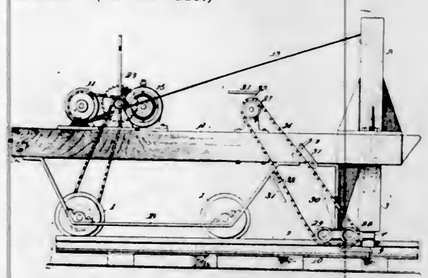
1,268,735. INTERCONNECTED REVERSING MECHANISM AND CLUTCH. MAURICE LETROTEUR, Paris, France. Filed Feb. 28, 1918. Serial No. 219,723. (Cl. 74—59.)

An apparatus for throwing into and out of gear and reversing the direction of motion of machinery, comprising a friction driving cone, a sliding shaft located in axial prolongation of the said cone, a friction cone on said shaft, an engaging spring acting upon said shaft, a driven shaft located at right angles to the said sliding shaft, a bevel wheel, on said driven shaft, pinions freely rotatable on the said sliding shaft, adapted to gear with the said bevel wheel, said pinions having clutch claws, a sleeve slidable on said slidable shaft, adapted to be rotated by the latter, said sleeve having claws adapted to engage



the claws on the said pinions, an operating shaft parallel to said driven shaft, an eccentric disk and a pin on said operating shaft, means operable by said eccentric for pushing said sliding shaft in opposition to its engaging spring, and means actuated by said sleeve for shifting said claw sleeve along said sliding shaft, substantially as set forth.

1,268,736. SPIKE-DRIVING MACHINE. ADAM LIGHTELL, New Orleans, La., assignor of one-half to James Murray, New Orleans, La. Filed Mar. 23, 1918. Serial No. 224,217. (Cl. 104—219.)

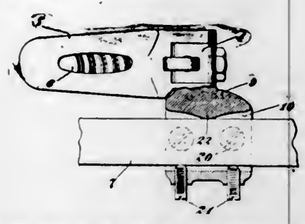


1. In a railway spike driving machine comprising a truck, spike driving means arranged thereon and means comprising an endless chain provided with a plurality of gripping clamps for feeding spikes to be driven beneath the spike driving means.

3. In a railway spike driving machine comprising a truck, spike driving means arranged thereon, and means for delivering spikes beneath the spike driving mechanism comprising an endless chain, sprocket wheels arranged above and below the truck for guiding such chain, clamping members arranged along said chain for feeding spikes beneath said driving means, the lower sprockets being so arranged that the said clamping means upon leaving the delivered spike is adapted to travel in substantially horizontal direction.

[Claim 2 not printed in the Gazette.]

1,268,737. LOOM-TEMPLE. HOMER F. LIVERMORE, Brookline, Mass. Filed Aug. 20, 1917. Serial No. 187,102. (Cl. 139—36.)

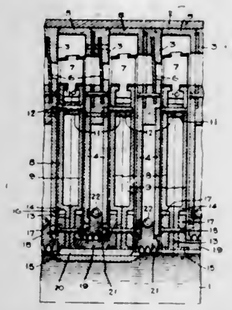


1. A loom temple having, in combination, a temple bar, a temple head having a neck provided with an opening

to receive the temple bar, a fixed pivot point in the temple neck substantially half way between the ends of the opening, and means for rocking said temple head about the fixed pivot point to change its angular relation to the temple bar.

[Claim 2 not printed in the Gazette.]

1,268,738. ELASTIC-FLUID TURBINE. WILLIAM J. A. LONDON, Springfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Sept. 13, 1917. Serial No. 191,147. (Cl. 253—69.)

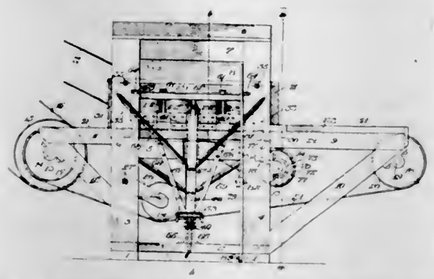


1. In an elastic fluid turbine, the combination of a shaft, wheels having flanges which engage the shaft, holding rings for said flanges, and an intermediate ring between some of the wheels which engages the shaft and is formed integral with the adjacent holding rings.

3. In an elastic fluid turbine, the combination of a casing, a shaft, diaphragms in the casing which divide it into stages, wheels in said stages, each of said wheels being formed of a pair of plates of sheet material, each of which has a flange which engages the shaft, holding rings surrounding said flanges, intermediate rings in every other space between the opposing faces of adjacent wheels, which rings engage the shaft and are connected to the adjacent holding rings, and packing members for the diaphragms which pack against said intermediate rings and the shaft.

[Claims 2 and 4 not printed in the Gazette.]

1,268,739. CAN-FILLING MACHINE. PETER I. LONGROD, East Williamson, N. Y., assignor to Frank H. Van Eenwyk, East Williamson, N. Y. Filed Mar. 16, 1916. Serial No. 84,506. (Cl. 226—9.)

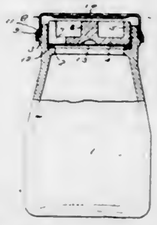


1. A machine for filling receptacles comprising a carrier adapted to hold a plurality of receptacles, an endless conveyer running through the carrier adapted to deliver said receptacles to the latter and to discharge them therefrom, means for temporarily arresting the receptacles upon the carrier, means for filling the receptacles while held by the carrier and means for vibrating the carrier to compact the contents of said receptacles.

5. A machine for filling receptacles comprising an endless conveyer adapted to carry a plurality of receptacles, a container adapted to be charged with contents for filling said receptacles and having a plurality of spaced openings at its bottom, a movable member adapted to close said openings, means operable to hold the receptacles upon the conveyer in registering engagement with said openings and a system of levers connected with said last mentioned means and said movable member adapted to be operated for simultaneously engaging the receptacles to hold them upon the conveyer and shifting said movable member to discharge the contents of the container into the receptacles.

[Claims 2 to 4 not printed in the Gazette.]

1,268,740. CONDIMENT-BOTTLE. WILLIAM A. LORENZ, Hartford, Conn. Filed Feb. 17, 1917. Serial No. 149,347. (Cl. 215—81.)



A hermetically sealable container comprising a jar having a shoulder in the interior and a shoulder on the exterior, a gasket on the interior shoulder, a gasket on the exterior shoulder, a cover loosely fitted into the mouth of the jar and resting on said inner gasket, and a cap with a corrugated top and a flexible rim fitted to the exterior gasket, whereby when said cap is subjected to greater atmospheric pressure on the outside than on the inside its rim seats tightly on the exterior gasket and hermetically seals the jar on the exterior and its corrugated top collapses against the cover and holds said cover tightly down on the interior gasket and hermetically seals the jar on the interior.

1,268,741. GAME APPARATUS. WILBER A. MCCOY, Pittsburgh, Pa. Filed Apr. 12, 1917. Serial No. 161,500. (Cl. 46—61.)



3. A projectile projector for a surface projectile game, comprising a manually guided chute adapted to be positioned at an inclination, and having a laterally extending handle at its upper end, said end also having a projectile supporting and starting section normally positioned at an angle to the chute, and hinged to swing into alinement with the chute to direct the projectile thereinto, and a trigger on said section extending alongside the aforesaid handle.

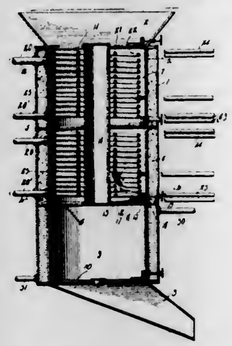
4. A projectile projector for a surface projectile game, comprising a manually guided chute adapted to be positioned at an inclination, and mechanical means at the upper end of the chute for supporting the projectile and directing the same into the chute.

[Claims 1 and 2 not printed in the Gazette.]

1,268,742. STILL OR RETORT. HUGH MACRAE, Wilmington, N. C. Filed Mar. 28, 1918. Serial No. 225,371. (Cl. 203—6.)

1. A vertically arranged retort or still comprising an outer wall, a partition extending across the interior of

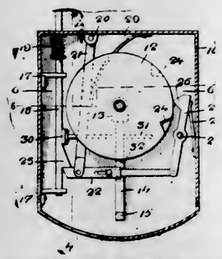
the retort or still having openings and means for closing them, said partition separating the retort or still into upper and lower compartments, heating pipes for heating the compartments, means for supplying a heating medium to the heating pipes of the different compartments independently, and separate offtakes for the products of distillation leading from the different compartments, the offtakes for the lower compartment leading from near the partition at the upper end of the compartment.



2. A vertically arranged retort or still comprising an outer wall, a partition extending across the interior of the retort or still having openings and means for closing them, said partition separating the retort or still into upper and lower compartments, heating pipes for heating the compartments, means for supplying a heating medium to the heating pipes of the different compartments independently, separate offtakes for the products of distillation leading from the different compartments, the offtake for a lower compartment leading from near the partition at the upper end of the compartment, a second partition extending across the interior of the retort or still at the lower end of the lower compartment having openings and means for closing them, said second partition separating the lower compartment from a chamber below it, and means for cooling said chamber.

3. A vertically arranged retort or still comprising an outer wall, a central tube, a partition surrounding the central tube and extending across the interior of the retort or still having openings and means for closing them, said partition separating the retort or still into upper and lower annular compartments, heating pipes for heating the compartments, means for supplying a heating medium to the heating pipes of the different compartments independently, and separate offtakes for the products of distillation leading from the different compartments, the offtake for a lower compartment leading from near the partition at the upper end of the compartment.

1,268,743. LOCK. PHILIP MADSON, Lemmon, S. D. Filed Feb. 20, 1917. Serial No. 149,894. (Cl. 175—282.)



1. A lock of the character described comprising a casing, a spring moved plunger within the same, combination disks rotatably supported within the casing, a switch blade insulated from the support for the disk and manually operated, a locking bolt movably mounted within the casing and engageable with the plunger to hold the same in one position, a contact insulated from and supported by the plunger, a contact on the switch blade and always engageable by the contact on said plunger when the latter is moved to another position under the action of the spring, and means controlled by the disks for permitting movement of the latch bolt.

[Claims 2 to 4 not printed in the Gazette.]

1,268,744. NECKTIE-HOLDER. MATHIAS MAGNUSON, Chicago, Ill. Filed Apr. 16, 1917. Serial No. 162,331. (Cl. 211—14.)



1. In a necktie holder, a hook engaged by the necktie and a pair of arms, and means connecting the hook and arms to open the arms when the hook is pressed.

2. In a necktie holder, a support for one portion of the tie, a pair of arms held yieldingly together, and means operated by the movement of the support to separate the arms for inserting and removing another portion of the tie.

3. In a necktie holder, a depressible support for the center of a tie, yielding means for engaging the ends of a tie and holding them together and the tie in extended position, and an operating connection between the support and said means.

4. In a necktie holder, the combination with a depressible hook and a pair of arms, of means connecting the hook and arms for simultaneous operation, and resilient means tending to press the arms together and to raise the hook.

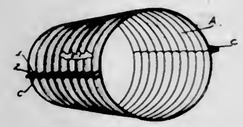
5. In a necktie holder, a supporting hook over which the central portion of the tie is engaged, resilient means for pressing the hook upwardly, a pair of arms for engaging the ends of the tie and holding the tie extended, and means to open the arms when the hook is depressed against said resilient means.

[Claims 6 to 11 not printed in the Gazette.]

1,268,745. BENDING CORRUGATED MATERIAL. CHARLES E. MARTIN, Mansfield, Ohio. Filed Feb. 12, 1917. Serial No. 148,027. (Cl. 61—9.)

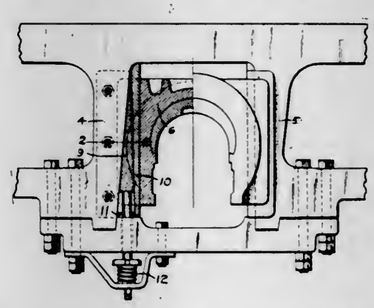
1. The herein-described method of forming flanges on corrugated material having alternate ridges and depressions, consisting in bending the edge of the material to form a flange and simultaneously forming such flange to present alternate ridges and depressions substantially similar to and uniform with such formations in the material but of opposed registry, whereby each ridge and each depression of the material merges into a depression and a ridge respectively of the flange.

2. The herein-described method of forming flanges on corrugated material having alternate ridges and depressions consisting in bending the edge of the material to form a flange, forming the flange with alternate ridges and depressions merging into and registering with the nonsimilar formations of the material, the line of merger between such formations of the material and flange constituting the line of bend.



3. A corrugated strip having ridges and depressions and an angularly related flange on one edge thereof having substantially similar ridges and depressions as the strip arranged in exact opposite order to such formations of the strip, the line of bend of the flange constituting the plane of least projection of the material beyond the normal plane of the material to avoid fracture.

1,268,746. AUTOMATIC WEDGE FOR DRIVING-BOXES. FREDERICK W. MARTIN, New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 1, 1917. Serial No. 189,293. (Cl. 105—113.)



1. The combination with a driving-box pedestal, of a wedge of substantially the same width as the thickness of the pedestal jaw, and removable wear strips attached to the front and rear sides of the pedestal and extending upon opposite sides of the wedge to guide the same.

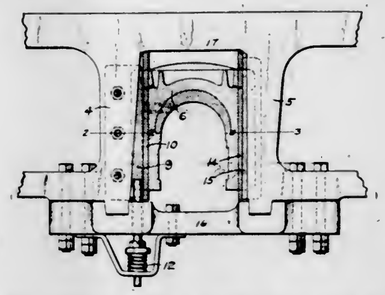
2. The combination with a pedestal, a driving-box having flanges, and a wedge for taking up wear, of removable wear strips attached to the front and rear sides of the pedestal and extending between the sides of the wedge and the flanges of the driving-box.

3. The combination with a pedestal, and a driving-box having flanges, of an adjusting wedge of substantially the same width as the thickness of the pedestal, a floating wedge extending between the flanges of the driving-box, and removable wear strips attached to the sides of the pedestal and extending upon opposite sides of the adjusting wedge.

1,268,747. DRIVING-BOX WEDGE DEVICE. FREDERICK W. MARTIN, New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 1, 1917. Serial No. 189,295. (Cl. 105—113.)

1. The combination with a pedestal jaw having an inclined face, and an adjusting wedge coöperating therewith, of a shoe engaging the pedestal jaw at the opposite side and having an inclined face toward the driving box.

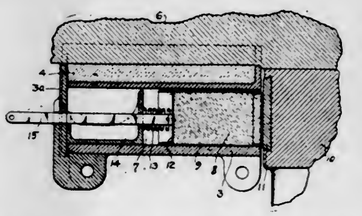
2. The combination of an adjusting wedge tapered in one direction at one side of the driving box, a floating wedge tapered in the opposite direction at the other side of the driving box, and a shoe having an inclined face engaging said floating wedge.



3. The combination with a pedestal jaw having an inclined face, and an adjusting wedge coöperating therewith, of a shoe having an inclined face at the opposite side of the driving box, and a floating wedge between said shoe and the driving box.

[Claims 4 and 5 not printed in the Gazette.]

1,268,748. DRIVING-BOX HUB-LUBRICATOR. FREDERICK W. MARTIN, New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del., a Corporation of Delaware. Filed Nov. 15, 1917. Serial No. 202,182. (Cl. 64—26.)

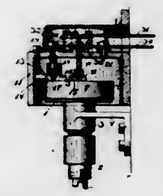


1. In a lubricator, the combination of a solid lubricant and means for pressing the same laterally against the hub of a wheel.

5. In a lubricator, the combination of a lubricant cellar having a chamber at one side and provided with an opening opposite the face of the hub of the wheel, a container in said chamber and having a perforated end extending through said opening, a lubricant in the container, and a follower and spring for pressing the lubricant against the hub of the wheel.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,268,749. VEHICLE-SIGNAL. JOHN MEILE, East St. Louis, Ill. Filed Nov. 27, 1916. Serial No. 133,531. (Cl. 175—355.)



1. In a vehicle signal, the combination with a series of separately designated signal compartments, electric lamps

in said compartments, and energizing circuits for said lamps, of a switch for controlling said circuits comprising a case, an annular series of contact segments mounted in said case, a revoluble member mounted in the case, a contact arm carried by said revoluble member and arranged to contact with said segments successively, a revoluble magnet for energizing the revoluble member whereby said revoluble member is turned and held in positions dependent upon the speed of rotation of said magnet, and a connection between said magnet and a wheel of the vehicle whereby the magnet is rotated coördinately with the speed of the vehicle.

2. In a vehicle signal, the combination with a series of separately designated signal compartments, electric lamps in each of said compartments, and energizinz circuits for said lamps, of a switch for controlling said circuits comprising an annular series of contact segments, said segments being electrically connected with one lead of the energizing circuits for said lamps respectively, a contact arm having electrical connection with the other lead of said lamp energizing circuit, a movable support for said arm, a magnet within said support and coördinated therewith so that the support is moved different distances according to the speed of rotation of the magnet, a spring for holding said support in position that the contact arm normally is in contact with one of said segments, and means connecting the magnet with a wheel of the vehicle so that the contact arm support is moved from its normal position different distances to bring the contact arm in contact successively with the segments dependent upon the speed of the vehicle.

3. In a vehicle signal, a series of electrical circuits adapted to energize separate lamps, a switch comprising an annular series of segmental contact plates connected respectively with one lead of said circuits, a movable member, a contact arm carried by said movable member electrically connected with the opposite lead of said circuits, and a magnetic device operated by a wheel of the vehicle for moving said movable member relative distances dependent upon the speed of the vehicle whereby said contact arm is moved successively so that the circuits are closed in succession dependent upon the speed of the vehicle.

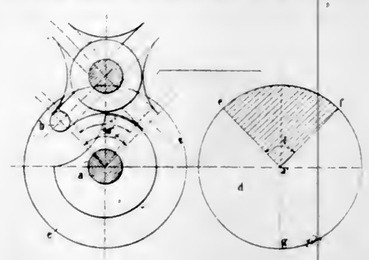
4. In a vehicle signal, a series of lamps, designated incasements for said lamps, and energizing circuits for said lamps arranged in combination with a switch comprising stationary contact plates connected with one lead of the circuits respectively, a contact element connected with the opposite lead of said circuits respectively, means including a magnetic device connected with a wheel of the vehicle for moving said contact arm for successive contact with certain ones of said contact plates, and means for returning said contact arm to a position in contact with one of said contact plates when the magnetic device is stationary.

5. In a vehicle signal, the combination with separate electrical circuits for energizing electric lamps, of a switch having an annular series of contact plates, said plates being of different lengths, a movable contact arm-support, a contact arm carried by said support, means for holding said support normally in contact with one of said contact plates, and a magnetic device connected with and operated by a wheel of the vehicle for moving said contact arm-support in opposition to the means holding it in normal position, whereby said contact arm is brought successively into contact with the contact plates.

1,268,750. TRANSMISSION MECHANISM. HUBERT CHARLES MÉNARD, St. Maurice, France. Filed Jan. 31, 1917. Serial No. 145,799. (Cl. 24—41.)

3. A motion-transforming driving mechanism, comprising, in combination, a disk; an intermittently-acting driving part secured to said disk; a continuously-rotating shaft; and a disk mounted on said shaft; one of said disks being provided with a finger, and the other with a slot wherein said finger is engaged; the two disks having their centers disposed out of alinement with each other.

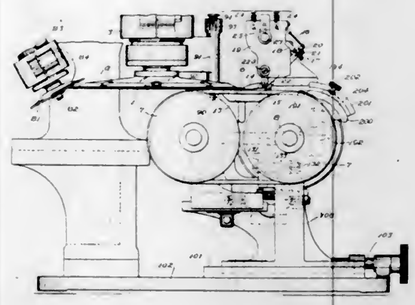
4. A motion-transforming driving mechanism, comprising, in combination, a rotatably-mounted Maltese cross; a disk; a driving finger acting intermittently on the arms of the Maltese cross and secured to said disk; a continuously-rotating shaft; a disk secured to said shaft; and a



second finger provided on one of said disks, the other disk being provided with a slot wherein said finger is engaged; the two disks having their centers disposed out of alinement with each other.

[Claims 1, 2, and 5 not printed in the Gazette.]

1,268,751. SKIVING-MACHINE. FRANK W. MERRICK, Boston, Mass., assignor to American Stay Company, Boston, Mass., a Corporation of Massachusetts. Filed Feb. 14, 1917. Serial No. 148,584. (Cl. 69—16.)



1. The combination comprising a moving material-supporting surface, a disk-cutter acting in a plane adjacent the said surface upon a portion of the material which is supported by the moving surface, and a series of work-pressers making contact with the surface of the work on a curve concentric with the edge of the disk cutter and close to such edge.

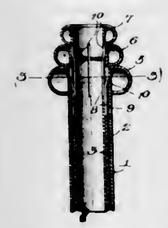
5. The combination comprising a cutter, material-feeding means, a series of work-pressers making contact with the surface of the work adjacent the edge of the cutter, and means for adjusting the pressers individually in a direction parallel with the plane of the cutter-edge to regulate the closeness of the same to the said edge.

24. The combination comprising a rotary cutter-body having holes exceeding in diameter in different directions the diameters of the securing screws or bolts to permit the latter to assume their own positions in such holes, a cutter-ring having holes occupied by such screws or bolts, and the said securing screws or bolts, occupying the holes, and fastening the cutter-ring to the cutter-body.

25. The combination comprising a cutter, and a traveling cutting-bed paralleling the plane in which the cutter operates, feeding the work to the action of the cutter and supporting it while being acted upon, and comprising a bed-apron composed of broad-surfaced blocks flexibly linked together and having portions interlapping with one another in the direction of the length of the bed-apron whereby the transverse joints are broken and with the projecting portions of said blocks formed with convex edges working in concavities in the opposing edges.

[Claims 2 to 4 and 6 to 23 not printed in the Gazette.]

1,268,752. KNITTING-NEEDLE. ALPHA H. METCALF, Attleboro, Mass., assignor to Marathon Company, Samuel M. Einstein, proprietor, Attleboro, Mass. Filed Feb. 13, 1918. Serial No. 216,869. (Cl. 66—17.)



1. A set of knitting needles composed of a hollow needle, and a second needle received on the interior of the hollow needle, said needles being of substantially the same length and diameter and each having a handle and a point.

2. A set of knitting needles composed of a hollow needle, a second needle movably received in the first needle, said second needle being formed with relatively short slits and the metal between the slits being bowed outwardly to form spring-like projections engageable with the inner circumferential wall of the hollow needle so as to hold the needles against accidental separation.

3. A set of knitting needles composed of a series of hollow outer needles receivable one within the other and an inner needle receivable in the inner one of the outer needles, all of the needles being of approximately the same diameter and length so as to each have a handle of similar length.

4. A set of knitting needles composed of a hollow outer needle, a hollow inner needle receivable on the interior of the outer needle and having a head engaging the adjacent end of the outer needle, said inner needle having a series of relatively short spaced slits extending to its head and having the material between the slits bowed outwardly to form spring fingers to engage the inner circumferential wall of the outer needle.

1,268,753. SLEEPING DOLL. SAMUEL MODERN, New York, N. Y. Filed Dec. 1, 1917. Serial No. 204,855. (Cl. 46—40.)



1. In a sleeping doll, an eye support, eyes each having a lateral stem, said stems having a sliding engagement to prevent their turning relative to one another, said stems bearing in said support, and a pendulum constrained to revolve with said stems.

2. In a sleeping doll, an eye support, eyes each having a lateral triangularly-shaped stem, one of said stems being tubular to accommodate the other stem, whereby the two eyes may be moved to or from one another but prevented from turning, said stems being mounted to turn in the support, and a pendulum having a triangular opening for engaging one of the stems, whereby said eyes are moved in the support when the pendulum is displaced.

3. In a sleeping doll, an eye support, eyes each in the shape of a hemisphere having a lateral, substantially triangular stem at the edge, one of said stems being tubular to receive the other stem whereby the two eyes may be moved to or from one another but are prevented from turning, said support having a round opening for said triangular stems wherein the same are mounted to turn, and a pendulum having a triangular opening for engaging the triangular stem, said opening in the pendulum being flanged by the depression of the material to form the triangular openings for the stem.

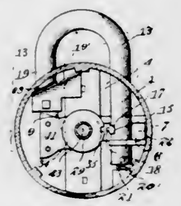
4. In a sleeping doll, in combination, an eye support, eyes revolubly mounted on said support, a pendulum for moving said eyes, and a tongue in pivotal connection with the pendulum and adapted to be drawn in when the doll is placed in a substantially horizontal position.

1,268,754. WASHTUB-COVER. GEORGE P. MORELL, New York, N. Y., assignor to Enameled Steel Specialties Company, Inc., New York, N. Y., a Corporation of New York. Filed June 21, 1916. Serial No. 105,033. (Cl. 220—11.)



In a one piece metallic wash tub cover having seamless corners, downwardly projecting edges having perforations therein, bolts adapted to be passed through certain perforations, a bumper secured to the cover by said bolts, means for hingedly connecting the cover to the tub, and bolts passing through other perforations on the opposite edge of the cover for securing the last mentioned means to the cover.

1,268,755. PERMUTATION-PADLOCK. WILLIAM J. MORGAN, Barton, Ohio. Filed Nov. 12, 1915. Serial No. 61,099. (Cl. 70—113.)

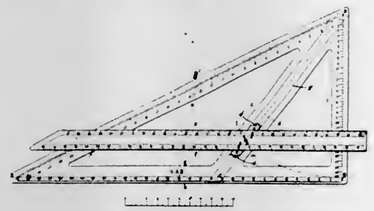


1. A permutation padlock including a casing having depressions in one of the faces thereof, a spring pressed shackle in the casing, a sliding member coacting with the shackle for securing the same in locked position in the casing, arbors in the casing one comprising a sleeve member receiving the other arbor, hands upon the exterior of the casing for both the arbors, a notched disk secured to one of the arbors, a finger upon said disk, notched tumbler members having arcuate slots of varying lengths disposed upon the said arbor and having the finger of the said disk received in the said slots, a second notched disk secured to the inner arbor and connected with the finger of the first mentioned notched disk and a spring detent upon one of the hands engaging with referred to depressions in the face of the casing.

2. A permutation padlock including a casing, a shackle having a notched leg received in the casing, spring means for normally moving the shackle to an unlocking position, a slidable member in the casing, a lug carried thereby and designed to engage in the notch of the shackle to hold the shackle in locked position, arbors, one comprising a sleeve and the other comprising a stem revolubly received in the sleeve arranged in the casing, operating

members for the arbors arranged exteriorly of the casing, a notched disk secured to the sleeve, a plurality of other notched disks loosely arranged on the sleeve, one of which being disposed adjacent the referred to fixed disks, and the remaining disks having arcuate slots of different lengths, means between the disks for normally retaining the same against movement on the sleeve, a notched disk rigidly secured to the end of the stem projecting through the sleeve, and a finger member connecting the last mentioned disk with the referred to loosely arranged disk upon the sleeve adjacent the fixed disk, and said finger passing through the arcuate slots in the remaining disks, all as and for the purpose set forth.

1,268,756. INSTRUMENT FOR DIVIDING LENGTHS ACCORDING TO THE GOLDEN SECTION. PAUL NICOLE, Lausanne, Switzerland. Filed Aug. 9, 1917. Serial No. 185,278. (Cl. 33—95.)



1. An instrument of the class described comprising a triangle, a brace connecting the base of the triangle with the opposite angle the axis of which brace divides the base of the triangle according to the golden section, and a straight edge movable on said brace so as to assume at all times a position parallel to the base of the triangle, the said triangle and straight edge being provided with scales so that by adjusting the straight edge to position the golden section of a given dimension may be read thereon.

2. An instrument of the class described comprising a right angle triangle, a brace connecting the base of the triangle with the opposite angle, which brace has a groove therein while the axis thereof divides the base of a triangle according to the golden section, a slide movable in the groove in the said brace, and a straight edge secured to the said slide so as to assume at all times a position parallel to the base of the triangle the sides of the triangle and the straight edge being provided with scales so that by adjusting the straight edge to position the golden section of a given domension may be read thereon.

[Claim 3 not printed in the Gazette.]

1,268,757. FASTENER FOR FILE-BINDERS. JOSEPH NIEBLING, Woodcliff Lake, N. J. Filed Apr. 26, 1917. Serial No. 164,691. (Cl. 129—25.)



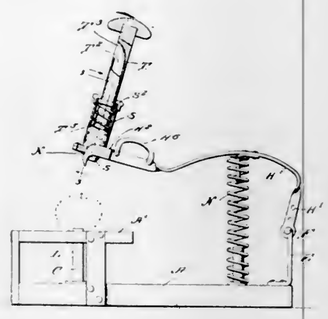
1. The combination with binding hinge strips having alined apertures, provided in pairs therein, of a retainer on one of said strips secured intermediate of said apertures and a pliable impaler pivotally connected with the other strip so as to enable it to be passed through either one of the paired apertures.

2. The combination with binding hinge strips having paired openings at suitable intervals therethrough, of a pliable impaler pivotally attached to one of said strips in such a manner as to permit it to traverse either pair of said openings, and a retainer on the other strip adapted to engage the free end of said impaler after it is drawn from either of the openings.

3. The combination with binding hinge strips having a plurality of apertures provided in the same, of an anchor on one of said strips located intermediately of said apertures, a pliable impaler journaled to said anchor in position to enter one of the apertures at either side thereof, and a retainer on the other strip capable of engagement with the free end of said impaler coming in either direction.

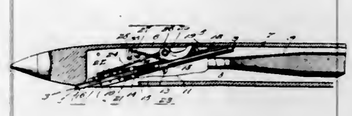
4. The combination with binding hinge strips, of a plate partly covering one of said strips exteriorly thereof and formed with openings in different parts of the same, said openings being capable of registering with similar openings in the other strip, an anchor secured to the latter intermediately of the openings, a retainer occupying a corresponding position on the plate, and a pliable impaler pivotally connected to said anchor so as to permit it to traverse either one of the openings and thence to engage said retainer while reclining over the plate from either end of the latter.

1,268,758. DEVICE FOR CORING APPLES. GEORGE NIKOLOW, New York, N. Y. Filed Apr. 15, 1918. Serial No. 228,670. (Cl. 146—6.)



A device for coring apples, comprising a base with a cylindrical outline, a pin rising therefrom, a platform supported upon the base and provided with an opening through which the pin projects, a spring pressed arm pivotally mounted upon said platform and terminating in a downwardly extending hook, a cylinder secured to said arm, a spring pressed punch mounted in said cylinder, said hook adapted to hold and engage the apple over the opening in the platform while the core is removed by forcing the punch through the apple and over said pin.

1,268,759. SHUTTLE. JOHN D. NIX, Philadelphia, Pa. Filed July 11, 1916. Serial No. 108,623. (Cl. 139—46.)

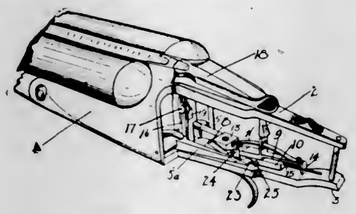


2. A shuttle comprising a recessed body having a bobbin positioned therein, a threading device situated within said body, said device consisting of a movable needle normally positioned within the recess of the body when in a retracted position, means for guiding the free extremity of the thread carried by said bobbon to a notch formed in one extremity of said needle, means for extending said needle so that the notched end thereof will extend beyond the body of said shuttle whereby said thread will be trained through the thread receiving eye of the shuttle, a thread tensioning device under the control of the needle, whereby the thread is simultaneously trained through the device and said eye, and means for automatically returning the device to normal position subsequent to the threading thereof.

7. A shuttle comprising a recessed body having a thread receiving bobbin mounted therein, a shuttle threading device mounted within said body and including a movable needle having a notch formed in one extremity thereof, means for moving said needle from its retracted position within said body to a point exterior of the latter, means for guiding the free extremity of the thread carried by the bobbin to said notched extremity of the needle, to effect the threading of said shuttle when the needle is extended, a thread tensioning device comprising a movable arm, loops formed on said arm, a cam surface disposed upon said arm and situated in the path of movement of said needle whereby to move said loops in the path of movement of said needle and thread, and means connected to said arm for placing said threads under a suitable tension when said needle is moved to a retracted position.

[Claims 1 and 3 to 6 not printed in the Gazette.]

1,268,760. SINGLE-TRIGGER MECHANISM FOR DOUBLE-BARREL GUNS. FRANK S. NOVOTNY, St. Paul, Minn., assignor of one-half to John F. Fitzpatrick, St. Paul, Minn. Filed Aug. 21, 1916. Serial No. 115,982. (Cl. 42—42.)



1. In trigger mechanism for double barrel guns, a pair of sears, an interposed actuator slide having oppositely extending lugs underlying the sears for raising the same, a trigger underlying the slide to lift the same, and a bracket pivoted at its forward end and formed with a seat slidably supporting the slide, said bracket also having a rearwardly extending arm formed with a downturned terminal portion for guiding the slide.

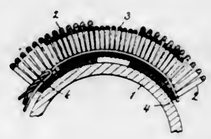
4. In a single trigger mechanism for double barrel guns, a pivotally mounted bracket having a rearwardly extending arm whose terminal is downturned and perforated, a sear actuator slide supported by the bracket, said slide having a rearwardly extending part received by the perforated arm for guiding the slide in its movements, a coiled spring encircling the slide part between the bracket arm and the body portion of the slide for urging the latter forwardly, said slide also having a forward extension, a rearwardly swinging arm normally free from the latter and adapted to engage the same for moving the slide rearwardly, and a bolt slidable on the breaking of the gun for swinging the last arm.

8. In a single trigger mechanism for double barrel guns, a pair of sears, an actuator therefor, having a projecting lug, a spring latch fixed at one end and having its other end of hook form to engage the lug and thereby hold the actuator from movement, the upper face of said hook end being beveled, and a lock slidably mounted and formed with an angular arm terminating in a hook to engage the beveled face of the latch for depressing the latter from normal position and interlocking with its hook end to retain the same inoperative.

11. In a single trigger mechanism for double barrel guns, a block, a sear on each side thereof, a bracket pivoted to the block and provided with a rearward extension having a downturned terminal and an upstanding slotted spring guide in advance of the latter, a leaf spring secured on the extension rearwardly of the guide and passing through the latter into the block for yieldingly holding the bracket down, an actuator slidably carried by the bracket for actuating the sears and provided with a rearwardly extending rod slidably received by the downturned terminal of the bracket extension, and a coiled spring encircling the rod between the downturned terminal and actuator body for urging the latter forwardly.

[Claims 2, 3, 5 to 7, 9, 10, and 12 not printed in the Gazette.]

1,268,761. HOSE-BAND. WILLARD A. OSLEY, Springfield, Mass. Filed Aug. 15, 1917. Serial No. 186,347. (Cl. 137—90.)



1. A hose band comprising telescoping encircling members for a hose, and means to secure such members to said hose, said band being adapted to protect the hose.

2. A hose band comprising telescoping encircling members for a hose, and means to secure such members to said hose, said securing means being wholly within said encircling members.

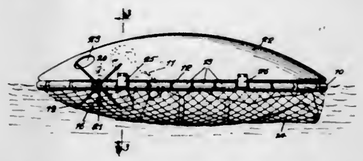
3. A hose band comprising telescoping encircling members for a hose, and an encircling member to secure such first-named members to said hose, said last-named member being entirely within said first-named members.

4. A hose band comprising a tubular member adapted partially to encircle a hose, a tubular member adapted to engage the ends of said first-named member and substantially fill the space between, and an encircling binding member within said tubular members.

5. A hose band comprising a flexible tubular member adapted partially to encircle a hose, a flexible tubular member adapted to engage the ends of said first-named member and substantially fill the space between, and a flexible and pliable, encircling and binding member within said tubular members.

[Claims 6 to 8 not printed in the Gazette.]

1,268,762. SWIMMING DEVICE. FREDERICO PACHECO, Brooklyn, N. Y. Filed Apr. 9, 1918. Serial No. 227,464. (Cl. 9—18.)



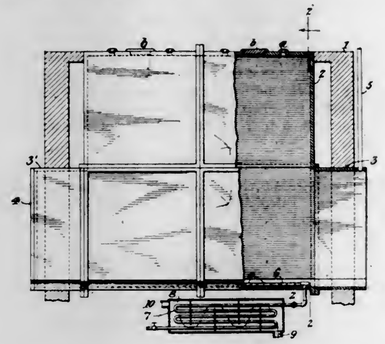
1. A swimming device comprising a float, a flexible intersticed hull on the float for supporting a person, means on the float, operable by the person whereby the float, hull and person will be propelled in the water, and a movable cover on top of the float.

4. A swimming device comprising an annular float with a suspended flexible intersticed hull for accommodating

a person, two propellers on the float, operable by the person to propel the float and hull, and a cover on the float, hinged so as to be swung to open and closed positions.

[Claims 2 and 3 not printed in the Gazette.]

1,268,763. PROCESS OF AND APPARATUS FOR MAKING NATURAL-GAS SUBSTITUTE. CHARLES S. PALMER, Pittsburgh, Pa. Filed Oct. 5, 1917. Serial No. 194,834. (Cl. 48—202.)



1. In the manufacture of water-gas, the process, which consists in confining a charge of fuel in a space having an envelop which consists principally of a metal associated with iron in the "iron group" in Mendeléjeff's table and of greater atomic weight than iron, said envelop not exceeding 1½ inches in thickness, being of good heat conductivity and not deleteriously affected when subjected to the action of a mixture of producer gas and air heated to a temperature of 1100° C., for prolonged periods of time, supplying sufficient heat to said charge through said conductive envelop from a strongly oxidizing, highly-heated, gaseous medium caused to contact with the outer surface of said envelop, to promote the water-gas reaction in said charge, maintaining said temperature by conduction of heat to said charge through said conductive envelop without the direct introduction to said chamber of substantial quantities of an air blast, simultaneously supplying a sufficient quantity of steam to said charge to effect the water-gas reaction so as to produce a strongly, reducing, highly-heated, gaseous medium in contact with a substantial portion of the inner surface of said envelop.

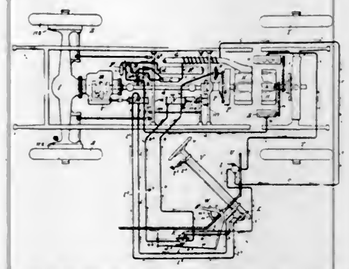
7. In an apparatus for producing water-gas, the combination comprising a heating chamber provided with a gas-inlet, a substantially closed retort positioned in said chamber, a substantial portion of said retort being relatively narrow and having thin, refractory, substantially non-corrosive walls not exceeding one and one-half inches in thickness composed of a metal associated with iron in the "iron group" in Mendeléjeff's table and of greater atomic weight than iron, an outlet conduit communicating with the interior of said retort for conducting gas therefrom and means for distributing steam throughout the interior of said retort.

[Claims 2 to 6 not printed in the Gazette.]

1,268,764. CONTROL SYSTEM FOR AUTOMOBILES. ARTHUR L. PARKER, Cleveland, Ohio. Filed Aug. 21, 1914. Serial No. 857,827. (Cl. 74—58.)

3. In a control system for automobiles, the combination, with a source of pressure fluid supply, of brake mechanism, clutch engaging mechanism, and connections between the pressure fluid supply and said mechanisms whereby the clutch engaging mechanism will be rendered ineffective and the clutch members disengaged and the brake mechanism operated and the brake applied in sequence.

7. In an automobile control system, the combination of change-of-speed-gears, a source of pressure fluid supply, pressure fluid actuated mechanism for engaging and disengaging said gears, clutch engaging mechanism adapted to be actuated by pressure fluid, communicative connections between said mechanisms and the pressure fluid supply, and means within said connections whereby the pressure fluid may be exhausted from the clutch operating mechanism and the clutch thereby disengaged, and admitted to the first mentioned mechanism to shift the gears, in sequence.

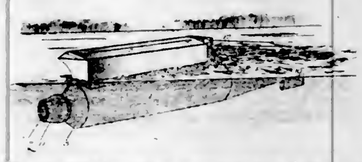


9. In an automobile control system, the combination, with a source of pressure fluid supply of brake operating mechanism, gear shifting mechanism, and clutch operating mechanism, communicative connections between the pressure fluid supply and said mechanisms, and means within said connections whereby pressure fluid may be exhausted from the brake operating mechanism and the brakes released, delivered to the gear shifting mechanism and the gears engaged, and admitted to the clutch operating mechanism and the clutch members engaged in sequence.

12. In an automobile control system, the combination, with a source of pressure fluid supply, of gear shifting mechanism, brake applying mechanism and clutch operating mechanism adapted to be operated by pressure fluid from such source, a controlling valve common to such mechanisms, and connections from said valve to said mechanisms whereby a certain sequence in the operation thereof is secured.

[Claims 1, 2, 4 to 6, 8, 10, 11, and 13 to 30 not printed in the Gazette.]

1,268,765. SHIP PROPULSION AND THE LIKE. GLOVER ORIN PARKER, Bentonville, Ark., assignor of one-third to Taylor Thomas Harris, Bentonville, Ark., and one-third to William M. Scott, Baltimore, Md. Filed Mar. 25, 1915. Serial No. 16,990. (Cl. 115—34.)

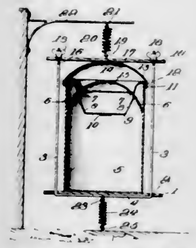


1. The combination of a vessel having a body, and a forward portion with sides which converge from the body, of a propeller located at the forward portion and comprising a cone-shaped casing, the narrow end thereof being the entrance end for a propelling medium, and the larger end being the discharge point therefor; said wider end being in proximity to and of larger dimension than the forward portion of the vessel.

5. In a vessel having a body or hull, an elongated steam portion and a bow or nose portion in the form of a truncated cone the sides of which converge abruptly from the body or hull; a drive shaft passing through the bow; means for driving the shaft located in the vessel; a truncated cone shaped casing in spaced relation to the drive shaft and connected therewith; a similarly shaped casing disposed around and in spaced relation to the inner casing; vane members disposed within the casings; the smaller end of the casings being forward and forming an entrance for a propelling medium; the larger end of the casings being in spaced relation to the nose of the vessel and of larger dimensions than said nose, whereby the propelling medium after passing through the casings will be given an outward deflection at an angle to the line of entrance thereto.

[Claims 2 to 4 not printed in the Gazette.]

1,268,766. CHURN. LUTHER MAXIE PAYNE, Campbell, ROBERT ASBURY THOMPSON, Dallas, and LUTE PERCY MORRIS, Campbell, Tex. Filed Sept. 13, 1917. Serial No. 191,283. (Cl. 259—92.)



1. A churn, comprising a movably supported receptacle having an annular flange, a cover for closing said receptacle having a concavo-convexed lining engaging said flange forming a substantially semi-spherical portion, and a dasher mounted within the substantially semi-spherical portion of said receptacle.

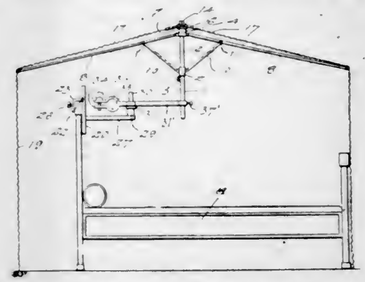
2. In a churn, the combination with a receptacle having an annular inwardly extending curved flange provided with oppositely disposed slots, of a dasher support provided with arms having hooked ends mounted in said slots, a cover for closing said receptacle having a lining extending over the upper portion of said flange for holding the arms within said slots, and a dasher transversely mounted upon said dasher support.

3. A churn, comprising a cylindrical body having adjacent its upper end an annular inwardly projecting curved flange, a cover for closing said receptacle having a lining curved to correspond with the curvature of said flange and adapted to form in conjunction therewith a substantially semi-spherical upper end for said receptacle, and a dasher supported within said semi-spherical portion of said churn.

4. A churn, comprising a cylindrical receptacle having adjacent its upper end an interior annular curved flange provided with oppositely disposed slots, a dasher support having arms arranged within said slots, a dasher carried by said support, and a cover having a concavo-convexed lining extending over the upper portion of said flange forming a substantially semi-spherical shaped top for said receptacle, said lining forming a closure for said slots for retaining the arms of said dasher support therein.

1,268,767. MOSQUITO NET OR CANOPY HOLDER. EDWIN PEAK, Centralia, Fla., assignor of one-half to John H. Gilbert, Plant City, Fla. Filed Aug. 3, 1917. Serial No. 184,304. (Cl. 5—14.)

3. A mosquito net or canopy supporting structure including a vertical plate provided adjacent each end with transverse openings, said plate provided on its rear face with a transverse dove-tail groove extending out through one vertical side edge thereof, an L-shaped bracket having the terminal of its horizontal flange enlarged to be removably arranged in the transverse groove of the plate, the vertical flange of said bracket being in spaced relation to and parallel with the supporting plate, means extending through the vertical flange for removably securing the plate to the head-board of a bed, a horizontal arm having one end formed integrally with the front face of the plate, a cylindrical extension formed integrally with the upper side of the horizontal arm at the outer end thereof, a reduced cylindrical extension formed integrally



with the cylindrical member, an arm rotatably mounted on the extension, the outer end of said arm provided with a cylindrical apertured member to facilitate the adjustable and removable supporting of the device for supporting the canopy or mosquito netting over a bed.

[Claims 1 and 2 not printed in the Gazette.]

1,268,768. MOLDING-MACHINE. EMLEN P. PITFIELD, Cambridge, Mass. Filed Mar. 3, 1913. Serial No. 751,719. (Cl. 22—32.)



1. Apparatus of the kind described, comprising a flask holder, and means for holding and moving the same, said means having provision for jolting the holder, and having a trunnion mounting whereby the holder may be inverted, said trunnion mounting bearing said holder and the means for moving same complete, including such jolting provision.

3. Apparatus of the kind described, comprising a flask table having a mounting on trunnions permitting it to be inverted, such mounting being arranged to hold the table normally upright by gravity, and means carried complete by said trunnion mounting for imparting a succession of jolts to the table while it is in upright position for compacting the sand contents of flasks thereon.

6. Apparatus of the kind described, comprising a flask holder having a trunnion mounting, and mechanism for lifting the same to facilitate inversion, said mechanism having provision to effect a preliminary jolting of the holder for compacting the sand contents of the flask thereon and being carried wholly by said trunnion mounting.

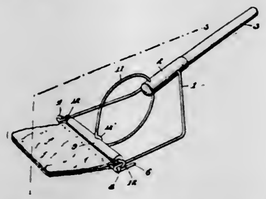
9. Apparatus of the kind described, comprising a trunnion mounting formed with a cylinder, a plunger fitted in said cylinder and bearing a flask table, said parts being formed to hold the flask table normally horizontal and upright, a slide valve device for controlling said plunger, and means carried by the table adapted to operate said valve device to effect a preliminary jolting of the table but being disengageable to permit a subsequent lifting of the table for the purpose stated.

12. Apparatus of the kind described, comprising a flask table having a journal mounting and equipped with provision for a lifting action on said mounting, such pro-

vision consisting of a cylinder carried by said mounting, a hollow plunger supporting the table fitted in said cylinder, and a piston head fitted within said plunger and fixed to a stem carried by said mounting, there being provision for admitting fluid pressure beneath said plunger, and above said piston head to act on an upper portion of said plunger.

[Claims 2, 4, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,268,769. MOP-HEAD. LUCIA MELISSA POOLE, San Jose, Cal. Filed Mar. 7, 1917. Serial No. 153,094. (Cl. 15—56.)



1. In a device for the purpose set forth, a socket designed to receive a handle, a substantially U shaped frame centrally connected to the socket, a rod pivotally secured to the end of one of the arms of the frame, means for removably securing the second end of the rod to the second arm of the frame, a second rod slidably mounted on the arms of the frame, a spring ring member hingedly connected with the socket and having an inwardly extending rounded depressed portion designed, when the ring is brought to one position, to engage with the second mentioned rod to move the same in the direction of the first mentioned rod and to hold the said second mentioned rod against the first mentioned rod.

2. In a device for the purpose set forth, a socket designed to receive a handle, a frame comprising a member formed to provide spaced parallel arms which are inclined angularly and inwardly at their inner ends, and the central portion of the said frame passing centrally through the socket,, one of the arms of the frame having its end provided with an eye, the second arm of the said frame having its end inturned to provide a hook, a bar having both of its ends formed with eyes, one of said eyes engaging with the eye of the frame and the other designed to be engaged by the hook of the frame, a second bar having its ends formed with eyes which are arranged on the parallel arms of the frame, whereby the said second mentioned rod is slidably connected to the frame, a spring ring member passing through the socket at the end thereof, and arranged at a right angle with respect to the longitudinal plane of the frame, and said ring having an inwardly depressed portion at the outer side thereof, designed to engage with the slidable rod to move the same outwardly of the frame and to retain the said slidable rod in frictional engagement with the pivoted rod, when the ring is swung in a line with the socket and the handle connected with the socket.

1,268,770. FLOOD CONTROL. ALVARO A. PRATT, Los Angeles, Cal. Filed May 7, 1917. Serial No. 167,122. (Cl. 61—30.)



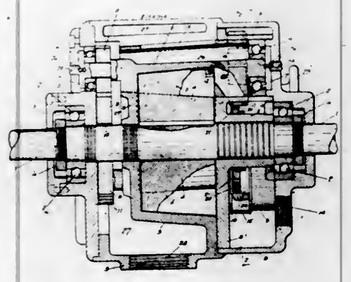
1. A flood control for water courses comprising a central course, a series of courses on each side of said central course, and a series of dams in each course, each dam in the respective courses having its top approximately level with the bottom of the next dam up-stream therefrom in the same course, and each dam in the respective courses having its bottom substantially level with the top of the adjacent dam in the next inner course.

2. A flood control for water courses comprising a central course, a series of courses on each side of said central course, a wire mesh separating the respective courses, and a series of wire mesh check dams in each course, each dam in the respective courses having its top approximately level with the bottom of the next dam up-stream therefrom in the same course.

3. A check dam comprising a wire structure consisting of a vertical portion, a horizontally extending up-stream portion, side extensions on said horizontal portion extending up-stream from the vertical portion, a horizontally extending down stream portion and side extensions on said horizontally extending down stream portion.

4. A wire mesh conduit open at each end and at the top consisting of a horizontal portion; a side portion extending upwardly at each side of the horizontal portion; and a wire mesh division wall extending between the side walls intermediate its length.

1,268,771. ROTARY ENGINE. LEONARD M. RANDOLPH, Newark, N. J., assignor to High Speed Engine Corporation, Newark, N. J., a Corporation of Delaware. Filed June 12, 1916. Serial No. 103,223. (Cl. 121—51.)



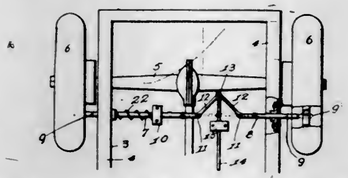
1. In a rotary engine in combination, a valve carrying member having an annular conical piston chamber with conical recesses therein, a number of conical, valvular abutments, adjustably mounted in such recesses, dividing such chamber into a number of compartments a solid, cylindrical, adjustably mounted piston carrying member, a conical piston provided with leaves, in number unequal to the valvular abutments, permanently secured to such last named member to rotate within such chamber, means for the longitudinal adjustment and positioning of such valvular abutments and such piston to secure steam tight joints, without contact of any of such parts with adjacent surfaces, and means for admitting steam through such valvular abutments to the piston chamber, so timed as to continuously drive such piston.

7. In a rotary engine, in combination, a valve carrying member having an annular piston chamber with recesses therein, a number of valvular abutments mounted in such recesses, dividing such chamber into a number of compartments, a solid, cylindrical, piston carrying member, a piston provided with leaves, in number unequal to the abutments, permanently secured to said last named member, to rotate within such chamber; such chamber, recesses, abutments and piston having suitable contours for adjustably positioning such abutments and piston to form steam tight joints without contact with adjacent surfaces, means for their longitudinal adjustment for such purposes, means for admitting steam through such valvular abutments to such chamber, so timed as to continuously drive such piston and valve rings adjustably controlling steam ports in the valvular abutments to vary the steam cut off.

13. In a rotary engine, in combination, a valve carrying member having an annular piston chamber with recesses therein, a number of valvular abutments mounted in such recesses for longitudinal adjustment, dividing such chamber into a number of compartments, a piston carrying member, comprising a solid shaft, a piston permanently secured thereto, to rotate in such chamber, having leaves, in number unequal to the abutments, such piston being adjustably positioned by means of threaded sections on said shaft, near the bearings and check nuts fitted to such sections and bearing on the valve carrying member, the piston and abutments being adapted to adjustably form steam tight joints, without contact with adjacent surfaces, and means for admitting steam through said abutments to said chamber, so timed as to continuously drive said piston.

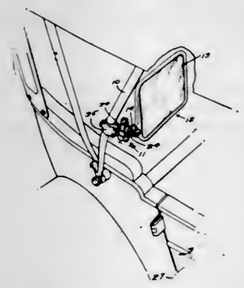
[Claims 2 to 6, 8 to 12, and 14 not printed in the Gazette.]

1,268,772. AUTOMOBILE SAFETY-LOCK AND EMERGENCY-BRAKE. CHARLES F. SCHMIDT, St. Louis, Mo. Filed Dec. 4, 1916. Serial No. 134,966. (Cl. 21—8.)



An automobile safety lock and emergency brake comprising a hand operating lever pivotally mounted to the floor of an automobile body, an operating rod slidably mounted in bearings secured to the underside of the automobile body, a connecting rod connecting one end of the operating rod to the lower projecting end of the hand operating lever, a pair of toggle arms connected to the rear end of the operating rod, a pair of locking rods connected to the ends of the toggle arms and being supported in bearings attached to the automobile frame, a spring located on one of the locking rods for returning the locking rods to their normal position when the same is released, the locking rods being placed in a position so as to permit the free ends to be advanced between the spokes of the wheel and near the arm, substantially as specified.

1,268,773. UNIVERSAL WIND-SHIELD. LEON T. SHETTLER, Los Angeles, Cal. Filed Dec. 22, 1916. Serial No. 138,332. (Cl. 21—148.)



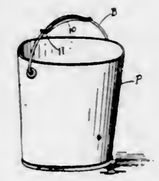
An adjustable wind-shield for vehicles comprising a pair of clamping jaws adapted to be detachably secured upon a fixed member upon a vehicle, a tubular bearing fixed to one of said jaws with its central opening vertically disposed, a pin extending downwardly through said opening and adapted to rotate therein, an eye formed integral with said pin and extending upwardly therefrom, a second pin extending through the eye and rotatably secured therein, an eye formed upon said second pin, a wind-shield provided with a horizontally extending pin extending through said last-named eye, whereby the wind-shield may have universal vertical movement in relation to its fixed support and simultaneous horizontal movement therearound, and means for clamping the shield in its adjusted position.

1,268,774. PROCESS OF DISSOCIATING WASTE LYE FROM THE SULFITE-CELLULOSE MANUFACTURE. INGVAR SÖRAAS, Indre Aalvik, Hardanger, Norway. Filed Mar. 27, 1918. Serial No. 225,081. (Cl. 252.)

1. A process of precipitating lignin material from the waste liquor separated from pulp made by the sulfite process, which comprises firstly, heating up the said liquor while confined in an atmosphere of a nonoxidizing gas, to a temperature of not materially below 80° C., and, secondly, subjecting the said liquor to the action of an oxidizing gas under superatmospheric pressure, while raising the temperature of the liquor to about 100° C., until said lignin material is precipitated.

2. In the process as set forth in claim 1, the improvement which comprises introducing compressed air into the liquor during the "second" heating operation, whereby the oxygen content of said air becomes considerably decreased, and thereafter conveying the remaining gas to the containers in which the "first" operation is carried out whereby the exit gas of the "second" operation is used as the non-oxidizing gas for the "first" operation.

1,268,775. BAIL-GUARD. NATHAN STANGER, Malden, Mass. Filed Apr. 11, 1917. Serial No. 161,294. (Cl. 220—32.)



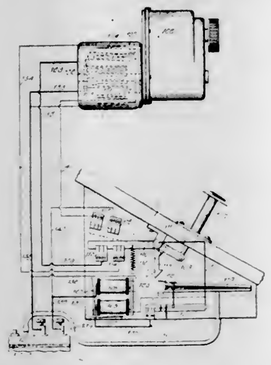
1. A bail guard or handle composed of a longitudinally curved strip of resilient material of concavo-convex form in cross-section and having its ends upturned and provided with slots for the reception of the bail and with longitudinal slits extending outwardly from said slots to the end of the strip, the ends of the strip constituting spring jaws normally disposed at a substantial angle to each other converging toward said slit whereby resilient yielding thereof is promoted, and terminating in flaring V-shape mouths for engaging a bail to guide it into said slots.

[Claims 2 and 3 not printed in the Gazette.]

1,268,776. ENGINE-STARTER. GEORGE M. WILLIS, Chicago, Ill., assignor, by direct and mesne assignments, to Charles A. Brown, Harvey L. Hanson, and Arthur H. Boettcher, doing business under the firm-name of Brown, Hanson & Boettcher. Filed Jan. 14, 1914. Serial No. 811,978. (Cl. 171—314.)

1. In combination a generator, a storage battery arranged to be charged by said generator, a first normally closed switch in said charging circuit, said battery comprising a closed receptacle, devices operated by the gases generated in the storage battery adapted to open said switch when the battery has been sufficiently charged, locking mechanism for said devices, and a sec-

ond normally closed switch in said circuit adapted when moved to open position to release said devices from said locking mechanism.

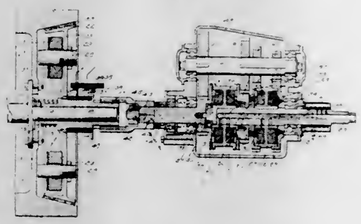


8. In combination a generator, a storage battery, connections between the battery and generator, a gas operated switch in said connections for breaking the charging circuit, a switch in series with the charging circuit, and means controlled by operation of said series switch for locking the gas controlled switch in open position.

9. In combination, a storage battery, a generator, and a charging circuit connecting the battery and generator, a switch in said circuit, means controlled by the generation of gases in the battery while charging to open said switch, and means to retard the action of said gas operated means during predetermined time after the battery has started to generate gas.

[Claims 2 to 7 not printed in the Gazette.]

1,268,777. TRANSMISSION MECHANISM. GEORGE M. WILLIS, Chicago, Ill., assignor, by direct and mesne assignments, to Charles A. Brown, Harvey L. Hanson, and Arthur H. Boettcher, doing business under the firm-name of Brown, Hanson & Boettcher. Filed Feb. 7, 1914. Serial No. 817,133. (Cl. 172—239.)



2. Mechanism of the class described comprising a plurality of pairs of coöperating clutch members, one clutch member of each pair comprising an energizing winding, a source of electric energy, circuit connections comprising a high resistance path, means for closing an electric circuit through all of said windings, and said high resistance path to insure the disengagement of the clutch members of each pair, means for causing electric current to flow through one of said windings in reverse direction to effect the engagement of the pair of clutch members with which said winding is associated, and means for again closing an electric circuit through said winding and the high resistance path to effect the disengagement of said clutch members.

4. In combination, a plurality of pairs of electrically operated clutch members, an energizing winding associated with each pair of clutch members, a source of electric energy common to all of said windings, a plurality of selector keys controlling the circuits for said windings, and interlocking mechanism associated with said selector keys.

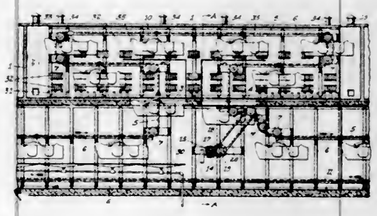
9. In combination, a plurality of electric clutching mechanisms, each clutching mechanism comprising a plurality of magnetic clutch members, an energizing winding associated with one of the clutch members of each set, a source of electric energy, a plurality of selector keys, one for each winding, each of said selector keys adapted when operated, to cause electric current to be supplied to its corresponding winding, and means for preventing more than one of said selector keys being operated at any one time.

15. In combination, a plurality of electric clutching mechanisms, each of said clutching mechanisms comprising an energizing winding, a source of electric energy, a plurality of selector keys, one for each energizing winding, and a locking bar associated with said selector keys, said locking bar shiftable in one direction when any one of the selector keys is operated to prevent the other selector keys from being operated and shiftable in another direction to prevent an operated selector key from being returned to normal position.

19. In combination, a driving shaft, a driven shaft, a plurality of magnetic clutching mechanisms, each of said clutching mechanisms adapted when actuated, to connect the driven shaft with the driving shaft in a predetermined ratio, means for selectively actuating said clutching mechanisms, and means for insuring that all of said clutching mechanisms are in nonoperative condition before any one of said clutching mechanisms is actuated.

[Claims 1, 3, 5 to 8, 10 to 14, and 16 to 18 not printed in the Gazette.]

1,268,778. ENAMELING APPARATUS. JOHN F. DODGE, Detroit, and HARRY C. ALLEN, Highland Park, Mich., assignors to Dodge Brothers, Detroit, Mich., a Corporation of Michigan. Filed Mar. 12, 1917. Serial No. 154,180. (Cl. 34—12.)



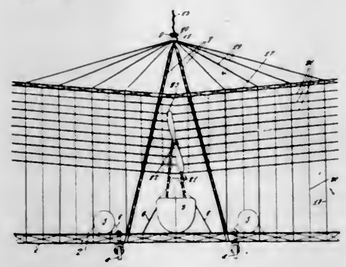
1. In apparatus of the class described, an oven, conveying means comprising a chain moving in a nearly closed path inside said oven, and having another loop like path outside said oven and connected with the inside loop through the oven bottom, said inside path having horizontal portions and vertical portions, the horizontal portions being longer than the vertical portions.

2. In apparatus of the class described, an oven normally open in a part of its lower side and conveying means comprising a chain moving in a nearly closed path inside said oven, said path having horizontal portions and vertical portions, the horizontal portions being longer than the vertical portions and the points of exit and entrance of said chain through the open lower side of the oven being adjacent.

19. In apparatus of the class described, the combination with a horizontally extended oven, of means for carrying articles to be treated in said oven first along a lower and then along an upper horizontal path in said oven, heating means alongside the lower path of travel of said articles, and other heating means alongside the upper path of travel of said articles.

[Claims 3 to 18 and 20 to 27 not printed in the Gazette.]

1,268,779. HYDROAEROPLANE. CHARLES L. HUDLER, St. Louis, Mo. Filed July 24, 1917. Serial No. 182,517. (Cl. 244—14.)



4. A flying machine including upper and lower spars, a mast connecting and projecting above the spars, said spars and mast each comprising parallel flat metal strips and interposed connecting flat strips, said strips coöperating to form trusses and all of the strips being arranged to cut through the air during the forward movement of the machine, flat tie strips placed with their front edges to the wind and connecting the upper and lower spars, and superposed sustaining planes connected to the tie strips and between the spars, said sustaining planes diverging upwardly along straight lines, guys extending from the upper spar to the upper portion of the mast, and means for taking up the slack within the guys.

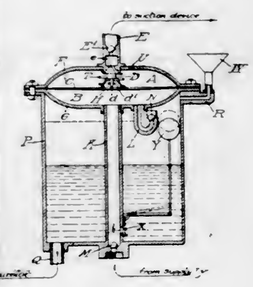
7. A flying machine including upper and lower spars, a mast connecting and extending above the spars, said spars and mast each consisting of parallel flat strips, a connecting flat strip interposed between said parallel strips and coöperating therewith to form a truss, the front edges of the strips being extended in a direction of the line of flight, superposed sustaining planes interposed between the spars, and extending in opposite direction from the mast, the planes at the two sides of the mast diverging upwardly along straight lines, a body rigidly mounted on the lower bar and straddled by the mast, a cellular tail plane movably connected to the rear portion of the body, and means for shifting the tail plane upwardly, downwardly and laterally to control the direction of the flight, a stabilizing plane extending vertically above the mast and fixed relative thereto, an aileron hingedly connected to said plane and movable about a vertical axis, and means for shifting the aileron.

9. A flying machine including flat metal strips placed edge to the wind and assembled to form connected trusses, and a sustaining plane connected to these trusses and defining an ogee curve extending downwardly from front to rear.

[Claims 1 to 3, 5, 6, and 8 not printed in the Gazette.]

1,268,780. VACUUM FEED DEVICE FOR ELEVATING LIQUID. WEBB JAY, Chicago, Ill. Filed Oct. 26, 1914. Serial No. 868,580. (Cl. 158—36.)

1. A device for the purpose indicated comprising a partial vacuum chamber, a liquid chamber, and an elastic bulged diaphragm which partitions said chambers from each other; a conduit leading into the liquid chamber; a receptacle with which said liquid chamber communicates; a check valve controlling said communication arranged for flow of liquid into the receptacle and for seating by reverse flow, said receptacle having a vent to the atmosphere; a valve carried by the diaphragm in the partial vacuum chamber, said partial vacuum chamber having an outlet port and a seat for the valve at said port, the connection between the valve and the diaphragm providing a lost motion of a range less than the buckling movement of the diaphragm, the partial vacuum chamber having a leak-port for atmospheric inlet smaller than the outlet port, and yielding means tending to buckle the diaphragm in the direction for unseating the valve.



6. In combination, an internal combustion engine, an intake supply pipe therefor, a carbureter connected to said intake supply pipe, a fuel supply tank, and a pneumatically operated pumping device having a pumping chamber of variable size and a separate motor chamber of variable size, the variations in size of the pumping chamber being dependent upon the variations in size of the motor chamber, the motor chamber of said pumping device being connected to the atmosphere and to said intake supply pipe so as to be varied in size by the vacuum of said intake supply pipe, and the pumping chamber of said pumping device being connected to said fuel supply tank and said carbureter so as to force fuel from the fuel tank to the carbureter when varied in size by the action of said vacuum on said motor chamber.

7. A vacuum feed device comprising a chamber having a movable wall, and having an outlet for connection to a partial vacuum, said chamber having an inlet leading from the atmosphere to said chamber, and a valve which controls said outlet, and connection from said movable wall to said valve for closing it by the movement of said wall to ensmall the chamber, and opening it upon movement of said wall to enlarge the chamber.

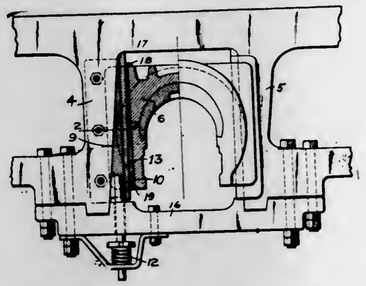
13. In combination, an internal combustion engine, an intake supply pipe therefor, a carbureter connected to said intake supply pipe, a fuel supply tank, and a pneumatically-operated pumping device provided with a flexible partition forming a motor side and a pump side, and having its motor side connected to the atmosphere and to said intake supply pipe so as to be actuated by the vacuum of said intake supply pipe, and having the intake and exhaust of its pump side connected to said fuel supply tank and said carbureter respectively.

[Claims 2 to 5 and 8 to 12 not printed in the Gazette.]

1,268,781. AUTOMATIC DRIVING-BOX WEDGE. FREDERICK W. MARTIN, New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del., a Corporation of Delaware. Filed Sept. 1, 1917. Serial No. 189,294. (Cl. 105—113.)

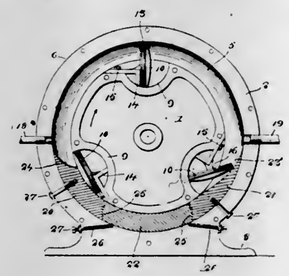
1. The combination with a pedestal jaw having an inclined face, of a driving box having a face inclined in the opposite direction, wedges engaging said inclined faces, and a floating plate between said wedges.

2. The combination with a pedestal jaw having an inclined face, of a driving box having a face inclined in the opposite direction, a spring actuated adjusting wedge engaging the pedestal jaw, and a wedge having stop lugs with clearance for engaging the driving box.



[Claims 3 and 4 not printed in the Gazette.]

1,268,782. ROTARY ENGINE. JOHN MATHES, Marion, Iowa. Filed Mar. 30, 1917. Serial No. 158,656. (Cl. 138—19.)

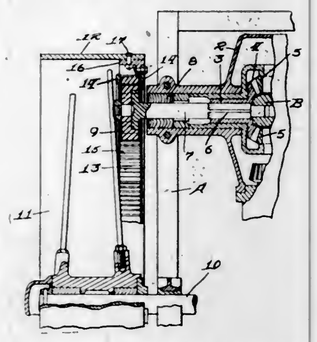


1. In a rotary engine, a stationary casing embodying an arcuate fluid chamber substantially half round in cross section and also having an inlet and exhaust ports communicating therewith, a stationary abutment face in said chamber, a rotor working in said casing and formed with substantially rectangular piston chambers, and tilting pistons pivotally supported by said rotor and mounted for oscillatory movement in said piston chambers, each of said pistons embodying a substantially half round portion and a substantially rectangular apron which is movable in the respective piston chamber and is acted upon by the motive fluid under pressure for tilting the piston to its operative position.

2. In a rotary engine, the combination of a stationary casing having an arcuate fluid chamber and inlet and exhaust ports adjacent to the ends of said fluid chamber, a rotor in said casing, tilting pistons having a pivotal mounting on said rotor, a sectional stationary abutment in said fluid chamber, and means for adjusting a section of said abutment to compensate for wear.

1,268,783. GEARING FOR TRACTORS. LOUIS MAYER and EDWIN A. BYE, Mankato, Minn., assignors to Mayer Brothers Company, Mankato, Minn., a Corporation of Minnesota. Filed Feb. 17, 1916. Serial No. 78,895. (Cl. 74—7.)

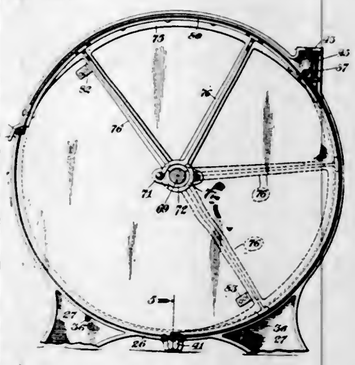
1. The combination with a self propelled vehicle having a body frame and a driving wheel revolubly supported thereon having a rim, an internal gear mounted upon and spaced inwardly from said rim having teeth formed with open passages between them connected with the space between said teeth and rim and a revoluble drive shaft freely slidable upon said frame having a pinion, the teeth of which mesh with the teeth of said gear, whereby said pinion is adapted to move freely and compensate for any lateral motion of said gear and wheel.



2. A self propelled vehicle having a body frame, a drive wheel revolubly supported upon said frame having a rim, an internal gear having a pair of laterally spaced parallel rings with gear teeth extending between said rings arranged with open passages between them and coupling elements connected with said rings and holding said gear inwardly spaced from said rim, differential gearing having a gear case mounted upon said frame, a shaft slidably connected with said differential gearing and journaled in case, and a pinion rigidly and removably carried by said shaft on its outer end having teeth in mesh with the teeth of said internal gear, said shaft being adapted by its sliding movement to compensate for lateral movement of said internal gear on said wheel.

3. In a self propelled vehicle having a body frame, a drive wheel revolubly supported upon said frame having a rim, and an internal gear spaced inwardly from said rim having a pair of laterally spaced parallel rings with gear teeth extending between said rings arranged with open passages between them communicating with the space between said gear and rim and coupling elements connected with said rings and holding said gear inwardly spaced from said rim.

1,268,784. WASHING-MACHINE. OTTO G. PFEIFFER, Salt Lake City, Utah, assignor, by mesne assignments, to St. Louis Washing Machine Company, a Corporation of Illinois. Filed Dec. 27, 1911. Serial No. 668,184. (Cl. 68—18.)



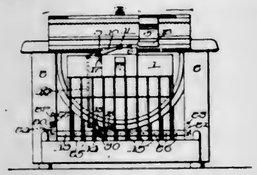
1. In a washing machine, a casing, a drum removably mounted therein, a movable cover for said casing extending above, and arranged to swing about the axis of, said drum, and means movable with and operable upon opening and closing of said cover for releasing and retaining said drum.

2. In a washing machine, a casing, a drum therein, a movable cover for said casing arranged to swing about the axis of said drum, bearings projecting into said casing and adapted to removably sustain said drum therein, and means for locking said drum in its bearings, said means being connected with and movable with said cover.

6. In a washing machine, a casing, a cover for said casing, a drum in said casing, bearings for removably sustaining said drum in said casing, a driving shaft having a connection with said drum constructed to permit the removal of said drum from said casing, and means adapted to embrace said bearings and operatively connected with said cover constructed to lock said drum in said bearings and in engagement with said driving means.

[Claims 3 to 5, 7, and 8 not printed in the Gazette.]

1,268,785. CALCULATING-MACHINE. ARTHUR F. POOLE, Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed May 12, 1913. Serial No. 767,051. (Cl. 235—130.)



1. In a recording calculating machine, the combination of: a traveling member determining a calculating zone on a work sheet; a set of computing keys adapted to print on said work sheet; a set of non-computing keys also adapted to print on said work sheet; and means for locking the non-computing keys while the work sheet is in the calculating zone.

2. In a recording calculating machine, the combination of: a traveling member determining a calculating zone on a work sheet; a set of computing keys adapted to print on said work sheet; a set of non-computing keys also adapted to print on said work sheet; and means controlled by said traveling member for locking the non-computing keys while the work sheet is in the calculating zone.

11. In a calculating machine, the combination of a platen adapted to receive a worksheet, a traveling member determining a calculating zone thereon, a totalizer adjustable on said traveling member, a set of computing keys adapted to print on said work sheet and enter numbers in said totalizer, a set of non-computing keys also adapted to print on said work sheet, and means associated with said totalizer for locking the non-computing keys while the worksheet is in the calculating zone.

[Claims 3 to 10, 12, and 13 not printed in the Gazette.]

1,268,786. STOVE FOR BURNING SOLID FUEL AND PROCESS OF MAKING SAME. HENRY PRICE BALL, Brooklyn, N. Y., assignor to S. Sternau & Co., Inc., Brooklyn, N. Y., a Corporation of New York. Filed Nov. 17, 1916. Serial No. 131,855. (Cl. 206—46.)

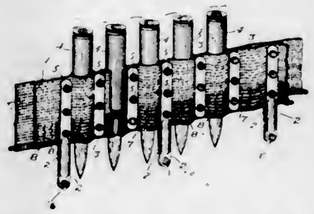


1. As a new article of manufacture, a container having an open end, a cover coöperating with the opening, a solidified fuel filling the container in close contact with the cover, there being a space between the fuel and the bottom of the container.

3. The process of making stoves, which consists in partly filling a sheet metal container having a cylindrical neck, and a cylindrical cover coöperating with said neck and movable longitudinally therein, with a melted liquid fuel composed of a mixture of alcohol and an absorbent, introducing the cover into the neck to compress the air or vapor in the space above the fluid, then reversing the container and allowing the contents to cool and solidify, leaving an open space between the solidified fuel and the bottom of the container.

[Claim 2 not printed in the Gazette.]

1,268,787. WOVEN CARRIER. FRANK R. BATCHELDER, Worcester, Mass., assignor to Universal Patents Company, a Corporation of Rhode Island. Filed Dec. 26, 1916. Serial No. 138,720. (Cl. 89—35.)



1. A carrier consisting of woven material which is formed into pockets or loops adapted to serve as receptacles, and having a series of heavy threads or cords superficially and exteriorly attached in the weaving upon a surface of a woven strip constituting a loop- or pocket-wall, the said series making a thickening and constricting band on a portion of the pocket or loop.

2. A carrier or belt consisting of woven material which is formed into pockets or loops adapted to serve as receptacles for individual cartridges, and having a series of heavy threads or cords superficially and exteriorly attached in the weaving upon a surface of a woven strip constituting a loop- or pocket-wall, the said series making a thickening and constricting band on a portion of the pocket or loop.

3. A woven carrier consisting of two woven strips placed face to face and secured together at intervals to form pockets or loops constituting receptacles, the said strips as woven each having a series of heavy threads or cords superficially and exteriorly attached upon a surface thereof in the weaving, making a thickening band.

4. A woven carrier or belt consisting of two woven strips placed face to face and secured together at intervals to form pockets or loops adapted to serve as receptacles for individual cartridges, the said strips as woven each having a series of heavy threads or cords superficially and exteriorly attached upon a surface thereof in the weaving, making a thickening band.

1,268,788. WOVEN FABRIC. JOHN C. BROOKS, Paterson, N. J., assignor of one-half to Ossian T. Waite, Oshkosh, Wis. Filed Mar. 1, 1917. Serial No. 151,741. (Cl. 139—9.)

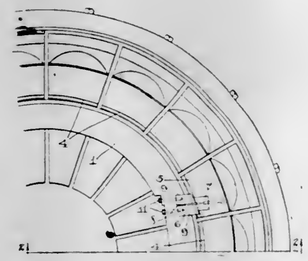


1. A woven fabric having two sets of face-forming warp threads and a set of intermediate warp threads and hav-

ing filling threads arranged in sets of four, each face-forming warp thread being floated over a plurality of adjacent sets of filling threads and then being interwoven with the intermediate warp threads by some of the filling threads of the next set, each face-forming warp thread appearing only on one face of the fabric.

2. A woven fabric having two sets of face-forming warp threads and filling threads arranged in sets of four, each warp thread being floated over a plurality of adjacent sets of filling threads and then passing under three filling threads of the next set whereby the face-forming warp threads of each set appear only on one face of the fabric.

1,268,789. MACHINE FOR SIZING TRANSPLIT RIMS. RICHARD S. BRYANT, deceased, Cleveland, Ohio, by Otto H. Jobski, Cleveland, and James H. Griswold, East Cleveland, Ohio, special administrators, assignors to The Standard Welding Company, Cleveland, Ohio, a Corporation of Ohio. Filed Nov. 13, 1916. Serial No. 131,102. (Cl. 153—10.)



1. In a device of the class described, the combination of a mandrel adapted to receive thereon a trans-split annulus, said mandrel being of a diameter greater than the internal diameter of such annulus, means for compressing the latter against said mandrel, and means abutting against the ends of such annulus for preventing deformation of the same during such compression.

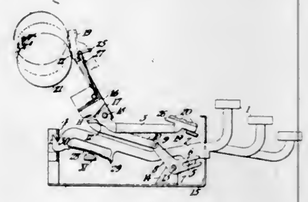
2. In a device of the class described, the combination of a mandrel adapted to receive thereon a trans-split annulus, said mandrel being of a diameter greater than the internal diameter of such annulus, means for compressing the latter against said mandrel, and a shield abutting against the ends of such annulus for preventing deformation of the same during such compression.

3. In a device of the class described, the combination of a mandrel adapted to receive thereon a trans-split annulus, said mandrel being of a diameter greater than the internal diameter of such annulus, means for compressing the latter against said mandrel, and a shield operated by said means to space the ends of such annulus apart and prevent deformation of the same during such compression.

4. In a device of the class described, the combination of a mandrel adapted to receive thereon a trans-split annulus, said mandrel being of a diameter greater than the internal diameter of such annulus, a plurality of radially movable compression blocks operating to force such annulus against said mandrel, and a shield attached to one of said blocks and adapted to be inserted thereby between the ends of such annulus to properly space the same and prevent deformation during such compression.

5. In a device of the class described, the combination of a mandrel adapted to receive thereon an annulus, transplit in a plane forming a sector across the same, said mandrel being of a diameter greater than the internal diameter of such annulus, a plurality of radially movable compression blocks operating to force such annulus against said mandrel, a shield attached to one of said blocks, the ends of such annulus being positioned against said shield and said one block being thereby guided to move in alinement with the plane of the ends of said annulus.

1,268,790. TYPE-WRITING MACHINE. LEE S. BURRIDGE, New York, N. Y.; Francis O. Burridge, New York, N. Y., executor of said Lee S. Burridge, deceased, assignor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y., a Corporation of Delaware. Filed Nov. 27, 1914. Serial No. 874,276. (Cl. 197—22.)



5. A typewriting machine comprising a keyboard at the front of the machine, a system of normally cumbent rearwardly striking pivoted type-bars directly in rear of the keyboard, levers of the second order converging from said keyboard rearwardly and fulcrumed at their rear ends; the type-bars lying very close to the key-levers, pull links extending forwardly from the rear ends of the type-bars, and bell-cranks to which the forward ends of said links are connected; said bell-cranks comprising upwardly-extending arms and forwardly-extending arms; said upwardly-extending arms connected at their upper ends to said links and extending down therefrom between the key-levers and fulcrumed at their lower portions, and said forwardly-extending arms directly engaging said levers to be depressed thereby, and said bell-cranks and links converging rearwardly to said type-bars, said upwardly-extending arms inclining rearwardly from their fulcrums, to be nearly in line with said links when in normal positions.

13. The combination of a system of rearwardly striking type-bars, key-levers extending beneath the type-bars, sub-levers between the key-levers and type-bars, and mounts whereon the sub-levers are pivoted; said sub-levers arranged in pairs, one pair on each of said mounts, the members of the pair being on opposite faces of the mount.

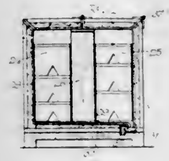
17. The combination with a system of key-levers, of a bar extending transversely of the system, and helical returning springs upon said levers, each spring connected at both ends to its lever and bearing between its ends against said bar, to be tensioned thereby upon the depression of the key, each lever having a lug upon which one end of the spring is caught, to afford clearance for the spring when bending upon said bar, and said lug being bendable to adjust the tension of the spring.

18. A system of pivoted type-bars mounted with their pivots arranged in an arc, each type-bar having a type-head carrying a plurality of types, the bodies of the bars forming various angles with the type-heads at the inner ends of the latter, said arc struck from a point far above or beyond the printing center, the type-bars swinging in planes radial to said point, and the bodies of the type-bars being variously bent inwardly from the hub portions thereof.

28. In a case-shift typewriting machine, the combination with a revoluble platen, of a system of key-levers, a system of short type-bars each carrying at least three types and pivoted in an arc below the platen and above the key-levers, each type-bar swinging through substantively more than ninety degrees, the type-bars at the center of the system lying normally in about horizontal positions, the arc of the type-bar pivots lying in a plane inclined rearwardly, the printing line on the platen being higher than the platen axis, but well beneath a radial line drawn from the platen center at right angles to said type-bar pivot-arc plane, and the line of the type faces when in printing position being about vertical and tangent to the platen at said printing line, the different types on the bars being designed to be brought into use by a relative shift between the bars and the platen in a direction which is approximately vertical, to permit the arrangement of the ink ribbon about vertically on edge.

[Claims 1 to 4, 6 to 12, 14 to 16, and 19 to 27 not printed in the Gazette.]

1,268,791. REFRIGERATOR. HILMER CARLSON, Chicago, Ill. Filed Apr. 2, 1917. Serial No. 159,077. (Cl. 45—71.)

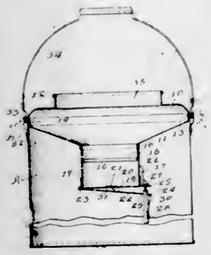


1. In combination an outer box or housing, a container for containing a refrigerating medium, a first set of shelf members, a second set of shelf members, the combined width of the shelf members being sufficient to substantially fill the space between the container and the walls of the box, said shelves and container being movable to permit the shelves to lie wholly on one side of the container or upon both sides of the container.

2. In an ice chest, an exterior box having a door at the top thereof an interior ice container of a length substantially equal to the interior length of the box, said box having a transverse channel or gutter in the bottom wall and said container having a drip pipe discharging into said gutter, said container being movable transversely in the box.

3. In an ice chest, an exterior box having a door at the top and an interior ice container of a length substantially equal to the interior length of the box, said box having a transverse channel or gutter in the bottom wall and said container having a drip pipe discharging into said gutter, said container being movable transversely in the box, and a plurality of shelves adapted to lie all on one side upon opposite sides of the ice container.

1,268,792. SANITARY MILK-PAIL. WINFIELD CATLIN, Rockville, Ind., assignor of one-half to Thomas S. Catlin, Guion, Ind. Filed Apr. 3, 1917. Serial No. 159,386. (Cl. 31—14.)

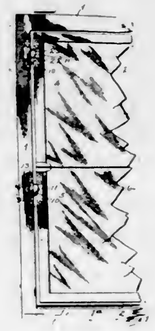


1. The combination with a receptacle, of a closure member fitting over the top of the receptacle and having an opening therethrough adapted to admit filling the receptacle, a valve hinged on said closure member for closing the opening, and a weight hinged at its upper end to said member in spaced relation to the hinged connection thereof and depending through said valve, the weight being free to swing in all lateral directions upon the tilting of the receptacle to bear against the adjacent marginal edge portion of the valve to close it.

2. The combination with a receptacle, of a closure member fitting over the top of the receptacle and having an opening therethrough adapted to admit filling the receptacle, a valve hinged on said closure member for closing the opening, a weight hinged at its upper end to said member and suspended therefrom through the valve, the weight having a shoulder spaced from its upper end for engagement beneath the valve to support it in open position, said weight being free to swing when the receptacle is tilted to bind against the valve to close the same.

3. The combination with a receptacle, of a closure member mounted on the open end of the receptacle and provided with a filler opening therethrough, a disk valve hinged at one edge to the closure member, a weight suspended from the closure member and passing through said disk valve, a spring arm mounted upon the weight and diverging from the upper end thereof to form a shoulder to support the valve in open position, said weight being free to swing upon the tilting of the receptacle to bind against the valve for closing the same.

1,268,793. HINGE. FREDERICK A. DILLINGHAM, Troy, Ohio, assignor to The Troy Carriage Sunshade Company, Troy, Ohio, a Corporation of Ohio. Filed Mar. 20, 1917. Serial No. 155,980. (Cl. 21—148.)



1. In a hinge construction of the character described, two tangentially positioned trunnion studs, means for separately attaching each stud to a support, and a clamp collar inclosing both studs, substantially as specified.

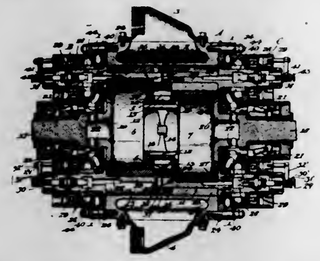
3. In a hinge construction of the character described, two eccentrically positioned trunnion studs mounted upon different relatively movable members, and a connecting link engaged simultaneously by both studs and means for simultaneously locking both trunnion studs in adjusted relation with each other, substantially as specified.

5. In a construction of the character described, two relatively movable members normally engaged in overlapping relation, one of said members being capable of an initial reciprocatory movement out of overlapping relation and a subsequent swinging movement, of a supporting means therefor including two eccentrically positioned trunnion members and a clamping collar common to both trunnions.

8. In a construction of the character described, two relatively movable members normally engaged in overlapping relation, one of said members being capable of an initial reciprocatory movement out of overlapping relation and a subsequent swinging movement, of a supporting means therefor including a bracket carried by one member, a trunnion carried by said bracket, a second trunnion carried by the other member, and a split collar surrounding both trunnions adapted by its contraction to lock the parts in adjusted position.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,268,794. ROTARY MOTOR. CHARLES R. HARRIS and RUTHERFORD G. GOLDMAN, Los Angeles, Cal. Filed Feb. 21, 1916. Serial No. 79,752. (Cl. 123—13.)



1. In a rotary motor, the combination with a casing having rotary abutments therein provided with recesses, of a runner rotatably mounted in the casing having pistons, the pistons being adapted to enter the recesses in passing the abutments, spindles journaled in the casing and upon which the abutments are mounted, said spindles being provided with passages which communicate with the recesses of the abutments through which a fluid may pass, and stationary means on the spindle for controlling the flow of fluid through the passages.

2. The combination with a casing having abutments therein, said abutments being provided with recesses, of a runner mounted in the casing and provided with pistons which are adapted to enter the recesses of the abutments in passing the abutments, spindles journaled in the casing and forming supports for the abutments, said spindles having communication with the recesses of the abutments for delivering a fluid to the recesses of the abutments, means for controlling the admission of fluid to the spindles, and means carried by the spindles for igniting the fluid.

3. The combination with a casing having a runner and abutments rotatably mounted therein, pistons mounted on the runner and recesses formed in the abutments in which the pistons enter as they pass an abutment, rotary spindles mounted in the casing and forming supports for the abutments, said spindles having explosion chambers which are in communication with the recesses of the respective abutments, and means for causing an explosive agent to be ignited in said spindles.

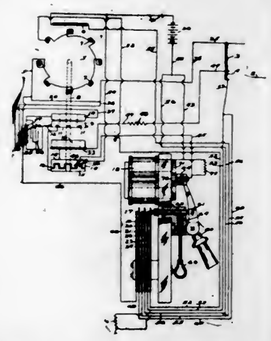
6. In a rotary motor, the combination with a casing and end members, spindles journaled in the end members, and having passages therein, abutments mounted on the spindle provided with recesses in communication with passages of the spindles, runners mounted in the casing having pistons thereon adapted to enter the recesses of the abutments as the pistons pass the abutments for receiving an impelling force for causing the runners to rotate, inlet chambers in communication with the passages of the spindles, means for introducing a combustible material to said inlet chambers, means carried by the spindles for igniting the combustible material within the spindle, and means for controlling the admission of explosive mixture to said spindles.

[Claims 4 and 5 not printed in the Gazette.]

1,268,795. ALTERNATING-CURRENT RECTIFIER. THOMAS J. MURPHY, Rochester, N. Y., assignor of one-half to James P. B. Duffy, Rochester, N. Y. Filed June 17, 1916. Serial No. 104,273. (Cl. 175—364.)

1. In an alternating current rectifier, the combination of a commutator, a synchronous motor, a pair of electrodes, one of the electrodes connected to the commutator, and means for automatically moving the other of the electrodes a fixed distance away from the first named electrode.

5. In an alternating current rectifier, the combination of a commutator, a synchronous motor, a pair of electrodes, one of the electrodes connected to the commutator, a rack connected to one of the electrodes, a pinion for operating on the rack, a ratchet wheel connected to the pinion, a reciprocating member, and a dog located on the reciprocating member for releasing one of the electrodes and lifting the last-named electrode a predetermined distance.

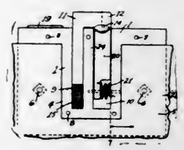


10. In a rectifier, the combination of a pair of electrodes, means for rotating one of the electrodes relatively to the other, spark terminals connected to one of the electrodes, a fixed spark terminal located in the vicinity of the path of movement of the first named spark terminals.

22. In an alternating current rectifier, a source of alternating current supply, electrodes connected to the source, spark terminals connected to the electrodes, means for rotating the spark terminals synchronously with the current changes, a transformer having a secondary for producing a high potential current connected to the spark terminals and the electrodes, and a winding for counteracting the effect of the first-named secondary when arcs have been established between the electrodes by the first-named secondary.

[Claims 2 to 4, 6 to 9, and 11 to 21 not printed in the Gazette.]

1,268,796. HITCHING DEVICE. OSCAR L. OLSON, Braham, Minn., assignor of two-thirds to Elmer E. Hegstrom, Braham, Minn. Filed Apr. 2, 1918. Serial No. 226,151. (Cl. 119—123.)



1. A hitching device comprising a suitable casing, a lower pinching member pivoted within the casing, a vertically slidable upper pinching member mounted within the casing and adapted to pinch a rope between itself and the lower pinching member, and means for releasing the upper pinching member when so desired.

2. In a hitching device comprising a suitable casing, an upper rope pinching member adapted to be lowered into an engaging position and adapted to be raised into disengaging position, a lower cam acting pinching lever pivoted within the casing and adapted to pinch a rope between itself and the upper pinching member when the latter is in engaging position, operative connection between the upper pinching member and the lower pinching lever for bringing the former into engaging position by a swinging movement of the latter on its pivot.

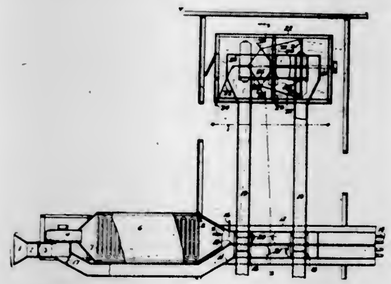
3. A hitching device comprising a suitable casing, a lower pinching lever pivoted within the casing, a vertically slidable upper pinching member mounted in the casing and adapted to pinch a rope between itself and the lower pinching lever when in a lowered position, spring-actuated means for causing the upper pinching member to assume an upper disengaging position, operative connection between the upper pinching member and the lower pinching lever for bringing the former into engaging position by a swinging movement of the latter on its pivot, hand controlled means for holding the upper pinching member in and for releasing it from its lowered engaging position.

4. The structure specified in claim 3, said hand controlled means having a spring throwing it into engagement with the upper pinching member and a finger catch to take hold of to disengage it against the resistance of said spring.

5. A hitching device comprising a frame adapted to be secured to a manger or other stationary object, two jaws mounted in the frame and adapted to grip a rope or other hitching strap between them; one of said jaws being pivoted and provided with a corrugated cam face by which to engage any part of the hitching strap, a spring arranged to swing said cam into engaging position, the other jaw being mounted to slide to and from the cam jaw, a spring closed finger catch arranged to engage and hold the slidable jaw in active position, a spring arranged to retract said sliding jaw into idle position when the finger catch is disengaged from it.

[Claim 6 not printed in the Gazette.]

1,268,797. APPARATUS FOR DRYING AND THE LIKE. AUGUST TEGOLI, San Francisco, Cal. Filed June 20, 1916. Serial No. 104,739. (Cl. 34—39.)



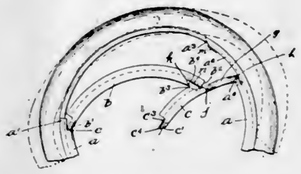
1. The combination of a blower, a treating chamber communicating with said blower, a coil of pipe therein, a duct communicating with said treating chamber, a return duct, drier sections communicating with each other and with which said ducts communicate, valves controlling said communication, and means, in each section, for supporting material in an exposed condition.

2. The combination of a blower, a treating chamber communicating with said blower, a coil of pipe therein, a duct communicating with said treating chamber, a return duct, drier sections communicating with each other and with which said ducts communicate, valves controlling said communications, and, in each section, drawers having apertured bottoms.

3. The combination of a blower, a treating chamber communicating with said blower, a coil of pipe therein, a duct communicating with said treating chamber, a return duct, drier sections communicating with each other and with which said ducts communicate, valves controlling said communications, and, in each section, interchangeable drawers having apertured bottoms.

[Claims 4 to 12 not printed in the Gazette.]

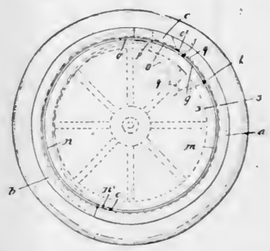
1,268,798. DEMOUNTABLE WHEEL-RIM. TIMOTHY S. YORK, Haverhill, Mass., assignor to Louis H. Harriman, Haverhill, Mass., trustee for said York, W. Scott Peters, Samuel E. Cass, and Frank M. Whitehouse, Haverhill, Mass. Filed Dec. 16, 1916. Serial No. 137,295. (Cl. 152—21.)



1. A wheel rim having a peripheral tire-receiving groove, and comprising a main rim-portion having an inwardly yieldable end-portion, a complemental rim-section adapted to span the space between the ends of said main rim-portion and, at one end, pivotally to engage the corresponding end thereof, a link having its ends pivotally engaged with said complemental section and said main rim-portion respectively adjacent the opposite ends thereof, to form an inwardly breaking toggle, and means, on the end-portion of the main rim-portion with which the toggle is engaged, to hold the same against outward swinging movement at a predetermined point.

[Claims 2 to 9 not printed in the Gazette.]

1,268,799. COLLAPSIBLE RIM. TIMOTHY S. YORK, Haverhill, Mass., assignor to Louis H. Harriman, Haverhill, Mass., trustee for said York, W. Scott Peters, Samuel E. Cass, and Frank M. Whitehouse, Haverhill, Mass. Filed Dec. 28, 1917. Serial No. 209,223. (Cl. 152—21.)



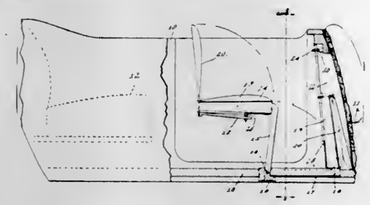
1. A collapsible rim comprising a plurality of tire-receiving rim sections having abutting ends, and an inner rim disposed on the inner periphery of said sections, rigidly connected thereto and composed of sections pivotally engaged adjacent the abutting ends of said tire-receiving sections.

[Claims 2 to 6 not printed in the Gazette.]

1,268,800. CONCEALED SEAT FOR AUTOMOBILES. CHARLES C. ADELSPERGER and GEORGE O. STUCK, Union City, Ind., assignors to Union City Body Company, Union City, Ind., a Corporation of Indiana. Filed Nov. 21, 1917. Serial No. 203,077. (Cl. 21—43.)

1. In an automobile body, the combination of a front seat having a recess on its rear face, an auxiliary seat mounted to fold into such recess for storage and out of such recess into position for use, said recess extending upward higher than is required to receive such auxiliary seat, and a door hinged to the rear lower portion of the auxiliary seat and swingable either to close the upper portion of said recess when said auxiliary seat is swung into such recess or against the under side of said auxiliary seat.

3. In an automobile body, the combination of a front seat having a recess on its rear face, an auxiliary seat mounted to fold into such recess for storage and out of such recess into position for use, said recess extending upward higher than is required to receive such auxiliary seat, a door hinged to the rear lower portion of the auxiliary seat and swingable either to close the upper portion of said recess when said auxiliary seat is swung into such recess or against the under side of said auxiliary seat, and fastening devices for holding the door in either position.



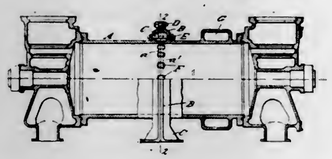
5. In an automobile body, the combination of a front seat having a recess on its rear face, an auxiliary seat mounted to fold into such recess for storage and out of such recess into position for use, said recess extending upward higher than is required to receive such auxiliary seat, a door hinged to the rear lower portion of the auxiliary seat and swingable either to close the upper portion of said recess when said auxiliary seat is swung into such recess or against the under side of said auxiliary seat, and fastening devices for holding the door in either position, each of said fastening devices comprising a spherical head and a rubber cup frictionally receiving said spherical head and having an internal diameter normally less than the diameter of said spherical head.

6. In an automobile body, the combination of a front seat having a recess on its rear face, an auxiliary seat mounted to fold into such recess for storage and out of such recess into position for use, said recess extending upward higher than is required to receive such auxiliary seat, a door hinged to the rear lower portion of the auxiliary seat and swingable to close the upper portion of said recess when said auxiliary seat is swung into such recess, and a fastening device for holding said door in position to close said recess, said fastening device comprising a spherical head and a rubber cup frictionally receiving said spherical head and having an internal diameter normally less than the diameter of said spherical head.

9. In an automobile body, the combination of a front seat having a recess on its rear face, an auxiliary seat mounted to fold into such recess for storage and out of such recess into the position for use, and a door hinged to said auxiliary seat and swingable either to coöperate with said auxiliary seat to close the recess when the auxiliary seat is swung into the recess or against the under side of the auxiliary seat.

[Claims 2, 4, 7, and 8 not printed in the Gazette.]

1,268,801. CYLINDER FOR UNIFLOW STEAM-ENGINES. HENRY PILLING, Chorlton-cum-Hardy, England. Filed Mar. 4, 1918. Serial No. 220,374. (Cl. 121—105.)



A cylinder for uni-flow steam engines comprising two sections forming the respective ends of the cylinder and having their adjacent ends in abutting engagement and shaped to form an exhaust port between them, said sections having circumferentially extending flanges cast integrally thereon adjacent to their abutting ends and projecting outwardly from their peripheries, said peripheral flanges being shaped to form between them a peripheral exhaust passage in communication with said exhaust port, and means directly connecting said circumferential flanges on the sections and operative to draw the adjacent ends of said sections into abutting engagement and to maintain said ends of the sections in abutting engagement.

1,268,802. PLASTER-BOARD. JOSEPH E. SCHUMACHER, Los Angeles, Cal. Filed Mar. 16, 1917. Serial No. 155,233. (Cl. 72—124.)



1. As an improved article of manufacture, a plaster lath comprising a body of initially plastic material and facial sheets of flexible material between which such body is disposed; there being a plurality of through openings produced through such sheets and said body and confined by roughened or mutilated walls; one of said surface coverings being disrupted in registration with each of said openings to produce irregular tongues overlying the same.

2. As an improved article of manufacture, a plaster lath provided with perforations, said lath comprising a body and surface sheets between which the body is interposed; one of said surface sheets being disrupted in the production of the perforations to provide tongues overlying one end of each perforation to partially and yieldingly seal the same.

3. Plaster board comprising surface sheets of flexible material and a body of plastic material disposed between and uniting the sheets, one of the sheets and said body having registering openings and the other of said sheets having openings therein registering with and being smaller than the openings of the first sheet and body, said last named openings having irregular confining walls.

6. A structurally completed plaster board having through openings provided therein and one of its elements so formed as to materially and yieldably retard the movement and the amount of wall material adapted to pass therethrough when the latter is applied to the board and extends into and through the openings.

8. A plaster board provided with through openings therein, and means for yieldingly holding certain ends of the openings closed and which act to open under the influence of plastic material applied to the board and which enters the openings.

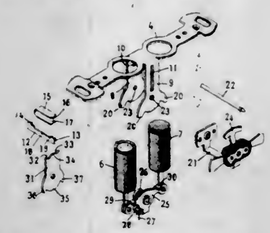
[Claims 4, 5, 7, and 9 not printed in the Gazette.]

1,268,803. SULFUR DYE. OSWALD SILBERRAD, Buckhurst Hill, England. Filed Mar. 1, 1918. Serial No. 219,918. (Cl. 8—1.)

1. The process of making a brown sulfur dye which comprises heating with alkali metal sulfid and sulfur, the oily residue separated from trinitrotoluene, during the purification of the latter by recrystallization from alcohol, which residue contains various di- and tri-nitro toluenes.

2. The herein described brown sulfur dye containing the reaction products of alkali metal sulfid, sulfur and the oil residue obtained in the purification of trinitrotoluene which residue contains various di- and tri-nitro toluenes.

1,268,804. PUSH-BUTTON SWITCH. ALEXANDER K. SUTHERLAND, Plainville, Conn., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn., a Corporation of Connecticut. Filed Apr. 24, 1915. Serial No. 23,655. (Cl. 175—293.)



1. In a device of the character described, a support, an oscillatory switch blade, an actuator for tensioning and moving the same, a detent, a detent actuator for freeing said detent, means for initially moving said detent actuator upon movement of the switch actuator to fully release the parts for flying movement of the switch blade, means moving with the switch blade in it, free flying movement for impinging against and imparting by impact therewith final movement to said detent actuator.

4. In a push button switch, a supporting frame having dependent members, a switch blade yoke bearing a switch blade, a detent member, said yoke and detent member pivotally mounted to oscillate in the frame, an actuator bar for actuating the switch blade, a pivoted cam plate adapted to be moved directly by the actuator bar during the partial movement of said actuator, a detent extending through the dependent members and having one end resting upon the cam plate, resilient means for depressing said detent member against the cam and abutments upon said cam plate adapted to be engaged by the oscillatory switch blade yoke as said yoke is released.

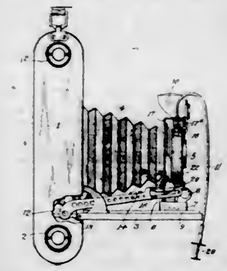
5. In a push button switch embodying a supporting frame, oscillatory switch blade, actuator bar and means for moving the switch blade upon movement of the actuator bar, of a detent bar extending through oppositely disposed perforations in the supporting frame, said bar having a spring seat and a shoulder engaged by one end of a spring and a U-shaped spring having one end projecting into the perforation of the frame and its opposite end resting against the shoulder of the detent, whereby said detent is held in operative position in the frame, and a cam plate for moving said detent to release the switch blade upon movement of the actuator bar.

[Claims 2, 3, and 6 to 9 not printed in the Gazette.]

1,268,805. AUTOMATIC FILM-WINDING CAMERA. GEORGE W. TOPLIFF, CARL BORNMANN, and EZRA C. CLARK, Binghamton, N. Y., assignors to Ansco Company, Binghamton, N. Y., a Corporation of New York. Filed Aug. 29, 1917. Serial No. 188,702. (Cl. 95—32.)

1. In a film-roll camera having means for the automatic advance of the film, shutter actuating devices adapted to be operated through three separate and distinct devices permanently connected with the camera, said devices being so constructed, combined and correlated that the operation and release of the shutter mechanism by either of them will be immediately and inevitably followed by the release of the film advancing mechanism.

3. In a film-roll camera having means for the automatic advance of the film, a shaft located within the box of the camera, a forwardly extending lever fast on the shaft, a connection between the free end of the lever and the shutter releasing devices, and devices connecting the shaft and the film advancing mechanism, whereby upon the depression either of said lever or the connecting device between it and the shutter mechanism, the latter will be actuated and upon the release thereof the film advancing mechanism will be actuated.



8. In a film-roll camera having means for the automatic advance of the film, a shaft located within the box of the camera, a lever fast on the shaft, means connecting said lever with the shutter releasing devices, a crank on the shaft, a lever for releasing the film advancing mechanism, and an adjustable device between the crank and the last-named lever, whereby the throw of the latter by the crank and the location of the first-named lever and its relation to the coacting parts may both be adjusted.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,268,806. LIFE-SAVING APPAREL. MIKE P. VUKOSAV, West Oakland, Cal. Filed Feb. 2, 1918. Serial No. 215,077. (Cl. 9—20.)

1. A life saving garment having trunk and leg portions of flexible material, and a main air chamber surrounding the trunk portion of the garment, upper and lower supplementary air chambers at the opposite sides of the main air chamber and in communication with the latter, and means for inflating said chambers.

5. A foot paddle comprising a frame consisting of a plurality of spaced wire rods, a second series of rods connecting the first named rods at intervals to each other, an inflatable fabric covering entirely inclosing said frame, and means secured to the frame for attaching the paddle to the foot of a user.

[Claims 2 to 4 not printed in the Gazette.]

1,268,807. FUSE-CARTRIDGE. FREDERICK A. FELDKAMP, Newark, N. J. Filed Mar. 31, 1917. Serial No. 158,809. Renewed Apr. 29, 1918. Serial No. 231,570. (Cl. 175—278.)

1. A multiple fuse cartridge comprising a casing subdivided longitudinally into a plurality of individual fuse compartments, external terminal caps on the opposite ends of said casing one of which is capable of movement relative

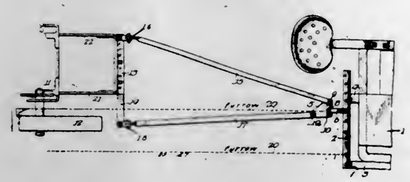
to said casing, a fuse element in each fuse compartment electrically connected with one external terminal cap, contact-pins to which the opposite ends of said fuse elements are respectively connected, means for mounting said contact-pins in insulated relation one to another, a male contact member formed at the outer end of each contact-pin, and a female contact member electrically connected with the movable terminal cap for selective engagement with said male contact members.



4. A multiple fuse cartridge comprising a casing subdivided longitudinally into a plurality of individual fuse compartments, an external fixed terminal cap mounted on one end of said casing, an external movable terminal cap mounted on the opposite end of said casing, a carrier portion of insulating material secured within said opposite end of said casing, a plurality of contact-pins extending longitudinally through said carrier portion and respectively into each fuse-compartment, a fuse element in each fuse compartment, one end of each fuse element being electrically connected with said fixed terminal cap, the opposite end of each fuse element being respectively electrically connected with a contact-pin, a male contact member connected with the outer end of each contact-pin, said carrier portion having counter-sunk openings or chambers in its outer end within which said male contact members are respectively situated, a female contact member having a receiving opening carried by said movable terminal cap adapted upon manipulation of the latter to be selectively moved into a counter-sunk opening or chamber in said carrier portion and there engaged with a male contact member, and a shield of insulating material secured against the inner side of said end wall of said movable terminal cap adapted to cover the openings or chambers and thus insulate the remaining male contact members when said female contact member is engaged with one male contact member.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,268,808. BALANCE-PLATE OR OSCILLATING MEMBER. JOSEPH W. GAMBLE, Carpentersville, Ill. Filed Sept. 2, 1915. Serial No. 48,739. (Cl. 97—4.)

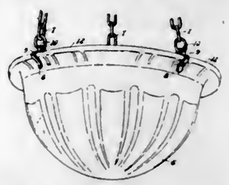


2. The combination with a tractor of a triangularly-shaped oscillating member connected on its shortest side and at a point intermediate thereof to said tractor, a plow, a plow connection having an extension toward the furrow side, a furrow-side draft bar connected at its forward end to the rearward corner of said triangular oscillating member and at its rear end to the furrow-side extension of the plow connection, said oscillating member being adapted to lie with one of its sides substantially in line with the furrow-side draft bar, a land-side draft bar pivotally connected at its forward end to the land-side corner of said triangular oscillating member and at its rear end to the land-side end of the plow connection.

[Claim 1 not printed in the Gazette.]

REISSUES.

14,478. LAMP-GLOBE FIXTURE. EUGENE COCHRAN, Cleveland, Ohio. Filed Mar. 25, 1918. Serial No. 224,632. Original No. 1,208,750, dated Dec. 19, 1916, Serial No. 38,454, filed July 7, 1915. (Cl. 240—115.)



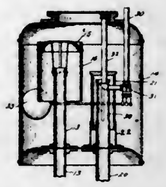
1. A clip for shade hangers, comprising a single strip of metal bent upon itself forming upper and lower spring arms adapted to receive the rim of the shade to be suspended, said upper arm being bent into an upwardly projecting loop and terminating in a downwardly projecting spring finger resiliently engaging within the inner side of the suspended shade for holding the clip thereon.

2. A clip for shade hangers, comprising a single length of metal bent upon itself forming upper and lower spring arms curved to conform to and engage with the rim of the shade to be suspended, said upper arm being provided with a loop to receive a hanger member and terminating in a downwardly projecting finger engaging within the rim of the shade and removably holding the clip in position.

3. A lamp fixture, comprising a shade having an outwardly projecting horizontal rim, hanger clips each comprising a single strip of metal bent upon itself forming upper and lower horizontally extending spring arms engaging the upper and lower sides of said horizontal rim, said upper arms terminating in upwardly extending loops projecting above said rim and having downwardly projecting spring fingers at their inner ends engaging within said shade to hold the clips on said rim, and hanger members detachably connected to said upwardly extending loops.

4. A clip for shade hangers comprising a single strip of metal bent to form upper and lower arms with a spring connection at their outer ends whereby the arms will closely engage the upper and lower surfaces of the rim of a shade, the upper arm having a loop at its inner end to receive a suspending device and a downwardly projecting finger at the inner end of the loop, to engage within said rim, and the inner end of the lower arm being extended downwardly to fit against the outer side of the shade.

14,479. AIR-LIFT-PUMP BOOSTER. FRANK S. MILLER, deceased, Indianapolis, Ind., by William Langsenkamp, Jr., trustee, Indianapolis, Ind., assignee, by mesne assignments. Filed May 1, 1916. Serial No. 94,833. Original No. 1,157,998, dated Oct. 26, 1915, Serial No. 815,594, filed Jan. 31, 1914. (Cl. 103—84.)



1. In combination, a closed chamber, a pipe leading from a well into such chamber and opening into said chamber above the liquid level therein, an air nozzle in such pipe below such chamber, a pipe leading from such chamber and opening into such chamber below the liquid level therein, a downwardly opening hood located in said chamber and having its open lower end below the liquid level therein, said first named pipe discharging upwardly into said chamber and said last named pipe opening under said hood, and an automatic air valve controlling the outlet of air from and maintaining a pressure greater than atmosphere in said chamber.

2. In combination, a closed chamber, a pipe leading from a well and discharging upwardly substantially vertically into such chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber, a hood in such chamber over the end of said last named pipe, said hood having its lower end open below the liquid level in said chamber and having its upper end closed, a container which is connected to said last named pipe to receive the discharge therefrom, and an automatic air valve controlling the outlet of air from and maintaining a pressure greater than atmosphere in said chamber.

3. In combination, a closed chamber, a pipe leading from a well into such chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber, a hood in said chamber over the end of said last named pipe, said hood having its lower end open below the liquid level in said chamber and having its upper end closed, and an automatic air valve controlling the outlet of air from and maintaining a pressure greater than atmosphere in said chamber.

4. In combination, a closed chamber, a pipe leading from a well into said chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber and opening into such chamber below the liquid level therein, a container which is connected to said last named pipe, said container being higher than said chamber, an automatic air valve controlling the outlet of air from such chamber, an air compressor for supplying air to said air nozzle, and an air nozzle in the connection between said chamber and said container, said air valve discharging both to the said last named nozzle and to the inlet side of said compressor.

5. In combination, a closed chamber, a pipe leading from a well into such chamber and opening into said chamber above the liquid level therein, an air nozzle in such pipe below such chamber, a pipe leading from such chamber and opening into such chamber below the liquid level therein, a downwardly opening hood located in said chamber and having its open lower end below the liquid level therein, said first named pipe discharging upwardly into said chamber and said last named pipe opening under said hood, said chamber having an air outlet opening therefrom which air outlet opening communicates with the chamber at a point higher than the liquid level therein, and a valve controlling said air outlet opening to permit the escape of air from said chamber but to maintain a pressure greater than atmosphere in said chamber.

6. In combination, a closed chamber, a pipe leading from a well and discharging upwardly substantially vertically into such chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber, a hood in such chamber over the end of said last named pipe, said hood having its lower end below the liquid level in said chamber and having its upper end closed, a container which is connected to said last named pipe to receive the discharge therefrom, said chamber having an air outlet opening therefrom which air outlet opening communicates with the chamber at a point higher than the liquid level therein, and a valve controlling said air outlet opening to permit the escape of air from said chamber but to maintain a pressure greater than atmosphere in said chamber.

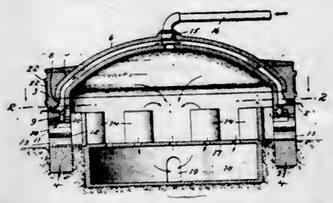
7. In combination, a closed chamber, a pipe leading from a well into such chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber, a hood in said chamber over the end of said last named pipe, said hood having its lower end open below the liquid level in said chamber and having its upper end closed, said chamber having an air outlet opening therefrom which air outlet opening communicates with the chamber at a point higher than the liquid level therein, and a valve controlling said air outlet opening to permit the escape of air from said chamber but to maintain a pressure greater than atmosphere in said chamber.

8. In combination, a closed chamber, a pipe leading from a well into such chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber and opening into such chamber below the liquid level therein, a container which is connected to said last named pipe, said container being higher than said chamber, said chamber having an air outlet opening therefrom which air outlet opening communicates with the chamber at a point higher than the liquid level therein, a valve controlling said air outlet opening to permit the escape of air from said chamber but to maintain a pressure greater than atmosphere in said chamber, an air compressor for supplying air to said air nozzle, and an air nozzle in the connection between said chamber and said container, said air valve discharging both to the said last named nozzle and to the inlet side of said compressor.

9. In combination, a closed chamber, a pipe leading from a well into such chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber and opening into the main space within the chamber below the liquid level therein and by a passageway which carries the liquid from the chamber first upward and then downward, said chamber having an air outlet opening therefrom which air outlet opening communicates with the chamber at a point higher than the liquid level therein, and a valve controlling said air outlet opening to permit the escape of air from said chamber but to maintain a pressure greater than atmosphere in said chamber.

10. In combination, a closed chamber, a pipe leading from a well into such chamber, an air nozzle in such pipe below such chamber, a pipe leading from such chamber and opening into the main space within the chamber below the liquid level therein and by a passageway which carries the liquid from the first chamber first upward and then downward, said chamber having a restricted air outlet opening therefrom which air outlet opening communicates with the chamber at a point higher than the liquid level therein so as to permit a restricted escape of air while maintaining the pressure of the retained air above atmospheric pressure.

14,480. DRAFT-AIR-HEATING SYSTEM FOR FURNACES. ROBERT D. MCMANIGAL, Logan, Ohio, assignor to The McManigal Grateless Furnace Company, Columbus, Ohio, a Corporation of Ohio. Filed Jan. 21, 1918. Serial No. 212,982. Original No. 1,146,188, dated July 13, 1915, Serial No. 860,059, filed Sept. 3, 1914. (Cl. 25—148.)



1. The combination with a furnace comprising an upright wall, a plurality of fire boxes adjacent the interior of said wall, a smoke outlet from the furnace, and a main crown supported by said wall, of a supplemental crown spaced above the main crown, a fresh air inlet into the space between the two crowns, and a plurality of hot air outlets leading from said space to said fire boxes.

2. The combination with a furnace comprising an upright continuous wall, a plurality of fire boxes adjacent the inner side of said wall, said fire boxes having air inlet openings through said wall, a smoke outlet from the furnace, and a main crown supported by said wall, of a supplemental crown spaced above the main crown, a fresh air inlet into the space between the two crowns,

and a plurality of hot air outlets leading from said space to said air inlets of the fire boxes.

3. A furnace comprising an inner continuous wall having a plurality of radial air inlets formed through its lower portion, a plurality of fire boxes within said inner continuous wall, one fire box being provided adjacent each air inlet, an outer wall surrounding the inner wall and having a plurality of upright grooves formed in its inner face whereby to provide hot air passages, one of said hot air passages being provided above each of said air inlets, other hot air passages establishing communication between the first named passages and said air inlets, inner and outer crowns spaced one from the other and supported by said inner and outer walls, a fresh air inlet into the space between said crowns and a smoke outlet from the bottom of the furnace.

4. In a structure of the class described, the combination with an imperforate crown extending over the main furnace chamber and a plurality of fire boxes, of an outer crown spaced from said imperforate crown and producing therewith an intermediate chamber, a fresh air inlet to said chamber intermediate said crowns, and a plurality of separate hot air outlets for distributing preheated air from said chamber to said fire boxes individually, said hot air outlets leading substantially from the marginal portion of the intermediate chamber.

5. In a structure of the class described, the combination with an imperforate crown positioned over the main furnace chamber so as to be exposed to the direct action of the heat circulating therein, and a plurality of fire boxes connected with said main furnace chamber, of a second crown spaced relatively to the imperforate crown and producing therewith an intermediate chamber the cross sectional area of which is equal at least to the area of the heating surface presented by said imperforate crown, means for feeding atmospheric air to the chamber intermediate said crowns, whereby atmospheric air is caused to flow within said chamber and into contact with the surfaces of said crowns so as to be preheated thereby, and means connecting said fire boxes with said intermediate chamber for distributing the preheated air to said fire boxes.

6. In a structure of the class described, the combination with a substantially imperforate crown positioned over the main furnace chamber so as to be exposed to the direct action of heat flowing therein, and a plurality of fire boxes, of a second crown spaced relatively to said imperforate crown and producing therewith a relatively shallow chamber intermediate said crowns, the only inlet to said shallow intermediate chamber being an intake for fresh atmospheric air adapted to flow within the chamber and into contact with the heated surfaces afforded by the inner crown thereof, and means for distributing air preheated within said intermediate chamber to each of said fire boxes.

7. In a structure of the class described, the combination with a substantially imperforate crown positioned over the main furnace chamber so as to be exposed to the action of heat flowing therein, and a plurality of fire boxes, of a second crown spaced relatively to said imperforate crown and producing a chamber extending intermediate the crowns, means for feeding atmospheric air to said intermediate chamber whereby atmospheric air flows within said chamber and becomes preheated to the exclusion of furnace gases and by absorption of heat radiated from the surface of the imperforate crown, and means for distributing to each of said fire boxes the atmospheric air preheated within said intermediate chamber.

8. In a structure of the class described, the combination with a substantially imperforate crown positioned over the main furnace chamber so as to be exposed to the action of heat flowing therein, and a plurality of fire boxes in communication with said main furnace chamber, of a second crown positioned over said imperforate crown and affording protection thereto from the action of the weather, said crowns being relatively spaced to produce an intermediate chamber the only inlet to which is an intake for atmospheric air, whereby air free from admixture with furnace gas is free to flow within the intermediate chamber and to absorb heat radiated from said imperforate crown, and means for distributing to each of said fire boxes the air preheated within said intermediate chamber.

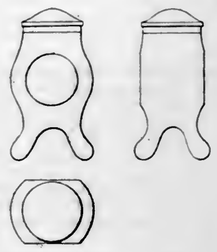
9. In a structure of the class described, the combination with an imperforate crown positioned over the main furnace chamber so as to be exposed to the action of heat flowing therein, and a plurality of fire boxes in communication with said main furnace chamber, of a second crown spaced relatively to said first crown and producing therewith an intermediate chamber the only inlet to which is an intake for fresh atmospheric air positioned substantially centrally with respect to said intermediate chamber, and means extending from the marginal portion of said intermediate chamber for feeding to each of the fire boxes atmospheric air preheated within said intermediate chamber.

10. In a structure of the class described, the combination with a substantially imperforate crown positioned over the main furnace chamber so as to be exposed to the action of heat flowing therein, and a plurality of fire boxes in communication with said main furnace chamber, of a second crown spaced relatively to said imperforate crown and producing therewith an intermediate chamber, an inlet for atmospheric air to said intermediate chamber, said inlet being positioned substantially centrally of said intermediate chamber, and a plurality of flues extending beyond the marginal portion of said intermediate chamber and connected with said fire boxes for feeding thereto air preheated by flowing through said intermediate chamber.

11. In a structure of the class described, the combination with a substantially imperforate crown positioned over the main furnace chamber so as to be exposed to the action of heat flowing therein, and a plurality of fire boxes in communication with said main furnace chamber, of a second crown spaced relatively to the imperforate crown and producing therewith a relatively shallow intermediate chamber, means for feeding atmospheric air to said intermediate chamber substantially centrally thereof whereby air unmixed with furnace gases is introduced within said intermediate chamber for contact with a highly heated surface afforded by the imperforate crown, and a plurality of flues extending beyond the marginal portion of said intermediate chamber for distributing air preheated therein to said fire boxes.

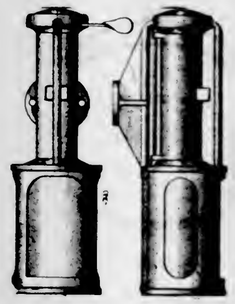
DESIGNS.

52,068. COMMERCIAL CONTAINER OF TOILET PREPARATIONS. ALFRED C. BLATZEK, Milwaukee, Wis. Filed Jan. 15, 1918. Serial No. 211,995. Term of patent 7 years.



The ornamental design for a commercial container of toilet preparations as shown.

52,069. CASING OF A DISPENSER FOR GRIT-SOAP AND THE LIKE. EDMUND BRUDER, Chicago, Ill., assignor to Harold I. Koppelman, Wilmette, Ill. Filed Feb. 16, 1918. Serial No. 217,707. Term of patent 3½ years.



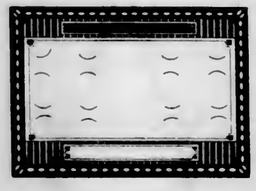
The ornamental design for the casing of a dispenser for grit soap and the like, as shown.

52,070. BUTTON, BADGE, OR EMBLEM. CHARLES CRIST DELMONICO, Morristown, N. J. Filed Jan. 29, 1918. Serial No. 214,432. Term of patent 7 years.



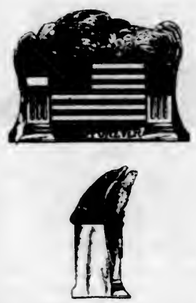
The ornamental design for a button, badge or emblem as shown.

52,071. DISPLAY CARD OR MOUNTING. JOHN L. FLANNERY, Jr., Chicago, Ill., assignor to the Boye Needle Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 21, 1917. Serial No. 208,324. Term of patent 7 years.



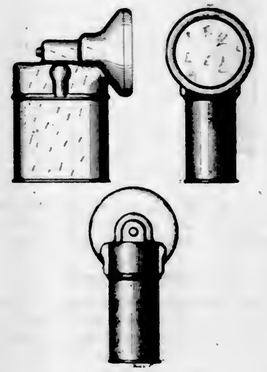
The ornamental design for a display card or mounting, as shown.

52,072. BOOK-STOP OR SIMILAR ARTICLE. ELMER AINSLIE FORD, GERTRUDE L. PEW, and EDWARD J. KELLY, New York, N. Y. Filed June 13, 1917. Serial No. 174,632. Term of patent 14 years.



The design for a book-stop or similar article, as shown.

52,073. LAMP-CASING. ELLSWORTH A. HAWTHORNE, Bridgeport, Conn. Filed Mar. 13, 1918. Serial No. 222,244. Term of patent 14 years.



The ornamental design for a lamp casing as shown.

52,074. BORDER ORNAMENT FOR FURNITURE, CASKETS, AND INTERIOR AND EXTERIOR DECORATIONS. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed May 2, 1917. Serial No. 166,044. Term of patent 3½ years.



The ornamental design for a border ornament for furniture, caskets, and interior and exterior decorations, substantially as shown and described.

52,075. MANUFACTURED PEDIMENT FIGURE FOR FURNITURE AND CASKETS AND FOR INTERIOR AND EXTERIOR DECORATIONS. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,562. Term of patent 3½ years.



The ornamental design for a manufactured pediment figure for furniture and caskets and for interior and exterior decorations, substantially as shown and described.

52,076. MANUFACTURED FIGURE FOR BRACKETS FOR FURNITURE AND CASKETS AND FOR INTERIOR AND EXTERIOR DECORATIONS. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,563. Term of patent 3½ years.



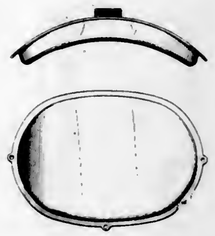
The ornamental design for a manufactured figure for brackets for furniture and caskets and for interior and exterior decorations, substantially as shown and described.

52,077. MANUFACTURED FIGURE FOR FURNITURE AND CASKET DECORATIONS AND FOR INTERIOR AND EXTERIOR DECORATIONS. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,565. Term of patent 3½ years.



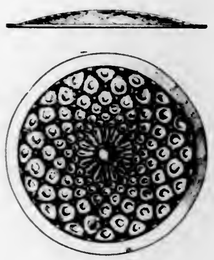
The ornamental design for a manufactured figure for furniture and casket decorations and for interior and exterior decorations, substantially as shown and described.

52,078. CONVERTIBLE RECEPTACLE FOR HOT WATER AND A FOUNTAIN-SYRINGE. THOMAS F. MANLEY, East Liverpool, Ohio. Filed Sept. 14, 1916. Serial No. 120,200. Term of patent 14 years.



The ornamental design for a convertible receptacle for hot water and a fountain syringe, as shown.

52,079. LENS. SIEGFRIED MARCUS, Philadelphia, Pa. Filed Apr. 4, 1918. Serial No. 226,749. Term of patent 7 years.



The ornamental design for a lens as shown.

52,080. LAMP-HOOD. NATHAN ROSEN, New York, N. Y. Filed Mar. 28, 1918. Serial No. 225,360. Term of patent 3½ years.



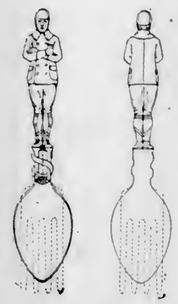
The ornamental design for a lamp hoop as shown.

52,081. SOUND-BOX. PAUL RUDERT, Tarentum, Pa. Filed Feb. 27, 1918. Serial No. 219,521. Term of patent 14 years.



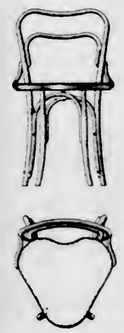
The ornamental design for a sound box as shown.

52,082. SPOON, FORK, OR SIMILAR ARTICLE. FREDERICK SCHWINN, Attleboro, Mass. Filed Mar. 4, 1918. Serial No. 220,412. Term of patent 7 years.



The original design for a spoon, fork, or similar article, as shown.

52,083. BENT-WOOD CHAIR. JOSEPH SILVERMAN, Chicago, Ill. Filed Mar. 26, 1918. Serial No. 224,903. Term of patent 14 years.



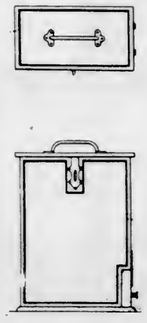
The ornamental design for a bent wood chair, as shown.

52,084. FLAG, PENNANT, SIGN, EMBLEM, OR ARTICLE OF A SIMILAR NATURE. FREDERICK SMITH, Brooklyn, N. Y. Filed Mar. 8, 1918. Serial No. 221,319. Term of patent 7 years.



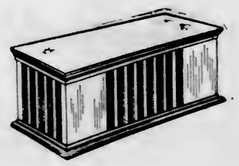
The ornamental design for a flag, pennant, sign, emblem, or article of a similar nature, as shown.

52,085. THERMOS RECEPTACLE. JOSEPH STEIN, Denver, Colo. Filed Apr. 11, 1916. Serial No. 90,512. Term of patent 3½ years.



The ornamental design for a thermos receptacle, as shown.

52,086. DUPLEX REGISTER. JAMES M. TRIGGS, Huntington, Ind., assignor to The Majestic Company, Huntington, Ind., a Corporation of Indiana. Filed Mar. 22, 1918. Serial No. 224,083. Term of patent 7 years.



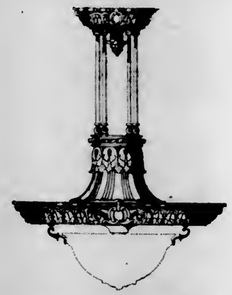
The ornamental design for a duplex register, substantially as shown.

52,087. TEETHING DEVICE. FRANK VALENTA, Pineville, Minn. Filed Feb. 13, 1918. Serial No. 216,990. Term of patent 7 years.



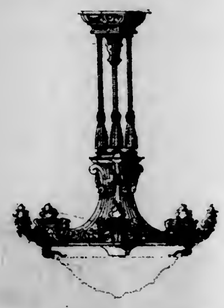
The ornamental design for a teething device, as shown.

52,088. CHANDELIER FOR A LIGHTING-FIXTURE. ROBERT G. WAGNER and ERNEST J. SCHWEITZER, Los Angeles, Cal. Filed Oct. 16, 1917. Serial No. 196,967. Term of patent 3½ years.



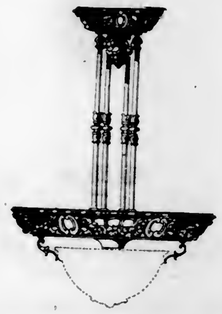
The ornamental design for a chandelier for a lighting fixture as shown.

52,089. CHANDELIER FOR A LIGHTING-FIXTURE. ROBERT G. WAGNER and ERNEST J. SCHWEITZER, Los Angeles, Cal. Filed Oct. 16, 1917. Serial No. 196,968. Term of patent 3½ years.



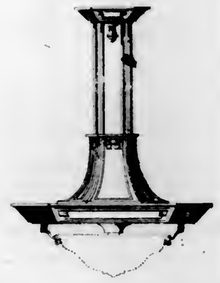
The ornamental design for a chandelier for a lighting fixture as shown.

52,090. CHANDELIER FOR A LIGHTING-FIXTURE. ROBERT G. WAGNER and ERNEST J. SCHWEITZER, Los Angeles, Cal. Filed Oct. 16, 1917. Serial No. 196,969. Term of patent 3½ years.



The ornamental design for a chandelier for a lighting fixture as shown.

52,091. CHANDELIER FOR A LIGHTING-FIXTURE. ROBERT G. WAGNER and ERNEST J. SCHWEITZER, Los Angeles, Cal. Filed Oct. 16, 1917. Serial No. 196,970. Term of patent 3½ years.



The ornamental design for a chandelier for a lighting fixture as shown.

52,092. FRAME FOR A HAND-BAG. HENRY WIENER, New York, N. Y., assignor to Whiting & Davis Company, Plainville, Mass., a Corporation of New York. Filed Mar. 26, 1918. Serial No. 224,907. Term of patent 7 years.



The design for the frame for a hand bag, as shown.

TRADE-MARKS

PUBLISHED JUNE 4, 1918.

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this date.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 99,559. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) READING STANDARD COMPANY, INC., Reading, Pa. Filed Nov. 25, 1916.



No claim being made to the representation of a wheel apart from the mark shown in the drawing.

Particular description of goods.—Motor-Cycles, Motor-Cycle Vans and Side Cars.

Claims use since about June 1907.

Ser. No. 99,989. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN L. MCKENNA, New York, N. Y. Filed Dec. 16, 1916.



Particular description of goods.—Medicated Foot-Powder.

Claims use since Dec. 11, 1916.

Ser. No. 102,668. (CLASS 15. OILS AND GREASES.) SINCLAIR REFINING COMPANY, Chicago, Ill. Filed Apr. 2, 1917.

MODOC

The trade-mark consisting in the word "Modoc."

Particular description of goods.—Lubricating-Oils.

Claims use since the year 1910.

Ser. No. 104,715. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEONARD H. EMBRY, Nacogdoches, Tex. Filed June 27, 1917.

"JVE-FOUN-DIT"

Particular description of goods.—A Tonic for the Liver and Digestive Organs.

Claims use since May 1, 1917.

Ser. No. 105,218. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BETTERTON-RUPERT COFFEE CO., Ashland, Ky. Filed July 24, 1917.

KENTUCKY HOME



Particular description of goods.—Roasted Coffee.

Claims use since Jan. 19, 1917.

Ser. No. 106,478. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) EVERETT, HEANEY & COMPANY, INC., New York, N. Y. Filed Sept. 28, 1917.



Particular description of goods.—Cotton Goods in the Piece.

Claims use since July 15, 1917.

Ser. No. 106,739. (CLASS 39. CLOTHING.) WM. HAHN & CO., Washington, D. C. Filed Oct. 13, 1917.

GRO-NUPS

Particular description of goods.—Leather, Rubber, and Canvas Shoes and Hosiery.

Claims use since Mar. 15, 1917.

Ser. No. 106,900. (CLASS 15. OILS AND GREASES.) WESTERN OIL REFINING COMPANY, Indianapolis, Ind. Filed Oct. 22, 1917.

TARGET

Particular description of goods.—Gasolene.
Claims use since July 15, 1917.

Ser. No. 107,055. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) NATIONAL PLANT FOOD CO., Eau Claire, Wis. Filed Oct. 31, 1917.

SNAPPER

Particular description of goods.—Plant-Soap, an Insecticide.
Claims use since Aug. 11, 1917.

Ser. No. 107,240. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) MARSHALL FIELD & COMPANY, Chicago, Ill. Filed Nov. 8, 1917.

HOMESTEAD



Particular description of goods.—Wool-Batting.
Claims use since about Apr. 1, 1917.

Ser. No. 107,260. (CLASS 39. CLOTHING.) HENRY A. DIX & SONS COMPANY, New York, N. Y. Filed Nov. 9, 1917.

Dix-Make 400

Particular description of goods.—Nurses' Uniforms.
Claims use since Aug. 1, 1917.

Ser. No. 107,360. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRCAL APPARATUS.) PRICE'S PATENT CANDLE COMPANY LIMITED, London, Cricklewood, Battersea, and county of Chester, England. Filed Nov. 13, 1917. Under ten-year proviso.

Pyramid Nursery

Particular description of goods.—Food-Warmers Heated by a Combustible Material, Night Candle-Lamps, and Nursery Candle-Lamps.
Claims use since 1887.

Ser. No. 107,606. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BESTEVER PRODUCTS CO., Chicago, Ill. Filed Nov. 26, 1917.



Our trade-mark consists of the arbitrary coined word "Eggette" placed on the side of a representation of a chick, the chick being shown as though just hatched from an egg, which is shown as though still clinging to the chick, a background of parallel stripes or bars for the chick and egg being also shown.
Particular description of goods.—A Substitute for Eggs.
Claims use since Jan. 12, 1917.

Ser. No. 107,648. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ALFRED A. HOSLER, Marion, Ohio. Filed Nov. 28, 1917.

BHC

Particular description of goods.—A Liquid Compound for Prevention of and Removal of Scales from Boilers.
Claims use since Sept. 30, 1917.

Ser. No. 107,651. (CLASS 37. PAPER AND STATIONERY.) BERTRAND L. MAKEFIELD, Boston, Mass. Filed Nov. 28, 1917.

Prudential

Particular description of goods.—Lead-Pencils, Graphite-Pencils, Fountain-Pens, Steel Pen-Points, Rubber Erasers, Drawing-Paper, Detail-Paper, Tracing-Cloth, and Tracing-Papers.
Claims use since Jan. 1, 1916.

Ser. No. 107,813. (CLASS 38. PRINTS AND PUBLICATIONS.) INTERNATIONAL LONGSHOREMANS ASSOCIATION, Buffalo, N. Y. Filed Dec. 7, 1917.

I.L.A.

Particular description of goods.—Printed Books, Pamphlets, Periodicals, (Published Monthly,) and Circulars Used Between the Different Units of the Association for the Furtherance of Its Business.
Claims use since 1892.

Ser. No. 108,325. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE HALEY-HAMMOND CO. INC., Jersey City, N. J., and New York, N. Y. Filed Jan. 5, 1918.

SOLEX

Particular description of goods.—Greases Used for Tanning Leather.
Claims use since Feb. 15, 1917.

Ser. No. 108,396. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) THE CHARLES H. BUETTNER COMPANY, Cincinnati, Ohio. Filed Jan. 10, 1918.



Particular description of goods.—Replace Curtain-Lights Made of Celluloid and a Leather or Imitation-Leather Binding for Use on Vehicle-Curtains.
Claims use since June 1, 1917.

Ser. No. 108,475. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) DOMINION ASBESTOS AND RUBBER CORPORATION, New York, N. Y. Filed Jan. 15, 1918.

RECENT

"Regent."
Particular description of goods.—Rubber Hose, Rubber Belting, and Asbestos Packing.
Claims use since June 1, 1917.

Ser. No. 108,918. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) ELKHART BRASS MANUFACTURING COMPANY, Elkhart, Ind. Filed Feb. 9, 1918.



Particular description of goods.—Fire-Department Hose-Nozzles.
Claims use since March, 1915.

Ser. No. 108,944. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) GEORGE HEINBERG, Bay City, Mich. Filed Feb. 11, 1918.



Particular description of goods.—A Preparation for the Treatment of Stomach Disorders and Constipation.
Claims use since Jan. 26, 1918.

Ser. No. 109,118. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE NATIONAL CHEMICAL CO., Detroit, Mich. Filed Feb. 19, 1918.

OK

Particular description of goods.—A Chemical Compound for Removing, Eliminating, or Destroying Soot in Stoves, Furnaces, or the Like.
Claims use since Jan. 30, 1918.

Ser. No. 109,154. (CLASS 39. CLOTHING.) LILLIAN MCNAUGHTON, Los Angeles, Cal. Filed Feb. 21, 1918.

SAMMY'S SIS

Particular description of goods.—Girl's Two-Piece Dress, Consisting of a Coat and Skirt.
Claims use since the 12th day of February, 1918.

Ser. No. 109,212. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) RAILEY F. WILLIAMSON, Gainesville, Fla. Filed Feb. 25, 1918.

Kernello

Particular description of goods.—Bread.
Claims use since about Jan. 17, 1918.

Ser. No. 109,231. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MAX WATERMAN, New York, N. Y. Filed Feb. 26, 1918.

HONOR

The trade-mark comprising the word "Honor."
Particular description of goods.—Fresh Fruits and Vegetables—viz., Endive, Alligator-Pears, and Potatoes.
Claims use since Oct. 1, 1917.

Ser. No. 109,318. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COMPANIA COMERCIAL MEXICANA, INC., New York, N. Y. Filed Mar. 2, 1918.



Particular description of goods.—Wheat-Flour, Dried Beans, Dried Peas, Dried Fruit, and Cornmeal.
Claims use since Nov. 26, 1917.

Ser. No. 109,328. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LANGE CANNING CO., Eau Claire, Wis. Filed Mar. 2, 1918.

Trogon



Particular description of goods.—Canned Vegetables.
Claims use since Aug. 21, 1909.

Ser. No. 109,350. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) BETHLEHEM MOTORS CORPORATION, Allentown, Pa. Filed Mar. 4, 1918.

BETHLEHEM

The letters of the word "Bethlehem" are white and the star is colored emerald green, as indicated in the drawing.
Particular description of goods.—Automobile-Trucks.
Claims use since Apr. 1, 1917.

Ser. No. 109,484. (CLASS 43. THREAD AND YARN.) BERNHARD ULMANN CO. INC., New York, N. Y. Filed Mar. 9, 1918.

PRIDE OF THE FLOCK

Particular description of goods.—Threads and Yarns of Wool, Worsted, Cotton, Silk, Artificial Silk, Flax, or a Combination of Two or More of These Materials.
Claims use since Mar. 2, 1918.

Ser. No. 109,648. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROBERT L. GERHART, Lancaster, Pa. Filed Mar. 19, 1918.

MORNING-GLOW

Particular description of goods.—Tea, Rice, Cinnamon, Allspice, Cloves, Pepper, and Mustard.
Claims use since July 29, 1913.

Ser. No. 109,717. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE IDEAL LAMP MANUFACTURING COMPANY, Faribault, Minn. Filed Mar. 22, 1918.

Joymobile

Particular description of goods.—A Toy Vehicle.
Claims use since Sept. 1, 1917.

Ser. No. 109,727. (CLASS 39. CLOTHING.) PETER W. ROUSS, Brooklyn, N. Y. Filed Mar. 22, 1918.

Particular description of goods.—Work-Shirts.
Claims use since 1904.

Ser. No. 109,784. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) THE ULMER LEATHER CO., Norwich, Conn. Filed Mar. 25, 1918.

YANTIC

Particular description of goods.—Belt-Dressing.
Claims use since Feb. 1, 1918.

Ser. No. 109,891. (CLASS 43. THREAD AND YARN.) NONOTUCK SILK COMPANY, Northampton, Mass. Filed Mar. 30, 1918.

SCOTOLA

Particular description of goods.—Woolen and Worsted Yarns.
Claims use since about July 16, 1917.

Ser. No. 109,892. (CLASS 43. THREAD AND YARN.) NONOTUCK SILK COMPANY, Northampton, Mass. Filed Mar. 30, 1918.

SAXOLA

Particular description of goods.—Woolen and Worsted Yarns.
Claims use since about Oct. 29, 1917.

Ser. No. 109,905. (CLASS 12. CONSTRUCTION MATERIALS.) WASHINGTON BRICK LIME & SEWER-PIPE COMPANY, Spokane, Wash.. Filed Apr. 1, 1918.

"WACO"

Particular description of goods.—Architectural Terra-Cotta, Vitrified Tile, Fire-Brick, Burnt Lime.
Claims use since Aug. 1, 1914.

Ser. No. 109,938. (CLASS 17. TOBACCO PRODUCTS.) CHARLES H. BRADLEY, Murray, Ky. Filed Apr. 3, 1918. Under ten-year proviso.

CALLOWAY COUNTY TWIST

Particular description of goods.—Twist-Tobacco.
Claims use since in or about the year 1890.

Ser. No. 109,955. (CLASS 39. CLOTHING.) JOHN WYLIE, New York, N. Y. Filed Apr. 3, 1918.



Particular description of goods.—Hosiery.
Claims use since Mar. 26, 1918.

Ser. No. 109,971. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE DIAMOND CREAMERY CO. INC., Massena and New York, N. Y. Filed Apr. 4, 1918.

HONEYSUCKLE



Particular description of goods.—Condensed Milk.
Claims use since Jan. 4, 1918.

Ser. No. 110,068. (CLASS 37. PAPER AND STATIONERY.) W. K. GERBRICK, Neenah, Wis. Filed Apr. 9, 1918.

CALUMET

Particular description of goods.—Writing-Paper.
Claims use since Jan. 1, 1918.

Ser. No. 110,214. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) A. LAITNER & SONS, Detroit, Mich. Filed Apr. 15, 1918.

Laco

Particular description of goods.—Floor-Brushes, Window-Brushes, Bench-Brushes, Scrubbing-Brushes, and Dust-Brushes.
Claims use since Apr. 4, 1918.

Ser. No. 110,265. (CLASS 39. CLOTHING.) SALANT & SALANT, New York, N. Y. Filed Apr. 16, 1918.

TRENCH

Particular description of goods.—Flannel Work-Shirts, Overalls, Men's and Boys' Knitted Underwear, Work-Coats, Work-Pants, Jumpers.
Claims use since Nov. 2, 1917.

Ser. No. 110,456. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) PINE TREE MILKING MACHINE COMPANY, Chicago, Ill. Filed Apr. 26, 1918.

PINE TREE

Particular description of goods.—Milking-Machines.
Claims use since about the month of March, 1917.

[Vol. 251. No. 1.]

DECISIONS
OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

U. S. Circuit Court of Appeals—Third Circuit.

GLOBE KNITTING WORKS *v.* SEGAL *et al.*

Decided December 27, 1917.

248 FED. REP., 495.

1. PATENTS—INVENTION—NEW USE OF OLD DEVICE.
The transfer of elastic features previously used in drawers or overalls to union-suits, when they are subjected to different strains and do not perform precisely the same functions, and therefore do not produce the same result, may constitute patentable invention.

2. SAME—EVIDENCE OF INVENTION—POPULAR RECOGNITION.
Where the question of invention is close, as it usually is when the thing done is simple, the thing achieved, its recognition by the art, and the demand for it by those who use it are matters properly to be put in the scale and weigh in favor of invention.

3. SAME—VALIDITY AND INFRINGEMENT—UNION-SUIT.
The Clarke patent, No. 1,035,819, for an improvement in knit underwear of the type known as "union-suits," while not covering a broad invention by the use of a new material in a new way, produced new results in such garments of a useful character, measured by the increased comfort they afford the wearer and the popular demand they created, and discloses patentable invention; also *Held* infringed.

APPEAL from the District Court of the United States for the Eastern District of Pennsylvania; Oliver B. Dickinson, judge.

Suit in equity by the Globe Knitting Works against Keeva Segal and Benjamin Segal, doing business as the Quaker Manufacturing Company. Decree for defendants, and complainant appeals. Reversed.

Messrs. Prichard, Saul, Bayard & Evans for the appellant.

Mr. E. Hayward Fairbanks for the appellees.

Before BUFFINGTON, MCPHERSON, and WOOLLEY, Circuit Judges.

WOOLLEY, *Cir. J.:*

The bill charges infringement of Letters Patent No. 1,035,819, issued August 13, 1912, to A. E. Clarke, assignor of the plaintiff, for improvements in knit underwear. The defenses are invalidity and non-infringement. The district court, while indicating its opinion that the garment of the patent lacked patentable novelty, dismissed the bill on the ground that infringement of the claim, if valid, could not be found under the narrow construction which it gave it. (239 Fed., 322.) The plaintiff took this appeal.

(1) The patent is for improvements in underwear of the type generally known as "union-suits." These garments comprise a shirt and drawers made in one continuous piece. When the two elemental garments are thus combined in one, the demands of the human body upon the unified garment are radically different in number and character from demands made upon its two elements when worn separately. To meet these requirements and to attain their objectives of convenience and comfort, the art has produced union-suits of many patterns. The fundamental types, as known to the trade, are "open crotch" and "closed crotch." The manifest discomfort of the former has greatly increased the use of the latter. To the latter class, the garment of the patent in suit belongs.

The human body, in different positions of sitting, stooping, reaching, subject a garment of one close-fitting piece, extending over its entire surface from neck to feet, to many strains. These strains begin at the shoulders, and extending downwardly, are arrested at the crotch, where, if not relieved by some compensatory means, they produce a discomfort that makes the wearing of union-suits undesirable or wholly impracticable. Here is a problem. It was first met by the open-crotch pattern, and in a measure solved. But this solution of the problem produced a new discomfort, which caused the trade, in response to popular demand, to confine itself chiefly to the closed-crotch pattern with its original problem of shoulder-strain and crotch-binding, and to seek its solution.

Johnson (No. 973,200) conceived that the strain upon the crotch of a union-suit and its consequent tightness and discomfort, could be relieved by supplying more material at that place. Terwillinger (No. 992,291) conceived the same idea. Both obtained patents for the particular means which they conceived for putting that idea into practice. But this solution brought still another discomfort to the wearer of union-suits. Instead of being of a pattern that would fit the body snugly, when in motion or in repose, union-suits of these patterns were made larger from shoulders to crotch, in order to supply a fullness of material to take up the strains. The

result was that the extra strain-relieving material, when not performing its function, became a useless and baggy excess of material and became also an active and ever-present cause of discomfort.

This was the state of the art when Clarke entered it. Manifestly he was not a pioneer. He did not claim to have invented a union-suit. He claimed, simply, to have made improvements upon garments of that kind. He found in the art union-suits with crotches and flaps and inserts, and set about to solve a problem admittedly there.

The means he conceived is set forth in the patent in suit and is nothing more than a combination of old elements of a union-suit and flaps, and—

an elastic knit fabric extending well up in front of the garment and extending down the leg seams, forming a lateral elastic closed crotch that is firmly sewed to the front of the garment and the leg seams and to the lower edges of the flaps, substantially as shown and described.

The insert or gusset as shown and described is a somewhat diamond-shaped piece of fabric, which in practice gets its elasticity from the weave of the fabric into ribs or wales, set in the garment with the ribs or wales placed transversely, the direction of the strains coming from the shoulders and body. Simple as this arrangement appears, it accomplished several things. It did away with the baggy fullness of union-suits of the prior art and permitted the making of a garment that conformed snugly to the outline of the body. Its elasticity acted as a compensating means for the strains as they came from the shoulders and prevented tightness at the crotch in various positions of the body, and relieved the wearer from discomfort. These things it did, as we are informed by the testimony.

To be sure, the range of invention in a garment of this character is obviously not broad, and Clarke's invention is not a great one. Yet, if the inserted fabric, cut in a particular shape and possessing a particular yielding quality, takes up strains in the garment, and transforms discomfort into comfort for the one wearing it, and achieves this in a manner not before employed, it is not impossible that the idea contains patentable novelty—unless something in the prior art, or in a kindred art, so closely resembles it as to make the improvement a mere improvement rather than an invention. And such the defendants insist is the claimed invention of the patent.

(2) There is nothing in the prior art, if restricted to garments of the union-suit variety, which anticipates or otherwise negatives the invention of the patent. But in the prior art of drawers, overall-pants and like nether garments, there are a number of patents containing elastic crotch-pieces or gussets in varied forms and arrangements, of which Scriven (No. 625,423) for drawers and Stecker (No. 924,013) for overall-pants may be taken as representative. At first view it would seem that it did not require an exercise of the inventive faculty for Clarke to put Scriven's drawers-gusset and Stecker's overall-pants insert, with some variation, into a union-suit and cause them to do there the same thing and produce the same result. But the fact is that drawers and overall gussets, when transferred to union-suits, do not perform precisely the same function and therefore do not produce the same results. Body-movement strains upon drawers and pants, which cover but half of the body, are entirely different from strains in union-suits moving from the whole body. It is also a fact that Clarke, whether or not he got his idea from the art of drawers-making, was the first to apply it to union-suits, with a result that is as surprising as the idea seems simple. The plaintiff paid Clarke $50,000 for his invention, $35,000 in cash and $15,000 in stock of the plaintiff corporation with a market value of par. And the plaintiff apparently knew its business, for in two years after acquiring the patent, it manufactured between six hundred thousands and seven hundred thousand dollars of garments under the patent and received and continues to receive royalties from seven corporations manufacturing under licenses.

(3) The district court, in considering without deciding the validity of the patent, evidently inclined to the opinion that Clarke's use of an elastic knit crotch-piece was little more than a substitution of material, and approached, if it did not fall within, the principle of law that the substitution of one material for another, which does not involve change of method nor develop novelty of use, even though it may result in a superior article, is not necessarily a patentable invention. (*Florsheim* v. *Schilling*, 137 U. S., 64; 11 Sup. Ct., 20; 34 L. Ed., 574.) True, undergarments of earlier patterns had inserts at the crotch, but no union-garment, so far as the record shows, had ever been made with an elastic insert at the crotch. Therefore, in a sense, Clarke did substitute one material for another, but we think he did something more. (*Frost Co.* v. *Cohn*, C. C., 112 Fed., 1009.) By the substitution, or more properly speaking, by the use of a new material in a new way, he produced new results of a useful quality measured by the increased comfort they afforded and the popular demand they created. Simple as it may seem, the elastic knit crotch-piece produced results desired by those who wear the garment and the payment of large tribute by those who manufacture it. When the question of invention is close, as it usually is when the thing done is simple, the thing achieved, its recognition by the art, and the demand for it by those who use it, are matters properly to be put in the scale and weigh in favor of invention. (*Neill* v. *Kinney*, 239 Fed., 309–314; 152 C. C. A., 297.) We find the patent valid.

Upon the issue of infringement, the district judge found that the defendant did not infringe, unless the claim of the patent be construed so broadly, that an undergarment made up of any combination of elements into which the idea of a knitted elastic gusset enters as an element, would be an infringement. He declined to construe the patent thus broadly. We do not think that, to find infringement, the claim must be thus broadly construed. Clarke's patent is not for an elastic knit gusset alone. It is for a combination containing such a gusset as an element, and the rule of the patent law,

that the omission of one element of a claim for a combination avoids the charge of infringement, applies to this patent as to any other. The question of infringement in this case, therefore, is not whether the claim of the patent may be infringed by the use of an elastic knit gusset in *any* combination of elements, but whether the defendants infringe by making the garment here charged as infringing, because it embraces *all* the elements of the claim of the patent. They are (1) the body of the union-suit, (2) the presence, location and adjustment of flaps, and (3) the elastic knit gusset. The mere inspection of the two garments determines the question of infringement. In looking at them and comparing them in the light of the testimony, we cannot escape the conclusion that the garment of the defendants corresponds precisely in elements and substantially in detail with the claims of the patent. The parts are the same, they are in the same positions and relation, are intended for the same uses, perform the same functions and operate exactly as disclosed by the patent—with one exception. This is found on the under or inside flap of the defendants' garment, which is a continuous piece extending from the under-arm seam across to its inner edge. In the patent, this flap is described as—

stitched to the opposite side of the garment and extending under the first named flap.

The second or inside flap of the patent, in the position disclosed, is the element of the patent, not the mere stitching of the flap. The defendants' second or inside flap, being in the same place and performing the same function, though made in a continuous piece from the arm-seam, is a full equivalent of this element; and the extension of the second flap from the arm-seam without stitching does not constitute an omission by the defendants of one of the elements of the patent claim whereby they avoid infringement.

We find that the patent is valid and infringed, and direct that a decree be entered in accordance with this opinion.

ADJUDICATED PATENTS.

(U. S. C. C. A. Cal.) The Weber patent, No. 801,944, for glass show-case, *Held* not infringed. *Diamond Patent Co.* v. *Webster Bros.*, 249 Fed. Rep., 155.

Adverse Decisions in Interference.

PATENT NO. 1,192,895.

On May 22, 1918, a decision was rendered that Ansil W. Hills was not the first inventor of the subject-matter covered by claims 13, 14, 15, and 20 of his Patent No. 1,192,895, subject, "Ticket-vending machine," and no appeal having been taken within the time allowed such decision has become final.

PATENT NO. 1,198,366.

On May 9, 1918, a decision was rendered that Patrick Alphonsus Martin and John Stanley were not the first inventors of the subject-matter covered by claims 1 and 2 of their Patent No. 1,198,366, subject, "Golf and other playing balls," and no appeal having been taken within the time allowed such decision has become final.

PATENT NO. 1,182,107.

On May 10, 1918, a decision was rendered that Frederick Merk was not the first inventor of the subject-matter covered by claim 10 of his Patent No. 1,182,107, subject, "Automatic telephone system," and no appeal having been taken within the time allowed such decision has become final.

Changes in Classification.

(ORDER NO. 2,396½.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 10, 1918.

It is hereby directed that class 162, Injectors and Ejectors, be transferred from Division XVIII to Division IX, this transfer to take effect immediately.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER NO. 2,399.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 13, 1918.

The following change in the classification of inventions is hereby directed, to take effect immediately:

In class 105, Railway Rolling-Stock, (Division XXXIV,) abolish subclass—

Cars—
Passenger—
83. Individual safes.

The patents formerly contained in this subclass have been placed in class 109, Safes, subclass 1, Burglar-proof.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER NO. 2,400.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 14, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 105, Railway Rolling-Stock, (Division XXXIV,) abolish subclass—

Locomotives—
97. Draw-bar lifters.

The patents formerly contained in this subclass have been placed in class 213, Railway Draft Appliances, subclass 68, Draw-bars, Lifters, hereinafter established.

In class 213, Railway Draft Appliances, (Division XLI,) establish subclass—

Draw-bars—
68. Lifters.

The patents contained in this subclass have been taken from class 105, Railway Rolling-Stock, subclass 97, Locomotives, Draw-bar lifters, hereinbefore abolished.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER NO. 2,401.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 15, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 105, Railway Rolling-Stock, (Division XXXIV,) abolish subclass—

Trucks—
Center-bearings—
109. Pressed steel.

The patents formerly contained in this subclass have been placed in class 64, Journal-Boxes, Pulleys, and Shafting, subclass 87, Truck-bearings, hereinafter established.

In class 64, Journal-Boxes, Pulleys, and Shafting, (Division XII,) give to the existing subclass title, Truck-

bearings, the number 87, the patents placed in this subclass having been taken from class 105, Railway Rolling-Stock, subclasses 109, hereinbefore abolished, 108, and 115.

J. T. NEWTON,
Commissioner.

Changes in Classification.

(ORDER No. 2,402.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 15, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 116, Signals, (Division XXXV,) establish subclass—

Annunciators—
67. Game.

The patents contained in this subclass have been taken from class 235, Registers, subclass 1, Miscellaneous.

In class 177, Electric Signaling, (Division XLII,) establish subclass—

Annunciator systems—
384. Game.

The patents contained in this subclass have been taken from class 235, Registers, subclass 1, Miscellaneous.

J. T. NEWTON,
Commissioner.

Employees Who Have Entered the Military or Naval Service of the United States.

DEPARTMENT OF THE INTERIOR,
Washington, D. C., June 15, 1918.

Summary of supplemental list for Honor Roll of employees who have entered military or naval service to date:

Previously listed on Honor Roll	1,518	
Deductions reported since	8	
		1,510
Reported by bureaus since last supplemental list of May 17:		
Office of the Secretary	2	
General Land Office	17	
Office of Indian Affairs	12	
Pension Office	2	
Patent Office	12	
Geological Survey	14	
Reclamation Service	28	
Bureau of Mines	14	
National Park Service	5	
Alaskan Engineering Commission	12	
St. Elizabeths Hospital	5	
Freedmen's Hospital	1	
Board of Indian Commissioners	2	
Grand Total		1,636

Supplemental List of Employees Who Have Entered Military or Naval Service to Date.

OFFICE OF THE SECRETARY (2).

Burnette, William H. — Loyd, Charles F.

GENERAL LAND OFFICE (17).

Best, Edward T. — Keefe, Edward J.
Brennan, William G. — Mengelkamp, Otto J.
Campbell, Quinton. — Pecore, Chester W.
Condon, Francis M. — Poole, Walter S.
Dorman, Fenwick G. — Richards, William H., Jr.

GENERAL LAND OFFICE.—Continued.

Robertson, William E. — Smith, Albert, Jr.
Robinson, Wallace A. — Stinson, Alton O.
Rudolph, Herman H. — Szabo, Andrew J.
Scanlon, James W.

OFFICE OF INDIAN AFFAIRS (12).

Bell, George E. — Merriss, Clinton W.
Dyson, James E. — O'Brien, Ancil K.
Hall, Wilfred M. — Parker, Wesley D.
Knotts, Dr. Roy R. — Roblee, Dr. William W.
McGuire, John G. — Sheppard, Richard F.
Makosky, Frank C. — Venne, Edmond A.

PENSION OFFICE (2).

Merino, Emilio E. — Powell, Samuel M.

PATENT OFFICE (12).

Ashurst, John W. — Harman, Arthur W.
Brinkley, Hugh G. — Helms, Silas B.
Crews, Clarence M. — Howard, David A.
Demaree, Harry S. — Purcell, Gratton.
Fellows, Hobert A. — Richards, James E.
Fogerty, Edwin F. — Sheridan, Francis W.

GEOLOGICAL SURVEY (14).

Dean, Charles J. — Neale, John R.
Farnham, Albert R. — Pait, Thomas R.
Jerman, Reid. — Reddick, James P.
Knapp, Jesse. — Sheelor, Kenneth H.
Krauskopf, Joseph. — Shreve, William A.
McLaughlin, Joe. — Thompson, Robert B.
Mayer, Paul G. — Willie, Leon.

RECLAMATION SERVICE (28).

Alexn, Joseph W. — Lucas, Floyd.
Avery, Joseph C. — Mennella, Stanley.
Barker, Lloyd. — Mong, L. H.
Burdock, R. H. — Presson, J. B.
Clark, Tom A. — Quinn, James.
Ellicott, George. — Ray, Clifford.
Gaber, Bernard. — Sornberger, Charles.
Getman, C. S. — Stearman, F. E.
Glover, R. E. — Swenson, Harold.
Hadland, John. — Tingley, W. I.
Hughes, Austin. — Tucker, Elmer W.
Jackson, Bud. — Vandemoer, John J.
Knowles, E. H. — Wade, Victor.
Loderick, Lee S. — Waller, Gilbert.

BUREAU OF MINES (14).

Allen, Edward J. — Kienle, Roy H.
Bowers, Paul C. — Marshall, Eli K.
Clark, Theodore. — Meckley, Robert B.
Chase, Robert S. — Perrott, George St. J.
Eaton, Harry A. F. — Sutherland, Leslie T.
Goodloe, Ossie W. — Thorp, Gerald.
Hood, Harrison P. — Swingle, Robert J.

NATIONAL PARK SERVICE (5).

Beltzell, J. G. — Dustman, George T.
Berven, Robert. — O'Brien, Frank M.
Brazell, Roy.

ALASKAN ENGINEERING COMMISSION (12).

Carlson, Grant. — Kimmel, John M.
Case, R. E. — Longfellow, L. E.
Daykin, Wallace. — Love, Walter.
Deane, E. C. — McPhee, Henry.
Fonda, Roy. — Stevenson, W. R.
Kahleen, Karl. — Townsend, H. L.

ST. ELIZABETHS HOSPITAL (5).

King, Elmer J. — Trammell, Everett C.
O'Neil, D. G. — Watson, Sterling D.
Rainey, Clarence E.

FREEDMEN'S HOSPITAL (1).

Passon, Fred W.

BOARD OF INDIAN COMMISSIONERS (2).

Henderson, Earl Y. — Knox, Major Frank.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

Vol. 251—No. 2. TUESDAY, JUNE 11, 1918. Price—$5 per year.
[PUBLISHED JULY 6, 1918.]

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Issue of June 11, 1918.

Patents	762—No.	1,268,809 to No.	1,269,570, inclusive.
Designs	13—No.	52,093 to No.	52,105, inclusive.
Trade-Marks	107—No.	121,843 to No.	121,949, inclusive.
Labels	None.		
Prints	None.		
Reissues	5—No.	14,481 to No.	14,485, inclusive.
Total	937		

Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 26, 1918.

In order that the public may have the benefit of the full time in trade-mark cases, the date of actual publication of the OFFICIAL GAZETTE will be the effective date from which the thirty-day period prescribed by the Trade-Mark Act will be computed. The actual date of publication will be found in each weekly number under the date of issue on the first page.

J. T. NEWTON,
Commissioner.

Notice—Photostat Copies.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 10, 1918.

Owing to difficulties encountered in obtaining the services of competent typists notice is hereby given that in order to avoid delays the Patent Office reserves the right to furnish photostat copies in lieu of type-written copies, in filling orders for copies of its records, on and after August 1, 1918, unless otherwise specifically directed.

J. T. NEWTON,
Commissioner.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 27, 1918.

The Star Manufacturing Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Fiske Brothers Refining Co., of 24 State street, New York, N. Y., for registration of a trade-mark and trade-mark registered October 7, 1890, No. 18,494, to The Star Manufacturing Co., of Dock street, Easton, Pa., and a notice of such declaration sent by registered mail to said The Star Manufacturing Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said The Star Manufacturing Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 25, 1918.

Norton & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Ulysses Grant Holley, Laramie, Wyo., for registration of a trade-mark and trade-mark registered October 16, 1894, No. 25,866, to Norton & Co., of 811 and 812 Royal Insurance Building, Chicago, Ill., and a notice of such declaration sent by registered mail to said Norton & Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Norton & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR
UNITED STATES PATENT OFFICE,
Washington, D. C., June 21, 1918.

Ezo Manufacturing Company, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Lawrence Chemical Co., of 582 Sixth street, Marietta, Ohio, for registration of a trade-mark and trade-mark registered June 17, 1902, No. 38,485, to Ezo Manufacturing Company, of 200 West South street, Akron, Ohio, and a notice of such declaration sent by registered mail to said Ezo Manufacturing Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Ezo Manufacturing Company, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business June 7, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action. New.	Amended.	No. of applications awaiting action.
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	May 3	May 17	155
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 14	Mar. 30	263
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 22	Apr. 29	172
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Apr. 20	May 13	193
167	5. Bookbinding; Harvesters; Jewelry; Music.	Mar. 23	Apr. 16	224
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Jan. 18	Feb. 19	395
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Feb. 1	Apr. 16	352
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 19	May 10	287
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Jan. 19	May 23	420
235	10. Carriages and Wagons; Motor Vehicles	Feb. 9	Apr. 20	586
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Mar. 18	May 13	214
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Feb. 16	Mar. 25	666
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 14	Apr. 24	529
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Mar. 23	Apr. 24	163
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics	May 7	May 9	225
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Feb. 1	Mar. 18	526
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 6	May 3	107
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 1	Apr. 1	343
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Mar. 14	Mar. 15	401
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	May 1	May 7	158
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 23	Apr. 18	217
249	22. Aeronautics; Firearms; Ordnance	Mar. 1	May 2	284
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Mar. 21	May 2	288
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	Apr. 18	May 2	208
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	Apr. 23	Apr. 30	155
105	26. Electricity, Generation; Motive Power	Dec. 8	Apr. 1	506
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Mar. 23	Apr. 26	294
225	28. Internal-Combustion Engines	Mar. 6	Apr. 1	421
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 4	Mar. 1	409
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Mar. 5	May 13	369
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Mar. 6	Mar. 4	231
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Dec. 10	May 1	671
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 3	Apr. 25	209
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	May 22	May 21	73
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Jan. 8	Jan. 26	530
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Apr. 16	May 3	526
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Jan. 12	Jan. 29	696
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	May 11	May 15	116
220	39. Water Distribution; Multiple Valves	Feb. 8	Apr. 6	347
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 14	Mar. 16	466
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Mar. 1	Mar. 8	305
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling.	Jan. 12	Jan. 19	651
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 18	Apr. 27	222
263	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Apr. 18	May 14	182
379	45. Clutches; Lubrication; Motors; Railway Brakes	Feb. 23	Mar. 2	341

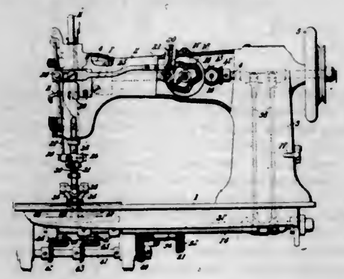
Oldest new case, Dec. 8; oldest amended, Jan. 19.
Total number of applications awaiting action 15,087

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	May 2	May 25	696
	Designs	Mar. 28	May 2	478
	Labels and Prints	May 31	May 20	56

PATENTS

GRANTED JUNE 11, 1918.

1,268,809. SEWING-MACHINE. CHARLES M. ABERCROMBIE, Bridgeport, Conn., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed July 11, 1916. Serial No. 108,569. (Cl. 112—4.)



1. In a sewing machine, the combination with a fabric-feeding and stitch-forming mechanism employing a needle for producing a straightaway seam and a needle for producing an open-work seam at a single operation, of means for presenting and directing superposed plies of fabric to the action of said stitch-forming mechanism simultaneously with the stitching operation.

2. In a sewing machine employing two needles and co-operating loop-takers, the combination of a needle-bar provided with one of said needles, a needle-bar actuating shaft operatively connected with said needle-bar to give to the latter and said needle stitch-forming movements in a given path only, a pivotally mounted needle-holding bracket carried by said needle-bar and provided with the other of said needles, and connections between said main-shaft and said pivotally mounted needle-holding bracket for giving to the needle carried by the latter lateral movements when out of the fabric being acted on to direct its stitch-forming movements in different paths and lateral movements when in the fabric to effect openings in the latter.

1,268,810. CURTAIN-BRACKET. EARL J. AMO, Malone, N. Y. Filed Aug. 29, 1916. Serial No. 117,538. (Cl. 156—23.)

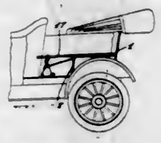


1. A curtain supporting device including brackets at opposite sides of a window casing and of substantially triangular conformation, having one side inclined to the window casing, said brackets being disposed with their inclined sides remote from each other, and a flexible and resilient curtain support extended between said brackets, and having each terminal extended along the inclined side of each bracket and secured to the remote corners thereof.

3. A curtain supporting device including brackets at opposite sides of a window, said brackets being substantially triangular and disposed with one side of each bracket against the face of the window casing and one side projecting therefrom to dispose the inclined side of the brackets outwardly, the said inclined sides being convexed and curved transversely to form longitudinal grooves, a sharpened claw member at the outer corner of each bracket adapted to engage the edges of the window casing, a curtain support adapted to be disposed between the brackets to lie within the grooves thereof, means on the remote corners of the brackets for engaging and securing the ends of said curtain support, a second curtain support, and means on the adjacent portions of the brackets for engaging the ends of said curtain support, to dispose both of said curtain supports in parallelism.

[Claim 2 not printed in the Gazette.]

1,268,811. FOOT-RAIL AND TONNEAU-TRUCK ATTACHMENT FOR PASSENGER-CARS. EDWARD J. BALMOS, Devine, Tex. Filed Aug. 3, 1917. Serial No. 184,293. (Cl. 21—7.)

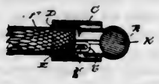


1. An attachment of the class described including spaced base plates upturned at one end, extensible elements pivotally connected to the other ends of the base plates and adapted to rest normally on the plates and to extend close to said upturned ends, a cross connection between the extensible elements and normally constituting a foot rest, and a brace mounted to swing upon each extensible element and shiftable to engage the adjacent base plate close to the upturned end, thereby to support the foot rest out of normal and in elevated position.

2. An attachment of the class described including bases, extensible telescopic elements pivotally connected thereto, and adapted to rest thereon, each of said bases having an aperture therein, a cross connection between the extensible element and constituting a foot rest, and a brace movably connected to each extensible element and shiftable to position one end within the aperture in the adjoining base, means for holding the extensible element against the longitudinal adjustment, a platform member, and means for detachably securing said platform member to the cross connection.

3. An attachment of the class described including a foot rest, extensible supports therefor, means for holding the foot rest out of its normal position and upon its extended supports, a platform member, and means for detachably securing the platform member to the extended foot rest.

1,268,812. TERMINAL. CHARLES W. BECK, Detroit, Mich., assignor to The Beck-Frost Corporation, a Corporation of Michigan. Filed Jan. 4, 1915. Serial No. 432. (Cl. 173—269.)

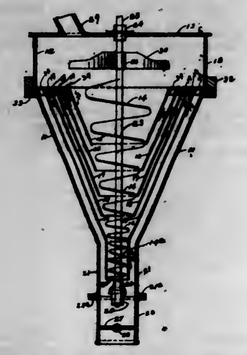


1. A terminal comprising a blank bent into substantially U-shaped form, the legs of the U having segmental portions for engaging the insulator covering of a wire and one of the legs having a struck-up bearing portion for engaging said wire, the base of the U forming a bearing

for engaging a terminal or the like, and a sleeve engaging said segmental portions.

2. A terminal adapted to be connected to an electrical conduit, comprising a blank bent into substantially U-shaped form, the legs of the U having segmental portions for engaging said conduit and one of the legs having a struck-up bearing portion for engaging the end portion of said conduit, the base of the U forming a bearing for engaging a terminal or the like, and means for clamping said segmental portions of the leg upon said conduit.

1,268,813. MACHINE FOR MIXING FLOUR AND OTHER MATERIALS. ISRAEL BENJAMINS, Bathbeach, N. Y., assignor to Albert A. Strauss, New York, N. Y. Filed Dec. 8, 1917. Serial No. 206,202. (Cl. 259—8.)



1. In a machine for mixing flour and other materials, an outer casing, a mixing screw and one or more guides adapted to direct the mixed material from the discharge end of said screw to a point or points of the working surface of said screw.

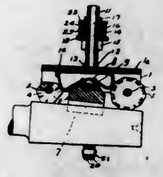
2. In a machine for mixing flour and other materials, an outer casing, a mixing screw and one or more guides coaxial with said screw, said guides being adapted to direct the mixed material from the discharge end of said screw to a point or points of the working surface of said screw.

3. In a machine for mixing flour and other materials, an outer casing, a mixing screw and one or more guides coaxial with said screw, said guides being adapted to direct the mixed material from the discharge end of said screw to a point or points of the working surface of said screw, said screw comprising a tapered portion near the discharge end thereof and a portion having the form of an Archimedean screw near the intake end thereof, one of said guides having a spout adapted to encompass said Archimedean screw and said outer casing having an end adapted to encompass said spout, thereby directing the material passing between the said outer casing and said guide to the end of said spout, which is also the intake of said screw.

4. In a machine for mixing flour and other materials, an outer casing, a mixing screw on a vertical shaft and one or more guides coaxial with said screw, said guides being adapted to direct the mixed material from the discharge end of said screw to a point or points of the working surface of said screw, combined with an impeller operatively connected to said screw, and situated at the discharge end thereof, said impeller being adapted to spread out the material in the upper end of the casing as it is being heaped up by the screw, thereby reducing the height of the heap.

5. In a machine for mixing flour and other materials, an outer casing, a mixing screw and a plurality of guides coaxial with said screw, said guides being adapted to direct the mixed material from the discharge end of said screw to a point or points of the working surface of said screw, combined with means for spacing said guides with relation to each other and to said casing, thereby keeping the same in a position coaxially with said screw.

1,268,814. TAPER-GAGE. LOWELL C. BLOMSTROM, Detroit, Mich. Filed June 11, 1917. Serial No. 173,942. (Cl. 33—174.)

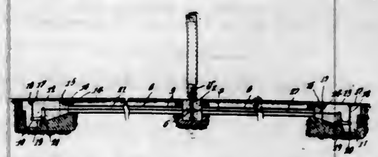


1. In a taper gage, a body having a plane gaging surface, a polygonal gage member rotatably mounted upon said body, having its axis parallel to said gaging surface, and having its peripheral faces differentially distanced from its axis, and a coacting gage member upon said body spaced from said polygonal member, and having a surface adapted to co-act with the peripheral faces selectively of said gage member in different positions of rotation of the latter to determine planes respectively corresponding to said peripheral faces and having known inclinations to the gaging surface of said body.

2. In a gage, a body having a plane gaging surface, a polygonal gage member rotatably mounted upon said body, having its axis parallel to said gaging surface, and having its peripheral faces differentially distanced from its axis, a co-acting member upon said body spaced from said polygonal member, and having a surface adapted to co-act with the peripheral faces selectively of said gage member in different positions of rotation of the latter to determine planes respectively corresponding to said peripheral faces and having known inclinations to the gaging surface of said body, and means engaged with said body for clamping the two said co-acting plane-determining surfaces against a tapered body.

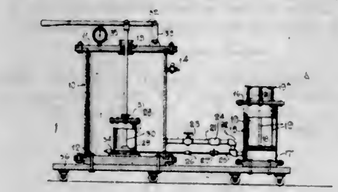
[Claims 3 to 12 not printed in the Gazette.]

1,268,815. AUTOMATICALLY-OPERATED FARM-GATE. HULEN BRAZEAL, Harrison, Ark. Filed Dec. 20, 1917. Serial No. 208,138. (Cl. 39—18.)



In a gate of the class described, the combination of a supporting post, a chamber arranged in front of said post at the base thereof, arms extending laterally from said post at its upper and lower ends, one of said arms projecting into said chamber, conduits leading from said chamber in opposite directions and in longitudinal alinement, wells arranged at the outer ends of said conduits and communicating therewith, closures for said wells, hinged at one end to the inner side walls of the wells at their upper ends, other ends of said closure being adapted to swing downwardly into the wells, stops for limiting the downward movement of said closures, an arm extending laterally from the lower pintle of said gate, rods connected at one end with said arms and extending through said conduits into the wells, links depending from the free ends of said closures, and bell cranks fulcrumed in said well between the outer ends of said rods and said links and connected at their free ends with said rods and links whereby the depression of either closure operates to open the gate.

1,268,816. COMPRESSED-AIR JACK. WARREN J. BUCHNER and RAYMOND F. NORTH, Glendive, Mont. Filed Jan. 19, 1918. Serial No. 212,602. (Cl. 138—9.)

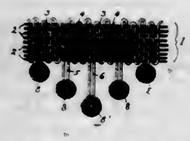


1. A lifting jack including a compressed air storage chamber, a jack chamber, a piston therein operatively connected to a lifting member, tubular connections from the storage chamber to the jack chamber below the piston, one of said connections having a manually operable valve, and a check valve preventing flow of compressed air from the jack chamber, the other connection having a manually operable valve and a check valve permitting flow from the jack chamber to the storage chamber.

3. A lifting jack including a compressed air storage chamber, a jack chamber, a piston therein operatively connected to a jack member, tubular connections from the storage chamber to the jack chamber below the piston, one of said connections having a manually operable valve, and a check valve preventing flow of compressed air from the jack chamber, the other connection having a manually operable valve and a check valve permitting flow from the jack chamber to the storage chamber, and means for positively pumping air from the jack chamber to the storage chamber, said means including a pumping cylinder disposed within the storage chamber and having an outlet nozzle provided with an outwardly opening check valve, a piston operating within the pumping chamber and having a rod extending through the storage chamber, and means for operating the piston.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,268,817. FRINGE. JOSEPH E. CHAPPATTE, Philadelphia, Pa., assignor to E. L. Mansure Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 31, 1915. Serial No. 48,203. (Cl. 139—10.)



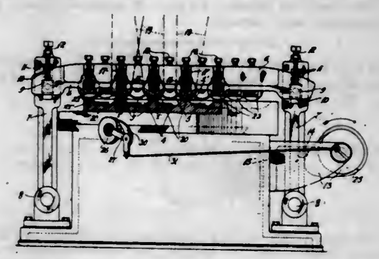
A fringe consisting of an interwoven heading, a series of weft threads of successively varying lengths interwoven with said heading and projecting therefrom, and tufts having core portions, said threads being looped at their outer ends, each of said looped ends being connected to the core of a respective tuft whereby a tufted edge of regular varying contour is defined by said tufts, said heading also including other weft threads intermediate the varying length threads, said other weft threads being confined within the heading, substantially as described.

1,268,818. PICKLING COMPOUND. HENRY J. CRABBE, Cleveland, Ohio, assignor to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 24, 1917. Serial No. 157,141. (Cl. 148—42.)

1. A metal pickling compound comprising bi-sulfate of soda and sodium chlorid in the approximate proportions of two parts of the former to one of the latter.

[Claim 2 not printed in the Gazette.]

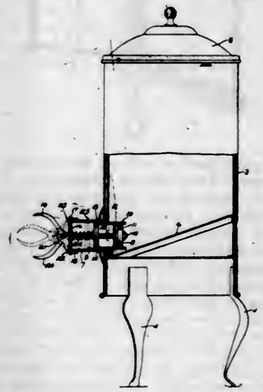
1,268,819. MANUFACTURE OF FILES AND SAWS. WILLIAM HENRY DENLEY, Birmingham, England. Filed Dec. 18, 1917. Serial No. 207,698. (Cl. 76—25.)



1. A machine for the manufacture of toothed cutting tools comprising in combination blank carrying means, feed means adapted to intermittently feed said blank carrying means, reciprocatory means moving at an angle to the direction of feed of said blank carrying means, rotary cutters operatively mounted in said reciprocatory means; and forming means mounted on said reciprocatory means and coöperating with said reciprocatory means whereby the last named means will describe the desired path during operation of said cutters.

[Claims 2 to 12 not printed in the Gazette.]

1,268,820. LIQUID MEASURING AND DISPENSING APPARATUS. PAUL DEPEW, Boston, and WALTER A. HILLIARD, Malden, Mass. Filed May 9, 1912. Serial No. 696,140. (Cl. 221—115.)



1. A liquid measuring and dispensing apparatus having, in combination, a container for the liquid, a discharge conduit having an inlet leading from said container and having an external outlet, a normally open valve controlling said inlet, a normally closed valve controlling said outlet and separated from the first-mentioned valve by a space to receive a predetermined supply of liquid from said container, a rod connecting said valves to move the same in unison to close said inlet and open said outlet to permit the escape of the measured supply of liquid from said outlet, a spring normally holding the first-mentioned valve open and the second-mentioned valve closed, and a pair of pivotally connected grasping handles connected to said rod for imparting a longitudinal motion thereto against the tension of said spring.

2. A liquid measuring and dispensing apparatus having, in combination, a container for the liquid, the discharge conduit 10 leading from said container and having the inlet 8, the outlet 9 and the valve seat 14 between said

inlet and said outlet, the valves 11 and 13, the closure 17 for said conduit provided with the aperture 16, the rod 15 connecting said valves and extending through said aperture, and the handles 19 and 20 pivoted to said rod and engaging said closure.

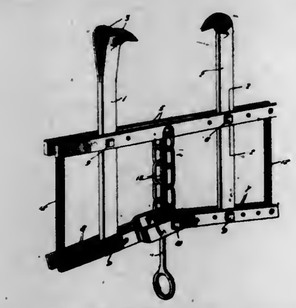
1,268,821. WATCHCASE. CHARLES L. DEPOLLIER, Brooklyn, N. Y. Filed Oct. 6, 1917. Serial No. 195,020. (Cl. 58—90.)



1. A watchcase having separable members, provided with an annular seat for packing material between proximate faces, and a saturated packing between the proximate faces, one of such case members being formed also with a recess for the reception of the surplus saturant.

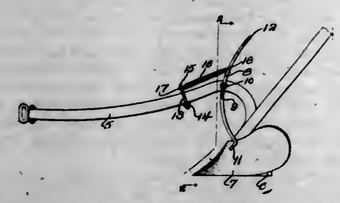
[Claim 2 not printed in the Gazette.]

1,268,822. GRAPPLE. CHARLES ERNEST DREILING, Henderson, Ky. Filed Nov. 5, 1917. Serial No. 200,328. (Cl. 57—9.)



A grapple comprising a pair of dogs having gripping spurs at one end, a bar arranged transversely of the dogs intermediate the ends thereof and pivotally connected to the dogs near its ends, a bar pivoted intermediate its ends to each dog at the end remote from the spur, said bars being pivotally connected at their adjacent ends, traction mechanism connected with the pivotal connection, spring arranged between the outer ends of the last named bars and the ends of the first named bar and normally tending to aline said last named bars, and a flexible connection between the connected ends of said last named bars and the first named bar to limit the movement of the said bars at their pivotal connection away from the first named bar and to distribute the pull of the traction mechanism upon the said bars.

1,268,823. PLOW-CLEANING ATTACHMENT. LE ROY E. DRIVER, Dumont, Tex. Filed May 3, 1917. Serial No. 166,260. (Cl. 97—3.)



The combination with a plow, of an arcuate lever pivotally secured to the plow beam, the lower half of the lever being offset to extend downwardly beneath the beam and having its extremity bent to provide a cleaner adapted to lie against the mold-board, a handle formed on the upper end of the lever and extending above the plow beam, and a spring having one end secured to said beam and the opposite end secured to the lever adjacent said handle.

1,268,824. FUSE-PLUG. JOSEPH A. DUGAN, Houston, Tex., assignor of one-half to William A. Vinson and Joe Cathriner, Houston, Tex. Filed Oct. 1, 1917. Serial No. 194,252. (Cl. 175—278.)



1. In a fuse plug, the combination of a supporting shell, a contact plate carried by said shell, a contact sleeve carried by said shell, a fusible wire connected to said sleeve and said plate, whereby a circuit may be formed, a second fusible wire connected to said sleeve and carried by said shell at a point adjacent said plate, and means for closing the circuit between said second fusible wire and said plate after the first mentioned fusible wire becomes inoperative.

3. In combination with a fuse plug, a primary circuit closing means carried by said shell and having contact terminals, an auxiliary means carried by said shell and being engageable with said contact terminals at a time after the first mentioned means becomes inoperative.

5. In a fusible plug of the class described, the combination of a shell, a contact sleeve carried by said shell, a contact plate carried by said shell, a fusible wire connected to said sleeve and said plate, said plate having a slot extending thereinto, a second fusible wire connected to said sleeve and at one end carried by said shell in alinement with the slot of said plate, and a trigger pivotally mounted upon said shell being adapted to be swung into said slot after said first mentioned fusible wire has become inoperative, thus causing said trigger to close the circuit between said second mentioned fusible wire and said plate.

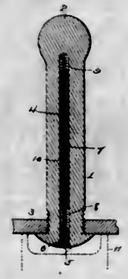
[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,268,825. METHOD OF REPEATING JACQUARD-CARDS. FRANK FISCHER, Paterson, N. J. Filed Jan. 29, 1918. Serial No. 214,386. (Cl. 164—114.)



The herein described method of repeating jacquard cards which consists in feeding master cards past and so as to selectively actuate the needles of a jacquard card repeating machine having its needles controllably connected in the following order with the punches, to wit: needles 1, 2, 3, 4, 5 and so on with punches 2, 3, 4, 5, 6 and so on, respectively, and the last needle with the first punch, and passing the blank cards to be repeated past and so as to be selectively punched by the punches in the direction relatively reverse to the direction of feeding the master cards, whereby the repeated set and the master set of cards, when connected in a single string with the leading end of one adjoining the tail end of the other and employed as a pattern in a jacquard machine in weaving, will produce in the fabric woven relatively reversed counterpart figures all composed of either the odd or the even threads of the warp.

1,268,826. STAY-BOLT STRUCTURE FOR BOILERS. JOHN ROGERS FLANNERY and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed July 31, 1917. Serial No. 183,730. (Cl. 85—1.5.)

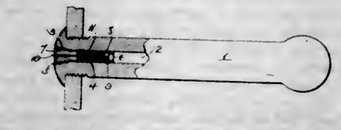


1. The combination with a stay bolt having a bore, of a device confined and movable in said bore to provide an audible signal within the latter.

5. The combination with a stay bolt having a bore, closed at both ends, of a rod of magnetic material disposed within said bore, a tube or envelop of absorbent material inclosing said rod and means normally spacing the ends of said rod from the closed ends of the bore.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,268,827. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY, BENJAMIN E. D. STAFFORD, and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Oct. 25, 1917. Serial No. 198,480. (Cl. 85—1.5.)



1. The combination with a stay-bolt having a tell-tale bore, and a closure for said bore, of a piston in said bore constructed to permit the passage of fluid, soluble material located between said piston and closure, and manually operable means connected with said piston.

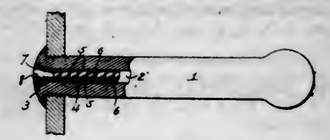
3. The combination with a staybolt having a tell-tale bore, of a tube in said bore having an opening in one end, a closure for the other end of said tube, a piston in the tube having a hole, soluble material in the tube between said piston and closure, and a manually operable device connected with said piston and extending through said closure.

[Claim 2 not printed in the Gazette.]

1,268,828. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY, ETHAN I. DODDS, and FREDERICK K. LANDGRAF, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Oct. 25, 1917. Serial No. 198,482. (Cl. 85—1.5.)

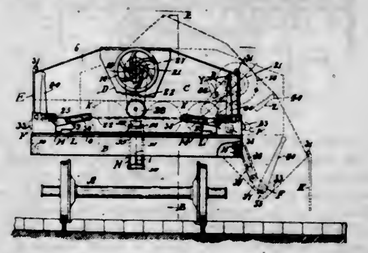
1. The combination with a staybolt having a tell-tale bore, of an expansible container packed with soluble material, contained within said bore, and means to permit the application of turning force to said container.

2. The combination with a staybolt having a tell-tale bore, of a convolute tube disposed in said bore and packed with soluble material, the convolutions of said tube being normally separated, and a plug attached to said tube



and closing the bore of the bolt, said plug adapted for the reception of a tool for applying turning force thereto.

1,268,829. DUMPING-CAR. HENRY FORT FLOWERS, New York, N. Y. Filed Nov. 27, 1914. Serial No. 874,165. (Cl. 105—191.)



1. In a car or other vehicle of the class described, an under-frame, rollers thereupon and arranged in pairs so that each pair can move transversely relative to the under-frame, a tilting body resting on said rollers, and mechanism carried by the car and coöperating with the underframe and body for shifting the body horizontally to either side until the body starts to tilt, which mechanism is constructed so that it can allow the body to tilt, the construction of the body and the rollers being such that when the body moves horizontally it travels faster than but in the same direction as the center lines of the rollers up to the time when the body starts to tilt, from which time the rollers on the side to which the body is tilted move with the body and serve as rockers.

4. A dumping car of the class described having an under-frame, rollers arranged in pairs mounted on the underframe so as to move transversely thereof, a car body supported on said rollers so that during horizontal transverse movement it will move a greater distance than the rollers move, and mechanism whereby the rollers along one side of the car can serve as rockers upon which the body tilts when it has been moved to one side of the under-frame, the construction of the car body and arrangement of the rollers being such that after the load has been discharged the center of gravity of the car body will be so positioned that there will be a tendency for the car body to restore itself to its horizontal position by gravity.

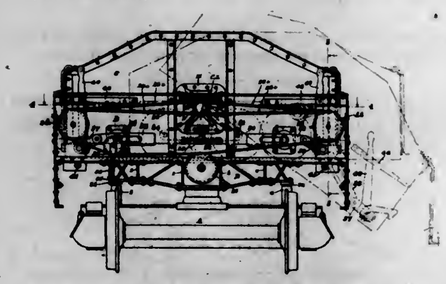
7. In a dumping car a mechanism for effecting the lateral movement of a tilting body, which mechanism comprises at each end of the tilting body, idler sheaves that are carried on the under-frame, idler sheaves that are carried on the body, a differential sheave, and a flexible connector passing over all of said sheaves, the differential sheaves at the ends of the car being mechanically connected together.

12. A dumping car or other vehicle of the class described having in combination with the main underframe thereof a tilting body that is provided with transversely extending tracks, said tracks being located above the center of gravity of the body, the rollers mounted upon tracks which are upon the underframe, upon which rollers said tracks upon the body members are supported whereby the body can be moved to either side of the car, the

construction being such that when the body is moved toward a side of the car the rollers will be moved along the tracks on the underframe and the tracks on the body will be moved longitudinally relative to the rollers.

[Claims 2, 3, 5, 6, and 8 to 11 not printed in the Gazette.]

1,268,830. DUMPING-CAR. HENRY FORT FLOWERS, New York, N. Y. Filed Nov. 24, 1915. Serial No. 63,247. (Cl. 105—191.)



1. A car of the class described comprising in combination an underframe having transversely extending tracks thereupon, pairs of rollers mounted upon each of said tracks, a car body mounted upon said rollers and arranged so that it can be moved horizontally transversely of the underframe and then moved to inclined position, car dumping mechanism comprising a shaft which is located below and extending the full length of the body, and means between the shaft and the body whereby as the shaft is rotated the body will be forced horizontally to a position where it can be tilted.

2. In a car of the class described the combination of an underframe having transversely extending tracks, pairs of rollers mounted upon said tracks, a car body mounted upon said rollers, an operating shaft located below the car body and extending the full length thereof, and flexible connectors at each end of the car body, each of which connectors extends from said shaft over idler wheels or sheaves carried on the underframe to members which are secured on the body.

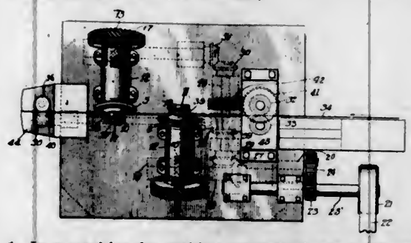
3. A car of the class described comprising in combination an underframe having spaced center sills, transversely extending tracks on the upper side of the under frame, rollers mounted upon said tracks, a car body mounted upon said rollers, and a dumping mechanism comprising a shaft which is located between said center sills, hitch members or castings which are secured to the body, one at each end, flexible connectors hitched to said hitch members or castings and extending to winding drums on said shaft, which flexible connectors pass over idler wheels that are carried on the underframe, the construction and arrangement of the various parts being such that as said shaft is rotated the body will be forced transversely of the underframe to a position where it can be tilted.

4. In combination in a car of the class described an underframe having transversely extending tracks, a pair of rollers on each track and movable along the latter, a body mounted on said pairs of rollers so that it can be moved transversely of the underframe and relatively to said pairs of rollers to a side tilting position, and dumping mechanism said dumping mechanism comprising a shaft which is located below the body, flexible connectors secured or hitched to the body and idler-wheels over which said connectors pass, the construction being such that by rotating the shaft the body will be forced sidewise from a central to a side tilting position.

5. A dumping mechanism for cars comprising an operating shaft, a hitch casting which is secured to a car body, a pair of thimble castings upon each hitch casting, a flexible connector which passes over one of said thimble castings, thence over an idler wheel at the right hand side of the car, thence back to a winding drum on the operating shaft; a flexible connector which passes over the other thimble casting, thence over an idler wheel at the left hand side of the car, and finally to a winding drum on the shaft.

[Claims 6 to 25 not printed in the Gazette.]

1,268,831. MACHINE FOR MAKING CORRUGATED-METAL FASTENERS. WILLIAM C. FORK, Chicago, Ill., assignor to Acme Steel Goods Company, Chicago, Ill., a Corporation of Illinois. Filed Nov. 23, 1915. Serial No. 63,027. (Cl. 10—28.)



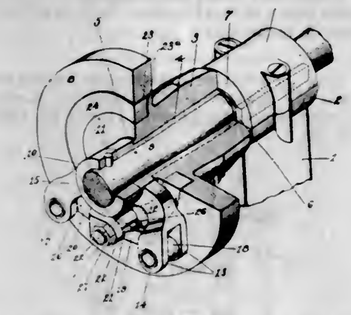
1. In a machine for making corrugated saw-tooth metal fasteners, the combination of means for holding a corrugated metal strip upright and guiding it rectilinearly and backing up its lower edge; means for continuously advancing the strip; a rotary cutting disk obliquely disposed above the strip-holding means with a portion of said disk that is below its axis intercepting the path of the exposed top edge of the strip centrally thereof, the cutting edge of the disk being adapted to penetrate such edge of the strip and cut through the apices of the corrugations thereof; and power-applying means for driving the disk in a direction corresponding with the advance of the strip and at a peripheral speed as fast as the advance movement of the strip.

2. In a machine for making corrugated saw tooth metal fasteners, the combination of means for holding a corrugated metal strip upright and guiding it rectilinearly and backing up its lower edge; means for continuously advancing the strip; rotary cutting disks obliquely disposed above the strip-holding means and reversely related one to another with portions of such disks that are below their axis intercepting the path of the exposed top edge of the strip centrally thereof, and cutting edges of the disks being adapted to penetrate such edge of the strip, one cutting through the apices of the corrugations thereof at one side and the other cutting through the apices of the corrugations thereof at the other side; and power-applying means for driving the disks in a direction corresponding with the advance of the strip and at peripheral speeds as fast as the advance movement of the strip.

3. In a machine for making corrugated saw-tooth metal fasteners, the combination of means for holding a corrugated metal strip upright and guiding it rectilinearly and backing up its lower edge; corrugating rolls; a rotary cutting disk obliquely disposed above the strip-holding means beyond the corrugating rolls with a portion of said disk that is below its axis intercepting the path of the exposed top edge of the strip centrally thereof, the cutting edge of the disk being adapted to penetrate such edge of the strip and cut through the apices of the corrugations thereof; corrugated feed rolls beyond the disks; and power-applying means for driving the corrugating and feed rolls and cutting disks continuously and correspondingly as to direction and with a peripheral speed of the disk as fast as that of the rolls.

1,268,832. MECHANICAL MOVEMENT. FREDERICK M. FURBER, Revere, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Nov. 4, 1914. Serial No. 870,313. (Cl. 74—14.)

1. In a mechanism of the character described, the combination of a rotary driving member, a driven member mounted for movement about an axis substantially parallel with the axis of said driving member, the driving member encircling the driven member, and mechanism for transforming the rotary motion of said driving member into oscillatory motion of said driven member.

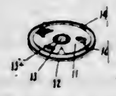


20. A support, a rock-shaft mounted on said support, a rotary driving element mounted on said support, and mechanism for transforming the rotary motion of said driving element into oscillatory motion of said shaft, comprising an eccentric ring directly connected with and movable relatively to the driving element, the mass of which is small as compared with that of the driving element.

30. A rotary element having a race eccentric to the periphery of said element, and an eccentric member lying in said race and substantially equal in mass to an amount of the material composing the rotary element sufficient to fill said race.

[Claims 2 to 19, 21 to 29, and 31 to 34 not printed in the Gazette.]

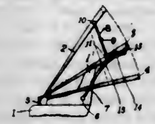
1,268,833. DETACHABLE BUTTON. EDWIN GEBHARDT, Norwood, Ohio. Filed Mar. 27, 1916. Serial No. 86,839. (Cl. 24—105.)



1. In a removable button, a flat disk having a central aperture, with the body of the disk slit adjacent the aperture to form spring tongues, a back for the button bent around the said disk and having an aperture registering with the aperture in the disk, said disk having its edges cut at the periphery thereof to prevent the rotation thereof within the back, and a head for the button having a post thereon adapted to slidably enter the aperture in the disk, and to be withdrawn therefrom only by unscrewing the same.

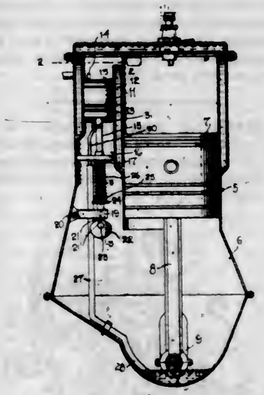
[Claims 2 and 3 not printed in the Gazette.]

1,268,834. FOLDING VEHICLE-TOP. FREDERICK DEWITT GREEN, Brantford, Ontario, Canada. Filed June 1, 1915. Serial No. 31,630. (Cl. 21—62.)



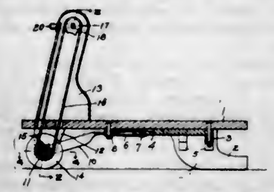
A folding vehicle top including an intermediate bow, a rear rest, an upwardly curved brace pivoted to said rest, and a pivoted connection shorter than said brace between said bow and the free end of the brace whereby when the top is folded, said bow will be supported from said brace above and out of contact with the rest.

1,268,835. VALVE FOR INTERNAL-COMBUSTION ENGINES. WILLIAM HAAS and TALBERT MCALEXANDER, Raub, Ind. Filed Apr. 18, 1917. Serial No. 163,018. (Cl. 123—90.)



The combination with an engine case having a valve chamber and a reciprocating valve therein provided with a stem, of a channel-shaped arm having side flanges extending its entire length and pivotally mounted at one of its ends upon the wall of the engine case immediately below the valve chamber, the open side of the channel-shaped arm facing downwardly and the lower end of the valve stem bearing upon the medial wall of the arm at its free end, a roller mounted between the side flanges of the arm at the latter end thereof, and a rotary operating element mounted in the engine case below the roller and coacting therewith, the axes of said operating element and the roller being in vertical alinement with the axis of the valve stem.

1,268,836. SLED. JAMES HAGERTY, Mount Lebanon, Pa. Filed Oct. 25, 1917. Serial No. 198,474. (Cl. 208—160.)



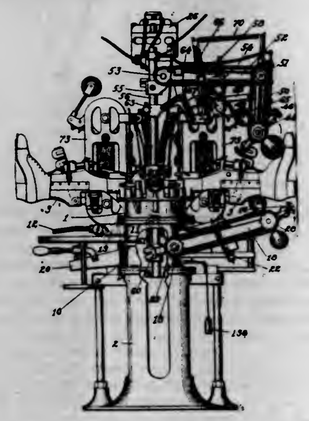
1. In a vehicle of the kind described, the combination of a body portion, a truck swingingly or pivotally secured to the rear end thereof, an axle movably mounted on the forward end of said body portion, connections between said axle and said truck, adapted to transmit motion from the axle to the truck, a propeller wheel mounted on said axle and means to operate said propeller wheel.

2. In a vehicle of the kind described, the combination of a body portion, a truck pivotally secured to the rear end thereof, a tongue secured to said truck, a yoke pivotally secured to the body portion and pivotally secured to the forward end of said tongue, an axle mounted in the forward end of the body portion and connections between said axle and said yoke, a propeller wheel mounted upon said axle and provided with a sprocket wheel, a housing secured to the forward end of said body portion, a sprocket

wheel mounted in the upper end of said housing, a chain operating over said sprocket wheels and means to operate the same.

3. In a vehicle of the kind described, the combination of a body portion, a truck pivotally secured to the rear end thereof, a tongue secured to said truck, a yoke pivotally secured to the body portion and pivotally secured to the forward end of said tongue, an axle mounted in the forward end of the body portion and connections between said axle and said yoke, a propeller wheel mounted upon said axle and provided with a sprocket wheel, an upwardly projecting frame secured to the forward end of said body portion incasing a sprocket wheel and a chain and carrying adjustable bearings for said sprocket wheel and means to operate said chain.

1,268,837. MACHINE FOR IRONING OR TREEING BOOTS OR SHOES. JOHN S. HANSEN, Brockton, Mass., assignor to O. A. Miller Treeing Machine Company, Portland, Me., a Corporation of Maine. Filed Sept. 14, 1914. Serial No. 861,585. (Cl. 12—68.)



1. In a machine of the class described, the combination with a shoe supporting tree, of side, instep and back stay ironing mechanisms arranged to operate on a shoe supported on said tree, said side ironing mechanism being arranged to operate on said shoe at a period when said back stay and instep ironing mechanisms are not operating on the shoe.

7. In a machine of the class described, the combination with a turret and a plurality of trees carried thereby, of a plurality of independent ironing mechanisms arranged to operate on different shoes supported on said trees, and a common controlling means for initiating the operation of said mechanisms.

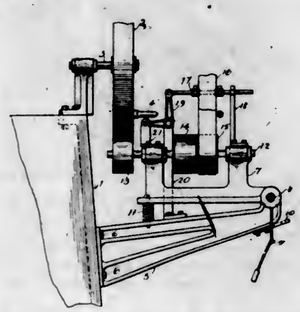
15. In a machine of the class described, the combination of instep ironing mechanism, a shoe supporting tree, means supporting said tree for movement into and out of operative relationship to said mechanism, said mechanism and tree being arranged for relative adjustment in the direction of the length of the shoe to enable the machine to accommodate shoes of different sizes.

40. In a machine of the class described, the combination with a shoe support, of a shoe treating device mounted for movement with reference to said support in a direction to traverse the side of a shoe lengthwise of the shoe, said device being movable also laterally with reference to said direction of movement, and a pair of cams shaped respectively to cause different lateral movements of said device for the treatment of different sides of shoes, said machine being constructed for determining selectively different relative locations of said cams in accordance with that side of a shoe which is presented for treatment.

69. A machine of the class described having, in combination, a shoe support, a shoe ironing tool, means for moving said tool bodily in one direction in a closed path to cause it to traverse repeatedly in the same direction a portion of a shoe on said support, and means for heating the tool continuously during said movement.

[Claims 2 to 6, 8 to 14, 16 to 39, 41 to 68, and 70 to 113 not printed in the Gazette.]

1,268,838. POWER-TRANSMISSION MECHANISM. KENNETH F. HARLOW and CHARLES E. MATHEWS, Beloit, Wis. Filed July 23, 1917. Serial No. 182,222. (Cl. 64—3.)

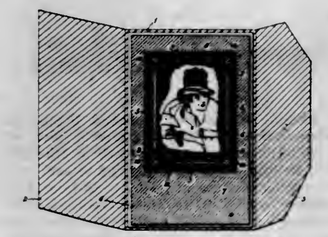


1. In power transmission mechanism, a bracket, a bearing fulcrumed at one end to said bracket, a spring connecting said bracket and the non-fulcrumed end of said bearing for yieldingly spacing the same the maximum distance from said bracket, manually operable means for adjusting and locking said bearing with relation to said bracket, a power transmission shaft journaled in said bearing, a pinion carried by said power transmission shaft, an idler carried by said shaft, a drive pulley carried by said shaft adjacent said idler, a belt adapted for alternate engagement with said idler and drive pulley, and means carried by said bearing for engagement with said belt to automatically shift the same from said idler to said drive pulley or vice versa as said bearing is adjusted with relation to said bracket.

2. In power transmission mechanism, a bracket, a bearing fulcrumed at one end to said bracket, a spring connecting said bracket and the non-fulcrumed end of said bearing for yieldingly spacing the same the maximum distance from said bracket, a rack carried at the free end of said bracket, a lever connected to said bearing for actuating the same and adapted for engagement with the said rack, a power transmission shaft journaled in said bearing, a pinion carried by said power transmission shaft, an idler carried by said shaft, a drive pulley carried by said shaft adjacent said idler, a belt adapted for alternate engagement with said idler and drive pulley, and means carried by said bearing for engagement with said belt to automatically shift the same from said idler to said drive pulley or vice versa as said bearing is adjusted with relation to said bracket.

3. In power transmission mechanism, a bracket, a bearing fulcrumed at one end to said bracket, a spring connecting said bracket and the non-fulcrumed end of said bearing for yieldingly spacing the same the maximum distance from said bracket, a rack carried at the free end of said bracket, a lever connected to said bearing for actuating the same and adapted for engagement with the said rack, a power transmission shaft journaled in said bearing, a pinion carried by said power transmission shaft, an idler carried by said shaft, a drive pulley carried by said shaft adjacent said idler, a belt adapted for alternate engagement with said idler and drive pulley, a standard carried by said bracket, standards carried by said bearing at opposite sides of the first named standard, a bell crank fulcrumed to the first named standard and connected to one of the other standards, and a belt shifter connecting said bell crank and the remaining standard.

1,268,839. PICTURE-MOUNTING. WILLIAM A. HATCH, Cleveland, Ohio. Filed Aug. 25, 1917. Serial No. 188,104. (Cl. 40—159.)

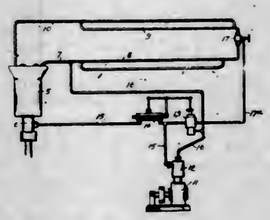


4. As a new article of manufacture, a picture mounting comprising a pair of sheets of different color and size, one of said sheets being fashioned with a slot and the other with a tongue extended therethrough, said tongue being flexible, and means for securing said sheets together.

8. As a new article of manufacture, a picture mounting comprising an overlay sheet provided near one end with a slot, an underlay sheet fashioned with a relatively movable tongue adapted to be inserted through said slot, the other end of said overlay sheet being likewise provided with a slot for securing the free end of said tongue, said sheets affording a color contrast, the arrangement being such that an edge of said underlay sheet appears to view between an edge of said underlay sheet and an edge of said tongue for the purpose specified.

[Claims 1 to 3 and 5 to 7 not printed in the Gazette.]

1,268,840. GAS-COMPRESSION PLANT. ARTHUR HEANE, Blayney, New South Wales, Australia. Filed Mar. 28, 1917. Serial No. 158,055. (Cl. 286—19.)



1. In a gas compression plant, a main compressor and in combination therewith a subsidiary exhausting machine having a suction pipe connected to said main compressor to reduce the gas pressure on the gland packing thereof and means for actuating said exhausting machine, and means for maintaining a normal working pressure in said suction pipe comprising a connection between said suction pipe and the pipe carrying pressure in excess of said normal pressure, and a valve in said connection maintained in closed position by said normal working or greater pressure, said valve being capable of opening upon reduction of pressure in said suction pipe.

2. In a gas compression plant comprising a main compressor and a gas regulating valve having a lantern in its packing box, a subsidiary exhausting machine having its suction pipe connected to said main compressor and valve lantern to reduce the gas pressure on the gland packing thereof, and means for actuating said subsidiary exhausting machine.

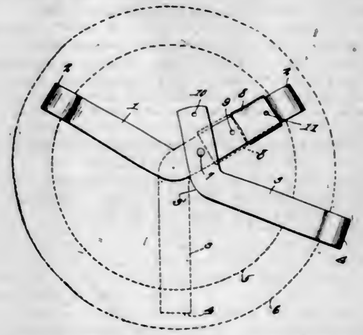
3. In a gas compression plant, a subsidiary exhausting machine having its suction pipe connected to the main compressor to reduce the gas pressure on the gland packing thereof, means for actuating said exhausting machine, and means for maintaining a normal working pressure in said suction pipe comprising a connection between said suction pipe and the pipe carrying pressure in excess of said normal pressure, and a valve in said connection maintained in closed position by said normal working or greater pressure, said valve being capable of opening upon reduction of pressure in said suction pipe.

4. In a gas compression plant comprising a main compressor and a gas regulating valve having a lantern in its packing box, a subsidiary exhausting machine having its suction pipe connected to said main compressor and valve lantern for the purpose specified, means for actuating said exhausting machine, and means for automatically maintaining a predetermined pressure in said suction pipe to prevent indrawing of air.

5. In a gas compression plant comprising a main compressor having a packing box and a lantern therein, the combination with such main compressor of a subsidiary exhauster having its suction pipe connected to said lantern, means for actuating said exhauster for the purpose specified, and means for maintaining a normal working pressure in said suction pipe comprising a connection between said suction pipe and the pipe carrying pressure in excess of said normal pressure, and a valve in said connection maintained in closed position by said normal working or greater pressure, said valve being capable of opening upon reduction of pressure in said suction pipe.

[Claims 6 to 9 not printed in the Gazette.]

1,268,841. MILK-CAN LOCK. BENJAMINE HENTHORN, Osawatomie, Kans. Filed Nov. 9, 1917. Serial No. 201,097. (Cl. 31—80.)

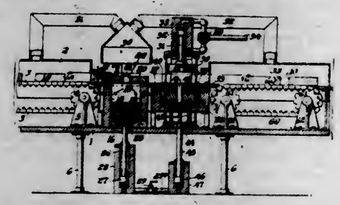


1. A lock for milk cans, comprising a formed strap presenting diverging arms, bent ends on the arms, an arm pivotally secured to the strap, a bent end on said arm, an angled portion on the arm and adapted to partly overlie the strap, and means for locking the angled portion of the arm to the strap.

2. A lock for milk cans, comprising a formed strap providing diverging arms, bent ends on the arms, an arm formed with an elbow and pivotally secured adjacent the elbow to the strap, a bent end on the arm, a short portion of the arm adjacent the elbow adapted to overlie the strap, and means for locking said short portion of the arm to the strap.

3. A lock for milk cans, comprising a formed metal strap, providing diverging arms, angled ends on the arms, an arm formed with an elbow and pivotally secured to the strap, a short portion of the arm beyond the elbow adapted to overlie the strap, an angled end on said arm, and a sleeve on the strap and adapted to embrace the overlying portion of the arm to hold the parts in locked position.

1,268,842. METHOD OF MANUFACTURING ABRADING-DISKS. JOSEPH A. HICKEY, Philadelphia, Pa., assignor of one-half to Francis Bancroft, Merchantville, N. J. Filed Aug. 3, 1916. Serial No. 112,893. (Cl. 18—47.5.)



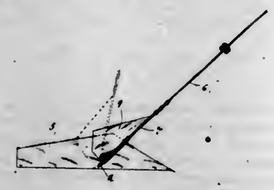
1. The method of treating abrading disks in the manufacture thereof which consists in treating the same to eliminate and remove gases and gaseous forming substances therefrom, thereafter heating the said disks sufficiently to render them plastic and while in such plastic state subjecting the same to pressure to condense and solidify the material thereof.

2. The method of treating abrading disks in the manufacture thereof which consists in preheating the said disks to a temperature of from 600 to 1000° F., thereafter heating the said disks to a temperature sufficiently high to render them plastic and while in such plastic state subjecting them to pressure to condense and solidify the material thereof.

3. The method of treating abrading disks in the manufacture thereof which consists in pre-heating the said disks, thereafter heating the said disks sufficiently to render them plastic and while in such plastic state subjecting the same to pressure to condense and solidify the material thereof and finally annealing the same.

4. The method of treating blocks of material containing a substance or substances which become plastic when sufficiently heated which method consists in pre-heating said blocks to a relatively low temperature, thereafter heating the same to a relatively high temperature to render them plastic and while in said plastic state subjecting the said blocks to pressure to condense and solidify the material thereof and finally annealing the said blocks.

1,268,843. DUST PAN AND CARRYING BOX. ELMER E. HIGGINS, Redcliff, Alberta, Canada. Filed Jan. 15, 1917. Serial No. 142,382. (Cl. 65—20.)

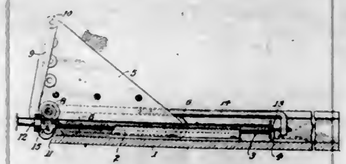


1. A combined dust pan and box comprising a box-like receptacle having a beveled open end, a handle having prongs embracing and pivoted to the sides of said box, and a hood rigidly attached to said prongs and arranged to close said box when hung in an upright position.

[Claim 2 not printed in the Gazette.]

1,268,844. PIPE-BENDING MACHINE. EMIL F. HOLINGER, Jersey City, N. J., assignor to The M. W. Kellogg Company, New York, N. Y., a Corporation of New Jersey. Filed July 26, 1917. Serial No. 182,861. (Cl. 153—40.)

1. In a machine of the kind described, a pipe rack, a carriage adapted to move along said rack, a roller on said carriage adapted to move in contact with a pipe disposed in said rack, an arm pivotally connected to said carriage, and means for securing the arm at its free end to said pipe, all for the purpose described.



2. In a machine of the kind described, a pipe rack, a carriage adapted to move along said rack, a roller on said carriage adapted to move in contact with a pipe disposed in said rack, an arm pivotally connected to said carriage, means for securing the arm at its free end to said pipe, a tension member secured at one end to said carriage and adapted to enter said pipe, and a head secured to said tension member and held in position under the roller, all for the purpose and substantially as described.

3. In a machine of the kind described, a pipe rack, a carriage adapted to move longitudinally with respect to a pipe in said rack, a roller adapted to engage the surface of said pipe, an arm, and means for securing one end of said arm to said carriage and the other end to the pipe to be bent, all for the purpose described.

1,268,845. CHAIN-GRATE STOKER. WILLIAM W. HOLLAND, Alton, and JAMES R. CARRINGER and WILLIAM BACHELDOR, Woodriver, Ill. Filed Jan. 12, 1918. Serial No. 211,528. (Cl. 110—40.)



1. In combination in a chain grate stoker, a link, cross-rods on which the link is pivoted, the link being apertured to receive the rods and the rods having projecting edges to ream the deposits from the apertures in the links.

2. In a chain grate, a transverse grate rod or pivot provided with scraping means to remove the deposit from surfaces contacting with the rod.

3. In a stoking grate, a link and transverse rods to which the link is pivoted, the rods having spirally arranged cutting edges serving to engage the surfaces of the apertures and ream out the deposit as formed, part of the rods having the cutting edges in the form of right-handed helices, and the remainder in the form of left-handed helices, the rods with the right and left-handed helices being alternately placed.

4. In a chain grate having links joined by transverse pivot rods, the links having apertures coöperating with the rods to form bearings so that the rods and links have coöperating bearing surfaces, one of the coöperating bearing surfaces having scraping edges to remove the deposit which forms between the rods and links.

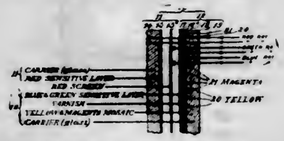
1,268,846. ELECTRICALLY-LIGHTED SATCHEL. CHARLES H. HOLTON, Baltimore, Md. Filed Aug. 21, 1916. Serial No. 115,941. (Cl. 240—2.)

The combination with a satchel having two flexible walls, of a frame-part attached to each wall and forming an opening to the satchel, the said frame-part of one satchel wall being pivotally connected to the frame part of the other satchel-wall; an electric lamp in the satchel; a battery; a switch attached to one of said frame-parts said switch having a movable contact device; connections between the switch and the electric lamp; connections between the battery and switch; a connection between the battery and lamp all of said connections being movable



with one of the frame-parts of the satchel, and means on the other frame-part of the satchel for moving the switch contact to an open position when the two satchel frames are closed together.

1,268,847. COLOR PHOTOGRAPHY. FREDERIC EUGENE IVES, Philadelphia, Pa. Filed Jan. 15, 1917. Serial No. 142,383. (Cl. 95—2.)



1. In the art of color photography the process of producing a sensitive plate set which comprises the following steps: producing a mosaic screen of a plurality of colors of which at least one is a secondary, and combining said mosaic screen with a plurality of differently sensitive films.

14. A sensitive plate set for color photography comprising a mosaic screen consisting of areas of two different secondary colors in combination with a sensitive layer sensitive to the two primaries which are complementary to said secondaries, and a sensitive layer which is sensitive to the third primary, both said sensitive layers being located behind the mosaic screen, the last mentioned sensitive layer being behind the first mentioned one, and provided with a coloring to exclude light of the first and second primary colors.

24. A negative set for trichromatic color photography consisting of one unreversed negative made by the action of and representing red light, and one reversed composite negative, the areas or elements of which are made by the action of and represent green light and blue light respectively, the said composite negative having embodied with it a colored mosaic composed of areas which respectively exclude green while transmitting blue light, and exclude blue while transmitting green light.

30. In the art of color photography the process of producing combinable positives from a negative set, one of which negatives is a mosaic negative combined with a colored mosaic, which consists in successively printing a plurality of prints by exposure by differently colored lights under said mosaic, and printing a print from each other negative of said set.

34. The system of color photography consisting in firstly producing two negatives through exposure of two sensitive members while in face contact, by the aid of a secondary color mosaic screen, whereby one negative represents in mosaic two primary colors and the other negative the third primary; and secondly producing from said mosaic negative in succession two monochrome positives and producing a third positive from the other negative; and thirdly suitably combining or blending the so produced three positive monochromes.

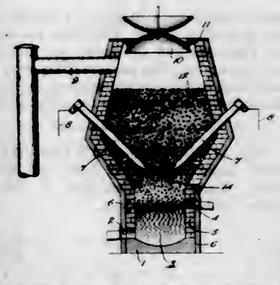
[Claims 2 to 13, 15 to 23, 25 to 29, and 31 to 33 not printed in the Gazette.]

1,268,848. HAIR-WAVING APPARATUS. HANNAH JACOBS and HARRY JACOBS, New York, N. Y. Filed Mar. 23, 1916. Serial No. 86,199. (Cl. 34—26.)



In a hair waving and drying apparatus, a heating and drying chamber formed of non-absorbent walls and adapted to incase a winding stem having hair wound thereon, an electric resistance unit formed upon said non-absorbent wall and adapted to supply heat to the said drying chamber, a flexible heat insulating member adapted to close the open end of the drying chamber incasing the said stem and hair, and inlet and outlet air passages formed upon the said heating and drying chamber and provided to allow a current of air to pass over the hair on the stem while same is being heated.

1,268,849. PROCESS FOR MAKING ALLOYS OF PHOSPHORUS. LEWIS A. JEFFS, Salt Lake City, Utah. Filed Nov. 18, 1917. Serial No. 201,780. (Cl. 204—63.)

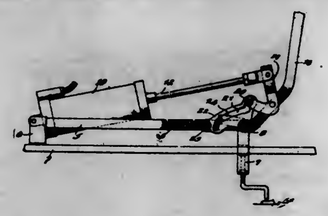


1. The process of making an alloy of a metal and phosphorus in an electric furnace which consists in providing a charge containing phosphate rock and carbon; adding to said charge a material adapted to supply said metal; passing a current of electricity through a portion of said charge to produce said metal in a fused condition and sufficient to evolve oxids of phosphorus in a gaseous condition while providing a localized fusion zone; and maintaining an excess of incandescent carbon in said zone, substantially as described.

2. The process of making an alloy of a metal and phosphorus in an electric furnace which consists in providing a charge of phosphate rock, fluxing material and carbon in excess; adding to said charge a material capable of supplying said metal in a fused state above the fusion zone when said rock is being decomposed; passing a current of electricity through a portion of said charge to provide a localized fusion zone and of a sufficient strength to cause oxids of phosphorus to be evolved from said rock; and maintaining in said charge an excess of free incandescent carbon to reduce said oxids of phosphorus, substantially as described.

3. The process of making an alloy of phosphorus and copper in an electric furnace which consists in providing a charge of phosphate rock and carbon; adding to said charge a material capable of supplying metallic copper in a fused state above the fusion zone while said rock is being decomposed; passing a current through a portion of said charge to provide a localized fusion zone and of a sufficient strength to produce oxids of phosphorus from said rock; and maintaining an excess of free incandescent carbon in said zone to reduce said oxids as fast as they are formed, substantially as described.

1,268,850. DIFFERENTIAL PUMP. LAWRENCE H. JENSEN, St. Charles, Ill. Filed Oct. 30, 1916. Serial No. 128,563. (Cl. 230—27.)

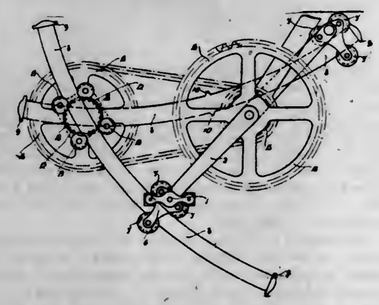


1. A pump compriang a frame, a cylinder pivoted thereto, a piston and piston rod operable in said cylinder, a bell-crank one arm whereof is pivotally secured to said piston rod, a cam member operatively engaged by the other arm of said bell-crank, an actuating lever, and a pivotal connection between said bell-crank and said lever.

2. A pump comprising a cylinder, a piston and piston rod coacting therewith, a cam, a member one end whereof coacts with said cam and the other end is pivotally secured to said piston rod, and an actuating arm pivotally secured to said member intermediate the ends of the latter.

3. A pump comprising a cylinder, a piston and piston rod coacting therewith, a cam, a member one end whereof coacts with said cam and the other end is pivotally secured to said piston rod, and an actuating lever fulcrumed adjacent said cam and pivotally secured intermediate its ends to said member intermediate the ends of the latter.

1,268,851. PEDAL DRIVING-GEAR FOR CYCLES AND THE LIKE. HENRY BANNISTER JOHNSTON, Handsworth, Birmingham, England. Filed Nov. 5, 1917. Serial No. 200,443. (Cl. 208—70.)



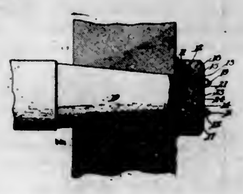
1. In pedal driving gear for cycles and the like the combination of a spindle; a crank on said spindle; a pedal carried by said crank; a second spindle; a gear box on said second spindle; a lever slidably engaging with said gear box and crank; and a one-way clutch in said gear box and connected to said second spindle, for the purpose specified and substantially as set forth.

2. In pedal driving gear for cycles and the like the combination of a spindle; a pair of cranks on said spindle; a pedal carried by each of said cranks; a second spindle; a pair of gear boxes carried by said second spindle; a pair of levers each slidably engaging with a gear box and crank; and a one-way clutch in each gear box and connected to said second spindle; for the purpose specified and substantially as set forth.

3. In pedal driving gear for cycles and the like the combination of a spindle; a pair of cranks on said spindle; a pedal carried by each of said cranks; antifriction rollers on said pedals; a second spindle; a pair of gear boxes on said second spindle; antifriction rollers on said gear boxes; a pair of levers each slidably engaging with the rollers on said gear box and crank; and a one-way clutch in each gear box and connected to said second spindle; for the purpose specified and substantially as set forth.

4. In pedal driving gear for cycles and the like the combination of a spindle; a pair of cranks on said spindle; a pedal carried by each of said cranks; antifriction rollers on said pedals; a second spindle; a pair of gear boxes on said second spindle; antifriction rollers on said gear boxes; a pair of levers each slidably engaging with the rollers on said gear box and crank and having abutments thereon serving to limit the sliding movement between the lever and rollers; and a one-way clutch in each gear box and connected to said second spindle; for the purpose specified and substantially as set forth.

1,268,852. LOCKING DEVICE. WILLIAM F. KIESEL, Jr., Altoona, Pa. Filed Feb. 7, 1917. Serial No. 147,205. (Cl. 151—5.)

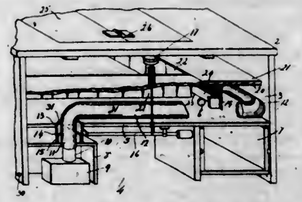


1. In combination with a shank formed with a transverse channel, a collar mounted on said shank and a member in said channel having a sharp edge at each of its opposite ends embedded in the interior surface of the collar to lock the collar and shank against relative rotation, said edges being parallel to the axis of the shank.

6. In combination with a threaded shank having a transverse channel in its end, an interiorly threaded nut on said shank formed with a counterbore and means for locking the nut and shank against relative rotation comprising a member fastened in said channel and having a sharp edge at one end engaging the interior of the counterbore, said member formed with a threaded opening to receive a bolt for withdrawing the member.

[Claims 2 to 5 not printed in the Gazette.]

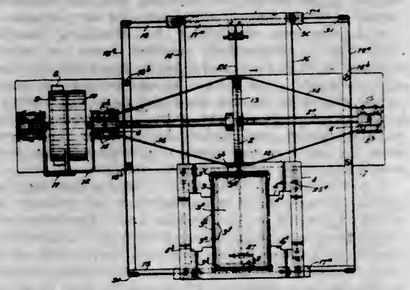
1,268,853. BROODER. GEORGE KNIERIEMEN, Atco, N. J. Filed Aug. 28, 1917. Serial No. 188,578. (Cl. 119—34.)



1. A brooder comprising a housing, a floor therein for dividing the same into upper and lower compartments, a heater in the lower compartment located at one end and adjacent one side of the brooder, a conduit leading from the heater and passing along one end and one side of the housing within the upper compartment at the lower portion thereof, said conduit having a restricted outlet to the atmosphere, a side and top wall of foraminous material for partially inclosing said conduit, a shelf overlying the foraminous top wall and projecting beyond the foraminous side wall and a curtain hanging from the edge of said shelf and spaced from the foraminous side wall to form a brooder chamber.

[Claims 2 and 3 not printed in the Gazette.]

1,268,854. POPCORN BRICK AND BAR CUTTING MACHINE. EUSTACE R. KNOTT, Sharon, Mass. Filed Feb. 25, 1916. Serial No. 80,528. (Cl. 146—11.)



1. In a machine for cutting pop-corn sheets into bricks and bars, the combination with a cutter, and a rack for containing stock to be cut, relatively movable with respect to the cutter to present the stock thereto for the purpose of being cut and turnable to present the stock thereto at different angles, of indexing and guiding means coöperating with the rack to determine its operating position as to the cutter for successive cutting operations, and during its movement past the cutter.

2. In a machine for cutting pop-corn sheets into bars and bricks, the combination, with a cutter, and a rack for containing the stock to be cut, and which is movable to present the stock to the cutter in order to be cut and also is movable transversely relative to the cutter to change the planes of successive cuts, of a gage which coacts with the rack in each of its respective positions after transverse adjustment to hold it alined with the cutter as it moves relative to the cutter for the cutting operation.

3. In a machine for cutting pop-corn sheets into bars and bricks, the combination, with a cutter, and a stock carrying rack for presenting stock to and in the path of said cutter to be cut thereby, of a gage with respect to which the rack is movable transversely to successive positions for cutting operations and longitudinally for cutting purposes at each of said positions, the said gage cooperating with the rack to maintain the latter in fixed path of movement in the plane of the cutter during the cutting operation, and means for adjusting the alinement of the gage with the cutter.

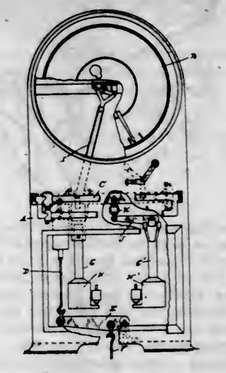
8. In a machine for cutting pop-corn sheets into bricks and bars, the combination, with a cutter, and a rack for presenting the stock to be cut to the edge of the cutter, of a carrier upon which the rack is removably supported and by which it is movable in a path parallel to the plane of the cutter, said carrier arranged to normally assume automatically an idle position to hold the rack away from the cutter.

14. In a machine for cutting pop-corn sheets into bricks and bars, the combination, with a rotary cutter, and a manually opersble rack for holding the sheets to be cut and movable transversely and parallel to the cutter to permit it to traverse the stock in parallel planes, of means for locking the rack in each of its positions of transverse adjustment during the movement relative to the cutter for cutting purposes.

[Claims 4 to 7, 9 to 13, and 15 to 19 not printed in the Gazette.]

1,268,855. COMPENSATING PENDULUM-WEIGHT MECHANISM FOR DIAL-SCALES. MODESTE J. LACHANCE, St. Johnsbury, Vt., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt., a Corporation of Vermont. Filed May 29, 1914. Serial No. 841,753. (Cl. 265—62.)

1. In a scale, the combination with an indicator, of an actuating arm therefor, a beam or lever on which said actuating arm is mounted, a pendulum weight connected with said beam or lever, a steelyard rod for actuating said beam and deflecting said pendulum weight in one direction, an auxiliary pendulum weight, an arm or beam projecting therefrom in a direction from the fulcrum opposite to the projection of said beam or lever from its fulcrum, and a link connection between said beam and said arm on the auxiliary pendulum weight, said main and auxiliary pendulum weights coöperating and reacting equally when the scale is level and compensating for mutual inaccuracies when the scale is out of level.



2. In a scale, the combination with an indicator, of an actuating arm therefor, a horizontally-extending beam or lever upon which said arm is mounted, a pendulum weight depending therefrom in line with the fulcrum of said beam, a second pendulum weight, an arm extending therefrom in an opposite direction from the extent of said beam from the fulcrum of the first-mentioned pendulum weight, a link connection between said arms, a steelyard rod in a plane intermediate said pendulum weights, a lever connected thereto, and a steelyard connection between said lever and said beam at one side of said first-mentioned pendulum weight for the purpose described.

3. In a scale, the combination with a frame or casing having a dial indicator at the upper end thereof, of a pair of pendulum weights beneath said dial, arms or levers extending oppositely from said pendulum weights and linked to each other to produce an equal reaction with a deflection of said weights in opposite directions, an arm connected with one of said pendulum weights for actuating said indicator, a steelyard rod in a plane intermediate said pendulum weights, a lever connected thereto, and a steelyard rod for connecting said lever with one of said pendulum weights arranged on the opposite side thereof from the direction in which it is deflected.

1,268,856. COLLAPSIBLE GO-CART. EDWARD H. LENG, Montclair, N. J. Filed Dec. 14, 1916. Serial No. 136,834. (Cl. 21—12.)

1. In combination with the side walls of a vehicle body, a front wall or dash extending therebetween and comprising a lower dash section having a fixed pivot between the side walls and an upper dash section pivoted to said lower dash section, said lower dash section adapted to be turned to lie flat between the side walls and the upper section to lie flat upon the lower section, whereby is constituted a seat extending partly between the side walls.

2. In combination with the side walls of a vehicle body, a front wall or dash extending therebetween and comprising a lower dash section having a fixed pivot between the side walls and an upper dash section pivoted to said lower dash section, said lower dash section adapted to be turned to lie flat between the side walls and the upper section to lie flat upon the lower section, whereby is con-

stituted a seat extending partly between the side walls and a back rest comprising a cross piece and depending legs pivoted to the front wall adjacent the pivotal connection between the dash sections.



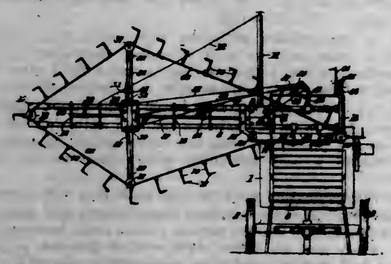
3. In combination with the side walls of a vehicle body, a front wall or dash extending therebetween and comprising a lower dash section having a fixed pivot between the side walls and an upper dash section pivoted to said lower dash section, said lower dash section adapted to be turned to lie flat between the side walls and the upper section to lie flat upon the lower section, whereby is constituted a seat extending partly between the side walls and a back rest comprising a cross piece and depending legs pivoted to the front wall adjacent the pivotal connection between the dash sections, the legs of the back rest closely overlying the faces of the side walls, and means for holding the legs in a given position.

4. In combination with the side walls of a vehicle body, a dash member at the front of the vehicle body movable to two positions, in one of which positions it is substantially vertical at the front of the vehicle body, and in the other of which it is substantially horizontal and disposed between the side walls partly within and partly without the vehicle body.

5. In combination with the side walls of a vehicle body, a dash member at the front of the vehicle body movable to two positions, in one of which positions it is substantially vertical at the front of the vehicle body, and in the other of which it is substantially horizontal and disposed between the side walls partly within and partly without the vehicle body, and a back-rest member comprising a cross-piece, and depending legs connected to the dash member, and means for holding the back-rest member in pivotal relation to the side walls.

[Claims 6 to 17 not printed in the Gazette.]

1,268,857. CONVEYER ATTACHMENT FOR THRESHING-MACHINES. ROBERT W. LESHER, Northumberland, Pa. Filed Nov. 2, 1914. Serial No. 869,805. (Cl. 193—16.)



1. A conveyer comprising a horizontal boom, means for pivotally supporting the same adjacent one end for swinging movement in a horizontal plane, a vertical transverse strut member mounted upon the boom and crossing the same, means for adjusting said transverse member longitudinally of the boom, and an endless belt supported by the ends of said boom and strut member.

2. A conveyer attachment for threshing machines comprising a horizontally pivoted boom, a carriage mounted on said boom and movable longitudinally thereof, a transverse strut carried by said carriage, an endless carrier supported by said strut and boom and having its lowermost point at the end of the strut, means for driving the carrier, and means for shifting the carriage along the boom so as to vary the distance of the lowermost point of the carrier from the machine.

3. A conveyer attachment for threshing machines comprising in combination a horizontal boom pivotally supported at one end on the machine and a transverse strut mounted on said boom and movable bodily longitudinally thereof, an endless carrier supported by the ends of said strut and boom, said strut being also movable vertically lengthwise in a direction transverse to said boom, and means on the threshing machine for moving said strut both vertically and horizontally relative to said boom so as to vary the height of the carrier from the ground and its distance from the machine.

4. A conveyer comprising a horizontal boom formed of a pair of spaced members, a carriage movable along said boom and having rollers constructed to engage said members, a strut mounted on said carriage and longitudinally adjustable relative thereto, and an endless carrier supported by said boom and strut.

5. In a conveyer, a horizontal boom, a carriage movable therealong, a strut mounted on said carriage, an endless carrier supported on said strut and boom, means for shifting said carriage along said boom, and independent means for adjusting the position of said strut relative to said carriage.

[Claim 6 not printed in the Gazette.]

1,268,858. BEVERAGE-URN. GEORGE G. LEWIS, Philadelphia, Pa. Filed Mar. 28, 1917. Serial No. 158,009. (Cl. 53—3.)

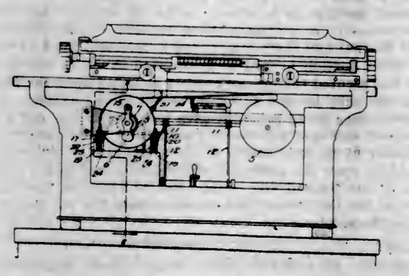


1. In a coffee urn, an annular flange forming a track extending around the interior of the urn, a reticulated coffee receptacle rotatably mounted on the track, a reticulated cap for closing the upper end of the receptacle, a shaft extending through the receptacle and operatively engaging the lower end thereof for unitary rotative movement, a sleeve rotatably mounted upon the shaft, manually operable means for rotating the shaft and the sleeve in opposite directions simultaneously, and means for supporting the cap from rotation.

2. In a coffee urn, an annular flange on the interior of the urn, a reticulated basket supported on said flange for rotation, an annular reticulated cap for the basket having an upwardly extending channel bar, a shaft extending through the basket and detachably engaging the lower end of the basket for unitary rotative movement, a sleeve surrounding the shaft and provided with agitator blades, vertically spaced collars through which the shaft passes, beveled gear wheels surrounding the shaft inward of said collars, one of the beveled gear wheels being connected to the sleeve and the other to the shaft, a sleeve surrounding the wheeled portion of the shaft and holding the beveled gear wheels in spaced relation, a driving beveled gear wheel mounted upon the sleeve and engaging the first named beveled gear wheel and having a shaft extending to the exterior of the urn, caps engaging over the collars and connected to each other by a vertical bar adapted to be disposed within the channel of the bar of the first named cap, and a clip hingedly connected to the upper end of said channel bar and adapted to be engaged over the uppermost collar to hold the parts in operative engagement.

3. In a coffee urn, a reticulated basket for holding coffee, rotatably and removably mounted within the urn, a reticulated cap for said basket, a shaft extending downward through the basket and detachably engaged with the lower end thereof, a sleeve mounted on the shaft and having agitator blades, means for rotating the sleeve in one direction and the basket in an opposite direction, and means for supporting the cap from rotation with the basket.

1,268,859. TYPE-WRITER ATTACHMENT. EARL PERCIVAL COURTENAY LOMAS, Butte, Mont. Filed Oct. 23, 1917. Serial No. 198,105. (Cl. 197—68.)



1. In combination with a typewriter, a spring for returning the carriage, means controlled by the striking of the keys during writing for placing the spring under tension, means for restraining the operation of the spring, means for releasing the restraining means controlled by the locking of the keys at the end of the line, and auxiliary locking means for holding the restraining means in released position when the keys are unlocked and controlled to release at the end of the return movement of the carriage.

2. In combination with a typewriter, means for returning the carriage, means for restraining the operation of the returning means, and means controlled by the key locking means at the end of a line for releasing the restraining means.

[Claims 3 to 8 not printed in the Gazette.]

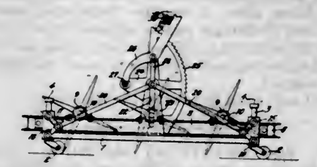
1,268,860. FOOD PRODUCT AND METHOD OF MAKING THE SAME. GUADALUPE LÓPEZ DE LARA, Guadalajara, Mexico. Filed Oct. 30, 1917. Serial No. 199,266. (Cl. 99—11.)

1. The method of preparing Indian corn for food which consists in separating the hulls from the bodies of the grains, glutinizing the hulls and grinding and mixing the hulls with the bodies of the grains.

[Claims 2 to 7 not printed in the Gazette.]

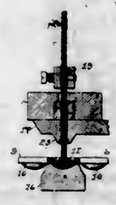
1,268,861. HARROW. AUGUST LOVSTAD, Algona, Iowa. Filed May 21, 1917. Serial No. 170,007. (Cl. 55—11.)

1. In a harrow comprising a wheeled frame, corner posts carried by said wheeled frame, sleeves slidable upon said corner posts, a second frame arranged above said wheeled frame and carried by said sleeves, teeth carried by said second frame, racks carried by said wheeled frame, levers associated with said racks, and connections between said levers, wheeled frame and sleeves whereby said sleeves may be moved relatively to said wheeled frame.



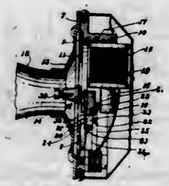
[Claim 2 not printed in the Gazette.]

1,268,862. METHOD OF MAKING EAR-WIRE SCREWS. DANIEL WILLIAM MACMILLAN, Providence, R. I. Filed Sept. 5, 1917. Serial No. 189,872. (Cl. 10—161.)



The method of making ear-wire screws consisting in forming a series of ear-pads on a metal strip, each ear-pad having a cavity and a raised wall surrounding the cavity, passing the strip of ear-pads between suitable swaging dies, feeding a predetermined length of screw-threaded wire to a cavity in an ear-pad, closing the dies and swaging the wall of the cavity in the ear-pad on to the end of the screw-threaded wire and then cutting off a predetermined length of the screw-threaded wire, thereby forming a screw-threaded stem on the ear-pad.

1,268,863. AUTOMOBILE OR MOTOR-CYCLE HORN. RAY H. MANSON, Elyria, Ohio, assignor to The Garford Manufacturing Company, Elyria, Ohio, a Corporation of Ohio. Filed Oct. 8, 1913. Serial No. 794,159. (Cl. 177—7.)



2. In an automobile or motor cycle horn, the combination of a frame, a vibratile diaphragm in said frame, an electromagnet for actuating said diaphragm, an armature for said magnet, a switch for controlling the circuit of the magnet including a pair of contacts and springs supporting the same from the frame, an adjustable screw in the diaphragm for adjusting the armature and a member connecting said switch to said adjustable screw whereby said switch is moved when the armature is moved by the screw.

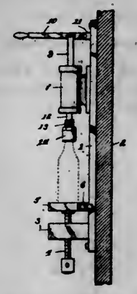
3. In an automobile or motor cycle horn, the combination of a frame, a diaphragm supported from said frame, a magnet, an armature for said magnet, a switch controlling the circuit of the magnet, means carried by the

diaphragm for adjusting said armature and means for moving said switch when said armature is moved by said adjusting means.

5. In an automobile or motor cycle horn, the combination of a frame piece, a sonorous diaphragm, means for actuating said diaphragm and an adjustable anvil on said diaphragm for adjusting said actuating means and against which said actuating means strikes to cause the diaphragm to sound a signal.

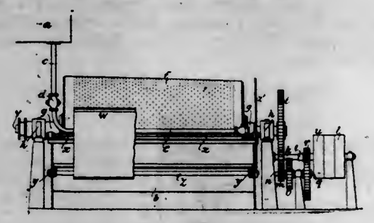
[Claims 1 and 4 not printed in the Gazette.]

1,268,864. BOTTLE-CAPPING MACHINE. JOE MATERNA, St. Cloud, Minn. Filed Aug. 31, 1915. Serial No. 48,342. (Cl. 113—2.)



In a bottle capping machine, a vertical supporting plate, a forwardly and horizontally extending arm disposed on the face thereof and provided with a central threaded opening, an upwardly extending screw threaded through said opening, a bottle supporting table of less width than said plate mounted on the upper end of said screw, and clips secured upon the sides of said table and projecting laterally therefrom and having their outer ends bent rearwardly to slidably engage the side edges of said plate whereby said table is prevented from lateral movement and rotary movement with said screw.

1,268,865. PROCESS FOR PRESSING YEAST. EJNAR ALFRED MEYER, Clifton, Bristol, England. Filed Nov. 12, 1917. Serial No. 201,571. (Cl. 210—14.)

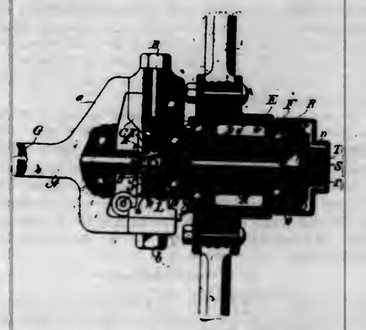


1. A process of pressing yeast, consisting in depositing yeast in liquid form upon the surface of a revolving drum, then exhausting air from the drum to solidify the yeast on the drum, and then removing the relatively dry outer layer of the deposited yeast leaving a relatively damp layer on the drum to prevent the breaking of a vacuum within the drum.

2. A process of pressing yeast, consisting in depositing the yeast from a vessel containing it upon the surface of a revolving drum, then exhausting air from the drum, and then removing the relatively dry outer layer of the yeast and leaving a relatively damp inner layer on the drum to prevent the breaking of the vacuum within the drum.

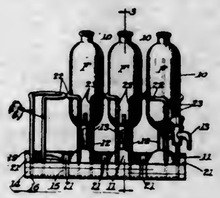
3. In the process of pressing yeast, supplying liquid containing yeast to a vessel into which a revolving drum extends, exhausting the air from the drum, removing the outer layer of yeast from the surface of the drum and spraying liquid containing yeast upon the surface of the drum in proximity to the part from which the deposited yeast is removed.

1,268,866. SHAFT-DRIVEN PIVOTAL HUB. JOHN WM. MOAKLER, East Worcester, N. Y. Filed Aug. 9, 1915. Serial No. 44,460. (Cl. 74—103.)



In a shaft driven pivotal hub, the combination with a journal having an enlarged portion at one end provided with a cavity, of a driving shaft, means for connecting the said journal and shaft comprising a universal joint having an outer portion formed to fit the said cavity in the journal and secured therein, an axlebox mounted upon the journal, the said journal being revoluble in the axlebox, the said axlebox being provided with a cavity at one end and the said enlarged portion of the journal being formed to movably fit the said cavity in the axlebox, a revoluble hub mounted upon the axlebox, and means secured to the outer end of the journal and constructed to transmit the rotation of the journal to the hub and to hold the hub in place upon the axlebox.

1,268,867. FLASK-HOLDER. JULIUS JOHN MOJONNIER, Oak Park, Ill., assignor to Mojonnier Bros. Co., Portland, Me., a Corporation of Maine. Filed May 20, 1916. Serial No. 98,759. (Cl. 23—3.)



2. The combination with a base provided with a plurality of sockets therein, of a cover pivoted to said base and adapted to swing thereover, said cover being provided with semi-circular recesses therein adapted to coincide with the sockets aforesaid when said cover is swung to a position over said base.

3. The combination with a base provided with a plurality of sockets, a cover arranged to swing over said base having recesses therein arranged to coincide with the sockets aforesaid, and an independent support coöperating with each socket.

11. In a flask holder the combination with a base, of means at the under side of one edge of said base to regulate the angularity thereof.

14. A holder for flasks or tubes of irregular shape, comprising a base provided with means for the reception thereof, in combination with means for coöperating with the irregularities in shape of said flasks or tubes to retain them in said base, and means for medially supporting said flasks or tubes.

15. A holder for flasks or tubes of irregular shape and having means for delivering the contents thereof projecting laterally therefrom, comprising a base provided with means for the reception of said tubes or flasks, in combination with means for coöperating with the irregularities in shape of said flasks or tubes to retain them in said base, and medial supports for said flasks or tubes including guides for the delivery means thereof.

[Claims 1, 4 to 10, 12, and 13 not printed in the Gazette.]

1,268,868. BUTTON. GEORGE H. MORRIS, London, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 13, 1914. Serial No. 850,743. (Cl. 24—90.)



1. A metal button comprising a head having a covering part with a circular periphery, an under part comprising two semi-circular sections disposed with straight edges abutting, and an eye connected at either end to one section and having a convex outer surface adjacent to the sections and a concave outer surface remote from said section.

3. A button comprising a head formed of two layers of sheet material, the under layer comprising two semi-circular parts disposed with their straight sides adjacent to each other, and an eye merging at each end into one of the semi-circular parts at its straight side.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,268,869. POULTRY FEEDER AND EXERCISER. JOSEPH HARRISON MORROW, Welland, Ontario, Canada. Filed Aug. 30, 1917. Serial No. 189,005. (Cl. 119—70.)

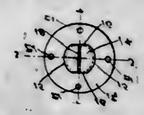


A poultry feeder and exerciser comprising a feed receptacle having a discharge orifice, a spring-closed shutter controlling said orifice, a rod for said shutter, and an arm for said rod, in combination with a treadmill, a screw conveyer for distributing the feed delivered through said orifice, a baffle for said screw conveyer below the discharge orifice and extending to both sides thereof, a feed depository between the baffle and the treadmill to receive the distributed feed, an arm for the conveyer engaging with the shutter rod arm by which the shutter is moved at each revolution of the feed conveyer to open position, and motion transmitting means between the conveyer and the treadmill.

1,268,870. SNAP-FASTENER. ISIDOR MOSS, Brookline, Mass. Filed Oct. 4, 1917. Serial No. 194,793. (Cl. 24—214.)

1. A snap fastener comprising a stud member having a substantially circular head, the periphery of which is reduced at intervals to form a larger and a smaller diameter, a circular shank of smaller diameter than the larger diameter of the head, and attaching means, the larger diameter of the head being resilient and compressible and the smaller diameter relatively rigid and incompressible, and a socket member having attaching means and a circular orifice the wall of which is expansible and has a diameter less than the larger diameter of the head.

[Claims 2 to 5 not printed in the Gazette.]



1,268,871. CHISEL-HANDLE. CHRISTOPHER J. ROACH, Middletown, Conn. Filed Sept. 17, 1915. Serial No. 51,197. (Cl. 145—61.)



1. A handle for a chisel or similar tool comprising an elongated structure of tubular form, the body portion constituting the major portion of the length, being of suitable size and having a suitable exterior formation to serve as the handle proper, and having an open bore, the end portions being each provided with a tapered socket, connecting with the said bore, and a plug of cushioning material being seated in one of the said sockets and having an axial bore, whereby a tool may be inserted through the said axial bore for removing a tool seated in the other of the said sockets.

3. A handle for a chisel or similar tool comprising an elongated structure having a bore extending continuously therethrough, means for removably receiving a tool shank at one end of the said bore, the other end of the said bore being in the form of a seat, a cushioning plug fitting and engaged with the said seat, and the said seat comprising at the inner end an elongated tapered portion, suitable for serving as a holding portion, the outer end of the said seat being approximately cylindrical, suitably to serve as a ferrule in engagement with the said plug, and an annular step connecting the said tapered portion and ferrule, suitable for serving as a seat proper in engagement with the said plug.

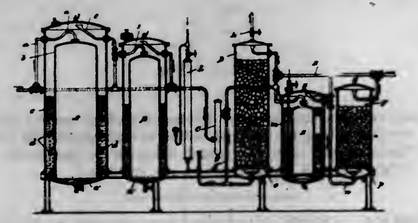
5. A handle for a chisel or similar tool comprising an elongated structure having a bore extending continuously therethrough, means for removably receiving a tool shank at one end of the said bore, the other end of the said bore being in the form of a seat, a cushioning plug fitting and engaged with the seat, and the said seat comprising at the inner end an elongated tapered portion, suitable for serving as a holding portion for holding the said plug in position, the outer end of the said seat being approximately cylindrical, suitably to serve as a ferrule in engagement with the said plug, and an annular step connecting the said tapered portion and ferrule, suitable for serving as a seat proper in engagement with the said plug.

[Claims 2 and 4 not printed in the Gazette.]

1,268,872. APPARATUS FOR CLEANING CARBONIC ACID. LEOPOLD NATHAN, Zurich, Switzerland. Filed Jan. 11, 1916. Serial No. 71,481. (Cl. 261—124.)

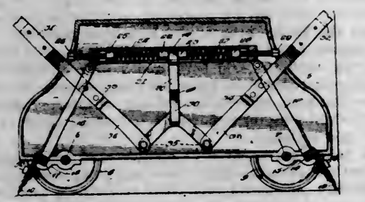
1. In a gas purifying apparatus, the combination of a vessel adapted to contain a washing medium, an open-bottomed bell concentrically disposed within said vessel the free space within the bell being at least as great as that outside of the bell, and a feed pipe for the gas to be purified, said bell having a downwardly and outwardly extending peripheral flange for breaking up the bubbles of gas fed to the bell.

2. In a gas purifying apparatus, the combination of a vessel adapted to contain a washing medium, an open-bottomed bell concentrically disposed within said vessel, the free space within the bell being at least as great as that outside the bell, and a feed pipe for the gas to be



purified, said bell having a plurality of peripheral flanges extending downwardly and outwardly nearly to the wall of the surrounding vessel and provided with concentric rows of perforations for breaking up the bubbles of gas fed to the bell, the bottom of the bell being notched for the same purpose.

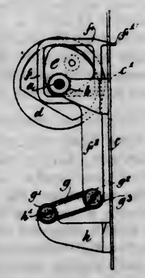
1,268,873. FLOOR-SCRAPER. ALFRED NELSON, Chicago, Ill. Filed Jan. 15, 1917. Serial No. 142,418. (Cl. 145—47.)



5. In a scraping machine, the combination of a carriage having four wheels, a pair of scrapers pivotally mounted in said carriage, means for connecting said scrapers, whereby one will be thrown out of operative position when the other is thrown into operative position, a handle, a yielding adjustable connection between the handle and the scrapers, whereby the pressure of the scrapers may be regulated, and means for limiting the movement of the scrapers toward or away from the surface to be acted upon.

[Claims 1 to 4 not printed in the Gazette.]

1,268,874. CAM-MOVEMENT. ERIK WM. NELSON, New Rochelle, N. Y. Filed Sept. 1, 1917. Serial No. 189,278. (Cl. 74—14.)

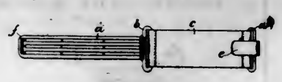


1. A cam-movement comprising a triangular cam with each face formed on a circular arc, a rectangular cam frame coöperating with the cam and provided with an extension, and a link pivoted on a fixed point and pivotally connected to said extension and constituting the sole support and guide for the cam frame.

2. A cam-movement comprising a triangular cam with each face formed on a circular arc, a rectangular cam frame coöperating with the cam and provided with an extension and with an actuating tooth, and a pivoted link pivotally connected to said extension and supporting and guiding the cam frame.

[Claim 3 not printed in the Gazette.]

1,268,875. HAIR-CLASP. ETHELL NOYES, Kensington, London, England. Filed Nov. 30, 1915. Serial No. 64,279. (Cl. 132—22.)



A hair clasp comprising a smooth elongated longitudinally curved plate adapted to be passed freely through the hair of the wearer, a link having top and bottom curved ends pivotally connected to the curved plate at right angles to the length of the plate, the plate being provided with an elongated slot at its free end at right-angles to the length of the plate, a single elongated elastic band at one end pivotally connected to the link, a link similar to the first mentioned link pivotally connected to the other end of the elastic band, a hook on the latter link including a free end or tongue offset from the link and extending lengthwisely of the band substantially centrally of the band and toward the plate and adapted to enter said slot, said hook being arranged on its link so as to enter the slot without passing over the free end of the plate only when the band is laid over the convex surface of the plate, said elastic band being provided to cover the convex surface of the plate and being wider than the plate, so that when said hook is engaged in said slot the opposite longitudinal marginal portions of the band project substantially evenly beyond the opposite longitudinal edges of the plate.

1,268,876. MANUFACTURE OF LEATHER. ADOLPH OBSER, Newark, N. J. Filed Apr. 18, 1917. Serial No. 162,929. (Cl. 149—4.)

1. In the manufacture of leather the method which comprises subjecting hides to a preliminary tanning operation in a bark-tanning liquor, thereafter splitting and pickling said hides and subjecting the splits to a subsequent tanning operation in a metallic tanning liquor.

3. In the manufacture of leather the method which comprises subjecting dehaired hides to the application of a bark tanning solution, subsequently splitting the hides, and thereafter pickling said splits, subjecting said pickled splits to a subsequent tanning operation by the application of an acid metallic tanning liquor until the tanning is completed, neutralizing the tanned splits by the application of an alkaline solution, and finally washing the splits and dressing the same.

21. An aqueous fat liquor for use in stuffing leather, said liquor comprising salt, a mixture of fat and cottonseed oil and waterless moellon.

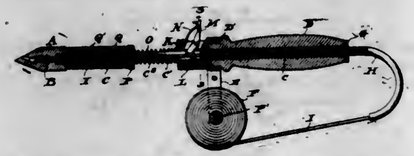
24. An aqueous fat liquor for use in stuffing leather said liquor comprising salt, cottonseed oil and waterless moellon.

[Claims 2, 4 to 20, 22, and 23 not printed in the Gazette.]

1,268,877. SELF-FEEDING SOLDERING-IRON. HARRY A. ORME, Washington, D. C. Filed Mar. 27, 1915. Serial No. 17,403. (Cl. 113—109.)

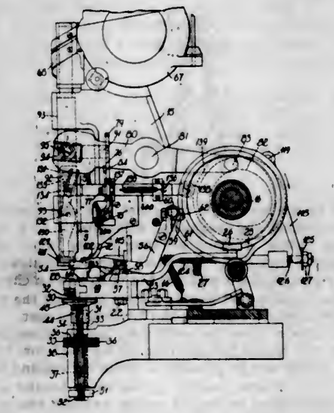
In a device of the kind described, the combination with a soldering iron, a tube slotted on opposite sides, a spring

coiled about the tube, a collar slidable on the tube and engaged by said spring, a fixed dog carried by the collar and entering one slot of the tube, a pivoted dog carried by the



collar and entering the opposite slot, the material fed passing between said dogs, and a spring carried by the collar and bearing on the pivoted dog.

1,268,878. LACING-HOOK-SETTING MACHINE. JOHN PIERCE, Milton, Mass. Filed Aug. 9, 1917. Serial No. 185,271. (Cl. 218—17.)



1. A lacing hook setting machine having, in combination, a punch and anvil, a punch die adapted to coöperate with said punch, a lacing hook carrier, mechanism adapted to move said punch die toward said punch, and laterally into alinement with said lacing hook carrier, and mechanism adapted to move said punch and anvil laterally into alinement with said lacing hook carrier, whereby said sheet material may be fed subsequent to the punching thereof.

6. A lacing hook setting machine having, in combination, a punch and anvil, a slide in which said punch and anvil are adapted to slide, a support upon which said punch is adapted to slide, means to hold said punch in engagement with said support and mechanism to move said slide transversely of said punch, whereby said punch may be caused to move along said support.

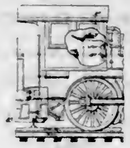
13. A lacing hook setting machine having in combination, a work-support, a slide movable on said work-support, a punch and anvil mounted on said slide and movable transversely thereof, a punch die adapted to coact with said punch to punch a hole in a piece of sheet material, a lacing hook carrier, mechanism adapted to move said punch die toward said punch and laterally into alinement with said lacing hook carrier, mechanism adapted to move said slide, with said punch and anvil, into alinement with said lacing hook carrier, one of said mechanisms being adapted to move said punch die away from said punch and laterally with relation thereto, mechanism adapted to move said lacing hook carrier toward said punch and anvil, whereby a lacing hook held in said lacing hook carrier may be clenched on said anvil, and mechanism adapted to move said lacing hook carrier laterally with relation to said punch, whereby the same may be disengaged from said lacing hook.

16. A lacing hook setting machine having, in combination, a raceway, a lacing hook carrier, a plunger upon which said lacing hook carrier is slidably mounted, a lever pivotally mounted on said plunger and engaging said carrier, a slide mounted on the frame of said machine and engaging said lever, means adapted to impart a reciprocatory motion to said slide, whereby said lever imparts a reciprocatory motion to said lacing hook carrier to move the same toward and away from said raceway and means to impart a reciprocatory motion to said plunger transversely of said raceway.

23. A lacing hook setting machine having, in combination, a lacing hook carrier, a punch and anvil in alinement with said lacing hook carrier, a holder in which said punch and anvil are adapted to slide, a plunger constituting a support for said punch and anvil, said plunger being made in two parts, one of said parts being in alinement with said lacing hook carrier and adjustable toward and away therefrom upon said other part, whereby said punch and anvil may be adjusted relatively to said lacing hook carrier, and mechanism adapted to move said two-part plunger toward and away from said lacing hook carrier.

[Claims 2 to 5, 7 to 12, 14, 15, and 17 to 22 not printed in the Gazette.]

1,268,879. AUTOMATIC SAFETY RAILWAY SYSTEM. HARRY WISE RICHARDS, Baltimore, Md. Filed Sept. 2, 1916. Serial No. 118,249. (Cl. 246—58.)



1. In a train controlling device, the combination of a track comprising a plurality of successive sections of substantially parallel rails insulated from each other, a track circuit including a resistance and four contact rails for each block; a train stopping means carried by a vehicle upon a track, a "clear" indication light, a closed electric control circuit, an electric magnet for holding inoperative the train stopping means, said magnet included in the said control circuit, a pair of vehicle contacts, two switches included in said control circuit and actuated by the vehicle contacts, a normally deënergized relay including contacts controlling the vehicle control circuit, means whereby the normally deënergized relay is energized by the track circuit current when the vehicle contacts engage the contact rails when the block ahead is clear.

[Claims 2 and 3 not printed in the Gazette.]

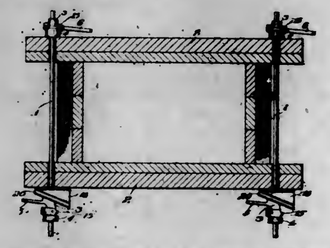
1,268,880. CLAMPING MECHANISM. HENRY W. ROOS, Cincinnati, Ohio. Filed Nov. 1, 1916. Serial No. 128,971. (Cl. 144—291.)

1. A clamping mechanism including a pair of members relatively rotatable about an axis passing longitudinally through the member to be clamped and having interiorly arranged openings which receive a member to be clamped and are surrounded by gripping surfaces engaging said member, and exteriorly disposed means connecting the members permitting their relative rotation, and serving, when one is turned relatively to the other, to vary the relative position of said openings and gripping surfaces transversely of the member to be clamped.

3. A clamping mechanism including a pair of members relatively rotatable about an axis passing longitudinally through a member to be clamped and which are hollow to receive a member to be clamped and provided with interior gripping surfaces, and connections between the

members permitting their relative rotation and acting when one is turned relatively to the other to move one of said gripping surfaces transversely of the member.

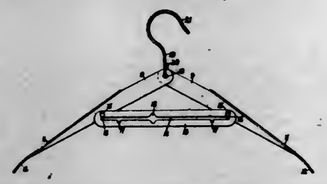
5. A clamping mechanism including a pair of hollow members having interior gripping surfaces normally arranged concentrically of the member to be clamped, one of said members having a socket coöperating with a projecting portion of the other, permitting relative rotation of said members, and having its bearing surface inclined with reference to a plane perpendicular to the axis of the member to be clamped.



10. The combination with a clamping mechanism including a pair of relatively rotatable gripping members, of a wedge device having a guideway thereon permitting said clamping mechanism to be adjustably positioned with respect to a supporting frame, and projections on one of the gripping members engaging said guideway and permitting relative sliding of the wedge member and gripping member.

[Claims 2, 4, 6 to 9, and 11 to 17 not printed in the Gazette.]

1,268,881. COAT-HANGER. HERMAN ROSENTHAL, New York, N. Y. Filed July 27, 1917. Serial No. 183,068. (Cl. 211—13.)



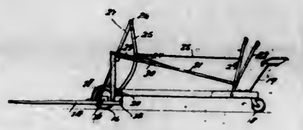
1. A coat hanger comprising a plurality of detachably connected arms; a spreader slidably connected with both of said arms; and means for fixing the service relation of said arms, said means embodying a plurality of pins, one fixedly mounted on each of said arms midway the ends thereof, and means provided in the ends of said spreader for engaging said pins.

4. A coat hanger comprising a plurality of arms, each having an integrally formed laterally extended shoulder form; means for uniting in service said arms, said means embodying a plurality of perforations, one formed in the end of each of said arms, a hook member for suspending said hanger, and a spreader movably attached to said arms for holding the same in outspread relation when said arms are connected by said hook; and means for suspending an additional garment from said spreader, said means embodying an elongated slot formed therein, said slot having recesses pendently disposed from said slot for receiving attaching devices of said garment.

[Claims 2 and 3 not printed in the Gazette.]

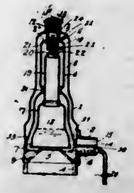
1,268,882. ATTACHMENT FOR SWEEP-RAKES. HENRY M. RUAS, Stockton, Kans. Filed Dec. 5, 1917. Serial No. 205,545. (Cl. 56—137.)

In a hay loader, the combination of a frame, rake teeth pivotally mounted on the frame, a vertically extending curved arm pivotally connected at its lower end upon the frame and having its opposite end directed forwardly, a push bar pivotally connected at one end to the upper end



of said arm and having its lower end sharpened and depending between the teeth of the hay loader, a hand lever mounted upon the frame, and a link connecting said lever with the curved arm.

1,268,883. AIR-VALVE. WILLIAM A. RUSSELL, Yonkers, N. Y. Filed Apr. 15, 1914. Serial No. 831,913. (Cl. 236—25.)

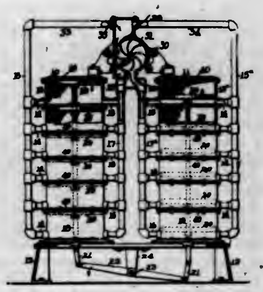


1. In an air valve for radiators, the combination with an outer casing and means for attaching it to a radiator, an inner casing, a valve working in the inner casing, a valve nipple carried by the valve and provided with a recess, a plug forming a seat for the valve, and a check-valve seated in the plug and having a stem entering the recess of the valve nipple for alining the latter in its seat.

2. In an air valve for radiators, the combination with a casing and means for securing it to a radiator, of a plug having an air escape passage, a valve for closing the passage, a valve nipple carried by the valve having a recess, and a check valve in the air-escape passage and having a stem entering the recess of the valve nipple for alining it in its seat.

[Claim 3 not printed in the Gazette.]

1,268,884. HYDRAULIC APPARATUS. JOHN P. RYAN, Worcester, Mass. Filed June 14, 1917. Serial No. 174,707. (Cl. 138—20.)



1. A hydraulic apparatus comprising two structures each composed of a plurality of cylinders, a piston rod for each structure having a piston in each cylinder thereof, means to actuate said rods simultaneously in opposite directions, a hydraulic motor, and connections between said cylinders and said motor whereby water forced from one series of cylinders flows past said motor to the opposite series of cylinders, thereby actuating said motor.

[Claim 2 not printed in the Gazette.]

1,268,885. ARTIFICIAL EYE AND METHOD OF FITTING THE SAME. CHARLES H. SAMPSON, Rochester, N. Y. Filed Dec. 20, 1917. Serial No. 207,998. (Cl. 3—13.)



1. An artificial eye comprising a sheet metal body and a vitreous coating for said body that will protect the metal against the action of the water of the eye socket.

2. An artificial eye comprising a concavo-convex body of material having a rolled edge, a glass coating for said body, and a lens held to the body by the coating.

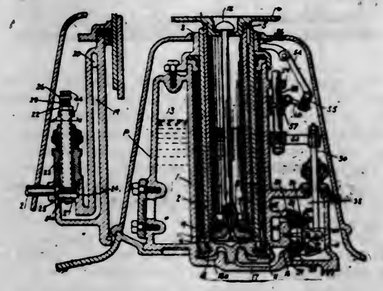
3. An artificial eye comprising a concavo-convex body of sheet-metal having a depression in its convex face, a lens fitted in said depression, and a vitreous coating for the body.

6. An artificial eye comprising a body portion formed from sheet material into concavo-convex form and having its convex face depressed, a lens fitted in said depressed portion, an iris simulating means arranged between the lens and the body portion.

7. An artificial eye comprising a body of ductile sheet material of concavo-convex form having a rolled edge and provided with a depression in its convex face, a lens fitted in said depression, a pupil simulating device arranged between the wall of the depression and the lens, an iris simulating means arranged about the pupil simulating device between the lens and the wall of the depression, an enamel coating on the convex portion about the lens to simulate the white of an eye, and a transparent glass coating over the enamel coating.

[Claims 4, 5, and 8 not printed in the Gazette.]

1,268,886. CHAIR. ADOLPH W. SCHRAMM, Riverton, N. J., assignor to Electro Dental Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed June 15, 1917. Serial No. 174,828. (Cl. 138—9.)



1. In an adjustable chair, supporting means for the seat of the chair, a fluid chamber, a pressure supply for placing a fluid in said chamber under pressure to actuate the chair seat supporting means, a valve controlling said pressure supply, ports for the passage of the fluid, valves controlling said ports, operating means for said first and second named valves, and means operating automatically to center said operating means and to cause the said last-named valves to close off their ports simultaneously.

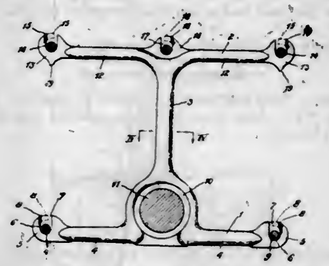
3. In an adjustable chair, supporting means for the seat of the chair, a fluid chamber, a pressure supply for placing a fluid in said chamber under pressure to actuate the chair seat supporting means, ports for the passage of the fluid, valves controlling said ports, operating means for said valves, means for actuating said operating means to neutral position automatically and the valves into position to close said ports simultaneously, one of said valves maintaining its port closed to maintain the chair seat supporting means in adjusted position should the pressure on the fluid due to the weight of the chair seat and its load be less than that due to the pressure supply.

11. In an adjustable chair, supporting means for the seat of the chair, a fluid chamber, a pressure supply for placing a fluid in said chamber under pressure to actuate the chair seat supporting means, valve mechanism controlling said pressure supply and the passage of the fluid, brake mechanism for preventing rotation of the supporting means for the chair seat, actuating means for said brake, a further movement of which in the same direction will actuate the valve mechanism, the brake being operable, however, without any motion being imparted to the valve mechanism.

17. In an adjustable chair, supporting means for the seat of the chair, a fluid chamber, a pressure supply for placing a fluid in said chamber under pressure to actuate the chair seat supporting means, valve mechanism controlling said pressure supply, valves controlling the passage of the fluid, springs for seating the last named valves so as to maintain them closed at the same time, and operating means for all of said valve mechanism whereby the pressure supply valve mechanism may be operated to admit pressure to the fluid chamber or discharge it therefrom as desired at the same time lifting one or the other of the fluid valves, the other remaining seated under the action of its spring.

[Claims 2, 4 to 10, and 12 to 16 not printed in the Gazette.]

1,268,887. REINFORCING DEVICE. ALBERT F. SCHROEDER, Cleveland, Ohio. Filed Feb. 3, 1917. Serial No. 146,326. (Cl. 72—122.)

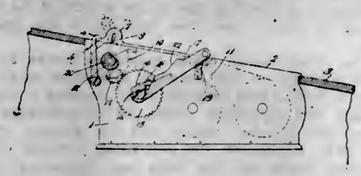


A reinforcing device of the character described comprising a skeleton member having a plurality of ends thin, substantially flat and somewhat flexible, such ends being furthermore fashioned with cut-out portions, having constricted communication through an edge of the member respectively, whereby the flexing of the material bordering said constricted cut-out area enables the insertion of an object fitted to the remainder of the cut-out area, some of said ends being fashioned with points for the purpose specified.

1,268,888. AUTOGRAPHIC REGISTER. JOHN Q. SHERMAN, Dayton, Ohio. Filed Apr. 29, 1916. Serial No. 94,300. (Cl. 281—11.)

1. In an autographic register, a casing therefor, a toothed feeding means for paper strips, a roll for carrying said means, and a combined tablet top and stripper plate adapted in one piece to be set into the casing, and cut away around the roll and the toothed feeding means.

2. In a autographic register, an operating handle, a toothed feeding means adapted to be rotated by said handle, intermediate gearing between the handle and the said means whereby a partial movement of the handle will cause a complete rotation of said means, and means connected to the said means, and means on the handle to contact with each other at the close of an operation to prevent overthrow.



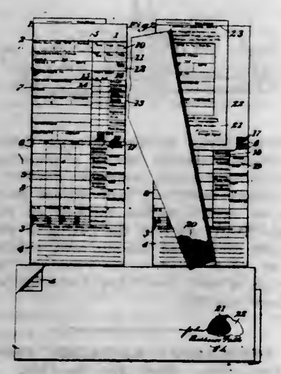
3. In an autographic register, an operating handle, a toothed feeding means adapted to be rotated by said handle, intermediate gearing between the handle and the said means whereby a partial movement of the handle will cause a complete rotation of said means, said means comprising in part a ratchet, and means connected to the said means, and means on the handle to contact with each other at the close of an operation to prevent overthrow, and a stop for the return movement of the handle as permitted by said ratchet.

4. In an autographic register, an operating handle, a toothed feeding means adapted to be rotated by said handle, intermediate gearing between the handle and the said means whereby a partial movement of the handle will cause a complete rotation of said means, and means connected to the said means, and means on the handle to contact with each other at the close of an operation to prevent overthrow, said means comprising a cam connected to the feeding means, and lying in the path of the handle, and a contact member on the handle for the cam.

5. In an autographic register, a casing therefor, a toothed feeding means for paper strips, a roll for carrying said means mounted in the casing, and a stripper plate mountable over the roll, and comprising a cut-away portion for the roll and a cut-away portion for the toothed means.

[Claim 6 not printed in the Gazette.]

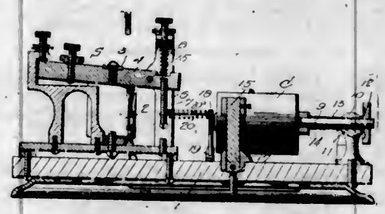
1,268,889. CAR-RECORD. ALBERT R. SMITH, Bellows Falls, Vt. Filed Oct. 24, 1914. Serial No. 868,497. (Cl. 11—19.)



1. A car record, comprising a folded sheet, having a plurality of longitudinally arranged parallel lines forming columnar divisions, a plurality of longitudinal and transverse lines subdividing these divisions into indicated spaces, one of the spaces containing a key designation whereby a car may be identified from its starting point to its destination, and other contiguous spaces to receive the particulars as to the train of which the car forms a part, the name of the place where the record is made, the name of the consignee and the name of the place from which the car was received, and other contiguous spaces marked to receive from time to time classified items as to the contents of the car and the charges incident to its transportation while *en route*, the spaces being systematically arranged in related order and the items therein identifiable with the car described in the said key designation, all of the folds of the sheet being substantially alike for duplicating the record.

2. A car record, comprising a folded sheet, having heavy conspicuous longitudinal lines dividing it into columns, transverse lines intersecting the longitudinal lines and thereby forming divisional spaces, longitudinal and transverse lines subdividing the divisional spaces into smaller spaces, the spaces having fixed headings to indicate the kind or character of data to be entered in the spaces and one of the spaces containing a key designation whereby a car may be identified from its starting point to its destination, and another contiguous space indicated to receive particulars as to the train of which the car forms a part, the name of the place where the record is made, the name of the consignee and the name of the place from which the car was received, and other spaces indicated to receive from time to time classified items as to the contents of the car and the charges incident to its transportation while *en route*, all of the folds of the sheet being substantially alike for duplicating the record, and a postcard adapted to be inserted between the folds and containing car identifying means and arranged to receive an address which is simultaneously inscribed on it and the record.

1,268,890. SOUNDER FOR TELEGRAPH-CIRCUITS. FRED E. SMITH and LE ROY HEFLIN, Fairfax, Okla. Filed July 28, 1917. Serial No. 183,332. (Cl. 178—98.)



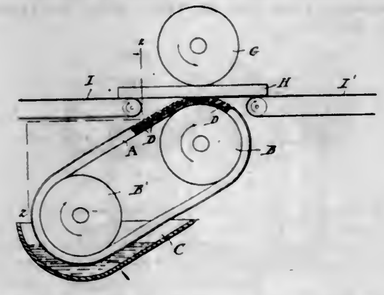
1. The combination of a telegraph sounder having actuating coils and a sounder bar, an auxiliary magnet having an individual movable armature, and means for connecting said movable armature with the sounder bar of the sounder to aid the latter in its movement.

2. The combination of a telegraph sounder having actuating coils and a sounder bar, an auxiliary magnet having an individual movable armature, means for connecting said movable armature with the sounder bar of the sounder to aid the latter in its movement, and means for adjusting the position of the coil of the auxiliary magnet with respect to its armature.

[Claims 3 to 7 not printed in the Gazette.]

1,268,891. TILE-COATING APPARATUS. HUGO STOMMEL, Red Bank, N. J. Filed Oct. 20, 1916. Serial No. 126,656. (Cl. 91—54.)

1. In a tile coating machine, a liquid conveyer member of flexible material, a portion of which is adapted to be immersed in a tile coating solution, said conveyer member being provided with grooves extending transversely of the direction of travel of said member whereby said grooves emerge from the tile coating solution charged with said solution and convey the same to the point of application to the tile, and a covering of haircloth over said conveyer member.

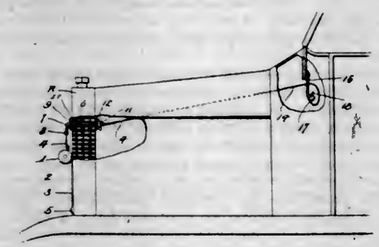


3. In a tile coating machine, a conveyer belt for the coating solution, a portion of which belt is adapted to be immersed in a body of said solution, and the exterior surface of which belt is provided with transverse undercut grooves positioned side by side and in parallel relation, which grooves become charged in passing through the tile coating solution and convey the same to its point of application to the tile.

4. In a tile coating machine, a conveyer member provided on its exterior face with depressed, under-cut pockets adapted to be charged with a tile coating solution from a source of supply, and means for subsequently compressing said conveyer member for the purpose of squeezing the solution out of the under-cut pockets and depositing the same upon the tile.

[Claims 2 and 5 not printed in the Gazette.]

1,268,892. AUTOMOBILE-RADIATOR PROTECTOR. AUGUST SUNNEN, Mexico, Mo. Filed Feb. 1, 1917. Serial No. 145,969. (Cl. 257—132.)



1. In a device of the class described the combination with a radiator, a shield to be drawn over the front of an automobile radiator, and a flexible element for drawing and controlling the position of said shield and passing to a point near the driver's seat, of a guide tube for said element, dimensioned for passage through a radiator opening, said guide tube having a collar secured thereto, and bolts in the collar positioned to pass through radiator openings at the side of said tube, said bolts securing the tube to the radiator.

2. In a device of the class described the combination with a radiator, a curtain shield to be drawn over the front of an automobile radiator, and a flexible element for drawing and controlling the position of said shield and passing to a point near the driver's seat, of a guide tube for said element dimensioned for insertion into a radiator opening and having a downwardly curved front end, a collar on said tube arranged to lie against the front of the radiator and a bolt at each side of the tube in said collar arranged to pass through radiator openings at the side of the tube.

1,268,893. PLOW. OLOF SWANSON, Kindersley, Saskatchewan, Canada. Filed Sept. 24, 1917. Serial No. 192,959. (Cl. 97—21.)

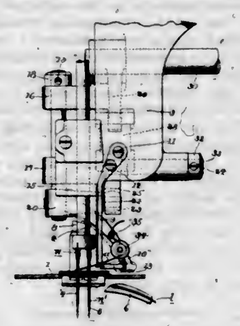


1. In a plow, the combination of a plurality of spaced beams, the rear ends of which turn downward in echelon formation; a share, a narrow sole plate, a mold board and a landside connected to each beam, the parts carried by one beam being spaced from the parts carried by the next adjacent beam and adapted as a whole to turn a single furrow.

4. In a plow, the combination of a plurality of landsides; means for carrying said landsides in echelon formation and in spaced relationship, each landside having a sole plate flange and a moldboard flange formed thereon; a narrow sole plate and plow share formed integrally and secured to the sole plate flange and moldboard flange of each landside; and a narrow rearwardly and upwardly directed moldboard slat secured to the moldboard flange of each landside, said slats being twisted and curved in the direction of their length so that the parts as a whole are adapted to turn a single furrow.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,268,894. THREAD-LAYING MECHANISM FOR SEWING-MACHINES. SAMUEL GEORGE TATE, Chicago, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed May 18, 1916. Serial No. 98,390. (Cl. 112—7.)



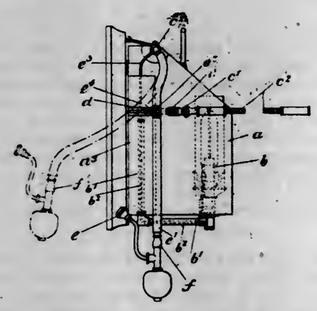
1. The combination of a work support, feeding mechanism, a pair of needles arranged in a plane at an angle to the line of feed, a fixed thread guide disposed at one side of the needles, a thread carrier movable across the line of feed for engaging a cross thread passing through said thread guide and forming a loop therein for the entrance only of the needle farthest removed from said thread guide, said feeding mechanism, said thread carrier, and said thread guide coöperating to position said cross thread loop so that the strand extending from the previously formed stitch to the end of the thread carrier is located wholly in rear of the needles, and the strand of said loop extending from said thread guide to the end of the thread carrier is disposed between the needles.

9. The combination of a work support, feeding mechanism, a pair of needles arranged in a plane at an angle to the line of feed, a fixed thread guide disposed at one side of the needles, a thread carrier movable across the line of feed for engaging a cross thread passing through said thread guide and forming a loop therein for the entrance only of the needle farthest removed from said thread guide, said feeding mechanism, said thread car-

rier, and said thread guide coöperating to position said cross thread loop so that the strand extending from the previously formed stitch to the end of the thread carrier will be located wholly in rear of the needles, and the strand of said loop extending from said thread guide to the end of the thread carrier will be disposed between the needles, and devices for exerting a pull on the thread passing through the thread carrier when the thread hook is moved to release the thread loop formed thereby so as to draw said thread taut about the shank of the needle.

[Claims 2 to 8 not printed in the Gazette.]

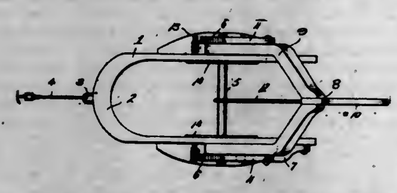
1,268,895. ADVERTISING DEVICE. HERBERT MOY THOMAS, London, England. Filed Aug. 26, 1913, Serial No. 786,769. Renewed Jan. 10, 1918. Serial No. 211,280½. (Cl. 240—1.)



1. In an advertising device, a case having a translucent front, a transparency in the shape of an advertisement behind the front, illuminating means within the case and behind the advertisements, a pendent cigar lighter carried by a gas supply tube and giving a lighting flame on raising the same, and means actuated by the movement of the pendent cigar lighter for causing the illumination of the illuminating means, as set forth.

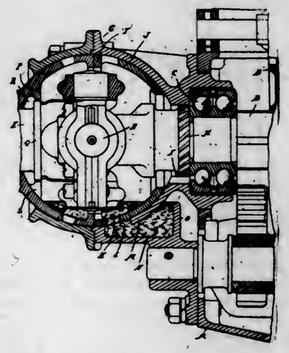
2. In an advertising device, a case having a translucent front, a transparency in the shape of an advertisement behind the front, illuminating means within the case consisting of a gas burner provided with a pilot jet, a valve controlling the supply of gas to said burner, a pendent cigar lighter provided with a gas supply tube and means controlled by said tube for closing said valve when the cigar lighter and tube are in their normal positions and for opening said valve when the cigar lighter is moved in order to obtain a light, as set forth.

1,268,896. COMBINED AUTO PULLER AND JACK. ENOCH THOMPSON, Stafford, Kans. Filed May 28, 1917. Serial No. 171,504. (Cl. 254—164.)



A device of the character described comprising, a frame, a revoluble drum, a ratchet wheel provided on each end of said drum, a pair of runners secured to the lower margin of each of the side members of the frame, said runners having their inner margins provided with right angular circular abutments through which the drum passes, and means engaging said ratchet wheels for revolving the drum.

1,268,897. SELF-LUBRICATING UNIVERSAL JOINT FOR MOTOR-VEHICLE TRANSMISSION-SHAFTS. GUY D. TRESSLAR, Flint, Mich., assignor to General Motors Corporation, Detroit, Mich., a Corporation of Delaware. Filed Aug. 27, 1917. Serial No. 188,353. (Cl. 184—11.)



1. In a rotary transmission, the combination with a transmission-gearing housing, a transmission-shaft and a universal joint adjacent to said housing, through which said shaft is driven from the transmission-gearing, of means operated by the rotation of said shaft for positively feeding lubricant from said housing to said joint.

3. In a rotary transmission mechanism, the combination with a transmission-gearing housing, a transmission-shaft therein, a universal joint in said transmission-shaft adjacent to said housing and a hollow concentrically-arranged universal joint constituting a driving thrust connection and housing for the first-mentioned universal joint, of means for propelling lubricant from said transmission-gearing housing into said hollow universal joint, means in the latter for directing lubricant to the universal joint in the rotary transmission-shaft, and means permitting the drainage of the surplus lubricant from said hollow universal joint back into said transmission joint housing.

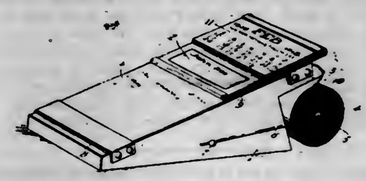
7. The combination with a rotary transmission-shaft, a universal joint therein, a non-rotating hollow universal joint surrounding and forming a housing for said rotating universal joint and a housing adjacent to said universal joints containing lubricant, of splash means for feeding lubricant from the last-named housing on to said rotary transmission-shaft, means on said rotary transmission-shaft for propelling the lubricant longitudinally thereof into said hollow non-rotating universal joint, a drainage connection for the lubricant in said hollow universal joint permitting the overflow thereof back into said housing, and a dam in said drainage connection for maintaining a predetermined level of liquid in said hollow universal joint.

9. The combination with a rotary transmission-shaft, a universal joint therein, a non-rotating hollow universal joint surrounding and forming a housing for said rotating universal joint, a housing adjacent to said universal joints containing lubricant, means for introducing lubricant from the last-named housing into said hollow universal joint, a drainage connection for the lubricant in said hollow universal joint permitting the overflow thereof back into said housing, and a dam in said drainage connection for maintaining a predetermined level of liquid in said hollow universal joint.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

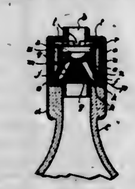
1,268,898. CALENDAR-SUPPORT. GEORGE ALLEN TUCKFIELD, Independence, Mo. Filed Mar. 13, 1918. Serial No. 222,198. (Cl. 281—1.)

A device of the character specified, comprising a support having an inclined upper face and having at the high end of the support a longitudinally extending shelf having a continuation of the upper surface and having that end remote from the support rounded, a roll supported beneath the shelf and adapted to carry a strip of



paper, a keeper at the lower end of the support on the upper face thereof, and a plate provided with means for supporting a calendar connected to the support at the upper end and forming a keeper at said end for the strip of paper.

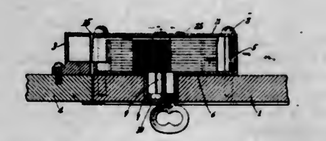
1,268,899. STOPPERING DEVICE FOR BOTTLES AND THE LIKE. GEORGE WADE, Longport, England. Filed May 12, 1916. Serial No. 97,196. (Cl. 215—62.)



1. A bottle stoppering device comprising the combination of an outer casing having an upper pouring aperture and radial ribs adjacent thereto, means for securing the casing to a bottle, a valve seat disposed adjacent the bottom of the casing, a valve cage disposed in the outer casing between the pouring aperture and the valve seat and provided with an upepr chamber and a lower conical chamber, said chambers communicating with each other, a hemispherical stop disposed in the upper chamber, a conical stop disposed in the lower chamber and arranged to project into the upper chamber and abut the hemispherical stop when the device is inverted, and a valve disposed between the valve seat and the conical stop.

[Claims 2 and 3 not printed in the Gazette.]

1,268,900. INTERCHANGEABLE-KEY LOCK. ELMER E. WATSON, Hamilton, Ohio. Filed Mar. 20, 1915. Serial No. 15,802. (Cl. 70—70.)



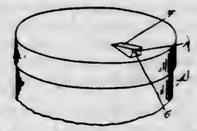
1. In combination, a locking member, a tumbler having a key engaging surface and controlling the movement of the locking member, and a racking stump at each end thereof adapted to engage and support the tumbler whereby when the locking member is in locked position one end of the tumbler is no longer engaged by its corresponding stump, and a fixed member for supporting said tumbler when the latter is out of engagemnt with said last mentioned stump.

2. In combination, a locking member, a tumbler having a key engaging surface and controlling the movement of the locking member, and racking stumps coöperating with the ends of the tumbler, one of said stumps being adapted to support one end of the tumbler at varying elevations and the other being thrown out of engagement with the tumbler when the locking member is in locked positions, whereby when the last mentioned parts are so out of engagement the key engaging surface is at the same elevation while one end of the tumbler may be at varying elevations.

3. In combination, a locking member, a key receiving member, a tumbler having a key engaging surface and controlling the movement of the locking member, and racking stumps coöperating with the ends of the tumbler, adapted to support one end of the tumbler at varying elevations, and to be thrown out of engagement with the tumbler at the other end thereof when the locking member is in locked position, whereby when the last mentioned parts are so out of engagement the key engaging surface is supported by the key receiving member, while one end of the tumbler may be at varying elevations.

[Claims 4 to 24 not printed in the Gazette.]

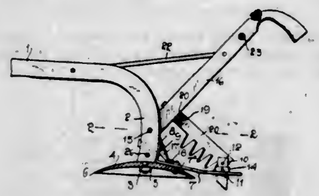
1,268,901. CLOSURE FOR DISCHARGE-APERTURES IN PACKAGES. CHARLES L. WEIL, Port Huron, Mich. Filed Jan. 8, 1916. Serial No. 70,902. (Cl. 221—11.)



1. The combination with a receptacle having a pouring aperture in an end face thereof, adjacent the edge of said face, of a closure for said aperture pivotally engaged with the inner edge thereof, said closure being outwardly adjustable to a deflector forming position, and means limiting outward pivotal motion of the closure.

[Claim 2 not printed in the Gazette.]

1,268,902. PEANUT-DIGGER. WADE H. WEST, Pandora, Tex. Filed Dec. 18, 1917. Serial No. 207,737. (Cl. 55—9.)



1. In combination with a sheth, a substantially horizontally disposed disk secured to the lower end of the sheth, and a bracing means coacting with the sheth and the rear portion of the disk.

2. In combination with a sheth, a substantially horizontally disposed disk secured to the lower end of the sheth, a bracing means coacting with the sheth and the rear portion of the disk, said bracing means extending rearwardly of the disk, and an earth penetrating member carried by the extended portion of the bracing means.

3. In combination with a beam provided with a sheth, a concavo-convex digging element secured to the lower end of the sheth, and a brace member coacting with the sheth and rear portion of the digging implement.

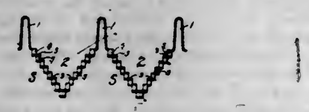
5. In combination with a beam provided with a sheth, a concavo-convex digging element secured to the lower end of the sheth, and downwardly and outwardly directed wings extending rearwardly of the sheth.

6. In combination with a beam provided with a sheth, a concavo-convex digging element secured to the lower end

of the sheth, and downwardly and outwardly directed wings extending rearwardly of the sheth, the lower marginal portions of said wings being provided with teeth.

[Claim 4 not printed in the Gazette.]

1,268,903. EXPANDED-METAL PRODUCT. HERBERT E. WHITE, Youngstown, Ohio, assignor to The General Fireproofing Company, Youngstown, Ohio, a Corporation of Ohio. Filed Sept. 4, 1913. Serial No. 788,154. (Cl. 72—117.)



1. An expanded metal structure comprising a plurality of uncut areas of open-work expanded sections of trough-like form lying between and projecting to the side of the uncut areas, the walls of each expanded section being of stepped formation and inclined in opposite directions with each inclined wall integrally united at its edge with one of the uncut areas.

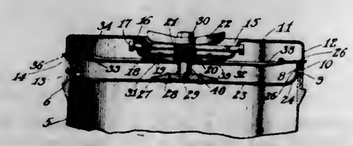
3. An expanded metal structure including a plurality of spaced ribs, and an intermediate V-shaped expanded section between at least a pair of the ribs, the said expanded section consisting of connected convergent walls each of which walls comprises open meshes of substantially diamond shape whose strands are arranged in stepped formation and are disposed in planes substantially parallel to each other and to the flat plane of the sheet.

4. An expanded metal structure including a pair of spaced uncut portions, and an intermediate troughed expanded section projecting from the edges of said uncut portions to one side of the flat plane of the sheet, said expanded section consisting of opposite integrally connected wall portions formed with substantially diamond-shaped meshes.

6. An expanded metal structure comprising a plurality of uncut areas connected by expanded open-work sections of trough-like form, the opposite sides of the trough-like expanded sections being inclined in different directions.

[Claims 2, 5, and 7 to 10 not printed in the Gazette.]

1,268,904. RECEPTACLE-CLOSURE. JOHN P. F. WHITE, Washington, D. C. Filed June 12, 1917. Serial No. 174,232. (Cl. 220—124.)

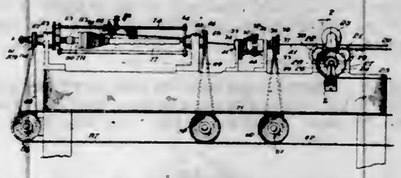


1. The combination with a receptacle, of a closure therefor including a cover member having a sealing groove to receive the upper edge of the receptacle wall, a plurality of radially disposed clamping elements operatively engaged with the cover at spaced points, a part surrounding the receptacle and projecting above the upper edge thereof, said part having means affording bearings for the outer ends of said clamping elements, locking means on the receptacle wall for engagement by said part, and means for actuating said clamping means to operatively engage said part with the locking means and simultaneously urge the cover to its applied position.

7. The combination with a receptacle, of a closure therefor including a main cover to engage exteriorly upon the wall of the receptacle, spaced elements fixed in the receptacle wall for locking engagement with the wall of the cover, a supplementary cover arranged within said main cover and having an open bead for engagement over the upper edge of the receptacle wall, said main cover being provided in its wall with spaced circumferentially extending slots, and a manually operable clamping device arranged between said covers and including an axially movable member, and spaced radially projecting clamping elements pivotally connected to said member and loosely engaged through the slots in the wall of the main cover, said elements being adapted to exert a positive bearing pressure upon the bead of the supplementary cover and tightly secure the same upon the receptacle wall.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,268,905. WINDING-MACHINE. MARK B. WHITE, Hanover, Ill. Filed Jan. 6, 1917. Serial No. 141,019. (Cl. 242—31.)



1. In a machine of the class described, winding mechanism comprising a frame rotatably mounted, a bobbin-carrying spindle arranged within the frame along the axial line thereof, means whereby the frame and said spindle are independently rotated, yarn-guiding mechanism arranged to travel in a direction lengthwise of the bobbin, means whereby the yarn-guiding mechanism is made to move lengthwise of the frame when the latter is rotated, and means whereby the direction of travel of said mechanism is controlled through contact of said means with the yarn wound on the bobbin.

4. In a machine of the class described, winding mechanism comprising a revolubly mounted frame, a bobbin-carrying spindle extending lengthwise of the frame and revolubly mounted at the axial line of said frame, a member mounted on said frame so as to move lengthwise thereof, a yarn-guiding shoe pivotally mounted on said member and adapted to have traveling contact with the yarn on the bobbin, means carried by the frame and adapted to be alternately engaged by the selective portions of said member whereby the latter is made to alternately travel in opposite directions lengthwise of the frame, and means for rotating said frame and to actuate said first-mentioned means.

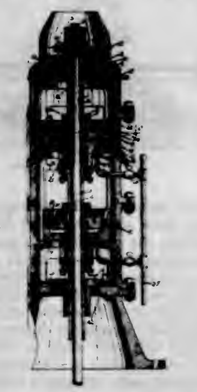
9. In a machine of the class described, winding mechanism comprising an elongated frame provided with hollow trunnions whereby the frame is revolubly mounted, a bobbin-carrying spindle rotatably mounted in said trunnions, means whereby the frame and said spindle are independently rotated, a traveling member carried by said frame, a guiding member pivotally mounted on said traveling member and arranged to have traveling contact with the bobbin, a pair of spring-controlled contacting members arranged on said traveling member and adapted to be actuated by said guiding member, and rotating means adapted to be engaged alternately by each of said contacting members.

14. In a machine of the class described, winding mechanism comprising a rotatably mounted frame provided with a pair of screw-rods having oppositely disposed threads, means whereby said screw-rods are rotated when said frame revolves, a bobbin-carrying spindle rotatably mounted in said frame, a member slidably mounted on said frame adapted to travel lengthwise of the screw-rods, a yoke pivotally mounted on said member, a yarn or thread-guiding member pivotally mounted at the lower end of said yoke and adapted to have traveling contact with the bobbin, and a pair of members pivotally mounted on said first-mentioned member adapted to alternately have operative engagement with said screw-rods whereby the direction of travel of the first-mentioned member is controlled.

18. Winding mechanism, comprising a rotatably mounted frame, a pair of oppositely threaded screw-rods, means whereby said rods are rotated through rotation of the frame, a bobbin-carrying spindle rotatably mounted in the frame, yarn-guiding means slidably mounted on the frame and having a spring-controlled portion held in yielding contact with the bobbin on the spindle, and oscillatingly mounted means carried by said guiding means adapted to be oscillated through movement of the spring-controlled portion of said guiding means so as to alternately engage with each screw-rod and thereby cause the guiding means to have back and forth movement during its travel from one end of the frame to the other.

[Claims 2, 3, 5 to 8, 10 to 13, 15 to 17, and 19 to 22 not printed in the Gazette.]

1,268,906. BEARING. JOHN A. WINTROATH, Los Angeles, Cal., assignor to Layne & Bowler Corporation, Los Angeles, Cal., a Corporation of California. Filed Aug. 30, 1916. Serial No. 117,600. (Cl. 64—47.)



1. In combination, a vertical shaft threaded near its upper end, a nut engaging the said threaded portion of the shaft, a sleeve embracing the said shaft and having a sliding relation therewith, the said sleeve being connected to the shaft however so as to rotate therewith, and bearing members connected to the sleeve for supporting downthrusts transmitted from the shaft.

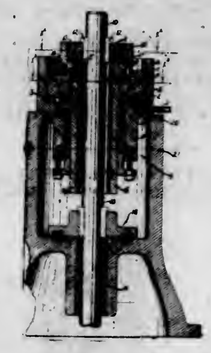
4. In combination, a rotating vertical shaft loaded from below, a fluid operated bearing coöperating in supporting the shaft, said fluid operated bearing including a rotary member and a stationary member, a connection between the said rotary member and the shaft so as to cause the rotary member to rotate with the shaft, the said rotary and stationary members being shaped in such manner as to form a pressure chamber for receiving fluid under pressure between them, independent means for supplying fluid to the bearing, and an accurately machined endless ring for packing off the space between the rotary member and the stationary member.

9. In combination, a rotating vertical shaft loaded from below, a fluid operated bearing coöperating in supporting the shaft, said bearing including a rotary member and a stationary member, an endless packing ring between the said rotary and stationary members having free lateral play, and independent means for supplying fluid to the bearing.

[Claims 2, 3, 5 to 8, and 10 not printed in the Gazette.]

1,268,907. BEARING. JOHN A. WINTROATH, Los Angeles, Cal., assignor to Layne & Bowler Corporation, a Corporation of California. Filed Oct. 17, 1916. Serial No. 126,104. (Cl. 64—47.)

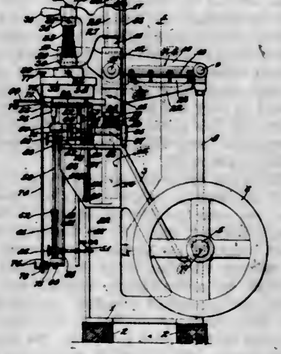
2. In combination, a vertical revoluble shaft, and a fluid operated bearing therefor including a stationary and a revoluble member, the joint between the stationary and revoluble member being made substantially fluid tight, and the said revoluble member being loosely connected to the shaft so that the revoluble member and the shaft are



compelled to revolve in substantial unison with each other but so that the shaft nevertheless has freedom of transverse motion within the revoluble member, which motion the revoluble member is not compelled to follow.

[Claims 1 and 3 not printed in the Gazette.]

1,268,908. MACHINE FOR CUTTING PIECED LIFTS AND FOR BUILDING HEEL-BLANKS THEREFROM. WILLIAM WOLFE and DENNIS PARKS, St. Louis, Mo. Filed Dec. 31, 1914. Serial No. 879,858. (Cl. 12—42.)



1. In a machine of the class described, in combination with a die, a constantly reciprocable, pivotally-mounted actuator located above said die, and a swinging cutting-block movable to a position under said actuator.

5. In a machine of the class described, in combination with the combined die and heel-blank holder of indefinite length, an indicator coöperating therewith and adapted to frictionally engage the column of lifts and to be actuated by the movement thereof in said holder to indicate the thickness of successive lifts cut by said die and forced into said holder.

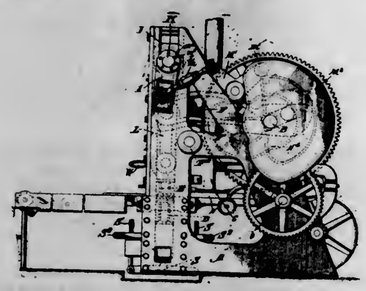
7. In a machine of the class described, in combination with a combined die and heel-blank holder of indefinite length, an indicator having a member adapted to be moved, against the force of gravity, by the movement of a column of lifts in the holder, and means for interrupting at will the operative relation of the indicating device with said column to permit said member to fall to the zero position.

10. In a machine of the class described, in combination with a die and a swinging depressible cutting-block cooperating therewith, a relatively stationary scraper cooperating with said cutting-block, and positioned to have the bottom of the cutting-block pass over and in close proximity to its edge in the swinging movement of said cutting-block.

12. In a machine of the class described, in combination with a cutting die, a rand-holder coöperating with said die, and adapted to hold a rand in position on the cutting end of said die.

[Claims 2 to 4, 6, 8, 9, 11, 13, and 14 not printed in the Gazette.]

1,268,909. TILE-PRESS. FRANK B. YINGLING, Hamilton, Ohio. Filed May 9, 1914. Serial No. 837,536. (Cl. 25—89.)



10. In a tile press, the combination of a lower die, an upper die, a toggle lever having one member connected to the upper die and its other member supported by an eccentric shaft, a power shaft, a pitman connected with the toggle, means rotated by the power shaft and engaging the pitman to reciprocate the latter and extend and break the toggle twice during each rotation of the power shaft, means for simultaneously moving both dies vertically, and connections between the power shaft and the eccentric toggle supporting shaft whereby the eccentric shaft will be adjusted to vary the position of the toggle and upper die relative to the lower die between the successive pressing operations imparted to the toggle during each rotation of the power shaft.

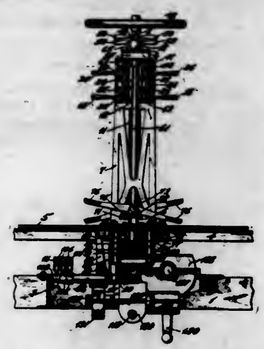
20. In a tile press, the combination of upper and lower dies, an eccentric shaft, a toggle having one member fulcrumed about the eccentric portion of said shaft and its other member connected with one of the dies, means for extending and breaking the toggle to compress a charge of material between the dies twice during each cycle of operation, means for automatically rocking the eccentric shaft between the successive pressing actions occurring twice during each cycle of operation, and an eccentric bushing arranged between said shaft and the surrounding portions of the toggle and adjustable relative to the shaft and toggle to adapt the press to produce tile of different thickness.

[Claims 1 to 9, 11 to 19, and 21 to 25 not printed in the Gazette.]

1,268,910. CONTROL FOR MOTOR-VEHICLES. WILLIAM C. ZELLE, St. Louis, Mo., assignor, by mesne assignments, to Zelle Tractor Company, Wilmington, Del., a Corporation of Delaware. Filed Oct. 12, 1914. Serial No. 866,375. (Cl. 74—39.)

1. A control for motor vehicles comprising a shaft, a hand wheel secured to said shaft, a second shaft, means for operatively connecting said shafts to turn relatively in one direction, means for operatively connecting said shafts to turn relatively in the opposite direction, and means for selectively operating said means.

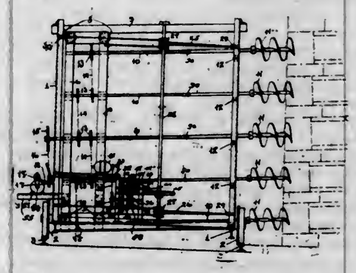
2. A control for motor vehicles comprising two shafts connected together to turn in opposite directions, two pedals secured to each of said shafts and projecting therefrom in opposite directions, means for operatively connecting said shafts to a spring engaged clutch of said motor vehicle, said means comprising a device for holding said clutch out of its clutching position against the action of its spring, said device being releasable by the movement of said means in the direction to throw said clutch into its clutching position, and a platform for the operator extending in front of and behind said pedals to enable the operator to use one set of pedals while facing in one direction and the other set of pedals while facing in the opposite direction.



5. A control for motor vehicles comprising a standard, levers projecting from said standard in opposite directions for controlling the change-speed gearing of the motor vehicle, a steering shaft mounted in said standard, a second shaft operatively connected to the steering wheels of the motor vehicle, means for operatively connecting said steering shaft and said second shaft to turn relatively in one direction; means for operatively connecting said steering shaft and said second shaft to turn relatively in the opposite direction, means for selectively setting said means into operation, and a platform for the operator extending far enough around said standard to enable the operator to use one set of levers while facing in one direction and the other set of levers while facing in the opposite direction.

[Claims 3 and 4 and 6 to 17 not printed in the Gazette.]

1,268,911. CLEANING APPARATUS FOR RETORTS. RICHARD ZIESING, Cleveland, Ohio, and GEORGE F. CARPENTER, Clarksburg, W. Va., assignors to The Grasselli Chemical Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 13, 1916. Serial No. 108,974. (Cl. 214—24.)

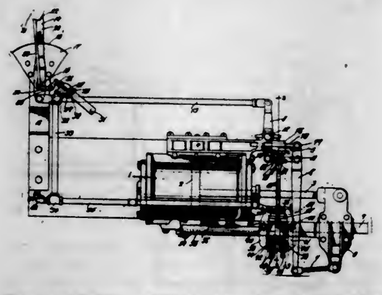


1. In a retort cleaning apparatus, the combination of a frame adapted to be positioned before a series of retorts, a carriage movably mounted on said frame toward said retorts, shafts rotatably mounted on said carriage and operable in unison, and cleaning tools flexibly joined to said shafts and normally supported on said frame, said tools being capable of upward or horizontal movement to enable them to be automatically alined in said retorts.

2. In a retort cleaning apparatus, the combination of a frame adapted to be positioned before a series of retorts, rollers mounted in said frame, a carriage movably mounted on said frame toward said retorts, shafts rotatably mounted on said carriage and operable in unison, a cleaning tool connected to each of said shafts with a universal joint and normally supported on said rollers in said frame in parallelism with each other, a motor mounted on said frame, sheaves also mounted on said frame, connections between said motor and said sheaves permitting rotation of the latter in either direction, and cables controlled by said sheaves and attached to said carriage for moving the same in either direction.

3. In a cleaning apparatus, the combination of a frame adapted to be positioned before a series of retorts, rollers mounted in said frame, a carriage movably mounted on said frame, toward said retorts, shafts rotatably mounted on said carriage and operable in unison, a cleaning tool connected to each of said shafts, with a universal joint normally supported on said rolls in said frame in substantially parallel alinement, said shafts and tools being freely movable over and above said rollers to allow them to be self-alining in said retorts, and means for rotating said shafts.

1,268,912. REVERSING-GEAR. STEPHAN BAADER, Philadelphia, Pa. Filed Feb. 19, 1917. Serial No. 149,624. (Cl. 121—98.)



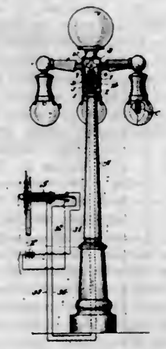
1. The combination with a reversing gear having a main piston and a valve controlling the movement of the main piston, of two separate means for locking the valve and piston, and common coupling means connected to said locking means whereby the movement of one of said locking means serves to actuate the other, substantially as described.

10. The combination with a reversing gear including an actuating member and a valve rod, of a rack movable in conjunction with said member, a rack movable in conjunction with said valve rod, latches for engagement with both of said racks, a member operatively connected to the latches of both of the racks, means providing a piston chamber, a piston movable in said chamber, means for supplying fluid under pressure to said chamber whereby the piston is actuated to move the latches out of locking engagement with the racks, and means operative to move the latches into contact with the rack when the pressure of said fluid is reduced, substantially as described.

[Claims 2 to 9 and 11 to 14 not printed in the Gazette.]

1,268,913. ELECTROMAGNETIC VALVE FOR GAS-LIGHTING SYSTEMS. EDWARD E. BAIR and JAMES E. STOUT, Hanover, Pa.; said Stout assignor to said Bair. Filed Dec. 1, 1916. Serial No. 134,518. (Cl. 137—4.)

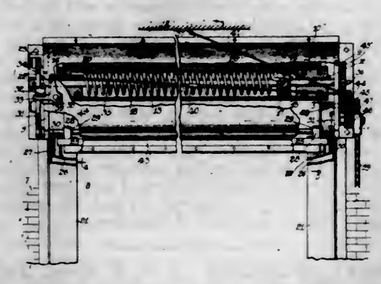
1. In means for controlling the flow of gas, a valve structure located in and forming a portion of the gas conduit, and electromagnetic means for controlling valve movements, said valve structure including a pair of members threaded together and combinedly providing a pair of external shoulders between which the coil of the magnet is positioned, said shoulders being carried by the respective members to permit ready assemblage of the coil relative to the valve structure, one of said members carrying a valve seat, an armature extending axially of said members and carrying the valve member coöperating with respect to said seat; said armature extending permanently within the planes of the coil, and a permanent magnet carried by the other member in axial alinement with the armature, said members having formations adapted to permit of passage of gas therethrough when the armature has been moved to open the valve.



6. In means for controlling the flow of gas, a valve structure located in and forming a portion of the gas conduit, and electromagnetic means for controlling valve movements, said valve structure including a pair of members threaded together to form a seat for a magnet coil of the magnetic means, one of said members carrying a valve seat, the other of said members extending axially of the coil and having an inwardly extending flanged portion, a permanent magnet carried by said flanged portion, the latter being perforated independent of the permanent magnet seat to permit passage of gas from one side to the other of the flanged portion, and an armature extending axially of the permanent magnet carrying member and having a valve at its lower end coöperating with said seat, said members having formations adapted to permit of passage of gas therethrough when the armature has been moved to open the valve.

[Claims 2 to 5 not printed in the Gazette.]

1,268,914. ROLLING SHUTTER. WALTER H. BARRY and THOMAS E. COLLINS, Chicago, Ill. Filed May 27, 1914. Serial No. 841,241. (Cl. 189—58.)



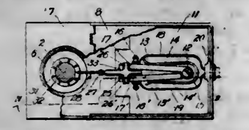
1. In combination, a rotatable member, a rolling shutter mounted on said member to be wound thereon and unwound therefrom, a spring counteracting the unwinding

rotation of said member substantially to balance said curtain in its normal wound, unwound or partially unwound condition, a centrifugal governor comprising a stationary drum and outwardly flying brake shoes for frictional engagement with said drum, said brake shoes being arranged for rotation with said rotatable member but being normally inoperative to secure braking action, and means for applying an excess load to the curtain to overbalance the spring, said brake shoes engaging said drum to secure braking action in the abnormal condition in which the spring is overbalanced by the excess load.

2. In combination, a rotatable member, a rolling shutter mounted on said member to be wound thereon and unwound therefrom, a spring counteracting the unwinding rotation of said member substantially to balance said curtain in its normal wound, unwound, or partially unwound condition, a centrifugal governor comprising a stationary drum and outwardly flying brake shoes for frictional engagement with said drum, said brake shoes being arranged for rotation with said rotatable member but being normally inoperative to secure braking action, a weight for addition to the curtain to overbalance the spring, and means for automatically controlling the application of said weight to said curtain, said brake shoes engaging said drum to secure braking action in the abnormal condition in which the spring is overbalanced by the application of said weight to said curtain.

3. In combination, a rotatable member, a rolling shutter mounted on said member to be wound thereon and unwound therefrom, a spring counteracting the unwinding rotation of said member substantially to balance said curtain in its normal wound, unwound or partially unwound condition, a centrifugal governor comprising a stationary drum and outwardly flying brake shoes for frictional engagement with said drum, said brake shoes being arranged for rotation with said rotatable member but being normally inoperative to secure braking action, a weight for addition to the curtain to overbalance the spring, and heat responsive means for normally preventing the application of said weight to said curtain and for automatically releasing said weight for application thereof to said curtain, said brake shoes engaging said drum to secure braking action in the abnormal condition in which the spring is overbalanced by the application of said weight to said curtain.

1,268,915. BURGLAR-ALARM FOR AUTOMOBILES. HIRAM A. BEALL, Kansas City, Mo. Filed Mar. 16, 1917. Serial No. 155,255. (Cl. 177—314.)

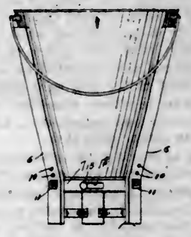


1. In a motor vehicle, the combination with an inclosed steering post, battery and signaling device, of a switch controlled circuit through the battery and signaling device; said switch comprising pivotally mounted arms, contact points mounted on said arms, a spring bearing against said arms to urge said contact points together, a key removably mounted between said arms to normally prevent engagement of the contact points, a hook pivotally connected with said key, an annular flange fixed about the steering post having apertures therein for receiving said hook so that actuation of said post will unseat the said key to close a circuit through the system.

[Claims 2 to 4 not printed in the Gazette.]

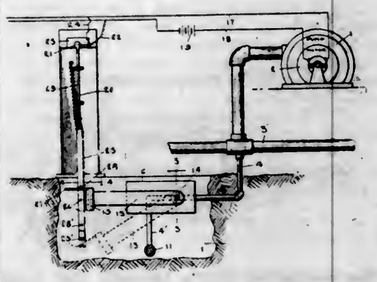
1,268,916. PAIL-HOLDER. PAUL H. BLACK, Algona, Iowa. Filed Aug. 23, 1917. Serial No. 187,816. (Cl. 248—41.)

A device of the class described, comprising a base, resilient arms extending upwardly from said base and provided with vertically alined openings, a supporting member disposed between said arms and formed from a single length of material having its ends overlapping and provided with registered slots, means engaging in said slots for securing the ends in adjusted positions whereby to



permit of variations being made in the sides of said supporting member, bolts carried by said supporting member and extending through the openings in said arms whereby to permit of a vertical adjustment of said supporting member, and means engaging said bolts to secure said supporting member in adjusted positions.

1,268,917. PUMPING APPARATUS. WILLIAM E. BLACKSTONE, Buchtel, Ohio. Filed Oct. 19, 1916. Serial No. 126,500. (Cl. 103—86.)



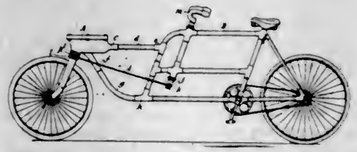
1. In a device of the class described, a motor, a pump driven thereby, in combination with a circuit for said motor, a line pipe for said pump, a branch suction pipe, a valve in the last mentioned pipe, a float connected to said valve and adapted to operate the same, a circuit closer in said circuit and means actuated by said float for closing said circuit, substantially as described.

3. In a device of the class described, a motor and a pump driven thereby in combination with a circuit for said motor and a line pipe for said pump, a branch suction pipe, a valve in the last mentioned pipe, an arm fixedly connected to said valve, a float on said arm, a circuit closer for said circuit, an operative connection between said float and said circuit closer, and means for adjusting the connection between said float and said circuit closer, substantially as described.

6. In a device of the class described, a motor and a pump operated thereby in combination with a circuit for said motor, a line pipe for said pump, a branch suction pipe, a valve in said last mentioned pipe, an arm fixedly conected to said valve, a float on said arm, a vertically reciprocating member adjacent said float, a circuit closer for said circuit comprising a pair of contacts, one of said contacts being fixed and the other arranged on said vertically reciprocating member, said reciprocating member being provided with a plurality of apertures, a pin selectively mounted in said apertures and means on said float for engaging said pin, substantially as described.

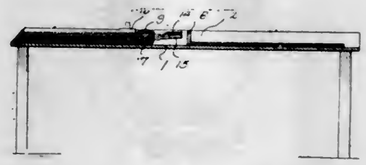
[Claims 2, 4, 5, and 7 to 9 not printed in the Gazette.]

1,268,918. VELOCIPEDE. JEAN BLANCHARD, Bordeaux, France. Filed Jan. 3, 1916. Serial No. 70,053. (Cl. 208—45.)



In a bicycle or the like, the combination of a frame including an inclined, tubular front member or bearing sleeve; a steering post rotatably fitted in said sleeve; upper and lower forwardly-extending members fastened at their rear ends to said sleeves; a luggage-carrier connected to the front ends of said forwardly-extending members; a front wheel fork rotatably secured to said carrier in rear of the front end thereof; and a steering connection between said fork and said post; said carrier having its center of gravity disposed above and approximately in line with the axis of said fork, whereby the weight of the luggage in the carrier is substantially borne by the front wheel and tends to constantly maintain said front wheel in a vertical plane.

1,268,919. DEVICE FOR HANDLING CRACKERS AND THE LIKE. ALBERT BLEILE, Dayton, Ohio. Filed Dec. 6, 1917. Serial No. 205,794. (Cl. 107—7.)



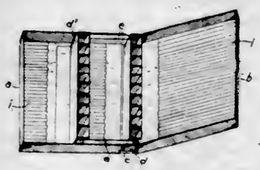
1. The combination with a structure adapted to support a plurality of superimposed sheets of crackers in vertical alinement, the crackers in each sheet being arranged in parallel rows, of a device to grip the superimposed sheets along substantially their full width and arranged to exert pressure thereon along the line of division between two transverse rows of crackers.

4. The combination with a structure comprising an elongated table top adapted to support a plurality of superimposed sheets of crackers, the crackers of each sheet being arranged in parallel rows, one portion of said table having side walls spaced apart a distance approximately equal to the width of the sheets of said crackers, and another portion of said table having side walls spaced apart a distance greater than the width of said sheets of crackers, one of said last-mentioned side walls being movable to engage the edge of the pile and move the several sheets into alinement, a movable partition interposed between the two parts of said table and forming an abutment against which the ends of the several sheets may be alined and which may be removed to permit a pile of alined sheets to be moved onto the first-mentioned portion of said table, of a device to grip one edge of said pile of sheets along substantially the full length thereof, and having a part to engage the uppermost sheet near the line of division between two rows of crackers, and having means for manipulating the same to cause pressure to be applied to said sheets along the line of division of the two rows of crackers.

13. The combination with a table to support a pile of superimposed sheets of crackers, each sheet comprising a plurality of rows of crackers, a pressure board to engage the uppermost sheet of said pile at a point remote from the edge thereof, a pair of jaws adapted to embrace the edge of said pile of sheets, one of said jaws having its edge arranged along the line of division between the two rows of crackers, and means to manipulate said jaws to impart bodily turning movement thereto and to cause said edge of said jaw to exert pressure on said row of crackers.

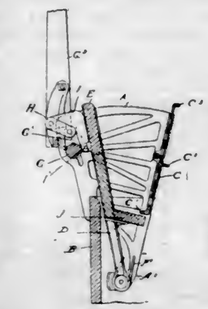
[Claims 2, 3, and 5 to 12 not printed in the Gazette.]

1,268,920. BOX FOR HOLDING AMPULLÆ, PHIALS, AND THE LIKE. PAUL BOTS, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Oct. 2, 1915. Serial No. 53,671. (Cl. 206—12.)



A box for holding ampullæ, phials and the like, comprising two box sections arranged to be inserted within one another, a movable connection part between said box sections allowing them to be folded back flat, and having a width corresponding substantially to the height of said box sections, a cellular gripping holder carried by said movable connection part so as to stand up in an upright position when the box is being opened, an additional cellular gripping holder arranged within one of the box sections so as to be movable in the same direction as the first cellular holder, and coupling means between said cellular holders so arranged as to cause a simultaneous raising and tilting thereof in the same direction, substantially as described.

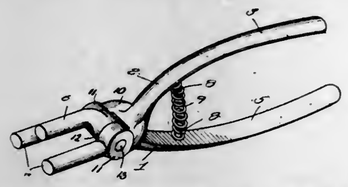
1,268,921. MOP-WRINGER. RICHARD A. BRACE, Fultonville, N. Y., assignor to White Mop Wringer Company, Fultonville, N. Y., a Corporation of New York. Filed Nov. 9, 1917. Serial No. 201,020. (Cl. 15—12.)



1. In a mop wringer, side frames provided with means to engage the wall of a pail, a presser board carried by the side frames, swinging members pivoted to the frames carrying a presser board, a shaft journaled in the frame having rocker arms spaced apart and also from the ends of the shaft with a hole in each arm in axial alinement to receive the pin of a toggle lever mechanism, and with an operating arm at one end of the shaft offset from radial alinement with the rocker arms and also laterally therefrom, whereby the pivot holes in the latter may be drilled from each end of the shaft, and toggle lever mechanism pivoted to said rocker arms and to said swinging members.

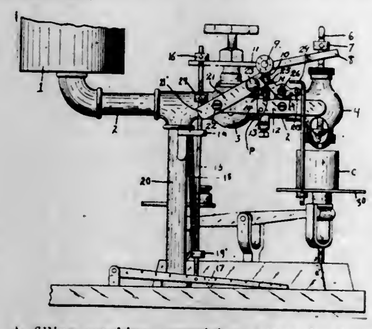
2. In a mop wringer, a frame having a presser plate, swinging members pivoted to the frame and provided with a presser board, a shaft journaled in the frame and provided at points spaced from its ends with spaced rocker arms having holes at their outer portions, an operating arm located at one end of the shaft in spaced relation with the adjacent rocker arms and also spaced laterally therefrom to permit the said holes in the rocker arms to be drilled from each end of the shaft, and means for connecting the swinging members with the rocker arms having pivots arranged in the holes of the latter.

1,268,922. IMPLEMENT FOR TIGHTENING WIRE FENCES. REMBERT L. BRYAN, Zephyrhills, Fla. Filed Sept. 16, 1914. Serial No. 862,066. (Cl. 81—15.)



A wire crimper comprising a member including a handle, a cross-head carried by one end of the handle and spaced parallel cylindrical fingers carried by the ends of the cross-head, a second member including a handle, a transverse head carried by one end of the handle and a cylindrical finger carried by the said transverse head between the ends thereof, said second member being disposed with its transverse head between the fingers of the first member adjacent to their attached ends, and a pivot pin engaged through the transverse head of the second member and through the fingers of the first member for movement of the two members to shift the fingers thereof toward and away from each other, the fingers of the first member extending radially of the point of pivotal connection and the finger of the second member being offset to lie tangentially to the pivot point of the members whereby the finger of the second member will lie at times in a plane spaced from the common plane of the fingers of the first member and parallel to the fingers of the first member and at times at an angle to the fingers of the first member and projecting therebetween, all of the fingers being straight throughout the entire length of their coacting portions.

1,268,923. FILLING-MACHINE. CHARLES H. BUCHHOLZ, deceased, Cleveland, Ohio, by Anna Buchholz, executrix, Cleveland, Ohio. Filed Mar. 20, 1915, Serial No. 15,751. Renewed Apr. 13, 1918. Serial No. 228,505. (Cl. 73—181.)

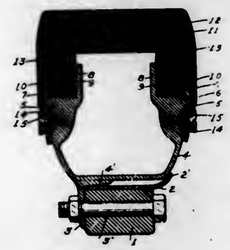


1. A filling machine comprising means for automatically stopping the flow of fluid into a container to be filled, said means consisting of a faucet, a spring pressed valve in said faucet, a rocking arm pivotally attached to said machine, one end of said rocking arm engaging the valve stem of said faucet and the other end of said arm adapted to be operated to raise said valve stem, a pawl on said rocking arm adapted to engage a notch in an overbalanced pivotally mounted dog, in combination with an auxiliary pivotally mounted weighted lever, the weighted end of which is adapted to be elevated, a notch in the end of said weighted lever adapted to be engaged by an overbalanced dog, and a balancing device provided with means for tripping said latter dog to allow said auxiliary pivoted mounted lever to trip aforesaid pivotally mounted dog to disengage said pawl from said dog for the purpose set forth.

2. A filling machine comprising a faucet, a balancing devnce provided with means for operating closing mechanisms in said filling machine, said mechanisms comprising a pivotally mounted arm provided with a pawl, one end of said arm engaging the valve stem of said faucet and the other end of said arm adapted to elevate said stem, a pivotally mounted arm provided with a notch to engage said pawl and an auxiliary weighted arm adapted to trip said aforesaid pivotally mounted arm for the purpose set forth.

[Claims 3 to 6 not printed in the Gazette.]

1,268,924. TIRE. HERBERT A. BURCH, Kalamazoo, Mich. Filed Dec. 14, 1915. Serial No. 66,845. (Cl. 152—10.)

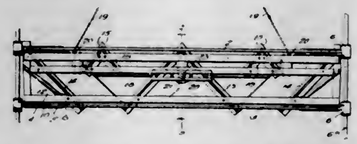


1. In a tire, the combination of a metal channel-shaped body member adapted to be mounted on a rim and having channel-like cushion seats in the peripheries of its side portions, the outer walls of said seats being relatively narrow, annular flat faced cushion members arranged in said seats, said cushion members being shouldered to overhang the outer walls of said seats with the outer sides of the cushion members substantially flush therewith, and a resilient tread member mounted on said cushion members and provided with side flaps fitting over the sides of said cushion members and lapped upon and secured to the sides of said body member, said body and tread members constituting a chamber adapted to contain air under pressure.

2. In a tire, the combination of a metal channel-shaped body member adapted to be mounted on a rim and a resilient tread member mounted on said body member and provided with flaps fitting over the edges of said body member and terminating on the sides thereof, the width of the tread being substantially that of the greatest width of the body member, said body member and tread members together constituting a chamber adapted to contain air under pressure, the edges of said flaps being secured throughout to the sides of said body member and adjacent the edges thereof by clamping means engaging the side of the said body member.

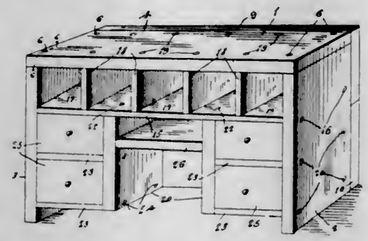
1,268,925. SUBGRADE-SCRAPER. EDWARD GEORGE CARR, Oakland, Cal. Filed Mar. 7, 1917, Serial No. 153,044. Renewed Nov. 15, 1917. Serial No. 202,257. (Cl. 37—5.)

1. A scraper of the character specified comprising a frame, scrapers carried by the frame, wheels for supporting the frame and means at the center of the frame for raising the frame, the frame being rotatable on the said means, and the said means comprising a shoe adapted to engage the ground, a shaft journaled on the frame to which the lower end of the shoe is connected, a bearing frame through which the shaft extends, said shaft having fixed collars above and below the frame, elbow levers pivoted to the ends of the frame, and links connecting the said levers with the main frame.



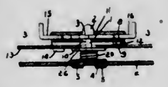
2. A scraper of the character specified comprising a frame, scrapers carried by the frame, shafts extending longitudinally of the frame at opposite sides thereof and at the outer sides of the frame, wheels on the ends of the shafts, a connection between each shaft and the frame for permitting the shaft to be raised or lowered with respect to the frame and to be held in adjusted position, and means at the center of the frame for raising the frame, the frame being rotatable on the said means.

1,268,926. DESK ATTACHMENT FOR TABLES. IRWIN LEWIS CATON, Asheville, N. C. Filed May 19, 1917. Serial No. 169,771. (Cl. 45—75.)



A take down desk top for tables comprising a plurality of independent sections consisting of a top wall, a two part rear wall, side walls, vertical and horizontal partitions arranged between the walls, said walls and partitions having a plurality of registering apertures formed therein and removable fastening rods adapted to frictionally seat in said registering apertures to hold the walls and partitions in position, as and for the purpose specified.

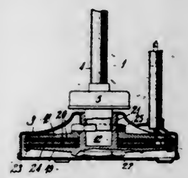
1,268,927. SEPARABLE FASTENER. HARRY H. COBE, Boston, Mass., assignor to Burd Ring Sales Company, Buffalo, N. Y., a Corporation of New York. Filed June 28, 1917. Serial No. 177,582. (Cl. 24—211.)



4. In a separable fastener, the combination with a stud member, of a socket member, stud-retaining means carried by the socket member, a spring encircling the shank of the stud and placed under tension when the stud is entered into the socket member, and means to retain the spring on the stud when the latter is withdrawn from the socket member.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,268,928. PERCOLATOR-HEATER. ORA A. COLBY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Apr. 2, 1913. Serial No. 758,316. (Cl. 219—41.)



1. In an electrical heating apparatus, a flanged member having a hollow central hub constituting a liquid-receiving well, a second flanged member having a central aperture therein of a size to receive and closely fit around a portion of said hub, and a heater element clamped between the flanges of the said members, one of said members having an integral portion engaging the other member to secure said members together.

2. In an electrical heating apparatus, a flanged member having a central exteriorly screw-threaded hollow hub constituting a liquid-receiving well, a second flanged member having an interiorly screw-threaded aperture to receive and closely fit the screw-threaded portion of said hub, and a heater element between the flanges of the said members, the screw threads on said members coöperating to clamp said element and members together.

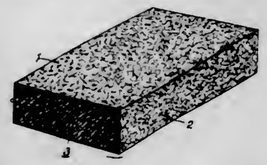
3. In an electrical heating apparatus, a member defining a liquid-receiving well and having an integral, outwardly-extending flange, a heating element supported on the said flange, an annular member surrounding the first-named member adjacent to the said well and having an outwardly-extending flange resting on the said heating element, and means for clamping the said heater element between the said flanges.

4. In an electrical heating apparatus, a member defining a liquid-receiving well and having an integral, outwardly-extending flange, a heating element supported on the said flange and an annular member surrounding the first-named member adjacent to the said well and having an outwardly-extending flange resting on the said heating element, the outer edge of one of the said flanges being bent over the adjacent edges of the other flange and of the said heater element.

6. In an electrical heating apparatus, a member defining a liquid-receiving well and having an integral, outwardly-extending flange, a heating element supported on the said flange, an annular member surrounding the first-named member adjacent to the said well and having an outwardly-extending flange resting on the said heating element, means for clamping the said heating element between the said flanges, and a casing surrounding both of the said members and spaced therefrom.

[Claim 5 not printed in the Gazette.]

1,268,929. REINFORCED-PLASTER BODY. WILLIAM E. CONNIFF, Kansas City, Mo., assignor of one-half to Edward J. Cutting, Kansas City, Mo. Filed Nov. 15, 1915. Serial No. 61,525. (Cl. 72—30.)



1. A body composed of plaster mixed with wood fiber, and perforate reinforcing material embracing the sides

and edges of the body and embedded therein flush with the surface thereof.

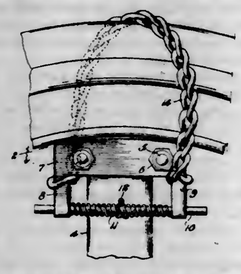
2. A body composed of cementitious material mixed with yielding fibrous material, and perforate reinforcing material embedded therein flush with the surface thereof.

1,268,930. MANICURING IMPLEMENT. JOHN EDWARD COOK, Little River, S. C. Filed Dec. 9, 1916. Serial No. 136,038. (Cl. 30—23.)



In a manicuring implement, a nut including a body having a polygonal periphery and oppositely projecting tubular extensions of less diameter than the body and externally threaded, the nut having an axial bore of common diameter from end to end, the walls of the extensions being imperforate; tools having reduced integral shanks defining shoulders at the inenr ends of the tools, the shoulders abutting against the ends of the extensions, the shanks being received in the bore and completely filling the same, one shank having a terminal recess, and the other shank having a reduced stem threaded into the recess and forming a shoulder which engages the end of the recessed shank; and caps housing the toools and threaded upon the extensions, the polygonal periphery of the body lying within a space defined by extending the outer surface of either cap.

1,268,931. ANTISKID DEVICE FOR AUTOMOBILE-WHEELS. BURTON G. COPE, Orrville, Ohio. Filed Feb. 2, 1918. Serial No. 215,156. (Cl. 152—14.)

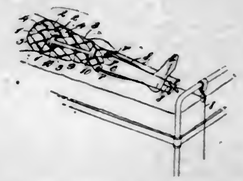


1. In an anti-slipping attachment for vehicle wheels, a head member secured upon the side of a spoke of said wheel, bifurcations upon the said head member, a bolt slidably mounted through apertures in said bifurcations, the extremities of the said bolt being designed to project through the apertures in the said bifurcations and to be withdrawn to permit the opposite end links of a chain section to be passed over said bifurcations, and means upon the said bolt for normally positioning it with its extremities projecting through the apertures in the bifurcations.

3. In an anti-slipping attachment for vehicle wheels, a head member, a U-bolt adapted to be fitted about a spoke of the said vehicle wheel and to secure the said head member upon the said spoke, bifurcations upon the said head member adapted to receive a link at the opposite end of a chain member wrapped diagonally about the tire upon the said vehicle wheel, horizontally alined apertures formed in the said bifurcations at a point adjacent their free ends, a sliding bolt adapted to fit within the said apertures and to be positioned with its extremities projecting through the said apertures and to be normally held in said position by a spring coiled about said bolt, the said spring being secured at a point intermediate its ends to the said bolt.

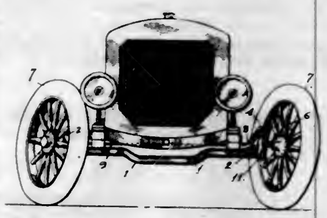
[Claim 2 not printed in the Gazette.]

1,268,932. EXTENSION-BANDAGE. FRANK P. CORRIGAN, Cleveland, Ohio. Filed Sept. 15, 1916. Serial No. 120,269. (Cl. 128—52.)



The combination with a tubular extension bandage composed of a plurality of strips braided together, of a splint having its ends inserted into said braided strips.

1,268,933. STEERING MECHANISM. ELMER T. COX, San Francisco, and WILLIAM E. COX, Oakland, Cal. Filed Mar. 21, 1917. Serial No. 156,479. (Cl. 21—141.)

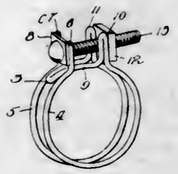


1. A steering mechanism for vehicles comprising an axle having a sleeve on each end thereof; a wheel for each sleeve having its axis pivotally mounted within the sleeve said sleeve being inclined toward the rear of the vehicle whereby the wheels are inclined toward the direction in which they are being turned when steering; and means for raising the inner end of one wheel axis and lowering the inner end of the other wheel axis simultaneously when said wheels are turned when steering whereby the elevation of the axle may be retained.

3. A steering mechanism comprising an axle having a hollow rearwardly inclined sleeve on each end thereof, each sleeve being provided with an inclined spiral slot, the inclination of the slot in one sleeve being opposite to that of the slot in the other sleeve and of equal pitch; a spindle rotatably mounted within each sleeve; a lateral wheel axis secured to each spindle and extending through the slot in the sleeve; a wheel rotatably mounted upon each lateral axis; and means for turning both wheels simultaneously whereby said wheels may be inclined toward the direction in which they are turned to partially offset the lateral thrust occasioned by turning.

[Claim 2 not printed in the Gazette.]

1,268,934. HOSE-CLAMP. WILLIAM L. CRABILL and WILLIAM E. WILEY, Battle Creek, Mich. Filed Sept. 22, 1917. Serial No. 192,662. (Cl. 24—19.)



1. A hose clamp consisting of a single length of wire folded at its center and bent to provide double coils

spaced apart uniformly except at the folded end which is adapted to enter between the free ends, the coils near the folded end being each crimped to provide a bearing for a nut, and the free ends being each turned in substantially parallel relation to the crimps, an eye plate secured between the turned free ends of the coils, a nut secured between the crimps, and a threaded element between the eye plate and nut adapted to draw the ends of the clamp together, substantially as described.

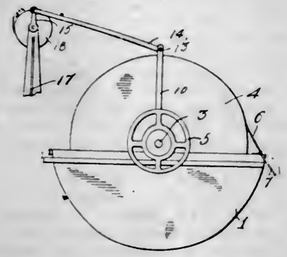
2. A hose clamp consisting of a single length of wire bent to provide double coils spaced apart uniformly for the major portion of their length, the coils near one end thereof being provided with a crimp and near the other end with a bend, an eye plate welded to the coils near one end, a nut welded to the coils near their other end, and a threaded bolt between the eye plate and nut adapted to draw the ends of the clamp together, substantially as described.

3. A hose clamp consisting of a single length of wire bent in double formation and curved to provide two coils adapted to surround a hose in parallel relation, the wire being bent laterally between the coils to provide a tongue at one end of the coils adapted to occupy a lapping relation with the other end of the coils, bends in the coils near the ends thereof providing bearings in substantially radial relation to the axis of the hose, an eye plate extended transversely between one set of bearings and a nut between the other, and a threaded bolt between the eye plate and nut adapted to draw the ends of the clamp together.

4. A hose clamp consisting of a single length of wire bent in double formation and curved to provide two coils adapted to surround a hose, the two coils at corresponding places being crimped to provide bearings one in line with each coil for an element extending transversely therebetween, the lapping sections of wire forming the crimp being welded together, and each coil being elsewhere bent at corresponding places to provide bearings for another transverse element, two elements arranged transversely between the different sets of bearings, and a threaded bolt between the two transverse elements for drawing the ends of the clamp together, substantially as described.

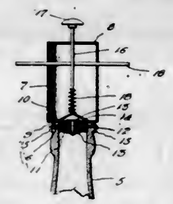
5. A hose clamp consisting of a single length of wire bent to provide an encircling coil for a hose, and having near one end thereof a crimp formed by bending portions of the wire in parallel relation in the plane of the coil and in a direction substantially radial with respect to the axis of the hose and welding together the facing surfaces of the wire portions which form the crimp, the other end of the wire coil being provided also with a bent portion extending in a direction which is likewise substantially radial with respect to the axis of the hose, elements engageable by a bolt secured to the crimp and to the bent portion at the other end, and a bolt arranged operatively between the elements, substantially as described.

1,268,935. PULP-FILTER. TOBIAS L. CRANE, Tyrone, N. Mex. Filed Apr. 5, 1917. Serial No. 160,043. (Cl. 92—86.)



A pulp filter comprising a casing, a suction drum, bearings formed on said casing and rotatably supporting said drum, a pair of arcuate shaped members disposed in said casing, upwardly and inwardly extending arms formed on said members, journals formed on said arms and rotatably supported by said bearings, a plurality of angle iron members connecting the arcuate shaped members and having their apexes disposed adjacent the drum to remove pulp therefrom, and means oscillating the arcuate shaped members.

1,268,936. BOTTLE-STOPPER. LEWIS O. CULVER, Fortyfort, Pa., assignor of one-third to George W. Culver, Fortyfort, Pa. Filed Apr. 13, 1917. Serial No. 161,847. (Cl. 215—33.)



1. A bottle closure including a stopper, a casing carried thereby and closed at each end, said casing having oppositely diverging openings in its lower end, a substantially V-shaped plate arranged within said casing and having its opposite ends extended through said openings and bent to provide hooks, and a reciprocating rod secured to said plate at the apex thereof.

3. A closure, including a stopper, a casing carried thereby said casing having oppositely diverging openings formed in its lower end, gripping members movable in said openings, an operating rod movably supported by said casing, and resilient means connecting said rod and gripping members.

[Claims 2, 4, and 5 not printed in the Gazette.]

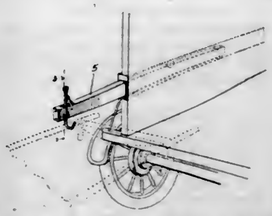
1,268,937. PACKAGE-TIE. NORVAL CUNNINGHAM, Pennsboro, W. Va. Filed Dec. 21, 1917. Serial No. 208,279. (Cl. 24—131.)



1. A package tie comprising a main elongated loop and auxiliary loops formed from a single strand of wire with the extremities of the same wrapped around the three loops, said main and auxiliary loops having parallel clamping portions.

[Claims 2 to 4 not printed in the Gazette.]

1,268,938. STRETCHER AND CASKET SUPPORT. WILLIAM DENEKE, Covington, Ky. Filed Jan. 7, 1918. Serial No. 210,646. (Cl. 21—80.)



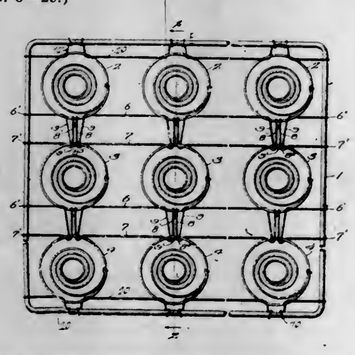
1. A stretcher support comprising a casing located in the side of a vehicle, an arm reciprocally mounted in the

casing, and means on the end of the arm adapted to support a stretcher.

2. A stretcher support comprising a casing located in the side of a vehicle, an arm reciprocally mounted in the casing, means on the end of the arm adapted to support a stretcher, and means adapted to release the stretcher from the support.

3. A stretcher support comprising a casing located in the side of a vehicle, an arm reciprocally mounted in the casing, a hook located at the end of the arm, and means adapted to raise the hook to receive a stretcher when the arm is in the withdrawn position and adapted to lower the hook to releaae the stretcher when the arm is retracted into the casing.

1,268,939. WIRE MATTRESS. FRANK P. DOOLEY, Chicago, Ill. Filed Jan. 14, 1918. Serial No. 211,816. (Cl. 5—29.)

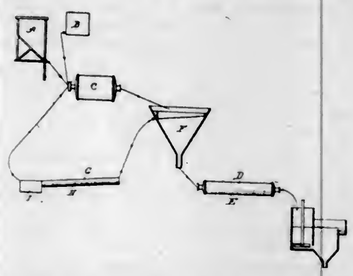


A wire mattress including a rectangular frame; a plurality of coiled springs disposed perpendicularly to the plane of the frame and arranged in spaced apart rows that extend longitudinally of the frame and which springs are also arranged in rows that extend transversely of the frame, end coils of the springs being substantially in the plane of the frame; and substantially parallel pairs of tie rods margining opposite sides of the spaces between parallel rows of springs and secured at their ends to opposite sides of said frame, the tie rods of each pair being formed with loops that extend across from one row of springs to the adjacent row of springs, each loop having its base and bight respectively in hinge engagement with adjacent sides of the top coils of the two adjacent springs in adjacent rows, the top coil of one of these two adjacent springs being disposed between the base of one loop and the bight of the companion loop, and through which bight the other loop passes, the base of said companion loop passing through the top coil of the other of these two springs, said loops having formations for engaging the top coils of these two springs to prevent material approach or separation thereof whereby the rows of springs margined by the tie rods are maintained substantially parallel.

1,268,940. PROCESS FOR CONCENTRATING ORES. BENJAMIN H. DOSENBACH, Butte, Mont. Original application filed Dec. 7, 1915, Serial No. 65,485. Divided and this application filed Mar. 7, 1918. Serial No. 220,960. (Cl. 75—18.)

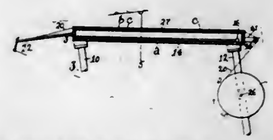
1. A process of concentrating ores containing copper in different chemical compounds, one of such compounds being sulfid of copper, which consists in subjecting the ore to the action of a solvent which causes the non-sulfid copper to go into solution while leaving the sulfid copper substantially unaltered, precipitating the dissolved copper in the metallic state in the mixture of ore and solvent, and then separating the precipitated copper and sulfid copper from the gangue by flotation.

2. A process for concentrating ores containing sulfid copper and compounds of copper that are convertible into sulfates by the action of sulfuric acid comprising the operations of subjecting the ore to the action of sulfuric



acid thus forming copper sulfate, precipitating the copper in the metallic state in the mixture of ore and acid, and then separating the precipitated copper and the sulfid copper from the gangue by flotation.

1,268,941. APPARATUS FOR TREATING COATED FABRICS. WILLIAM P. EGAN and JOHN J. SHEEHAN, Lynn, Mass. Filed May 7, 1917. Serial No. 166,862. (Cl. 91—55.)



1. In an apparatus of the character described, in combination, a steam chamber provided with a perforated wall with which a coated fabric coöperates to be moistened and heated by steam passing through said perforated wall, and having an inlet for moist steam, and a heat radiator separate from the walls of said steam chamber and located in said steam chamber to increase the heat therein without impairing the effectiveness of the moist steam on the fibrous layer of a coated fabric movable over said perforated wall.

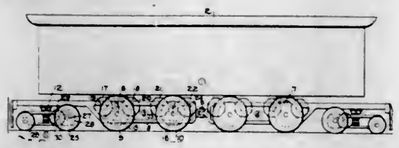
3. In an apparatus of the character described, in combination, a steam chamber provided with a perforated wall, with which a coated fabric coöperates to be moistened and heated by steam passing through said perforated wall, a steam inlet pipe extended into said chamber and provided with perforations for the passage of moist steam through the pipe into said chamber, and a heat radiator separate from the walls of said chamber and located in said chamber and capable of radiating heat therein to increase the heat within said chamber without impairing the effectiveness of the moist steam upon the fibrous layer of a coated fabric movable over said perforated wall.

4. In an apparatus of the character described, in combination, a steam chamber provided with a perforated wall, a plurality of perforated steam inlet pipes extended within said chamber for substantially the length of the same, and an upwardly inclined steam pipe located between said perforated pipes and substantially closed to the passageway of steam through it and having its inlet end below its upper end.

[Claim 2 not printed in the Gazette.]

1,268,942. LOCOMOTIVE. GEORGE M. EATON, Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 3, 1916. Serial No. 129,280. (Cl. 105—220.)

1. In a locomotive, the combination with a cab, of two running gears pivotally associated therewith, each of said running gears comprising two pairs of main driving wheels mounted in a rigid wheel base and a secondary rigid wheel base pivotally joined to the frame of the running gear.

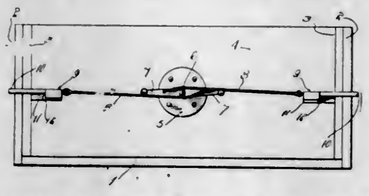


2. In a locomotive, the combination with a cab, of two running gears pivotally associated therewith, each of said running gears comprising two pairs of main driving wheels in a rigid wheel base and a four-wheel pivotal guiding truck, and means for directly transmitting power to one pair of the wheels on said guiding truck.

3. In a locomotive, a running gear comprising a plurality of pairs of main driving wheels, two motors directly connected to each pair of said main driving wheels, a four-wheel pivotal truck, and one motor directly connected to one pair of wheels on said pivotal truck.

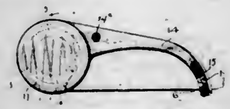
[Claims 4 to 12 not printed in the Gazette.]

1,268,943. END-GATE FASTENER. THOMAS H. EATON, Keysport, Ill. Filed Aug. 28, 1916. Serial No. 117,311. (Cl. 21—21.)



In a wagon body, the combination of an end gate having longitudinal slots in the ends thereof adjacent the sides of the body, fastening clips each formed of a substantially flat plate disposed horizontally with respect to the end gate and projecting rearwardly therefrom, one edge of said plate having a flange abutting said end gate and provided with an opening registering with said slot, means extending through said opening and slot and engaging said flange and end gate whereby to support the fastening clip in operative position, the rear edge of the plate opposite said flange being extended to provide a hook engaging the adjacent side of the wagon body, and means secured to said end gate and connected to said plates for adjusting said hooks in clamping engagement with said sides.

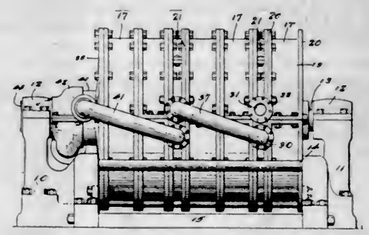
1,268,944. DENTAL-FLOSS DEVICE. FREDERIC ECAUBERT, New York, N. Y. Filed Jan. 3, 1914. Serial No. 810,148. (Cl. 132—12.)



1. A dental floss device comprising in combination a supply of dental floss subdivided into a continuous series of predetermined lengths, a case for containing the same, said case having a peripheral hole through which the supply of dental floss may be withdrawn, and a resilient arm for holding one of said predetermined lengths of dental floss extended under tension, the normal distance from the outer end of said arm to said peripheral hole being slightly greater than one of said lengths.

[Claims 2 to 5 not printed in the Gazette.]

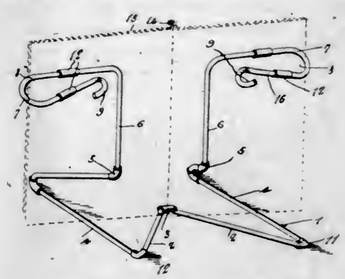
1,268,945. TURBINE-MOTOR FOR USE WITH COMPRESSED AIR. GUSTAF ENGELBREKT, Superior, Wis. Filed Oct. 4, 1917. Serial No. 194,772. (Cl. 253—87.)



2. A turbine of the character described comprising a coaxial series of cylindrical casing sections, respective rotor elements revoluble therein, a common shaft splined in the rotors said rotors being paired and including an end rotor, the rotors in each pair having mutually adjacent open sides and outer closed sides, an annular series of vanes constructed thereon immediately adjacent the periphery and directed inwardly, the faces between the vanes being closed at the outer side immediately adjacent the peripheries of the rotors, an annular flange being formed on each rotor at the open side concentric with the shaft and parallel to the closed portion of the rotor, and extending a distance inwardly of the vanes, nozzle elements carried by the casing elements within the rotors, the nozzles in each pair being directed oppositely to each other, means to admit expansive fluid to one of the nozzles from the exterior, connections between the interior of alternate rotors and the nozzles of the next, in series throughout the turbine, as for the purposes described, alternate casing sections having exterior exhaust ports and connections between said exhaust ports and the nozzles in the second casing sections following in series.

[Claims 1 and 3 not printed in the Gazette.]

1,268,946. BOOK-SUPPORT. FRANK H. FARRIS, Medford, Okla. Filed May 18, 1917. Serial No. 169,516. (Cl. 45—57.)

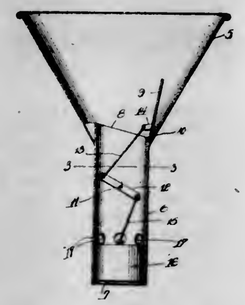


1. A book support comprising a base, vertical supporting arms formed on said base, horizontal supporting arms carried by the vertical supporting arms, and being bent upon themselves to form a space for receiving the front and back of a book, and means for connecting the horizontal arms together to permit the device to support a book horizontally and also to support a note book vertically.

2. A book rack comprising a single length of material having a substantially V-shaped portion, the ends of the arm portions of the V-shaped portion being bent rearwardly and parallel to coöperate with the V-shaped portion in forming a base, the ends of the parallel portions being bent to converge upwardly and forwardly

and later bent upwardly to form vertically supporting arms, the ends of the vertical supporting arms being disposed at right angles in a horizontal plane thereto to form horizontally supporting arms having their free ends bent to form hooks, said hooks adapted to be interlocked with each other for supporting a note book and for supporting a book horizontally.

1,268,947. FUNNEL. CLARENCE T. FELL, Winnipeg, Manitoba, Canada. Filed May 11, 1916. Serial No. 96,923. (Cl. 226—33.)



In a device of the class described, a funnel having the usual bowl and neck portions, a flange extending into the neck portion at the lower end thereof, a float slidably arranged in said neck in the path of liquid passing downwardly through the same and normally resting upon said flange, the said neck being provided with a plurality of openings spaced from the lower end of the said neck a distance equal to the height of said float and through which liquid is adapted to pass from the interior to the exterior of the funnel, a valve at the juncture of the neck and bowl portions, and means connecting the said valve and float for closing the said valve when the float moves upwardly in the neck and for opening the valve when the said float moves downwardly.

1,268,948. FENCE-GATE. JOHN ARTHUR FERRIS, Chicago, Ill. Filed Feb. 1, 1917. Serial No. 145,858. (Cl. 39—80.)

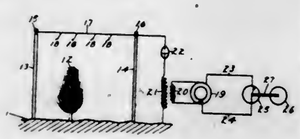


1. In combination with an adjustable gate, a clamp comprising a cam disk provided with semispherical bosses upon each side thereof, a handle extending therefrom, cam plates on each side of said disk, said plates being provided with inclined circular grooves with which the bosses engage, a clamp plate spaced from the cam plates, and bolts *n* connecting said plates substantially as described and shown.

2. In combination with an adjustable gate, a pivoted lock lever having a wheel pivoted to its lower end and lock slats adjacent thereto operated by said lever, substantially as described and shown.

[Claim 3 not printed in the Gazette.]

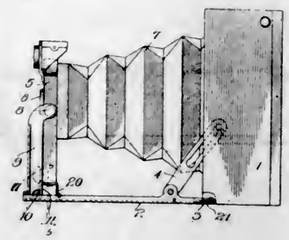
1,268,949. METHOD AND APPARATUS FOR AGRICULTURAL ENGINEERING. REGINALD A. FESSENDEN, Brookline, Mass. Filed Feb. 4, 1918. Serial No. 215,358. (Cl. 175—311.)



1. The method of increasing the growth and production of plants, which consists in generating an electrical discharge, controlling said electrical discharge so that said discharge occurs at a definite, pre-determined, and relatively low frequency, and placing said electrical discharge in operative relation to the plant whose growth is to be influenced, thereby promoting the growth of said plants.

2. Apparatus for increasing the production and growth of plants, comprising an electrical discharge field in proximity to said plants and means for varying the intensity of said electrical discharge periodically and at a relatively low frequency.

1,268,950. FOLDING CAMERA. AUSTIN CARL FISHER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 5, 1917. Serial No. 140,687. (Cl. 95—40.)



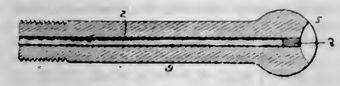
1. In a folding camera, the combination with a body and a hinged bed closing the front thereof, of a pair of links pivoted to the bed to fold rearwardly against the latter, a front pivoted to the links to also fold against the bed and having an operative position in rear of the pivots of the link and bed, a bellows connecting the front and body, a spring for projecting the bed and a spring for raising the links and front into operative position on the bed when the camera is opened.

2. In a folding camera, the combination with a body and a hinged bed closing the front thereof, of a pair of links pivoted to the bed to fold rearwardly against the latter, a front pivoted to the links to also fold against the bed and adapted to abut the links at another point to establish itself in an erect, operative position in rear of the pivots of the ling and bed, a fixed rearward brace on the front directly engaging the bed, a bellows connecting the front and body, a spring for projecting the bed and a spring for raising the links and front into operative position on the bed when the camera is opened.

5. In a folding camera, the combination with a body and a hinged bed closing the front thereof, of a pair of links pivoted to the bed to fold rearwardly against the latter, a front pivoted to the links to also fold against the bed, a spring for raising the links and front into operative position on the bed when the camera is opened and the bed projected, means for locking the front and links together and fixed means on the front coöperating with the bed to prevent rearward folding of the links while the front is in operative position.

[Claims 3 and 4 not printed in the Gazette.]

1,268,951. MANUFACTURE OF STAY-BOLTS FOR BOILERS. JOHN ROGERS FLANNERY and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Feb. 21, 1917. Serial No. 150,197. (Cl. 10—27.)

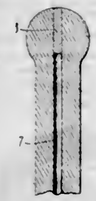


1. The herein described method of making a staybolt, consisting in forging a head at one end of a tubular bar, boring the headed bar to reopen the portion of the bore closed by the forging operation, and then permanently closing the end of the bore at the headed end of the bolt.

2. The herein described method of making a staybolt consisting in subjecting one end of a tubular bar to a forging action forming a head on said tubular bar and closing a portion of the bore therein, then reopening said closed portion of the bore through the headed end of the bar, and then securing a plug into said reopened bore within said head.

3. The method of making a staybolt, consisting in forging a head at one end of a tubular bar and simultaneously closing a portion of the bore of said bar, and reopening said bore into the headed portion of the bar.

1,268,952. MANUFACTURE OF STAY-BOLTS. JOHN ROGERS FLANNERY, Pittsburgh, Pa., assignor to Flannery Bolt Company, Pittsburgh, Pa. Filed Mar. 7, 1917. Serial No. 153,066. (Cl. 10—27.)



1. The method of making a staybolt, consisting in forming a hole longitudinally through a bar of iron, temporarily closing one end portion of the hole, forming a head on this end of the bar, removing the temporary closure, and permanently plugging the end of the hole within the headed end of the bar.

2. A method of making a staybolt, consisting in forming a hole longitudinally through a bar of iron, securing a fusible plug in said hole to close the end thereof on which the head of the bolt is subsequently formed, forging a head on the end of the bolt within which the fusible plug is located, removing the fusible plug, thus leaving a continuous bore, and permanently closing the forged end leaving the bore continuous from the inner end of the bolt to a point within the headed end.

1,268,953. STAY-BOLT STRUCTURE. JOHN ROGERS FLANNERY and ETHAN I. DODDS, Pittsburgh, Pa., assignors to Flannery Bolt Company, Pittsburgh, Pa. Filed Oct. 25, 1917. Serial No. 198,479. (Cl. 85—1.5.)

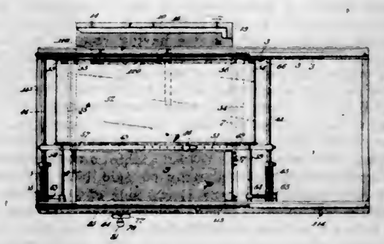


1. The combination with a staybolt having a tell-tale bore, of soluble material in said bore, and an iron piece normally held fixed by said soluble material and adapted when said material shall have been dissolved by the entrance of moisture into the tell-tale hole, to be moved by the application of an electro-magnet having its coil included in an alternating current source of electrical supply to provide an audible signal denoting a ruptured condition of the bolt.

3. The combination with a staybolt having a tell-tale bore, of a tube therein having a hole at one end, and a plug portion at the other end located in the entrance of said tell-tale bore, a plug closing the end of the tube, soluble material inclosed within said tube, and an iron piece normally embedded in said soluble material and out of engagement with the walls of the tube.

[Claim 2 not printed in the Gazette.]

1,268,954. PLATEN AND PLATEN EQUIPMENT FOR TYPE-WRITING MACHINES. HARRY A. FOOTHORAP, Harrisburg, Pa., assignor to Elliott-Fisher Company, Harrisburg, Pa., a Corporation of Delaware. Filed Feb. 6, 1911. Serial No. 606,933. (Cl. 197—3.)

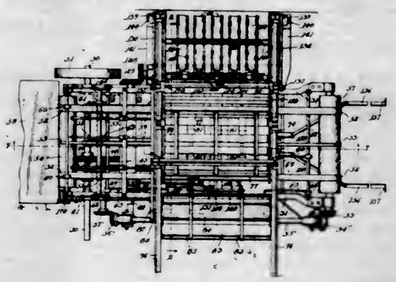


1. The combination with a stationary support and work holding means, of a platen movably carried by the support and coacting with the work holding means, means for moving the platen away from the work holding means, a locking device for retaining the platen in the position to which it is moved, and means for operating the locking device and the platen moving means.

7. The combination with a platen, of a tape disposed thereover, and a work gage carried by said tape.

[Claims 2 to 6 and 8 to 18 not printed in the Gazette.]

1,268,955. SAMPLE-MOUNTING MACHINE. JOHN FREDRICKSON and FRED A. RISBERG, Chicago, Ill. Filed Mar. 17, 1915. Serial No. 15,108. (Cl. 216—14.)



1. A machine of the class described comprising gluing means; sample carrying means; card carrying means; and means for operating said card carrying means to apply a card in the same to said gluing means and to a sample in said sample carrying means, substantially as described.

4. A machine of the class described comprising a reciprocating carriage; gluing and sample carrying means on said carriage; card carrying means coöperating with said carriage; and means for operating said card carrying means to apply a card in the same alternately to said gluing means and to a sample in said sample carrying means, substantially as described.

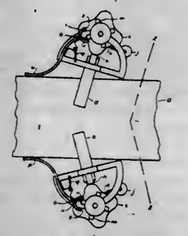
8. A machine of the class described comprising a frame; means for feeding cards through said frame in one direction; a carriage reciprocating in said frame across and above said interrupted cards; card gluing means on said carriage; sample carrying means on said carriage; means for supplying samples to said carrying means; means for applying said gluing means to said cards; and means for applying said samples to said glued cards and releasing said samples, substantially as described.

29. A machine of the class described comprising a frame; a vertically reciprocating table in said frame; card carrying belts traveling across said table; an intermittent stop arranged to position cards on said belts over said table; glue supplying means at one side of said table; a sample holder at the other side of said table; a carriage reciprocating across said table over said gluing means and sample holder; a gluing frame at the corresponding end of the under side of said carriage; a plurality of glue applying blocks on said frame having recesses in their faces; and sample carrying and releasing means at the other end of the under side of said carriage and coöperating with said sample holder and said table to apply samples to said cards, substantially as described.

34. A machine of the class described comprising a frame; a vertically reciprocating table in said frame; card carrying belts traveling across said table; an intermittent stop arranged to position cards on said belt over said table; glue supplying means at one side of said table; a vertically reciprocating sample holder at the other side of said table; a carriage reciprocating across said table over said gluing means and sample holder; glue applying means at the corresponding end of the under side of said carriage and coöperating with said glue supplying means and said table to apply glue to cards on the latter; a sample carrying and releasing frame at the other end of the under side of said carriage; a plurality of plates on said carrying and releasing frame and having threaded openings therein; hollow posts threaded in said openings; rotatable and reciprocatory stems mounted in said posts; a curved needle extending substantially tangentially from the lower end of each of said stems; a grooved pulley on the other end of each of said stems; an oscillatory drum; a flexible element wound upon each pulley upon each plate and having its ends wound upon said drum; means on said sample holder for effecting oscillation of said drum to operate said needle; and means for effecting oscillation of said drum to release said samples when said table is elevated to apply a glued card thereto, substantially as described.

[Claims 2, 3, 5 to 7, 9 to 28, 30 to 33, 35, and 36 not printed in the Gazette.]

1,268,956. APPARATUS FOR GUIDING CLOTH. GEORGE W. FRENCH, Jr., Danvers, Mass. Filed Sept. 8, 1914. Serial No. 860,539. (Cl. 26—18.)



1. An apparatus for guiding cloth comprising guide rolls at an inclination to the direction of travel of the cloth and arranged to grasp the cloth between them, a cam arranged to act upon one of said rolls and operative according to its position to place the said roll against the cloth and away from the same respectively, an actuator tending constantly to move said cam, a feeler engaging the edge of the cloth, and an escape mechanism operated by said feeler and constructed to permit and limit actuation of the cam upon each operation to an extent such as to bring said roll from one of said positions to the other.

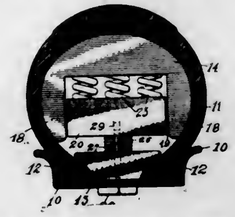
3. In an apparatus for feeding and guiding cloth the combination of a pair of rolls between which the cloth passes arranged at an inclination to the line of travel of the cloth, a feeler bearing against an edge of the cloth, and movable in consequence of lateral displacement of such edge and mechanical means controlled by said feeler when the latter moves in one direction for causing displacement of one of said rolls from contact with the cloth, and for causing return of said roll against the cloth when the feeler is moved in the opposite direction.

8. In an apparatus for feeding and guiding cloth, the combination of complemental guiding rolls gripping the edge portion of the cloth, one of which is movable toward and away from the surface of the cloth against which it is arranged to act, a cam for controlling such movements of said movable roll, and means controlled by shifting the cloth transversely of its direction of normal motion, for causing actuation of said cam.

10. In a cloth guiding apparatus complemental guiding rolls between which the cloth is passed, one of said rolls being movable toward and away from the cloth and being constantly urged by gravity away from the cloth, a rotatable cam arranged to act on said roll and constructed to hold said roll against the cloth when in one of its positions, and to permit withdrawal of the roll when in another position, and means controlled in its operation by the position of the traveling cloth for causing said cam to shift from one to another of its said positions.

[Claims 2, 4 to 7, 9, and 11 not printed in the Gazette.]

1,268,957. SPRING-TIRE. JOHN B. GABRIELSON and GUSTAF E. SWENSON, Springville, N. Y. Filed Jan. 8, 1918. Serial No. 210,832. (Cl. 152—8.)



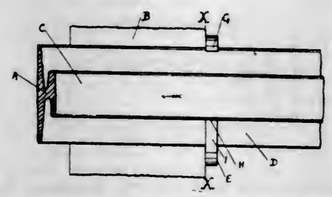
3. A spring wheel comprising a wheel rim, a hollow casing attachable to said rim, a series of segmental U-shaped blocks having radial joints therebetween said U-shaped blocks having a plurality of sockets therein, blocks slidably mounted within said U-shaped blocks one to each having a plurality of sockets therein corresponding to said U-shaped blocks to form pairs, a corresponding plurality of coil springs with ends in said sockets one to each pair, nut blocks within said rim and hollow casing one to each of said segmental U-shaped blocks to attach said casing to said rim, and screw bolts extending through said nut blocks and wheel rim to bear against said blocks slidably mounted within said U-shaped blocks to give tension to said springs.

4. A spring tire comprising a tire casing, a series of U-shaped blocks fitting end to end around and within said tire casing and having sockets therein, said U-shaped blocks having radial interlocking joints therebetween, a corresponding series of blocks slidably mounted within said U-shaped blocks one to each and having corresponding sockets therein and hollowed central portions on their bottoms, coil springs with ends in said sockets one to each pair to resiliently separate said blocks, a wheel rim, a corresponding series of nut blocks bearing against said wheel rim shaped to hold said tire casing, and a corresponding series of screw bolts extending through said wheel rim and nut blocks having rounded ends to bear against the hollowed central portions of said series of blocks fitting within said U-shaped blocks.

5. A spring tire comprising a tire casing, a series of radial U-shaped blocks fitting around within said tire casing and having sockets therein, said U-shaped blocks having radial joints therebetween, a corresponding series of blocks slidably mounted within said U-shaped blocks one to each and having corresponding sockets therein to form pairs, coil springs in said sockets one to each pair to resiliently separate said blocks, a wheel rim, a corresponding series of nut blocks shaped to hold said casing against said wheel rim and having double pins slidably engaging in holes in the blocks within said U-shaped blocks to limit turning of said nut blocks, a corresponding series of screw bolts extending through said nut blocks and bearing against the blocks within said U-shaped blocks to tensionally hold said U-shaped blocks and casing, and pins extending from said U-shaped blocks through said blocks fitting therewithin and through holes in said screw bolts to hold said parts in line and assist in assembling the same.

[Claims 1, 2, and 6 to 12 not printed in the Gazette.]

1,268,958. ANTICREEPER FOR RAILS. HORATIO G. GILLMOR, Washington, D. C. Filed Dec. 6, 1915. Serial No. 65,242. (Cl. 238—4.)



1. An anticreeper for rails, comprising a transversely extending bar provided with means for engaging one edge of a rail base flange and means at the other end thereof engaging the under surface of the head and the upper surface of the base flange and arranged to be driven in between said head and said base flange by a forced transverse angular movement in relation to the rail.

5. A rail stay, comprising a transverse part adapted to extend under the base flange of a rail and provided with means for engaging the edge of the base flange at one side of the rail and means for engaging the head and upper surface of the base flange of the rail at the other side of the rail, said head and base flange engaging means being so arranged that, with said base flange edge engaging means in engagement with the edge of the rail base flange, said head and base flange engaging means may, by forced transverse angular movement thereof toward the rail, be engaged with the rail head and base flange and the gripping action of the device thereby secured.

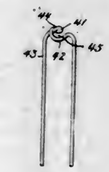
7. A rail anchor, comprising a transverse bar provided with a rail base edge engaging jaw at one end thereof and, at the other end thereof, a portion adapted to engage the upper corner of the opposite edge of the rail base and, fulcrumed upon said corner of the rail edge, to be forced transversely into engagement with the head and upper surface of the base flange of the rail, whereby a transverse pull is put upon said bar and pressure exerted upwardly on the head and downwardly on the base of the rail.

21. A rail anchor, comprising a bar adapted to extend under the base flange of the rail and engage the edge of the same at one side and the upper surface of the same at the other side of the rail and provided with a resilient rail head engaging extension formed so as to be strained when forced into engagement with the rail head.

23. In an anticreeper, a body having at one end a jaw arranged to engage the edge of the rail base at one side of the rail and at the other end a portion disposed so as to rigidly engage the upper surface of the base flange and the under surface of the railhead when said portion is forcibly moved transversely angularly about the rail base and thereby retain the anticreeper in position on the rail.

[Claims 2 to 4, 6, 8 to 20, and 22 not printed in the Gazette.]

1,268,959. HAIR-PIN. MATTHEW GOLLUB, Philadelphia, Pa. Filed Sept. 21, 1917. Serial No. 192,607. (Cl. 132—22.)

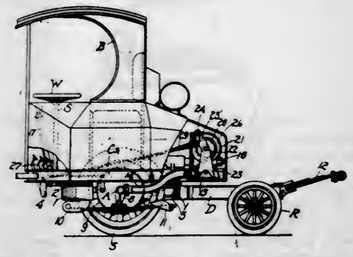


1. A hair pin having an extension springing outwardly from its head and bent in the direction of the side of said pin, said extension being spaced beyond the outer end of the head to provide a recess into which hair can enter from the side, substantially as described.

3. A hair pin having an extension springing outwardly from its head and bent in the direction of the side of said pin, said extension being spaced beyond the outer end of the head to provide a recess into which hair can enter from the side, said extension being made integral with the portion of said pin which forms the head, substantially as described.

[Claim 2 not printed in the Gazette.]

1,268,960. DRIVING-GEAR FOR VEHICLES. LOUIS GOODHART, St. Louis, Mo., assignor to One Wheel Truck Company, St. Louis, Mo., a Corporation of Missouri. Filed Jan. 15, 1918. Serial No. 211,933. (Cl. 180—12.)



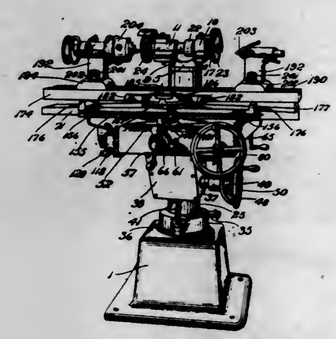
1. In a tractor, a draft frame, a carriage coupled rotatably to said frame and provided with a horizontally disposed ring, a traction wheel comprising two wheel sections spaced apart, and a drum connecting said sections disposed centrally within the carriage ring, the axis of rotation of the wheel being disposed substantially in the plane of rotation of the carriage ring, a drive shaft on the carriage disposed parallel to the rotation plane of the traction wheel, a counter shaft leading from the drive shaft and disposed at right angles thereto, and a drive chain or belt disposed in the plane of rotation of the traction wheel, leading from the counter shaft to the drum between the sections of said wheel, the drive belt having portions thereof extending into the carriage ring and intersecting the rotation plane thereof.

2. In a tractor, a rotatable carriage frame provided with a horizontally rotatable ring, a centrally located traction wheel in said ring comprising two wheel sections

spaced apart, a central drum connecting said wheel sections, a drive-shaft on the carriage frame on one side of the traction wheel disposed parallel to said wheel, a counter shaft leading from the drive-shaft, and a sprocket chain-drive leading from the counter shaft to the drum of the traction wheel, said chain extending into the carriage ring at an angle to the plane of rotation of the ring, and being disposed on the central longitudinal axis of the carriage frame.

3. In a tractor, a suitable draft-member, a carriage provided with a ring mounted for horizontal rotation relatively to the draft member, a driving wheel in the center of said ring comprising two wheel sections, a spacing member or drum joining said sections, an axle for said wheel, means for securing the carriage to the axle, a drive-shaft on the carriage disposed on one side of the driving wheel and parallel thereto, a countershaft actuated by the drive-shaft and disposed at right angles thereto, and a final driving member leading from the counter-shaft between the wheel sections into the carriage ring and intersecting the plane of rotation of said ring, the said driving member being disposed parallel to the drive-shaft and substantially in the plane of the longitudinal axis of the vehicle.

1,268,961. GRINDING-MACHINE. EDWIN T. GORHAM, Grand Rapids, Mich., assignor to Wilmarth & Morman Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Mar. 13, 1917. Serial No. 154,459. (Cl. 51—12.)



1. In a grinding machine, a cylindrical stationary post, an elongated cylindrical sleeve extending the full length of the post and covering the same and having relatively large bearing contact with the post at both its upper and lower ends, whereby said sleeve is adapted to be turned relative to the post, means to clamp the sleeve to the post, a knee adjustably mounted on the sleeve, means to clamp the knee to said sleeve, a grinding wheel carried by the post, and work holding devices carried by the knee, substantially as described.

2. In a grinding machine, a cylindrical stationary post, an elongated cylindrical sleeve around and bearing upon the post, two clamping members positioned in alinement mounted on the sleeve having adjacent ends formed to fit the outer surface of the post, means to draw the clamping members toward each other against the post, a knee mounted in the sleeve, a grinder carried by the post, and work holding devices mounted on the knee, substantially as described.

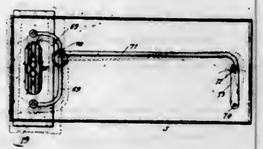
3. In a grinding machine, a cylindrical upright post, having an enlarged cylindrical lower end, an elongated sleeve covering the post and bearing thereagainst, said sleeve at its lower end having an enlargement to cover the lower end of the post, two clamping members in alinement with each other mounted in the enlarged lower end of the sleeve, said members having adjacent ends at one side formed to fit the enlarged lower end of the post, means to operate the clamping members toward or away from each other, a knee mounted on the sleeve, a grinder carried by the post, and work holding means carried by the knee.

4. In a grinding machine, a cylindrical upright post, an elongated sleeve rotatably mounted on the post, a bar positioned vertically and connected to side of the sleeve, a knee including a cylindrical section positioned around and adjustably mounted on the sleeve, said section of the knee having a guide for slidably receiving said bar, means to clamp the sleeve to the post, and means to clamp the knee to the sleeve.

5. In a grinding machine, a cylindrical upright post, an elongated sleeve rotatably mounted on the post, a bar positioned vertically and secured to a side of the sleeve, a knee including a cylindrical section positioned around and mounted for vertical adjustment on the sleeve, said section of the knee having a guide slidably receiving the bar, a pair of clamping members positioned in alinement with each other mounted on the knee, and having their adjacent ends cut to conform to the outside surface of the sleeve, similar clamping members on the sleeve having adjacent ends cut to conform to the outer adjacent surface of the post, and means to operate each of said pairs of clamping members toward or away from each other.

[Claims 6 to 27 not printed in the Gazette.]

1,268,962. CARPET-WASHING MACHINE. HALLA F. GRAY, Denver, Colo. Continuation in part of application Serial No. 145,351, filed Jan. 30, 1917. This application filed June 25, 1917. Serial No. 176,670. (Cl. 15—8.)



1. A machine of the class described, including a frame, a scrubber, a yoke connected with the scrubber, the yoke having a jointed arm pivotally connected with the frame and means connected with the yoke for imparting body travel to the scrubber in a circular path.

2. A machine of the class described, including a frame, a scrubber, a yoke having two arms connected with the scrubber and a third arm rigidly connected with the first named arms, a link connected with the third arm and with the frame, and means pivotally connected with the yoke for imparting a crank arm movement to the scrubber.

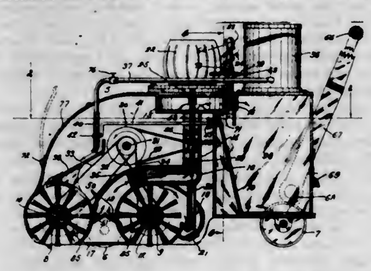
3. A machine of the class described, comprising a frame and a scrubber movably connected therewith and comprising a hollow holder and a brush carried thereby having a head open for the passage of liquid, means for imparting orbital travel to the brush, and a conduit in fixed relation to the frame and projecting into the hollow holder which is open at the top to prevent interference with the conduit during the movement of the brush.

1,268,963. CARPET-CLEANING MACHINE. HALLA F. GRAY, Denver, Colo. Filed Oct. 12, 1917. Serial No. 196,202. (Cl. 15—60.)

1. A portable machine for cleaning carpets, rugs, floors and the like, comprising a frame adapted to be moved over the article or surface to be cleaned and having mounted thereon two rotary brushes the frame including a housing forming a chamber in which the brushes are located and a suction nozzle means spacing the brushes and communicating with the portions of the housing chambers in which the brushes are located and shaped to draw the refuse material from approximately all of the scrubbed portion of the carpet or other surface engaged by the brushes and adjacent thereto.

4. A portable machine for cleaning carpets, rugs, floors and the like, comprising a frame adapted to move over

the article or surface to be cleaned and having mounted thereon two rotary brushes and a suction nozzle arranged between the brushes and shaped to draw the refuse material from approximately all the scrubbed portion of the carpet or other surface engaged by the brushes adjacent thereto, the frame being constructed to form chambers in which the brushes are respectively located, and a spacing member arranged between the brushes and coöperating therewith and with the suction nozzle, between which and the spacing member are arranged passages forming communication between the brush chambers and the nozzle.



5. A portable machine of the class described, comprising a frame, a scrubbing brush carried thereby, means for imparting rotary scrubbing movement to the brush, and means for feeding a cleansing medium to the brush including a stationary inclined plate, a conduit arranged above the plate and in communication with the source of the cleansing medium, and means for oscillating the conduit.

7. A portable machine of the class described, comprising a frame adapted to be moved over the article or surface to be cleaned and having mounted thereon two rotary brushes, a suction nozzle arranged between the brushes, a spacing member also arranged between the brushes and below the mouth of the nozzle and so positioned that passages are formed between the lips of the nozzle and the said spacing member, a plate arranged on one side of each of these passages, and means for adjusting the same to compensate for the wear of the brushes.

10. A portable machine of the class described, comprising a frame adapted to be moved over the article or surface to be cleaned and having mounted thereon two rotary brushes, the frame including a housing forming chambers in which the brushes are respectively located, a suction nozzle arranged between the brushes and communication with the brush chambers by suitable passages, vertically disposed side plates arranged on the opposite sides of the frame, in which the said brushes are journaled, movable arms having inclined slots which receive wrist pins formed on the said plates, suction regulating plates having end pins which engage inclined slots formed in the said side plates, the suction regulating plates being arranged adjacent the passages forming communication between the suction nozzle and the brush chambers, and means for actuating the said arms, the stationary frame of the machine being slotted to permit vertical adjustment of the side plates.

[Claim 2, 3, 6, 8, and 9 not printed in the Gazette.]

1,268,964. WELL EQUIPMENT. JOHN HAHN, Los Angeles, Cal. Filed Jan. 5, 1917. Serial No. 140,717. (Cl. 103—80.)

1. The combination with pump tubing of a chamber connected with the lower end of said tubing and closed at its upper end and open at its lower end so as to retain air or gas when lowered into the liquid in a well.

3. In combination, means forming a reservoir having an inlet, a discharge conduit extending down into the reservoir below the inlet, and means forming a second reservoir above the first named reservoir, there being perforations in the conduit opening into the second reservoir.

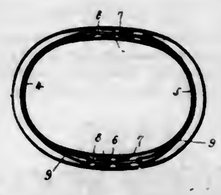
10. In combination, a pump cylinder having an internal shoulder, a plunger in the cylinder, a valve cage fastened to the lower end of the plunger and forming a shoulder on the outside of the plunger adapted when the plunger is raised above its normal pumping position to engage the first shoulder, a seat-forming member, pump tubing connected with the seat forming member, and a standing valve cage having a seat-forming member and connected with the cylinder, said seat-forming member engaging the first named seat-forming member.



17. In combination, pump tubing, a sealing coupling 6 at the lower end of the pump tubing, a cylinder inserted through said coupling, and a seat for the cylinder, said coupling being downwardly and outwardly tapered.

[Claims 2, 4 to 9, 11 to 16, and 18 to 28 not printed in the Gazette.]

1,268,965. BRACELET. HENRY E. HALSETH, Aurora, Minn. Filed Feb. 9, 1918. Serial No. 216,287. (Cl. 63—6.)



1. In a bracelet, the combination with a pair of hollow arcuate members, retaining strips extending diametrically across the said arcuate members at each end thereof, links connecting the ends of said arcuate members and being engaged with said strips, and a contractile member in each of said arcuate members connected at its opposite ends directly with the links in the said ends.

2. In a bracelet, a pair of hollow arcuate members open at their ends, retaining strips in the ends of said members and extending diametrically across the same, the said strips being bent and having their extremities secured to the inner surfaces of their respective hollow members and extending inwardly from the open ends of the latter, the retaining strips in the ends of one of said arcuate members projecting therefrom and being adapted to fit within and engage the walls of the adjacent ends of the opposite member, links engaged at their ends behind the strips in the ends of said arcuate members, and a contractile member in each arcuate member engaged at its extremities with the ends of the links at its open ends.

1,268,966. SHOCK-ABSORBING ANTIFRICTION-SPRING. JOHN M. HAMILTON, Los Angeles, Cal. Filed Dec. 11, 1916, Serial No. 136,133.. Renewed May 7, 1918. Serial No. 233,170. (Cl. 267—33.)



1. In a leaf spring, in combination, a plurality of curved superposed spring leaves, and auxiliary spring members interspersed between said spring leaves, said spring members having a normal configuration of less curvature than the spring leaves.

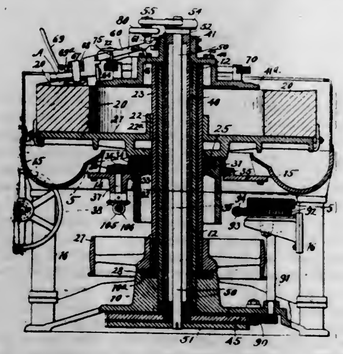
2. In a leaf spring, in combination, a plurality of curved superposed spring leaves, and auxiliary spring members interspersed between said spring leaves, said spring members having a normal configuration of less curvature than the spring leaves, said spring members being of lesser resilient strength than said spring leaves.

4. In a leaf spring, in combination, a plurality of curved superposed spring leaves, auxiliary spring members interspersed between said spring leaves, said spring members having a normal configuration of less curvature than the spring leaves, said spring members being of lesser resilient strength than said spring leaves and extending throughout the central portions of the spring leaves, and rolling bearings between the outer portions of those spring leaves which are spaced apart by said auxiliary spring members.

5. In a leaf spring, in combination, a plurality of curved superposed spring leaves, auxiliary spring members interspersed between said spring leaves, said spring members having a normal configuration of less curvature than the spring leaves, said spring members being of lesser resilient strength than said spring leaves and extending throughout the central portions of the spring leaves, rolling bearings between the outer portions of those spring leaves which are spaced apart by said auxiliary spring members, and spacer frames for said rolling bearings pivotally connected to said auxiliary spring members and pivotally connected together.

[Claims 3 and 6 to 11 not printed in the Gazette.]

1,268,967. GRINDING-MACHINE. JOHN WADE HAMPTON, Berea, Ohio, assignor to The Cleveland Stone Company, Cleveland, Ohio, a Corporation of Ohio. Filed Apr. 9, 1917. Serial No. 160,604. (Cl. 51—7.)



1. In a machine of the character specified, the combination of a rotatable horizontal grindstone having a shaped top grinding surface, a concentric rotatable head, means to simultaneously rotate said grindstone and head, the former rapidly and the latter slowly, a work holding arm pivoted to said head and extending over and toward said grindstone, means to clamp the work to the under side of the outer end of said arm, and means to oscillate said arm about the substantially vertical axis of the pivotal connection between it and said head as said pivotal connection is being carried around with said head.

2. In a machine of the character specified, the combination of a rotatable horizontal grindstone having a shaped top grinding surface, a concentric rotatable head, means to simultaneously rotate said two parts, the former rapidly and the latter slowly, a work holding arm connected to said head by a pivotal connection which permits the arm to oscillate its own longitudinal axis, and means to compel said arm to oscillate upon its longitudinal axis and at the same time to go with the head as it is turned about its axis.

3. In a machine of the character specified, the combination of a rotatable horizontal grindstone having a shaped top grinding surface, a concentric rotatable head, means to simultaneously rotate said grindstone and head, the former rapidly and the latter slowly, a work holding arm connected with said head by a ball and socket joint and extending over and toward said grindstone, means to clamp the work to the under side of the outer end of said arm, and means to oscillate said arm about the substantially vertical axis of the universal connection between it and said head.

4. In a machine of the character specified, the combination of a rotatable horizontal grindstone having a shaped top grinding surface, a concentric rotatable head, means for simultaneously rotating said two parts, the former rapidly and the latter slowly, a work holding arm having a universal joint connection with said head and extending over and toward said grindstone, and means to compel said arm to oscillate upon its longitudinal axis and at the same time go with the head as it is turned about its own axis.

5. In a machine of the character specified, the combination of a rotatable horizontal grindstone having a shaped top grinding surface, a concentric rotatable head, means for simultaneously rotating said two parts the former rapidly and the latter slowly, a work holding arm connected with said head by universal joint and extending over and toward said grindstone, means to clamp the work to the under side of the outer end of said arm, means to oscillate said arm about the substantially vertical axis of the universal joint connections between it and the head and to at the same time oscillate the said arm about its own longitudinal axis.

[Claims 6 to 16 not printed in the Gazette.]

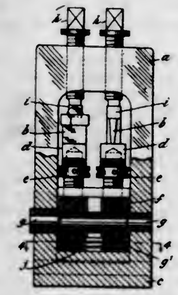
1,268,968. TOOTH. FRANK Z. HANSCOM, Elmhurst, Ill. Filed Dec. 3, 1913. Serial No. 804,386. (Cl. 32—9.)



A tooth for plates, comprising a body portion with an integrally formed projection on the back thereof, said projection having a concavely curved lower surface merging into the lower surface of the cutting edge of the tooth, and adapted to aline with the lower surface of the plate, said projection also having a concavely curved upper surface which merges into the inner surface of the cervical end of the tooth, the sides of said projection also being undercut to permit the material of the plate to securely clasp the same.

1,268,969. TOOL-HOLDER FOR CAPSTAN AND THE LIKE LATHES. ROBERT JAMES HARDING, Lambeth, London, England. Filed Nov. 9, 1916. Serial No. 130,369. (Cl. 82—36.)

1. The combination with a lathe bed of a tool holder including a post adjustably mounted on the bed, a tool supporting block loosely carried by the post for movement toward and away from the bed, a tool supporting member adjustably carried by the block, means carried by the post for clamping a tool to said adjustable supporting member and means for moving the block to hold the post against movement with respect to the bed, said means comprising a shaft journaled in the post and including an eccentric portion engageable with the block to clampingly hold said block against the lathe bed.



2. The combination with a lathe bed of a tool holder including a post adjustably mounted on the bed, a tool supporting block loosely carried by the post for movement toward and away from the bed, a tool supporting member adjustably carried by the block, means carried by the post for clamping a tool to said adjustable supporting member, means for moving the block to hold the post against movement with respect to the bed and a spring disposed between the post and block to urge said block and its tool supporting means toward the tool clamping means of the post.

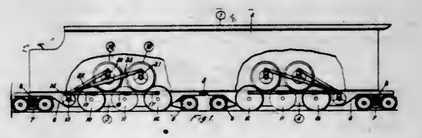
1,268,970. ATTACHMENT FOR PENS. WILLIAM A. HARTLINE, Penns Grove, N. J. Filed Nov. 22, 1917. Serial No. 203,409. (Cl. 120—1.)



1. A frusto-cylindrical casing, a blotting disk rotatably mounted therein and projecting through the flattened peripheral portion of the casing, a resilient member secured to the back of the casing and adapted to snugly receive the end portion of a penholder so as to secure the casing on the same, said securing member being extended and bent to form a housing, and a resilient approximately U-shaped cutting member slidably mounted in said housing provided at the outer end of its outer arm with an inwardly directed cutting blade.

[Claims 2 and 3 not printed in the Gazette.]

1,268,971. LOCOMOTIVE. RUDOLF E. HELLMUND, Swissvale, Pa., assignor to Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1916. Serial No. 128,426. (Cl. 105—259.)



1. In a locomotive, the combination with a single cab, of two articulated running gears supporting said single cab, each of said running gears comprising two auxiliary trucks, pairs of driving wheels disposed between said auxiliary trucks, a single jack shaft between the driving wheels and the outer auxiliary truck, and propelling means connected to said single jack shaft.

2. In a locomotive, the combination with a single cab, of two articulated running gears supporting said cab, each of said running gears comprising a four-wheel pivotal outer truck, a two-wheel radial inner truck, and driving wheels disposed between said trucks.

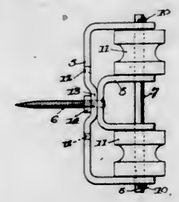
3. In a locomotive, the combination with a single cab, of two articulated running gears supporting said cab, each of said running gears comprising a four-wheel pivotal outer truck, a two-wheel radial inner truck, three pairs of driving wheels disposed between said trucks, a jack shaft connected to said driving wheels, and means connected to the jack shaft for propelling the driving wheels.

4. In a locomotive, the combination with a single cab, of two articulated running gears connected thereto, each of said running gears comprising a four-wheel outer pivotal truck, a two-wheel inner radial truck, three pairs of driving wheels disposed between said trucks, a single jack shaft located between said driving wheels and the four-wheel pivotal truck, side rod members for connecting the single jack shaft to all the driving wheels, and means for applying a torque to said jack shaft.

5. In a locomotive, the combination with a cab, of two articulated running gears connected thereto, each of said running gears comprising a four-wheel outer truck, a two-wheel inner truck, a plurality of pairs of driving wheels disposed between said trucks, a jack shaft located between said four-wheel truck and the pairs of driving wheels, a plurality of motors disposed above said driving wheels, and means, comprising rods, for connecting the jack shaft to the motors and to the pairs of driving wheels.

[Claims 6 to 14 not printed in the Gazette.]

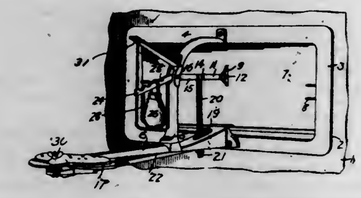
1,268,972. INSULATOR-SUPPORT. LEM E. HENDEE, Milwaukee, Wis. Filed Jan. 3, 1918. Serial No. 210,138. (Cl. 173—321.)



1. An insulator support comprising a U-shaped bracket, a second U-shaped bracket disposed within the first bracket and detachably secured thereto, the arms of said brackets being disposed in spaced relation to each other, a rod removably mounted in the arms of said brackets, and insulators removably mounted on said rod.

2. An insulator support comprising a U-shaped bracket having an opening therein, a second U-shaped bracket disposed within the first bracket and having a threaded member passing through said opening and detachably secured to said first bracket, the arms of said brackets being disposed in spaced relation to each other, a rod removably mounted in the arms of said brackets, and insulators removably mounted on said rod.

1,268,973. VENTILATOR. CLEMENT V. HILL, Trenton, N. J. Filed Mar. 17, 1916. Serial No. 84,831. (Cl. 236—6.)

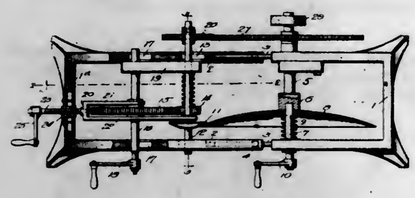


1. In a ventilator, the combination with a frame having an opening therethrough, of a damper pivotally mounted in the opening of said frame, an arm secured to and extending rearwardly from said frame, an operating lever mounted on said arm back of said opening, a link connected at one end of said lever and at its other end to said damper and temperature responsive means for operating said lever, whereby the damper is operated.

3. In a ventilator, the combination with a frame, a damper pivotally mounted in said frame, an arm extending rearwardly from said frame, a lever pivotally mounted on said arm, a link connected at one end to the inner end of said lever and at its other end to said damper, a thermostat frame, a thermostat carried by said thermostat frame and supported from said arm and first mentioned frame, an opening in said thermostat frame, a connecting rod extending from the thermostat lever and adapted to pass through said opening in said thermostat frame, said connecting rod being fastened to said operating lever at the joint between the lever and link.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,268,974. DISK-SHARPENER. WILLIAM C. HOPPES, Dawson, Nebr. Filed Dec. 12, 1917. Serial No. 206,829. (Cl. 51—7.)



1. A device of the character specified, comprising a supporting frame, a sectional shaft journaled on the supporting frame, the sections having means for engaging and holding a disk between them for rotation with the shaft, a grinding wheel supporting shaft, a drive shaft, the frame having longitudinal bearing slots in which the said shafts are movable toward and from the disk supporting shaft, a grinding wheel on the grinding wheel supporting shaft, means for rotating the driving shaft, an auxiliary frame in which the two shafts are journaled, a driving connection between the driving shaft and the grinding wheel supporting shaft, a spring normally pressing the grinding wheel toward the disk, and means for moving the auxiliary frame toward and from the disk, and means for rotating the disk supporting shaft.

2. A disk sharpener comprising a supporting frame, means on the frame for supporting and rotating the disk, said frame having pairs of longitudinally extending bearing slots, shafts in the slots, a driving connection between the shafts, an auxiliary frame supporting the shafts, the shaft adjacent to the disk supporting means having a grinding wheel for engaging the disk, the other shaft having means for rotating the same, means for moving the auxiliary frame toward and from the disk, and a spring normally pressing the grinding wheel toward the disk.

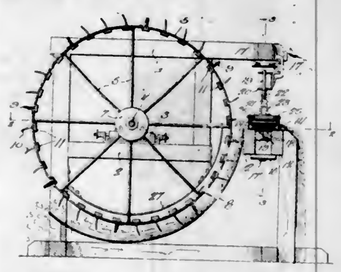
3. A disk sharpener comprising a supporting frame, means on the frame for supporting and rotating the disk, said means having pairs of longitudinally extending bearing slots, shafts in the slots, a driving connection between the shafts, an auxiliary frame supporting the shafts, the shaft adjacent to the disk supporting means having a grinding wheel for engaging the disk, the other shaft having means for rotating the same, and means for moving the auxiliary frame toward and from the disk.

4. A disk sharpener comprising a sectional supporting frame, one of the sections having means for supporting and rotating the disk to be sharpened, an auxiliary frame mounted on the other section, means for moving the said frame toward and from the disk, a grinding wheel supported by the frame, means for rotating the same, and means for holding the sections of the frame in adjusted position.

5. A disk sharpener comprising a supporting frame, means on the frame for supporting and rotating the disk to be sharpened, an auxiliary frame, means for moving the said frame toward and from the disk, a grinding wheel supported by the frame, means for rotating the disk, and a driving connection between the grinding wheel and the disk supporting means.

[Claims 6 and 7 not printed in the Gazette.]

1,268,975. SCUTCHING-MACHINE. JOHN HUBLER, Brandon, Wis. Filed June 2, 1917. Serial No. 172,393. (Cl. 13—18.)



2. In a scutching machine of the class described, a gripping and conveying mechanism including upper and lower endless belts, a support for the inner stretch of one of the belts, means engageable with the inner stretch of the other belt to hold the same together and in contact with said support, said means comprising a plurality of plunger rods, a head pivoted to each of said rods, the pivotal connection between said heads and rods extending transversely of the former, a plurality of rollers revolubly mounted in each of said heads, said rollers extending transversely of the latter and parallel with said pivotal connection, and means for moving said heads toward the inner stretch of the belts.

4. In a scutching machine of the class described, a revoluble scutching drum, means for feeding work material to said drum, a stationary arcuate guard at the inner end of the drum, said guard being disposed externally of the drum, and a similar stationary guard at the opposite end of the drum, said guard being positioned internally of the drum.

[Claims 1 and 3 not printed in the Gazette.]

1,268,976. FOUNTAIN SHAVING-BRUSH. WILLIAM JOHNSTON, Dayton, Ohio. Filed July 10, 1917. Serial No. 179,770. (Cl. 15—50.)



1. A fountain shaving brush comprising a liquid-soap containing cylinder, an inclosing head for one end thereof, a rod extending from said head above the top portion of the cylinder, a bristle tuft-supporting member adapted to be screwed upon said rod's upper end, which is threaded, to close the cylinder, and having an outlet passage at one side of said rod and extending between said cylinder and bristle tuft, through the brush-supporting member, and a valve in the latter for controlling the flow of liquid soap through said outlet passage upon the bristle tuft.

2. In a fountain shaving brush, a liquid-soap containing cylinder, a delivery member secured to one end of the latter, an outlet passage extending through said delivery member, a valve for controlling the flow of liquid soap through said outlet passage, a sleeve adapted to be forced over said cylinder and delivery member from the rear thereof, and means carried by said valve to prevent the passage of said sleeve over the delivery member until said valve has been operated to close the outlet passage therein.

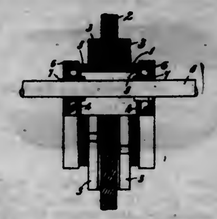
3. A fountain-shaving brush comprising a liquid-soap containing cylinder, a delivery member secured to one end thereof, an outlet passage extending through said delivery member, a transverse valve extending through said delivery member into the outlet passage to control the flow of liquid soap therethrough, a sleeve adapted to be forced over the cylinder and delivery member from the rear thereof, and a head for said valve that stands in the path of the sleeve to prevent it being forced over the brush until the valve has been moved inwardly to its closing position.

1,268,977. HAT-SHAPE RETAINER. HERBERT JONES and ARTHUR PALMER JONES, Swansea, Wales. Filed Sept. 24, 1917. Serial No. 192,918. (Cl. 2—108.)



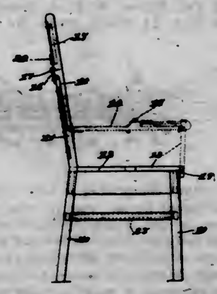
A device for maintaining soft felt hats in shape comprised of a central spring member to which are attached a pair of side wings curved and shaped to agree with the contour of the fore part of the hat to the inside of which it is fastened; arranged and operated substantially as hereinbefore described and shown.

1,268,978. GLAND. ROBERT INGLIS KINNEAR, Clydebank, Scotland. Filed June 5, 1917. Serial No. 173,064. (Cl. 247—17.)



In combination, a partition wall having an orifice, an externally threaded tube fitted to said orifice and projecting beyond both sides of said wall, said tube formed at each end with an internal shoulder, nut-forming members engaging said tube and bearing against both sides of said wall, apertured inner disks fitted to said tube, one bearing against each internal shoulder, apertured outer disks spaced from said inner disks, the apertures of said inner and outer disks being in alinement, split tubular adapters fitted to the apertures of said disks, said adapters formed with shoulders bearing on the adjacent faces of said disks and serving to space said disks, and nut-forming members threaded on the ends of said tube and securing said outer disks against displacement.

1,268,979. CONVERTIBLE CHAIR. WILLIAM H. KRUM and JOSEPH E. JANOUSEK, Chicago, Ill. Filed July 19, 1917. Serial No. 181,492. (Cl. 155—26.)



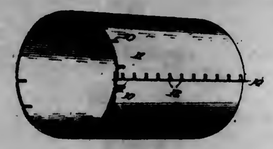
8. A convertible chair comprising a back having a hinged upper portion adapted to be swung forwardly and downwardly to constitute chair arms and a table; a seat, the front portion of said seat being hinged at its front edge and adapted to be swung upwardly to vertical position to support said hinged back portion, when the latter is in lowered position; and a locking device carried by said front portion of said seat adapted, when said portion is in vertical position, to engage with the upper portion of the chair back, when in lowered position, and adapted, when said seat portion is in lowered position, to engage with the seat proper of the chair, substantially as described.

[Claims 1 to 7 not printed in the Gazette.]

1,268,980. METAL JOINT AND METHOD OF WELDING THE SAME. AUGUST KRUMHOLZ, Chicago, Ill. Filed Dec. 19, 1917. Serial No. 207,811. (Cl. 113—112.)

1. The method of joining metallic plates which consists in providing spaced, narrow slits in one of the

overlapped portions of a joint, then welding along the extremity of the exposed edge, then welding at the slits, substantially as described.



3. The method of joining plates which consists in providing spaced slits in one margin of a plate, superposing said margin on the object to which it is to be joined, welding along the exterior seam, and then welding at the slits, and filling the slits with metal, substantially as described.

7. A welded joint comprising superposed plates the marginal edge of one of which is provided with spaced notches, the plates being welded along the exterior seam and along the edges of the notches, substantially as described.

9. A welded joint comprising the lapped marginal edges of plates or sheets to be joined, one of said edges being provided with notches of a width substantially equal to the thickness of the plate, the extremities of the plates being welded along the exterior seam and welded among the line of the notches, and fused metal filling said notches to present a smooth surface, substantially as described.

[Claims 2, 4 to 6, 8, and 10 not printed in the Gazette.]

1,268,981. STRAIN-CLAMP FOR AERIAL CABLES. JOHN S. LAPP, Victor, N. Y., assignor to The Locke Insulator Mfg. Co., Victor, N. Y., a Corporation of New York. Filed Mar. 24, 1913. Serial No. 756,569. (Cl. 24—135.)



3. A strain clamp comprising a body plate having an anchoring attachment at one end in alinement with one face of the plate, a cable clamping plate disposed against said face of the body plate, an off-set eye projecting from the opposite face of the body plate and extending beyond the ends of both plates, and means for drawing the two plates together to clamp a cable between them.

4. In a strain clamp, the combination with two parts adapted to form a cable seat between them, one of said members being provided with a relatively short open slot and the other with a relatively-long closed slot extending beyond the open slot, of a bolt for securing the parts together arranged to pass through both slots and to be displaced from the open one while rocked toward the far end of the closed one to permit the passage of the cable into and out of its seat.

[Claims 1 and 2 not printed in the Gazette.]

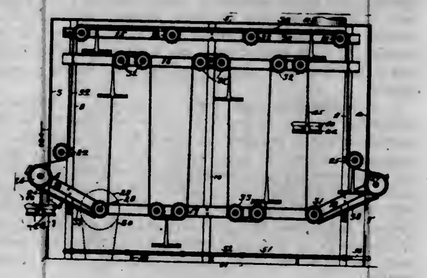
1,268,982. WAGON-RACK. ARTHUR D. LONG, Fairfield, Iowa. Filed Nov. 29, 1916. Serial No. 134,078. (Cl. 21—74.)

In a device of the class described, the combination of a frame, said frame being adapted to be carried upon a wagon body, said frame having a narrow vertical primary slot adjacent its inner portion, said frame having an outward-carved auxiliary slot extending from the upper portion of the primary slot, said auxiliary slot increasing in size toward the top of said frame, whereby the upper portion of said last mentioned slot will be substantially triangular, said frame having a depending lug and an upwardly projecting lug formed in horizontal alinement with each other within the triangular portion of said auxiliary slot, said frame having a pair of lugs below said first-mentioned lugs projecting into said curved slot from opposite sides thereof, said last mentioned pair of lugs being in alinement with each other in a plane of approximately 45 degrees, all of said lugs being spaced above



said straight slot, a bracket having a pair of spaced side portions, fitting upon each side of said frame, arms carried by said side portions and spanning the distance therebetween, said arms being adapted to fit entirely within said straight slot, or engage either said last mentioned lugs or said first mentioned lugs, whereby said bracket may be retained in either a vertical plane, a diagonal plane, or a horizontal plane, as desired.

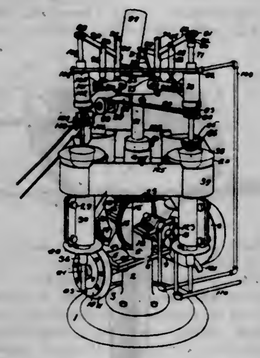
1,268,983. DRIER. OSCAR C. MCCORMICK, Cleveland, Ohio, assignor of one-fourth to James E. Moyer, Akron, Ohio, one-fourth to Samuel K. Hine, Girard, Ohio, one-eighth to John W. Wright, Youngstown, Ohio, and one-eighth to William P. Canfield, Pittsburgh, Pa. Filed Sept. 9, 1916. Serial No. 119,243. (Cl. 34—12.)



A drier comprising in combination a heating chamber having an upper wall and side and end walls, said end walls each provided with a pair of openings the members of which are spaced apart, a series of vertical posts arranged in spaced relation near each of said side walls, a horizontal beam secured to each series of posts near the upper wall, sprocket wheels on said beams, a second pair of beams secured to each series of posts and positioned below said first beams, sprocket wheels arranged in pairs mounted on said second beam, a third pair of beams each of which is secured to said posts near the lower ends thereof the ends of said third beams projecting out through the openings in the end walls of said device, a series of pairs of sprocket wheels on said third beam, each pair being disposed in alternate vertical relatioo with respect to the pairs of sprocket wheels on the second beams, sprocket wheels on the projecting portions of said third beams outside of said end walls, a sprocket chain on each series of sprocket wheels, and arranged to pass around said

pairs of sprocket wheels and be held by them in spaced relation, said sprocket chains also adapted to run around the sprocket wheels on the projecting ends of said third beams outside of said chamber, ware racks mounted on said sprocket chains, means to move said chains simultaneously to cause the racks to pass out through the end openings for the loading and unloading operations, and means to heat said chamber.

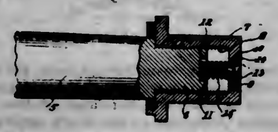
1,268,984. MACHINE FOR FORMING ARTICLES OF PLASTIC MATERIAL. OSCAR C. MCCORMICK, Cleveland, Ohio, assignor of one-fourth to James E. Moyer, Akron, Ohio, one-fourth to Samuel K. Hine, Girard, Ohio, one-eighth to John W. Wright, Youngstown, Ohio, and one-eighth to William Canfield, Pittsburgh, Pa. Filed Dec. 4, 1916. Serial No. 134,913. (Cl. 25—26.)



1. A device of the character described comprising a housing, a carrier mounted thereon, means to intermittingly revolve said carrier a definite fractional portion of a revolution, means to lock said carrier against movement at the termination of each partial revolution thereof, a plurality of rotatable mold supports on said carrier, a mold for a batch of clay mounted in each support, a rotatable spreader arranged to engage the batch of clay in one mold when the orbital movement thereof ceases, a shaping tool adapted to engage a previously spread batch of clay in another mold, means to rotate the mold support containing the mold in operative engagement with said shaping tool, said means being operative when the orbital movement of the carrier ceases, means to terminate the rotation of said mold support when the carrier resumes its orbital movement, means to independently rotate said spreader, and means for moving said spreader and forming tool downwardly to their operative positions.

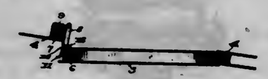
[Claims 2 to 7 not printed in the Gazette.]

1,268,985. AXLE-NUT LOCK. OREL J. MCCURLEY, Kissimmee, Fla. Filed Feb. 13, 1915. Serial No. 8,112. (Cl. 21—30.)



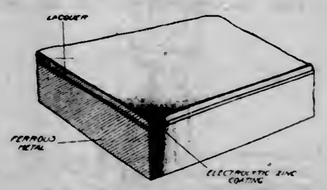
In a device of the character described, in combination with an axle having an extension thereon, a nut threaded upon said extension and having a closed end provided with a transverse groove in its outer face, a stem extending through said closed end centrally of said groove, an angular member on the inner end of said stem engaging within a corresponding recess in the end of said axle extension, a spring surrounding said stem and abutting against said angular member and said closed end of the nut, and a cross-piece secured upon the outer end of said stem and seated within said groove, the ends of said cross-piece extending beyond the ends of said groove to afford finger grips.

1,268,986. AUTOMOBILE-DOOR VENTILATOR. LA MONT A. MCDOWELL, Racine, Wis. Filed July 24, 1916. Serial No. 110,893. (Cl. 16—81.)



The combination, with the body of an automobile, a door hingedly connected thereto, and a lock for said door including a spring pressed slidably movable latch having a beveled end, of a plate hingedly secured adjacent the door within the body of the automobile and adapted to be swung outwardly therefrom, said plate being provided with a slot for receiving the latch, a beveled end for automatically moving the latch inwardly against its spring when the door is moved against the outwardly swung plate to permit said latch to automatically engage in said slot when the door is moved inwardly, and a stop on the plate for engaging the door when the latch is lockingly engaged with the plate.

1,268,987. METAL-COATING. EARLE W. MCMULLEN, Kenosha, Wis., assignor to Simmons Company, Kenosha, Wis., a Corporation of Delaware. Filed Feb. 11, 1918. Serial No. 216,581. (Cl. 91—68.)



1. The improvement in the art of coating steel or other ferrous metal which consists in electrolytically depositing a coating of zinc upon the surface of the metal and subsequently covering the said deposit with lacquer.

2. The improvement in the art of beautifying and protecting a steel surface which consists in electrolytically depositing a coating of zinc upon the said surface and subsequently coating the deposit with a cellulose lacquer.

3. As a new article of manufacture, a lacquered ferrous article provided with an intermediate electrolytic zinc deposit under the lacquer coating.

4. As a new article of manufacture, a steel part coated electrolytically with zinc deposit, and having an outer coat of cellulose lacquer covering said deposit.

1,268,988. VACUUM-CLEANER. FRANCIS C. MASON, Grand Rapids, Mich., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Dec. 6, 1915. Serial No. 65,346. (Cl. 15—60.)

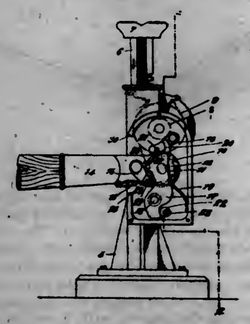
1. In a combined vacuum cleaner and carpet sweeper, the combination of a nozzle casing, suction creating means connected therewith, a rotary carpet sweeper brush supported within the nozzle casing, an eccentric adjusting means mounted on the ends of the brush and rotatably mounted in the ends of said casing, floor wheels at the ends of said carpet sweeper brush, a multiplying gearing disposed within one of said floor wheels comprising an in-

transmit spur gear secured to said wheel, a circular plate fixed to the adjusting means, spur gear pinions on journal pins on said fixed plate meshing with the said internal gear, a driven spur gear secured to said brush and disposed between the said pinions and in mesh therewith to be driven thereby, coacting for the purpose specified.



2. In a carpet sweeper structure, a rotary carpet sweeper brush in a suitable casing, floor wheels at the ends of said carpet sweeper brush, eccentric adjusting means mounted in the ends of said casing, a multiplying gearing disposed within one of said floor wheels comprising an internal spur gear secured to said wheel, a circular plate fixed to one of said adjusting means, spur gear pinions on journal pins on said fixed plate meshing with the said internal gear, a driven spur gear secured to drive said brush and disposed between the said pinions and in mesh therewith to be driven thereby, coacting for the purpose specified.

1,268,989. RATCHET-AND-PAWL ACTUATING MECHANISM. LOUIS MASTRANGEL, West Hoboken, N. J., assignor to Hartford Suspension Company, Jersey City, N. J., a Corporation of New York. Filed Oct. 1, 1910. Serial No. 584,831. (Cl. 254—95.)



2. In a lifting device, the combination with a lifting element embodying a rack, a train of gears, embodying a pinion meshing with said rack, an operating lever, a pawl carried thereby for positively operating said gears to move said lifting element in one direction, a dog mounted independently of said operating lever for controlling the movement of said lifting element in such direction, and a device adapted for engagement by said operating lever and having portions to engage said dog and said pawl in sequence upon the functioning of said operating lever to control the movement of the lifting element in the reverse direction.

4. A lifting device, the combination of a lifting element, of an operating lever, a pawl carried thereby for positively operating said lifting element in one direction, a dog for controlling the movement of the lifting element in such direction, and a device adapted for engagement by said lever and provided with surfaces to render effective the functioning of said dog and said pawl in sequence to control the movement of the lifting element in the reverse direction.

8. In a lifting device, the combination with a lifting element embodying a rack, a gear train embodying a pinion meshing with said rack, a ratchet for imparting motion to said gear train, an operating element, a pawl carried thereby, and adapted to engage said ratchet to positively operate said lifting element in one direction, a dog adapted to engage said ratchet and control the operation of said lifting element in such direction, a cam lever having a plurality of cam surfaces adapted to be effective on said pawl and said dog, and means for functioning said cam lever, whereby said operating element will actuate the same to cause said cam surfaces to sequentially engage with said dog and said pawl and control the movement of the lifting element in the reverse direction.

[Claims 1, 3, 5 to 7, and 9 not printed in the Gazette.]

1,268,990. MANGLE. EMIL MOELLER, Chicago, Ill. Filed July 23, 1917. Serial No. 182,219. (Cl. 219—37.)



A hand operated mangle comprising a handle; a hollow roller rotatably supported by said handle; an electrical heating element arranged in said roller; electrical conductor wires coöperating with said heating element, said roller having openings at its ends for the entrance of said conductor wires; and closures at the inner sides of said openings through which said conductor wires pass, substantially as described.

1,268,991. DRAFT-ARM. CHARLES J. NASH, Chicago, Ill., assignor to Universal Draft Gear Attachment Co., a Corporation of Illinois. Filed Aug. 10, 1917. Serial No. 185,455. (Cl. 213—42.)

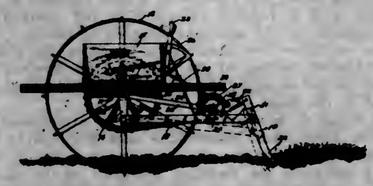


1. A draft casting comprising a body portion having a lateral flange adjacent to its lower margin, an aperture adjacent to and above the flange for receiving a bar for supporting a portion of the draft rigging of a car, and a beveled boss at the upper margin of the aperture.

2. In combination, a pair of draft castings each having a lateral flange adjacent to its lower margin, an aperture above and adjacent to the flange and one of said castings having a beveled boss at the upper margin of the aperture, and a bar passing through the apertures of the two arms and having a gib at one end overhanging the flange of one casting and being bolted to the flange of the other casting, the head of the attaching bolt bearing upon the boss.

3. In combination, a pair of draft castings each having a lateral flange adjacent its lower margin and apertures above and adjacent to the flange, one of such arms having a beveled boss at the upper margins of its apertures, a carry iron and gear-supporting plate extending through corresponding apertures of the two castings, such iron and plate each having a gib at one end engaging the margin of one of the castings and being bolted to the flange of the other casting, the heads of the attaching bolts bearing against the boss associated with the casting aperture.

1,268,992. QUACK-GRASS DIGGER. OLAUS O. NORBY, Detroit, Minn. Filed Aug. 6, 1917. Serial No. 184,740. (Cl. 97—25.)



1. The combination with a wheel-supported frame, of a plurality of laterally-spaced tedder bars pivotally connected to the frame, with freedom for endwise reciprocating movement, cranks for operating the tedder bars, tedder levers intermediately pivoted to the tedder bars and having toothed lower ends, springs yieldingly holding the tedder levers in operative positions, and means for operating the cranks.

3. The combination with a wheel-supported frame, of a plurality of laterally-spaced tedder bars, connected to the frame, with freedom for endwise reciprocating movement, a shaft, vertical swinging links connecting the shaft to the frame, eccentrics on the shaft and coöperating eccentric straps on the tedder bars for operating the same, tedder levers on the free ends of the tedder bars, means for raising and lowering the shaft, and means for driving the shaft.

4. The combination with a frame, an axle on which said frame is supported, and traction wheels journaled on the axle, of depending arms loosely pivoted on the axle, laterally-spaced tedder bars having their forward ends pivoted to the free ends of the arms, tedder levers on the rear ends of the tedder bars, a horizontal shaft, a pair of links connecting the shaft to the axle, eccentrics on this shaft, and coöperating eccentric straps on the tedder bars for operating the same, and connections from the traction wheels to the shaft for driving the same therefrom.

[Claim 2 not printed in the Gazette.]

1,268,993. ROCKER SIDE BEARING. JOHN F. O'CONNOR, Chicago, Ill., assignor to William H. Miner, Chazy, N. Y. Filed Feb. 26, 1917. Serial No. 151,004. (Cl. 64—65.)

1. In a side bearing, the combination with a housing, of a polygonal shaped rocker loosely seated within the housing, and coöperating means on said rocker and housing for properly and positively guiding said rocker to normal position after each actuation thereof, said means including non-circular lugs on the ends of the rocker and correspondingly outlined guiding ledges on the housing.

3. In a side bearing, the combination with a housing, of a rocker loosely mounted within the housing, the rocker being provided at each end thereof with substantially triangular shaped lugs having curved sides, and the adjacent walls of the housing having guiding ledges, the outlines



of which are generated substantially in the manner of a cycloid by said lugs.

[Claims 2 and 4 not printed in the Gazette.]

1,268,994. FLUID-GAGE SHIELD. HENRY D. OLER, Middletown, N. Y. Filed June 1, 1916. Serial No. 101,153. (Cl. 73—54.)



1. A fluid gage shield comprising forward and rear casing members, each casing member comprising a pair of sections, one section of each casing member having longitudinal ways formed therein, the remaining section of each casing member projecting into the ways of the corresponding casing member, thereby telescopically connecting said sections together, and means for releasably retaining said casing members in engagement with each other.

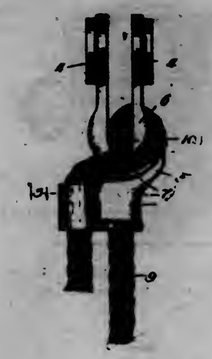
4. A fluid gage shield comprising forward and rear casing members, means for releasably connecting said casing members together, said casing members comprising a plurality of sections, the lower of said sections having ways formed therein, the remaining sections projecting into said ways, said sections having extensions, securing means carried by said extensions, said forward casing member having transparent portions, and said rear casing member having registering perforations formed therethrough, whereby steam and water from a broken fluid gage will be directed from said shield through said perforations.

[Claims 2 and 3 not printed in the Gazette.]

1,268,995. ROPE-SOCKET. EDWARD P. PARMETER, Grand Rapids, Wis., assignor to Rood Construction Company, Grand Rapids, Wis., a Corporation of Wisconsin. Filed June 27, 1917. Serial No. 177,180. (Cl. 24—129.)

4. A device of the character described comprising a body member having two openings extending longitudinally through the same, a longitudinally-arranged an-

chering jaw projecting from one end of the body member beside one of said openings and disposed symmetrically with respect to a plane containing the axis of the latter



opening, the end of the block from which the jaw projects being in the form of a helical seat extending past said opening and partly around said jaw.

[Claims 1 to 3 not printed in the Gazette.]

1,268,996. ANTICREEPER. FREDERICK A. PRESTON, Highland Park, Ill., assignor to P. & M. Company, Chicago, Ill., a Corporation of Illinois. Filed Apr. 13, 1917. Serial No. 161,726. (Cl. 238—4.)



1. A single piece rail anchor comprising a plurality of arms, a tension member intermediate said arms, a jaw at the end of one of said arms, the end of the other of said arms extending upwardly at an angle thereto and adapted to be bent over the flange of a rail after said anchor has been sprung into position.

2. A single piece rail anchor comprising a plurality of arms, one of said arms being provided with a rail base engaging jaw, the other of said arms having its end upturned and adapted to be bent around the flange of a rail after the anchor has been positioned thereon, and a downwardly projecting U-shaped member joining the inner ends of said arms and adapted to exert a horizontal tension to retain said anchor in firm frictional engagement.

4. A rail anchor comprising a single piece of flat steel having a rail base engaging jaw at one end, the angle of said jaw being smaller than the corresponding angle of the rail base, and means whereby said anchor snaps into position on said rail base when said jaw is driven into snug engagement therewith.

7. An anti-creeper comprising a steel bar having its ends bent to form opposed rail base engaging members, and a portion thereof intermediate said ends being bent to form a substantially U-shaped tension member adapted to depend beneath the rail base and to engage one face of a cross tie, the sides of said tension member lying in close proximity and being substantially parallel, and means whereby said tension member is sprung when said anchor is applied to a rail thereby holding the same firmly in position.

[Claims 3, 5, and 6 not printed in the Gazette.]

1,268,997. CUTTING DEVICE. TRUMAN CURTIS PRUETT, Covington, Ky. Filed Sept. 6, 1917. Serial No. 189,990. (Cl. 30—9.)

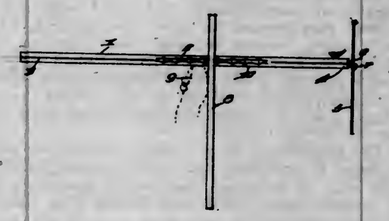


2. A device of the character specified for attachment to a cutting blade, and comprising a shoe provided at its rear end with a reduced extension having upstanding arms adjacent to the shoe and adapted to embrace the blade, a set screw for clamping the arms on the blade, said extension having at its rear end an upstanding notched lug for engaging the blade for holding the blade inclined to the plane of the shoe.

3. A device of the character specified for attachment to a cutting blade, and comprising a shoe provided at its rear end with upstanding arms adapted to embrace the blade, a set screw for clamping the arms on the blade, said shoe having beyond the arms an upstanding notched lug for engaging the blade to hold the blade inclined to the plane of the shoe.

[Claim 1 not printed in the Gazette.]

1,268,998. TOY. CHARLES M. RANKERT, Spokane, Wash. Filed Oct. 22, 1917. Serial No. 197,878. (Cl. 46—14.)



1. In a toy, a rotating body, a spindle supporting said body and having a series of projections extending substantially transversely with respect to the longitudinal axis of said spindle, a member adapted to be reciprocated along said projections to vibrate the latter, said body being rotatable about an axis eccentric to the longitudinal axis of said spindle whereby brace of the latter by the finger will generate rotative thrust to rotate said body, substantially as described.

2. In a toy, a spindle adapted to be held in one hand of the player and having a roughened linear surface, a body rotatively mounted on one end of said spindle, a member adapted to be held by the other hand of the player and reciprocated along said roughened surface to generate vibratory orbital movement of the free end of said spindle, said body being mounted to rotate about an axis off center with respect to the axis of said spindle whereby said orbital movement of said spindle will cause said body to rotate in a direction corresponding to the direction of said body and whereby support of the spindle by the thumb finger of the player on the side of the spindle will cause said body to reverse its direction of rotation, substantially as described.

1,268,999. OIL-BOLT. RUDOLPH W. RAY, Cleveland, Ohio, assignor, by direct and mesne assignments, of five-tenths to Albert D. Ray, four-tenths to Worthington Hoyt, and one-tenth to Bluford W. Brockett and Elbert L. Hyde, Cleveland, Ohio. Filed Nov. 4, 1916. Serial No. 129,511. (Cl. 64—27.)



3. As an article of manufacture, a self contained oil bolt, comprising a bolt body having a head and shank and provided with an inner cavity forming an oil reservoir, said head and shank being each provided with a radial port, a rotatable valve member in said cavity adapted to open and close both of said ports, and an extension on said valve member lying outside of said valve body and adapted to cover and uncover the outer end of the port in the bolt head.

7. An oil bolt, comprising a bolt body having an oil reservoir, a rotatable valve controlling the flow of oil from said reservoir, and a spring strip connecting the valve and body and adapted to be twisted when the valve is rotated.

10. An oil bolt, comprising a bolt body having an oil reservoir and a filling port in its wall, and a valve rotatable in said body and provided with portions adapted to open and close both ends of said port.

[Claims 1, 2, 4 to 6, 8, 9, and 11 not printed in the Gazette.]

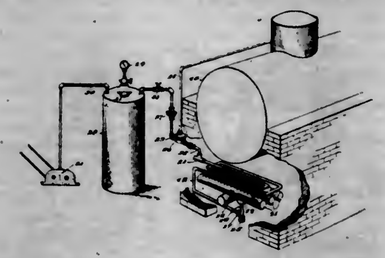
1,269,000. SOFT-METAL ALLOY AND METHOD OF MAKING SAME. WILLIAM L. RICE, Reading, Pa., assignor of one-half to himself and one-half to Peter S. Braucher, Reading, Pa. Filed June 27, 1916. Serial No. 106,084. (Cl. 75—1.)

1. An alloy consisting of lead, tin, antimony and sodium.

2. An alloy formed by solidifying a molten mixture of lead, tin, antimony and caustic soda.

3. The method of forming a soft metal alloy which consists in adding caustic soda to a molten mixture of tin and antimony, and then effecting a molten mixture of the product with lead and adding caustic soda thereto.

1,269,001. VAPORIZING-TUBE. HERBERT E. RIDER, Brooklyn, N. Y., assignor, by mesne assignments, to Liberty Aeroil Burner, Inc., a Corporation of New York. Filed Sept. 11, 1917. Serial No. 190,832. (Cl. 158—65.)



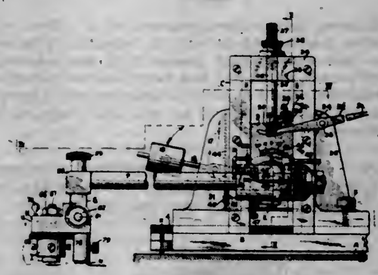
1. In an oil burner of the class described, a retort comprising a shell and a plurality of corrugated rods therein of different metals having different coefficients of expansion.

5. In an oil burner of the class described, a burner head comprising a plurality of detachable burner tubes, a distributing duct supporting said burner tubes, disposed centrally under said burner tubes, an inlet for a mixture of air and gas formed in the distributing duct, a nozzle under said inlet, and a retort comprising a shell having a plurality of rods of different metals therein, connected to said nozzle.

8. A liquid fuel retort including means operable by temperature changes for abrasively dislodging precipitation of carbon.

[Claims 2 to 4, 6, 7, 9, and 10 not printed in the Gazette.]

1,269,002. DIAMOND-GRINDER. FERDINAND RIES, New York, N. Y. Filed Apr. 13, 1917. Serial No. 161,725. (Cl. 51—11.)



1. A machine of the nature disclosed combining a base; a frame horizontally adjustable thereon and consisting of an upright frame and a carriage vertically slidable thereon; a member horizontally pivoted to said carriage; an arm pivoted transversely to said member; a support vertically pivoted to the extremity of said arm; a member horizontally pivoted to said support; and a dop holder vertically pivoted to said member.

2. A machine of the nature disclosed combining an upright frame and a carriage vertically slidable therein; a gem holding instrumentality having movement in all directions mounted on said carriage; means for counterbalancing the weight of said carriage; and means for rendering said counterbalancing means effective or ineffective.

8. A gem polishing machine combining a downwardly movable mechanism having an arm located over a lap; a collet having a dop-receiving socket and also a number of symmetrically disposed sockets; a gem-carrying dop carried by said collet; and a series of prongs adapted to be individually secured in said sockets and to be independently shifted from one socket to another.

9. A gem-grinding mechanism combining a member provided in its end with a recess adapted to seat a gem; a part having a plurality of sockets disposed around the axis of said seat; a few gem-retaining prongs adapted to be inserted into said sockets each to exert pressure on said gem in the direction of the axis of said member and grouped to expose a predetermined side of the gem to the action of a lap; and means for clamping said prongs in said sockets, whereby the prongs may individually be shifted in succession to other sockets to expose the different sides of the gem to the action of the lap without releasing said gem or permitting it to shift its mounting in said seat.

10. A gem-grinding mechanism combining a holder; a mounting for said holder; indexing means for adjustably fixing the angular relations of said parts; means for seating a gem in definite relation to said holder; a plurality of independent diversely shaped fingers; and means enabling one or more of said fingers to be independently secured to said holder and to be individually shifted in position; whereby the fixed relation of said gem to said holder will always be maintained by some of said fingers during the re-adjustment of other fingers.

[Claims 3 to 7 not printed in the Gazette.]

1,269,003. PHOTOGRAPHIC-FILM SPOOL. GARSHOM A. RIGGS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed June 27, 1916. Serial No. 106,188. (Cl. 242—128.)



A photographic film spool composed of a tubular core having its ends turned radially to constitute attaching portions and flange plates composed of disks disposed against the ends of the core and having notched marginal flanges crimped over the said attaching portions to present continuously smooth surfaces on the inner faces of the spool flanges.

1,269,004. HINGE-JOINT FOR ARTIFICIAL LIMBS. JAMES FRANCIS ROWLEY, Chicago, Ill. Filed June 18, 1917. Serial No. 175,386. (Cl. 16—11.)



1. A hinge joint for artificial limbs, comprising a pair of members which are formed to interfit at one end by one member being forked to straddle the other, a ball race formed in the unforked one of said members, and a pair of bearing cones supported in said forked member, one of said bearing cones having a shank threaded into one arm of said forked member and a cylindrical head fitting a cylindrical aperture in the remaining arm of said forked member.

2. A hinge joint for artificial limbs, comprising a member having a bearing race therein, a second member having a bifurcated head, the branches of said head being adapted to embrace the opposite sides of said first-mentioned member, one of said branches having a recess therein, a bearing cone loosely carried in said recess, a second bearing cone supported by the other of said branches and having threaded relation with said one branch, said cones having their bearing surfaces in opposed relation to each other and forming a split bearing race located in opposed relation to the bearing race in said first-mentioned member, and rollers coacting between said bearing races.

5. A joint for artificial limbs, comprising a pair of members one of which is forked to receive the other in hinge relation, said members being apertured in coaxial alinement with the hinge axis and provided with ball races respectively, balls coacting with said races, the race for the forked member being split and including a part set in and projecting from the inner face of one of the fork arms, and a part having a head held in the aperture of the opposite arm and a shank extending through the first mentioned part and supported in the aperture of the said one arm, and means for adjusting the spacing of said parts, the aperture in said opposite arm being adapted to admit both of said parts in assembling the joint.

[Claims 3 and 4 not printed in the Gazette.]

1,269,005. RELAY-BUZZER. FRED SCHOENWOLF, Chicago, Ill., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Sept. 8, 1914. Serial No. 860,554. (Cl. 177—7.)

1. A device of the character described, including an electromagnet, a heel iron and an armature for said electromagnet, a mounting plate, a member extending from the core of said electromagnet through the said heel iron and mounting plate to secure said electromagnet and heel iron to said mounting plate, a spring member extending parallel to the axis of said electromagnet having its one end attached to said heel iron, a pair of interrupter springs also secured to said heel iron and extending parallel to said first spring, a buffer extending through an orifice in said first spring against which one of said springs of said pair of springs rests, a buffer carried by said first spring adapted to engage the other spring of



said pair of springs to move it from engagement with its companion spring, a circuit for said electromagnet adapted to be intermittently interrupted by the action of said spring member, a dust cover for completely inclosing said electromagnet and springs, and a weight attached to said spring member adapted to intermittently engage the inner surface of said dust-proof cover in response to the intermittent operation of said electromagnet to produce an audible signal.

[Claim 2 not printed in the Gazette.]

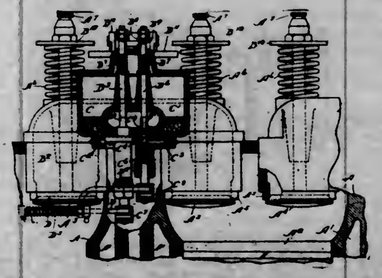
1,269,006. PROCESS FOR PURIFYING FLUIDS. BOTHO SCHWERIN, Berlin, Germany, assignor to Elektro-Osmose Aktien-Gesellschaft (Graf Schwerin Gesellschaft), a Corporation of Berlin, Germany. Filed Dec. 4, 1916. Serial No. 135,055. (Cl. 210—1.)

1. A process of purifying liquids which comprises mixing with the liquid amorphous silicic acid the normal charge of which is so altered as to increase the potential difference between the silicic acid and the impurities which are to be adsorbed thereby.

2. A process for purifying liquids, in which to the liquid is added amorphous silicic acid, the charge of which is so altered by treatment with unneutral substances that the silicic acid has an increased power to adsorb the impurities of the liquid.

3. A process for removing germs from drinking water, in which amorphous silicic acid, of which the charge capacity is altered by treatment with acids, is added to the water.

1,269,007. INTERNAL-COMBUSTION ENGINE. JOHN A. SECOR, Laporte, Ind. Filed Apr. 16, 1915. Serial No. 21,875. (Cl. 123—25.)



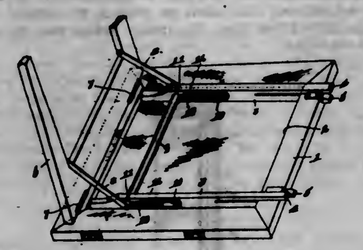
1. A combustion motor containing a cylinder, an air conduit with a Venturi tube portion to establish a high velocity air zone, engine controlled means for cutting the air current on and off, governor controlled means for delivering a varying supply of oil and water within such high velocity air zone and engine controlled means for cutting in the supply of oil and water after the air current has started and for cutting off the supply of oil and water before the air current has ceased.

10. A combustion motor containing a cylinder, an air conduit, engine controlled means for cutting the air current on and off, governor controlled means for delivering a supply not varying of oil and water to such air current and engine controlled means for cutting in the supply of oil and water after the air current has started and for cutting off the supply of oil and water before the air current has ceased.

21. A constant compression combustion motor containing a cylinder, an air conduit with means to establish a high velocity air zone therein, a liquid fuel valve and a water valve each having outlet nozzles within the zone of maximum air velocity, engine controlled means for cutting a constant air supply on and off, engine controlled means for cutting in the supply of fuel and water after the air current has started and for cutting off the supply of fuel and water before the air current has ceased, with means for automatically varying the relative proportions of fuel and water in thermodynamic correlation with the power output and heat development so as to provide leaner fuel mixtures as the power demand decreases and richer mixtures as the power demand increases.

[Claims 2 to 18 and 20 not printed in the Gazette.]

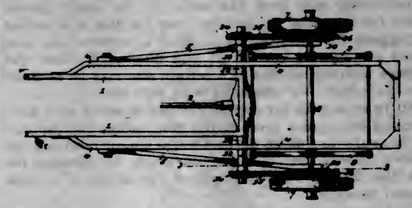
1,269,008. FOLDING TABLE. JOHN SEDAJ, Kenosha, Wis. Filed July 1, 1916. Serial No. 107,147. (Cl. 45—11.)



1. The combination with a table top, of a support therefor foldably connected therewith; means for releasably locking said support in operative position, said means comprising a pair of brace rods each having one end pivotally connected with said support; a member connecting the free ends of said brace rods; cleats at the under side of said table top having elongated slots loosely engaged by said connecting member; and flexible detents formed integral with said cleats and each constituting one side of the corresponding slot, adapted for engagement with said connecting member to releasably lock the same in engagement with corresponding terminals of said slots, substantially as described.

2. The combination with a table top, of a support therefor foldably connected therewith; means for releasably locking said support in operative position, said means comprising a pair of brace rods each having one end pivotally connected with said support; a member connecting the free ends of said brace rods; cleats at the under side of said table top having elongated slots loosely engaged by said connecting member; and flexible detents formed integral with said cleats and each constituting one side of the corresponding slot, adapted for engagement with said connecting member to releasably lock the same in engagement with corresponding terminals of said slots, the inner sides of said detents being inclined to widen said slots as they recede from the ends of said detents, substantially as described.

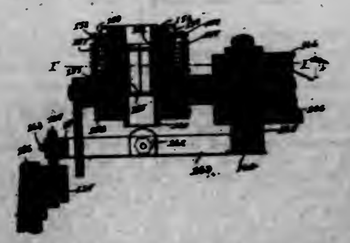
1,269,009. MOTOR-TRUCK ATTACHMENT. JAMES W. SHAW, Chicago, Ill. Filed Oct. 11, 1916, Serial No. 124,974. Renewed Nov. 12, 1917. Serial No. 201,724. (Cl. 180—16.)



1. In a motor truck attachment of the type herein described, the combination of a forward frame and a rearward or extension frame fixedly connected together, an axle resiliently associated with the rearward frame aforesaid, driving wheels mounted on said axle, a vibratory frame pivotally connected at its forward end to one of said frames and rigidly connected at its rearward ends to the axle aforesaid, a differential drive shaft mounted on said vibratory frame and having chain and sprocket connections with the driving wheels aforesaid, and operative connection with a motor shaft, substantially as set forth.

2. In a motor truck attachment of the type described, the combination of a forward frame and a rearward or extension frame fixedly connected together, an axle resiliently associated with the rearward frame aforesaid and carrying the fixed heads of brake mechanisms, driving wheels mounted on said axle, a vibratory frame pivotally connected at its forward end to one of said frames and rigidly connected at its rear ends to the fixed heads of the brake mechanisms of the axle aforesaid, a differential drive shaft mounted on said vibratory frame and having chain and sprocket connections with the driving wheels aforesaid, and operative connection with a motor shaft, substantially as set forth.

1,269,010. SORTING AND GAGING APPARATUS. WILLIAM SHAW, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Original application filed Feb. 24, 1913, Serial No. 750,142. Divided and this application filed Oct. 10, 1916. Serial No. 124,807. (Cl. 83—92.)



1. In apparatus for sorting articles, a rotatable member for carrying a plurality of articles, a plurality of rotatable die carrying members and means for passing the articles successively through a die in each member.

4. In apparatus for sorting articles, a rotatable shaft, a drum keyed thereto having a plurality of recesses spaced about its periphery, a plurality of spaced members keyed to the shaft having a plurality of dies therein in alinement with said recesses, means adapted to deposit the articles successively into the dies of each carrying member and a hopper for feeding articles into said drum.

7. In apparatus for sorting articles, a rotatable vertical shaft, a drum fastened thereto having a plurality of re-

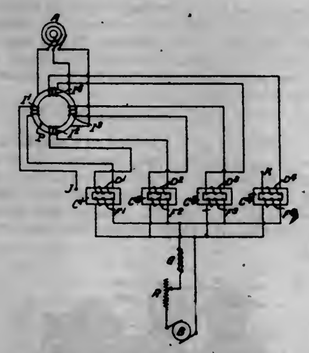
cesses spaced about its periphery, means for feeding articles thereto, a plurality of horizontal plates attached to the shaft, a plurality of dies of equal size in each of the plates, said dies being in alinement with the recesses and of increasing size from the upper to the lower plates, means for releasing the articles from the dies, a plurality of hoppers for receiving articles of a certain size, and means for opening certain of said dies when above the hoppers whereby articles of a certain size may be dropped into the hopper corresponding with said size.

10. In apparatus for sorting articles, a set of split dies, a second set of dies beneath the first, means for depositing an article in a die in the first set, a bin for receiving the articles passing therethrough and means for opening the said dies in the first set to release the article if it fails to pass through.

15. In apparatus for sorting articles, a rotatable shaft, a plurality of spaced members secured thereto, a plurality of split dies of uniform size in one member, a plurality of split dies of uniform but larger diameter in each next succeeding member, a bin to receive the articles passing through the closed split dies in each member, means for feeding the articles into the dies in the first member, means for opening the split dies in each member when they are above the bin corresponding thereto.

[Claims 2, 3, 5, 6, 8, 9, 11 to 14, and 16 to 21 not printed in the Gazette.]

1,269,011. METHOD FOR MULTIPLYING THE FREQUENCY OF ELECTRIC CURRENTS. ISAAC SHOENBERG, London, England, assignor to Marconi Wireless Telegraph Company of America, New York, N. Y., a Corporation of New Jersey. Filed Dec. 27, 1917. Serial No. 209,197. (Cl. 172—281.)



2. An apparatus for increasing the frequency of a multiphase current comprising a coil having an iron core of low reluctance connected into one lead of each phase, a winding for continuous current on each of said cores, means for supplying current to said windings, and a choking coil having a core with open magnetic circuit in series with each of said windings, the ratio between the continuous current ampere turns and the alternating current ampere turns being such that the current wave of each phase is increased in amplitude and decreased in duration on one side of the zero line to such extent that the portion of increased amplitude is an integral fraction of the fundamental frequency, the phases being directly connected in such manner that the portions of the current waves of increased amplitude all lie on the same side of the zero line.

3. The method of obtaining a relatively high frequency current from n currents of different phase having a common lower frequency, which consists in increasing the amplitude and decreasing the duration of one part of the current wave of each of said currents and directly combining the resulting currents with non-magnetic connections to give a single alternating current n of times the frequency of the original currents.

5. The method of obtaining a relatively high frequency current from a plurality of currents of different phase having a common lower frequency, which consists in deforming the wave shape of said currents in such manner as to increase the amplitude and decrease the duration of the part of the wave on one side of the zero line as compared to the other part, and directly combining the deformed waves to give a current of increased frequency.

6. The method of obtaining a relatively high frequency current from a plurality of currents of different phase of a lower common frequency, which consists in deforming the wave shape of each of said currents by inserting therein a transformer having an iron core and having a magnetic circuit of low reluctance, magnetizing said transformer by a continuous current, and directly combining the distorted currents to give a current of high frequency.

8. An apparatus for increasing the frequency of a multiphase alternating current comprising in combination a coil connected into each phase of said source, saturated cores for said coils of low magnetic reluctance, and a winding for each core connected to a source of continuous current for saturating the core, the number of phases and coils as well as the ratio of the continuous current and alternating current ampere turns being so arranged as to enable the phases to be directly added and to give the desired multiple of the fundamental frequency.

[Claims 1, 4, 7, and 9 not printed in the Gazette.]

1,269,012. CLOTHES-DRIER. CARTER W. SINGLETERRY, Downers Grove, Ill., assignor of one-fourth to Edward D. Schuth and one-fourth to William F. Schuth, Chicago, Ill. Filed Nov. 17, 1916. Serial No. 131,815. (Cl. 68—34.)



1. The combination of a suitable hollow case adapted to receive through a suitable opening in one wall, a plurality of rigid clothes bars adapted to be moved from a position in the case to a position outside the case where they extend therefrom, and a trackway mounted substantially inside the case engaged by the end portions of said clothes bars adapted to guide and control said clothes bars in all positions of their said movement.

2. In a device of the class described, a generally vertical case provided with an elongated slot therein permitting the entrance of clothes bars therethrough, a generally horizontal supporting member extending across the interior of the case adapted to receive and support clothes bar members entering the case, a plurality of clothes bar members suspended from said cross member, means on the outer ends of said cross member preventing the free movement of the clothes bar members out of the case, and spring means within the case urging the clothes bar members outward.

3. In a device of the class described, a generally vertical case having a slot on one side forming an entrance for clothes bar members, a plurality of clothes bar members adapted to enter the case through said slot and lie in a substantially vertical position inside the case, a cap or hood at the top of the case of approximately semi-circular cross-section having in its outer vertical face an elongated slot within which the ends of clothes bar members may enter said hood, and a continuous supporting member for the clothes bar members extending transversely of the case to support the clothes bar members in the case, thence into the hood to retain the ends of the same clothes bar members inside the hood, the whole so shaped and arranged that the clothes bar members may be moved from suspended concealed position in the case to a position wherein they project from the hood in a plane at right angles to the general length of the case and are supported for clothes drying purposes, for the purposes set forth.

[Claim 4 not printed in the Gazette.]

1,269,013. CONVEYER-LAG. ROBERT R. SMILEY, Goodman, Wis. Filed Aug. 13, 1917. Serial No. 185,845. (Cl. 193—8.)



A conveyer lag comprising a pair of spaced plates having alined keeper apertures and cable receiving recesses therein, a swinging keeper provided with a bolt aperture at its free end, said keeper being fitted between the plates and pivoted thereto, the keeper being provided with cable gripping recesses adapted to register with the cable receiving recesses in the plates when said keeper is folded between said plates to thus form a cable receiving opening, and a bolt fitted through the keeper apertures and the bolt aperture in the keeper for locking the latter to the plates in its folded position, whereby the aforesaid keeper constitutes a cable grip and reinforcing filler for the spaced plates.

1,269,014. DOUBLE-ENDED CROCHET-HOOK AND SHIELD. WARREN H. STANSBERY, Grand Haven, Mich. Filed Feb. 27, 1917. Serial No. 151,198. (Cl. 66—17.)



1. In combination a tubular shield having open ends and a longitudinal slot in one side closed at both ends, a hook member mounted loosely within the shield and comprising a central cylindrical section having substantially the same diameter as the inner diameter of the shield and oppositely extending shanks, each terminating in a hook, projections pressed inwardly in the tube at substantially its middle point to frictionally engage the central cylindrical section of said hook member, a sleeve having a knurled outer surface located loosely around the shield and a pin passing through the sleeve and slot in the shield into the hook member at substantially the middle point thereof.

[Claim 2 not printed in the Gazette.]

1,269,015. MILKING-MACHINE. EMIL STARCH and BENJAMIN STARCH, La Crosse, Wis. Filed Nov. 16, 1914. Serial No. 872,284. (Cl. 31—98.)

1. In milking apparatus, a chamber having its lower end open and provided at said end with a downwardly facing valve seat, a milk inlet pipe connected to said chamber, a reciprocating pump connected to said chamber, a counterweighted valve disposed outside of said chamber and adapted to close the lower end thereof, said counterweight acting in conjunction with the suction stroke of said pump to maintain said valve closed, and a depending flange on the chamber for directing the discharge downward.

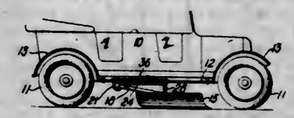


2. In milking apparatus, the combination of a casing having an integral top and provided with a discharge opening, a valve for closing said opening, a pump, a connection between the pump and the casing, and an inlet pipe extending through the top of the casing and into the milk chamber to a point below the connection for the pump.

3. In milking apparatus, the combination of an inverted, cup-shaped casing having an integral top and having its lower end open, a downwardly opening valve for closing said open end, an inlet connection comprising a nipple removably secured in the top of the casing, a pump, and a connection between the pump and the casing comprising a nipple removably secured in the top of the casing.

4. In milking apparatus, a casing, means for admitting milk thereto and for discharging the same therefrom, an exterior shoulder formed annularly on said casing, and a ring adapted for screw-threaded engagement with said casing above said shoulder, whereby to clamp therebetween the edge of a support.

1,269,016. SNOW-PLOW. BAZYLI STASZKO, Hatfield, Mass. Filed Mar. 23, 1918. Serial No. 224,296. (Cl. 37—7.)



1. In a snow plow, the combination with a vehicle having lateral running boards, of a pair of diagonally disposed curved shear plates, levers rigidly engaged with said plates, brackets upon which said levers are pivotally supported at one end, resilient supports at the opposite ends of said levers, and means for engaging or disengaging said brackets from the running boards of said vehicle.

2. In a snow plow attachment for vehicles, the combination with a vehicle having running boards extending longitudinally at both sides thereof, of brackets fitted against the lower side of said running boards, studs extending upward through said brackets, said studs having oppositely disposed transverse slots formed therethrough, sliding plates having openings receptive of the heads of said studs, and slots extending between the openings adapted to engage with the slots in said studs, means for holding said sliding plates in an engaged position, levers pivoted in said brackets, angular bars formed with said levers, shear plates secured to said angularly disposed bars, and flexible connections between said bars and said brackets whereby said plates are held resiliently suspended.

1,269,017. CAR. FRED STEFFENS, St. Joseph, Mo. Filed Mar. 12, 1917. Serial No. 154,198. (Cl. 105—239.)

1. A car body, two trucks centrally pivoted thereto, a single bearing on one truck centrally supporting said car

body, and two bearings supporting said car body on the other truck.



2. A car body, two trucks centrally pivoted thereto, a single bearing on one truck centrally supporting said car body, and two bearings supporting said car body on the other truck, the truck carrying the two bearings being disposed so that it carries the greater portion of the load.

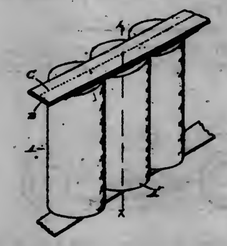
3. A car body, a truck, and oscillatory bearing means pivoted to swing on a horizontal axis on said truck and revoluble with respect to the car body and supporting the car body at two points at opposite sides respectively of said axis.

4. A car body, a truck, a bearing member pivoted to the truck on a horizontal axis, and two rollers supported by said member at opposite sides respectively of the axis thereof and supporting said car body.

5. A car body, a truck, two bearing members pivoted to the truck on a horizontal axis, and two pairs of rollers supporting said car body and respectively supported by said bearing members at opposite sides of said axis.

[Claims 6 to 21 not printed in the Gazette.]

1,269,018. CUSHION. ROBERT L. STEVENS, Albion, Mich., assignor to National Spring & Wire Company, Albion, Mich., a Corporation of Michigan. Filed Dec. 2, 1916. Serial No. 134,559. (Cl. 5—13.)



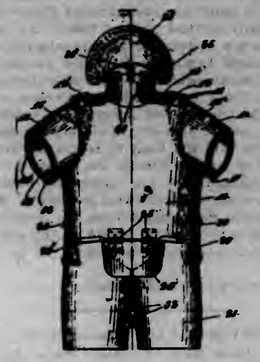
3. In a cushion, the combination with a series of springs, of means for engaging and securing the inner ends of said springs, a fabric covering comprising a series of individual fabric tubes open at their inner ends for engaging the respective springs, and a fabric strip stitched to the flattened outer ends of said tubes forming a closure for the pockets and a flat tie extending in a plane transverse to the axis of the springs.

[Claims 1 and 2 not printed in the Gazette.]

1,269,019. WAR PROTECTING-SUIT. FRANCISZEK SZMYT, Bayonne, N. J. Filed Apr. 22, 1918. Serial No. 230,008. (Cl. 89—36.)

1. A laminated armor comprised of inner layer of cotton fabric, a center layer of glass, and another layer of paraffin fiber, all of said layers being firmly united together.

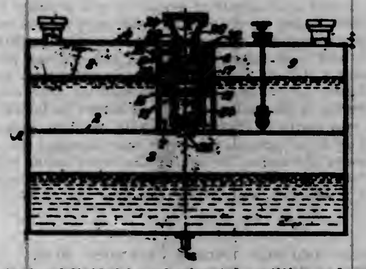
3. An armor, comprising a front and back plate, leggings attached thereto, said leggings covering the rear and front portion of the limbs, connections between the elements of said leggings, armored aprons attached hingedly to said front and rear plates respectively, conical armored coverings for the arms, said coverings being removably engaged in said front and back plates, a helmet hingedly engaged with said rear plate, and means for normally holding said helmet in position, all of said



plates being of laminated construction, comprised of layers of cotton, glass and paraffin fiber respectively.

[Claim 2 not printed in the Gazette.]

1,269,020. MEASURING DEVICE FOR FLUID-TANKS. STEPHEN TACTKIAN, New York, N. Y. Filed June 21, 1916. Serial No. 104,882. (Cl. 220—120.)



A tank subdivided by a horizontal partition and vertical partitions into a lower compartment and upper middle and end compartments, the middle compartment having an upper inlet and a lower outlet discharging into the lower compartment, a measuring wheel in the middle compartment and journaled in the side walls thereof, a housing inclosing the measuring wheel and in communication with the inlet and the outlet of the middle compartment, and indicating mechanism disposed in the middle compartment exterior to the housing of the measuring wheel and geared to the latter.

1,269,021. CAMERA. STEPHEN TACTKIAN, New York, N. Y. Filed June 28, 1916. Serial No. 105,397. (Cl. 242—71.)

3. In a camera, in combination with film strip supporting means, means for severing a portion of the film strip from the remainder, a winding spool provided with film gripping means adapted to move bodily into juxtaposition with the end portion of the said remainder, and means holding the said end of the film strip in position to be engaged by the said film strip gripping means.

5. In a camera adapted to support and advance a film strip, a closed casing detachably mounted on the camera, a spool carried by said casing on which the said strip is adapted to be wound, said casing having a member adapted to be moved to provide an opening for the passage of the strip, a cutting device mounted on said member adapted to sever the portion of the film strip wound upon

the said spool from the remainder when the said member is moved to close the casing, means holding the end of said remainder in juxtaposition with the line of opening of said casing, and means whereby the said spool may be moved bodily toward the said line of opening to engage the said strip end.



6. In a camera, a film strip winding spool having a pair of relatively movable film gripping jaws operable from the exterior of the camera casing.

11. In a camera, a bodily movable film strip winding spool having a pair of relatively movable film strip gripping jaws, a common handle for operating said jaws and rotating the spool, means for preventing operation of the jaws when the spool is in normal winding position, and means adapted to permit operation of the jaws and to prevent rotation of the spool when the latter is displaced from normal winding position.

18. In a camera adapted to support and advance a film strip, a receptacle closed so as to exclude light detachably mounted on the camera and adapted to receive the exposed portion of the film strip, means mounted within said receptacle for gripping and winding said film within the receptacle, and a part of said receptacle comprising means for severing the portion of the strip in the said receptacle from the remainder.

[Claims 1, 2, 4, 7 to 10, and 12 to 17 not printed in the Gazette.]

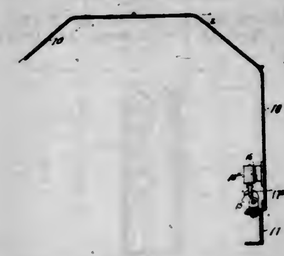
1,269,022. OIL CONTAINER AND REGISTER. FERDINAND JOSEPH THIPE, San Bernardino, Cal. Filed July 19, 1917. Serial No. 181,624. (Cl. 221—67.)



1. An oil container and register comprising a receptacle with a supporting base having a cutaway portion, a spigot fastened to and communicating with an exit opening in the bottom of the receptacle, said spigot having a socket portion communicating with the duct therein, a tube positioned in the latter and means upon the top of the receptacle for holding the tube in place, the circumference of the receptacle having graduations adjacent to the tube, as set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,269,023. FASTENING AND LOCKING MEANS FOR THE HOODS OF AUTOMOBILES. GEORGE R. WADSWORTH, Boston, Mass., assignor to The Peerless Motor Car Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 6, 1913. Serial No. 788,376. (Cl. 70—82.)



1. In combination with the hood and chassis of an automobile, means for fastening the hood to the chassis comprising a set of spaced fastening devices on the hood, a set of correspondingly spaced fastening devices on the chassis adapted to coöperate with the set on the hood, and a movable support carrying the fastening devices of one set and adapted to be operated to cause the latter to be moved into and out of engagement with the fastening devices of the other set.

2. In combination with the hood and chassis of an automobile, a plurality of yieldingly supported fastening devices on the inner side of the hood and spaced lengthwise thereof, a rock shaft supported by the chassis on the inner side of the hood and provided with fastening devices adapted to be moved into and out of engagement with the fastening devices carried by the hood and to place them under tension, and means extending through the hood by which said rock shaft may be rotated.

5. In combination with the hood and chassis of an automobile, a plurality of fastening devices carried on the inner side of the hood and spaced lengthwise thereof, a rock shaft supported on the chassis and provided with a plurality of fastening devices arranged adjacent to and adapted to coöperate with the fastening devices carried by the hood, said rock shaft being located on the interior of the hood, and being provided with a member projecting through the latter, and means connected to said member for locking the hood to the chassis.

[Claims 2 and 4 not printed in the Gazette.]

1,269,024. ADVERTISING-DISPLAY DEVICE. EDWARD B. WASTIE, Billings, Mont. Filed Nov. 24, 1916. Serial No. 133,121. (Cl. 35—17.)



1. An advertising display for wall covering materials and the like, comprising a plate carrying a representation

of surrounding objects not to be covered with said materials, a stencil coated with one of said materials and representing a part of the article or wall to be covered, and a plate behind said stencil and covered with another of said materials to represent the body of said wall, said stencil and said last mentioned plate being each individually replaceable by other like members.

8. An advertising display comprising separate stencils, one for depicting roof trim and the other for depicting wall trim of a house, and color backgrounds adapted to be disposed behind said stencils to depict the body parts of said roof and wall to complete a representation of a house in color.

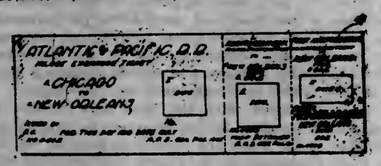
[Claims 2 to 7 and 9 not printed in the Gazette.]

1,269,025. BOOK-MARK. JULIUS R. WATTS, Atlanta, Ga. Filed Sept. 19, 1917. Serial No. 192,122. (Cl. 116—66.)



A book marker including a clip formed of a single piece of spring metal bent upon itself and adapted to be detachably engaged with a book back, the intermediate portion of said clip being enlarged and provided with a slot, one side of the clip being widened and formed concavo-convex, a plurality of tits formed on said concavo-convex side, and a flexible marker engaged with said slot.

1,269,026. RAILROAD-TICKET. ALEXANDER WEINFELD, New Orleans, La. Filed Oct. 5, 1914. Serial No. 865,209. (Cl. 283—23.)

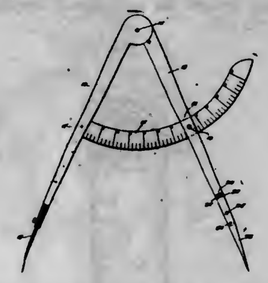


1. A railroad ticket comprising a body portion having suitable indicia thereon, and a detachable auditor's check identifying the body portion and bearing the name of the destination and the number of the station of the beginning of the trip.

2. A railroad ticket including a body portion having suitable indicia thereon, a detachable auditor's check at one end of and identifying the body portion, and a terminal coupon detachably connected with the auditor's check and comprising a detachable auditor's check and a detachable conductor's check both identifying the body portion, said auditor's check and the conductor's check bearing the name of the destination and identifying the station at the beginning of the trip by secret indicia.

1,269,027. DIVIDERS. JAMES WHITE, Tampa, Fla. Filed Feb. 2, 1918. Serial No. 215,112. (Cl. 33—148.)

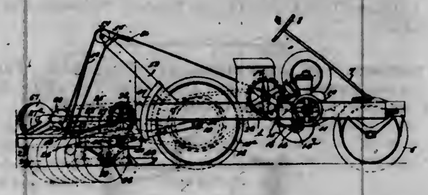
1. In a device of the class described, a plurality of leg members pivotally connected, a scale member pivotally connected with one of the leg members and slidable with reference to the other of said members, an adjustable foot member carried by one of the leg members, a pivotally mounted foot member carried by the other leg member and mounted to swing in a plane parallel with the plane of movement of said leg members, one of the leg members having a scale thereon, and a pointer carried by the pivoted member last named and coöperating with the scale last mentioned.



2. In a device of the class described, a plurality of leg members pivotally connected, a foot member adjustable with reference to one of the leg members, an arc shaped scale connected with one of the leg members and cooperating with the other of said members, a pivotally mounted foot member carried by one of the leg members, a pointer on the upper end of said foot member, the adjacent leg member having a scale extending transversely with reference thereto, and a stop member for limiting the movement of the pivoted foot member.

3. In a device of the class described, a plurality of pivotally connected leg members, a main arc shaped scale member connected therewith, one of the leg members being cut away near its lower end, a foot member correspondingly cut away and pivotally connected with said leg member last named, a clamping screw for retaining said foot member in adjusted position, the leg member last named having a scale extending transversely with reference thereto, and means movable with the pivoted foot member for coöperation with the scale last named.

1,269,028. AGRICULTURAL MACHINE. ROLLIN H. WHITE, South Euclid, Ohio, assignor, by direct and mesne assignments, to The Cleveland Tractor Company, Euclid, Ohio, a Corporation of Ohio. Filed Aug. 14, 1914. Serial No. 856,741. (Cl. 97—71.)



1. In an agricultural machine, the combination with a chassis of a motor thereon, traction means including a traction roller upon which the chassis is mounted, an implement frame behind the chassis, a spacer means between one side of the chassis and the implement frame, a three point spacer means between the other side of the chassis and implement frame, and driving connections between the motor and traction roller.

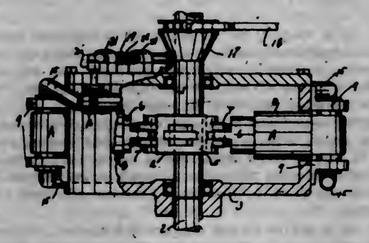
3. In an agricultural machine, the combination with a chassis, traction means upon which the chassis is mounted, a motor, driving connections between the motor and roller means, an implement frame behind the chassis frame, ground engaging means carried by the said frame, a spacer means flexibly connected with one end of the frame and hingedly connected with the chassis, a second Y shaped spacer means connected to the other end of the implement frame and chassis, the two points of the spacer being flexibly connected with the chassis frame and the remaining point of the spacer being hingedly connected with the chassis.

5. In an agricultural machine, comprising a chassis, a motor mounted thereon, roller means including a traction roller upon which the chassis is mounted, an implement frame behind the said chassis, the axis of said implement frame extending at an angle with respect to the axis of the chassis, spacing means hingedly mounted at one end upon the chassis, said spacing means engaging both ends of said implement frame by a universal connection and means carried by the chassis for limiting side movement of the said spacing means, but permitting vertical movement thereof.

7. An agricultural machine, comprising a chassis, a motor mounted thereon, rollers upon which the chassis is mounted, including a traction roller, an implement frame at the rear of said chassis, a spacing rod hingedly connected to the chassis frame at one end, and at its opposite end flexibly connected with one end of the implement frame, a second spacing rod hingedly connected at one end with the chassis frame, means universally connecting the opposite end of the last mentioned rod with an end of the implement frame, and a guiding means comprising a member having a substantially vertical slot, through which slot the last mentioned spacing rod extends.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

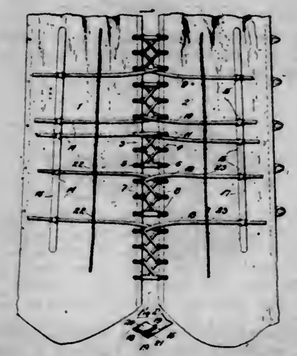
1,269,029. OIL-CONTROL TRANSMISSION. ALVA J. WILLIAMS, Seattle, Wash., assignor to Williams Oil Control Transmission Company, Pierce county, Wash. Filed Feb. 19, 1917. Serial No. 149,647. (Cl. 192—18.)



1. In an oil control transmission, the combination of a drive shaft, a driven shaft, a casing secured to the driven shaft and revolubly mounted upon the drive shaft, a plurality of plunger oil pumping means passing radially through and trunnioned externally to said casing, and an eccentric mounted upon the drive shaft, an eccentric strap revolubly mounted upon said eccentric and pivotally connected to each of the said plungers, an endless pipe system connecting all of said pumping means said pipe system including alternate individual pipes joining two adjacent pumping means on one side through the trunnions thereof, the pipe system being filled with an operating fluid, and means for regulating the flow of operating fluid in said pipe, said means including a sliding tapered sleeve mounted upon the drive shaft, a valve in said pipe system, a valve rod slidably mounted externally said casing and connected at one end to the handle of the said valve and coöperating with the said sleeve, whereby the valve may be closed or opened by moving said sleeve.

2. In an oil control transmission the combination of a drive shaft, a driven shaft, a casing secured to the driven shaft and revolubly mounted upon the drive shaft, radial openings in the said casing, a plurality of plunger oil pumping means, each of said pumping means including a cylinder which passes through one of the said openings in the casing and which is trunnioned at its outer end and externally to the said casing, a plunger slidably mounted within the said cylinder, an inlet valve in the outer end of the said cylinder, a similar outlet valve similarly located, pipes external the said casing and connected at one end through the trunnion of the cylinder with the outlet passage of one cylinder and with the inlet passage of the adjacent cylinder, whereby an operating fluid is admitted to the cylinder through one of the pipes and discharged to the adjacent cylinder through the other pipe thus forming an endless pipe system between the said cylinders, and a valve in the said system, whereby the flow of oil through the system is controlled.

1,269,030. CORSET. GEORGE H. WILLIAMS, Los Angeles, Cal. Filed July 30, 1917. Serial No. 183,455. (Cl. 2—74.)



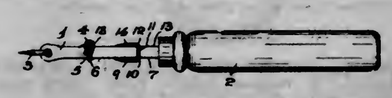
1. A corset comprising two sections, each provided with a row of eyelets, a stirrup pivotally hooked in each eyelet, a plurality of series of tapes threaded through said stirrups and adjustably conjoining the sections, and means to lock and unlock the terminals of each tape on the front of the corset.

2. A corset comprising two sections, each provided in the back thereof with a row of eyelets, a stirrup pivotally and removably hooked in each eyelet, a plurality of series of tapes threaded through said stirrups and conjoining the sections, a plurality of loops on the front of the sections through which the tapes pass to hold same in flat position, and locking means on the front of the corset for the tape terminals.

4. A corset comprising two sections, each having stays and each provided with a row of eyelets, pivotal means removably hooked in each eyelet, a plurality of series of tapes threaded through said means and toward the center of the corset, and the tape terminals extending around, and to the front of, the corset, said pivotal means holding the tapes away from contact with the body of the wearer, and a plurality of clasps fastened to one of the stays of each section and on the front thereof, said tapes passing through, and being held in position by, said clasps, and said clasps operable by said tpaes to release same.

[Claim 3 not printed in the Gazette.]

1,269,031. CAN-OPENER. WILLIAM A. WILLIAMSON, Newark, N. J. Filed Oct. 23, 1916. Serial No. 127,060. (Cl. 30—3.)



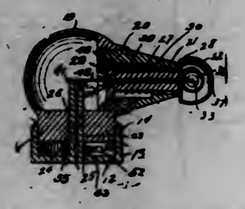
1. A can-opener comprising a radius-bar, and a cutter element movably disposed upon said bar, said cutter-element being made of spring-wire formed with end-portions embracing the side-edges and lower surface of said bar, and arc-shaped retaining elements intermediate of the end-portions of said cutter-element, said arc-shaped ele-

ments extending over the upper surface of the said radius-bar to provide frictional contact between the said cutter-element and the radius-bar.

2. In a can-opener, a flat radius-bar provided at one end with a piercing point, and a cutter-element mounted upon said bar, said cutter-element being made of wire formed with end-portions embracing the side-edges and lower surface of said bar, one of said end-portions terminating in a laterally extending loop-shaped end-member, and a cutter-blade extending downwardly into and through the said loop-shaped end-member.

[Claim 3 not printed in the Gazette.]

1,269,032. SIGNAL-LAMP. MAUD M. WINKLER, Schenectady, N. Y. Filed May 21, 1917. Serial No. 169,968. (Cl. 116—31.)



3. A combined side light and direction indicator, comprising a stationary base and standard, a lamp housing rotatably mounted in said base, a telescoping lamp support mounted in said housing and operatively connected to the standard, resilient means carried by said lamp support for holding the same in its retracted position for use as a side light, a stop lug carried by the base, a supporting member pivoted to the housing, a spring pressed pawl pivoted to said member and arranged to engage the stop lug when the lamp is used as a side light, a spring operated lever movably mounted in said base and operatively connected to said supporting member, and a catch carried by said base for releasing the spring pressed lever and permitting the lamp housing to rotate and extend the telescopic lamp support for use as a direction indicator.

4. A combined side light and direction indicator, comprising a stationary base and spindle, a lamp housing rotatably mounted in said base at spaced relation to the bottom of said base to form a compartment, a telescoping lamp support extending from one side of said housing, a lever secured at one end to said stationary standard and movably connected at its other end to the telescoping lamp support, resilient means carried by said lamp support for holding the same in its retracted position for use as a side light, a stop lug carried by said base within the compartment, a supporting member pivoted to the lower surface of the lamp housing within the compartment, a spring pressed pawl pivoted to said supporting member and arranged to engage the stop lug when the lamp is used as a side light, a spring operated lever extending into the compartment and operatively connected to the supporting member, and a catch carried by the base and operatively engaged with the lever for releasing the latter and permitting the lamp housing to rotate and extend the telescopic lamp support for use as a direction indicator.

[Claims 1 and 2 not printed in the Gazette.]

1,269,033. FEEDER FOR THRESHING-MACHINES. THOMAS G. WISDOM, Admire, Kans. Filed June 10, 1915. Serial No. 33,242. (Cl. 193—48.)

1. In a shock feeder for band cutters, the combination with a main frame, and an endless belt movable in a substantially horizontal path within said frame; of a crank shaft rotating within said frame above the belt, a series of kicking forks carried by its cranks and moved thereby in a direction to relieve congestion on the feeder, a rocking frame structure on said main frame connected at its front end with said crank shaft and having a cross shaft at its rear end, and spring loops on the main frame yieldably engaging said cross shaft in the different positions of the frame structure.



[Claim 2 not printed in the Gazette.]

1,269,034. DRIVE FOR MOTOR-VEHICLES. HOWARD P. WOODWORTH, Bay City, Mich. Filed May 4, 1917. Serial No. 166,402. (Cl. 180—72.)

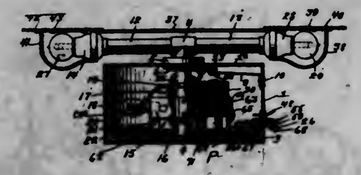


1. In a vehicle, the combination of a frame, an axle, a drive wheel on the axle, a spring having the axle mounted thereon, a shackle connection between one end of said spring and the frame, a bracket secured to the frame, a drive member mounted in said bracket, a drive chain forming connecting means between the drive member and drive wheel, a plate slidable on the said bracket and having the opposite end of the spring connected thereto, means for adjusting the plate on the bracket, and means for securing the plate to the bracket in the required adjusted position.

2. In a device of the character described, a chassis, a rear axle, a drive wheel mounted on said axle, a sprocket wheel concentric with said axle and fixed with relation to the first mentioned wheel, a bracket secured to the chassis, a shackle pivoted on said bracket, a second bracket on the chassis, a jack shaft journaled in the second mentioned bracket, a plate slidable on said second mentioned bracket, a spring secured intermediate its ends to said axle and secured at its ends to said shackle and said plate, a sprocket wheel on said jack shaft, a chain drive connection between said sprocket wheels, and means to slide said plate so as to increase the distance between the centers of the two aforesaid sprocket wheels and thereby adjust the drive chain.

3. In a device of the character described, a chassis, a rear axle, a drive wheel on the axle, a sprocket wheel fixed to the drive wheel, a bracket in the rear of the drive wheel, a shackle mounted on said bracket, a spring secured intermediate its ends to the axle and at its rear end connected to said shackle, a second bracket mounted on the chassis in advance of the drive wheel, said bracket including a bed portion provided with an upturned flange having a screw threaded aperture therein, a plate mounted for adjustment on said bed and at its rear end having downwardly directed ears, the forward end of said spring being mounted in said ears of said adjustable plate, a jack shaft journaled in the second mentioned bracket, a sprocket wheel on said jack shaft, a drive chain connecting said sprocket wheels, and a screw bolt mounted in the screw threaded aperture of the upturned flange of the bed of the second mentioned bracket to move said plate rearwardly and thereby increase the distance between the centers of said sprocket wheels and adjust the drive chain.

1,269,035. SIGNALING MEANS. PEYTON H. WORKMAN, Santa Ana, Cal., assignor of one-third to Cornelious M. Steele and one-third to Hipolito Sepulveda, Santa Ana, Cal. Filed Dec. 13, 1916. Serial No. 136,741. (Cl. 177—327.)



2. In signaling means, a casing, a shaft rotatable therein, a signaling arm carried by said shaft at the outer end thereof, means for releasably locking said shaft against rotation, an electric light carried by said arm at one end thereof, means for rocking the shaft in either direction, and circuit closing means interposed in the circuit of said light for closing said circuit when the shaft is rocked in either direction, said circuit closing means also serving to provide braking means for retarding movement of said shaft.

4. In signaling means, a casing, a shaft rotatable therein, a signaling arm carried by said shaft at the outer end thereof, means for oscillating said shaft, an electric light carried by said arm, a contact bar mounted within said casing, a contact finger carried by the shaft and connected to one pole of said lamp, said finger being normally out of contact with the bar and adapted to engage the end portion thereof when moved in either direction so as to retard rotation of the shaft.

6. In signaling means, a casing, a shaft rotatably mounted therein, a signaling arm carried by said shaft at the outer end thereof, an electric lamp carried by said arm, means for rocking the shaft in either direction, a contact bar mounted within the casing concentric with said shaft and electrically insulating therefrom, said bar being of undulating configuration and having a central depression and a raised portion at each end contiguous therewith, and a resilient contact finger secured on said shaft and extending radially therefrom, said finger being connected to one pole of the lamp and the outer portion of said finger being normally spaced a short distance above the depressed portion of said bar.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,269,036. COAT. SAM YATTER, Chicago, Ill. Filed Apr. 26, 1917. Serial No. 164,645. (Cl. 2—61.)

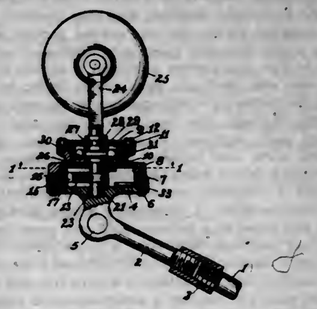


2. The combination with a coat, of a belt encircling the waist portion thereof, said coat being provided with slits opening therethrough a short distance from the front opening thereof, said belt being stitched to said coat immediately behind each of said slits, said belt having a button-hole in one end and a button on the other end; a button provided on the inside of said coat to the rear of the slit corresponding with the end of said belt having a button-hole; and a loop secured to the inside of said coat to the rear of the other slit, substantially as described.

[Claim 1 not printed in the Gazette.]

1,269,037. TROLLEY-POLE HEAD. CHARLES R. YIRAVA and WILLIAM J. HEJNA, Cleveland, Ohio. Filed June 30, 1917. Serial No. 177,945. (Cl. 64—66.)

1. In a trolley pole head, the combination with a trolley pole of a base, a shaft rotatably supported by the base, the shaft terminating in a harp, a trolley wheel pivotally mounted in the harp, a rack slidably carried by the base, a toothed quadrant fixed to the shaft adapted to engage the rack to move it in one direction, and means for forcing the rack in the opposite direction to rotate the shaft to its original position, substantially as described.



2. In a trolley pole head, the combination with a trolley pole of a base, a shaft rotatably supported by the base, the shaft terminating in a harp, a trolley wheel pivotally mounted in the harp, a rack slidably carried by the base, the rack having a pair of arms, the arms being provided with sets of teeth, a toothed quadrant fixed to the shaft adapted to engage either set of teeth to move the rack in one direction, and means for forcing the rack in the opposite direction to rotate the shaft to its original position, substantially as described.

3. In a trolley pole head, the combination with a trolley pole of a base, a housing carried by the base, the housing having a circular recess, a cover fixed to the housing over the circular recess, the cover being provided with an opening, a shaft passing through the opening, the shaft terminating in a harp, a trolley wheel pivotally mounted in the harp, the shaft having a flange engaging the outer face of the cover, a ball bearing race fixed to the shaft and engaging the other face of the cover, an outer race in said circular recess of the housing, ball bearings between said races, the housing having a rectangular recess, a rack slidably mounted in the rectangular recess, the rack having a pair of arms, the arms being provided with opposite sets of teeth, a toothed quadrant fixed to said shaft adapted to engage either set of teeth to move the rack in one direction, and springs for forcing the rack in the opposite direction to rotate the shaft to its original position, substantially as described.

1,269,038. AUTOMATIC-LOCKING COUPLING CONNECTION. DAVID AHLDIN, New York, N. Y. Filed Sept. 5, 1916. Serial No. 118,402. (Cl. 285—84.)



1. In a coupling connection, the combination of portions to be connected together, one of the said portions having a curved end portion the opposite sides of which are provided with openings extending therethrough, a nut within the said curved end portion said nut having an opening in alinement with the openings in said curved portion and a connecting member for connecting the said portions, one end portion of the said connecting member being in engagement with the opening in said nut and with

said curved portion whereby said curved portion acts automatically to lock the said connecting member against accidental rotation after it has been tightened, substantially as described.

2. In a coupling connection, the combination of adjacent end portions to be connected together, one of the said end portions comprising a cylindrically curved part having diametrically disposed openings therein, a cylindrical nut situated within the said curved portion said nut having a screw-threaded opening in alinement with the openings in the said curved part and a device for connecting the said end portions, said device being in engagement with the screw-threaded opening in the said nut and projecting through the opening in the said cylindrically curved part, portions of the edges of said openings contacting with and pressing against portions of the said connecting device when the latter is tightened.

3. In a coupling connection, the combination of adjacent end portions, a connecting device having connection with and extending between said end portions, one of the said end portions comprising a cylindrically curved part, said part having diametrically disposed openings therein and a cylindrical nut situated within the said cylindrically curved part and having a screw-threaded opening extending therethrough in alinement with the oppositely disposed openings in the said cylindrically curved part, said screw-threaded opening being adapted to be engaged by the said connecting device, and portions of the said curved part acting automatically upon said device upon the tightening of the same to prevent its accidental disengagement from said nut, substantially as described.

4. In an automatic locking coupling connection, the combination of the adjacent end portions of a band, a connecting bolt having connection with and extending between said end portions, one of the said end portions comprising a cylindrically curved yielding part, said curved yielding part being provided with diametrically disposed openings therethrough and a cylindrical nut situated within the said cylindrically curved part and having a screw-threaded opening extending therethrough in alinement with the said diametrically disposed openings, the said connecting bolt extending through the said diametrically disposed openings and being in engagement with the screw-threaded opening through said nut, oppositely related portions of the edges of said openings at opposite sides of the said nut being adapted to engage oppositely related parts of the said bolt when the latter is tightened to prevent accidental turning movement of the same.

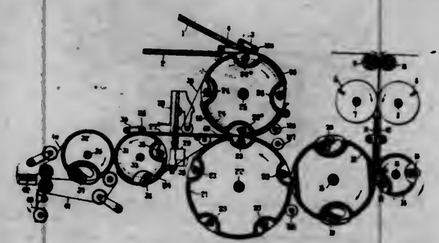
5. A coupling connection for securing together the telescoping ends of tubes, said connection comprising a band having overlapping ends, said band extending around the telescoping portions of said tubes, a strap connected with said band and provided with a curved part at its outer free end, a correspondingly curved nut situated in said curved part, and a connecting means in engagement with said nut and having connection with the opposing end of said band, the said curved part being provided with means which acts automatically upon the tightening of said connecting means to engage the latter to lock it against accidental disengagement from said nut.

1,269,039. SHEET ASSOCIATING AND FOLDING MACHINE. HOWARD M. BARBER, Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 5, 1916. Serial No. 113,367. (Cl. 270—37.)

1. Means for cutting and folding a main web sheet or sheets, means for associating cover and insert sheets fed from different sources with said folded sheet or sheets, and means for stitching the so associated sheets together and delivering the same.

4. Means for cutting and folding a main web sheet or sheets, means for associating cover and insert sheets fed from different sources with said folded sheet or sheets, and a common means for feeding the cover and insert sheets to the associating means.

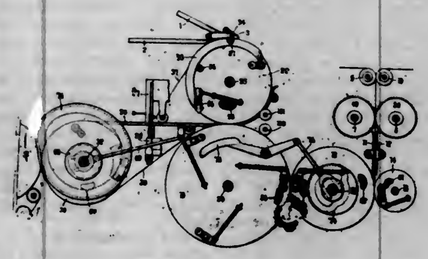
7. Means for cutting and folding a main web sheet or sheets, means for associating cover and insert sheets fed from different sources with said folded sheet or sheets, a common means for feeding the cover and insert sheets to the associating means, and means for stitching and folding the so associated sheets together and delivering the same.



13. Rotary carriers arranged to fold a main web sheet or sheets, a rotary carrier arranged to associate cover and insert sheets fed from different sources with the folded sheet or sheets, and means for stitching and folding the so associated sheets together and delivering the same.

[Claims 2, 3, 5, 6, 8 to 12, and 14 to 41 not printed in the Gazette.]

1,269,040. SHEET COLLECTING, ASSOCIATING, AND FOLDING MACHINE. HOWARD M. BARBER, Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 5, 1916. Serial No. 113,368. (Cl. 270—38.)



1. Means for collecting a group of sheets, means for associating extra sheets fed from different sources with said group of sheets and a common means for feeding the extra sheets successively to the associating means.

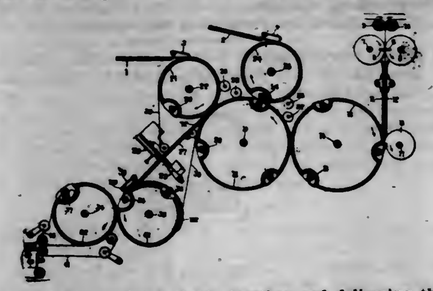
7. Rotary carriers arranged to collect a group of sheets, a rotary carrier arranged to associate thereon extra sheets fed from different sources with the collected group of sheets, a rotary carrier arranged to feed the extra sheets to the sheet associating carrier, and means for folding the so associated sheets together and delivering the same.

[Claims 2 to 6 and 8 to 32 not printed in the Gazette.]

1,269,041. SHEET COLLECTING, ASSOCIATING, AND FOLDING MACHINE. HOWARD M. BARBER, Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y., a Corporation of Delaware. Filed Aug. 5, 1916. Serial No. 113,369. (Cl. 270—38.)

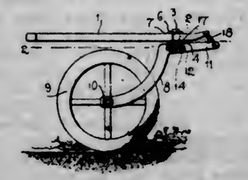
1. Means for collecting a group of sheets, a rotary carrier arranged to associate thereon extra sheets fed from different sources, with said group of sheets, separate rotary carriers arranged to feed the extra sheets to the associating carrier, and means for stitching the so associated sheets together and delivering the same.

6. A rotary carrier arranged to collect thereon a group of sheets, a rotary carrier arranged to associate thereon extra sheets fed from different sources and the group of sheets fed from their collecting carrier, rotary carriers arranged to feed the extra sheets from different sources to the associating carrier, and means for stitching and folding the so associated sheets together and delivering the same.



[Claims 2 to 5 and 7 to 14 not printed in the Gazette.]

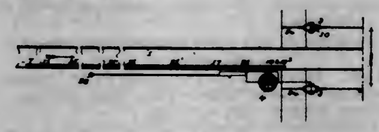
1,269,042. VINE-CUTTER. LEONARD BRECHLEY, Kingsley, Iowa. Filed Feb. 20, 1918. Serial No. 218,214. (Cl. 97—43.)



1. A vine cutter comprising a beam adapted to be secured to the shank of a cultivator plow, a vertically disposed shank having swivel connection with the beam, a fork having pivotal engagement with said shank for movement in a vertical direction, a cutter carried by the lower end portion of the fork, said fork being provided with an extension underlying the beam, and a retractile member connected to the extension of the fork for constantly urging in one direction the cutter carried by the fork.

[Claim 2 not printed in the Gazette.]

1,269,043. AUTOMATIC ELECTRICALLY-OPERATED RAILWAY-GATE. ISIDORO BETTINARDI and ADOLFO TALPO, Chicago, Ill. Filed Jan. 10, 1916. Serial No. 71,331. (Cl. 269—3.)



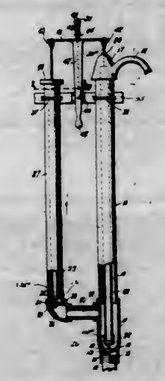
1. In an electrically actuated gate for railway crossings, the combination of a movable gate arm, a motor operatively connected thereto, a pole changer associated with said motor, and a plurality of electro-magnetic circuit closers, operative in one direction only, disposed along the tracks in reversed relation for actuation by trains moving in opposite directions respectively and connected with opposite terminals of the pole changer, substantially as set forth.

3. In an electrically actuated gate for railway crossings, the combination of a movable gate arm, a motor operatively connected thereto, a pole changer associated with said motor, a plurality of electro-magnetic circuit closers, operative in one direction only, disposed along the tracks and connected with opposite terminals of the pole changer, a second plurality of electro-magnetic circuit closers, operative in one direction only, disposed along the tracks for actuation by trains moving in opposite directions respectively and connected to opposite terminals of the pole changer, the two pluralities of circuit closers being arranged in reverse directions, and a series of circuit interrupters, operative in one direction only, disposed along the tracks and adapted to interrupt the circuits of the circuit closers aforesaid, substantially as set-forth.

15. In an electrically actuated gate for railway crossings, the combination of a movable gate arm, a motor operatively connected thereto, a pole changer associated with said motor, and a plurality of electro-magnetic circuit closers, operative in one direction only, disposed along the tracks and connected with opposite terminals of the pole changer, each circuit closer having a floating operating bar, U-shaped in cross-section, operatively connected to a contact member adapted to close the circuit of the mechanism, substantially as set-forth.

[Claims 2, 4 to 14, and 16 to 19 not printed in the Gazette.]

1,269,044. HYDRANT. JOHN BONDERSON, Emerson, Nebr. Filed Oct. 1, 1917. Serial No. 194,249. (Cl. 137—13.)



1. A hydrant having an inlet valve and an outlet, a drain valve between the inlet valve and the outlet, yieldable means connected to said valves for normally holding them closed, and means connected to said yieldable means for opening either valve while maintaining the other valve closed.

2. A hydrant having an inlet valve at one end and an outlet at the opposite end, a drain valve for the hydrant above the inlet valve, a valve rod for each of said valves, a cross head pivotally connected at its ends to the valve rods, resilient means acting on the cross head to maintain both valves closed when the hydrant is out of use, and means for rocking said cross head to open either valve, the pivoted connection of the other valve serving as a fulcrum for the cross head.

3. A hydrant having a straight body with an inlet valve at one end and an outlet at the opposite end, a pipe section parallel to said body and opening thereinto a short distance above the inlet valve, a drain valve in said pipe section, manually operative rocking means connected to said valves for opening either valve without actuating the other valve, and resilient means for normally holding both valves in closed position and also closing the open valve upon release of the rocking means.

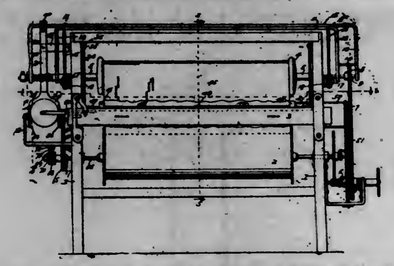
4. A hydrant comprising a straight body having a casing at its lower end and an outlet at its upper end, a valve in said casing controlling the flow of water into the hydrant, a pipe section parallel to the hydrant body and connected at its lower end to the casing above the inlet valve, a drain valve in the bottom of said pipe section and adjacent a drain opening in the side thereof, a valve stem connected to each valve and extending upwardly above the top of the hydrant, a cross head connected to said valve stems, resilient means acting on said cross head to maintain said valves in closed position, and means for rocking

said cross head to raise one of said valves while maintaining the other in closed position.

5. A hydrant having an inlet valve at its lower end and an outlet at its upper end, a pipe section parallel to said hydrant connected at its lower end thereto a short distance above the valve, said pipe section having a drain opening near its lower end, a drain valve in said pipe section below the drain opening, a valve stem extending upwardly from each valve above the top of the hydrant, a cross head pivotally connected to each valve rod, a shifting fulcrum resiliently bearing on said cross head intermediate the valve rod connections, and means for rocking said cross head to hold either of said valves closed while the other is opened.

[Claim 6 not printed in the Gazette.]

1,269,045. MECHANICAL SHEET-CONTROLLING MEANS. GEORGE P. BRAND, New York, N. Y. Filed Apr. 13, 1915. Serial No. 21,165. (Cl. 84—161.)



1. In a device of the character described, mechanical music-spool-moving sheet controlling means embodying friction means out of contact with but under the control of a note sheet.

10. In a device of the character described employing a perforated sheet, a swinging carrier, movably mounted edge guides thereon, a friction wheel carried by said carrier, disks between which said friction wheel is movable, and a transmission mechanism controlled by said friction wheel and disks.

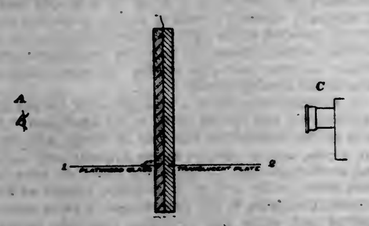
21. In a device of the character described, a wholly mechanical sheet controlling means embodying pivotally mounted edge guides, a revoluble friction control and means for throwing said friction control out of operation upon the rewind.

40. In a device of the character described, mechanical music-spool-moving sheet controlling means embodying friction means under the control of a note sheet.

51. A non-extensible music spool and a mechanical mechanism independent of the trackerbar and operated directly from a note sheet for causing the registration between a traveling note sheet and trackerbar.

[Claims 2 to 9, 11 to 20, 22 to 39, and 41 to 50 not printed in the Gazette.]

1,269,046. PROJECTED-LIGHT SCREEN. AUSTIN DAY BAILEY, New York, N. Y. Filed Apr. 30, 1915. Serial No. 24,895. (Cl. 88—24.)



1. A picture visualizing means adapted to be interposed between a projector and the eye of the observer, comprising a screen of inherently translucent light diffusing material and a light absorbing screen of platinized glass interposed between the said translucent screen and the eye of the observer.

[Claims 2 and 3 not printed in the Gazette.]

1,269,047. ACETYLENE-LAMP. JOHN M. BROCK, Brooklyn, N. Y. Filed Oct. 2, 1915. Serial No. 53,725. (Cl. 67—105.)



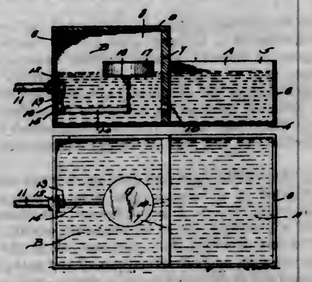
1. In an acetylene lamp, the combination, with a burner tube, and a burner connected therewith and having a burner-orifice, of a cap surrounding the burner and arranged to form a flame-surrounding chamber into which the burner-orifice opens, said cap having a flame opening ahead of the burner-orifice through which opening the flame passes and also having an opening for admitting air to the interior of the chamber at a point away from the burner orifice, the flame opening being so large as compared to the burner orifice, and the relation of said opening and orifice to the opening for admitting air being such that under normal operating conditions the base of the flame is within said chamber.

3. In an acetylene lamp, the combination, with a burner-tube, and a burner connected therewith and having a burner-orifice, of a cap connected to the burner and forming a flame-surrounding chamber into which the burner-orifice opens, said cap having a flame-opening in its front wall substantially in line with the burner-orifice through which opening the flame passes and also having a plurality of air-inlet openings substantially smaller than the flame opening arranged to supply air to the chamber out of the direct path of the flame.

5. In an acetylene lamp, the combination, with a burner tube, and a burner connected therewith, said burner having an enlarged circular front portion provided with a peripheral groove and having a burner-orifice and grooves extending from said orifice and merging into the peripheral groove, of a cap having a plurality of inward projections arranged to enter corresponding grooves in the burner and to lock with the peripheral groove, said cap also having a flame-opening in its front wall substantially in line with the burner-orifice and also having a plurality of air-inlet openings arranged to supply air to the chamber out of the direct path of the flame.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

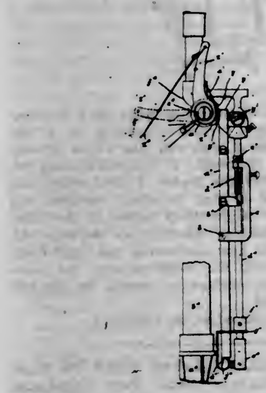
1,269,048. STOCK DRINKING-FOUNTAIN. LOWELL R. BUTCHER, Holstein, Iowa. Filed Aug. 25, 1916. Serial No. 116,917. (Cl. 137—104.)



1. The combination with a chamber provided with a water inlet, of a bell crank lever pivotally mounted adjacent said inlet and having the shorter arm thereof formed of resilient material and curved to provide a spring terminal, a flexible valve carried by said terminal and adapted to close said inlet, and a float connected to the longer arm of the lever.

2. The combination with a chamber provided with a water inlet, of a bracket arranged adjacent said inlet, a bell crank lever pivotally mounted in said bracket, the shorter arm of said lever being formed of resilient material and twisted at right angles and bent to provide a resilient terminal, a flexible valve carried by said terminal to close said opening, and a float operatively connected with the longer arm of the lever.

1,269,049. GAS LIGHTING AND EXTINGUISHING APPARATUS. DANIEL CARTER, Toronto, Ontario, Canada, assignor of one-half to James D. B. McNeice and Albert James Merrifield, Toronto, Ontario, Canada. Filed Mar. 31, 1917. Serial No. 159,003. (Cl. 67—116.)



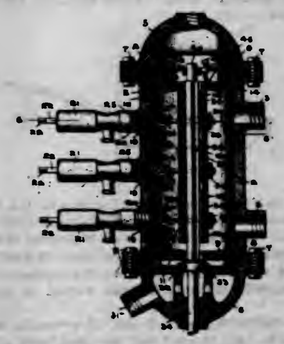
1. In a gas lighting and extinguishing apparatus, the combination of a gas burner, a spring-closed stop cock therefor, a lever to effect the opening movement of the stop cock and having a return movement independently thereof, detent means holding the stop cock in open position when the gas is ignited, and thermostatic means rendering the detent means inoperative when the gas fails to ignite and when the flame has been extinguished, the detent means causing a lateral movement of the lever when turned to fully open the valve to enable the lever to return to its normal position independently of the stop cock, and being rendered inoperative by a partial movement of the lever.

3. In a gas lighting and extinguishing apparatus, the combination of a gas burner, a spring-closed stop cock therefor, a thermostatically-actuated detent holding the stop cock in open position when the gas is ignited inoperative when the gas fails to ignite and when the gas is intentionally or inadvertently extinguished and a lever to open the stop cock when turned in the opening direction, a partial movement of the lever rendering the detent inoperative, and the detent on a complete operation of the lever causing the lateral movement of the lever for its return to a normal position independently of the stop cock.

5. In a gas lighting and extinguishing apparatus, the combination of a gas burner, a stop cock therefor, a lever, a clutch to cause the united movement of the stop cock and the lever when operated to turn the stop cock to open position, said lever having a limited lateral movement, a thermostatic detent holding the stop cock in open position when the gas is ignited and being inoperative when the gas fails to ignite and when the gas has been extinguished, the thermostatic detent having an inclined side to engage with, and cause the lateral movement of, the lever when turned to fully open the stop cock for its return to normal position.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,269,050. WATER-COLUMN AND GAGE-COCK. FRANK H. CATHCART, Trenton, N. J., assignor, by mesne assignments, to Safety First Manufacturing Company, Incorporated, Alexandria, Va., a Corporation of Virginia. Filed June 11, 1915. Serial No. 33,508. (Cl. 137—138.)



9. The combination with a casing constituting a water column, a vertical series of gage cocks communicating with the column, and a valve controlling the outlet from the lower end of the column, of a stem in the column secured to the valve, cams on the stem controlling the operation of the gage cocks, a frame in the casing providing rotary mounting for the stem, an arm secured to the upper end of the stem, a ball supported at the upper end of the frame, and a screw carried by the outer end of the arm and adapted to engage the ball and lift the valve from its seat at each complete revolution of the stem, substantially as described.

10. The combination with a casing constituting a water column, a vertical series of gage cocks communicating with the water column, and a valve normally closing an outlet in the lower end of the column, of a frame secured within the casing and having a plurality of alined bearing sleeves, bearing blocks in the sleeves having angular openings therein, a stem secured to the valve and having an angular portion located in the angular openings in the blocks, cams between the bearing sleeves having angular openings receiving the angular portion of the stem, said cams constructed to operate the gage cocks in succession when the stem is turned, and means on the stem compelling the valve to open at each complete revolution of the stem, substantially as described.

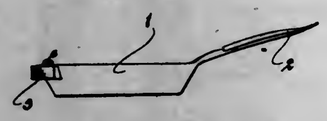
11. The combination with a casing constituting a water column, a vertical series of gage cocks communicating with the water column, and a valve normally closing an outlet in the lower end of the column, of a frame secured within the casing and having a plurality of alined bearing sleeves, bearing blocks in the sleeves having angular openings therein, a stem secured to the first-mentioned valve and having an angular portion located in the angular openings in the blocks, cams between the bearing sleeves having angular openings receiving the angular portion of the stem, yokes mounted to slide in the frame, said yokes having forked ends engaging the valve stems of the gage cocks, and said yokes adapted to be moved in succession by the cams when the stem is revolved, and means on the stem compelling the valve to open at each complete revolution of the stem, substantially as described.

12. The combination with a casing constituting a water column, of a vertical series of gage cocks communicating with the column, and a valve in the lower end of the

column controlling the outlet therefrom, of a stem connected to the first-mentioned valve and having means thereon for operating the first-mentioned valve and to said gage cocks in succession, each gage cock having a stem projecting therethrough, a spring exerting pressure on the stem normally holding the valve on its seat, and said stems having angular outer ends to facilitate the turning thereof to grind the valve seats, substantially as described.

[Claims 1 to 8 and 13 not printed in the Gazette.]

1,269,051. PAN-COUNTERWEIGHT. GEORGE H. CHENEY, Spokane, Wash. Filed Mar. 31, 1917. Serial No. 158,893. (Cl. 53—7.)



1. The combination with a frying pan or the like, of a weight supported on the rim of the pan and provided with a boss centrally located and engaging the outside face and hook members near the ends thereof and on each side of the boss and engaging the inside face of the pan and securely maintaining the weight in connection therewith.

2. The combination with a pan, of a weight supported on the outside edge thereof and provided with a securing means consisting of a boss or raised portion centrally located and engaging the pan on the outside face and of hook members on each side of said boss engaging the pan on the inside face and provided with a tapered engaging face, said securing means being disposed in alinement with the periphery of a circle of a larger diameter than that of the pan.

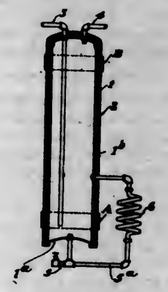
3. The combination with a frying pan or the like having a handle extending therefrom, of a counter-weight to maintain a balance therefor consisting of a curvilinear weight member removably secured to the outer rim of the pan and in frictional engagement therewith, said counterweight consisting of a weight body portion, a raised boss centrally located on the inside surface of said weight and engaging the outer face of the pan, and hook members on each side of said boss and engaging the rim of the pan on the inside surface.

4. The combination with a frying pan, of a counterweight member consisting of a weight portion formed curvilinear and of substantially the same form as the outside of the rim of the pan, said weight provided with means for securing it thereto consisting of a raised boss located centrally of the weight and engaging the outer face of the rim of the pan and of hook members located on each side of the boss and engaging the inner face, said hook members provided with tapering pan engaging faces and provided to wedge the weight securely to the pan and with increasing security as pressure is applied for such engagement.

1,269,052. ELECTRIC-HEATER ELEMENT. FARLEY GRANGER CLARK, PAUL ACKERMAN, and CHARLES ERNEST CANSFIELD, Toronto, Ontario, Canada, assignors to The Toronto Power Company Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed July 5, 1917. Serial No. 178,621. (Cl. 219—38.)

1. An electric heater element comprising a frame consisting of a mechanically-strong peripheral wall and side pieces of non-inflammable insulating material, a non-inflammable insulation contained within the frame, a heat-conducting bed of plastic material of high dielectric strength and comparatively high heat conductivity molded in the inner surface of the heat-insulating material, and an electrical resistant embedded in the heat-conducting bed.

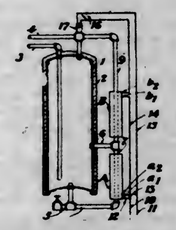
2. An electric heater element consisting of a self-contained unit comprising an electrical resistant, a heat conducting bed of plastic material of high dielectric strength and comparatively high heat conductivity for the resistant, a covering of non-inflammable heat insulation for the resistant and heat-conducting bed, and heat-conducting material filling the voids between the heat-conducting bed and the surface to which the electric heater element is applied.



5. An electric heater element consisting of a self-contained unit, comprising a frame consisting of a mechanically-strong peripheral wall and side pieces of non-inflammable insulating material, a non-inflammable insulation contained within the frame, a heat-conducting bed of plastic material of high dielectric strength and comparatively high heat conductivity molded in the inner surface of the heat-insulating material, an electrical resistant embedded in the heat-conducting bed, and heat-conducting material filling the voids between the heat-conducting bed and the surface to which the electric heater element is applied.

[Claims 3 and 4 not printed in the Gazette.]

1,269,053. ELECTRICALLY-HEATED TANK OR RESERVOIR. FARLEY GRANGER CLARK, PAUL ACKERMAN, and CHARLES ERNEST CANSFIELD, Toronto, Ontario, Canada, assignors to The Toronto Power Company Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed July 5, 1917. Serial No. 178,622. (Cl. 219—38.)



1. An electrically heated tank comprising a by-pass pipe having an inlet into the side of the tank, a main electric heater installed on said pipe, a pipe connecting the by-pass pipe with the top of the tank, an auxiliary electric heater installed on the connecting pipe, and means controlling the circuit of the current through said heaters.

2. An electrically heated tank comprising a by-pass pipe having an inlet into the side of the tank, a main electric heater installed on said pipe, a pipe connecting the by-pass pipe with the top of the tank, an auxiliary electric heater installed on the connecting pipe, electrical conductors for the main and auxiliary heaters, and means selectively controlling the circuit of the current to the heaters for energising the main heater to heat the entire tank content and the auxiliary heater to heat the upper portion of the tank content.

1,269,054. PROCESS FOR CHEMICALLY EXTRACTING PURE METALS FROM THEIR ORES AT A TEMPERATURE LOWER THAN THE FUSING-POINT OF THE METALS TO BE EXTRACTED. FARLEY GRANGER CLARK and ALEXANDER THOMAS STUART, Toronto, Ontario, Canada, assignors to The Toronto Power Company Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed July 5, 1917. Serial No. 178,635. (Cl. 75—17.)

1. A process for extracting pure metal from its ores and removing undesirable constituents therefrom, which consists of passing ore and a gaseous reagent in regulable quantities through a reaction zone at a temperature sufficient to cause the reaction, but below the fusing point of the metal, to effect the isolation of the contained metal in a pure state, the gaseous reagent combining with the removed substances as compounds of the gaseous reagent.

2. A process for extracting pure metal from its ores and removing oxygen, sulfur, phosphorus, and manganese therefrom, which consists of passing ore and a gaseous reagent in regulable quantities through a reaction zone at a temperature sufficient to cause the reaction, but below the fusing point of the metal, to effect the isolation of the contained metal in a pure state, the gaseous reagent combining with the oxygen, sulfur, phosphorus, and manganese as compounds thereof.

3. A process for extracting pure metal from its ores and removing oxygen, sulfur, phosphorus, and manganese therefrom, which consists of passing ore and a gaseous reagent in regulable quantities through a reaction zone at a temperature sufficient to cause the reaction, but below the fusing point of the metal, to effect the isolation of the contained metal in a pure state, the gaseous reagent combining with the oxygen, sulfur, phosphorus, and manganese as compounds thereof, and then recovering such compounds.

1,269,055. ROUNDING AND CHANNELING MACHINE. THOMAS CORROW, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 20, 1917. Serial No. 187,114. (Cl. 12—18.)



1. A sole rounding machine, having, in combination, shoe feeding and guiding means, and a chopping knife for trimming the edge of the sole having its cutting edge inclined in the direction of the feed to compensate for the lead given the shoe by the operator.

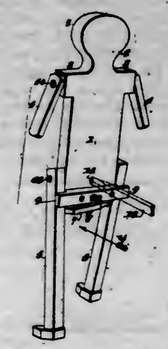
4. A sole rounding machine, having, in combination, feeding devices, guides against which the operator leads the shoe during the feed, a chopping knife, and means for varying the angle of its cutting edge in accordance with the lead to be given to the shoe.

7. A shoe machine, having, in combination, feeding and guiding means, and a chopping knife having its cutting edge inclined in the direction of feed to compensate for the lead given to the work in directing it to the guiding and feeding means.

[Claims 2, 3, 5, 6, 8, and 9 not printed in the Gazette.]

1,269,056. WALKING DOLL. FRANK CRIBST, Sharpsville, Pa. Filed Feb. 28, 1918. Serial No. 219,661. (Cl. 46—40.)

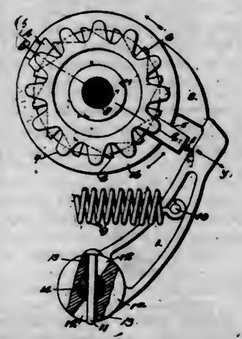
1. A walking toy that includes a body, a pair of stiff legs pivotally connected to the body to swing backwardly and forwardly relatively to the said body, a pull member connectible with the body and adapted to project in the walking direction of the toy, and means coöperating with the body and the legs for imparting a reverse movement to one leg as the other leg moves forward, as the body is pulled forwardly or backwardly.



4. A walking toy comprising a body, a pair of rigid legs having hip joint connections with the body for permitting forward and backward swinging thereof, a rocking device pivotally mounted on the body and having its opposite ends held in flexible engagement with the legs whereby as the body and the legs are pulled along, as one leg moves forwardly, the oscillation of the said device operates to swing the other leg backwardly.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,269,057. CLUTCH MECHANISM. HARRY J. CRINER, Burlington, Iowa, assignor to Hampton Planter Company, a Corporation. Filed May 4, 1917. Serial No. 166,895. (Cl. 74—46.)



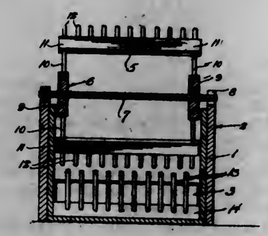
1. A clutch comprising the following elements in combination; a rotatable shaft, and an oscillatable shaft, a continuously rotating driver loosely mounted on the rotatable shaft, a clutch device for connecting the said rotatable shaft and the continuously rotatable driver, an arm loosely mounted on the oscillatable shaft spring moved in one direction, and coöperative connections on the oscillatable shaft and the arm, for swinging the arm out against the tension of its spring, said clutch device including a spring shifted dog, movable with the rotatable shaft, and adapted to be moved out of the clutched position by the swinging arm, and means movable with the rotatable shaft for holding the swinging arm out to the inoperative position and under tension of its spring.

3. In a clutch device of the character stated, the combination with the plate shaft, and the fork shaft, a constantly rotating driver loosely mounted on the plate shaft, said driver including a ratchet gear, a casing that turns with the said plate shaft, a dog transversely and slidably

held on the casing, said dog including a pawl, means tending to normally move the dog to engage its pawl with the ratchet gear on the driver, said casing having an eccentric boss on its peripheral edge, an arm including a hub loosely mounted on the fork shaft, said hub having oppositely disposed tapered slots, a key pin on the fork shaft whose ends extend into the said slots for engaging the walls of the said slots, to swing the arm in one direction, a spring connected to the arm for swinging it in the opposite direction to engage the clutch dog to slide said dog out of its clutching position and for holding the free end of the arm in engagement with the casing flange for being engaged by the eccentric boss on the said flange.

[Claim 2 not printed in the Gazette.]

1,269,058. FISH-SCREEN. HENRY L. CRISP and BEN T. HARRISON, Jayton, Tex. Filed Sept. 10, 1915. Serial No. 50,017. (Cl. 61—5.)



In a fish screen for water-ways, a water wheel including a plurality of blades, a plurality of radial teeth on each blade, a sounding element in the form of a resilient plate adapted to be secured at one longitudinal edge to the bed of the stream and to extend upward and at an angle and in the direction of the flow of the stream, whereby the upper edge thereof may be engaged during rotation of the wheel, by the teeth to produce a noise, and means engageable by the teeth during revolution of the wheel to remove the debris from the teeth.

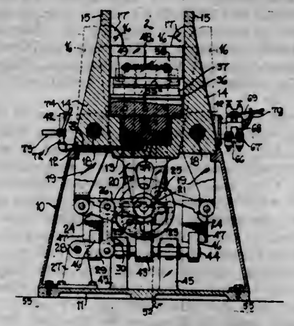
1,269,059. CAP-SCREW LOCK. WILLIAM D'ARDEN, San Jose, Cal. Filed May 11, 1917. Serial No. 168,015. (Cl. 151—47.)



In cap screw locking means, the combination with a member to be secured and a cap screw threaded into the same; of a locking washer mounted about the stem of the screw and provided on its underface with downwardly directed gripping teeth, a locking plate secured on the stem of the screw adjacent the head of the same and provided with a plurality of peripheral similarly directed teeth, and a plurality of upwardly directed resilient locking fingers formed integral with the locking washer at the periphery thereof, said fingers having their intermediate portions arched inwardly so as to engage the teeth of the locking plate and prevent reverse rotation thereof.

1,269,060. HAND-CONTROLLED HYDRAULIC PRESS. GEORGE E. DAVENPORT, Camden, N. J. Filed Aug. 14, 1916. Serial No. 114,814. (Cl. 18—5.3.)

1. A die of the character described having a recessed outer face, an outer annular groove deeper than the recess and having screw-threaded interior and exterior walls, and means for holding a matrix in said recess comprising a screw-threaded ring having a flange on its inner edge and adapted to engage in said screw-threaded recess.



2. In a press for stamping phonographic records, a die having a pair of fluid circulating grooves, of channels formed therein, the pair of channels being approximately parallel and extending in a spiral course from the center of the die toward the circumference thereof, the channel terminating at diametrically opposite points of the die, there being an outlet duct communicating with both of said channels at their inner ends, the outer ends of the channel being respectively connected to a source of steam and a source of cold water.

1,269,061. CINEMATOGRAPHIC-PICTURE COMPOSITION. NORMAN DAWN, Venice, Cal. Filed June 8, 1917. Serial No. 175,028. (Cl. 88—16.)



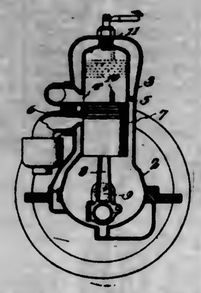
2. The method of making pictures for cinematographic projection consisting in masking a portion of the sensitized film, photographing on the exposed surface a portion of a selected scene, removing the mask, photographing an artificial representation prepared to occupy the balance of the sensitized film and fading into a non-actinic color for an area equal to the area of the previously exposed portion of the film whereby the previously exposed film portion remains unaffected on second exposure, and supplying the artificial representation, at the point of registration with the natural scene with outline conforming with the natural scene to conceal the boundary of association of the natural with the artificial.

[Claim 1 not printed in the Gazette.]

1,269,062. IGNITION SYSTEM FOR GAS-ENGINES. JAMES M. DAYTON, Torrington, Conn., assignor, by mesne assignments, to The Torrington Company, Torrington, Conn., a Corporation of Connecticut. Filed Apr. 25, 1914. Serial No. 834,421. (Cl. 123—41.)

1. The combination with a reversible gas engine, of an ignition system therefor including a magneto, driving connections between said magneto and the shaft of the engine, said connections comprising means for shifting the timing of the movement of the armature of the magneto when said engine is reversed, whereby a maximum spark may be produced in proper timed relation to the firing of the charge.

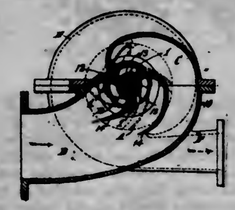
2. The combination with a reversible gas engine, of an ignition system therefor including a magneto, driving connections between the magneto and the shaft of the engine, said driving connections including means for automatically controlling the timing of the armature of the magneto relative to the engine shaft, whereby maximum sparks are produced in proper timed relation to the firing of the charge upon the operation of the engine shaft in either direction.



3. The combination with a reversible gas engine, of an ignition system therefor including a magneto, driving connections between said magneto and the shaft of the engine, said connections comprising a disk connected to the armature shaft of the magneto, a member connected to the engine shaft for rotating said disk, and devices connecting said member and disk, said devices permitting said disk to be shifted relative to said member when the direction of rotation of said member is reversed, so that said magneto will give a maximum spark in the same timed relation to the rotation of said member regardless of the direction of rotation of said member.

4. The combination with a reversible gas engine, of an ignition system therefor including a magneto, driving connections between said magneto and the shaft of the engine, a disk fixed to the armature shaft, a gear mounted to rotate freely concentric with the armature shaft, said gear being connected to the shaft of the engine, whereby the same is positively driven thereby, said gear having a slot formed therein and a pin carried by said disk and engaging said slot, said slot being of sufficient length to shift the position of the armature relative to the driving gear therefor when the direction of the magneto is reversed, so as to position said armature for a maximum spark at the same time relative to the rotations of said gear.

1,269,063. CENTRIFUGAL PUMP. CARL GEORGE DE LAVAL, Orange, N. J., assignor to Henry R. Worthington, a Corporation of New Jersey. Filed June 2, 1915. Serial No. 31,665. (Cl. 253—191.)

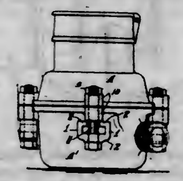


1. A centrifugal or turbine pump having an impeller with a horizontal suction entrance, a suction chamber surrounding the suction entrance of the impeller, a suction passage entering the suction chamber transversely to the impeller shaft, whereby a flow transverse to the impeller shaft is produced, and one or more vanes in the suction chamber arranged to direct said transverse flow about the suction entrance of the impeller and to separate the flow about the suction entrance from the incoming flow through the suction passage, whereby counter-currents are avoided and the flow distributed throughout the impeller suction, said vane or vanes being developed helically adjacent to the impeller suction to direct the water in the direction of the rotation of the impeller.

2. A centrifugal pump comprising in combination, a casing, a rotary impeller mounted therein and provided with an axially disposed suction inlet, an inlet conduit for said casing terminating in a suction chamber which surrounds and extends to the inlet of the impeller, a shaft on which said impeller is mounted, a hub member inclosing the shaft and forming a bearing therefor which extends from the casing through the suction chamber substantially to the inlet of the impeller and a plurality of vanes extending from the hub member to the walls of the suction chamber and to the inlet of the impeller whereby the flow is directed between said vanes to the inlet of the impeller and counter-currents are prevented.

3. A centrifugal pump comprising in combination, a casing, a rotary impeller mounted therein and provided with an axially disposed suction inlet, an inlet conduit for said casing terminating in a suction chamber which surrounds and extends to the inlet of the impeller, a shaft on which said impeller is mounted, and a plurality of vanes extending from the inner wall to the outer wall of the suction chamber and to the inlet of the impeller whereby the flow is directed between said vanes to the inlet of the impeller and counter-currents are prevented.

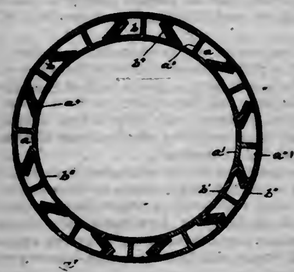
1,269,064. FRANGIBLE CLAMPING-PIECE FOR FROST-PROOF METERS. CARL GEORGE DE LAVAL, Orange, N. J., assignor to Henry R. Worthington, New York, N. Y., a Corporation of New Jersey. Filed July 31, 1915. Serial No. 42,996. (Cl. 85—50.)



1. In a frost proof water meter or the like, a casing having two parts and bolts passing through projecting portions of the casing parts for holding the parts together, and rigid clamping pieces on said bolts, said clamping pieces having frangible arms with inwardly extending portions on opposite sides of the bolt and forming a frangible connection between the bolt and projecting portions of the casing parts, whereby the casing parts are allowed to separate on the bolts on breaking of the clamping pieces.

[Claim 2 not printed in the Gazette.]

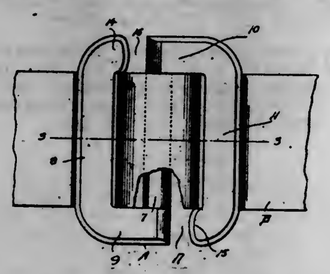
1,269,065. VOUSSOIRS FOR THE CONSTRUCTION OF CIRCULAR AND ARCHED MASONRY. ANDREW DOBE, Mimico, Ontario, Canada. Filed Jan. 10, 1917. Serial No. 141,673. (Cl. 72—51.)



A sewer construction comprising two sets of voussoirs in which all of the voussoirs of the same set are of the

same size and shape but differ in size and shape from those of the other set, and the voussoirs of each set alternately interlock with those of the other set; each voussoir of one set comprising an arched wedge-shaped segment, having zigzag sides, each side consisting of two parallel traverses located at the inner and outer extremities of the side, diverging from the radius of the voussoir and unequal in length, and a diagonal traverse connecting the inner extremities of the diverging traverses, each voussoir of the other set having zig-zag sides each consisting of two parallel traverses located at the inner and outer extremities of the side and converging toward the radius of the voussoir, and a diagonal traverse connecting the inner extremities of the converging traverses, the lengths and angles of said parallel and diagonal traverses corresponding with those of the other voussoir, the angles of the traverses with respect to their radii being such as to create an interlocking condition which will resist the radial separation of the voussoir when subjected to internal and external pressure.

1,269,066. BUCKLE. FRANK J. DUNLEAVY, San Francisco, Cal. Filed May 24, 1916. Serial No. 99,606. (Cl. 24—169.)



A buckle including a straddle bar, clamping arms disposed on opposite sides of said bar and connected to the opposite ends thereof, said clamping arms having their adjacent longitudinal margins beveled to provide downwardly and forwardly directed cutting edges, said cutting edges being disposed substantially in alinement with the upper edge of said straddle bar and serrated to provide penetrating teeth.

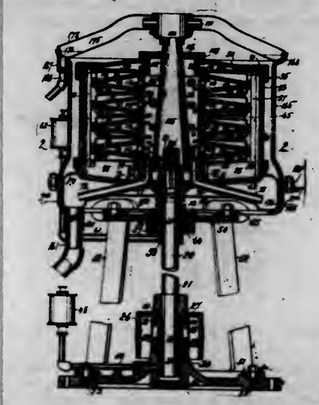
1,269,067. CENTRIFUGAL FILTERING AND CLARIFYING APPARATUS. OTTO EDWARD ENELL, Jersey City, N. J. Filed Oct. 12, 1916. Serial No. 125,170. (Cl. 210—25.)

1. In an apparatus of the character described the combination, of a rotative bowl, means to introduce a fluid to be treated into said bowl, a sleeve having openings in said bowl, a plurality of filter frames mounted on said sleeve, each filter frame having formed therewith an inner receiving chamber and filtering means coacting with each chamber.

2. In an apparatus of the character described the combination, of a rotative bowl, means to introduce a fluid to be treated into said bowl, a sleeve having openings in said bowl, a plurality of detachable conoidal filter frames mounted on said sleeve, each filter frame having formed therewith an inner receiving chamber and filtering means coacting with said chamber.

3. In an apparatus of the character described the combination, of a rotative bowl, means to introduce a fluid to be treated into said bowl, a sleeve having openings in said bowl, a plurality of detachable filter frames each having formed therewith an inner receiving chamber carried on said sleeve and filtering means coacting with said chambers.

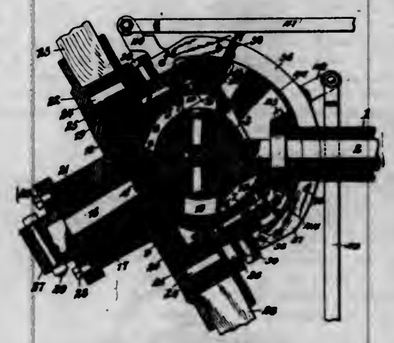
4. In an apparatus of the character described the combination, of a rotative bowl, means to introduce a fluid to be treated into said bowl, a sleeve having openings in said bowl, a plurality of filter frames mounted on said sleeve and a plurality of removable partitions in the base of said bowl.



5. In an apparatus of the character described the combination, of a rotative bowl, means to introduce a fluid to be treated into said bowl, a sleeve having openings in said bowl, a plurality of filter frames mounted on said sleeve and a plurality of removable retarding shelves at the inner face of the wall of the bowl.

[Claims 6 to 14 not printed in the Gazette.]

1,269,068. COMBINED DRIVING AND STEERING WHEEL. WILLIAM J. EVANS, Dayton, Iowa. Filed Aug. 18, 1916. Serial No. 115,709. (Cl. 180—43.)



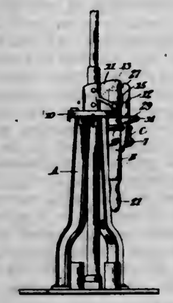
1. The combination with a steering wheel having interior driving connections and a spindle upon which the wheel is mounted, of an axle terminating in a yoke having its ends connected to the wheel spindle on opposite sides of the axis of the wheel, a steering yoke straddling and closely embracing the axle exterior to the axle yoke and arranged at right angles to the latter, and a casing structure secured to the yoke and to the wheel spindle and wholly inclosing the axle yoke.

3. The combination with a steering wheel having interior driving connections and a spindle upon which the wheel is mounted, of an axle terminating in a yoke connected to the wheel spindle on opposite sides of the axis of the wheel, a steering yoke straddling the axle exterior to the axle yoke in close embracing relation to the axle and arranged at right angles to said axle yoke, a casing structure secured to the steering yoke and to the wheel spindle and wholly inclosing the axle yoke, and guard means fast to the axle interior to the steering yoke.

5. The combination of a steering wheel, a spindle therefor, wheel driving mechanism interior to the spindle, an axle terminating in a yoke connected to and carrying the wheel spindle at the steering axis of the wheel, a drive shaft extending through the axle, a steering yoke connected at the ends to the wheel spindle and comprising bars spaced apart to lie on opposite sides of the axle exterior to the axle yoke, shield members fast to the bars of the steering yoke and inclosing the axle yoke and extending to and connected to the wheel spindle at the steering axis thereof, and guard members carried by the axle within the steering yoke in closing relation to the space between the bars constituting the steering yoke.

[Claims 2 and 4 not printed in the Gazette.]

1,269,069. SWITCH-STAND. CHARLES FORTH, Ottawa, Ontario, Canada, assignor to Flexible Metal Hose Company Limited, Ottawa, Ontario, Canada. Filed July 23, 1917. Serial No. 182,277. (Cl. 104—25.)

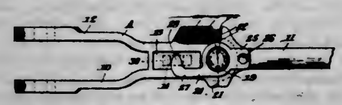


1. In a switch stand and in combination, a disk having a peripheral slot, a housing carried by the disk provided with an inner curvilinear wall, a lever pivotally mounted on the housing having a pocket in the upper end and a slot communicating with the pocket, a longitudinal displaceable latch member mounted on the lever, provided on the upper end with an arm designed to engage the pocket and slot, and resilient means in the pocket co-acting with the arm.

2. In a switch stand and in combination, a disk having a peripheral slot, a housing on the disk having an inner curvilinear wall, a lever pivotally mounted on the housing, a latch member, an arm on the upper end of the latch member, a projection at the end of the latch member, a pocket in the lever co-acting with the arm, resilient means in the pocket engaging with the arm and a hand grip formed integral with the latch member.

[Claims 3 to 5 not printed in the Gazette.]

1,269,070. SWITCH-LEVER. CHARLES FORTH, Ottawa, Ontario, Canada, assignor to Flexible Metal Hose Company Limited, Ottawa, Ontario, Canada. Filed July 23, 1917. Serial No. 182,278. (Cl. 104—25.)

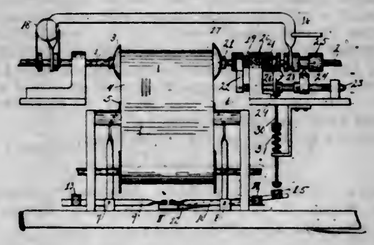


1. A switch lever comprising a member designed to be pivotally attached to a switch stand, a handle pivotally attached to the member, and designed to be moved to a limited extent laterally, a locking member carried by the handle and resilient means for holding the handle normally in alinement with the said member.

2. A switch lever comprising a member designed to be pivotally attached to a switch stand, and provided with a pair of shoulders angularly disposed to each other, a handle pivotally attached to the said member provided with the pair of angularly disposed shoulders designed to co-act with the said shoulders, and a locking member carried by the handle.

[Claim 3 not printed in the Gazette.]

1,269,071. MUSIC-SHEET-REGULATOR THROW-OUT. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Aug. 18, 1917. Serial No. 186,980. (Cl. 84—161.)



1. A revoluble spindle adapted to engage a music roll; a collar fixed with the said spindle and a circumferential groove in the said collar; a revoluble shaft parallel with the said spindle; a cam fixed on said shaft and having its outer part standing between the sides of the groove of the said spindle collar, and the said outer part of the cam of approximately the full width of the said groove at one revolved position of the said shaft and cam, and of much less than the width of the said groove at another revolved position of the said cam; means adapted to revolve the said shaft and its cam to their two above stated positions; and means adapted to move the shaft and its cam to several positions in the direction of the length of the said shaft spindle.

2. A revoluble spindle adapted to engage a music roll; a collar fixed with the said spindle and a circumferential groove in the said collar; a revoluble shaft parallel with the said spindle; a cam fixed on said shaft and having its outer part standing between the sides of the groove of the said spindle collar, and the said outer part of the cam of approximately the full width of the said groove at one revolved position of the said shaft and cam, and of much less than the width of the said groove at another revolved position of the said cam; means adapted to revolve the said shaft and its cam to their two above stated positions; and means adapted to move the shaft and its cam to several positions in the direction of the length of the said shaft spindle when the said cam is in its said position of its wider part engaging the groove in the said collar.

4. A revoluble spindle adapted to engage a music roll; a collar fixed with the said spindle and a circumferential groove in the said collar; a revoluble shaft parallel with the said spindle; a cam fixed on said shaft and having its outer part standing between the sides of the groove of the spindle collar, and the said outer part of the cam of approximately the full width of the said groove at one revolved position of the said shaft and cam, and of much less than the width of the said groove at another revolved position of the said cam; means adapted to revolve the said shaft and its cam to their two above stated positions; a revoluble threaded regulator means having its axis in the same general direction as the axis of the said spindle and the said shaft; a circumferential groove in the said regulator means; and a collar fixed on the said shaft and revoluble therewith and engaged in the said groove of the said regulator means; and means adapted to revolve the said shaft to the two said positions of the said cam.

6. Means for propelling a web; hand controlled means adapted to regulate the travel of the said web to a true line of travel; automatic means adapted to regulate the travel of the said web to a true line of travel, the said automatic means including two detector fingers adapted to contact the two edges of the said web during the operation of the said automatic means; means adapted to alternatively make effective the said hand controlled means and the said automatic means and to remove the said detector fingers from contact with the said web when set for the operation of the said hand controlled means.

7. Means for propelling a web; hand controlled means adapted to regulate the travel of the said web to a true line of travel; automatic means adapted to regulate the travel of the said web to a true line of travel, the said automatic means including two detector fingers adapted to contact with both edges of the said web during the operation of the said automatic means; means adapted to alternatively make effective the said hand controlled means and the said automatic means and to spread the said two detector fingers away from each other and from contact with the said web when set for the operation of the said hand controlled means.

[Claims 3 and 5 not printed in the Gazette.]

1,269,072. WIRE-STRETCHER. EDWARD C. GILBERTSON, Norma, N. D. Filed Dec. 19, 1917. Serial No. 207,929. (Cl. 254—68.)



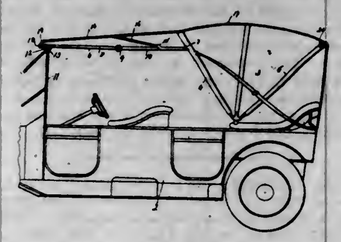
3. A wire stretcher, comprising a supporting frame including a socket, side members diverging outwardly from said socket, an elongated bar connecting the divergent ends of said side members and guide rods positioned between said side members, a sliding frame, including a guide arranged to slide on said guide rods, side members connected to said guide and arranged to slide through the bar connecting the side members of the supporting frame, a clamping bar connected to said sliding side members and means to move the sliding frame.

5. A wire stretcher, including a socket, clamping plates carried by the socket and adapted to serve as a brace to be engaged with the wire, rods diverging outwardly from said socket, an elongated bar connecting the divergent ends of said rod, a flat bar, positioned between said rods and provided with a double row of alternately arranged openings, guide rods positioned on either side of said last named bar, slide arranged on said guide rods, ears extending outwardly from said slide, a lever provided with a yoke adapted to straddle said flat bar, said yoke provided with ears adapted to be pivotally secured to the ears extending from the guide and having openings formed therein adapted to register with the openings in the flat bar, a pin insertible through the alined openings of the lever and bar and a wire clamping frame movable with said slide.

[Claims 1, 2, 4, and 6 not printed in the Gazette.]

1,269,073. COMBINATION VEHICLE-TOP. AMOS H. GILLETTE, Atlantic City, N. J., assignor to Frank M. Simons and William J. Simons, Atlantic City, N. J. Original application filed Mar. 3, 1917, Serial No. 152,164. Divided and this application filed Sept. 6, 1917. Serial No. 189,939. (Cl. 21—62.)

1. A vehicle top comprising a victoria frame, a touring frame hinged thereto and adapted to extend from the forward portion of or folded up in parallelism with said forward portion of said victoria frame, said touring frame consisting of side bars, a reach bow hinged to the outer end thereof and a supporting bow hinged to the side bars intermediate their length, a cover attached to the victoria frame, an extension of said cover adapted to cover the touring frame or be folded under the main cover, fastening devices carried by the reach bow and the victoria frame whereby said extension may be held in an open or closed position.



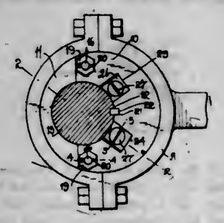
2. A vehicle top comprising in combination a victoria frame including a front bow and rear bow, fastening means carried by the rear bow, side bars hinged to the forward bow adjacent the top thereof, a reach bow hinged to said side bars, said side bars and reach bow forming a touring top frame, said reach bow adapted to coincide with the forward bow of the victoria frame when the touring top frame is collapsed, fastening means carried by the reach bow and a cover attached to the victoria frame and provided with an extension, complementary fastening means carried by the forward end of the extension whereby said extension may be detachably secured to the touring top frame when the same is in a raised position and whereby said extension may be folded under the reach bow and the forward bow of the victoria frame and detachably secured to the rear bow of the victoria frame when the touring top frame is collapsed.

1,269,074. SLING-TRIP. RUSSEL P. GORDON, Lakevista, Colo. Filed Apr. 13, 1917. Serial No. 161,921. (Cl. 57—128.)



A device of the class described comprising a substantially rectangular body member with an aperture therein intermediate of its ends with a cross bar dividing said aperture, said bar being offset, a substantially U-shaped catch having the terminal of one leg offset and pivoted to said body adjacent one side of said aperture, the other leg of said catch which is located at the other side of the bar and spaced therefrom being movable across said aperture, a spring for holding said catch in closed position, and a load carrying latch pivoted on said member with its free end adapted to be engaged by said catch and locked thereby in closed position.

1,269,075. ECCENTRIC-MOUNTING. JOHN F. GRABILL, Flora, Ill., assignor of one-half to Horatio C. Chaffin, Flora, Ill. Filed July 11, 1917. Serial No. 179,910. (Cl. 74—8.)

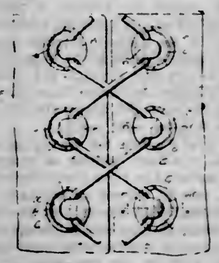


1. A member to be mounted upon a shaft and having a shaft passage and formed in two sections, the division line between said sections extending through the shaft passage, the ends of the sections being reduced in thickness and overlapping each other, one of said sections being formed with a radially extending groove, the outer wall of which is beveled, means passing through the overlapped portions of the sections and holding them in engagement with each other, and a wedge having its inner face conforming to the curvature of the shaft passage and its outer face beveled to engage the end face of the beveled wall of said groove.

3. A member to be mounted upon a shaft and formed in two sections, the member having a shaft passage, the dividing line of the sections intersecting the shaft passage, the ends of the sections having inter-locking engagement with each other, bolts passing through said interlocking ends, one of said sections being formed with a radially extending groove, having a beveled outer end wall, a wedge disposed in said groove, the inner face of the wedge conforming to the curvature of the shaft passage, the outer face of the wedge being beveled to coact with the beveled end wall, a member disposed on one face of the eccentric and arching over the groove, and a bolt passing through the wedge, through said last named member, and having nuts bearing against the last named member whereby the wedge may be adjusted.

[Claim 2 not printed in the Gazette.]

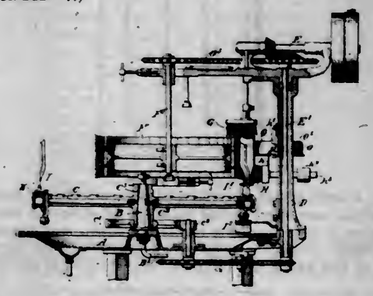
1,269,076. LACING-HOOK. JAMES H. HALL, Chicago, Ill. Filed June 30, 1916. Serial No. 106,804. (Cl. 24—146.)



1. A lacing member of the kind described, comprising a tubular head, provided with a shank at one end and with a shoulder about the shank at its juncture with the head, said head provided with a projecting hook at one side extending across the head to adjacent the other side thereof, and slightly depressed at its free end below the top edge of the head, said head inwardly flanged about said hook end and cut away at each side of the hook to adjacent the base, the outer edge at the shoulder on the under side of the base of the head formed to impinge into the material carrying the member, and the shank of sufficient length to permit the same to be flanged outwardly and inwardly and impinge at its free ends into the material carrying the member.

[Claim 2 not printed in the Gazette.]

1,269,077. BOTTLE-WASHER. CHARLES HAMANN, Port Chester, N. Y. Filed Aug. 21, 1914. Serial No. 857,882. (Cl. 141—7.)



1. In a bottle washer, a bottle carrier, a belt for rotating bottles supported by said carrier, pulleys for operating said belt, bracket arms, means carried by said bracket arms for adjustably supporting one of said pulleys, means for adjusting said bracket arms toward and from the carrier, and means for supporting the other pulley.

2. In a bottle washer, a bottle carrier, a belt for rotating bottles supported by said carrier, pulleys for operating said belt, bracket arms, means carried by said bracket arms for adjustably supporting one of said pulleys, means for adjusting said bracket arms toward and from the carrier, means for supporting the other pulley, and means for adjusting the last mentioned pulley relative to the carrier.

3. In a bottle washer, a bottle carrier, a belt for rotating bottles supported by said carrier, pulleys for operating said belt, bracket arms, an adjustable support carried by said arms and provided with means for supporting one of said pulleys, means for adjusting said support to tighten the belt, means for adjusting said bracket arms toward and from said carrier, and means for supporting the other pulley.

4. In a bottle washer, a bottle carrier, a belt for rotating bottles supported by said carrier, pulleys for operating said belt, bracket arms, a yoke pivotally supported by said arms and provided with bearings for one of said pulleys, an adjusting screw for regulating the position of said yoke, means for adjusting said bracket arms toward and from said carrier, and means for supporting the other pulley.

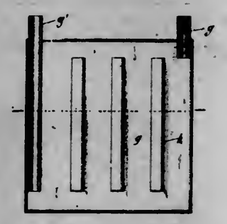
5. In a bottle-washer, the combination with a rotating bottle-carrier, of a rotating brush, means for pressing the bottles against the brush and rotating them in contact therewith, a separate brush located adjacent to the neck of the bottle, a projection on the brush for suspending it, and a weight for pressing the brush against the neck of the bottle.

[Claim 6 not printed in the Gazette.]

1,269,078. ELECTROLYTIC TANK FOR ELECTRO-CHEMICAL REACTIONS. EDWARD HENRY HAMILTON, Trail, British Columbia, Canada, assignor to The Consolidated Mining & Smelting Company of Canada, Limited, Toronto, Ontario, Canada, a Corporation of Canada. Filed Oct. 4, 1917. Serial No. 194,784. (Cl. 204—5.)

1. An electrolytic tank comprising a set of electrodes, constituting the reacting couples, a hollow, insoluble, baffle interposed between the tank inlet and the adjacent electrode to direct the inflowing electrolyte below the electrodes, and circulating pipes for the baffle by which the circulation of a temperature regulating agent may be maintained through it.

2. A baffle for an electrolytic tank having no direct connection with the source of the electrical circuit for the electro-chemical reactions, said baffle comprising a hollow insoluble container having an inlet and outlet for the circulation of the temperature regulating agent.



3. A baffle for an electrolytic tank comprising a hollow, insoluble, container, having an inlet and outlet for the circulation of a temperature-regulating agent, and appropriate means within the container, permitting of the circulation of said agent, and resisting the distortion of the baffle.

1,269,079. AUTOMATIC SWITCH. GEORGE F. HAMMOND, Montecito, Cal. Filed Oct. 12, 1917. Serial No. 196,197. (Cl. 175—281.)



1. In an apparatus of the character described, a pair of opposed switches having movable switch arms, a pair of opposed spring-controlled shifting members connected to said switch arm and normally maintaining the latter in inoperative position, and a cam rotatable between the said shifting members and arranged to simultaneously engage and shift one of said members and release the other.

3. In an apparatus of the character described, a pair of opposed circuit closing members having movable contacts, a pair of opposed shifting members connected to said movable contacts to shift the latter into and out of operative position, springs for moving said shifting members in one direction, and a cam member rotatable between the said shifting members to move the latter in the opposite direction, and arranged to simultaneously engage one of said shifting members and release the other.

[Claim 2 not printed in the Gazette.]

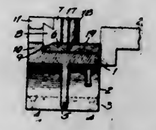
1,269,080. PROCESS OF TREATING PHOSPHORIC ACID TO BE USED AS A CLARIFIER. TAKAKAZU HAYASHI and UMEJIRO EMURA, Tokyo, Japan, assignors of fifty one-hundredths to Kwanto Sanso Kabushiki Kaisha, Ltd., Tokyo, Japan. Filed May 24, 1917. Serial No. 170,605. (Cl. 127—2.)

1. A process of treating used carbonaceous sugar-purifying material, which comprises the steps of washing the same with dilute phosphoric acid and thereafter mixing the residue with a more concentrated phosphoric acid substantially free from sulfuric acid, in such proportions as to produce a semi-solid mixture.

3. A process of treating used carbonaceous sugar-purifying material, which comprises the steps of first charring the organic substances in the material, thereafter washing the same with dilute phosphoric acid and thereafter mixing the residue with a more concentrated phosphoric acid substantially free from sulfuric acid, in such proportions as to produce a semi-solid mixture.

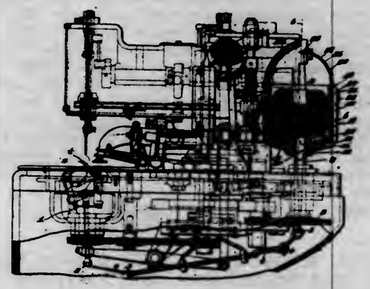
[Claim 2 not printed in the Gazette.]

1,269,081. MACHINE FOR CUTTING AND TRIMMING SHEET-METAL STRIPS. RICHARD HELMOLD and HENRY LORCH, Chicago, Ill., assignors to J. F. Helmold & Bro., Chicago, Ill., a Copartnership. Filed May 1, 1916. Serial No. 94,665. (Cl. 164—47.)



In a device of the class described, the combination with a suitable frame and a ledger blade in the form of a post rising therefrom, of a plunger, means for reciprocating it relatively to said ledger blade, said plunger having a longitudinal dove tail rib, said frame having a flange providing in part a guide-way for said dovetail rib, a clamping plate engaging said dove tail rib and means for securing said clamping plate to said flange, the meeting faces of said flange and clamping plate being inclined or beveled whereby they may be adjusted longitudinally relatively to each other and thereby take up or compensate for any wear between the dovetail rib aforesaid and its guide-way.

1,269,082. THREAD-HOLDER. GEORGE S. HILL, Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed June 7, 1916. Serial No. 102,854. (Cl. 112—4.)



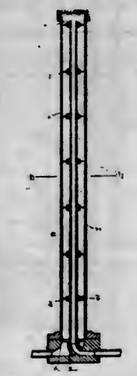
1. A rotary thread holder for sewing machines, having, in combination, means for holding a cop or a ball of thread at the option of the operator and provided with a thread passage at its bottom, a guide for guiding the thread from the supply when in the form of a cop through the center of the cop and through the thread passage, a side guide for guiding the thread from the thread supply when in the form of a ball along the side thereof, and mechanism for rotating said means.

5. A rotary thread holder for sewing machines, having, in combination, a hollow spindle, a receptacle for the thread supply mounted to turn about the axis of the hollow spindle, a pair of thread guides each comprising a bent tube extending down the side of the receptacle and beneath the bottom thereof and communicating with the hollow spindle, and an overhanging upper portion pivoted upon the lower portion, the free ends of such portions being substantially in line with the axis of rotation of the thread holder, and means for rotating the holder.

[Claims 2 to 4 not printed in the Gazette.]

1,269,083. WATER-BACK CONSTRUCTION FOR FURNACES. FRANK A. HURLBUT, Kansas City, Mo. Filed June 24, 1916. Serial No. 105,725. (Cl. 122—292.)

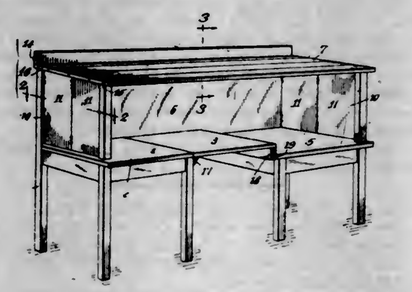
1. In a furnace wall construction, a water back member comprising an outer casing mounted with one side thereof exposed to the flame side of the wall, a feed tube mounted longitudinally within said casing, and baffle elements mounted in the space between said casing and feed tube and arranged in position to direct the flow of water in a path along the flame side of said casing.



5. In a furnace bridge wall construction, a water back member comprising an outer casing mounted with one side thereof exposed to the flame side of the bridge wall, a feed tube mounted longitudinally within said casing, and baffle elements mounted in the space between said casing and feed tube, said elements being of a contour of the same form as the cross-section of the casing and mounted eccentrically within the latter with one side of each of said elements in contact with the casing on the side opposite the flame side of the casing, whereby the flow of water is directed in a path along the inner face of the flame side of said casing.

[Claims 2 to 4 not printed in the Gazette.]

1,269,084. DESK. THOMAS ORMOND HUSSEY, Brooklyn, N. Y., assignor of one-half to National City Bank, New York, N. Y., a Corporation. Filed Feb. 16, 1918. Serial No. 217,531. (Cl. 45—6.)

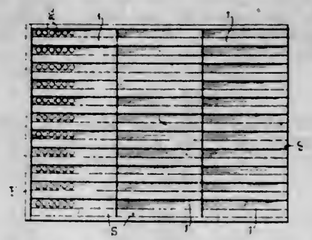


1. A combined typewriting, filing and bookkeeping desk comprising a main desk having a support for a typewriter, a back, and a foldable desk adapted to fold over the main desk into substantially horizontal position and form a temporary raised filing or bookkeeping desk and foldable sides hinged to the back and adapted to support the foldable desk at an elevation above the main desk.

3. A combined typewriter, filing, bookkeeping and adding machine desk, comprising a main desk, having a removable support to support a typewriter, a foldable desk adapted to fold over the main desk into substantially horizontal position and form a temporary raised filing or bookkeeping desk, foldable sides adapted to support the foldable desk at an elevation above the main desk, said removable typewriter support being adapted to be removed to permit an adding machine to be rolled into the desk to be temporarily used in place of the typewriter.

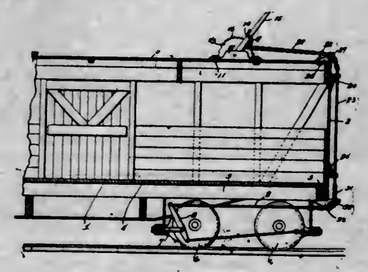
[Claim 2 not printed in the Gazette.]

1,269,085. GRAIN-SEPARATOR. SAMUEL A. JESSE, Jamestown, N. D. Filed Feb. 26, 1917. Serial No. 151,039. (Cl. 130—19.)



A grain separator comprising a plurality of screening elements arranged in stepped relation, each of said elements comprising a sheet of metal longitudinally corrugated, the corrugations being open at their discharge ends, a side wall of each of the corrugations being provided with a longitudinally extending series of perforations, said perforations being substantially oval in form, the longer axes of the perforations extending vertically, the perforate portions of one screening element discharging upon an imperforate portion of the screening element immediately beneath and in advance of the perforate portions of said second element, each of said screening elements having an imperforate portion extending over the perforate portion of the screening element immediately beneath and discharging downward onto said second named screening element at a point beyond the perforate portions of said second named screening element.

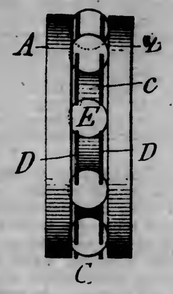
1,269,086. RAILWAY-CAR BRAKE. FREDERICK JOHNSON, Warba, Minn. Filed Oct. 3, 1916. Serial No. 123,520. (Cl. 188—42.)



In a device of the class described, the combination of a railway car having a brake mechanism, a tapering bracket fixed upon the top of the car and projecting beyond one end, a sheave carried by said bracket, the top portions of said bracket being unobstructed, tapering brackets fixed upon the end of the car, in alinement with the other, said tapering brackets having enlarged portions at their ends, said enlarged portions being recessed and unobstructed, a bracket having notched portions fitting upon the lower portions of the car, said last mentioned bracket having a sheave, a transverse rod carried at the outer portion of said last mentioned bracket, said rod being in direct alinement with the outer portions of the second mentioned brackets, the notched portions of said last mentioned bracket relieving the securing means of the last mentioned bracket from strain, a rod slidably mounted in the recessed portions of said second mentioned brackets, a flexible

means extending from the last mentioned rod around the last mentioned sheave, whereby said transverse rod will engage the flexible means under certain conditions for holding said last mentioned rod against accidentally disengaging said second mentioned brackets and flexible means connecting the remaining end of said last mentioned rod and passing around the first mentioned sheave for actuating said brake mechanism.

1,269,087. END-THRUST BEARING. HENRY BRINSER KEIPER, Lancaster, Pa. Filed Dec. 4, 1912. Serial No. 734,957. (Cl. 64—49.)

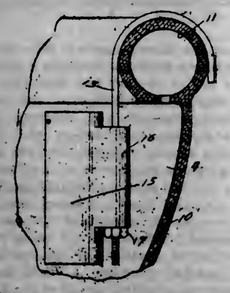


1. A ball bearing comprising a ring-shaped body provided with spaced peripheral projections and balls seated in the spaces between such projections, the ball-seating spaces being circular in form but less than a complete circle and opening outwardly on curved converging lines, and the projections being elastic adapting the balls to be sprung into the spaces therebetween, and a series of oppositely disposed openings in said flanges in which balls are seated and which open outwardly on converging lines into larger intersecting openings through which the balls are inserted and then sprung into their seats.

3. A ball retainer comprising an annular body having spaced peripheral flanges provided with a series of oppositely disposed openings therein which open outwardly on converging lines into larger intersecting openings through which balls may be inserted laterally and then sprung into the seats provided therefor by the smaller openings, said flanges being also provided with an outer series of oppositely disposed openings which open outwardly at the periphery of the flanges and provide another series of ball-seating spaces therebetween into which the balls are sprung, substantially as described.

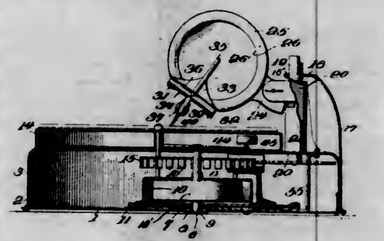
[Claim 2 not printed in the Gazette.]

1,269,088. DISINFECTANT-HOLDER. MARTIN P. KELLY, Scranton, Pa. Filed Mar. 20, 1917. Serial No. 156,080. (Cl. 4—30.)



A disinfectant device for a closet bowl including a disinfectant receptacle having a longitudinal tubular portion, a rod disposed through said tubular portion, a stop member on the lower end of the rod, said receptacle being arranged to slide vertically on said rod, a bowl edge engaging hook on the upper end of the rod, the bottom of the receptacle having an outlet opening, and means on the receptacle for engagement with the bowl to prevent axial movement of the receptacle with respect to the wall of the bowl.

1,269,089. TALKING-MACHINE. HARRY T. KINGSBURY and EDWARD J. KINGSBURY, Keene, N. H. Filed July 22, 1916. Serial No. 110,759. (Cl. 274—16.)



1. A talking machine comprising a housing, a spring driven drum in said housing, a record supporting table driven by the drum, a shaft extending upwardly through the casing, means connecting the shaft with the spring within the drum for winding the spring for driving the drum and a sound box mounted upon the winding shaft.

4. A talking machine comprising a housing, a spring driven drum in said housing, a record supporting table driven by the drum, a shaft extending upwardly through the casing, means connecting the lower end of the shaft with the spring within the drum for winding the spring for driving the drum, a sleeve loosely mounted on said shaft above the casing, ears carried by said sleeve, a sound box having an ear pivoted between the ears on the sleeve and the upper end of the shaft above the sleeve constructed to receive a crank whereby the same may be rotated for winding the drum.

7. A talking machine comprising a housing, a spring driven drum in said housing, a record supporting table supported above the housing and driven by the drum, a vertical shaft extending into the housing, a gear connection between the spring and the shaft for winding the spring, through the shaft, a sleeve loosely mounted on the shaft above the housing, a sound box horizontally pivoted to said sleeve, a speed governor driven by the record supporting table, a lever for varying the speed of the governor, and a stop pivoted to the housing and engaging the edge of the table for stopping the same.

[Claims 2, 3, 5, 6, and 8 to 10 not printed in the Gazette.]

1,269,090. METHOD FOR CEMENTING WELLS. SAMUEL L. KISTLER, Los Angeles, Cal. Substitute for application filed Nov. 15, 1915, Serial No. 61,691. Divided and this application filed Apr. 20, 1917. Serial No. 163,528. (Cl. 166—21.)

1. The method of cementing wells which consists in placing a water-tight bridge in the casing below the point to be cemented, partially separating the casing near the point to be cemented, placing a guide in the casing on said bridge, said guide being of sufficient length to extend past the place at which the partial separation has been made, exerting force on said casing to cause it to separate, lifting the casing to enlarge the separation, pumping cement into the casing, lowering the casing to close the separation, allowing the cement to set, and clearing the interior of the casing of obstructions.

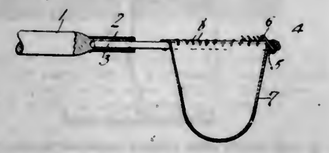
2. The method of cementing between an oil well casing and an impervious shell which consists in separating the casing near the shell, pumping cement into the space around the shell through the separation in the casing, lowering the casing to close the separation, and allowing the cement to set, the sections of casing on either side of the separation being held in alinement by a suitable guide.

3. The method of insuring the realinement of casing



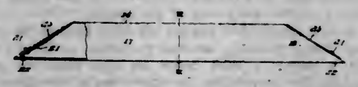
separated in cementing an oil well which consists in supporting inside the casing during the cementing operations an internal guide of sufficient length to bridge the separation.

1,269,091. BERRY-PICKER. THEODORE H. KRUSE, Arvada, Colo., assignor of one-half to Clarence C. Cole, Denver, Colo. Filed May 22, 1917. Serial No. 170,212. (Cl. 56—99.)



A berry picker, comprising a handle, a ring secured to the handle and having spaced apertures formed therein and extending downwardly and outwardly from the upper face thereof, short prongs secured in the apertures and extending upwardly and inwardly from the ring, and a bag secured within and depending from the ring, the prongs adapted to direct berries downwardly against the ring.

1,269,092. METALLIC RAILWAY-TIE. MICHAL KWIATKOWSKI, New York, N. Y., assignor of one-half to Piotr Kwiatkowski, Chicago, Ill. Filed Oct. 22, 1917. Serial No. 197,873. (Cl. 238—5.)

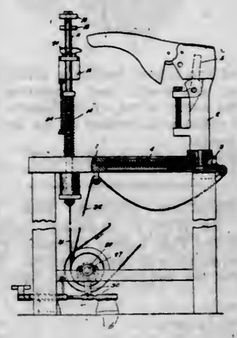


1. A hollow single piece tie comprising a piece of sheet metal substantially rectangular in form having opposite longitudinal marginal sections adapted for overlapping forming the bottom of the tie when the blank is folded with a middle section forming the top thereof and intermediate sections forming downwardly flaring sides, parallel slits at the ends of the blank forming tongues as continuations of the top section of the tie and further forming opposite substantially rectangular portions adapted for overlapping each other beneath the said tongues and therewith forming oppositely sloping ends for the tie, hold-fast devices for the tongues and flaps and hold-fast devices for the bottom sections.

2. A metallic sheet metal tie comprising a substantially truncated pyramid shape having overlapping bottom sections, overlapping inturned flaps at the ends of the tie, tongues at the opposite ends of the tie overlapping the said flaps and hold-fast devices between the said flaps and tongues, the said flaps being arranged relatively to the bottom sections in such a manner as to form openings at the opposite ends of the tie.

3. A sheet metal tie having overlapping bottom sections and a relatively narrow top section parallel therewith, inclined side sections connecting the said top and bottom sections having severed end portions forming opposite flaps and intermediate tongues adapted for overlapping the said flaps and hold-fast devices between the said tongues and flaps when the said members are in their end forming arrangement for the tie.

1,269,093. MACHINE FOR SEPARATING SHOES AND LASTS. EUCLID I. LA CHAPELLE, Brockton, Mass. Filed July 17, 1917. Serial No. 181,067. (Cl. 12—1.)



2. A machine of the character described, having, shoe compressing means, comprising movable sole engaging means for loosening the upper of a shoe on a last, and additional shoe engaging means to hold the shoe against the strain of said shoe compressing means and limiting means for limiting the movement of said movable sole engaging means relatively to said additional shoe engaging means.

10. A machine of the character described, having, sole compressing means, substantially as described, for loosening firstly, the upper of a shoe on a last, last engaging means, a movable support for said last engaging means and actuating means for actuating secondly, said movable support, during the time that the upper is loosened on the last by said sole compressing means.

13. A machine of the character described, having, shoe compressing means, for loosening the upper of a shoe on a last, during the time of the separation of the shoe and the last, shoe and last separating means, positioned at the heel part of the last, a single actuating means for all said means, connections positioned relatively to said shoe compressing means and to said single actuating means and connections positioned relatively to said shoe and last separating means and to said single actuating means, said connections being relatively timed so that said shoe compressing means may be actuated prior to the actuation of said shoe and last separating means.

21. A machine of the character described, having, sole compressing means, substantially as described, means for separating a shoe and a last and actuating means for said means, timed to operate relatively to said sole compressing means, so that said means for separating a shoe and a last will be thereby actuated at a predetermined time.

91. A machine for separating a shoe and a last, having, last holding means, positioned at the heel of the last, and sole compressing means for loosening the upper of the shoe on the last during the longitudinal separation

of the shoe and the last and arranged to hold the shoe against the strain incident to the longitudinal separation of the shoe and the last.

[Claims 1, 3 to 9, 11, 12, 14 to 20, 22 to 90, and 92 to 99 not printed in the Gazette.]

1,269,094. NEEDLE. FRED N. LA CHAPELLE, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed July 11, 1916. Serial No. 108,573. (Cl. 112—11.)



1. A curved eye needle having a chisel edge lying in the plane of the needle and extending substantially throughout the entire width of the needle in a direction substantially radial with respect to the arc of the curvature of the needle.

[Claim 2 not printed in the Gazette.]

1,269,095. BRAKING DEVICE FOR ELEVATING-TRUCKS. DE WITT C. LAMBSON, Springfield, Mass., assignor to The Fisk Rubber Company, Chicopee Falls, Mass., a Corporation of Massachusetts. Filed Sept. 26, 1917. Serial No. 193,221. (Cl. 21—65.)



1. The combination in a truck, of brake shoes movably mounted to engage wheels thereof, and stationary and lever operated coacting cams so constructed that the lever operated cam is movable axially when turned with relation to the stationary cam, and connections between the lever and said shoes to force the latter against said wheels by the axial movement of the lever operated cam, said cams being so constructed that the lever operated cam remains in the positions to which it is moved.

3. In a lifting truck, having a wheel supported frame and a load lifting platform movable relatively to the frame, brake shoes carried by the frame and adapted to engage wheels thereon, a power multiplying mechanism carried by the platform, and means connecting said shoes and mechanism, whereby an actuation of the latter will move the shoes against said wheels, said mechanism comprising a cam on the platform, a rod passing through said cam and connected to the last-named means, a lever mounted on said rod and having a coöperating cam portion to engage said cam, and means to hold the said portion in engagement with the cam, whereby a swinging movement of said lever will move the rod and thus said shoes, said lever arranged to be frictionally held in the positions to which it is moved.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,269,096. STORAGE-BATTERY COVER. EDMUND LAND, Detroit, Mich., assignor to Century Storage Battery Company, a Corporation of Michigan. Filed Sept. 17, 1917. Serial No. 191,709. (Cl. 204—29.)

5. A storage battery cover comprising a closure having a filling hole formed with depending inclosing walls, and a movable closing member for said filling hole movable to a closing position over said hole and to an open position to one side of said hole, said closure having a vent communicating with the space beneath said closure and opening outward adjacent to said filling hole, and said closing member having a depression on its under side for overlapping said vent opening and a portion of



said hole in one position of said closing member and said closing member having a smooth surface on its under side for closing said vent in another position of said closing member, and a vent for venting said hole to atmosphere when said closing member is in said former position.

[Claims 1 to 4 not printed in the Gazette.]

1,269,097. APRON FOR SHOE-SEWING MACHINES. JOSEPH H. LA ROUCHE, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Aug. 30, 1916. Serial No. 117,765. (Cl. 112—20.)



1. A lock stitch shoe sewing machine having, in combination, stitch forming devices including a curved hook needle, a looper, a work table, an apron interposed between the looper and the shoe operated upon, and means for supporting the upper end of the apron having provision whereby the upper end only of the apron may be adjusted relatively to the looper and work table.

2. A lock stitch shoe sewing machine having, in combination, stitch forming devices including a curved hook needle, a looper, a work table, an apron secured at its lower end to the machine, and an abutment against which the upper end of the apron is adapted to rest having provision whereby the position of the upper end of the apron may be adjusted relatively to the looper independently of the lower end of the apron.

5. A lock stitch shoe sewing machine having, in combination, stitch forming devices including a curved hook needle, a looper, a work table, an edge gage, an apron, and means for supporting the upper end of the apron and for adjusting it relatively to the looper and to the edge gage.

[Claims 3 and 4 not printed in the Gazette.]

1,269,098. ROAD-MAKING MACHINE. MILTON NIMMON LATTA, Valentine, Nebr. Filed Oct. 31, 1917. Serial No. 199,536. (Cl. 94—6.)

10. A machine of the character described having a conveyer frame intermediately fulcrumed at the forward portion thereof and extending forwardly therefrom, an endless conveyer in the said frame, a digging member carried by the forward portion of the frame and arranged to throw dug material upon the lower portion of the conveyer, a roller mounted support beneath the forward portion of the conveyer frame having hinged connection therewith and provided with uprights at the sides of the conveyer frame, and manually controlled connections joined to the said uprights whereby the forward portion of the conveyer frame may be raised and lowered.



12. A machine of the character described having a forward radial digging cylinder extending transversely thereof, and the intermediate portion of which has radial digging blades, and the side portions of which have helical blades, for the purpose described.

[Claims 1 to 9 and 11 not printed in the Gazette.]

1,269,099. PLAYING-CARDS. DAISY GRESHAM LEE, Clermont, Fla. Filed Sept. 15, 1917. Serial No. 191,590. (Cl. 46—25.)

1. A pack of cards comprising a plurality of sets of cards, each set consisting of a series of cards certain of which are provided with stars differing in number and certain other cards in each set having different numbers of stripes thereon, one complete set of cards making up the forty-eight stars and thirteen stripes of the United States flag.

2. A pack of cards comprising a plurality of sets of cards, each set consisting of a series of cards certain of which are provided with stars differing in number and certain other cards in each set having different numbers of stripes thereon, one complete set of cards making up the forty-eight stars and thirteen stripes of the United States flag, and additional honor cards each having one or more complete United States flags delineated thereon.

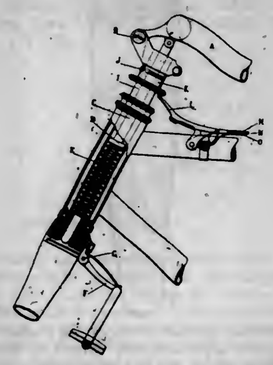
8. A pack of cards consisting of seventy-six cards including twelve sets of cards each consisting of six cards, four cards in each set having different numbers of stars thereon and the two remaining cards of each set having different numbers of stripes thereon, the six cards in each set together making up the forty-eight stars and thirteen stripes of the United States flag, and four additional honor cards having one, two, three, and four complete United States flags delineated thereon respectively.

1,269,100. PROCESS OF TREATING GRAIN FOR BEVERAGES. BERTHA LEIBBRANDT, Santa Cruz, Cal. Filed Nov. 12, 1917. Serial No. 201,562. (Cl. 99—11.)

1. The herein described process of treating whole wheat grain which consists in first softening the grain in a temperature of substantially 80° Fr. until the grain begins to germinate; secondly, moistening the grain and subjecting it to a cooking heat for a period of approximately six hours until the grain becomes mellow; thirdly, drying the cooked grain in a mild heat until the moisture is evaporated and the grain becomes hardened; and finally, slightly roasting the germinated grain.

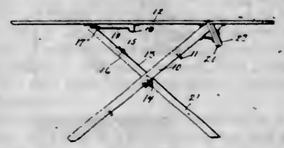
[Claim 2 not printed in the Gazette.]

1,269,101. HANDLE-BAR WITH UNIVERSAL CONTROL FOR BICYCLES AND MOTOR-CYCLES. CHARLES LEJEUNE-SACONNEY and THEODULE TESTO, Nice, France. Filed Jan. 31, 1917. Serial No. 145,773. (Cl. 208—13.)



Controlling mechanism for cycles and motorcycles comprising in combination with the front fork and steering tube, a handle bar pivoted to the tube, a rod pivoted to the handle bar and passing downwardly through said tube, brake mechanism controlled by the lower end of said rod, a spring acting upon the rod to hold the handle bar normally in the raised position, a collar sliding on the tube, a projection on the rod coöperating with the collar and mechanism including a lever for operating the rear brake of the cycle adapted to be controlled by said collar, said lever projecting into the path of, but separated from, said collar.

1,269,102. COMBINATION FURNITURE. PAUL M. LEWIS, Velpen, Ind. Filed Jan. 5, 1917. Serial No. 140,789. (Cl. 228—32.)



1. An article of combination furniture including a ladder having a platform at one end, a prop for said ladder in the form of an ironing board hingedly connected to the platform end of the ladder, an extension hingedly connected to the hinged end of the prop, a member rigidly secured to said extension at an angle thereto to be disposed in alinement with the platform to form a continuation thereof when the article is used as a ladder, said extension being movable into a position in alinement with the ironing board with the member in contact with the platform to form a support for said extension when the article is used as an ironing board.

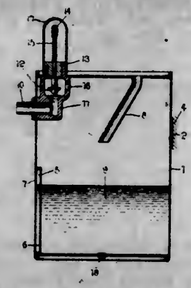
2. An article of combination furniture including a ladder, a platform at one end, a prop hingedly connected to the platform end of the ladder in the form of an ironing board, an extension hingedly connected to the hinged end of said prop, a member rigidly connected to said extension to be disposed in alinement with the platform, a pair of braces formed of hingedly connected sections for disposing the prop and ladder in angular relation, and a supporting element hingedly connected to each brace for use, in conjunction with the ladder to support the prop in a horizontal position when using the article as an ironing board.

1,269,103. CONTAINER. FREDERICK LOBL, Boston, Mass. Filed Dec. 9, 1916. Serial No. 136,080. (Cl. 150—8.)



An expansible receptacle comprising a sheet of flexible material folded to form a neck portion, a threaded neck band within and adjacent the neck portion to receive interiorly a threaded stopper, said threads also constituting a roughened outer surface to grip the neck portion of the flexible receptacle, said neck band having an outwardly and downwardly turned perforated flange compressed against said neck portion, the latter being forced outward by the compressing action into the perforations to lock the neck band and neck portion of the receptacle together.

1,269,104. CARBURETER ATTACHMENT. JOHN C. MAGNESS, New York, N. Y., assignor, by direct and mesne assignments, to Atlas Auto Specialties Corporation, New York, N. Y., a Corporation of New York. Filed Apr. 12, 1917. Serial No. 161,589. (Cl. 261—121.)



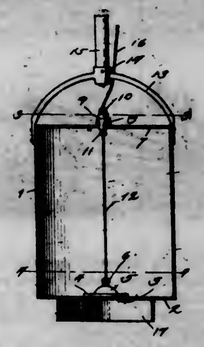
5. A device of the character described comprising a liquid holding tank, a compartment adjacent said tank, said compartment being in communication with the tank and with the atmosphere, a dry air inlet spaced from the bottom of the tank, and a valve controlled moist air outlet also spaced from the bottom of the tank.

7. A device of the character described comprising a cylindrical liquid holding tank, and a narrow, arcuate compartment located at one side of the tank and near its bottom, said compartment having a hole near its bottom for opening communication with the tank, and a hole near its top for opening communication with the atmosphere.

13. A device of the character described comprising a liquid holding tank, a compartment adjacent said tank, said compartment being in communication with the tank and with the atmosphere, a dry air inlet near the top of said tank, and a tube extending from said dry air inlet into the tank.

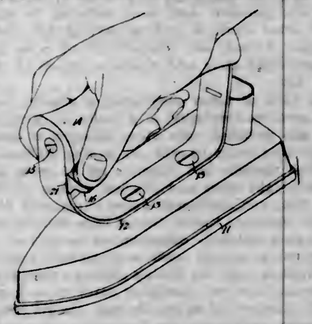
[Claims 1 to 4, 6, and 8 to 12 not printed in the Gazette.]

1,269,105. CISTERN-CLEANER. EDWARD M. MANGOLD, Seaside Park, N. J. Filed Oct. 2, 1916. Serial No. 123,365. (Cl. 210—8.)



A device for cleaning cisterns, comprising a cylinder, the bottom of said cylinder having an opening formed therein, a flap valve secured to the bottom of the cylinder to open inwardly, a weight mounted on the valve, a valve seat formed in the head of the cylinder, a valve engageable with the seat, a cord connecting the flap valve and the last mentioned valve, a second cord secured to the upper end of the last mentioned valve and serving when pulled to unseat both of said valves, and a V-shaped collector flange secured around said opening in the bottom of the cylinder and having its legs extending to the margin of the cylinder bottom.

1,269,106. THUMB-REST. WYNN MEREDITH, San Francisco, Cal., assignor to Hotpoint Electric Heating Company, Ontario, Cal., a Corporation of California. Filed Apr. 25, 1917. Serial No. 164,548. (Cl. 68—26.)



1. In a flat iron; a body; a handle; a handle bow secured to said body and supporting one end of said handle; a thumb rest secured to said handle and forming a guard extending across the under side of the handle to prevent the hand of the operator from coming in contact with said bow.

3. In a flat iron; a metal bow; a handle having a recess in one end thereof; a screw passing through said bow into said handle; a metal member having a hole through which said screw passes, said metal member fitting into said recess and projecting sufficiently below said handle to form a guard therefor; and a thumb button forming a portion of said unitary member.

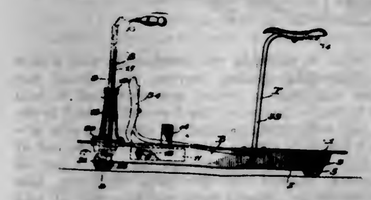
4. In a flat iron, a metal bow; a handle supported in said bow; and a thumb button located to one side and below the horizontal plane of the handle and so placed that the ball of the thumb of a hand which grips the handle rests naturally thereon in such a position as to assist in propelling the iron forward.

5. A combination as in claim 4 in which the thumb button is formed independently of the handle and rigidly secured thereto.

7. A combination as in claim 5 in which the surface of the thumb button is approximately in a plane passing through the axis of the handle.

[Claims 2 and 6 not printed in the Gazette.]

1,269,107. JUVENILE VEHICLE. HENRY E. MOOMAW, Salem, Va., assignor to John E. Annis, Chattanooga, Tenn. Filed Jan. 9, 1918. Serial No. 211,039. (Cl. 21—191.)



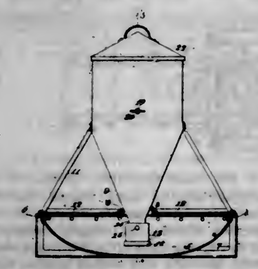
1. In a juvenile vehicle, a body formed by bending sheet metal in a substantially U shape to form depending flanges, a rear wheel-supporting rod secured transversely of said body and rigidly to said flanges, and a brake-supporting rod rigidly secured to said flanges transversely of said body and at the forward end thereof.

2. In a juvenile vehicle of the class described, a body, wheels carried by said body, a seat and a seat-supporting and locking means comprising a substantially U-shaped member secured upon the under side of said body, a transverse pivot for said seat mounted in vertical slots formed in the sides of said U-shaped member, the bottom of said U-shaped member being provided with an opening adapted to receive the lower end of a seat-supporting rod, and a guide stop formed adjacent one side of said opening, as and for the purpose set forth.

3. In a juvenile vehicle, a body, ground-engaging means rigidly supported at the rear end of said body, a steering rod vertically mounted at the forward end thereof and extending above and below said body, a housing vertically disposed at the forward end of said body and adapted to receive and support said rod, a base-flange formed upon said housing, a plate coöperating with said base-flange to clamp together said body and housing, a yoke carried by the lower end of said rod, means carried by said rod and bearing against the vertical sides of said yoke for locking said yoke to said rod, and ground-engaging means carried by said yoke.

[Claims 4 and 5 not printed in the Gazette.]

1,269,108. STOCK-FEEDING TROUGH. JOHN C. NICHOLS, West Liberty, Iowa. Filed Aug. 27, 1917. Serial No. 188,330. (Cl. 119—53.)



1. In a stock-feeder, the combination of a trough, a feed-hopper mounted over the same, and having a parallel-sided outlet, a housing of larger area surrounding said outlet, and pivotally connected with its supports, and supporting means adapted to secure said housing at any desired elevation.

[Claims 2 to 4 not printed in the Gazette.]

1,269,109. THRESHING-MACHINE. PETER A. NOACK, Guttenberg, Iowa. Filed Mar. 25, 1918. Serial No. 224,501. (Cl. 130—27.)



1. A threshing machine concave, comprising a series of pivoted concave bars provided with threshing teeth and grate teeth, and means for tilting the said bars to place the threshing teeth of one bar out of action and between the grate teeth of the bar next to it in the series.

2. A threshing machine concave, comprising a series of concave bars, the end bars of the series each having a row of threshing teeth and a row of grate teeth, and the intermediate bars having each a row of threshing teeth and two rows of grate teeth arranged at an angle to each other, and means for tilting the said bars to place the threshing teeth of one bar out of action and between the grate teeth of the bar next to it in the series.

3. A threshing machine concave, comprising a casing, a series of pivoted concave bars provided with threshing teeth and arranged in the casing, a locking member secured outside the casing, tilting shafts operatively connected with the said bars and having screwthreaded portions which project through holes in the said member, and locking nuts screwed on the said shafts and arranged on opposite sides of the said member.

4. A threshing machine concave, comprising a casing, a series of pivoted concave bars mounted in the casing and provided with threshing teeth, adjusting screws carried by the casing and operating endwise on the said bars to adjust them longitudinally, a locking member secured outside the casing on the other side of it from the said screws, tilting shafts operatively connected with the said bars and having screwthreaded portions which project through holes in the said member, and locking nuts screwed on the said shaft and arranged on opposite sides of the said member.

5. A threshing machine concave, comprising a casing, concave frame bars supported in the casing and provided with holes and notches respectively, removable concave bars provided with threshing teeth and having pivots at one end which engage with the holes of one frame bar and having bearings at the other end which are mounted in the notches of the other frame bar, a locking member secured outside the casing, removable tilting shafts slidably connected with the concave bars and having screwthreaded portions which project through holes in the said member, and locking nuts screwed on the said shafts and arranged on opposite sides of the said member.

1,269,110. CONTINUOUS PROCESS FOR RECOVERING LEAD OR ZINC OR BOTH METALS FROM THEIR ORES OR FROM SLAG IN THE FORM OF METAL FUMES, WHEREBY THE CHARGE IS MIXED WITH FUEL. FRIEDRICH OHLMER, Griesheim, near Frankfort-on-the-Main, Germany. Filed Sept. 26, 1914. Serial No. 863,689. (Cl. 75—17.)

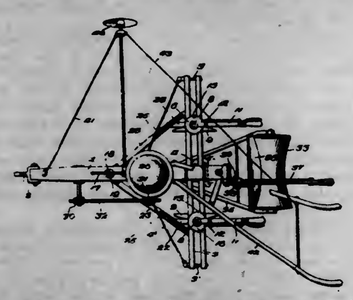
1. The continuous process of recovering lead or zinc of both metals in the form of oxids from their ores and slags, which comprises feeding a mixture of the metalliferous material with carbonaceous fuel into a revolving furnace, heating the mixture therein in immediate con-

tact with a heating flame to a temperature sufficient to effect the desired reduction without smelting the charge, maintaining a reducing atmosphere in the reduction zone of the furnace so as to avoid immediate reoxidation of the disengaged metal fumes in said zone, and oxidising said fumes thereafter in an oxidising zone; substantially as described.

2. The continuous process of recovering lead or zinc or both metals in the form of oxids from their ores and slags, which comprises feeding a mixture of the metalliferous material with carbonaceous fuel and other substances which will prevent smelting at relatively high temperatures into a revolving furnace, heating the mixture therein by direct contact with a heating flame to a temperature sufficient to effect the desired reduction without smelting the charge, maintaining a reducing atmosphere in the reduction zone of the furnace so as to avoid immediate reoxidation of the disengaged metal fumes in said reduction zone, and oxidising said fumes thereafter in an oxidising zone; substantially as described.

3. The continuous process of recovering lead or zinc or both metals in the form of oxids from their ores and slags, which comprises feeding a wet mixture of the metalliferous material with carbonaceous fuel into a revolving furnace, heating the mixture therein to below the reduction temperature of zinc oxid to granulate the charge, feeding the granulated material into a second revolving furnace and heating the same therein in immediate contact with a heating flame to a temperature sufficient to effect the desired reduction without smelting the charge, maintaining a reducing atmosphere in the reduction zone of said second furnace, so as to avoid immediate reoxidation of the disengaged metal fumes in said reduction zone, and oxidising said fumes thereafter in an oxidising zone; substantially as described.

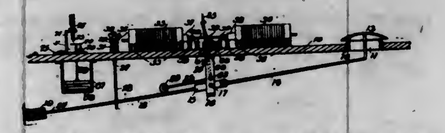
1,269,111. COMBINATION FARMING IMPLEMENT. THOMAS B. OLIVER, Montgomery county, Tenn. Filed June 2, 1917. Serial No. 172,500. (Cl. 97—37.)



1. In a cultivator, the combination of a beam, a guideway disposed transversely relative to the beam, a block slidably engaged within the guideway, a stem rotatably supported by the block, means for holding the stem against rotation, a ground working member supported by the stem, a link engaged with the stem adjacent the ground working member, and a bracing rod, one end portion of the rod having adjustable connection with the beam in a direction longitudinally of the beam and the opposite end portion of the rod having adjustable connection with the link.

2. In a cultivator, the combination of a beam, a guideway disposed transversely relative to the beam, a block slidably engaged within the guideway, a stem rotatably supported by the block, means for holding the stem against rotation, a ground working member supported by the stem, a link engaged with the stem adjacent the ground working member, and a bracing rod, one end portion of the rod having adjustable connection with the beam in a direction longitudinally of the beam, and the opposite end portion of the rod being provided with a slot, the slotted portion of the rod overlapping the link and a pin carried by the link and extending through the slot of the rod.

1,269,112. AUTOMATIC THERMOSTATIC CONTROL FOR INCUBATORS. ADAM OSTHEIMER, Cleveland, Ohio. Filed Oct. 9, 1916. Serial No. 124,642. (Cl. 236—4.)

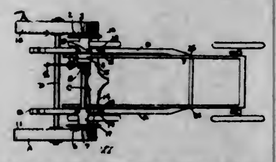


1. In a device as specified, the combination with a base having a ventilating opening therein, of a frame suspended from said base, a rocker arm journaled in said frame and having a closure on the free end thereof to engage with said ventilating opening, an actuating arm pivoted in said frame to engage said rocker arm, one end of said actuating arm extending through the base, a pair of electro-magnets adapted for alternate operation, said magnets operatively engaged with the free end of said actuating arm, a circuit controller operable by said electro-magnets to alternately energize a signal, and a thermostatic circuit closer within an area to be heated and interposed in the circuit of said electro-magnet to alternately energize the same upon changes in temperature.

2. In a device as specified, the combination with a base having a ventilating opening therein, of a frame mounted beneath said base and having a rocker arm therein, one end of said arm having a closure for said opening, a shock absorber and return member carried by said base to engage said rocker arm, an actuating arm pivoted to said frame and extending through said base, a pair of solenoids on said base, cores operable in said solenoids and operatively connected with said actuating arm, a thermostatic circuit closer interposed in the circuits of said electro-magnets to alternately energize the same upon changes in temperature, and a mechanical circuit closer actuated by said electro-magnets to independently control their respective circuits.

3. In a device as specified, the combination with a base having a ventilating opening therein, of a frame mounted beneath said base, a rocker arm carried thereby, one end of said arm having a closure for the opening, a shaft journaled in said frame, an actuating arm on said shaft extending through the base, a supplemental angularly disposed arm on said shaft positioned parallel with and engaging the rocker arm, a pair of oppositely disposed solenoids on said base, connected cores carried thereby, and said connection engaging the actuating arm to move the rocker arm.

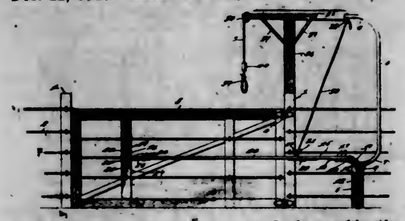
1,269,113. AUTOMOBILE-TRACTOR. WILLIAM PATTERSON and MAY H. PATTERSON, Oakland, Cal. Filed Aug. 15, 1917. Serial No. 186,414. (Cl. 180—16.)



In a device of the class described, a tractor frame, tractor wheels supporting the same, means transferring the drive from an automobile partly supported on said frame to said traction wheels, an integral counter shaft journaled parallel to driving axle of said automobile, upon said frame, a chain sprocket and united pinion keyed to one end of said counter shaft, a chain sprocket with united pinion on one side of its hub, a sleeve and clutch united to the other side of its hub mounted turnably upon the other

end of said counter shaft, said sleeve adapted to revolve around said counter shaft within a journal box, a slidable clutch having a key-seat adapted to slide on a feathering key fixed on said counter shaft, a shipping lever adapted to slide said clutch into engagement with corresponding jaws of clutch on said sleeve, said pinions mounted on and projecting from each end of said counter shaft, meshing with internal spur gear secured within the tire of each traction wheel, the chain sprockets of which are united to said pinions being in alinement with the sprockets on the drive wheels of the automobile, as shown and described and for the purposes set forth in the foregoing specification.

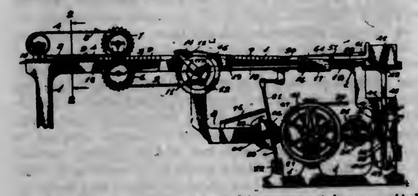
1,269,114. SWIVEL-HINGE-GATE OPENER AND CLOSER. EUGENE PATENER, Fountain City, Wis. Filed Feb. 12, 1917. Serial No. 148,160. (Cl. 39—59.)



1. In a device of the class described, the combination of a hingedly supported gate, a post, a bracket carried upon said post, said bracket having alined openings formed therein, a sectional bar pivotally connected to said gate, said bar having a sleeve carried upon its rear end and an inverted L-shaped rod having an inner end portion projecting through the openings of said bracket, whereby said rod will be supported, said rod also projecting through said sleeve for pivotally and retainably supporting the rear end of said sectional bar, and means for moving said bar.

2. In a device of the class described, the combination of a hingedly supported gate, a standard, a frame formed integral upon said standard, said frame being off-set with respect to one side of said standard, said frame terminating in an overhanging portion, a bracket carried upon said frame, a rod pivotally supported upon said bracket, a section bar pivotally secured to said gate and carried by said rod, pulleys connected to the overhanging portion of said frame, cables passing around said pulleys and connected to said bar, whereby said bar may move so as to swing said gate, and the off-set frame permitting the swinging movement of said bar, without interference.

1,269,115. LOAF-SUGAR-PACKING MACHINE. CHARLES C. REESE, San Francisco, Cal. Filed Apr. 21, 1917. Serial No. 163,731. (Cl. 107—45.)



1. A loaf sugar packing machine comprising a suitable receptacle; means for feeding layers of loaf sugar into the receptacle; means for moving the receptacle after each layer is fed thereinto whereby successive layers may be superimposed; and means for automatically stopping the layer feeding means when a predetermined number of layers have been fed into the receptacle.

2. A loaf sugar packing machine comprising a suitable packing receptacle; means for feeding a continuous layer of loaf sugar toward the receptacle; a reciprocating member arranged to carry a portion of the continuous layer into the receptacle; means for preventing the return of the loaf sugar with the return of the reciprocating member; and means for lowering the receptacle to superimpose successive layers within said receptacle.

6. A loaf sugar packing machine comprising a vertically reciprocating member; means for normally retaining the elevation of said member; a suitable packing receptacle upon said member; a suitable runway alined with the receptacle and having the opposite end thereof converging; means for feeding a layer of spaced apart loaf sugar into the said converging end toward the receptacle whereby said loaves may be gathered; a horizontally reciprocating member to intermittently feed portions of the layer into the receptacle; means for operating the horizontally and vertically reciprocating members alternately whereby successive layers may be superimposed within the receptacle; and means for automatically stopping the movement of the layer feeding means when a predetermined number of layers have been fed into the receptacle.

7. A loaf sugar packing machine comprising parallel runways provided with diverging forward end portions; a vertically movable member arranged at the ends of the runways; suitable packing receptacles arranged on the movable member and arranged to receive layers of loaf sugar from the runways; means for gathering loaf sugar spaced in both directions into the converging runways and toward the receptacles at the ends thereof; a horizontally reciprocating member to feed portions of the layers into the receptacles; means for alternately operating the vertical and horizontally reciprocating members to superimpose successive layers of the loaf sugar into the receptacles; and means for automatically stopping the machine when a predetermined number of layers have been superimposed within the receptacles.

[Claims 3 to 5 not printed in the Gazette.]

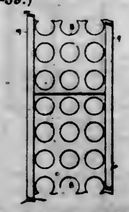
1,269,116. LUTING OR CEMENTING COMPOSITION. DAGMAR H. REIMULLER, Morris Plains, N. J. Filed Jan. 23, 1918. Serial No. 213,415. (Cl. 106—8.)

1. A composition for mending metallic articles containing black oxid of manganese, oxid of zinc, china clay and a refractory binder.

6. A composition of matter of putty like consistency consisting of eight parts of asbestos, four parts of oxid of zinc, four parts of black oxid of manganese, three parts of china clay, six parts of aluminum powder, and equal quantities of varnish and linseed oil.

[Claims 2 to 5 not printed in the Gazette.]

1,269,117. BALL-BEARING. TURE GUSTAF RENNERFELT, Katrineholm, Sweden. Filed Sept. 28, 1915. Serial No. 53,101. (Cl. 64—59.)



1. The combination of an inner ring having a plurality of concave grooves, an outer ring spherical on its outside and formed on its inside with a cylindrical running face at one end and with a concave face at its other end, a row of balls in each groove between the rings, and a casing having a cylindrical bore inclosing the outer ring, together with means, independent of the outer ring, for sustaining end pressure on the inner ring.

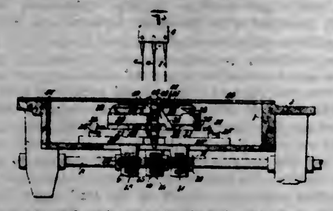
3. The combination of an inner ring having a plurality of concave grooves, an outer ring spherical on its outside and formed on its inside with a cylindrical running face at one end and with a concave face at its other end, a

row of balls in each groove between the rings, a casing having a cylindrical bore inclosing the outer ring, and a spring between the casing and the latter end of the outer ring, together with means within the casing, independent of the outer ring, for sustaining end pressure acting on the inner ring.

8. The combination of an inner ring having a plurality of concave grooves, an outer ring spherical on its outside and formed on its inside with a cylindrical running face, a row of balls in each groove between the rings, a casing having a cylindrical bore inclosing the outer ring, and means within the casing independent of the outer ring for retaining the inner ring in its position relatively to the outer ring.

[Claims 2, 4 to 7, and 9 not printed in the Gazette.]

1,269,118. **SEWING-MACHINE.** JOHN C. RINOS, Bridgeport, Conn., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed Aug. 4, 1916. Serial No. 113,063. (Cl. 112—22.)

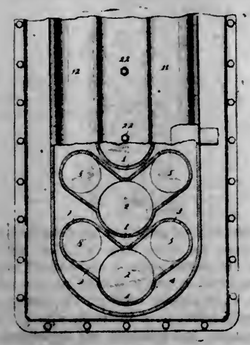


2. In a stitch-forming mechanism for sewing machines, the combination with triangularly arranged loop-takers provided with loop-seising elements having stitch-forming movements in a given plane, of coöperating needles having stitch-forming movements in paths at substantially right angles to said plane, the loop-seising elements of the loop-takers coöperating with said needles to seize the loops of needle-thread in substantially the same horizontal and vertical planes.

4. In a sewing machine, the combination with a stitch-forming and cloth-feeding mechanism including triangularly arranged loop-takers and coöperating needles, of means for supporting the fabric being acted on including a slide-plate located back of the line of needle actuation and a needle-plate, the latter forked to receive said slide-plate.

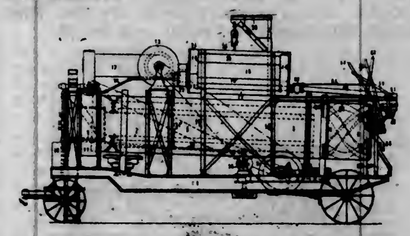
[Claims 1, 3, and 5 not printed in the Gazette.]

1,269,119. **INTERNAL-COMBUSTION ENGINE.** ALVA E. ROOT, Pleasanton, Kans. Filed Apr. 21, 1916. Serial No. 92,642. (Cl. 123—59.)



In an internal combustion engine, main cylinders arranged in longitudinal alinement and having pistons therein, inlet and exhaust cylinders arranged in respective longitudinal alinement on opposite sides of the main cylinders and each having a piston valve therein, the inlet and exhaust cylinders for the respective main cylinders being connected thereto by inclined ports having side walls arranged so as to form with the inlet and exhaust cylinders, a V the apex of which V is defined by the main cylinders, the inner of said side walls defining the inclined ports receiving the next adjacent main cylinder therebetween, a pair of longitudinal spaced parallel ducts common to each of the respective inlet and exhaust cylinders, and a horizontal plate connecting the inner sides of said ducts, said ducts spanning the respective inlet and exhaust cylinders and portions of the inclined ports thereof.

1,269,120. **MIXER AND DRIER.** WILLIAM B. RUGGLES, Bayonne, N. J. Filed Mar. 9, 1911. Serial No. 613,440. (Cl. 94—6.)



4. In an apparatus of the character described, in combination, a rotary drier drum, means adapted to heat said drum, means adapted to convey material therethrough, a mixer attached to said drum adjacent the point of collection of material, a passageway between said drier and said mixer, a deflector mounted on said drum and adapted to rotate therewith, and means adapted to move said deflector to permit or prevent discharge of material through said passageway.

6. In an apparatus of the character described, in combination, a drier drum adapted to receive heating gases and thereby dry material, said drum having a receptacle adapted to receive and mix material, an auxiliary heater adapted to heat material, and a pipe connecting said drum and said heater and adapted to direct heating gases from said drum into said heater.

10. In an apparatus of the character described, in combination, a rotatable drier drum having an opening, means adapted to close said opening comprising a movable plate having a curved portion adapted to rotate with said drum, a rod attached to said plate, a cross bar, said cross bar having a portion adapted to receive and loosely hold said rod and to thereby permit said rod to rotate, means adapted to move said cross bar and to thereby move said plate backward and forward, and a rotatable mixer communicating with said drum, the movement of said plate being adapted to establish and cut off communication between said drum and said mixer.

11. In an apparatus of the character described, in combination, a rotatable drier drum, a mixer, said mixer being an integral extension of said drum, a partition dividing said mixer and said drum having an opening adapted to establish communication between said drum and mixer, means adapted to close said opening comprising a movable deflecting plate having a curved peripheral portion adapted to rotate with said drum, a rod attached to said plate, a cross bar, said cross bar having a portion adapted to receive and loosely hold said rod and to thereby permit said rod to rotate, and means adapted to move said cross bar and to thereby move said plate backward and forward.

[Claims 1 to 3, 5, and 7 to 9 not printed in the Gazette.]

1,269,121. **ELECTRIC SWITCH.** JOSEPH H. RUSBY, Nutley, N. J. Original application filed May 22, 1913, Serial No. 769,199. Patent No. 1,228,052, dated May 29, 1917. Divided and this application filed May 14, 1917. Serial No. 168,372. (Cl. 175—293.)

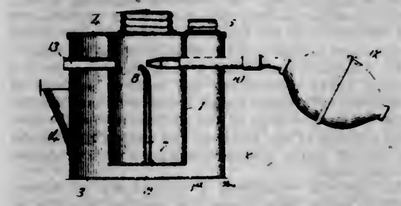
1. An electric switch comprising a metal receptacle, an insulating supporting block seated in said receptacle, said insulating supporting block being extended through the bottom of the said receptacle to form mounting seats for said switch, to retain a separation between said receptacle and mounting surface, and to assist in securing said insulating block in said receptacle.



11. An electric switch comprising an insulating support, a make and break mechanism, said mechanism comprising a blade, and a conductor contact formed of relatively thick metal, said contact forming a support for a thinner contact adapted to connect with said blade.

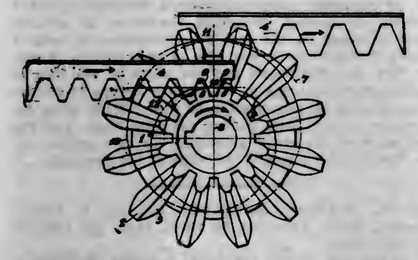
[Claims 2 to 10 and 12 to 16 not printed in the Gazette.]

1,269,122. **ATOMIZER.** WILL W. SAILE and HENRY E. GANIARD, Le Roy, N. Y. Filed July 24, 1917. Serial No. 182,549. (Cl. 128—2.)



An atomizer, comprising inner and outer concentric receptacles, the bottom of the inner receptacle being spaced from the bottom of the outer receptacle, a top common to both receptacles and closing the upper ends thereof and formed with openings leading into the respective receptacles, closures for such openings, a suction tube disposed within the inner receptacle and having a lower inlet near the bottom thereof, an air pipe supported in the walls of both receptacles and projecting beyond the same and having its inner end terminating adjacent the upper end of the suction tube to direct a blast of air across the delivery end thereof, and a discharge pipe supported in the walls of both receptacles and extending across the space formed between them, such pipe being in line with the delivery ends of the suction tube and air pipe.

1,269,123. **HOBBING-CUTTER.** OLIVER G. SIMMONS, Rochester, N. Y. Filed Apr. 4, 1917. Serial No. 159,782. (Cl. 29—103.)



1. A hob for hobbing bevel gears provided with a thread of uniformly varying pitch substantially equal to the uniformly varying circular pitch of the bevel gear adapted to be cut.

4. A hob of increased pitch, the increase of which pitch is uniform from one end of the hob to the opposite end, the measure of the increase of the pitch equaling the measure of the decrease of the pitch at any two given adjacent pitch points.

9. A new article of manufacture consisting of a hob for hobbing bevel gears, said hob being provided with cutting teeth arranged in the form of a thread of uniformly increased pitch; the depth, width and cutting surfaces of which teeth increase according to said uniformly increasing pitch.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,269,124. **BLOW-OUT PATCH.** JESSE M. SMITH, Pittsburgh, Pa. Filed Sept. 19, 1917. Serial No. 192,033. (Cl. 152—26.)



1. A blow-out patch for pneumatic tires comprising a metal plate conforming to the curvature of the tire shoe and forming a rigid bridge covering the weakened portion of the shoe, said plate being provided with studs extending from the face of the plate through the material of the shoe and clenched on the other surface of the shoe, substantially as and for the purposes described.

4. A blow-out patch for pneumatic tires comprising a plate of ductile metal adapted to conform to the curvature of the tire shoe and forming a bridge covering the weakened portion of the shoe, said plate being provided with integral studs extending from the face of the plate through the material of the shoe and clenched on the other surface of the shoe and the exposed face of the plate being provided with rounded corners and beveled edges so as to merge smoothly with the material of the shoe, substantially as and for the purposes described.

[Claims 2 and 3 not printed in the Gazette.]

1,269,125. **METHOD OF ATTACHING SHANK-EYED BUTTONS.** WILLARD A. SMITH, Melrose, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 9, 1916. Serial No. 119,183. (Cl. 2—34.)



1. The method of attaching a series of shank-eyed buttons to a fabric by primary loops through the eyes of the buttons, and secondary loops passed through the primary loops outside the eyes and over the heads of the buttons, which consists in passing the primary and secondary loops through the fabric at points which are spaced apart transversely of the series of buttons, the series of primary loop holes being in line with each other, and the series of secondary loop holes being in line with each other along the series, so that the shanks of the buttons are substantially parallel to the edge of the fabric along which they are attached.

2. The method of attaching a series of shank-eyed buttons to a fabric by primary and secondary loops one of which passes through and the other of which passes outside of the button eye, which consists in passing the primary and secondary loops through the fabric at points which are spaced apart transversely of the series of buttons, the series of primary loop holes being in line with each other, and the series of secondary loop holes being in line with each other along the series.

4. The method of attaching shank-eyed buttons to a fabric by primary and secondary loops one of which passes through and the other of which passes outside of the button eye, which consists in superimposing on the fabric a buttonholed fabric, passing the button attaching loops through the under fabric and through a buttonhole at points spaced apart lengthwise of the buttonhole, passing one of the loops over the button head, and taking up the loops to tighten the knot.

[Claim 3 not printed in the Gazette.]

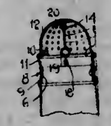
1,269,126. WIRE-CUTTING BAYONET FOR FIREARMS. MIKE SHOKS, Lackawanna, N. Y. Filed Mar. 20, 1918. Serial No. 223,499. (Cl. 42—90.)



2. In combination with a rifle barrel, a projecting post carried thereby having a flaring tenon-shaped end, a bayonet having a blade and shank and a connecting portion therebetween with a dove-tailed groove at the free end of the shank adapted for slidably mounting upon said tenon end, a collar projecting from said connecting portion mounted upon the barrel when the device is arranged for use, the said connecting portion having a plurality of open cutting notches therein, a shiftable section provided with a head pivoted to the said connecting portion arranged with edge notches adapted for registering with the said cutting notches for the reception of wires to be cut by the device, a swinging resilient latch carried by said shank adapted for overlying the said section when closed, an opening spring for the said section when the latch is released, and finger-engaging lugs oppositely arranged upon the outer sides of the said section and shank.

[Claim 1 not printed in the Gazette.]

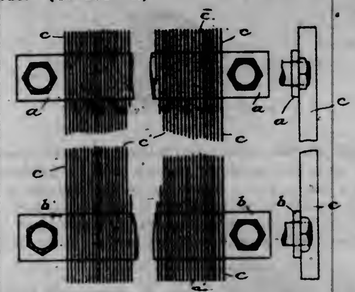
1,269,127. CONDIMENT-HOLDER. WILLIAM A. STEWART, San Francisco, Cal. Filed Sept. 26, 1917. Serial No. 193,308. (Cl. 65—57.)



3. A condiment holder including a fixed section, a perforated cap section rotatably mounted upon the fixed section of the holder, and a length of resilient wire fixed at its extremities to said fixed section, said wire adjacent each of its ends having a spring coil therein, the intermediate portion of the wire being curved and having frictional scraping engagement with the under side of the cap wall.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,269,128. ELECTRODE. ALEXANDER THOMAS STUART, Toronto, Ontario, Canada, assignor to The Toronto Power Company Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed July 5, 1917. Serial No. 178,715. (Cl. 204—4.)



1. An electrode comprising a multiplicity of current conducting paths free at each end, forming the reacting surfaces of the electrode, such surfaces consisting of electrically connected reacting structures, with unobstructed spaces between them for the freedom of movement of the electrolyte and the electrolytic products of the reaction.

2. An electrode comprising a multiplicity of current conducting paths constituting the reacting surfaces of the electrode, with unobstructed spaces between them for the freedom of movement of the electrolyte and the electrolytic products of the reaction, and current distributers at one side of, and in electrical contact with, the current conducting paths.

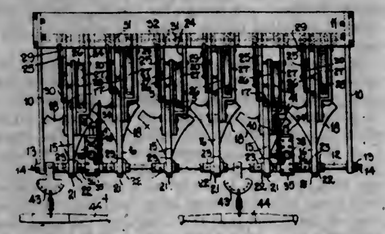
3. An electrode comprising a multiplicity of current conducting paths, constituting the reacting surfaces of the electrode, arranged in parallel order with unobstructed spaces between them for the freedom of movement of the electrolyte and the electrolytic products of the reaction and current distributers at one side of, and in electrical contact with the current conducting paths.

4. An electrode comprising current distributers, a multiplicity of current conducting paths arranged at one side of the current distributers and electrically connected therewith, said current conducting paths consisting of reacting structures with unobstructed spaces between them for the freedom of the movement of the electrolyte and the electrolytic products of the reaction, the length of said structures being many times their width or diameter or thickness, such reacting structures being arranged with their adjacent sides parallel in such a manner that their lengths constitute one of the dimensions of the electrode and the sum of their thickness and the width of their separating spaces constitute the second dimension, and the width or depth of the reacting structures the third dimension.

5. An electrode comprising current distributers and a plurality of reacting structures consisting of metallic strips arranged on the current distributers in such a manner that the one or rear edge of each strip is in contact with the distributers and the width of the strip is at an appropriate angle to the surface formed by the reacting structures, any number of these strips being arranged in a row with spacing between them, and the front edges of the strips presenting an appropriate surface throughout the length and width of the electrode.

1,269,129. WEEDING-MACHINE. CHARLES E. SWAIN, Telstad, Mont. Filed Oct. 18, 1916. Serial No. 126,350. (Cl. 97—34.)

1. A machine of the character described including a transversely extending bar, a plurality of cutter supporting beams pivotally mounted upon the bar for free vertical and lateral oscillation, caster wheels supported upon the bar for vertical adjustment, a cutting member mounted upon each of said beams, and weed holding wheels mounted upon each beam and disposed behind each of said cutting members and each vertically adjustable with relation to the beam upon which it is mounted.

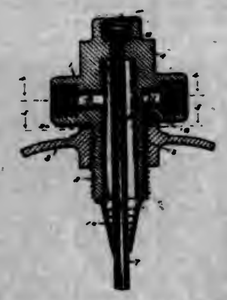


3. A weeder including a transversely extending supporting bar, a plurality of caster wheels mounted upon said bar, a plurality of rearwardly extending beams operatively mounted upon the bar for free vertical movement and lateral oscillation, side bars extending from the first named front bar, a transverse platform connecting said side bars, vertically depending guides on the platform with which the beams are operatively engaged for vertical movement, and springs operatively connected to said guides and beams and resiliently supporting the platform and resisting the upward movement of the beams.

7. In a machine of the character described, a supporting frame, a beam pivotally mounted at its forward end upon said supporting frame for vertical movement, an earth working and weed cutting implement mounted upon the beam having a middle portion and laterally disposed oppositely projecting wings, the middle portion of the implement being relatively low and the wings extending out therefrom being relatively flat, and a freely rotatable weed holding wheel mounted upon the beam rearward of one of said wings and adapted to hold the weeds upon the ground during the severing action of the cutter.

[Claims 2 and 4 to 6 not printed in the Gazette.]

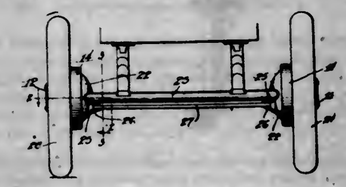
1,269,130. CHARGING-FITTING FOR BEVERAGE-CARBONATORS. IMOGEN N. THOMAS, Troy, N. Y. Filed Nov. 28, 1916. Serial No. 133,843. (Cl. 261—115.)



1. A charging fitting for a beverage carbonator consisting of a body with an integral threaded stem having a groove cut across the threads of the stem, said body having a central downwardly opening chamber with a passage opening through one side of the body to the central chamber and a passage opening into the body from one side and communicating with the groove across the threads of the stem, a sprayer secured to the stem over the lower end of the central chamber in the body, and a tube passing through said sprayer and the central chamber and opening at one end below the sprayer and at the other end above the top of the chamber.

2. A charging fitting for a beverage carbonator consisting of body with an integral threaded stem having three grooves cut across the threads of the stem, said body having a central downwardly opening chamber with a lateral passage through the side of the body to said chamber and three lateral passages opening through the side of the body and communicating each with a groove across the threads of the stem, a sprayer secured to the stem over the lower end of the central chamber in the body, and a tube passing through said sprayer and the central chamber and opening at one end below the sprayer and at the other end above the top of the chamber.

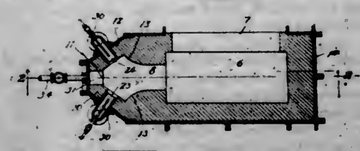
1,269,131. VEHICLE-WHEEL HUB. ALBERT J. THOMPSON, Dunn Center, N. D. Filed July 29, 1915. Serial No. 42,605. (Cl. 180—48.)



1. In a device of the character described, a boxing formed with a substantially hemispherical bearing recess in one side and an external annular flange, a cylindrical casing having an inwardly directed flange on one side secured to said boxing and forming a channel-way with said boxing flange, spokes receivable in said channel-way, a non-rotatable cap for the inner end of said casing, anti-friction bearings between said cap and casing, a steering arm projecting from said cap, an axle passing freely through a horizontal slot in the cap, a ball formed on each extremity of said axle receivable in said hemi-spherical boxing recess, retainer means for said ball extremity, a semi-circular groove in said boxing opening into said hemi-spherical bearing recess, and means on said ball movable in the groove in the boxing for rotating said hub upon rotation of said axle and also permitting angular displacement of said hub on the axle.

2. In a device of the character described, a hub including a recessed boxing, an annular flange formed on said boxing, a cylindrical casing having an inwardly directed annular flange on one side secured to said boxing and forming with the boxing a flanged channeled way, spokes receivable within said way, a substantially hemi-spherical cap closing the ends of said casing opposite the flange, anti-friction bearings between the casing and the cap, an axle formed with a bearing ball on its outer extremity adapted to be seated in the recess in said boxing, means for supporting said ball in its seat, and means projecting from said ball engaging a curved slot in the boxing for driving said hub when the axle is rotated permitting angular variation of said hub.

1,269,132. FURNACE. JAMES S. TIBBENEY, Brooklyn, N. Y., assignor to American Shop Equipment Co., Chicago, Ill., a Corporation of Maine. Filed Feb. 6, 1917. Serial No. 146,919. (Cl. 158—1.)



7. In a furnace, the combination of a chamber, a passage communicating with said chamber, means for causing streams of air with fuel in either or both thereof, to enter said passage from opposite directions for impingement against each other and converging in a direction for forcing them through said passage and into said chamber, the wall of said chamber in the rear of the point at which said streams impinge, containing an opening with a bridge at said opening, the upper and lower surfaces of which converge in a direction away from the movement of the

streams through said passage, and means for directing fluid under pressure through said opening, whereby the fluid sweeps against the upper and lower surfaces of said passage, for the purpose set forth.

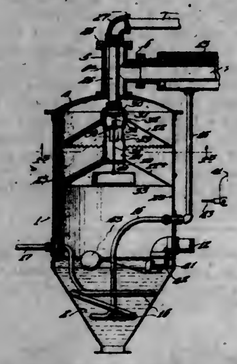
[Claims 1 to 6 not printed in the Gazette.]

1,269,133. SLIDING-DOOR HANGER. DANIEL HILL TOWNSEND, Memphis, Tenn. Filed June 13, 1917. Serial No. 174,610. (Cl. 16—92.)



The combination with the longitudinally slotted tubular track, and means including intermediate and outer brackets for supporting the same, each bracket having a collar embracing the track and slotted to register with the slot in the track, of a tubular core of less diameter than the diameter of said track, slidably engaged therein, and having slots near opposite ends in its lowermost side, a pair of spaced straps forming hangers for supporting a door vertically engaged in the slots in said core, said straps being slidable in the longitudinal slot in said track, and fasteners passed transversely through the core and straps to secure the latter in said core, the core being of a length to connect both straps and substantially equal to the width of the door.

1,269,134. CRUDE-PETROLEUM AND NATURAL-GAS SEPARATOR. MILON J. TRUMBLE, Los Angeles, Cal., assignor of one-third to Francis M. Townsend and one-third to Alfred J. Gutsler, Los Angeles, Cal. Filed Nov. 14, 1914. Serial No. 872,110. (Cl. 183—105.)



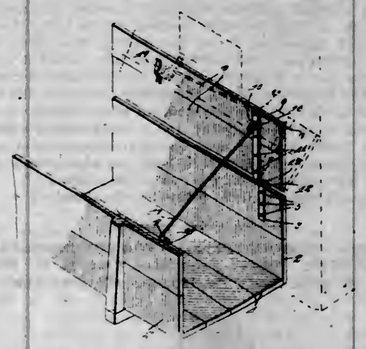
4. In an oil and gas separator, the combination of an expansion chamber, means for delivering oil and gas into the chamber, means for maintaining pressure within the chamber, means for drawing oil from the chamber, and means within the chamber adapted to cause the oil to flow in a thin body for a distance to enable the gas contained and carried thereby to be given off while the oil is subjected to pressure.

8. In an oil and gas separator, the combination of an expansion chamber, means within the chamber adapted to spread the oil in a thin film like form over the wall of the chamber, gas outlet means leading from the chamber, consisting of a gas pipe, pressure regulating means arranged to control the passage of gas from the chamber through such gas pipe, oil outlet means arranged to draw oil from the expanding chamber, means to maintain such oil outlet means submerged within the body of oil in the chamber, velocity reducing means arranged to receive oil and gas from a source of oil supply and deliver the same into the expansion chamber, and means for heating the oil within the velocity reducing device before its entry into the expansion chamber.

11. In an oil and gas separator, the combination of an expansion chamber having a centrally perforated top, a T arranged with one end of its cross to register with the central perforation in the top and having its stem disposed horizontally, a bushing on the upper end of the cross of the T, a gas pipe leading from such bushing, means for regulating the flow of gas from such expansion chamber through such gas pipe to maintain pressure within such chamber, a gas pipe depending from such bushing through the cross of the T and into the expanding chamber, means for delivering oil to the chamber through the stem of the T, oil dividing means secured to the lower end of the last named gas pipe, and means for drawing oil from the chamber.

[Claims 1 to 3, 5 to 7, 9, 10, and 12 to 14 not printed in the Gazette.]

1,269,135. MEANS FOR OPERATING THROW-BOARDS. CYRUS L. VANMETER, Macomb, Ill. Filed Apr. 20, 1917. Serial No. 163,446. (Cl. 21—7.)

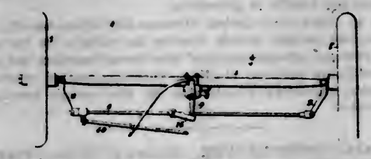


In a device of the class described, the combination with a body, of a pair of brackets attached to the sides of said body near one end thereof, each bracket provided with a rolled upper end constituting a sleeve on said bracket, a throw-board above one of said brackets, a strap secured to said throw-board, said strap provided near its upper end and between its edges with a struck-out band, said strap provided at its lower end with a horizontal extending pin, said pin adapted to be positioned in the sleeve of said last-mentioned bracket, said pin projecting beyond one end of said sleeve, said projecting end provided with an opening, a plug in said opening, a retaining clip on said throw-board and in horizontal alinement with said struck-out band, and a link attached to the struck-out band and being adapted to engage the sleeve of the bracket on the opposite side of the body for holding the throw-board in an adjusted position, and said link also adapted to be swung into a horizontal position upon the throw-board and into engagement with said retaining clip, substantially as shown and described.

1,269,136. SAFETY STEERING MECHANISM. GEORGE VAN TASSEL, Cedar Rapids, Iowa. Filed Feb. 28, 1918. Serial No. 219,644. (Cl. 21—194.)

1. The combination with the axle and the reach bar of the steering mechanism; of a lever pivotally mounted on the axle, a link connecting the lever and the reach rod, and friction brake elements connecting the lever and the axle for holding the reach rod locked, when the lever is at the midway position, and manually controlled means for shifting the friction brake elements to a releasing position to thereby permit the application of the steering gear.

2. The combination with the axle and the reach bar of the steering mechanism; of a lever pivotally mounted on the axle, a link connecting the lever and the reach rod, and friction brake elements connecting the lever and the axle for holding the reach rod locked, when the lever is at the midway position, and manually controlled means for shifting the friction brake elements to a releasing position, to thereby permit the application of the steering gear, the said elements including a bracket attached to the axle and having a friction face, a brake shoe frictionally engaging the said bracket, a lever having a brake head for coöperating with the brake shoe, the said brake head being pivoted on the bracket eccentrically with respect to the brake shoe, whereby a maximum frictional locking of the brake head and the brake shoe is attained, when the lever is at a midway position, and means for shifting the brake lever, whereby to gradually separate the friction faces of the brake head and the shoe to thereby permit of the application of the steering devices for turning the wheels.



3. A means for the purposes stated comprising in combination with the front axle and the reach bar of a steering mechanism that joins with the opposite front wheels, of a bracket frame having attached means for securing it to the front axle, a laterally movable brake shoe mounted in the bracket and having a substantial semi-cylindrical braking surface, the brake lever including a head having a substantially semi-cylindrical face for coengagement with the friction face of the shoe, a stud on which the brake head is pivoted, said stud including end spindles eccentric with respect to the axis of the brake head, a lever arm attached to one of the eccentric spindles, the said brake head including an arm, a link connecting the brake bar and the reach arm, a crank arm on the upper one of the eccentric pintles and a flexible connection for turning the said pintles for the brake head as set forth.

4. The combination with the front axle of a motor vehicle and the reach bar of the steering mechanism therefor; of a frictional brake device for holding the said bar from movement, when the front axle wheels are at the straight ahead position, the said brake device including a bracket having means for attaching it to the axle, said bracket having a friction surface, a brake shoe engaging said surface and having lateral movement relatively to such surface, the said shoe having a semi-cylindrical friction face, a brake arm including a head having a semi-cylindrical friction face for coengaging with the semi-cylindrical face of the brake shoe, means for eccentrically pivoting the said head, whereby, when the brake arm is at the midway position, the head and the shoe will be in a locked frictional engagement and, when the arm is turned either way from the midway position, the said head and the brake shoe friction faces separate, a link connection that joins the arm and the reach rod, the lever on the eccentric pivot of the head of the brake arm for turning the said arm to release its head from frictional engagement with the brake shoe to thereby permit the arm to move under the shifting action of the reach rod.

1,269,137. BABBITTING-FIXTURE. ALBERT VON BRAULIEU, Owego, N. Y. Filed Aug. 11, 1917. Serial No. 185,663. (Cl. 22—123.)

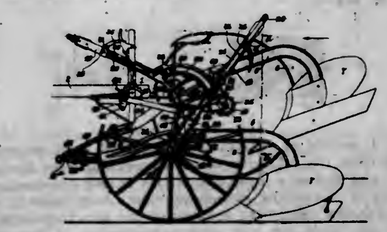
1. A babbitting fixture, for connecting rods, comprising a frame member, pins, respectively corresponding in size and spacing to the wrist pin and crank pin bores of the connecting rod, secured to said frame member, a member detachably secured to one of said pins for clamping one end of the connecting rod against said frame member, and means whereby the Babbitt metal may be introduced around the last-mentioned pin.



2. A babbitting fixture, for connecting rods, comprising a frame member, pins, respectively corresponding in size and spacing to the wrist pin and crank pin bores of the connecting rod, secured to said frame member, a member detachably secured to one of said pins for clamping one end of the connecting rod, and the other of said pins being readily removable from said frame member, and one or more openings in said frame member for the introduction of the Babbitt metal.

3. A babbitting fixture, for connecting rods, comprising a frame member, pins, respectively corresponding in size and spacing to the wrist pin and crank pin bores of the connecting rod, secured to said frame member, a member detachably secured to one of said pins for clamping one end of the connecting rod, grooves surrounding the last-mentioned pin, in the member secured thereon and in said frame member, and one or more openings in said frame member communicating with the said groove therein and whereby the Babbitt metal may be introduced.

1,269,138. WHEEL-PLOW. BENJAMIN B. WALLACE, Poughkeepsie, N. Y., assignor to Moline Plow Company, a Corporation of Illinois. Filed Feb. 12, 1915. Serial No. 7,669. (Cl. 97—55.)

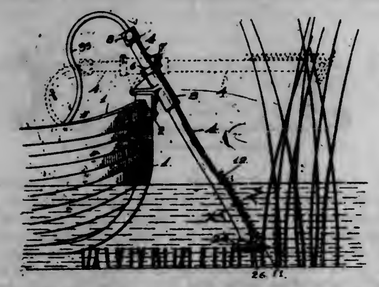


1. In a plow, the combination of a frame, a swinging bail pivotally mounted on the frame and carrying a plow beam, a ground wheel journaled on the bail and movable therewith, a lifting lever movable about the pivotal axis of the bail and operatively conected with the bail, a plunger mounted on said lever and adapted to coöperate with the ground wheel in effecting the lifting movement of the lever, a rocking operating member for said plunger mounted on the pivotal axis of the bail and operatively connected with the plunger, means for actuating said operating member, and a segment frame fixed relatively to the frame of the machine, and with which the lifting lever is adapted to coöperate.

3. In a plow, the combination of a frame, a plow beam movable upwardly by the draft applied to propel the machine, a swinging lifting lever, a slide on the lever provided with a socket, a roller mounted loosely in the socket, a plunger connected with the slide and adapted, when projected, to control the action of the draft in raising the beam, a segmental frame on which said roller travels in the swinging movements of the lever, and a cam on the segmental frame adapted to be engaged by the roller, and acting by such engagement to retract the plunger.

[Claim 2 not printed in the Gazette.]

1,269,139. SUBMARINE-GROWTH CUTTER. ROBERT L. WELCH, Williams, Cal. Filed Nov. 2, 1916. Serial No. 130,300. (Cl. 56—70.)



1. A submarine growth cutter comprising horizontally and vertically disposed cutting mechanisms pivotally and slidably mounted upon the bow of a boat or the like; and means for operating both cutting mechanisms simultaneously.

2. A submarine growth cutter comprising a horizontally disposed cutting mechanism; means for operating the cutting mechanism; and means for pivotally and slidably mounting the cutting means on the bow of a boat or the like whereby said cutting means may be submerged below water at various elevations.

[Claims 3 to 5 not printed in the Gazette.]

1,269,140. REINFORCED PAPER AND METHOD OF MAKING THE SAME. WILLIAM M. WHEILDON, Ashland, Mass., assignor to Edward H. Angier, Framingham, Mass. Filed Nov. 30, 1917. Serial No. 204,497. (Cl. 154—2.)



1. A method of constructing laminated sheet material comprising the following steps:—providing webs having on a face thereof a layer of adhesive having incorporated therewith reinforcing strands extending longitudinally of the web and assembling sections of one web transversely with the other web and with a lamination of material similar to the web interposed between said layers.

2. The method of constructing laminated sheet material comprising the following steps:—superposing a pair of webs with an interposed adhesive layer having longitudinal reinforcing strands incorporated therewith and applying transversely thereto sections of a web having an adhesive facing in which reinforcing strands are longitudinally stretched whereby to provide a structure of alternating thicknesses of fabric material and adhesive reinforced with independent sets of strands in the several layers of adhesive, the direction of the strands in successive sets crossing.

3. The method of constructing laminated sheet material comprising the following steps:—coating a web with adhesive and incorporating in said adhesive reinforcing strands stretched longitudinally of the web, dividing said web transversely into sections and securing them in transversing relation on another web by means of said adhesive.

4. As a new article of manufacture, a laminated structure comprising in serial order as named:—a paper web, a thickness of adhesive, a thickness of paper, a thickness of water repellent adhesive and a paper layer comprising sections joined end to end, reinforcing strands in said layers of adhesive and extending longitudinally of the web in one layer and stretched transversely across the same in the other layer, the grain of the paper forming the first and last laminations mentioned being crossed.

5. As a new article of manufacture, a laminated structure comprising in alternation three or more paper thicknesses, interposed layers of adhesive and reinforcing strands in said adhesive layers extended in one layer transversely to those in an adjacent layer, certain of the thicknesses of paper having the grain thereof relatively crossed.

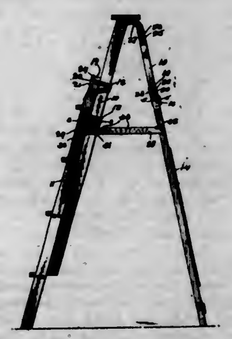
[Claim 6 not printed in the Gazette.]

1,269,141. PRODUCING CRYSTALLINE ALUMINA. RAY HILL WHITE, Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 18, 1917. Serial No. 186,927. (Cl. 204—64.)

1. In the art of fusing alumina in carbon-hearth furnaces, the method which consists in electrically fusing a non-uniform charge whereof the lower portion contains an oxidizing addition, whereby reduction of alumina by the carbon hearth is prevented.

2. In the art of fusing alumina in carbon-hearth furnaces, the method which consists in electrically fusing a non-uniform charge whereof the lower portion contains an oxidizing addition yielding volatile reduction products, whereby reduction of alumina by the carbon hearth is prevented.

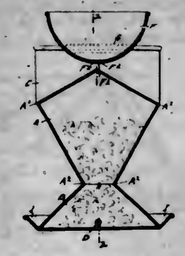
1,269,142. STEP-LADDER. GEORGE C. WILCKE, Findlay, Ohio. Filed May 10, 1916. Serial No. 96,668. (Cl. 228—25.)



A step ladder comprising upper and lower sections slidably connected and each provided with side bars, the side bars of the upper section of the step ladder being provided with sockets, bearing brackets carried by the side bars of the lower section adjacent the upper end thereof, and pawls pivotally connected with the bearing brackets and extending across and resting flat upon the upper ends of the lower side bars and fitting into the sockets of the side bars of the upper section to releasably hold the upper section at an adjusted height, said pawls having their free ends cut to provide cam faces causing the pawls to move to an inoperative position when the upper section is raised.

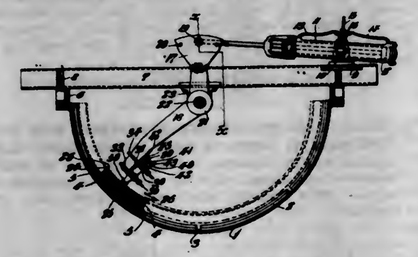
1,269,143. AERATOR AND COOLER. CHARLES LEWIS WILLIAMS, Laurens, N. Y., assignor, by mesne assignments, to Ideal Aerator Company, Inc., a Corporation of New York. Filed Apr. 29, 1915, Serial No. 24,689. Renewed Apr. 30, 1918. Serial No. 231,747. (Cl. 257—189.)

An aerator and cooler, comprising a receptacle adapted to contain a cooling medium, the said receptacle having an upper compartment of an approximately diamond shape in cross section and a lower compartment of an approximately triangular shape, the apex of the lower compartment being in communication with the bottom of the upper compartment, a filling spout extending upwardly and sidewise from one end of the said upper compartment for filling the latter with crushed ice, a distributing trough removably mounted on top of the said receptacle with its bottom extending a short distance above the apex of the upper compartment, said trough



being U-shape in cross section having two rows of perforations in bottom, one at each side of the center of the trough and adjacent thereto and a collecting trough extending upwardly and outwardly from the base of the lower compartment on the sides and the end opposite the filling spout.

1,269,144. METHOD OF BLADING TURBINES. JAMES WILLIAMSON, Newport News, Va. Filed July 19, 1915. Serial No. 40,680. (Cl. 29—28.5.)



1. The method of blading turbines, which consists in assembling the turbine blades with the casing and shroud band with the ends of the blades passing through the shroud band, exerting a pressure against the entire inner periphery of the blades, then exerting a pressure against only opposite portions of the inner periphery of the blades, then exerting a pressure against the inner periphery of the blades and simultaneously therewith forming the side walls of the inner ends of the blades.

2. The method of blading turbines, which consists in assembling the turbine blades in a groove of the casing with the inner ends of the blades passing through a shroud band, and successively subjecting the inner ends of the blades to the rolling action of a convex roll, a level roll, and a finishing roll.

3. The method of blading turbines, which consists in assembling the turbine blades in a groove of the casing with the inner ends of the blades passing through a shroud band, and successively subjecting the inner ends of the blades to the rolling action of a convex roll, a level roll, and a finishing roll by reciprocating said rolls in a path concentric with a turbine groove.

1,269,145. GATE-LATCH. ALBERT C. WRIGHT and JOHN H. LEARY, Jr., Westcliffe, Colo. Filed Mar. 29, 1917. Serial No. 158,863. (Cl. 70—28.)

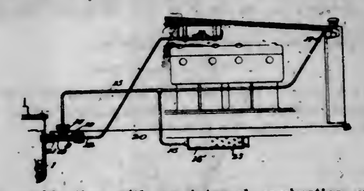
1. A gate latch comprising a frame member having projections thereon by which it is pivotally mounted, one of said projections being provided with a squared portion, a second member having a projecting part adapted to engage the frame member, and a spring having its arms contacting with opposite faces of the squared portion of said projections for normally holding the frame member in a locked position.



2. A gate latch comprising a frame member having projections thereon by which it is pivotally mounted upon the post, a second member having a projecting part adapted to engage with the frame member, and a spring engaging one of the projections on the frame member for normally holding said member in a locked position.

3. A gate latch comprising a plate having projecting ears thereon, a frame member having projections thereon for pivotally mounting the frame in the projected ears, one of said projections being provided with a squared portion, a second member having a projecting part for contacting with the frame member, and a spring secured to said plate and having its arms contacting with opposite faces of the squared portion of said projection, for normally holding the frame member in a locked position.

1,269,146. ATTACHMENT FOR CARBURETERS. JOHN F. ABEL, Burlington, Iowa. Filed Mar. 27, 1917. Serial No. 157,783. (Cl. 261—18.)

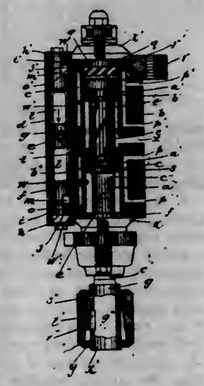


In combination with an internal combustion engine and a carbureter therefor, the latter having a fuel inlet and a valve controlling such inlet, an outlet, and a valve therefor, an oil receptacle, means for supplying moistened oil-ladened air to said carbureter comprising a coupling secured at one end to the carbureter casing intermediate said fuel inlet and said outlet, said coupling having a branched connection with the radiator of a motor vehicle to receive water therefrom, a pipe for supplying air heated by the engine exhaust to said branched connection, and a second branched connection from said coupling to said oil reservoir.

1,269,147. PERCUSSIVE ROCK-DRILLING APPARATUS. RICHARD HENRY ADAMS, Cobalt, Ontario, Canada. Filed May 10, 1917. Serial No. 167,650. (Cl. 121—11.)

1. A percussive rock-drilling apparatus comprising a cylinder having a piston therein and a central exhaust port within the boundaries of the stroke of the piston heads, a jacket surrounding the cylinder, and forming with it an exhaust chamber having outlet ports, an air chest having inlet ports into the cylinder adjacent to the cylinder head and exhaust ports into the exhaust chamber in the vicinity of the inlet ports, and valve-reversing ports in the vicinity of the air-chest heads leading to opposite sides of the center of the piston stroke, and a reciprocating tubular air-valve in the air-chest having ports registering with the inlet ports of the cylinder and recesses in its cylindrical wall coupling the inlet and exhaust ports during the reciprocation of the valve.

2. A percussive rock drilling apparatus comprising a cylinder having an inlet port adjacent to each cylinder head, an air chest for the cylinder having an air intake, a tubular air container within the air chest having a port through which the air flows into it continuously from the air intake, the ends of the container being closed and the wall of the container being provided with ports to register during the cycle of action with the



ports leading into the cylinder, the wall of said container being recessed in the vicinity of said ports, and an exhaust chamber surrounding the cylinder having exhaust ports leading to the atmosphere and ports communicating with the air chest in the vicinity of the inlet ports for the cylinder and coupled therewith by the recesses in the wall of the container during the cycle of action.

[Claim 8 not printed in the Gazette.]

1,269,148. PROCESS OF SINGEING STOCKINGS. CHARLES SCOTT ALTHOUSE, Reading, Pa. Filed Sept. 22, 1917. Serial No. 192,676. (Cl. 26—14.)



1. The process of singeing stockings which consists of directing and causing them to pass in loose form and in large numbers through a singeing heat.

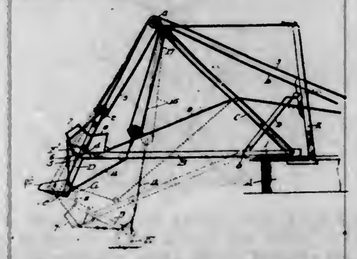
6. The art of singeing stockings without preparing them individually, which consists in subjecting them, in relatively large numbers, to a series of flames.

7. The process of singeing relatively small textile articles which consists in tumbling them in loose form through a heated chamber.

[Claims 2 to 5 not printed in the Gazette.]

1,269,149. DIPPER-DREDGE. VINCENT G. ANDERSON, Thief River Falls, Minn., assignor to Frederick C. Austin, Chicago, Ill. Filed Dec. 15, 1916. Serial No. 136,765. (Cl. 214—138.)

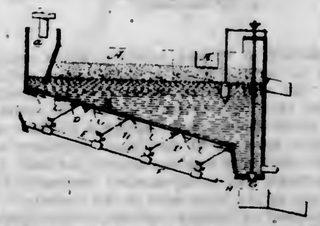
3. A dredging or excavating machine comprising a body, a boom pivotally supported on said body to swing up and down at its outer end, a beam pivoted on the outer end of said boom to tilt about a horizontal axis and to swing up and down with the beam, a dipper pivoted on the lower end of said beam, and instrumentalities to control said dipper to receive and dump the load, said instrumentalities comprising a pivoted locking device to hold the dipper in loading position on said beam, a connection to control said locking device, a lever pivoted on the beam to connect said device with said connection, and means on the boom to engage said connection.



5. A dredging or excavating machine comprising a body, a boom pivotally supported on said body to swing up and down at its outer end, a beam pivoted on the outer end of said boom to tilt about a horizontal axis and to swing up and down with the beam, a dipper pivoted on the lower end of said beam, and instrumentalities to control said dipper to receive and dump the load, said instrumentalities comprising a flexible connection extending to the lower end of said beam, a flexible connection extending to the upper end of said beam, and a hitch between the dipper and the connection extending to the lower end of the beam.

[Claims 1, 2, 4, and 6 not printed in the Gazette.]

1,269,150. PROCESS OF AND APPARATUS FOR CONCENTRATING ORES. CEDRIC JUDSON BEATTY ARMSTRONG, Cobalt, Ontario, Canada, assignor to Metals Recovery Company, Augusta, Me., a Corporation of Maine. Filed Mar. 15, 1917. Serial No. 155,056. (Cl. 83—85.)



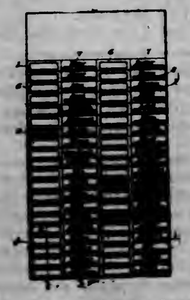
1. A flotation tank adapted to contain pulp composed of powdered ore and water and a frothable agent, and having means for gasifying the pulp to thereby facilitate the formation of a froth or bubbles, which accumulate as a mass on the surface of the liquid, said tank having a froth accumulating space of substantial depth and extended area above the pulp level elongated in the direction of travel of the froth, and provided with a horizontally constricted outlet from said froth accumulating space and adapted to retard the flow of the bubbles of froth therefrom.

2. A flotation tank adapted to contain an ore pulp and having means for gasifying the pulp, and forming froth therein, said tank having a froth accumulating space of substantial depth and extended area above the pulp level subdivided, and elongated in the direction of travel of the froth, and provided with a horizontally constricted outlet from said froth accumulating space adapted to delay the froth discharge and thereby produce a concentration of said froth.

3. A flotation tank adapted to contain an ore pulp and having means for gasifying the pulp and forming froth therein, said tank having a froth discharge positioned above its liquid level, and means forming a horizontally tortuous passage along the liquid surface of the tank, said froth discharge being horizontally constricted to thereby slow the escape of the froth and facilitate the concentration of said froth.

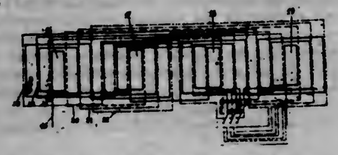
4. The process herein described of concentrating the froth generated in a flotation tank by gasifying a pulp containing powdered ore and water and a frothable agent, said process consisting, essentially, in accumulating a body of froth of substantial depth and extended area above the pulp level and extended in the direction of its travel, and prolonging the period in which the froth is retained in the tank by horizontally constricting the discharge through which the froth escapes from said tank.

1,269,151. STOCK-INDICATOR. FRANK BAYLAY, Newton, British Columbia, Canada, assignor of one-third to Agnes T. Downing, Boston, Mass. Filed May 1, 1916. Serial No. 94,789. (Cl. 116—50.)



A stock indicator comprising a front wall, a rear wall, a marginal spacing frame interposed between the front and rear walls and secured thereto, parallel spacing strips extending horizontally of the indicator in spaced relation to each other, slidable panels movable between said parallel spacing strips, and combined panel operating handles and stops projecting from said panels, the front wall of the indicator being provided with a column of display openings for said panels and being also provided with a column of horizontally extending slots through which the panel handles are slidable, the front wall also having represented thereon in opposition to said display openings, the names of various stock articles and the two columns being in spaced parallel relation to each other, the panels being adapted to be sealed behind the column having the horizontal slots.

1,269,152. SINGLE-PHASE MOTOR. JULIUS BECKER, Racine, Wis. Filed Aug. 24, 1914. Serial No. 858,228. (Cl. 172—278.)

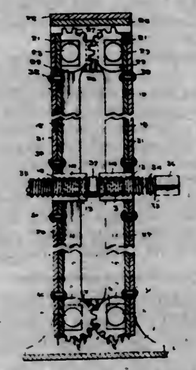


1. In a single-phase motor, the combination with a stator field core, of conductors of a power winding embedded therein, connections between said conductors for providing turns of power winding in the field core suitably positioned therein for the generation of alternate north and south magnetic poles along the face of the field core when the power winding is energized, groups of auxiliary turns in the core intermediate turns of the power winding, each of said groups of auxiliary turns being suitably connected up to provide auxiliary sets of coils in the core displaced along the body thereof with respect to the coils of the power winding, and each of said sets of auxiliary coils having a different amount of displacement with respect to the power winding from the other sets of auxiliary coils, and a rotor mounted within the stator core.

2. In a single-phase motor, the combination with a stator field core, of a plurality of power coils embedded in the same and adapted to generate alternate north and south poles in the core, and a group of auxiliary coils corresponding to each of the power coils, the auxiliary coils of each group being angularly displaced from corresponding power coils different angular amounts, and the auxiliary coils of the various groups being connected up in sets, the auxiliary coils of each set being displaced from their respective power coils by equal angular amounts, for the purpose specified.

3. In a single phase motor, the combination of a stator field core of a plurality of power coils embedded in the same and adapted to generate alternate north and south poles in the core, and a group of auxiliary turns on each side of each power coil, the auxiliary turns of each group being angularly displaced from their respective power coils different angular mounts, each auxiliary turn of each group being angularly displaced from its power coil an amount equal to the angular displacement of a corresponding turn of a group adjacent to each of the other coils, and means for connecting in series corresponding auxiliary turns of the several groups, for the purpose specified.

1,269,153. LIFTING-JACK. PERCY L. BILLINGSLEY, Orlando, Fla., assignor to Atlas Manufacturing Company of Orlando, Orlando, Fla. Filed July 28, 1917. Serial No. 183,263. (Cl. 254—126.)



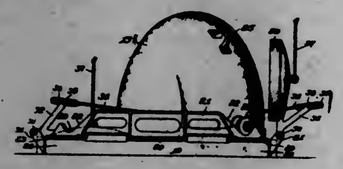
3. A device of the character specified, comprising a base provided with spaced flange members, a head provided with spaced flange members, upper and lower channel bars connecting the flange members of said base and said head, means for pivotally connecting said channel bars together, means for drawing said channel bars toward and away from each other for moving said head toward and away from said base, removable gear, means rotatably mounted upon said base and upon said head and removably but nonrotatably connected with the upper and lower ends of said channel bars for preventing movement of said head out of operative vertical alinement with said base, and means for preventing the inward movement of said channel bars toward each other beyond a predetermined point.

5. A device of the character specified, comprising a base member, a head, a co-acting pair of drums revolubly mounted in said base, a co-acting pair of drums revolubly mounted in said head, a plurality of intermeshing teeth upon the contiguous faces of each pair of drums, lower

channel bars having their lower ends mounted upon the drums within said base member, upper channel bars having their upper ends mounted upon the drums within said head, internally screw threaded blocks having trunnions for pivotally connecting together the adjacent ends of said channel bars, a threaded rod engaging the internal threads of said blocks for drawing said blocks and said channel bars toward and away from each other for operatively moving said head relative to said base, and a collar upon said screw threaded rod for limiting the inward movements of said blocks toward each other for preventing the movement of said channel bars inwardly beyond a predetermined point.

[Claims 1, 2, 4, 6, and 7 not printed in the Gazette.]

1,269,154. REVERSING APPARATUS FOR REGENERATIVE FURNACES. THOMAS S. BLAIR, Jr., Chicago, Ill., assignor to Blair Engineering Company, Chicago, Ill., a Corporation of New York. Filed June 5, 1917. Serial No. 172,908. (Cl. 277—5.)



1. In a regenerative-furnace reversing apparatus, the combination of a flue-terminal, a switching duct rotatably and tiltingly supported at one end on said terminal and carrying a wheel, a pair of flue-terminals alternately with which the opposite swinging end of said duct registers, and cam-ways between said first-named terminal and said pair of terminals for riding said duct on said wheel out of and into such registration.

4. In a regenerative-furnace reversing apparatus, the combination of a flue-terminal, a turn-table on said terminal, a switching duct rotatably and tiltingly supported at one end on the turn-table and carrying a wheel, a pair of flue-terminals alternately with which the opposite swinging end of said duct registers, power-mechanism for swinging said duct, comprising hydraulic cylinders having piston-rods connected with the turn-table for turning it, and cam-ways and an intermediate track on which said wheel rides in the movement of said duct from one to the other of the flue-terminals of said pair.

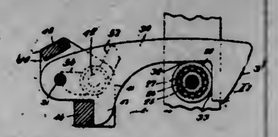
[Claims 2 and 3 not printed in the Gazette.]

1,269,155. RESILIENT HEEL AND ANCHORING-WASHER THEREFOR. JOHN H. BROWN, Chicago, Ill. Filed Mar. 29, 1917. Serial No. 158,418. (Cl. 36—75.)



As a new article of manufacture, a resilient heel lift having an anchoring washer embedded therein, the said washer comprising a body formed centrally with an opening and provided at its periphery with a series of spurs projecting substantially at right angles from the underside of the said body, the material of the lift entering between the said spurs and the said lift being molded with an opening extending from its tread surface to the under side of the body of the washer to receive the head of a fastening element to be driven through the said opening in the body of the washer, the ends of the spurs being presented at the said tread surface of the lift.

1,269,156. CIRCUIT-BREAKER AND SWITCH. GEORGE A. BURNHAM, Saugus, Mass., assignor to Sears B. Condit, Jr., Brookline, Mass. Filed Apr. 4, 1916. Serial No. 88,803. (Cl. 175—268.)



1. A circuit-breaker having a movable switch-member, an operating-member for it, locking-means for said operating-member, one of the component elements of which is adapted for angular movements and for rotation in any angular position it may occupy, and a tripping-coil controlling said locking-means.

7. In combination with a circuit breaker having a movable member and an operating member therefor having latch engaging means, of a latch, a pivot shaft, a housing for the latch arranged on said shaft intermediate the length thereof, a pivotal support for said latch arranged in the housing in the rear of the axis of the pivot shaft, and a tripping coil for the latch.

[Claims 2 to 6 and 8 not printed in the Gazette.]

1,269,157. PROCESS OF CONCENTRATING ORES. JOHN M. CALLOW, Salt Lake City, Utah, assignor to Metals Recovery Company, Augusta, Me., a Corporation of Maine. Filed Nov. 2, 1916. Serial No. 129,154. (Cl. 83—85.)

1. The process herein described of concentrating metalliferous ores, which consists in subjecting a pulp of powdered ore and water to the action of sodium-hydrogen-sulfate in quantity sufficient to immunize against flotation certain of the mineral components normally susceptible to flotation, and then subjecting the mass to flotation separation whereby products are obtained relatively high in certain values and other products are obtained relatively high in other values.

2. The process herein described of concentrating metalliferous ores which consists in subjecting a pulp of powdered ore and water to digestion in a solution of sodium-hydrogen-sulfate in quantity sufficient to immunize against flotation certain of the mineral components normally susceptible to flotation, and then subjecting the mass to flotation separation to obtain products relatively high in certain values and other products relatively high in other values.

3. The process herein described of concentrating metalliferous ores which consists in reducing the ore in the presence of an appropriate frothing agent to a fineness sufficient to liberate the various metallic constituents of the ore; adding to the ground mass sodium-hydrogen-sulfate in quantity sufficient to immunize against flotation certain of the mineral components normally susceptible to flotation, and then treating the mass to flotation separation.

4. The process herein described of concentrating metalliferous ores which consists in reducing the ore in the presence of an appropriate frothing agent to a fineness sufficient to liberate the various metallic constituents of the ore, adding to the ground mass sodium-hydrogen-sulfate in quantity sufficient to immunize against flotation certain of the mineral components normally susceptible to flotation and an acid to thereby secure preferential selective action of one metallic constituent of the ore mass to the others, and then treating the mass to flotation separation.

1,269,158. HAIR-CURLER. GEORGE G. CAMPANA, New York, N. Y., assignor, by mesne assignments, of one-half to The Thomas Lasting Wave Co., New York, N. Y., a Corporation of New York. Filed June 9, 1916. Serial No. 102,616. (Cl. 132—19.)

1. A device of the class described including a pair of straight members relatively small in cross-section pivoted intermediate their ends and coacting to provide exterior hair receiving surfaces, the adjacent ends of the members at one end of the device provided with means coacting to fasten a strand of hair to the device, a spring acting on said members to move said hair fastening means into closed position, said members coacting to provide a curler substantially circular in cross-section upon which the fastened strand of hair may be wrapped in a coil.



2. A hair waver for use in forming the hair on a person's head into waves, said waver constituting a forceps provided with clasping means designed to engage the strand of hair adjacent the person's head and thus secure the waver in position, said waver increasing in circumference progressively from said clamping means toward the opposite end whereby the progressively thinner coils of the hair may be arranged in succession on progressively larger portions of the waver.

10. A hair curler comprising a pair of members pivoted together, one of said members including an extension provided with a notch, the other member provided with a hook designed to engage in said notch to hold the hair.

[Claims 3 to 9 not printed in the Gazette.]

1,269,159. GREASE-CUP. LLOYD G. COPEMAN, Flint, Mich. Filed Apr. 2, 1917. Serial No. 159,137. (Cl. 184—38.)

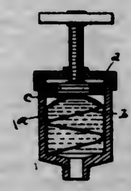


1. A grease-cup provided with a plunger or follower, and a domed capsule contained therein, the said plunger or follower being provided with a recess into which the domed capsule material is driven in collapsing the capsule.

2. The combination of a grease-cup, a follower provided with a reduced portion forming an annular groove, and a domed capsule contained in said grease-cup, the material in said capsule being forced into and engaging the groove in collapsing the capsule.

[Claim 3 not printed in the Gazette.]

1,269,160. GREASE-CAPSULE. LLOYD G. COPEMAN, Flint, Mich., assignor to Copeman Development Company, Flint, Mich., a Corporation of Michigan. Filed May 12, 1917. Serial No. 168,269. (Cl. 184—38.)

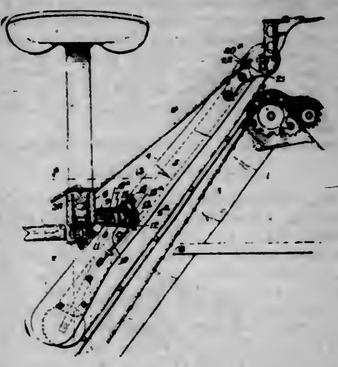


1. A grease capsule for the purpose specified, comprising a shell of collapsible material, means within the shell for automatically opening out the shell when the collapsing force is removed and means at the closed end for the purpose specified.

3. A grease capsule, comprising a shell of a mercerised silk fabric, and a spiral spring contained therein for the purpose specified.

[Claim 2 not printed in the Gazette.]

1,269,161. ELEVATOR-SUPPORT FOR HARVESTERS. WILLIAM H. CRANE, Poughkeepsie, N. Y., assignor to Moline Plow Company, a Corporation of Illinois. Filed May 22, 1916. Serial No. 99,067. (Cl. 56—89.)



1. In a harvesting machine, and in combination with the machine frame and lower elevator frame, a fixed horizontal supporting member, a carrying member sustained by the supporting member and adjustable in a rectilinear path horizontally relatively thereto, and an upper elevator frame sustained by the carrying member and adjustable vertically relatively to said carrying member.

3. In a harvester, and in combination with a machine frame and lower elevator frame, a supporting member fixed to the machine frame, a carrying member mounted on the supporting member and movable in relation to the same, an adjusting device between the supporting member and carrying member operable to move the latter to adjust it, a clamping device independent of said adjusting device for holding the parts in their adjusted position, an upper elevator frame sustained by the carrying member and movable relatively thereto, an adjusting device between the carrying member and elevator frame operable to move the latter to adjust it, and a clamping device independent of said adjusting device for holding the elevator frame in its adjusted position.

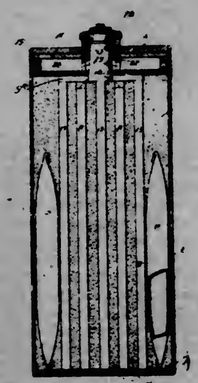
4. In a harvester and in combination with a machine frame and lower elevator frame, a supporting member fixed to the machine frame, a carrying member seated flatly against the supporting member so as to slide thereon to adjust the same, a clamping bolt extending through the supporting member and the carrying member and operable to clamp the same releasably in their different relative positions, a rod connected with the supporting member and extending in the direction of the sliding movement of the carrying member and loosely through the latter, a nut on the rod engaging the supporting member to adjust the same, and an upper elevator frame sustained by the carrying member.

6. In a harvester and in combination with a machine frame and lower elevator frame, a supporting member fixed to the machine frame, a carrying member mounted on the supporting member and movable relatively thereto to adjust the same, a rod connected with the supporting member and extending through the carrying member, a nut on the rod engaging the carrying member to adjust said member relatively to the supporting member, an upper elevator frame sustained by the carrying member and movable relatively thereto, a rod connected with the elevator frame and extending through the carrying member, and a nut on the rod engaging the carrying member to adjust the elevator frame relatively to said carrying member.

9. In a harvester and in combination with the machine frame and lower elevator frame, a supporting member fixed to the machine frame and provided with a horizontal slot, a carrying member mounted on the supporting member and movable relatively thereto in the direction of said slot, a rod connected with the supporting member and extending loosely through the carrying member, a nut on the rod engaging the carrying member to adjust the latter, a clamping device on the carrying member engaging in the said slot to hold the parts in their adjusted position, said carrying member being provided with a vertical slot, an upper elevator frame, a clamping device on the elevator frame engaging in said vertical slot and adapted to hold the parts in their adjusted position, a rod connected with the said clamping device and extending loosely through the carrying member, and a nut on the rod engaging the carrying member to adjust the elevator frame relatively thereto.

[Claims 2, 5, 7, 8, 10, and 11 not printed in the Gazette.]

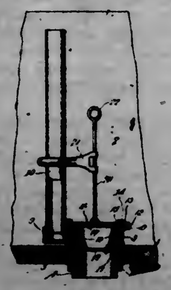
1,269,162. STORAGE BATTERY. WALTER A. CROWDUS, Chicago, Ill. Filed May 22, 1917. Serial No. 170,169. (Cl. 204—29.)



5. A storage battery comprising a container and battery elements therein, a non-flowing filler for holding a liquid electrolyte in the container and embedding said elements, and a tube of porous material having closed ends and embedded in said filler to form a receiving and exuding reservoir for the liquid electrolyte.

[Claims 1 to 4 not printed in the Gazette.]

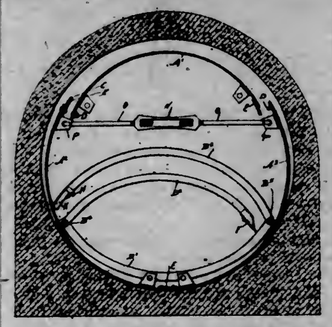
1,269,163. FLUSH-TANK VALVE. WILLIAM A. DANIELSSN, Palatine, Ill. Filed Jan. 26, 1916. Serial No. 74,321. (Cl. 4—5.)



1. A flush tank valve comprising an outlet casing having a seat provided with an upwardly extended annular flange and an internally threaded rim on said flange, an elastic annular member seated on said flange and having a depending flap, a peripherally threaded ring for securing said elastic member within the said rim, a closure consisting of a hollow head in the form of an inverted truncated cone provided with an air opening on the underside thereof, and a cage attached to said ring and adapted to guide said closure with reference to said seat.

[Claims 2 to 7 not printed in the Gazette.]

1,269,164. SEWER-FORM. HARRY O. DAVIDSON, Cleveland, Ohio, assignor to The Hydraulic Pressed Steel Company, Cleveland, Ohio, a Corporation of Ohio. Filed Sept. 5, 1916. Serial No. 118,361. (Cl. 25—126.)



1. A form comprising a plurality of curved plates and means for detachably locking said plates together along their longitudinal edges, an interior ring composed of a plurality of sections hinged together, means for detachably connecting the ends of said hinged sections, and means for connecting said ring sections to the ends of the curved plates.

3. In a form, a ring composed of a plurality of sections hinged together, the end of one section having a laterally movable latch connected thereto and the end of the opposite section having a stud adapted to be engaged by said latch, together with means carried by one section and adapted to engage the opposite section to prevent lateral displacement of said sections.

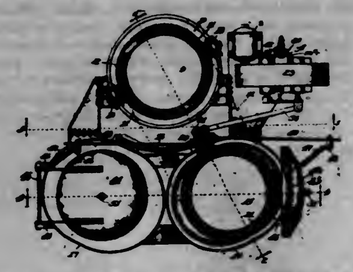
8. A form comprising a plurality of curved plates, each having an apertured strip along one edge and headed studs upon the opposite edge, said apertured strips carrying latches, and a ring composed of a plurality of sections hinged together, the end of one section having a latch and the end of another section having a headed stud adapted to be engaged by said latch, each ring section having a longitudinally slotted latch adapted to engage a headed stud carried by a plate section at the end thereof.

11. A form comprising a plurality of curved plates, each carrying a latch upon one longitudinal edge and a headed stud adjacent the opposite longitudinal edge, said curved plates being adapted to be interlocked to provide a form section, and a ring composed of a plurality of sections hinged together, the end of one section having a latch adapted to engage means upon the opposite meeting ring section, said ring being of a width to overlap the joint of two form sections, said ring carrying means for engagement with fastening means carried upon the end of the section.

[Claims 2, 4 to 7, 9, and 10 not printed in the Gazette.]

1,269,165. REVERSING APPARATUS FOR REGENERATIVE FURNACES. ORIN H. DAVISON, Chicago, Ill., assignor to Blair Engineering Company, Chicago, Ill., a Corporation of New York. Filed June 5, 1917. Serial No. 172,907. (Cl. 277—5.)

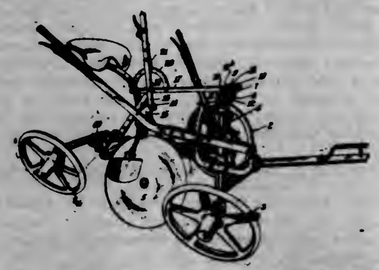
1. In a regenerative-furnace reversing apparatus, the combination of a flue-terminal, a switching duct rotatably and tiltingly supported at one end on said terminal, a pair of flue-terminals alternately with which the opposite swinging end of said duct registers, and a track comprising a loop having cam-ways at its ends for guiding the duct in moving from one to the other of the flue-terminals of said pair.



7. In a regenerative-furnace reversing apparatus, the combination of a flue-terminal, a switching duct rotatably and tiltingly supported at one end on said terminal, a pair of flue-terminals alternately with which the opposite swinging end of said duct registers, cam-ways and an intermediate track between said first-named terminal and said pair of terminals for supporting the duct at a point between its ends and guiding it in moving from one to the other of the terminals of said pair, and power-mechanism for swinging said duct, comprising an electric motor, gear-mechanism geared to the motor-shaft and carrying a contact-brush and a crank having a link-connection with said duct, a switch in circuit with said motor and with which said brush contacts, and a circuit-controlling throw-switch.

[Claims 2 to 6 not printed in the Gazette.]

1,269,166. WHEELED PLOW. HARRY S. DICKINSON, Moline, Ill., assignor to Moline Plow Company, a Corporation of Illinois. Filed Dec. 17, 1915. Serial No. 67,338. Renewed Apr. 20, 1918. Serial No. 229,862. (Cl. 97—73.)

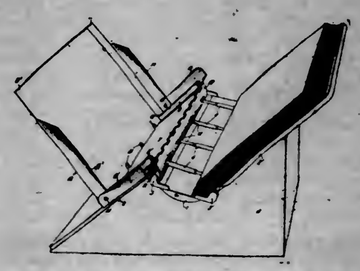


1. In a plow, the combination of a frame, a ground wheel, a ground wheel support for the ground wheel mounted on the frame, and movable relatively thereto to angle the ground wheel, an operating arm detachably interlocked with the upper end of the ground wheel support to shift the same, and means receiving support from the ground wheel support and engaged with said arm, said means being operable to draw the arm down on the ground wheel support and maintain the same in interlocked engagement therewith.

4. In a plow, the combination of a frame, a ground wheel, a support for the ground wheel having an upright stem swiveled in the frame to angle the wheel and provided with a squared end, an operating arm having a square hole in its end to receive the squared end of the stem, an abutment on the stem below the arm, a strap provided at its inner end with an opening surrounding the stem below the abutment and engaging the latter, a tie bolt connecting the arm and strap together adjacent their inner ends, means connecting the arm and strap together beyond the tie bolt, and means for operating the arm to swivel the stem.

[Claims 2 and 3 not printed in the Gazette.]

1,269,167. RACK ATTACHMENT FOR LEDGERS. ALEXANDER DOM, Cincinnati, Ohio, assignor to The Samuel C. Tatum Company, Cincinnati, Ohio, a Corporation of Ohio. Filed May 10, 1916. Serial No. 96,505. (Cl. 129—1.)



1. A leaf holding attachment for a loose leaf binder comprising a hingedly connected base and back, a member attached to the base for fitting over the binder plate and formed to detachably engage the binder posts for supporting the base and back on an inclined cover.

2. A leaf holding attachment for a loose leaf binder comprising a hingedly connected base and back formed with side flanges, the base being formed with leaf positioning devices, and a binder engaging member hingedly connected to the base.

4. A sheet metal leaf holding attachment for a loose leaf binder comprising a base and back formed with the integral side flanges hingedly connected, the base having U-ribs extending parallel with said side flanges of the base and adapted to engage into the leaf apertures, and a member hinged to the front edge of the base contoured to fit over the binder plate, the lower margin of said member being formed with apertures to detachably engage the binder posts for supporting the holder in the subsequent position on the inclined cover of the binder.

5. An attachment for a loose leaf binder comprising a leaf holder adapted to be supported on the inside of the cover of an opened binder and to detachably engage the binder posts.

6. A rack for binder leaves, adapted to detachably engage the binder posts and to support the rack in leaf holding position on the inside of the cover of an open binder.

[Claim 3 not printed in the Gazette.]

1,269,168. PROCESS OF TREATING RUBBER. FRANK A. FAHRENWALD, Cleveland, Ohio. Filed Oct. 11, 1916. Serial No. 125,009. (Cl. 18—52.)

1. The process of reclaiming sulfurized rubber, which consists in submitting it to the action of tellurium in the presence of heat with or without pressure.

4. A composition of matter containing rubber, sulfur and tellurium.

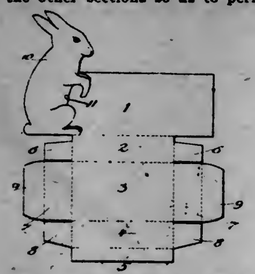
[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,169. CARTON. JESSE K. FARLEY, Jr., Kenilworth, Ill. Filed Jan. 19, 1917. Serial No. 143,233. (Cl. 46—37.)

1. A carton made up of a single blank comprising five central sections arranged in a row and constituting the top, bottom and two side walls and an attaching strip, together with end sealing flaps for closing the ends of the carton, that section most remote from the attaching strip being extended at its three free edges and being shaped to give a configuration to the corresponding side of the carton differing from the opposed side.

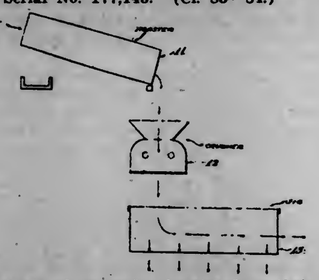
2. A carton blank comprising a series of five sections arranged in a row and adapted to form four sides of a carton and an attaching strip, together with flaps extending from each end of the three intermediate sections adapted to form the ends of the carton, the section at one

end of the row being the attaching strip and the section at the opposite end of the row having a shape different from any of the other sections so as to permit one side



of a carton made from the blank to have a configuration which shall be independent of the size and shape of the other three sides of the carton.

1,269,170. METHOD OF SEPARATING BORATES FROM THEIR GANGUE. HERBERT W. FAULKNER, Ryan, Cal., assignor to Pacific Coast Borax Company, Reno, Nev., a Corporation of Nevada. Filed June 26, 1917. Serial No. 177,145. (Cl. 83—84.)



1. A process of recovering borates from their gangue which comprises subjecting a mixture of borate and gangue to a heat sufficient to dehydrate the borate to such a degree that its specific gravity is altered and thereafter subjecting the mixture to separation according to the specific gravity of the components.

2. A process as in claim 1 in which the mixture is crushed after dehydration and before separation.

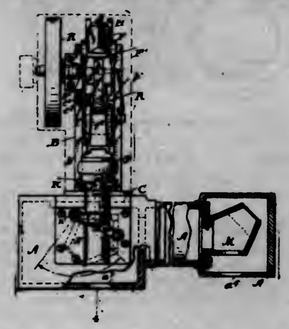
3. A process as in claim 1 in which the separation is effected by a jigging operation dependent on the specific gravities of the components.

4. A process as in claim 2 in which the separation is effected by a jigging operation dependent on the specific gravities of the components.

1,269,171. RANGE-FINDER. GOTTLIEB FECKER, Cleveland, Ohio, assignor to The Warner and Swasey Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 13, 1914. Serial No. 850,643. (Cl. 88—2.)

1. A range finder, which includes a tubular base member having an objective opening adjacent one end, and two separated reflectors in said tubular member bounding the base line of the instrument, and a head which is rotatably supported on said base member, two telescopes supported by said head one fixed thereto with its optical axis parallel with and above the mechanical axis of the head, and the other telescope being located below the mechanical axis of the head and in such position that its own axis will normally lie in the same vertical plane as the axis of the upper telescope and the mechanical axis of the head,—said lower telescope being capable of angular deflection about an axis which lies in the same vertical plane above mentioned, means for angularly deflecting the second telescope, and means indicating in desired terminology the extent of such deflection.

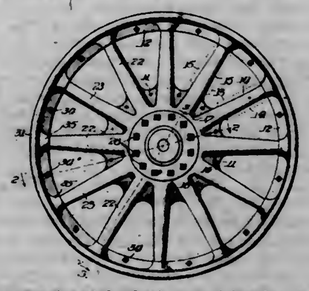
4. In a range finder, the combination of a horizontal frame member, two reflectors secured thereto at a known distance apart, and two normally collimated telescopes supported by said frame member with their optical axes normally parallel in the same vertical plane, one of said telescopes being fixed directly behind one reflector and the other telescope being mounted to swing out of the plane in which said optical axes lie but in a plane at right angles thereto, an eye piece common to both telescopes and having a right angle reflecting prism which is so set that the line in which its two reflecting planes intersect is at right angles to the plane in which the optical axes of the two telescopes lie when they are parallel, and an indicator which moves in proportion to the said swinging movement of said movable telescope.



6. In a range finder, the combination of a horizontal frame member, two reflectors secured thereto at a known distance apart and two normally collimated telescopes supported by said frame member with their optical axes normally parallel and in the same vertical plane, an eye piece common to both telescopes, which eye piece includes a reflecting prism whose reflecting planes intersect in a line which is at right angles to the vertical plane in which the optical axes of said telescopes normally lie, the lower telescope being fixed in operative relation to said eye piece and to the adjacent reflector carried by the horizontal frame member, the upper telescope comprising an objective and a reflecting prism, an arm which is pivoted to swing in a horizontal plane to which said objective is secured, a lever pivoted to said arm to which the prism of said telescope is secured, means for swinging said lever into any desired position, means for swinging said arm, and an indicator which moves proportionately to said arm.

[Claims 2, 3, 5, and 7 to 9 not printed in the Gazette.]

1,269,172. VEHICLE-WHEEL. GEORGE H. FORSYTH, Chicago, Ill., assignor to Forsyth Brothers Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 21, 1914. Serial No. 813,476. (Cl. 152—21.)



1. A pressed metal wheel comprising integral rim and spoke portions, the rim having an integral tire-retaining flange on one side thereof and a removable tire-retaining flange detachably secured to the rim upon the other side thereof, substantially as described.

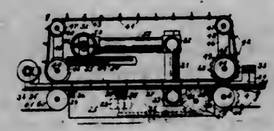
[Claims 2 to 4 not printed in the Gazette.]

1,269,173. PROCESS OF MAKING BATTERY-DEPOLARIZERS. HARRY F. FRENCH and RAYMOND C. BENNER, Fremont, Ohio, assignors, by mesne assignments, to National Carbon Company, Inc., a Corporation of New York. Filed Nov. 21, 1916. Serial No. 132,556. (Cl. 204—38.)

1. The process of making a battery depolarizer which consists in reducing copper oxid with an excess of sulfur and then reoxidizing the reduced mass in the presence of the excess sulfur.

[Claim 2 not printed in the Gazette.]

1,269,174. LETTERING AND DECORATING DEVICE. WILLIAM FRITZ, Philadelphia, Pa. Filed June 1, 1917. Serial No. 172,277. (Cl. 91—3.)



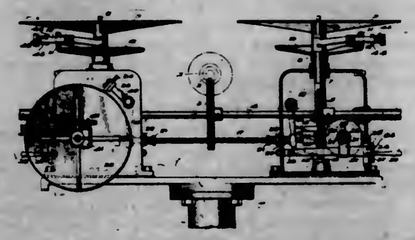
1. In a coating machine a pair of transverse grooved rollers, a table having longitudinal spaced strips, endless ribbons between said strips and around said rollers, top and bottom transverse ribs fixed to said endless ribbons the bottom ribs registering with the grooves of said rollers, transverse rotary supports above the ends of said endless ribbons, transverse bars with outwardly projecting pins and registering with said rotary supports, and endless carriers connected to said transverse bars, the whole registering with the travel of said ribbons.

6. The combination in a chocolate decorating apparatus, of a container having a slot in its underside, a movable plate perforated with letters or designs, and means for moving said plate across the slot of the container.

7. The combination in a coating machine, of an open-work table comprising transverse bars having vertical slots, spaced vertical plates pointed at their ends and fastened in said slots, springs disposed between the plates, means for moving blanks on the table, and agitating means disposed below the springs.

[Claims 2 to 5 not printed in the Gazette.]

1,269,175. AUTOMATICALLY-ACTING MULTIPLE-RECORD-SUPPORTING TABLE. LEWIS RICHARD GILBERT, New York, N. Y., assignor to George Regester Webb, Baltimore, Md. Filed June 26, 1914. Serial No. 847,462. (Cl. 274—10.)



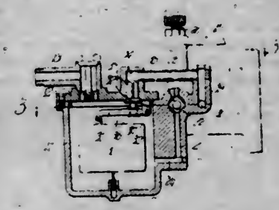
1. A plurality of record-supporting tables, driving mechanism including coöperating toothed wheels for each table for rendering its record alternately active and inactive, a coupling connecting the driving mechanism of one table with like mechanism of the other table, means for automatically actuating said coupling to bring the record of one table to a state of rest and give motion to the record of the other table, and a shock absorbing device associated with one of the coöperating toothed wheels of the driving mechanism to take up the shock incident to initial intermeshing of the teeth of the two wheels.

5. In a talking machine, driving mechanism for rendering the record alternately active and inactive, a trigger and means connecting it with the driving mechanism, a rotatable drum coöperatively related to the trigger and serving to hold it in one position while the record is active and to release it when the record is to be brought to a state of rest, means for feeding the drum horizontally in relation to the trigger while being rotated, and means for releasing the feeding means to permit the drum to be restored to its starting position.

8. In a record-supporting table, a rotatable shaft carrying a record-supporting member and provided with an arm carrying a pinion, a driven gear coöperating with said pinion for rotating the record-carrying shaft, and a shock absorber associated with said pinion and comprising a threaded shaft rotatable with the pinion, a nut traveling on the threaded shaft, a spring whose tension is increased by said nut, and means to lock the nut with the spring under tension.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

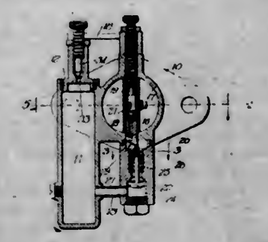
1,269,176. CARBURETER. PIERRE P. GILLES, Springfield, Mass. Filed Aug. 6, 1917. Serial No. 184,736. (Cl. 158—36.)



1. A carbureter, comprising, an air intake passage adapted for connection to suction means, means for maintaining constant fluid communication between said passage and a low level supply tank, all constructed and arranged so that fuel from the latter may be directly supplied to said passage by the suction produced therein, a suction passage connecting the air intake passage and said communication between the tank and intake passage, and a valve normally closing said suction passage and automatically operable at times when needed to open the suction passage, whereby increased suction is available to draw fuel from said tank.

[Claims 2 to 7 not printed in the Gazette.]

1,269,177. CARBURETER. PIERRE P. GILLES, Springfield, Mass. Filed May 21, 1917. Serial No. 170,098. (Cl. 261—41.)



1. A carbureter, comprising, an air intake passage adapted for connection to suction means, an air-tight chamber having a passage which is adapted for connection with a low-level fuel-supply tank and constitutes the sole connection between the tank and chamber, and an air-tight fuel passage between the latter and said intake passage arranged so that the suction applied to the fuel passage is operable to create a vacuum in said chamber and completely fill the latter from said tank.

2. A carbureter, comprising, an air intake passage adapted for connection to suction means, a throttle valve in said passage, an air-tight chamber having a passage which is adapted for connection with a low-level fuel-supply tank and constitutes the sole connection between the tank and chamber, an air-tight fuel passage between the latter and said intake passage arranged so that the suction applied to the fuel passage is operable to create a vacuum in said chamber and completely fill the latter from said tank, and a valve in the fuel passage operably connected to the throttle valve to be opened and closed by the opening and closing of the throttle valve.

5. A carbureter, comprising in combination, an air intake passage adapted for connection to suction means, a throttle valve in said passage, a chamber in which a partial vacuum may be established and adapted for direct connection with a low level fuel supply tank, a main fuel passage connecting said chamber and intake passage, a secondary fuel passage connecting the latter and said chamber, said main and secondary passages constituting high speed and slow speed nozzles, respectively, and constituting the sole means of creating a vacuum in said chamber to fill the latter from the low level tank, means to vary the effective opening of the main fuel passage proportionately with the variations of the intake passage by said throttle valve and operable to assist in controlling the fuel level in said chamber, and controlling means operable for any given degree of opening of the throttle valve to regulate the suction effective through the secondary fuel passage on said chamber and arranged to control for any given degree of throttle opening the distribution of fuel between the high speed and slow speed nozzles.

[Claims 3 and 4 not printed in the Gazette.]

1,269,178. FIREARM. JAMES B. HAMILTON, Hoboken, and ALSTON HAMILTON, Sandy Hook, N. J. Filed May 3, 1916, Serial No. 95,287. Renewed Nov. 6, 1917. Serial No 200,643. (Cl. 88—2.2.)



1. A firearm having a depressed stock and an altiscopic sighting tube hinged at its rear end to the stock and adjustable to different ranges.

2. A firearm having a depressed stock and a removable altiscopic sighting tube hinged at its rear end to the stock and adjustable to different ranges.

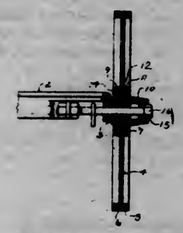
8. A firearm having a depressed stock, a removable altiscopic sighting tube hinged at its rear end to the stock, means carried by the stock for raising and lowering the front end of the sighting tube to adjust it to different ranges, and means for securing the sighting tube to the stock in its different adjustments.

9. A firearm having a depressed stock and its casing, an altiscopic sighting tube hinged thereto and adjustable to different ranges and means for adjusting the sighting tube comprising a train of gears within the casing and an operating hand wheel at the side of the casing.

10. A firearm having a depressed stock and its casing, an altiscopic sighting tube hinged thereto and adjustable to different ranges, a range indicator and a common means for operating the indicator and adjusting the sighting tube comprising trains of interconnected gears within the casing and an operating hand wheel at the side of the casing.

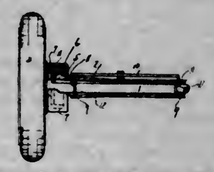
[Claims 3 to 7 not printed in the Gazette.]

1,269,179. WHEEL AND METHOD OF MAKING THE SAME. CHARLES M. HAYNES, Newark N. J. Original application filed July 29, 1914, Serial No. 853,811. Divided and this application filed Oct. 22, 1915. Serial No. 57,256. (Cl. 21—69.)



A wheel comprising an internally grooved rim formed from channel iron, the groove of the rim facing inwardly, and a one-piece web in the rim, the width of the groove of the rim being greater than the thickness of the web, the latter having a plurality of peripheral resilient teeth formed by slitting the web inwardly, the teeth extending in opposite directions to each other, fitted in the groove and yieldingly engaging the side walls of said groove, to hold the parts assembled by the expansive effect of the web, and the latter being practically flat.

1,269,180. AXLE SAFETY DEVICE. FRANK J. HEMEN, Seattle, Wash. Filed June 19, 1916. Serial No. 104,357. (Cl. 21—5.)



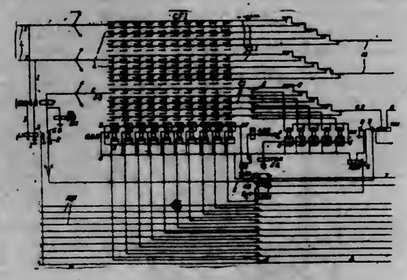
1. In a device of the class described, the combination of an axle having a traction wheel secured thereto, an outer casing around the said axle, a brake drum secured to said wheel, a flanged housing removably attached to said outer casing and inclosing said brake drum, whereby said wheel is prevented from separating from the outer casing, and indicating means, whereby the presence of a broken axle shaft is indicated.

2. In a device of the class described, the combination of a vehicle axle, a traction wheel secured to one end of said axle, a tubular outer casing inclosing said axle, a brake drum secured to said wheel, and a flanged outer housing inclosing the said brake drum and engaging a projection on the said outer casing and removably attached thereto, whereby the wheel and its axle are prevented from separating from the outer casing.

1,269,181. TELEPHONE SYSTEM. HENRY JAMES HERRING, London, England, assignor to The Relay Automatic Telephone Company, Limited, London, England. Filed Feb. 8, 1916. Serial No. 76,977. (Cl. 179—18.)

1. In a telephone system, the combination of a plurality of groups of incoming lines, a plurality of groups of outgoing lines, each incoming group having access to an outgoing group particularly associated with it, links adapted to connect the incoming lines of one group to the outgoing lines of another group and call-finder switches associated with the outgoing lines and each having access to the corresponding group of incoming lines and to a link associated with another group of incoming lines.

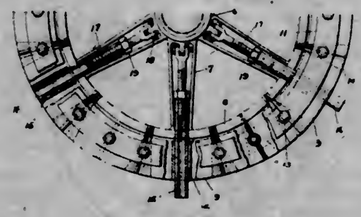
2. In a telephone system, the combination of a plurality of groups of incoming lines, a plurality of groups of outgoing lines, each incoming group having access to an outgoing group particularly associated with it, links adapted to connect the incoming lines of one group to the outgoing lines of another group, call-finder switches associated with the links and having access to the incoming lines of the appertaining group as well as to the overflow links of an adjacent group, and call-finder switches associated with the outgoing lines and each having access to the corresponding group of incoming lines and to a link associated with another group of incoming lines.



3. In a telephone system, the combination of a plurality of calling lines, a common line and a switch comprising a set of relays and adapted to connect a calling line to the common line, the number of calling lines being greater than the number of relays and the circuit of said relays being controlled in such a manner that when a plurality of the relays is energized one only can be maintained energized.

4. In a telephone system, the combination of a plurality of calling lines, a common line and a switch comprising two sets of relays and a single relay adapted to extend a set of wires common to one set of relays to the other set, the number of calling lines being greater than the number of relays and the circuit of the relays of the two sets being controlled in such a manner that when a plurality of the relays in either set is energized one only in either set can be maintained energized.

1,269,182. VEHICLE-TIRE. OTIS A. HOLLIS, Pittsburgh, Pa., assignor to Hollis Automatic Traction Jack Company, Pittsburgh, Pa., a Corporation of Delaware. Filed Mar. 15, 1916. Serial No. 84,417. (Cl. 21—209.)



1. A vehicle traction wheel provided with extensible tubular projections at the tread of the wheel, substantially as described.

2. A traction wheel comprising a hub, spokes and rim, and a tire built up of hollow blocks having recesses adapted to engage the road bed.

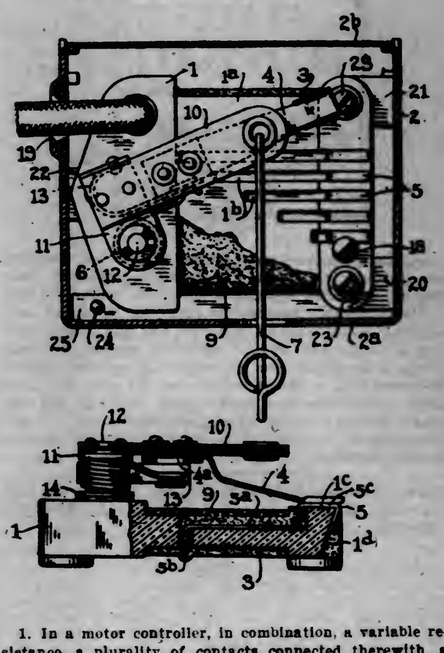
3. A vehicle wheel having a tire rigidly built up of separable hollow blocks presenting cups to the road bed.

4. A vehicle wheel having a tire or tread portion with a series of open cups and some of said cups capable of individual adjustable projection beyond the mean surface of the tread.

5. The combination with a traction wheel, of a series of tubes extending through the tread of the wheel and adjustable in radial position, substantially as described.

[Claim 6 not printed in the Gazette.]

1,269,183. CONTROLLER. ALBERT J. HORTON, White Plains, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed May 11, 1916. Serial No. 96,955. (Cl. 219—55.)



1. In a motor controller, in combination, a variable resistance, a plurality of contacts connected therewith, a controlling member to coöperate with said contacts, means biasing said member with respect to said contacts and a circuit making device associated with said member and effective upon failure of said biasing means to interrupt the circuit of said member.

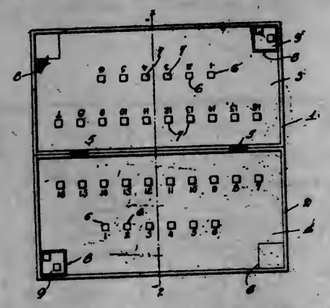
5. In a motor controller, in combination, an insulating base having a recessed and beveled end portion and a reduced intermediate portion longitudinally serrated by slots of graduated lengths, conductive strips lying in said slots and having their outer terminals bent about said end portion to mechanically clamp the same thereto while providing contacts, a resistance element coiled about said base and connected at different points with the respective inner terminals of said strips, a controlling member pivotally mounted upon said base and movable for selectively engaging said contacts and means biasing said member against movement in one direction, said controlling member having an electrical connection dependent on said biasing means.

9. In combination, a fixed contact, a movable arm carrying a contact for engaging said fixed contact, means biasing said arm against such engagement and circuit making means carried by said arm for engaging said movable contact and operating to disengage the same upon failure of said biasing means.

10. In combination, coöperating fixed and movable contacts, a fixed stud, an insulating arm pivotally mounted thereon for supporting said movable contact, an electrically connected resilient member carried by said arm for engaging said movable contact but biased therefrom, and a preponderant spring coiled about said stud for holding said member in engagement with said movable contact while biasing the latter against engagement with said fixed contact, whereby failure of said coiled spring releases said member for disengaging said movable contact.

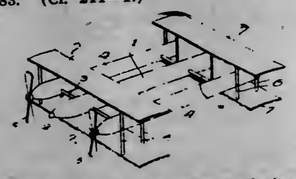
[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,269,184. GAME. EDWARD J. HOWLEY, Struthers, Ohio. Filed Sept. 11, 1916. Serial No. 119,531. (Cl. 46—64.)



A game comprising a rectangular game board including two separate containers having their proximate walls hingedly connected together whereby the containers may be folded together to close the game, the bottom of each container being provided adjacent the said hinged wall with a longitudinal row of ordinaled squares, a second shorter longitudinal row approximately midway between the outer wall of the container and the said first mentioned longitudinal row, each outside corner of the containers having a square marked off therein, and a receptacle adapted to be placed in either of the said squares in each container.

1,269,185. AERIAL TORPEDO. EDWARD HATELEY HUGHES, Canton, Ohio. Filed July 6, 1917. Serial No. 178,983. (Cl. 244—1.)



1. An aerial torpedo including an explosive shell, motive means arranged upon the opposite sides of said shell, supporting means secured to the forward and rear portions of the motive means, and air planes carried upon the extremities of said supporting means and arranged in spaced relation to the motive means and shell.

3. An aerial torpedo, including an explosive shell, supporting bars arranged transversely of the forward and rear portions of the said shell, motive means arranged upon the opposite ends of the supporting bars, vertical standards secured to the forward and rear portions of the motive means, certain of said standards being of greater length than others, and air planes secured to the ends of said standards.

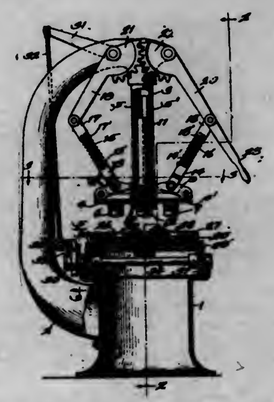
[Claim 2 not printed in the Gazette.]

1,269,186. PRESS. EMIL G. JOHANSON, Chicago, Ill. Filed Dec. 6, 1917. Serial No. 205,802. (Cl. 49—37.)

1. A press including two relatively movable plungers; a third plunger movable with respect to each of the aforesaid plungers; two levers for effecting operation of the aforesaid plungers, one connected with each of the first aforesaid plungers and both connected with the third plunger; and mechanism for effecting plunger actuating operation of the levers.

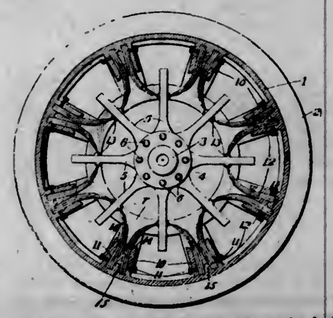
2. A press including two plungers; a third plunger movable with respect to each of the aforesaid plungers; two levers for effecting operation of the aforesaid plungers, one connected with each of the first aforesaid plungers and both connected with the third plunger; and mechanism for effecting plunger actuating operation of the levers.

3. A press including two relatively movable plungers; a third plunger movable with respect to each of the aforesaid plungers; two levers for effecting operation of the aforesaid plungers, one connected with each of the first aforesaid plungers and both connected with the third plunger; two operating levers for operating the aforesaid levers; two intermeshing gears, one connected with each of said operating levers; and links connecting the first mentioned levers with the last mentioned levers.



4. A press including two plungers a third plunger movable with respect to each of the aforesaid plungers; two levers for effecting operation of the aforesaid plungers, one connected with each of the first aforesaid plungers and both connected with the third plunger; two operating levers for operating the aforesaid levers; two intermeshing gears, one connected with each of said operating levers; and links connecting the first mentioned levers with the last mentioned levers.

1,269,187. RESILIENT WHEEL. JOHN JOHNSON, Honolulu, Hawaii. Filed Nov. 25, 1916, Serial No. 133,417. Renewed Mar. 1, 1918. Serial No. 219,870. (Cl. 152—28.)



1. In a resilient wheel, the combination of a hub, spokes having a rigid relation thereto and extending radially therefrom and each having substantially flat working faces, said spokes terminating short of the rim, a tire carrying rim freely encircling the hub and extremities of the spokes, lugs arranged at intervals on the inner face of the rim and each formed with a plurality of spring receiving sockets, leaf springs having portions thereof held in said sockets and having their inner portions diverging on curvilinear lines and provided at their free extremities with friction shoes, each of the spokes being frictionally held between a pair of said shoes, and annular housing plates inclosing said lugs and portions of the springs and also overlapping the end portions of the spokes to prevent relative lateral movement between the hub and rim.

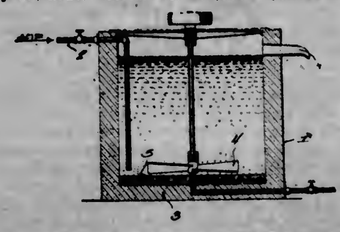
2. In a resilient wheel, the combination of a hub, spokes having a rigid relation thereto and extending radially therefrom and each having substantially flat working faces, said spokes terminating short of the rim, a tire carrying rim freely encircling the hub and extremities of the spokes, lugs arranged at intervals on the inner faces of the rim and each formed with a plurality of spring receiving sockets, leaf springs having portions thereof held in said sockets and having their inner portions diverging on curvilinear lines and provided at their free extremities with friction shoes, each of the spokes being frictionally held between a pair of said shoes, and annular housing plates inclosing said lugs and portions of the springs and also overlapping the end portions of the spokes to prevent relative lateral movement between the hub and rim, each of the spokes having its outer end portion positioned and working between the housing plates and adjacent lugs and adapted to be limited in its circumferential movement in both directions by said lugs.

1,269,188. WRENCH. OSCAR A. JOHNSON, Napoleon, N. D. Filed May 14, 1917. Serial No. 168,529. (Cl. 81—126.)



A wrench comprising a fixed and a movable jaw, a casing including an end wall integrally formed with the fixed jaw, a bifurcated guide member integrally formed with the fixed jaw and projecting at right angles therefrom, removable plates attached to the said walls and the sides of said guide member a second end wall having a tongue received between the ends of the bifurcated guides, the two end walls being curved and projected toward each other to provide a restricted opening communicating with the space between the said removable plates, a slidable jaw mounted in the said bifurcated guide member, and a handle pivoted in the said restricted opening and connected to the said jaw for moving the same toward and away from the said end walls to move the nut engaging faces of the said jaw toward and away from each other.

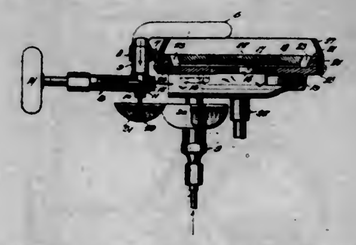
1,269,189. METHOD OF RECOVERING FERTILIZING MATERIAL FROM TANNERY WASTE LIQUIDS. VICTOR H. KADISH, Milwaukee, Wis., assignor of one-half to Halbert L. Kadish, Milwaukee, Wis. Filed May 31, 1917. Serial No. 171,805. (Cl. 71—6.)



1. The method of recovering fertilizing material from tannery sulfid liquor waste which consists in adding an acid to the liquor in sufficient quantities to neutralise its alkalinity and to precipitate said material, and thereafter separating the precipitated material from the liquid.

[Claims 2 and 3 not printed in the Gazette.]

1,269,190. LIQUID-FUEL BURNER. EDWARD C. KAHN, Milwaukee, Wis. Filed May 28, 1917. Serial No. 171,338. (Cl. 158—65.)

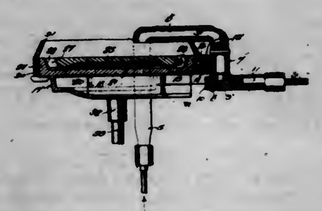


1. In an oil burner, a mixing chamber having an outlet opening, partitions in the mixing chamber defining a series of communicating compartments each in communication with said outlet opening, and an inlet communicating with one of said compartments.

10. An oil burner of the class described, comprising a circular dished plate provided with a central aperture, a distributing burner cap seated in the dished plate and evenly spaced from the peripheral wall thereof, a mixing and expansion chamber formed on the under side of said plate, a pair of partitions extending from the inner portion of said chamber to a point outward of the peripheral wall thereof, said partitions defining a series of communicating compartments each communicating with said central aperture, the central compartment defined by said partitions providing an inlet opening, a spray nozzle in line with the open mouth of said central compartment, a super-heating pipe connected with the spray nozzle and having a portion thereof disposed over the distributing burner cap, and a source of supply connected with said super-heating pipe.

[Claims 2 to 9 not printed in the Gazette.]

1,269,191. LIQUID-FUEL BURNER. EDWARD C. KAHN, Milwaukee, Wis. Filed Sept. 4, 1917. Serial No. 189,511. (Cl. 158—71.)



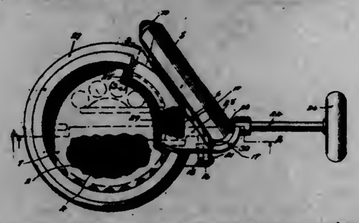
2. In a burner, a mixing chamber, a pair of partitions in the chamber having their inner ends spaced from the rear portion of the peripheral side wall of said chamber and their outer ends outward of said mixing chamber whereby to provide an intake opening, said partitions defining the mixing chamber into a series of communicating compartments, a baffle plate disposed intermediate the communication of said compartments, and said central compartment having its inner portion of greater volume than its mouth, substantially as described.

3. In a burner, a mixing chamber and burner head comprising a circular dish plate having a series of apertures therein, a distributing burner cap seated in the

dish plate, a circular mixing and expansion chamber formed on the under side of said plate, said mixing and expansion chamber being divided into a series of compartments, the outermost of said compartments registering with the apertures of said dish plate, an inlet opening formed by the central compartment of said mixing chamber, and means in said mixing chamber whereby to prevent the accumulation of gas pockets, substantially as described.

[Claims 1 and 4 not printed in the Gazette.]

1,269,192. LIQUID-FUEL BURNER. EDWARD C. KAHN, Milwaukee, Wis. Filed Jan. 25, 1918. Serial No. 213,660. (Cl. 158—71.)



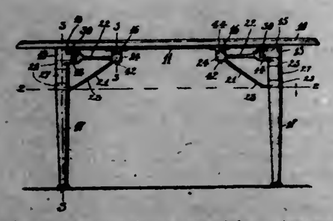
1. In a device of the class described, a one-piece combined vaporizing tube and discharge nozzle comprising a pipe open at both ends and internally screw threaded adjacent its opposite ends, one end portion being reduced in diameter, said reduced end portion having transversely extending alined openings, one of said openings forming a fuel discharge port, an outwardly extending internally threaded sleeve surrounding the opposite opening, a threaded valve stem disposed through said sleeve and having a valve head to control the discharge port, a closure plug screwed in the reduced end of the pipe, and a coupling screwed into the opposite end of said pipe.

3. In a device of the class described, a fuel burner having a burner outlet around its peripheral edge, a vaporizing pipe disposed outwardly of the burner, means for controlling the discharge of vaporized fuel from said pipe to the burner, a split open topped hood surrounding said burner outlet, the interruption therein being adjacent said pipe, a substantially horizontal flange connecting the ends of said hood, and an apron depending from the inner edge of said flange inwardly of said burner outlet, said flange and apron deflecting the flames outwardly toward said pipe.

5. In a device of the class described, a burner head, a vaporizing pipe therefor, and means for adjustably mounting said pipe on the burner head including a socket formed on one, a stud carried by the other and rotatable in said socket, an arm extending from the pipe, and means on the arm for engagement with the burner head.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,269,193. KNOCKDOWN TABLE AND THE LIKE. GROVER C. KELLY, Buffalo, N. Y. Filed Apr. 24, 1916. Serial No. 93,243. (Cl. 45—48.)



1. An article of furniture comprising a top member having sockets, two pairs of connected legs, a swinging brace member applied to each leg, a dove-tailed connection between said top member and the free or outer end of said brace member, and means for detachably fitting the upper ends of said legs into said sockets.

3. A knock-down table comprising a table top having sockets provided with horisontal notches, table legs having their upper ends slidably retained in said sockets, and swinging elements on said table legs having hook-shaped portions adapted to enter the notches of said sockets.

9. A knock-down table comprising a table top, two pairs of connected legs connected to said table top and a swinging element on each of said table legs, each swinging element having its axis coincident with the axis of the leg on which it swings and being adapted to lock and brace the table top to said leg and to be locked in position between a pair of connected legs when disconnecting the legs from the table top.

[Claims 2 and 4 to 8 not printed in the Gazette.]

1,269,194. WINDING DEVICE. GEORGE E. KING, Newton, Mass., assignor to The Gamewell Fire Alarm Telegraph Company, Newton Upper Falls, Mass., a Corporation of New York. Filed May 28, 1917. Serial No. 171,600. (Cl. 74—33.)

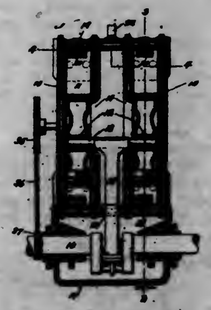


1. A folding winding-device including a hub adapted for engagement with a winding shaft, a handle having resilient means engaging said hub, and coacting therewith to be maintained in certain definite positions relative thereto, and to be prevented from being maintained in certain other positions relative thereto.

7. A folding winding device including a hub adapted for engagement with a winding shaft, a handle formed of a resilient plate reflexed to form two substantially parallel arms movably engaging said hub and coacting therewith to be maintained in certain definite positions relative thereto, and to be prevented from being maintained in other relative positions thereto.

[Claims 2 to 6 not printed in the Gazette.]

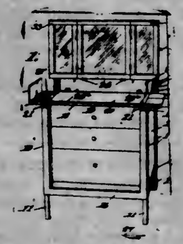
1,269,195. INTERNAL-COMBUSTION ENGINE. MARION M. MCCOY, Dawson, N. Mex., assignor of one-half to G. A. Will, St. Louis, Mo. Filed Nov. 27, 1916. Serial No. 133,751. (Cl. 123—57.)



1. In an internal combustion engine, a pair of cylinders arranged side by side, there being vertically disposed openings formed in the adjacent walls of said cylinders, a plate applied to the upper ends of the cylinders for closing the combustion chambers therein, a crank case applied to the lower ends of the cylinders, a portion of which crank case constitutes a plate to close the lower ends of the combustion chambers in said cylinders, there being an opening in said plate between the cylinders, a double-headed piston arranged for operation within each cylinder, a shaft connecting the central portions of the piston, which shaft passes through the slots in the walls of the cylinders, a pitman journaled on the central portion of said shaft, which pitman passes through the opening in the top of the crank case, a crank shaft arranged for operation within the crank case to which shaft the lower end of the pitman is connected, valves arranged at both ends of the cylinders for controlling the inlet of explosive vapor into said cylinders and the discharge of burnt gases from said cylinders, housings fixed to the engine cylinders, a cam shaft journaled in said housings, cams on said shaft within said housings, and valve stems extending from the inlet and exhaust valves into said housings, the inner ends of which valve stems normally engage the cams in said housings.

2. In an internal combustion engine, a pair of cylinders arranged side by side, there being vertically disposed openings formed in the adjacent walls of said cylinders, a plate applied to the upper ends of the cylinders for closing the combustion chambers therein, a crank case applied to the lower ends of the cylinders, a portion of which crank case constitutes a plate to close the lower ends of the combustion chambers in said cylinders, there being an opening in said plate between the cylinders, a double-headed piston arranged for operation within each cylinder, a shaft connecting the central portions of the piston, which shaft passes through the slots in the walls of the cylinders, a pitman journaled on the central portion of said shaft, which pitman passes through the opening in the top of the crank case, a crank shaft arranged for operation within the crank case to which shaft the lower end of the pitman is connected, plates secured to the cylinders for closing the space in which the pitman operates, inlet and exhaust valves arranged at both ends of both cylinders for controlling the inlet of explosive vapor into the ends of each combustion chamber and for controlling the discharge of burnt gases from said chamber, housings fixed to the engine cylinders, valve stems carried by the inlet and exhaust valves, which stems extend into the housings, a cam shaft journaled in said housings, cams on said shaft within the housings, which cams engage the inner ends of the valve stems, and a driving connection from the crank shaft to said cam shaft.

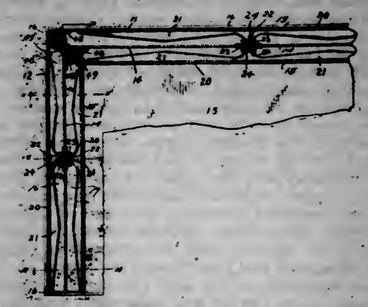
1,269,196. COMBINED TRUNK AND DRESSER. SIMON R. MAKI, Ishpeming, Mich. Filed May 19, 1917. Serial No. 169,751. (Cl. 190—5.)



In a combined trunk and dresser, a frame having ends and a rear side, a front slidably mounted in the frame, extensions carried by the front forming a part of the dresser top when said front is employed as the top of the dresser, a cover, a mirror seated therein, means for holding the mirror in its seated position, arms hingedly connecting the mirror to the cover, and means hinged to the slidable front for supporting the said mirror in its extended position.

1,269,197. HEAT-INSULATING CONTAINER. JOHN J. MENDENHALL, Raiford, Fla. Filed Apr. 3, 1917. Serial No. 159,459. (Cl. 220—5.)

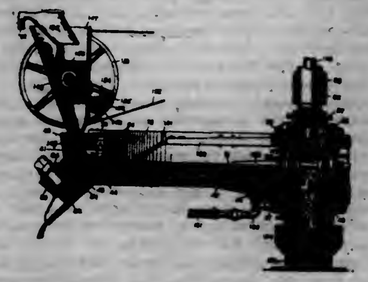
1. In a heat-insulating container, the combination of a plurality of spaced-apart wall sections, bracing plates secured against the inner opposite faces of said wall sections and provided with outstanding ribs for reinforcing the wall sections and having opposed inwardly extending projections, supports arranged between the opposed projections, boxings on the supports in line with the projections, a heat-insulating material in the boxings, and bearing plates in the boxings against the material and adapted to receive the projections thereagainst to brace the same against each other.



2. In a heat-insulating container, the combination of a plurality of spaced-apart wall sections, bracing plates secured against the inner opposite faces of the wall sections and provided with pluralities of registering ribs of pressed formation adapted to hold the wall sections from bending, said plates being also provided with inwardly extending projections adapted to register transversely, supports between the bracing plates and a heat-insulating material carried by the supports between said projections for holding the same in spaced-apart relation and for bracing the wall sections.

[Claims 3 to 7 not printed in the Gazette.]

1,269,198. MINERAL-CONCENTRATOR. CHARLES O. MICHAELSEN and WILLIAM P. MICHAELSEN, Minneapolis, Minn., assignors to Michaelsen Machinery Company, a Corporation of Nevada. Filed Sept. 7, 1916. Serial No. 118,939. (Cl. 83—88.)



1. In a mineral concentrator, a pan mounted to oscillate about a vertical axis, said pan having an annular trough disposed marginally thereof and the bottom of the pan sloping inwardly and downwardly from the inner edge of said annular trough, means for feeding materials into said annular trough, means forming a discharge outlet from the bottom of said annular trough, means forming two outlets from the pan at the central part thereof, one of said outlets being at a higher level than the other, and means for receiving materials from the lower of said outlets and returning the same to the annular trough.

3. In a machine of the class described, a pan mounted to oscillate about a vertical axis, said pan having an annular conical portion, an annular trough encircling said conical portion and adapted to overflow uniformly onto the upper peripheral part thereof, and an outer rim extending above the level of the inner margin of the trough, a continuous baffle-ring supported from the upper part of

the outer rim and disposed concentrically therewith and so as to dip into the annular trough to a level below the inner margin thereof, and means for feeding materials into the trough between the outer rim and the baffle-ring, whereby said materials pass beneath the submerged lower edge of the ring before flowing onto the conical pan-portion.

4. In a machine of the class described, a horizontally disposed pan mounted to oscillate about a vertical axis, said pan having an annular conical concave portion, an axial opening through the bottom thereof, and an annular trough surrounding said conical portion, a tubular rotary member disposed axially of the pan, a cross-shaft extending transversely above the pan, driving connections between said cross-shaft and tubular member, sweep-arms connected with said member and having portions movable in the annular trough, means for feeding materials into the trough so that the same will flow therefrom inwardly over the surface of the conical portion, a discharge-pipe extending through the bottom-opening of the pan in spaced relation to the edges of said opening, a tubular valve-member disposed around the upper portion of the discharge-pipe and adapted to stop-off the opening around said pipe through the bottom of the pan, means extending up from said valve-member through the tubular rotary member and connecting with the cross-shaft to support the valve-member therefrom, and means for varying the relation of said connecting means and the cross-shaft to raise and lower the valve-member and vary the extent of the opening around the discharge-pipe.

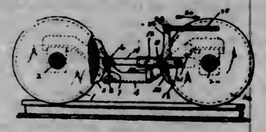
5. In a machine of the class described, a horizontally disposed pan comprising an annular trough having a substantially cylindrical outer rim, and a relatively flat conical body-portion sloping inwardly and downwardly from the inner margin of the annular trough, said inner margin of the trough being lower than the outer rim whereby fluid materials placed in the trough will fill the same to the level of said margin and then flow inwardly over said margin and down the sloping body-portion toward the center of the pan, a continuous baffle-ring arranged to dip within the annular trough and extend below the level of the inner margin thereof, means for feeding materials into the trough outside the baffle-ring, whereby said materials must pass beneath said ring in flowing to the inner margin of the trough, means for agitating materials within the pan, means forming an annular discharge opening at the central lowermost portion of the pan, and means forming a discharge passage at the center of the pan and opening thereto at a higher level than that of the first-named discharge passage.

7. In a mineral concentrator, in combination, primary separation means comprising an oscillatory receptacle, means for feeding materials thereto, means for discharging concentrates from the bottom thereof, and means for controlling a marginal overflow of materials therefrom; secondary separation means comprising a receptacle receiving the overflow from the primary receptacle, means for agitating said materials, means for discharging partially-concentrated materials from the bottom thereof, and means for discharging waste material at a level above that for discharging the partially-concentrated materials; and means for returning the partially-concentrated materials to the primary separation means to be rehandled therein.

[Claims 2 and 6 not printed in the Gazette.]

1,269,199. BRAKE MECHANISM. PORTER S. MORGAN, Norwalk, Conn., assignor, by direct and mesne assignments, to Momentum Brake Corporation, a Corporation of New York. Filed May 12, 1915. Serial No. 27,523. (Cl. 188—24.)

1. The combination with two rotary elements, of a tiltable lever, a frictional member co-acting with each of said rotary elements, said two frictional members being attached to said lever at two distinct points whereby upon tilting of said lever the points of attachment of said frictional members are caused to move in the same angular direction to different distances so as to initially apply said frictional members to said rotary elements, and means coöperating with said lever for causing said points of attachment to move farther in the direction of rotation of said rotary elements after engagement therewith.



2. The combination with two rotary elements, of a tiltable lever, a frictional member co-acting with each of said rotary elements, said two frictional members being attached to said lever at two distinct points, whereby upon tilting of said lever the points of attachment of said frictional members are caused to move to different distances so as to initially apply said frictional members to said rotary elements, and means coöperating with said lever for causing said points of attachment to move farther in the direction of rotation of said rotary elements after engagement therewith.

3. The combination with two rotary elements, of frictional members adapted to be applied thereto for retarding the movement thereof, a tiltable lever to which said frictional members are attached at two distinct points, stationary fulcrums coöperating with said lever and adapted to serve as an anchorage for either end thereof so that a tilting of said lever causes the points of attachment of said frictional members to move to different distances, and means connected to said lever for tilting the same, at will, whereby said frictional members are caused to engage said rotary elements, the movement of one of said rotary elements then causing the points of attachment to further move in the direction of rotation thereof.

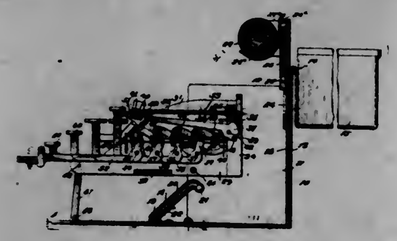
4. The combination with two rotary elements, of a frictional member coöperating with each of the same, a connection between said two members to cause the same to move simultaneously into contact with said elements, and means co-acting with one of said frictional members for causing the same, after contact, to move in the direction of rotation of its rotary element for causing the said frictional member to retard its rotary element, the connection between said two frictional members at the same time applying the other frictional member to its rotary element.

5. The combination with two rotary elements, of a frictional member coöperating with each of the same, means for bringing said members simultaneously into contact with said elements, and means for causing one of said frictional members to move, after contact, in the direction of rotation of its rotary element so as to retard the rotation thereof, the other frictional member being at the same time applied to its rotary element.

[Claims 6 to 9 not printed in the Gazette.]

1,269,200. TYPE-WRITING MACHINE. CHARLES PHILO MOSHER, Groton, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Original application filed Oct. 16, 1915, Serial No. 56,242. Divided and this application filed Nov. 13, 1915. Serial No. 61,292. (Cl. 197—28.)

1. In a type action, the combination of upwardly and rearwardly movable type-bars, a plurality of groups of bell-crank levers pivotally supported beneath and closely adjacent to the type-bars, said levers having depending arms and rearwardly extending arms, a plurality of groups of links pivotally connected at their rear ends with the type-bars, the forward ends of the links of each group being pivotally connected with the rearwardly extending arms of one of the groups of bell-crank levers, groups of key-operated levers having upwardly extending portions supporting keys in banks and having horizontal portions of equal lengths extending rearwardly below the type-bars, the horizontally extending portions of the levers of each group being pivotally supported below and closely adjacent the coöperating group of bell-crank levers and formed with upwardly extending cam portions adapted to engage cam edges on the depending arms of the bell-crank levers.

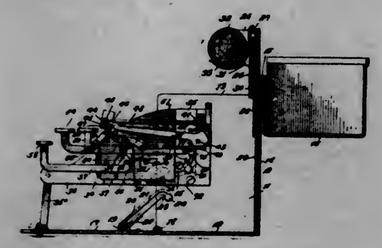


3. In a typewriting machine, the combination of a plurality of supports arranged horizontally and in parallel relation, bell-crank levers mounted upon said supports, type-bars, links operatively connecting the bell-crank levers to the type-bars, a plurality of supports arranged in horizontal parallel relation below the supports of the bell-crank levers, and key-operated levers pivotally held on said last-mentioned supports and having means to engage the bell-crank levers and impart an accelerated movement thereto.

7. In a typewriting machine, the combination of a support, four rods arranged in parallel relation on the support, auxiliary levers pivotally held to said rods and arranged in banks thereon, each auxiliary lever having a cam edge, type-bars pivotally held on said support, a link connecting each type-bar to one of the auxiliary levers, said links of the different banks or groups being of relatively different lengths, four rods arranged in parallel relation extending transversely of the machine, and key-operated levers pivotally held in banks on said latter rods and each having ends provided with a cam edge adapted to engage the cam edge of a bell-crank lever and adapted when depressed to impart an eccelerated movement thereto and through a link impart a similar movement to its coöperating type-bar.

[Claims 2, 4 to 6, and 8 to 12 not printed in the Gazette.]

1,269,201. TYPE-WRITING MACHINE. CHARLES PHILO MOSHER, Groton, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Filed Nov. 27, 1915. Serial No. 63,736. (Cl. 197—74.)



5. In a typewriting machine, the combination of a foldable support, a platen carriage, a type segment mounted on the foldable support, and case-shift mechanism also mounted on the support.

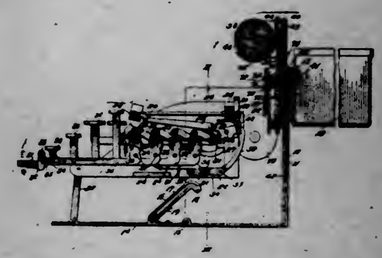
8. In a typewriting machine, the combination of a normally stationary support, a platen carriage movable along said support, a foldable support pivotally held to the stationary support, a type segment, and case shift mechanism mounted entirely upon the foldable support to partake of its folding movement.

16. In a typewriting machine, the combination of a support, a carriage adapted to move along said support, a vertically movable segment, type-bars pivotally held to the segment, means for operating the type-bars, a lug carried by the segment, stops arranged on opposite sides of the lug to position the segment in its normal and shifted positions, a shift lever, and a supplemental lever having a connection with the shift lever and having one end thereof adapted to engage the lug of the segment to adapt the segment to be elevated when the shift lever is depressed.

19. In a typewriting machine, the combination of a type segment support, a shift lever, and a supplemental lever adapted to lift said type segment support and having a shiftable point of connection with the shift lever and a shifting fulcrum.

[Claims 1 to 4, 6, 7, 9 to 15, 17, 18, and 20 to 24 not printed in the Gazette.]

1,269,202. TYPE-WRITING MACHINE. CHARLES PHILO MOSHER, Groton, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Original application filed Oct. 16, 1915, Serial No. 56,242. Divided and this application filed Nov. 27, 1915. Serial No. 63,737. (Cl. 197—82.)



1. In a visible typewriting machine, the combination of a platen carriage, type-bars having an upward and rearward movement, key-operated levers forming a part of a universal keyboard and operatively connected to the type-bars, a foldable support on which the type-bars and key-operated levers are mounted and which partake of the foldable movement of said support, a universal bar movably held upon said foldable support, escapement mechanism normally maintained in a fixed relation to the platen carriage and adapted to permit said carriage to have letter-spacing movement, and means operatively connecting the universal bar to the escapement mechanism to adapt the escapement mechanism to be operated each time a key-operated lever is depressed and which permits the keys of the keyboard to be moved into close relation to the platen carriage and the coöperative relation between the universal bar and the escapement mechanism maintained.

6. In a visible typewriting machine, the combination of a platen carriage, a foldable support movable relatively to said platen carriage, type, key-operated levers forming a part of a universal keyboard and operatively connected to said type to move the same toward the platen and mounted with the type upon said foldable support, a universal bar, escapement mechanism for letter spacing the carriage, and a two-part non-separable foldable mechanism operatively connecting the universal bar and the escapement mechanism, a part of said mechanism being mounted on said foldable support and foldable therewith.

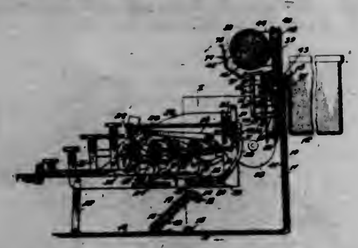
7. In a visible typewriting machine, the combination of supporting means, a platen carriage movable along said supporting means, rotary escapement mechanism for letter spacing the carriage, a foldable support, a universal bar mounted upon said support, key-operated levers forming a part of a universal keyboard mounted upon said foldable support, type-bars one for each key-operated

lever also mounted upon said support and adapted to operate the universal bar, and foldable and operative mechanism connecting the universal bar to the escapement mechanism.

37. In a typewriting machine, the combination of a support, a platen carriage mounted on the support, escapement mechanism mounted on the support, a foldable keyboard, a universal bar foldable with the keyboard, a lever pivotally held to the support intermediate its ends and operatively connected to actuate the escapement mechanism, two relatively movable cam members, one of which has a foldable connection with said lever, and means operated by the universal bar for causing a relative movement between said cam members for actuating the lever.

[Claims 2 to 5 and 8 to 36 not printed in the Gazette.]

1,269,203. TYPE-WRITING MACHINE. CHARLES PHILO MOSHER, Groton, N. Y., assignor to Corona Typewriter Company, Inc., a Corporation of New York. Original application filed Oct. 16, 1915, Serial No. 56,242. Divided and this application filed Dec. 20, 1915. Serial No. 67,812. (Cl. 197—115.)



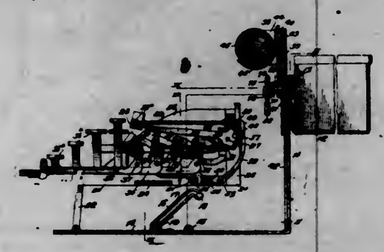
1. In a visible typewriting machine, the combination of a platen carriage, type-bars having an upward and rearward movement, key-operated levers forming a part of a universal keyboard and operatively connected to the type-bars, a foldable support on which the type-bars and key-operated levers are mounted and which partake of the foldable movement of said support, a universal bar movably held upon said foldable support, ribbon mechanism normally maintained in a fixed relation to the platen carriage and adapted to move the ribbon lengthwise of the carriage and to vibrate the ribbon to cover and uncover the printing point, and means operatively connecting the universal bar to the ribbon mechanism to adapt said mechanism to be operated each time a key-operated lever is depressed and which permits the keys of the keyboard to be moved into close relation to the platen carriage and the coöperative relation between the universal bar and the ribbon mechanism maintained.

15. In a visible typewriting machine, the combination of supporting means, a platen carriage movable along said supporting means, ribbon mechanism, a universal bar, key-operated levers forming a part of a universal keyboard, type-bars one for each key-operated lever, and non-separable foldable operative mechanism connecting the universal bar to the ribbon mechanism.

58. In a typewriting machine, the combination of a frame, ribbon mechanism for feeding a ribbon lengthwise mounted on said frame, a rotatable shaft journaled in the frame transversely of the machine, key-operated levers, a universal bar operatively connected to be moved when said key levers are actuated, a foldable support for the key levers and universal bar loosely pivoted on said shaft, means actuated by the universal bar for rotating said shaft, said means maintaining a constant operative connection between the bar and shaft, and means operated by said shaft for actuating the ribbon feeding mechanism, said means maintaining a constant operative connection between said rotatable shaft and ribbon feeding mechanism.

[Claims 2 to 14 and 16 to 57 not printed in the Gazette.]

1,269,204. TYPE-WRITING MACHINE. CHARLES PHILO MOSHER, Groton, N. Y., assignor to Corona Typewriter Co., Inc., a Corporation of New York. Original application filed Oct. 16, 1915, Serial No. 56,242. Divided and this application filed Dec. 24, 1915. Serial No. 68,536. (Cl. 197—97.)



1. In a visible typewriting machine, the combination of a platen carriage, a foldable support movable relatively to said platen carriage, types, key-operated levers forming a part of a universal keyboard and operatively connected to said types to move the same toward the platen and mounted with the types upon said foldable support, a universal bar, and a two-part foldable mechanism operated by the universal bar, a part of said mechanism being mounted on said foldable support and foldable therewith away from the platen carriage.

3. In a visible typewriting machine, the combination of supporting means, a platen carriage movable along said supporting means, mechanism, a shaft operatively connected to move said mechanism, a bell-crank lever having one of its arms engaging a part of said shaft to move the same and having its other arm slotted, a sliding cam member having a grooved portion engaged by said slotted end of the bell-crank lever, a spring normally forcing said member in one direction, a rotary shaft extending transversely of the machine, a cam member held to said shaft and adapted to move the first-mentioned cam member against the tension of the spring to move the bell-crank lever, arms projecting outward from said rotary shaft and provided with pins, a rod, arms having slotted ends held to said rod and engaging said pins, upwardly extending arms held to said rod, a pivotally held universal bar adapted when moved to move said last-mentioned arms and thereby rotate the cam member carrying shaft, and key-operated levers operatively connected to move the universal bar when depressed.

27. In a typewriting machine, the combination of a platen carriage, mechanism coöperating with said carriage, foldable key-operated levers forming a part of a standard keyboard, and two coöperating relatively movable and rotatable cam members, one connected to the key-operated levers to be operated thereby, and the other connected to operate said mechanism, the axis of the cam members being coincident with the line of fold of the key-operated levers.

[Claims 2 and 4 to 26 not printed in the Gazette.]

1,269,205. COLLAR-SPREADER. LOUIS C. NEFF, Brooklyn, N. Y. Filed Apr. 7, 1915. Serial No. 19,799. (Cl. 68—7.)



1. A collar spreader consisting of oppositely disposed coöperating members, one of said members having an opening therein, and the other of said members having a projection adapted to enter said opening, the width of said opening being greater than that of said member adapted to enter same whereby the fabric of the collar band is permitted to slide between said members as said projection enters said opening.

2. A collar spreader consisting of oppositely disposed coöperating members, one of said members having an elongated opening therein, and the other of said members having a projection of gradually increased height toward one end thereof adapted to enter said opening, the width of said opening being greater than that of said member adapted to enter the same whereby the fabric of the collar band is permitted to slide between said members as said projection enters said opening.

3. A collar spreader consisting of oppositely disposed coöperating members, one of said members having an opening therein, and the other of said members having a projection adapted to enter said opening, the width of said opening being greater than that of said member adapted to enter same whereby the fabric of the collar band is permitted to slide between said members as said projection enters said opening, said members being provided with oppositely disposed surfaces and adapted to limit the extent of penetration of said projection into said opening.

6. A collar spreader consisting of oppositely disposed coöperating members, one of said members having an elongated opening therein and bearing surfaces upon opposite sides thereof and the other of said members having a projection of gradually increased height toward one end thereof adapted to enter said opening and stop shoulders upon opposite sides of said projection adapted to engage said bearing surfaces upon the other member and limit the extent of penetration of said projection into said opening, the width of said opening being greater than that of said member adapted to enter the same and the edges of said opening and the top of said projection being rounded whereby the fabric of the collar band is permitted to slide between said members as said projection enters said opening.

11. A collar spreader consisting of oppositely disposed jaws, pivotally connected lever handles adapted to open and close said jaws, one of said jaws having an opening therein with bearing surfaces upon opposite sides of said opening, and the other of said jaws having a projection thereon adapted to enter said opening and stop shoulders adapted to engage said bearing surfaces whereby the extent of penetration of said projection into said opening is limited, the width of said projection being less than that of said opening whereby the fabric of the band of a collar is permitted to slide between said jaws while they are being closed to prevent the breaking or stretching of said fabric and a stop gage for accurately positioning the collar band with relation to said jaws and the pivotal connection of said members.

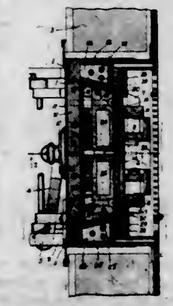
[Claims 4, 5, 7 to 10, and 12 not printed in the Gazette.]

1,269,206. SAFE OR VAULT CONSTRUCTION. GEORGE A. NEEDHAM, Brooklyn, N. Y. Filed Nov. 3, 1914. Serial No. 870,012. (Cl. 109—1.)

1. In a safe or vault, a door having a front section formed of armor steel, a section formed of chrome steel secured thereto behind the same, and other sections secured behind and to said chrome steel section, including a second section of chrome steel separated from said first chrome steel section, and an integral section of cast steel between said chrome steel sections, said cast steel section containing a core of difficultly-fusible material entirely inclosed within the same, substantially as set forth.

2. In a safe or vault, the combination of a door formed of rigidly connected sections, having locking means carried by the rear section, a spindle for operating said locking means, extending through said sections, means for preventing explosives introduced between said spindle and its bearing from destroying a rear section, and means in line with said locking means for protecting the same from attack by heat, substantially as set forth.

3. In a safe or vault, the combination of a frame having a door jamb formed of a plurality of sections rigidly secured together, comprising a forward member designed to be proof against attack by the application of heat and a rear member of difficultly machinable metal, and a door adapted to seat in said door jamb, formed of a plurality of sections rigidly secured together, said door carrying locking means on the rear thereof, and comprising members of difficultly machinable metal, and a member directly in front of said locking means, designed to withstand attack by the application of heat, substantially as set forth.



4. In a safe or vault, a door having a front section, an explosive chamber to the rear of the front section, and an integral cast-metal member to the rear of said chamber having a recess within the mass of the same, and a core member of difficultly-fusible material in said recess entirely, said recess being behind and in line with said chamber, substantially as set forth.

5. In a safe or vault, a door having front and rear sections arranged to provide an explosive chamber between the same, a cylindrical member extending through the door from front to back, and a plate within the body of the door through which said cylindrical member extends, said plate having a recess in its forward side surrounding said cylindrical member, and a channel in its forward side extending from said recess to said chamber, substantially as set forth.

1,269,207. TOILET-BOX. MICHAEL J. NOLAN, Chicago, Ill. Filed Nov. 6, 1916. Serial No. 129,732. (Cl. 220—14.)

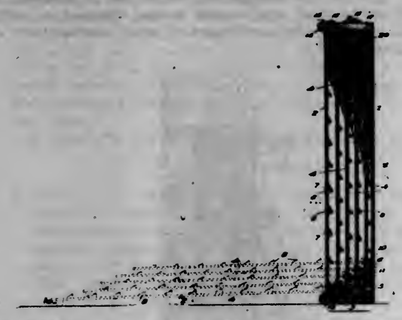


A toilet box of the character described, comprising shells of equal diameters arranged in axial alinement with each other and disposed end to end, a disk like partition interposed between the adjacent inner ends of said shells, the peripheral edge of the partition being flush with the outer surfaces of the shells and the inner ends of the latter abutting said partition, a relatively wide band concentrically of the shells medially thereof and overlapping the same a distance above and below the partition, and covers having rims removably telescoped over the outer ends of said shells with the outer faces of said rims and bands flush with each other.

1,269,208. MOLDING-DISPLAY CABINET. GEORGE OHDE, Jr., and WILLIAM OHDE, Manning, Ohio. Filed Mar. 20, 1917. Serial No. 156,015. (Cl. 211—16.)

2. A molding display cabinet comprising a front drop-leaf hinged thereto forming the closure and provided with an inward extension secured to its lower end and an oppositely disposed lateral extension secured to its upper end, said upper extension carrying means adapted to en-

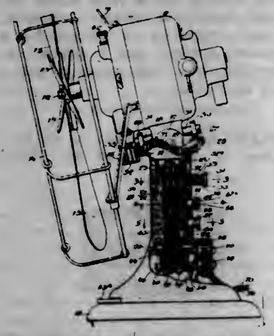
gage a hook pivoted to the top of the cabinet, a shelved filling block secured within the base portion, a series of leaves hinged to said filling block, each leaf having a lateral extension secured to its lower end adapted to contact with one of the shelves of the filling block and an oppositely disposed lateral extension secured to its upper



end adapted to contact with the face of the leaf secured in front of it, each of said upper extensions having a beveled portion formed on its lower face with an opening therethrough, and each leaf and the drop-leaf adapted to be provided with a series of sample moldings fixedly secured thereto by a plurality of screws.

[Claim 1 not printed in the Gazette.]

1,269,209. DRIVING MECHANISM FOR ELECTRIC FANS. GUSTAF OLSON, Chicago, Ill., assignor of one-half to Louis Greenberg and one-sixth to Willard M. McEwen, Chicago, Ill. Filed June 19, 1915. Serial No. 35,121. (Cl. 230—1.)



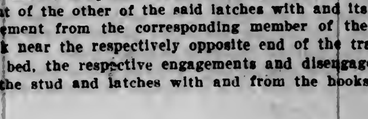
1. An air-circulating device comprising a supporting member, blower mechanism revolubly mounted thereon, a motor connected with said blower mechanism, coacting means on said supporting member and said blower mechanism, so constructed and adjusted that, upon the operation of said motor, said blower mechanism will rotate to a predetermined extent in one direction with respect to said supporting member, will then rotate to a less extent in an opposite direction, and will again rotate in the first direction.

3. An air-circulating device comprising a supporting member, blower mechanism revolubly and tiltably mounted thereon, a motor connected with said blower mechanism, and co-acting means carried by said supporting member and said blower mechanism, adapted to effect a tilting movement of said blower mechanism, said co-acting means being so adjusted anti-frictionally that the operation of said motor will cause said blower mechanism to rotate in one direction with respect to said supporting member, and to allow it to rotate in an opposite direction, under the influence of gravity.

6. An air-circulating device comprising a supporting member, blower mechanism revolubly and tiltably mounted thereon, a motor connected with said blower mechanism, and co-acting means carried by said supporting member and said blower mechanism, and so adjusted anti-frictionally that, upon the operation of said motor, said blower mechanism will be allowed to rotate continuously about said supporting member in one direction, said continuous rotation, however, being interrupted at predetermined intervals with backward rotation to a less extent, and to be continuously tilted up and down in a vertical plane.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,269,210. BED-RECIPROCATING MECHANISM. HERBERT PEARCE and FRED SPENCE, Broadheath, England, assignors to Linotype and Machinery Limited, London, England. Original application filed May 12, 1915, Serial No. 27,506. Divided and this application filed Aug. 22, 1916. Serial No. 116,362. (Cl. 74—98.)

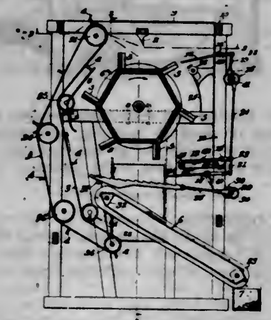


1. In bed-reciprocating mechanism, the combination with a reciprocating bed and two co-axial spur pinions adapted to move it at uniform velocity in respectively opposite directions, of a crank adapted to rotate about the axis common to both pinions, two connecting rods, two slides each connected to the crank by one of the said rods and adapted to be reciprocated thereby at velocities varying downwardly to and upwardly from zero, a two-member hook fast to each of the two slides, a stud rigid with the bed and adapted, by reason of the relative motion of the bed and slide, to engage with and disengage from one member of each of the said hooks in alternation, two latches adapted to move independently of the bed but accompanying it throughout its travel, means adapted to automatically effect the engagement of one of the said latches with and its disengagement from the other member of one of the said hooks near one end of the travel of the bed, and means adapted to automatically effect the engagement of the other of the said latches with and its disengagement from the corresponding member of the other hook near the respectively opposite end of the travel of the bed, the respective engagements and disengagements of the stud and latches with and from the hooks being effected at instants at which the velocity of the respective slide is equal or approximately equal to that of the bed, and within a period which is less than one half of that occupied by one revolution of the crank.

2. In bed-reciprocating mechanism, the combination with a reciprocating bed and two spur pinions adapted to move the bed at uniform velocity in respectively opposite directions, of a crank adapted to rotate at the same angular velocity as the said pinions, two connecting rods, two slides each connected to the crank by one of the said rods and adapted to be reciprocated thereby at velocities varying downwardly to and upwardly from zero, a two-member hook fast to each of the two slides, a stud rigid with the bed and adapted, by reason of the relative motion of the bed and slide, to engage with and disengage from one member of each of the said hooks in alternation, two latches adapted to move independently of the bed but accompanying it throughout its travel, means adapted to automatically effect the engagement of one of said latches with and its disengagement from the other member of one of the said hooks near one end of the travel of the bed, and means adapted to automatically effect the engagement of the other of the said latches with and its disengagement from the corresponding member of the other hook near the respectively opposite end of the travel of the bed, the respective engagements and disengagements of the stud and latches with and from the hooks being

effected at instants at which the velocity of the respective slide is equal or approximately equal to that of the bed and within a period which is less than one-half of that occupied by one revolution of the crank.

1,269,211. PEA-VINER. CLARENCE H. PLUMMER, Kewaunee, Wis. Filed May 29, 1916. Serial No. 100,432. (Cl. 130—30.)



1. A pea viner, comprising the combination with a drum having peripheral beaters, of a belt elevator at one side of the drum, adapted to repeatedly lift and drop material into the path of the beaters, and means for shaking the material to separate shelled peas from the other material after each beating operation and preparatory to the next lifting operation.

5. In a pea viner, the combination of a rotary member provided with projecting beater wings and a belt elevator located along one side thereof and adapted to elevate vines and pods and drop them into the path of the beater wings, together with means for returning the vines and pods to the elevator after each set of beating operations until substantially all the peas are shelled, and an inclined support down which the peas are permitted to roll from the machine as soon as separated.

8. In a pea viner, the combination of a revoluble drum, an anular series of beater blades attached to said drum, means for revolving said drum and series of blades at a speed sufficient to shell peas by impact, an endless conveyer provided with a plurality of lifting members, said conveyer extending upwardly along the side and partially over said revoluble drum, and means for conveying pea vines and pods to said conveyer, said beater being adapted to strike the pea vines and pods in mid air as the latter are delivered from said conveyer, and means, independent of the beater, for separating and delivering the shelled peas to the exterior of said machine, as soon as they are shelled.

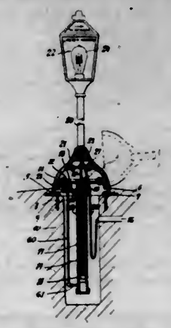
12. In a pea viner, the combination with shelling apparatus, of an inclined endless apron conveyer upon which shelled peas are free to drop and roll from the machine to the exterior, vine shaking apparatus interposed between the shelling apparatus and said apron, a pair of angular shafts for supporting the respective ends of said endless apron, said angular shafts being adapted to simultaneously shake said apron as the latter is being moved forward over said shafts, and said conveyer being actuated to feed the fragments of vines and pods thereon toward the receiving portion of the viner.

14. In a pea viner, the combination of devices for successively beating the pods and vines while dropping by gravity in free air, and vibratory means for agitating the pods and vines and removing the free peas therefrom in the intervals between said dropping operations.

[Claims 2 to 4, 6, 7, 9 to 11, 13, and 15 not printed in the Gazette.]

1,269,212. TILTABLE POST. CHARLES A. POOLE, Jersey City, N. J. Filed Apr. 19, 1916. Serial No. 92,106. (Cl. 189—28.)

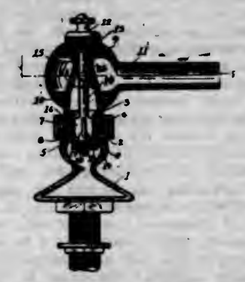
1. A tiltable post comprising a foundation member, a post member resting on the same and adapted to tilt thereon, directing means on said post, projections formed on said foundation member, coöperating projections formed on said post member and adapted to fit between the projections on the foundation member, flexible means connecting the said two members and means tending to maintain said post member in normally upright position.



2. A tiltable post comprising a foundation member, a post member thereon and adapted to tilt with respect thereto, directing means on said post, coöperating means on said members preventing relative lateral displacement of the same and means for checking the return movement of said post after it has been tilted.

[Claims 3 to 6 not printed in the Gazette.]

1,269,213. SWING-SPOUT COMPRESSION-FAUCET. JAMES T. POWER, Springfield, Ill. Filed Aug. 21, 1914. Serial No. 857,941. Renewed Nov. 10, 1917. Serial No. 201,400. (Cl. 137—4.)



1. In a swing-spout faucet, a hollow main body, an internally recessed stationary core having its lower portion adapted to fit into the main body and provided with a valve seat on the lower end, a valve stem carried in the internal recess in the core and shiftable longitudinally therein, a valve on the lower end of the stem adapted to seat on the valve seat on the lower end of the core, cam slots through the walls of the core, a cross pin loosely fitted in the valve stem and having its ends protruding through the cam slots in the core, the core provided with external spaced apart tapered ground joint surfaces, a spout member having a hollow spherical base provided with internal spaced apart tapered ground joint surfaces positioned to register with the external ground joint surfaces on the core, and said spout base having oppositely positioned pairs of parallel ribs on its internal walls between the ribs of which pairs the protruding ends of the cross pin of the valve stem may be entered, substantially as described.

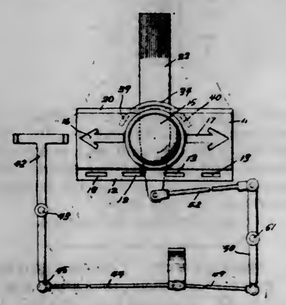
4. In a swing-spout faucet, a main body, an internally recessed stationary core carried by the main body, said core provided with a valve seat, a valve adapted to be seated on the valve seat and arranged to close in line with the water pressure, the core provided with cam slots in its wall, a cross pin engaging the valve stem of said

valve, said cross pin protruding through the cam slots in the core, a spout member having a hollow spherical base mounted to turn about said core, coacting tapered ground joints formed on the external wall of the core and on the internal walls of the spherical base, and said spout held in place about the core by a screw nut and coil spring washer carried by the core member, and said spout member provided with parallel ribs adapted to engage the protruding ends of the cross pin of the valve stem therebetween so that upon turning the spout above the core the cross pin and valve stem is shifted vertically by the stationary cam slots, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,269,214. AUTOMOBILE-SIGNAL. LESTER E. PRESCOTT and EUGENE L. PRESCOTT, South Tacoma, Wash. Filed July 2, 1917. Serial No. 178,193. (Cl. 177—327.)

1. An automobile signal comprising a housing having

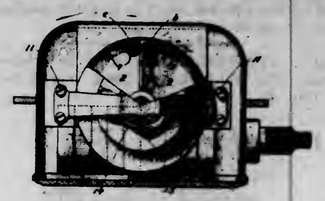


partitions therein dividing the housing into side compartments and an intermediate compartment, sockets in the compartments, an indicating arm, the intermediate socket being extended to provide a pin passing through the indicating arm to pivotally mount the indicating arm, a main circuit passing through the intermediate socket to illuminate a lamp carried thereby, auxiliary circuits branching from the main circuit to illuminate lamps carried by the side sockets, the auxiliary circuits including stationary contacts carried by the housing and a movable contact carried by the indicating arm, and means for swinging the indicating arm to one side and bring the contact thereof into engagement with one of the stationary contacts and illuminate a selected side lamp.

2. An automobile signal comprising a housing divided into side compartments and an intermediate compartment, electrically energized indicators in the compartments, an indicating arm, the indicator of the intermediate compartment being provided with a pin passing through the indicator arm to pivotally mount the indicator arm, a main circuit passing through the indicator of the intermediate compartment to energize the same, auxiliary circuits to energize the indicators of the side compartments, the auxiliary circuits including stationary contacts and a movable contact carried by the indicating arm, and means for swinging the indicating arm to one side to bring the contacts thereof into engagement with one of the stationary contacts and energize the indicator of a selected side compartment.

1,269,215. SPEED-INDICATOR. THEODORE C. PROUTY, Aurora, Ill., assignor, by mesne assignments, to The Van Sicklen Company, a Corporation of Illinois. Filed Aug. 5, 1913. Serial No. 783,069. (Cl. 264—14.)

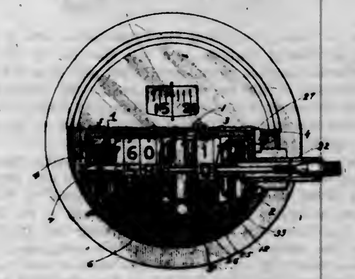
1. In a fluid actuated speed indicator or similar instrument, the combination of a casing providing an operating chamber and having an inlet and an outlet in connection therewith, said outlet being calibrated to afford exact indication of different speeds, an actuatable member pivotally mounted and arranged to be operated by the fluid as it passes through the operating chamber, indicating means coacting with said actuatable member, and means



for yieldingly holding said actuatable member and its indicating device in operative position, said means operating to return it to its normal or zero position.

[Claims 2 to 9 not printed in the Gazette.]

1,269,216. ODOMETER. THEODORE C. PROUTY, Aurora, Ill., assignor, by mesne assignments, to The Van Sicklen Company, a Corporation of Illinois. Filed Aug. 5, 1913. Serial No. 783,070. (Cl. 235—144.)



1. In an instrument of the class described, in combination, a chambered indicating wheel, means to rotate said wheel in accord with a rotating element, a second chambered indicating wheel located adjacent said first named wheel and provided with an internal annular gear, an intermediate pinion for transmitting motion from said first named wheel to said second named wheel, means to maintain said pinion in operative position, said means comprising a bracket provided with a pin, said pinion being rotatively mounted upon said pin, a shaft, said indicating wheels being rotatably mounted on said shaft, said bracket being provided with a split portion frictionally engagaing said shaft.

2. In a device of the class described, an indicator wheel, a second indicator wheel located adjacent thereto, said wheels being rotatably mounted on a supporting member, means to rotate said first named indicator wheel, the latter being chambered on one side and provided with an internal annular shoulder, projections carried thereby, said second named indicator being provided on its adjacent face with an internal annular gear, a pinion rotatably mounted and extending between said first and second named indicators, said pinion being provided with a gear portion meshing with the teeth of said internal annular gear and being further provided with projections adapted to be engaged by said projections of said first named indicator upon rotation of the latter to effect rotation in any desired proportion of the second named indicator, said pinion being further provided with a second gear portion engageable at the will of the operator with said gear portion of said primary wheel.

3. In a device of the class described, indicating wheels, means to rotate one of said wheels, and means operatively connecting said wheels to transmit the rotation of one to the other in a desired ratio, said means being constructed and arranged to transmit the rotation of said first-named wheel to said other wheel at the same rate when desired.

4. In a device of the class described, indicating wheels, means to rotate one of said wheels, and means operatively connecting said wheels to transmit the rotation of one to the other in a desired ratio, said means being constructed and arranged to transmit the rotation of said first-named wheel to said other wheel at the same rate when desired, said means and one of said wheels being relatively movable to effect rotation of either kind.

[Claims 5 to 11 not printed in the Gazette.]

1,269,217. AUTOMOBILE RECORDING APPARATUS. AUGUST E. HENNING, Santa Ana, Cal. Filed Oct. 25, 1917. Serial No. 198,438. (Cl. 281—8.)



1. An automobile record apparatus including a casing provided with a door in the top and a bottom, a pair of rollers within said casing, said rollers journaled in openings in the ends of the said casing, a pair of guides and a gear fixedly mounted on each roller, a pair of drive gears which project through separate apertures in the top of the casing and mounted on separate shafts, which are journaled in openings in the ends of the said casing, said drive gears engaging with the gears on the rollers, a writing platen arranged longitudinally of and in said casing adjacent to the door, the ends of said writing platen fixed in openings provided for the same in the ends of the casing.

2. An automobile record apparatus consisting of a pair of rollers with a gear fixedly mounted on each, a writing platen supported above said rollers, said rollers propelled by two gears mounted on separate shafts, which engage respectively with the gears mounted on the rollers; said pair of rollers, writing platen and drive gears all contained and operating within a casing, except said drive gears which project beyond the top of the casing through openings made for the same, said casing also having a door in its top, a bottom and a surrounding flange, all substantially as described.

3. An automobile record apparatus including a casing provided with a door in the top, a bottom, a flange with screw or bolt holes and two rectangular apertures, each end of the casing also having a slot for the support of a writing platen and four circular openings acting as bearings for two shafts and two rollers, said two rollers being provided with a pair of guides and a gear mounted on each, said two shafts being provided with a drive gear mounted on each which engage respectively with the gears on the rollers and projecting through the rectangular apertures, a writing plate and a set of brake blocks and springs attached to the bottom of the casing, all substantially as described.

4. An automobile record apparatus including a casing provided with a door in its top and a bottom, a pair of rollers within said casing, said rollers journaled in openings in ends of said casing and engaging with a pair of drive gears mounted on separate shafts which are journaled in other openings in the ends of said casing, said drive gears projecting beyond the top of said casing through openings made for the same.

1,269,218. ODOMETER-RESETTING DEVICE. FRANK A. ROSS, Chicago, Ill., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill., a Corporation of Virginia. Filed June 30, 1916. Serial No. 106,775. (Cl. 235—144.)

1. In a revolution meter, a manually-operable device for operating or resetting the indicating train, comprising in combination with a prime operating shaft of said train, a shaft transverse thereto; a housing in which said transverse shaft is journaled, said housing being mounted for rotation about the axis of the prime shaft, and said transverse shaft protruding from said housing for manual operation, and intermeshing gears on said shafts respectively within the housing.

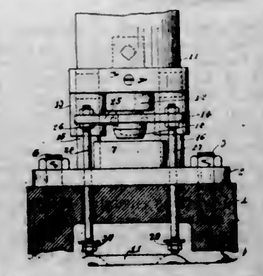


2. In a revolution meter, a manually-operable device for operating or resetting the indicating train, comprising in combination with a prime operating shaft of the train, a shaft transverse thereto; a housing in which said transverse shaft is journaled, said housing being mounted for rotation about the axis of the prime shaft, said transverse shaft being protruded from said housing and exteriorly provided with means for manually rotating it, and intermeshing gears on said two shafts respectively within the housing.

6. In an odometer, in combination with a train to be operated for re-setting, comprising a longitudinally-movable shaft; a shaft transverse to said train shaft; a housing in which said transverse shaft is journaled and longitudinally slidable, the train shaft protruding into said housing; intermeshing gears on said two shafts respectively within the housing, disengageable by the sliding of said transverse shaft in said housing; a conical cam on said transverse shaft and circumferential grooves adjacent to the larger and smaller ends of said conical cam; the prime shaft having a rounded terminal adapted to engage said grooves and to be encountered and actuated by said conical cam upon the longitudinal actuation of said transverse shaft, for forcing said train shaft longitudinally in its bearing and holding the transverse shaft yieldingly at the respective limits of its longitudinal movement; the gear on the transverse shaft being positioned thereon for intermeshing with the gear on the train shaft at the limit of the movement of said transverse shaft at which the train shaft is forced in direction for resetting action.

[Claims 3 to 5 not printed in the Gazette.]

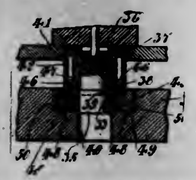
1,269,219. APPARATUS FOR FORMING SHAPED ARTICLES. CARLETON E. SANDERS, Passaic, N. J. Filed May 18, 1916. Serial No. 98,263. (Cl. 78—13.)



1. In a press for shaping articles of suitable material, the combination of a reciprocable die, a stripper concentric therewith and movable relatively thereto, a stationary die, means for causing the stripper to engage the walls of the stationary die in advance of the reciprocable die to thereby form a closed die chamber, said die walls having a plurality of air vents of a size permitting the escape of air between the material and the die but preventing the escape of any of the material, and means to arrest the stripper before the die has completed its retractile movement.

2. In a press for shaping articles of suitable material, the combination of a reciprocable die and a stationary die, one of said dies being provided with vents of a size permitting the escape of air between the material and the die but preventing the escape of any of the material.

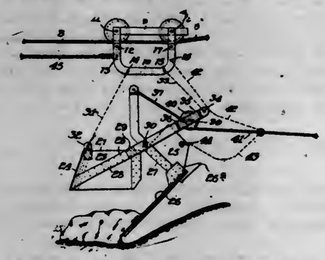
1,269,220. PROCESS OF FORMING SHAPED ARTICLES. CARLETON E. SANDERS, Passaic, N. J. Filed Feb. 14, 1917. Serial No. 148,647. (Cl. 78—81.)



1. The process of forming shaped articles from metal blanks which consists in taking a blank containing substantially the same amount of metal as that contained in the article to be formed, pressing the blank while hot into the desired shape in a closed die and permitting the escape of air from the die during the operation while preventing the escape of any of the metal at those points where air would be entrapped between the metal and the die.

2. The process of forming shaped articles from plastic material which consists in pressing the material into the desired shape in a closed die and permitting the escape of air from between the material and the die while preventing the escape of any of the material at those points where air would be entrapped between the metal and the die.

1,269,221. EXCAVATING APPARATUS. HENRY B. SAUERMAN, Chicago, Ill. Filed Feb. 8, 1918. Serial No. 216,006. (Cl. 37—19.)



1. A scraper-bucket formed of sections pivoted together, one being a body-portion and the other a bottom therefor, said bottom carrying upwardly extending members arranged at an angle to said bottom and to the upper portions of which adjacent the upper edge of said body portion said bottom is pivoted to said body-portion.

5. In an excavating apparatus, the combination of a support, a scraper-bucket formed of sections pivoted together, one being a body-portion and the other a bottom for said body-portion having an upward extension, with the pivot for said sections engaging said extension short of its upper end, means for supporting said body-portion, and a hauling-line connected with the upper end of said extension and operating when drawn taut to hold said bottom closed.

[Claims 2 to 4 not printed in the Gazette.]

1,269,222. PREPARING ALUMINOUS ABRASIVES. LEWIS E. SAUNDERS and RAY HILL WHITE, Niagara Falls, N. Y., assignors to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 18, 1917. Serial No. 186,919. (Cl. 204—64.)

1. In the art of preparing aluminous abrasives by the electric furnace fusion of aluminous materials in presence of carbon, the method of preventing reduction of alumina, which consists in adding to the charge to be fused a relatively small proportion of an oxygen-containing substance of which the reduction products are volatile under the furnacing conditions.

2. In the art of preparing aluminous abrasives by the electric furnace fusion of aluminous materials in presence of carbon, the method of preventing reduction of alumina, which consists in adding to the charge to be fused a relatively small proportion of an oxygen-compound of a volatile metal.

3. In the art of preparing aluminous abrasives by the electric furnace fusion of aluminous materials in presence of carbon, the method of preventing reduction of alumina, which consists in adding to the charge a relatively small proportion of an oxygen-compound of zinc.

1,269,223. PROCESS OF PURIFYING ALUMINOUS MATERIALS. LEWIS E. SAUNDERS, Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 18, 1917. Serial No. 186,921. (Cl. 204—64.)

1. The process of purifying aluminous materials, which consists in fusing the same in presence of a sufficient proportion of carbon to effect a substantial reduction of the alumina, separating the reduced impurities, and then re-oxidizing the reduction products of alumina by electric furnace fusion with a solid oxidizing addition.

2. The process of purifying aluminous materials, which consists in fusing the same in presence of a sufficient proportion of carbon to effect a substantial reduction of the alumina, separating the reduced impurities, and then re-oxidizing the reduction products of alumina by electric furnace fusion with bauxite.

3. The process of purifying aluminous materials, which consists in fusing the same in presence of a sufficient proportion of carbon to effect a substantial reduction of the alumina, separating the reduced impurities, and then re-oxidizing the reduction products of alumina by electric furnace fusion with bauxite, the bauxite in such proportion that the non-aluminous oxids thereof are in excess of the quantity necessary for the re-oxidation.

4. The process of purifying aluminous materials, which consists in fusing the same in presence of a sufficient proportion of carbon to effect a substantial reduction of the alumina, separating the reduced impurities, and then re-oxidizing the reduction products of alumina by electric furnace fusion with bauxite admixed with carbon, the bauxite in such proportion that the non-aluminous oxids thereof are in excess of the quantity necessary for the re-oxidation, and the carbon in proportion to reduce a part only of the excess of non-aluminous oxids in the bauxite.

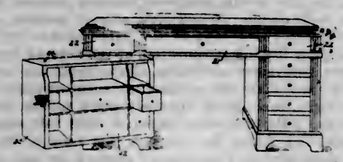
1,269,224. PURIFYING ALUMINOUS MATERIALS. LEWIS E. SAUNDERS, Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass., a Corporation of Massachusetts. Filed Aug. 18, 1917. Serial No. 186,922. (Cl. 204—64.)

1. The hereindescribed process of purifying aluminous materials and producing crystalline alumina, which consists in fusing the impure aluminous charge with a proportion of carbon approximating that theoretically required for complete reduction of the non-aluminous oxids, in presence of metallic iron in sufficient proportion to prevent material reduction in alumina.

2. The hereindescribed process of purifying aluminous materials and producing crystalline alumina, which consists in fusing the impure aluminous charge with a proportion of carbon approximating that theoretically required for complete reduction of the non-aluminous oxids, in presence of upward of ten per cent. by weight of metallic iron.

1,269,225. DESK. JULIUS SCIANNAMEA, New York, N. Y. Filed Mar. 7, 1917. Serial No. 153,105. (Cl. 45—94.)

1. A desk comprising a top; drawers slidably mounted in said top adjacent the ends thereof; a plurality of pedestals for said top; a plurality of cabinets pivotally mounted in said pedestals to swing outwardly therefrom; a plurality of locks for holding said cabinets in said pedestals, said locks being actuated by said drawers; a plurality of locks for said drawers; and means normally concealed for releasing said locks, said means actuating a drawer mounted in said top between the first-mentioned drawers.



3. A desk comprising a top; drawers slidably mounted in said top adjacent the ends thereof; a plurality of pedestals for said top; a plurality of cabinets pivotally mounted in said pedestals to swing outwardly therefrom; a plurality of locks for holding said cabinets in said pedestals, said locks being actuated by said drawers; a plurality of locks for said drawers; means normally concealed for releasing said locks, said means embodying a plurality of bolt pins laterally extensible for engaging to restrain the movement of said drawers; and a master drawer adapted for operatively engaging said bolt pins to extend the same laterally for engaging said first-mentioned drawers, said master drawer being slidably mounted in service in said top between the first-mentioned drawers.

[Claim 2 not printed in the Gazette.]

1,269,226. GRAIN-CLEANING DEVICE. THOMAS M. SHANK, Bidwell, Ohio. Filed Dec. 22, 1917. Serial No. 208,454. (Cl. 130—19.)

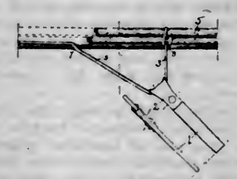


1. In a grain sifting sieve, the combination of a frame having a foraminous sifting screen mounted thereon, and a removable receptacle mounted intermediate the ends of the sieve and removably supported by the said frame.

3. A grain cleaning device comprising an elongated sieve having a frame and a strip of foraminous material mounted on the frame, the foraminous material having an opening approximately intermediate its ends to divide the said sifting surface into the two end portions, the supports carrying the proximate edges of the said portions, and a removable receptacle mounted in the said opening and engageable with the said support, the latter having strips attached thereto for supporting the said removable receptacle.

[Claim 2 not printed in the Gazette.]

1,269,227. HAT-STRAP. ALLEN SMITH, Jr., U. S. Army. Filed Jan. 7, 1918. Serial No. 210,593. (Cl. 132—25.)



1. A hat strap having flat metallic eyelets fixed on each end thereof, each of said eyelets attached to the opposite sides of a hat by an adjustable string loop therethrough, each of said loops formed by a lacing string around the front of said hat and the ends of said string passed through a front and rear hole in the brim on opposite sides of said hat, and each end of said string fastened by passing through a multiple of holes near its respective rear hole in the side brim of said hat.

3. A hat strap having flat loop eyelets of suitable material on each end thereof, an adjustable string loop through each of said eyelets, each of said loops attached to the opposite sides of a hat at points in front and back of the center of the sides of said hat, a uniform hat cord on said hat and said uniform hat cord held in place by the lacing string composing said string loops passing around the front of said hat and through the slip knot of said uniform hat cord and said lacing string having its ends securely looped about said uniform hat cord on the opposite sides of said hat as shown and described and for the purposes set forth.

[Claims 2 and 4 not printed in the Gazette.]

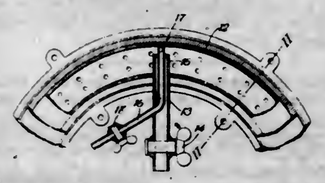
1,269,228. SHOE. IRA MARTIN SMITH, Seattle, Wash. Filed Mar. 22, 1917. Serial No. 156,795. (Cl. 36—50.)



1. The combination with a laced shoe of means for concealing the tied upper ends of the shoe lace, said means including flaps secured to the top of the shoe and means for fastening the said flaps together.

2. The combination with a laced shoe of a pair of similar flexible flaps secured to the top of the shoe adjacent the lacing eyelets, and resilient means for fastening the said flaps together, whereby the tied ends of the shoe lace may be concealed beneath the said flaps.

1,269,229. METHOD AND APPARATUS FOR MANUFACTURING TIRES, HOSE, AND THE LIKE. MICHAEL SMITH, Passaic, N. J. Filed Dec. 13, 1916. Serial No. 136,676. (Cl. 18—6.)



1. Apparatus for vulcanizing and integrating tires and the like under water pressure, comprising in combination a perforated hollow core upon which the tire is built, a form for inclosing said tire and water inlet and air outlet pipes for said core, arranged one within the other.

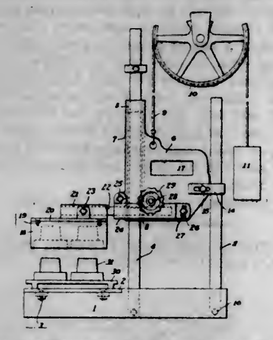
3. The method of vulcanizing and integrating tires, hose and the like, which consists in building up the tire on a perforated hollow core, inclosing the tire in forms, displacing the air in said core with a liquid, sealing said core, placing the whole in a tank, submerging the same in a liquid, opening said seal to permit equalization of the liquid pressure inside and outside of said core, increasing the liquid pressure to the desired degree, and raising the temperature of the water to the desired degree.

[Claim 2 not printed in the Gazette.]

1,269,230. CORE-MAKING MACHINE. CHARLES E. TEPPER, Rochester, N. Y. Filed Jan. 21, 1918. Serial No. 213,103. (Cl. 22—10.)

1. In a core making machine, a bench, a guide rod arranged in rear of said bench, a frame guided on said rod, a core-box supporting-member on said frame, a second guide, and an adjustable take-up device comprising a rigid projection on the frame coöperating with one face of the rear guide, an inclined surface on the frame, a slotted member

coöperating with the inclined surface and also with the opposite face of the rear guide, and a bolt for securing the slotted member in its adjusted position on the inclined surface.



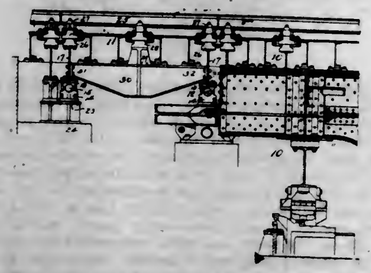
2. A core making machine comprising a bench, a split sleeve mounted at the rear of the bench to turn about a horizontal axis, means for securing said sleeve in its adjusted position, a rod fitted to turn in the sleeve, means for clamping the sleeve on the rod, and a core box supported by the rod over the bench.

3. A core making machine comprising a bench, a core box, and means for supporting the core box so that the latter may turn about a horizontal axis in rear of the box and also about a horizontal axis at right angles to the first named axis.

4. A core making machine comprising a base frame, a bench plate angularly adjustably secured to the base frame, a guide rising from the base frame in rear of the bench plate, a frame adjustable toward and from the bench plate on the guide, and a core box angularly adjustable on said frame.

5. A core making machine comprising a bench, two rods rising in rear of the bench one of said rods being rotatable, a frame guided on the other rod, a core box mounted on said frame, and a take-up device coöperating with opposite sides of the rotatable rod.

1,269,231. TRACK-SCALE. AXEL S. VOGT, Altoona, Pa. Filed Apr. 3, 1917. Serial No. 159,526. (Cl. 265—71.)



1. In combination with a track scale, the scale, a track on the scale and a track leading from the main road-way to the scale, an immediate approach section for the scale interposed between the rails on the scale and the rails leading to the main road-way, transverse members forming a part of the approach section, bearings carrying the ends of the transverse members, means for supporting the said bearings, and means adapted to be interposed between the support means and said bearings for raising and lowering the ends of the approach section independent of each other.

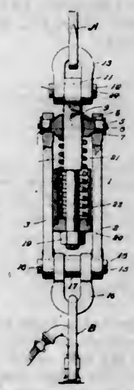
3. In combination with a track scale, an approach section for the scale, transverse and longitudinal members forming a part of the approach section, rail supporting means carried by the said transverse and longitudinal members, bearings positioned at the ends of the longitudinal members, and in immediate contact with the transverse members, upper members of the bearings adapted to be secured to the said transverse members, lower members adapted to rest upon removable liners, foundation supports for the bottom members, concave surfaces in the adjacent faces of the two members, a spool member adapted to coöperate with each of the said concave surfaces, and means for locking the surfaces of the bearing together to prevent transverse movement of the approach section.

6. In a track scale the combination with the main track and the scale track, of an approach track section located between the main and scale tracks, a rigid rail engaging and supporting frame for carrying the rails of the approach track section, a stationary support for one end of said frame and a relatively movable support being a part of the scale mechanism for the other end of said frame.

8. In a track scale, the combination with the main track and the scale track, of an approach track section including a frame carrying the approach track and interposed between the main and scale track sections, and means for maintaining either end of the frame of the approach track section at the desired level independent of the other to bring the same flush with the adjacent end of either the main or scale track section.

[Claims 2, 4, 5, 7, and 9 not printed in the Gazette.]

1,269,232. RESILIENT ATTACHMENT FOR WELL-CASINGS. WALTER G. VREELAND, Chattanooga, Tenn., assignor to Lacey Manufacturing Corporation, Chattanooga, Tenn., a Corporation of Tennessee. Filed May 18, 1917. Serial No. 169,549. (Cl. 267—13.)



1. A resilient attachment for well rigs comprising upper and lower bails for connection between two of the upper members of a well rig, links connected to said lower bail and carrying a crosshead, a stem connected to the upper bail, resilient means interposed between the lower end of said stem and said crosshead adapted to carry the load supported from said lower bail and to return said lower bail to its normal position after a vertical movement thereof, and means to limit the downward movement of said lower bail and relieve the load on said resilient means when the latter has contracted a predetermined amount.

4. A resilient attachment for well rigs comprising upper and lower bails for connection between two of the upper members of a rig, an apertured cross-head, links pivotally connected at their lower ends to said lower bail and pivotally connected to the upper ends of said apertured cross-head, a stem pivotally connected to the upper bail extending through the aperture of said cross-head and provided at its lower end with a disk, a sleeve carried by said disk, and a spring interposed between said crosshead and said disk.

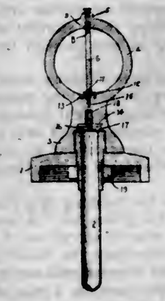
[Claims 2 and 3 not printed in the Gazette.]

1,269,233. PUZZLE. GEORGE WARGA, Hoboken, N. J. Filed Nov. 15, 1916. Serial No. 131,447. (Cl. 46—41.)



In combination two blocks, one of said blocks being in the form of a trapezoid having oppositely-inclined sides and a long and short side arranged in parallelism, the other block being in the shape of a triangle having its base of even length with that side of the trapezoidal block which is shortest so that when the homologous sides of both blocks contact the inclined sides of both blocks form the opposite sides of a triangle.

1,269,234. COMBINATION ORNAMENT AND HEAT-INDICATOR FOR HORSELESS VEHICLES. JOHN H. WARNER, Dayton, Ohio, assignor to The Warner Spinner-Novelty Company, Dayton, Ohio, a Corporation of Ohio. Filed Sept. 10, 1917. Serial No. 190,682. (Cl. 116—31.)



1. In a device of the class specified, an ornament attachable to a horseless vehicle, a normally movable mechanical device carried by said ornament, and heat-responsive means exposed to the heat generated by the engine adapted to check the motion of said movable mechanical device when the rising heat of the engine reaches a predetermined point.

4. In a device of the class specified, an ornament attachable to the radiator cap of a horseless vehicle, a normally operative air-propelled rotor mounted in said ornament, and a heat-responsive device extensible into said radiator through the cap, adapted to check the motion of said rotor when the rising heat within said radiator reaches a predetermined point.

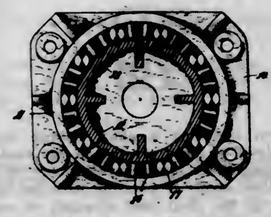
5. In a device of the class specified, an ornament attachable to the radiator cap of a horseless vehicle, a normally operative air-propelled rotor mounted in said ornament, a heat-responsive device within said radiator, and means operatively connected between said heat-responsive device and the rotor adapted to check the motion of the latter when the rising heat within said radiator reaches a predetermined point.

6. In a device of the class specified, an ornament attachable to the radiator cap of a horseless vehicle, a normally rotating air-propelled rotor mounted in said ornament, a heat-responsive device within said radiator, a vertical element forming the lower bearing for said rotor, and a member in contact with said heat-responsive device, for raising the vertical element to check the motion of the rotor when the rising heat within the radiator reaches a predetermined point.

8. In a device of the class specified, an ornament attachable to the radiator cap of an automobile, consisting of a bell-shaped base and ring top, a normally rotating air-propelled rotor mounted in said ring top, consisting of a vertical spindle carrying outwardly projecting blades, a tube removably attached to said ornament extensible therefrom through said cap into the radiator, an expansible liquid in said tube, a diaphragm on the top of said tube adapted to be moved upwardly when the liquid expands, a plunger, a base for said plunger, resting upon the diaphragm, a removable sleeve bearing for the upper end of said spindle, an inverted cup-shaped bearing piece for the lower end thereof, said bearing piece being supported by the upper end of the plunger, and having its circumferential rim extensible into an annular groove provided in the bottom part of the ring top, and a spring for returning the diaphragm to its normal position, and withdrawing said bearing piece from tight engagement with the lower end of the spindle, after the temperature within the radiator has been reduced.

[Claims 2, 3, and 7 not printed in the Gazette.]

1,269,235. ROLLER-BEARING. FRANK A. WASSON, Milwaukee, Wis., assignor to Wasson Engineering and Supply Company, Santa Rosa, Cal., a Corporation of California. Filed Oct. 7, 1916. Serial No. 124,253. (Cl. 64—64.)



1. A roller thrust bearing for conducting electrical current having an annular race-way between relatively fixed and oscillatory parts and cylindrical rollers arranged in the race-way in approximately radial positions, and means for confining the rollers within the race-way and permitting a slight tangential travel thereof to shift their axes out of the radial positions, so that they advance and return in different paths and wear their contacting surfaces clean.

3. A roller bearing for conducting an electrical current comprising a base having an annular flange, a companion plate having an annular flange of different diameter, hard metal lining rings removably secured inside the larger flange and outside the smaller flange, cylindrical rollers in approximately radial positions within the race-way and having sufficient play between the flanges to permit of slight straight line movements thereof to depart from truly radial positions and polish their contacting surfaces to maintain conductivity.

4. A roller bearing for conducting an electrical current comprising a base having an annular flange and a companion plate having an annular flange of different diameter, one flange positioned within the other to form an annular race-way therebetween, cylindrical rollers radially positioned and having sufficient play between the flanges to permit of short straight line movements thereof, so that they wear sufficiently to maintain conductivity, and other cylindrical rollers positioned between the radially disposed rollers and having their axes parallel with the axis of the bearing and taking the side thrust of the bearing by fitting between the flanges.

[Claims 2 and 5 not printed in the Gazette.]

1,269,236. PROCESS OF PURIFICATION. VICTOR M. WEAVER, Harrisburg, Pa., assignor to Weaver Company, a Corporation of Wisconsin. Original application filed Aug. 22, 1914, Serial No. 858,001. Divided and this application filed Aug. 9, 1915. Serial No. 44,518. (Cl. 23—13.)

2. The process of purifying aluminum chlorid which consists in conducting it to and through a maintained bath of molten aluminum, and then collecting the resulting purified gas.

3. A process of purifying compounds which consists in maintaining a heated bath of liquid material the same as one of the ingredients of the compound to be purified, and feeding the compound to be purified to a point near the bottom of said bath.

5. A process of purifying a metal compound which consists in maintaining a bath of molten metal the same as the metal of the compound to be purified, and feeding the compound to a point near the bottom of the bath, so as to replace the impurities whose affinity for another ingredient of the compound is less than that of the metal.

7. A process of purifying compounds which consists in maintaining a heated bath of liquid material the same as one of the ingredients of the compound to be purified, and feeding the compound to be purified to said bath in liquid state, the heat of the bath transforming said compound to a gas in which state it is led from the bath.

[Claims 1, 4, and 6 not printed in the Gazette.]

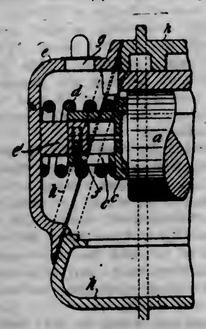
1,269,237. SWITCH. FRANK ERNEST WILSON, London, England. Filed July 1, 1916. Serial No. 107,158. (Cl. 175—282.)



1. A switch including a shaft having longitudinal grooves, a series of disks pivoted on the shaft and arranged to be moved by hand, contact blades on the disks, insulated contact strips coöperating with the blades, and balls housed in the disks and arranged to engage the grooves in the shaft in the closed and open positions of the switches, and springs positioned within said disks and adapted to fall against said balls for insuring a firm seating of said balls within the grooves.

[Claim 2 not printed in the Gazette.]

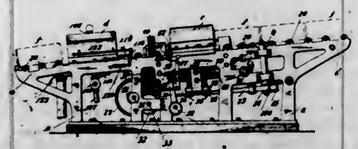
1,269,238. MEANS FOR PREVENTING SHOCKS BY THE AXLES OF TRAMWAY AND RAILWAY VEHICLES. THOMAS CHARLES WINFIELD, Wanstead, England. Filed July 24, 1917. Serial No. 182,454. (Cl. 64—25.)



2. A shock absorber for journal boxes including the combination with the box and a detachable lid therefor, of a shock absorber unit carried by said lid and including a rigid boss element on the inner face of said lid, a removable bushing element detchably interlocked with said boss, and a spring confined between a portion of the bushing and said lid.

[Claim 1 not printed in the Gazette.]

1,269,239. MACHINE FOR FINISHING AND COOLING STEREOTYPE-PLATES. HENRY A. WISE WOOD, New York, N. Y., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Filed Apr. 6, 1906. Serial No. 310,343. (Cl. 29—21.)



1. In a stereotype plate finishing machine, the combination of means for first finishing the plate, means for thereafter applying a cooling fluid to the plate, and a support arranged so that the plate will be directed from the finishing means to a position where it may be acted upon by the cooling means and the truth of the finished plate preserved.

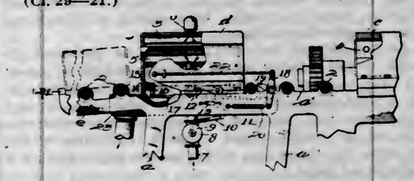
2. In a stereotype plate finishing machine, the combination of a runway or guide along which semi-cylindrical plates can be guided on their straight edges, a finishing mechanism, and a cooling mechanism arranged so that the plates will be guided by their straight edges through the finishing mechanism on and through the cooling mechanism.

3. In a stereotype plate finishing machine, the combination with a finishing device having means for freely supporting a plate therein after it it finished, and a series of rollers arranged in alinement with said supporting means for receiving plates therefrom, of a cooling arch located over said rollers and adapted to cool the plate as it passes along the same.

35. In a machine for finishing cast plate, the combination of a feed for the plates having means at each side for supporting one edge of the plates, a finishing mechanism, a shaft for operating the finishing mechanism, a guard above the shaft between said means, for guiding the cast plates into proper position, a cam on said shaft, and a stopping device for the plates operable by said cam and located above said guard along the feed.

[Claims 4 to 34 and 36 not printed in the Gazette.]

1,269,240. MACHINE FOR COOLING STEREOTYPE-PLATES. HENRY A. WISE WOOD, New York, N. Y., assignor to Wood Newspaper Machinery Corporation, New York, N. Y., a Corporation of Virginia. Original application filed Apr. 6, 1906, Serial No. 310,343. Divided and this application filed Aug. 20, 1915, Serial No. 46,560½. Renewed Nov. 24, 1917. Serial No. 203,859. (Cl. 29—21.)



4. In a machine of the character described, the combination of an arch, a runway comprising a series of rollers arranged in alinement and extending into said arch for feeding plates thereto, and means in the arch for cooling a plate resting on said rollers therein.

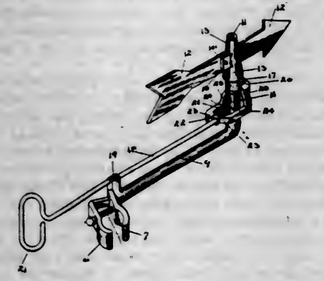
7. In a device of the character described, the combination of an arch, a runway extending therethrough lengthwise adapted to receive printing plates thereon outside the arch at one end, feed them into the arch and out of the other end thereof, and means connected with said arch for cooling a plate therein, comprising a water distributing device, a valve for controlling the admission of water to said water distributing device, and means adapted to be operated by a plate while entering the arch for opening said valve.

15. In a device of the character described, the combination of a device for finishing curved stereotype printing plates, a cooling device arranged in alinement therewith, a runway adapted to feed plates endwise from the finishing device to the cooling device, means in the cooling device for spraying both the convex and concave sides of a plate therein, and means located in the path of a plate as it travels along the runway for automatically turning water on when the plate enters the cooling device, and for turning it off as the plate leaves the cooling device.

39. A method of preparing stereotype printing plates which consists in finishing the plates, feeding them forward in a straight path, and cooling them on the inside and outside simultaneously while they are in position in line with the position in which they were finished.

[Claims 1 to 3, 5, 6, 8 to 14, 16 to 38, and 40 to 47 not printed in the Gazette.]

1,269,241. VEHICLE-SIGNAL. FRANK M. WOOD, Portland, Oreg. Filed Apr. 26, 1917. Serial No. 164,805. (Cl. 116—31.)



1. A vehicle signal comprising a clamp; an arm integral with said clamp; a head upon said arm; a signal rotatably mounted upon said head; a cam integral with said signal; a yoke coacting with said cam; and means to operate said yoke.

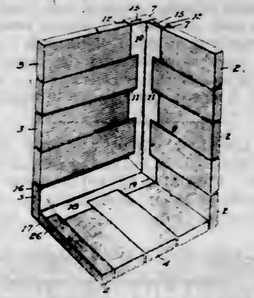
2. In a vehicle signal a pair of rotatably mounted members each consisting of an arm, a hub, and a half cam; said half cams coacting to form a complete cam when said members are secured in place; a spindle upon which said members are pivotally mounted; a yoke substantially surrounding said spindle and coacting with said complete cam; and means to operate said yoke.

5. A vehicle signal comprising a clamp; an arm; an operating rod rotatably mounted upon said arm substantially parallel therewith; a spindle upon the outer extremity of said arm; a yoke secured upon the outer extremity of said rod and encompassing said spindle; a cam rotatably mounted upon said spindle and coacting with said yoke; and a signal arm mounted upon said cam.

[Claims 3 and 4 not printed in the Gazette.]

1,269,242. BOX. CHARLES A. WOOLSEY, Minneapolis, Minn. Filed Feb. 17, 1913. Serial No. 748,902. Renewed Nov. 15, 1915. Serial No. 61,685. (Cl. 217—36.)

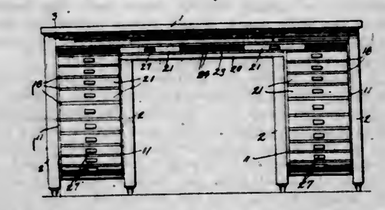
1. A box having walls composed of slats arranged one above another, angle plates fitting the corner of the box on the inside and outside thereof and having ears punched from their longitudinal edges, the ears of the inner plate lapping and co-inciding substantially with the ears of the outer plate, the ears of both plates being seated on the longitudinal edges of the slats, the ends of said slats being inclosed and concealed by said plates and ears, and lacing wires passing through said slats transversely and through the ears of said inner and outer plates and securing said ears and said slats together.



4. A box comprising a bottom, and a wall having a slat adjacent to said bottom, a metallic plate folded to inclose said slat and having inwardly-projecting, substantially parallel flanges lapping over and concealing the joint between said slat and the bottom of the box, the slats composing the box bottom being inserted between said parallel flanges, said flanges having ears pressed therefrom to pass between said slats, said plate having a part to embrace the corner of the box, and lacing wires passing through said ears and slats and through said corner embracing part.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,269,243. FILING-CABINET FOR DESKS. GEORGE H. YOUNG, New London, Wis., assignor to John Lanier, Manistique, Mich. Filed June 2, 1917. Serial No. 172,490. (Cl. 45—3.)



2. In a filing cabinet of the class described, the combination of a cylinder comprising a plurality of spaced disks, a core carried between said disk, means for rotatably supporting said core and said disks, said core being provided with a plurality of grooves, radiating partitions fitting within said grooves and extending toward the outer portions of said disks, ears formed upon said partitions, means for anchoring said ears upon said partitions, strips fitting between said disks adjacent the outer ends of said partitions, ribs formed upon said strips and provided with slanting sides, slides carried by said strips, said slides fitting under the slanting sides of said ribs whereby said slides will be removably carried upon the outer portions of said cylinder for closing the cylinder, a guide frame carried adjacent said cylinder, said guide frame having side ribs formed thereon, said ribs having internal channels, one of said slides being adapted to be moved to one side when access is desired between certain partitions whereby a slide so moved will pass onto said frame and be held by said last-mentioned ribs, thereby holding the cylinder against rotation and at the same time causing the slide so moved to be held in position for its correct return over the outer portions of the cylinder.

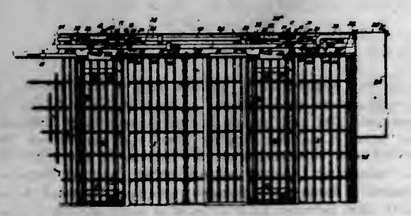
5. In a desk filing-cabinet, the combination of a body provided with a slide-way, rotary record carrying means

having compartments at the ends of said slide-way, and sliding covers for said compartments, said covers being adapted to be placed in said slide-way from either end thereof.

7. In a desk filing-cabinet, the combination with a desk body, of rotary cylinders carried at opposite ends of said body, each cylinder provided with laterally movable covers, said body provided with means between said cylinders for receiving at either of its ends the covers, and said covers when moved toward the center of the desk being adapted to lock the cylinders against movement.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,269,244. LOCKING AND OPERATING SYSTEM FOR JAIL-DOORS. DAVID FRANKLIN YOUNGBLOOD, San Antonio, Tex. Filed May 18, 1917. Serial No. 169,509. (Cl. 189—7.)



1. A locking system for jail doors, comprising locking means for each door, operating means for the door-locking means common to all the doors, and means individual to the doors and operable from a common point for disconnecting the locking means of any door from the operating means therefor without affecting the locking means of the other doors, whereby any one of a number of doors may be unlocked or locked without effect upon the locking means of the other doors, or any chosen number of doors up to the full number thereof may be unlocked or locked, at the will of an operator, from a common point.

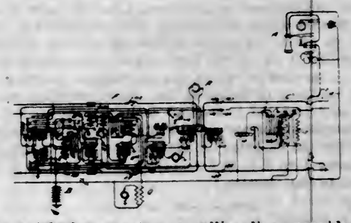
2. A locking system for jail doors, comprising locking means individual to the doors and embodying locking devices for locking each door in either the open or closed position, operating means for the door-locking means common to all the doors, and means operable from a common point and individual to each door for eliminating any one or more of the doors from the common operating means for the locking means, with the eliminated doors remaining in either the open or the closed position and there locked.

3. In a locking system for jail doors, a series of doors, a longitudinally movable master lock-operating bar common to all the doors and having means for manipulating it, an upright lock bar individual to each door and movable up and down with respect to the door, means associated with each individual lock bar to lock the door in either the closed or the open position, a sub lock-operating bar, also individual to each door and connected to the upright lock bar of the door for moving it up and down, interlocking connections between the master lock-operating bar and the sub lock-operating bar, which connections are individual to the respective doors, and means individual to each door for connecting and disengaging the interlocking connections, to either include in or take out any door from operative relation with said master lock-operating bar.

4. In a locking system for jail doors, a series of doors, a longitudinally movable master lock-operating bar for the doors having means for manipulating it, an upright lock bar individual to each door and movable up and down with respect to the door, and said door having means for its individual lock bar to lock the door in either the closed or the open position, connecting means between the master lock-operating bar and the upright lock bar for the door for moving said lock bar up and down, said connecting means including a lug and the master bar having a notch individual to the lug, and means individual to each door and separate from the master bar and said connecting means for moving the lug into the notch to permit the operation of the door lock bar and for moving the lug out of the notch to disconnect the door lock bar from the master lock operating bar.

[Claims 5 to 29 not printed in the Gazette.]

1,269,245. AUTOMATIC TELEPHONE SYSTEM. ALBERT ANDERSEN, Chicago, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed June 7, 1916. Serial No. 102,181. (Cl. 179—9.)



1. In a telephone system, a calling line provided with a toll assessing device, a plurality of other lines of two kinds, means for connecting the calling line with a called one of said other lines, automatic means for operating said device to register the call, and automatic means common to all of said lines for preventing the operation of said device when the called line is of a particular kind.

2. In a telephone system, a calling line provided with a toll assessing device, a plurality of other lines of two kinds, means for connecting the calling line with a called one of said other lines, and controlling means for said device common to said other lines adapted to discriminate between the two kinds of lines whereby if the called line is of one kind the device is operated and if the called line is of the other kind the device is not operated.

3. In a telephone system, the combination with a calling line provided with a measured service device, a plurality of other lines, and means for connecting said calling line with any one of said other lines, of means for operating said device to register the call, and automatic means common to all of said other lines for preventig the operatio of said device whereby certain of said other lines may be rendered accessible free of charge.

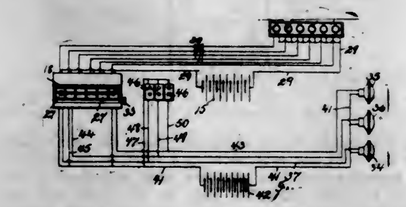
4. In a telephone system, an automotic connector switch, lines of two kinds accessible to said switch, a calling line and means for extending it to said switch, a toll assessing device for said calling line, means for operating said switch to connect with any one of said first lines, means for operating said device if connection is established with a line of one kind, and means individual to said switch for preventing the operation of said device if connection is established with a line of the other kind.

5. In a telephone system, a calling line provided with a registering device, a connector switch, a plurality of other lines accessible to said switch, means for extending the calling line to said switch, means for operating said switch to connect with any one of said other lines, means for operating said register when the called subscriber answers, and means common to said other lines for rendering said last means ineffective when a particular line is called.

[Claims 6 to 11 not printed in the Gazette.]

1,269,246. SIGNAL SYSTEM FOR VEHICLES AND THE LIKE. FRANCESCO P. ANELLO and GIUSEPPI POCORORA, Newark, N. J. Filed Oct. 20, 1916. Serial No. 126,645. (Cl. 177—337.)

1. A signaling system for vehicles comprising an annunciator having a plurality of movable normally invisible visual signals, and means for moving the said signals into visible positions; a plurality of controlling circuits associated with said signals; a series of push buttons, each associated with and adapted to close one of said controlling circuits to thereby operate the visible signal controlled by the circuit with which the push button in question is associated; a plurality of lamp circuits in each of which a lamp is included; a plurality of circuit closing devices included one in each of said lamp circuits, said circuit closing devices being associated each with one of said visual signals and adapted to close the lamp circuit in which it is included when the visual signal associated with the circuit closing device in question is operated; a plurality of devices separate from said set of push buttons and each of which devices is adapted to close one of said lamp circuits; and means for supplying current to said several circuits.

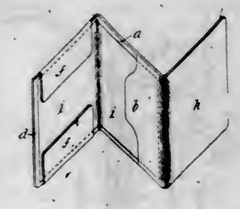


2. A signaling system for vehicles comprising an annunciator having a plurality of movable normally invisible visual signals, and means for moving the said signals into visible positions; a plurality of controlling circuits associated with said signals; a series of push buttons, each associated with and adapted to close one of said controlling circuits to thereby operate the visible signal controlled by the circuit with which the push button in question is associated; a plurality of lamp circuits in each of which a lamp is included; a plurality of circuit closing devices included one in each of said lamp circuits, said circuit closing devices being associated each with one of said visual signals and adapted to close a lamp circuit in which it is included when the visual signal associated with the circuit closing device in question is operated; a plurality of auxiliary circuits associated with said lamp circuit; a second set of push buttons included one in each of said auxiliary circuits and adapted to close the same; and means for supplying current to said several circuits.

3. A signaling system for vehicles comprising an annunciator having a plurality of visual signals, and a plurality of magnets associated each with one of said signals and adapted to release the same and permit the signal controlled by it to move from its initial position; a plurality of controlling circuits associated with said magnets; a set of push buttons, each associated with and adapted to close one of said controlling circuits to thereby release the visual signal controlled by the circuit with which the push button in question is associated; a plurality of lamp circuits in each of which a lamp is included; a plurality of circuit closing devices included one in each of said lamp circuits, said circuit closing devices being associated each with one of said visual signals and adapted to close the lamp circuit in which it is included when the visual signal associated with the circuit closing device in question is released; a plurality of auxiliary circuits associated with said lamp circuit; a second set of push buttons include each in one of said auxiliary circuits and adapted to close the same; and means for supplying current to said several circuits.

1,269,247. WALLET OR CASE FOR DOLLAR-BILLS, PASSPORTS, OR THE LIKE. FREDERICK CHARLES ASLIN, Woodford Green, England. Filed May 29, 1916. Serial No. 100,650. (Cl. 150—38.)

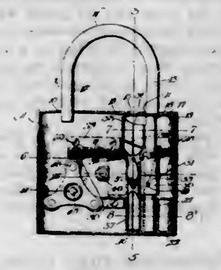
1. A wallet or note case consisting of three equal leaves flexibly connected together, the central leaf being provided with two pockets, one on each side thereof and oppositely disposed with relation to one another, and each



end leaf with a pair of flaps, the flaps on one end leaf being arranged in opposite relation to the flaps on the other end leaf.

[Claim 2 not printed in the Gazette.]

1,269,248. SEAL-LOCK. LEON J. BAIRD and CHARLES G. LAY, Elmira, N. Y. Filed June 27, 1916. Serial No. 106,174. (Cl. 70—97.)



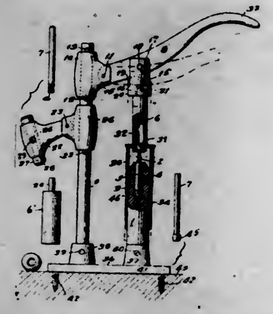
1. A seal lock comprising a casing, alined openings in the top and bottom adapted to receive and discharge a seal, a shackle having legs of unequal length, the long leg extending through the top and pivotally and slidingly mounted within said casing, a cylindrical member fastened in the casing, two opposed plungers slidable in said member, openings in the cylinder member walls in line with the openings in the top and bottom of the casing, a fixed abutment limiting movement of one of the plungers in one direction, key actuated means adapted to slide said last mentioned plunger away from the abutment and toward the other plunger, a sleeve mounted on the said long leg of the shackle and having a flat sided cam adapted to form an abutment for the other plunger to hold it in spaced relation to the first mentioned plunger, the said openings and space between the plungers adapted to receive a disk seal, said sleeve and leg being connected by a pin and coöperating helical groove, the parts being arranged so that a seal between the two plungers prevents outward or unlocking movement of the long leg of the shackle.

2. A seal lock comprising a casing, a shackle having a long and a short leg, the short leg adapted to be inserted in an opening in the top of the casing, the long leg pivotally and slidably mounted in the casing, a member adapted to be moved by the sliding movement of the long leg in one direction, and means in the casing to receive a destructible seal in position to prevent the movement of said member and thereby the long leg of the shackle.

11. A seal lock comprising a casing formed with an opening for the insertion of a destructible seal and having means therein to receive said seal, means actuated by closing the lock for closing said opening, and means also actuated by closing the lock for positively moving a seal into operative position in the lrst mentioned means.

[Claims 3 to 10 not printed in the Gazette.]

1,269,249. DE- AND RE-CAPPER FOR SHOTGUN-SHELLS. JOHN L. BARNES, Los Angeles, Cal. Filed May 1, 1917. Serial No. 165,789. (Cl. 86—37.)

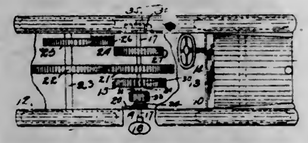


1. A de- and re-capper comprising a convertible punching and non-punching stake having an end socket, and a punch detachably mounted in said socket; interchangeable tools comprising a socketed plunger of one diameter and a pressing plunger of less diameter to coöperate respectively with the stake and its punch when the punch is in place and with the stake when the punch is detached; and radius means adapted to swing on a horizontal axis, and about a vertical axis, to control the plungers respectively at separate times to alternatively coöperate with the stake when it is supplied with the punch and also when it is divested of the punch.

2. A de- and re-capper comprising a stake and a post in parallelism with each other, a tool to coöperate with the stake, and means swiveled to the post on a vertical axis to control the tool for such coöperation.

[Claims 3 to 5 not printed in the Gazette.]

1,269,250. AUTOMOBILE TOY. OLIVER W. BARRICK and JOSEPH E. SPEICHER, Altoona, Pa. Filed Sept. 29, 1917. Serial No. 193,953. (Cl. 46—48.)



1. A toy automobile including a body, wheels designed to carry the body, power means for propelling the toy in a forward direction, direction reversing means actuated by the power driving element, a train of gears for transmitting forward motion to the toy and a train of gears for transmitting motion in a reverse direction.

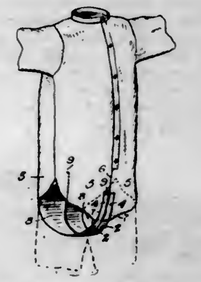
2. A toy automobile including a body, wheels and axles to carry the body, a spiral spring constituting the power element, a gear train for transmitting power to drive the toy in a forward direction, another train of gears consisting of an idler gear for transmitting motion such that the toy will move in a reverse direction, an automatic gear shift operated by the driving spring, and means for locking the forward motion gear train in operative relation with the rear driving axle.

3. A toy automobile including a driving axle, separate gears on said axle, a driving shaft, a coil spring thereon, separate spaced gears also on said driving shaft, and means automatically controlled by the expansion of the said spring as it unwinds for shifting the gears on the driving shaft into and out of engagement with those on the said axle.

4. A toy automobile including a driving axle having spaced gears thereon, an idler gear meshing with one of said gears, propelling means including a spring, a driving shaft, and spaced gears mounted on said shaft, and means actuated by the unwinding of said spring for causing said shaft to be shifted in the direction of its axis to cause the gear thereon meshing with the primary gear on the axle to shift out of engagement therewith, and the other gear on said shaft to engage with said idler.

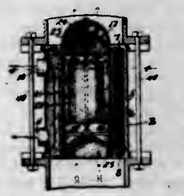
[Claims 5 to 7 not printed in the Gazette.]

1,269,251. SHIRT. EDWIN F. BOOTH, Milwaukee, Wis. Filed Mar. 6, 1917. Serial No. 152,448. (Cl. 2—41.)



In a garment of the described class, the combination with the front and rear parts of a shirt, of two separate end members both end members being permanently connected at their respective ends to the front and rear members of said garment, said members being adapted to prevent a shirt from accidentally moving upwardly when worn, while they also permit the two opposing sides of both the front and rear of the garment to be moved apart as circumstances may require.

1,269,252. FUEL HEATER AND MIXER. MARVIN H. BROWN, San Francisco, Cal., assignor to H. J. McGinnis, R. O'Connor, B. M. Vigoureux, San Francisco, Cal., and C. P. Eggleston, Oakland, Cal. Filed Jan. 11, 1917. Serial No. 141,796. (Cl. 257—241.)

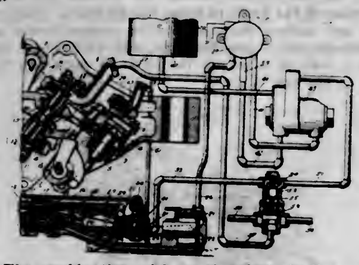


1. In a fuel heating and mixing device for internal combustion engines, a casing having an inlet for connection to the carbureter and an outlet for connection to the inlet manifold and means to heat same by the exhaust gases, a spider in said casing, a vertical rod supported by the spider, a hemispherical screen supported by the lower end of the rod and located below the spider, a pair of vertically spaced horizontal screens on the rod the lower of which is located above the spider, a vertical screen of substantially star-shape cross section between said horizontal screens, a vertical scroll screen on the interior of the star-shaped screen, a pair of spaced hemi-spherical screens on the rod located above the upper horizontal screen and arranged one within the other, and a horizontal screen on the rod spaced above said upper horizontal screen and extending across the concave sides of said pair of hemispherical screens.

[Claims 2 and 3 not printed in the Gazette.]

1,269,253. CAR AND ELECTRIC COUPLING CONTROL. THOMAS R. BROWN, Sparkill, N. Y., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Apr. 10, 1914. Serial No. 830,998. (Cl. 173—332.)

3. The combination of a coupling provided with a movable lock for holding counterpart couplings clamped together, an electric train line coupling having a movable contact carrier adapted to be projected for closing the train line circuits, fluid pressure means for releasing the carrier and the coupler lock, a manually operated valve for supplying fluid to said means, a valve controlling a direct connection for supplying fluid thereto, and a piston operated by the flow of fluid to said means for opening said valve.



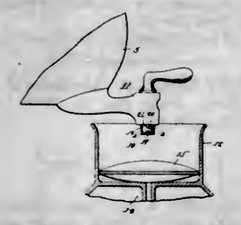
6. The combination with an electric train line coupling and fluid pressure means for operating said coupling, of a manually actuated valve for controlling the fluid pressure for operating said coupling and an electric switch operable with said valve for controlling a circuit supplying current for the electric train lines.

7. The combination with an electric train line coupling having a contact carrier adapted to be projected for closing the train line circuits and fluid pressure actuated means for operating said carrier, of a valve for supplying operating fluid to said means, a handle for actuating said valve, and an electric switch operated by said handle for controlling the current in said train line circuits.

9. The combination with an electric train line coupling having a plurality of fixed contacts and a movable contact carrier having contacts and adapted to be projected for electrically connecting the fixed contacts of counterpart couplings, of fluid operated means for effecting the release of the contact carrier to open the train line circuits, a manually operated valve for supplying fluid to said means and an electric switch normally closing a circuit through which current is supplied to said train line circuits and operated upon movement of said valve to open said supply circuit.

[Claims 1, 2, 4, 5, and 8 not printed in the Gazette.]

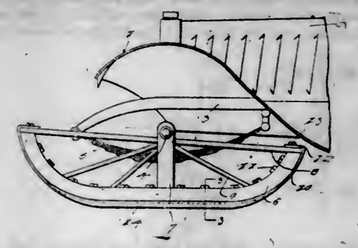
1,269,254. LIQUID-SUPPLY-REGULATING DEVICE FOR CREAM-SEPARATORS. SAMUEL BROWN, Grand Rapids, Ohio. Filed Mar. 2, 1918. Serial No. 219,970. (Cl. 137—68.)



In a centrifugal separator, a supply tank having an outlet valve consisting of a hollow turning plug, a receiver into which the plug discharges, a float in the receiver and positioned to seat against the outlet end of the plug, said end of the plug having side apertures, and a rotatable sleeve in the plug, said sleeve having apertures adapted to register with the plug apertures.

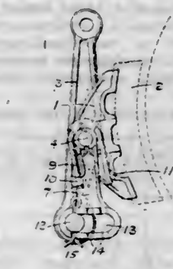
1,269,255. SLED-RUNNER FOR AUTOMOBILES. WILLIAM BURNIP, Chase River, British Columbia, Canada. Filed Oct. 7, 1916. Serial No. 124,322. (Cl. 21—96.)

A sled runner comprising a felly having each end curved upwardly to form a horizontal portion, means securing said felly to an axle, a flat shoe secured to said structure and having its ends bent about the ends of the felly and having a horizontal portion, and a right angled



flange formed on one edge of the horizontal portion of the shoe and having tapering curved ends to conform to the contour of the shoe.

1,269,256. BRAKE-HEAD-BALANCING DEVICE. THOMAS L. BURTON, St. Louis, Mo., assignor to The American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed July 27, 1916. Serial No. 111,581. (Cl. 188—70.)



1. The combination of a brake hanger, a brake head pivotally connected thereto, a spring acting between the brake head and hanger, and manually operable means movably mounted relative to the hanger for adjusting the position of one end of the spring.

3. The combination of a brake hanger, a brake head pivotally connected thereto, a spring bearing at one end against the brake head, an arm pivotally mounted on the hanger for supporting the other end of the spring, and manually operable means for adjusting the position of the arm.

5. The combination of a brake hanger, a brake head pivotally connected thereto, a spring bearing at one end against the brake head, an arm pivotally mounted on the hanger for supporting the other end of the spring, a brake beam attached to said hanger, and adjustable connecting means between said arm and the end of the brake beam.

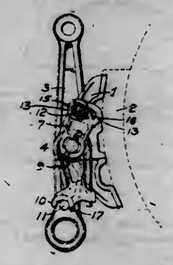
[Claims 2 and 4 not printed in the Gazette.]

1,269,257. BRAKE HEAD AND SHOE-BALANCING DEVICE. THOMAS L. BURTON, St. Louis, Mo., assignor to The American Brake Company, St. Louis, Mo., a Corporation of Missouri. Filed July 27, 1916. Serial No. 111,582. (Cl. 188—70.)

1. The combination of a brake hanger, a brake head pivotally connected thereto, an arm mounted to turn with the brake head through a limited movement relative to the hanger, and an adjustable connection between said arm and the brake head.

4. The combination of a brake hanger, a brake head pivotally connected thereto, a friction arm pivotally mounted to have a limited movement relative to the hanger, a frictional connection between said arm and the brake head, and means for adjusting the frictional resistance.

5. The combination of a brake hanger, a brake head pivotally connected thereto, a friction arm pivotally mounted to have a limited movement relative to the hanger, a spring acting between the arm and the hanger, a frictional connection between said arm and the brake head, and a clamping nut for adjusting the frictional resistance.

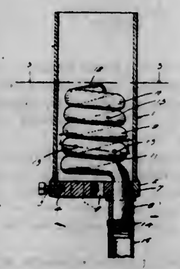


6. The combination of a brake hanger, a brake head pivotally connected thereto, a friction arm mounted on the same pivot with the brake head, limiting stops for defining the relative movement between the friction arm and the hanger, a spring opposing the movement between said stops, and a frictional connection between said arm and the brake head.

7. The combination of a brake hanger, a brake head pivotally connected thereto, a friction arm mounted on the same pivot with the brake head, a stud carried by the brake head, and a clamping nut mounted on said stud for producing frictional engagement between said arm and the brake head.

[Claims 2 and 3 not printed in the Gazette.]

1,269,258. OIL-BURNER. AUGUST H. CAILLOUETTE, Nashville, Tenn. Filed Sept. 7, 1917. Serial No. 190,185. (Cl. 158—61.)



1. In an oil burner, a cylindrical casing, a head detachably carried by one end of said casing, a burner pipe oil positioned within said casing and having its convolutions gradually decreasing in diameter as they extend upwardly, the uppermost convolution of said coil being provided with a plurality of spaced fuel egressing openings, said head provided with a plurality of openings communicating with the interior of said casing, and fuel-conducting means connected to said coil.

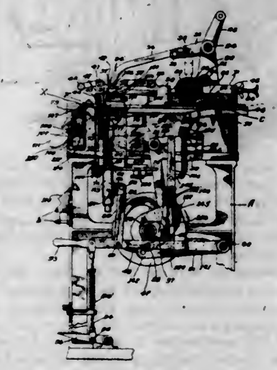
[Claim 2 not printed in the Gazette.]

1,269,259. MACHINE FOR APPLYING FLIES TO PAPER BOXES. WALTER C. CARLSON, Milwaukee, Wis., assignor to Stokes & Smith Company, Summerdale, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 17, 1916. Serial No. 126,097. (Cl. 93—57.)

1. A machine of the class described embodying in its construction a box-supporting anvil and a support for a stack of flies independent of the anvil and movable toward and from the latter to bring a portion of one of the flies of the stack into position to overlie an adjacent wall of the anvil.

2. A machine of the character described embodying in its construction a box-supporting anvil, a support for a stack of flies, and means for moving the support laterally toward the anvil to bring an edge portion of the uppermost fly of the stack into position to overlie the anvil.

3. In a machine of the class described, an anvil, a support for a stack of flies, means for applying an adhesive to a fly on the support, means for moving the support bodily toward the anvil to bring the fly into a position to overlie one wall of the anvil, and a presser device movable toward and from the anvil and adapted to press against a wall of a box on the anvil to cause the fly to adhere to the box.

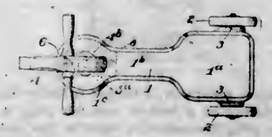


4. In a machine of the class described, an anvil, a vertically-reciprocating laterally-movable support for a stack of flies, means for applying an adhesive to the uppermost fly of the stack on the support and means for imparting the lateral movement to the support to cause the adhesive leaf to overlie the anvil.

20. In a machine of the class described, an anvil, a support for a stack of flies located adjacent the anvil, a clamping plate overlying the flies on the support, a glue applying stencil movable toward and from the fly support and adapted to apply glue to the edge portion of the uppermost fly on the support which projects beyond the clamping plate, said stencil in its movement away from the fly being adapted to separate the glued portion of the fly from the remainder of the stack, means for moving the support to bring the glued portion of the fly into a position to overlie one wall of the anvil, and a presser device moving into operative position to cause the fly to adhere to a box supported on the anvil when the stencil has moved away from the fly.

[Claims 5 to 19 not printed in the Gazette.]

1,269,260. CHILD'S VEHICLE. ATHERTON D. CONVERSE, Winchendon, Mass. Filed Jan. 22, 1918. Serial No. 213,199. (Cl. 21—191.)

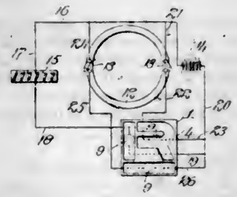


1. In combination, in a device of the character described, a body member having a recess extending in from its edge, a bearing block filling said recess, a vertically arranged steering post journaled in said bearing block, and located with its axis within the limits of the recess and means for detachably holding the bearing block within the recess, substantially as described.

5. In combination in a device of the character described, a body member having a recess extending in from its edge, a bearing block fitted to said recess, means for fixing the bearing block in said recess, and a steering head or post mounted in said block, said bearing block having a portion lapping upon the underside of said body member.

[Claims 2 to 4 and 6 not printed in the Gazette.]

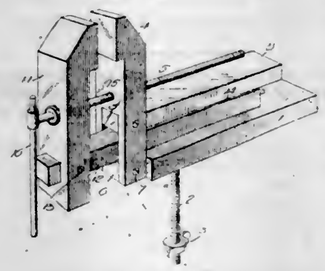
1,269,261. DIRECTION-INDICATOR FOR AUTOMOBILES. DWIGHT C. COOK, Philadelphia, Pa. Filed Jan. 15, 1917. Serial No. 142,460. (Cl. 40—132.)



1. In an automobile illuminating and direction signal, a rectangular casing subdivided into a plurality of compartments, and a cover plate for the casing having outlined characters constituting index elements, one of said compartments being constantly illuminated to provide a tail light and the other compartments being adapted to be alternately lighted and forming, when lighted, in combination with the outline of the tail light compartment, a letter which is the initial one of the direction.

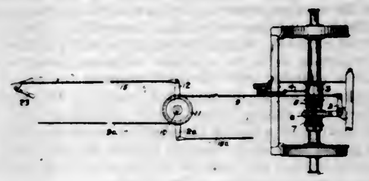
2. In an automobile illuminating and direction signal, a casing sub-divided into a plurality of compartments, one of said compartments being constantly illuminated to provide a tail light, and the other compartments when singly illuminated forming with the tail light compartment a direction index, each of said compartments having a reflector which curves from the center toward the upper edges of the sides of the compartment.

1,269,262. VISE. THOMAS JOHN CRAWFORD, Ottawa, Ill. Filed Oct. 23, 1917. Serial No. 198,113. (Cl. 81—31.)



A vise comprising a pair of jaws, one jaw having secured to the bottom thereof a base plate provided with means for engaging a fixed support, said jaw having a ratchet plate spaced above the base plate, the other jaw having a bar extending through the first named jaw and between the plates and provided with a catch for engaging the ratchet teeth to limit the inward movement of the bar when said last named jaw is tilted with respect to the other jaw by its engagement with an object between the jaws, said bar carrying a spring engaging the teeth to release the catch when the pressure on the jaw is relaxed, and a handled screw journaled in the last named jaw and having threaded engagement with the first named jaw.

1,269,263. CAR-BRAKE MECHANISM. EDWARD H. DEWSON, New York, N. Y., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa., a Corporation of Pennsylvania. Filed Oct. 22, 1915. Serial No. 57,249. (Cl. 188—16.)



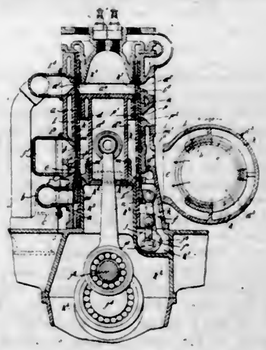
1. The combination with a brake applying mechanism, and a spring device normally tending to cause the brakes to apply, of a manual element under the control of the motorman for opposing said spring and regulating the action of the same, and an independent manually operated means for interrupting the motorman's control and releasing the spring device to apply brakes.

3. The combination with a brake applying mechanism and a spring device normally tending to cause the brakes to apply, of a motorman's brake handle, a connection from said handle to the spring device and including a clutch element, and an independent manually operated means having a connection for throwing said clutch element out of engagement.

6. The combination with a brake applying mechanism and means normally tending to cause the brakes to apply, of a manual element under the control of the motorman for regulating the action of said means, and an independent manually operated device connected to said means for actuating the same independently of the position of the motorman's element.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,269,264. INTERNAL-COMBUSTION ENGINE. THEODORE LIVINUS REEPMAKER D'ORVILLE, Twickenham, England. Filed June 4, 1917. Serial No. 172,716. (Cl. 123—75.)



1. A four cycle internal combustion engine including a cylinder having upper and lower fuel intake ports and a plurality of exhaust ports, an annular abutment within the cylinder, a piston adapted to coöperate with the head of the cylinder to form a working chamber in communication with the upper fuel intake port and the exhaust ports and also coöperating with said abutment to provide a compressor chamber, a receiver adapted to communicate with the latter on the down stroke of the piston, and a casing formed at the lower end of the cylinder, and in communication with the lower fuel intake port thereof, and

said casing adapted to communicate with the compressor chamber on the up stroke of the piston.

2. A four cycle internal combustion engine including a cylinder having a main fuel intake port and exhaust ports and an auxiliary fuel intake port, and means for injecting a supplementary fuel charge into the main charge at the end of the suction stroke including a fixed abutment within the cylinder, a piston coöperating therewith, an initial fuel receiving chamber communicating with said auxiliary fuel intake port, a valve to establish communication between the latter chamber and the space between the piston and the abutment on the compression stroke of the piston, a receiver, and sliding valve means including the valve above mentioned adapted to establish communication between the compression chamber formed by the piston and the abutment and the receiver, and also between the latter and the working chamber of the cylinder.

4. A four cycle internal combustion engine including a cylinder having a fixed head and inlet and exhaust ports adjacent thereof, a fixed abutment ring arranged in the lower part of the cylinder, a piston working between the fixed cylinder head and fixed abutment ring and forming a compressor chamber, an auxiliary fluid receiving chamber formed at the lower end of the cylinder and including a closed well portion, valves for controlling the inlet and exhaust ports of the cylinder and also the inlet and exhaust ports of the compressor chamber, operating mechanism for the valves located in the aforesaid well, and a compressed fluid receiving chamber located exterior of the chamber and having spaced inlet and discharge ports adapted to respectively communicate with the compressor chamber and with the interior of the working cylinder at different points in the cycle of operation of the engine.

[Claim 3 not printed in the Gazette.]

1,269,265. INTERCHANGEABLE AND REMOVABLE TRUCK-BODY. WILLIAM T. DUGGAN, Cleveland, Ohio. Filed Sept. 25, 1917. Serial No. 193,115. (Cl. 214—65.)

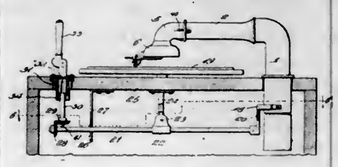


1. In a device of the class described, the combination with a motor truck chassis having a pair of spaced I beams secured thereto, of a body detachably associated with the chassis, rollers mounted on the under surface of the body and positioned on top of the I beams, legs pivotally secured to the under surface of the body and adapted to engage the I beams, said legs being adapted to drop down in an extended position by their own weight when the body is removed from the chassis.

2. In a device of the class described, the combination with a motor truck chassis having a pair of spaced I beams secured longitudinally on the same, and a body detachably associated with the chassis, rollers rotatably carried by the under surface of the body and positioned on the top of the I beams, legs pivotally carried by the under surface of the body, rollers mounted on the free ends of the legs, said rollers adapted to engage the I beams, and means to lock said body on the chassis.

3. In a device of the class described, the combination with a motor truck chassis having a pair of spaced I-beams secured longitudinally on the same, of a body detachably associated with the chassis, rollers rotatably carried by the under surface of the body and positioned on top of the I-beams, legs pivotally carried by the under surface of the body, rollers mounted on the free ends of the legs and adapted to engage the I-beams, said I-beams extending rearwardly of the chassis and having their free ends curved downwardly, as and for the purpose specified.

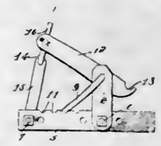
1,269,266. TONE-ARM. ZENA ECKLEBARGER, Goshen, Ind. Filed June 16, 1917. Serial No. 175,205. (Cl. 274—23.)



1. The combination of a tone arm having an upright portion, a gear on said upright portion, a shaft having a gear intermeshed with the first-named gear, a handle, and a connection intermediate the handle and the shaft for actuating the latter by the former.

[Claims 2 to 4 not printed in the Gazette.]

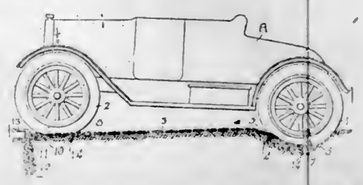
1,269,267. AUTO LIFTING-JACK AND TIRE-SAVER. CHRISTIAN EICHELBERGER, Shickley, Nebr. Filed July 18, 1917. Serial No. 181,310. (Cl. 254—89.)



3. A vehicle jack comprising spaced base members, bracket arms pivoted to the forward portions of said base members, a U shaped adjusting yoke rotatably mounted in the upper ends of said bracket arms and arranged for engagement with the base members, said adjusting yoke coöperating with the bracket arms in the adjusting operation, axle engaging lifting bars rotatably mounted at their forward portions on the pivoted ends of the U shaped adjusting yoke, rocker arms pivoted to the rear portions of the base members, a U shaped operating yoke rotatably mounted in the upper ends of said rocker arms and pivoted at its ends to the rear portions of the lifting bars for raising and lowering the latter, and means for operating said operating yoke.

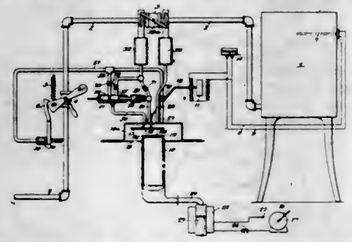
[Claims 1 and 2 not printed in the Gazette.]

1,269,268. DEVICE FOR PULLING AUTOMOBILES OUT OF MUD-HOLES. FRED ERVIN, Sioux Falls, S. D. Filed Mar. 2, 1917. Serial No. 152,013. (Cl. 180—7.)



The herein described device for pulling automobiles out of the mud, including, in combination with an automobile tire chain formed with side chains and cross links, of a similar complemental chain length detachably coupled to one end of the tire chain, a stiff spreader bar extending transversely across the supplemental chain length for holding the side chains in a properly spaced relation, attaching means for securing the end of the supplemental chain length to the periphery of an automobile wheel, a pair of converging side chains detachably connected to the opposite end of the tire chain, a stiff spreader bar extending transversely between the flared ends of the converging chains, the spreader bars being curved to correspond to the curvature of the tire, an anchor stake, and means for connecting the converging chains to the anchor stake.

1,269,269. CIRCUIT-CONTROLLING APPARATUS. HARRY FALTERMAYER, Philadelphia, Pa. Filed June 6, 1916. Serial No. 101,967. (Cl. 236—8.)



1. The combination of an air actuated device; a source of air under pressure; and a galvanometer-controlled valve in the form of an oscillatory perforated plate for governing the admission of air from the source to said device.

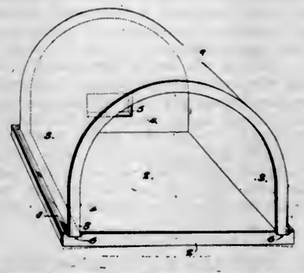
3. The combination of a galvanometer having an oscillatory member; a perforated plate carried by said member; a plurality of air actuated devices having inlets controlled by said plate; and means for periodically delivering air to one of the inlets as determined by the position of said plate.

11. The combination of a plurality of cylinders having plungers; an abutment structure; conduits opening on one face of said structure and respectively connected to supply fluid to said cylinders; a plate free to move adjacent the face of said structure on which said conduits open; means for actuating said plate; a cylinder mounted adjacent the path of movement of the plate; a plunger operative in the cylinder and provided with an opening; with means for supplying fluid under pressure to the cylinder to temporarily clamp the plate against the abutment structure and simultaneously deliver fluid through its opening to one of the conduits.

23. The combination of a plurality of air actuated devices; a source of air under pressure; an instrument having a movable member; a valve moved by said member adjacent the inlets of said devices; and means for periodically holding said valve in a position in which it will permit flow of air from the source to one of the inlets of the air actuated devices to the exclusion of the others.

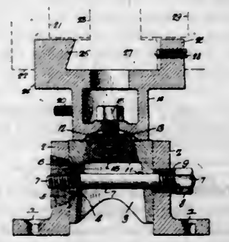
[Claims 2, 4 to 10, 12 to 22, and 24 to 28 not printed in the Gazette.]

1,269,270. MUFFLE. JAMES B. FARQUHAR, Vancouver, British Columbia, Canada. Filed Dec. 18, 1916. Serial No. 137,671. (Cl. 263—49.)



A muffle constructed in two parts, one an arched wall and roof member, and an integrally formed end wall, the other part comprising the floor member and being provided with an upwardly projecting edge bead to receive the bottom edge of the wall of the first part, the inner edge of said bead being beveled outwardly to provide a space at the outside of the wall, and a sealing material located in said space, said floor member also being recessed to receive the lower edge of the walls of the first part, said recess at the inner side having a vertical wall surface against which the side of the lower edge of the wall of said first part rests, all being arranged substantially as shown and for the purpose described.

1,269,271. VISE. THOMAS J. FEGLEY and GEORGE O. LEOPOLD, Philadelphia, Pa., assignors to North Bro's M'f'g Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed July 30, 1917. Serial No. 183,548. (Cl. 81—41.)



1. The combination in a vise, of a base having upwardly projecting bearings spaced apart; a swiveled coupling located between the bearings; a body portion carried by the swiveled coupling; means for holding the said body portion to said coupling; a bolt extending through the bearings on the base and through the swivel coupling, one of said bearings having a socket; a nut mounted in the socket and engaging the swivel coupling; a bolt extending through said nut; and a short sleeve extending through the opposite bearing and located between the bolt and the swivel coupling so that, when the nut is turned, the swivel coupling is clamped to the bearing.

4. The combination of a vise having bearings spaced apart; a swivel coupling mounted between the bearings; means for adjustably holding the coupling in position, the swiveled coupling having a tapered opening in its upper portion; a body portion seated on the swiveled coupling; a tapered nut mounted in the tapered opening in the swivel coupling, said nut engaging the body portion so that it will turn therewith; and a bolt extending through an opening in the body portion and engaging the nut so that, on turning the bolt in one direction, the nut will be drawn tightly into the tapered opening in the swivel coupling in order to lock the body portion to said coupling and, on reversing the movement, the body portion will be released so that it can be turned; and vise jaws mounted in the body portion.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,272. DEVICE FOR SHARPENING KNIVES, SCISSORS, AND LIKE CUTTING IMPLEMENTS. AUGUST BERGER FLOBACK, South Shields, England. Filed Dec. 23, 1916. Serial No. 138,580. (Cl. 51—7.)

1. A device for sharpening the blades of cutting implements comprising co-acting sharpening members which are hinged together, and blade guiding means associated with the said members.

2. A device for sharpening the blades of cutting implements comprising co-acting sharpening members which are hinged together and have relatively inclined abrading surfaces.

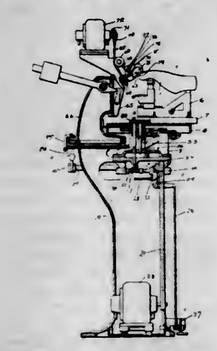
3. A device for sharpening the blades of cutting implements comprising co-acting sharpening members which are hinged together and have relatively inclined abrading surfaces, and blade guiding means associated with said members.

4. A device for sharpening the blades of cutting implements comprising co-acting sharpening members which are hinged together and have relatively inclined abrading



surfaces and a casing for the said members provided with guide slots through which the respective abrading surfaces are exposed.

1,269,273. LAST-MAKING MACHINE. EDWARD E. FOSTER, Beverly, Mass., assignor to C. C. Blake, Incorporated, Boston, Mass., a Corporation of New York. Filed Nov. 4, 1915. Serial No. 59,645. (Cl. 144—145.)



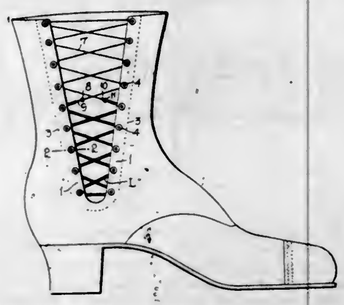
1. A last making machine, having, in combination, a support for a last in process, a rotary cutter of less axial dimension than the last to form a shoulder thereon, means for relatively moving the support and the cutter to transfer the point of operation of the cutter along the last, and means engaging an end surface of the last and controlling the relative vertical position of the cutter and the last by variations of said end surface from a plane to maintain a uniform relation between the cutter and the bottom of the last and thus locate the shoulder at the juncture of the bottom of the last with the upper-shaking surface thereof.

5. A last making machine, having, in combination, a support for supporting a last, and a conical cutter of less axial dimension than the last and arranged with its cutting element in a vertical plane, to form a vertical shoulder at the juncture of the bottom of the last with the upper-shaping surface thereof.

10. A last machine, having, in combination, a support for a last in process; a leader carried by the support and having a guiding flange; a rotary cutter operating to form a shoulder at the sides of the last bottom, the projections of which upon the plane of the leader coincide with the guiding flange; means for relatively actuating the support and cutter to transfer the point of operation of the cutter around the last; and means for relatively shifting the support and cutter during the transfer of the point of operation of the cutter around the toe of the last to form a shoulder the projections of which upon the plane of the leader fall within the guiding flange, substantially as described.

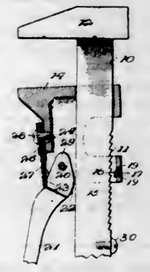
[Claims 2 to 4, 6 to 9, 11, and 12 not printed in the Gazette.]

1,269,274. SHOE-FASTENER. ANTONIO D. FRASCOLA, El Reno, Okla. Filed Mar. 31, 1917. Serial No. 158,927. (Cl. 24—143.)



As an article of manufacture, a shoe string comprising two separable sections, one of said sections being of a gage less than the second section, a catch secured to an extremity of each of the sections, an eyelet secured to the opposite extremity of each of the sections, the catch and eyelet of one section interlocking the eye and catch of the second section.

1,269,275. QUICK-ADJUSTING WRENCH. EDWARD W. GROGAN, Byers, Tex. Filed Feb. 6, 1918. Serial No. 215,637. (Cl. 81—141.)



A wrench comprising a stock having a plurality of teeth and a rigid jaw, a sleeve slidable upon the stock and having an opposing jaw, a stop carried by the sleeve and engageable with the teeth, a lock lever pivoted in the sleeve and including a lock recess and a cam face adapted to move the sleeve laterally to cause the stop to engage one of the teeth, a clip device including a base member having side ribs and a clamp member, a plurality of resilient members superposed between the base member and its ribs and engaged by the clamp member, and a fastening device operating through the clamp member, resilient members and the base and into the sleeve, said resilient members adapted to normally maintain the cam face in engagement with the stock and to engage in the lock recess and limit the outward movement of the lever.

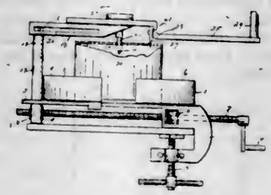
1,269,276. ARMY AND NAVY PILLOW KIT. REBECCA HARRIS, Newark, N. J. Filed Nov. 10, 1917. Serial No. 201,283. (Cl. 150—52.)

3. A bag comprising a rectangular body of flexible material adapted for tubular arrangement, securing means at the edges of the body whereby the latter may assume its flat arrangement or tubular form at will, gathering-strings carried by the body in spaced relations from each other and from the ends of the body, adapted for forming a central pillow portion and opposite end compartments when the body is in its tubular arrangement, the said securing means being also adapted for closing the said end compartments, and a plurality of pockets arranged within one of the end compartments.



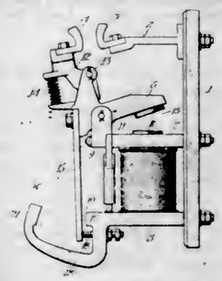
[Claims 1 and 2 not printed in the Gazette.]

1,269,277. CAN-OPENING DEVICE. SAMUEL P. HARTMAN, Kansas City, Mo. Filed Feb. 8, 1918. Serial No. 216,001. (Cl. 30—3.)



A can opener attachment for can holders, consisting of a vertically extending attaching member demountably mounted on the holder and having a longitudinally extending slideway, a carrier slidably mounted in said attaching member and provided at its upper end with oppositely disposed pivots projecting transversely of the carrier, a supporting member slidably and also rotatably mounted on said carrier and provided with a downward extending perforating punch having a shoulder upwardly adjacent its point, a lever rotatably mounted on said supporting member and engaged by the upper portion of said perforating punch, said lever being bent intermediately to form a vertical section, the portion of the lever outwardly of the vertical section forming a limiting stop to limit the penetration of the perforating punch, and a cutter mounted on said vertical section of the lever and adapted to penetrate the can simultaneously with said perforating punch.

1,269,278. ELECTRIC SWITCH. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 14, 1914. Serial No. 861,599. (Cl. 175—281.)



1. An electromagnetic mechanism comprising an electromagnet, a movable armature, and means including a magnetic circuit of limited capacity and an extension of said armature for magnetically preventing movement of the armature when current in the magnet winding is high, said mechanism having a member for reversing the magnetic pull on said armature extension after it has responded.

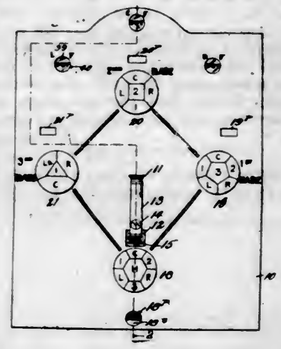
5. An electromagnetic mechanism having a movable armature, an operating winding therefor, a magnetic circuit of limited capacity, means controlled by excess flux for preventing movement of the movable armature when the winding is initially energized above a predetermined value, and a member associated with said mechanism for causing the excess flux to assist in moving the armature after movement thereof has been initiated.

6. An electromagnetic mechanism having an operating winding, a movable armature, a main magnetic circuit including said armature, said circuit having a portion of limited magnetic capacity, said armature having a portion normally forming a magnetic shunt to the portion of the main magnetic circuit of limited capacity and said mechanism having a member by which said portion of the armature completes another shunt magnetic circuit to the portion of the main magnetic circuit of limited capacity as the armature is moved to closed position.

9. An electromagnetic mechanism having a movable armature, a main magnetic circuit of limited capacity for actuating the armature under certain electrical conditions, a second magnetic circuit for holding the armature against movement under other electrical conditions and a third magnetic circuit in shunt to said circuit of limited capacity and adapted to be closed upon movement of the armature.

[Claims 2 to 4, 7, and 8 not printed in the Gazette.]

1,269,279. AMUSEMENT DEVICE. AUGUSTUS M. HENRY, New York, N. Y. Filed July 29, 1916. Serial No. 111,979. (Cl. 46—59.)



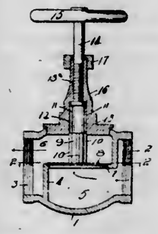
1. Apparatus of the kind described comprising a board having thereon the representation of a baseball field including base points, a target at one of said base points, a target at the next succeeding base point, a signal at said succeeding base point, and means operative upon the striking of the first named target to cause an actuation of the signal at said succeeding target.

8. Apparatus of the kind described comprising a board having thereon the representation of a baseball field including base points, a two-part target at one base point, a signal adjacent the succeeding base point, electro-magnetic means operative upon the striking of one of the two target-parts at the first named base point for causing an actuation of the signal at the succeeding base point, a second signal, electro-magnetic means operative upon the striking of the other target-part at the first named base to cause actuation of said second signal, and a moving member controlling said targets.

12. Apparatus of the kind described comprising a board having thereon the representation of a baseball field including base points, a multi-part target at each base point, "safe" and "out" signals controlled by said targets, a moving element supervising the control of said signals by said targets, and electro-mechanical means whereby said control and said supervision are effected.

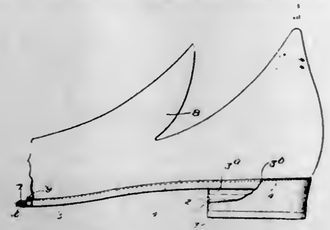
[Claims 2 to 7 and 9 to 11 not printed in the Gazette.]

1,269,280. VALVE. WALTER J. HICKEY, Oil City, La. Filed July 1, 1916. Serial No. 107,057. (Cl. 137—4.)



In a valve, a casing having an integral web dividing the casing into an inlet chamber and an outlet chamber, said web having an opening provided with a peripheral valve seat, a valve adapted to be seated in said opening and having a stem provided with radial guide ribs, a cap plug secured in said casing and having a cylindrical chamber provided with radial grooves loosely receiving the said ribs of the valve stem so as to permit free vertical movement of the valve, the said ribs being of smaller cross section than the grooves so as to permit limited rotary movement of the valve in either direction, and a valve rod threaded into the cap plug and provided with a valve stem engaging head on its inner end for positively limiting the upward movement of the valve and for frictionally engaging the upper end of the valve stem so as to cause partial rotation thereof when the said rod is in engagement with the valve stem so as to seat the valve.

1,269,281. SHOE. FRANK W. HOMAN, Philadelphia, Pa. Filed Mar. 10, 1917. Serial No. 153,875. (Cl. 36—34.)

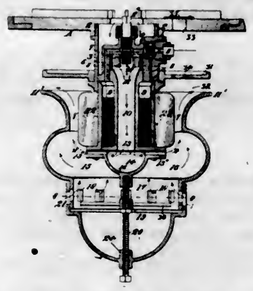


1. A shoe having a covered heel, with the upper margin of the heel-covering extending upward so as to inclose the edge of the heel-seat of the sole, and with the said margin located externally of the seam uniting upper and sole together, and fastened to the sole around the said edge.

[Claims 2 and 3 not printed in the Gazette.]

1,269,282. OIL-BURNER. WILLIAM DAVIS MERRY HOWARD, San Francisco, Cal. Filed June 20, 1917. Serial No. 175,766. (Cl. 158—53.)

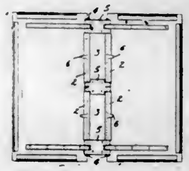
6. In an oil burner, a head, a flame spreader secured thereto, a gas retort within said head, a burner nozzle in communication with the lower end of said retort, and a combustion chamber supported from the bottom of said



retort and adapted to allow the flame to pass upwardly and outwardly around said spreader.

[Claims 1 to 5 and 7 to 10 not printed in the Gazette.]

1,269,283. CLOSURE OR DOOR. JAMES HOWDEN HUME, Glasgow, Scotland, assignor to James Howden & Company, Limited, Glasgow, Scotland, a Corporation of Great Britain. Filed Dec. 4, 1917. Serial No. 205,399. (Cl. 110—173.)



1. In combination with a door hinged along one edge, stationary sockets, and an angularly movable eccentric extending along and bearing against the hinged edge of the door, said eccentric being formed with pintles closely fitting said sockets.

2. In combination with a door, stationary sockets, and an eccentric extending along and bearing against one edge of said door, said eccentric being formed with pintles closely fitting said sockets and with an integral lateral projection by which it may be turned.

3. The combination of a door, a plate presenting a seating face to be engaged by the door adjacent to one edge thereof, said plate having sockets adjacent to said edge and an eccentric formed with pintles fitting said sockets, said eccentric being angularly movable to press the door against said seating face.

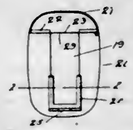
1,269,284. CLOSURE OR DOOR. JAMES HOWDEN HUME, Glasgow, Scotland, assignor to James Howden & Company, Limited, Glasgow, Scotland, a Corporation of Great Britain. Filed Dec. 4, 1917. Serial No. 205,400. (Cl. 110—173.)



1. In combination, a door hinged along one edge and a slidable wedge device fitted adjacent to the hinged edge and movable in a plane parallel to the pintle of the hinge so as to coöperate with the hinge to effect a tight fitting of the door at its hinged edge.

2. In combination, a door, a stationary hinge element secured to one edge of said door, a pivoted hinge element coöperating with said first-mentioned hinge element, and a slidable wedge device located between said hinge elements and slidable in a direction parallel with said edge, as and for the purpose specified.

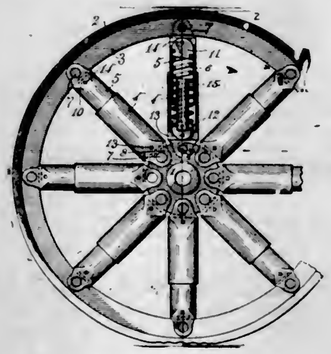
1,269,285. MATCH-RECEPTACLE. RICHARD D. KNIGHT, Providence, R. I. Filed June 27, 1917. Serial No. 177,186. (Cl. 206—36.)



1. The combination with a match box having a recess in one side thereof, of an open frame pivoted to said side near the bottom and in a position to coincide with said recess, said frame and said recess being of less width than the side, and relatively shaped to receive and clamp between them a strip of friction material, the upper end of the recessed portion of the box and the free end of the frame having complemental means for maintaining the frame in closed position.

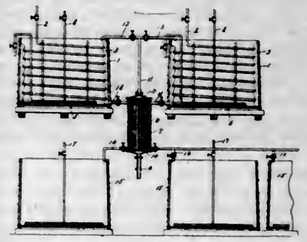
[Claim 2 not printed in the Gazette.]

1,269,286. RESILIENT WHEEL. WILLIAM F. KOPKE, Dayton, Ohio. Filed Oct. 25, 1916. Serial No. 127,515. (Cl. 152—47.)



In a wheel of the character specified, the combination with the rim and the hub thereof, of hollow spokes consisting each of two telescopic members which are attached respectively at their outer and inner ends to the rim and hub of the wheel respectively, a coil spring in each of said telescopic spokes occupying substantially the length of said spokes when they are under normal expansion, members attached to the inner and outer ends of said spokes and to which the ends of said springs are attached, and a guide member for each spring lying within the coils thereof, said guide members being attached to the members to which the inner ends of the springs are attached, whereby the said springs are subjected alternately to a maximum amount of compression and expansion during the rotation of the wheel.

1,269,287. PROCESS OF FERMENTING SULFITE LIQUOR. ALEXANDER LACKMAN, New York, N. Y. Filed Feb. 26, 1912. Serial No. 679,836. (Cl. 195—20.)



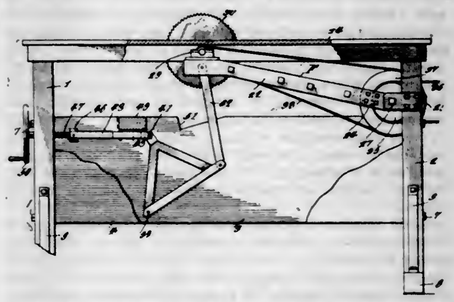
1. The process of treating sulfite liquor which comprises adding sulfuric acid to the hot liquor in substantially the amount equivalent to SO_2 and sulfites present, removing the sulfur dioxid in gaseous form and fermenting the acidified liquor.

2. The process of treating sulfate liquor which comprises adding an acid to the hot liquor in substantially the amount equivalent to SO_2 and sulfites present, removing the sulfur dioxid in gaseous form and fermenting the acidified liquor.

6. The process of treating sulfite waste liquor which comprises bringing such liquor to a boil, adding about 0.2 per cent. sulfuric acid, cooling and fermenting the cooled and acidified liquor.

[Claims 3 to 5 not printed in the Gazette.]

1,269,288. CIRCULAR-SAW MACHINE. RUPERT X. LANDOLL, Carthagena, Ohio. Filed Nov. 29, 1915. Serial No. 64,114. (Cl. 143—35.)



1. The combination of a supporting table, stringers pivotally mounted upon said table, said stringers being in parallel relation, depending bars connected to the outer end of said stringers, a pyramidal frame mounted upon said table, said bars being pivotally connected to said pyramidal frame, whereby said bars will have a direct downward pressure directly beneath said stringers, upon said pyramidal frame, and means connected to the apex of the pyramidal frame for moving the apex of the pyramidal frame in either direction, thus causing said bars to raise or lower said stringers.

[Claims 2 and 3 not printed in the Gazette.]

1,269,289. SHOCK-ABSORBER. JAMES S. LANG, Boston, Mass. Filed Nov. 29, 1915. Serial No. 63,945. (Cl. 21—105.)

1. In a shock absorber, the combination comprising a friction blade, a friction member in contact with said blade, a carrier for the friction member retained to cooperate with said blade in the support of said friction member and in relation to which said friction member is retained to have a limited endwise movement, a compres-

sion member interposed between said friction member and said carrier, said friction and compression members presenting surfaces coöperating with one another whereby said compression member may have a determinate rolling contact with said friction member and simultaneously with the rolling of said compression member said members be displaced laterally in relation to one another, and means whereby said compression member may be retained to have a determinate rolling contact with the surface of said friction member and a lateral displacement of said members be effected upon the endwise displacement of said friction member and said carrier with relation to one another.



2. In a shock absorber, the combination comprising a friction blade, a friction member in contact with said blade, a carrier for the friction member retained to cooperate with said blade in the support of said friction member and in relation to which said friction member is retained to have a limited endwise movement, a compression member interposed between said friction member and said carrier, said carrier and compression member presenting surfaces coöperating with one another whereby said compression member may have a determinate rolling contact with said carrier and simultaneously with the rolling of said compression member said friction member be displaced laterally in relation to said carrier, and means whereby said compression member may be retained to have a determinate rolling contact with the surface of said carrier and a lateral displacement of said friction member be effected upon the endwise displacement of said friction member and said carrier with relation to one another.

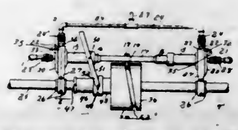
3. In a shock absorber, the combination comprising a friction blade, a friction member in contact with said blade, a carrier for the friction member retained to cooperate with said blade in the support of said friction member and in relation to which said friction member is retained to have a limited endwise movement, a compression member interposed between said friction member and said carrier, said friction member and said carrier both presenting surfaces coöperating with surfaces presented by said compression member whereby said compression member may have a determinate rolling contact with both said friction member and said carrier and simultaneously with the rolling of said compression member said friction member be displaced laterally in relation to said carrier, and means whereby said compression member may be retained to have a determinate rolling contact with both said friction member and said carrier and a lateral displacement of said friction member be effected upon the endwise displacement of said friction member and said carrier with relation to one another.

4. In a shock absorber, the combination comprising a friction blade, friction shoes arranged to engage said blade on opposite sides thereof and combined to be movable in unison, a carrier for the shoes with relation to which said shoes are confined to have a limited endwise movement, a strap passed around the back of said carrier and mounted to turn pivotally thereon with arms extending by said blade and shoes on either side thereof, and means for yieldingly retaining under tension and otherwise pivotally supporting the outer ends of said arms.

5. In a shock absorber, the combination comprising a friction blade, friction shoes arranged to engage said blade on opposite sides thereof and combined to be movable in unison, a carrier for the shoes with relation to which said shoes are confined to have a limited endwise movement, bearings interposed between said carier and one of said shoes, a strap passed around said carrier and mounted to turn thereon with its arms extending by said shoes and blade on either side thereof, and means for yieldingly retaining under tension and otherwise pivotally supporting the outer ends of said arms.

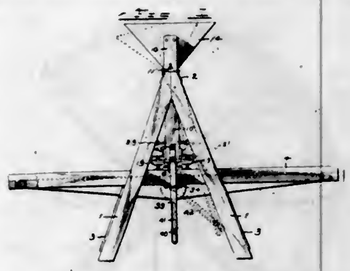
[Claims 6 to 13 not printed in the Gazette.]

1,269,290. BILGE-PUMP FOR MOTOR-BOATS. WALTER E. LOWELL, New York, N. Y. Filed Apr. 9, 1917. Serial No. 160,728. (Cl. 103—65.)



A bilge water pump support comprising in combination with a propeller shaft, a plurality of vertically extending standards, a plurality of pumping cylinders, bearings carried by the cylinders and embracing the propeller shaft for supporting one side of the pump, said cylinders being provided with means for engaging the vertically extending supports to support the other side of the pump, pistons operating in the cylinders, and means carried by the shaft for operating said pump pistons.

1,269,291. FRUIT SLICING AND SPREADING MACHINE. WILLIAM M. LUTHER, San Francisco, Cal. Filed Mar. 17, 1915. Serial No. 15,096. (Cl. 146—7.)



1. A slicing machine including a supporting frame, a feeder pivoted on said frame; a slicing blade beneath said feeder; conveying mechanism beneath said blade; frictional means attached to said conveying mechanism and connected to said feeder whereby movement of the pivoted feeder is synchronized with the operation of the conveying mechanism, for carrying away the cut slices.

2. A slicing machine including a supporting frame, a feeder pivoted on said frame; a slicing blade beneath said feeder, a stripper spaced outward from said feeder and having a slot adapted to engage said slicing blade; and a traction roller journaled in said frame beneath said blade and working synchronously with the said feeder.

3. A slicing machine including a supporting frame, a feeder pivoted in said frame; a gage adjacent to and below the level of said cutting blade; a stripper placed outward from said feeder having a slot adapted to engage said slicing blade and wipe across said blade; a traction roller journaled in said frame beneath said blade; ratchet clutches engaging the journals of said roller; and operating means on said feeder connected with said clutches.

4. A slicing machine including a supporting frame; a feeder pivoted on said frame and divided into vertical chutes open at the bottom; a slicing blade sharpened on both lateral edges fixed beneath said feeder; gages adjacent to and below the level of the cutting edges of said blade; a traction roller journaled in said frame beneath said blade; ratchet clutches engaging the journals of said roller; operating means on said feeder connected with said clutches.

5. A slicing machine including a supporting frame; a feeder pivoted on said frame and divided into vertical chutes open at the bottom; a slicing blade sharpened on both lateral edges fixed beneath said feeder; gages adjacent to and below the level of the cutting edges of said blade; a traction roller journaled in said frame beneath said blade; ratchets fixed on the opposite ends of the journal of said roller; arms pivoted on said journals having oppositely disposed pawls engaging said ratchets; and arms fixed on said feeder pivotally engaging said pivoted arms.

[Claims 6 to 10 not printed in the Gazette.]

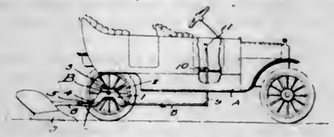
1,269,292. INDURATED PRODUCT. JAMES MCINTOSH, Norristown, Pa., assignor to Diamond State Fibre Company, Bridgeport, Pa., a Corporation of Delaware. Filed Jan. 26, 1917. Serial No. 144,761. (Cl. 149—7.)

1. As a new article of manufacture an animal membrane impregnated with solidified synthetic resin.

2. As a new article of manufacture, leather impregnated with solidified synthetic resin.

3. As a new article of manufacture, leather impregnated with solidified condensite.

1,269,293. DEVICE FOR ATTACHING PLOWS TO VEHICLES. CLARENCE D. MCKNIGHT, San Francisco, Cal. Filed Mar. 22, 1918. Serial No. 223,940. (Cl. 97—36.)



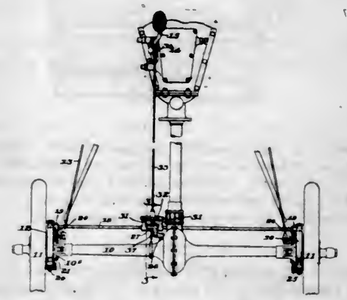
1. A device for attaching a plow to a vehicle, consisting of a clamp device pivotally mounted to the rear end of a vehicle on a plane out of line with other pivotal connections to the clamp, a clevis secured to one end of the clamp device and fastened to the plow beam, a rod pivotally attached to the other end of the clamp device, and an operating lever connected to said rod and pivotally mounted to the vehicle.

2. In a device for attaching a plow to a vehicle, the combination of a clamp member of inverted approximately U-shape, means for securing the said member loosely to the rear end of a vehicle, a second clamp member, means pivotally connecting the first mentioned clamp member to the front end of the beam of a plow, an operating lever extending into the vehicle body, and means connecting said lever to the forward end of the clamp member, substantially as shown.

1,269,294. BRAKE ATTACHMENT FOR AUTOMOBILES. FLOYD J. MANNING, San Francisco, Cal. Filed Nov. 15, 1915, Serial No. 61,482. Renewed Oct. 28, 1916. Serial No. 128,346. (Cl. 21—8.)

1. In combination with the rear axle and the supporting wheels of an automobile, said wheels having the usual friction drums, a brake band encircling each drum, a two-part shaft, a bracket supporting the inner ends of the shaft parts, a rock-arm fixed on the outer end of each shaft part and connected to the adjacent brake band, an arm fixed on the inner end of each shaft part and formed with a flared opening, an equalizing bar having end trunnions engaged in the flared openings of the last arms, and operating means connected to the equalizing bar.

2. A brake for an automobile having the usual rear axle and supporting wheels, comprising friction drums carried by the wheels, external contracting brake bands cooperating with the drums, brackets supported on the housings for said drums and extending forwardly thereof, rock-shafts having operative connections with said brake bands journaled in said brackets and extending inwardly with their adjacent ends abutting each other, an elongated bearing for the adjacent ends of said rock-shafts, an offset support for said bearing carried detachably upon the differential housing of the automobile, upwardly extending arms on the adjacent ends of said rock-shafts, each arm having an aperture tapered inwardly from each side of the arm, an equalizing bar pivotally engaging in the apertures of said arms, and a tension rod pivoted centrally upon said equalizing bar, and means for actuating said tension rod to operate the rock-shafts and control said brakes.



3. In combination with the rear axle and the supporting wheels of an automobile, said wheels having the usual friction drums, a brake band encircling each drum, a two-part shaft, a bracket supporting the inner ends of the shaft parts, a rock-arm fixed on the outer end of each shaft part and connected to the adjacent brake band, an apertured arm fixed on the inner end of each shaft part, an equalizing bar having end trunnions engaged in the apertures of the last arms, and operating means connected to the equalizing bar.

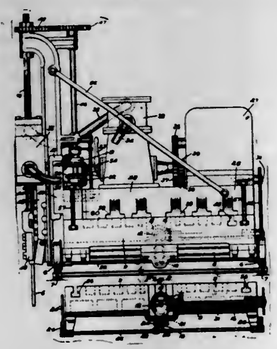
4. A brake for an automobile having the usual rear axle and supporting wheels, comprising friction drums carried by the wheels, external contracting brake bands cooperating with the drums, brackets supported on the housings for said drums and extending forwardly thereof, rock-shafts having operative connections with said brake bands journaled in said brackets and extending inwardly with their adjacent ends abutting each other, an elongated bearing for the adjacent ends of said rock-shafts, an offset support for said bearing carried detachably upon the differential housing of the automobile, upwardly extending apertured arms on the adjacent ends of said rock shafts, an equalizing bar pivotally engaging in the apertures of said arms, and a tension rod pivoted centrally upon said equalizing bar, and means for actuating said tension rod to operate the rock shafts and control said brakes.

1,269,295. CHANNELING-MACHINE. HENRY H. MERCER, Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed June 17, 1912. Serial No. 704,052. (Cl. 125—2.)

1. In a channeler, a truck having a plane upper surface, a platform support slidable on said surface, channel cutting mechanism on said platform support including an overhanging tool and an operatively connected motor, and truck driving mechanism operatively connectible with said motor when said tool overhangs either side of said truck.

12. In a channeler, a truck having a plane upper surface, a platform support slidable thereon and disposable in a plurality of reverse positions at either end of said

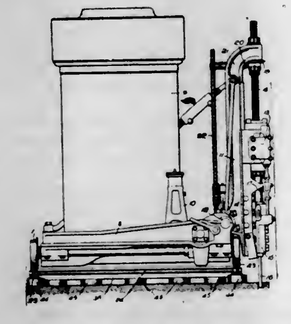
surface, each substantially parallel to the end of said truck, channel cutting mechanism on said platform support including a tool and an operatively connected motor, and truck driving mechanism operatively connectible to



said motor in any operative position of said support including a reversible driving connection disposable in a plurality of reverse positions beneath the surface of said truck at a point intermediate the ends thereof.

[Claims 2 to 11 not printed in the Gazette.]

1,269,296. CHANNELING-MACHINE. HENRY H. MERCER, Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed June 17, 1912. Serial No. 704,053. (Cl. 125—2.)



1. The combination with a track channeling machine having a truck adapted to be moved along a trackway upon the quarry bottom and having also a tool adapted to overhang one side of the trackway, of a trackway on which the channeling machine may be traversed, and means including a reversible track section on which the channeler may be turned into reverse relation with said trackway.

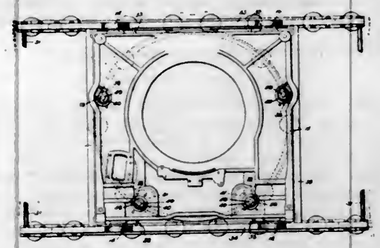
4. The combination with a channeling machine having a truck and an overhanging tool gang, of a trackway, and means located within the trackway on which the truck may be turned to reverse the relation of the tool gang to the trackway.

7. The combination with a channeling machine having a truck and an overhanging tool gang, of a trackway, a fixed ring-like support on said trackway, and means for supporting and turning said truck on said ring-like support to reverse the relation of the tool to the trackway.

12. The combination with a channeling machine, of a portable trackway therefor having connected track sections and reversible track sections, the latter comprising opposite rail members with intermediate connections including a supporting member, an underlying supporting member adapted to remain in fixed position and support said track section when the latter is turned, and vertical and lateral roller members interposed between said supporting and underlying members.

[Claims 2, 3, 5, 6, and 8 to 11 not printed in the Gazette.]

1,269,297. CHANNELING-MACHINE. HENRY H. MERCER, Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed July 5, 1912. Serial No. 707,694. (Cl. 125—2.)



1. In a channeling machine, a wheeled truck, channeling apparatus thereon including a tool adapted to overhang one side of the truck, a trackway on which said truck may be traversed, a circular guideway rigidly connected to said trackway and disposed between the rails thereof, and vertically adjustable means carried by said truck for transferring the weight of said truck from said trackway to said guideway.

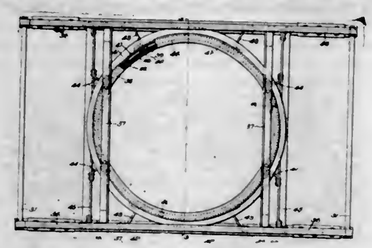
2. In a channeling machine, a wheeled truck, channeling apparatus thereon including a tool at one side of said truck, a traversing trackway for said truck, a circular guideway rigidly connected to said trackway and disposed between the rails thereof, rotatable means between said truck and guideway engageable with the latter, and vertically adjustable means between said rotatable means and truck for transferring the weight of said truck from said trackway to said guideway.

3. In a track channeling machine, a wheeled truck, channeling devices thereon including a tool adapted to overhang one side of said truck, a trackway on which said truck may be traversed, a circular guideway rigidly connected to said trackway and disposed between the rails thereof, and means engageable with said guideway and adjustable in one direction to shift the weight of said truck from said trackway to said guideway.

4. In a track channeling machine, a wheeled truck, channeling devices thereon including a tool adapted to overhang one side of said truck, a trackway on which said truck may be traversed, a circular guideway rigidly connected to said trackway and disposed between the rails thereof, and means engageable with said guideway and adjustable in one direction to shift the weight of said truck from the trackway to said guideway and adjustable in the opposite direction to return the weight of said truck to said trackway.

1,269,298. TURNING DEVICE FOR CHANNELING AND OTHER LIKE MACHINES. HENRY H. MERCER, Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass., a Corporation of Massachusetts. Filed Jan. 27, 1913. Serial No. 744,348. (Cl. 105—32.)

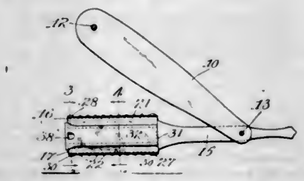
1. The combination with a main trackway, of a supplemental track section comprising two relatively short parallel lengths of rails, means uniting said rails into a rigid frame, and means for rotatably supporting said frame with its rails in registration with and superimposed upon



the rails of the main trackway, said means including a fixed, circular trackway and intermediate roller supports.

[Claims 2 and 3 not printed in the Gazette.]

1,269,299. SAFETY-RAZOR. EUGENE G. MERGENTHALER, Baltimore, Md. Filed July 15, 1912. Serial No. 709,461. (Cl. 30—12.)



1. In a safety razor the combination of a blade holder having a bifurcated portion, a separate blade supported on each of the members comprising the bifurcated portion, each blade having a cutting edge and a blunt edge, and means adapted to engage the blunt edges of said blades and portions of the holder to clamp the blades in operative position, said bifurcated blade holder, blades and clamping means being substantially flat and disposed substantially in the same plane.

2. In a safety razor, the combination of a bifurcated blade holder made in one piece and comprising a shank and parallel blade supporting members having parallel guard portions on the outer edges thereof, a separate blade on each of said supporting members, the blades having cutting edges lying parallel to the guard portions and blunt edges disposed opposite to each other, and means between and engaging the blunt edges of said blades to hold the blades in operative position on the blade supporting members, said shank, blade supporting members, blades and blade holding means being substantially flat and disposed substantially in the same plane.

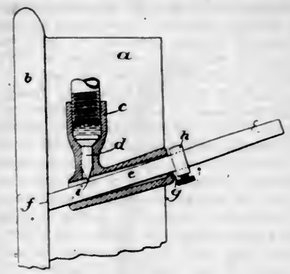
5. In a safety razor, the combination of a blade holder comprising a shank and parallel blade supporting members integral with the shank, means fitting said members and the blades thereon and slidable along the members toward said shank to clamp the blades in operative position on the supporting members, means on the blade holder to limit the movement of the blades toward said shank, and means on the clamping means to engage the outer ends of the blades.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,269,300. FLANGE-LUBRICATOR. JAMES H. MINER, Lumberton, Miss. Filed June 7, 1917. Serial No. 173,319. (Cl. 184—3.)

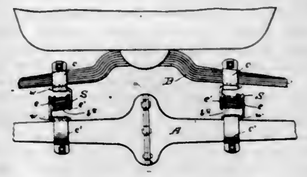
1. In a flange oiler, a vertically movable controlling lubricant feed valve, an oscillating inclined bar extending beneath the valve and adapted to be actuated by the movement of the wheel flange to positively raise said valve, and means for maintaining the bar against the wheel flange, substantially as described.

2. In a flange lubricator, a valve controlling the lubricant feed, a sliding bar adapted to be actuated by the movement of the wheel flange to positively raise said valve,



said bar being provided with means for slightly resisting the pushing action of the flange, substantially as described.

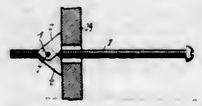
1,269,301. SHOCK-ABSORBER. MOSES H. NABER. Chicago, Ill. Filed Aug. 13, 1917. Serial No. 185,832. (Cl. 267—40.)



1. A shock-absorber for automobiles comprising a spring composed of a length of wire having an attaching wing at each end formed of parallel strands, arms extending in the same direction from the outer ends of the wings in different vertical and horizontal planes, vertical coils at the ends of the arms in the same horizontal plane, and an integral pair of legs projecting reversely from the adjacent portions of the coils and united in a horizontally disposed bend, and a pair of clips pivotally mounted on the strands of each wing.

[Claim 2 not printed in the Gazette.]

1,269,302. TOGGLE-BOLT. MATHEW H. PAINE, Glenellyn, and WINFIELD S. WILLIAMS, Chicago, Ill. Filed June 9, 1913. Serial No. 772,590. (Cl. 85—3.)



1. In an anchoring device, the combination of a screw, a nut movable thereon, trunnions on said nut, two oppositely disposed wings coaxially pivoted upon said trunnions and having surfaces adapted for engagement with a wall, means to project said wings outwardly from said screw until said wall engaging surfaces stand at substantially right angles to the longitudinal axis of said screw.

2. In an anchoring device the combination of a screw; a nut thereon having trunnions; two folding members pivoted coaxially upon the said trunnions—said members adapted to fold longitudinally of said screw and into each other; means to laterally project said pivoted

members to a position at substantially right angles to the said screw; means to limit said lateral projection.

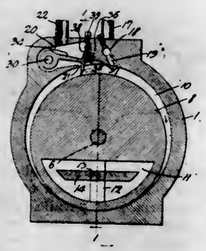
3. In an anchoring device consisting of a screw; a nut adapted to work in threaded engagement thereon; said nut formed with a pair of lugs—one projecting from either side thereof—adapted to serve as an axis; a pair of truss elements pivoted coaxially on said lugs—in reverse relation to each other—adapted to form a truss when projected outwardly from the screw; means to force the said truss elements outwardly from the screw and maintain the same in lateral distension when free.

4. A device for the purposes described consisting of a screw; in threaded engagement therewith a nut having trunnions, adapted to act as an axis; anchoring means pivoted coaxially of each other to said nut and movable laterally from the bolt and outwardly with respect to the same into anchoring position; a spring serving to force the anchoring means laterally from each other and from the screw—on said axis—into an anchoring position.

5. In a device of the character described the combination of a bolt; a nut threaded thereon and movable relatively longitudinally of the bolt; anchoring means pivoted coaxially of each other on said nut and movable laterally from the bolt and outwardly with respect to the same toward the outer end of the bolt into anchoring position.

[Claims 6 to 25 not printed in the Gazette.]

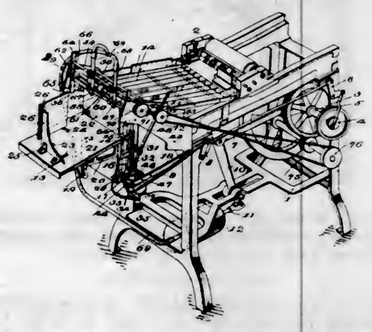
1,269,303. ROTARY ENGINE. FRANK H. PARDON, Owensboro, Ky. Filed Nov. 20, 1914. Serial No. 873,188. (Cl. 121—84.)



A rotary engine comprising a stator having a bore and provided with eccentric chambers disposed on opposite sides of the bore, the stator having an inlet port and an outlet port for each chamber; a rotor journaled in the bore and provided with oppositely disposed eccentric portions moving in shifting contact with the peripheries of the respective chambers and tending to counterbalance each other approximately, the eccentric portions of the rotor having internal recesses which are oppositely disposed; weights in the recesses and shiftable radially of the rotor to effect an exact counterbalancing of the eccentric portions of the rotor; means for supporting the weights in adjusted positions in the recesses; and movable abutments in the chambers; between the inlet and outlet ports of the respective chambers, the abutments coöperating with the peripheries of the ecentric portions of the rotor.

1,269,304. AUTOMATIC PAPER-FEED FOR PRINTING-MACHINES. FRANK H. QUADE, Jr., Fresno, Cal. Filed Apr. 20, 1917. Serial No. 163,457. (Cl. 187—24.)

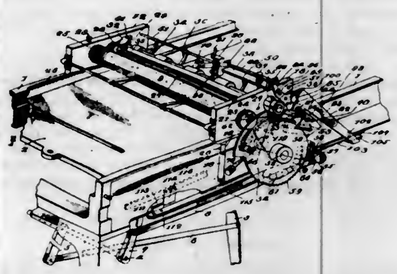
1. In an apparatus for the purpose set forth, the combination of a support, a table movable vertically on the support, a worm operatively connected with the table, a ratchet disk secured to the lower end of the worm, a hood disposed concentrically with the worm and the ratchet disk and partly inclosing the disk, an arm fixed to and extending from the support over the hood, means carried by the free end of said arm to engage the hood and secure the same in a set position, a lever mounted concentrically with the worm and extending over the hood and beyond the rim of the same, means for oscillating said lever, and a pawl carried by the lever and arranged to ride on the rim of the hood and engage the edge of the ratchet disk.



4. In an apparatus for the purpose set forth, the combination of a support, a table movable vertically on the support, a worm operatively connected with the table, a ratchet disk secured to the lower end of the worm, a hood disposed concentrically with the worm and ratchet disk and partly inclosing the disk, said hood being provided with a graduated scale on its upper surface disposed concentrically with the worm, an arm fixed to and extending from the support over the hood and having its outer end divided longitudinally, one branch of said divided portion being turned to the top of the hood to coöperate with the scale thereon and the other branch of the said divided portion of the arm depending past the rim of the hood, a clamping plate disposed at the inner side of the rim of the hood, a clamping bolt carried by said plate and extending through the depending portion of the fixed arm, means coöperating with said bolt whereby the rim of the hood may be clamped between said plate and the depending portion of the arm to hold the hood in a set position, a lever mounted concentrically with the worm and extending beyond the rim of the hood, and a pawl carried by said lever and arranged to ride on the rim of the hood and engage the edge of the ratchet disk.

[Claims 2 and 3 not printed in the Gazette.]

1,269,305. AUTOMATIC FEED-CONTROLLING MECHANISM FOR PRINTING-MACHINES. FRANK H. QUADE, Jr., Fresno, Cal. Filed May 15, 1917. Serial No. 168,778. (Cl. 101—278.)



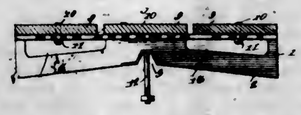
1. In a printing machine, the combination of feeding mechanism, means for controlling the feeding mechanism including a controlling plate and a locking lever arranged to at times hold said plate against movement, a feeler disposed adjacent the feeding mechanism, a cam operatively connected with the feeler and disposed adjacent said controlling plate and said lever, a pin on the controlling plate arranged to ride against said cam, and interengaging means on said cam and locking lever.

4. In a printing machine, the combination of a feed roller, a controlling plate adapted to raise said roller, means acting constantly on said plate to move it forward, a dog arranged to hold said plate against forward movement, and an actuating plate arranged to release said dog from said controlling plate, said actuating plate being constructed to move the controlling plate rearward.

9. In a printing machine, the combination of feeding mechanism, means for controlling and actuating the feeding mechanism including a controlling plate provided with a shoulder, a locking lever adapted to engage said shoulder, a feeler disposed adjacent the feeding mechanism, a cam plate operatively connected with said feeler, and a projection on the said cam plate adapted to engage the said locking lever.

[Claims 2, 3, 5 to 8, and 10 to 15 not printed in the Gazette.]

1,269,306. RUNNING-BOARD SADDLE. JOHN J. RECTENWALD, Logan, Ohio. Filed Oct. 26, 1915. Serial No. 58,071. (Cl. 105—194.)



1. A running board saddle comprising a web having an elongated opening extending from the bottom and terminating a distance from the top, recesses formed on each side of the elongated opening and of greater depth at one end than the other, and a bolt, said bolt having an elongated head adapted to pass through the elongated opening and be received in the deepest portion of the recesses.

2. A running board saddle comprising a web having an elongated opening extending from the bottom and terminating a distance from the top, recesses formed on each side of the elongated opening at opposite ends thereby forming shoulders, and a bolt, said bolt having an elongated head adapted to be passed through the elongated opening and be received between the shoulders.

3. A running board saddle comprising a web having an elongated opening extending from the bottom and terminating a distance from the top, recesses formed on each side of the elongated opening at opposite ends thereby forming shoulders, said recesses being of greater depth at the ends adjacent the shoulders, and a bolt, said bolt having an elongated head adapted to be passed through the elongated opening and to be received in the deepest portion of the recesses and between the shoulders.

[Claims 4 to 6 not printed in the Gazette.]

1,269,307. DOOR CONSTRUCTION FOR CONVERTIBLE AUTOMOBILE-BODIES. CHARLES REDECKER, Louisville, Ky., assignor of one-half to Robert V. Board, Louisville, Ky. Filed Nov. 25, 1916. Serial No. 133,401. (Cl. 21—125.)

1. A door construction for convertible automobile bodies comprising in combination, a door case and a door permanently hinged thereto, a removable and replaceable sash panel adapted to have a rockable bearing engagement with the upper edge of the door and carrying tenon elements therewith, a socket device permanently carried by the door for each tenon and having a locking and deflecting spring engaging the lower end of said tenon elements only when the sash is on the door to place the said tenons under tension and tilt the sash panel toward the door case.

2. A door construction for convertible automobile bodies comprising in combination, a door case, a swinging door permanently hinged to said case and including a frame having slots in the top member thereof, yielding tenon engaging and deflecting means carried by the door frame below said slots, and a removable and replaceable panel having tenon means at each corner for entering said slots and detachably engaging with said tenon engaging and deflecting means to tilt the door inwardly against one edge of said slots.



4. A panel attachment for vehicle bodies comprising in combination, a vehicle body having a panel seat, a fulcrum bead, a sash panel separate from said bead and adapted to be engaged and disengaged therefrom by a substantially vertical movement, and means located below said bead for detachably and yieldably engaging a portion of said panel when the same is on the fulcrum bead to rock the same toward its seat.

8. A door construction for convertible automobile bodies comprising in combination with a swinging door including a frame and a fixed top having an abutment seat of a removable sash panel rockably mounted on the upper edge of the door, tenon elements depending from each corner of said sash panel, and socket elements carried by the side frame members of the door and having their entrance end in communication with a slot in the top frame pieces of the door, said socket elements each consisting of an angular body portion having an attaching flange and a right-angularly disposed abutment flange, and a supporting ear formed from said attaching flange and spaced from the abutment flange, a tenon engaging and deflecting spring carried by said ear and having the body portion thereof substantially parallel with the inner face of the abutment flange to provide a socket portion, and having a rounded hook portion at its lower end which extends into close proximity to the inner surface of the abutment flange to substantially close the socket to thereby engage and deflect the free end of the tenon element carried by the sash panel to tilt the latter toward the abutment-seat of the fixed top.

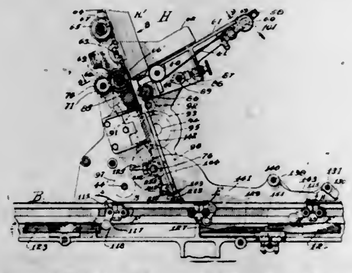
11. A door construction for convertible automobile bodies comprising the combination with a door frame of a swinging door including a frame having slots in the top member thereof, an upstanding bead also on the latter, yielding tenon clamping and deflecting means carried by the door below said slots, a sash panel having a groove for rockably receiving said bead and tenons carried by said panel for entering said slots, and engaging with said yielding tenon clamping and deflecting means.

[Claims 3, 5 to 7, 9, and 10 not printed in the Gazette.]

1,269,308. CATALOGUE-WRAPPING MACHINE. JAMES D. REIFSNYDER and WILLIAM A. WEIGHTMAN, Philadelphia, Pa., assignors to Stokes & Smith Company, Summerdale, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Oct. 14, 1916. Serial No. 125,550. (Cl. 93—7.)

1. In a machine of the class described, the combination of means for advancing a wrapper sheet, mechanism for applying an adhesive along a face of one side portion of the wrapper sheet, mechanism for depositing an article

to be wrapped upon the sheet, means acting to engage one end of the wrapper sheet to fold such end over one end portion of the article on the sheet, folder mechanism operating to fold opposite side portions of the sheet into overlapping relation with each other and with the folded end portion, whereby said side portions will be adhesively connected by the adhesive previously applied to one side portion as aforesaid, mechanism for applying an adhesive to the end portion of the sheet opposite to the first mentioned folded end portion, and means for folding the adhesive end portion of the sheet over the adjacent end of the article and upon the previously folded side portions.



12. In a machine of the class described, the combination of means for advancing a wrapper sheet, means for depositing an article to be wrapped upon the sheet, means for folding one end of the wrapper sheet about one end of the article, mechanism adapted to engage the article and push the latter into close engagement with the end fold of the wrapper sheet, means for folding over the side portions of a sheet about the article, and means for folding over the remaining end portion of the sheet to complete an envelop for the article.

21. In a machine of the class described, the combination with means for folding one end of a wrapper sheet about an adjacent portion of an article, means for carrying the wrapper blank and the article along a predetermined path of travel and a pusher device adapted to engage with a portion of the article opposite that portion above which the end of the blank is folded, to push said article backward and into close contact with the fold of the wrapper sheet.

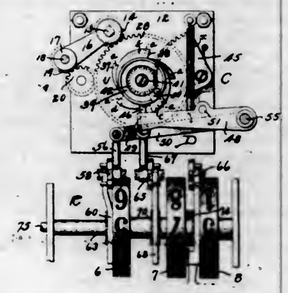
23. In a machine of the class described, means for advancing a wrapper sheet, comprising a pair of endless chains, and sheet gripping devices carried by said chains, of means for folding one end of the sheet about an article and pushing said article along a predetermined path, said means including a second pair of endless chains, and sheet folding and article engaging means mounted thereon in alternate relation with the sheet gripping devices on the first mentioned pair of chains.

24. In a machine of the class described, the combination with sheet selecting mechanism, sheet advancing mechanism adapted to receive a sheet from the sheet selecting mechanism, and feed such sheet along a predetermined path, mechanism for depositing an article upon a sheet brought therebeneath by the sheet advancing mechanism, power transmission mechanism for driving the sheet selecting mechanism, the sheet advancing mechanism and the article depositing mechanism, an electrically controlled mechanism operable upon the power transmission mechanism for automatically throwing the sheet selecting mechanism, the sheet advancing mechanism and the article depositing mechanism out of operation at predetermined times.

[Claims 2 to 11, 13 to 20, and 22 not printed in the Gazette.]

1,269,309. HOURLY TAXIMETER. CHARLES DONAT RICHARD, New York, N. Y. Filed May 1, 1916. Serial No. 94,769. (Cl. 235—30.)

1. A taximeter including a time mechanism, a register mechanism including a plurality of independently rotatable registering elements, and a charge regulating device adapted to actuate said registering elements an amount prime to the radix including any necessary transfer.



2. A taximeter including a time mechanism, a register mechanism, and a charge regulating device including means for simultaneously effecting a necessary transfer, adapted to augment the register reading an amount prime to the radix by a single step.

3. A taximeter including a time mechanism, a register mechanism including a plurality of independently rotatable registering elements and a charge regulating device including a plurality of differential cam elements adapted to actuate said registering elements an amount prime to the radix including any necessary transfer, and separate lever connections between said cam elements and said independently rotatable registering elements.

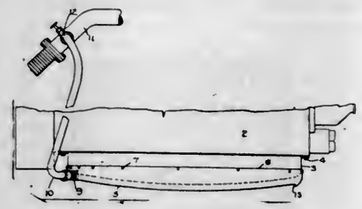
20. A taximeter including a time mechanism, a register mechanism, the charge regulating device including a duplex cam unit and a trip member having a notch, register operating means, a restraining device having levers for maintaining said register operating levers out of engagement with the cam unit of the charge regulating device, a trip dog carried by said restraining device, manually operated means for causing said trip dog of the restraining device to come into operative engagement with the collar carried by the charge regulating device and remaining in operative relation thereto for a predetermined period while maintaining the register operating means disengaged from the cam unit, said trip dog entering the notch of the collar at the end of said predetermined period and causing said register operating levers to become engaged with the duplex cam unit to operate the register mechanism, and said manually operated means adapted to restore the restraining device to normal position and simultaneously reset the register mechanism.

24. A taximeter including a time mechanism, a register mechanism, a charge regulating device comprising rigidly connected cam members, a collar having a notch rigidly carried by one of said cam members and an operating gear, a manually shiftable clutch member for connecting the time mechanism with said gear of the charge regulating device, registering operating means including separate register operating levers respectively for said separate cam members, a restraining device having a pivoted trip dog and means for holding said levers out of engagement with the cam members of the charge regulating device, manually controlled means for releasing said restraining device into engagement with the trip collar, pawl and ratchet means for the register mechanism, and link connections between said levers and said pawl and ratchet means.

[Claims 4 to 19 and 21 to 23 not printed in the Gazette.]

1,269,310. OIL-PAN HEATER. GUSTAF A. RINGLUND, Minneapolis, Minn. Filed Feb. 2, 1917. Serial No. 146,279. (Cl. 184—104.)

1. The combination with a gas engine base and depending oil circulating pan, of an auxiliary pan, one pan fitting within and secured to the other and the bottoms of the two pans spaced from each other to form a heat-medium chamber covering the bottom which sustains the oil in its pan, the heat-medium chamber having an inlet and an exhaust for the medium.



2. The combination, with a gas engine oil pan, of an auxiliary pan into which the lower portion of said oil pan is inserted, means for securing the edges of said auxiliary pan to said oil pan, a space being provided between the bottoms of said pans, a pipe leading from the engine exhaust to said space and said auxiliary pan having a discharge for the exhaust therein.

3. The combination, with a gas engine oil pan, of an auxiliary pan into which said oil pan is fitted with the bottoms of said pans spaced apart, means for securing the edges of said auxiliary pan to the walls of said oil pan, a pipe communicating with said space at one end of said oil pan and with the engine exhaust, and said auxiliary pan having a narrow slit or opening near its opposite end through which the exhaust gases are discharged.

1,269,311. CREMORNE BOLT. OSCAR C. RIXSON, New Rochelle, N. Y. Filed Oct. 23, 1917. Serial No. 198,011. (Cl. 16—63.)



1. In a bolt construction, the combination of a hollow bolt having a longitudinal slot therein and a guide comprising a plate the two opposite ends of which are depressed, the intermediate portion being connected with the depressed ends by narrow necks, said intermediate portion being located inside of the bolt, the depressed ends outside thereof and the necks traversing the slot.

2. In a Cremorne bolt construction, a pair of hollow reciprocating bolt rods each having a slot in the rear face thereof, guide plates wholly hidden behind the rods and having guiding parts projecting through the slots in the bolts, actuating mechanism for the bolts connected to the inner ends thereof, a casing surrounding the actuating mechanism and the adjoining ends of the rods, said casing having inner portions in guiding contact with the rods and other portions equal in length to the movement of the rods extending beyond the guiding portions and which cover but do not touch the rods.

1,269,312. SOUNDING TOY. FRANK G. ROVENSKY, Toledo, Ohio, assignor of one-third to William H. Scott and one-third to Sigmund Schragenheim, Toledo, Ohio. Filed Aug. 20, 1917. Serial No. 187,265. (Cl. 46—46.)



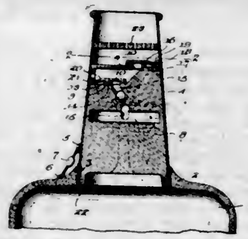
1 In a toy, a rod, a sounding member socketed in the end of the rod, a figure of sheet material removably connected to the sounding member.

2. In a toy, a pair of sounding members, one of the members rotatably movable with respect to the other of the sounding members, the rotatable member having a head having inclined sides, a figure having an opening for engaging the sides of the head.

3. In a toy, a pair of sounding members, one of the sounding members mounted for rotative movements, the rotatable member having a head, a figure of sheet material removably connected to the head.

4. In a toy, a pair of sounding members, one of the members rotatably connected to the other of the members for producing a sound by the frictional contact between the members, a figure connected to the rotative member for causing rotation of the rotative member by whirling movement of the member to which the rotative member is connected.

1,269,313. NON-REFILLABLE BOTTLE. ANDREW J. RUSSELL and ERWIN VAN ALLEN, New York, N. Y. Filed July 20, 1917. Serial No. 181,835. (Cl. 215—68.)

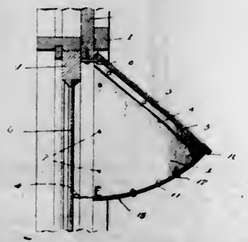


1. A non-refillable bottle comprising, a shell adapted to be secured to the body of the bottle, a non-metallic body fixedly mounted within the shell and provided with a plurality of relatively staggered seats and a sinuous portway communicating with all of said seats, each of said seats having a plurality of angularly disposed surfaces and valves respectively mounted to slide and swing relatively of the seats and having portions confined in operative position upon said non-metallic body by the shell, each of said valves having a plurality of angularly disposed surfaces adapted to co-act with the corresponding surfaces of the next adjacent seat.

2. A non-refillable bottle comprising, a shell adapted to be secured to the body of the bottle, a non-metallic body fixedly mounted within the shell and provided with a plurality of relatively staggered seats and a sinuous portway communicating with all of said seats, each of said seats having a plurality of angularly disposed surfaces and valves respectively mounted to slide and swing relatively of the seats and having portions confined in operative position upon said non-metallic body by the shell, each of said valves having a plurality of angularly disposed sur-

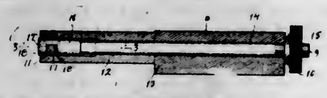
faces adapted to co-act with the corresponding surfaces of the next adjacent seat, and a perforated guard extending across the shell above the uppermost valve.

1,269,314. WINDOW-VENTILATOR. OSCAR B. SABEL, Chicago, Ill. Filed Aug. 31, 1917. Serial No. 189,171. (Cl. 98—31.)



The herein described window ventilator comprising sector-shaped end plates whose upright edges are adapted to be secured to the sides of a window frame at its top, an imperforate strip connecting the oblique outer edges of said plates, a cross bar connecting the lower inner corners of said plates, and a sheet of screening extending from plate to plate, leading from the lower edge of said strip to and fastened to said cross bar and having its free edge projecting inward beyond such bar into wiping contact with the glass of the upper window sash.

1,269,315. LATHE-TOOL. THOMAS B. SAULT, Milwaukee, Wis., assignor of one-half to George S. Meredith, Milwaukee, Wis. Filed Sept. 11, 1915. Serial No. 50,147. (Cl. 29—99.)



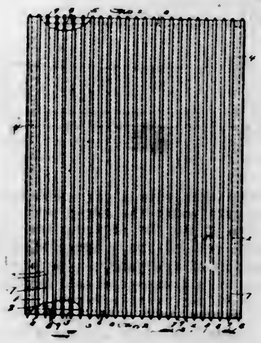
2. A lathe tool, comprising a sleeve member provided with a transverse groove at one end portion, one bore of the grooved portion being approximately in axial alinement with the bore of the sleeve, a threaded rod extending through the bore of the sleeve and having a groove in one side portion adjacent to the groove of the sleeve and in alinement therewith, the threaded portion of the rod projecting from one end of the sleeve, a cutter member extending transversely through the grooves and projecting from one side of the sleeve member, the grooved portions holding the cutting face of the cutter member approximately in axial alinement with the bore of the sleeve, and a nut threaded on the projecting rod for clamping the cutter member between the sleeve member and the rod.

[Claims 1 and 3 not printed in the Gazette.]

1,269,316. BED-SPRING FABRIC. LOUIS F. SCHILLING, Salem, Ohio. Filed Dec. 24, 1915. Serial No. 68,533. (Cl. 5—39.)

1. A bed spring fabric of canvas sheeting adapted to afford a resting surface for the occupant of the bed and having longitudinal parallel pockets extending from end to end thereof and arranged at regular transverse intervals, and flexible reinforcing and supporting elements extending through said pockets and having projecting attachment terminals, said elements being in somewhat close association with one another and of such construction that the fabric may be rolled longitudinally into a compact cylinder.

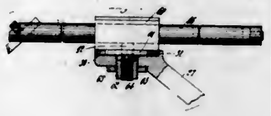
3. A bed spring fabric of canvas sheeting, adapted to afford a resting surface for the occupant of the bed and having longitudinal parallel pockets extending from end to end thereof and arranged at regular transverse intervals and reinforcing and supporting flat link chains extending through and projecting beyond said pockets, said chains being in somewhat close association with one another and of such construction that the fabric may be rolled longitudinally into a compact cylinder.



5. A bed spring fabric of canvas sheeting adapted to afford a resting surface for the occupant of the bed, and flexible reinforcing and supporting elements over which said resting surface extends, said elements being disposed longitudinally of said sheeting in somewhat close association with one another and being of such construction that the fabric may be rolled longitudinally into a compact cylinder, said elements having projecting attachment terminals, the sheeting having means for holding said elements thereto and definitely determining the extent of their spacing from one another.

[Claims 2 and 4 not printed in the Gazette.]

1,269,317. TOOL-HOLDER. EMRICH SCHLEGL, Astoria, N. Y. Filed May 16, 1917. Serial No. 169,074. (Cl. 29—98.)



1. An improved tool holder comprising a shank, a head provided with an opening therethrough, an arcuate abutment wall at the rear of said head, a block member adapted to support a tool, and provided with a circumferential engaging portion, the said abutment wall adapted to engage said circumferential engaging portion, said abutment wall adapted to resist working strains on the tool, means for securing the said block to the said head, and immovable pins on one of said members spaced from said abutment wall, the sides of said pins being perpendicular to the surface of said member, the other of said members being provided with a socket having its sides perpendicular to the surface of said member, and adapted to be engaged by said pins to form a connection therebetween against rotation.

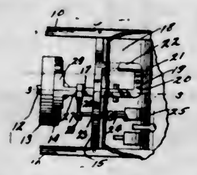
4. An improved tool holder comprising a shank, a head provided with an opening therethrough, an arcuate abutment wall at the rear of said head, a block member adapted to support a tool, and provided with a circumferential engaging portion, the said abutment wall adapted to engage said circumferential engaging portion, said abutment wall adapted to resist working strains on the tool, means for securing the said block to the said head, and immovable pins on one of said members spaced from said abutment wall, the sides of said pins being perpendicular to the surface of said member, the other of said

members being provided with a socket having its sides perpendicular to the surface of said member, and adapted to be engaged by said pins to form a connection therebetween against rotation, and means adapted to permit vibratory movement of said tool.

12. In a tool holder, a shank, a supporting post at the end of said shank, and tool holding means comprising a pair of tool clamping blocks having adjacent and coöperating tool engaging portions, said blocks having openings therein adapted to be engaged with said post to permit of movement of said blocks axially of said post, said post adapted to limit the movement of one of said blocks, and means on said post adapted to move and retain the other of said members into clamping relation with said first mentioned member, said relation being adjustable to accommodate different sized tools.

[Claims 2, 3, 5 to 11, 13, and 14 not printed in the Gazette.]

1,269,318. AUTOMOBILE-LOCK. GEORGE SCHNEIDER, Cleveland, Ohio. Filed July 25, 1917. Serial No. 182,695. (Cl. 70—90.)



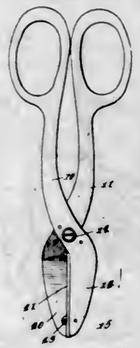
1. In a locking device for an automobile, the combination with the fly wheel of the engine of the automobile, said fly wheel having teeth on the periphery thereof, a toothed member movable axially with respect to the fly wheel into and out of engagement with the toothed periphery thereof, means for automatic engagement with said toothed member to hold the toothed member in engagement with the fly wheel.

2. In a locking device for an automobile, the combination with the fly wheel of the engine of the automobile, said fly wheel having peripheral teeth thereon, an internally toothed arcuate member movable axially with respect to the wheel into and out of engagement with the toothed periphery thereof, said toothed member including a stem having an aperture, supporting means for the stem having an aperture for registry with the aperture of the stem, and an automatic locking means engageable through the registered apertures of the support and stem when the arcuate member engages with the teeth of the fly wheel.

1,269,319. SHEARS. JOHN B. SCHNEIDER, Cape Girardeau, Mo. Filed Nov. 12, 1915. Serial No. 61,095. (Cl. 76—104.)

1. A shears element comprising a jaw having a pivotal portion, a plate separate from but connected with said jaw and formed with serrations in such relation that said serrations are located between said pivotal portion and the free end of the jaw and extend toward said free end, a plate having serrations formed therein to snugly mesh interchangeably with the serrations of said plate, and a securing element between said serrations and said free end, said securing element and said serrations permitting adjustment of the blade and holding said blade in different adjusted positions with relation to the said jaw.

2. The method of forming a shears element, which consists in (first) providing a jaw with a pivotal portion and a seat adjacent to the pivotal portion, (second) providing a plate with a series of counterpart serrations, (third) fixedly securing said plate to said seat so that its serrations extend toward the free end of said jaw, (fourth) providing a cutting blade with a series of counterpart serrations which are adapted to mesh interchangeably with the serrations of said plate, (fifth) and adjustably securing said cutting blade to a portion of the jaw near its free end and in such position that the



serrations of said cutting blade may be caused to mesh interchangeably with the serrations of said plate.

1,269,320. PLAYING-CARDS. EMIL M. SCHOLZ, New York, N. Y. Filed Sept. 5, 1917. Serial No. 189,732. (Cl. 46—25.)



A pack of cards each of which has thereon a map and name of a different political division or the name of a body of water each of which is contiguous to a plurality of other political divisions or bodies of water, the names of all contiguous political divisions or bodies of water, the population of the political division represented, a simple number denoting points based on the population of the political division represented or arbitrary as to bodies of water, each of said cards being adapted to be played in accordance with its contiguous geographical connection, whereby three cards may be played at once independently of other cards played when only two of said cards are connected geographically.

1,269,321. RING-SIZING TWEEZERS. BISMARCK R. SCHWARZ, Minneapolis, Minn. Filed Aug. 30, 1916. Serial No. 117,625. (Cl. 81—5.)

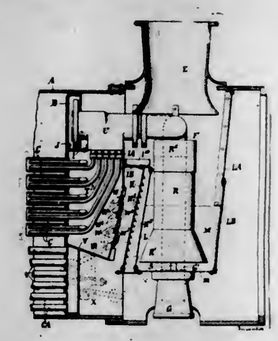


1. Ring sizing tweezers having a relatively small holder and a relatively large holder, and wads of pliable material applied in said holders and within which pliable material a ring setting and jewel may be completely embedded under compression of said holders.

2. Ring sizing tweezers having a pair of holders, and wads of pliable material applied in said holders and within which pliable material a ring setting and jewel may be completely embedded under compression of said holders, one of said holders being cup-like and the other thereof having a plurality of hook-like prongs.

[Claims 3 and 4 not printed in the Gazette.]

1,269,322. LOCOMOTIVE. IRWIN A. SEIDERS, Reading, Pa., assignor of one-half to himself and one-half to Agnew T. Dice, Jr., Reading, Pa. Filed July 8, 1916. Serial No. 108,088. (Cl. 122—480.)



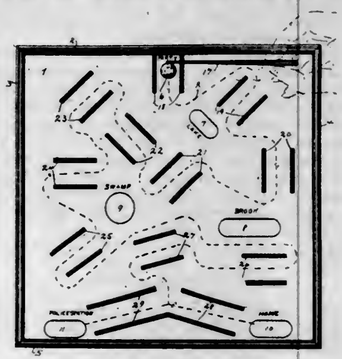
1. In a locomotive, the combination with the boiler shell, the tube sheet dividing the steam and water space of the locomotive from the smoke box, the smoke stack outlet, the fire tubes connected to said tube sheet, the exhaust nozzle located in the lower portion of the smoke box, the superheater pipes located in some of said tubes, and the chambered superheater header, a spark breaker plate and damper mechanism adapted when open to permit the direct passage from said mechanism into contact with the said spark breaker plate of products of combustion issuing from the fire tubes containing superheater pipes and to divert away from said plate the gaseous products of combustion issuing from the fire tubes not containing superheater pipes, and adapted when closed to permit the products issuing from the fire tubes not containing superheater pipes to pass into direct contact with said spark breaker plate while preventing the passage of gaseous products of combustion through the fire tubes containing superheater pipes.

2. In a locomotive, the combination with the boiler shell, a tube sheet dividing the steam and water space of the locomotive from the smoke box, the smoke stack outlet, the fire tubes connected to said tube sheet, the exhaust nozzle located in the lower portion of the smoke box, the superheater pipes located in the upper fire tubes and the chambered superheater header, of a screen system extending across the smoke box between the said tube sheet and said smoke stack outlet and comprising a substantially vertical portion lying in front of the fire tubes, a perforated spark breaker plate lying to the rear of said screen portion and a damper mechanism adapted, when open, to direct the gaseous products issuing from the fire tubes containing superheater pipes against said spark breaker plate and to divert the gaseous products issuing from the other fire tubes away from the said spark breaker plate, and adapted, when closed, to prevent the passage through the fire tubes containing superheater pipes of gaseous products of combustion without interfering with the passage of gaseous products issuing from the fire tubes not containing superheater pipes into direct engagement with said spark breaker plate.

1,269,323. GAME. ABBIE MARIA SHATTUCK, New York, N. Y. Filed July 21, 1917. Serial No. 181,953. (Cl. 46—63.)

1. A game consisting of a game board provided with a plurality of baffles and a plurality of movable members of different sizes adapted to be propelled through said baffles.

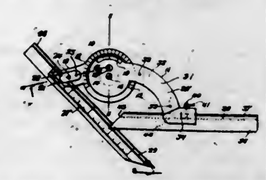
4. A game board provided with a plurality of recesses and a plurality of baffles arranged in pairs and secured to said board, said pairs of baffles being angularly disposed upon the surface of said board, and a plurality of marbles of different sizes adapted to be propelled in a circuitous



line through said baffles and means for propelling said marbles along said circuitous line.

[Claims 2 and 3 not printed in the Gazette.]

1,269,324. COMBINED BEVEL-PROTRACTOR. WILLIAM R. SHAVER, Covington, Va. Filed Mar. 7, 1917. Serial No. 153,025. (Cl. 33—97.)

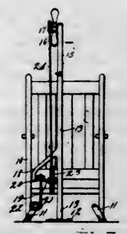


1. A protractor comprising a body member composed of two sections concentrically pivoted together, means for adjustably securing a blade to one of said sections, a slotted arm carried by the other section, said slot being positioned to receive the blade carried by the first mentioned section and means located at the outer end of said slotted arm for adjustably holding another blade.

4. A protractor comprising a body member composed of two sections concentrically pivoted together, a blade adjustably secured to each of said sections, said blades being in the same plane and a longitudinally slotted arm for connecting one of the blades to one section of the body member in a manner to permit of the entrance of the other blade within the slot.

[Claims 2 and 3 not printed in the Gazette.]

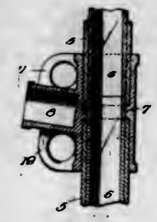
1,269,325. CHAIR ATTACHMENT. ALEXANDER SINGER, Peekskill, N. Y. Filed Apr. 11, 1916. Serial No. 90,471. (Cl. 230—7.)



A motor attachment for rocking chair rockers comprising a vertical support adapted to rest upon a foundation

adjacent to the rocker, and having an adjustable upper end, a laterally and downwardly extending bearing on said support, a horizontally disposed crank shaft journaled in the support and bearing, a driving wheel on the crank shaft, a pitman connected with the crank of said shaft, a loop removably engaged on one end portion of the rocker and pivotally connected to the pitman, the pivotal axis of the loop being parallel with the axis of the crank shaft, and a driven connection between the driving wheel and a part to be operated when supported on the upper end of the support.

1,269,326. DERRICK. GUY P. SLATER, Tulsa, Okla. Filed Apr. 24, 1916. Serial No. 93,173. (Cl. 189—16.)

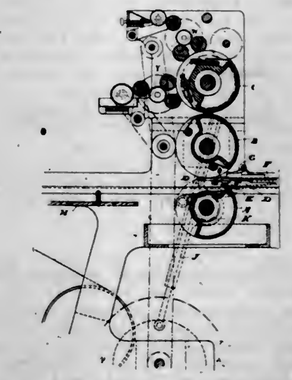


1. A derrick having sectional legs connected together by coupling members, each section comprising a pair of concentrically arranged tubes arranged to break joints, the inner tube of each section projecting outwardly beyond the outer tube, and adapted to engage the inner tube of the adjacent section, the ends of the outer tubes engaging said coupling member.

2. A derrick having sectional legs connected together by coupling members, each coupling member having a bore provided with a centrally disposed annular flange, each leg section being formed of a pair of concentrically arranged tubes of different lengths, the outer tube of each section abutting against said flange, and the ends of the inner tube of each section being arranged in contact with the ends of the inner tubes of the adjacent sections to one side of said flange.

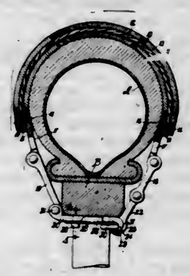
[Claims 3 to 7 not printed in the Gazette.]

1,269,327. PRINTING-MACHINE. MARK SMITH, Reddish, near Stockport, England, assignor to Taylor Garnett Evans & Co. Limited, Reddish, near Stockport, England. Filed Dec. 22, 1914. Serial No. 878,473. (Cl. 101—144.)



A printing machine adapted to print sheets or cards in flat form, comprising two oscillatory cylinders each of said cylinders having a cylindrical surface adapted to register with the corresponding surface of the other cylinder as the cards or sheets pass between said cylinders, and each of said cylinders being cut-away so as to provide a space between said cylinders when said cylindrical surfaces are out of contact with each other, a reciprocating frame, grippers mounted on said frame for gripping the sheet or card and drawing it between said cylinders, said frame having an opening therein of sufficient size to permit the printed sheet or card to fall through the frame upon being released from said cylinders, said grippers being adapted to pass between said cylinders through the space provided by cutting the portions of said cylinders, means for reciprocating the frame, and means for releasing the grippers.

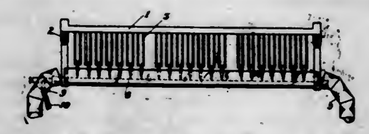
1,269,328. FASTENING MEANS FOR TIRE-GRIPS. PATRICK SMITH, Foresthill, Cal. Filed Oct. 23, 1917. Serial No. 198,109. (Cl. 24—241.)



1. The herein described fastening means for tire grips, including a latch plate adapted at one end for connection with the grip at one side of the latter, spaced hooked arms on the opposite end of said plate, a latch slide on said plate, that end of the slide adjacent to the said hooked arms having a latching terminal curved oppositely to the said arms, means to lock the said slide against movement, a bar adapted at one end for connection with the grip at the opposite side of the latter from that carrying the latch plate, said bar having a head formed with a transverse hole, and a loop extending at a side thereof through the said hole, the said head being receivable between the hooked arms of the latch plate and the loop projecting at the sides of the head to be engaged by the said hooked arms, the curved latching terminal of the slide being movable with the latter adjacent to or from the hooked arms, and adapted to extend through the said loop.

[Claim 2 not printed in the Gazette.]

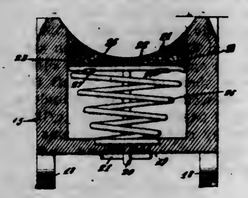
1,269,329. DEVICE FOR REMOVING FIBERS FROM MATCH-STICKS. SYLVESTER A. SOMMERS, Saginaw, Mich. Filed Oct. 19, 1915. Serial No. 56,719. Renewed Dec. 4, 1917. Serial No. 205,432. (Cl. 144—50.)



1. In a match machine having traveling holders for the match splints, means adapted to remove slivers from the splints by burning, said means comprising a plurality of burners arranged beneath the path of travel of the splints, each burner adapted to direct a small flame between two rows of matches, and means adapted to direct a blast of air against the rows of splints after the splints have passed the burners.

[Claims 2 and 3 not printed in the Gazette.]

1,269,230. GREASE-CELLAR FOR LOCOMOTIVES. LUIGI TESTA, Grafton, W. Va. Filed Aug. 21, 1917. Serial No. 187,439. (Cl. 64—35.)



1. In a grease cellar for locomotives, a journal box having an opening in its lower end, said grease cellar comprising a casing, said casing having its outer walls beveled and provided with channels communicating with the beveled portions for the escape of cuttings, a follow plate in the casing, springs for pressing the follow plate upwardly and an apertured shield through which the grease is forced.

2. In a grease cellar for locomotives, a journal box having an opening in its lower end, said grease cellar comprising a casing, said casing having its outer walls beveled and provided with channels communicating with the beveled portions for the escape of cuttings, a follow plate in the casing, springs for pressing the follow plate upwardly, an apertured shield through which the grease is forced, one end of the said grease cup having oil ducts therein.

3. In a grease cellar for locomotives, a casing, a journal box having apertures, a rod having a hooked end extending through the aperture of the journal box and adapted to support the cellar, a rod adapted to extend through another aperture of the journal box for supporting the cellar, the second mentioned rod having an eye therein for the reception of the first mentioned rod, and means for preventing the disconnection of the rod from said eye.

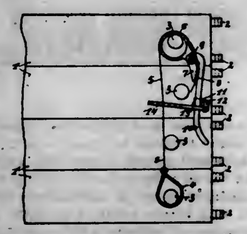
1,269,331. BRICK AND THE LIKE AND PROCESS OF MAKING THE SAME. ARTHUR C. SPENCER, Washington, D. C. Filed Aug. 24, 1917. Serial No. 188,053. (Cl. 106—9.)

1. The process of forming bricks and other structural shapes which comprises heating a charge of material containing greensand until the particles become exteriorly softened and then compressing into shape in suitable molds.

10. Structural shapes composed of pressure welded preformed pellets, said pellets comprising co-sintered lime and greensand.

[Claims 2 to 9 not printed in the Gazette.]

1,269,332. TIGHTENING APPARATUS FOR MOLDING-BOXES. HEINRICH HERMANN SPRINGER, Copenhagen, Denmark. Filed Nov. 27, 1917. Serial No. 204,235. (Cl. 22—109.)



In a tightening apparatus for molding-boxes consisting of a series of frames having taps, the combination of a circular hoop 6 having a firm and a movable jaw and a handlebar, and being adapted to be placed on the tap of the upper frame, another hoop 4 adapted to be placed on the tap of the lower frame, a piece of hoop-iron 5 connected with the said hoop 4, and being carried about the said hoop 6 and jammed in between the said jaws, and strained by the said handlebar, and a rod connected with the said handlebar and having a series of incisions for the said hoop-iron, substantially as set forth.

1,269,333. GAS-BURNER. WILLIAM F. STEWART, St. Louis, Mo., assignor to American Water Heater Company, St. Louis, Mo., a Corporation of Missouri. Filed July 27, 1917. Serial No. 183,088. (Cl. 158—112.)

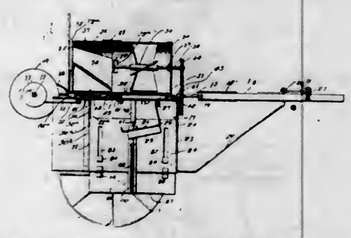


1. A gas burner comprising a vertical mixing tube having spaced conical surfaces, air and gas inlets for said mixing tube, a cap for the top of the mixing tube having flame outlets, a flame-check consisting of a foraminous sheet rolled into a cone open at both ends, and fitting said conical surfaces of the mixing tube so as to seal the flame-check at its upper and lower ends.

9. A gas burner comprising a vertical mixing tube adapted to be mounted on the burner spud of a water heater, a flame-check mounted on the upper end of the mixing tube, a housing surrounding said flame-check, and a widened mouth located in the side of the housing near its top, said mouth being provided with a plurality of horizontally extending passageways constituting flame openings.

[Claims 2 to 8 not printed in the Gazette.]

1,269,334. BOLL-WEEVIL EXTERMINATOR. ORACE V. STUBBS, Buda, Tex. Filed June 30, 1917. Serial No. 177,848. (Cl. 43—1.)

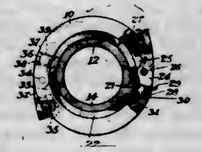


2. In a boll weevil exterminator, a housing forming a suction chamber, means for creating an air suction through said chamber, plates adjustably carried by the sides of said housing for vertical adjustment with respect thereto, plates hingedly connected to the lower edges of said vertically adjustable plates for adjustment therewith, said hinged plates having their lower portions bent at right angles to the sides of the housing for preventing air suction from drawing loose dirt upwardly into the housing.

5. In a boll weevil exterminator, a housing forming a suction chamber, supporting wheels carried by said housing, means for creating an air suction upwardly through said housing, a receptacle carried by the housing for receiving insects and infected squares which are drawn upwardly by the air suction within the housing, a plate pivotally mounted within said housing and adapted to strike cotton plants upon passage of the housing thereover for agitating the plants to shake boll weevils and infected squares from the plants, plates adjustably carried by the sides of said housing for vertical adjustment, angle plates hingedly connected to the lower edges of said adjustable plates for vertical adjustment therewith, said angle plates having their lower portions bent to normally lie in horizontal planes for riding upon the surface of the ground alongside a row of plants, and springs connected to the horizontal portions of said hinged angle plates for normally holding them in horizontal position, and means connected to said vertically adjustable plates for adjusting them in unison.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

1,269,335. COUPLING. GEROME F. TADINI, New York, N. Y. Filed Apr. 6, 1916. Serial No. 89,274. (Cl. 285—124.)

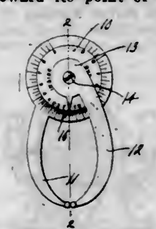


1. A pipe coupling comprising a pipe end, a socket thereon provided with a square internal screw thread, a second pipe end, a head thereon having a square screw thread with a serrated peripheral surface and adapted to engage with the square internal screw thread in the socket, a pawl slidable in a seat provided therefor in the said socket, and a lever pivoted in a recess provided therefor in the socket and having at one end a rounded extremity lying within a recess in the said pawl for actuating the same.

2. A pipe coupling comprising a pipe end having a flange thereon and being beveled at its extremity, a gasket fitting over the beveled end of the pipe and lying adjacent one face of the flange, a socket on the said pipe end provided with a square internal screw thread, a second pipe end internally beveled at its extremity to receive the beveled extremity of the aforesaid pipe end, a head on the second pipe end having a square screw thread with a serrated peripheral surface adapted to engage with the square internal screw thread in the socket, a pawl slidable radially in a seat provided therefor in the socket, a lever pivoted in a recess in the said socket and having at one end a rounded extremity lying within a recess provided therefor in the pawl, and a spring acting against the opposite end of the lever for normally maintaining the said pawl in a position to engage the serrated peripheral surface of the screw thread on the head of the second pipe end.

1,269,336. CALIPERS. ALPHA O. TAYLOR, Bluecreek, W. Va. Filed Dec 8, 1915. Serial No. 65,755. (Cl. 33—148.)

Calipers comprising a pair of measuring arms one of which is provided with a dial having graduations thereon beginning at zero and progressing in two arcuate and opposite series from said zero which latter is between and in alinement with the center of arcuation of said dial and the contact point of its measuring arm, the other arm of said pair being ungraduated and being mounted to turn about said center and being provided with an indicating finger extending toward its point of contact with said



other arm, so as to register with said zero when the contact points of said arms are touching one another.

1,269,337. VEHICLE-CURTAIN. ADAM GREGG TEABON, St. Louis, Mo. Filed Mar. 7, 1917. Serial No. 153,009. (Cl. 21—220.)



1. A vehicle curtain having a window pane therein composed of non-opaque material, the upper part of the said pane being upon the inside of the curtain and the lower part on the outside of the said curtain, there being a slit in the said curtain through which the said pane passes from the inside to the outside of the said curtain.

2. A vehicle curtain comprising a body portion, a vision portion or portions, and means for connecting the said body portion to the said vision portion or portions, the upper part of the latter being upon the inside of the former, there being a slit in the said body portion through which the said vision portion or portions passes or pass to the front of the body portion, and reinforcements opposite the said slits.

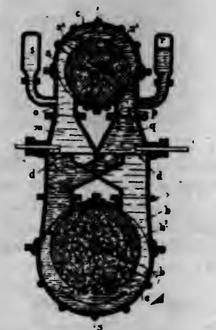
3. A vehicle curtain comprising a body portion having a window pane therein composed of non-opaque material said pane being disposed with its upper edge lying inwardly of the body portion and overlapping the same and with its lower edge disposed outwardly of the body portion and overlapping the same.

4. A curtain of the type described, having a sight-opening therein, a pane of transparent or diaphanous material positioned to cover said sight-opening and having its marginal edges applied directly to said curtain, around the edges of said sight opening, the upper edges of said pane lying inwardly of the body of said curtain and overlapping the same, and the lower edge of said pane disposed outwardly of said curtain-body-portion and overlapping the same, and independent detachable two-part fastenings for binding the pane and curtain together.

1,269,338. VARIABLE-SPEED APPARATUS. MAURICE TOURASIL, Nantes, France. Filed Mar. 7, 1913. Serial No. 752,667. (Cl. 138—22.)

1. A variable speed transmission apparatus comprising a plurality of geometrically similar rotary pumps, conduits connecting said pumps, valves controlling the reversal of direction of flow through said conduits, the rotary elements of said pumps moving in harmony with the movement of liquid therethrough and operating indifferently as pump or motor and in either direction of rotation, the body of at least one of said pumps comprising a plurality of compartments, intake and discharge collecting chambers common to said compartments and communicating

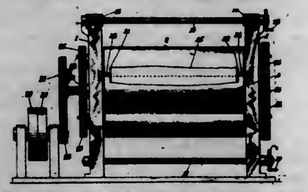
with each other at one end and with the intake and discharge conduits connecting the pumps at their other ends, in combination with valves working in harmony in said collecting chambers to short circuit said collecting chambers or to open the same to the circulating conduits connecting the pumps.



3. A variable speed transmission apparatus comprising a plurality of geometrically similar rotary pumps, conduits connecting said pumps, valves controlling the reversal of direction of flow through said conduits, the rotary elements of said pumps moving in harmony with the movement of liquid therethrough and operating indifferently as pump or motor and in either direction of rotation, the body of at least one of said pumps comprising a plurality of compartments, intake and discharge collecting chambers common to said compartments and communicating with each other at one end and with the intake and discharge conduits connecting the pumps at their other ends, in combination with valves working in harmony in said collecting chamber to short circuit said collecting chambers or to open the same to the circulating conduits connecting the pumps, together with means for automatically emptying the short circuited compartments of the pump.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,269,339. PROCESS OF PRODUCING ARTIFICIAL LEATHER. THOMAS J. TURNER, Wilmington, Del., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Sept. 3, 1914. Serial No. 859,971. Renewed Dec. 19, 1917. Serial No. 207,879. (Cl. 91—68.)



1. The process of producing a coated fabric which comprises applying to a fabric a coating of nitrocellulose plastic by means of calender rolls.

[Claims 2 to 5 not printed in the Gazette.]

1,269,340. METHOD OF TREATING THREADS OF CELLULOSIC MATERIAL AND THE THREADS SO PRODUCED. CHARLES E. VANDERKLEED, Collingswood, N. J., and JAMES ED. BREWER, Norristown, Pa., assignors of one-fifth to William M. Field, Haverford, Pa., one-fifth to Harry J. Verner, Bryn Mawr, Pa., and one-fifth to Fritz Heidlberg, Jersey City, N. J. Filed Aug. 5, 1916. Serial No. 113,291. (Cl. 8—20.)

1. The art of treating threads of cellulosic material which comprises the softening or dissolving of the outer portions of such threads, depositing a coating of dissolved cellulose upon such threads, and thereafter subjecting the same to the action of a precipitant.

5. The art of treating a thread composed of cellulosic material which consists in subjecting the said thread to the action of a copper ammonium solution containing cellulose in solution and depositing a thin layer of such cellulose upon said thread, next subjecting it to the action of an acid precipitant to precipitate and harden the dissolved cellulose and to form compounds of copper and ammonium and thereafter washing the said thread in water to remove the said copper and ammonium compounds and acid if any should have adhered to the said thread.

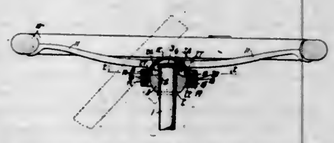


8. The art of treating threads composed of cellulosic material, which consists in passing the same through a quantity of copper ammonium solution containing cellulose in solution, thereafter smoothing the surfaces of said threads and rendering them of uniform diameter throughout their lengh, subsequently subjecting the said threads to the action of an acid to precipitate and fix the dissolved celluose thereon and to form compounds of ammonium and copper and thereafter washing the said threads to remove said compounds.

11. The art of treating a fabric composed of threads of cellulosic material which consists in passing the said fabric through a copper ammonium solution containing cellulose in solution and depositing a portion of said cellulose as a layer upon the threads of said fabric, thereafter subjecting the said fabric to compression, next passing the same through sulfuric acid to precipitate and fix dissolved and softened cellulose upon said fabric and to form copper and ammonium sulfates and subsequently washing the said fabric to remove the said sulfates and leaving the threads of the said fabric surrounded with a coating of previously precipitated cellulose.

[Claims 2 to 4, 6, 7, 9, and 10 not printed in the Gazette.]

1,269,341. SHIFTABLE STEERING-WHEEL. EDWARD H. VINCENT, Detroit, Mich. Filed Sept. 14, 1916. Serial No. 119,996. (Cl. 74—33.)



1. In combination, a steering rod for a motor vehicle, a head mounted thereon, a steering wheel carried by the head, latch means whereby the rod is normally caused to rotate with the wheel, said wheel being capable to angular movement about the rod when the latch means is in inoperative position, said wheel also having another movement in respect to the rod at an angle to the first mentioned movement.

10. In combination, a steering rod for a motor vehicle, a spherical head mounted thereon, a steering wheel mounted on the head, said head having a groove and a socket therein, and latch means carried by the wheel, said latch means including a plunger adapted to be received in the groove and to be guided thereby into the socket.

[Claims 2 to 9 and 11 not printed in the Gazette.]

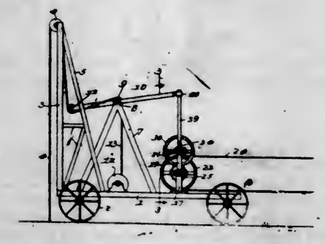
1,269,342. POTATO SEPARATOR AND GRADER. HENRY H. WABERS, Wautoma, Wis., assignor of one-fourth to Croyden J. Farwell and Clara Farwell. Filed Sept. 10, 1917. Serial No. 190,581. (Cl. 130—32.)

1. A potato cleaner and grader comprising an upper vertically oscillating fork having widely spaced tines movable to inclined positions nearer to a horizontal than to a vertical plane, a lower vertically oscillating fork below said upper fork and having closely spaced tines also movable to inclined positions nearer to a horizontal than to a vertical plane, and means for oscillating said forks; together with a box around said forks having a pair of outlets equal in width to and located at the free ends of said forks, said outlets being arranged to receive the potatoes rolling down said forks.



2. A potato cleaner and grader comprising an upper vertically oscillating fork having widely spaced tines movable to inclined positions nearer to a horizontal than to a vertical plane, a lower vertically oscillating fork below said upper fork and having closely spaced tines also movable to inclined positions nearer to a horizontal than to a vertical plane, a box around the forks having outlets equal in width to said forks and located at the free ends thereof, said outlets being arranged to receive the potatoes rolling down said forks, each fork including rock shaft from which the tines thereof extend, said shafts being located at opposite sides of said box, a crank arm on one shaft and a pitman connected thereto for rocking said shaft to oscillate its fork, a second crank arm extending vertically from said shaft, a third crank arm extending vertically from the other shaft, and a rigid link extending between and pivoted to said second and third crank arms for oscillating one fork from the other.

1,269,343. PUMP-JACK. ALOYSIUS WACKER, Pierz, Minn. Filed Aug. 16, 1917. Serial No. 186,604. (Cl. 74—14.)

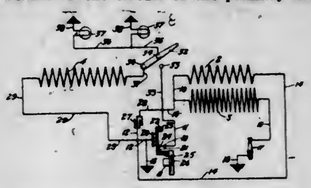


1. As a means for operating a vertically swinging walking beam, a rotatably mounted shaft, means for transmitting movement to the shaft, a gear carried by the shaft, another rotatably mounted shaft positioned above the first shaft, a gear carried by the second shaft and meshing with the first gear for transmitting motion to the second shaft and also provided with a series of radial openings, a crank arm carried by the other end of the second shaft and provided with a series of openings, crank pins fitted in any one of the openings in the gear and in the arms, connecting rods having their lower ends operably arranged about the crank pins, a lifting cross bar adjustably connected to the upper ends of the connecting rods, and means for pivotally connecting one end of the beam to the cross bar.

[Claims 2 and 3 not printed in the Gazette.]

1,269,344. ELECTRICAL SYSTEM FOR MOTOR-VEHICLES. GEORGE W. WACKER, Rutherford, N. J., assignor to National Carbon Company Inc., New York, N. Y., a Corporation of New York. Filed Nov. 12, 1917. Serial No. 201,689. (Cl. 171—315.)

2. An electrical system for motor vehicles having, in combination, a primary armature coil, a secondary coil in inductive relation with the primary coil, a separate and independent armature coil, a lighting circuit, a circuit controller for connecting said independent coil in the lighting circuit or in circuit with the primary coil for reinforcing the inductive effect of the primary coil, a spark gap in the circuit of the secondary coil, and a circuit breaker in the circuit of the primary coil.

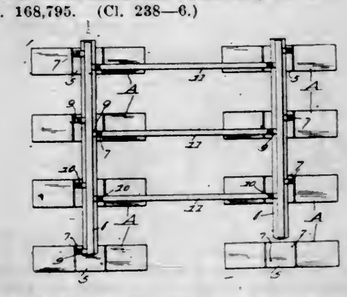


4. An electrical system for motor vehicles comprising a magnetic field and an armature core mounted for relative rotation with the armature core projecting to opposite sides of the axis of rotation, a primary winding on one end of the core at one side of said axis, a secondary winding on the same end of the core as the primary winding, a separate and independent winding on the other end of the core at the other side of said axis, a spark gap in the circuit of the secondary winding, a circuit breaker in the circuit of the primary winding, a lighting circuit, and a circuit controller for connecting said independent coil in the lighting circuit or in the circuit of the primary winding as may be desired.

6. An electrical system for motor vehicles having, in combination, a primary armature coil, a secondary coil in inductive relation with the primary coil, a separate and independent armature coil, means for independently utilizing the current delivered by said independent coil, a circuit controller for connecting said independent coil in circuit with said means or in circuit with the primary coil for reinforcing the inductive effect of the latter, and means for utilizing the high tension current delivered by the secondary coil.

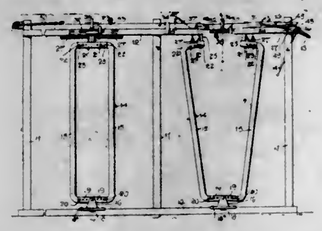
[Claims 1, 3, and 5 not printed in the Gazette.]

1,269,345. RAILWAY-TIE. WILLIAM HENRY WADSWORTH, Chickasha, Okla. Filed May 15, 1917. Serial No. 168,795. (Cl. 238—6.)



In a railway tie, a cementitious body, a cushioning block embedded in said body when the body is being molded and having its upper surface disposed above the plane of the upper surface of the body to form a bearing for a rail, vertical bolt members engaged through the block, heads on the bolt members bearing against the bottom of the block and anchored in the body when the body is being molded to prevent accidental displacement of the block, the upper ends of the bolt members projecting above the block, rail clamps mounted on the bolt members and adapted to engage a rail, nuts threaded on the upper projecting ends of the bolt members and acting against the rail clamp and a tie rod disposed about the innermost bolt member for preventing lateral spreading of said body and being retained in position by the nut on the innermost bolt member.

1,269,346. CATTLE-STANCHION. RAYMOND C. WAEHLER, Lomira, Wis. Filed July 23, 1917. Serial No. 182,312. (Cl. 119—148.)

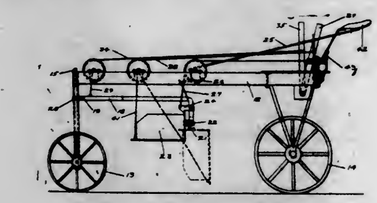


1. A construction of the character described including a supporting frame, a pair of stanchion bars mounted upon said frame for movement toward or from each other, slides mounted upon the frame in spaced relation to each other and movable in opposite directions between which slides portions of the stanchion bars project, and a pair of members pivoted each upon one of said slides and rotatable in a vertical plane from an inoperative position directed away from the stanchion bars to an operative position directed toward the stanchion bars, whereby when the slides are shifted in one direction, the stanchion bars will be engaged by said members and will be shifted toward each other and when the slides are shifted in the opposite direction, the stanchion bars will be released.

2. In a stanchion, a supporting frame, a pair of stanchion bars mounted for movement toward or from each other in said frame and rotatable in a horizontal plane, the bars including trunnion members to which the bars are adjustably connected for movement toward or from said frame.

[Claims 3 to 11 not printed in the Gazette.]

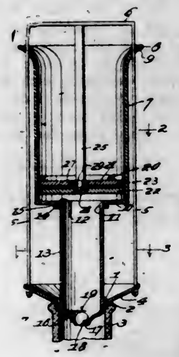
1,269,347. WHEELED SCRAPER. SAMUEL WALKER, Jerome, Ariz. Filed July 11, 1917. Serial No. 179,938. (Cl. 37—33.)



1. In a wheeled scraper, a rectangular main frame, brackets extending downwardly from the frame at the front and rear ends, an axle mounted in the rear brackets, a king-post mounted in the front bracket, an axle connected to the king-post, wheels upon the axles, a knuckle pivotally and slidably mounted upon the king-post, a subframe pivotally connected to the knuckle and extending horizontally backwardly beneath the main frame; said sub-frame consisting of oppositely diverging bars turned downwardly at their rear ends; shovel brackets pivotally connected to the rear lower ends, a scraping shovel fastened to the shovel brackets, trip dogs pivoted to the turned down ends of the sub-frame and adapted to hold the shovel in its upright operative position, means for releasing the trip dogs to allow the shovel to dump, means for swinging the shovel to operative position after it has been dumped, and means for raising and lowering the subframe to raise and lower the shovel.

2. In a wheeled scraper, a main frame, a king-post vertically mounted and extending downwardly from the main frame, a knuckle slidingly and pivotally mounted upon the king-post, a sub-frame comprising diverging bars having down turned rear ends; the forward ends being pivotally connected to the knuckle; shovel brackets pivotally connected to the down turned rear ends, a shovel connected to the shovel brackets, trip dogs for holding the shovel upright, means for operating the trip dogs to dump the shovel, means for returning the shovel to its normal position, a lifting lever pivotally mounted upon the main frame, a chain connecting the lifting lever to the rear end of the sub-frame; so that by operating the lifting lever the rear end of the sub-frame may be raised or lowered; a shaft mounted at the forward end of the main frame, a cable wound upon the shaft and attached to the forward end of the sub-frame, a pulley upon the shaft, a cable operating upon the pulley, and an operating lever mounted upon the main frame and connected to the cable; so that by manipulating the operating lever the forward end of the sub-frame may be raised or lowered.

1,269,348. CREAM-SKIMMING DEVICE. LEVI B. WARREN, Butternut, Mich. Filed May 11, 1917. Serial No. 167,942. (Cl. 137—18.)



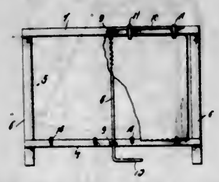
3. A device of the character described including a supporting frame embodying an annular band adapted for engagement with the shoulder of the neck of a bottle, a frustro-conical flange integral with and extending exteriorly of the band, spaced vertical rods removably connected upon opposite sides of the flange and extending upwardly therefrom, a handle connecting the rods and integral therewith at the upper ends thereof, a cylinder slidably mounted on the rods and limited in its downward movement by the flange, a cream conducting tube having one end removably connected to the bottom of the cylinder and arranged for sliding movement and in close relation with the band so as to be guided thereby, check valve means mounted at the outer end of the tube, a piston rod depending from the handle, a piston mounted on the outer end of the rod and arranged within the cylinder whereby when the cylinder is moved downwardly so as to move the tube in a corresponding direction a suction will be created so as to open the valve means and draw cream into the tube and cylinder.

[Claims 1 and 2 not printed in the Gazette.]

1,269,349. MUSIC-LEAF TURNER. ERNEST WATKINS, La Fayette, Ind. Filed Apr. 26, 1917. Serial No. 164,721. (Cl. 84—17.)

In a device of the class described, a rectangular frame including vertical and transverse members, a plurality of outwardly and upwardly projecting fingers in spaced relation and in horizontal alinement upon the lower transverse members of said frame, the said fingers being

provided with depressed portions to receive and support the lower edges of music sheets, bearings on said transverse members intermediate the ends thereof arranged in vertical alinement, a shaft rotatably mounted in said bearings for sliding vertically therein, the upper end of said shaft being disposed at right angles, clamps on



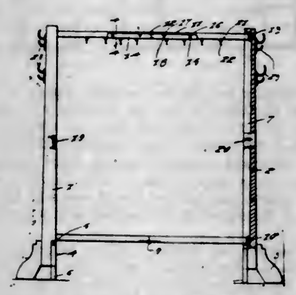
said angularly bent portion adapted to hold the upper edge of a music sheet, the lower end of said shaft being disposed at an angle to provide an operating arm, and the distance between the said upper and lower angularly bent portions being greater than the distance between said bearings.

1,269,350. MANUFACTURE OF PAPER-PULP. SIDNEY D. WELLS, Madison, Wis., dedicated, by mesne assignments, to the Government of the United States and to the people of the United States. Filed Apr. 30, 1918. Serial No. 231,735. (Cl. 92—7.) (Dedicated to the public.)

1. A process of cooking wood or other fibrous material for the production of paper pulp in which the desired amount of moisture is introduced to the digester during the cook, in direct combination with the steam whereby the cellulose is protected to a marked degree from the action of the cooking liquors while their action on the incrusting matter is in no way diminished.

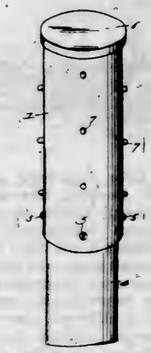
[Claims 2 to 4 not printed in the Gazette.]

1,269,351. FOLDING CLOTHES-RACK. GUSTAF W. WENDELIUS, Cleveland, Ohio. Filed May 27, 1916. Serial No. 100,265. (Cl. 211—14.)



A folding clothes rack comprising a pair of vertical standards each provided on the inner face with a longitudinally extending groove, a pair of supporting feet secured to the lower end of each standard on the outer and inner face thereof, a lower connecting arm consisting of sections having their inner ends hinged together and the outer end of each section hinged to the rear wall of the groove of each standard, an upper arm consisting of sections hinged together at the inner ends thereof and having their outer ends hinged to the rear wall of each standard adjacent the upper end thereof, a brace rod pivotally secured to one section of the upper supporting arm and adapted to be removably attached to the other section of said arm to prevent collapsing of the standards with relation to each other, and means carried by one standard and adapted to engage suitable means carried by the other standard for holding the standards in collapsed position.

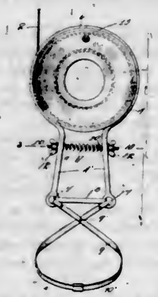
1,269,352. HOG-OILER. BASIL H. WHALEY, Brook, Ind. Filed Jan. 10, 1918. Serial No. 211,197. (Cl. 119—157.)



1. In a device of the kind set forth, a cylindrical casing having means for attachment to the end of a post, a closure member for the upper end of the casing, the casing being provided with series of holes in its cylindrical wall, studs projecting through said holes, each stud terminating in a disk interior to the cylinder, washers in surrounding relation to the stud and interposed between the disks and the inner wall of the cylinder, and flat spring steel members positioned vertical in the casing and attached one to all of the studs projecting through each series of holes, whereby an animal rubbing against the latter may have oil or disinfectant discharged over its body, the casing being designed to receive such oil or disinfectant.

[Claim 2 not printed in the Gazette.]

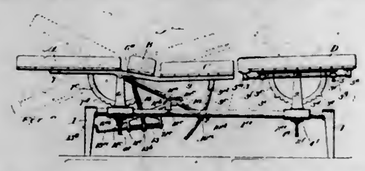
1,269,353. FIRE-ESCAPE. SAMUEL B. WHITTEN, Wilcox, Wash. Filed July 25, 1917. Serial No. 182,719. (Cl. 254—154.)



In a device of the character specified, a reel, a cable wound on the reel, a spring brake band embracing the reel and inclosing the cable thereon, and having its end portions depending and provided with openings and terminating in eyes, an expansible spring interposed between the depending ends of the brake band, rods passing through the spring and through the openings in the depending ends of the brake band, and having their inner ends engaging the ends of the spring, thumb nuts mounted upon the projecting ends of the rods, a strap engaging the eyes of

the ends of the brake band to limit the outward movement thereof, and a body strap supported in the said eyes of the depending ends of the brake band.

1,269,354. CHIROPRACTIC OPERATING-TABLE. WILLIAM GRANT WILLIAMS, Columbus Junction, Iowa. Filed May 8, 1917. Serial No. 167,263. (Cl. 128—16.)



1. An operating table comprising a frame, relatively adjustable supports mounted thereon; a top section mounted on one support, means for adjusting said section at different angles longitudinally of the frame; a second top section hinged to the other support, and means for adjusting this second section at different angles longitudinally of the frame; an intermediate section hingedly connected with one support, and means adjusting the intermediate section at different angles longitudinally of the frame; with means whereby the said intermediate section when adjusted may be either rigidly or yieldingly supported on the frame.

3. In a chiropractic operating table, the combination of a frame, a support slidably adjustable thereon, a member hinged to said support, a top section connected with said member, a segment connected with said member for adjusting the same to different angles, a bolt mounted in the support and engaging said segment to lock the member in adjusted position, and a lever connected with said bolt and extending beneath the support and projecting at opposite sides thereof so that either end may be depressed to release the bolt.

7. In combination a support, a top section hinged to said support, a lever hinged to said support, means connecting the top section with said lever, a second lever engaging the first lever at one end and hingedly connected to the support at its other end; springs connecting the second lever with the support to yieldingly uphold said levers, and means for adjusting the tension of the spring; with a second member hinged to said support at the side opposite the lever, a segment connected with said member, means on the support engaging said segment to hold the said member in adjusted position, and a top section mounted on said member.

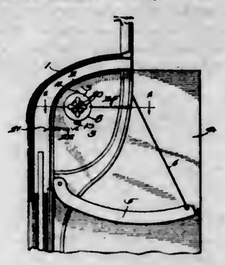
11. In combination a support, a top section hinged thereto, a lever supporting the top section, a second lever below the first lever having its free end engaged with the first lever, a rotatable screw mounted on the second lever, a nut on said screw, and springs connecting said nut with the said support to uphold the levers.

13. In a chiropractic table the combination of a support, a top section hinged thereto, a lever hinged to this support and adjustably connected with said section, a second lever hinged to the support below the first lever and having its free end connected by a pin and slot with the first lever, a rotatable screw mounted on the second lever, a nut on said screw, springs connecting said nut with the said supports to uphold the lever, and means for locking the levers.

[Claims 2, 4 to 6, 8 to 10, and 12 not printed in the Gazette.]

1,269,355. MOUNTING FOR TRANSLATING DEVICES. DANIEL WOODHEAD, Evanston, Ill. Filed May 28, 1917. Serial No. 171,354. (Cl. 230—1.)

1. In apparatus of the class described, a partition having an aperture in it, a flat imperforate panel closely fitting said aperture and capable of facing either way, and an electric translating device mounted wholly on one side of said panel whereby the translating device may exert its effect in either direction from the partition and vision through the aperture will be totally cut off.



7. A passenger car having partitions between the sections, the partition having a fixed and a removable portion, the fixed portion having a hole extending through it, a ventilating fan, a support for said fan mounted in the hole and being movable to present the fan at one side or the other of the partition, and means operated by the removable portion of the partition for locking said support against movement.

9. A passenger car having partitions between the sections, the partition having a fixed and a removable portion, the fixed portion having an aperture, a fan, a support for closing said aperture, said support being rotatable to present the fan toward one or the other of the sections, a locking rod mounted in the fixed portion of the partition for preventing rotation of the support, a spring for normally holding said rod out of engagement with the support, and means operated by the removable portion of the support for holding said rod in engagement with the support.

[Claims 2 to 6, 8, and 10 not printed in the Gazette.]

1,269,356. MOUNTING FOR TRANSLATING DEVICES. DANIEL WOODHEAD, Evanston, Ill. Filed June 4, 1917. Serial No. 172,592. (Cl. 230—1.)



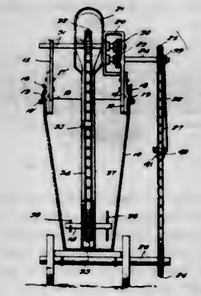
1. A passenger car having sections separated by partitions, each partition having an opening and being composed of a fixed and a movable part, an electric translating device, a pivotally mounted support therefor having side walls arranged at approximately right angles to each other, said walls each being adapted to form a closure for said opening, and locking means operated by the movable part of the partition for locking said support against rotation.

5. A passenger car having sections separated by partitions, an electric fan having a motor, fan shaft and blades, a support for the fan pivotally mounted upon an axis in the plane of the partition, the fan being pivotally mounted upon said support, a housing for the motor, said housing having a spherical portion with a slot in it for accommodating the fan shaft, said slot extending in a plane perpendicular to the fan pivot, and a shield encircling the fan shaft and lying adjacent to the housing for closing the slot therein.

8. A passenger car having a ventilating fan comprising an electric motor, motor shaft and blades, a support for the motor, pivot bearings for said motor whereby the direction of delivery may be changed, a housing in front of said motor having a slot for accommodating the motor shaft, and a friction device bodily movable with the motor and rubbing upon said housing for yieldingly holding the motor in the position to which it is adjusted.

[Claims 2 to 4, 6, 7, and 9 not printed in the Gazette.]

1,269,357. PEANUT-PLANTING ATTACHMENT. MELVIN T. WRIGHT, Boyd, Tex. Filed July 25, 1916. Serial No. 111,200. (Cl. 193—6.)

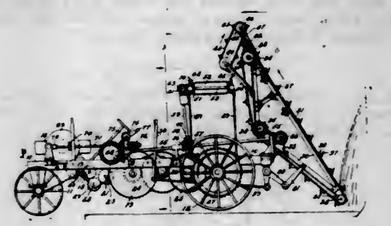


1. A peanut planter attachment including a conveyer casing, a directing spout leading from the upper end thereof, shafts journaled in the upper and lower ends of the casing and having their respective ends projecting beyond the sides of the casing, sprocket wheels carried by the shafts and positioned within the casing, a conveyer chain operating about the sprocket wheels and having the rear lay passing through the casing, sectional arms, the upper sections being provided with openings for journaling the outer ends of the upper shaft, the inner ends of the upper sections being provided with small openings, the upper ends of the lower sections being provided with slots, bolts engaged in the small openings and in the slots, means for engaging the bolts to clamp the sections in relatively adjusted positions, lugs projecting from the outer faces of the lower sections beneath the slats and adapted for engagement with a suitable support, clamps carried by the lower section for coöperating with the lugs in holding the lower sections in position on a main support, and means for rotating the upper shaft.

2. A peanut planter attachment including a conveyer casing, a directing spout leading from the upper end thereof, shafts journaled in the upper and lower ends of the casing and having their respective ends projecting beyond the sides of the casing, sprocket wheels carried by the shafts and positioned within the casing, a conveyer chain operating about the sprocket wheels, sectional arms, the upper sections of the arms having openings therein for journaling and supporting the upper shaft, means for removably holding the sections of the arms in various positions of vertical adjustment, lugs formed on the outer faces of the lower sections and adapted for engagement with a suitable support, clamping means operably connected to the lower arms for coöperating with the lugs for facilitating the mounting of the attachment in a rigid position on a support, a frame carried by the upper section of one of the arms, the upper shaft being also journaled in the frame, a gear carried by the upper shaft, another shaft journaled in the frame and projecting outwardly therefrom, a gear carried by the last shaft and meshing with the gear on the upper shaft, a sprocket wheel carried by the last shaft, a chain operating about the last mentioned sprocket wheel and about a suitable source of power, resilient spreader arms operably connected to the last mentioned shaft, and idlers rotatable on the outer ends of the spreader arms and normally held in yielding engagement with the transmitting chain by the spreader arms so as to take up the slack in the chain during the adjustment of the casing.

1,269,358. GRAIN-TRANSFERRING DEVICE. JOHN W. WYLAND, Harlan, Kans. Filed Apr. 1, 1915. Serial No. 18,524. (Cl. 193—8.)

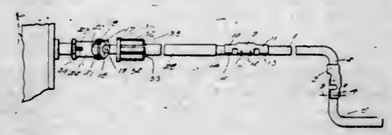
1. In a grain transferring device, a carriage, an elevating conveyer upon the carriage adapted to tear and pick up grain directly from the stack, a second conveyer upon which said first conveyer discharges, and a kicker mechanism between said conveyers comprising a toothed traveling belt intersecting and reversely inclined to the plane of the convering side of said first conveyer



and traveling faster than the conveyer so as to kick the grain from the first conveyer to the second conveyer.

[Claim 2 not printed in the Gazette.]

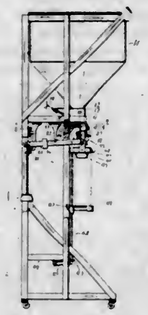
1,269,359. HANDLE FOR AUTOMOBILE-JACKS. JOHN C. YOUNG, Pittsburgh, Pa. Filed July 27, 1917. Serial No. 183,166. (Cl. 74—33.)



1. A handle for jacks comprising a pair of sections, a clamp pivoted to each of said sections, extensions formed on said clamp, inwardly directed projections formed on said extensions and adapted to engage the sections to form a rigid construction, a hand grip connected to one of said sections, and means detachably connecting the other section to a jack.

[Claims 2 to 5 not printed in the Gazette.]

1,269,360. AUTOMATIC SCALE. RICHARD J. ZANONE, New Albany, Ind. Filed Feb. 7, 1916, Serial No. 76,543. Renewed Nov. 12, 1917. Serial No. 201,657. (Cl. 73—181.)



1. In a scale, a frame, a scale beam, a delivery chute, a feed gate, a catch adapted to engage with said gate and hold it open, a shaft and co-acting means between the shaft and gate, whereby said catch may yield to engage with the gate without influencing said shaft and whereby downward movement of said beam under load will actuate the shaft to release the catch and permit the gate to close.

2. In a scale, a frame, a storage hopper, a feed gate, a scale beam, a catch adapted to engage with said feed gate, a pair of studs projecting from the side of said catch, a shaft on which said catch swings, a pin extended from said shaft and lying between said studs, and a projection on said scale beam adapted to engage and rock said shaft.

[Claims 3 to 5 not printed in the Gazette.]

1,269,361. TEAT-CUP. AUGUST W. ZERATSKY and OSCAR WOSTAL, La Crosse, Wis. Filed Sept. 17, 1917. Serial No. 191,674. (Cl. 31—102.)



1. The combination with the body portions of a teat cup, provided with outwardly projecting segmental flanges near its upper end, of an annular flanged cap member, adapted to fit over the body member with its flanges engaging underneath the body member flanges, and a non-metallic annulus composed of resilient material centrally apertured to receive a teat, and interposed between the upper margin of the cap member and body member respectively, the upper margin of the cap member being inwardly and downwardly turned and adapted to bear upon said annulus above the upper margin of the body member.

5. The combination with a teat cup body member, an annular teat engaging annulus seated upon the upper margin of the body member, an annular cap member seated upon said resilient annulus, and adapted, when forcibly pressed upon the annulus and partially rotated, to move into or out of interlocking engagement with the body member without increase of pressure upon the annulus after said engagement is effected.

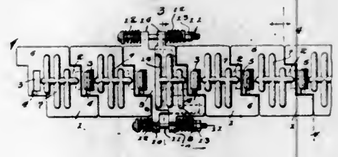
7. In a teat cup, an apertured teat receiving rubber diaphragm having its outer margin thickened and constituting a rim adapted to facilitate centering and retaining the diaphragm in position.

9. In a teat cup, an apertured diaphragm composed of elastic material having a peripherally thickened rim portion to facilitate centering and retaining the diaphragm in proper relation to the other parts of the cup, in combination with a cup body adapted to engage the under surface of the diaphragm within the thickened marginal portion thereof, and a retaining ring provided with a channel adapted to receive said thickened portion of the diaphragm and having an annulus in position to bear upon the upper portion of the diaphragm within said rim portion.

11. In a teat cup, the combination of a disk shaped apertured diaphragm composed of elastic material, a cup body having an upper margin adapted to receive said diaphragm, and an annular clamping member adapted to removably engage the cup body and having one annular wall projecting downwardly into clamping engagement with the upper surface of said diaphragm opposite the margin of the cup body, whereby the diaphragm may be clamped in position without flexion, said diaphragm, when clamped upon the body, being secured thereto without distortion or stretching of the material, and having its outer margin in substantially the same plane with its margin at the central aperture.

[Claims 2 to 4, 6, 8, and 10 not printed in the Gazette.]

1,269,362. TIRE-ARMOR. WILLIAM J. ADAMS, Mobile, Ala. Filed July 9, 1917. Serial No. 179,523. (Cl. 152—16.)



1. In a tire armor a link having an intermediate portion provided with an opening and having grooves leading into the said opening, the said intermediate portion being further provided with a knuckle, the link having at the opposite sides of the said intermediate portion side portions, one of which projects beyond one end of the intermediate portion and the other of which projects beyond the opposite end of the said intermediate portion.

2. In a tire armor a link having an intermediate portion provided with an opening in the vicinity of one end and carrying a knuckle at its opposite end, ribs provided upon the intermediate portion, the link having side portions located at the opposite sides of the intermediate portion, the side portion at one side of the intermediate portion projecting beyond one end thereof and the side portion at the opposite side projecting beyond the opposite end thereof.

1,269,363. DOLL. GEORGENE AVERILL, New York, N. Y. Filed Jan. 2, 1918. Serial No. 209,814. (Cl. 46—40.)



1. A doll-body consisting of a fabric casing, said casing being stitched together at the arm-pit and hip-portions to form flexible arms and legs, each arm and leg portion being stuffed independently of each other and of the body portion.

2. A foot for a doll-body consisting of a plurality of fabric sections stitched together, the heel portions being stuffed independently of the remainder of the foot; the stuffing for said heel portion being separated from the stuffing of the remainder of the foot.

3. A doll comprising a fabric casing, a stuffing therefor, a movable head, and a flange carried by the neck portion of the head, extending under the fabric casing, said stuffing being forced against said flange to hold same firmly in contact with the casing.

4. A doll comprising a fabric casing, a stuffing therefor, a movable head, and a flange carried by the neck portion of the head, extending under the fabric casing, said stuffing being forced against said flange to hold same firmly in contact with the casing, said head being unsecured to either the casing or stuffing.

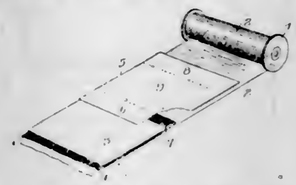
[Claims 5 to 12 not printed in the Gazette.]

1,269,364. REMOVABLE GOOSENECK-IRON. CLARENCE L. BAIR, Detroit, Mich., assignor to Anto Specialties Manufacturing Co., St. Joseph, Mich., a Corporation of California. Filed Nov. 16, 1916. Serial No. 131,614. (Cl. 21—61.)



In combination with the side of a vehicle body having a perforation therethrough at a point below the top edge thereof, a tubular member extending from the inside of the vehicle through said perforation to the front, reinforcing wing members on the inner end of said tubular member suitably secured to the vehicle body to prevent rotation of the tubular member and secure it in place, a goose neck iron body member insertible from outside of the vehicle body through said tubular member, a lug upon the goose neck iron body member insertible in a recess formed in the tubular member to prevent both rotation and longitudinal movement of the goose neck iron member with reference to the tubular member, and a locking device carried on the inner end of the goose neck iron member operated from its outer end adapted to lock it in position in the tubular member with reference to the vehicle body.

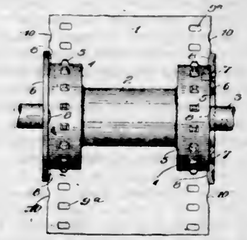
1,269,365. PHOTOGRAPHIC-ROLL-FILM CARTRIDGE. THOMAS BAKER, Melbourne, Victoria, Australia, assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 30, 1916. Serial No. 139,752. (Cl. 95—9.)



1. In a photographic film cartridge, the combination with a backing and a sensitive film strip wound together into a roll, of a sticker pasted to the inner end of the film strip and having a gummed portion adapted for attachment to the backing, the said gummed portion being radially offset from the pasted portion at the end of the film strip in the superposed convolutions of the roll and the inner surface of the portion of the backing lying next beneath the pasted portion being disposed against an ungummed surface.

2. In a photographic film cartridge, the combination with a backing and a sensitive film strip wound together into a roll, of a sticker pasted at one edge to the inner end of the film strip and provided at the opposite edge with an adhesive for future attachment to the backing, the intervening portion of the sticker being free of adhesive and being disposed next beneath that convolute portion of the backing which is next beneath the pasted portion of the sticker.

1,269,366. MOTION-PICTURE APPARATUS. FREDERICK W. BARNES, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Oct. 15, 1917. Serial No. 196,613. (Cl. 88—17.)

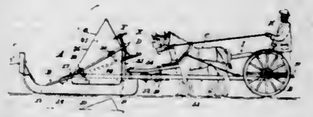


1. A moving picture film strip having the usual equally spaced sprocket perforations in its margins and also provided with equally spaced notches in its edges at points opposite intervals between the sprocket perforations, said notches being distributed throughout the length of the film with a frequency equal to at least half that of the picture areas on the film, for the purposes set forth.

2. In a motion picture machine, a film strip feeding sprocket drum provided with the usual sprocket teeth and having end flanges formed with lugs projecting inwardly opposite intervals between the sprocket teeth and into the path of the extreme lateral edges of a film of the width for which the machine is adapted.

3. In a motion picture machine, the combination with a film strip feeding sprocket drum provided with the usual sprocket teeth equally spaced apart, and having end flanges formed with equally spaced lugs projecting inwardly opposite intervals between the sprocket teeth, of a film strip having the usual equally spaced sprocket perforations in its margins to coöperate with the sprocket teeth and also provided with equally spaced notches in its edges at points opposite intervals between the sprocket perforations to coöperate with the lugs.

1,269,367. SNOW-PLOW. LOUIS EDWY BARTON, Malta, Ill. Filed Mar. 19, 1918. Serial No. 223,413. (Cl. 37—5.)



1. In a machine of the nature described, a snow plow proper, said plow consisting of a pair of principal runners, a pair of auxiliary runners intermediate the principal runners, the latter runners being of less depth than the principal runners, a fixed platform mounted on said runners in inclined position, a movable platform hingedly connected at its forward end to the forward end of the fixed platform, mechanism for raising and lowering the rear end of the movable platform, fenders hingedly connected to the movable platform at the side margins thereof, a deflector on the movable platform, said deflector comprising two triangular members jointed together along one margin of said members, the margins of said members where they join the movable platform being angularly placed to resemble the letter "V," and means whereby said snow plow is propelled, said propelling means being located in the rear of the machine.

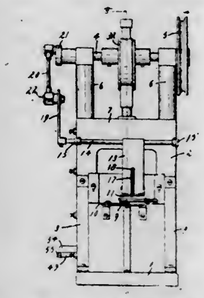
3. In a machine of the nature described, a snow plow proper, said plow comprising a pair of runners, a fixed platform mounted on said runners, said fixed platform being rearwardly and upwardly inclined, said platform being fixed to the runners at its forward end, an arched support upon said runners for the rear end of said fixed

platform, a movable platform hingedly connected to the forward end of the fixed platform, mechanism for raising and lowering the rear end of said movable platform, fenders hingedly connected to the movable platform at the side margins thereof, a deflector on the movable platform, and means whereby said snow plow is propelled, said propelling means being located at the rear of the machine, said deflector including two triangular members jointed at one of their side margins and angularly disposed with reference to the plane of the movable platform, said fenders being provided with bars having a series of notches engaging pins for changing the angularity of said fenders with reference to the plane of the movable platform.

7. In a machine of the nature described, the combination, of a snow plow proper and means whereby said snow plow is propelled, said means including a push bar extending rearwardly from said plow, a wheeled vehicle at the rear of said plow, a reach connecting said wheeled vehicle to said push bar, a link connection between said push bar and said reach, the abutting ends of said reach and said push bar being provided with gear teeth.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,269,368. STRIP-CUTTING MACHINE. ROBERT F. BEARDSLEY, Kalamazoo, Mich., assignor to Kalamazoo Corset Company, Kalamazoo, Mich. Filed Oct. 10, 1917. Serial No. 195,728. (Cl. 164—48.)



1. In a structure of the class described, the combination of a driving shaft, a stock feed way, a feed jaw, a rock shaft, an arm on said rock shaft on which said feed jaw is pivotally mounted, a spring arranged to hold said feed jaw yieldingly in engagement with the stock, driving connections from said rock shaft to said driving shaft, a spring pressed stock retaining jaw, a shear bar disposed at the rear of and below said feed way, a reciprocating cutter head, driving connections therefor to said driving shaft, a cutter blade on said cutter head coacting with said shear bar, a support disposed at the rear of said shear bar in alinement with said feed way so that the stock is fed across the shear bar onto the support, said support having a pivoted spring supported front section adapted to yield under the action of the cutter blade and to return the severed piece to position to be engaged and advanced by the stock, a spring pressed retaining shoe coacting with said support to hold the severed pieces, a packing trough disposed at the rear of said support and having an opening alined with said support, a packing plunger reciprocating in said packing trough past said opening therein, means for supporting the severed pieces, and means for actuating the packing plunger comprising said cutter head.

4. In a structure of the class described, the combination of a stock feed way, means for feeding the stock step by step, a shear bar disposed at the rear of and below said feed way, a reciprocating cutter head, a cutter blade on said cutter head coacting with said shear bar, a support disposed at the rear of said shear bar in alinement with said feed way so that the stock is fed across the shear bar onto the support, said support having a pivoted spring supported front section adapted to yield under the action of the cutter blade and to return the severed piece to position to be engaged and advanced by the stock, and a spring pressed retaining shoe coacting with said support to hold the severed pieces.

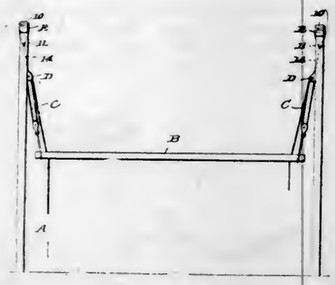
6. In a structure of the class described, the combination of a driving shaft, a stock feed way, a feed jaw, a rock shaft, an arm on said rock shaft on which said feed jaw is pivotally mounted, a spring arranged to hold said feed jaw yieldingly in engagement with the stock, driving connections from said rock shaft to said driving shaft, a spring pressed stock retaining jaw, a shear bar disposed at the rear of and below said feed way, a reciprocating cutter head, driving connections therefor to said driving shaft, and a cutter blade on said cutter head coacting with said shear bar.

10. In a structure of the class described, the combination of a stock feed way, means for feeding the stock step by step, a shear bar disposed at the rear of and below said feed way, a reciprocating cutter head, a cutter blade on said cutter head coacting with the said shear bar, and a support disposed at the rear of said shear bar in alinement with said feed way so that the stock is fed across the shear bar onto the support, said support having a section adapted to yield under the action of the cutter blade and to return the severed piece to position to be engaged and advanced by the stock.

13. In a structure of the class described, the combination of a stock feed way, means for feeding the stock step by step, a shear bar disposed at the rear of and below said feed way, a reciprocating cutter head, a cutter blade on said cutter head coacting with said shear bar, a support disposed at the rear of said shear bar in alinement with said feed way so that the stock is fed across the shear bar onto the support, a packing trough disposed at the rear of said support and having an opening therein alined with said support, and a packing plunger reciprocating in said packing trough past said opening.

[Claims 2, 3, 5, 7 to 9, 11, and 12 not printed in the Gazette.]

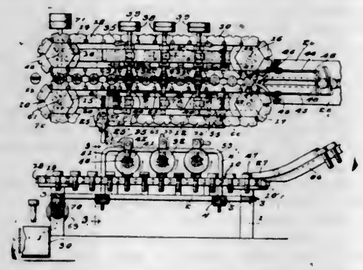
1,269,369. LADDER-RIGGING. VICTOR E. BERNSON, Salem, Mass. Filed Oct. 13, 1916. Serial No. 125,484. (Cl. 20—82.)



In a ladder rigging including a platform and a block-and-tackle, the combination with a supporting chain attached to said block, of a box-like cap for detachably engaging the side bar of the ladder, the same consisting of single blank of sheet metal bent to form an inner wall whose upper portion is carried over to form the top and thence downward to form a tongue and finally upward to form a lip spaced from the tongue, the side portions of said inner wall being bent to form the ends of the box and then lapped between said tongue and lip to constitute the rear wall of the box, said inner wall being also carried downward and formed into a loop extension and connections between said chain and loop.

1,269,370. SCREW-SLOTTING MACHINE. CHARLES E. BOTENSTEIN, Chicago, Ill. Filed June 2, 1917. Serial No. 172,459. (Cl. 10—6.)

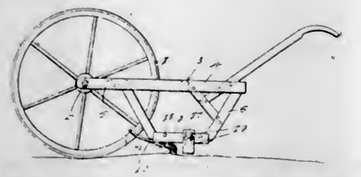
2. In a screw slotting machine, a plurality of belt conveyers including a series of links having recesses in the free sides thereof, the recesses of the links of the oppositely located belts coöperating to form screw holding receptacles, means for driving the conveyers, means for feeding the screws in timed relation to the operation of the conveyers and the movement of the successive links, and means for cutting the slots therein.



9. In a screw slotting machine, a device for receiving the screws to be slotted, a tripping device for feeding the screws, a plurality of conveyers oppositely located having recessed coöperating links for holding the screws between the conveyers, and a plurality of saws of different thicknesses for cutting slots of varying sizes, and means for operating the saws independently, said feeding device comprising a plurality of spring-held delivery members pivotally mounted at points intermediate their ends and adapted to be spread apart for discharging a screw in position to be operated upon.

[Claims 1 and 3 to 8 not printed in the Gazette.]

1,269,371. BEET-TOPPER. DOLE I. BREECE, Alma, Mich. Filed Jan. 27, 1917. Serial No. 144,848. (Cl. 55—107.)



1. In a beet topper, the combination of a substantially rectangular supporting frame, the sides of said frame being extended forwardly and adapted for attachment to a wheeled axle, a plurality of substantially U-shaped members arranged in pairs and adjustable laterally of said frame, and a beet topping knife carried by the lower bight portions of said substantially U-shaped members.

2. In a beet topper, a substantially rectangular supporting frame, the sides of said supporting frame being extended forwardly and adapted for connection with a wheeled axle, a plurality of substantially U-shaped members arranged in pairs and adjustably connected to said rectangular supporting frame for lateral adjustment with respect to each other, a beet crowning knife adjustably carried by each pair of said U-shaped members and comprising a horizontal blade having its longitudinal edges sharpened.

3. In a beet topper, a substantially rectangular supporting frame, a plurality of U-shaped members arranged in pairs and adjustably connected to said supporting frame for lateral adjustment with respect to each other, a knife adjusting plate adjustably connected to each pair of said U-shaped members and adapted for movement under pressure of beet tops, and a crowning knife connected to each of said knife adjusting plates.

4. In a beet topper, a substantially rectangular supporting frame, a plurality of U-shaped members arranged in pairs and adjustably connected to said supporting frame for lateral adjustment with respect to each other, a knife adjusting plate adjustably connected to each pair of said U-shaped members and adapted for movement under pressure of beet tops, a crowning knife comprising a horizontal blade having its longitudinal edges sharpened, upstanding plates formed upon the ends of said blades, and means for adjustably connecting said upstanding ends to said knife adjusting plates.

5. In a beet topper, a supporting frame, a plurality of depending members carried by said frame and adapted for lateral adjustment, said members arranged in pairs, a knife adjusting plate yieldably connected to each pair of said members for vertical movement, and a topping knife carried by each knife adjusting plate for movement with the plate.

1,269,372. TIE-SLIDE. JENNIE V. BRENNAN, Trenton, N. J. Filed Jan. 26, 1918. Serial No. 214,005. (Cl. 2—11.)

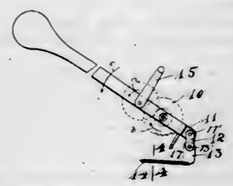


1. A tie slide for folded collars comprising detachable retaining means formed of wire adapted to engage a collar having opposite parallel portions, and a plate mounted on said parallel portions adapted to overlie a collar button to prevent engagement of the collar button with a tie when passed through the fold of a collar.

2. A tie slide composed of wire formed to present three vertical portions spaced apart, each having parallel side members, the inner and intermediate portions affording an unobstructed space for the loose reception of the tie, and the intermediate and outer portions having a spring closing relation enabling the same to grip a collar fold therebetween, the outer portion being turned inwardly at the upper ends of its side members to constitute an offset to engage the outer face of the collar.

[Claims 3 and 4 not printed in the Gazette.]

1,269,373. CUTTING DEVICE FOR OPENING PLASTER CASTS ON THE BODIES OF INJURED. HANS BRINCK, Los Angeles, Cal., assignor of forty-nine one-hundredths to Louis E. Bergeron, Chicago, Ill. Filed Aug. 21, 1917. Serial No. 187,456. (Cl. 128—28.)



1. A cutting device for opening plaster casts, comprising a shield plate adapted to be interposed between the wall of a cast and an injured member inclosed thereby, a fixed lug extending upwardly from one end of said plate, a handle pivotally mounted to said lug for radial and longitudinal movement in relation to the plate, a rotary cutting member mounted upon the handle and adapted to swing therewith, driving gears by which the cutting member is driven, a crank rotating said driving gears, and a stop pin extending downwardly from the handle to strike the plate when the periphery of the cutting member has passed through the wall of the plaster cast.

[Claim 2 not printed in the Gazette.]

1,269,374. AIMING DEVICE. GUSTAF A. BRODSTROM, Portsmouth, Va., assignor to John B. Barrett, Alexandria, Va. Filed Aug. 8, 1917. Serial No. 185,183. (Cl. 124—15.5.)

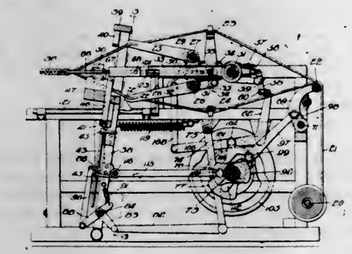


1. A device of the character specified, comprising a staff having means for connecting the same to a gun, a frame having means for supporting a target and a card in parallel planes, a guide frame for the target frame, means in connection with the frames for moving the target holding frame laterally with respect to the staff, means in connection with the guide frame and the staff for moving said guide frame vertically, and for preventing swinging movement of the frame, a means for puncturing the card, said means being at the center of the target, and comprising a key provided with a needle supported by the staff and mounted to move toward and from the card, and a spring normally pressing the key away from the card.

4. A device of the character specified, comprising a staff having means for connecting the same with the muzzle of a gun, means on the staff for supporting a target and a card in parallel planes approximately perpendicular to the barrel of the gun, means for moving the target with respect to the barrel, and means at the end of the staff for puncturing the card.

[Claims 2 and 3 not printed in the Gazette.]

1,269,375. LOOM. JOHN C. BROOKS, Paterson, N. J., assignor to Ossian T. Waite, Oshkosh, Wis. Filed May 5, 1917. Serial No. 166,601. (Cl. 139—18.)



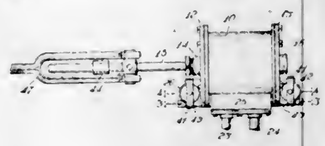
1. In a machine of the class described, the combination of a pair of sword arms, upper fixed reed dents connected to said arms, lower movable companion reed dents carried by the sworn arms, upper and lower sets of vertically oscillatable warp guides, upper and lower sets of fixed warp guides, the upper warp guides oscillating in planes intermediate the planes of oscillation of the lower warp guides, a weft-feeding traveler, means for guiding the same in a horizontal direction of travel and between the upper and lower warp guides when said guides are respectively in their upper and lower positions, means for raising the lower movable reed dents into operative engagement with respect to the upper fixed reed dents, a shuttle guide on the sword arms, a shuttle traveling in said guide, means for throwing the sword arms forward and back for the purpose of packing a weft, means for oscillating the warp guides simultaneously in opposite directions to thereby cause the positions of said guides to cross each other, means for causing the traveler to advance alternately back and forth, and means for causing the shuttle to travel alternately back and forth along the shuttle guide.

6. In a machine of the class described, the combination of an oscillatable reed having companion sets of relatively movable reed dents, upper and lower sets of relatively vertically movable warp guides, upper and lower sets of relatively fixed warp guides, a traveler, means for causing said traveler to travel between said sets of warp guides when the relatively movable warp guides stand in their normal positions, a shuttle guide mounted on the reed, a shuttle traveling in said guide, means for moving the companion reed dents into operative engagement with respect to each other, means for moving the reed forward and back for the purpose of packing a weft, means for relatively moving the upper and lower sets of movable warp guides to thereby cause said guides to reverse their positions, means for causing the traveler to advance alternately back and forth when the warp guides stand in their normal positions, and means for causing the shuttle to travel alternately back and forth along the shuttle guide when the reed stands in its normal position.

11. In a machine of the class described, the combination of upper and lower sets of relatively vertically movable warp guides, upper and lower sets of relatively fixed warp guides, a traveler adapted to work between the relatively movable warp guides when the same stand in their normal positions, means for moving said traveler alternately back and forth when the relatively movable warp guides stand in their normal positions, means for reversing the positions of the relatively movable warp guides, said traveler remaining idle while the movable warp guides stand in reversed positions, means for packing up a weft, and means for introducing a weft between the warps when the relatively movable warp guides stand in reversed positions.

[Claims 2 to 5 and 7 to 10 not printed in the Gazette.]

1,269,376. VACUUM-PUMP. LIONEL BULL, Libertyville, Ill., assignor of one-half to George R. Linn, Chicago, Ill. Filed Sept. 10, 1917. Serial No. 190,573. (Cl. 230—34.)



In a vacuum pump, in combination, a horizontal cylinder having an integral side wall formed at one side with intake and exhaust passages extending longitudinally through the same from end to end, at different levels, heads removably applied to the ends of the cylinder, each head being formed with an outstanding integral upright chambered boss, located at one side of the axis of the cylinder and having its chamber located beyond the plane of the outer surface of the remaining of the head, and with three ports communicating with the chamber of the boss at different levels, the intermediate port also communicating with the chamber of the cylinder and the upper and lower ports registering respectively with the said exhaust and intake passages, an upwardly opening intake valve operating in the chamber of each cylinder head between the lower and intermediate ports and an upwardly opening exhaust valve operating in the chamber of each cylinder head between the intermediate and upper ports.

1,269,377. VEHICLE-COUPLING. GEORGE L. BUMGARDNER, Gridley, Kans., assignor of one-half to Harry A. Patrige, Gridley, Kans. Filed July 13, 1917. Serial No. 180,397. Renewed Apr. 12, 1918. Serial No. 228,279. (Cl. 21—39.)

1. In a coupler for vehicles, the combination with an axle and a sand-board; of a bolster construction including a stationary portion carried by said sand-board and having guiding channels, relatively adjustable and superposed plates associated with said stationary portion and having segmental end sections, the end sections of one

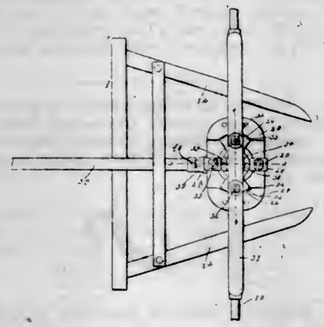
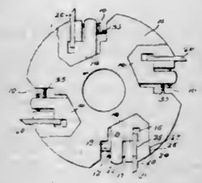


plate projecting into said guide channels, and a bolster secured to the other plate.

[Claims 2 to 4 not printed in the Gazette.]

1,269,378. MOLDING-FACE CUTTER. LEMUEL T. BUNCH, Charleston, S. C. Filed July 28, 1916, Serial No. 111,894. Renewed Nov. 10, 1917. Serial No. 201,398. (Cl. 144—230.)

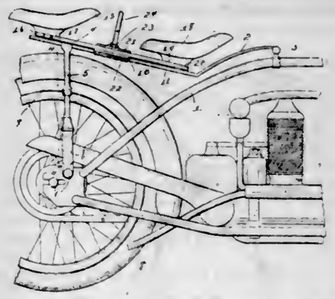


The combination with a cylinder having notches at equal distances apart in the periphery thereof, removable blocks held within the notches, cutting knives removably fitted within the blocks, means adjustably mounted in the blocks for the fastening of the knives therein, means mounted within the cylinder for securing the blocks in the notches, one wall of each notch being formed with a groove, a key on each block for engagement in the groove, roughened surfaces formed on each knife and the wall adjacent thereto of the block for interlocking engagement with each other, a filler plate carried by each block and acting upon the knife to move the same for the interlocking engagement of the roughened surfaces, and roughened surfaces formed in the notches and on the blocks for interlocking engagement with each other.

1,269,379. MOTOR-CYCLE. LOT F. BURKE, Schenectady, N. Y. Filed July 2, 1917. Serial No. 178,140. (Cl. 208—63.)

1. The combination with a vehicle; of a seat-mount extending longitudinally of the vehicle; a pair of seats; seat-supporting means shiftable to extend either longitudinally or transversely of said vehicle and said seat-mount, and supporting both seats in either of said positions with their longitudinal axes extending longitudinally of said seat-mount and vehicle.

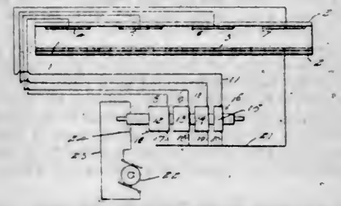
6. In a device of the class described and in combination, a support; a pair of seats; seat-supporting means shiftable to extend either longitudinally or transversely of said support; detachable means for fixedly securing said seat-supporting means in either of said positions



upon said support; and a handle mounted upon said support between said seats.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,269,380. ELECTRIC FISH-STOP. HENRY T. BURKEY, Tulsa, Okla. Filed Sept. 28, 1917. Serial No. 193,800. (Cl. 61—51.)



1. An electric fish stop of the class described including means for electrifying the water of a stream or ditch at a sectional portion of the same to prevent fish from passing the fish stop, said means including a plurality of electrodes arranged at intervals, and means for producing electric currents of progressively increasing strength through the water.

3. An electric fish stop of the class described including means for electrifying the water of a stream or ditch at a section or portion of the same to prevent fish from passing the fish stop.

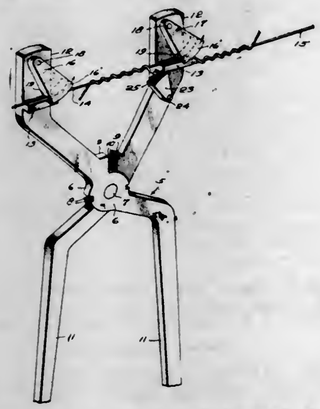
5. An electric fish stop of the class described including a pivotally mounted buoyant electrode arranged to rise and fall with the water and adapted to electrify the water of a stream or ditch to prevent fish from passing along the same.

7. An electric fish stop of the class described including a plurality of pivotally mounted electrodes arranged at intervals along a ditch or stream and adapted to electrify the water passing along the same with increasing intensity, said electrodes being hollow to form air chambers for rendering the electrodes buoyant to enable the same to rise and fall with the water and adapted to cause currents of electricity to pass through the water from the surface to the bottom of the same.

8. An electric fish stop of the class described including a plurality of pivotally mounted electrodes arranged at intervals along a ditch or stream and adapted to electrify the water passing along the same with increasing intensity, said electrodes being hollow to form air chambers for rendering the electrodes buoyant to enable the same to rise and fall with the water and adapted to cause currents of electricity to pass through the water from the surface to the bottom of the same, a transformer having units connected with the electrodes, and a generator connected with the transformer.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,269,381. APPARATUS FOR STRETCHING WIRE. ORBID W. BURNETT, Laclede, Mo., assignor of one-half to John L. Welsh, Laclede, Mo. Filed Sept. 22, 1917. Serial No. 192,699. (Cl. 254—73.)



1. In apparatus of the character described, a pair of crossing arms which are pivoted together at the point of crossing, said arms being provided with forward extensions; transverse lugs carried by the forward extensions and spaced from the forward ends thereof; dogs pivoted to the forward ends of the extensions and disposed forwardly of the lugs and provided with rearwardly extending flanges which extend over the sides of the lugs to prevent the strand of wire from passing off of the same, said dogs swinging in the same direction; and a third dog pivoted to one arm and arranged rearwardly of and near the transverse lug thereof for clamping the wire to such lug.

2. In apparatus of the character described, a pair of crossing arms which are pivoted at the point of crossing and are provided at their forward ends with extensions, said extensions being provided upon corresponding sides thereof with recesses; transverse lugs carried by said corresponding sides of the extensions and arranged at points spaced from the forward ends of the extensions; dogs disposed forwardly of the lugs and pivoted to the forward ends of the extensions, said dogs swinging in the same direction, said dogs being provided upon their inner sides with recesses adapted for co-action with the first named recesses; and a compressible coil spring arranged within the coacting recesses.

1,269,382. PICTURE-SECURING DEVICE. DAVID H. BUTLER, Providence, R. I., assignor to The Inlaid Company, Inc., Providence, R. I., a Corporation of Rhode Island. Filed May 11, 1917. Serial No. 168,028. (Cl. 40—145.1.)



In a picture securing device, a disk formed of stiff material formed with a struck-out part providing a socket having an open end and a closed end the latter formed with a central hole, and a tack having its point passed through said hole and its head loosely received in the socket, said disk being adapted to be cemented to the back of a picture so as to cause the latter to close the open end of the socket and to limit longitudinal movement of the tack by engagement with the outer face of the latter.

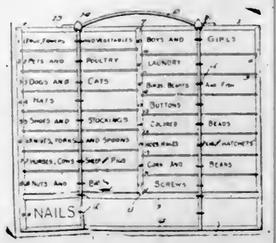
1,269,383. OPHTHALMIC MOUNTING. HENRY C. CADY, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Jan. 2, 1917. Serial No. 140,250. (Cl. 88—43.)



2. An ophthalmic mounting comprising a filled metal base portion having an annular groove formed therein near each end thereof, and sleeves formed from spirally wound wire arranged within said grooves and connected to the base portion by pressing of the material of the sleeves into the filled base to cause the sleeves to bite into the base and form a substantially smooth joint therewith, substantially as illustrated.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,269,384. EDUCATIONAL APPLIANCE. ADA H. CAMPBELL, Atlanta, Ga. Filed June 26, 1917. Serial No. 177,010. (Cl. 35—12.)

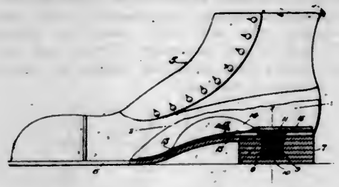


1. In an educational device, the combination with a cabinet having rows of superposed receptacles slidably mounted therein, each receptacle having partitions to divide the same into a large and a plurality of smaller compartments, eyes on each receptacle adapted to form handles for the same, and locking rods adapted to be positioned through said eyes to lock the receptacles in the cabinet.

2. In an educational device the combination with a cabinet having rows of different size superposed receptacles slidably mounted therein, each receptacle having a longitudinally extending partition therein disposed adjacent one side wall and parallel therewith, a plurality of transverse partitions extending from the longitudinal partition to the opposite wall of the receptacle, eyes on the outer wall of each receptacle adapted to form a handle for the same, and locking rods adapted to be positioned through the eyes when the receptacles are positioned in the cabinet to lock the same therein.

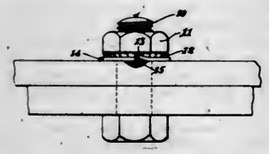
1,269,385. SHOE. GEORGE CAPATA, Gary, Ind. Filed May 16, 1916. Serial No. 97,898. (Cl. 36—37.)

A shoe having a pocket in the heel thereof communicating with the interior of the shoe, a spring in said pocket, a flat flap plate having one of its edges hinged in the shoe and overlying the pocket thereof and normally swung to an angular position by contact of the spring, a plate conforming to the shape of the sole of the shoe between the instep and the heel portion thereof, overlying the hinge flap, and having one of its corners loosely secured to the instep portion of the sole of the shoe, said



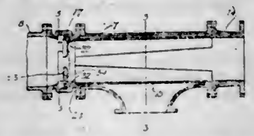
plate, on the side thereof, connected with the shoe having an upwardly extending arched member, and a cushioned member upon the plate over the heel portion thereof.

1,269,386. NUT-LOCK. AXEL S. CARLSON, Jerome, Ariz. Filed Apr. 17, 1917. Serial No. 162,718. (Cl. 151—39.)



In a nut lock construction, a threaded bolt, a nut screw-seated upon the bolt and having an inclined ratchet face outside of the bearing face, a washer adapted to fit upon the bolt against the bearing face of the nut; said washer being split from the bolt opening to the outer edge and said washer being bent downwardly upon radial lines parallel with the split; a spring pawl bent upwardly from said downwardly bent portion and along the split, and a down-turned tang at the opposite side of the split from the pawl.

1,269,387. HYDRAULIC JET-PUMP. GEORGE W. CHRISTIANS, Chattanooga, Tenn. Filed May 25, 1916. Serial No. 99,786. (Cl. 162—1.)



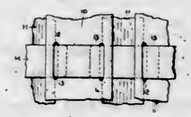
1. The combination in a jet pump of a T of substantially the same diameter throughout its length, a nozzle arranged within said T and provided with a cross shaped passage which decreases in area toward its discharge, channels formed by the arms of the cross on the exterior of the nozzle and increasing in area toward the discharge, a suction line leading into said T for conveying the material to the T, which is drawn through the T by a stream passing through said nozzle, a pipe section secured to the outlet end of the T and provided with an inwardly tapered ring for directing the material passing through the nozzle and T toward the axis of the pipe section, and baffles arranged in said pipe section directly in front of the channels and out of line with the nozzle passage.

4. A jet pump comprising a T of substantially the same diameter throughout its length and having inlet and discharge orifices, a nozzle arranged within said T and having a cross-shaped passage of decreasing cross-sectional area toward the discharge thereof, channels formed in the exterior of said nozzle by the arms of said cross and increasing in area toward the discharge end of the nozzle, a suction line leading into said T intermediate the ends of the same, a pipe section secured to the outlet end of the T and provided with an inwardly tapered wall for directing the material passing through the pipe section toward the axis of the same, and automatically adjustable baffles arranged in said pipe section in front of the nozzle channels.

6. The combination in a hydraulic jet pump of a tube having inflow and outflow orifices, a suction line leading into sad tube intermediate the said orifices, a nozzle substantially cross-shape in section and directed toward the discharge orifice and of decreasing cross-sectional area toward the discharge thereof and the said suction line communicating with the channels formed on the exterior thereof whereby fluid passing through said nozzle induces a contiguous flow from said suction line, and automatically adjustable baffle means located at the discharge ends of said channels to control eddies tending to create back pressure.

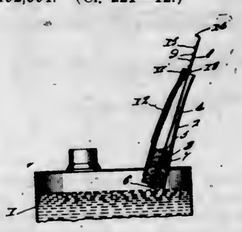
[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,388. PROTECTIVE ARMOR-BELT FOR PNEUMATIC TIRES. JAMES CLYDESDALE, Weehawken, N. J. Filed Aug. 24, 1917. Serial No. 187,996: (Cl. 152—18.)



A belt as characterized comprising a plurality of interlocking plates, said plates being disposed in two series, one series having at the opposite edges thereof, slots, the other series having at the opposite edges, tongues corresponding with said slots for extension therethrough; and a fixed metal band adapted to be passed through said slots for maintaining the aggregate circumference of said belt.

1,269,389. DEVICE FOR CLOSING SPOUTS OF CANS. ALBERT T. COFFIN, El Paso, Tex. Filed Sept. 24, 1917. Serial No. 192,994. (Cl. 221—12.)



1. The combination with a can, and a delivery spout therefor, of a valve fitted in the inner end of said spout for controlling the passage of fluid from said can, a stem for moving said valve passing through said spout and projecting a distance out of the mouth thereof, a series of spaced projections carried by and movable with said stem, the spaces between said projections adapted to receive the outer end of the spout to hold the stem and valve in the adjusted position, and yieldable means for constantly tending to bring the appropriate space between said projections against the spout end, substantially as described.

[Claim 2 not printed in the Gazette.]

1,269,390. PARING-MACHINE. BURTON C. COONS, Rochester, N. Y. Filed Sept. 28, 1916. Serial No. 122,641. (Cl. 146—8.)

2. In combination with a fork on which the article to be pared is supported, a knife movable in a curved path

from the inner end to the outer end thereof, and comprising a blade, a guard and a head supporting the guard and the head having an opening in the side which cooperates with the inner end of the fork, through which opening the parings and stems may pass.

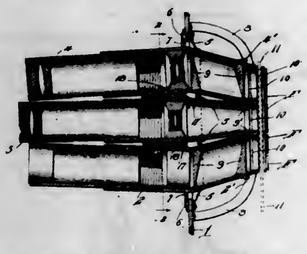


5. In combination in a knife for paring machines, a head comprising a guard supporting portion, a blade supporting portion spaced from the guard supporting portion between its ends, and also at one end, a side wall connecting the other ends of the guard and the blade supporting portion and extending rearwardly from said parts, and a deflector extending rearwardly and forwardly from the guard supporting portion and connected at one side of the side wall, a flat guard secured to the guard supporting portion to overhang the space and extending at least to the free end of the supporting portion; and a flat blade secured to the supporting portion to overhang the space and extend at least to the free end of the blade supporting portion.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,269,391. MOTION-PICTURE CAMERA FOR COLOR PHOTOGRAPHY. ORANGE J. COOPER, Lamar, Colo. Filed July 11, 1917. Serial No. 179,861. (Cl. 88—16.4.)

1. In combination with a camera, an objective arrangement therefor consisting of three telephoto lenses superimposed in a vertical plane.



7. In a motion picture camera for color photography, means including a plurality of telephoto lenses arranged in a common plane for producing a plurality of negatives upon a single film, said negatives covering identical fields both at the point of the principal plane and in perspective to all practical purpose in color photography.

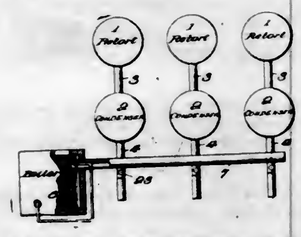
[Claims 2 to 6 not printed in the Gazette.]

1,269,392. AUTOMATIC WOOD-GAS-REGULATING VALVE FOR DESTRUCTIVE-WOOD-DISTILLATION PLANTS. ROBERT A. COOPER and WILLIAM COOPER, East Smethport, Pa. Filed June 10, 1916, Serial No. 102,867. Renewed Jan. 12, 1918. Serial No. 211,671. (Cl. 203—6.)

1. In a wood distillation plant, the combination with a series of condensers, of a pipe connection from said condensers to the boiler of the plant, and a suction controlled damper for controlling the passage of gases through said pipe.

2. In a destructive wood distillation plant, the combination with a battery of condensers, of a boiler, a wood gas line pipe having a connection with said boiler, branch pipes connecting said condensers to said wood gas line pipe, dampers arranged in said branches, and fluid actuated means for controlling the position of said dampers.

3. In a destructive wood distillation plant, the combination with a battery of retorts and a battery of condensers connected together, of a boiler, a wood gas line pipe extending from said boiler, means for creating a suction in said pipe, a connection between said pipe and condensers, and a fluid controlled damper for controlling the suction in each condenser.

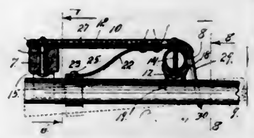


4. In a destructive wood distillation plant, the combination with a battery of retorts and a battery of condensers, of a boiler, a gas line pipe extending from said boiler, means for creating a suction in said pipe, a connection between each condenser, and said pipe, and a fluid controlled damper arranged within each of said connections.

5. A destructive wood distillation plant, comprising a battery of retorts, a battery of condensers, a boiler, and a connection from said boiler to said condensers, means for creating suction within said connection, and fluid actuated means for controlling the suction in each condenser.

[Claims 6 to 17 not printed in the Gazette.]

1,269,393. SWEEP-RAKE. JOSEPH H. COPE, Windsor, Colo. Filed Dec. 26, 1914. Serial No. 879,222. (Cl. 55—66.)



1. A sweep rake whose teeth are movably connected with the head to permit both vertical and lateral oscillation, the movement of the teeth being independent of one another.

3. The combination with a rake head, a tooth, and a shackle for connecting the tooth with the head, said shackle including a loop extending underneath the tooth in front of the head, the tooth being loosely mounted in the loop and yieldable means for connecting the tooth to the head in the rear of the loop.

10. In a rake, the combination with the head and the teeth, the head comprising bars, of means for connecting each tooth with the head including a shackle comprising a plate connecting said bars, a spring secured at one end to the plate and at the other end to the tooth, and means adjacent one of said bars serving as a fulcrum for said tooth.

[Claims 2, 4 to 9, and 11 to 15 not printed in the Gazette.]

1,269,394. EGG-BOX. JOSEPH LEOPOLD COYLE, Smithers, British Columbia, Canada. Filed Aug. 6, 1917. Serial No. 184,747. (Cl. 217—33.)

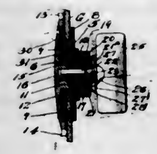
2. In an egg box, transverse end walls provided with foldable extension forming cover flaps for the box, spaced longitudinal connecting walls extending therebetween detachably locked thereto, a filler inserted between said connecting walls and foldable so as to form therewith a series of catenary suspensory unitary egg enveloping pockets the bottoms of which are above the level of the lower edges of the said connecting walls, the said walls being slotted to receive said filler the



pocket connecting portions of which form transverse walls fitting the said slots, the upper edges of the last mentioned walls extending above the upper edges of the longitudinal connecting walls and the filler being provided on its opposite free ends with foldable gripping portions.

[Claim 1 not printed in the Gazette.]

1,269,395. WINDOW-CLEANER. ARTHUR CRANSTON, Washington, D. C. Filed May 17, 1915. Serial No. 28,582. (Cl. 15—59.)



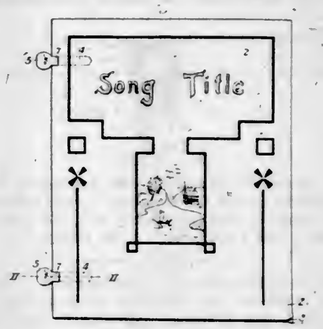
1. In a device of the class described designed to be applied to a glass pane having an aperture, the combination of a bearing thimble passing through the aperture and having a flange at the outside of the glass, a disk surrounding the thimble at the inside of the glass, a screw cap engaging the thimble to clamp the flange and disk upon the glass, compressible washers between the flange and disk and the glass, a hub having a stud extending within said bearing thimble, a turning device adjustably engaging the stud, means for securing the turning device to the stud, a handle pivotally secured to the turning device and one or more cleaner arms carried by said hub and bearing against the outer face of the glass.

3. In a device of the class described designed to be applied to a glass pane having an aperture, the combination of a bearing member having a sleeve within the aperture and a flange at one side of the glass, another flange at the other side of the glass, gaskets between the said flanges and the glass, a threaded cap engaging the bearing sleeve and locking the flanges upon the glass, a hub having a stud within the bearing sleeve, said stud having an angular socket and a screw-threaded counterbore, a screw plug engaging said threaded counterbore and having a flange engaging the end of said bearing sleeve, said screw-plug having an angular hole registering with the socket in said hub, a stem of angular section passing through the hole in said screw-plug and engaging the socket in said hub, a flange on the stem held in position by the end of said screw-cap, and a foldable operating handle connected to the end of said stem.

[Claim 2 not printed in the Gazette.]

1,269,396. INDEXING, MARKING, AND BINDING DEVICE. JESSE CLARE CRAWFORD, Pittsburgh, Pa. Filed May 24, 1916. Serial No. 99,667. (Cl. 40—23.)

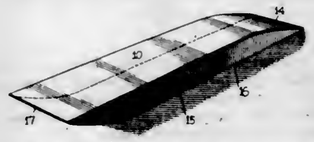
1. A combined indexing and binding device for a loose sheet within a folded cover, comprising a tab having a binding portion and a tongue extending therefrom, said tongue being attached to the sheet and extending through a slot in the cover, the binding portion being arranged to secure the sheet to the cover and also to



form an indexing portion at the exterior of the cover; substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,269,397. HYDROAEROPLANE-PONTOON. GLENN H. CURTISS, Buffalo, N. Y., assignor to Curtiss Aeroplane and Motor Corporation, a Corporation of New York. Original application filed Aug. 22, 1911, Serial No. 645,340. Divided and this application filed Nov. 18, 1916. Serial No. 132,105. (Cl. 244—2.)



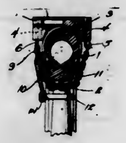
1. A pontoon for hydroaeroplanes comprising a main body having a longitudinally extending hydroplaning surface on its bottom terminating rearwardly in a transverse edge, a broad longitudinally convexed downwardly and rearwardly inclined landing prow surface curving gradually from the frontal extremity of the pontoon to e aforesaid hydroplaning surface, substantially vertical sides the height of which is substantially equal to the maximum depth of the pontoon, a substantially horizontally flat top deck hermetically sealing the pontoon and extending straight back from its point of intersection with said landing prow surface, and a rear deck portion approaching the bottom of the pontoon.

2. A pontoon for hydroaeroplanes comprising a main body having a longitudinally extending hydroplaning bottom surface substantially horizontally flat throughout the greater portion of its length, substantially vertical sides, a top deck hermetically sealing the pontoon and substantially horizontally flat throughout the greater portion of its length, the flat hydroplaning bottom surface and the flat top deck being substantially parallel with the former extending rearwardly beyond the rear end of the horizontally flat deck portion and the latter extending forwardly beyond the forward end of the horizontally flat bottom hydroplaning surface, the deck at its rearward extremity sloping downwardly for intersection with the bottom and the bottom at its forward end sloping upwardly for intersection with the deck.

1,269,398. MUD-BLOCK. WILLIE C. DANIEL, Louisa, Va. Filed Nov. 24, 1917. Serial No. 203,746. (Cl. 152—14.)

1. A mud block for automobile wheels comprising a block shaped to fit over the tire and having a substan-

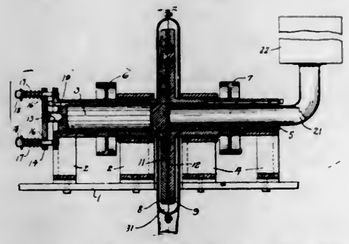
tially semi-circular recess formed therein for the reception of the tire, a protective covering attached to the block in the said recess and adapted to embrace the said



tire and the wheel felly and means attached to the block and extending around the protective covering to maintain the said block in tight engagement with the tire.

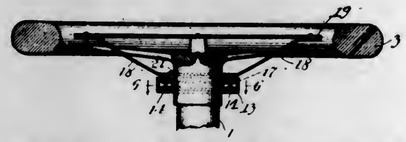
[Claims 2 and 3 not printed in the Gazette.]

1,269,399. EMULSIFYING APPARATUS. JOHN T. DAVIS, Alameda, Cal., assignor of one-half to Joseph Rothschild, San Francisco, Cal. Filed July 13, 1917. Serial No. 180,379. (Cl. 99—2.)



In an apparatus for emulsifying milk, the combination of two disks, each formed with a series of concentric circular grooves, the grooves of one disk being eccentric to those of the other, means for pressing said disks together, and means for revolving said disks.

1,269,400. SWITCH. WILLIAM W. DEAN, Chicago, Ill., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 11, 1914. Serial No. 837,844. (Cl. 175—366.)

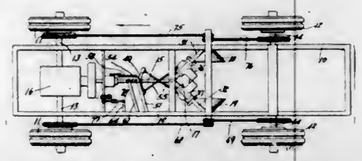


5. A circuit closer for use with a steering wheel and its post, comprising a movable member surrounding said post, and having an annular catch, a stationary member surrounding said post and having an annular catch thereon, said catches being in engagement throughout their peripheries, and said movable member being tiltable with respect to the stationary member about any point of its periphery, spring means between the movable and stationary member permitting the movement thereof, a switch operated when the movable member is tilted, and a ring in proximity to the rim of the steering wheel for operating said movable member.

[Claims 1 to 4 and 6 to 9 not printed in the Gazette.]

1,269,401. DRIVING AND STEERING GEAR FOR VEHICLES. THOMAS WILLIAM DELANEY, St. Paul, Minn. Filed Jan. 21, 1918. Serial No. 212,962. (Cl. 180—17.)

1. In transmission mechanism, the combination of a driving cone, a driven cone, driving and driven shafts upon which the cones are respectively connected, said shafts being out of alinement with each other but in the same plane, while the active elements of the driving and driven cones in said plane are in alinement with each other, and friction means coöperating with the surfaces of the driving and driven cones serving to transmit the power from one cone to the other.



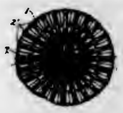
2. In transmission mechanism, the combination of a driving shaft, a hollow driving cone fixed at its apex to the driving shaft, a hollow driven cone, a driven shaft to which the driven cone is connected out of alinement with the driving shaft, pairs of friction wheels coöperating with the inner and outer surfaces of the two cones respectively, and means to support the friction wheels whereby the power from the driving cone is transmitted to the driven cone.

3. In transmission mechanism, the combination of a power shaft, a hollow driving cone having its apex end fixed to the power shaft, a pair of hollow driven cones having their axes out of alinement with the power shaft but on opposite sides of the axis thereof, pairs of friction wheels coöperating with the shell of the driving cone and the adjacent portions of the driven cones respectively, and means to shift the friction wheels toward and from the apex of the driving cone.

4. In power transmission devices, the combination of a hollow driving cone, a pair of hollow driven cones on opposite sides of the axis of the driving cone, the axes of all of the cones lying in the same plane and the active geometric elements of the three cones lying in said plane, pairs of friction wheels bearing upon the inner and outer surface of the driving and the driven cones whereby the power of the driving cone is transmitted to the driven cones, and means to shift the aforesaid friction wheels simultaneously toward and from the apexes of the driven cones.

5. In power transmission devices, the combination of a hollow driving cone, a pair of hollow driven cones on opposite sides of the axis of the driving cone, the axes of all of the cones lying in the same plane and the active geometric elements of the three cones lying in said plane, pairs of friction wheels bearing upon the inner and outer surfaces of the driving and the driven cones whereby the power of the driving cone is transmitted to the driven cones, and means to shift said friction wheels simultaneously toward the apex of one driven cone and away from the apex of the other driven cone.

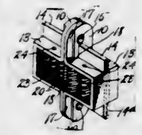
1,269,402. METHOD OF COVERING THREAD-BUTTONS. HERMANN DEPPERMANN, Nowawes-Neuendorf, Germany. Original application filed May 13, 1913, Serial No. 767,464. Divided and this application filed Mar. 30, 1915. Serial No. 18,179. (Cl. 66—6.)



2. The method for the manufacture of thread buttons which consists first, in taking a foundation ring, winding thread around the annular portion of said ring whereby a securing surface is formed for the thread winding of the next step, then winding thread diametrically of the circular disk outline formed by said ring whereby the peripheral edge of said ring receives two covers, and then interweaving thread between the threads of the diametrical warp to secure the same in position and to one another.

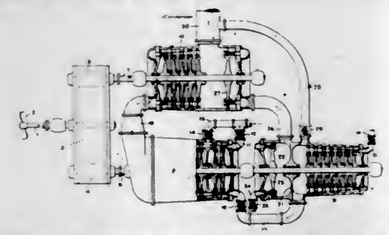
[Claim 1 not printed in the Gazette.]

1,269,403. HINGE. JOHN DIANOVSZKY, Sr., Passaic, N. J. Filed Sept. 20, 1917. Serial No. 192,263. (Cl. 16—105.)



A hinge of the kind described comprising opposed butt plates having thin walled pockets with plain interior surfaces, the butt plates being also thinned near one edge and near the open side of the pockets, a plurality of alternately arranged double elbow levers connecting the butt plates wtih the main arms of the levers arranged at sharp angles to each other and with their main elbows pivoted together opposite the meeting faces of the butt plates, each elbow lever having a short sharply bent arm near one end hung on a fixed pivot in one of the aforesaid pockets near the front part and in alinement with the thinned portion of the corresponding butt plate, the long arm of said lever projecting into the opposite pocket, and links pivoted in the pockets behind the elbow levers and pivotally connected with the long arms of said levers.

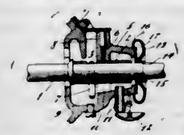
1,269,404. SHIP PROPULSION. EDGAR D. DICKINSON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 3, 1917. Serial No. 200,026. (Cl. 121—58.)



1. In a ship propulsion system, the combination of a propeller, two shafts arranged in parallel for driving the propeller, a high pressure turbine and a cruising turbine on one of said shafts, a low pressure turbine on the other, means for connecting said turbines in series for cruising speed, and the high pressure and low pressure turbines in series for higher speeds, reversing turbine elements in the low pressure ends of the cruising turbine and low pressure turbine casings, and means for supplying elastic fluid to them in series.

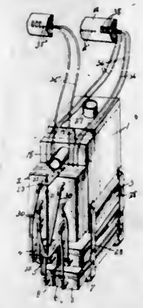
[Claims 2 to 4 not printed in the Gazette.]

1,269,405. SHIELD FOR BEARINGS. CHARLES H. J. DILG, Rye, N. Y. Original application filed Apr. 30, 1910, Serial No. 558,588. Divided and this application filed Apr. 26, 1915, Serial No. 24,011. Renewed May 2, 1918. Serial No. 232,157. (Cl. 64—22.)



The combination with a bearing and shaft of a shield carried by the rotating part and comprising a disk having a peripheral oil-retaining chamber, said disk being mounted to receive oil escaping from the bearing surfaces and to convey the same to the peripheral chamber.

1,269,406. SELF-PLAYING MUSICAL INSTRUMENT. LEWIS B. DOMAN, East Syracuse, N. Y., assignor to the Amphion Piano Player Company, Syracuse, N. Y., a Corporation of New York. Filed July 21, 1913. Serial No. 780,350. (Cl. 84—168.)



1. In a self-playing musical instrument, tone-modifying means comprising a high tension chamber and a low tension chamber for communication, respectively with a wind-inducing device and a sound-producing action, said chambers having a connecting passage, a self-opening valve for said passage at the high tension side thereof, a pneumatic in open communication with the low-tension chamber only for partially closing said valve, pneumatic resisters for opposing the closing action of the first-named pneumatic, and means for selectively placing said resisters in communication with the high tension chamber.

3. In a self-playing musical instrument, tone-modifying means comprising a high-tension chamber and a low-tension chamber having separate ports for communication, respectively, with a wind-inducing device and a sound-producing action, said chambers having a connecting passage, a valve for said passage opening into the high tension chamber, a pneumatic communicating through a separate passage with the low-tension chamber for partially closing said valve, pneumatic resisters opposing the closing action of the first-named pneumatic, means for selectively placing said resisters in communication with the high-tension chamber, and separate means for opening and closing the high-tension port.

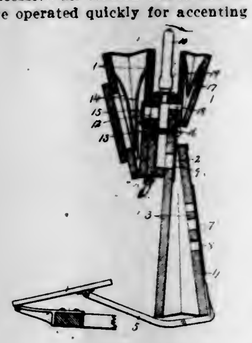
5. In a self-playing musical instrument, a wind chest having a high-tension chamber and a low-tension chamber for communication respectively with a wind-inducing device and a sound-producing action, said chambers having a connecting port, a tension-regulating pneumatic in open communication with the low-tension chamber, a valve for said port controlled by the tension-regulating pneumatic and opening into the high-tension chamber outside of said pneumatic, a gate box communicating with the high-tension chamber and provided with a port for communication with a wind-inducing device and a pneumatically operated gate in the gate box for closing communication between the last named port and high-tension chamber.

[Claims 2 and 4 not printed in the Gazette.]

1,269,407. PNEUMATIC SELF-PLAYING MUSICAL INSTRUMENT. LEWIS B. DOMAN, East Syracuse, N. Y., assignor to the Amphion Piano Player Company, Syracuse, N. Y., a Corporation of New York. Filed Feb. 14, 1916. Serial No. 78,173. (Cl. 84—168.)

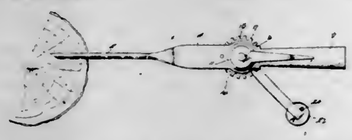
1. In a pneumatic self-playing musical instrument, the combination of a pedal-operated wind-inducing device, a wind-chest having means for communication with a sound-producing action, a tension-equalizer directly connected through a restricted constantly open passage with

the wind-chest to permit the tension in the action to be increased over that in the equalizer by sudden or rapid action of the pedals, and a secondary pneumatic in direct constantly open communication with the wind-chest for preventing excessive air-tension resistance or shock when the pedals are operated quickly for accenting purposes.



2. In a pneumatic self-playing musical instrument, the combination of a pedal-operated wind-inducing device, a wind-chest having means for communication with a sound-producing action, a tension-equalizer directly connected with the wind-chest through a restricted constantly open passage and through a separate relatively larger passage, a normally closed check valve for the larger passage adapted to open when the tension in the equalizer exceeds that in the wind-chest, and a secondary pneumatic in direct constantly open communication with the wind-chest for relieving the tension under impulsive action of the pedal for accenting purposes.

1,269,408. UNDERCUTTER-GUIDE. IRA C. DRAKE, Rochester, Wash. Filed Jan. 7, 1916. Serial No. 70,814. (Cl. 143—163.)

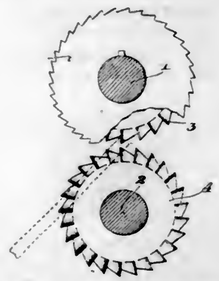


An undercutter guide including a chisel constituting a supporting member and adapted to be driven into a log, said chisel consisting of a blade, a handle and an intermediate portion having flat side faces arranged in a plane at right angles to the plane of the blade, said intermediate portion being provided with an integral laterally projecting boss having an inwardly tapered opening, a bolt passing through the opening and provided with an enlarged tapered portion fitting the same, a toothed wheel mounted on the enlarged portion of the bolt and projecting beyond the boss, a supporting arm piercing the enlarged portion of the bolt and interlocked with the toothed wheel, and a pin projecting laterally from the flat intermediate portion of the chisel and engaging the toothed wheel at the periphery thereof to secure the wheel and the supporting arm in an adjusted position with relation to the chisel, and a guide wheel carried by the supporting arm.

1,269,409. METHOD OF PRODUCING LAPPED JOINTS IN PISTON-RINGS. MILLARD L. DUNHAM, New York, N. Y. Original application filed Oct. 26, 1916, Serial No. 127,778. Divided and this application filed Aug. 11, 1917. Serial No. 185,654. (Cl. 29—156.1.)

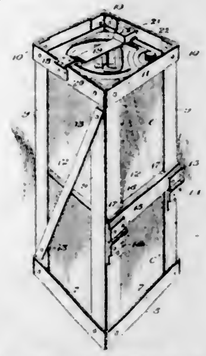
1. The method of producing lap joints in piston rings which consists in applying cutters to opposite sides of a ring while holding said ring at an oblique angle relatively to said cutters.

2. The method of dividing piston rings and producing lap joints therein, which consists in applying a pair of cutters to opposite sides of a ring while holding said ring



at an oblique angle relatively to said cutters; and in applying a dividing cutter to said ring for removal of excess material, intermediate said pair of cutters, at the same time.

1,269,410. CRATE. THOMAS F. DURNING, Newark, N. J. Filed Dec. 18, 1917. Serial No. 207,707. (Cl. 220—111.)



1. A metallic crate for holding a plurality of superposed packages comprising four longitudinal annular members, a flanged bottom connected to one end thereof, an open frame connected to the opposite ends thereof, two hinged flange plates connected to two oppositely disposed longitudinal members for movement into and out of the crate, the flanges thereof when projected within the crate forming a support for the uppermost package, and a hinged closing member connected to the open frame or mouth of the crate.

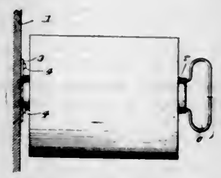
4. A metallic crate for holding a plurality of superposed rectangular cans and including a rectangular open bottom, four angle bars attached thereto and forming corners of the crate, a rectangular frame connected to the opposite ends of said longitudinal members, two oppositely disposed plates each of which is provided with a flange for projection within and without the crate, said plates being hingedly connected to the outer faces of the longitudinal members intermediate of the ends of such members, the flanges when projected within the crate forming a support for engaging the bottom of the uppermost can at its two opposite sides, and a closure attached to the open frame.

6. A metallic crate for supporting a plurality of rectangular cans including a rectangular open frame-work, the lower end of which is provided with flanges for engaging the bottom of and supporting the lowermost can, two oppositely disposed plates, each one of which is provided with a longitudinal flange formed at right angles to

one edge thereof, hingedly connected exteriorly of the frame at opposite sides of the crate, said flanges being so disposed that when the body of the plate is parallel with the sides of the frame the flange is projected within the crate to form bottom rests for the uppermost can, whereby the uppermost can is separated from the lowermost, and the weight of the upper can is held thereaway from, and means connected to the mouth of the crate for holding the uppermost can seated upon the flanges.

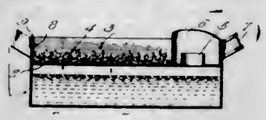
[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,411. ROLL-HOLDER. CHARLES H. EDWARDS, Saginaw, Mich. Filed Mar. 17, 1917. Serial No. 155,505. (Cl. 211—31.)



A roll holder comprising a tubular spindle provided at its end with an inturned flange, a spring member consisting of a strip of material having an open head portion which is of greater diameter than the spindle, said member also being provided with arm portions insertible in the spindle and which are provided at their opposite edges and adjacent the head with notches adapted to receive the flange of the spindle whereby the said member is held in contact with the spindle, the enlarged head portion of the member being compressible whereby the notches of the arms of the member may be disengaged from the flange of the spindle.

1,269,412. FRUIT AND VEGETABLE DRIER. MICHAEL ENDRES, New Philadelphia, Ohio. Filed Mar. 11, 1918. Serial No. 221,791. (Cl. 34—22.)



A vegetable and fruit drier comprising a pan divided by a horizontal partition into an upper fruit or vegetable tray and a lower water boiler, said partition having at one corner of said tray an opening for filling said boiler, and a partition wall extending across said corner of the tray and segregating said opening from the remainer of the tray, said wall being of greater height than the tray wall, whereby boiling water discharged through said opening from the boiler will overflow the tray wall rather than said partition wall and will not therefore dampen the contents of the tray.

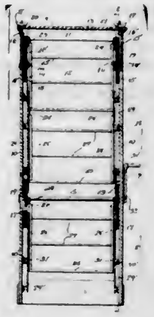
1,269,413. SCREW-DRIVER. JAMES H. FINNIGAN, Noxon, Mont., assignor of one-third to Christ C. Hansen and one-third to Maurice Burk, Noxon, Mont. Filed June 26, 1917. Serial No. 177,038. (Cl. 145—64.)

1. A tool of the character described, comprising an elongated handle, a barrel angular in cross section within and coextensive with said handle, a ferrule on one end of the handle and having opposed side openings, a bit passed through the ferrule and slidably telescoped in said barrel, and shaped in cross section correspondingly to the barrel, a key disposed transversely in the ferrule and having an opening for the bit, with one edge constructed to engage with bit, one end of the key being protruded through one opening in the ferrule to the exterior thereof, and its opposite end reduced to engage in the other opening in said ferrule, and a spring within the ferrule and working against said key for the positive engagement of the key with said bit.



2. A tool of the character described, comprising an elongated handle, a barrel within and coextensive with said handle, an adjustable bit slidable in the barrel through one end, and a cap formed on and closing the opposite end of the barrel, and turned over the adjacent end of the handle to reinforce the same.

1,269,414. DISPLAY-CABINET. SILAS M. FITTERLING, Fulton, Ind. Filed May 29, 1916. Serial No. 100,685. (Cl. 211—21.)

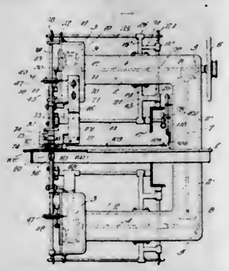


In a device of the character described, a housing, transparent plates mounted in the sides of said housing, a shaft journaled in said housing, carrying studs mounted above said shaft, sprocket wheels on said shaft, a sprocket wheel on each of said studs, sprocket chains trained about certain of said sprocket wheels, a series of display racks, means swivelly connecting said display racks and said chains, guide-ways carried by said housing for said chains, guide rollers carried on said display racks, other guide members carried by said housing to guide said rollers and retain said racks in an upright position at all times, and means to guide said shafts to actuate said sprocket chains, for the purpose specified.

1,269,415. MACHINE FOR MAKING HAND BUTTON-HOLE-STITCHES. JOSEPH FORMAN, Baltimore, Md. Filed May 20, 1915. Serial No. 29,372. (Cl. 112—21.)

1. A machine for making a hand button hole stitch comprising in combination a needle, two needle gripping and transferring devices movable toward and away from each other and between which the material is fed, mechanism for forming a loop encircling the path of movement of said needle, and means for tightening said loop.

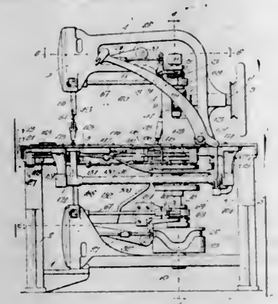
6. A machine for making a hand button hole stitch comprising in combination a needle, two needle gripping and transferring devices movable toward and away from each other and between which the material is fed, mechanism for forming a loop encircling the path of movement of said needle, and means for shifting said needle laterally between its down and up strokes.



20. In a stitch forming mechanism for sewing machines, the combination of means for vertically reciprocating a needle, means for moving said needle laterally at predetermined intervals, a loop forming device positioned in the path of said needle and comprising pivoted laterally opening and closing jaws having thread receiving eyes positioned to lap and aline when the jaws are closed, cam controlled means for opening said jaws, and spring means for closing them, said needle being so actuated and timed in its vertical and lateral movements as to pass through the alined eyes on its vertical movement in one direction and through the loop formed thereby on its vertical movement in the opposite direction.

[Claims 2 to 5, 7 to 19, and 21 to 33 not printed in the Gazette.]

1,269,416. BUTTONHOLE-SEWING MACHINE. JOSEPH FORMAN, Walbrook, Md. Filed May 18, 1916. Serial No. 98,411. (Cl. 112—4.)



2. A buttonhole sewing machine including in combination, a needle, needle gripping and transferring devices movable toward and away from each other and between which the material is fed, mechanism for forming a loop encircling the path of movement of said needle, a thread tension device, means for tightening said loop and positioning it in said tension device, means for relieving the tension on the thread at the beginning of the stitch, and a stitch setting device coöperating with said tightening means.

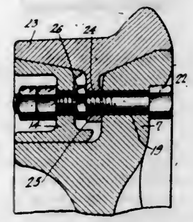
17. A buttonhole sewing machine, including a needle bar, a pair of needle clamping jaws mounted on one end of said bar and both of which are movable toward and from the longitudinal axis of said bar, a slide on the bar for actuating said jaws simultaneously toward and from each other, a spring for moving the slide in one direction and means for moving the slide in the opposite direction.

19. A buttonhole sewing machine including a needle bar, a needle chuck carried thereby and comprising a pair of laterally movable jaws having coacting needle gripping faces, and a member slidable on said needle bar, said member and jaws, one having diverging grooves and the other diverging lips engaging said grooves whereby said jaws are opened and closed on the reciprocation of said member on said needle bar.

23. A buttonhole sewing machine, including in combination, a needle, needle gripping and transferring devices movable toward and away from each other and between which the material is fed, mechanism for forming a loop encircling the path of movement of said needle, a thread tension device, means for tightening said loop and positioning the thread in said tension device, and cam controlled stitch setting mechanism for engaging and setting each stitch prior to the tightening of the loop.

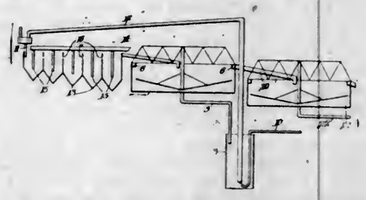
[Claims 1, 3 to 16, 18, 20 to 22, and 24 to 35 not printed in the Gazette.]

1,269,417. CAR-WHEEL. WILLIAM W. FULLER, Charleston, S. C. Filed Jan. 16, 1918. Serial No. 212,109. (Cl. 105—158.)



A device of the character described comprising a main body provided with a flange disposed substantially at right angles thereto, a second flange carried by the main body and provided with an enlarged head having an inclined face, an annular ring disposed upon the first mentioned flange said annular ring comprising a pair of oppositely disposed flanges, one of said flanges having engagement with the first mentioned flange, the other of said flanges being provided with an inclined face, a supplemental rim disposed upon the second mentioned flange and provided with inclined faces one of which is adapted to engage the inclined face carried by the second named flange the other of which is adapted to engage the inclined face carried by the annular ring, a depending flange secured to said supplemental rim, said depending flange being confined between the second named flange and said annular ring, a bolt passed through said annular ring, said depending flange, and the second named flange, said bolt being adapted to retain the annular ring in engagement with the first mentioned flange and the supplemental rim, and means for retaining said depending flange in engagement with the second named flange.

1,269,418. METHOD OF RECOVERING METALS FROM SOLUTION. RUDOLF GAHL, Miami, Ariz. Filed Aug. 15, 1917. Serial No. 186,411. (Cl. 75—18.)



1. The hereindescribed process of recovering metal-values from dilute solution, which consists in maintaining

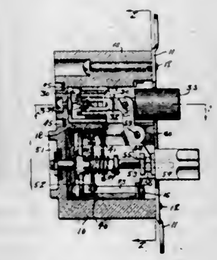
particles of limestone in suspension in said solution until the values are precipitated, the limestone greatly in excess of the proportion theoretically required, and thereafter treating the precipitate to recover the values therefrom.

2. The hereindescribed process of recovering metal-values from dilute solution, which consists in maintaining particles of limestone in suspension in said solution until the values are precipitated, separating the enriched limestone into richer and poorer portions, re-treating the poorer portion with solution, and recovering the values from the precipitate.

3. The hereindescribed process of recovering metal-values form dilute solution, which consists in maintaining a large excess of particles of limestone in suspension in said solution until the values are precipitated, separating the enriched limestone into richer and poorer portions, re-treating the poorer portion with solution, and recovering the values from the precipitate.

4. The hereindescribed process of recovering copper and ferrous iron from sulfate solution, which consists in maintaining particles of limestone in suspension in said solution, the limestone greatly in excess of the proportion theoretically required, and thereafter treating the precipitate to recover the values therefrom.

1,269,419. ELECTRIC SWITCH. FREDERIC P. GATES, Hartford, Conn., assignor to The Arrow Electric Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 25, 1915. Serial No. 47,353. (Cl. 175—293.)



1. An electric switch device, comprising a switch mechanism, a pair of push buttons for operating the same, one of said buttons being susceptible of rotation, an independent switch mechanism and an operative connection between the latter and said rotary push button.

3. An electric switch device comprising a switch mechanism, a pair of push buttons for operating the same, an independent switch mechanism having a rotary operating spindle, an operative connection between one of said push buttons and said operating spindle, said push button being capable of rotation to actuate said spindle.

5. An electric switch device, comprising an oscillating push button switch, and a rotary snap switch, a pair of push buttons for operating the former and an operative connection between one of said buttons and the rotary snap switch, said button being susceptible of rotation to actuate the latter.

7. An electric switch device comprising an insulating base, a pair of snap switches arranged in series thereon, independent snap switch mechanisms therefor, and a common operating means for both switch mechanisms, said operating means serving to actuate either switch without affecting the other, and irrespective of the position of the other.

11. An electric switch device comprising a switch mechanism, a pair of push buttons for operating the same, a second independent switch mechanism and an operative connection between one of said push buttons and the second switch mechanism for operating the latter.

[Claims 2, 4, 6, and 8 to 10 not printed in the Gazette.]

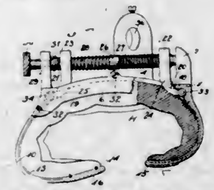
1,269,420. PROCESS OF FORMING AEROPLANE STRUCTURAL ELEMENTS. WILLIS A. GIBBONS, Fushing, N. Y., assignor to The Goodyear's India Rubber Glove Manufacturing Company, a Corporation of Connecticut. Filed Sept. 25, 1916. Serial No. 122,139. (Cl. 154—2.)

1. The process of forming aeroplane structural elements consisting of heating a hard rubber treated sheet to give it greater extensibility, while warm stretching the sheet taut, securing the taut sheet to a supporting frame, and permitting the sheet to shrink.

6. An aeroplane structural element comprising a frame, and a hard rubber treated sheet shrunk on and supplying tension to the frame.

[Claims 2 to 5, 7, and 8 not printed in the Gazette.]

1,269,421. HOLDING DEVICE FOR VIBRATORS. PETER GIGLIO, New York, N. Y. Filed Sept. 17, 1914, Serial No. 862,173. Renewed Nov. 24, 1917. Serial No. 203,864. (Cl. 128—16.)



1. A holding device for vibrators comprising a body formed with a pair of inclosing arms, clamping means arranged in said body designed to clamp a hand to said body, means designed to move transversely of the hand for operating said clamping means, and a rotatable member operating said transversely movable means.

2. In a holder of the class described, a body designed to be arranged to extend transversely of the hand in operation, a slot arranged longitudinally of the body, a pair of arms arranged at each end of the body, said arms describing approximately half of a circle, a pair of flexible members arranged in said body, one member being arranged adjacent each arm, a traveling nut connected with each of said flexible members, said traveling nut projecting through said slot, and a threaded shaft engaging said nuts for moving the same whereby they cause said flexible members to clamp the hand arranged in said body.

6. In a holding device for vibrators, a body, clamping means, a pair of traveling nuts secured to said clamping means for moving the clamping means toward each other and away from each other, said nuts being formed with apertures threaded in opposite directions and with different pitched threads, a shaft threaded at each end for engaging the respective nuts, and means extending from said body acting as supports for said shaft whereby when said shaft is rotated in one direction said nuts will be moved toward each other, one nut traveling faster than the other, and when said shaft is moved in the opposite direction said nuts will move apart, one nut traveling faster than the other.

[Claims 3 to 5, 7, and 8 not printed in the Gazette.]

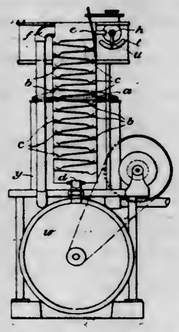
1,269,422. LENS. ROBERT LEITCH GORDON, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 24, 1917. Serial No. 203,726. (Cl. 88—57.)



1. A lens including spaced opposed walls merged together at their circumferential edges, and means whereby these walls may be adjusted toward or away from each other.

[Claims 2 and 3 not printed in the Gazette.]

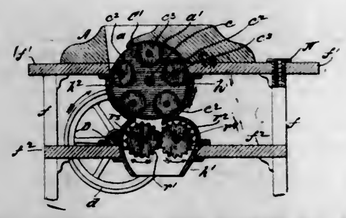
1,269,423. CARBURETER. JOHN THOMAS GRAHAM, Halstead, England. Filed Sept. 28, 1916. Serial No. 122,667. (Cl. 261—113.)



1. In a carbureter, the combination of a vertical chamber having both a petrol supply means and an outlet for the carbureted air at its top; two series of oppositely-inclined plates alternately disposed one above another in said chamber below said supply means; each plate being provided with relatively-fine apertures and having a curved, metal gauze lip at its lower edge, so that the petrol, as it passes from plate to plate, will form a thin film on the upper side of the plate, then percolate through the apertures in the plate and form a thin film on the under side of the plate, while the surplus petrol will collect in the lip on the plate and fall therefrom upon the next lower plate; and means for supplying air to said chamber below the lowermost plate, whereby the air is caused to follow a circuitous path through the chamber between said plates and come into contact with the films of petrol on both sides of the plates.

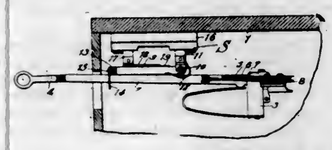
2. In a carbureter, the combination of a vertical chamber having both a petrol supply means and an outlet for the carbureted air at its top; two series of oppositely-inclined plates alternately disposed one above another in said chamber; each plate being provided with groups of fine perforations and having a drainage device at its lower edge for the surplus petrol, so that the petrol, as it passes from plate to plate, will form a thin film on the upper side of the plate, then percolate through the perforations in the plate and form a thin film on the under side of the plate, while the surplus petrol will collect in the drainage device on the plate and be discharged therefrom upon the next lower plate; and means for supplying air to said chamber below the lowermost plate, whereby the air is caused to follow a circuitous path through the chamber between said plates and come into contact with the films of petrol on both sides of the plates.

1,269,424. MILL. SEBASTIANO GRASSI, Ridgefield, Conn. Filed July 19, 1917. Serial No. 181,469. (Cl. 83—14.)



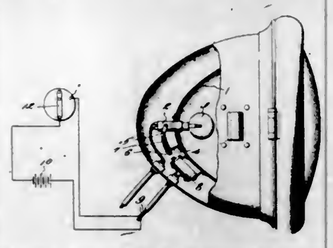
In apparatus of the character designated, in combination, a suitable frame, a roll casing supported thereon, and formed with a corrugated attritive surface, a hopper member arranged to feed reducible material to said roll casing, a grinding roll in said casing carrying mounted therein a plurality of peripherally and spirally grooved grinding rolls, and means for rotating said grinding roll, for the purpose described.

1,269,425. TELEPHONE HOOK-SWITCH AND CUT-OUT. JOHN T. GRAY, Great Falls, Mont. Filed Mar. 4, 1916. Serial No. 82,172. (Cl. 179—164.)



In a telephone cut-out, the combination with a hook switch, of a main switch including a pair of interconnected pivoted parallel conductor arms, a yoke carried by the arms engaged in said hook switch, spaced rigid contact posts, and spring strips carried by the conductor arms for engaging said contact posts.

1,269,426. AUTOMOBILE-HEADLIGHT. FRANK W. GREEN and NICHOLAS GREEN, Oshkosh, Wis. Filed Apr. 28, 1917. Serial No. 165,262. (Cl. 240—44.)



A headlight comprising a reflector, a socket member pivoted therein, a yoke pivotally connected with the socket member, a guide mounted on the reflector and slidably receiving the shank of the yoke, a spring bearing on the guide and operating upon the yoke to hold the socket members at normal position, and electric means adapted to operate upon the shank of the yoke for moving the socket member to an abnormal position, said means lying in the path of movement of the shank of the yoke and adapted to limit the movement of the same.

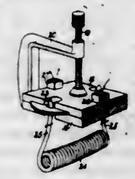
1,269,427. ROCK AND LOG PULLER. ELMER RAY GREENFIELD, Wattsburg, Pa. Filed Nov. 21, 1917. Serial No. 203,235. (Cl. 57—9.)



1. A rock and log puller comprising two jaws, one having a recessed portion, a bar pivoted to the shank portion of the other jaw and having notches therein, a pin carried by said recessed portion of the jaw and adapted to engage said notches, and spring pressed adjustable connections between said shank portion of one jaw and the notched bar.

2. A rock and log pulling apparatus, comprising two jaws, one having a recessed portion, and a bar pivoted to the other engaging said recessed portion, said bar having notches, pins carried by the walls of the recessed portion and adapted to engage said notches, a curved notched segment member pivoted to the shank portion of one jaw, pins carried by said bar and adapted to engage the notches of the segment member, and a spring fastened at one end to the jaw and the other end to the segment member.

1,269,428. METHOD OF FORMING SOLDERED FUSIBLE LINKS. LESTER A. GRIMES, Orange, N. J. Filed June 30, 1917. Serial No. 177,903. (Cl. 22—203.)



1. The herein described method of forming a complete soldered fusible link comprising the assemblage of the link elements together suitably supplied with tin or solder between them, applying heat and pressure to the elements to properly seat the same with respect to each other, then applying lengthwise tension to the link elements approximating the tension required for the link to withstand in practice, then applying further pressure on opposite sides of the elements, and then pouring fusible metal suitably confined while fluid along and over the meeting edges of the link elements to thoroughly seal the joint between them all the way around, whereby when cooled the formation of the complete link is accomplished.

2. The herein described method of forming a soldered fusible link comprising the assemblage of the link elements together suitably supplied with tin or solder between them and along their meeting edges, applying heat, pressure and tension to the elements to properly seat the same with respect to each other according to the type of link, then applying fusible metal suitably confined while fluid along the meeting edges of the link edges to thoroughly seal the joint between them all the way around and forming a smooth uniform bead of such metal, and finally cooling the link and the attached fluid metal while the pressure upon the element is maintained, whereby when cooled the formation of the complete link is accomplished, substantially as set forth.

1,269,429. APPARATUS FOR TREATING SHOES. JOSEPH E. GROAT, Webster, Mass., assignor to B. A. Corbin and Son Company, a Corporation of Massachusetts. Filed Mar. 9, 1917. Serial No. 153,786. (Cl. 12—1.)



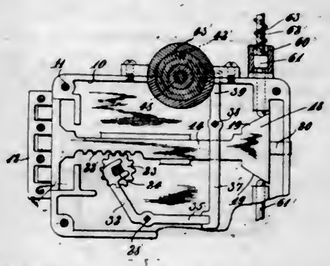
1. In an apparatus for subjecting the toe portion of a shoe to the action of a heated fluid medium, means for protecting the vamp of a shoe from the action of said medium constructed and arranged to conform automatically substantially to the contour of the upper of the shoe in the region of the rear part of the toe cap and presenting a continuous surface for engagement with the upper of the shoe.

6. In an apparatus of the character described, the combination of a trough-like shield of flexible sheet material, a support to which the middle portion of the forward end of said shield is secured leaving the side portions of the shield at said end free to move toward and from each other, and a helical spring extending along the forward edge of said shield and tending to pull said free side portions toward each other.

10. The combination with a treating chamber having an aperture as described, of jaws movable relative to the edges of the aperture and adapted to embrace an object in the aperture, and means for holding said jaws in operative position.

[Claims 2 to 5 and 7 to 9 not printed in the Gazette.]

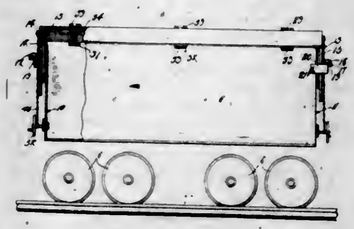
1,269,430. BOLT-OPERATING DEVICE. PETER GRZECH, Dunellen, N. J. Filed May 31, 1917. Serial No. 171,859. (Cl. 16—63.)



1. In a bolt operating device, the combination with a casing, a bolt slidable therein, a plurality of projections formed with said bolt, said projections being separately engageable within a keeper, a pair of oppositely disposed plungers at the rear of said casing adapted to engage with the bottom and top of the door, means combined with the bolt for actuating said plungers, means for actuating said bolt, knobs arranged on said casing, and a plurality of levers operated by said knobs whereby the bolt actuating mechanism may be engaged or released.

2. In a bolt operating mechanism, the combination with a casing, a bolt slidable therein, a rack formed upon one edge of said bolt, a pinion engageable with said rack, a square shaft mounted transversely in said casing upon which said pinion is rigidly mounted, a lever engageable with said squared shaft, means for operating said lever, a second lever for holding the first lever in a locked position and means for actuating said levers independently.

1,269,431. CAR-TOP. CHARLES B. GUTHRIE, Charleston, W. Va. Filed Dec. 13, 1917. Serial No. 206,965. (Cl. 105—78.)



1. A car having stationary sides and stationary ends, adjustable ends to coöperate with the stationary ends, a plurality of hingedly connected sections movable from the sides of the car to a connected position upon the upper edges of the sides and ends to form a cover, means for moving the sections, and braces for supporting the sections.

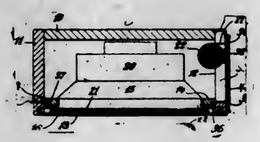
3. A car having stationary sides and ends, the upper edge of each being notched and provided adjacent said

edge with a rod, adjustable supplementary ends, a plurality of sections arranged in hingedly connected pairs on each side of the car, and slidably connected with the rods, removable braces having interlocking members for supporting the sections, rotatable guide members secured to the movable ends, chains attached to one of the sections upon each side of the car, and a windlass for winding and unwinding said chain for moving said sections, said sections when in the covering position forming a walk way longitudinally of the car.

5. A car having stationary sides and ends, movable and adjustable supplementary ends, each having a plurality of holes, adjacent each vertical edge, a transverse member spaced from the stationary end and secured thereto to permit the movable end to move therebetween, and means on the member for releasably holding the movable ends at a predetermined height.

[Claims 2 and 4 not printed in the Gazette.]

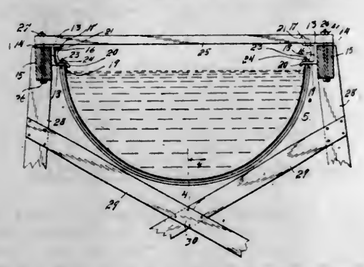
1,269,432. AUTOGRAPHIC CAMERA. AXEL DALGAARD HANSEN, Camillus, N. Y. Filed Mar. 7, 1916. Serial No. 82,569. (Cl. 95—1.1.)



1. An autograph plate of the character described consisting of a piece of non-opaque material provided with a coating of opaque easily removable substance, said autograph plate being divided into equal numbered spaces and having a starting point printed thereon in a predetermined position.

2. A camera having an opening in one of its sides and a plate secured thereto to close said opening, said plate being provided with means to support a supply roll of inscription receiving material within the camera and with an aperture through which such material may be passed to the outside of said plate to receive an inscription and with a second aperture through which the inscribed portion of such material may be returned within the camera, means within the camera for guiding the inscribed portion of said material into printing relation with a sensitized element contained in said camera, and a cover for protecting that portion of the inscription material which is exposed on the exterior of said plate.

1,269,433. SHEET-METAL FLUME. RUDD HARDESTY, Denver, Colo., assignor to The Flume Improvement Company, Denver, Colo., a Corporation of Colorado. Filed Sept. 7, 1915. Serial No. 49,176. (Cl. 61—5.)



1. In a flume structure, the combination of side sills, connecting cross beams above the sills, a flume body, and brackets supported by the sills and extending downwardly along their inner surfaces, their lower portions lying directly above the upper edges of the flume body and connected to support said upper edges sufficiently below the lower surfaces of the cross beams to allow floating trash to pass underneath said beams without damming the water.

2. A flume construction comprising side sills, connecting cross beams above said sills, a flume body, an exterior supporting member engaging said flume body and having its ends extending above the edges of the flume body, brackets supported on said sills and extending downwardly along the inner faces thereof, the lower extremities of the brackets having inwardly extending flanges to which the ends of said supporting member are secured, the upper edges of the flume body lying below said flanges.

3. A flume structure comprising side sills, connecting cross beams, a flume body composed of over-lapping sheet metal sections, and exterior and interior clamping members coöperating to form the joints of the flume, and brackets supported on the sills, and extending downwardly along the inner surfaces of the latter, the lower extremities of the brackets having inwardly extending flanges perforated to receive the upper extremities of the exterior clamping members, and means for securing the said clamping members to the said flanges of the brackets, the upper edges of the flume body, being below said flanges.

1,269,434. CHUCK. GUSTAF HARLING, Stockholm, Sweden. Filed Apr. 9, 1918. Serial No. 227,515. (Cl. 279—71.)

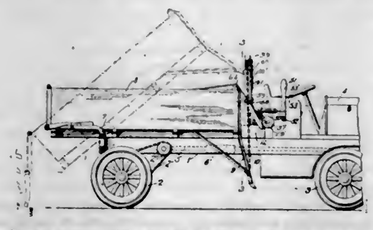


1. A chuck comprising a hub centrally bored to receive a tool shank and pierced by a series of circumferentially spaced longitudinal slots, a corresponding series of wedge blocks of rectangular cross section, said blocks being channeled in the same plane on their inner gripping surfaces, the bottoms of the channels being inclined to the plane of the outer and inner surfaces of said blocks, an expansion coil spring common to said wedge blocks and confined within the bore of the hub and lying in the channels of said wedge blocks, in combination with a rotatable sleeve surrounding the hub and having on its inner face wedging surfaces engaging the outer surfaces of the wedge blocks to force the latter inward against the action of said expansion spring.

2. A chuck comprising a hub centrally bored to receive a tool shank and pierced by a series of circumferentially spaced, longitudinal slots, the sides of each slot being oppositely inclined to afford a beveled slot of greater inner than outer diameter, a corresponding series of wedge blocks passing through said slots into the hub bore and having limited freedom of angular play in said slots, said blocks being channeled in the same plane on their inner gripping surfaces, an expansion coil spring common to said wedge blocks and confined within the bore of the hub and lying in the channels of said wedge blocks, in combination with a rotatable sleeve surrounding the hub and having on its inner face wedging surfaces engaging the outer surfaces of the wedge blocks to force the latter inward against the action of said expansion spring.

1,269,435. AUTOMOBILE-TRUCK. JOSEPH JAMES HERLBAUER, Richmond Hill, N. Y. Filed Dec. 27, 1917. Serial No. 209,046. (Cl. 21—20.)

1. In an automobile truck having a frame, a body tiltable thereon, a clutch, a motor for driving said truck through said clutch, the combination therewith of a body tilting drum and a supplemental drum, means for connecting and disconnecting said drums with said motor, and independent means for connecting and disconnecting said lifting drum with said motor and supplemental drum, a brake which controls both said supplemental drum and said lifting drum and a lever for actuating both said brake and said first connecting and disconnecting means.



2. In an automobile truck having a frame, a body tiltable thereon, a clutch and a motor for driving said truck through said clutch, the combination therewith of a supplemental drum having its axis transverse to the longitudinal axis of said truck, a shaft geared to said supplemental drum, lifting drums revoluble independently of said first mentioned drum, means for operatively connecting and disconnecting said shaft and said lifting drums, and means for connecting and disconnecting said shaft and said motor and a brake which controls both said supplemental and lifting drums through said shaft.

3. In an automobile truck having a frame, a body tiltable thereon, a clutch, a motor for driving said truck through said clutch, the combination therewith of a pinion, two drum-carrying shafts having gears meshing with said pinion, two tilting drums loosely carried by said shafts, lifting cables connecting said tilting drums and the forward end of said tiltable body, the axes of said pinion and shafts being parallel to the longitudinal axis of said truck, a shaft at right angles to the axis of one of said drum-carrying shafts and geared thereto, a supplemental drum on said transverse shaft, and means for connecting and disconnecting said tilting drums and their shafts, and means for connecting and disconnecting said motor and pinion.

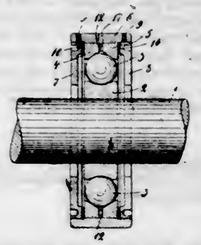
4. In an automobile truck having a frame, a body tiltable thereon, a clutch, a motor for driving said truck through said clutch, the combination therewith of a body tilting drum and a supplemental drum, means for connecting and disconnecting said drums with said motor, independent means for connecting and disconnecting said lifting drum with said motor and supplemental drum, and a base separable from said frame and supporting said drums and shaft.

5. In an automobile truck having a frame, a body tiltable thereon, a clutch, a motor for driving said truck through said clutch, the combination therewith of a body tilting drum and a supplemental drum, means for connecting and disconnecting said drums with said motor, independent means for connecting and disconnecting said lifting drum with said motor and supplemental drum, a brake for said drums, and means for alternately applying said brake and actuating the means for connecting said drums and motor.

1,269,436. BALL-BEARING. KNUT WALDEMAR HEYMAN, Stockholm, Sweden. Filed Apr. 5, 1918. Serial No. 226,900. (Cl. 64—36.)

1. In a ball bearing, a race element formed of two members having complementary surfaces for engaging the balls, and resilient means bearing against one of said members to permit the same to move away from the other member when the balls are forced against the complementary surfaces with sufficient force.

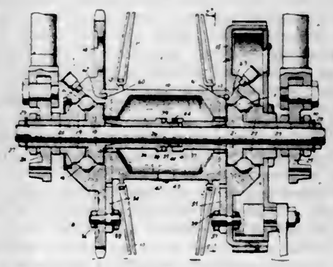
3. In a ball bearing, a race element formed of two members having complementary surfaces for engaging the balls, a housing, and resilient means located between said housing and one of said members to permit said member to move away from the other member when the balls are forced against the complementary surfaces with sufficient force.



6. In a ball bearing, a race element formed of a plurality of rings having complementary inclined faces for engaging the balls, resilient means bearing against one of said rings to permit the same to move away from the other ring when the balls are forced against the complementary faces with sufficient force, and a ring located between rings for limiting the movement of the balls.

[Claims 2, 4, 5, and 7 to 10 not printed in the Gazette.]

1,269,437. DEMOUNTABLE AND INTERCHANGEABLE WHEEL FOR MOTOR-CYCLES. DANIEL LAWRENCE HICKS, Hicksville, N. Y. Filed Feb. 19, 1918. Serial No. 218,166. (Cl. 208—139.)



1. In a motor cycle, a driving means, a braking means, and a propelling or traction wheel having a hub detachably secured at one end to the said driving means and detachably secured at its other end to the said braking means to allow removal of the said propelling or traction wheel without disturbing the said driving means and the said braking means.

8. In a motor cycle, a sprocket wheel, a brake drum, fixed bearings on which the said sprocket wheel and brake drum are mounted to turn, a traction wheel having its hubs slidingly fitting between the hubs of the said sprocket wheel and brake drum, means to detachably secure the traction wheel hub to the said sprocket wheel and brake drum, an axle extending centrally through the said bearings and the hub of the traction wheel, and a spreader made in sleeve sections screwing one on the other, the sleeve sections engaging the rod within the said traction wheel hub, the outer ends of the sleeve sections abutting against the inner faces of the said bearings.

[Claims 2 to 7 not printed in the Gazette.]

1,269,438. GREASE-GUN. ARTHUR H. HEATZMAN, Baltimore, Md., assignor of one-half to William A. Snyder, Baltimore, Md. Filed June 4, 1917. Serial No. 172,699. (Cl. 221—78.)

1. A grease gun of the class described including a hollow cylindrical body provided at its outer end with a nozzle and having a piston bore adjacent to the same and provided with a counter-bore or enlargement of its opening extending inwardly or rearwardly from the piston

bore to the inner end of the said body, a cap fitted on the body and provided adjacent to the same with a cartridge receiving portion of the diameter of the counter-bore of the said body to permit a cartridge to project beyond the inner end of the body to the cap, the latter being provided at its inner end beyond the cartridge with a piston bore, and a piston operating in the cap and the body and being of the diameter of the interior of the cartridge and adapted to pass through the same.



4. A grease gun including a cylindrical body having a nozzle at the front end and having the rear portion of its bore or opening enlarged the thickness of the shell of a cartridge to permit a cartridge to be arranged within the body with the interior of the shell in flush relation with the front portion of the bore or opening of the body, said shell projecting beyond the rear end of the body, a cap having a bore or opening enlarged at the front end to fit the exterior of the body and form a shoulder for engaging the rear end thereof, the intermediate portion of the opening of the cap being of a diameter to receive the projecting portion of the cartridge and forming a shoulder for engaging the inner end of the shell, a piston operating in the cap and the body, and means for detachably interlocking the cap and the body.

5. A grease gun of the class described consisting of a hollow cylindrical body provided at its outer end with a nozzle, a cartridge of grease arranged within with the end projecting from the inner end of said body, a cap fitted on the body and provided adjacent to the same with a counter bore of sufficient diameter to inclose the end of the cartridge projecting from the hollow cylindrical body portion, the said cap being provided at its inner end beyond the cartridge with a piston bore of the same diameter as the interior of the cartridge, and a piston of similar diameter operating therein.

6. A grease gun of the class described including a grease cartridge, a means for entirely enveloping the said cartridge consisting of a hollow cylindrical body provided with a nozzle at its outer end, a cap fitted on the inner end of the body, and means for detachably interlocking the cap and the body, said cartridge extending in advance and in rear of the joint between the cap and the body, a plunger entirely inclosed within said hollow cylindrical body and cap whereby the cartridge is emptied without loss or leakage, and the said cartridge projecting from the body when the cap is removed whereby the shell of the cartridge may be readily extracted from the body.

8. A grease gun of the class described including a hollow cylindrical body provided with a nozzle, a cap fitted on the body at one end thereof, a piston operating within the cap and the body, and a tubular member fitting the interior of the body and the cap and spanning the joint between the same to prevent leakage of grease thereat, said tubular member carrying a charge of grease.

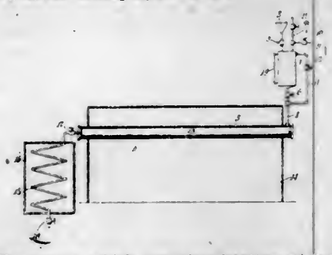
[Claims 2, 3, and 7 not printed in the Gazette.]

1,269,439. PROCESS OF PRODUCING AROMATIC HYDROCARBONS. ROY LINDEN HILL, Chester, Pa., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed July 26, 1915, Serial No. 41,888. Renewed Mar. 28, 1918. Serial No. 225,370. (Cl. 23—24.)

1. The process which comprises heating an aromatic hydrocarbon in the presence of an alkaline earth metal carbid, so as to produce a lower boiling hydrocarbon.

4. The process which comprises heating an aromatic hydrocarbon in the presence of calcium carbid, so as to produce a lower boiling hydrocarbon.

14. The process which comprises heating, at a pressure greater than the atmospheric pressure, an aromatic hydrocarbon, having a higher boiling point than toluol, in the presence of an alkaline earth metal carbid so as to produce a lower boiling hydrocarbon.



15. The process which comprises heating, at a pressure greater than the atmospheric pressure, heavy naphtha in the presence of an alkaline earth metal carbid, so as to produce a lower boiling hydrocarbon.

24. The process which comprises heating to above 500° C., at a pressure greater than the atmospheric pressure, heavy naphtha in the presence of calcium carbid, so as to produce a lower boiling hydrocarbon.

[Claims 2, 3, 5 to 13, and 16 to 23 not printed in the Gazette.]

1,269,440. ARTIFICIAL TOOTH. EDWARD R. HOFF, Brooklyn, N. Y. Filed Sept. 5, 1917. Serial No. 189,725. (Cl. 32—9.)

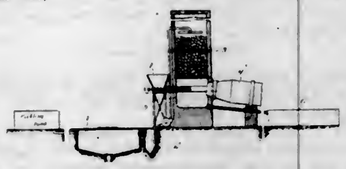


1. An artificial tooth, comprising a tooth body of vitreous material provided with a socket, a post having a head and a base fitting the said socket, and screw in the said tooth body and engaging the said base.

2. An artificial tooth, comprising a tooth body of vitreous material provided with spaced sockets at the back, posts having bases fitting into the said sockets, each socket and the base therein being approximately rectangular in cross section to hold the post against turning and a screw passing into the tooth from one side thereof and engaging both post bases.

3. An artificial tooth, comprising a tooth body of vitreous material provided with spaced sockets at the back, posts having bases fitting into the said sockets, and a screw passing into the tooth from one side thereof, passing through the base of one post and screwing into the base of the other post.

1,269,441. METHOD OF TREATING WASTE PICKLE LIQUOR. ADDISON F. HOFFMAN and WILLIAM METCALF PARKIN, Pittsburgh, Pa. Filed Apr. 8, 1916. Serial No. 89,032. Renewed Nov. 10, 1917. Serial No. 201,399. (Cl. 23—1.)



1. The method of treating sulfuric acid waste pickle liquor for the recovery of sulfuric acid and ferric oxid, which consists in collecting the waste pickle liquor and removing extraneous matter therefrom, then recovering the ferrous sulfate in the form of crystals, pulverizing the crystals and oxidizing the same, then subjecting the product to the action of heat to drive off sulfuric acid and water producing ferric oxid and collecting the ferric oxid and sulfuric acid.

2. The method of treating sulfuric acid waste pickle liquor for the recovery of sulfuric acid and ferric oxid, which consists in collecting the waste pickle liquor and recovering the ferrous sulfate in the form of crystals, oxidizing the ferrous sulfate, heating the product of such treatment while agitating the same, to a temperature sufficient to drive off the acid radical and water, producing ferric oxid and collecting the sulfuric acid and ferric oxid.

3. The method of treating sulfuric acid waste pickle liquor which consists in removing from the solution insoluble matter by sedimentation, concentrating the waste pickle liquor, crystallizing out ferrous sulfate, crushing and oxidizing the crystals thereby changing ferrous sulfate to ferric sulfate, subjecting the ferric sulfate to the action of heat sufficient to produce ferric oxid, absorbing the vapors from the said heating operation in waste pickle liquor and returning the acid mother liquor from the crystallization step to the metal pickling operation.

4. The herein described process of treating waste sulfuric acid pickle liquor, which comprises settling out a material proportion of the insoluble impurities, and thereafter without neutralization of the free acid or reduction of the ferric compounds therein, concentrating the relatively clear liquor by subjecting flowing currents thereof to the action of a gas current containing acid-forming vapors, crystallizing out a material quantity of the ferrous sulfate content, oxidizing the ferrous sulfate and subjecting the oxidized product to heat in the presence of steam, at a temperature between 179 and 338° C.

1,269,442. PROCESS OF PRODUCING BY-PRODUCTS FROM WASTE PICKLE LIQUOR. ADDISON F. HOFFMAN, Pittsburgh, Pa. Filed Apr. 8, 1916, Serial No. 89,886. Renewed Nov. 10, 1917. Serial No. 201,401. (Cl. 134—59.)

A process of treating waste pickle liquor which comprises settling the hot liquor, adding a calcareous neutralizing agent in amount capable of neutralizing all the free acid therein, without previously reducing the ferric salts contained therein, and a sufficient excess of such neutralizing agent to convert the soluble iron salts into hydroxids, said neutralizing agent containing compounds of magnesium capable of neutralizing acids, thoroughly agitating the mixture, and allowing the same to settle, separating the sludge from the liquid, drying and aerating the sludge, calcining the same under conditions capable of reducing at least a considerable proportion of the calcium sulfate content thereof, and leaching the calcined material with a liquid capable of removing the alkaline earth metal sulfur compounds therefrom.

1,269,443. PICKLING PROCESS AND BATH. ADDISON F. HOFFMAN, Pittsburgh, Pa. Filed Jan. 23, 1917, Serial No. 144,002. Renewed Nov. 10, 1917. Serial No. 201,402. (Cl. 148—42.)

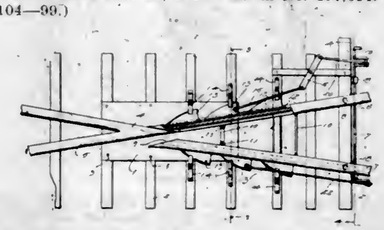
1. A process of pickling which comprises subjecting the article to be pickled to the action of a pickling solution and restoring the bath to an active condition by subjecting the same to oxidation by treating the same with an oxidizing agent in the presence of an oxygenating catalyst.

2. The process of pickling which comprises subjecting the article to be pickled to the action of a pickling solution and restoring the bath to an active condition by subjecting the same to oxidation by treating the same with an oxidizing agent in the presence of a manganese compound capable of serving as an oxygenating catalyst.

8. A process of pickling which comprises subjecting the article to be pickled to the action of a pickling solution and restoring the bath to an active condition by subjecting the same to oxidation by treating the same with an oxidizing agent in the presence of a catalyzer, while the solution is at a boiling temperature.

[Claims 3 to 7 not printed in the Gazette.]

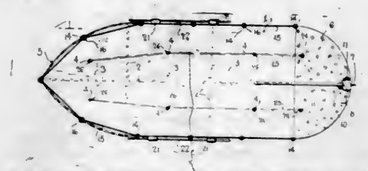
1,269,444. SWITCH. NEWTON HOLLINGSHED, Seattle, Wash. Filed Oct. 20, 1917. Serial No. 197,684. (Cl. 104—99.)



1. A railway switch comprising ties, a frog carried by said ties, switch points pivoted to said ties and located in close proximity to the frog, plates slidable on said switch points, quadrant switch point operating blocks carried by said plates, guides carried by the ties and engaging the curved faces of the blocks, and an operating means connected to the blocks and adapted to slide the plates in opposite directions upon the switch points to cause said blocks to alternately move the switch points into and out of engagement with the frog.

2. A railway switch comprising a frog, switch points pivotally mounted and disposed upon each side of the frog, links pivotally connecting the switch points, plates slidable on the side faces of the switch points, quadrant blocks having their straight faces formed on the plates, guides engaging the curved faces of said blocks and means sliding the plates in opposite directions to cause the blocks to move the switch points by their curved faces engaging the guides.

1,269,445. LIFE-SAVING RAFT. DOROTHY HOOPER, Nahant, Mass. Filed Oct. 29, 1917. Serial No. 198,930. (Cl. 9—11.)



1. A life saving raft comprising a flexible and inflatable body, a flexible guard rail extending around said body and comprising a series of stanchions, and tubular sockets for said stanchions extending transversely of the marginal portion of the body, said sockets being open at both ends.

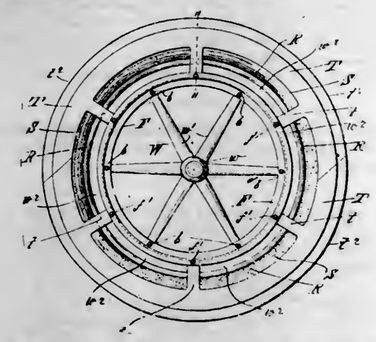
5. A life saving raft comprising a flexible and inflatable body, a band of cork extending around the bow of the raft, and an after deck or stern portion comprising a cork section flexibly connected to the main body of the shaft.

[Claims 2 to 4 not printed in the Gazette.]

1,269,446. TREAD ATTACHMENT FOR VEHICLE-WHEELS. FREDERICK W. HOTTENROTH, New York, N. Y. Filed Sept. 27, 1917. Serial No. 193,414. (Cl. 21—154.)

1. The combination, with a vehicle wheel having rigidly incorporated with its central basic structure and on each side thereof an annular concentric coupling flange,

of a plurality of auxiliary tread sections adapted to cover the periphery of the fixed tread of the wheel and detachably secured to said annular coupling flanges, for the purpose set forth.

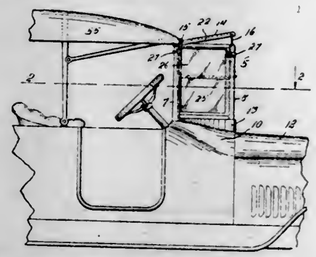


3. The combination, with a vehicle wheel having rigidly incorporated with its central basic structure and on each side thereof an annular concentric coupling flange, of a plurality of auxiliary tread sections adapted to cover the periphery of the fixed tread of the wheel and detachably secured to said annular coupling flanges, each of said auxiliary tread sections having a peripheral rail flange which is adjustable thereon, for the purpose described.

5. The combination, with a vehicle wheel having rigidly incorporated with its basic central structure and on each side thereof an annular concentric coupling flange, of a plurality of auxiliary tread sections adapted to cover the periphery of the fixed tread of the wheel and detachably secured to said annular coupling flanges, the abutting ends of said auxiliary tread sections being beveled to contactually overlap each other, for the purpose described.

[Claims 2 and 4 not printed in the Gazette.]

1,269,447. WIND-SHIELD FOR AUTOMOBILES. JOHN J. HOVER, Denver, Colo. Filed Jan. 29, 1917. Serial No. 145,068. (Cl. 21—148.)



1. A wind shield whose sides approach each other as they extend forwardly, and an upright stationary bar in which the forward extremities of both such plates are anchored.

2. A wind shield whose sides approach each other as they extend forwardly, and means for closing the wind shield at the top and bottom, the top closure consisting of a plate hinged to permit raising and lowering as may be required.

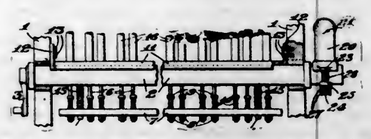
3. A wind shield whose sides approach each other as they extend forwardly, and means for closing the wind shield at the top and bottom, the top closure consisting of a triangular plate hinged to permit adjustment.

5. A wind shield whose sides approach each other as they extend forwardly, and means for closing the wind shield at the top and bottom, the top closure consisting of a downwardly inclined plate hinged to permit adjustment.

7. A wind shield whose sides approach each other as they extend forwardly, and means for closing the wind shield at the top and bottom, the top closure consisting of a downwardly inclined transparent plate hinged for purposes of adjustment.

[Claims 4, 6, and 8 to 10 not printed in the Gazette.]

1,269,448. CAPSULE-MACHINE. HENRY J. HUBERT, St. Louis, Mo., assignor to John T. Milliken, St. Louis, Mo. Filed Oct. 1, 1917. Serial No. 194,297. (Cl. 18—25.)



2. In a capsule machine, in combination with the conducting device for the formed capsule shell, and the trimming mechanism for the shell, said conducting device comprising a tube, and said trimming mechanism comprising a mandrel and a cutting knife coöperating therewith, a shoe through which said tube of the conducting device extends, said shoe having an arcuate face, a suction-controlled receiver-tube in rotatable engagement with the arcuate face of said shoe, a tubular receiver disposed transversely in said receiver-tube and being transversely apertured, and an ejector in said receiver, said receiver-tube being moved to bring said receiver alternately into alinement with said conducting tube to receive the capsule shell therefrom and with the mandrel of the trimming mechanism to effect the transfer of the shell to said mandrel.

7. In a capsule machine, a shoe having a row of conducting tubes extending therethrough for the formed capsule shells, a receiver-tube having an air-tight rotatable engagement with said shoe, said receiver-tube having a multiplicity of tubular receivers disposed transversely therein in correlation to the respective conducting tubes, a trimming mechanism comprising a multiplicity of mandrels and cutting knives coöperating therewith, there being one of said mandrels correlated to each of said receivers, said receiver-tube being oscillated to bring said receivers alternately into coöperative alinement with said conducting tubes and with said mandrels of the trimming mechanism, a suction-pipe, and means for establishing communication between said suction-pipe and said receivers when the latter are in coöperative relation to said conducting tubes.

[Claims 1 and 3 to 6 not printed in the Gazette.]

1,269,449. METHOD OF AND APPARATUS FOR FORMING AND ENLARGING OR CAVATING BORES. HOWARD R. HUGHES, New York, N. Y. Filed May 11, 1916. Serial No. 96,764. (Cl. 255—76.)

1. In a drilling apparatus of the class described, a pilot bit; suporting mechanism for actuating the pilot bit; mechanism carried down with the pilot bit for enlarging and expanding the pilot bore, without removal of the drilling apparatus, when the proper point is reached; and a support passing out through the supporting mechanism normally retaining the expanding mechanism in a non-operative position within the pilot bit mechanism support; and means whereby such enlarging mechanism may be forced forward into operative position when the desired point or stratum is reached.

3. In a drilling apparatus, a pilot bit, a supporting mechanism for actuating said pilot bit, adapted to be rotated in one direction to cut the pilot or main bore, and in the reverse direction in order to release and abandon the pilot bit in the bottom or end of the main pilot bore, mechanism carried in with the pilot bit suppporting mechanism for enlarging and expanding the pilot bore without removal of the drilling apparatus, when the proper point is reached; means for bringing the expanding mechanism into operative position upon release of the main pilot bit, whereupon the supporting mechanism may be again rotated for causing enlargement of the main bore above the abandoned bit; and means for withdrawing the enlarging mechanism.

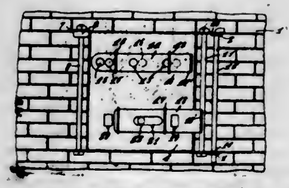


5. In a drilling apparatus, a drill, a well casing, a combined centering and strengthening sleeve spaced behind the drill for centering the drilling mechanism within the hole, said sleeve comprising a longitudinal tube adapted to bear throughout its length on the inner surface of the well casing, and having grooves in its outer surface for the purpose described.

38. The hereinbefore described method or process of drilling bores, comprising the following steps: (1) drilling a pilot bore to the required point by rotation of the pilot boring drill bit flushing the detritus from the hole by a stream of water under pressure; (2) releasing the pilot boring bit from the drill rod by reverse rotation, and withdrawing the drill rod free from the bit; and then (3) forcing an expanding reamer into operative position by fluid pressure and without removal of the boring mechanism from the bore, enlarging the bore above the disconnected pilot boring bit by rotation of the drill rod in the original direction of rotation.

[Claims 2, 4, 6 to 37, and 39 to 41 not printed in the Gazette.]

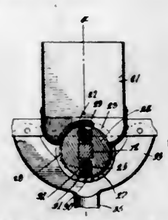
1,269,450. FURNACE-DOOR FOR BRICK-KILNS. STEPHEN E. ISGETT, Gilbert, La. Filed Oct. 11, 1917. Serial No. 196,063. (Cl. 110—175.)



The combination with an apertured kiln wall, including brackets anchored therein, of a door swung from the brackets, said door comprising a casing provided with sight apertures and draft openings, means secured to the casing for closing the sight openings, means secured to the casing for regulating the shaft openings, and fire brick secured to the back of the casing.

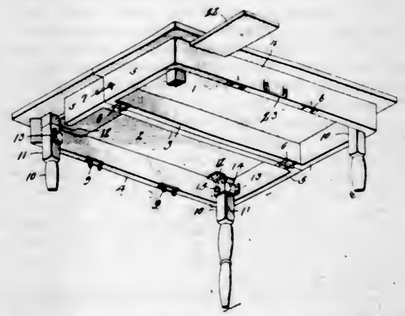
1,269,451. CORN-PLANTER. CARRIE I. JACKSON, Pepin, Wis. Filed Aug. 29, 1917. Serial No. 188,798. (Cl. 221—137.)

1. In a corn planter, a rotatably mounted drum having a plurality of radial recesses and threaded openings in the bottom of each recess, a washer movable in each recess, a screw entering each washer for engagement in the threaded opening of the recess, and a coil spring within each recess bearing against the washer to urge the same outward, movement of the washer being limited by engagement thereof with the screw.



2. In a corn planter, a seed box having its lower end reduced and formed with an aperture, an arcuate member extending from one edge of the aperture upwardly into the box, a second arcuate member extending from the opposite edge of the aperture downwardly, a drum having a flange at each end mounted for rotation between the arcuate members and receiving between said flanges the reduced end of the box, an apron of flexible material secured to the arcuate member which extends into the box for engaging a portion of the periphery of the drum, a pad of resilient material secured to one end of the apron to engage the drum, and means within the drum to receive seed and to discharge the same therefrom.

1,269,452. PORTABLE DESK. ANDREW JAMES, Stamford, Conn. Filed Mar. 6, 1917. Serial No. 152,647. (Cl. 45—116.)

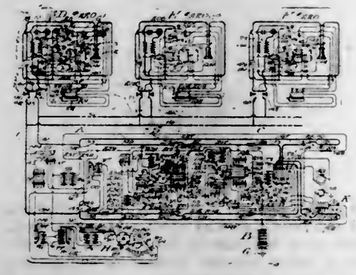


A folding table comprising a pair of hinged leaf sections having mid rails, side rails and end rails depending therefrom, legs pivoted in the angles formed by said side and end rails, a threaded socket member in each leg and a device associated with each leg for holding the same in a fixed condition when extended, said device comprising a fixed section secured to the adjacent end rail, a hinged section supported from the fixed section and a set screw carried by the hinged section, adjustable in the socket member of the leg and serving to move the leg into the angle between the adjacent side and end rails.

1,269,453. AUTOMATIC PARTY-LINE TELEPHONE-EXCHANGE SYSTEM. ALEXANDER E. KEITH, Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Company, a Corporation of Illinois. Filed Aug. 20, 1906. Serial No. 331,343. (Cl. 179—17.)

1. In a telephone exchange system, the combination of a telephone line, a plurality of substations on said line, a preliminary trunking switch allotted to said line, trunk lines leading from said switch, automatic switching machinery to which said trunk lines lead, and mechanism at

the substations by which any subscriber on the line can operate said automatic switching machinery in accordance with all of the digits of any called number, and subsequent to the automatic preliminary trunking operation by which the said individual switch extends the telephone line into connection with said automatic switching machinery, said mechanism returnable to normal position after each digit.



3. In a telephone exchange system, the combination of a telephone line, a plurality of substations on said line, trunk lines, automatic means by which any calling subscriber on said line obtains connection with a preselected idle trunk line, means by which each calling subscriber selects the next idle trunk line for use by the next calling subscriber, and suitable means for switching and connecting in accordance with any called number.

20. In a telephone exchange system, the combination of a telephone line, a plurality of subscribers' substations on said line, an individual preliminary trunking switch for said line, a master switch controlling the operation of said individual switch, trunk lines, a selector and a connector, and means at the substations for controlling the operations of said individual switch and master switch and for controlling the operations of said selector and connector, together with automatic means for preventing one subscriber on the line from disturbing or interfering with a connection already established by some other subscriber on the same line.

47. In a telephone system, a party-line, a non-numerical trunking switch common to the different subscribers on said party-line, an automatic busy test for preventing an effective connection with a busy line, and means for temporarily rendering the busy-test inoperative when one subscriber calls another on the same line.

50. In a telephone system, a party-line, means for calling back on said line, means for placing a busy potential on said line, and means common to a plurality of lines for removing said busy potential.

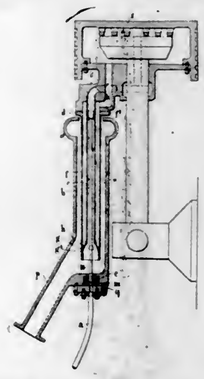
[Claims 2, 4 to 19, 21 to 46, 48, and 49 not printed in the Gazette.]

1,269,454. INTERNAL-COMBUSTION ENGINE. OLAV ESKIL JORGENSEN, Copenhagen, Denmark. Filed July 11, 1916. Serial No. 108,543. (Cl. 123—176.)

1. In combination in a water circulating gear for a vertical engine piston an upwardly extending inlet pipe, flexibly secured at its lower end, a tube extending from the piston telescoping easily over said pipe, an enlarged head to said pipe fitting nicely within said tube and means for leading the water away from said piston.

2. In combination in a water circulating gear for a vertical engine piston a pipe secured below and extending upward to lead water to said piston, a tube depending from the piston telescoping easily over said pipe, a passage from said tube reaching to the upper portion of the hollow piston, and a second encircling tube depending from said piston for leading water from the lower portion thereof in a downward stream enveloping said pipe and tube so as to entrain any water leaking past the telescoping joint.

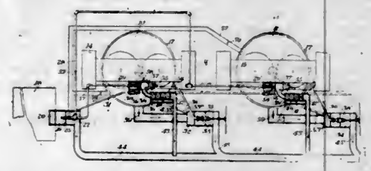
6. In combination in a water circulating gear for a vertical engine piston an upwardly extending inlet pipe flexibly secured at its lower end, a tube extending from the piston telescoping easily over said pipe, an enlarged head to said pipe fitting nicely within said tube, a passage from said tube reaching to the upper portion of the hollow piston, a second larger tube enveloping the last and forming



an annular passage communicating with the lower portion of the piston interior, said two tubes communicating freely at their lower ends, an external fixed pipe wherein said larger tube loosely telescopes, a liquid supply connection to said inner fixed pipe and a free delivery connection to the external pipe.

[Claims 3 to 5 not printed in the Gazette.]

1,269,455. APPARATUS FOR GRINDING AND SMOOTHING GLASS. WILLIAM L. KANN, Pittsburgh, Pa. Filed Apr. 24, 1914. Serial No. 834,102. (Cl. 51—11.)



1. Apparatus for delivering abrasive material consisting of a preliminary collecting tank provided with a downwardly extending partition at its upper portion, a supply conduit opening to the upper part of said tank at one side of said partition, an overflow conduit leading from the tank at the other side of said partition, a separate settling and classifying tank, and means for removing abrasive and water from the classifying tank to the settling tank; substantially as described.

2. Apparatus for delivering abrasive material, comprising a preliminary collecting tank, a separate classifying tank having a plurality of compartments, means for removing abrasive and water from the collecting tank and delivering it to the classifying tank, the classifying tank having means whereby the velocity of flow may be varied in different compartments thereof; substantially as described.

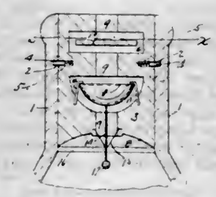
6. In apparatus for delivering abrasive material, a collecting chamber, a grading tank system, means for removing abrasive and water from the collecting chamber and supplying it to the grading tank system, and means for maintaining a substantially constant head of water in the grading tank system, said apparatus being arranged to maintain a continuous circulation of the abrasive material and water from the table to and through the collecting chamber and thence to the grading tank system and back to the table, substantially as described.

7. In apparatus for delivering abrasive material to a single machine to be supplied therewith, a collecting chamber arranged to receive the discharge of abrasive and water from the said machine only, a grading tank system, means for removing abrasive and water from the collecting chamber and supplying it to the grading tank system, means for maintaining a substantially constant head of water in the grading tank system, and means for varying the grading of sand lifted from the collecting chamber, the abrasive and water circulating system and the grading tank system of such machines being isolated from other machines, whereby the used abrasive from said machine is independently graded, substantially as described.

8. In apparatus for delivering abrasive material, a collecting chamber, an elevated grading tank system, means for removing abrasive and water from the collecting chamber and elevating it to the grading tank system, means for maintaining a substantially constant head of water in the grading tank system, and means for varying the grading action of the grading tank system, substantially as described.

[Claims 3 to 5 and 9 to 30 not printed in the Gazette.]

1,269,456. NON-REFILLABLE BOTTLE. PERRY W. KERR, Seattle, Wash. Filed Dec. 22, 1915. Serial No. 68,133. (Cl. 215—63.)

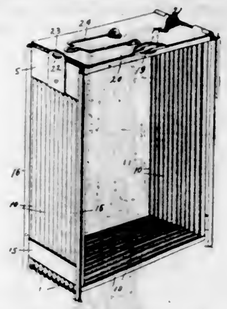


In combination, a bottle, a stopper formed with a vertical passage throughout its entire length and interrupted by an upper cylindrical chamber and a lower hemispherical chamber, a transverse integral baffle extending centrally across the cylindrical chamber, and forming adjacent the sides of the latter lateral passages, a hemispherical float valve located in and of less diameter than the diameter of the hemispherical chamber, inclined guides extending upwardly from the bottom of the hemispherical chamber and turned inwardly at their upper ends, to engage and limit the float valve to a position below and spaced from the upper wall of the hemispherical chamber to prevent closing of such vertical passage, the upper ends of the guides terminating below the top of the hemispherical chamber, a cord depending from the bottom of the float valve and below the bottom of the cork, a weight attached to the lower end of the cord, a yoke extending inwardly from the walls of the vertical passage and extending below the bottom of the cork, said yoke having a central opening through which the cord passes, and means between the cork and the bottle to secure said cork in fixed position.

1,269,457. PHOTOGRAPHIC-FILM HOLDER. HIRAM S. KILLGORE, Eldon, Mo. Filed June 5, 1917. Serial No. 172,994. (Cl. 95—100.)

1. A holder for photographic films for developing the same, comprising a rectangular frame whose sides and bottom are of sheet metal and V-shaped in cross section, and whose top consists of parallel strips spaced apart, and forming a guide for the insertion of the film into the frame, said strips being respectively attached to the inturned portions of the two frame sides and spaced apart to form opposite film guiding surfaces.

2. A holder for photographic films for developing the same, comprising a plurality of frames each having sides and a bottom with film edge receiving grooves and a top formed of cross bars of substantially inverted V-shape



in cross section, each bar between the extreme outer frames lying between and connecting adjacent frames.

[Claim 3 not printed in the Gazette.]

1,269,458. PICTURE AND PROCESS OF MAKING THE SAME. JOSEPH G. KITCHELL, Haddam, Conn. Filed Feb. 21, 1916. Serial No. 79,555. (Cl. 41—22.)

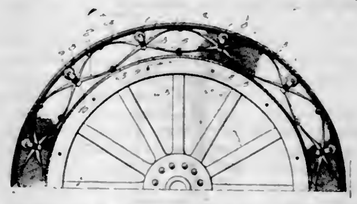


1. A design or picture consisting of an opaque medium having color values thereon, a transparent medium having merely the outlines of the design or picture thereon, a ridge extending from one of the mediums at its edge, the other medium being secured to the ridge, the designs being in substantial register.

2. A design or picture consisting of an opaque support or mounting having color values placed thereon, a transparent medium having the contours or principal details thereon in contrasting shades, the two mediums secured to each other with the designs in register.

[Claims 3 and 4 not printed in the Gazette.]

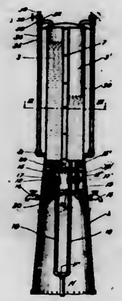
1,269,459. VEHICLE-TIRE. FRANK C. KOTZE, Newark, N. J. Filed Jan. 17, 1918. Serial No. 212,250. (Cl. 152—8.)



2. A structure as specified in claim 1, the carrying means of each of said additional rollers comprising a pair of arms mounted at their inner ends on the adjacent pivot, the outer ends of said arms receiving said rollers therebetween, the inner end of one arm of each pair being bent laterally into engagement with one of the springs to prevent tilting of said arms.

[Claim 1 not printed in the Gazette.]

1,269,460. FLUID-DISPENSING-TANK CONSTRUCTION. ANDREW A. KRAMER, Kansas City, Kans. Filed Dec. 2, 1916. Serial No. 134,580. (Cl. 220—125.)



1. A fluid dispensing device comprising a hollow base, a pair of closed tanks mounted on said base; said tanks being substantially semi-circular in cross section and placed back to back in spaced relation to form a circular body, clamp plates seated against adjacent edges of the opposite tanks, bolts extending between said tanks and attached to said clamp plates, and nuts on said bolts whereby said plates are tightened against the said tanks, for the purpose set forth.

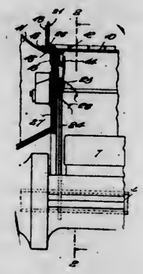
[Claim 2 not printed in the Gazette.]

1,269,461. SPANNER-KEY. ISAAC KREWSON, Cheltenham, Pa. Filed May 9, 1916. Serial No. 96,425. (Cl. 254—120.)



A device of the class described comprising a pair of hingedly connected sections, one of said sections having a slot for the reception of the other section when folded, the latter mentioned section when in extended position constituting a handle for the device, an offset terminal formed on the said section and projecting beyond one longitudinal edge thereof, and a stop lug formed on said offset terminal and projecting at a right angle therefrom for engagement with the other section at one side of the slot therein to hold said sections in alined extended position for use.

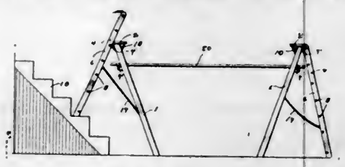
1,269,462. AUTOMOBILE-COWL ATTACHMENT. WILLIAM B. LADD, Kingston, Tenn. Filed Nov. 12, 1917. Serial No. 201,712. (Cl. 180—90.)



1. The combination with an automobile having a cowl of a trough bent at the ends thereof to a substantial arcuate shape to conform to the shape of the cowl, said trough being provided with two sides, one of which is substantially wider than the other; a flange carried at the upper edge of the wider of said flanges; and tubes connected to the ends of said trough for conveying water from the trough to a remote point.

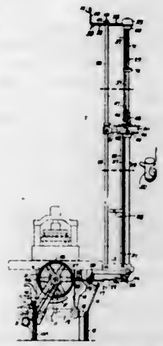
2. The combination with an automobile having a cowl of a trough bent downwardly at the ends thereof and provided with cups for collecting water from said trough, said trough being provided with two sides, one of which is substantially wider than the other; a flange carried at the upper edge of the wider of said flanges and adapted for connection with the cowl; and tubes connected to the ends of said trough for conveying water collected in said cups to a remote point.

1,269,463. COMBINED STEP AND EXTENSION LADDER. ERNEST A. LANGILLE, San Francisco, Cal. Filed Dec. 30, 1915. Serial No. 69,425. (Cl. 228—19.)



An interchangeable prop or extension ladder having rearwardly extending brackets in proximity of the top thereof carrying slidable bolts, in combination with a further section, the stiles of said section being grooved on the inner faces thereof and adapted to engage said bolts and be slid thereon to extended position, and a series of spaced openings along said grooves interchangeably engageable by the bolts, certain of the openings being near the end of the stiles whereby the section may be pivotally engaged with said bolts in position to serve as a prop.

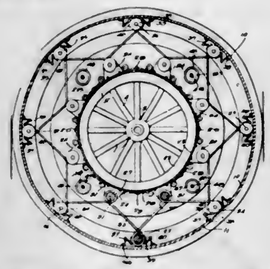
1,269,464. STOP-MOTION. WALTER LARKIN, Philadelphia, Pa., assignor to H. Brinton Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 2, 1916. Serial No. 129,127. (Cl. 66—7.)



4. The combination in a knitting machine of a supporting structure; a knot catching plate thereon; a casing having a cover and also mounted on said structure; a plate vertically guided in the casing; a wire connected to said plate and extending longitudinally of the supporting structure; a spindle having one end extended into the casing and having an arm projecting under said plate; a sweep arm on the other end of the spindle; a bearing supporting said spindle adjacent the sweep arm; and a spring operative on the arm within the casing to normally maintain the sweep arm in elevated position.

[Claims 1 to 3 not printed in the Gazette.]

1,269,465. RESILIENT WHEEL. WILLIAM LAYTON, Sea Girt, N. J. Filed Dec. 4, 1915. Serial No. 65,044. (Cl. 152—38.)

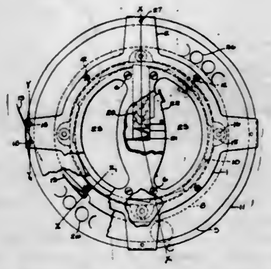


1. A resilient wheel including an inner wheel structure, a rim arranged in spaced relation to said wheel structure and carrying a tire, spring seats carried by the wheel structure and capable of circumferential movement in relation thereto, resilient means limiting the movement of said seats, rods carried by said seats, springs connected to said rods, and means connecting said springs to the rim.

5. A resilient wheel including an inner wheel structure, a rim arranged in spaced relation to said wheel structure and carrying a tire, spring seats carried by the wheel structure and capable of circumferential movement in relation thereto, means limiting the movement of said seats, rods carried by said seats and having reduced portions, rods carried by the rim and having reduced portions, resilient means carried by the rim and engaging the second named rods to permit said rods to have circumferential movement in relation to the rim, and resilient rods wound about the reduced portions of the first and the second named rods to form a cushioning means between the rim and the wheel structure.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,269,466. REEL FOR TAPE-MEASURES. CLEMENT F. LEMASSENA, Newark, N. J. Filed Mar. 13, 1917. Serial No. 154,566. (Cl. 242—84.8.)

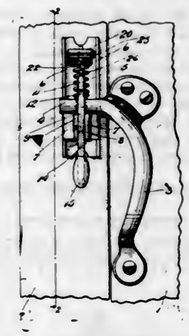


2. In a reel, the combination with a plate member, of a hand grip formed in said member, a tape drum revolubly mounted upon said member, a plurality of ratchet teeth therein, a pawl mounted in said hand grip to engage with said ratchet teeth, and a lever mounted in said hand grip operable by the thumb of the hand to disengage said pawl.

9. In a reel, the combination with a plate member, of a trunnion connected therewith, a recess formed by said trunnion adjacent to said member, a plate within said recess, an annular member connected thereto and revolubly mounted upon said trunnion, a tape secured to said annular member, a second plate secured to said first mentioned plate to form a space for said tape, means to revolve said plates and annular member, and means to lock same to said member.

[Claims 1 and 3 to 8 not printed in the Gazette.]

1,269,467. REFRIGERATOR-LATCH. HARRY C. LEONARD and ALEXANDER F. WINTERS, Grand Rapids, Mich., assignors to Grand Rapids Refrigerator Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Dec. 1, 1915. Serial No. 64,562. (Cl. 70—119.)



1. A latch including a base, ears extending outwardly from the base, a latch member pivotally mounted between the ears, spaced apart projections on the latch member adjacent the base, a stop on the base between said projections, a slotted lug projecting from the base a distance from the stop, a bar having pivotal engagement at one end with the latch member adjacent one projection and at its other end extending through the slot of the lug, a rocker member on the bar bearing against the lug, and a spring around the bar between the latch member and the rocker member.

2. A latch member including a base formed of a plate of metal having ears turned therefrom at each side edge of the plate, a latch member pivotally mounted between the ears, a lug turned from the base adjacent one end thereof, a stop lug struck from the base below the latch member, two spaced apart projections on the latch member adapted to strike against the last lug to limit the movement of the latch member, a bar having pivotal engagement at one end with one of said projections and extending through the first lug at the other end, and a spring around the bar between said lug and the latch member.

3. In a latch, the combination of a pair of fixed supports, an arm pivoted to swing on a fixed axis on one support, a coil spring between the other fixed support and the arm and thrusting against the latter and also moving with the latter from one side to the other of the dead center thrust line, a jaw on the said arm arranged at all times to be on the side of the pivot toward the spring and provided with an outer jaw piece and an inner jaw piece, and a striker in the form of a pin arranged to travel in a plane approximately perpendicular to the plane in which the arm swings and substantially perpendicular to the said dead center thrust line, the said striker striking the inside jaw piece at the outside of the dead center line and being trapped by the inside of the outside jaw piece as the arm passes the dead center thrust line.

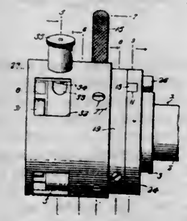
4. In a latch, the combination of a pair of fixed supports, a pair of engaging toggle arms pivoted on the supports to allow spreading of the arms, one toggle arm being provided near its inner end with a shoulder and the other with a jaw, said jaw having an outer jaw piece and an inner jaw piece, a coiled expansion spring about one toggle arm and between its fixed support and its said shoulder, and a striker in the form of a pin arranged to travel in a plane approximately perpendicular to the plane in which the toggle arms swing and substantially perpendicular to their dead center line, the said striker striking the inside jaw piece on the inside of the dead center line and being trapped by the inside of the outside jaw piece as the arms pass inside of the dead center line.

5. In a latch, the combination of a support, an arm

pivoted to swing on a fixed axis on said support, a spring thrusting against said arm so that at one point in the swinging arc of the arm the spring exerts a dead center thrust on the arm and at either side of said point the spring forces the arm in opposite directions, a jaw on the said arm at all times on the side of the pivot toward the spring, the said jaw being provided with an inside jaw piece and an outside jaw piece, and a striker in the form of a pin arranged to travel in a plane approximately perpendicular to the plane in which the said arm swings and substantially perpendicular to the dead center thrust line of the spring upon the said arm, the said striker striking the inside jaw piece at the outside of the dead center thrust line and being trapped by the inside of the outside jaw piece as the arm passes the dead center thrust line inwardly.

[Claims 6 to 12 not printed in the Gazette.]

1,269,468. DIE-HEAD. WILBUR A. LEONARD, Woodmont, Conn. Filed Oct. 8, 1915. Serial No. 54,807. (Cl. 10—96.)



A die head of the character described comprising a stock, a head carried by said stock and having resiliently opposed longitudinal movement thereon, radially movable dies in said head, a cam ring engaging said dies and having a peripheral flange inclosing said head, a setting ring revoluble upon said head within said flange, an adjusting ring revolubly adjustable on said head, a spring pressed bolt extending through an elongated slot in said stock and through said adjusting ring and having its end engaged within a recess in said locking ring, and means for holding said adjusting ring in adjusted position, said means comprising a stud threaded into said head and extending within a slot in said adjusting ring, and oppositely arranged alined screws in said adjusting ring engaging said stud.

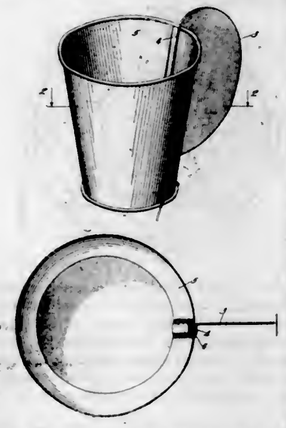
1,269,469. SEWING-MACHINE LAMP. ROBERT E. LEVE, New York, N. Y. Filed Feb. 27, 1917. Serial No. 151,211. (Cl. 240—46.)



A reflecting shade for an incandescent electric light comprising a light shielding shell having a supporting member at the bottom and a plurality of spaced downwardly and inwardly directed light reflectors; and a plurality of outwardly and downwardly directed light confining tubes opening into said shell, each opposite a light reflector.

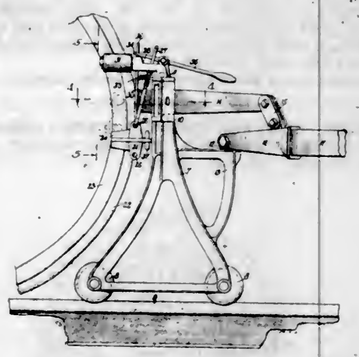
1,269,470. HANDLE FOR JOINTED CONTAINERS. JOSEPH LEVY, Brooklyn, N. Y. Filed Feb. 6, 1918. Serial No. 215,586. (Cl. 65—13.)

In combination with a container having a longitudinal single lock seam, a handle having a portion of same infolded by the single lock seam and whereby said handle is secured to the container at the seam, said handle having



the infolded portion extending substantially through the length of the seam of the container.

1,269,471. CAR-MOVER. CHARLES MCCARTER, Decatur, Ill., assignor of one-half to Charles F. Evans, Decatur, Ill. Filed Oct. 5, 1917. Serial No. 194,887. (Cl. 105—132.)



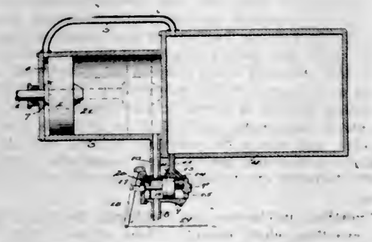
1. A car mover comprising a carriage, a lever fulcrumed on the carriage and disposed diagonally thereon not to decrease the stability of said carriage, a wheel grip suspended from the carriage and operable by said lever, and a second lever connected to the carriage and to the first lever, said second lever being also disposed diagonally of the carriage so as to facilitate the working of the mover in close quarters.

2. A car mover comprising a carriage adapted to be supported on a rail of a track, a first-class lever mounted diagonally on the carriage so that the stability of the carriage on the rail is not materially affected by said lever, means on the top of the carriage for engaging the sides of a car wheel to steady the carriage on the rail, a wheel grip suspended from the carriage and operable by said lever, and a lever of the second class secured to the carriage and engaging the lever of the first class and whereby said lever of the first class is operated.

3. A car mover comprising a carriage, a lever of the first class disposed diagonally on said carriage, a wheel grip suspended from the carriage and operable by the lever, and a lever of the second class disposed diagonally on the carriage in alinement with the first and connected to the said first lever whereby the same is operated, the diagonal position of said second lever permitting the working of the car mover in close quarters.

[Claims 4 to 8 not printed in the Gazette.]

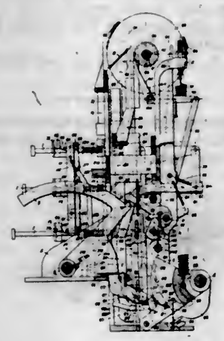
1,269,472. FLUID-PRESSURE BRAKE. RICHARD H. MCGEARY, Allegheny, Pa. Filed Jan. 8, 1915. Serial No. 1,185. (Cl. 188—1.)



1. In a fluid pressure brake, in combination, a brake cylinder, a brake piston in said cylinder having varying pressure surfaces on opposite sides thereof, a pressure supply pipe leading from the train line and in constant open communication with said cylinder to maintain a normal supply of fluid under pressure at the side of the piston having the greater pressure surface, a pressure reservoir in constant open communication with the cylinder to supply fluid under pressure to the side of the piston having the lesser pressure surface, a connection between said supply pipe and reservoir, a valve in said connection to normally close the same and means effective when the pressure in the reservoir and supply pipe is equalized to maintain said valve in closed position, said valve being pressure operated to open said connection when the pressure in the supply pipe temporarily exceeds the pressure in the reservoir.

[Claims 2 to 6 not printed in the Gazette.]

1,269,473. CASH-REGISTER. GEORGE MACBETH and MALCOMB MACBETH, Sefton Park, Liverpool, England. Filed Jan. 8, 1915. Serial No. 1,263. (Cl. 235—3.)



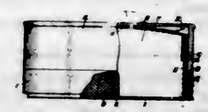
1. A cash register comprising in combination, sets of keys; a rectilinearly movable gate; a gate locking and releasing movable device operated by the keys; a hand actuated part; and a locking mechanism connected with the part and adapted to be operated by the said gate holding and releasing device when the device is operated, so as to release same; substantially as described.

3. A cash register comprising sets of keys; a rectilinearly movable gate controlled by the keys; a hand operated part; a movable tappet on the hand operated part; movable rack bars which are operated by the movable tappet on the complete return stroke; and a holding releasing pawl which engages the rack bars when freed by the tappet at the end of the return stroke; substantially as described.

15. A cash register comprising in combination, a bodily rectilinearly movable gate; means for actuating same in one direction; value keys arranged transversely to the direction of movement of the gate; rack mechanism connected with the gate; indicating parts revolved by the rack mechanism; a hand operated weight adapted to return the gate to the zero position; and a gate locking and releasing device with which the keys make contact and which they operate to release the gate; substantially as described.

[Claims 2 and 4 to 14 not printed in the Gazette.]

1,269,474. POWDER-CONTAINER. JAMES MACDONALD, New York, N. Y. Filed Oct. 3, 1917. Serial No. 194,547. (Cl. 221—61.)



2. A container for powder, comprising a box filled with a powder, having a side, a cup-shaped bottom and a cup-shaped cover, the bottom being exteriorly secured to the lower portion of the said box side and the said cover fitting removably and exteriorly on the upper portion of the said side, and a sieve of flexible material extending across the top of the powder and having an integral side extending down along the inner face of the said box side and around the lower edge thereof, the terminal portion of the sieve extending upward between the said side and the box bottom.

5. As an article of manufacture, a container for holding powder and comprising a box having a removable cover and filled with the complexion powder, a sieve of flexible material extending over the top of the powder in the box, the sieve having its side extending loosely down on the inner face of the side of the box, the end of the sieve side being fastened to the box, and a protecting seal removably overlying the said sieve and having a side extending between the box body and the side of the said sieve.

8. As an article of manufacture, a container for holding powder and comprising a box having a removable cover and filled with the complexion powder, a sieve of flexible material extending over the top of the powder in the box, the sieve having its side extending loosely down on the inner face of the side of the box, the end of the sieve side being fastened to the box, and a protecting seal removably overlying the said sieve and having a side extending between the box body and the side of the said sieve, the said seal having tabs at the margin of its side, the tabs being fastened to the outer face of the box body.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,269,475. WINDOW CONSTRUCTION. ARCHIBALD MACKINNON, Tuckahoe, N. Y. Filed Oct. 4, 1916. Serial No. 123,672. (Cl. 20—43.)

2. The combination of a window frame having on the inner face of each side a longitudinal groove, upper and lower window sashes slidably mounted in the frame and disposed at opposite sides of the grooves, means for supplying the window sashes and for permitting each to turn on a horizontal axis, and parting means located within each groove, each parting means comprising a fixed strip lying along the upper sash and terminating short of the lower sash, and a slidable element in the groove adapted

to occupy a position in the bottom of the frame to hold the lower sash in place and adapted to move into the upper



part of the frame for permitting either sash when in lowered position to turn.

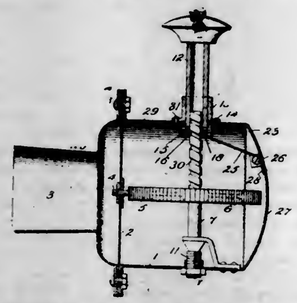
[Claims 1 and 3 not printed in the Gazette.]

1,269,476. METHOD OF TREATING VEGETABLE FIBER. MARK W. MARSDEN, Philadelphia, Pa. Filed Feb. 6, 1917. Serial No. 146,895. (Cl. 92—13.)

1. The method herein-described for treating vegetable fiber for its ultimate recovery as pulp, which consists in removing the incrusting and other difficultly soluble bodies by subjecting the prepared stock to the solvent action of a mixture of sodium chlorid and lime in the presence of heat, moisture, and pressure.

[Claims 2 to 5 not printed in the Gazette.]

1,269,477. MECHANICAL HORN. JERARD R. MARSICO, Brooklyn, N. Y., assignor to The Sparks-Withington Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 21, 1915. Serial No. 57,111. (Cl. 116—1.)



1. In a horn, an air-vibrating member, a rotary actuator for said vibrating member, a spiral shaft upon which said actuator is mounted, bearings for said spiral shaft, one of said bearings being slidable over the shaft, a nut mounted on the shaft, a cup-shape case secured to the slidable bearing and forming therewith a chamber inclosing the nut, said chamber of greater depth than the thickness of the nut and permitting movement of the nut axially of the shaft in said chamber, and a clutch element engaging said nut in one of its positions axially of the shaft and disengaged from the nut in another of said axial positions.

3. A mechanical horn comprising, a pair of bearings, a shaft having its extreme ends mounted in said bearings, said shaft having a worm groove, one of said bearings being mounted to slide over the grooved portion of the shaft, mating normally inactive clutch elements carried by the sliding bearing, one of said elements embracing the shaft and having a portion extending into the groove, said elements being adapted to coact with each other so as to impart rotary movement to the shaft when said sliding bearing is moved in one direction over said shaft, and a diaphragm over which the striker is adapted to revolve.

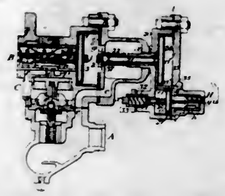
5. A mechanical horn, comprising, a pair of bearings, a shaft having its extreme ends mounted in said bearings, said shaft having a worm groove, one of said bearings being mounted to slide over the grooved portion of the shaft, mating normally inactive clutch elements carried by the sliding bearing, and one of said elements embracing the shaft and having a portion extending into the groove, said elements being adapted to co-act with each other so as to impart rotary movement to the shaft when said sliding bearing is moved in one direction over said shaft, and a diaphragm over which the striker is adapted to revolve, and means for normally holding said sliding bearing in a starting position and comprising a spring having a terminal operatively connected with said sliding bearing.

8. Operating mechanism for diaphragm horns, comprising, a revolving shaft having a fixed striker adapted to operate against the diaphragm, and provided with a worm groove, a pair of bearings normally receiving the ends of the shaft, one of said bearings being slidable over the worm portion of the shaft, and provided with a flange, a clutch element freely supported from the flange, and a clutch element normally spaced from the first element and adapted to be moved into engagement therewith on movement of the sliding bearing in one direction and to separate therefrom on movement of said bearing in an opposite direction, a portion formed on the first element and extending into said worm groove, and having a terminal freely slidable over said flange and serving to normally hold both elements separated.

12. A mechanical horn, comprising, a casing having a diaphragm, a striker supported thereagainst, a shaft fixed to the striker and provided with a worm groove, a guide carried by the casing, a sliding member movable through the guide and forming a bearing for one end of the shaft, a clutch element supported by the member and disposed within the casing and having a portion extending into the worm groove, and a clutch element carried by the sliding member and adapted to be advanced into coacting engagement with the first clutch element on movement of the sliding member toward the striker, and a portion threadedly connected with the sliding member and forming a rest for the first clutch element, and a spring carried by the casing and having a free terminal adapted to slide over said portion.

[Claims 2, 4, 6, 7, and 9 to 11 not printed in the Gazette.]

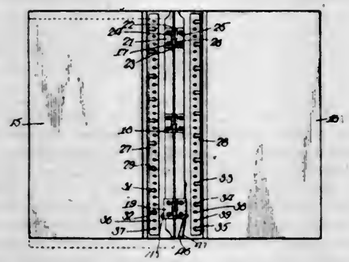
1,269,478. FLUID-PRESSURE BRAKE SYSTEM. FRANK L. MARSTON, Portland, Me. Filed July 31, 1916. Serial No. 112,276. (Cl. 188—1.)



1. Means for cushioning the operation of a brake valve comprising a casing having two chambers normally communicating with each other at points spaced from each other, one chamber having an exhaust port, a piston movably mounted in the other chamber, means for normally holding the piston at an initial position, means for applying uniform pressure at the opposite sides of the piston when at its initial position and at rest, the said communications between the chambers being so arranged that the pressure in both chambers is normally uniform, a valve movably mounted in the chamber having the exhaust port, a piston movably mounted in the last mentioned chamber between the communications connecting the chambers and connected with the valve, resilient means for holding the last mentioned piston at a normal position and the valve at a closed position over the port, and means adapted to coöperate with the first mentioned piston after the beginning of its movement and before the end thereof to interrupt the passage of the pressure in that chamber in which it is located and thereby disturbing the balance of the pressure in the ported chamber whereby the piston therein moves the valve to an open position with relation to the port.

[Claims 2 and 3 not printed in the Gazette.]

1,269,479. LOOSE-LEAF BINDER. ALFRED MARTIN, Chicago, Ill., assignor of one-half to William J. Sandberg, Chicago, Ill. Filed Sept. 24, 1917. Serial No. 192,857. (Cl. 129—17.)



1. In a binder the combination with front and rear sets of alined leaf posts, of means holding said sets in pivotal relation to each other, said sets being mounted on said means for movement longitudinally of each other.

3. In a binder the combination with hinged covers, of a set of leaf posts mounted on each cover, said sets being movable longitudinally of each other.

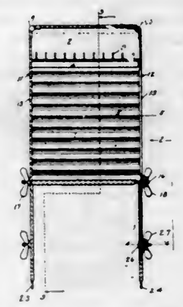
8. In a binder the combination of front and rear covers hinged together, an apertured post frame on each cover, and alined leaf posts on each frame equidistant from the axis of the hinge, the free ends of the posts of one frame entering apertures of the other frame in the closed position of the binder, and said frames being relatively movable longitudinally of the axis of the hinge in the open position of the binder.

12. In a binder the combination with two elements forming a cover, and leaf holding means on each element, of hinges for connecting said elements, each hinge comprising a leaf having two lugs remote from each other, and a pintle rigidly gripped by said lugs; and a leaf having a single lug slidably embracing said pintle between said two lugs and of less length axially of the pintle than the distance between said two lugs.

[Claims 2, 4 to 7, 9 to 11, and 13 not printed in the Gazette.]

1,269,480. WASHBOARD. MARY MARTIN, Santa Barbara, Cal. Filed Jan. 19, 1918. Serial No. 212,713. (Cl. 68—29.)

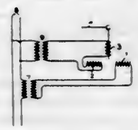
2. In a wash board, a corrugated rubbing board, a frame plate extending from the upper edge of the rubbing board, soap ledges secured to opposite sides of the lower part of the frame plate; there being drain openings through the frame plate above the ledges; a binding strip at the upper edge of the frame plate, hinges connected to the ends of the binding strip, legs connected to the hinges and adapted to engage the side edges of the



rubbing board, and means for removably clamping the legs in position.

[Claim 1 not printed in the Gazette.]

1,269,481. PROTECTIVE DEVICE. HOWARD D. MATTHEWS, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 1, 1916. Serial No. 112,602. (Cl. 175—211.)



1. A relay of the dynamometer type comprising a fixed potential element and a fixed current element coöperating to produce a resultant magnetic field, the field produced by said potential element normally aiding the field produced by said current element but under abnormal conditions opposing the field of said current element by a force which is a measure of the potential, and a second potential element movable in said resultant field.

5. A relay of the dynamometer type comprising three coils, a movable coil responsive to potential, a fixed current coil, and a second fixed coil in series with said movable potential coil and in inductive relation with said current coil.

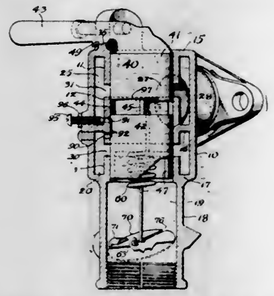
9. In combination with an electric circuit, of means for protecting said circuit under conditions of reversal of power comprising a relay of the dynamometer type having fixed current and potential coils producing a resultant magnetic field, and a movable potential coil producing a coacting magnetic field, and contacts controlled by said movable potential coil, said magnetic fields being so related under conditions of reversal with large drop in voltage that said potential coil moves into contact engaging position while under conditions of reversal with slight drop in voltage said potential coil is maintained out of contact engaging position.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,269,482. MIXING-VALVE. JOSEPH B. MERIAM and HOWARD W. PRICE, Cleveland, Ohio. Filed Nov. 17, 1916. Serial No. 131,865. (Cl. 48—180.)

1. The combination of a casing having intake and exit ports, a movable hollow plug within the casing adapted to control communication between said ports and having a port through its wall, an air passageway communicating with the interior of the plug, a damper in said passageway, a tensile spring within the casing anchored at one end to the damper and at the other end to the valve plug,

and means for moving the plug longitudinally and rotatively to change its presentation to the ports.



2. The combination of a casing having an internal bore with ports in it, a hollow plug occupying said bore and having openings for establishing communication between the ports through the interior of the plug, means for admitting air into the interior of the plug, and a bypass between said ports in the casing, said bypass including a recess in the plug.

3. The combination of a casing having an internal bore, two passageways within the casing outside of said bore, ports from said passageways into the bore, a plug within said bore controlling communication between said ports, two openings into the bore from the respective passageways independent of the ports, a recess in the plug adapted to establish communication between said openings, and a pointed screw adapted to act as a needle valve with one of said openings.

4. The combination of a casing having an internal cylindrical bore, intake and exit passageways terminating in ports at said bore, a cylindrical valve plug occupying said bore, means for turning the plug, means for causing the plug to move longitudinally when turned, and a bypass between said ports, said bypass including a recess in the exterior of the plug.

1,269,483. COLLAPSIBLE CONTAINER. SAMUEL C. MILLER, Louisville, Ky., assignor to Lawrence Jones, Louisville, Ky. Filed May 18, 1917. Serial No. 169,568. (Cl. 221—60.)

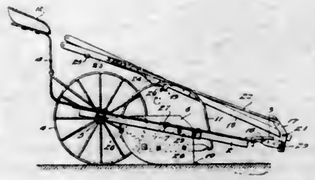


1. A collapsible container having its body portion in the form of a cylindrical tube made of a plurality of thicknesses of textile material having the ends thereof cemented or glued to said body portion, with one end of said tube bent to form a straight fold, with a metal clip engaging said fold and thus securely closing said end of said tube, and the other end of said tube folded to form a neck, a ferrule mounted in said neck, a fastening member mounted exterior to said ferrule and having its walls tapering outward and downward, with its lower end securing the neck of said fabric to said ferrule, and the said fastening member being provided with coarse screw threads above said ferrule, and a screw cap mounted over said fastening member, and provided with a hood in the form of a frustum of a hollow cone adapted to be centered by said fastening member, substantially as described.

2. A collapsible container having its body portion in the form of a cylindrical tube made of a plurality of thicknesses of textile material having the ends thereof cemented or glued to said body portion, with one end of said tube bent to form a straight fold, with a metal clip engaging said fold and thus securely closing said end of said tube, and the other end of said tube folded to form a neck, a ferrule mounted in said neck, a fastening member mounted exterior to said ferrule and having its walls tapering outward and downward, with its lower end securing the neck of said fabric to said ferrule, and the said fastening member being provided with the coarse screw threads above said ferrule, a screw cap mounted over said fastening member, and provided with a hood in the form of a frustum of a hollow cone adapted to be centered by said fastening member, with a cork ring mounted above said ferrule and inside of said fastening member, the said fastening member being provided with an inwardly projecting flange adapted to hold said cork ring in place, and a cork disk mounted inside of said screw cap, substantially as described.

3. A collapsible container having its body portion in the form of a cylindrical tube made of a plurality of thicknesses of textile material having a coating impervious to the contents of the tube on one side of said material, and having the ends thereof cemented or glued to said body portion, with one end of said tube bent to form a straight fold, with a metal clip engaging said fold and thus securely closing said end of said tube, and the other end of said tube folded to form a neck, a ferrule mounted in said neck, a fastening member mounted exterior to said ferrule and having its walls tapering outward and downward, with its lower end securing the neck of said fabric to said ferrule, and the said fastening member being provided with coarse screw threads above said ferrule, and a screw cap mounted over said fastening member, and provided with a hood in the form of a frustum of a hollow cone adapted to be centered by said fastening member, substantially as described.

1,269,484. EARTH-SCRAPER. ARTHUR R. MISKIN, Idaho Falls, Idaho. Filed Oct. 21, 1915. Serial No. 57,214. (Cl. 37—33.)



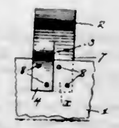
2. In an earth scraper, the combination with ground wheels, of a draft frame supported by the wheels, a scoop pivotally supported by the frame and adjustable means pivotally united with the frame at a point distant from the line of the pivot of the scoop, the means being adapted to be connected with the scoop and arranged to positively hold the latter, while in contact with the ground, either in an inclined position for loading or in an approximately horizontal position for transit, accordingly as the means are adjusted, the said means being arranged to be disconnected from the scoop at will leaving it free to be turned over by reason of its contact with the ground when the scraper as a whole is moved forward.

9. In an earth scraper, the combination of a supporting frame, a scoop pivotally mounted in the frame and arranged to be suspended therein with its center of gravity below the frame, a pair of runners secured to the scoop and extending above it, a cross-bar uniting the runners, and means for holding the scoop against freely turning on its pivots, supported in the frame and arranged to engage with the cross-bar uniting the said runners.

11. In an earth scraper, the combination of a rigid supporting frame formed of two separable portions securely united, a cross axle upon which are supporting wheels, secured to the rear separable portion of the said frame, a scoop pivotally supported in the front portion of the said frame, means supported by the forward portion of the frame arranged to hold the scoop against turning on its pivots and to control its movements and angular relations while working, and draft devices connected with the forward portion of the frame.

[Claims 1, 3 to 8, and 10 not printed in the Gazette.]

1,269,485. ELECTROLYTIC STARTING-SHEET SUSPENDER. HENRY S. MONTGOMERY and HENRY A. TOBELMANN, Ajo, Ariz. Filed Nov. 13, 1917. Serial No. 201,801. (Cl. 204—4.)



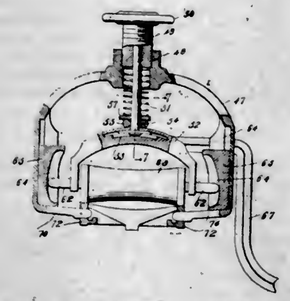
1. An electrolytic starting sheet suspender in which the ends of the suspender loop are secured to the faces of the sheet so as to include no metal of the sheet between the surfaces of said ends contacting with the sheet.

2. An electrolytic starting sheet suspender in which the suspender loop ends are secured to opposite faces of the starting sheet but spaced laterally to include no metal of the sheet between the surfaces of said ends contacting with the sheet.

3. An electrolytic starting sheet suspender in which the ends of the suspender are slit longitudinally and secured to opposite faces of the sheet to include no metal of the sheet between the surfaces of said ends contacting with the sheet.

4. An electrolytic starting sheet suspender having slit ends, an end at one side and an end at the opposite side of the strip being cut away, thereby securing but one thickness of non-overlapping suspender metal to opposite faces of the sheet.

1,269,486. SOLE-LEVELING MACHINE. HONARE MORIN, Auburn, Me. Filed Aug. 31, 1917. Serial No. 189,144. (Cl. 12—34.)



1. In a sole leveling machine, a movable carriage, a frame pivotally secured thereto, guide blocks slidably mounted in said frame, and a spring actuated leveling roller journaled in said blocks.

13. In a sole leveling machine, a reciprocable carriage, a frame pivotally secured thereto, a yoke carried by and movable relatively to the frame, a leveling roller supported by said yoke, and a hand lever connected to said yoke for manually forcing said roller into a sole engaging position.

20. In a sole leveling machine, a frame structure, a reciprocable carriage carried by the frame structure, a frame pivotally secured to the carriage, a spring pressed rod supported in said frame, a yoke carried by and movable relatively to the rod, a shaft journaled in the arms of said yoke, a sole leveling roller carried by said shaft, guide blocks slidably carried by said frame and provided with vertical recesses in their inner spaces, the ends of said shaft extending into said guide blocks, a hand lever connected to said yoke for manually forcing said roller into a sole engaging position, shoe clamping means supported by the frame structure, a foot lever, and a series of levers connecting said foot lever and shoe clamping means to move the clamping means into and out of clamping positions upon operation of the foot lever.

[Claims 2 to 12 and 14 to 19 not printed in the Gazette.]

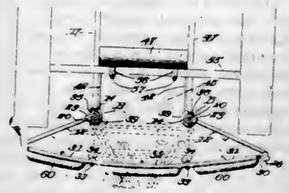
1,269,487. COMMERCIAL PAPER. PERCY MORRIS and JOHN OLIVER BRYANT, London, England, assignors to Whitehead, Morris & Company, Limited, London, England. Filed July 30, 1914. Serial No. 854,179. (Cl. 91—67.9.)

2. Paper, provided with a printed ground of ordinary fluid writing ink and adapted to receive characters applied in the same identical ink.

3. Commercial paper, provided with a safety ground applied to its surface with ordinary fluid writing ink, substantially the same in chemical composition and condition as that in which it is used for writing, whereby alteration, without detection, of matter subsequently written thereon, is prevented.

[Claim 1 not printed in the Gazette.]

1,269,488. FENDER MECHANISM. EARL R. MOUDY, Chester, Pa. Filed Mar. 15, 1918. Serial No. 222,758. (Cl. 293—16.)



1. A fender mechanism having foldable fender sections to abut an object, and means mounting said sections and foldable therewith.

8. A fender mechanism having a collapsible fender, normally retracted means to engage an object from below and means positively driven for operation simultaneously with collapse of the fender to project said normally retracted means.

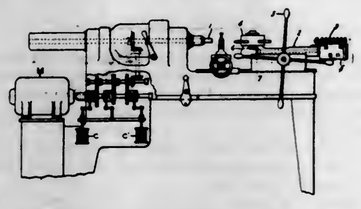
12. A fender mechanism having a collapsible fender, pivotal mounting means therefor, having a fixed section and a movable section, an object supporting device, a gear member associated with the device and turnably mounted from the fixed section, and a gear member meshing with the first mentioned gear member and movable with the movable section.

16. A collapsible fender having a pivotal mounting means comprising a fixed section and a movable section, a bolt adjoining the sections, a spring surrounding the bolt and at opposite ends being secured to the respective sections, and coöperating fastening means on the sections engageable to fasten the fender in collapsed position.

19. A collapsible fender having an arm, pivotal mounting means therefor, comprising a fixed section and a movable section, one section resting on the other section, and the sections at the junction having overlapping flanges, a bearing joining the sections, a spring surrounding the bearing and connected to each section, a gear member extending laterally from the movable section, an object supporting means operable from the said gear member, a dog pivoted to the movable section, said gear member lying in the path of movement of the dog in one direction, and keeper means on the fixed section engageable by the dog.

[Claims 2 to 7, 9 to 11, 13 to 15, 17, and 18 not printed in the Gazette.]

1,269,489. CONTROL FOR TURRET-LATHES AND THE LIKE. EDWIN J. MURPHY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 7, 1916. Serial No. 130,070. (Cl. 29—64.)



1. The combination with a turret lathe or the like having a manually operated turret and an electric motor for driving the lathe, of means for automatically changing the motor from one speed to another as the turret is turned and means for varying the amount of each change independently of the other and of the machine.

10. The combination with a turret lathe or the like and an electric motor for driving the same, of means for automatically changing the speed of the motor as the turret is turned comprising a resistance in the motor shunt field circuit, a controller operated by the turret for short circuiting a part or all of the resistance, and means whereby the amount of the resistance short circuited by the controller may be varied while the motor is running.

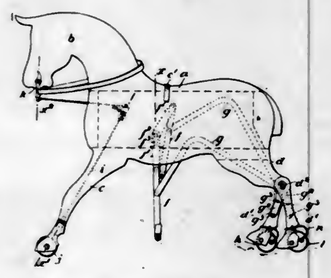
20. The combination with a turret lathe or the like and an electric motor for driving the same, of means for automatically varying the speed of the lathe as the turret is turned, comprising a resistance for the motor and an electromagnetically actuated speed changing clutch for varying the ratio of speeds between the driving motor and the work spindle, a controller having an operative position for each position of the turret operated by the turret to vary the resistance and energize the clutch magnet, a plurality of commutators each of which has a plurality of insulated sections connected to the resistance, and means for varying at will the connections of the controller to the commutator and the clutch magnet to vary the amount of resistance affected by the controller and the operation of the clutch at each operative position of the turret.

[Claims 2 to 9 and 11 to 19 not printed in the Gazette.]

1,269,490. WALKING OR PROGRESSING TOY. ALBERT MURRAY, Birmingham, and GEORGE A. J. MARLEY, Edgbaston, Birmingham, England. Filed Apr. 14, 1917. Serial No. 162,199. (Cl. 46—22.)

1. A walking or progressing mechanical toy in the form of an animal, comprising a body having rigid legs, external reciprocating devices on the body actuated by the user of the toy, levers mounted in the body and connected to said external reciprocating devices, angularly moving leg members associated with a part of said legs and having the said levers rigidly attached thereto, and rollers carried by said leg members and provided with one-way clutches.

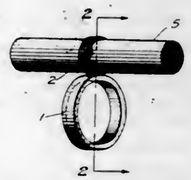
2. A walking or progressing mechanical toy in the form of an animal, comprising a body having rigid legs, external reciprocating devices on the body actuated by the user of the toy, levers mounted in the body and connected to said external reciprocating devices, angularly movable leg members associated with a part of said legs and having the said levers rigidly attached thereto, rollers carried by said leg members and provided with one-way clutches, and steering members associated with the remaining legs.



3. A walking or progressing mechanical toy in the form of an animal, comprising a body having rigid legs and seating means for a user, external driving devices operative by the feet of the user for actuating the toy, levers mounted in the body and connected to said external devices, movable leg members associated with a part of said rigid legs and having said levers rigidly attached thereto, the remaining rigid legs having steering members, rollers carried by the movable leg members and the steering members, and mechanism operable by the user for controlling the steering members and directing the movements of the toy.

[Claims 4 to 7 not printed in the Gazette.]

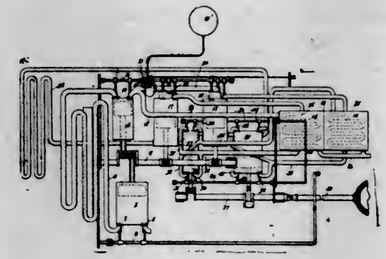
1,269,491. CIGARETTE-HOLDER. WYLIE E. MURRAY, St. Louis, Mo. Filed July 23, 1917. Serial No. 182,145. (Cl. 131—51.)



A device of the character described comprising a pair of non-concentric rings, the one being adapted to be worn upon a finger and the other being superimposed thereon and connected thereto and being adapted to serve as a holder for a cigarette or the like, the connections between said rings being such that said cigarette-holding ring may be bodily rotated to shift the same in a plane with or at right angles to the finger ring.

1,269,492. POWER PLANT. CLEMENS B. NAGELMANN, Carneyville, Wyo. Filed Dec. 19, 1917. Serial No. 207,883. (Cl. 123—5.)

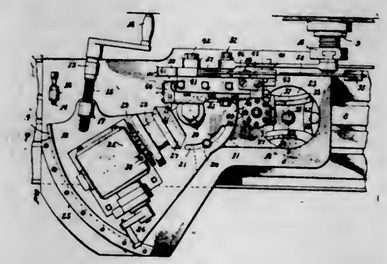
1. A power plant comprising in combination, a multistage compressor, means for cooling the compressed air during the successive stages of its compression, a reservoir for the compressed air, an internal-combustion engine for actuating the compressor, means separating said reservoir into two independent compartments, heating coils in said compartments, means for uniting said coils to the exhaust of the internal-combustion engine whereby said compartments are heated, a multistage air motor, means connecting the cylinders of said air motor to the compartments of the reservoir, and motion-transmission means for said motor.



7. A power plant comprising in combination an air compressor, an internal-combustion engine for driving the compressor, an air motor to be driven by the compressed air, the cylinders of the engine and the motor being jacketed, said jacketed cylinders of the engine being connected in series with the jacketed cylinders of the motor so that a cooling medium is caused to pass successively through the jackets of the engine and the motor.

[Claims 2 to 6 not printed in the Gazette.]

1,269,493. GEAR-CUTTING MACHINE. OLAF NEWLANDER, Bridgeport, Conn. Filed Apr. 22, 1916. Serial No. 92,828. (Cl. 90—10.)

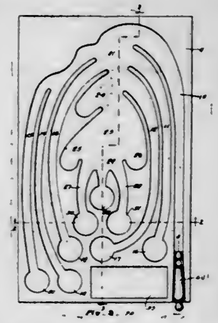


3. A machine of the class described, including a bed, a carrier pivotedly mounted thereon, a standard, a slideway pivoted thereon, a cutter slide mounted in the slideway, means for reciprocating the slide, means for moving the carrier upon its pivot, a gear blank supporting and indexing device mounted upon the carrier, an adjustable pedestal mounted upon the carrier, a series of former plates upon the pedestal to determine the line of movement of the cutter slide, a weight for holding down the slideway and parts carried thereby, an adjustable plate upon the slideway, a dial upon the slideway, and a series of adjustable screws carried by the dial to engage the adjustable plate which rests upon the former plate.

[Claims 1 and 2 not printed in the Gazette.]

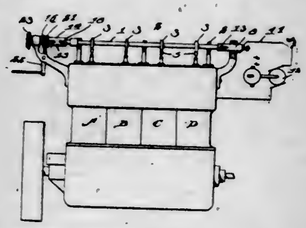
1,269,494. GAME APPARATUS. JOHN D. NIELSON, Lyndhurst, N. J. Filed Oct. 29, 1917. Serial No. 199,132. (Cl. 46—61.)

As an article of manufacture, a game apparatus comprising a solid block having formed therein a series of open-ended channels, the ends of said channels converging upon a field portion, the floor of said field portion being flush with the bottoms of said channels, one of said channels having a curved wall for the delivery of a rolling ball, the delivery end of said wall having a return curve for projecting the ball upon said field portion, the walls of said channels being integral with said block and the upper



edges of said walls being flush with the upper surface of said block.

1,269,495. IGNITION SYSTEM. FRANK M. NORRIS, Los Angeles, Cal. Filed Jan. 17, 1917. Serial No. 142,907. (Cl. 123—167.)



1. In an ignition mechanism for engines having spark plugs, a shaft, means for attaching said shaft of an engine in proximity to a spark plug of the engine, means carried by the shaft whereby the spark plug of the engine will be energized at a predetermined point in the rotation of the shaft, a drive shaft for the first-mentioned shaft, a sleeve on said shafts formed adjacent one of the shafts with a longitudinal slot and formed adjacent the other shaft with a spiral slot, each shaft having a portion engaged in the respective slot, a means for moving said sleeve longitudinally of said shafts, a spring pressed plunger having means whereby it is engaged with the first mentioned shaft, and means for electrically energizing said plunger.

3. An ignition mechanism for internal combustion engines having a plurality of spark plugs, comprising a rotatable insulated shaft of conducting material, provided at one end with means of connection to a source of electricity, this means consisting of a spring-operated contact member engaging a depression in the end of the shaft, said contact member being provided with a projecting portion facilitating withdrawal from said depression, said shaft having secured thereto a plurality of disks of insulating material equal in number to the spark plugs of the engine, and so arranged as to rotate with the shaft with the circumference of each disk in juxtaposition to the terminal of the corresponding spark plug, each disk being provided with a conducting segment electrically connected with said shaft, means for electrically energizing the shaft, and means for rotating the same.

5. An ignition mechanism for internal combustion engines having a plurality of spark plugs, comprising a rotatable insulated shaft of conducting material, journaled in bearings having removable caps, provided at one end with means of connection to a source of electricity, this means consisting of a spring-operated contact member engaging

a depression in the end of the shaft, said contact member being provided with a projecting portion facilitating withdrawal from said depression, said shaft having secured thereto a plurality of disks of insulating material equal in number to the spark plugs of the engine, and so arranged as to rotate with the shaft with the circumference of each disk in juxtaposition to the terminal of the corresponding spark plug, each disk being provided with a conducting segment electrically connected with said shaft, means for electrically energizing the shaft, means for rotating the same, and means for adjusting said shaft while rotating so as to vary the time of coincidence of the conducting segments with the corresponding spark plug terminals or extensions thereof.

7. In an ignition mechanism for engines having spark plugs, a shaft, means for attaching said shaft to an engine in proximity to a spark plug of the engine, means for rotating the shaft, means for electrically energizing the shaft, means carried by the shaft whereby the spark plug of the engine will be energized at a predetermined point in the rotation of the shaft, said shaft being formed in at one end with a recess; and a plunger adapted to enter said recess and also adapted to be manually disengaged from said recess.

[Claims 2, 4, and 6 not printed in the Gazette.]

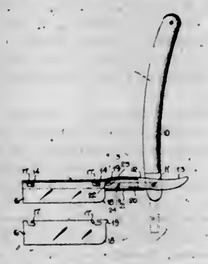
1,269,496. CONDENSER FOR PROJECTION APPARATUS. JOHN A. ORANGE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Oct. 24, 1917. Serial No. 198,331. (Cl. 240—41.)



1. The combination in a projection apparatus of a light source of such structure that when used with a symmetrical condenser in such a way as to utilize the light to best advantage it produces a non-uniform illumination on a screen and an astigmatic condenser associated therewith in such a way as to produce a substantially uniform illumination on a screen.

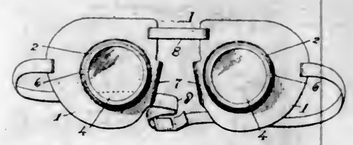
[Claims 2 and 3 not printed in the Gazette.]

1,269,497. DETACHABLE-BLADED RAZOR. NATHANIEL M. ORR and GEORGE D. SNIDER, Blacksburg, Va. Filed June 20, 1917. Serial No. 175,925. (Cl. 30—12.)



A razor including a handle, and a hollow shank, a pivot pin running through the handle and the shank and pivotally connecting the same, transversely extending rivets disposed through the shank, a blade having bayonet slots on its back engageable with said rivets, the inner end of the blade at its back marginal portion being provided with a lug extending outwardly of the blade, and a latch pivoted on said pivot pin and swinging thereon into the hollow shank to engage the rear end of the blade and overlie the lug of the blade whereby said blade is prevented from being shifted to disengage it from the rivets, said latch being T-shaped in cross section, opposed faces of the latch end shank being provided with co-acting means for holding the latch in engagement with the inner end portion of the blade.

1,269,498. EYE-PROTECTOR. HAROLD K. PARSONS, Southbridge, Mass. Filed Mar. 12, 1917. Serial No. 154,305. (Cl. 2—149.)

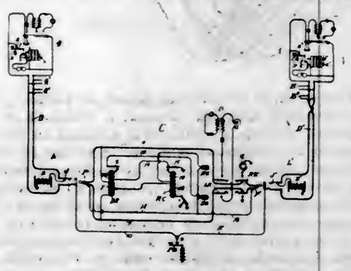


1. In an eye protector, the combination with an eye cup terminating in a peripheral flange, said flange having a plurality of notches formed therein with rearwardly and forwardly inclined portions adjacent the notches on one side, of lenses, and lense retaining rims having fingers adapted to pass through the notches and be interlocked with the rims by relative rotation of the parts, causing the fingers to ride upward on the inwardly inclining surfaces and finally engage the outwardly inclining surfaces.

2. In an eye protector, the combination with an eye cup terminating in a peripheral flange, said flange having a plurality of notches therein and inclined walls adjacent the notches, of lenses and lens rims having fingers adapted to pass through the notches and be interlocked with the inclined portions by relative rotation of the parts to detachably connect the lens rims with the flange.

3. In a device of the character described, the combination with a mask having a bridging eye cup terminating in a channel flange, of a lens adapted to fit against the flange and a retaining rim for the lens having fingers thereon adapted to be inserted through the channels in the flange and brought into interlocking engagement with the flange by relative rotation of the rim and flange to securely retain the same in position.

1,269,499. SUPERVISORY CONTROL-CIRCUITS FOR TELEPHONE SYSTEMS. SAMUEL PATERSON, Kenton, Manitoba, Canada, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Filed Oct. 17, 1914. Serial No. 867,213. (Cl. 179—72.)



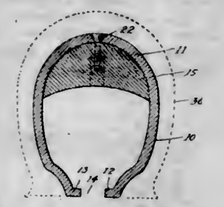
1. A telephone system comprising telephone lines, an operator's link circuit for connecting to said lines, disconnect and recall relays for the link circuit, and control circuits whereby said relays may be operated selectively from a connected substation.

3. A telephone system comprising telephone lines, an operator's link circuit having a terminal plug for connecting to said lines, a disconnect relay connected in bridge of the talking conductors of the link circuit, a recall relay having one terminal of its winding grounded and the other terminal thereof connected to a central point of the disconnect relay winding, and control circuits whereby said relays may be operated selectively from a connected substation.

12. A telephone system including a calling and a called subscriber's line, a link circuit for connecting said lines in conversational circuits, a pair of signals for said link circuits, means controlled from the calling substation to operate one of said signals, and means controlled from the called substation for effacing said signal and for operating the other of said signals.

[Claims 2, 4 to 11, and 13 not printed in the Gazette.]

1,269,500. TIRE-CORE. FREDERICK PAULSEN, Minneapolis, Minn. Filed June 15, 1917. Serial No. 174,878. (Cl. 18—45.)

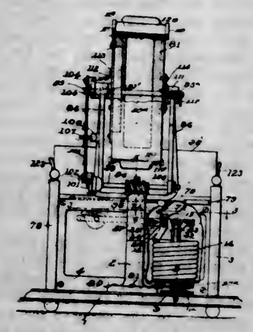


1. A core for tires comprising a spring metal shell and a tread filler within and secured to said shell.

4. A tire core comprising a spring metal shell and a reinforcing member within the tread portion of the shell and secured thereto, said shell and reinforcing member being formed in sections, and coöperating lugs and sockets formed on the adjacent ends of the reinforcing members for holding the sections together.

[Claims 2 and 3 not printed in the Gazette.]

1,269,501. AUTOMATIC EXTINGUISHER. THOMAS PERNER, Sr., Hartford, Conn. Filed Aug. 22, 1914. Serial No. 858,104. (Cl. 169—14.)

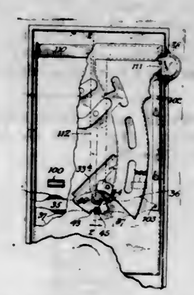


1. A device of the class described comprising a rotary fire extinguishing member formed to contain a fire extinguishing material, supporting means for said member, means for rotating said member, means for opening said member upon rotation of the same, means for causing the supporting means for said member to revolve upon rotation of said member, and an inflammable member for normally retaining the first mentioned member against rotation.

[Claims 2 to 6 not printed in the Gazette.]

1,269,502. VENDING-MACHINE. ROGER W. PERRIN, New York, N. Y., assignor to Theatre Vending Machine Corporation, New York, N. Y., a Corporation of New York. Filed Nov. 9, 1916. Serial No. 130,307. (Cl. 194—48.)

1. In a vending machine, in combination, an article magazine, a rocking cradle which in its normal position lies in the path of the articles tending to issue from the magazine, said cradle being adapted to be rocked from such position by the insertion of a coin and to drop one of the articles from the magazine, into the cradle, means for locking the cradle in its article holding position to which it has been thus rocked, extending into the path of the falling coin so as to be tripped thereby to unlock the cradle, the said cradle when thus freed being adapted to be rocked by the weight of the article contained therein back into its normal position, whereby it will release the contained article and again engage the article above it in the magazine and restrain the latter from issuing therefrom.



5. In a vending machine, in combination, an article magazine, a cradle adapted to be rocked by means of an inserted coin into a position where it receives an article from the magazine, a detent for locking it in such article holding position, a second detent for engaging with and locking the first named detent against movement, the second detent being adapted to be operated by a falling coin to release the other and thereby unlock the cradle.

[Claims 2 to 4 not printed in the Gazette.]

1,269,503. BOTTOM-FORMING MECHANISM FOR PAPER BAGS. JAMES PERRY, Somerville, Mass., assignor to Lockport Machine Company, New York, N. Y., a Partnership composed of William Muirhead and James Perry. Filed Aug. 4, 1917. Serial No. 184,370. (Cl. 93—27.)

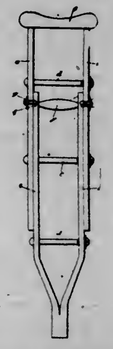


1. A bottom forming mechanism for paper bags having, in combination, a pair of rotary feed members, a folder blade and a paste applying blade fast to one of said feed members, means to adjust said paste applying blade relatively to said folder blade, a gripper blade movably mounted on the other of said feed members, with its outer edge projecting between said folder and paste applying blades, and means to move said gripper blade toward and away from said folder blade.

2. A bottom forming mechanism for paper bags having, in combination, a pair of rotary feed rolls, a folder blade and a paste applying blade fast to one of said rolls, each of said blades projecting beyond the periphery of said roll, means to adjust said paste applying blade relatively to said folder blade, a gripper blade movably mounted on the other of said rolls, with its outer edge projecting between said folder and paste applying blades, and means to move said gripper blade toward and away from said folder blade.

3. A bottom forming mechanism for paper bags having, in combination, a pair of rotary feed members, each comprising a shaft and a roll fast thereto, a pair of disks fast to the shaft of one of said feed rolls at opposite ends of said roll, a pair of carrier members interposed between said disks and the adjacent ends of said rolls, means to adjustably fasten said carrier members to said disks, a bar fastened at its opposite ends to said carrier members and extending longitudinally thereof through a slot provided in said roll, a paste applying blade fast to said bar and projecting at its outer edge beyond the periphery of said roll, a folding blade fast to said disks and extending longitudinally through the slot in said roll, a gripper blade movably mounted on the other of said feed members with its outer edge projecting between said folder and paste applying blades, and means to move said gripper blade toward and away from said folder blade.

1,269,504. CRUTCH. JAMES PETER PLUMB, Wood Green, London, England. Filed June 27, 1917. Serial No. 177,224. (Cl. 155—42.)



3. A combined crutch and seat consisting of two sections, each having two parallel members, the sections having at their upper ends, an arm rest, and a hand grip, respectively, bolts connecting the members of the sections, a pivot connecting the sections, means for locking the sections in extended position and lapped engagement, whereby to form a crutch, and a piece of flexible material adapted to be secured to the bolts of the sections to form a seat, when the sections are swung upon their pivot.

[Claims 1 and 2 not printed in the Gazette.]

1,269,505. PNEUMATIC TIRE. LEONARD R. POSCHADEL, Milwaukee, Wis. Filed Apr. 16, 1915. Serial No. 21,713. (Cl. 152—16.)

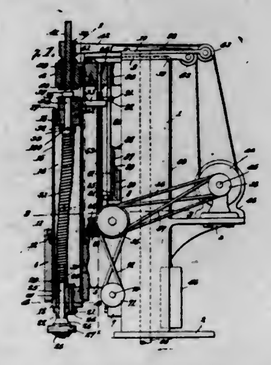


1. The combination with a pneumatic tire substantially circular in cross section, of a circumferentially curved continuous annular tread section composed of spirally coiled metallic strands forming contiguous flexible cables of relatively small diameter extending circumferentially around the tire, said tread section being substantially rectangular in cross section to present continuous and cylindrical inner and outer surfaces and permanently mounted in an exteriorly projecting position so as to engage the surface of the road and receive the wear and prevent the tire from coming in contact with the same.

4. A pneumatic tire of the class described including an outer tube, and a tread section extending circumferentially around the outer tube and composed of spirally wound or twisted strands, said tread section being provided with fastening devices carried by certain of the strands and each having sides or legs spread to embrace two of the strands of the tread section.

[Claims 2 and 3 not printed in the Gazette.]

1,269,506. GRINDER. EDWARD PRESTON, Sedalia, Mo., assignor, by direct and mesne assignments, of one-fourth to James T. Montgomery, one-fourth to Joseph Chasnoff, one-twelfth to William Mindell, and one-sixth to Claude Wilkerson, Sedalia, Mo. Filed Apr. 19, 1917. Serial No. 163,208. (Cl. 51—4.)

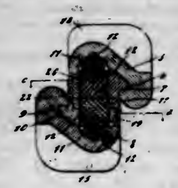


1. In a device of the class described, an outer shaft; an inner shaft having one of its ends disposed eccentrically of the outer shaft; means for connecting said shafts for simultaneous longitudinal movement but for independent rotation; a supporting structure; means for mounting the shafts on the supporting structure for rotation and for longitudinal movement; a grinding element carried by said end of the inner shaft; means for rotating the inner shaft; mechanism for imparting longitudinal movement to both shafts; means operating in one direction for rotating the outer shaft; driving means operating in a reverse direction; and shiftable means for selectively coupling the means for rotating the outer shaft, and said driving means, with said mechanism.

2. In a device of the class described, an outer shaft; an inner shaft; means for mounting the shafts for simultaneous longitudinal movement but for independent rotation; a support on one end of the outer shaft; a bearing eccentrically mounted in the support for rotary adjustment; disks at the ends of the bearing and adapted to be clamped on the ends of the support to hold the bearing in adjusted positions, the inner shaft being journaled in the disks and being journaled eccentrically in the bearing; a clamping device connecting the disks and passing through the bearing; and a grinding wheel carried by the inner shaft and disposed externally of the support.

3. In a device of the class described, a pedestal; an outer shaft mounted to rotate and to move longitudinally with respect to the pedestal; an inner shaft within the outer shaft and having one of its ends disposed eccentrically with respect to the outer shaft; a grinding element carried by said end of the inner shaft; means for rotating the shafts independently of each other; means for moving the shafts longitudinally, together; a flexible element; means on the pedestal for supporting the intermediate portion of the flexible element slidably; means for connecting one end of the flexible element with the shafts; and means for applying tension to the other end of the flexible element whereby the flexible element will aid in supporting the shafts during the longitudinal movement thereof.

1,269,507. CABLE-CLAMP. OLIN S. PROCTOR, New York, N. Y. Filed Apr. 27, 1915. Serial No. 24,339. (Cl. 24—136.)

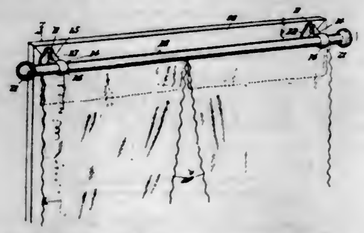


4. A clamping device comprising opposing relatively longitudinally slidable and separable shell members having grooves, means formed therewith to resist lateral separation, said grooves being adapted to receive two opposed tension members, and a pair of wedges interposed between the tension members and walls of said shell members.

5. A clamping device comprising opposing relatively longitudinally slidable and separable concave shell members formed to resist lateral separation and adapted to retain two opposed tension members therein internally and a pair of wedges interposed between the tension members, and means whereby each wedge of the pair is caused to move with the shell inclosing the cable.

[Claims 1 to 3 not printed in the Gazette.]

1,269,508. CURTAIN-POLE. BENJAMIN PROVINCE, Kent, Ohio. Filed Aug. 1, 1917. Serial No. 183,920. (Cl. 156—19.)



1. A curtain pole, said pole including an inner rod member having enlarged round ends, two approximately semi-circular members arranged over the enlarged ends of the rod and designed to have one of their edges brought in contacting engagement, head members having cylindrical openings receiving the ends of the said members, and forcing the same into contact with the rounded ends of the rod.

2. A curtain pole, and a support therefor, said pole including an inner rod member having enlarged round ends, two approximately semi-circular members arranged over the enlarged ends of the rod and designed to have one of their edges brought in contacting engagement, head members having cylindrical openings receiving the ends of the said members, and forcing the same into contact with the rounded ends of the rod, and the supports comprising split spring rings, designed to engage the semi-cylindrical members inward of the heads for holding the said members associated, and the split portion of the said supports being arranged in a line with the opening between the confronting edges at the lower portion of the semi-cylindrical members.

1,269,509. COMBINED PITCH-GAGE. PURLEY L. REEDER, Alton, Ill. Filed July 27, 1915. Serial No. 42,198. (Cl. 33—98.)

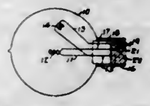
1. In a gage of the character described, a pair of sections, means connecting said sections in movable relation to one another, an arm pivotally connected to the outer end of each of said sections, and a gage element adjustable independently of said arms on each of said sections, for the purpose specified.



2. In a device of the character described, a pair of sections, means adjustably connecting said sections, an arm pivoted to the outer end of each of said sections, each of said sections provided with a lateral extension, and a gage element movably mounted on each of said extensions, for the purpose specified.

[Claim 3 not printed in the Gazette.]

1,269,510. BULB FOR ELECTRIC HEADLIGHTS. JAMES M. RICHARDSON, Highland Park, Mich. Continuation in part of application Serial No. 793,568, filed Oct. 4, 1913. Patent No. 1,088,094. Divided and this application filed Feb. 16, 1914. Serial No. 818,835. (Cl. 176—26.)



2. An incandescent electric lamp bulb comprising a cylindrical base, a bulb attached thereto, one of the filaments being positioned with the body of its heated portion substantially in the axis of the base, the other filament being positioned with the body of its heated portion spaced apart considerably from the heated portion of the first mentioned filament and located substantially wholly at one side of the axis of the base.

[Claim 1 not printed in the Gazette.]

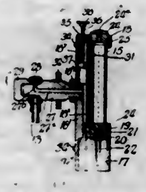
1,269,511. ROD-GONG FOR STRIKING-CLOCKS. JOSEPH I. ROBERGE, Waterbury, Conn., assignor to Waterbury Clock Co., Waterbury, Conn., a Corporation. Filed Aug. 30, 1917. Serial No. 188,954. (Cl. 84—31.)



2. In a striking mechanism for clocks, a gong-rod consisting of a solid straight vibrating rod provided with a collet adjustable in the direction of the length of the rod.

[Claims 1 and 3 not printed in the Gazette.]

1,269,512. GAGE DEVICE. MARTIN ROCKSTEAD, Chicago, Ill. Filed June 30, 1916. Serial No. 106,749. (Cl. 73—54.)

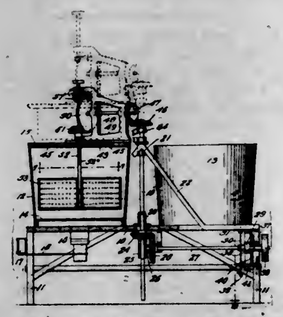


2. In a device of the kind described, a gage and a pipe adapted to connect said gage with a tank and to depend

into said tank to a predetermined low level therein, said gage comprising a casing having a chamber in its bottom and a passageway communicating with the top of said chamber and connected to said pipe, said casing also having a piston chamber communicating with said passageway, a piston movable in said chamber and means operable from the outside of the casing for actuating said piston, an upright transparent tube mounted in said casing and open at its top to atmospheric pressure, a tube of less diameter than said transparent tube and connecting the same with said chamber and depending to a point near the bottom of said chamber, and a liquid normally filling said chamber and the lower end of said transparent tube.

[Claim 1 not printed in the Gazette.]

1,269,513. WASHING-MACHINE. RICHARD E. SMITH, Lima, Ohio. Filed Aug. 6, 1917. Serial No. 184,701. (Cl. 68—18.)

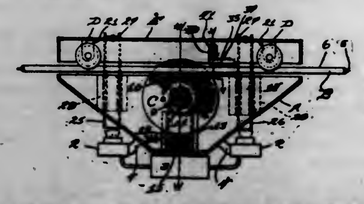


1. In a washing machine the combination with adjacently supported washing and rinsing tubs, a vertical shaft between said tubs, adapted to rotate and to be moved longitudinally, a bracket journaled on said shaft, a clothes basket supported by said bracket in position to be swung over and inserted in either of said tubs, means rotatable by said shaft for imparting to said basket a simultaneous rotary and rectilinear movement, means for driving said shaft, and shifting means operating on said driving means for causing it to rotate at different speeds.

2. In a washing machine the combination with adjacently supported washing and rinsing tubs, a vertical shaft between said tubs adapted to rotate and to be moved longitudinally, a bracket journaled on said shaft, a clothes receptacle, an upright shaft projecting upwardly from said clothes receptacle and rotatable in said bracket, gearings operated by said first named shaft for imparting a rotary and rectilinear movement through the upright shaft to the clothes receptacle, and driving means for said vertical shaft for optionally imparting different speeds thereto.

[Claims 3 and 4 not printed in the Gazette.]

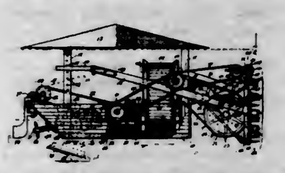
1,269,514. INSULATION-REPAIRING DEVICE. WILLIAM C. ULRICH, St. Paul, Minn., assignor of one-half to Peter J. Lavalle, St. Paul, Minn. Filed May 13, 1916. Serial No. 97,303. (Cl. 91—41.)



1. A device for repairing the insulation on overhead electrical conductors, comprising, a portable receptacle containing a bath of insulating material, mechanism yieldably disposed within said receptacle for delivering the bath about said conductor, and means adapted for vertical movement toward and from said receptacle and to be held in its selected position for retaining said conductor in position to be operated upon by said mechanism.

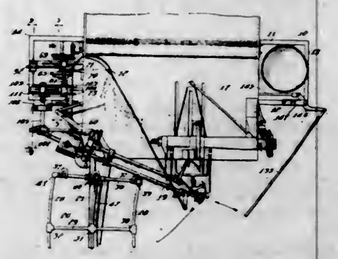
[Claims 2 to 5 not printed in the Gazette.]

1,269,515. APPARATUS FOR GATHERING VEGETABLE MATTER FROM IRRIGATION-CANALS. JOSEPH E. WYCKOFF, Los Angeles, Cal., assignor to Ella H. Jones, trustee, Los Angeles, Cal. Filed Feb. 8, 1917. Serial No. 147,513. (Cl. 56—70.)



Apparatus of the class specified, comprising the combination of a float, a shaft mounted thereon, a second shaft, spaced arms pivotally mounted on the first mentioned shaft and having the second shaft mounted on a portion thereof extending beyond the float, a drum mounted on the second shaft, spaced rows of teeth stationarily mounted on the drum, sprocket chains operatively connected to the first mentioned shaft and to said drum, spaced strips connected to the sprocket chains and adapted when passing around the drum to be disposed in the spaces between the rows of teeth on said drum, and a platform having fingers between which the teeth pass substantially as and for the purpose set forth.

1,269,516. SHOCK-FORMER FOR HARVESTING-MACHINES. LOUIS ANDERSON, Chicago, Ill. Filed Apr. 29, 1912. Serial No. 693,984. (Cl. 56—121.)

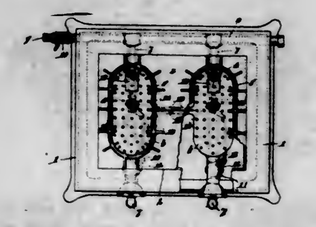


1. In a shock former, in combination, a tilting cradle movable between a horizontal position and an upright position about an axis which is below the cradle in its horizontal position whereby the latter part of the tilting movement may be affected by gravity, a latch normally holding the cradle against tilting, mechanism for tilting the cradle including a pair of elastically connected members, a stop limiting the relative movement of the said elastically connected members, one of the said elastically connected members being connected with the cradle, and means for releasing the latch and driving the other one of said elastically connected members operable in succession in the order named.

2. In a shock former in combination, a traveling frame, a cradle transversely pivoted in the frame and having its rear end open and normally occupying a substantially horizontal position, operating means for tilting the cradle backwardly about its pivot to discharge its load, through its top by the forward travel of the frame when the contents of the cradle is engaged with the ground, means for internally compressing the contents of the cradle during the said tilting, a spring acting to release the said compressing means when the cradle occupies an upright position, and means for moving the cradle backwardly with respect to the frame when the cradle occupies an upright position.

[Claims 3 to 6 not printed in the Gazette.]

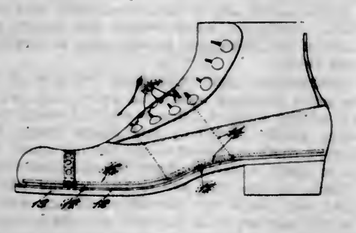
1,269,517. GAS-BURNING HEATER. LOUIS C. BADER, Chicago, Ill., assignor of one-half to Martin J. Detmer, Chicago, Ill. Filed Sept. 11, 1916. Serial No. 119,588. (Cl. 126—52.)



1. In a gas burning heater, the combination of a supporting frame; a plurality of burners arranged below said frame; valves coöperating with said burners to control the supply of gas thereto; contiguously positioned portions on said burners having adjacently positioned fuel outlet openings; and a valve-operating member coöperating with each of said valves and normally projecting above said supporting frame, substantially as described.

2. In a gas burning heater, the combination of a supporting frame; a plurality of burners arranged below said frame; valves coöperating with said burners to control the supply of gas thereto; laterally projecting portions on said burners projecting from the bodies thereof terminating in close proximity with each other and having adjacently positioned elongated comparatively narrow fuel outlet slots; and a valve-operating member coöperating with each of said valves and normally projecting above said supporting frame, substantially as described.

1,269,518. SHOE WITH ANKLE-BRACE. WILLIAM HENRY BAIN, St. Louis, Mo. Filed Jan. 25, 1917. Serial No. 144,407. (Cl. 36—71.)



1. A shoe comprising an upper, an insole and an outsole, said upper being secured to the outsole and loose from the insole on the inside of the shank, and a brace adapted to encircle the instep and having a portion extending between the insole and outsole and secured to the outside shank portion of the insole.

9. An instep brace for shoes having inner and outer soles, the middle of said instep brace being adapted to extend between said soles and its ends having means for fastening it over the instep, and a pad or tongue attached to one end of said instep brace and adapted to lap under the other end of said instep brace to protect the top of the instep.

[Claims 2 to 8 not printed in the Gazette.]

1,269,519. DASH-POT FOR MEASURING INSTRUMENTS. ADELBERT O. BANACKER, Boston, Mass., assignor to General Electric Company, a Corporation of New York. Filed Nov. 15, 1915. Serial No. 61,508. (Cl. 74—69.)



1. A measuring instrument having in combination a movable element and an air damping device comprising a hollow box-like damper secured to said element and movably positioned in a substantially closed air chamber.

6. A measuring instrument having in combination a movable element and an air damping device comprising a hollow box-like damper symmetrically positioned with respect to the axis of said element and consisting of a substantially S-shaped wall formed of a continuous strip of sheet metal and sheet metal top and bottom members, a hollow sleeve secured to said element and positioned within said damper and adapted to serve as a spacing means for said top and bottom members, and means forming two substantially closed air chambers in each of which is movably positioned a symmetrical portion of said damper, the dimensions of said damper and its clearance in said air chamber being such that relatively long narrow air passages are provided for the passage of air between the two compartments formed in each air chamber by the symmetrical portions of said damper.

14. A measuring instrument comprising in combination a movable element having a pivotally mounted shaft, an air damper secured to said shaft, means including a base member forming a closed air chamber in which said damper is adapted to move, and a jewel screw for said shaft adjustably mounted in said base member whereby the clearance of the damper between the top and bottom of the air chamber can be adjusted.

[Claims 2 to 5 and 7 to 13 not printed in the Gazette.]

1,269,520. MANUFACTURE OF INCANDESCENT LAMPS. FRITZ BLAU, Charlottenburg, Germany, assignor to General Electric Company, a Corporation of New York. Filed Apr. 18, 1916. Serial No. 91,961. (Cl. 176—16.)

1. The method which consists in introducing into a lamp having a glass envelop a metallic compound decomposable at a temperature above room temperature and below the temperature at which glass softens and producing a drying medium when decomposed, and heating the envelop of the lamp to decompose said compound.

3. The method which consists in introducing into an incandescent lamp barium azoimid BaN_6 and heating the lamp to decompose said barium azoimid.

6. An incandescent lamp comprising a sealed envelop, a filament therein, and metallic barium on the interior surface of said envelop.

7. An incandescent lamp having a sealed envelop, a filament therein, and anhydrous oxid of barium in said envelop.

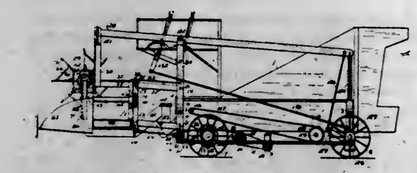
[Claims 2, 4, and 5 not printed in the Gazette.]

1,269,521. ARTIFICIAL TOOTH. WALTER H. BOWMAN, Philadelphia, Pa., assignor to The S. S. White Dental Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1916. Serial No. 128,405. (Cl. 32—9.)



A pin for attaching a tooth facing to a metal backing, arranged to have one end integrally embedded in the body of said tooth facing and the other end sharpened and provided with an axial slit having its inner end terminating within that portion of said pin which is adapted to project beyond the tooth body, and affording relatively bendable prongs complementary to pierce the backing plate of said tooth, and arranged to be bent away from each other to clench said plate and tooth together, the region of distortion of said prongs being limited by the inner termination of said slot, to a position exterior to the tooth body.

1,269,522. COMBINED HARVESTER. JOSEPH T. BRENEMAN, Rust, Cal. Filed Aug. 11, 1914. Serial No. 856,234. (Cl. 56—22.)



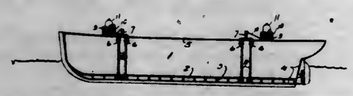
1. In a grain header, a hollow rotary reel shaft, a reel secured thereto, and a band saw, movable so that one portion passes through said hollow shaft, and another portion is outside of, and below, said reel.

2. In a grain header, a hollow rotary reel shaft, a reel secured thereto, a band saw, and guard fingers provided with guiding means therefor, said band saw being movable in one direction through said hollow shaft and in the other direction through said guiding means.

4. In a harvester, a reel comprising a shaft, bars secured to and extending radially from said shaft, a frame secured to said bars, arms pivoted to ends of said bars and having angular extensions, means connected to said extensions for moving said arms, arms pivoted to said frame, links connecting said latter arms with the first-named arms, and longitudinal rods connecting the ends of said arms.

[Claims 3 and 5 not printed in the Gazette.]

1,269,523. DEVICE FOR LOCATING AND RAISING SUNKEN VESSELS. CHARLES G. CHENEY, Tacoma, Wash. Filed Mar. 19, 1917. Serial No. 155,672. (Cl. 114—51.)

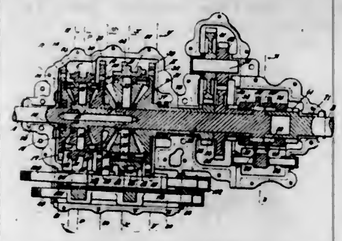


1. In a device of the class described, the combination with a vessel having a frame including an inner keel member and transverse deck beams, of securing means mounted on the deck of the vessel, vertical tension bars or members fitted against the sides of the keel member and the transverse beams and secured to the said securing means, and raising mechanism having means for engaging the securing means.

4. In a device of the class described, the combination with a loop and means for securing the same to the deck of a vessel, of raising mechanism including an inverted open ended approximately U-shaped body and a pair of pivoted latch members mounted on the body at opposite sides thereof and arranged to close the open end of the said body and engage the said loop.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,524. CHANGE-SPEED AND REVERSING GEAR. ARTHUR THOMAS COLLIER, St. Albans, England. Filed Mar. 18, 1918. Serial No. 223,162. (Cl. 74—34.)



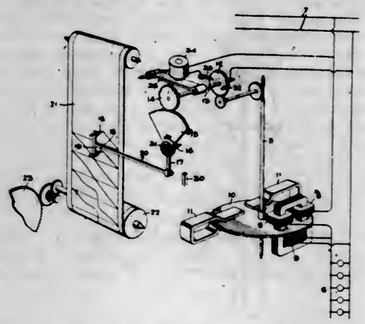
2. A change-speed gear comprising two sets of bevel epicyclic gears arranged axially in series, each set comprising a driving wheel, a fulcrum wheel, a rotary frame, and planet wheels carried by said rotary frame, a primary driving shaft connected to the driving wheel of the first set of gears, a driven shaft, means connecting the rotary frame of the first set to the driving wheel of the second set, means for holding stationary when desired the fulcrum wheel of the first set, means for locking when desired the rotary frame of the first set to the fulcrum wheel of this set, means connecting the rotary frame of the second set to the driven shaft, said means including a clutch, means for holding stationary when desired the fulcrum wheel of the second set, and means for locking when desired the rotary frame of the second set to the fulcrum wheel of the second set.

3. A change-speed gear comprising two sets of bevel epicyclic gears arranged axially in series, each set comprising a driving wheel, a fulcrum wheel, a rotary frame, and planet wheels carried by said rotary frame, a primary driving shaft connected to the driving wheel of the first set of gears, a driven shaft, means connecting the rotary frame of the first set to the driving wheel of the second set, means for holding stationary when desired the fulcrum wheel of the first set, means for locking when desired the rotary frame of the first set to the fulcrum wheel of this set, means connecting the rotary frame of the second set to the driven shaft, and means for holding stationary when desired the rotary frame of the second set, to reverse the direction of rotation of the driven shaft.

4. A change-speed gear comprising two sets of bevel epicyclic gears arranged axially in series, each set comprising a driving wheel, a fulcrum wheel, a rotary frame, and planet wheels carried by said rotary frame, a primary driving shaft connected to the driving wheel of the first set of gears, a driven shaft, means connecting the rotary frame of the first set to the driving wheel of the second set, means for holding stationary when desired the fulcrum wheel of the first set, means for locking when desired the rotary frame of the first set to the fulcrum wheel of this set, said means comprising a sleeve mounted on said frame, a key and keyway connecting the sleeve and frame so as to permit sliding of the sleeve on the frame while preventing turning of the sleeve on the frame, mechanisms on the sleeve which, when the sleeve is moved in the proper direction, engage with corresponding mechanisms on the adjacent fulcrum wheel, means for sliding the sleeve on the frame, means connecting the rotary frame of the second set to the driven shaft, means for holding stationary when desired the fulcrum wheel of the second set, and means for locking when desired the rotary frame of the second set to the fulcrum wheel of the second set.

[Claims 1 and 5 to 11 not printed in the Gazette.]

1,269,525. DEMAND MEASUREMENT. JAMES R. CRAIGHEAD, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Sept. 2, 1916. Serial No. 118,256. (Cl. 234—5.5.)

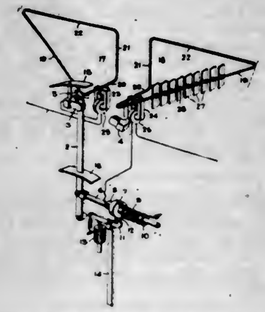


1. A demand apparatus comprising an integrating electric meter having a rotatable shaft, a time actuated record sheet, a plurality of recording devices in contact with said record sheet and displaced from one another in the direction of movement of the record sheet, means for moving said recording devices transversely of said record sheet at a rate proportional to the rate of rotation of said meter shaft, and means for intermittently returning said recording devices to their initial positions at one side of said record sheet.

7. A demand apparatus comprising an integrating electric meter, a time actuated record sheet, and means coöperating with said meter for producing on said record sheet two graphic records of the amounts of metered energy, said two records being identical except that every point of one record is displaced from the corresponding point of the other record a predetermined distance in the direction of travel of the record sheet.

[Claims 2 to 6 and 8 to 13 not printed in the Gazette.]

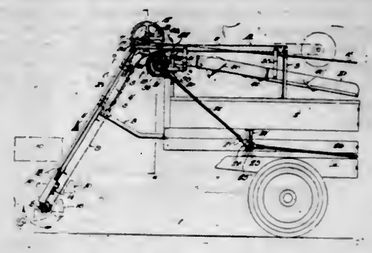
1,269,526. PROTECTIVE DEVICE. ELMER E. F. CREIGHTON, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed June 8, 1916. Serial No. 102,452. (Cl. 175—282.)



6. The combination with a movable switch member, of arc extinguishing means coöperating therewith comprising two short circuited members having portions coöperating to form a horn gap, means responsive to the current through the switch for inducing a heavy current in said short circuited members in a direction to cause the magnetic field set up on said portions forming the horn gap to rapidly attentuate the arc, and a member carried by said switch member and coöperating with the arcing portions to carry the arc formed as said switch member opens to said arcing portions.

[Claims 1 to 5 and 7 to 29 not printed in the Gazette.]

1,269,527. TRUCK-LOADER. RICHARD F. DOWNEY, Milwaukee, and WILLIAM MURDOCH, West Allis, Wis. Filed Aug. 2, 1917. Serial No. 184,071. (Cl. 37—32.)



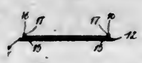
1. The combination with a pivoted dump truck body, of a loading device therefor comprising an endless conveyer adapted to discharge into said body and to be disposed over the truck when not in use.

7. The combination with a truck body of a loading device therefor comprising a track having a horizontal portion disposed over the truck body and a downwardly extending portion, a conveyer carried by said track and adapted when in use to be carried by the downwardly extending portion and when not in use to be carried by the horizontal portion of said track, a driven gear adjacent said track, and an operating gear for the conveyer engageable with said driven gear.

14. The combination with a truck body, of a loading device therefor comprising a track having a portion disposed over the body and a downwardly extending portion, and a conveyer mounted on said track and adapted to be carried by the downwardly extending portion when in use and by the portion of the track disposed over the body when not in use.

[Claims 2 to 6, 8 to 13, and 15 not printed in the Gazette.]

1,269,528. INSOLE FOR BOOTS AND SHOES. EVERETT W. FESSENDEN and HARVEY A. DUNN, Lynn, Mass. Filed Apr. 30, 1917. Serial No. 165,360. (Cl. 36—44.)



1. An inner sole for boots and shoes having, in combination, two thicknesses of sheet material, one of said sheets of material only being turned up around its edge to form a lip, and stitches extending only through said last-named sheet material adjacent the inner side of said lip and only part way through said other sheet of material.

7. An inner sole for boots and shoes having, in combination, two thicknesses of sheet material, one of said sheets of material being turned up around its edge to form a lip, and stitches extending only through said last named sheet of material adjacent the inner side of said lip and only part way through said other sheet of material and in a direction approximately normal to the insole faces.

[Claims 2 to 6 not printed in the Gazette.]

1,269,529. MUSICAL-INSTRUMENT VALVE. ROBERT A. GALLY, Cincinnati, Ohio, assignor to The Baldwin Company, Cincinnati, Ohio. Filed Aug. 14, 1917. Serial No. 186,225. (Cl. 103—66.)

1. In combination: an oblong rectangular valve having a face member and a stiffener member attached to the said face member along the middle and lengthwise of the said face member and on the outer surface of the said face member, said stiffener member being substantially less in width than said face member.

3. In combination: an oblong rectangular valve having a face member and a stiffener member attached to the

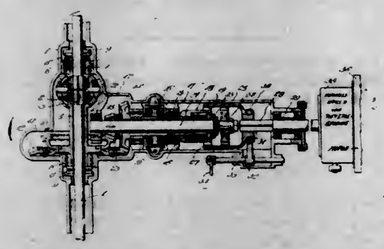
said face member along the middle and lengthwise of the said face member and on the outer surface of the said face member, said stiffener member being substantially less in width than said face member; a spring attached midway the outer face of said stiffener member and free from said stiffener member at the ends of said spring and member, a valve seat, and fixed members attached to the said valve seat and extended to positions opposite the outer ends of the said spring, the said outer ends of said spring standing between the said stiffener and the said fixed members.



6. In combination: a bodily movable oblong rectangular valve having a face member and a stiffener member attached to the said face member lengthwise of the said face member and on the outer surface of the said face member, an oblong narrow strip form spring extended in the same general direction as the general direction of the length of the said stiffener and attached midway the outer face of said stiffener member and free from said stiffener member at the ends of said spring and member, a valve seat, and fixed members attached to the said valve seat and extended to positions opposite the outer ends of the said spring, the said outer ends of said springs standing between the said stiffener and the said fixed members.

[Claims 2, 4, and 5 not printed in the Gazette.]

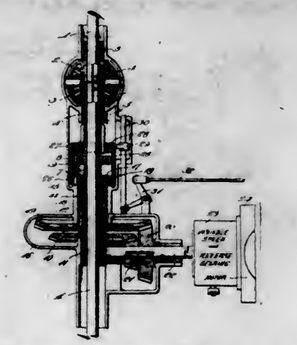
1,269,530. MOTOR-VEHICLE DRIVE MECHANISM. GEORGE IRA GARDETT, Alma, Mich. Filed Dec. 17, 1917. Serial No. 207,561. (Cl. 74—59.)



2. In a motor vehicle driven mechanism, the combination of a differential housing, a hub extending from said housing, an annular flange on said hub, two concentric bevel gear rings mounted on said flange, an outer tubular shaft, a bevel pinion at one end of said tubular shaft meshing with the outer gear ring, an enlarged hollow head on the other end of said tubular shaft having external clutch teeth, thrust and supporting bearings surrounding said tubular shaft, an inner shaft passing rotatably through said tubular shaft and extending beyond both ends thereof, a supporting bearing for the end of said inner shaft adjacent said pinion, a beveled pinion on this end of said inner shaft and meshing with the inner gear ring, a supporting bearing for the other end of said inner shaft located in said hollow head, a clutch member on this end of said inner shaft having external clutch teeth spaced from the aforesaid teeth, a thrust bearing for said inner shaft disposed between the two pinions, a second thrust bearing for said shaft abutting the last named supporting bearing thereof, a hollow driven clutch member having internal teeth for engagement with either of the aforesaid sets of teeth, and means for shifting said hollow clutch member.

[Claim 1 not printed in the Gazette.]

1,269,531. CHANGEABLE-SPEED BEVEL-GEARING. GEORGE IRA GARDETT, Alma, Mich. Filed Dec. 17, 1917. Serial No. 207,562. (Cl. 74—59.)



1. In a changeable speed gearing for motor vehicles, the combination of a two-part shaft for driving the vehicle wheels, differential gearing connecting the two sections of said shaft and including a rotatable differential housing, a short outer tubular shaft surrounding one section of said two-part shaft in spaced relation thereto, a fixed bearing in which said outer shaft is rotatably mounted, a clutch member on the end of said outer shaft adjacent said differential housing and a gear on the other end of said shaft, an inner relatively long tubular shaft passing rotatably through and projecting from both ends of said outer shaft, a clutch member on the end of said inner shaft adjacent said first named clutch member and a fixed bearing in which the other end of said inner shaft is rotatably mounted, a gear on said inner shaft, means for driving the gears of the inner and outer shafts at different speeds and a movable clutch member rotatable bodily with said differential housing and coacting with the aforesaid clutch members, to lock either tubular shaft to said housing.

2. In a changeable speed gearing for motor vehicles, the combination of a two-part shaft for driving the vehicle wheels, differential gearing connecting the two sections of said shaft and including a rotatable housing, a pair of tubular shafts disposed one within the other, the inner shaft surrounding one section of said two-part shaft, in spaced relation with said housing, a tubular hub extending from said housing toward said tubular shafts, externally toothed heads on the ends of said tubular shafts adjacent said hub, a hollow clutch member rotatable bodily with and slidable along said hub, said clutch member being movable over said heads, internal teeth on said member for engagement with the teeth of either head, means for shifting said clutch member, and means for driving said tubular shafts at different speeds.

1,269,532. BOLT AND NUT LOCK. WILLIAM B. GASSER, Chicago, Ill., assignor, by direct and mesne assignments, of one-fourth to Albert Schoch, one-eighth to Minnie Alexander, and one-eighth to Reuben J. Feldman, Chicago, Ill. Filed Mar. 26, 1917. Serial No. 157,465. (Cl. 151—39.)



In a device of the nature described, the combination, of a bolt, a nut on said bolt, said nut having in its lower face a series of radially extending depressions, one wall of said depressions being substantially at right angles to the bottom face of said nut, the other wall being inclined and vanishing in said bottom face, a washer under said nut, said washer being radially split, the split being inclined to the faces of said washer, there being at adjacent ends of said washer inclined projections, the upper one of said projections engaging one of said depressions in said nut to prevent unscrewing thereof, the radial depressions in the nut terminating substantially the same distance from the nut-axis as the projection on the upper face of the split washer, and an auxiliary washer under said split washer, said auxiliary washer being a solid ring having in one of its faces radially extending, V-shaped depressions engaging the lower projection on the split washer, the other face of said solid washer having a contour corresponding to the contour of the object on which the washer is to be placed, the projection on the upper face of the split washer extending from the hole in said washer to within a pronounced distance from the margin thereof, the lower projection on said split washer extending entirely across the face thereof, but in a direction opposed to the projection on the upper face.

1,269,583. MACHINERY FOR THE MANUFACTURE OF LAID CORDS AND ROPES. JOSEPH GILL, Summer Bridge, Dacre, England. Filed Oct. 29, 1915. Serial No. 58,588. (Cl. 28—21.)



1. A cord-making and rope-making machine, in combination with a plurality of rotating bobbins, each supplying a thread, a guiding device through which these threads are directed collectively, a gripping device for the laid cord issuing through said guiding device, means for automatically reciprocating said guiding device and gripping device and for closing and opening said gripping device at the beginning of its forward movement and of its rearward movement respectively, and rotating twisting and take-up elements for twisting the threads together and taking up the united cord.

4. In a cord-making or rope-making machine, in combination with a plurality of bobbins, each supplying a thread, and tension devices therefor, a guiding device through which the threads pass collectively, forming one cord, a gripping device for the laid cord issuing from said guiding device, a slide on which said guiding device and gripping device are mounted, means for reciprocating said slide and for closing and opening said gripping device at the beginning of the forward and rearward movement of said slide respectively, and rotating flier spindles and bobbins for twisting the threads together and taking up the united cord.

6. In a cord-making or rope-making machine, a plurality of bobbins, each supplying a thread, a guiding device through which said threads pass collectively as one cord, a gripping device for this laid cord comprising a fixed jaw and a movable jaw, a slide on which said guiding device and gripping device are mounted, connections from said movable jaw to an operative part of the machine whereby said slide is reciprocated and said gripping device is closed and opened, and rotating flier spindles and bobbins for twisting the threads together and taking up the united cord.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,534. PROTECTIVE DEVICE. GEORGE FRANCIS GRAY, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Feb. 3, 1916. Serial No. 76,049. (Cl. 175—30.)

1. A protective device comprising an evacuated vessel, a spark gap within said vessel, and means for introducing into the vicinity of said gap a continuous supply of ions.

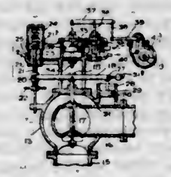
5. In combination with a line conductor to be protected, of means for immediately relieving said line of abnormal voltages comprising a spark gap connected in a path between said line and ground, a vessel inclosing said spark gap and containing an attenuated atmosphere, and radioactive material within said vessel for maintaining a constant supply of ions within the vicinity of said gap



and thereby eliminating the time lag between the application of break down voltage across said gap and the discharge of said gap.

[Claims 2 to 4 not printed in the Gazette.]

1,269,535. ELASTIC-FLUID ENGINE. REGINALD F. HALLIWELL, Rugby, England, assignor to General Electric Company, a Corporation of New York. Filed Feb. 15, 1917. Serial No. 148,858. (Cl. 121—118.)

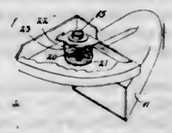


1. The combination with an engine adapted to be operated by low pressure elastic fluid, of a valve mechanism for controlling the flow of such elastic fluid, and regulating means for the valve mechanism comprising means responsive to the speed of the engine, and means responsive to the pressure of the low pressure elastic fluid, and a manually operable device for moving the valve mechanism independently of said regulating means, whereby the effective action of the regulating means on the valve mechanism may be varied.

7. In combination, an elastic-fluid engine, an accumulator for supplying low pressure elastic fluid thereto, a valve mechanism for admitting high pressure elastic fluid to the engine, a valve mechanism for controlling the flow of low pressure elastic fluid from the accumulator to the engine, means responsive to the load on the engine for successively operating said valve mechanisms, said means including a floating lever connected between its ends to the low pressure valve mechanism, an adjustable fulcrum for one end of said lever, a movable abutment responsive to the pressure of the low pressure elastic fluid operatively connected to the other end of said lever, and releasable means for supporting the adjustable fulcrum.

[Claims 2 to 6 not printed in the Gazette.]

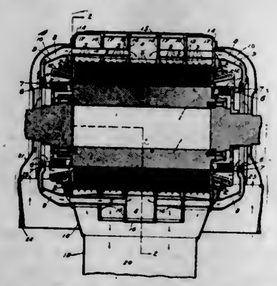
1,269,536. PHONOGRAPH. SAMUEL J. HOEXTER, Kalamazoo, Mich. Filed June 21, 1916. Serial No. 104,950. (Cl. 274—2.)



A phonograph comprising in combination a main housing, a disk record support, and driving mechanism for

said support having an element operating upon a stationary axis at a fixed distance from the record support axis, and means for moving said record support about said stationary axis into and out of said housing.

1,269,537. DYNAMO-ELECTRIC MACHINE. WILLIAM E. HOLCOMBE, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Jan. 8, 1916. Serial No. 70,950. (Cl. 171—252.)



1. In a dynamo-electric machine, a rotatable member, a laminated stationary member surrounding said rotatable member and having radial ventilating spaces, means for conveying cooling fluid to the outer periphery of a group of adjacent ventilating spaces, and means for conveying cooling fluid to the air gap between said rotatable and said stationary members and thereby to the inner periphery of another group of adjacent ventilating spaces.

2. In a dynamo-electric machine, a rotatable member, a laminated stationary member surrounding said rotatable member and having radial ventilating spaces, means forming a chamber about the outer periphery of a group of adjacent ventilating spaces, means for conveying cooling fluid to said chamber, and means for conveying cooling fluid to the air gap between said rotatable and said stationary members and thereby to the inner periphery of another group of adjacent ventilating spaces.

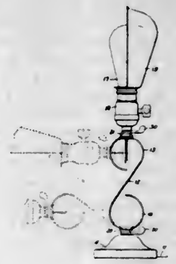
3. In a dynamo-electric machine, a rotatable member, ventilating means rotatable with the rotatable member, a stationary member surrounding said rotatable member and having radial ventilating spaces, means in operative relation with said ventilating means for conveying cooling fluid to the outer periphery of a group of adjacent ventilating spaces located at a distance from said ventilating means, and other means in operative relation with said ventilating means for conveying cooling fluid to the air gap between said rotatable and said stationary members and thereby to the inner periphery of another group of adjacent ventilating spaces located near said ventilating means.

[Claims 4 to 12 not printed in the Gazette.]

1,269,538. ADJUSTABLE LAMP-FIXTURE. HENRY R. HUBBRICH, Cleveland, Ohio, assignor to General Electric Company, a Corporation of New York. Filed Aug. 21, 1915. Serial No. 46,626. (Cl. 240—81.)

4. In a lamp fixture the combination of a standard having a slot therein, an externally threaded bolt passing through said slot and having a head engaging the inner surface of said standard, a bearing plate loosely carried on the said bolt and engaging the outer surface of the said standard, and an internally threaded member engaging a thread on said bolt and adapted to engage the said plate to clamp the aforesaid head against the said standard.

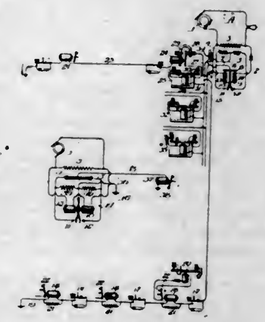
5. In a lamp fixture the combination of a standard having a slot therein, an externally threaded bolt passing through said slot and having a head engaging the inner surface of said standard, a bearing plate loosely carried on the said bolt and having a projection engaging the said slot and engaging the outer surface of the said standard, and an internally threaded member engaging the thread on said bolt and adapted to be tightened against the said plate to clamp the aforesaid head against the said standard.



6. In a lamp fixture the combination of a standard having a slot therein, an externally threaded bolt passing through said slot and having a head engaging the inner surface of said standard, a bearing plate loosely carried on the said bolt and engaging the outer surface of the said standard, and an internally threaded winged member engaging the thread on said bolt and adapted to be tightened against the said plate to clamp the aforesaid head against the said standard.

[Claims 1 to 3 not printed in the Gazette.]

1,269,539. TELEGRAPH SYSTEM. OSCAR M. LEICH, Genoa, Ill., assignor to Leich Electric Company, Genoa, Ill. Filed Feb. 9, 1917. Serial No. 147,517. (Cl. 178—2.)



1. A system of the character described comprising a telepragh line, telegraph relays connected to said line, a source of pulsating uni-directional current for said line, and a resistance bridging said relays to maintain magnetization thereof irrespective of the pulsations of said current thereby prevent chattering of the relay armatures.

2. A system of the character described comprising a telegraph line, electromagnetic telegraph instruments connected to said line, a source of pulsating uni-directional current for said line, and a resistance bridging said instruments to maintain magnetization thereof irrespective of the pulsations of said current thereby to prevent chattering of the instrument armatures.

5. A system of the character described comprising a telegraph line, electromagnetic telegraph instruments connected to said line, a source of pulsating uni-directional current for said line, and a by path about said instruments to maintain magnetization thereof irrespective of the pulsations of said current thereby to prevent chattering of the instrument armatures.

[Claims 3 and 4 not printed in the Gazette.]

1,269,540. ELASTIC-FLUID TURBINE. FREDRIK LJUNGSTRÖM, Stockholm, Sweden, assignor to Aktiebolaget Ljungströms Angturbin, a Corporation of Sweden. Filed Aug. 8, 1917. Serial No. 185,018. (Cl. 253—77.)



1. The method of attaching blades having U-shaped bases to a blade carrying member having a rim, the inner surfaces of the legs of the U-shaped bases and the sides of the rim being provided with complementary ridges and grooves, and said legs being substantially straight and spaced apart throughout their length a distance greater than the width of the rim, which comprises placing the U-shaped bases over the rim and squeezing the legs of the bases throughout their length toward the rim to bring the complementary ridges and grooves into engagement, the blades at the same time being displaced outwardly, the pressure used being such as to exceed the limit of elasticity of the material so that a permanent deformation of the material occurs.

4. The method of attaching blades having U-shaped bases to a blade carrying member having a rim, the slots in the U-shaped bases being wider than the thickness of the rim, which comprises placing the U-shaped bases over the rim and squeezing the legs of the bases into engagement with the rim, the squeezing pressure being applied first to any one of the blades, then to a blade located opposite thereto, then to a blade located between said two opposite blades, then to a blade located opposite to the third mentioned blade, and so on.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,541. ELASTIC-FLUID TURBINE. BIRGER LJUNGSTRÖM and FREDRIK LJUNGSTRÖM, Stockholm, Sweden, assignors to Aktiebolaget Ljungströms Angturbin, a Corporation of Sweden. Filed Aug. 8, 1917. Serial No. 185,180. (Cl. 253—77.)

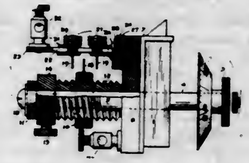


1. In an elastic-fluid turbine, the combination of a blade-carrying member having a rim provided with projections and grooves which slope toward the center of said member, and blades having U-shaped bases which fit over said rim and have complementary projections and grooves sloping away from the center of said member, said projections and grooves on the rim and blade bases interlocking to fasten the blades to the rim.

[Claims 2 and 3 not printed in the Gazette.]

1,269,542. ALARM FOR COMBINATION-LOCKS. FLOYD R. MCNABB and RICHARD M. SKINNER, San Francisco, Cal. Filed July 31, 1916. Serial No. 112,275. (Cl. 200—27.)

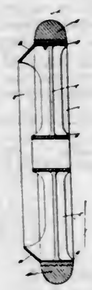
2. In a circuit closer, a shaft, a support therefor, a screw secured to said shaft, an internally threaded traveler engaging said screw, means extending from the support for preventing the rotation of said traveler, a contact movable with said traveler, two contacts electrically connected, and between which the first contact extends, and



adjustable in a direction parallel with the travel of said first-named contact, said first contact forming one terminal of a circuit and the other two contacts forming the other terminal thereof.

[Claim 1 not printed in the Gazette.]

1,269,543. WHEEL FOR ROAD-VEHICLES. COLIN MACBETH, Birmingham, England, assignor to The Dunlop Rubber Company, Limited, Westminster, England. Filed Sept. 17, 1917. Serial No. 191,837. (Cl. 21—69.)



1. A vehicle wheel which is formed or provided with a protector, the outer or protecting surface of which extends laterally from a point adjacent to the juncture of the tire and wheel rim or felly, said projecting surface being inclined inwardly toward the center of the wheel and beyond the inner circumference of the rim to a relatively large depth whereby said surface will engage the angular portion or corner edge of a curb and form a point contact therewith.

2. A vehicle wheel which is formed or provided with a protector, the outer or protecting surface of which extends laterally from a point adjacent to the juncture of the tire and wheel rim or felly, said surface being inclined inwardly toward the center of the wheel and beyond the inner circumference of the rim at an angle of about 45° to the vertical and having a relatively large depth whereby said surface will engage the angular portion or corner edge of a curb and form a point of contact therewith.

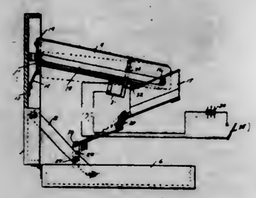
4. A vehicle wheel having spoke members, a wheel rim and a protector, the outer or protecting surface of the latter of which extends laterally from a point adjacent to the juncture of the tire and wheel rim or felly and is inclined inwardly toward the center of the wheel, said spoke members having extensions for reinforcing said protector and said wheel rim, spoke members, protector and extensions on said spoke members being cast as an integral element.

6. A vehicle wheel having spoke members, a wheel rim and a protector, the outer or protecting surface of the latter of which extends laterally from a point adjacent to the juncture of the tire and wheel rim or felly, said projecting surface being inclined inwardly toward the center of the wheel, said spoke members having extensions for reinforcing said

protector and said wheel rim, spoke members and protector on said spoke members being cast as an integral element.

[Claims 3 and 5 not printed in the Gazette.]

1,269,544. NAIL-STRIPPER DEVICE. GEORGE MARSHALL, Los Angeles, Cal. Filed July 23, 1917. Serial No. 182,212. (Cl. 1—6.)

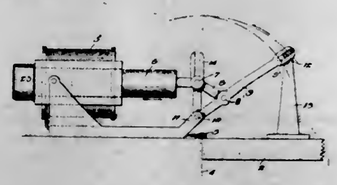


1. A nail stripper comprising in combination a support, an upper hopper adjustably secured thereto for variation of its inclination, an under hopper secured to said support for receiving nails from said upper hopper, and an electro-mechanical vibrator secured to said upper hopper for jarring the latter.

4. The combination of an upper hopper, an under hopper disposed so as to receive nails from said upper hopper, runners secured to said under hopper, said runners being interrupted to form a cut-off, said cut-off being adjustable, and a vibrator for jarring said upper hopper.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,545. DOOR-OPENER. CARL H. MENGEDOHT, Seattle, Wash. Filed May 21, 1917. Serial No. 170,054. (Cl. 268—9.)



1. A closure operating apparatus including a closure to be operated, a support on which it is movably mounted, and electro-magnetic means for opening said closure, including a rocking solenoid and its core connected to the said closure and the support, and a guide, independent of the connection between the door and means, for controlling the swinging of the solenoid.

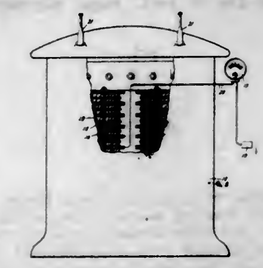
6. The combination with a door and a support to which it is hinged, of a pivoted solenoid carried by one thereof and having a core movably connected to the door and a lever for controlling the angle of oscillation of the solenoid, connected to said core.

8. A device for opening a hinged door, comprising a solenoid pivotally mounted with relation to the door and having a core operatively and pivotally connected to the door whereby when the solenoid is energized said door is opened, and pneumatic means for controlling the core movement, the core forming a piston for said means.

[Claims 2 to 5, 7, 9, and 10 not printed in the Gazette.]

1,269,546. TEMPERATURE-INDICATOR. VINCENT M. MONTSINGER, Pittsfield, Mass., assignor to General Electric Company, a Corporation of New York. Filed Aug. 21, 1916. Serial No. 116,214. (Cl. 73—82.)

1. In combination with a transformer provided with windings separated by insulating spacing blocks, means for indicating the interior temperature of said transformer comprising a temperature responsive element disposed within one of said blocks.



4. In an electric apparatus provided with a plurality of coils in which heat is developed during operation, the combination of spacing blocks located between the coils which are larger than considerations of insulation require, a temperature responsive device disposed within one of said blocks, and means for indicating the temperature of said device.

[Claims 2 and 3 not printed in the Gazette.]

1,269,547. AIRPLANE. JAMES JOSEPH MURRAY, New York, N. Y. Filed Aug. 17, 1917. Serial No. 186,786. (Cl. 244—30.)



1. A body structure for aircraft comprising a plurality of hoops, a series of tubular stringers connecting said hoops at intervals throughout the circumference thereof, said stringers being arranged in diametrically opposite pairs, internally threaded and headed nipples extending through the inner walls of the stringers, and a diametrical brace having its opposite end portions in threaded and adjustable engagement with said nipples.

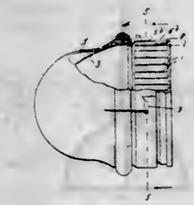
4. A body structure for aircraft comprising a plurality of hoops, a series of tubular stringers connecting said hoops at intervals throughout the circumference thereof, said stringers being arranged in diametrically opposite pairs, internally threaded and headed nipples extending through the inner walls of the stringers, and a diametrical brace having its opposite end portions in threaded and adjustable engagement with said nipples, each nipple passing through the inner wall of the respective stringer and also through a hole in the adjacent hoop and serving as a means for preventing relative movement between the hoop and stringer.

[Claims 2 and 3 not printed in the Gazette.]

1,269,548. GLARE-CONTROLLING DEVICE FOR LAMPS. HERBERT R. PALMER, Cleveland, Ohio. Filed Oct. 10, 1916. Serial No. 124,860. (Cl. 240—45.)

1. A glare controlling device for lamps, comprising a longitudinal extension attached to the front of the lamp, a longitudinal tubular member mounted in said extension, whereby it is adapted to rock, longitudinal partitions permanently attached to the interior of the rockable tubular member, and means for rocking said tubular member.

3. In a vehicle lamp the combination of a light member provided with a reflector; a casing in which said light member is housed, said casing being open in front of the light member; a longitudinal open extension member projecting outward from the front of the lamp casing; a tubular member mounted in said extension whereby it is adapted to rock, longitudinal partitions permanently attached to the interior of the rockable tubular member, said partitions forming a series of longitudinal cells; a transparent cover member over the outer end of said tubular member; and means for rocking said tubular member.



[Claims 2 and 4 not printed in the Gazette.]

1,269,549. LAMP. HERBERT R. PALMER, Cleveland, Ohio. Filed June 11, 1917. Serial No. 174,057. (Cl. 240—48.4.)



1. In a lamp for the purpose set forth, the combination of an adjustable illuminating member; a composite reflector including a circular portion back of the illuminating member and a parabolic portion extending forward from the vertical plane of said member; a glare controlling member attached to the front of said reflector and comprising a supporting frame, a series of longitudinal partitions arranged in horizontal planes within and supported by said frame, and supported on each other by vertical members, said partitions surrounding an elliptical auxiliary frame which carries a prismatic glass member.

5. In a lamp for the purpose set forth a glare controlling member attached to the front of the lamp and comprising an annular supporting frame, and an elliptical auxiliary frame comprising segments having the same radial dimension as the annular frame, a series of longitudinal partitions arranged in horizontal planes within the annular frame surrounding the auxiliary frame and supported by said annular and auxiliary frames.

[Claims 2 to 4 not printed in the Gazette.]

1,269,550. PEANUT-DIGGER. JOHN T. BEASLEY, Blakely, Ga. Filed Sept. 5, 1917. Serial No. 189,715. (Cl. 55—189.)

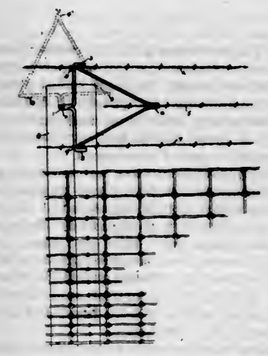
1. The peanut digger comprising the frame formed of upright members connected at the base one to the other by a V shaped base-shoe and having at the junction of the uprights and base-shoe forwardly inclined cutting-edge bracing webs, a detachable share secured to the base-shoe, and fingers extending rearwardly of the share.

2. The peanut digger comprising the frame provided with a V shaped base-shoe, a detachable V shaped share secured to the base-shoe, the rear edge of the share conforming to the rear edge of the base-shoe to form a V shaped open space at the rear of the shoe and share,



and rearwardly extending fingers, each formed with a wing attached to the base-shoe and having a rear inclined face conforming to the rear inclined edge of the V shaped base-shoe.

1,269,551. ADJUSTABLE FENCE-GUARD. GEORGE BENNIE BIRD, Hillisburg, Ind., assignor of one-half to Nathan Victor Boulden, Sheridan, Ind. Filed Feb. 8, 1918. Serial No. 216,095. (Cl. 256—11.)



1. The combination with a fence post of a brace pivotally attached to the side thereof, means for the support of said brace in a horizontal position, means for the engagement of a wire at the outer extremity of said brace, substantially as set forth.

2. The combination with a fence post of a triangular brace pivotally attached to the side thereof, means for the support of said brace in a horizontal position, means for the engagement of a wire at its outer extremity, substantially as set forth.

1,269,552. MOTION-PICTURE SCREEN. MOXLEY BLUMENBERG, Portland, Me., by judicial change of name to Moxley Hill. Filed July 10, 1917. Serial No. 179,747. (Cl. 124—15.)



1. A frame structure, rollers supported therein, one of said rollers being spring pressed to constitute a tension roller, an endless apron guided over the rollers some of which are so disposed as to maintain portions of the front and rear leads of the apron in juxtaposed relation, a moving picture screen supported adjacent to the juxtaposed portions of the front and rear leads of the apron, and means for imparting feed motion to the apron.

2. The combination with a moving picture screen, of an endless apron, supporting means for said apron including a frame structure having top and bottom members and rearwardly extending brackets, and rollers supported for rotation in said top and bottom members and brackets, one of said rollers being a tension roller, and means for imparting feed motion to one of the rollers.

1,269,553. CEMENT-REINFORCEMENT. OLIVER D. COLLIS, Clinton, Iowa, assignor to The Collis Co., Clinton, Iowa, a Corporation of Iowa. Filed Aug. 31, 1914. Serial No. 859,371. (Cl. 72—53.)



1. A reinforcing instrumentality for concrete structures, comprising an outer member; an inner member surrounded by and in approximately the same radial plane as said outer member; a plurality of oppositely disposed radial tie members connecting said inner and outer members; and a plurality of cross braces welded to said inner and outer members and to said tie members.

2. A reinforcing instrumentality for concrete structures, comprising an outer member; an inner member surrounded by and in approximately the same radial plane as said outer member; a plurality of oppositely disposed radial tie members connecting said inner and outer members; and a plurality of cross brace members disposed in angular relation to said oppositely disposed radial tie members and approximately tangentially to one of said members, said brace members being welded to both inner and outer members and said radial tie members.

3. A reinforcing instrumentality for concrete structures, comprising a plurality of circular wire members arranged one within the other and in approximately the same radial plane; oppositely disposed radial tie members in approximate alinement welded to said inner and outer members and extending beyond said members on opposite sides thereof; and a series of cross brace members some of which are arranged tangentially to said inner members, at right angles to said radial tie members, and having a portion in engagement with said outer member; said inner and outer members, radial tie members and cross braces being welded together to form an integral structure.

4. As an article of manufacture a concrete unit comprising a tubular cementitious mass and a reinforcing structure embedded therein and including a reinforcing instrumentality comprising a plurality of circular wire members arranged one within the other and in approximately the same radial plane; oppositely disposed radial tie members in approximate alinement welded to said inner and outer members and extending beyond said members on opposite sides thereof; and a series of cross braces some of which are arranged tangentially to said inner member, at right angles to said radial tie members and having a portion in engagement with said outer member; said inner and outer members, radial tie members and cross braces being welded together to form an integral structure.

1,269,554. OIL-CAN. JOHN A. FROST, Brockton, Mass., assignor to Frost & Chadwick Co., Concord, N. H., a Firm. Filed Jan. 6, 1914. Serial No. 810,586. (Cl. 221—48.)

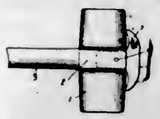
1. A spout for oil-cans comprising a screw-plug and integral discharge-tube, a spout fitted to and surrounding the outer end of the discharge-tube, a tube fitted within the discharge-tube and provided with orifices, a valve at the upper end of the said inner tube, a threaded stem connected with said valve, a spring mounted or sleeved upon



the threaded stem, and a nut which screws on the threaded stem for regulating tension of the spring.

[Claim 2 not printed in the Gazette.]

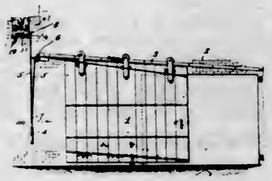
1,269,555. NAIL-PULLER. JOHN GUNNING, Wallace, Idaho, assignor of one-half to James Walsh, Butte, Mont. Filed Nov. 8, 1916. Serial No. 130,217. (Cl. 254—26.)



2. A nail puller comprising, in combination, a tool provided with a socket, a handle received in the socket, a wedge member driven into the handle to expand the same for facilitating the fastening of the handle in the socket, a head formed on the end of the wedge, the said head being of a width to overlap the end of the handle and engage the said tool, nail pulling elements extending in opposite directions from the head, the said nail pulling elements comprising curved sections having their terminals disposed in close proximity to the tool and bifurcated to receive a nail or embrace the said tool.

[Claims 1 and 3 to 5 not printed in the Gazette.]

1,269,556. FIRE-DOOR-RELEASING MECHANISM. ERNEST A. LOWE, North Plainfield, N. J., assignor to Lowe Manufacturing Company, Plainfield, N. J., a Corporation of New Jersey. Filed June 17, 1913. Serial No. 774,101. (Cl. 189—47.)



1. In an automatic releasing apparatus for fire doors and the like, the combination with the door, of a releasing device, detent mechanism normally holding said releasing device out of action and an air thermostat having an air vent with a predetermined rate of leak and operating by the expansive force of a confined body of air to mechanically free the detent mechanism.

2. In an apparatus of the character described, the combination with a door, of a detent controlled releasing apparatus and a thermostat acting directly and mechanically by the force of expansion of heat upon a detent of said releasing apparatus and adjusted to operate upon any abnormal rate of change of temperature affecting said thermostat.

[Claims 3 to 7 not printed in the Gazette.]

1,269,557. TRAP-DOOR-OPERATING MECHANISM. WILLIAM H. MUSSEY, Hollis, N. Y. Filed Mar. 17, 1917. Serial No. 155,520. (Cl. 105—84.)



1. A counter-balancing means for a trap-door hinged to swing on a horizontal axis eccentrically disposed relative to the center of gravity of the door, comprising, in combination, a hinge member secured to a fixed portion of the car, a complementary hinge member secured to the door, and a plurality of springs operatively associated with the two members, the springs being so relatively tensioned that when the door is released in its horizontal position first both and then one only of said springs will act on the door to lift it toward its horizontal position.

2. In a counter-balancing means for a trap-door of the kind described, in combination, a hinge member secured to a fixed portion of the car, a complementary hinge member secured to the door, a part fixedly carried by one of the members, a part movably carried by the other member and adapted to move relatively to the first-mentioned member as the door is lowered toward vertical position, and a plurality of springs of different strengths arranged in tandem to be compressed during said relative movement between said two parts.

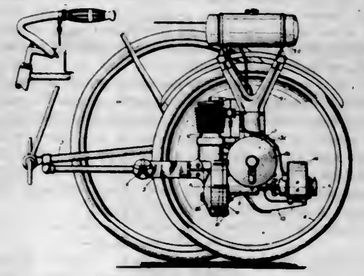
3. In a counter-balancing means for a trap-door hinged to swing on a horizontal axis eccentrically disposed relative to the center of gravity of the door, in combination, a hinge member secured to a fixed portion of the car, a complementary hinge member secured to the door, spring-compressing means carried partially by one of said members and partially by the other, and spring means compressed by the spring-compressing means as the door is swung from its vertical to its horizontal position, the spring means being so designed that as the door is lowered and its center of gravity moves farther and farther away from the vertical plane passing through the door's axis the resistance to compression of the spring means correspondingly increases.

4. In a counter-balancing means for a trap-door hinged to swing on a horizontal axis eccentrically disposed relative to the center of gravity of the door, in combination, a hinge member secured to a fixed portion of the car, a complementary hinge member secured to the door, spring-compressing means carried partially by one of said members and partially by the other, a plurality of springs of different strengths to be compressed by the spring-compressing means when the door is in its horizontal position, the parts being so designed that when the door is released from its horizontal position the various springs act to first move the door upward with a force sufficient to overcome its inertia and starting friction and then continue the movement while diminishing the force in correspondence with the diminishing load as the door's center of gravity approaches closer and closer the vertical plane passing through its axis.

5. In a counter-balancing means for a trap-door of the kind described, the combination with the two-section casing and the co-acting relatively rotatable members arranged therein so that one of these members establishes a spring recess within one of the sections the length of which recess is to be shortened by the movement of one of said members when the door is being lowered to horizontal position, of a spring system confined in the recess and comprising a plurality of springs of different strengths which are simultaneously variously compressed as the length of the recess is shortened.

[Claims 6 to 9 not printed in the Gazette.]

1,269,558. MEANS FOR PROPELLING BICYCLES AND THE LIKE. CARL A. NERACHER, New York, N. Y., assignor to The Dropby Engineering Company, Cleveland, Ohio, a Corporation of Ohio. Original application filed Oct. 1, 1914, Serial No. 864,520. Divided and this application filed May 31, 1916. Serial No. 100,930. (Cl. 180—11.)



1. In a vehicle propelling apparatus, the combination of a shaft to be driven, a worm gear wheel upon said shaft, a power plant frame, a casing, a drive shaft in said frame, a worm upon said shaft intermediate the ends thereof meshing with said worm gear wheel, a pair of bearings in said frame for said shaft, one on either side of said worm, one of said bearings being a ball and ring bearing, a hydrocarbon engine on one end of said frame, a fly wheel on one end of said shaft in one end of said frame, a casing on one end of said frame for said fly wheel, a crank pin in said fly wheel, a piston rod for the engine connected to said crank pin, an inwardly projecting collar on said fly wheel casing, forming a recess for said ball and ring bearing, said collar being exteriorly threaded, a ring provided with threads to engage with the threads on the collar, an inwardly projecting flange on said ring to engage the ball and ring bearing and to hold said bearing in said recess, said fly wheel being provided with a recess from one end of said ball and ring bearing, a magneto connected in the other end of said frame, a spider connected on the other end of said shaft and a web connected to the moving part of the magneto connected to said spider, thereby connecting the magneto to the shaft.

2. In a vehicle propelling apparatus, the combination of a shaft to be driven, a worm gear wheel mounted on said shaft, a frame, a hydro-carbon engine in one end of said frame and a magneto in the other end of said frame, a pair of bearings in said frame, one on each side of said shaft to be driven, a drive shaft mounted in said bearings, a worm on said drive shaft intermediate said bearings meshing with the worm wheel, a fly wheel on one end of said shaft provided with a recess, one of said bearings extending into said recess, a crank pin on said fly wheel, a piston rod connected to said crank pin and means to connect the magneto to the other end of said drive shaft.

3. In a vehicle propelling apparatus, the combination of a shaft to be driven, a worm wheel mounted on said shaft, a frame provided with a tail extension, a hydro-carbon engine in said frame on one side of said shaft, a magneto carried by said tail extension on the other side of said shaft, a pair of bearings, one on each side of said shaft, a drive shaft extending perpendicularly to the shaft to be driven mounted in said bearings, a worm on said drive shaft meshing with the worm wheel, a fly wheel on one end of said drive shaft provided with a recess, one of said bearings extending into said recess, a crank pin on the fly wheel, a piston rod for the engine connected to the crank pin and mechanism to connect the magneto to the other end of the drive shaft.

4. In a vehicle propelling apparatus, the combination of a driven shaft, a worm gear wheel mounted on said shaft, a power plant casing or frame, a pair of bearings in said frame below said driven shaft and one on each side thereof, a drive shaft perpendicular to said driven shaft mounted below said driven shaft in said bearings, a worm gear on said drive shaft meshing with said worm gear wheel,

a fly wheel connected to one end of said drive shaft rotatable in a plane perpendicular to said drive shaft, a crank pin in said fly wheel, a hydro-carbon engine in said frame, on one side of said driven shaft, a piston rod connected at one end to the engine and at the other end to the crank pin, said frame being provided with a tail extension, a magneto carried by said extension on the other end of said frame and the opposite side of said driven shaft from said engine, a magneto shaft on the end of the drive shaft, mechanism to connect said magneto with said magneto shaft and electric conductors connecting the magneto with said engine.

5. In a bicycle propelling apparatus, the combination of a hydro-carbon engine, a drive shaft, means through which the engine is connected to one end of said shaft and drives the same, a magneto connected to the other end of the shaft and driven thereby, a worm on said shaft intermediate the engine and magneto and mechanism including a worm gear wheel engaging said worm, through which the bicycle is driven from said drive shaft.

[Claims 6 to 12 not printed in the Gazette.]

1,269,559. **FOOT-BALL DUMMY.** EDGAR FAUVER and DAN CUMMINS KENAN, Middletown, Conn. Filed Apr. 14, 1917. Serial No. 162,168. (Cl. 46—69.)

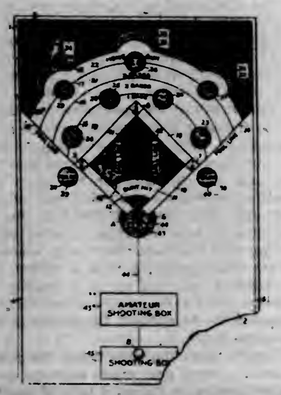


1. A foot ball dummy comprising a generally cylindrical structure having an enlarged base, having an outer casing of fibrous material, a layer of cushioning material immediately within the said casing, and a relatively rigid inner core structure inclosed by the said cushioning material.

3. A foot ball dummy comprising an elongated structure having a cylindrical main part and an enlarged base, having a frame of metal composed of a top and a bottom plate connected by a rod, filling material housed between the said plates, cushioning material exterior to the said filling material and frame, and the said bottom plate being appreciably larger than the said top plate and positioned within the said enlarged base.

[Claim 2 not printed in the Gazette.]

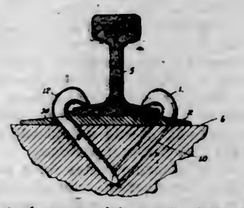
1,269,560. **GAME-BOARD.** EARL J. SIMPSON, Schenectady, N. Y. Filed Jan. 11, 1917. Serial No. 141,892. (Cl. 46—61.)



1. In a game apparatus, a board having at one end a vertical end wall and adjacent vertical side walls, indicia on the board adjacent the end of the board having the end wall which define a base ball field, the "home plate" of the diamond being toward the center of the board, lines defining areas on the ball field which represent plays in a ball game, all of the areas which represent an "out" being of a distinctive color, lines adjacent the other end of the board defining an area which represents a shooting box, a disk to be placed on the "home plate," and a second disk adapted to be placed in the shooting box and propelled toward the first named disk.

[Claim 2 not printed in the Gazette.]

1,269,561. **RAIL-FASTENING.** JAMES ROBERT STEELE, Owego, N. Y., assignor to Steele Rail Anchor Company, Inc., Owego, N. Y., a Corporation of New York. Filed Apr. 27, 1917. Serial No. 164,873. (Cl. 238—2.)



1. A rail fastening comprising a tie plate with diagonal holes at opposite sides of the rail, and fasteners having plain shanks which fit closely in said holes and thence extend diagonally in the tie beneath the rail so that the tie plate rests on and holds the fasteners, and integral laterally projecting heads, the relation of which to the diagonal of the holes and shanks is such as to cause them to bear upon the rail flanges primarily toward their ends, the fasteners being elastic above the tie plate.

5. A rail fastener comprising a tie plate having diagonal holes at opposite sides of the rail, and fasteners comprising plain cylindrical rods of elastic material pointed for driving, and having their upper portions bent to form heads in such relation to the shanks as to cause the heads to bear point first upon the rail flanges when the shanks are driven in the direction of the diagonal holes, the tie plate resting upon and holding the necks of the fasteners.

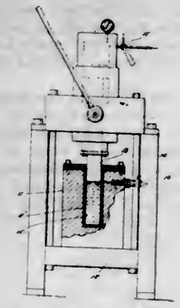
9. A rail fastening comprising a substantially rigid tie plate having inwardly inclined fastener-receiving holes at opposite sides of the rail base seat and fasteners having plain shanks to fit closely in said holes to lock the plate and fasteners rigidly together, and project diagonally into the tie below the plate and above said plate having yielding laterally extending heads with their rail base engaging portions remote from the shank, whereby vertical pressure of the rail base produces lateral as contradistinguished from longitudinal strain on the shank within the openings in the plate and relative vertical movement of the rail and plate is permitted by the yielding of the head of the fastener.

[Claims 2 to 4, 6 to 8, and 10 to 15 not printed in the Gazette.]

1,269,562. **METHOD OF BACTERIA DESTRUCTION BY PRESSURE.** JOSIAH R. WITNAL, Philadelphia, Pa., assignor to Food Sterilization Company, a Corporation of Delaware. Filed Jan. 29, 1917. Serial No. 145,290. (Cl. 99—15.)

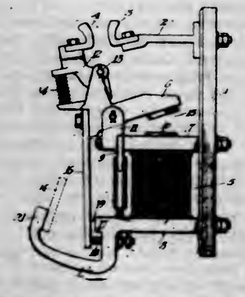
1. The process for the destruction and disintegration of cell bodies and organisms held in suspension in a fluid, which consists in confining such fluid, cell bodies and organisms and exhausting the pressure to cause an expansion of said cell bodies, and thereupon applying a pressure to an extent sufficient to break down such bodies whereby the organisms are destroyed and the cell bodies are ruptured or disintegrated so that the substances thereof are more intimately diffused throughout the containing fluid.

2. The process for the destruction and disintegration of cell bodies and organisms held in suspension in a fluid, which consists in confining such fluid, cell bodies and organisms and exhausting the pressure to cause an expansion of said cell bodies, and thereupon applying a pressure of substantially between 75,000 and 100,000 pounds to



the square inch to break down such bodies whereby the organisms are destroyed and the cell bodies are ruptured or disintegrated so that the substances thereof are more intimately diffused throughout the containing fluid.

1,269,563. **ELECTRIC SWITCH.** CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 14, 1914. Serial No. 861,600. (Cl. 175—281.)



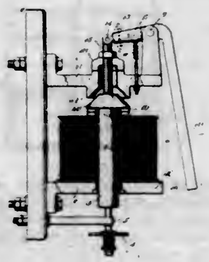
1. An electromagnetic mechanism having a movable member, and operating winding therefor, a magnetic circuit of limited capacity, means controlled by excess flux from said limited capacity circuit for preventing movement of the movable member when the winding is energized above a predetermined value, and means for shunting a portion of the flux through said circuit of limited capacity away from the armature so that it will be inactive to exert a starting pull on the movable member until movement of said member has been initiated.

3. An electromagnet having an energizing winding provided with a core, an armature adapted to be attracted by said core, means including a magnetic circuit of limited capacity for preventing movement of the armature when the winding is energized above a predetermined value, and a magnetic circuit from said core to said circuit of limited capacity comprising a member in shunt to said armature and extending from the circuit of limited capacity nearly to the core, said member being arranged so that it is short-circuited by the armature as the armature moves toward the core whereby an increased pull is exerted on the armature as it approaches the core.

4. An electromagnet having an operating winding provided with a core, an armature adapted to be attracted by said core, a magnetic return circuit of limited capacity from the armature to the core, a second armature connected to the first and arranged to be acted upon by excess flux from the limited capacity circuit to exert a pull in opposition to that of the first armature, and a projection on the limited capacity circuit extending nearly to the core and coöperating across an air gap with the core to provide a magnetic path in parallel to the first armature which is short-circuited by the armature as it moves toward the core whereby an additional pull is exerted thereon as the armature seals with the core.

[Claims 2 and 5 to 7 not printed in the Gazette.]

1,269,564. **ELECTRIC SWITCH.** CLARK T. HENDERSON, Milwaukee, Wis., and WILLIAM C. STEVENS, New York, N. Y., assignors to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Sept. 14, 1914. Serial No. 861,601. (Cl. 175—281.)



1. An electromagnetic mechanism having a movable plunger, a magnetic circuit acting to move the plunger in one direction, a second magnetic circuit acting to hold the plunger against movement, and a third magnetic circuit adapted to be closed as the plunger moves for increasing the moving force after it has overcome the holding force.

2. An electromagnetic mechanism having an armature at least a portion of which constitutes a plunger, said armature being biased to one position and movable to another position, means for causing the electromagnet to hold the armature in its first position when the initial current through the winding is high and to move it to the second position when the current decreases to a predetermined value, and a magnetic circuit controlled by movement of the armature for causing the electromagnet to exert a force on said armature to assist the closing force after the movement of the armature has been initiated.

5. An electromagnetic mechanism having an armature at least a portion of which constitutes a movable plunger, an operating winding for the armature, means by which said winding exerts a pull to move said armature and an opposing pull to prevent movement thereof when the initial current in the winding is above a predetermined value, and said plunger being adapted to cause the holding pull to assist the moving pull after the moving pull has overcome the holding pull.

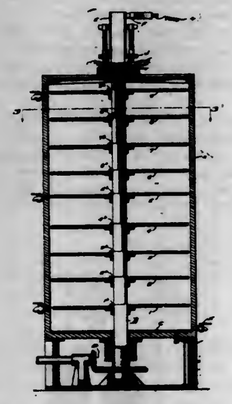
[Claims 3, 4, and 6 to 13 not printed in the Gazette.]

1,269,565. **PROCESS OF ELECTROCHEMICAL PRECIPITATION OF METALS.** EDWARD ROYAL HOLDEN, Los Angeles, Cal. Filed Oct. 10, 1916, Serial No. 124,902. Renewed Nov. 5, 1917. Serial No. 200,456. (Cl. 204—15.)

1. The process of precipitation of metals from solution by introducing an electric current at a plurality of points throughout a solution, and by regulating the resistance thereto, producing and maintaining any desired density of current throughout the electrolyte, substantially as set forth.

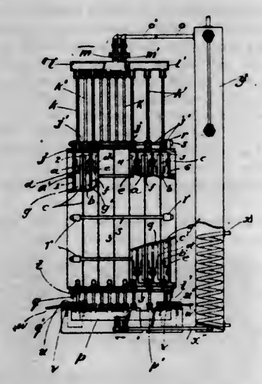
2. The process of treating a solution containing metals, consisting in agitating the solution, in introducing an electric current into the solution at points at different distances from the cathode, and regulating the voltages

to maintain any desired density of current throughout the solution.



3. A process of treating a solution containing metals, introducing electric currents into the solution at points at different distances from the cathode, and regulating the voltage at each point in accordance with its distance from the cathode.

1,269,566. ELECTROLYTIC APPARATUS. ARCHIBALD JAMES MACDOUGALL and GUY NOVERRE MIDDLETON, Toronto, Ontario, Canada, assignors to The Toronto Power Company, Limited, Toronto, Ontario, Canada, a Corporation of Ontario. Filed July 5, 1917. Serial No. 178,616. (Cl. 204—5.)



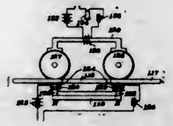
1. An electrolytic apparatus comprising a cell, an electrode couple therein, an insulated offtake whose diameter bears such proportion to its length that the evolved gases during their ascent through said offtake convey with them portions of the electrolyte, gas separating means through which said evolved gases and portions of electrolyte are caused to circulate for their separation, and means for then returning the electrolyte to the cell.

3. An electrolytic apparatus comprising a cell, an electrode couple therein, an insulated offtake whose diameter bears such proportion to its length that the evolved gases during their ascent through said offtake convey with them portions of the electrolyte, gas separating means through which said evolved gases and portions of electrolyte are caused to circulate for their separation, and insulated means for then returning the electrolyte to the cell.

5. An electrolytic apparatus comprising a cell, an electrode couple therein, an insulated offtake for the cell whose diameter bears such proportion to its length that the electrolyte may circulate with negligible shunt-current losses, an intake for the cell to complete the cyclic movement of the electrolyte, and means for regulating the temperature of the electrolyte returned from the offtake to the cell.

[Claims 2 and 4 not printed in the Gazette.]

1,269,567. TRAIN STOP AND SIGNALING DEVICE. WILLIAM CONRAD NEIN, New York, N. Y., assignor of one-third to May A. Holden, administratrix of George A. Holden, deceased, and one-third to Thomas W. Varley, New York, N. Y. Filed July 28, 1914. Serial No. 853,572. (Cl. 246—58.)



5. The combination with a wheeled vehicle traveling along a fixed line of way, of track rails, track magnets comprising permanent magnets, adapted to have their magnetic circuits completed through wheels succeeding each other on the same rail, the poles of said track magnets being presented to wheels upon one side of said track, and means controlled by the magnetism in said circuits for stopping the vehicle.

11. The combination with a wheeled vehicle traveling along a fixed line of way, of track rails, track magnets comprising permanent magnets, adapted to have their magnetic circuits completed through wheels succeeding each other on the same rail, the poles of said track magnets being presented to wheels upon the same side of the track, a coil about the magnetic circuit on the vehicle through which the magnetic circuits of the track magnets are adapted to be completed, a closed circuit for said coil, a source of electromotive force and a translating device also included in said circuit and means for controlling the flow of magnetism from the permanent magnet in the magnetic circuit.

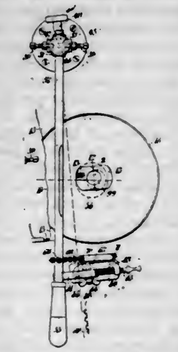
19. The combination with a line of rail upon one side of a railway, a permanent magnet magnetically connected therewith at longitudinally separated points, a plurality of wheels having rolling contact with said rail so as to be at times included in a magnetic circuit with the permanent magnet, a coil surrounding a magnetic circuit through said magnet and wheels and a closed circuit for said coil including a translating device.

22. The combination with a wheeled vehicle traveling along a fixed line of way, of track rails and track magnets adapted to have their magnetic circuits completed through wheels succeeding each other on the same rails and the poles of said magnets being presented to wheels upon one side of said track.

30. The combination with a wheeled vehicle traveling along a fixed line of way, of track rails, track magnets comprising permanent magnets of different strengths at different positions along the line of way, said magnets having their magnetic circuits completed through wheels succeeding each other on the same rails, the poles of said track magnets being presented to the wheels upon one side of said track, a coil about the magnetic circuit on the vehicle through which the magnets are adapted to have their circuits completed, a closed circuit for said coil comprising a translating device, whereby at a predetermined speed the translating device will be operated when passing a permanent magnet of a certain strength valve and not operated in passing permanent magnets of different strength value.

[Claims 1 to 4, 6 to 10, 12 to 18, 20, 21, 23 to 29, and 31 to 34 not printed in the Gazette.]

1,269,568. MECHANISM FOR MAKING BIFOCAL LENSES. ARTHUR E. PAIGE, Philadelphia, Pa. Filed Mar. 4, 1915. Serial No. 12,028. (Cl. 51—3.)



28. In surfacing mechanism, the combination with means for rotating the material which is to be surfaced; of a rotary lap having a conoidal surface with its axis inclined obliquely transversely with respect to the axis of rotation of said material.

33. In surfacing mechanism, the combination with means for rotating the material which is to be surfaced; of a rotary lap having a conoidal surface with its axis extending transversely with respect to the axis of rotation of said material; one edge of said surface being nearer the lap axis than the other edge.

36. In surfacing mechanism, the combination with means for rotating the material which is to be surfaced; of a rotary lap having a conoidal surface arcually curved respectively differently concentrically to its axis and transversely thereto with its axis extending transversely with respect to the axis of rotation of said material; one edge of said surface being nearer the lap axis than the other edge.

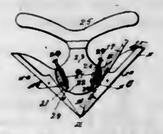
40. In surfacing mechanism, the combination with means for rotating the material which is to be surfaced; of a rotary lap having a conoidal surface with its axis inclined transversely with respect to the axis of rotation of said material, presenting only a transverse line of contact to said material in a plane which is radial to the axis of rotation of said lap and tangential to a circle of rotation of said material; means supporting said lap permitting oscillation of its axis, the center of such oscillation being nearer said abrading surface than the center of transverse curvature of the latter, and intermediate of the length of said line of contact; resilient means for pressing said center toward the surface being abraded; adjustable means for limiting the movement of the lap toward the latter surface; and means limiting the freedom of oscillation of said lap to said radial plane.

70. The combination with a rotatable glass holder; of a lap having an annular conoidal abrading surface rotatable upon an axis inclined to the axis of the glass holder.

[Claims 1 to 27, 29 to 32, 34, 35, 37 to 39, 41 to 69, and 71 to 73 not printed in the Gazette.]

1,269,569. CORE-PLANE OR THE LIKE. JAMES M. PARK, Rock Island, Ill., assignor of one-half to Willis J. Bliesener, Rock Island, Ill. Filed Aug. 4, 1917. Serial No. 184,501. (Cl. 145—7.)

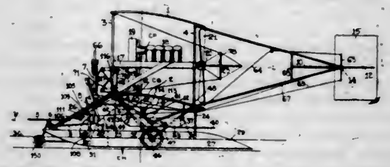
4. A core-plane comprising a body portion having two contacting surfaces which surfaces are to be arranged at right-angles, a face plate forming one side of the frame, an integral projection formed on the face plate and projecting into the frame, said projection being hollowed out to provide a passage for the shavings, a handle pivotally mounted in the frame, said handle having a pivoted portion the periphery of which being provided with rack teeth, cutter blades located in the frame and arranged to be advanced and retarded by means of the peripheral rack of the handle, adjusting screws located on the handle and arranged to contact with the integral projection of the face plate for limiting the projection of the cutting knives



of the blades, said handle alternately advancing and retarding each of the blades by the oscillating movement of the handle, substantially as specified.

[Claims 1 to 3 not printed in the Gazette.]

1,269,570. CONVERTIBLE RUNNING-GEAR. GLENN H. CURTISS, Buffalo, N. Y., assignor to Curtiss Aeroplane and Motor Corporation, a Corporation of New York. Original application filed Aug. 22, 1911, Serial No. 645,340. Divided and this application filed Nov. 18, 1916. Serial No. 132,104. (Cl. 244—2.)



1. A launching and landing gear for air-craft comprising a runner, a supporting strut for the runner arranged to be placed under compression and a second collapsible supporting strut for the runner arranged to be placed under tension by rearward thrust, the compression member being located aft of the tension member.

5. A collapsible launching and landing gear for air-craft comprising a runner, a fixed part of the craft and a pair of meeting struts pivotally connected therewith at points longitudinally spaced, the pivot axes of the struts being relatively stationary, the rearmost one of said struts being longitudinally fixed in length between the runner and the body of the craft and the front strut adjustable to permit movement of the runner with the rearmost strut as a radius.

10. A launching and landing gear for air-craft comprising a collapsible runner, a release latch arranged to hold said runner in collapsed position, and foot operated means for collapsing the runner, aerial controlling means for said craft and hand operated means for said aerial control means.

15. A launching and landing gear for hydroaeroplanes inclundig a pontoon having a downwardly and rearwardly inclined prow, a land runner projected beneath said prow portion together with collapsible runners located rearwardly of said prow runner at opposite sides of the pontoon, both the forward runner and the rear runner, when extended, extending beyond the horizontal plane of the bottom of the pontoon.

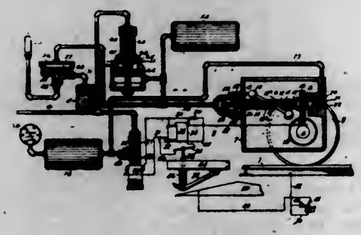
[Claims 2 to 4, 6 to 9, 11 to 14, 16, and 17 not printed in the Gazette.]

REISSUES.

14,481. SPEED-CONTROLLING APPARATUS FOR RAILWAY-VEHICLES. LLOYD V. LEWIS, Edgewood borough, Pa., assignor to The Union Switch and Signal Company, Swissvale, Pa., a Corporation of Pennsylvania. Filed Jan. 19, 1917. Serial No. 143,385. Original No. 1,185,214, dated May 30, 1916, Serial No. 755,537, filed Mar. 19, 1913. (Cl. 246—58.)

1. Controlling apparatus for vehicles comprising a centrifugal device operatively connected with an axle of a

vehicle, fluid pressure on the vehicle acting in opposition to the centrifugal device, means on the vehicle for permitting a gradual reduction of fluid pressure in accordance with lapse of time, and means controlled by the centrifugal device when the latter overcomes the said fluid pressure for controlling the vehicle.



2. Controlling apparatus for vehicles comprising a centrifugal device operated by the movement of the vehicle, fluid pressure on the vehicle acting in opposition to the centrifugal device, means on the vehicle for permitting a gradual reduction of fluid pressure in accordance with lapse of time, and means controlled by the centrifugal device when the latter overcomes the said fluid pressure for controlling the vehicle.

3. Controlling apparatus for vehicles comprising a centrifugal device operatively connected with an axle of a vehicle, fluid pressure on the vehicle acting in opposition to the centrifugal device, means for permitting reduction of said fluid pressure through an orifice of restricted area, and means responsive to opening of said centrifugal device for controlling the vehicle.

4. Apparatus for controlling railway vehicles comprising a centrifugal device operated by an axle of a vehicle, fluid pressure on the vehicle acting in opposition to said centrifugal device, means independent of the fluid pressure for exerting a comparatively small force on the centrifugal device in the same direction as the action of the fluid pressure, means for permitting reduction of said fluid pressure, and means responsive to the centrifugal device for controlling the vehicle when the pressure exerted by the centrifugal device is sufficient to overbalance the sum of the pressure of the fluid and the pressure exerted by said independent means.

5. Speed controlling apparatus for vehicles comprising a centrifugal device operated by an axle of the vehicle, fluid pressure on the vehicle tending to hold the centrifugal device closed, means for permitting reduction of said fluid pressure through an orifice of restricted area, means for exerting sufficient pressure on the centrifugal device to hold the latter closed when the speed of the vehicle is low and the fluid pressure acting on the centrifugal device is atmospheric, and means responsive to opening of the centrifugal device for controlling the vehicle.

6. Speed controlling apparatus for vehicles comprising a centrifugal device operated by an axle of the vehicle, fluid pressure tending to hold the centrifugal device closed, means for permitting reduction of said fluid pressure, means for indicating to the driver of the vehicle the pressure of said fluid, and means responsive to opening of the centrifugal device for controlling the vehicle.

7. Speed controlling apparatus for vehicles comprising a centrifugal device operated by the movement of the vehicle, fluid pressure tending to hold the centrifugal device closed, means for permitting reduction of said fluid pressure, means for indicating to the driver of the vehicle the pressure of said fluid, and means responsive to opening of the centrifugal device for controlling the vehicle.

8. Speed controlling apparatus for vehicles comprising a source of fluid pressure and a reservoir on the vehicle, means for connecting the reservoir with the said source or disconnecting the reservoir from said source and permitting gradual reduction of the pressure in the reservoir through a restricted orifice, a centrifugal device driven by an axle of the vehicle and acting in opposition to the pressure in the reservoir, and means responsive to opening of the centrifugal device for controlling the vehicle.

9. Speed controlling apparatus for railway vehicles comprising a source of fluid pressure on a vehicle, a reservoir on the vehicle normally connected with the source, a centrifugal device operated by an axle of the vehicle and acting in opposition to the pressure in the reservoir, means on the vehicle for disconnecting the reservoir from the source and permitting gradual reduction of the reservoir pressure through a restricted orifice, means located in the trackway and adapted to at times cause operation of said means, and means responsive to opening of the centrifugal device for controlling the vehicle.

10. Speed controlling apparatus for vehicles comprising a source of fluid pressure and a reservoir on the vehicle, means for connecting the reservoir with the said source or disconnecting the reservoir from said source and permitting gradual reduction of said reservoir pressure through a restricted orifice, a centrifugal device driven by an axle of the vehicle and acting in opposition to the pressure in the reservoir, means for holding the centrifugal device closed when the pressure in the reservoir is atmospheric and the speed of the vehicle is low, and means responsive to opening of the centrifugal device for controlling the vehicle.

11. Controlling apparatus for vehicles, comprising a centrifugal device operated by a wheel or axle of the vehicle, fluid pressure on the vehicle acting in opposition to the centrifugal device, means for gradually varying the pressure of said fluid in accordance with lapse of time, and means controlled by said centrifugal device for controlling the vehicle.

12. A speed controlling apparatus for railways comprising a signal, a trip located in the rear of the signal, means for rendering said trip operative or inoperative according as the signal indicates stop or proceed, a source of fluid pressure on a vehicle, a reservoir on the vehicle normally connected with said source, means on the vehicle controlled by said trip when the latter is operative for disconnecting the reservoir from the source and connecting the reservoir with atmosphere thereby permitting reduction of pressure in the reservoir; a centrifugal device operated by a wheel of the vehicle and acting in opposition to the fluid pressure in the reservoir, and means responsive to opening of the centrifugal device for controlling the vehicle.

13. A speed controlling apparatus for vehicles comprising a source of fluid pressure and a reservoir on the vehicle, a centrifugal device operated by an axle of the vehicle and acting in opposition to the fluid pressure in the reservoir, a valve device adapted to connect said reservoir with the source of fluid pressure or with atmosphere according as it occupies one position or another, said valve being normally held in the first of said positions, means located in the trackway for at times causing said valve device to be moved to the second position, and means affected by the centrifugal device for controlling the vehicle when the action of the centrifugal device overbalances the fluid pressure.

14. Speed controlling apparatus for railway vehicles comprising a centrifugal device on the vehicle, a member moved longitudinally by the weights of said device, a source of fluid pressure on the vehicle acting in opposition to the movement of said member corresponding to the outward movement of the weights, means on the vehicle for permitting gradual decrease of said fluid pressure, a device in the trackway for causing operation of said means, and means affected by outward movement of the weights for controlling the vehicle.

15. In combination, a vehicle, brakes therefor, a warning signal device on the vehicle, a fluid pressure reservoir on the vehicle, means responsive to a certain reduction of pressure in said reservoir for causing operation of said warning signal, means responsive to a greater reduction of pressure in said reservoir for causing application of the brakes, and means for permitting gradual reduction of pressure in said reservoir, whereby an interval of time elapses between the operation of the warning signal and the application of the brakes.

16. In combination, a vehicle, brakes therefor, a reservoir on the vehicle, means for supplying fluid pressure to said reservoir, an orifice of small area for said reservoir, means for opening the reservoir to atmosphere through said orifice thereby permitting gradual reduction of pressure in said reservoir, means controlled by a slight reduction of pressure in said reservoir for giving a warning signal, and means controlled by a considerable reduction of pressure for causing an application of said brakes, whereby a period of time intervenes between the warning signal and the application of the brakes.

17. In combination, a vehicle, brakes therefor, a reservoir on the vehicle, means for supplying fluid pressure to said reservoir, an orifice of small area for said reservoir, means for opening the reservoir to atmosphere through said orifice thereby permitting gradual reduction of pressure in said reservoir, a warning signal on the vehicle, a valve biased to the open position which valve is held closed by the fluid pressure in said reservoir but is opened when the fluid pressure in the reservoir is considerably reduced, and which valve is adapted when opened to cause an application of the brakes, and means responsive to a slight reduction of fluid pressure in the reservoir for causing an operation of said warning signal.

18. In combination, a vehicle, brakes therefor, a warning signal on the vehicle, a fluid pressure reservoir on the vehicle, means responsive to a certain change of pressure in said reservoir for causing operation of said warning signal, means responsive to a greater change of pressure in said reservoir for causing application of the brakes, and means for causing a gradual change of pressure in said reservoir, whereby an interval of time elapses between the operation of the warning signal and the application of the brakes.

19. In combination, a railway vehicle, a speed-responsive device thereon, a fluid pressure receptacle, means for causing gradual variation of the pressure in said receptacle in accordance with lapse of time, and vehicle-governing means controlled by said speed-responsive device and by the fluid pressure in said receptacle.

20. A speed controlling apparatus for railway vehicles comprising a source of fluid pressure on the vehicle, a reservoir normally connected with said source, means for disconnecting said reservoir from the source of fluid pressure and connecting the reservoir with atmosphere through a restricted orifice thereby permitting a gradual reduction of pressure in the reservoir; means located in the trackway for at times causing operation of said means, a centrifugal device operated by an axle of the vehicle and acting in opposition to the fluid pressure in the reservoir, a second reservoir on the vehicle, means for supplying the second reservoir with fluid pressure, a valve connected with said second reservoir and opened by the centrifugal device when the latter overcomes the fluid pressure acting against it, means responsive to a slight reduction of pressure in the second reservoir for causing a warning signal to be given on the vehicle, and means responsive to a considerable reduction of pressure in said second reservoir for causing an application of the brakes of the vehicle.

21. In combination, a railway vehicle, a movable member thereon, fluid pressure acting on said member, speed-responsive means operated by a wheel or axle of the vehicle for exerting pressure on said member in opposition to the fluid pressure, means for gradually varying the pressure of said fluid on the member in accordance with lapse of time, and vehicle governing means controlled by said member.

22. Controlling apparatus for railway vehicles, comprising a speed-responsive device operatively connected with a wheel of the vehicle, means on the vehicle adapted to vary in accordance with lapse of time, means located in the trackway and adapted to set said time-varying means into operation, and means controlled by coöperation of said speed-responsive device and said time-varying means for controlling the vehicle.

23. Speed controlling apparatus for vehicles comprising a movable member on the vehicle, means for exerting a force on said member in one direction varying in accordance with the speed of the vehicle, means for exerting an opposing force on said member varying in accordance with lapse of time, and traffic controlling means on said vehicle controlled by said movable member.

14,482. TENSIONAL JOINT. CURTIS J. ROTHERMEL, Philadelphia, Pa., assignor, by mesne assignments, to Signote System, Inc., Chicago, Ill. Filed Feb. 16, 1918. Serial No. 217,700. Original No. 1,123,805, dated Jan. 5, 1915, Serial No. 831,607, filed Apr. 13, 1914. (Cl. 24—23.)



1. A splice-joint comprising the mutually-overlapping ends of a flexible-metal strip and a flexible-metal girth encircling said ends, said girth and overlapping strip ends being simultaneously crimped together, whereby said strip ends are confined at their crimp between the crimped walls of the said girth.

2. A splice-joint comprising the mutually-overlapping ends of a flat flexible-metal strip, and a girth formed of a flat flexible-metal strip bent to surround said ends, said girth and overlapping strip ends being simultaneously crimped together, whereby said strip ends are confined at their crimp between the crimped walls of said girth.

3. A sealed joint for the mutually overlapped ends of flat tensional box strapping comprising in combination the mutually overlapped tensional strap ends and a reinforcing girth comprising a strip of stiff metal bent around the overlapped strap ends, the strap ends and reinforcing girth being thereafter simultaneously crimped to afford a conjoint deformation, transverse to the strap ends, in both strap ends and in the walls of said reinforcing girth and on both sides of the strap ends, whereby the strap ends and girth are provided with conjoint interlocking transverse deformations and a tension resisting joint thereby produced, in which each of the strap ends and sides of the reinforcing girth contribute to the tensional strength of the joint by the mutual effect of their interlocking deformations.

4. A tension resisting joint for tensional box strapping comprising in combination two mutually overlapped box strap ends, and a reinforcing girth, of metal of a thickness appropriate to the desired strength of the completed joint, embracing the mutually overlapped strap ends, the reinforcing girth and overlapped strap ends being all simultaneously crosswise of the strap deformed into a conjoint interlocked tension resisting deformation to provide a tension resisting joint in which the strength of the tension resisting shoulders on the reinforcing girth prevents the deformed sections of the strap ends from being pulled out of their interlocking deformations.

5. A method of forming a tension-resisting joint connecting strap ends and adapted to resist heavy tensional strains on the strap, which comprises assembling the strap ends overlapped in face to face contact, with an embracing flexible metal reinforcing and strengthening girth having walls of a thickness sufficient to render them effectually stiff when flexed and resistant against being straightened out; and simultaneously crosswise of the strap crimping the strap ends and girth, and forming in them mutually interlocking, abrupt tension-resisting bends or shoulders disposed across the line of tension on the strap, whereby the double embracing walls of the crimp in the girth so confine between them the corresponding sections of the overlapping strap ends as to resist effectually the straightening of said bends or shoulders.

6. A tension-resisting joint for tension resisting box-strapping comprising, in combination, two mutually overlapped box-strap ends and a reinforcing girth, crimping means for deforming the material of said strap ends and girth crosswise of said straps.

14,483. DESIGN FOR A SNAP-SWITCH COVER. GEORGE B. THOMAS, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Apr. 15, 1918. Serial No. 229,476. Term of patent 14 years. Original No. 51,271, dated Sept. 11, 1917, Serial No. 65,621, filed Dec. 7, 1915, for 3½ years.





The ornamental design for an article of manufacture substantially as shown.

14,484. SHOE-BLACKING DEVICE. WILLIAM E. ELAM, Washington, D. C. Filed Jan. 6, 1917. Serial No. 140,914. Original No. 1,191,879, dated July 18, 1916, Serial No. 77,947, filed Feb. 12, 1916. (Cl. 15—46.)



1. The combination with a block having an oblique working face, a brush alongside said face and a passage leading from said face through the block to the side opposite said face, of a blacking receptacle detachably secured to said side and internally continuous with said passage, and a removable cap engaging the block peripherally and hermetically covering said oblique face and brush.

2. The combination with a block having an oblique working face, a brush alongside that face, and a passage leading from that face through the block to the opposite side, of a removable cap peripherally engaging the block and hermetically inclosing said face and brush, a removable plug normally closing the passage, a collapsible blacking tube detachably secured to said opposite side and integrally continuous with said passage, and a trough handle fixed to the block, protecting three sides of the tube and provided with lateral slots to permit manipulating the tube within the trough.

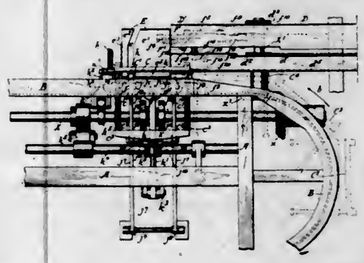
3. The combination with a rigid trough-like handle open at one end adapted to receive and protect a collapsible tube, of a block fixed in and projecting from one end of the trough, having an oblique blacking applying face, a threaded recess opposite that face in position to receive the usual threaded end of such tube, and with a passage leading from said recess to said face, and a removable plug adapted to close said passage and extend into the end portion of a tube when the latter is in place in the block.

4. The combination with an open trough-like handle of stiff material, of a blacking applying block fixed in and projecting from one end of the trough, and adapted to receive and distribute blacking from a collapsible tube secured in the block, said handle being cut away on opposite sides near said block to permit grasping a tube therein with the fingers.

5. The combination with a paste spreading shoe brush, of an adjacent block having a paste applying face extending from near the middle of the side of the pliable portion of the brush obliquely away from both the axis and the face of the brush, whereby the free end portion of the bristles, without abrupt bending, may lie flat upon the shoe when paste is properly applied by the oblique face of the block.

6. The combination with a paste spreading brush, of a closely adjacent block having a paste applying face extending, at a point near the middle of the side of the free portion of the bristles, obliquely away from both the axis and the face of the brush, and means for supplying paste to the paste applying face.

14,485. BOOKBINDING-MACHINE. ALFRED BREDENBERG, Champlain, N. Y., assignor of one-half to The Sheridan Iron Works, a Corporation of New York, and one-half to T. W. & C. B. Sheridan Company, a Corporation of New York. Filed Feb. 6, 1917. Serial No. 147,017. Original No. 1,051,074, dated Jan. 21, 1913, Serial No. 623,315, filed Apr. 25, 1911. (Cl. 11—1.)



1. A book-binding machine including, in combination, a signature-gathering mechanism; a binding mechanism comprising a series of signature-group clamps, means for causing the clamps to travel successively through the machine, and means for automatically causing the closing of the successive clamps upon the transferred signature-groups; and mechanism intermediate said gathering and binding mechanisms for transferring the successive signature-groups from the delivery of the gathering mechanism and feeding them into the successive clamps.

2. A book-binding machine including, in combination, a signature-gathering mechanism; a binding mechanism comprising a series of signature-group clamps, each constructed to hold and convey a signature-group with its back edge at the proper height, means for causing the clamps to travel successively through the machine, and means for automatically causing the closing of the successive clamps upon the transferred signature-groups; and mechanism intermediate said gathering and binding mechanisms for transferring the successive signature-groups from the delivery of the gathering mechanism and feeding them into position at the proper height within the successive clamps.

3. A book-binding machine including, in combination, a signature-gathering mechanism; a binding mechanism comprising a series of upright signature-group clamps, each constructed with open bottom to hold and convey a signature-group with its back edge at the proper height, means for causing the clamps to travel successively through the machine, and means for automatically causing the closing of the successive clamps upon the transferred signature-groups; and mechanism intermediate said gathering and binding mechanisms for transferring the successive signature-groups from the delivery of the gathering mechanism and carrying each signature-group to the proper height within its clamp.

4. A book-binding machine including, in combination, a signature-gathering mechanism; a binding mechanism comprising a series of upright signature-group clamps, each constructed with open bottom to hold and convey a signature-group with its back edge at the proper height, means for causing the clamps to travel successively through the machine, and means for automatically causing the closing of the successive clamps upon the transferred signature-groups; and mechanism intermediate said gathering and binding mechanisms for transferring the successive signature-groups from the delivery of the gathering mechanism and carrying each signature-group with a rising movement through the open bottom of its clamp to the proper height within the clamp.

5. A book-binding machine including, in combination, a signature-gathering mechanism; a binding mechanism comprising a series of signature-group clamps, means for causing the clamps to travel successively through the machine, and means for automatically causing the closing of the successive clamps upon the transferred signature-groups; and mechanism intermediate said gathering and binding mechanism for transferring the successive signature-groups from the delivery of the gathering mechanism and feeding them into the successive clamps, comprising a signature-group holder swingingly movable for swinging a signature-group from its flatwise gathered position to upright position, and means for actuating said holder.

6. A book-binding machine including, in combination, a signature-gathering mechanism; a binding mechanism comprising a series of signature-group clamps, means for causing the clamps to travel successively through the machine, and means for automatically causing the closing of the successive clamps upon the transferred signature-groups; and mechanism intermediate said gathering and binding mechanisms for transferring the successive signature-groups from the delivery of the gathering mechanism and feeding them into the successive clamps, comprising a signature-group holder swingingly movable for swinging a signature-group from its flatwise gathered position to upright position, means for actuating said holder, and means for subsequently causing each signature-group to enter with a rising movement into its clamp.

7. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring means comprising a movable holder adapted to successively receive and carry signature-groups from said gathering machine and a contrivance for moving each such group from said holder to said clamp, and means for automatically causing the closing of said clamp upon said signature group.

8. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring means comprising a swinging holder adapted to receive signature-groups substantially flatwise and swing them to upright position, and a lifter for lifting such groups from said holder into said clamp.

9. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring means comprising a swinging holder adapted to receive signature-groups substantially flatwise and swing them to upright position, a retaining part opposed to the upright holder position, and a lifter for lifting such groups from said holder into said clamp.

10. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring means comprising a lifter adapted to lift each such group into said clamp and a device for causing lateral adjustment of the group in said clamp.

11. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring means comprising a lifter adapted to lift each such group into said clamp and a device for causing said lifter to take an inclined direction of movement for effecting lateral adjustment of the group in said clamp.

12. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring means comprising a swinging holder adapted to receive signature-groups substantially flatwise and swing them to upright position, a lifter for lifting such groups from said holder into said clamp, and a device for causing lateral adjustment of the group in said clamp.

13. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring mechanism comprising a contrivance for reaching to the said gathering mechanism delivery and drawing a group therefrom and a contrivance for moving such group into said clamp.

14. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanisms for transferring each signature-group from the delivery of the gathering mechanism to said clamp; said transferring mechanism comprising a contrivance constructed, fitted and actuable to reach to the said gathering mechanism delivery and to engage and draw a group therefrom, a holder adapted to receive a group so drawn from the gathering mechanism, and constructed and fitted to swing it to upright position, and a contrivance for moving such group from the holder upward into said clamp.

15. A book binding machine including in combination a signature gathering mechanism, a binding mechanism comprising a clamp, and means intermediate said gathering and binding mechanism for transferring each signature-group from the delivery of the gathering mechanism to said clamp, and means coöperating therewith for causing the opening and closing of said clamp; said transferring means comprising a swinging holder adapted to receive signature-groups substantially flatwise and swing them to upright position, and a lifter for lifting such groups from said holder into said clamp.

16. A book binding machine including in combination a transferring mechanism, a gathering mechanism adapted to present signature-groups successively to said transfer mechanism, a binding mechanism having traveling clamps adapted to be presented successively to said transfer mechanism, said transfer mechanism constructed and adapted to receive a signature-group substantially flatwise, set it on edge, insert it into one of said clamps, and bring about its clamping therein.

17. A book binding machine including in combination a transferring mechanism, a gathering mechanism adapted to present signature-groups successively to said transfer mechanism, a binding mechanism having traveling clamps adapted to be presented successively to said transfer mechanism, said transfer mechanism constructed and adapted to receive a signature-group substantially flatwise, set it on edge, insert it into one of said clamps, and bring about its clamping therein, and adjust it there.

18. A transfer mechanism for book binding or analogous machines including in combination a swinging holder constructed and located to have objects successively fed substantially flatwise to it, means for swinging said holder

from a substantially flatwise to an upright position, and means for moving an object from the upright holder into engagement with a clamp or the like.

19. A transfer mechanism for book binding or analogous machines including in combination a swinging holder constructed and located to have objects successively fed substantially flatwise to it, means for swinging said holder from a substantially flatwise to an upright position, a retaining part located to oppose the holder when in upright position, and means for moving an object from the upright holder into engagement with a clamp or the like.

20. A transfer mechanism for book binding or analogous machines including in combination a holder constructed and located to have objects successively fed to it, and a contrivance for moving an object from said holder to a clamp, said contrivance comprising a plurality of studs constructed and located to have each object rest edgewise thereon and having means for causing vertical movement of such studs.

21. A transfer mechanism for book binding or analogous machines including in combination a holder constructed and located to have objects successively fed to it, and a contrivance for moving an object from said holder to a clamp, said contrivance comprising a plurality of studs constructed and located to have each object rest edgewise thereon and having means for causing vertical movement of such studs, and the said holder having one or more stud-receiving slots.

22. A transfer mechanism for book binding or analogous machines including in combination a swinging holder constructed and located to have objects successively fed substantially flatwise to it, means for swinging said holder from a substantially flatwise to an upright position, a retaining part located to oppose the holder when in upright position, and a contrivance for moving an object from the upright holder into engagement with a clamp, said contrivance adapted to have each object rest edgewise thereon and having means for causing the member's vertical movement.

23. A transfer mechanism for book binding or analogous machines including in combination a swinging holder constructed and located to have objects successively fed substantially flatwise to it, means for swinging said holder from a substantially flatwise to an upright position, a retaining part located to oppose the upright holder when in upright position, and a contrivance for moving an object from the upright holder into engagement with a clamp, said contrivance comprising a plurality of studs constructed and located to have each object rest edgewise thereon and having means for causing vertical movement of such studs, and the said retaining part having one or more stud-receiving slots.

24. A transfer mechanism for book binding or analogous machines including in combination a holder constructed and located to have objects successively fed to it, a contrivance for moving an object from said holder to a clamp, a stop oscillated with said clamp and means for laterally adjusting the object toward said stop after the object has been moved to said clamp.

25. A transfer mechanism for book binding or analogous machines including in combination a holder constructed and located to have objects successively fed to it, a contrivance for moving an object from said holder to a clamp comprising vertically and laterally movable studs, a stop oscillated with said clamp and means for laterally adjusting the object toward said stop after the object has been moved to said clamp comprising inclined slots engaged by said studs.

26. A transfer mechanism for book binding or analogous machines including in combination a holder constructed and located to have objects successively fed to it, a clamp, means for moving an object from said holder to said clamp, and a reciprocating contrivance for reaching out to a support at one side and drawing an object therefrom on to said holder, said contrivance including a to-and-fro moving arm and a movable finger carried thereby.

27. A transfer mechanism for book binding or analogous machines including in combination a holder constructed and located to have objects successively fed to it, a clamp, means for moving an object from said holder to said clamp, and a reciprocating contrivance for reaching out to a support at one side and drawing an object therefrom on to said holder, said contrivance including an oscillating arm, a movable finger carried thereby, and a mechanical movement for causing the finger on each instroke to pass into object-engaging position, and on each outstroke to pass out of such position.

28. A transfer mechanism for book binding or analogous machines including a holder, a contrivance for reaching out to a support at one side and drawing an object therefrom on to said holder, said contrivance including an oscillating arm, a movable finger carried thereby, and a mechanical movement for causing the finger on each instroke to pass into object-engaging position, and on each outstroke to pass out of such position, said mechanical movement including a friction sleeve, a lever pivoted on said arm and connected to said sleeve and a link extending from said lever to said finger.

29. In combination with a clamp, a transfer mechanism for book binding machines including a holder located below said clamp and adapted to swing from substantially flatwise to substantially upright position, a lifting contrivance, constructed and fitted to operate upon an object in said holder, and a single machine part having connections for effecting operations in the following order; holder swings up raising object to upright position, lifter lifts object from holder to clamp, and parts resume original positions.

30. In combination with a clamp, a transfer mechanism for book binding machines including a holder located below said clamp and adapted to swing from substantially flatwise to substantially upright position, a lifting contrivance, constructed and fitted to operate upon an object in said holder, a clamp-operating device and a single machine part having connections for effecting operations in the following order: holder swings up raising object to upright position, lifter lifts object from holder to clamp, clamp operating device causes clamp to close, and parts resume original positions.

31. In combination with a clamp, a transfer mechanism for book binding machines including a holder located below said clamp and adapted to swing from substantially flatwise to substantially upright position, an out-and-in-moving reaching device adapted to engage and draw an object to said holder, a lifter, constructed and fitted to operate upon an object in said holder, a clamp operating device, and a single machine part having connections for effecting operations in the following order: reaching device engages and draws object inward to holder, holder swings up raising object to upright position, lifter lifts object from holder to clamp, clamp operating device causes clamp to close, and parts resume original position.

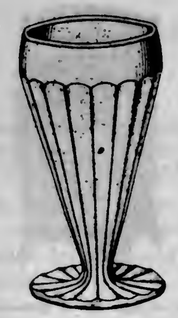
DESIGNS.

52,093. SODA-GOBLET. FRANK M. DUNN, Oakland, Cal., assignor to United States Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1918. Serial No. 218,001. Term of patent 7 years.



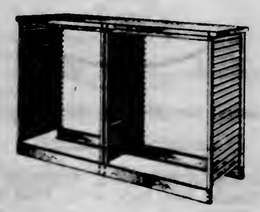
The ornamental design for a soda goblet, substantially as shown.

52,094. ICE-CREAM GOBLET. FRANK M. DUNN, Oakland, Cal., assignor to United States Glass Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Feb. 18, 1918. Serial No. 218,002. Term of patent 7 years.



The ornamental design for an ice cream goblet, substantially as shown.

52,095. PRINTER'S-CASE STAND. JOSEPH E. GAGNON, Philadelphia, and OSCAR B. ANDERSON, Chester, Pa., assignors to Keystone Type Foundry, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 1, 1915. Serial No. 5,577. Term of patent 14 years.



The ornamental design for a printer's case stand, as shown in the accompanying drawing.

52,096. FURNITURE, CASKET, INTERIOR, OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,544. Term of patent 3½ years.



The ornamental design for furniture, casket, interior, or exterior decoration, substantially as shown and described.

52,097. FURNITURE, CASKET, INTERIOR, OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,546. Term of patent 3½ years.



The ornamental design for furniture, casket, interior or exterior decoration, substantially as shown and described.

52,098. FURNITURE, CASKET, INTERIOR, OR EXTERIOR DECORATION. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,547. Term of patent 3½ years.



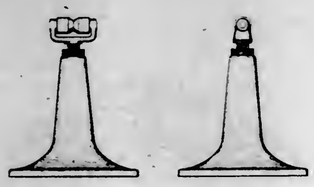
The ornamental design for furniture, casket, interior or exterior decoration, substantially as shown and described.

52,099. MANUFACTURED FIGURE FOR FURNITURE AND CASKET DECORATIONS AND FOR INTERIOR AND EXTERIOR DECORATIONS. ADOLPH M. HOLSTEIN, Syracuse, N. Y. Filed Aug. 22, 1917. Serial No. 187,570. Term of patent 3½ years.



The ornamental design for a manufactured figure for furniture and casket decorations, and for interior and exterior decorations, substantially as shown and described.

52,100. ADJUSTABLE STOCK-SUPPORT. WILLIAM C. LOEHRIG, Hartford, Conn., assignor to A. F. Way Company, Inc., Hartford, Conn., a Corporation of Connecticut. Filed Dec. 3, 1917. Serial No. 205,268. Term of patent 14 years.



The ornamenal design for an adjustable stock support, as shown.

52,101. PHONOGRAPH-CABINET. KENNETH F. MATTHEWS, Waukesha, Wis., assignor to The R. L. Kenyon Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Mar. 2, 1918. Serial No. 220,059. Term of patent 7 years.



The ornamental design for a phonograph cabinet as shown.

52,102. PHONOGRAPH-CABINET. KENNETH F. MATTHEWS, Waukesha, Wis., assignor to The R. L. Kenyon Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Mar. 2, 1918. Serial No. 220,060. Term of patent 7 years.



The ornamental design for a phonograph cabinet as shown.

52,103. PHONOGRAPH-CABINET. KENNETH F. MATTHEWS, Waukesha, Wis., assignor to The R. L. Kenyon Company, Waukesha, Wis., a Corporation of Wisconsin. Filed Mar. 2, 1918. Serial No. 220,061. Term of patent 7 years.



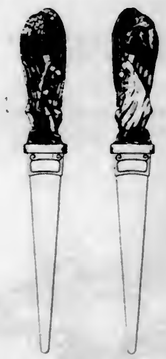
The ornamental design for a phonograph cabinet as shown.

52,104. CROCHET-BALL HOLDER. EARL C. POWELL, Chester, W. Va. Filed Mar. 13, 1918. Serial No. 222,245. Term of patent 7 years.



The ornamental design for a crochet ball holder, as shown.

52,105. PAPER-CUTTER OR SIMILAR ARTICLE. WILLIAM SPEITEL, New York, N. Y. Filed Mar. 7, 1918. Serial No. 221,077. Term of patent 3½ years.



The ornamental design for a paper cutter or similar article, substantially as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 11, 1918.

(PUBLISHED JULY 6, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 87,878. (CLASS 49. DISTILLED ALCOHOLIC LIQUORS.) ANDRÉS MORALES, Malaga, Spain. Filed July 10, 1915.



The signature is that of the late Pedro Morales, father of the applicant.

Particular description of goods.—Aguardiente, (Brandies and Whiskies.)

Claims use since Sept. 28, 1896.

Ser. No. 92,653. (CLASS 15. OILS AND GREASES.) WADHAMS OIL COMPANY, Milwaukee, Wis. Filed Feb. 5, 1916.

IMPERIAL

Particular description of goods.—Gasolene.

Claims use since Apr. 5, 1911.

Ser. No. 97,536. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) APPLETON COMPANY, Lowell, Mass. Filed Aug. 22, 1916.

APPLEFABRICS

The trade-mark comprising the word "Applefabrics," no claim being made to the exclusive use of the word "fabrics" apart from the mark.

Particular description of goods.—Fancy Goods in the Piece—viz., Ginghams, Shirtings, and Cotton Flannels.

Claims use since June 28, 1916.

Ser. No. 97,539. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) APPLETON COMPANY, Lowell, Mass. Filed Aug. 22, 1916.

APPLEMADRAS

The trade-mark comprising the word "Applemadras," no claim being made to the exclusive use of the word "madras" apart from the mark.

Particular description of goods.—Shirtings.

Claims use since June 30, 1916.

Ser. No. 97,540. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) APPLETON COMPANY, Lowell, Mass. Filed Aug. 22, 1916.

APPLESHIRTING

The trade-mark comprising the word "Appleshirting," no claim being made to the exclusive use of word "shirting" apart from the mark.

Particular description of goods.—Shirtings.

Claims use since June 30, 1916.

Ser. No. 100,611. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CASTLE BROTHERS, San Francisco, Cal. Filed Jan. 15, 1917.

OUTING

Particular description of goods.—Seeded Raisins, Prunes, Dried Pears, Dried Apricots, Dried Nectarines, Dried Figs, Dried Pitted Plums, and Dried Peaches.

Claims use since the year 1905.

Ser. No. 101,087. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) EASTMAN KODAK CO., Rochester, N. Y. Filed Feb. 1, 1917.

HAWK-EYE

Particular description of goods.—Photographic Film.
Claims use since January, 1912.

Ser. No. 102,688. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE MECHANICAL RUBBER COMPANY, New York, N. Y.; Chicago, Ill., and Cleveland, Ohio. Filed Apr. 3, 1917.

SHIELD

Particular description of goods.—Rubber Toys—Namely, Dolls, Toy Animal Figures, and Rattles.
Claims use since Sept. 20, 1915.

Ser. No. 102,689. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE MECHANICAL RUBBER COMPANY, New York, N. Y.; Chicago, Ill., and Cleveland, Ohio. Filed Apr. 3, 1917.

M

Particular description of goods.—Rubber Toys—Namely, Dolls, Toy Animal Figures, and Rattles.
Claims use since Sept. 20, 1915.

Ser. No. 102,886. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) LILYWOOD FARMS COMPANY, Robinsdale, Minn. Filed Apr. 11, 1917.

[redacted]

Particular description of goods.—Butter.
Claims use since Jan. 27, 1917.

Ser. No. 103,004. (CLASS 37. PAPER AND STATIONERY.) AUTOMATIC RECORD COMPANY, Chicago, Ill. Filed Apr. 16, 1917.

MURR-SYSTEM

Particular description of goods.—Blank Sheets for Record-Books.
Claims use since Apr. 9, 1917.

Ser. No. 103,247. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BUFFALO CANDY COMPANY, Buffalo, N. Y. Filed Apr. 24, 1917.

Particular description of goods.—Candy Made Either Only of Sugar, Syrup, or the Like or Mixed with Chocolate, Nuts, and the Like.
Claims use since 1893.

Ser. No. 103,386. (CLASS 31. FILTERS AND REFRIGERATORS.) EDMOND LANDAUER, Paris, France. Filed Apr. 28, 1917.

LE FRIGOGÈNE

Particular description of goods.—Ice-Making Machine and Refrigerators.
Claims use since Mar. 1, 1917.

Ser. No. 103,746. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EUGENE O. REED COMPANY, Chicago, Ill. Filed May 12, 1917.

PALS

Particular description of goods.—Candy.
Claims use since May 1, 1917.

Ser. No. 104,676. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) INSULAR PACKING CO., New York, N. Y. Filed June 25, 1917.

INSULAR

Particular description of goods.—Canned Sardines.
Claims use since June 1, 1917.

Ser. No. 104,677. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) INSULAR PACKING CO., New York, N. Y. Filed June 25, 1917.

YUM-YUM

Particular description of goods.—Canned Sardines.
Claims use since June 1, 1917.

Ser. No. 104,733. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JEROME J. GLADEK, Elmira, N. Y. Filed June 28, 1917.

REFRESHAL

Particular description of goods.—A Cream for Tender, Sunburned, and Chapped Skin.
Claims use since Jan. 1, 1917.

Ser. No. 104,760. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) MRS. CHARLES FREMONT POND, Berkeley, Cal. Filed June 29, 1917.

CONSTITUTION

Particular description of goods.—A Card Game.
Claims use since Oct. 1, 1915.

Ser. No. 106,332. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ERNEST L. WELLMAN, Grand Rapids, Mich. Filed Sept. 19, 1917.

QUALITEED

Particular description of goods.—Dried White Pea-Beans.
Claims use since Nov. 1, 1916.

Ser. No. 106,752. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) ELI ZERY DAVISON, Burwell, Ga. Filed Oct. 13, 1917.

E. Z.

Particular description of goods.—Measuring-Tape Wound with Ribbon on Reels or Spools.
Claims use since Sept. 24, 1917.

Ser. No. 107,261. (CLASS 39. CLOTHING.) HENRY A. DIX & SONS COMPANY, New York, N. Y. Filed Nov. 9, 1917.

Dix-Make 401

Particular description of goods.—Nurses' Uniforms.
Claims use since Aug. 1, 1917.

Ser. No. 107,363. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ATLAS SPECIALTY CO., Richmond, Va. Filed Nov. 14, 1917.

CAPITOL

Particular description of goods.—Molasses.
Claims use since Jan. 6, 1910.

Ser. No. 107,517. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) WAPPLER ELECTRIC CO., INC., New York, N. Y. Filed Nov. 21, 1917.

DENTATHERM

Particular description of goods.—Electric Machines for Applying Electric Currents of High Frequency to the Teeth and other Parts of the Human Body.
Claims use since Sept. 10, 1917.

Ser. No. 107,696. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) ALFRED C. WATERS, Pittsburgh, Pa. Filed Nov. 30, 1917.

CONSERVO

Particular description of goods.—Auxiliary Air-Inlet-Valve Device for Attachment to Fuel-Supply Manifolds of Internal-Combustion Engines.
Claims use since about Nov. 8, 1917.

Ser. No. 107,781. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) THE BEAU-SITE COMPANY, New York, N. Y. Filed Dec. 6, 1917.



The picture of the individual being fanciful.

Particular description of goods.—Lime-Juice, Lemon-Juice, Grape-Juice, Mineral Water, Ginger-Ale, Sarsaparilla, and Cider; Fruit Syrups, Flavoring Extracts, and Colorings Used in Making Soft Drinks.

Claims use since October, 1917.

Ser. No. 107,886. (CLASS 39. CLOTHING.) OSCAR L. STANARD, Huntington, W. Va. Filed Dec. 10, 1917.



Particular description of goods.—Hosiery, Ladies' Knitted Union-Suits, Ladies' Knitted Vests, Men's Knitted Union-Suits, Sweater-Coats, Men's Shirts for Outer Wear.

Claims use since July, 1915.

Ser. No. 108,270. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BLANKE BAER CHEMICAL COMPANY, St. Louis, Mo. Filed Jan. 3, 1918.



Particular description of goods.—Flavoring-Paste for Foods.

Claims use since the 1st day of November, 1917.

Ser. No. 108,315. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JOHN C. SPARKS, New York, N. Y. Filed Jan. 4, 1918.



Particular description of goods.—Dyes.

Claims use since September, 1917.

Ser. No. 108,452. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) HEATH & MILLIGAN MFG. CO., Chicago, Ill. Filed Jan. 14, 1918.



Particular description of goods.—Mixed and Unmixed Paints, Enamels Containing Pigments, Colors in Oil, Varnishes, Finishes Containing Varnishes and Pigments or Pigments and Oil, Stains Containing Pigments, Primers Containing Pigments, Fillers Containing Pigments, Coatings Containing Pigments, Colors Containing Pigments, Dressings Containing Varnishes, and Polishes in Liquid Form Containing Oil and Wax.

Claims use since Sept. 27, 1917.

Ser. No. 108,501. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE FEDERAL BEARINGS CO. INC., Fairview, Poughkeepsie, N. Y. Filed Jan. 17, 1918.

Universal

Particular description of goods.—Antifriction-Bearings.

Claims use since Apr. 23, 1913.

Ser. No. 108,671. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LEO LICHTMAN, New York, N. Y. Filed Jan. 28, 1918.



Particular description of goods.—Hair-Tonic, Curative for Dandruff, and Restorative for Falling Hair.

Claims use since on or about Jan. 1, 1910.

Ser. No. 108,804. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ORIENTAL OIL COMPANY, Dallas, Tex. Filed Feb. 4, 1918.

OROCO

Particular description of goods.—A Compound for Removing Incrustations.

Claims use since Jan. 12, 1917.

Ser. No. 109,139. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIÉTÉ CHIMIQUE DES USINES DU RHONE ANCIENNEMENT GILLIARD, P. MONNET ET CARTIER, Paris, France. Filed Feb. 20, 1918.

NOVAMIDON

Particular description of goods.—A Derivative of Antipyrin Used as an Antipyretic or Antineuralgic.

Claims use since July, 1915.

Ser. No. 109,156. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) A. C. MCCANDLESS, Wichita, Kans. Filed Feb. 21, 1918.



Particular description of goods.—Rubber Patches for Auto and Motor-Cycle Inner Tubes, Rubber Boots, Hose, Rubber Belting, and Hot-Water Bottles.

Claims use since Feb. 1, 1917.

Ser. No. 109,213. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BAILEY F. WILLIAMSON, Gainesville, Fla. Filed Feb. 25, 1918.

Nutrimeal

Particular description of goods.—Flour, Particularly Flour Made from or Containing Peanut-Meats.

Claims use since about Jan. 17, 1918.

Ser. No. 109,264. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) CHARLES BOND COMPANY, Philadelphia, Pa. Filed Feb. 28, 1918.

FABRITEX

Particular description of goods.—Beltings, Transmission-Linings, Hood-Lacings, Made of Textile Fabric.

Claims use since about May, 1917.

Ser. No. 109,346. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SHAPLEIGH COFFEE CO., Boston, Mass. Filed Mar. 2, 1918.



Particular description of goods.—Coffee.

Claims use since December, 1892.

Ser. No. 109,354. (CLASS 46. FOODS AND INGREDIENTS OF FOODS. CHAPIN-SACKS MANUFACTURING COMPANY, Washington, D. C. Filed Mar. 4, 1918.

VICTORV

Particular description of goods.—Ice-Cream.

Claims use since Feb. 25, 1918.

Ser. No. 109,526. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) RALSTON PURINA COMPANY, St. Louis, Mo. Filed Mar. 12, 1918.

PURINA

Particular description of goods.—Cornmeal.

Claims use since on or about Nov. 7, 1902.

Ser. No. 109,569. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM PEARSON LIMITED, London, England. Filed Mar. 14, 1918.

INTERSTOCK

Particular description of goods.—A Disinfectant, Antiseptic, and Germicidal Substance Used for Agricultural, Horticultural, Veterinary, and Sanitary Purposes.

Claims use since about January, 1918.

Ser. No. 109,687. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) THE JAMES E. BLAKE CO., Attleboro, Mass. Filed Mar. 21, 1918.



Particular description of goods.—Buckles, Bells, Cigarette Cases and Boxes, Cologne-Bottles, Casters, Candlesticks; Boxes for Powder, Candy, Matches, and Trinkets; Card-Cases, Eyeglass-Cases, Toilet Ware, Jam-Jars, Jewel-Cases, Knitting-Needles and Sheaths, Memorandum-Pads, Penholders, Photograph-Cases, Perfume-Balls, Pencils, Rosary-Cases, Spectacle-Cases, Smelling-Salts Bottles, Telephone-Pad Holders, Thimbles, Vases, Vanity-Cases, and Yarn-Holders, All of Which Articles are Made of Precious or Plated Metal.
Claims use since about the 1st of January, 1905.

Ser. No. 109,716. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) INTERSTATE SHADE CLOTH CO., Hoboken, N. J. Filed Mar. 22, 1918.

RAYCLOTH

Comprising the word "Raycloth," no claim being made to the word "cloth" apart from the mark.
Particular description of goods.—Shade-Cloths of Sized and Oil-Painted Fabrics, Hollands, Prepared Muslins, and Cotton Piece Goods.
Claims use since Feb. 15, 1918.

Ser. No. 109,720. (CLASS 12. CONSTRUCTION MATERIALS.) A. T. MALMED & CO., Philadelphia, Pa. Filed Mar. 22, 1918.

QUICKSTONE

Particular description of goods.—A Liquid Preparation Used in the Batch with other Materials in Making Concrete, Acting as a Hardener, Waterproofer, and Accelerator in Cement-Work.
Claims use since Sept. 1, 1916.

Ser. No. 109,743. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) JAMES H. CUMMING, INCORPORATED, Chicago, Ill. Filed Mar. 23, 1918.



Particular description of goods.—Talking-Machines.
Claims use since Jan. 15, 1918.

Ser. No. 109,781. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SWIFT AND COMPANY, Chicago, Ill. Filed Mar. 25, 1918. Under ten-year proviso.

Swift's Premium

Particular description of goods.—Oleomargarin.
Claims use since June 1, 1892.

Ser. No. 109,838. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CHASE & SANBORN, Boston, Mass. Filed Mar. 28, 1918. Under ten-year proviso.

SANRIKA

Particular description of goods.—Coffee.
Claims use since October, 1887.

Ser. No. 109,840. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) L. C. CHASE & COMPANY, Boston, Mass. Filed Mar. 28, 1918.

GLAZETTE

Particular description of goods.—Pile Fabrics Made Wholly or in Part of Mohair or other Kinds of Cattle-Hair, and More Particularly Used for Cloakings and Trimmings.
Claims use since Feb. 15, 1918.

Ser. No. 109,868. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) HERCULES ELECTRIC STEEL CORPORATION, New York, N. Y. Filed Mar. 29, 1918.

GLADIATOR

The trade-mark consisting in the word "Gladiator."
Particular description of goods.—High-Speed Tool-Steel in Bar, Rod, and other Forms Adapted for Use in the Making of Metal-Working Tools.
Claims use since about the 1st day of February, 1918.

Ser. No. 109,894. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SCOTT & BOWNE, Bloomfield, N. J. Filed Mar. 30, 1918.

KI-MOIDS

Particular description of goods.—A Digestive Tablet.
Claims use since Mar. 1, 1918.

Ser. No. 109,910. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BISCEGLIA BROS., San Jose, Cal. Filed Apr. 2, 1918.

GILROY VALLEY

Particular description of goods.—Canned Peaches, Canned Cherries, Canned Apricots, Canned Pears, and Canned Tomato Pulp.
Claims use since May 1, 1913.

Ser. No. 109,917. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) AGOSTINO GARBINI, San Francisco, Cal. Filed Apr. 2, 1918.

CASTLE

Particular description of goods.—Olive-Oil.
Claims use since Mar. 1, 1918.

Ser. No. 109,934. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ANDREW C. VARRMER, Chicago, Ill. Filed Apr. 2, 1918.

Old Fireplace

Particular description of goods.—Scotch-Toffee-Bar Candy.
Claims use since Mar. 7, 1918.

Ser. No. 109,967. (CLASS 39. CLOTHING.) CHURCHILL & ALDEN CO., Brockton, Campello Station, Mass. Filed Apr. 4, 1918.

Craftsman

Particular description of goods.—Shoes for Men, Women, and Children, Made of Leather, Canvas, or Fabric.
Claims use since Feb. 10, 1904.

Ser. No. 109,969. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) COHN FLOUR & FEED CO., Baton Rouge, La. Filed Apr. 4, 1918.



The picture being fanciful.
Particular description of goods.—Wheat-Flour.
Claims use since April, 1913.

Ser. No. 109,975. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) FEATHER FOOT COMPANY, New York, N. Y. Filed Apr. 4, 1918.

FEATHER FOOT

Particular description of goods.—A Medical Cream for All Foot Troubles, Tired or Aching Feet, Perspiring, Burning, or Blistered Feet, Frost-Bites, Chilblains, Corns, Calluses, Chapped Hands, Chapped Skin, Sores, Cuts, and Pimples, Bodily Odors, and for Application as a Massage in General Skin or Scalp Troubles or Afflictions, for External Use.
Claims use since February, 1917.

Ser. No. 110,180. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SAN JOAQUIN FRUIT CO., Tustin, Cal. Filed Apr. 13, 1918.

Huck Finn



Particular description of goods.—Fresh Citrus Fruits Consisting of Oranges, Lemons, and Grape-Fruit.
Claims use since Mar. 11, 1918.

Ser. No. 110,181. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SAN JOAQUIN FRUIT CO., Tustin, Cal. Filed Apr. 13, 1918.

President

Particular description of goods.—Fresh Citrus Fruits Consisting of Oranges, Lemons, and Grape-Fruit.
Claims use since Mar. 11, 1918.

Ser. No. 110,182. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SAN JOAQUIN FRUIT CO., Tustin, Cal. Filed Apr. 13, 1918.

Senator

Particular description of goods.—Fresh Citrus Fruits Consisting of Oranges, Lemons, and Grape-Fruit.
Claims use since Mar. 11, 1918.

Ser. No. 110,194. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) FRANK E. BLOCK COMPANY, Atlanta, Ga. Filed Apr. 15, 1918.

ROOKIES

Particular description of goods.—Candy.
Claims use since Dec. 12, 1917.

Ser. No. 110,196. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) H. BOKER & CO. INC., New York, N. Y. Filed Apr. 15, 1918.

Boker

The name "Boker" shown on the drawing being the facsimile handwriting of Mr. H. R. Boker, president of the undersigned applicant.

Particular description of goods.—Iron, Steel, Steel Alloys, Nickel, Nickel Alloys, High-Speed Steel, High-Speed Steel Alloys, Tool-Steel, Alloys of Tool-Steel and the Various Alloy Steels Adapted for Use in Hot Die-Work, Balls and Ball-Bearings, Cold Punching or Blanking, Dies, Chisels, Reamers, Taps, Drills, Files, Milling-Cutters, Lathe and Planer Tools, Knives, Hydraulic Tools, Magnets, Wiredrawing Dies and Plates, Wortles, Saws, Springs, and Similar Purposes, All Being in the Form of Bars, Rods, Blanks, Sheets, Strips, Plates, Wire, Tubes, Balls, and Castings, the Word "Blanks" Being a Technical Trade Expression and Meaning a Short Piece of Metal Cut Off from a Rod or Bar and Also a Short Piece of Metal Which is Sometimes Forged to Approximate the Shape of a Short Piece or Slice Cut Off from a Bar.

Claims use since about Sept. 15, 1917.

Ser. No. 110,198. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) H. BOKER & CO. INC., New York, N. Y. Filed Apr. 15, 1918.

Hermann Boker & Co

The name "Hermann Boker & Co." shown on the drawing being in the facsimile handwriting of Mr. H. R. Boker, president of the applicant corporation.

Particular description of goods.—Iron, Steel, Steel Alloys, Nickel, Nickel Alloys, High-Speed Steel, High-Speed Steel Alloys, Tool-Steel, Alloys of Tool-Steel and the Various Alloy Steels Adapted for Use in Hot Die-Work, Balls and Ball-Bearings, Cold Punching or Blanking, Dies, Chisels, Reamers, Taps, Drills, Files, Milling-Cutters, Lathe and Planer Tools, Knives, Hydraulic Tools, Magnets, Wiredrawing Dies and Plates, Wortles, Saws, Springs, and Similar Purposes, All Being in the Form of Bars, Rods, Blanks, Sheets, Strips, Plates, Wire, Tubes, Balls, and Castings, the Word "Blanks" Being a Technical Trade Expression and Meaning a Short Piece of Metal Cut Off from a Rod or Bar and Also a Short Piece of Metal Which is Sometimes Forged to Approximate the Shape of a Short Piece or Slice Cut Off from a Bar.

Claims use since about Sept. 15, 1917.

Ser. No. 110,201. (CLASS 19. VEHICLES, NOT INCLUDING ENGINES.) DORT MOTOR CAR CO., Flint, Mich. Filed Apr. 15, 1918.



The central background being blue.

Particular description of goods.—Automobiles.

Claims use since April, 1915.

Ser. No. 110,204. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FINE ART LACE COMPANY, Philadelphia, Pa. Filed Apr. 15, 1918.



No claim is made to the exclusive use of the representation of lace apart from the mark shown on the drawing.

Particular description of goods.—Lace Goods in the Piece and Lace Curtains.

Claims use since Jan. 1, 1918.

Ser. No. 110,213. (CLASS 39. CLOTHING.) JIFFY-ALL CORPORATION, New York, N. Y. Filed Apr. 15, 1918.

JIFFY-ALL

Particular description of goods.—Overalls, Aprons, and Outer Garments of Cotton and Waterproof Fabrics for Protection of Inner Garments.

Claims use since about Apr. 9, 1918.

Ser. No. 110,252. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) FRED'K LUDEWIG & CO., New York, N. Y. Filed Apr. 16, 1918.

OVER THE TOP

Particular description of goods.—An Elastic Veil, Being a Textile Fabric.

Claims use since Dec. 26, 1917.

Ser. No. 110,255. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MYRON L. MCMILLAN, Clarkston, Wash. Filed Apr. 16, 1918.

GASAPERTUS

Particular description of goods.—A Medicine for the Treatment of Chronic Stomach Trouble, Change of Life, and Menstrual Disorders.

Claims use since Apr. 1, 1918.

Ser. No. 110,380. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MCKESSON & ROBBINS, INCORPORATED, New York, N. Y. Filed Apr. 22, 1918.



The trade-mark consisting of the picture of two fish inclosed in an oval figure.

Particular description of goods.—Cod-Liver Oil.

Claims use since about the 7th day of January, 1918.

Ser. No. 110,432. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EDWARD GLASS, Troy, N. Y. Filed Apr. 25, 1918.



Particular description of goods.—Rochelle Salt.

Claims use since Sept. 6, 1917.

Ser. No. 110,455. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) PARK & TILFORD, New York, N. Y. Filed Apr. 26, 1918.

COMMODORE

Particular description of goods.—Coffee.

Claims use since Apr. 18, 1918.

Ser. No. 110,458. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) TANNERS EXTRACT & CHEMICAL WORKS, INC., Mariners Harbor, N. Y. Filed Apr. 26, 1918.



Particular description of goods.—A Tanning Extract or Preparation.

Claims use since the 15th day of July, 1917.

Ser. No. 110,471. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE DEIS-FERTIG CO., Dover, Ohio. Filed Apr. 27, 1918.

DEFCO

Particular description of goods.—Rubber Fruit-Jar Rings.

Claims use since Jan. 1, 1914.

Ser. No. 110,494. (CLASS 37. PAPER AND STATIONERY.) OLD DOMINION PAPER COMPANY, Norfolk, Va. Filed Apr. 27, 1918.

COW HIDE

Particular description of goods.—Wrapping-Paper.

Claims use since 1900.

Ser. No. 110,496. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ROGERS MILK CORPORATION, New York, N. Y. Filed Apr. 27, 1918.

DORIS

Particular description of goods.—Condensed Milk.

Claims use since Mar. 20, 1918.

Ser. No. 110,501. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 27, 1918.

FURINE

Particular description of goods.—Coal-Tar Colors.

Claims use since the year 1902.

Ser. No. 110,502. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 27, 1918.

INDIGENE

Particular description of goods.—Coal-Tar Colors.

Claims use since the year, 1898.

Ser. No. 110,505. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 27, 1918.

PERCAIN

Particular description of goods.—Pharmaceutical Products to be Used as Anesthetics, Hypnotics, Narcotics, and Sedatives.
Claims use since Aug. 6, 1917.

Ser. No. 110,507. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIETY OF CHEMICAL INDUSTRY IN BASLE, Basel, Switzerland. Filed Apr. 27, 1918.

DIALACETIN

Particular description of goods.—Pharmaceutical Products to be Used as Anesthetics, Hypnotics, Narcotics, Sedatives, Analgesics, and Antipyretics.
Claims use since May, 1916.

Ser. No. 110,512. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CLARENCE M. ARNEY, Prosser, Wash. Filed Apr. 29, 1918.

HIGH LIFE

Particular description of goods.—A Compound for Enriching Gasolene.
Claims use since Apr. 16, 1918.

Ser. No. 110,515. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA CENTRAL CREAMERIES, San Francisco, Cal. Filed Apr. 29, 1918.

KEWPIES

Particular description of goods.—Butter.
Claims use since Mar. 13, 1918.

Ser. No. 110,516. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA SEA FOOD CO., East San Pedro, Cal. Filed Apr. 29, 1918.

CALTUNA

Particular description of goods.—Canned Tuna Fish.
Claims use since Aug. 15, 1917.

Ser. No. 110,517. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CULINARY PRODUCTS CO., Wichita, Kans. Filed Apr. 29, 1918.

Ex-It-Eg

Particular description of goods.—A Preparation to be Used in Place of Eggs in Cooking and Baking.
Claims use since about Apr. 1, 1918.

Ser. No. 110,547. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) STRAITS PACKING CO., Seattle, Wash. Filed Apr. 29, 1918.

"GIMME"

Particular description of goods.—Canned Salmon.
Claims use since Aug. 3, 1912.

Ser. No. 110,551. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ASPEGREN & CO., New York, N. Y. Filed Apr. 30, 1918.



Particular description of goods.—Peanut-Oil.
Claims use since Apr. 15, 1918.

Ser. No. 110,631. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) GLORIA PHONOGRAPH SUPPLY CO. INC., New York, N. Y. Filed May 3, 1918.



Particular description of goods.—Phonograph-Needles.
Claims use since Apr. 1, 1918.

Ser. No. 110,713. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE OHIO BUTTERINE CO., Cincinnati, Ohio. Filed May 6, 1918.

KERNEL

Particular description of goods.—Oleomargarin.
Claims use since Feb. 11, 1918.

Ser. No. 110,721. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) H. A. JOHNSON CO., Boston, Mass. Filed May 6, 1918.

MIDGET

The word "Midget."
Particular description of goods.—Raisins.
Claims use since January, 1915.

Ser. No. 110,730. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) M. J. BRANDENSTEIN & CO., San Francisco, Cal. Filed May 7, 1918.

NU-PROSO
MJB

Particular description of goods.—Uncoated Rice.
Claims use since February, 1918.

Ser. No. 110,751. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MAGNOLIA PROVISION COMPANY, Houston, Tex. Filed May 7, 1918.

Pindapan

Particular description of goods.—An Oleaginous Compound Produced from Peanuts for Cooking Purposes.
Claims use since Feb. 22, 1918.

Ser. No. 110,759. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SHEFFIELD PHARMACAL CO., Chicago, Ill. Filed May 7, 1918.

DEL-A-TONE

Particular description of goods.—A Depilatory Used for the Removal of Superfluous Hair.
Claims use since Apr. 7, 1910.

Ser. No. 110,789. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SCHWARZ & SON, Newark, N. J. Filed May 9, 1918.



TIGER

Particular description of goods.—Cough-Drops.
Claims use since Sept. 15, 1916.

Ser. No. 110,801. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CENTRAL MANUFACTURING COMPANY, INC., Iowa City, Iowa. Filed May 10, 1918.



Particular description of goods.—Compound Toilet Cream of Fresh Lemons.
Claims use since 1900.

Ser. No. 110,810. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HOLLEY MILLING COMPANY, Laramie, Wyo., and Ogden, Utah. Filed May 10, 1918.

TOLTEC

Particular description of goods.—Wheat-Flour.
Claims use since Nov. 21, 1917.

Ser. No. 110,811. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE HOLLEY MILLING COMPANY, Laramie, Wyo., and Ogden, Utah. Filed May 10, 1918.

BIJOU

Particular description of goods.—Wheat-Flour.
Claims use since Nov. 12, 1917.

Ser. No. 110,839. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GUANO & RAGGIO, INC., Philadelphia, Pa. Filed May 11, 1918.

IL GATTO NERO

"Il Gatto Nero."
Particular description of goods.—Alimentary Pastes, Covering All Kinds of Macaroni.
Claims use since Mar. 1, 1918.

Ser. No. 110,849. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ALBERT C. SMITH, Columbus, Ohio. Filed May 11, 1918.

Stand Pat

Particular description of goods.—Wheat-Flour.
Claims use since about Nov. 15, 1916.

TRADE-MARK REGISTRATIONS GRANTED

JUNE 11, 1918.

121,843. YEAST. ELMER J. AGNEW, Pontiac, Ill.
Filed February 11, 1918. Serial No. 108,935. PUBLISHED MARCH 19, 1918.

121,844. ANTIFREEZING LIQUID FOR AUTOMOBILE-RADIATORS AND GAS-ENGINES. AKSALA COMPANY, Syracuse, Nebr., and Chicago, Ill.
Filed November 8, 1917. Serial No. 107,223. PUBLISHED MARCH 19, 1918.

121,845. CHEMICAL COMPOSITION FOR CERTAIN NAMED PURPOSES. AMERICAN BOILER LIFE COMPANY, Boston, Mass.
Filed March 3, 1915. Serial No. 84,904. PUBLISHED MARCH 26, 1918.

121,846. CANNED TOMATO SAUCE AND CANNED OLIVES. AMERICAN OLIVE COMPANY, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,948. PUBLISHED MARCH 19, 1918.

121,847. PREPARATION FOR DANDRUFF, FALLING HAIR, AND SCALP DISEASES. L. R. ALEXANDER, Fort Worth, Tex.
Filed January 30, 1918. Serial No. 108,691. PUBLISHED MARCH 26, 1918.

121,848. SLEEPING BAGS OR POCKETS. ATHOL MANUFACTURING COMPANY, Athol, Mass.
Filed October 29, 1917. Serial No. 106,999. PUBLISHED MARCH 19, 1918.

121,849. BABBITT METAL. E. C. ATKINS & COMPANY, Indianapolis, Ind.
Filed January 15, 1918. Serial No. 108,466. PUBLISHED MARCH 5, 1918.

121,850. BITUMINOUS ROAD-OIL AND LIQUID ASPHALT. THE BARBER ASPHALT PAVING COMPANY, Philadelphia, Pa.
Filed February 20, 1918. Serial No. 109,121. PUBLISHED MARCH 19, 1918.

121,851. CERTAIN NAMED METALS AND METAL CASTINGS AND FORGINGS. GEO. BABNSLEY & SONS, Sheffield, England.
Filed May 2, 1916. Serial No. 94,849. PUBLISHED MARCH 12, 1918.

121,852. TARRY COATING FOR ROADS AND OTHER SURFACES. THE BARRETT COMPANY, New York, N. Y.
Filed January 15, 1918. Serial No. 108,468. PUBLISHED MARCH 26, 1918.

121,853. TARRY COATING FOR ROADS AND OTHER SURFACES. THE BARRETT COMPANY, New York, N. Y.
Filed January 15, 1918. Serial No. 108,469. PUBLISHED MARCH 26, 1918.

121,854. TARRY COATING FOR ROADS AND OTHER SURFACES. THE BARRETT COMPANY, New York, N. Y.
Filed January 15, 1918. Serial No. 108,470. PUBLISHED MARCH 26, 1918.

121,855. PREPARED MEATS—VIZ., CORNED BEEF. JAMES BARNES, Waterloo, Sydney, New South Wales, Australia.
Filed December 8, 1917. Serial No. 107,828. PUBLISHED MARCH 19, 1918.

121,856. CERTAIN NAMED ABRASIVE, DETERGENT, AND POLISHING MATERIALS. THE BIG WIZARD CHEMICAL CO., Cincinnati, Ohio.
Filed November 7, 1917. Serial No. 107,210. PUBLISHED MARCH 19, 1918.

121,857. CERTAIN NAMED FOODS. BLATCHFORD'S CALF MEAL FACTORY, Waukegan, Ill.
Filed June 19, 1917. Serial No. 104,518. PUBLISHED MARCH 19, 1918.

121,858. PREPARATIONS FOR TREATING CERTAIN NAMED DISEASES. BOERICKE & TAFEL, Philadelphia, Pa.
Filed December 18, 1916. Serial No. 99,996. PUBLISHED MARCH 19, 1918.

121,859. MINERAL ORE. JAMES JACKSON BOWDEN, Sr., Atlanta and Manchester, Ga.
Filed January 2, 1918. Serial No. 108,241. PUBLISHED MARCH 5, 1918.

121,860. A LINIMENT AND AN OINTMENT FOR TREATING CERTAIN NAMED DISEASES. JOSEPH H. BROWN, Chicago, Ill.
Filed November 5, 1917. Serial No. 107,148. PUBLISHED MARCH 19, 1918.

121,861. STOCK CONDITION-POWDER AND WORM-DESTROYER. HAROLD E. BRYAN, Angola, Ind.
Filed November 26, 1917. Serial No. 107,608. PUBLISHED FEBRUARY 12, 1918.

121,862. SOLVENT TURPENTINE FOR PAINTS AND VARNISHES. BUSCH & JOLLES INC., Savannah, Ga.
Filed October 30, 1917. Serial No. 107,019. PUBLISHED MARCH 5, 1918.

121,863. SPIRITS OF TURPENTINE. BUSCH & JOLLES INC., Savannah, Ga.
Filed October 30, 1917. Serial No. 107,020. PUBLISHED MARCH 26, 1918.

121,864. BUTTONS FOR WEARING-APPAREL. M AND T BUTTON COMPANY, Boston, Mass., and Providence, R. I.
Filed January 24, 1918. Serial No. 108,621. PUBLISHED MARCH 19, 1918.

121,865. CANNED TOMATOES WITH PURÉE FROM TRIMMINGS. CALIMA CANNING CO., Los Angeles, Cal.
Filed February 4, 1918. Serial No. 108,790. PUBLISHED MARCH 12, 1918.

121,866. CANNED LIMA BEANS. CALIMA CANNING CO., Los Angeles, Cal.
Filed February 4, 1918. Serial No. 108,789. PUBLISHED MARCH 12, 1918.

121,867. MOTION-PICTURE MACHINES. CAMO CORPORATION, New York, N. Y.
Filed January 25, 1918. Serial No. 108,628. PUBLISHED MARCH 5, 1918.

121,868. WOOD-PRESERVATIVES. CARBOLINEUM WOOD PRESERVING COMPANY, New York, N. Y.
Filed November 6, 1917. Serial No. 107,194. PUBLISHED APRIL 2, 1918.

121,869. SPINNING-SPINDLES. CHAPMAN MANUFACTURING COMPANY, Winchester, Mass.
Filed November 22, 1917. Serial No. 107,524. PUBLISHED MARCH 19, 1918.

121,870. PREPARATION TO BE TAKEN INTERNALLY FOR RHEUMATISM. F. & W. CHEMICAL CO., Philadelphia, Pa.
Filed November 27, 1917. Serial No. 107,629. PUBLISHED MARCH 19, 1918.

121,871. BEARINGS FOR SHAFTING AND AXLES. CHICAGO BEARINGS CO., Chicago, Ill.
Filed September 1, 1917. Serial No. 106,007. PUBLISHED MARCH 5, 1918.

121,872. PNEUMATIC HAMMERS, PNEUMATIC RIVETERS, AND ROCK-DRILLS. CHICAGO PNEUMATIC TOOL CO., Chicago, Ill.
Filed January 23, 1918. Serial No. 108,595. PUBLISHED MARCH 19, 1918.

121,873. ENAMELS. COOPER-BELL VARNISH CO., Chicago, Ill.
Filed December 13, 1917. Serial No. 107,938. PUBLISHED JANUARY 15, 1918.

121,874. AUTOMOBILE AND FURNITURE POLISHES. JAMES M. CRAMER, San Francisco, Cal.
Filed January 21, 1918. Serial No. 108,567. PUBLISHED MARCH 26, 1918.

121,875. CHOCOLATES. CLARENCE ARTHUR CRANE, Cleveland, Ohio.
Filed October 25, 1917. Serial No. 106,943. PUBLISHED MARCH 19, 1918.

121,876. PHOTOGRAPHIC PAPER. COMMERCIAL CAMERA COMPANY, Providence, R. I.
Filed October 25, 1917. Serial No. 106,939. PUBLISHED MARCH 12, 1918.

121,877. CANNED FISH. THE CURTIS CORPORATION, Bloomington and Long Beach, Cal.
Filed December 1, 1917. Serial No. 107,703. PUBLISHED MARCH 19, 1918.

121,878. TEA. CHARLES DE CORDOVA, New York, N. Y.
Filed August 9, 1917. Serial No. 105,557. PUBLISHED MARCH 19, 1918.

121,879. CERTAIN NAMED METAL-WORKING MACHINERY. THE DEFIANCE MACHINE WORKS, Defiance, Ohio.
Filed December 13, 1917. Serial No. 107,939. PUBLISHED MARCH 26, 1918.

121,880. LAWN-SWINGS. STEPHEN A. DOUGLASS, St. Louis, Mo.
Filed February 5, 1918. Serial No. 108,821. PUBLISHED APRIL 2, 1918.

121,881. PAPETERIES AND WRITING-TABLETS. DRUGGISTS' SUPPLY CORPORATION, New York, N. Y.
Filed October 4, 1917. Serial No. 106,591. PUBLISHED MARCH 26, 1918.

121,882. AN AUTOMOBILE-RADIATOR SEALING COMPOUND AND SCALE-REMOVER. ECONOMY SCALE REMOVER COMPANY, Chicago Heights, Ill.
Filed February 6, 1918. Serial No. 108,850. PUBLISHED MARCH 26, 1918.

121,883. READY-MIXED PAINTS, PASTE, AND DRY PIGMENTS USED IN THE MANUFACTURE OF PAINTS. THE FERRO-CONCRETE PAINT & CHEMICAL CO., St. Louis, Mo.
Filed September 10, 1917. Serial No. 106,160. PUBLISHED MARCH 19, 1918.

121,884. A PREPARATION FOR TREATING CERTAIN NAMED DISEASES. CHARLES O. FILKINS, Rochester, N. Y.
Filed October 28, 1916. Serial No. 98,942. PUBLISHED APRIL 2, 1918.

121,885. CERTAIN NAMED DENTAL, MEDICAL, AND SURGICAL APPLIANCES. H. G. FISCHER & CO., Chicago, Ill.
Filed January 2, 1917. Serial No. 100,290. PUBLISHED FEBRUARY 12, 1918.

121,886. TUNGSTIC ACID. FOOTE MINERAL CO., Philadelphia, Pa.
Filed January 26, 1918. Serial No. 108,648. PUBLISHED APRIL 2, 1918.

121,887. MAGNESIUM AND MAGNESIUM COMPOUNDS. FOOTE MINERAL CO., Philadelphia, Pa.
Filed January 26, 1918. Serial No. 108,640. PUBLISHED MARCH 19, 1918.

121,888. CERTAIN NAMED CROCKERY, EARTHENWARE, AND PORCELAIN. FULPER POTTERY COMPANY, Flemington, N. J.
Filed May 7, 1917. Serial No. 103,594. PUBLISHED MARCH 19, 1918.

121,889. TWINE, CABLE-FILLING, AND SEAMING CORDS MADE OF PAPER. GATES PAPER TWINE CO., Pleasantville, N. Y.
Filed September 18, 1917. Serial No. 106,297. PUBLISHED MARCH 19, 1918.

121,890. LIME TO BE USED AS AN ELEMENT OF MORTAR OR THE LIKE. GENERAL BASIC PRODUCTS COMPANY, Seattle, Wash.
Filed September 26, 1916. Serial No. 98,242. PUBLISHED MARCH 19, 1918.

121,891. PREPARATION FOR TREATMENT OF TEETH AND GUMS TO RELIEVE PAIN AND FOR LOCAL PAIN RELIEF. ORLANDO C. GILBERT, Spokane, Wash.
Filed May 16, 1917. Serial No. 103,864. PUBLISHED SEPTEMBER 11, 1917.

121,892. TOOL-STEEL. HALCOMB STEEL COMPANY, Syracuse, N. Y.
Filed January 21, 1918. Serial No. 108,571. PUBLISHED MARCH 5, 1918.

121,893. SKIN-LOTION. LUTHER J. HEATH, Baltimore, Md.
Filed February 9, 1918. Serial No. 108,921. PUBLISHED MARCH 19, 1918.

121,894. CANNED ASPARAGUS. R. HICKMOTT CANNING CO., San Francisco and Orwood, Cal.
Filed February 12, 1918. Serial No. 108,952. PUBLISHED MARCH 19, 1918.

121,895. CANNED ASPARAGUS. R. HICKMOTT CANNING CO., San Francisco and Orwood, Cal.
Filed February 12, 1918. Serial No. 108,954. PUBLISHED MARCH 19, 1918.

121,896. NON-INTOXICATING CEREAL BEVERAGES, MALTLESS. THE HOME BREWING CO., Bridgeport, Conn.
Filed February 5, 1918. Serial No. 108,825. PUBLISHED MARCH 26, 1918.

121,897. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. ALBERT D. HOWLETT COMPANY, Boston, Mass.
Filed November 30, 1917. Serial No. 107,079. PUBLISHED MARCH 12, 1918.

121,898. CONCRETE-FORMS AND PARTS THEREOF. THE HYDRAULIC PRESSED STEEL COMPANY, Cleveland, Ohio.
Filed November 16, 1917. Serial No. 107,405. PUBLISHED MARCH 26, 1918.

121,899. FILTER-PRESSES, FILTER-FRAMES, FILTER-PLATES, AND FILTER PARTS. INDEPENDENT FILTER PRESS CO., INC., New York, N. Y.
Filed February 16, 1918. Serial No. 109,029. PUBLISHED APRIL 2, 1918.

121,900. LEATHER-DRESSINGS, LEATHER-SEASONINGS, LEATHER-FILLERS, AND LEATHER-VARNISH. INNIS, SPEIDEN & CO., INC., New York, N. Y.
Filed January 28, 1918. Serial No. 108,668. PUBLISHED MARCH 5, 1918.

121,901. INSECTICIDES AND FUNGICIDES. INTERSTATE CHEMICAL CO., Jersey City, N. J.
Filed December 8, 1917. Serial No. 107,843. PUBLISHED MARCH 19, 1918.

121,902. CIDER. INTERSTATE PRODUCTS COMPANY, Vancouver, Wash.
Filed November 16, 1917. Serial No. 107,408. PUBLISHED MARCH 26, 1918.

121,903. UNDERWAISTS. IDA BASSETT JOHNSON, Chicago, Ill.
Filed January 9, 1918. Serial No. 108,383. PUBLISHED MARCH 5, 1918.

121,904. CANDIES, CRACKERS, AND COOKIES. JOHNSON BISCUIT COMPANY, Sioux City, Iowa.
Filed March 6, 1917. Serial No. 101,928. PUBLISHED MARCH 19, 1918.

121,905. INDUSTRIAL MOTOR-TRUCKS. KARRY-LODE INDUSTRIAL TRUCK CO. INC., Long Island City, N. Y.
Filed October 26, 1917. Serial No. 106,970. PUBLISHED MARCH 5, 1918.

121,906. TEA. SEIJU KATO, Yokohama, Japan.
Filed January 16, 1918. Serial No. 108,491. PUBLISHED MARCH 19, 1918.

121,907. TEA. SEIJU KATO, Yokohama, Japan.
Filed January 16, 1918. Serial No. 108,490. PUBLISHED MARCH 19, 1918.

121,908. CORN AND BUNION REMEDY, LIVER-PILLS, HEADACHE REMEDY, AND COLD AND LA GRIPPE PREPARATION. KEYSER CHEMICAL COMPANY, INCORPORATED, Roanoke Va.
Filed January 17, 1918. Serial No. 108,504. PUBLISHED MARCH 26, 1918.

121,909. LIQUIDS FOR STOPPING HEMORRHAGES. ELSIE M. KNORP, San Francisco, Cal.
Filed January 10, 1918. Serial No. 108,403. PUBLISHED MARCH 26, 1918.

121,910. PREPARATION FOR TREATING CERTAIN NAMED AILMENTS AND DISEASES. THE KREWPINA COMPANY, Waynesburg, Pa.
Filed January 17, 1916. Serial No. 92,196. PUBLISHED MARCH 26, 1918.

121,911. COMPOUND FOR CLEANING CARPETS, RUGS, AND WASH-CLOTHES. PHILIP C. LAMP, Cleveland, Ohio.
Filed August 29, 1917. Serial No. 105,946. PUBLISHED MARCH 12, 1918.

121,912. CORDIAL. CARL F. LAUBER, Philadelphia, Pa.
Filed February 28, 1918. Serial No. 109,276. PUBLISHED APRIL 2, 1918.

121,913. FOOD AND TONIC FOR PLANTS, FLOWERS, &C. GEO. A. LIPPINCOTT, Philadelphia, Pa.
Filed December 11, 1916. Serial No. 99,851. PUBLISHED JANUARY 8, 1918.

121,914. LEATHER BOOTS AND SHOES. THE CHARLES E. LYNCH SHOE MF'G. CO. INC., Poughkeepsie and New York, N. Y.
Filed November 9, 1916. Serial No. 99,193. PUBLISHED NOVEMBER 20, 1917.

121,915. NON-ALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. THE MACLOW ALE & MANUFACTURING COMPANY, Huntington, W. V.
Filed January 19, 1918. Serial No. 108,545. PUBLISHED MARCH 5, 1918.

121,916. SALAD-DRESSING. R. H. MACY & CO., New York, N. Y.
Filed October 8, 1917. Serial No. 106,668. PUBLISHED MARCH 19, 1918.

121,917. ELECTRIC SHOVELS. THE MARION STEAM SHOVEL CO., Marion, Ohio.
Filed December 26, 1917. Serial No. 108,157. PUBLISHED MARCH 5, 1918.

121,918. VARNISH. JOHN W. MASURY & SON, Brooklyn, N. Y.
Filed February 15, 1918. Serial No. 109,010. PUBLISHED MARCH 26, 1918.

121,919. MEDICATED SOAP. ALEXANDER MARR, Westerly, R. I.
Filed December 4, 1917. Serial No. 107,752. PUBLISHED MARCH 5, 1918.

121,920. BALANCED FOOD IN THE FORM OF BREAD. FANNY O. MARQUIS, New York, N. Y.
Filed December 5, 1917. Serial No. 107,771. PUBLISHED MARCH 19, 1918.

121,921. MUSTARD. MEYER & LANGE, New York, N. Y.
Filed October 11, 1917. Serial No. 106,722. PUBLISHED MARCH 19, 1918.

121,922. GASOLENE, KEROSENE, AND LUBRICATING-OIL. MONTANA OIL CO., Helena, Mont.
Filed September 26, 1916. Serial No. 98,245. PUBLISHED OCTOBER 16, 1917.

121,923. PREPARATION FOR USE IN THE TREATMENT OF RHEUMATISM. ALFRED MOUNTFORD, New York, N. Y.
Filed December 26, 1917. Serial No. 108,158. PUBLISHED MARCH 26, 1918.

121,924. VARNISHES, ENAMELS, AND VARNISH-STAINS. MURPHY VARNISH COMPANY, Newark, N. J.
Filed February 16, 1918. Serial No. 109,032. PUBLISHED MARCH 26, 1918.

121,925. BILLIARD-CHALK. NATIONAL BILLIARD SUPPLY CORPORATION, Chicago, Ill.
Filed February 12, 1918. Serial No. 108,961. PUBLISHED MARCH 19, 1918.

121,926. PADDED CASKET-LININGS AND CASKET-PILLOWS. NATIONAL CASKET COMPANY, New York, N. Y.
Filed November 3, 1917. Serial No. 107,137. PUBLISHED DECEMBER 25, 1917.

121,927. SOLUBLE OILS, SOLUBLE-OIL BASES, SULFONATED OILS, CUTTING-OILS, AND DRAWING-OILS FOR LUBRICATING PURPOSES. NATIONAL OIL PRODUCTS CO., Harrison, N. J.
Filed January 30, 1918. Serial No. 108,698. PUBLISHED MARCH 19, 1918.

121,928. COATS AND OVERCOATS. M. & W. NAUMBURG & CO., New York, N. Y.
Filed December 18, 1917. Serial No. 108,041. PUBLISHED MARCH 12, 1918.

121,929. DENTIFRICE. R. H. NELSON, Missoula, Mont.
Filed February 8, 1918. Serial No. 108,892. PUBLISHED MARCH 26, 1918.

121,930. INTERNAL-COMBUSTION ENGINES. NELSON BROS. CO., Saginaw, Mich.
Filed May 2, 1917. Serial No. 103,475. PUBLISHED MARCH 26, 1918.

121,931. CANNED SARDINES. NEPTUNE SEA FOOD COMPANY, San Diego, Cal.
Filed February 12, 1918. Serial No. 108,965. PUBLISHED MARCH 19, 1918.

121,932. CANNED SARDINES. NEPTUNE SEA FOOD COMPANY, San Diego, Cal.
Filed February 12, 1918. Serial No. 108,967. PUBLISHED MARCH 19, 1918.

121,933. CANNED SARDINES. NEPTUNE SEA FOOD COMPANY, San Diego, Cal.
Filed February 12, 1918. Serial No. 108,966. PUBLISHED MARCH 19, 1918.

121,934. CERTAIN CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. NEW ENGLAND BREWING COMPANY, Jersey City, N. J., and Boston, Mass.
Filed November 16, 1917. Serial No. 107,413. PUBLISHED MARCH 5, 1918.

121,935. GOLF-BALLS. THE NORTH BRITISH RUBBER CO., LTD., Edinburgh, Scotland.
Filed October 31, 1917. Serial No. 107,056. PUBLISHED MARCH 19, 1918.

121,936. WATER-COLUMNS WHICH CARRY THE WATER-GAGE AND TRY-COCKS ON STEAM-BOILERS. THE OHIO STEAM SPECIALTY CO., Cleveland, Ohio.
Filed October 1, 1917. Serial No. 106,543. PUBLISHED MARCH 12, 1918.

121,937. LUBRICATING-GREASE. ORIENTAL OIL COMPANY, Dallas, Tex.
Filed February 4, 1918. Serial No. 108,806. PUBLISHED MARCH 26, 1918.

121,938. WRITING-TABLETS, COMPOSITION-BOOKS, STUDENT NOTE-BOOKS, PRINTING AND WRITING PAPERS. OSBORN PAPER COMPANY, Marion, Ind.
Filed January 4, 1918. Serial No. 108,313. PUBLISHED MARCH 19, 1918.

121,939. TOOTH-BRUSHES. THE OWL DRUG COMPANY, San Francisco, Cal.
Filed November 19, 1917. Serial No. 107,477. PUBLISHED MARCH 19, 1918.

121,940. CERTAIN NAMED PAINTS AND PAINTERS' MATERIALS. JOEL T. PAINTER COMPANY, McKeesport, Pa.
Filed July 20, 1917. Serial No. 105,154. PUBLISHED DECEMBER 11, 1917.

121,941. DENTIFRICES. PARFUMERIE MARCEAU, INC., New York, N. Y.
Filed September 6, 1917. Serial No. 106,099. PUBLISHED MARCH 19, 1918.

121,942. OLIVE-OIL. P. PASTENE & CO., INC., Boston, Mass.
Filed October 17, 1917. Serial No. 106,818. PUBLISHED MARCH 19, 1918.

121,943. LINIMENT FOR EXTERNAL APPLICATION FOR RHEUMATISM AND SWELLINGS. FRANK W. PETERSON, Minneapolis, Minn.
Filed April 29, 1916. Serial No. 94,804. PUBLISHED APRIL 2, 1918.

121,944. METALS—NAMELY, COPPER, LEAD, ZINC, GOLD, AND SILVER. PHELPS DODGE & COMPANY, New York, N. Y.
Filed March 30, 1917. Serial No. 102,593. PUBLISHED MARCH 19, 1918.

121,945. METALS—NAMELY, COPPER, LEAD, ZINC, GOLD, AND SILVER. PHELPS DODGE CORPORATION, New York, N. Y.
Filed March 30, 1917. Serial No. 102,592. PUBLISHED MARCH 19, 1918.

121,946. CANNED SARDINES. PREMIER PACKING CO., San Diego, Cal.
Filed February 12, 1918. Serial No. 108,963. PUBLISHED MARCH 19, 1918.

121,947. PREPARATION FOR CLEANING AND BRIGHTENING WHITE AND COLORED SHOES AND GLOVES. THE RADIUM DYE COMPANY, Kansas City, Mo.
Filed November 20, 1917. Serial No. 107,498. PUBLISHED MARCH 5, 1918.

121,948. MONTHLY MAGAZINE OR PERIODICAL. REALTY PUBLISHING CO., Newark, N. J.
Filed December 26, 1917. Serial No. 108,162. PUBLISHED MARCH 5, 1918.

121,949. LACQUERS, VARNISHES, READY-MIXED PAINTS. REDMANOL CHEMICAL PRODUCTS CO., Chicago, Ill.
Filed August 5, 1914. Serial No. 80,335. PUBLISHED MARCH 12, 1918.

121,950. HAND-SOAP. THE REYNOLDS CORPORATION, Bristol, Tenn.
Filed December 7, 1917. Serial No. 107,818. PUBLISHED MARCH 19, 1918.

121,951. DRY, PASTE, AND READY-MIXED PAINTS. HUGHES T. REYNOLDS, Rome, Ga.
Filed December 14, 1917. Serial No. 107,965. PUBLISHED MARCH 26, 1918.

121,952. STUCCO COMPOSITION. THE ROCBOND COMPANY, INC., Van Wert, Ohio.
Filed February 13, 1918. Serial No. 108,981. PUBLISHED APRIL 2, 1918.

121,953. CHEMICAL COMPOUND FOR PRESERVING RUBBER. THE SAVE-O CO. INC., Hartford, Conn.
Filed November 29, 1916. Serial No. 99,634. PUBLISHED MARCH 26, 1918.

121,954. KNITTING-MACHINES. ELSIE SCHNEIDER, Cleveland, Ohio.
Filed February 1, 1918. Serial No. 108,756. PUBLISHED MARCH 5, 1918.

121,955. CERTAIN NAMED FOODS. SEATTLE GROCERY CO., INC., Seattle, Wash.
Filed March 29, 1917. Serial No. 102,574. PUBLISHED MARCH 19, 1918.

121,956. NON-ALCOHOLIC MALTLESS BEVERAGE SOLD AS A SOFT DRINK. SHER-A-COCA BOTTLING COMPANY, INCORPORATED, Lexington, Ky.
Filed March 17, 1917. Serial No. 102,225. PUBLISHED APRIL 17, 1917.

121,957. CERTAIN NAMED MUSICAL INSTRUMENTS AND SUPPLIES. LOUIS C. SCHERMERHORN, Paterson, N. J.
Filed October 16, 1917. Serial No. 106,795. PUBLISHED MARCH 19, 1918.

121,958. SURFACE CLEANER AND POLISHER FOR AUTOMOBILE-BODIES AND OTHER ENAMELED SURFACES. HENRY SCHIELD, St. Louis, Mo.
Filed October 31, 1917. Serial No. 107,073. PUBLISHED MARCH 5, 1918.

121,959. CONCENTRATED SYRUP FOR A NON-ALCOHOLIC FRUIT BEVERAGE SOLD AS A SOFT DRINK. W. SHEINKER & SON, New York, N. Y.
Filed August 8, 1917. Serial No. 105,548. PUBLISHED FEBRUARY 19, 1918.

121,960. LUBRICATING-OILS. SINCLAIR REFINING COMPANY, Chicago, Ill.
Filed April 2, 1917. Serial No. 102,667. PUBLISHED MARCH 12, 1918.

121,961. CLOVER-SEED, GRASS-SEED, AND SIMILAR SEEDS FOR THE GROWING OF CROPS. DATUS C. SMITH, Blanchard, N. D.
Filed November 17, 1916. Serial No. 99,358. PUBLISHED MARCH 12, 1918.

121,962. CERTAIN NAMED CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF. SPARTAN SAW WORKS, Springfield, Mass.
Filed January 16, 1918. Serial No. 108,495. PUBLISHED MARCH 5, 1918.

121,963. LUBRICATING OILS AND GREASES. THE STAR OIL COMPANY, Chicago, Ill.
Filed March 26, 1917. Serial No. 102,468. PUBLISHED MARCH 19, 1918.

121,964. BUTTONS TO BE USED FOR ATTACHMENT OF WEARING-APPAREL. STEIN BROTHERS MANUFACTURING COMPANY, Williamsport, Pa.
Filed October 25, 1917. Serial No. 106,961. PUBLISHED MARCH 19, 1918.

121,965. COATS AND SUITS. LOUIS STILLMAN, New York, N. Y.
Filed December 24, 1917. Serial No. 108,134. PUBLISHED MARCH 12, 1918.

121,966. NUT-OLEOMARGARIN. SWIFT AND COMPANY, Chicago, Ill.
Filed February 1, 1918. Serial No. 108,759. PUBLISHED MARCH 19, 1918.

121,967. FRUIT-JUICE EXTRACTORS. SWISS MANUFACTURING COMPANY, San Francisco, Cal.
Filed January 17, 1918. Serial No. 108,510. PUBLISHED MARCH 26, 1918.

121,968. ANNEALED AND UNANNEALED SPECIAL TOOL-STEEL. TENNESSEE COAL, IRON & RAILROAD CO., Birmingham, Ala.
Filed November 24, 1917. Serial No. 107,595. PUBLISHED FEBRUARY 26, 1918.

121,969. STEEL WIRE. C. TENNANT SONS & CO. OF NEW YORK, New York, N. Y.
Filed December 28, 1917. Serial No. 108,207. PUBLISHED MARCH 19, 1918.

121,970. PAINT-REMOVER. TEPPER BRIQUETTE BINDER, INC., New York, N. Y.
Filed December 8, 1917. Serial No. 107,857. PUBLISHED MARCH 19, 1918.

121,971. MEDICINE FOR THE TREATMENT OF NERVOUS, ANEMIC, RHEUMATIC, AND STOMACH DISEASES. ELVIRA TESSICINI, New York, N. Y.
Filed May 21, 1917. Serial No. 103,998. PUBLISHED MARCH 26, 1918.

121,972. FOOT-ACCELERATOR, BEING A MECHANICAL DEVICE FOR CONTROLLING FUEL-SUPPLY FOR INTERNAL-COMBUSTION ENGINES. W. H. THOMAS CO., Spencer, Iowa.
Filed November 6, 1917. Serial No. 107,207. PUBLISHED MARCH 5, 1918.

121,973. CERTAIN NAMED MOTOR-SPIRITS. TIDE WATER OIL COMPANY, Bayonne, N. J., and New York, N. Y.
Filed December 19, 1917. Serial No. 108,066. PUBLISHED MARCH 26, 1918.

121,974. LIQUID FUELS COMPRISING GASOLENE, NAPHTHA, BENZIN, AND KEROSENE FOR INTERNAL-COMBUSTION ENGINES AND MOTORS. TRUE'S OIL COMPANY, Spokane, Wash.
Filed March 6, 1917. Serial No. 101,941. PUBLISHED MARCH 12, 1918.

121,975. LIQUID PREPARATIONS FOR HARDENING, PRESERVING, AND WATERPROOFING CONCRETE FLOORS. ALFRED C. TURNER, Boston, Mass.
Filed March 1, 1918. Serial No. 109,307. PUBLISHED APRIL 2, 1918.

121,976. CANNED SARDINES. CHARLES EDWARD VAN LANDINGHAM, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,974. PUBLISHED MARCH 19, 1918.

121,977. CANNED SARDINES. CHARLES EDWARD VAN LANDINGHAM, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,970. PUBLISHED MARCH 19, 1918.

121,978. CANNED SARDINES. CHARLES EDWARD VAN LANDINGHAM, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,971. PUBLISHED MARCH 19, 1918.

121,979. CANNED SARDINES. CHARLES EDWARD VAN LANDINGHAM, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,973. PUBLISHED MARCH 19, 1918.

121,980. CANNED SARDINES. CHARLES EDWARD VAN LANDINGHAM, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,972. PUBLISHED MARCH 19, 1918.

121,981. HACKSAWS, COPING-SAWS, BUTCHERS' SAWS, BAND-SAWS, AND JEWELERS' SAWS. VICTOR SAW WORKS, Springfield, Mass.
Filed January 2, 1918. Serial No. 108,266. PUBLISHED MARCH 19, 1918.

121,982. WRENCHES. WALDEN-WORCESTER, INC., Worcester, Mass.
Filed November 5, 1917. Serial No. 107,188. PUBLISHED MARCH 12, 1918.

121,983. CHEMICAL CARBON-REMOVER. THE WALLACE COMPANY, Newark, N. J.
Filed January 19, 1918. Serial No. 108,559. PUBLISHED MARCH 26, 1918.

121,984. PERFUMES, TOILET WATER, AND FACE-POWDERS. THE J. R. WATKINS MEDICAL CO., Winona, Minn.
Filed February 4, 1918. Serial No. 108,813. PUBLISHED MARCH 19, 1918.

121,985. ELECTRIC SWITCHES AND ELECTRICAL DEVICES FOR CAUSING DIMMING OF HEAD-LIGHTS. LEIGH F. WATSON, Chicago, Ill.
Filed October 29, 1917. Serial No. 107,016. PUBLISHED MARCH 19, 1918.

121,986. COATED BOOK AND MAGAZINE PAPER. WEST VIRGINIA PULP & PAPER CO., New York, N. Y.
Filed January 5, 1917. Serial No. 100,377. PUBLISHED MARCH 19, 1918.

121,987. COLORING MATERIAL FOR LEATHER. WESTERN MANUFACTURING COMPANY, Cudahy, Wis.
Filed September 17, 1917. Serial No. 106,289. PUBLISHED OCTOBER 30, 1917.

121,988. CERTAIN NAMED SHEET-METAL PRODUCTS. WHEELING CEILING & ROOFING CO., Wheeling, W. Va.
Filed January 4, 1918. Serial No. 108,319. PUBLISHED MARCH 19, 1918.

121,989. CERTAIN NAMED OILS AND GREASES. THE WHITE EAGLE PETROLEUM COMPANY, Chanute, Kans.
Filed November 24, 1917. Serial No. 107,600. PUBLISHED MARCH 26, 1918.

121,990. BUTTONS FOR WEARING-APPAREL. FRANK W. WHITCHER COMPANY, Boston, Mass.
Filed January 31, 1918. Serial No. 108,731. PUBLISHED MARCH 19, 1918.

121,991. ELECTRIC SEARCH-LIGHTS. WILLIAMS MANUFACTURING COMPANY, Santa Ana, Cal.
Filed September 4, 1917. Serial No. 106,049. PUBLISHED MARCH 5, 1918.

121,992. WRITING AND PRINTING PAPER. WHITING-PLOVER PAPER COMPANY, Stevens Point, Wis.
Filed October 6, 1917. Serial No. 106,647. PUBLISHED MARCH 19, 1918.

121,993. FISHING LINES, LEADERS, FLIES, SNELLED HOOKS, RODS, AND REELS. THE WHITNEY SPORTING GOODS COMPANY, Denver, Colo.
Filed October 24, 1917. Serial No. 106,931. PUBLISHED APRIL 2, 1918.

121,994. EYEGLASSES. T. A. WILLSON & CO., INC., Reading, Pa.
Filed February 4, 1918. Serial No. 108,814. PUBLISHED MARCH 26, 1918.

121,995. ANTIMALARIAL AND GENERAL TONICS. WINTERSMITH CHEMICAL CO., Louisville, Ky.
Filed January 18, 1918. Serial No. 108,539. PUBLISHED MARCH 19, 1918.

121,996. COLORING FOR HAIR-DRESSINGS, SUCH AS SHAMPOOS. JOHN J. WITTWER, Sr., Seattle, Wash.
Filed December 14, 1917. Serial No. 107,972. PUBLISHED MARCH 19, 1918.

121,997. COMPOUND FOR THE TREATMENT OF CONSUMPTION AND HEART TROUBLE. SOMETARO YASUDA, Los Angeles Cal.
Filed December 28 1917. Serial No. 108,208. PUBLISHED MARCH 19, 1918.

121,998. WRITING-PAPER, PRINTING-PAPER, CARD-STOCK, AND ENVELOPS. ZELLERBACH PAPER COMPANY, San Francisco, Cal.
Filed November 24, 1917. Serial No. 107,601. PUBLISHED MARCH 26, 1918.

121,999. WHITE-KID CLEANER. CHRIST A. ZOES, Chicago, Ill.
Filed January 29, 1918. Serial No. 108,690. PUBLISHED MARCH 5, 1918.

TRADE-MARK REGISTRATIONS RENEWED.

14,551. SALVES, OINTMENTS, WASHES, AND DETERGENTS. ARNICARBOLINE COMPANY, Milwaukee, Wis.
Registered June 28, 1887. Renewed June 28, 1917.

15,402. ULTRAMARINE. DESCHAMPS FRÈRES, Vieux-Jeand'Heurs, Meuse, France.
Registered May 1, 1888. Renewed May 1, 1918.

15,502. HORSE-NAILS. LIVINGSTON-NAIL CO., New York, N. Y., Livingston-Cooper Corporation, assignee.
Registered May 22, 1888. Renewed May 22, 1918.

15,877. TEXTILE PIECE-GOODS, INCLUDING PLUSH, VELVET, AND OTHER PILE FABRICS. SIR TITUS SALT, BART., SONS & COMPANY, (LIMITED,) Saltaire, West Riding, county of York, England.
Registered September 18, 1888. Renewed September 18, 1918.

15,960, 15,961, 15,962. TYPE-WRITING MACHINES. STANDARD TYPE WRITER MANUFACTURING COMPANY, New York, N. Y.; Remington Type Writer Company, assignee.
Registered October 23, 1888. Renewed October 23, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

ADJUDICATED PATENTS.

(U. S. C. C. A. N. Y.) The Quist and Blanch reissue patent, No. 13,408, (original No. 976,494,) for a pneumatic carpet-cleaner, *Held* void for lack of invention in view of the prior art. *Domestic Vacuum Cleaner Co.* v. *Bissell Carpet Sweeper Co.*, 249 Fed. Rep., 201.

(U. S. C. C. A. Ind.) The Bone patent, No. 705,732, for a retaining-wall, *Held* not infringed. *Bone* v. *Commissioners of Marion County*, 249 Fed. Rep., 211.

(U. S. C. C. A. Ill.) The Brooke patent, No. 723,983, for an apparatus for cutting and distributing molten material, *Held* not anticipated, valid, and infringed. *Schram Glass Mfg. Co.* v. *Homer Brooke Glass Co.*, 249 Fed. Rep., 228.

(U. S. C. C. A. Ill.) The Foster patent, No. 798,406, for a railway water-column, *Held* valid and infringed. *American Valve & Meter Co.* v. *Fairbanks, Morse & Co.*, 249 Fed. Rep., 234.

(U. S. D. C. Ill.) The Van Berkel patents, Nos. 806,603 and 895,213, for meat-slicing machines with removable meat-plates, *Held* valid and infringed as to claim 2 of the earlier patent and claims 8, 9, and 10 of the later. *United States Slicing Mach. Co.* v. *Wolf, Sayer & Heller*, 249 Fed. Rep., 245.

(U. S. C. C. A. Ill.) The Johnson patent, No. 818,968, for a railway water-column, *Held* not anticipated, valid, and infringed. *American Valve & Meter Co.* v. *Fairbanks, Morse & Co.*, 249 Fed. Rep., 234.

(U. S. C. C. A. Ill.) The Woods patent, No. 904,665, for a journal-box, *Held* valid and infringed as to claim 2 and not infringed as to claim 3. *McCord & Co.* v. *Woods*, 249 Fed. Rep., 203.

(U. S. C. C. A. Ill.) The Woods patent, No. 969,933, for a journal-box, *Held* valid and infringed. *McCord & Co.* v. *Woods*, 249 Fed. Rep., 203.

(U. S. C. C. A. N. Y.) The Sturgeon patent, No. 996,810 for a pneumatic carpet-cleaner, *Held* void for anticipation. *M. S. Wright Co.* v. *Bissell Carpet Sweeper Co.*, 249 Fed. Rep., 199.

(U. S. C. C. A. Ill.) The Kramer patent, No. 1,014,155, for a rail-anchor. *Held* valid and infringed. *P. & M. Co.* v. *Ajax Rail Anchor Co.*, 249 Fed. Rep. 215.

(U. S. C. C. A. Ill.) The Becker patents, Nos. 1,024,549 and 1,024,550, for a process of making ornamental prepared roofing and the product thereof, *Held* void for anticipation. *West Coast Roofing & Mfg. Co.* v. *Elaborated Ready Roofing Co.*, 249 Fed. Rep., 221.

(U. S. C. C. A. Ill.) The Goldberg patent, No. 1,113,116, for a process of making ornamental prepared roofing and the resulting product, *Held* not infringed. *West Coast Roofing & Mfg. Co.* v. *Elaborated Ready Roofing Co.*, 249 Fed. Rep., 221.

(U. S. C. C. A. Ind.) The Rextrew patent, No. 1,123,376, for an eye-shield, *Held* void as to claim 4 and not infringed as to the remaining claims. *American Goggle Co.* v. *Malcom*, 249 Fed. Rep., 240.

(U. S. C. C. A. Ill.) The Baender patent, No. 1,138,437, for a carpet-cleaner, *Held* void for lack of invention. *National Sweeper Co.* v. *Bissell Carpet Sweeper Co.*, 249 Fed. Rep., 196.

(U. S. D. C. Ill.) The Sturm patent, No. 1,153,269, for brick-handling tongs, *Held*, in view of prior art, not to show invention, this being particularly true as patent, which, if valid, was a very narrow one, was not commercially successful. *Sturm* v. *Wm. E. Dee Co.*, 249 Fed. Rep., 244.

(U. S. C. C. A. Ill.) The Becker patent, No. 1,157,664, for a process of making ornamental prepared roofing, *Held* void for lack of invention, and No. 1,157,665, for the product, *Held* void in part and in part not infringed. *West Coast Roofing & Mfg. Co.* v. *Elaborated Ready Roofing Co.*, 249 Fed. Rep., 221.

(U. S. C. C. A. Ind.) The Malcom patent, No. 1,182,398, for an eye-shield, claims 5, 6, 7, 8, and 9 *Held* void and claims 1, 2, 3, 4, and 10 valid and infringed. *American Goggle Co.* v. *Malcom*, 249 Fed. Rep., 240.

Applications Made to the Federal Trade Commission for Licenses Under Enemy-Controlled Patents and Trade-Marks Pursuant to the "Trading with the Enemy Act."

Patent No. 782,739, dated February 14, 1905, to Emil Fischer, of Berlin, Germany, assignor to the Firm of E. Merck, of Darmstadt, Germany. "C-C-Dialkyl-barbituric acid and process of making same." License applied for by Victor Halper, 562 West One Hundred and Forty-eighth street, New York city.

Patent No. 711,377, dated October 14, 1902, to Max Bazlen, of Ludwigshafen, Germany, assignor to the Badische Anilin & Soda Fabrik, of Ludwigshafen, Germany, a corporation of Germany. "Solid alkaline hydrosulfites and process of making same." License applied for by Merrimac Chemical Company, 148 State street, Boston, Mass.

Patent No. 795,755, dated July 25, 1905, to Max Bazlen, of Ludwigshafen-on-the-Rhine, Germany, assignor to the Badische Anilin & Soda Fabrik, of Ludwigshafen-on-the-Rhine, Germany, a corporation of Baden. "Process of making stable dry hydrosulfites." License applied for by Merrimac Chemical Company, 148 State street, Boston, Mass.

Patent No. 837,017, dated November 27, 1906, to Carl Auer von Welsbach, of Vienna, Austria-Hungary. "Pyrophoric alloy." License applied for by American Pyrophor Company, 317 East Thirty-fourth street, New York city.

Patent No. 976,760, dated November 22, 1910, to Carl Auer von Welsbach, of Vienna, Austria-Hungary, assignor to the Firm of Treibacher Chemische Werke Gesellschaft M. B. H. "Pyrophoric mass." License applied for by American Pyrophor Company, 317 East Thirty-fourth street, New York city.

Changes in Classification.

(ORDER No. 2,397.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 10, 1918.

The following changes in the classification of inventions are hereby directed, to take effect immediately:

In class 58, Horology, (Division XXIII,) abolish the following subclasses, with their definitions:

Clocks—
Winding—
47. Motors, pneumatic.
49. Motors, thermal.

The patents formerly contained in these subclasses have been placed in class 60, Power Plants, subclass 7, Combined types, With mechanical motor, hereinafter established.

In class 110, Furnaces, (Division XIX,) abolish the following subclasses, with their definitions:

Furnace structure—
2. Automobile.
Draft-regulators—
149. External exhaust and blower,
151. Exhaust-nozzle—
152. Variable discharge—
153. Boiler-controlled,
154. Exhaust-controlled,
155. Air-feed,
156. Shunt-pipe,
164. Lift-pipe.

The patents formerly contained in subclass 2 above have been placed for the most part in class 60, Power Plants, hereinafter established; those in subclass 149 have been placed for the most part in class 60, subclass 90, Exhaust treatment, Flue ejection, hereinafter established, and those in subclasses 151 to 156 and 164 have been placed in class 162, Injectors and Ejectors, subclass 4, Flue-ejectors, and the subclasses indented thereunder, hereinafter established.

In class 121, Steam-Engines, (Division XVIII,) abolish subclasses—

Rotary—
56. Impact—
57. Axial flow,
58. Compound,
59. Injector,
60. Radial flow,
61. Reaction.
Speed-governors—
118. Turbine control.

The patents formerly contained in subclasses 56 to 61 above have been placed in class 60, Power Plants, hereinafter established, and those in subclass 118 have been placed in class 137, Water Distribution, subclass 158, Valve actuation, Systems, Turbine control, hereinafter established.

In class 122, Liquid Heaters and Vaporizers, (Division XVIII,) abolish the following subclasses, with their definitions:

Feed-heaters—
416. Compound engine,
Stack—
440. Furnace-gases and steam.
Regulation—
445. Depending on load.
Feeders—
453. Exhaust-steam—
454. Water-injected—
455. From boiler.

The patents formerly contained in subclass 416 above have been placed in class 60, Power Plants, subclass 65, Exhaust treatment, Reëxpansion, and the subclasses indented thereunder, hereinafter established; those in subclass 440 have been placed in class 60, subclass 4, Combined with heater, Heating water, By furnace-gases and steam, hereinafter established; those in subclass 445 have been placed in class 60, subclass 105, Regulation, and the subclasses indented thereunder, hereinafter established; those in subclasses 453 and 454 have been placed for the most part in classes 60, Power Plants, hereinafter established, and 162, Injectors and Ejectors, and those in subclass 455 have been placed for the most part in class 60, subclass 92, Exhaust treatment, Regeneration, hereinafter established.

In class 122, Liquid Heaters and Vaporizers, (Division XVIII,) establish the following subclass and definition:

5.5. **Air-injected.**

5.5. AIR-INJECTED. Devices for vaporizing a liquid, with means for mingling air therewith in the vaporizer.

Search Class—
60—POWER PLANTS, subclass 39, Mixed fluids.

The patents contained in this subclass have been taken for the most part from class 60, Miscellaneous Heat-Engine Plants, subclasses 9, Steam, Air-injected, and 29, Pressure-generators, Steam, Air-Injected, hereinafter abolished.

In class 123, Internal-Combustion Engines, (Division XXVIII,) abolish the following subclasses, with their definitions:

Combined devices—
4. Internal combustion and fluid-pressure—
5. Fluid transmission.
6. Waste-heat utilizing.
Rotary—
9. Impact,
10. Reaction.
20. **Steam-convertible.**
36. **Multiple expansion.**
40. **Vacuum-exhaust.**
49. **Valve-controlled combustion-chamber.**
Starting devices—
181. Compressed-air supply,
Mechanical—
187. Motors.
194. **Exhaust treatment.**

The patents formerly contained in these subclasses have been placed for the most part in class 60, Power Plants, hereinafter established; those in subclasses 4, 5, and 6 having been placed in subclasses 11, Combined types, Internal combustion and turbine, and the subclasses indented thereunder, and 14, Combined types, Internal combustion and fluid-pressure, and the subclasses indented thereunder; those in subclasses 9 and 10 having been placed in subclasses 41, Mixed fluids, Turbine, Combustion products, and 42, Mixed fluids, Turbine, Combustion products, Water-injected; those in subclasses 20 and 181 having been placed in subclass 16, Combined types, Internal combustion and fluid-pressure, Convertible; those in subclass 36 having been placed in subclass 15, Combined types, Internal combustion and fluid-pressure, Reexpansion; those in subclass 40 having been placed in subclass 32, Internal generation, Combustion, Exhaust treatment, Suction; those in subclass 49 having been placed in subclass 44, Mixed fluids, Combustion products, and the subclasses indented thereunder; those in subclass 187 having been placed partly in subclass 7, Combined types, With mechanical motor, and those in subclass 194 having been placed in subclass 29, Internal generation, Combustion, Exhaust treatment, and the subclasses indented thereunder. Some of the patents formerly contained in subclass 187 have also been placed in class 185, Motors.

In class 126, Stoves and Furnaces, (Division XIX,) abolish the following subclass, with its definition:

Hot-air furnaces—
Combined with boiler—
101.5. Locomotive.

The patents formerly contained in this subclass have been placed in class 237, Heating Systems, subclass 12.6, Heat and power plants, Car, Air, hereinafter established.

In class 137, Water Distribution, (Division XXXIX,) establish subclasses—

156. **Pressure-responsive devices—**
157. Diaphragm.
Valve actuation—
Systems—
158. Turbine control.

The patents contained in subclasses 156 and 157 above have been taken for the most part from class 60, Miscellaneous Heat-Engine Plants, subclass 2, Atmospheric and solar, hereinafter abolished, and those contained in subclass 158 have been taken from classes 121, Steam-Engines, subclass 118, Speed-governors, Turbine control, hereinbefore abolished, and 137, Water Distribution, subclass 144, Valve actuation, Systems.

In class 138, Hydraulic Motors, (Division IX,) abolish subclass—

22. **Pump and motor circuit.**

The patents formerly contained in this subclass have been placed in class 60, Power Plants, hereinafter established, particularly in subclass 53, Hydraulic type, Fluid transmission, Rotary.

In class 162, Injectors and Ejectors, (Division IX,) establish subclasses—

4. **Flue-ejectors—**
5. With spark-arresters—
6. Variable,
7. Variable—
8. **Jet.**

The patents contained in these subclasses have been taken from class 110, Furnaces, subclasses 151 to 156 and 164, hereinbefore abolished.

In class 171, Electricity—Generation, (Division XXVI,) give to the subclass title "Magneto-electric" the number 319, the patents contained in this subclass being for magneto-electric generators, taken from various classes throughout the Office, which do not fall in any of the subclasses indented under that title.

In class 185, Motors (Division XLV,) abolish the following subclasses, with their definitions:

Composite—
Weight—
Winding—
Motor—
8. **Fluid.**
Weight—
Winding—
Motor—
34. **Fluid.**
Spring—
Winding—
Motor—
42. **Fluid.**

The patents formerly contained in subclass 8 above have been placed in classes 60, Power Plants, subclass 8, Combined types, With mechanical motor, Gravity, hereinafter established, and 185, Motors, subclass 7, Composite, Weight, Winding, Motor; those in subclass 34 have been placed in class 60, Power Plants, subclass 8, Combined types, With mechanical motor, Gravity, hereinafter established, and those in subclass 42 have been placed in class 60, Power Plants, subclass 7, Combined types, With mechanical motor, hereinafter established.

In same class, in the definition of subclass 2, Composite, cancel the note and substitute the following:

Search Class—
60—POWER PLANTS, subclass 7, Combined types, With mechanical motor, and the subclasses indented thereunder, for combinations which include motors of types properly classifiable in other classes than this.

In same class, in the definition of subclass 7, Composite, Weight, Winding, Motor, cancel the note and substitute the following:

Note.—See note under subclass 2.

In same class, in the definition of subclass 11, Composite, Spring, Winding, Motor, cancel the note and substitute the following:

Note.—See note under subclass 2.

In class 237, Heating Systems, (Division XIX,) abolish the following subclasses, with their definitions:

20. **Fire-engine.**
21. **Vehicle.**
22. **Train—**
23. Smoke,
24. Air—
25. Radiator,
26. Water,
27. Steam.

The patents formerly contained in these subclasses have been placed for the most part in class 237, Heating Systems, subclass 12.1, Heat and power plants, and the subclasses indented thereunder, hereinafter established.

In same class establish the following subclasses and definitions:

12.1. **Heat and power plants—**
12.2. Fire-engine,
12.3. Vehicle,
12.4. Car—
12.5. Smoke,
12.6. Air—
12.7. Radiator,
12.8. Steam.

12.1. HEAT AND POWER PLANTS. Systems combining means for generating and distributing heat to buildings or other inclosures with means for the production of power by a motor.

Search Class—
60—POWER PLANTS, subclass 2, Combined with heater, and the subclasses indented thereunder, and, as indicated in the search notes thereto, for power plants *per se* capable of use with a heater or heating system.

12.2. HEAT AND POWER PLANTS, FIRE-ENGINE. Combinations of a heating system with a fire-engine.
Note.—See search note under subclass 12.1.

12.3. HEAT AND POWER PLANTS, VEHICLE. Combinations of a heating system for a vehicle other than a railway car or train with a power plant.
Note.—See search note under subclass 12.1.

12.4. HEAT AND POWER PLANTS, CAR. Heating systems for a car or train, combined with the locomotive or other power plant.
Note.—See search note under subclass 12.1.

12.5. HEAT AND POWER PLANTS, CAR, SMOKE. The car or train is heated directly by the furnace-gases from the power plant.
Note.—See search note under subclass 12.1.

12.6. HEAT AND POWER PLANTS, CAR, AIR. The car or train is heated by a supply of warm air supplied by the power plant.
Note.—See search note under subclass 12.1.

12.7. HEAT AND POWER PLANTS, CAR, AIR, RADIATOR. The warm air supplied by the power plant is passed through radiators.
Note.—See search note under subclass 12.1.

12.8. HEAT AND POWER PLANTS, CAR, STEAM. The car or train is heated by steam, usually from the power plant.
Note.—See search note under subclass 12.1.

The patents contained in these subclasses have been taken for the most part from class 237, Heating Systems, subclasses 20 to 27, hereinbefore abolished.

In same class, in the main class definition, cancel the second search note, beginning "131—Steam-Engines," and add to the search notes the following:

60—POWER PLANTS, for power plants combined with heating apparatus which does not constitute a heating system.

In class 253, Motors—Fluid, (Division IX,) abolish the following subclasses, with their definitions:

Gas-operated—
Rotary—
Peripheral supply—
41. Injected fluid,
Plural shafts—
Series—
42. Jet—
43. Reversely rotating,
End supply—
58. Injected fluid,
Plural shafts—
60. Reversing,
61. Series—
62. Reversely rotating—
63. Reversing—
64. Alternately locked,
Center supply—
80. Injected fluid,
Plural shafts—
Series—
83. Reversely rotating—
84. Reaction-wheel.

60.—POWER PLANTS.
1. **Miscellaneous.**
2. **Combined with heater—**
3. Heating water—
4. By furnace-gases and steam,
5. By steam.
6. **Combined types—**
7. With mechanical motor—
8. Gravity—
9. Oscillating,
10. Rotary,
11. Internal combustion and turbine—
12. Fluid transmission,
13. Reëxpansion,
14. Internal combustion and fluid-pressure—
15. Reëxpansion,
16. Convertible,
17. Boosting—
18. Convertible pump,
19. Fluid transmission,
20. Fluid-pressure and turbine—
21. Reëxpansion.
22. **Buoyancy.**
23. **Expansion and contraction—**
24. Hot-air type—
25. With vapors.
26. **Utilizing natural heat.**
27. **Internal generation—**
28. Combustion—
29. Exhaust treatment—
30. Fluid-mingling,
31. Cooling,
32. Suction,
33. Hot air,
34. Cooling,
35. Special motive fluid.

60.—POWER PLANTS—Continued.
36. **Special motive fluid—**
37. Chemical,
38. Separate fluids.
39. **Mixed fluids—**
40. Turbine—
41. Combustion products—
42. Water injected,
43. Semicompound,
44. Combustion products—
45. Water injected—
46. Flasher,
47. Semicompound—
48. Automatic.
49. **Separate fluids.**
50. **Chemical.**
51. **Hydraulic type—**
52. Fluid transmission—
53. Rotary—
54. Turbine,
55. Turbine—
56. Heated.
57. **Pneumatic type—**
58. Reëxpansion,
59. Heated,
60. Vacuum,
61. Convertible pump,
62. Fluid transmission.
63. **Hot-air charged.**
64. **Exhaust treatment—**
65. Reëxpansion—
66. Tapping—
67. Turbine,
68. Convertible.
69. Multiple motor—
70. Turbine,
71. Duplex—
72. Cut-off,
73. Turbine,
74. Moving cylinder,

60.—POWER PLANTS—Continued.
Exhaust treatment—
Reëxpansion—
75. Rotating piston—
76. Rotary abutment,
77. Sliding abutment,
78. Swinging abutment,
79. Oscillating piston,
80. Concentric cylinder,
81. Differential piston,
82. Cut-off,
83. Tandem—
84. Single-acting,
85. Single valve,
86. Single-acting,
87. Single valve,
88. Delivery to furnace,
89. Tapping,
90. Flue ejection—
91. With cooling,
92. Regeneration,
93. Fluid-mingling—
94. Liquid,
95. Cooling—
96. By air.
97. **Multiple motor—**
98. Single control,
99. Duplex—
100. Cut-off,
101. Synchronizing,
102. Turbine—
103. Reversely rotating.
104. **Superheating.**
105. **Regulation—**
106. Furnace and feed-water,
107. Feed-water.
108. **Turbine.**

J. T. NEWTON,
Commissioner.

The patents formerly contained in these subclasses have been placed for the most part in class 60, Power Plants, hereinafter established; those in subclasses 41, 58, and 80 having been placed in subclass 40, Mixed fluids, Turbine; those in subclasses 42, 61, 99, 146, and 161 having been placed in subclass 70, Exhaust treatment, Reëxpansion, Multiple motor, Turbine; those in subclasses 60, 100, and 145 having been placed in subclass 102, Multiple motor, Turbine, and those in subclasses 43, 62, 63, 64, 83, 84, 98, 147, and 162 having been placed in subclass 103, Multiple motor, Turbine, Reversely rotating.

In class 60, Miscellaneous Heat-Engine Plants, (Division XVIII,) change the title of the class to read:

60.—POWER PLANTS,

abolish the existing subclasses and definitions, and establish in lieu thereof the following subclasses and definitions:

Changes in Classification.

(ORDER No. 2,295.)

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 10, 1918.

The following change in the classification of inventions is hereby directed, to take effect immediately:

In class 105, Railway Rolling-Stock, (Division XXXIV,) abolish subclass—

Cars—
Street—
213. Awnings.

The patents formerly contained in this subclass have been placed in class 135, Tents, Canopies, Umbrellas, and Canes, subclass 5, Canopies.

J. T. NEWTON,
Commissioner.

Disclaimer.

1,260,766.—*Edward J. Granger*, Chicago, Ill. FOLDING AND PLAITING MACHINE. Patent dated March 26, 1918. Disclaimer filed June 24, 1918, by the patentee.

Enters this disclaimer—

"To the following claims in the aforesaid Letters Patent, to wit: 1 to 12 inclusive; Nos. 14 to 21 inclusive, and Nos. 24 to 39 inclusive."

Communications to the Patent Office.

RULE 8. A separate letter should in every case be written in relation to each distinct subject of inquiry or application. Assignments for record, final fees, and orders for copies or abstracts must be sent to the Office in separate letters.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

Vol. 251—No. 3. TUESDAY, JUNE 18, 1918. Price—$5 per year.
[PUBLISHED JULY 10, 1918.]

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Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Designs	19—No.	52,106 to No.	52,124, inclusive.
Trade-Marks	51—No.	122,000 to No.	122,050, inclusive.
Labels	51—No.	20,657 to No.	20,707, inclusive.
Prints	11—No.	4,900 to No.	4,910, inclusive.
Reissues	2—No.	14,486 to No.	14,487, inclusive.
Total	816		

Notice—Assistant Examiner Examination.

The Civil Service Commission has announced an open competitive examination for the position of Assistant Examiner in the Patent Office on July 24 and 25 and on August 21 and 22, 1918. Qualified persons are urged to enter this examination. Entrance salary, $1,500 per annum.

Application blanks and information as to where the examination will be held may be obtained from the Civil Service Commission, Washington, D. C.

Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 26, 1918.

In order that the public may have the benefit of the full time in trade-mark cases, the date of actual publication of the OFFICIAL GAZETTE will be the effective date from which the thirty-day period prescribed by the Trade-Mark Act will be computed. The actual date of publication will be found in each weekly number under the date of issue on the first page.

J. T. NEWTON,
Commissioner.

Notice—Photostat Copies.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 10, 1918.

Owing to difficulties encountered in obtaining the services of competent typists notice is hereby given that in order to avoid delays the Patent Office reserves the right to furnish photostat copies in lieu of type-written copies, in filling orders for copies of its records, on and after August 1, 1918, unless otherwise specifically directed.

J. T. NEWTON,
Commissioner.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 27, 1918.

The Star Manufacturing Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Fiske Brothers Refining Co., of 24 State street, New York, N. Y., for registration of a trade-mark and trade-mark registered October 7, 1890, No. 18,494, to The Star Manufacturing Co., of Dock street, Easton, Pa., and a notice of such declaration sent by registered mail to said The Star Manufacturing Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said The Star Manufacturing Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 25, 1918.

Norton & Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Ulysses Grant Holley, Laramie, Wyo., for registration of a trade-mark and trade-mark registered October 16, 1894, No. 25,866, to Norton & Co., of 811 and 812 Royal Insurance Building, Chicago, Ill., and a notice of such declaration sent by registered mail to said Norton & Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Norton & Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 21, 1918.

Ezo Manufacturing Company, their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Lawrence Chemical Co., of 532 Sixth street, Marietta, Ohio, for registration of a trade-mark and trade-mark registered June 17, 1902, No. 88,465, to Ezo Manufacturing Company, of 200 West South street, Akron, Ohio, and a notice of such declaration sent by registered mail to said Ezo Manufacturing Company at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Ezo Manufacturing Company, their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

APPLICATIONS UNDER EXAMINATION.

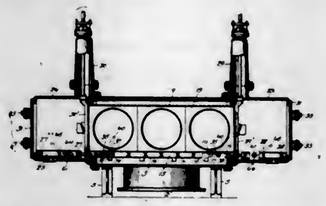
Condition at Close of Business June 14, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	May 7	May 17	152
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging; Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 19	Mar. 30	261
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 22	Apr. 29	187
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	Apr. 22	May 24	185
167	5. Bookbinding; Harvesters; Jewelry; Music	Mar. 23	Apr. 18	222
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Feb. 21	Mar. 27	392
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Feb. 5	May 2	340
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	Apr. 30	May 16	280
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Jan. 28	Apr. 29	419
235	10. Carriages and Wagons; Motor Vehicles	Feb. 15	Apr. 27	595
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Mar. 29	May 21	214
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Feb. 18	Mar. 25	686
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 23	Apr. 17	539
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure; Wire-Working.	Apr. 2	Apr. 24	173
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	May 15	May 16	227
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Feb. 9	Mar. 18	505
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 6	May 3	103
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Mar. 18	Apr. 4	360
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Mar. 14	Apr. 1	395
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	May 4	May 18	168
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Feb. 28	Apr. 20	219
249	22. Aeronautics; Firearms; Ordnance	Mar. 12	May 8	294
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 2	May 4	281
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	May 3	May 20	206
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	Apr. 29	May 1	152
105	26. Electricity, Generation; Motive Power	Dec. 8	Apr. 1	500
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Mar. 29	May 6	281
225	28. Internal-Combustion Engines	Mar. 14	Apr. 25	415
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 23	Jan. 7	433
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Mar. 12	May 18	360
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 1	Mar. 28	229
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Dec. 22	May 1	662
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 3	May 4	214
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	May 27	May 27	82
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Jan. 17	Jan. 26	519
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Apr. 18	May 11	505
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Jan. 21	Jan. 29	686
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	May 23	May 15	100
220	39. Water Distribution; Multiple Valves	Feb. 16	Apr. 9	354
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 14	Apr. 1	480
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Mar. 1	Apr. 19	295
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling	Jan. 14	Jan. 19	641
882	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 20	Apr. 23	214
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Apr. 18	May 14	180
379	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 2	Mar. 7	334
	Oldest new case, Dec. 8; oldest amended, Jan. 7.			
	Total number of applications awaiting action			15,039
168	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
	Trade-Marks	May 13	May 29	675
	Designs	Mar. 30	May 21	484
	Labels and Prints	May 28	May 25	98

PATENTS

GRANTED JUNE 18, 1918.

1,269,571. HIGH-PRESSURE STRAINER AND METHOD FOR CLEANING OR EXCHANGING THE STRAINER-BASKETS. AXEL AKERS, Chicago, Ill. Filed Dec. 7, 1916. Serial No. 135,560. (Cl. 210—16.)



1. A high pressure strainer comprising a casing having an inlet and outlet opening, a series of strainer baskets arranged in said casing, auxiliary chambers arranged at both ends of the strainer, and means for moving said baskets whereby one enters the adjacent one of said chambers.

2. A high pressure strainer comprising a casing having an inlet and outlet opening, a series of strainer baskets arranged in said casing, auxiliary chambers arranged at both ends of said casing, means for slidingly supporting said strainers, and means for moving said baskets whereby one enters the adjacent one of said chambers.

3. A high pressure strainer comprising a casing having an inlet and outlet opening, auxiliary chambers arranged at both ends of said casing, a series of strainer baskets arranged in said casing with the longitudinal axes in horizontal position, castings provided at both ends of said baskets and secured thereto, rails extending longitudinally of said casing, bearing rollers on said rails supporting said castings, and means for moving said baskets whereby one enters the adjacent one of said auxiliary chambers.

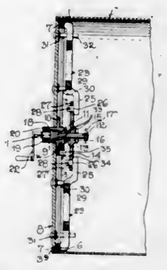
4. A high pressure strainer comprising a casing having an inlet and outlet opening, said casing being formed with a longitudinal raceway, auxiliary chambers at both ends of said casing, a series of strainer baskets arranged in said casing with their longitudinal axes in horizontal position, castings provided at both ends of said baskets and secured thereto, one of said castings projecting into said raceway, rails extending longitudinally of said casing, bearing rollers on said rails, said castings being supported by said bearing rollers, and means for moving said baskets whereby one enters the adjacent one of said auxiliary chambers.

5. A high pressure strainer comprising a casing having an inlet and outlet opening, a series of strainer baskets arranged in said casing, auxiliary chambers arranged at both ends of said casing, means for placing said chambers in and out of communication with said casing, and means for horizontally moving said baskets whereby one enters the adjacent one of said chambers.

[Claims 6 to 19 not printed in the Gazette.]

1,269,572. CLOSURE FOR BURIAL-VAULTS. SAMUEL ALLENBAUGH, Galion, Ohio. Filed Oct. 27, 1917. Serial No. 198,841. (Cl. 27—7.)

1. The combination with a vault body and closure head therefor, of locking mechanism carried by said closure head including a pluarility of shiftable locking members to coact with means on the body wall of the vault, a rotatable and axially movable actuating member mounted in the closure head, and means operatively connecting the locking frames to each other for simultaneous shifting movement, and means carried by said actuating element to operatively engage the connecting means between said frames when said actuating element is unthreaded from connection with the vault head and axially moved with respect thereto to shift said frames upon a subsequent rotation of said element and move the frames to effective locking positions or to their released positions.



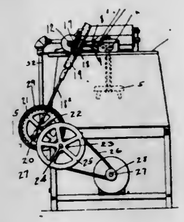
2. The combination with a vault body and closure head therefor, of locking mechanism carried by the closure head including a plurality of shiftable locking frames adapted to coact with means on the body wall of the vault, an actuating element having a threaded connection with the vault head, means operatively connecting the locking frames to each other for simultaneous shifting movement, and means carried by said actuating element to operatively engage the connecting means between said frames when said actuating element is unthreaded from connection with the vault head and axially moved with respect thereto to shift said frames upon a subsequent rotation of said element and move the frames to effective locking position or to their released positions.

3. The combination with a vault and closure head therefor, of locking mechanism carried by said closure head including shiftable locking frames to engage a part fixed to the body wall of the vault, a bearing centrally secured in the head and internally threaded at one end, an actuating member extending through said bearing and having threaded engagement therewith, a member loosely engaged on said actuating element and operatively connecting the locking frames to each other for simultaneous movement, said actuating element having means to coact with said member when the actuating element is unthreaded from the bearing and moved axially therethrough whereby the frames are actuated upon a subsequent rotation of said element and moved to their locking or released positions, and means mounted upon the bearing and adapted to be positioned for operative engagement with the actuating element when the latter is threaded into the bearing to prevent the operation of said element and of the shiftable frames whereby the vault head is permanently locked in place.

4. The combination with a vault and closure head therefor, of locking mechanism carried by said closure head including shiftable locking frames to engage a part fixed to the body wall of the vault, a bearing centrally secured

in the head and internally threaded at one end, an actuating member extending through said bearing and having threaded engagement therewith, a member loosely engaged on said actuating element and operatively connecting the locking frames to each other for simultaneous movement, said actuating element having means to coact with said member when the actuating element is unthreaded from the bearing and moved axially therethrough whereby the frames are actuated upon a subsequent rotation of said element and moved to their locking or released positions, and a spring pressed pin mounted on the bearing, said actuating member having ratchet teeth with which said pin is adapted to coact to prevent the rotation of said memoer after it has been threaded into the bearing whereby the actuation of the locking frames is prevented and the closure head permanently locked in place.

1,269,573. DRIVING MECHANISM. ALPHEUS W. ALTORFER, Roanoke, Ill. Filed Feb. 16, 1914. Serial No. 818,887. (Cl. 74—50.)



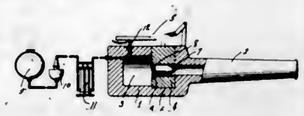
1. In a driving mechanism, in combination, a machine having a hinged element, a shaft passing through said element, a cross-shaft journaled on said element and geared to said first shaft, a driving shaft journaled on said machine, meshing gears on said cross and driving shafts, said gear on the driving shaft being slidable on said driving shaft to be moved into and out of meshing relation with said gear on the cross shaft, and means movable with said hinged element for sliding said gear on the driving shaft.

7. In a driving mechanism, in combination, a machine having a hinged element, a shaft passing through said element, a cross-shaft journaled on said element and geared to said first shaft, a driving shaft journaled on said machine, bevel gears connecting said driving and cross-shafts, said gear on the driving shaft being slidable thereon, a pivoted member for sliding said slidable gear, a casing attached to said element and adapted to cover the gears connecting the driving and cross-shafts, said casing provided with a groove to receive said pivoted member, the opposite walls of which are curved, whereby, when said element is raised, one wall of the groove will move said pivoted member to slide the slidable gear in one direction, and when said element is lowered, the opposite wall of said groove will move said pivoted member to slide the slidable gear in the opposite direction.

10. In a driving mechanism, in combination, a machine having a hinged element, a shaft passing through said element, a cross-shaft journaled on said element and geared to said first mentioned shaft, a driving shaft journaled on said machine, gears on each of said driving and cross-shafts adapted to intermesh to impart movement from the driving shaft to the cross-shaft, means controlling the operation of the gear on the driving shaft by said shaft, said means operating to actuate the gear on the driving shaft when the hinged element is lowered, whereby operation may be imparted to the cross-shaft, and said means operating to interrupt the operation of the gear on the driving shaft when the hinged element is raised.

[Claims 2 to 6, 8, 9, and 11 to 16 not printed in the Gazette.]

1,269,574. GASOLENE-GUN. JOHN L. ANTHONY and WILLIAM S. BRADFORD, Haynes, Ark. Filed Nov. 7, 1917. Serial No. 200,775. (Cl. 89—7.)



1. A gun comprising a barrel, a combustion chamber at the rear of the barrel, a breech block transversely slidable between the barrel and combustion chamber and provided with a shell chamber adapted to aline with the bore of the barrel and to communicate with the combustion chamber, means for feeding a charge of explosive gas into the combustion chamber and means for firing the charge.

[Claims 2 and 3 not printed in the Gazette.]

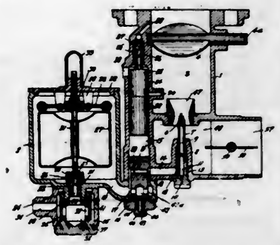
1,269,575. ADJUSTABLE BUFFER AND ANTIRATTLER FOR DOORS. SETH B. ATWOOD, Rockford, Ill. Filed Nov. 17, 1916. Serial No. 131,847. (Cl. 16—77.)



1. A buffer and anti-rattler attachment for doors comprising an attaching plate having an opening therein, a buffer slidably movable through said opening and having an elongated slot substantially parallel in the plane with which the buffer is movable, a screw passing through said slot and associated with the attaching plate, and a part associated with the screw and so arranged with respect to the buffer as to clamp the same rigidly to the attaching plate by turning the screw.

2. A buffer and anti-rattler for doors comprising a door or door jamb casing shaped to receive a buffer member, one end of which is adapted to project from the casing, an elastically yieldable buffer member positioned in said casing and movable relatively thereto to project more or less therefrom, the buffer member having an elongated slot coincident with its plane of movement, a screw-threaded member passing through said slot, and a member associated with the screw-threaded member and the buffer member and adapted upon turning of the screw member to tighten or loosen the buffer member in the casing in any adjusted position of the buffer member therein.

1,269,576. CARBURETER. FRANK H. BALL and FREDERICK O. BALL, Detroit, Mich., assignors to Ball & Ball Carburetor Company, Detroit, Mich., a Corporation of Michigan. Filed Oct. 4, 1915. Serial No. 53,898. (Cl. 261—41.)



4. In a carbureter, the combination of a primary carbureter comprising a mixing chamber, a throttle valve, a fuel nozzle, an air passage leading to the mixing chamber, and a yielding valve for said passage actuated by the movement of air through the passage; and a secondary carbureter supplementing the delivery of mixture from the primary carbureter and normally out of action, comprising means for augmenting the fuel supply, a secondary air passage leading to the mixing chamber, and devices presenting a non-yielding resistance to the flow of air through the secondary air passage comprising a closure valve for said secondary air passage.

16. In a carbureter, the combination of a carbureter passage; a throttle controlling said passage; a fuel chamber supplying fuel to said passage; a pick-up device comprising a receptacle to which fuel is supplied; a connection between the receptacle and said passage; a vent above the normal fuel level in the receptacle normally preventing an indrawing of fuel through said connection by suction; and means acting with the opening of the throttle for forcing fuel into the path of the air passing through the vent and connection to deliver the fuel with the air to the mixing chamber through said connection.

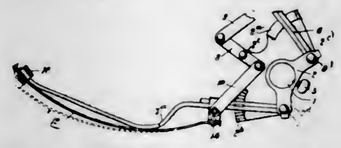
20. In a carbureter, the combination of a mixing chamber; means for delivering air and fuel to said chamber; a throttle valve; and devices actuated by fluctuations in the degree of vacuum at the discharge side of the throttle for momentarily supplementing the normal delivery of fuel, said devices acting to augment said normal supply without disturbing said normal supply.

21. In a carbureter, the combination of a mixing chamber; a throttle valve; means for delivering air and fuel to said chamber; a pick-up receptacle; and devices subjected to fluctuations of pressure at the discharge side of the throttle and acting under the influence of such fluctuations to fill the receptacle on the closing of the throttle and to discharge the fuel from the receptacle to supplement the normal fuel supply when the throttle opens, said devices acting to supplement said normal fuel supply without disturbing said normal supply.

30. In a carbureter, the combination of a primary carbureter comprising a mixing chamber; a throttle valve controlling the flow of mixture from the mixing chamber; a fuel nozzle; an air inlet; and a secondary carbureter supplementing the delivery of mixture from the primary carbureter and normally out of action comprising a fuel nozzle; an air passage to which the nozzle leads, said air passage being inclined to the direction of flow of the air through the mixing chamber; and a closure valve in said air passage.

[Claims 1 to 3, 5 to 15, 17 to 19, and 22 to 29 not printed in the Gazette.]

1,269,577. BAG-HOLDER. JACOB BOLANDER, Toronto, Ontario, Canada. Filed Nov. 26, 1917. Serial No. 204,065. (Cl. 83—26.)



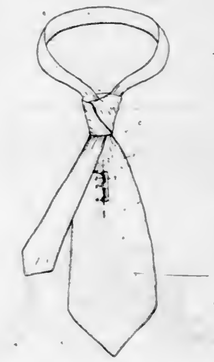
1. In a bag holder, a pair of bag-supporting arms provided with upwardly offset portions over which the rim of a bag may be folded, grippers secured at their inner ends to said arms, said grippers, when operative, extending along the outer surfaces of the upwardly offset portions of said arms, and locking means carried at the free ends of the grippers to engage the arms.

2. In a bag holder, a pair of bag-supporting arms provided with upwardly offset portions over which the rim of a bag may be folded, and grippers hingedly secured at their inner ends to said arms, the outer ends of said grippers being adapted to engage the upwardly extending offset portions of said arms to bind the folded rim of the bag thereon.

3. In a bag holder, a laterally offset bag-supporting arm, a laterally elongated gripper secured at one end to said arm, and means to detachably secure the free end of said gripper to said arm, whereby when the gripper is attached at both ends to the arm the intermediate portion thereof will impinge against the lateral offset in the arm and the closing of said gripper is effected against the resilience thereof.

4. In a bag holder, a bag supporting arm, an elongated, resilient gripper, swingably mounted on said bag holder to move laterally with respect to said arm, said supporting arm forming a stop to contact with said gripper intermediate of its length, when said gripper is partly closed on said arm, whereby the full closing of said gripper will be effected against the resilience thereof.

1,269,578. TIE-PIN HOLDER. LAWRENCE M. CAMPAU, Detroit, Mich. Filed July 17, 1917. Serial No. 180,978. (Cl. 24—155.)

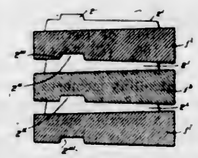


1. A tie-pin holder comprising a body having spaced projections for engagement at one side of a pin and an intermediate projection engageable at the opposite side of the pin, one of said projections presenting a bearing edge to the pin and acting as a detent to resist relative displacement of pin and holder longitudinally of the former.

7. A tie-pin holder comprising a resilient body having spaced lugs for engagement at one side of a tie-pin and an intermediate lug engageable at the opposite side of said pin, the first-mentioned lugs being bent to incline them oppositely at a slight angle to the plane of the body whereby they present bearing edges to the pin and form detents to resist longitudinal displacement thereof, said lugs being further shaped to resist lateral displacement of the pin.

[Claims 2 to 6 not printed in the Gazette.]

1,269,579. GRATE AND GRATE-BAR THEREFOR. FERDINAND E. CANDA, New York, N. Y. Filed May 4, 1916. Serial No. 95,312. (Cl. 83—56.)



1. A grate bar blank such as described, consisting of a rolled steel member, having at intervals on one side, spacing pads provided with projecting lugs, and having on its

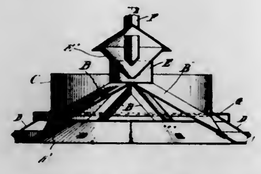
opposite side a continuous groove adapted to receive lugs similar to the lugs referred to.

2. A grate comprising a plurality of grate bars each provided on one side with spacing pads each having a projecting lug, and on its other side with a continuous groove corresponding in position to such lugs and adapted to receive similar lugs of another bar, such grate bars interlocked by engagement of the lug of one bar with the said groove of an adjacent bar.

3. A grate structure comprising a support for a plurality of grate bars, and a plurality of grate bars secured to such support, each such grate bar having on one side a continuous longitudinal groove, and having on its opposite side a projecting pad provided with a further projecting lug adapted to engage the corresponding groove of an adjacent similar bar, the fact that the said grooves are continuous permitting interlocking of the adjacent bars wherever such lugs may be, and without registry of the lugs of one bar with the lugs of adjacent bars.

4. A grate comprising a spirally wound strip, such strip provided on one side with spacing pads each having a projecting lug and on its other side with a continuous groove corresponding in position to such lugs and adapted to receive such lugs, the several turns of the spiral interlocked by engagement of the lugs of one turn with the grooves of an adjacent turn of the spiral.

1,269,580. DEVICE FOR FEEDING SLOP OR SWILL. EDWARD AUGUSTUS CASPER and JOHN KNILL SYMONDS, Dunlap, Ill. Filed Mar. 28, 1917. Serial No. 158,101. (Cl. 119—52.)



1. A slop feeding device including in its construction a trough, a series of spouts spaced around said trough to discharge into the same and secured at one of their ends with respect thereto, their other ends converging upwardly toward a common point, and a housing overlying the spouts near their lower ends, and bracing means connecting the housing and the trough.

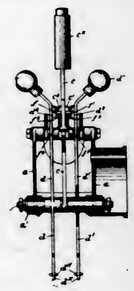
5. A slop feeding device comprising, in combination, a trough having the form of a ring, a series of spouts at one of their ends spaced around the trough and arranged to discharge material into the same, and at their other ends converging upwardly, a hopper disposed above the convergent ends arranged to discharge material into all of the spouts, and a ring overhanging the trough and free to be lifted at any point thereof, and means on which the said ring freely rests.

[Claims 2 to 4 not printed in the Gazette.]

1,269,581. MECHANISM FOR CONTROLLING DRIVING MEANS. PAUL DAIMLER, Cannstatt, and MAX FRIZ, Stuttgart-Untertürkheim, Germany, assignors to Daimler-Motoren-Gesellschaft, Stuttgart-Untertürkheim, Germany, a Corporation of Germany. Filed Feb. 8, 1916. Serial No. 77,100. (Cl. 74—39.)

1. A mechanism of the kind described comprising a plurality of auxiliary controlling members movable independently of each other, means for locking said auxiliary members against operation a movable main member and means on said main member whereby said auxiliary members are first released from said locking means and then coupled to said main lever whereby an actuation of the latter will concurrently actuate all of said auxiliary members.

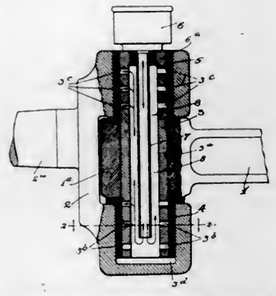
8. A mechanism of the kind described comprising a plurality of independently movable controlling members, means for locking said members against operation and means for first releasing said controlling members and for



subsequently coupling at least two of said members together to operate concurrently.

[Claims 2 to 7 and 9 not printed in the Gazette.]

1,269,582. LUBRICATING DEVICE. PAUL DAIMLER, Cannstatt, Germany, assignor to Daimler-Motoren-Gesellschaft, Stuttgart-Untertürkheim, Germany, a Corporation of Germany. Filed Aug. 10, 1916. Serial No. 114,155. (Cl. 64—56.)



1. In a device of the character described, the combination of two bearing surfaces spaced apart in a vertical direction and means for conducting a lubricant first to the lower surface and then to the upper surface.

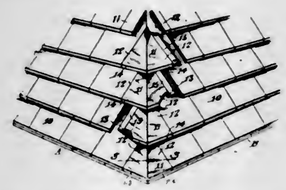
4. In a device of the character described the combination of a pivot spindle, a receptacle for a lubricant at one end of said spindle, spaced bearing members journaled on said spindle and located respectively in proximity to said receptacle and at a distance therefrom and a tube connected with said receptacle and terminating in proximity to the bearing member located at a distance therefrom whereby the lubricant is first conducted to this bearing member and then to the bearing member located in proximity to said lubricating receptacle.

6. The combination of an axle having an apertured head, a hollow spindle fixed in said head and extending transversely therethrough in a vertical direction, said spindle being provided with transverse openings near its opposite ends, upper and lower bearing rings journaled on said spindle and located respectively above and below said head and opposite said transverse openings, a yoke rigidly carried by said rings, a wheel spindle projecting from said yoke, a grease cup located at the upper end of said hollow spindle and a tube connected with said grease cup and depending therefrom within said hollow spindle and forming therewith an annular space, whereby a lubricant is first conducted to the lower transverse openings and to the lower bearing ring and then rises in said annular space to the upper transverse openings and upper bearing ring.

10. The combination of a pair of bearing surfaces spaced from each other in an axial direction and means for conducting a lubricant first in a direction away from the source of lubricant to one bearing surface and then in the reverse direction toward said source to the other bearing surface.

[Claims 2, 3, 5, and 7 to 9 not printed in the Gazette.]

1,269,583. METAL SHINGLE. STEPHEN J. DAVIS, Willimantic, Conn., assignor of one-fourth to William P. Jordan, Willimantic, Conn. Filed July 31, 1917. Serial No. 183,774. (Cl. 108—24.)



1. A metallic shingle for the hip or corner of a roof, comprising a body having flanged edges which elevate the body to substantially the same height as the remaining shingles of the roof and provide a ventilating space beneath the same, the side flanges abutting the edges of the adjacent shingles and the end flanges coinciding with the lower ends of said shingles, and means for fastening the metallic shingle in place.

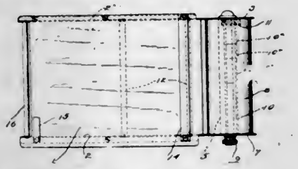
2. A metallic shingle for the hip or corner of a roof, comprising a body formed from a single piece of metal bent longitudinally to provide angular portions, depending side and end flanges on the body, and outwardly extending lateral wings on the side flanges and coextensive therewith.

3. A metallic shingle for the hip or corner of a roof, comprising a body formed from a single piece of metal bent longitudinally to provide angular portions, side and end flanges on the body, and lateral wings extending outwardly from the side flanges beyond the body for the fastening of the latter, and to permit the overlapping of shingles adjacent thereto upon the wings.

4. A metallic shingle for the hip or corner of a roof, comprising a substantially diamond-shaped body bent longitudinally to conform to the angle of the hip or corner, angular sides of gradually reduced thickness, and laterally extending wings projected outwardly from said sides.

5. A metallic shingle for the hip or corner of a roof, comprising a substantially diamond-shaped body bent longitudinally to conform to the angle of the hip or corner angular sides on the body of gradually reduced thickness, laterally extending wings projecting outwardly from said sides, and angular ends meeting each other and the sides.

1,269,584. DESK APPLIANCE. PHILIP B. DOWNING, Everett, Mass. Filed Dec. 20, 1917. Serial No. 208,012. (Cl. 281—6.)



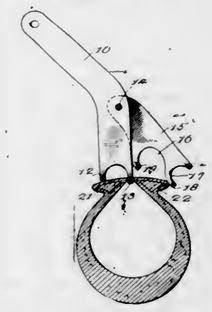
1. An apparatus of the class described, comprising in combination a plate, base members supporting the same, one of said members terminating in a bracket forward of said plate, an axle carried by said bracket, an oppositely disposed adjustable bracket, and means coöperating with said adjustable bracket for holding a roll of paper on said axle under restraint.

2. An apparatus of the class described, comprising in combination a plate, members supporting the same, a cross plate secured to the forward ends of said supporting members, a bracket integral with one of said supporting members, an axle secured to said bracket, an oppositely disposed adjustable bracket, said adjustable bracket being apertured to pass endwise over said axle and cross plate, and means on said cross plate to restrain said adjustable bracket from transverse movement with respect to said cross plate.

3. An apparatus of the class described, comprising in combination a plate, members supporting the same, one of said members terminating in a bracket, an axle carried by said bracket, a cross plate secured to the forward ends of said members and provided with an upwardly arranged rib, and an adjustable bracket having an aperture for receiving said axle and a slot conforming to the shape of said cross plate, and rib whereby said bracket may be passed longitudinally over the latter and restrained from transverse movement with respect thereto.

4. An apparatus of the class described, comprising in combination a plate, a bracket located in front of the forward end thereof, an axle secured to said bracket, said axle being arranged to receive a roll of paper of less width than the plate, an adjustable bracket arranged opposite the bracket first mentioned and apertured to pass over said axle, a sleeve on said axle between said adjustable bracket and the roll of paper, and a nut threaded to the end of said axle which projects beyond the adjustable bracket.

1,269,585. AUTOMOBILE-TIRE IMPLEMENT. LEWIS BELDEN DUTCHER, Oswego, N. Y. Filed June 30, 1917. Serial No. 177,972. (Cl. 152—27.)



1. An implement of the class described comprising a stock having a tire casing bead engaging recess in one end, a lever member pivoted to said bar intermediate the ends thereof and having a plurality of tire casing bead engaging recesses in spaced relation at its free end.

2. An implement of the class described comprising a stock having a bend therein near one end and with an outwardly opening tire bead engaging recess in the shorter end, a lever member pivoted to the stock at its bend and having a plurality of bead engaging recesses in spaced relation at its free end.

1,269,586. BOOKBINDING. HENRY W. ELLSWORTH, Montvale, N. J. Filed Aug. 17, 1915. Serial No. 45,939. (Cl. 281—27.)

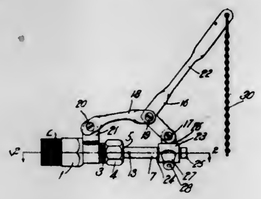
In a book of the class described, the combination of front and back covers having two spaced sets of openings which are arranged adjacent the back edges of the covers in rows parallel thereto and which openings register in pairs when the book is closed, separate leaves ar-

ranged between the covers and having openings which register with the cover openings when the book is closed, and a single binding cord having one end looped through one set of openings and the other end looped through the



other set, the cord in each set of openings extending parallel with the back edges on the outside of the cover and at right angles with the back edges inside and between the covers.

1,269,587. GAGE-COCK. CHARLES W. ENOS, Peabody, Mass. Filed Apr. 2, 1917. Serial No. 159,074. (Cl. 137—138.)

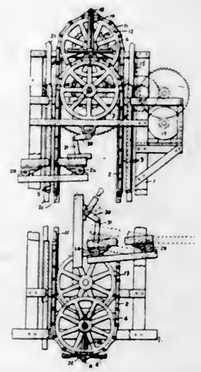


1. A gage cock having, in combination, a casing, a valve adapted to seat in said casing, a reciprocating valve stem protruding from said casing, said stem having a discharge passage extending longitudinally thereof provided with an inlet opening in the side of said stem and an outlet opening at the end thereof, a nozzle reversibly secured to the end of said stem, adapted to be reversed to change the direction of discharge, and a toggle connected at one end to said casing and at the opposite end to said nozzle, adapted to operate said stem to connect and disconnect said discharge passage with the interior of said casing.

2. A gage cock having, in combination, a casing, a valve adapted to seat in said casing, a reciprocating valve stem protruding from said casing, said stem having a discharge passage extending longitudinally thereof provided with an inlet opening in the side of said stem and an outlet opening at the end thereof, a nozzle having a screw threaded hole extending therethrough, adapted to receive, in either end thereof, the end of said stem, the discharge end of said nozzle being disposed substantially at right angles to said screw threaded hole, a plug adapted to close the opposite end of said hole, an ear on said nozzle disposed at an angle to said discharge end, and a toggle attached at one end to said casing and detachably secured at the opposite end to said ear, whereby said nozzle may be reversed on said stem to change the direction of discharge.

1,269,588. CONVEYER. GEORGE ERDMAN, Hudson, N. Y., assignor to Gifford-Wood Company, a Corporation of New York. Filed May 5, 1914. Serial No. 836,431. (Cl. 193—8.)

1. In a conveyer, the combination of two endless flexible chains, a carrier pivotally mounted thereon, a third chain permanently connected to said carrier and mounted to move in a path parallel to and of the same length and shape as the path of the pivot of said carrier, and means for moving said third chain at the same speed as said two chains to maintain said carrier at substantially the same angle to the horizontal at every point in its travel.

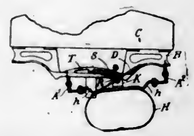


5. In a conveyer, the combination of two endless flexible elements, turning wheels for supporting said elements, carriers pivotally mounted on and between said elements, an endless flexible traveling guide mounted beside said endless elements, to move at the same speed as said endless elements and in a path parallel to and a duplicate of the path of said elements, and means for permanently connecting said carriers to said endless traveling guide to positively steady and control said carriers at every point in its movement.

9. In a conveyer, the combination of two parallel endless flexible elements each in the form of a loop, a rigid cross bar extending from one element to the other and journaled on said elements with one end projecting beyond one of the journals, a load carrying platform mounted on said bar with its load engaging surfaces above the bar, a control arm mounted on the projecting end of said bar, and a traveling guide in the form of a loop parallel to said elements and permanently connected to said control arm to hold said platform horizontal throughout the travel of said platform.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

1,269,589. AUTOMATIC DEFLECTOR FOR ELECTRIC CAR-HEATERS. THOMAS FARMER, Jr., New York, and ERNEST D. JANSEN, Albany, N. Y., assignors to Consolidated Car-Heating Company, Albany, N. Y., a Corporation of West Virginia. Filed Feb. 1, 1915. Serial No. 5,534. (Cl. 237—28.)



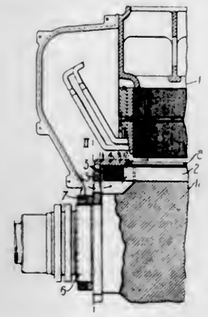
1. The combination with a heater casing adapted to inclose a heater, of a reversible deflector member supported thereby, and a yieldable actuating device for imparting reversing movements to said deflector member.

2. The combination of a heater casing adapted to inclose a heater and having uprights thereon, a deflector member pivotally supported at its ends in said uprights and provided at one end with an operating arm, a spring member attached at one end to said arm, and an operating link connected to the other end of said spring and adapted to be attached to a shiftable element, whereby reversing movements may be imparted to said deflector.

4. The combination with a heater casing adapted to inclose a heater, of a flat deflector plate pivotally mounted at its ends on the exterior of the casing and reversible to deflect the heat therefrom to either side thereof, and means connected to the deflector, whereby reversible movement may be imparted to said deflector.

[Claims 3 and 5 not printed in the Gazette.]

1,269,590. COIL-RETAINING MEANS. ALLAN BERTRAM FIELD, West Cliff-on-Sea, England, and BERNARD A. BEHREND, Boston, Mass., assignors to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 21, 1914. Serial No. 820,266. (Cl. 171—252.)



1. In a dynamo-electric machine, the combination with a magnetizable core provided with a plurality of coils having overhanging end-portions, of a magnetizable member for peripherally supporting said end-portions, and a grid comprising a plurality of highly conductive bars embedded in said magnetizable member, said bars extending longitudinally and circumferentially around said member.

2. In a dynamo-electric machine, the combination with a magnetizable core provided with a plurality of coils having overhanging end-portions, of an annular magnetizable member for peripherally supporting said end-portions, and a plurality of non-magnetizable bars of conductive material disposed in intimate relation with said member and adapted to constitute a damping winding around the periphery of said member.

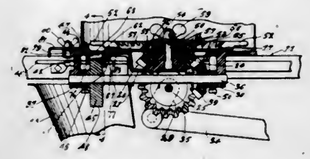
3. In a dynamo-electric machine, the combination with a magnetizable core provided with a plurality of coils having overhanging end-portions, of a retaining ring for said end-portions of magnetizable material, and a damping grid of non-magnetizable material embedded in the outer surface of said ring.

4. In a dynamo-electric machine, the combination with a magnetizable core provided with a plurality of coils having overhanging end-portions, of a retaining ring for said end-portions of magnetizable material having relatively great mechanical strength, a plurality of wedge-sectioned bars of non-magnetizable material transversely embedded in the periphery of the ring, a wedge-sectioned ring for short circuiting said bars at one end and circumferentially embedded in said periphery, and a plurally apertured annular member of non-magnetizable material secured to said retaining ring for short-circuiting said bars at their other ends and adapted to act as a non-magnetizable spacer between said retaining ring and said core.

[Claims 5 to 9 not printed in the Gazette.]

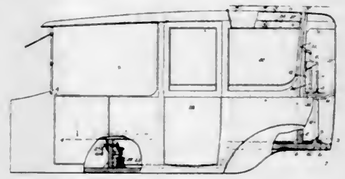
1,269,591. PLANTER. CHARLES E. FISCHER, West Harrison, Ind., assignor to The Campbell Bros. Manufacturing Company, Harrison, Ohio, a Corporation of Ohio. Filed Apr. 13, 1914. Serial No. 831,564. (Cl. 221—120.)

1. In a planter of the character described, the combination of a seed-hopper provided with a bottom wall having a seed-opening, a rotatable picker-wheel extending under said bottom wall and coacting with said seed-opening, the periphery of said picker-wheel provided with alternate seed-excluding and seed-receiving parts, a swinging gate having a seed-contacted upper face extending from a point adjacent to said periphery upwardly and outwardly below said bottom wall for forming a downwardly contracting sub-hopper between said periphery of said picker-wheel and said seed-contacted face under said bottom wall into which the seed is delivered from said seed-receiving part, and means for normally urging said swinging gate toward said picker-wheel.



2. In a planter of the character described, the combination of a seed-hopper provided with a bottom wall having a seed-opening, a rotatable picker-wheel extending under said bottom wall and coacting with said seed-opening, the periphery of said picker-wheel provided with alternate seed-excluding and seed-receiving parts, a swinging gate having a seed-contacted upper face extending from a point adjacent to said periphery upwardly and outwardly below said bottom wall for forming a downwardly contracting sub-hopper between said periphery of said picker-wheel and said seed-contacted face under said bottom wall into which the seed is delivered from said seed-receiving part, means for normally urging said swinging gate toward said picker-wheel, and a stop for limiting the movement of said swinging gate toward said picker-wheel for normally positioning the lower end of said swinging gate adjacent to but slightly removed from the path of movement of said seed-excluding part.

1,269,592. VEHICLE FOLDABLE TOP. OTTO E. P. FRANZ, New York, N. Y. Filed Jan. 10, 1917. Serial No. 141,576. (Cl. 21—62.)



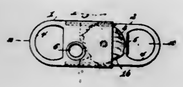
1. In combination with a vehicle body, a collapsible top comprising a bow hinged to the body at the free ends thereof, a flexible covering between said body and the bow, an arm above the hinged connection of the bow projecting rearwardly of said bow, a pair of relatively movable members in threaded engagement connecting the arm to the body, and means for revolving one of said members whereby said bow is adapted to be swung on its hinge to fold the flexible covering.

2. In combination, a vehicle body, a bow hinged to the body, a flexible covering connected to the body and bow, an arm projecting from the bow, a threaded rod connected to the arm, a threaded socket engaging the rod, means for revolving the socket, and a universal joint coupling the socket to the means for revolving it.

3. In combination, a vehicle body, a bow hinged to the body, a flexible covering connecting the body to the bow, an arm projecting from the bow, a threaded rod connected to the arm, a threaded socket engaging the rod, means

for revolving the socket, a universal joint coupling the socket and the means for revolving it, a top section having a flexible cover, a double hinge securing the top section to the bow, a lever fulcrumed on the bow in pivotal engagement with the top section, and a link connecting said lever to the body.

1,269,593. CIGAR-CUTTER. FRANZ A. FULLER, Newark, N. J., assignor to The J. E. Mergott Company, Newark, N. J., a Corporation of New Jersey. Filed Apr. 3, 1916. Serial No. 88,440. (Cl. 131—38.)



1. A cigar cutter comprising two members slidably secured together, one of said members provided with an opening, and further provided with channels along the longitudinal edges thereof, a cutter pivotally secured to the other member and located between said sliding members and said channels, said cutter provided with peripheral means in engagement with the said channels for limiting the forward and rearward movement of said cutter.

5. A cigar cutter comprising two members arranged to slide longitudinally of each other, one of said members provided with an opening and further provided with channels along the longitudinal edges thereof, a cutter rotatably secured to the other member and located between the channels of said sliding members, said cutter provided with a series of projections formed on the peripheral edge thereof, designed to engage with a corresponding series of apertures formed in one of said channels.

[Claims 2 to 4 not printed in the Gazette.]

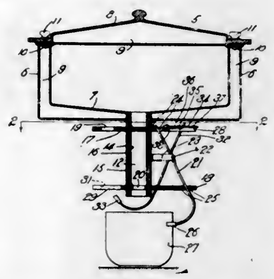
1,269,594. COMBINED CAP AND HAND-BAG. HELEN L. GERAGHTY, Ishpeming, Mich., assignor of one-third to Oscar J. Lidberg, Grand Rapids, Minn. Filed Apr. 3, 1917. Serial No. 159,515. (Cl. 2—106.)



1. In an article of the class described, a body member having a box seam extending transversely thereof and further provided with wings located at the opposite sides of the box seam and having their lower edges lying in the rim line of the body member, the folds forming the wings being closed at said rim line of the body.

2. In an article of the class described, a body or crown member having a box plait extending transversely thereof, the body at each side of the box plait being formed with two ply wings, the plies of the wings being mutually disconnected except at their line of juncture and at their lower edges where they are secured to each other and to the lower edges of the sides of the body member, and a hem member having plies secured to the inner and outer faces of the sides, front and back of the body member and receiving and binding the said lower edges of the body member.

1,269,595. MEASURING DEVICE. JAMES W. GIBBONS, Boston, Mass. Filed May 16, 1917. Serial No. 169,080. (Cl. 221—112.)



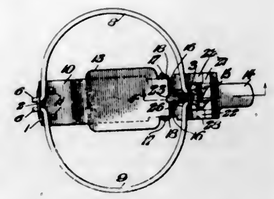
1. A measuring device having, in combination, a pair of chutes, two valves slidably mounted in each of said chutes, one above the other, each of said valves having a hole therethrough, means adapted to simultaneously move said slide valves and to move the slide valves in each chute in opposite directions, all the holes in said valves being adapted to be moved out of alinement with said chutes at the same time.

3. A measuring device having, in combination, a pair of chutes, two valves slidably mounted in each of said chutes, one above the other, each of said valves having a hole therethrough, means adapted to simultaneously move said slide valves and to move the slide valves in each chute in opposite directions, the holes in said slides being so arranged that the hole in the upper slide of one chute and the hole in the lower side of the other chute are in alinement with their respective chutes at the same time.

5. A measuring device having, in combination, a pair of chutes, two valves slidably mounted in each of said chutes, one above the other, each of said valves having a hole therethrough, a lever pivoted to each of said chutes and connected on opposite sides of its pivot to the valves of its respective chute, and a third lever connecting the valve of one chute to the corresponding valve of the other chute and a pivot for said lever located between said valves, all the holes in said valves being adapted to be moved out of alinement with said chutes at the same time.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,269,596. ANIMAL-TRAP. WALTER A. GIBBS, Wilmington, Del. Filed July 24, 1917. Serial No. 182,390. (Cl. 43—23.)



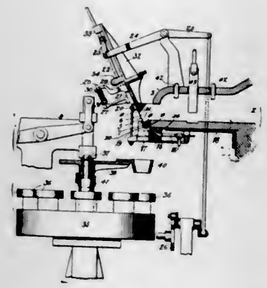
3. An animal trap comprising the jaws, a spring to effect their closing, and releasing means for said spring including a latch carried by the portion of said spring which moves to effect the closing of said jaws.

4. An animal trap, comprising the jaws, a spring to effect their closing, and releasing means for said spring including a latch positioned between said spring and trunnions of said jaws and engaging said trunnions to retain said jaws in set position.

5. An animal trap comprising the jaws, a latch to lock the jaws in set position, a spring, and a treadle carried by said spring, said latch when in set position bearing against the upper face of said treadle whereby when said treadle is depressed it moves out of the path of said latch to release the latch and effect the closing of said jaws.

[Claims 1, 2, and 6 not printed in the Gazette.]

1,269,597. APPARATUS FOR DELIVERING GLASS FROM FURNACES OR THE LIKE. ROBERT GOOD, Jr., Washington, Pa. Filed Sept. 2, 1911, Serial No. 647,333. Renewed Nov. 1, 1917. Serial No. 199,774. (Cl. 49—55.)



2. In an apparatus for delivering molten glass from a furnace or the like, the combination of a delivery spout having a plane face and a refractory cutting edge at one side of the spout-opening; means, other than the heat of the glass, for maintaining said edge in a heated condition; a knife working against the plane face and adapted to contact with said refractory cutting edge; and means for keeping the edge of said knife cool.

5. In an apparatus for delivering molten glass from a furnace or the like, the combination of a delivery spout, the mouth whereof inclines rearwardly toward its lower end or sill; means for heating said sill; a knife working over said mouth and contacting, when closed, with the sill; and means for cooling the knife.

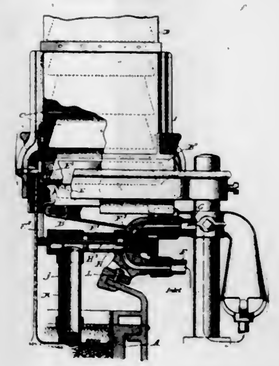
9. In an apparatus for delivering molten glass from a furnace or the like, the combination of a delivery spout the mouth whereof inclines rearwardly toward its lower end; a clay sill located at the lower portion of said mouth; means for bathing said sill in flame and thereby maintaining it in a heated condition at all times; a knife working across the spout and adapted to coöperate with the sill to effect a severance of the charge of glass being delivered; means for maintaining said knife in a cool condition; and means for moving the knife, the speed of the knife accelerating as it passes the sill.

12. In an apparatus for delivering molten glass from a furnace or the like, the combination of a delivery spout; a knife working over said spout and serving, as it is moved downwardly, to cut the stream of glass flowing from the spout; a mold located beneath the spout and adapted to directly receive the charge of glass severed by the knife; and a guide for the severed charge, interposed between the spout and mold, said guide being provided with a deflecting pocket adapted to be positioned between the mold and spout to deflect the severed glass away from the mold, as and for the purpose described.

16. In an apparatus for delivering molten glass from a furnace, the combination of a spout; a removable clay extension or mouth therefor; a face plate; burner blocks located adjacent the lower portion of the mouth; a pivoted burner supporting member; and detachable connections between said supporting member and the face plate.

[Claims 1, 3, 4, 6 to 8, 10, 11, and 13 to 15 not printed in the Gazette.]

1,269,598. TYPOGRAPHICAL CASTING-MACHINE. ALFRED W. F. GUEST, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed May 25, 1914. Serial No. 840,867. (Cl. 22—80.)



1. In a typographical casting machine, the combination of a main casting pot, an auxiliary chamber to contain the supply metal, a burner arranged beneath the auxiliary chamber, a fuel supply system for the burner, and means for controlling the flow of the fuel to the burner, the said means including a valve, and a thermostat positively connected to the valve and adapted to move it postively to open and closed positions under the influence of the heat of the molten metal in the main casting pot.

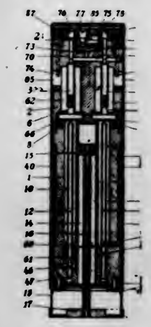
2. In a typographical casting machine, the combination of a main casting pot, an auxiliary chamber to contain the supply metal, a burner arranged beneath the auxiliary chamber, a fuel supply system for the burner, and means for controlling the flow of the fuel to the burner, the said means including a valve, and a thermostat comprising two connected strips of metal having different coefficients of expansion and positively connected to the valve and adapted to move it positively both to open and closed positions under the influence of the heat of the molten metal in the main casting pot.

3. In a typographical casting machine, the combination of a main casting pot, an auxiliary chamber to contain the supply metal, a burner arranged beneath the auxiliary chamber, a fuel supply system for the burner, and means for controlling the flow of the fuel to the burner, the said means including the horizontal tube F^1 having the outlet opening F^3, the vertical tube K communicating with the tube F^1 and disposed within the main casting pot, the valve H slidably arranged in the tube F^1 and controlling the passage of the fuel through the outlet opening F^3 and formed with the elongated stem H^1, and a thermostatic device located within the tub K and comprising the connected strips of metal J having different coefficients of expansion and operatively connected to the valve stem H^1.

4. In a typographical casting machine, the combination of a main casting pot and mechanism for feeding molten metal thereto, said mechanism including a melting cup to contain the supply metal and provided with a constantly exposed outlet opening extending through the vertical wall of the cup terminating above the bottom thereof, so as to provide a dam over which the molten metal must flow from the melting cup into the main pot, a burner

located beneath the melting cup, and means controlled by the level of the molten metal in the main casting pot to regulate the supply of fuel to the burner.

1,269,599. METHOD AND APPARATUS FOR TESTING GASES. FRITZ HABER and RICHARD LEISER, Berlin-Dahlem, Germany. Filed Apr. 30, 1914. Serial No. 835,419. (Cl. 73—51.)



1. The method of tracing or determining admixtures or variations of composition of gases by means of tone vibrations which consists in confining portions of the gases to be compared in separate chambers closed by diaphragms then producing tone vibrations in front of each of said diaphragms and comparing the resultant tones.

5. The method of tracing or determining admixtures or variations of composition of gases by means of tone vibrations which consists in confining samples of the gases to be compared in separate tubular chambers, one wall of each chamber comprising an elastic diaphragm then blowing currents of one of the gases past said diaphragm thereby producing tone vibrations adapted to be affected by the confined gases back of the diaphragms, and comparing the resultant tones.

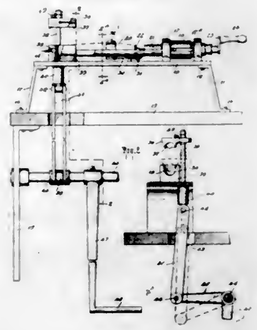
12. In an apparatus for tracing or determining admixtures or variations of composition of gases by means of the tone vibrations of two pipes, the combination of two pipes mounted in coöperative relation, one of said pipes being adapted to contain a standard gas, means in the lip ends of said pipes for producing tone vibrations by currents of gas, a gas tight diaphragm stretched transversely of the axis of one of said pipes said diaphragm shutting off the rear part of the pipe body from the part close to the lip, a single feed passage adapted to supply gas for blowing both of said pipes to produce tone vibrations and means for throttling said passage.

18. In an apparatus for tracing or determining admixtures or variations of compositions of gases by means of the tone vibrations of two pipes, the combination of two pipes mounted in coöperative relation, one of said pipes being adapted to contain a standard gas, means in the lip ends of said pipes for producing tone vibrations by currents of gas, a gas tight diaphragm stretched transversely of the axis of one of said pipes, said diaphragm shutting off the rear part of the pipe body from the part close to the lip, a single feed passage adapted to supply gas for blowing both of said pipes to produce tone vibrations, branches leading from said passage to the respective pipes, means for throttling said passage, means for throttling each of said branches, means for cleaning the blowing gas and a device for the suction of the latter.

25. In an apparatus for tracing or determining admixtures or variations of composition of gases by means of the tone vibrations (beats) of two pipes, a stopped labial pipe containing a thin elastic plate of mica placed transversely to the axis of the pipe body and shutting off the rear part of the pipe body from the part close to the lip and means for introducing into the rear part of the pipe, back of the elastic plate, gaseous mixtures to be tested.

[Claims 2 to 4, 6 to 11, 13 to 17, and 19 to 24 not printed in the Gazette.]

1,269,600. APPARATUS FOR APPLYING PROTECTIVE WRAPPERS TO CIGARS. OSCAR HAMMERSTEIN, New York, N. Y. Filed Dec. 7, 1916. Serial No. 135,579. (Cl. 131—48.)



1. An apparatus of the kind described comprising a stationary shaping device having a tapering recess open at both ends, a carrying trough located in axial alinement with said recess, a rotatable sleeve forming a continuation of said trough, bearings for said sleeve, a plunger slidably mounted in said sleeve and connected therewith, said plunger extending into said trough, and an actuating handle connected with said plunger whereby the later is moved lengthwise in said sleeve and the plunger, sleeve and trough are coincidentally rotated relatively to said recess.

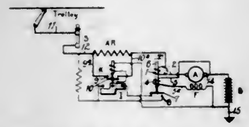
3. An apparatus of the kind described comprising a table having an opening, an apertured base carrying said table, means for supporting said base, a stationary recessed shaping device located upon said table, bearings carried by said table, a sleeve rotatably mounted in said bearings and provided with a slot, a trough forming a continuation of said sleeve, a plunger slidably mounted in said sleeve, a stud extending radially from said plunger through said slot whereby said plunger and sleeve are rotatable together, an adjustable head carried by said plunger, an actuating handle connected with said plunger, a forming member located above and in registry with said shaping device, a vertically movable rod carrying said forming member and extending downwardly through the table opening, a shaft journaled on said supporting means, an arm carried by said shaft, a link connecting said arm and said rod, a lever depending from said shaft and a foot piece on said lever whereby the latter is actuated to rock the shaft and vertically reciprocate the forming member relatively to the shaping device.

4. An apparatus of the kind described comprising a recessed element adapted to receive one end of a partially finished cigar contained in a protective wrapper, means whereby said cigar is rotated relatively to said element to complete the application of the protective wrapper at said end, and tamping means whereby said end of the cigar is finished coincidentally with the finishing of the wrapping operation.

5. An apparatus of the kind described comprising a device having a recess open at its outer end for the accommodation of a projecting portion of the protecting wrapper of a wrapped cigar and means for rotating said cigar whereby said projecting portion of said wrapper may be twisted, said device having a transverse notch communicating with said open end for the accommodation of the twisted end of said wrapper, whereby said twisted end may be coiled upon itself as said cigar is rotated to form a cushion at the one end thereof.

[Claims 2, 6, and 7 not printed in the Gazette.]

1,269,601. SYSTEM OF CONTROL. RUDOLF E. HELLMUND, Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Nov. 25, 1914. Serial No. 873,917. (Cl. 172—179.)



1. In a system of control, the combination with a supply circuit, and an electric motor having an armature and a series field-magnet winding, said armature being adapted to receive currents of different value from those flowing through the field winding, of a main-circuit translating device initially connected in circuit with the armature and the field winding of said motor, and means for excluding said translating device from circuit upon a predetermined variation of machine torque.

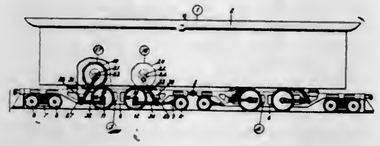
2. In a system of control, the combination with a supply circuit, and an electric motor having an armature and a field-magnet winding, said armature being adapted to receive currents of different value from those flowing through the field winding, of means included in the circuit of the armature and of the field winding for automatically changing the amounts of current flowing through the armature and the field winding to effect acceleration of the motor.

5. In a system of control, the combination with a supply circuit, and an electric motor having an armature and a field-magnet winding, of an auxiliary source of energy connected to said motor to cause a difference in the values of the armature and field-winding currents, and means influenced by the electrical conditions of both the armature and field winding to automatically effect acceleration of the motor.

9. In a system of control, the combination with a supply circuit, and an electric motor having an armature and a field-magnet winding, of a switching device for initially effecting a predetermined set of accelerating connections of the motor windings, and controlling means for said device adapted to be actuated in proportion to the motor torque for automatically actuating said device to effect another set of motor connections for further acceleration.

[Claims 3, 4, 6 to 8, and 10 not printed in the Gazette.]

1,269,602. LOCOMOTIVE. RUDOLF E. HELLMUND, Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed Oct. 30, 1916. Serial No. 128,424. (Cl. 105—259.)



1. In a locomotive, the combination with a cab and two articulated running gears having pairs of driving wheels adapted to support said cab, of motors mounted on each of said running gears, and rods for transmitting the driving effort of each motor to one pair of said driving wheels.

2. In a locomotive, the combination with a cab and two articulated running gears having pairs of driving wheels adapted to support said cab, of motors mounted on each of said running gears, each of said motors having two armatures tandem mounted on one shaft, and means comprising rods for transmitting the driving effort of each motor to one pair of said driving wheels.

3. In a locomotive, the combination with a cab and articulated running gears having pairs of driving wheels, of motors and independent rod connections between each of said motors and one pair of said driving wheels.

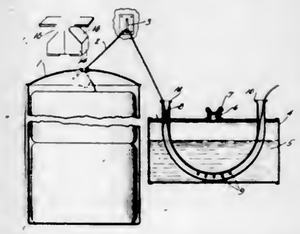
[Claims 4 to 12 not printed in the Gazette.]

1,269,603. MOLD. CARL PHILLIP HERD, Kewanee, Ill. Filed Aug. 28, 1917. Serial No. 188,643. (Cl. 22—126.)



A mold comprising coöperating sections of metal recessed on their inner faces to correspond with the external surface of a radiator section, each recess having a lateral extension at its top for forming a boss on the radiator section at each face thereof and at the top, each extension having a laterally extending vent, the sections having a gate at the top of the mold, and the extensions being of a depth and diameter to receive lateral extensions from the core to support the core in proper position in the mold and out of contact with the bottom of the mold.

1,269,604. TWINE-OILER. WILLIAM HEUER, Wonewoc, Wis. Filed Apr. 12, 1916. Serial No. 90,667. (Cl. 91—32.)



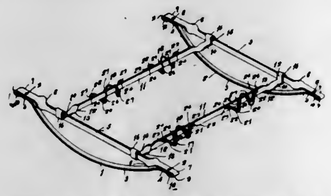
1. In a twine oiler, a substantially U-shaped liquid container, centrally perforated screw caps for the end of said container, an apertured box formed with a flanged end adapted to rest upon one end of said liquid container and to be frictionally secured thereto by one of said perforated screw caps, said apertured box being formed with a contracted neck portion, and balls arranged in said box below said neck portion.

2. In a twine oiler, a substantially U-shaped liquid container, centrally perforated screw caps for the ends of said container, a box formed with a contracted neck carried at one end of said container and balls arranged within said box.

1,269,605. ADJUSTABLE ROCKER FOR BABY-CARRIAGES. JOSEPH C. HILL, Aransas Pass, Tex., assignor of one-half to Reuben Freese, Aransas Pass, Tex. Filed Aug. 31, 1917. Serial No. 189,162. (Cl. 21—12.)

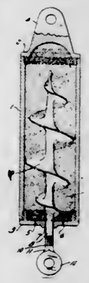
1. A device of the class described comprising a pair of rockers having arcuate bodies having their ends extended

in a horizontal plane, supporting bars, said supporting bars including vertically disposed bodies having their ends twisted and extended in a substantially horizontal plane to provide attaching members, means for securing the attaching members of the supporting bars to the upper side of the attaching ends of the rockers, supporting members, means formed integrally with the ends of the supporting members to adjustably and slidably connect them to the vertical bodies of the supporting bars, and spring clips slidably and adjustably mounted upon the supporting members, as and for the purpose specified.



2. A device of the class described comprising a pair of rockers including arcuate bodies having their ends extended in a substantially horizontal plane forming attaching members, supporting bars, said supporting bars having vertical bodies and their ends twisted to provide horizontally disposed attaching portions, means securing the attaching portions of the supporting bars to the attaching portions of the rockers, and supporting members adjustably mounted upon the vertical bodies of the supporting bars, and spring clips slidably and adjustably mounted upon the supporting members.

1,269,606. SHOCK-ABSORBER. JOHN N. HOVAS, Chicago, Ill. Filed Oct. 3, 1917. Serial No. 194,485. (Cl. 74—69.)



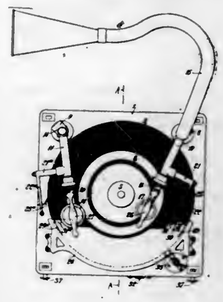
1. In a shock absorber, a container, a spiral plunger within said container and formed with a shank projected beyond said container, and a filler of granular material within said container.

4. In a shock absorber, a container, a spiral plunger within said container and formed with a shank projected beyond said container, said shank being terminally formed with a socket, a screw-eye adapted for releasable engagement with the socket of said shank, a filler of granular material within said container and serving as a packing for said spiral plunger, and supporting means engaging said container and screw-eye.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,607. RECORDING AND REPRODUCING PHONOGRAPH. ERNEST ALBERT IVATTS, Paris, France, assignor to Compagnie Générale des Etablissements Pathé Frères Phonographe et Cinématographe, Paris, France. Filed Feb. 10, 1914. Serial No. 817,724. (Cl. 274—13.)

1. In a recording and reproducing phonograph: a recording sound box, a reproducing sound box, a guide plate having a spiral groove, means for rotating said guide plate, sound arms upon which the recording and the reproducing sound boxes are respectively mounted so as to be capable of swinging vertically, supports upon which the sound arms may swing freely, guiding points mounted on the sound arms, respectively, and adapted to swing vertically on the same, means for forcing the guiding points downwardly in contact with the spiral groove on the guide plate, a member moving with each of the sound boxes and adapted to remove the corresponding guiding point, from the spiral groove when the sound box is brought to the inoperative position and means for supporting the sound boxes in inoperative position, substantially as described and for the purpose set forth.



2. In a recording and reproducing phonograph: a recording sound box, a reproducing sound box, a guide plate having a spiral groove; means for rotating said guide plate, sound arms carrying the recording sound box and the reproducing sound box, respectively, supports upon which the sound arms may swing freely, guiding points mounted on the sound arms, respectively, and adapted to swing vertically on the same so as to engage with the spiral groove or to be removed therefrom and means for supporting the sound boxes in inoperative position with respect to the phonographic disk, said means embodying an arc shaped plate provided with marks at its ends, substantially as described and for the purpose set forth.

1,269,608. THREE-COIN-REGISTER BANK. ARTHUR E. JACOBS, Cleveland, Ohio. Filed Mar. 25, 1912, Serial No. 686,147. Renewed Nov. 14, 1917. Serial No. 202,073. (Cl. 235—100.)



1. In a self registering bank adapted to register coins of several denominations, in combination, a cent dial spaced in divisions of five cents each, with a total indication of one dollar, a flash rotatable about the dial, a case having a reading opening and a shaft on which said dial and flash are mounted in said case, said dial provided with a series of ratchets, corresponding to said divisions on said dial, a pawl member adapted to engage

said ratchets, said pawl member provided with as many engaging parts as there are denominations of coins, and a coin controlled and spring actuated member pivotally mounted on said flash and having a coin engaging member common to all the coins, and also provided with a member, adapted to selectively engage said engaging parts on said pawl member so as to rotate said dial through a sufficient number of spaces to make up the value of said coin deposited, and whereby the value of the coins deposited will be progressively indicated on said dial.

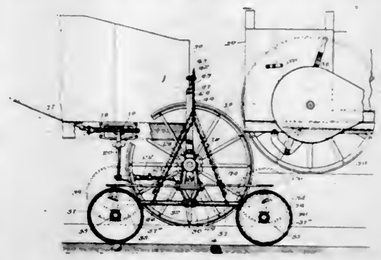
2. In a self registering bank, adapted to register coins of several denominations, a cent dial having a spaced ratchet, a dollar dial, an inclosing frame having reading openings, a flash plate, a common supporting shaft for the dials and flash plate, a pawl member arranged between said cent dial and said flash plate, said pawl member adapted to engage in turn said ratchets on said cent dial, said pawl member having spaced engaging parts, a coin controlled member pivoted on said flash and provided with an arm adapted to selectively and alternately engage with said engaging parts on said pawl member when a coin is deposited, so as to cause the pawl member to rotate the said cent dial when the flash is turned a predetermined distance, determined by the size of the coin, and means for operating the dollar dial once in a complete revolution of the cent dial.

3. In a self registering bank, in combination, a regularly spaced cents dial having a corresponding series of ratchets thereon a flash plate, a shaft on which said dials and flash plate are mounted, a case inclosing said dials and flash plate, said case having a reading opening, a coin chute on said flash closed at its inner end, a pawl member pivoted on said shaft and interposed between said flash and cents dial, and adapted to engage in turn said spaced ratchets on said cents dial, and said pawl member provided with spaced points of engagement and a separate controlling member for said pawl member pivoted upon said flash plate, said controlling member provided with an arm adapted to enter said coin chute and engage the coin deposited therein, and with a second arm adapted to selectively engage one of said spaced points of engagement on said pawl member, so as to rotate said pawl and cents dial when said flash is rotated, a retaining spring for the controlling member, and means for returning said flash, pawl member and controlling member to their original positions.

4. In a self registering bank, the combination with rotatable dial members, one spaced with repetitions of a definite value and provided with corresponding ratchets, and the other dial spaced with multiples of the total value of the spaces on the first named dial, of a flash plate rotatable about the dials, a separate pawl member provided with spaced engaging points and adapted to engage the ratchets in the first named dial, a coin chute on the wall of said flash plate, a rotatable coin controlled member pivoted on said flash plate and adapted to engage said pawl fember selectively at said spaced engaging points to force it into engagement with said ratchets in said dial member and turn said dial when said flash is turned, means for rotating said coin controlled member to engage a coin when the flash plate is turned, and means for rotating the second named dial one space for each total revolution of the cents dial.

5. In a self registering bank adapted to register coins of several denominations, and sizes, in combination, a regularly spaced dial provided with ratchets correspondingly spaced, a flash plate rotatable about said dial, a pawl plate adapted to engage said ratchets and provided with spaced engaging points, a controlling member pivoted in said flash plate and having an arm adapted to engage selectively said engaging points upon the said pawl plate according to the size of the coin deposited in the coin chute, and turn said dial through the space thereon corresponding to the denomination of the coin, a fixed plate, a second drum on said controlling member adapted to engage said fixed plate to rotate said controlling member when the flash plate is moved so that the first arm will engage a coin, and means for restoring the controlling member to its first position.

1,269,609. STEERING DEVICE FOR TRACTION-ENGINES. EDWARD A. JOHNSTON, Chicago, Ill., assignor to International Harvester Corporation, a Corporation of New Jersey. Filed Sept. 14, 1914, Serial No. 861,530. Renewed Jan. 16, 1918. Serial No. 212,154. (Cl. 97—81.)



1. In combination, a traction engine having an axle, a wheel on said axle, a wheel retaining element on the axle, and a furrow pilot steering device supported by said wheel retaining element.

4. In combination, a traction engine having an axle, a wheel on said axle, a wheel retaining element on the axle and having a plurality of bearing portions, oppositely extending furrow pilot steering members pivotally mounted in said bearing portions, and means centrally arranged with respect to said steering members for raising and lowering the steering members.

5. In combination, a traction engine having an axle, a member connected to one portion of said axle, a steering member mounted in said first mentioned member, bracing means connecting said first mentioned member with another portion of said axle, a pivotally mounted lever mounted on said bracing means, and means associated with said steering member and lever for raising said steering member.

8. In combination, a traction engine having an axle, said axle carrying a wheel and a member outside the wheel, steering poles oppositely and pivotally mounted in the member and furrow guide means carried thereby.

12. In a steering device for traction engines, a steering wheel, and steering means associated therewith adapted to engage a furrow in advance of and behind the steering wheel.

[Claims 2, 3, 6, 7, 9 to 11, and 13 to 15 not printed in the Gazette.]

1,269,610. ENVELOP AND LETTER-PAPER PAD. WALTER J. KENNEDY, New York, N. Y. Filed Sept. 10, 1917. Serial No. 190,432. (Cl. 281—38.)



1. An envelop and letter sheet pad, comprising a plurality of letter sheets and a plurality of envelop sheets, the envelop sheets being adapted to be folded transversely to form a transverse central body portion having at its opposite side edges main folding flaps, one of which is a sealing flap, said central body portion being also provided at its transverse ends with supplemental sealing flaps and the transverse dimensions of the letter sheets being less than the corresponding dimensions of the envelop sheets minus said supplemental sealing flaps.

[Claim 2 not printed in the Gazette.]

1,269,611. PUSH-BUTTON SWITCH. JOHN E. KETTEMAN, Toledo, Ohio. Filed Feb. 24, 1917. Serial No. 150,636. (Cl. 175—284.)



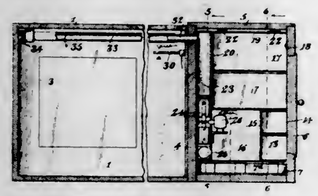
1. In a push-button switch, the combination of a fixed contact, spring-pressed member having a coacting contact, a spring-dog for engaging the spring-pressed member when the spring-pressed member is pushed to a certain point, means for causing the dog to release the spring-pressed member by further movement of the spring-pressed member, and sudden releasement of the spring-pressed member.

4. In a push-button switch, the combination of a spring-pressed member mounted for longitudinal and lateral movements and yieldingly held against said movements, a dog for engaging the member, and means for releasing the spring-pressed member from the dog by lateral movements of the member.

7. In a push-button switch, the combination of a spring-pressed member having a channel, an elliptical shell, a second shell pivoted to the first-named shell and for containing the spring-pressed member, a dog located on the first-named shell for engaging the spring-pressed member, and means for moving the shell to release the spring-pressed member.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,612. REFRIGERATING APPARATUS. FRED KNOERR, Chicago, Ill. Filed Mar. 23, 1917. Serial No. 156,875. (Cl. 62—37.)



1. In a refrigerating apparatus, a cabinet containing tanks spaced from the bottom thereof adapted to contain ice or a freezing mixture and having therebetween a cold air space, a blower in said cold air space, a show case, a conduit connecting said blower with said show case, said tanks being spaced from opposite walls of said cabinet providing passages, and conduits connecting said show case with the passages.

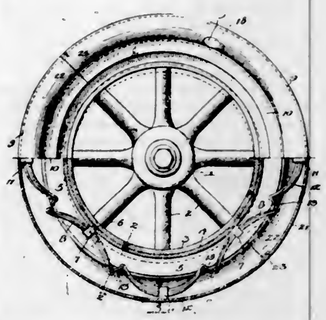
3. In a refrigerating apparatus, a cabinet, a grating located at the bottom of said cabinet, a pair of tanks adapted to receive ice or a freezing mixture mounted within the cabinet and spaced apart, a cold storage receptacle resting upon said grating and located between said tanks, a second cold storage receptacle mounted above said first-mentioned receptacle and extending beyond the end thereof providing a cold air space between the tanks and said receptacles, a show case, a blower within said cabinet adjacent to said space, and conduits connecting said blower with said show case.

5. The combination with a show case, of a refrigerator comprising a cabinet adjacent to said show case, tanks within said cabinet spaced from each other and from certain of the walls of the cabinet forming passages communicating with the show case, cold storage receptacles mounted between said tanks, a drip pan within the bottom of the cabinet, a reticulated grating mounted upon said drip pan for supporting the tanks and receptacles, the lower of said receptacles being spaced a substantial distance from the wall of the cabinet adjacent to the show case, providing a cold air space therein, a cold air tank interposed in the upper end of said cabinet between said tanks and the upper of said receptacles and the wall of the cabinet adjacent to the case, a blower or fan mounted within said cabinet below said cold air tank and connected to the latter, and a connection between said cold air tank and said show case whereby cold air is driven from said space into the show case and returned through said passages and up through the grating back into the cold air space.

7. In a refrigerating apparatus, a cabinet containing a pair of tanks spaced from each other and from a pair of opposite walls providing side passages between the same and the walls, means for supporting said tanks spaced from the bottom forming a bottom passage communicating with the side passages, cold storage receptacles of unequal size mounted within the cabinet between the tanks and forming therewith a central cold air space communicating with the bottom passage, a cold air tank mounted in the upper portion of said cabinet between said tanks and another wall of the cabinet, a blower mounted below said cold air tank adjacent to said central air space, a show case, conduits connecting said cold air tank with said show case whereby cold air can be forced into the same, and return conduits connecting said show case with said side passages.

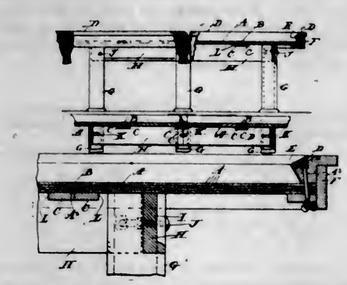
[Claims 2, 4, and 6 not printed in the Gazette.]

1,269,613. COMBINED AUTOMOBILE-WHEEL AND FLEXIBLE TIRE. HENRY J. LA BAUVE, Austin, Tex. Filed Mar. 16, 1914. Serial No. 825,174. (Cl. 152—37.)



In a resilient tire, an inner rim, a series of inner spaced bowed springs secured thereto, an outer rim, a series of outer spaced bowed springs secured to the outer rim, the adjacent ends of adjacent inner and outer springs having spaces therebetween which intervene between said adjacent springs, and means crossing the said intervening spaces and connected to the adjacent ends of adjacent springs, the ends of the inner springs projecting beyond the outer sides of the adjacent ends of the outer springs so as to be disposed between the ends of the outer springs and the tread of the outer rim and there being free space between the entire concave faces of both sets of springs and the opposite rims, whereby the inner springs may bodily and freely and unobstructedly move in said free space toward the inner circumferential face of the outer rim and the outer springs may also bodily and freely and unobstructedly move in said free space toward the periphery of the inner rim.

1,269,614. COLLAPSIBLE BILLIARD AND POOL TABLE. HERBERT F. LAPP, Cleveland, Ohio. Filed Apr. 21, 1917, Serial No. 163,649. Renewed Apr. 15, 1918. Serial No. 228,808. (Cl. 46—12.)

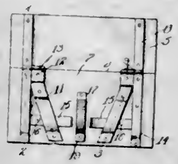


1. In a collapsible billiard table, a sectional table bed, the said sections hinged together, marginal reinforcing strips upon the hinged edges, side rails detachably secured to said table bed, frame members upon which said table bed rests, said frame members having recesses with which said reinforcing strips interlock, and posts to which the extremities of said frame members are detachably secured.

2. In a collapsible billiard table, a sectional table bed, the sections being hinged together, side rails detachably secured to said table bed, frame members upon which said table bed is mounted, and posts interlocking with said frame members, and means for rigidly attaching said side rails to said table bed.

[Claims 3 to 5 not printed in the Gazette.]

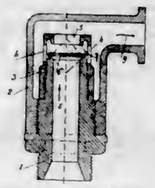
1,269,615. END-GATE FASTENER. GEORGE H. LARSON, Aurelia, Iowa. Filed July 2, 1917. Serial No. 178,239. (Cl. 21—21.)



The combination of a wagon body having an opening in one end, an end gate mounted in said opening, vertical straps secured to said end of the wagon body and bent intermediate their ends to provide bearings, other straps carried by the end gate and having their ends bent upon themselves to provide bearings alined with the first named bearings, pintles engaging in said bearings for pivotally mounting the end gate in position, the lower ends of said vertical straps being inclined to space the same from the end of the wagon body whereby to form tapering slots, and latches extending beneath the second named straps and pivoted to said end gate the outer ends of said latches being adapted to bind in the reduced ends of said tapering openings formed by said vertical straps and the end of the wagon body.

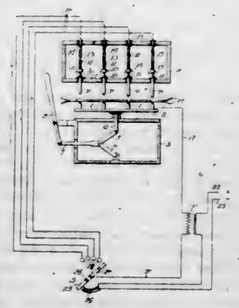
1,269,616. AUTOMATIC VALVE. LÉON LE BOZEC, Bécon-les-Bruyères, France. Filed Aug. 6, 1917. Serial No. 184,790. (Cl. 137—32.)

1. A valve of the character described, comprising in combination, a pipe conduit, a valve casing or cage within said conduit, a nipple secured in said casing, a disk reinforced at its margin capping said nipple, an annular projection on the inner face of said cage facing said nipple, said casing having lateral holes and an enlarged axial hole for automatically preventing back flow of the liquid passed through said nipple, valve and cage into said conduit, substantially as described.



2. A valve of the character described, comprising in combination, a pipe conduit, a valve casing or cage within said conduit, a nipple secured in said casing, a disk reinforced at its margin capping said nipple, said casing having lateral holes for automatically preventing back flow of the liquid passed through said nipple, valve and cage into said conduit, and means for limiting the axial displacement of said disk; the end of said nipple having an annular beveled edge formed by the intersection of two cones arranged in opposite directions and having the same longitudinal axis, substantially as described and for the purpose set forth.

1,269,617. MULTIPLE SPOT-WELDING MACHINE. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 10, 1917. Serial No. 141,641. (Cl. 219—4.)



1. A spot welding machine comprising a plurality of movable electrodes and means for causing said electrodes to contact with the work in a predetermined succession and be collectively held in operative position relative to the work.

11. A welding machine comprising stationary electrodes, a plurality of individually movable electrodes, means tending to yieldingly urge the movable electrodes into operative relation with the stationary electrodes, means acting in opposition to said first named means to control the movement of the movable electrodes and to permit them to be moved into operative relation with the stationary electrodes in a predetermined succession by said first named means, and means for passing an electric current through each movable electrode and the corresponding stationary electrode.

23. A welding machine comprising a plurality of electrodes, current distributing means normally in an inoperative position but adapted when set in motion to distribute current to said electrodes, and a switch for controlling the supply of current to said means, said switch being automatically controlled by the machine so that it is open when said current distributing means is in its

inoperative position and is closed when the current distributing means is set in motion.

[Claims 2 to 10 and 12 to 22 not printed in the Gazette.]

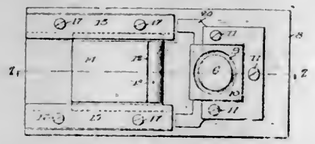
1,269,618. COUPLING FOR HARNESS AND THE LIKE. HUGH J. LEONARD, Big Lake, Ark. Filed Sept. 7, 1917. Serial No. 190,163. (Cl. 24—124.)



4. In a coupling for harness, a shank having external threads and recesses in stepped relation to each other near one end of the shank and having recesses in stepped relation at points more remote from the opposite end, a link having arms with projections fitting in the first mentioned recesses, a link having arms of greater length than the arms of the first mentioned link and provided with projections lying in the recesses at the opposite end of the shank, and a sleeve threaded on the said shank for holding the arms in engagement with the shank.

[Claims 1 to 3 not printed in the Gazette.]

1,269,619. MACHINE FOR CUTTING CORN-PADS. JOHN J. LEPPER, Milwaukee, Wis. Filed July 23, 1917. Serial No. 182,280. (Cl. 164—60.)



1. In a device of the described class, the combination of a supporting base, a fixed member provided with a cylindrical aperture secured to said base, a former slidably secured to said base and adapted to force a piece of felt into one side of said cylindrical aperture, a cylindrical cutting blade, and means for revolving said blade and moving the same downwardly as it is being revolved.

4. In a device of the described class, the combination of a supporting base, a fixed member provided with a cylindrical aperture secured to said base, a former slidably secured to said base and adapted to force a piece of felt into one side of said cylindrical aperture, a cylindrical cutting blade, means for revolving said blade and simultaneously moving the same downwardly, a removable core secured to said base within said cylindrical aperture, a pair of guide members secured to said base and adapted to guide said former as it is being moved toward and from said cylindrical cutting blade, all substantially as and for the purpose specified.

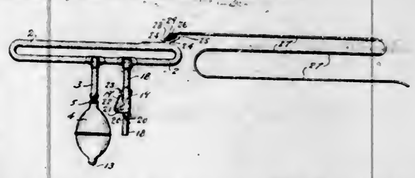
[Claims 2 and 3 not printed in the Gazette.]

1,269,620. SURGICAL TOURNIQUET. WILLIAM LEVINE, Princeton, N. J. Filed June 27, 1917. Serial No. 177,166. (Cl. 128—3.)

1. A pneumatic tourniquet comprising a continuous tubular elastic body, an air pumping device connected with said body so as to communicate with its interior, and a normally closed air escape means connected with said body in communication with its interior.

3. A pneumatic tourniquet comprising a continuous tubular elastic body, an air pumping device connected with said body so as to communicate with its interior, a normally closed air escape means connected with said body in communication with its interior, and a flexible binder member of non-elastic material adapted to be wrapped exteriorly about said body when in use.

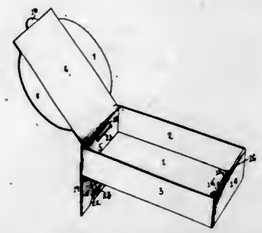
5. A pneumatic tourniquet comprising a hollow body of elastic material, an air inlet tube connected with said body, an air pumping device secured to the outer end of said inlet tube, an air outlet tube connected with said body, means for normally closing said outlet tube against the escape of air therethrough, an exterior flap integrally connected with the outer surface of said body, a binder of non-elastic flexible material, and means for detachably securing one end of said binder to said flap.



7. A pneumatic tourniquet comprising an endless tubular elastic body, an air outlet tube connected with the marginal edge of said body at one side thereof, an air pumping device secured to the outer end of said inlet tube, an air outlet tube connected with the marginal edge of said body at one side thereof, means for normally closing said outlet tube against the escape of air therethrough, and a flexible binder member of non-elastic material adapted to be wrapped exteriorly about said body when in use.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,269,621. EASEL-CARTON. JEROME LEWINSON, New York, N. Y. Filed Aug. 31, 1917. Serial No. 189,087. (Cl. 211—28.)

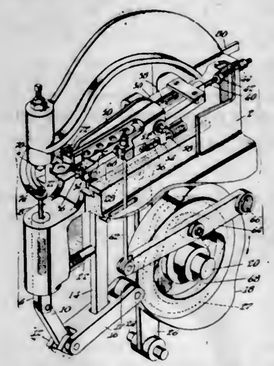


1. An easel carton comprising a body, a flexible strip hinge one end of which is attached to the bottom of the body at a point intermediate its ends, an easel piece attached to the other end of the hinge at a point intermediate its ends and an elastic band secured at one end to the easel and at the other to the end of the carton body, the length of the hinge being such that the easel assumes a position substantially at right angles to the body bottom when in raised position and lies wholly within the boundaries of said bottom when in closed position.

2. An easel carton comprising a body, a slotted easel piece, a strip hinge one end of which is attached to the body bottom at a point intermediate its ends and the other end of which passes through the easel slot and is secured thereto, an elastic band secured at one end to the easel and at the other to the body end, the length of the hinge being such that the easel assumes a position at substantially right angles to the body bottom when open and lies wholly within the boundaries of the said bottom when closed.

3. An easel carton comprising a body having a top, bottom, sides and ends, one of said ends being provided with a keystone slot, tabs on the sides adjacent to the slotted end, double slots in each of said tabs adapted to register with the keystone slot, an easel piece, a strip hinge one end of which is fastened to the body bottom at a point intermediate of its ends and the other end fastened to the easel piece and an elastic band extending from the easel piece to the slots in the tabs and end, the effective length of the hinge being such that the easel assumes a position at substantially right angles to the bottom when open and lies entirely within the boundaries of said bottom when closed.

1,269,622. FASTENER-SETTING MACHINE. AUGUSTINE F. LITTLEFIELD, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 26, 1913. Serial No. 750,837. (Cl. 218—15.)



1. A machine of the class described having, in combination, a frame carrying a stationary upsetting die, a movable eyelet inserting die, a raceway for delivering eyelets to the eyelet inserting die, a sliding carrier arranged to reciprocate in a path approximately at right angles to the path of the inserting die and having means for positively advancing a perforated strip to bring its endmost perforation into line with the inserting die, and means for severing the end of the strip, the inserting die being moved to pass an eyelet barrel through the piece so severed and to clench the eyelet without transversely moving said piece.

2. A machine of the class described having, in combination, setting dies, a guideway leading toward said dies, strip feeding means comprising a wheel journaled below the guideway and having teeth for entering and positvely feeding the strip, and a strip severing knife disposed above the guideway and movable relatively thereto.

3. A machine of the class described having, in combination, coöperating setting dies, means for severing a washer from a strip while the washer is located adjacent to the setting dies, means for withdrawing the forward end of the strip from the severing means, and means for actuating the dies to clench a gromet barrel upon the washer while the washer remains in substantially the position in which it was severed.

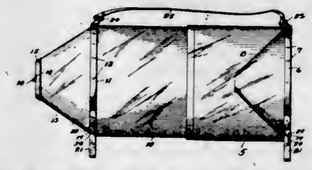
4. A machine of the class described having, in combination, coöperating setting dies, means for supplying a fastener to the dies, intermittently acting feeding means for a perforated strip arranged to enter successive perforations in the strip and advance the end of the strip into alinement with the dies, and means for severing the end of the strip after each feeding step.

5. A machine of the class described having, in combination, relatively movable setting dies, means for supplying a fastener to the dies, means for feeding a perforated strip along a path intersecting that of the dies, said means including a member shaped to enter each successive perforation in the strip, and means for severing the end of the strip at a point in the path of movement of the strip.

[Claims 6 to 22 not printed in the Gazette.]

1,269,623. MINNOW-TRAP. JAMES E. LOGSDON, Joplin, Mo. Filed Apr. 18, 1916. Serial No. 91,919. (Cl. 43—20.)

In a minnow trap; a casing-section circular in cross-section and formed of transparent flexible material; a reinforcing ring secured to the outer end only of the casing section whereby the inner end of the casing-section remains flexible; a conical end member formed of transparent flexible material and tapering inwardly and provided at its reduced end with an opening and having its large end arranged inwardly of and adjacent the reinforced end of the casing-section and secured to such reinforced end; a coacting casing-section circular in cross-section and formed of transparent flexible material with its inner end telescoping with the inner end of



the first named casing-section; a stiffening ring secured to the outer end only of the second named casing-section whereby the inner end of the casing-section remains flexible; a second conical end member formed of transparent flexible material having its inner end provided with a flange mounted to reciprocate within the second named casing-section and to be moved within the reinforcing ring thereof; feet secured to the lower portions of the reinforcing rings; and a handle attached to the upper portions of the ring.

1,269,624. SLIP-ON REMOVABLE LENS-RIM FOR SPECTACLES, &c. GEORGE J. LOWARS, Newark, N. J. Filed Dec. 5, 1917. Serial No. 205,613. (Cl. 88—47.)



1. A detachable rim for spectacles, eyeglasses and the like, comprising a rim member split at one side to provide separable ends, and a clamp coupling joining said ends comprising an expandible and contractable loop-member the arms of which are respectively secured in fixed relation to said respective ends of said rim member.

4. In a device of the kind described, a non-metallic rim-member having an inner annular groove, said rim-member being split at one side to provide separable ends, an expandible and contractable metallic loop-member having normally diverging arms, said normally diverging arms having off-set portions adapted to off-set said loop-member from the plane of said rim-member, and means connected with the free ends of said arms for securing the same respectively to the separable ends of said rim-member.

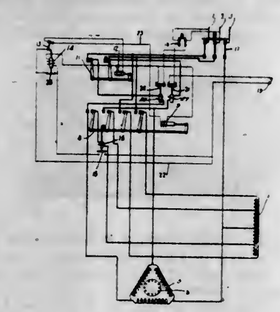
[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,625. AUTO-STARTER. WALTER O. LUM, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed May 3, 1915. Serial No. 25,575. (Cl. 172—289.)

1. In an auto-starter, the combination with a source of current, an electric motor, and a plurality of electromagnetic switches for successively establishing starting and operating connections between said motor and said source, of means for automatically controlling said switches in accordance with motor-circuit conditions, said means comprising a current-limit device directly and mechanically connected to one of said switches.

2. In an auto-starter, the combination with a source of current, an electric motor, and a plurality of electromagnetic switches for successively establishing starting and operating connections between said motor and said source, of means for automatically controlling said

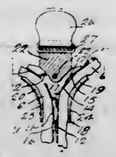
switches in accordance with motor-circuit conditions, said means comprising a double-throw switch which operates, according to its position, to render one or another of said electromagnetic switches operative and a current-limit device directly and mechanically connected to one of said electromagnetic switches for electrically controlling said double-throw switch.



3. In an auto-starter, the combination with a source of current and an electric motor, of a four-pole switch for establishing starting connections between said source and said motor, a two-pole switch for establishing running connections for said motor, means for controlling said switches, said means comprising a relay which operates, according to its position, to render operative either of said switches, a current-limit device having a switch member for controlling the energizing circuit of said relay during the starting of said motor and an overload device for controlling said relay during the normal operation of said motor.

4. In an auto-starter, the combination with a source of current and an electric motor, of a plurality of electromagnetic switches for successively establishing starting and running connections between said source and said motor, of a relay which is biased to close a circuit for the actuating coil of one of said switches and which operates, under predetermined circuit conditions, to open said circuit and close a second circuit for the actuating coil of a second switch, a current-limit device directly and mechanically connected to one of said switches for controlling said relay during the starting of said motor and an overload device having a switch member for controlling the energizing circuit of said relay during the normal operation of the motor.

1,269,626. FASTENING DEVICE. WILLIAM M. MCCLEARREN, Dinuba, Cal. Filed June 16, 1917. Serial No. 175,095. (Cl. 24—205.)



A device of the class described comprising parts having separable edges; fasteners carried by said edges, the fasteners on one edge being provided with tongues, the fasteners on the other edge being provided at one end with offset keepers receiving the tongues when said edges are brought together, the last specified fasteners being provided at their other ends with projections which engage the tongues when the tongues are engaged with the keepers; and a rider slidable on the fasteners, and constituting means for bringing the fasteners together to cause the tongues to interlock with the keepers.

1,269,627. PROCESS OF HARDENING PHENOLIC CONDENSATION PRODUCTS. JAMES P. A. MCCOY, Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company, a Corporation of Pennsylvania. Filed July 3, 1914. Serial No. 848,802. (Cl. 106—22.)

1. The process of hardening fusible phenolic condensation products that comprises adding to such a product a substance that is capable of being decomposed with evolution of formaldehyde and a tannin condensing agent having no deleterious effect upon the dielectric strength of the resulting product and causing the said decomposable substance to decompose.

7. The process of hardening fusible phenolic condensation products that comprises adding to such a product catechol tannin and paraformaldehyde and causing the paraformaldehyde to decompose with evolution of formaldehyde.

[Claims 2 to 6 not printed in the Gazette.]

1,269,628. PNEUMATIC TIRE. PETER MALACOS, Wheeling, W. Va. Filed Jan. 23, 1918. Serial No. 213,409. (Cl. 152—14.)



1. A pneumatic tire comprising a fabric carcass, a rubber tread mounted on said carcass, and a plurality of metal studs embedded in said tread, said studs being projected through said tread and having their ends flush with the opposite faces of the latter, said studs being of truncated pyramid form and having their lateral faces roughened.

4. A pneumatic tire comprising a rubber tread having in the road-engaging surface thereof a plurality of parallel circumferential rows of spaced depressions defining intermediate projections of truncated pyramid form, and metal studs disposed centrally with respect to said projections and having their inner ends flush with the inner surface of said tread, said studs having their lateral faces roughened for intimate engagement with said tread, and a fabric carcass upon which said tread is mounted.

[Claims 2 and 3 not printed in the Gazette.]

1,269,629. PORTABLE VULCANIZER. BSCHARA I. MALOUF, Salt Lake City, Utah. Filed Dec. 27, 1916. Serial No. 139,135. (Cl. 18—18.)



3. In a vulcanizing device of the class described, the combination of a base, an overhanging arm pivotally connected to said base, a clamping member pivotally connected to the base and movable toward or from the arm for engagement or disengagement therefrom, a swivel support depending from the arm, a holding device swiveled to said support and comprising radially extending arms having holding means, and a fuel holding member constructed for detachable connection with said holding means for movement therewith.

5. In a vulcanizing device of the class described, the combination of a base upon which the part to be vulcanized is disposed, an overhanging arm pivotally connected to the base at one side, a support depending from the arm, pressure arms swivelly mounted on said support and adjustable about the axis thereof with respect to the part to be vulcanized preliminary to the application of pressure thereto, a vulcanizing member separate from but engageable by said arms, and clamping means pivotally mounted at the other side of the base and movable into and out of engagement with the overhanging arm whereby to impart clamping action when the operative vulcanizing position has been determined by the arms aforesaid.

[Claims 1, 2, and 4 not printed in the Gazette.]

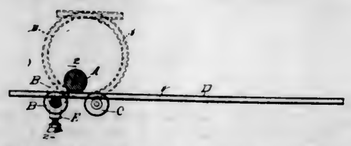
1,269,630. BALE-TAG. DORUS W. MOORE, Fultonville, N. Y. Filed Aug. 24, 1917. Serial No. 188,018. (Cl. 40—2.)



1. A bale tag comprising an elongated wedge-shaped body portion adapted to be introduced at its smaller end beneath the tie of a bale and having a flat upper face adapted to receive data thereon, said body portion being provided at its bottom face and at its larger end with a transverse shoulder adapted to engage in the material of the bale and having a groove across its upper face to retain the tag from displacement.

[Claim 2 not printed in the Gazette.]

1,269,631. METHOD OF FORMING CIRCULAR T-SECTION TRACKS FROM STRAIGHT PIECES OF RAIL. ALFRED D. MOSBY, Chicago, Ill., assignor to Marsh-Capron Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed May 31, 1911. Serial No. 630,283. (Cl. 153—56.)



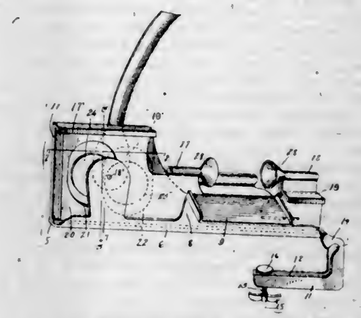
1. The method of forming from a straight piece of T section railroad rail a circular bearing ring having the ball of the rail on the outside and the base flange on the inside which consists in causing the rail while cold to be moved back and forth between bearing elements which exert bending pressures only against the rail base while guiding the ball of the rail so as to hold it from lateral displacement.

2. The method of forming from a straight piece of T section railroad rail a circular bearing ring having the ball of the rail on the outside and the base flange on the inside which consists in causing the rail while cold to be moved back and forth between bearing elements which exert bending pressures only against the rail base while guiding the sides of the ball of the rail, and also the edges of the rail base, so as to hold them from lateral displacement.

3. The method of forming a circular track or tire of the character described from a straight piece of T section railroad rail by a cold bending operation which consists in causing the rail to be moved back and forth between bearing elements arranged to exert bending pressures against opposite sides of the rail base while guiding the ball of the rail so as to hold the same from lateral displacement, exerting said bending pressures so as to give the rail a slight helical form, continuing the operation until the straight ends of the rail are overlapped and the track brought to the proper diameter, and then cutting off the overlapping portions.

4. The method of forming a circular track or tire of the character described from a straight piece of T-section railroad rail by a cold bending operation which consists in causing the rail to be moved back and forth between bearing elements which exert pressure against the bottom of the rail base and elements which exert pressure against the upper inclined surfaces of the rail base, the latter so formed as to cut into the same while guiding the ball of the rail so as to hold it from lateral displacement.

1,269,632. ACTUATING MECHANISM FOR NUT-CRUSHERS. CHARLES N. MUNDELL, Los Angeles, Cal. Filed Apr. 7, 1917. Serial No. 160,447. (Cl. 74—14.)



1. In a nut cracker, a base, a pair of plates mounted for longitudinal sliding movement on said base and each plate having an opening therein, a shaft secured to said base and extending through said openings, a pair of oppositely disposed relatively small cams rotatably mounted on said shaft, each cam being adapted to engage with the walls of one of said openings, a lever connected to both of said cams for rocking the same, and an element carried by each plate.

3. In a nut cracker, a base, a plate slidably mounted on said base, a second plate slidably mounted on said first plate, the said plates being provided with openings, a pair of oppositely disposed cams supported by said base and one being disposed in each of said openings, means for rocking said cams, and an element carried by each of said plates.

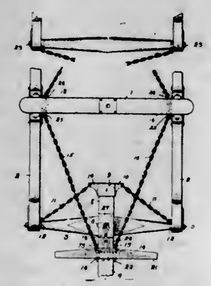
5. In a nut cracker, a base having a channel, a plate slidably arranged in said channel, a second plate slidably carried by the said first mentioned plate, each plate having an opening, a shaft supported by said base and extending through said openings, oppositely disposed cams rotatably mounted on said shaft and one being disposed in each opening, means for rotating said cams simultaneously, a sleeve carried by each of said plates, the said sleeves being axially alined, and an element in each sleeve.

[Claims 2 and 4 not printed in the Gazette.]

1,269,633. SLEIGH-POLE ATTACHMENT. JOHN MUZZY, Warba, Minn. Filed Dec. 17, 1917. Serial No. 207,440. (Cl. 21—48.)

1. The combination with a sleigh of the character described having a front bob, a hind bob and pole, of cross chains leading from the tomkin pins of the hind bob to and through the ends of the beam of the front bob and thence to the sides of the pole at a point forward of the

roll of the front bob and means for locking the chains against reciprocal motion through the beam.



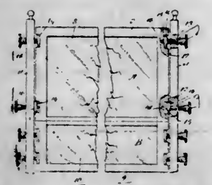
2. The combination with a sleigh of the character described having a front bob and a hind bob, of a pole resting upon the roll of the front bob and extending rearwardly of said roll, cross chains leading from the tomkin pins of the hind bob to and through the ends of the beam of the front bob and to the sides of the pole at a point in front of the roll, chains connecting the inner end of the pole with the tomkin pins of the front bob, means for slidably holding the pole on the roll and means for holding the cross chains against longitudinal movement in the beam.

3. The combination with a sleigh of the character described having a front bob and a hind bob, of an elongated hole through the center of the roll of the front bob, a pole slidably resting upon the roll of the front bob and having a hole therein registering with the hole in the roll, said pole extending inwardly a predetermined distance beyond the roll, a draft chain having one end fixed to the under side of the pole in front of the roll and passing upwardly through the hole in the roll and the hole in the pole, the free end of the draft chain being provided with means of attachment to a drawing evener, short chains connecting the inner end of the pole to the two ends of the roll and long chains extending from the sides of the pole in front of the roll to and through the ends of the beam on the front bob and thence diagonally to the ends of the roll of the hind bob and short locking chains carried by the long chains for holding the latter against movement in the beam.

5. The combination with a sleigh having a beam and roll, of a one piece pole extending inwardly beyond the roll and slidably mounted thereupon, means for supporting the inner end of the pole and means whereby the lateral movement of the pole imparts a forward draft upon either one end or the other of the beam.

[Claim 4 not printed in the Gazette.]

1,269,634. WIND-SHIELD. HOWARD S. NEIMAN, Brooklyn, N. Y. Filed Feb. 23, 1917. Serial No. 150,314. (Cl. 21—148.)



1. In a device of the character specified, in combination, a support, a windshield, means connecting the support and the windshield and allowing the revolution of the windshield upon two axes of revolution at opposite sides of the windshield and means between the windshield and the support for maintaining the windshield at any predetermined position of revolution.

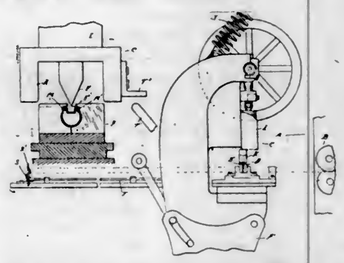
2. In a device of the character specified, in combination, a support, a windshield, two series of pivotal means at approximately the top and bottom of the windshield around each of which series the windshield may be revolved, and frictional means between the windshield and the support for maintaining the windshield at any predetermined position of revolution.

3. In a device of the character specified, in combination, a support, a windshield, removable pivotal means between the windshield and the support upon which the windshield may be revolved at approximately its upper edge and approximately its lower edge and frictional means between the pivotal member and the windshield for supporting the windshield at any predetermined position of revolution.

6. In a device of the character specified, in combination, a support, a windshield, a series of two pivotal means at approximately the top of the windshield, a series of two pivotal means at approximately the bottom of the windshield, each pivotal means comprising a threaded bolt, means whereby the turning of said bolt upon its threads will first place the support and windshield in pivotal engagement, a further movement of the bolt locking the support and windshield into non-movable engagement, and means whereby the turning of said bolt in an opposite engagement will release the windshield from engagement with the support.

[Claims 4 and 5 not printed in the Gazette.]

1,269,635. TUBE-CUTTING MACHINE. HUGO NEUMAN, Ford City, Ontario, Canada, assignor to Diamond Manufacturing Company, Detroit, Mich., a Corporation of Michigan. Filed Mar. 20, 1914. Serial No. 825,989. (Cl. 164—49.)



1. The combination with means for continuously feeding a tube, of a movable shearing press therefor, clamping dies for said tube upon said press, and means actuated upon the tripping of said press for closing said clamping dies to couple the same and the press with said tube during the shearing operation.

5. The combination with a shearing-blade having a piercing point, of a split die for surrounding a tube, transversely slotted for the passage of said blade, and a yoke movable with said piercing blade for embracing said split die to clamp the same in advance of the piercing and shearing action of said blade.

8. The combination with means for feeding a tube, of a shearing-press movable with said tube, dies mounted on said press for embracing said tube, a gage extending in rear of said press into the path of said tube, means operated by movement of said gage under the propulsion of the end of said tube for tripping said shearing-press, means operating upon the tripping of said press for first clamping said dies to said tube to cause the movement of the press with said tube and for then shearing the tube, and means automatically operated by said shearing means for disengaging said gage from said tube to permit the further feeding and removal thereof.

[Claims 2 to 4, 6, 7, and 9 to 11 not printed in the Gazette.]

1,269,636. LUMINOUS INDICATING DEVICE AND MEANS FOR ATTACHING SAME. SIGURD A. E. NORRING, Brooklyn, and VICTOR C. THORNE, New York, N. Y., assignors to Schlosinger Radium Co., a Corporation of New York. Filed May 1, 1917. Serial No. 165,730. (Cl. 240—1.)

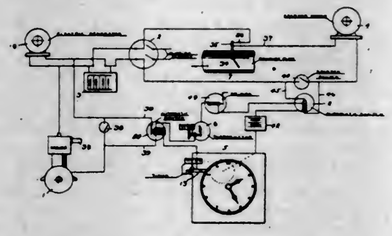


1. The combination, in a socket for attachment to pull chains or the like, of a suspending member, an independent resilient member combined therewith, a suspending chain or the like and a projection carried by said chain or the like and arranged to be forced beyond said resilient member whereby said suspending member and chain or the like are coupled together.

5. A luminous indicating device comprising a translucent casing, a luminous material in the casing, carried by a material spirally arranged within the casing, the luminous material being secured on the outside of the carrying material.

[Claims 2 to 4 not printed in the Gazette.]

1,269,637. AUTOMATIC INTERMITTENT CONTROL FOR INTERNAL-COMBUSTION ENGINES. GEORGE C. OLMSTED, Minneapolis, Minn. Filed Mar. 9, 1917. Serial No. 153,787. (Cl. 123—179.)



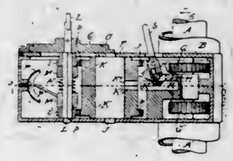
1. The combination with an engine furnishing the motive power of a self propelled vehicle and having an electric starter operatively connected therewith, of controlling means comprising a thermostatic circuit maker and breaker, a time operated circuit maker and breaker and means whereby the operation of said controlling means may be predetermined.

3. The combination with an engine forming the motive power of a self propelled vehicle and having a motor operated starter connected therewith, of means for controlling the starter, means for controlling the duration of the operation of the engine, means for automatically operating the controller and means whereby the automatic operation may be predetermined and preadjusted.

7. The combination with a vehicle engine having an electric generator, a storage battery, an electric starter and an electric circuit therefor, of a coöperative auxiliary electric circuit whereby the electric starter circuit is controlled, said auxiliary circuit having coöperatively installed therein a time controlled switch, a thermostatically controlled switch, an electro-magnetically controlled switch, and an electro-magnetically controlled primer, substantially as and for the purpose described.

[Claims 2 and 4 to 6 not printed in the Gazette.]

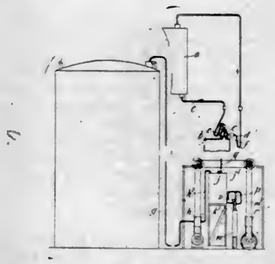
1,269,638. LOCK FOR MOTOR-VEHICLES. ALEXANDER OZEROWICZ, Hamtramck, Mich. Original application filed July 5, 1917, Serial No. 178,755. Divided and this application filed Nov. 10, 1917. Serial No. 201,226. (Cl. 74—7.)



1. In a device of the character described, a divided steering post, a gear keyed to each portion of the post, a laterally movable shaft, pinions keyed to the shaft, a rack-bar coupled at one end to the movable shaft, a pinion in mesh with the rack-bar, means for manually rotating the pinion to shift the rack-bar, whereby the first named pinions may be brought into intermeshing relation with the gears carried by the steering post that the latter may be operated as a unit, or released therefrom as desired, and means for locking the rack-bar in either of said positions.

2. In a device of the character described, a divided steering post, a gear keyed to each portion of the post, a sleeve for the post, a case supported by said sleeve, a laterally movable shaft projecting through slots in the case, pinions keyed to the shaft adapted to be brought into mesh with the gears of the steering post or released therefrom, a rack bar coupled to the shaft, a manually rotatable pinion for shifting the rack-bar, and means for locking the rack-bar, whereby the pinions may be held in coöperation or released relation to the gears of the steering post.

1,269,639. PROCESS OF RECOVERING THE VAPOR OF VOLATILE LIQUIDS. TOM DIXON PARR, London, England. Filed Oct. 10, 1914. Serial No. 866,120. (Cl. 62—178.)



1. In the transference of volatile liquids from one vessel to another, the method of preventing loss of volatilized matters produced during the transfer, which consists in causing the transfer under seal and removing the volatilized matters and reducing them to liquid condition.

2. In the distribution of volatile liquids for vending purposes, the method of preventing evaporation losses, which consists in causing the transfer of the liquid from one vessel to another under seal, withdrawing the vapors produced by such transference and condensing the vapors to liquid form.

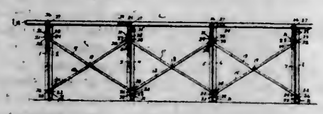
1,269,640. SEWER-TRAP. ALBERT PETER, St. Louis, Mo. Filed Jan. 25, 1918. Serial No. 213,692. (Cl. 182—14.)



2. A sewer trap valve comprising a disk, a pair of triangular ears disposed adjacent the edge thereof, a hinge pin connecting the free vertices of the ears, a web spaced from the hinge pin and connecting the webs at points adjacent the valve body, a waste pipe, and a member in said pipe provided with an open recess for receiving the hinge pin of the valve, the inner wall of the recess operating as a finger and positioned relatively to the adjacent edge of the web aforesaid for engaging said edge and thereby arresting the valve in its downward swing and maintaining it at an incline to the axis of the waste pipe.

[Claim 1 not printed in the Gazette.]

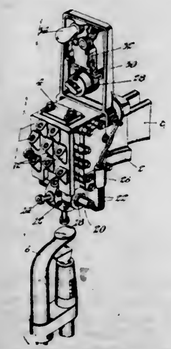
1,269,641. COLLAPSIBLE COT. PETER H. PETERSON, Racine, Wis., assignor to Gold Medal Camp Furniture Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed Jan. 4, 1917. Serial No. 140,484. (Cl. 5—5.)



1. In a collapsible cot, the combination with legs pivotally connected in pairs and provided with hinge members, of braces pivotally connected in pairs, and links pivotally connected to said braces and to said hinge members.

[Claim 2 not printed in the Gazette.]

1,269,642. STAMPING-MACHINE. EDWIN N. PREBLE, Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 8, 1913. Serial No. 805,307. (Cl. 101—21.)



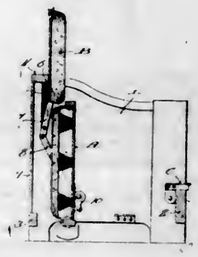
1. In a stamping machine adapted to operate with interchangeable dies, a metallic plate with a plurality of projecting bosses, each boss having a die-receiving socket inclined with respect to the surface of the plate, and means for heating the plate.

2. A stamping machine having, in combination, a rotatable turret, a hollow spindle therefor, electric heating means disposed wholly within said spindle and having flexible conductors for the heating means extending from within the spindle out through the end of said spindle, and a threaded tubular extension rigid with the spindle end, said extension serving as a guide for the flexible conductor and aiding in the retention of the turret upon the spindle.

8. In a stamping machine adapted to operate with interchangeable dies, a metallic plate with a plurality of bosses formed thereon, each boss having an inclined upper surface, a tapering body portion and a die-receiving opening, and means for heating the plate.

[Claims 3 to 7 not printed in the Gazette.]

1,269,643. DAVENPORT. JOHN M. RICHARDSON, Milwaukee, Wis. Filed Dec. 29, 1917. Serial No. 209,486. (Cl. 5—48.)



1. In a foldable couch bed, a frame, a normally substantially horizontally disposed seat having its rear end in pivotal union with said frame, a substantially vertical back, and means connecting the seat and back whereby when the seat is raised from a horizontal to a vertical position the back will be moved upwardly and disposed vertically above the top or front edge of said seat.

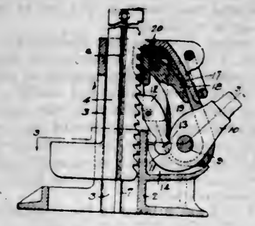
2. In a foldable couch bed, a frame, a normally substantially horizontal seat having its rear end in pivotal union with the frame, a substantially vertical back, a lever pivotally carried by the frame and connected with the back, and a connection between said lever and the seat whereby when the latter is raised from a horizontal to a vertical position the back will be moved upwardly and disposed vertically above the top or front edge of said seat.

4. In a foldable couch bed, a frame, a normally substantially horizontal seat having its rear end in pivotal union with the frame, a substantially vertical back, a link pivotally connected with the back and frame, a lever fulcrumed intermediate its ends to the frame at a point spaced from the pivot of the link therewith, one end of the lever being pivoted to the back at a point spaced from the pivot of the link therewith, and a connecting member pivoted to the other end of the lever the other end of the member being pivoted to the seat at a point spaced from its fulcrum, whereby when the seat is raised from a horizontal to a vertical position the back will be moved upwardly and disposed vertically above the top or front edge of said seat.

[Claim 3 not printed in the Gazette.]

1,269,644. LIFTING-JACK. THOMAS A. RICHARDSON, Verona borough, and EMANUEL WOODINGS, Oakmont borough, Pa., assignors to Verona Tool Works, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Jan. 26, 1914. Serial No. 814,393. (Cl. 254—108.)

A jack in combination with a frame, a toothed rack therein, a hand lever mounted on a pivot pin supported in the frame having a recessed seat at its forward end, a pawl mounted in said recessed seat between the rack and the pivot pin, and a detent having depending side arms fitting on both sides of the hand lever and mounted



on the pivot pin and overlapping the journal of the pawl where it is mounted in the hand lever.

1,269,645. AEROPLANE, HYDROPLANE, AND THE LIKE. GEORGE M. ROBBINS, Newark, N. J. Filed Aug. 31, 1917. Serial No. 189,052. (Cl. 244—21.)



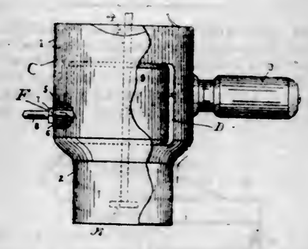
1. In an aeroplane structure the combination with an elongated boat-like body-proper of a parachute-like structure comprising a frame-work composed of a plurality of outwardly bowed ribs fixed to and extending between the bow and stern of said body-proper, an annular frame-piece providing an air escape opening fixed in the top of said frame-work intermediate of its ends, transverse annular braces interconnecting said ribs with said body-proper, a covering supported by said frame-work, and the side marginal edge of said frame-work being spaced laterally outward from the side marginal edges of said body-proper to provide side openings through which air may rush upwardly into the interior of said parachute-like structure.

3. In an aeroplane structure a substantially cigar-shaped body, the lower half of which constitutes a boat-like body-proper, and the upper half of which constitutes a parachute-like structure, the sides of said parachute-like structure flaring outwardly beyond the sides of said boat-like body-proper to provide longitudinal side openings in horizontal plane through which air may rush upwardly into the interior of said parachute-like structure, and means providing an air escape opening in the upper wall of said parachute-like structure.

13. In an aeroplane structure a substantially cigar-shaped body, the lower half of which constitutes a boat-like body-proper, and the upper half of which constitutes a parachute-like structure, the sides of said parachute-like structure flaring outwardly intermediate of the bow and stern beyond the sides of said boat-like body-proper to provide longitudinal side openings in horizontal plane through which air may rush upwardly into the interior of said parachute-like structure, and the sides of said boat-like body-proper curving downwardly intermediate of the bow and stern to provide longitudinal side openings in vertical plane through which outward vision from the interior of said body-proper may be had, means providing an air escape opening in the upper wall of said parachute-like structure, laterally extending sustaining planes connected with said parachute-like structure, the same inclining slightly downward from their forward edges rearward, cantaliver braces for stiffening and holding rigid the forward edges of said planes, braces for supporting the rear edges of said planes, said braces being free to flex vertically at their outer ends whereby the outer rearward corners of said planes may be warped upward or downward out of normal plane, tail-planes extending outwardly from each side at the stern end of said parachute-like structure, and an independently movable starboard and port steering plane hinged to the rear-edges of said tail-planes.

[Claims 2 and 4 to 12 not printed in the Gazette.]

1,269,646. ELECTRICALLY-HEATED CUP OR CONTAINER. WILLIAM P. ROBERTSON, New York, N. Y., assignor to William Henry Johnston, New York, N. Y. Filed Sept. 15, 1916. Serial No. 120,310. (Cl. 219—44.)



1. An electric heating device comprising a container, a metal incased electric resistance element therein, tubular supporting members extending through the container but insulated therefrom and supporting the resistance element in position out of contact with the inner surface of the contained, and connectors for the resistance elements mounted in the tubular members but insulated therefrom.

2. An electric heating container comprising a cup, an electric heating element on the interior spaced from the wall, and means on the ends of the heating element adapted to deflect liquid circulated in the cup to opposite sides of the heating element.

3. In combination a container, a mixing element therein, a heating element in the container and means to deflect the material circulating in the container to opposite sides of the element.

7. In combination, a container, a heating element therein, including a hollow casing and resistance wire, tubular members connected to the casing and projecting through the wall of the container, terminal pins connected to the resistance wire, but insulated from the tubular members, said pins being formed with outer removable portions.

8. An electrical heating device comprising a container having the upper section larger than the lower section, a metal incased electric heating element in the upper section, spaced from the walls thereof of a diameter substantially the same as the lower section and located concentrically thereabove, means for holding the heating element in a rigid position in relation to the walls of the container and means insulated from the walls of the container for carrying the terminals of the heating elements to the exterior thereof.

[Claims 4 to 6, 9, and 10 not printed in the Gazette.]

1,269,647. BOX MATERIAL FOR BOX-TOES OR THE LIKE FOR SHOES. ALBERT J. RYAN, Cincinnati, Ohio, assignor to Ryan Ideal Stain and Blacking Company, Lynn, Mass., (a Firm composed of Albert J. Ryan, Cincinnati, Ohio, and Alexander J. McCormick and Dennis F. Marks, Lynn, Mass.) Filed Sept. 8, 1914. Serial No. 860,550. (Cl. 91—68.)

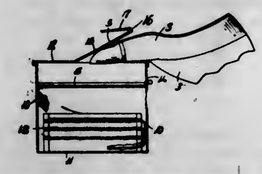
1. A box material for box toes or the like for shoes comprising a piece of material permeable to gums and waxes in general, said material permeated with a solution of bold black gum and a suitable solvent.

2. A box material for box toes and the like for shoes comprising a piece of material permeable to gums and waxes in general, said material permeated with a composition comprising a gum hard at normal temperature, and

a solvent of benzol or naphtha, which composition softens at from 175° to 225° F. without running, and hardens at once at normal atmospheric temperatures.

3. A box material for box toes and the like for shoes comprising a piece of material permeable to gums and waxes in general, said material permeated with a composition comprising a gum hard at normal temperature, and a solvent of benzol or naphtha, which composition softens at from 175° to 225° F. without running or becoming sticky, and hardens at once at normal atmospheric temperatures.

1,269,648. BOX-TOE-TREATING APPARATUS. ALBERT J. RYAN, Cincinnati, Ohio, assignor to Ryan Ideal Stain and Blacking Company, Lynn, Mass., (a Firm composed of Albert J. Ryan, Cincinnati, Ohio, and Alexander J. McCormick and Dennis F. Marks, Lynn, Mass.) Filed Sept. 8, 1914. Serial No. 860,551. (Cl. 34—26.)



3. A receptacle having a heater in the lower portion thereof, a foraminated partition above the heater to prevent contact therewith while permitting the heat to rise therethrough, and a top cover for the box having openings therein, with the cover arched over the openings, of a shape to permit the insertion under the arched portions of the toe of a shoe, and flaps to close the openings of the arched portions and prevent escape of the heat when the shoe is removed.

[Claims 1 and 2 not printed in the Gazette.]

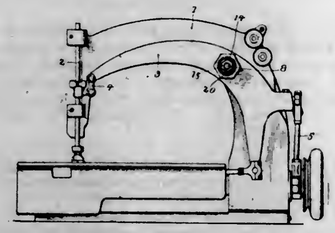
1,269,649. COMPOSITION FOR BRICKS, BLOCKS, POSTS, AND THE LIKE. RICHARD RYAN, Cleveland, Ohio, and THEODORE SMITH, Wheeling, W. Va. Filed Jan. 21, 1918. Serial No. 212,888. (Cl. 106—24.)

3. A composition consisting of the following materials mixed in about the proportions named:

Slag	28 parts.
Cement	8 "
Asphaltum	4 "
Rosin	1 part.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,269,650. NEEDLE-LEVER SUPPORT FOR SEWING-MACHINES. DUDLEY S. SEYMOUR, Oak Park, Ill., assignor to Union Special Machine Company, Chicago, Ill., a Corporation of Illinois. Filed July 6, 1916. Serial No. 107,806. (Cl. 112—29.)

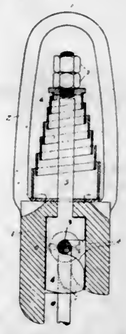


1. In a sewing machine, the combination with an overhanging arm, a needle bar reciprocating in said arm, a needle lever for reciprocating said needle bar, and means for pivotally supporting said needle lever, including a supporting stud, cone bearings carried thereby, a sleeve mounted on said cone bearings, and means for connecting said needle lever to said sleeve.

6. In a sewing machine, the combination of an overhanging arm, a main shaft, a needle bar reciprocating in said arm, a needle lever reciprocating in the needle bar, means for pivotally supporting said needle lever including a supporting stud, cone bearings carried thereby, a sleeve mounted on said cone bearings, means for connecting said needle lever to said sleeve, said needle lever being offset at the driving end thereof, an eccentric strap connected to said lever, and an eccentric on the main shaft for operating the eccentric strap.

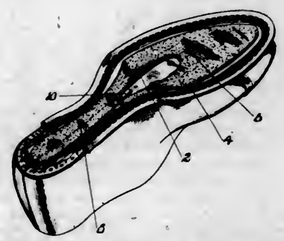
[Claims 2 to 5 not printed in the Gazette.]

1,269,651. TRACTION-COUPLING. DUNCAN SHANKLAND, Glasgow, Scotland. Filed Jan. 24, 1918. Serial No. 213,541. (Cl. 213—67.)



The hereindescribed traction coupling, comprising, in combination, a coupling element formed with a cam slot, a plate slidably fitted to said element, said plate being formed with a slot partly in register with said cam slot and having an extension in the form of a bolt, a spring enveloping said extension and a shackle pin passing through said slots.

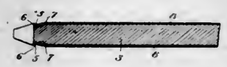
1,269,652. SHOE. WALTER SHAW, Dedham, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Sept. 29, 1915. Serial No. 53,169. (Cl. 36—30.)



3. As an article of manufacture, a combined shoe filler and shank piece of vulcanized rubber compound and comprising a forepart portion shaped to occupy the space within the inseam of the shoe and to provide a substantially flat surface to receive the tread portion of the outsole and a shank portion extending rearwardly from said forepart portion and shaped to conform to the longitudinal and transverse curvatures of the last and of the outsole, there being a break or sharp change in direction between the forepart and shank portions, and having a longitudinally arched metallic stiffening member associated with the shank portion and beginning at the rear of the break to reinforce said shank portion in maintaining its arched conformation.

[Claims 1 and 2 not printed in the Gazette.]

1,269,653. CUTTING AND ABRASIVE IMPLEMENT. JAMES C. SMITH, San Francisco, Cal. Filed Sept. 3, 1915. Serial No. 48,837. (143—140.)

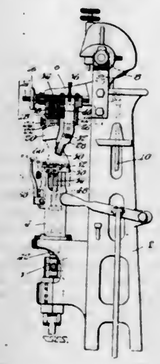


5. A cutting and abrasive implement comprising a metallic cutting element provided on one side with an annular groove, and an abrasive disk secured to the grooved side of the cutting element and having its periphery confined within said groove.

7. A cutting and abrasive implement comprising a cutting disk having saw teeth at its periphery, the disk being reduced in thickness at the point where said teeth join the same whereby to produce grooves on the faces of the disk adjacent its periphery, said grooves gradually increasing in depth as they approach the periphery of the disk and terminating in an abrupt end wall and sheets of abrading material secured to the faces of the disk, the edge portions of said sheets projecting within the grooves whereby the same are disposed out of contact with the work to which either the abrading disks or the saw teeth are active.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,269,654. MACHINE FOR OPERATING ON HEELS. JOHN F. STANDISH, Winthrop, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Feb. 23, 1915. Serial No. 9,968. (Cl. 1—32.)



1. A machine for operating on heels, having, in combination, a gang of drivers including a rear driver and side drivers adjustable bodily toward and from each other for heels of various sizes, a guiding tube for each side driver adjustable bodily with its respective driver, means for simultaneously adjusting the side driver tubes and drivers, and means for adjusting the rear driver independently of the side drivers.

2. A machine for operating on heels, having, in combination, a gang of tools, and heel holding means including a tread engaging member and a member for engaging the rear sloping surface of a heel, said members being so connected as to insure automatically the application of an equal degree of pressure on heels of various shapes.

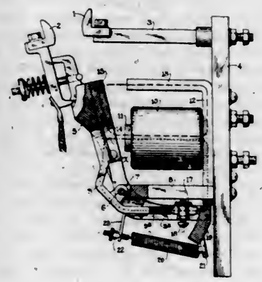
6. A machine for operating on heels, having in combination, a tread engaging member, a spring tending to move said member toward a heel, and a second member for engaging the sloping surface of the heel adjustable in response to the movements of the tread engaging member.

7. A machine for operating on heels, having, in combination, a flat heel engaging member, a spring tending to move said member toward a heel, a forked heel engaging member also acted upon by said spring, and an adjustable stop for determining the initial position of both members.

21. A machine for operating on heels, having, in combination, a stationary post, a gang of relatively adjustable drivers, guiding tubes for the drivers movable in the post, and gage members symmetrically adjustable with respect to their effective width in accordance with the spread of the drivers, whereby the outermost drivers are maintained equal distances within the side edges of the heel.

[Claims 3 to 5, 8 to 20, and 22 to 27 not printed in the Gazette.]

1,269,655. ELECTRIC SWITCH. WILLIAM C. STEVENS, Summit, N. J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed Apr. 4, 1916. Serial No. 88,864. (Cl. 175—281.)



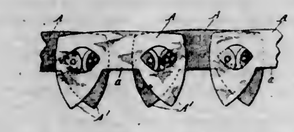
3. In an electromagnetic switch, in combination, cooperating contacts, an actuating member for one of said contacts, an electromagnetic operating winding for said member having magnetic circuits whereby its magnetic flux exerts opposing pulls on said member and means subjected to a uni-directional pull by said winding and responsive to vary the sensitiveness of response of said member.

4. In an electromagnetic switch, in combination, cooperating contacts, an actuating member for one of said contacts, an electromagnetic operating winding for said member having magnetic circuits whereby its magnetic flux exerts opposing pulls on said member and means subjected to a uni-directional pull by said winding and responsive prior to said member to supplement the magnetic pull on said member in a single direction.

11. In an electromagnetic switch, in combination, cooperating contacts, an actuating member for one of said contacts, an operating winding for said member having magnetic circuits whereby its magnetic flux exerts opposing pulls on said member, said member having means for adjusting the same to vary relatively the normal reluctances of said magnetic circuits, means subjected to a uni-directional pull by said winding and adapted upon response to reduce the reluctance of one of said magnetic circuits and means controlled by said former means to supplement the actuating pull on said member, said last mentioned means being adjustable to vary the degree of such supplementation.

[Claims 1, 2, 5 to 10, 12, and 13 not printed in the Gazette.]

1,269,656. DRIVE-CHAIN. JOHN K. STEWART, deceased, Chicago, Ill., by Julia B. Stewart, executrix, Northport, N. Y. Filed Oct. 14, 1916. Serial No. 125,646. (Cl. 74—32.)

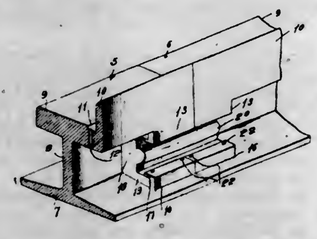


1. A chain composed of link plates, each having a bearing lug extending laterally from the surface of the plate with a convexly curved bearing surface adapted to rock upon the similar surface of a bearing lug of the next link, each plate having a clearance aperture of general triangular shape bounded on one side by said curved bearing surface of the lug and on the other two sides by curves conformed to the paths of the edges of the coöperating lug in its said rocking movement, to accommodate said coöperating lug of the connected link.

2. A chain composed of link plates, each having a bearing lug extending laterally from the surface of the plate with a convexly curved bearing surface adapted to rock upon the similar surface of a bearing lug of the next link, each plate having a clearance aperture of general triangular shape bounded on one side by said curved bearing surface of the lug and extending therefrom to accommodate the coöperating lug of the connected link, the remaining outline of such clearance aperture being curved to conform to the paths of the edges of said coöperating lug in its said rocking movement for contact with the said coöperating lug throughout said movement.

3. A rocker joint chain composed of multiplate links, each plate of one link having an integrally formed bearing lug extending laterally from the face of the plate, laterally adjacent plates of the next link having integral bearing lugs extending respectively for contact with the lugs of the first link to form a rocking joint therewith, the plates of each link having clearance apertures partially bounded by the bearing faces of the lugs and positioned to accommodate the lugs of the other link, and transversely disposed rivets for laterally joining the plates of each link, said rivets being positioned back of the bearing faces of the lugs within the clearance apertures of the next adjacent links.

1,269,657. RAILROAD-RAIL. ERNEST J. STRINGES, Chicago, Ill. Filed Oct. 3, 1917. Serial No. 194,556. (Cl. 239—14.)



1. A rail having a flange formed integrally with its outer side, said flange extending upwardly beyond the upper surface of the ball of the rail, and the ball being provided with a longitudinally extending groove which is adjacent to the flange and the bottom wall of the groove provided with a drain opening, as and for the purpose specified.

2. A rail comprising a base flange, a web, and a ball, said ball provided on its outer edge with an upstanding integral flange, the upper edge of which is in a plane above the upper surface of the ball thereof, said ball provided in its upper side with a longitudinally extending groove which is adjacent to said flange and having openings therein whereby the water may drain from the groove, for the purpose specified.

3. The combination with a pair of rail sections, each section having an upstanding integral flange formed on the outer edge thereof and extending above the upper surface of the ball thereof, of retaining flanges carried by the ball, and base flange of each rail section, and a retaining plate slidably fitted in the flanges of the rail sections, means extending through the retaining plates and the flanges of the rail sections to retain the rails connected together.

4. The combination with a pair of rail sections, each including a base, web and head, each head provided on its outer longitudinal edge with an upstanding right angularly related flange in a plane above the upper surface of the head thereof, of flanges formed integrally with the under side of the head and the upper side of the base at a distance from the web, the edge of each flange bent angularly in the direction of the web to form retaining or supporting members, a locking plate, flanges formed integrally with the locking plate, the flanges of the locking plate adapted to engage the supporting flanges of the base and head of the rail sections, means extending through the flanges of the rail and plate to retain the rails in connection.

1,269,658. COMPOSITION FOR WATERPROOFING LEATHER ARTICLES. HARRY C. TRENAMAN, Hamilton, Ontario, Canada. Filed Dec. 20, 1917. Serial No. 208,112. (Cl. 134—9.)

1. A composition comprising grease, gum, wax, oil, and rubber, substantially in the proportions stated.

2. A composition comprising grease 25 per cent., gum 5 per cent., wax 30 per cent., oil 35 per cent., and rubber 5 per cent.

1,269,659. SOUND-BOX FOR PHONOGRAPHS. CHARLES P. TRUNDY, Boston, Mass. Filed July 12, 1917. Serial No. 180,114. (Cl. 274—24.)



1. A sound box for phonographs, having, in combination, a box having a bottom, a tone arm sleeve having a portion adapted to fit the bottom of the box, a rubber washer interposed between the tone arm sleeve and the sound box, and connections between the tone arm sleeve and the sound box, provision being made to positively insure a harder clamping action on the washer at two diametrically-opposite points than at the intermediate points thereof, for the purpose set forth.

2. A sound box for phonographs, having, in combination, a box, a tone arm sleeve, a washer having diametrically opposed thickened portions, and means for holding the tone arm on the sound box.

3. A sound box for phonographs, having, in combination, a sound box, a tone arm sleeve, a rubber disk having two diametrically opposed thickened portions, and fastening means passing through said thickened portions for holding the tone arm sleeve to the sound box, causing greater pressure to be exerted upon the thickened portions of the rubber disk.

4. A sound box for phonographs, having, in combination, a box, a tone arm sleeve, a washer interposed between the sleeve and box for holding the tone arm sleeve and box together, said tone arm sleeve and box having provisions to cover the rubber disk between the two, and said washer having provision for positively insuring a harder clamping action on the washer at two diametrically-opposite points than at the intermediate points of the washer, for the purpose set forth.

5. In combination with the hub of a tone-arm, a sound-box, fastening screws inserted through the wall of the sound-box and having their threaded ends terminating in said hub, a diaphragm mounted in the sound-box so as to cover the screw-heads, and a needle-holder mounted on the sound-box.

1,269,660. TATTING-HOOK AND ATTACHING MEANS THEREFOR. NETTIE V. TURNER, New Smyrna, Fla. Filed Aug. 12, 1916. Serial No. 114,637. (Cl. 24—13.)



The combination of a tatting hook having a loop opening in the direction of the body of the hook and engaging said body at its open end and provided with an eye, an attaching pin having a closed eye with which the open loop of the hook is designed to engage when the hook is not in use, and a flexible element connecting the eye of said hook with the eye of said pin to hold the hook suspended when in use.

1,269,661. GUN. SYLVESTER A. VERNIA, Indianapolis, Ind. Filed Jan. 21, 1918. Serial No. 212,935. (Cl. 42—77.)



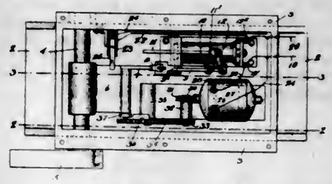
1. In a fire arm, the combination with a receiver, having a pair of sockets therein, of a pair of barrels connected together, one of which is threaded and adapted to engage one of the sockets of the receiver, shell containing magazines coöperating with said barrels, and a threaded sleeve on one of said magazines adapted to engage the other socket of said receiver, whereby the barrels will be locked into engagement with the receiver.

2. In a fire arm, the combination with a stock having a receiver thereon, said receiver having a pair of sockets and a slot formed therein, said sockets having segmental threads, of a pair of barrels for coöperation with said receiver, one of said barrels being threaded and adapted to engage the threads of one of the sockets, and the other barrel to enter said slot, magazines coöperating with said barrels, and means on one of the magazines for engaging the other socket of the receiver whereby the barrels will be locked into engagement with the receiver.

6. In a combined shot gun and rifle, the combination with a shot gun barrel and a rifle barrel, and a magazine for each barrel, of a shell releasing slide for each magazine, a single pivotally mounted, laterally swinging slide handle, arms on said handle for engagement with one or the other of said slides when the handle is swung laterally, and means to lock the slide handle in engagement with one or the other of the slides.

[Claims 3 to 5 not printed in the Gazette.]

1,269,662. TRAIN-STOP MECHANISM. LEWIS R. WALLACE, Waltham, Mass., assignor to Nevens-Wallace Train Control Company, a Corporation of Massachusetts. Filed May 26, 1914. Serial No. 841,054. (Cl. 246—59.)



1. In train stop mechanism, an oscillatable track stop, a counter-balance therefor, a pivoted arm having a normal supporting relation to said counter-balance, a locking arm operatively connected with said supporting arm, a pivoted dog adapted for locking engagment with said locking arm to normally maintain said supporting arm in supporting position relative to the counter-balance, and an electro-magnetic mechanism normally maintaining the locking engagement of said dog with said locking arm.

2. In train stop mechanism, a rock shaft, a track obstacle thereon adapted for oscillation in the vertical plane, a counterbalance for said obstacle mounted on said shaft and disposed in the direction opposite to that of the track obstacle, a pivoted arm having a spring latch at its free end normally disposed for supporting engagement with said counterweight, a pair of operatively connected levers associated with said arm, a locking member fastened to one of said levers, a locking dog pivoted on the pivot for said first named arm and adapted for locking engagement with said locking member, an armature carrying said dog and an electro-magnet for said armature.

3. In train stop mechanism, a track obstacle having a position of interference and a position of non-interference with relation to a train-carried air-brake relief actuator, a gravity operating member controlling the position of said track obstacle and having a supported and a non-supported position, an electro-magnetic supporting mechanism controlled by the condition of the track ahead for maintaining said gravity member in supported position, a resetting circuit subject to said electro-magnetic mechanism for restoring said gravity member to supported position only when said supporting mechanism is in condition to support the same, a motor included in said circuit, and a rotatable member driven by said motor and having an element thereon disposed for resetting engagement with a portion of said gravity member during a part of the revolution of said rotatable member.

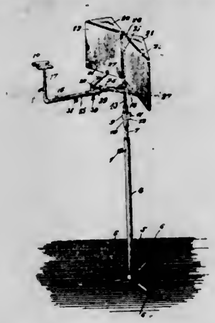
4. In train stop mechanism, a track obstacle having a position of interference and a position of non-interference with relation to a train-carried air-brake relief actuator, a gravity operating member controlling the position of said track obstacle and having a supported and a non-supported position, a cam roll on said gravity member, a restoring mechanism for said gravity member including a rotatable resetting member having a cam disposed for resetting engagement with said cam roll of the gravity member.

1,269,663. REFRACTING-STEREOSCOPE. REINHOLD H. WAPPLER, New York, N. Y., assignor to Wappler Electric Company, Inc., a Corporation of New York. Filed Apr. 24, 1917. Serial No. 164,089. (Cl. 88—29.)

1. In a stereoscope the combination, with means for supporting a pair of visual objects to be observed, of a pair of optical prisms each associated with one of said visual objects, each prism having a large facet and two smaller facets, each of said smaller facets being inclined relatively to said large facet, the angle of inclination for one of said smaller facets being substantially double the angle of inclination of the other of said smaller facets.

2. In a device of the character described the combination, with means for supporting a pair of visual objects

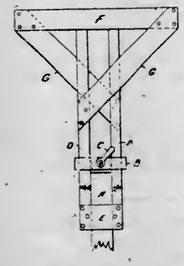
to be observed stereoscopically, of a pair of optical prisms each associated with one of said objects, each prism being provided with a plurality of facets so distributed that a group of convergent light rays in passing from the visual object through the prism to the eye of the spectator, is refracted in entering and also in leaving said prism and is twice reflected internally thereof, said prisms being so located relatively to each other and to the objects to be observed that the group of convergent light rays from one of said objects is crossed by the group of convergent light rays from the other of said objects.



4. In a device of the character described the combination of a pair of pictures and a pair of prisms for viewing the same stereoscopically, said prisms being so formed and so located relatively to said pictures that a group of convergent light rays passing from one of said pictures through its coresponding prism is crossed by a group of convergent light rays passing from the other of said pictures through the other of said prisms, mechanism for spacing said pictures at different distances from said prisms, and means for turning said pictures to different angles relatively to each other, in order to render said pictures normal relatively to said prisms when thus spaced at different distances from said prisms.

[Claims 3 and 5 to 7 not printed in the Gazette.]

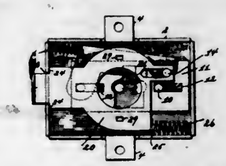
1,269,664. ADJUSTABLE SUPPORT. HOWARD T. WARE, El Paso, Tex. Filed May 17, 1917. Serial No. 169,243. (Cl. 248—3.)



1. In an adjustable prop or the like, the combination of two relatively movable members, one of which comprises two uprights slidably arranged at opposite sides of the other member, means connecting said uprights to move together, and a clamp adapted to rest against the end of the central member and having means to engage opposite sides of each of said uprights, to hold the two members in adjusted position.

2. The same as claim 1 with the addition that the clamp comprises two members each having central portions adapted to rest upon one of the prop members and each having lateral extensions provided with clamping ridges to bite the edges of the two uprights, the clamp also comprising a bolt and nut for drawing the two members together.

1,269,665. LOCK. SAMUEL W. WEISS, Newark, N. J., assignor to Globe Art Mfg. Company, Newark, N. J., a Corporation of New York. Filed Oct. 22, 1917. Serial No. 197,779. (Cl. 70—115.)



1. In a hasp-lock, the combination with a face plate and a hasp, of a lock-case fastened to the back of the said plate, a spring-actuated latch-plate located in top of said case and engaging with the hasp, a push ring slidably mounted upon the face plate and secured to the latch plate and co-acting therewith for disengaging the same from the hasp, a lock plate slidably located in the bottom of said lock case and slidably connected with said latch plate, and a spring-actuated tumbler interposed between said latch plate and said locking plate, pivotally connected to the lock case, and engaging with the lock plate for holding the parts in operative position.

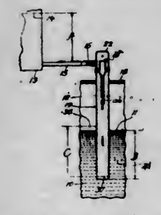
2. In a hasp-lock, the combination with a face plate and a hasp, of a lock-case fastened to the back of the said plate, a spring-actuated latch plate located in the top of said case and engaging with the hasp, a push ring slidably mounted upon the face plate and secured to the latch plate and co-acting therewith for disengaging the same from the hasp, a lock plate provided with holding means slidably located in the bottom of said lock case and slidably connected with said latch plate, and a tumbler provided with engaging means pivotally connected to the lock case, said tumbler interposed between said latch plate and said locking plate, the said engaging means of the tumbler co-acting with the holding means on the lock plate for holding the parts in operative position.

3. In a hasp-lock, the combination with a face plate and a hasp, of a lock case provided with two alined studs, fastened to the back of said plate, a spring-actuated latch plate located in the said case and engaging with the hasp, a push button slidably mounted upon the face plate and secured to the said latch plate and co-acting therewith for disengagaing the same from the hasp, a lock plate provided with alined slots, said slots designed to receive the said studs, slidably located within said lock case and slidably connected with said latch plate, and a spring-actuated tumbler pivoted to one of said studs and engaging with the lock plate for holding the parts in operative position.

1,269,666. ELECTROLYTE-FEEDING DEVICE. FRANK G. WHEELER, Appleton, Wis., assignor to Bleach Process Company, Appleton, Wis., a Corporation. Filed June 18, 1917. Serial No. 175,266. (Cl. 137—68.)

1. In apparatus of the class described, the combination of a supply tank containing liquid at a prescribed pressure, a consumption tank the liquid level of which is to be maintained, a conduit having its lower end immersed in the liquid of the consumption tank, and a pressure chamber having an overflow port communicating with the conduit and having a lower feed port communicating with the liquid of the supply tank.

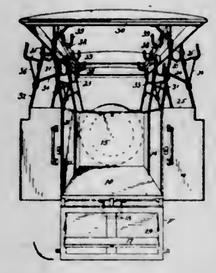
2. In apparatus of the class described, the combination of a supply tank provided with an outlet, the pressure of liquid in said tank being maintained constant at said outlet, a consumption tank the liquid level of which is to be maintained, and a sealed conduit having one end connected to said outlet and the other end immersed in the liquid of the consumption tank, said conduit being arranged to inclose a body of gaseous fluid under pressure for the purpose of regulating the flow of liquid through said conduit.



4. In apparatus of the class described, the combination of a supply tank provided with an outlet, the pressure of liquid in said tank being maintained constant at said outlet, a consumption tank the liquid level of which is to be maintained, and a sealed conduit having intermediate its length an air-trap portion and having one of its ends connected to said outlet and the other end immersed in the liquid of the consumption tank and arranged to include in said air-trap portion a body of gaseous fluid extending from the top of the trap to the bottom of the open end of the conduit which is immersed in the liquid of the consumption tank, said gaseous fluid being under a pressure substantially equal to the depth of immersion of the open end of said conduit in the consumption tank, the pressure of liquid in the supply tank being suitably maintained in an amount sufficient to force liquid therefrom up to the overflow level of said trap.

[Claims 3 and 5 to 12 not printed in the Gazette.]

1,269,667. WAGON-BODY. FRED H. WILLIAMS, Cleveland, Ohio, assignor, by mesne assignments, to The White Motor Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 3, 1916. Serial No. 81,849. (Cl. 21—7.)

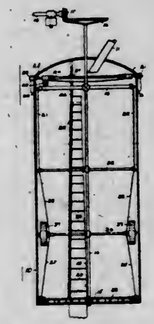


1. The combination of a wagon box, of a plurality of alined stanchions secured to and projecting upward from each side,—each stanchion comprising an outer member, an inner member which extends above the outer member, and an open U-shaped brace extended between and secured to said two members adjacent the upper end of the outer member.

2. The combination of a wagon box, a plurality of stanchions secured to each side, each stanchion comprising an inner member, an outer member, braces connecting them, and a bracket secured to and extending outward from the outer member and having an upwardly extended outer end.

3. The combination of a wagon box, a plurality of stanchions secured to each side thereof, each stanchion comprising an outer member, an inner member which extends above the outer member, braces extending between and secured to said members, and a top secured to the upper ends of the inner members of the several stanchions.

1,269,668. DEVICE FOR HANDLING NON-FLOWING MATERIALS. CARL WOOLCOTT and HARRY M. WOOLCOTT, Harrisburg, Ill. Filed Jan. 10, 1916. Serial No 71,239. (Cl. 214—17.)



1. The combination with a bin having a discharge opening therein, of a shaft revolubly mounted in the bin, means to rotate the shaft, a support fixed to the shaft, a conveyer slidably and revolubly mounted on the shaft for conveying materials toward the discharge opening, a plurality of loosely connected cross-arms loosely mounted on the shaft between the conveyer and support, the conveyer being loosely connected to one of the cross-arms and the fixed support being loosely connected to another of said cross-arms.

2. The combination with a bin having a discharge opening therein, of a shaft revolubly mounted in the bin, means to rotate the shaft, a support within the bin and fixed on the shaft, a cross-arm slidably and revolubly mounted on the shaft below the support and having a loose connection to the support, a revolubly mounted drum at each end of the cross-arm, a revoluble conveyer suspended from the cross-arm and having a series of flights thereon adapted, as the conveyer is revolved, to convey materials in the tank toward the discharge opening.

3. The combination with a bin having an elongated discharge opening at its side, of a conveyer revolubly suspended within the bin, means to rotate the conveyer at a plurality of positions in the bin, means on the conveyer to engage materials in the bin for conveying the same toward the discharge opening, and means adjacent the discharge opening for loosening the materials at said opening.

4. The combination with a bin for the storage of non-flowing materials and having an elongated discharge opening at its side, of a revoluble support within the bin, means to rotate the support, a conveyer mechanism suspended from the support, means adjacent the feed opening for loosening the materials at said opening and means connected to the loosening means and operatively connected to the support for actuating the loosening means.

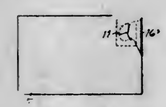
5. The combination with a bin for the storage of non-flowing materials and having a discharge opening in one side thereof, a vertically movable conveyer revolubly mounted within the bin, means to rotate the conveyer, the conveyer having a series of hinged flights at opposite corners thereof for neutralizing the conveying action of the conveyer when overloaded with the materials, and means on the conveyer for conveying the materials toward the discharge opening as it is revolved.

[Claim 6 not printed in the Gazette.]

1,269,669. ENVELOP. YOSHITADA YOSHINO, Los Angeles, Cal. Filed Jan. 25, 1917. Serial No. 144,462. (Cl. 229—82.)

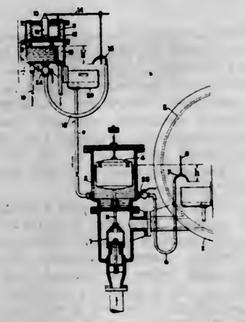
An envelop cut from a substantially rectangular blank, comprising a front part, an inner flap folded upon said

front part, an end flap folding upon and glued to said inner flap, an outer flap folding upon the inner flap and glued thereto for a portion of its length, an end flap to be inserted beneath the outer flap and secured to the outer



surface of said inner flap, and an extension on said outer flap, and provided with perforations at the folding edge adapted to be inserted in a slot cut in the right upper corner of the front part, and secured by affixing a postage stamp thereto.

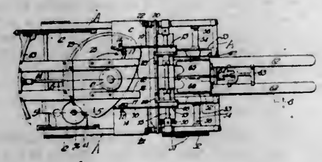
1,269,670. HOT-WATER-HEATING INSTALLATION. WILHELM ZUBLIN, Winterthur, Switzerland. Filed July 23, 1917. Serial No. 182,304. (Cl. 257—241.)



1. In a hot water heating installation, an apparatus for regulating the flow of circulating water, comprising a controlling valve for the flow of water, a movable float connected therewith, a float chamber containing the float and furnished with a liquid supply, flexible pipes, one being arranged to supply said float chamber, the other serving for the outflow of liquid therefrom, so as to determine a regulable flow of liquid through the same and automatic adjusting devices connected with said flexible pipes and arranged to raise or lower them in dependence of variable magnitudes in order to correctly harmonize the liquid flow through said float chamber according to variations of said magnitudes, substantially as and for the purpose described.

[Claims 2 and 3 not printed in the Gazette.]

1,269,671. ENVELOP-SEALING MACHINE. HARRY Y. ARMSTRONG, Springfield, Mass., assignor to United Sealing Machine Company, Springfield, Mass., a Corporation of Massachusetts. Filed June 11, 1917. Serial No. 174,138. (Cl. 120—6.)

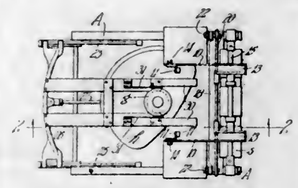


1. An envelop sealing machine, comprising in combination, means to support an envelop for free extension of the flap thereof angularly relatively to its body, a head rotatable on an axis substantially perpendicular to the plane in which the envelop body is supported and provided with a beveled marginal portion having absorbent material on part of such portion adapted to extend between the projecting flap of the envelop and its body to moisten the gummed portion of the flap by engagement therewith, means to press the moistened flap to the body of the envelop to seal the latter, means to carry the envelop from its supporting means to the sealing means, and means intermittently engageable by said head to supply moistening fluid to the absorbent marginal portion thereof.

4. An envelop sealing machine, comprising in combination, means to support an envelop for free extension of the flap thereof angularly relatively to its body, a head rotatable on an axis substantially perpendicular to the plane in which the envelop body is supported and provided with a beveled marginal portion of absorbent material adapted to extend between the projecting flap of the envelop and its body to moisten the gummed portion of the flap by engagement therewith, means to press the moistened flap to the body of the envelop to seal the letter, means to carry the envelop from its supporting means to the sealing means, a container for moistening fluid arranged in the path of said absorbent portion, and a ball float in the container engageable intermittently by said absorbent portion and adapted to be turned by the latter to convey fluid from the container to said portion, a tank for containing the moistening fluid, a single outlet pipe therefrom depending into said container and spaced above the bottom of the latter, whereby the fluid level in the container may be maintained substantially constant, means to move the pipe relatively to the container to vary the level of the fluid therein.

[Claims 2 and 3 not printed in the Gazette.]

1,269,672. ENVELOP-MACHINE. HARRY Y. ARMSTRONG, Springfield, Mass., assignor to United Sealing Machine Company, Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 12, 1917. Serial No. 201,601. (Cl. 271—44.)

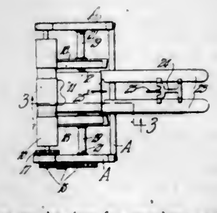


1. In an envelop machine, a magazine to receive and support a stack of envelops, means to successively withdraw the end envelop of the stack from the magazine, a device mounted on the magazine and arranged adjacent the exit portion thereof, brushes carried by said device and arranged to prevent the removal of more than one envelop at a time, and rigid means on said device and arranged closely adjacent the brushes, said last-named means being spaced from the envelop engaging portions of the latter sufficiently to permit the withdrawal of the end envelop and arranged to prevent deflection of the brushes by the engagement therewith of others than the end envelop.

4. In an envelop machine, a magazine to receive and support envelops in stacked relation for free angular extension of the flap of the end envelop relatively to its body, means engageable between the flap and body of the end envelop to remove the latter, and means carried by the last-named means and operable as the end envelop is withdrawn to tilt the envelop adjacent to the end envelop to prevent the flap thereof from catching on the end envelop and being carried therewith.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,673. STACKING MECHANISM. HARRY Y. ARMSTRONG, Springfield, Mass., assignor to United Sealing Machine Company, Springfield, Mass., a Corporation of Massachusetts. Filed Nov. 20, 1917. Serial No. 202,959. (Cl. 271—87.)



1. A stacking mechanism for envelops and the like, comprising, a table upon which the envelops are successively delivered with their faces contiguous thereto, a second table upon which the envelops may be stacked on edge, and revoluble devices arranged on opposite sides of the first-named table and having means in which the envelops may be positioned both laterally and longitudinally, said devices successively operable on the envelops to gradually tilt the rear edges thereof and at the same time gradually carry the forward edges along the first-named table to the last-named table.

5. A stacking mechanism for envelops or the like, comprising, a substantially horizontal table upon which the envelops are delivered one by one, a delivery table to support the envelop in substantially horizontally stacked relation, and means to transfer the envelops one by one from the first to the last-named table, said means comprising revoluble disks on opposite sides of the first-named table, each provided with flanges extending toward the latter, said flanges having portions cooperating with the first-named table when the envelop is delivered thereon to form a slot to receive the envelop and position it along three sides thereof, another portion adapted to engage with a flat surface the under face of the envelop and to gradually tilt the envelops into substantially upright position on the delivery table, and a third portion to hold the envelops against backward movement on the latter.

[Claims 2 to 4 and 6 to 11 not printed in the Gazette.]

1,269,674. BUILDING-BLOCK. GIUSEPPE BACIGALUPO, San Francisco, Cal. Filed Dec. 14, 1915. Serial No. 66,818. (Cl. 72—41.)

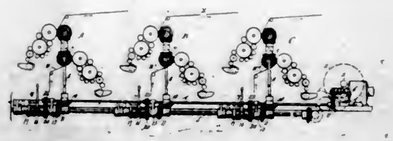


1. A wall composed of wedge shaped bricks arranged in alternately reversed positions, each of said bricks comprising parallel side walls, diverging end walls, an open base and a hollow interior, whereby the top row of inverted bricks provide a series of open receptacles integral with the wall.

2. A wall composed of wedge shaped bricks arranged in alternately reversed position, each of said bricks comprising parallel side walls, diverging end walls, an open base and a hollow interior and having an internal web extending from apex to base, and an opening at the apex whereby the top row of inverted bricks provide a series of open receptacles integral with the wall.

3. A vertical wall composed of chambered wedge shaped bricks arranged in horizontal rows and set alternately base down and base up, each of said bricks comprising parallel side walls, diverging end walls, an open base and a hollow interior and having an internal web extending from apex to base and an opening at the apex, forming a series of receptacles integral with the wall and supporting means for the ends of the adjacent brick.

1,269,675. DRIVING MECHANISM FOR WEB-PRINTING MACHINES. HARRY VINCENT BALL, Montreal, Quebec, Canada, assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed June 13, 1916. Serial No. 103,390. (Cl. 101—220.)



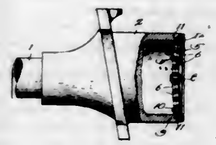
1. In a web printing machine, the combination with a plurality of printing units, of mechanism for driving all the units at high speed, an independent driving mechanism for driving the units at low speed common to all the units, and connections whereby any one of the units may be driven from the low speed drive, the other units being silenced.

4. In a web printing machine, the combination with a plurality of printing units, of a high speed shaft from which the units are driven, a low speed shaft, a sliding clutch for each unit, clutch members fast on the high speed shaft, clutch members loosely mounted on the high speed shaft, connections from the latter to the low speed shaft, and sliding clutches keyed to the loosely mounted members normally out of engagement with the members and movable into clutching engagement therewith.

5. In a web printing machine, the combination with a plurality of printing units, of a high speed shaft, a low speed shaft, sleeves loosely mounted on the high speed shaft, connections from the sleeves to the units, geared clutch members loosely mounted on the sleeve driven from the low speed shaft, and sliding clutches keyed to the sleeves normally out of engagement with the clutch members and movable into clutching engagement therewith.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,269,676. GAS-BURNER. ROBERT L. BENSON, Chicago, Ill. Filed Oct. 10, 1917. Serial No. 195,679. (Cl. 158—112.)

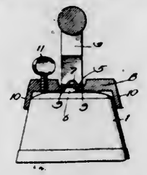


A gas burner including a nozzle and a dished screen of plate formation for preventing the gas flame from striking back to the gas flowing through the nozzle to the flame and having holes therethrough that are longer than their breadth, said screen being formed of assembled laminæ each having holes therethrough that are shorter than their breadth and which register with the holes in the other lamina.

1,269,677. FLAT-IRON. VIRGINIA B. BENSON, River Forest, Ill. Filed Oct. 10, 1917. Serial No. 195,680. (Cl. 68—26.)

1. A flat iron having an element overlying the body thereof; in combination with a U-shaped weight having shoulders margining the inner sides of the weight and which shoulders are receivable between said element and the flat iron body, the weight having a depending skirt inclosing an upper portion of the flat iron body and con-

forming in contour to such portion, said skirt being engageable with the flat iron body to define the relative position of the weight and flat iron body.



2. A flat iron, in combination with a U-shaped weight having shoulders margining the inner sides of the weight and which shoulders are receivable between the flat iron body and the base of the handle structure of the flat iron, the weight having a depending skirt inclosing an upper portion of the flat iron body and conforming in contour to such portion, said skirt being engageable with the flat iron body to define the relative position of the weight and flat iron body.

3. A flat iron having an element overlying the body thereof, in combination with a U-shaped weight having shoulders margining the inner sides of the weight and which shoulders are receivable between said element and the flat iron body.

4. A flat iron, in combination with a U-shaped weight having shoulders margining the inner sides of the weight and which shoulders are receivable between the flat iron body and the base of the handle structure of the flat iron.

5. A flat iron having a flat iron body and a handle assembled with such body, in combination with a weight formed to be insertible between the gripping portion of the handle and the flat iron body and to be removable from the flat iron while the flat iron body and flat iron handle are assembled.

1,269,678. PROCESS OF MANUFACTURING VEGETABLE GLUE. VICTOR G. BLOEDE, Catonsville, Md. Filed Oct. 10, 1917. Serial No. 195,751. (Cl. 87—17.)

1. The process of producing a vegetable glue, or adhesive, by first acting upon starch with a caustic alkali and water until a clear, viscous, solution or paste is formed, then neutralizing, or partly neutralizing the alkali contained in the paste so produced, by means of an acid gas, or vapor, injected into the body of the material substantially as set forth.

2. The process of producing a vegetable glue or adhesive by first acting upon starch with a caustic alkali and water until a clear, viscous solution or paste is formed, then neutralizing, or partly neutralizing the alkali in such paste by injecting into the body of the material a current of air carrying an acid gas or vapor, substantially as set forth.

3. The process of producing a vegetable glue or adhesive by first acting upon starch with a caustic alkali and water until a clear, viscous solution or paste is formed, then neutralizing, or partly neutralizing the alkali in such paste by injecting into the body of the material a combination of acids in gaseous or vapor form.

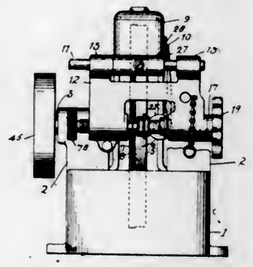
1,269,679. PRIMARY BATTERY. MENOTTI BONORA, Turin, Italy. Filed Jan. 31, 1917. Serial No. 145,785. (Cl. 204—41.)



6. In a primary battery cell, three adjacent frames, each frame having a vertical partition and a transverse partition above its bottom extending from said vertical partition to the ends of the frames thereby forming an electrolyte compartment at one end common to all the frames, a second electrolyte compartment common to all the frames beneath the transverse partition and an electrode space above said transverse partition, diaphragms between the frames separating the electrode space into separate electrode compartments, the transverse partition of the middle frame having openings therethrough to the second electrolyte compartment beneath the transverse partition and the vertical partitions of the other frames having openings therethrough to the first electrolyte compartment.

[Claims 1 to 5 not printed in the Gazette.]

1,269,680. EDGING-MACHINE. LUCIAN W. BUGBEE, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Nov. 5, 1915. Serial No. 59,758. (Cl. 51—11.)



1. In an edging machine, the combination with a stone and a carriage mounted adjacent the stone the carriage having a fixed lens clamp and the stone having portions for rimless edging and portions for bevel edging of a lens when held by the clamp, of means for shifting the carriage across the stone when a lens is being ground with a flat edge, and additional means for controlling the movement of the carriage across the stone when the lens is having a bevel ground thereon.

3. In an edging machine of the character described, the combination with a stone and a hood therefor, of a lens holding carriage pivotally supported adjacent the stone, means impelling the carriage toward the stone, an adjustable device carried by the hood for limiting the movement of the carriage toward the stone, and an indicator also carried by the hood and having a portion engaging the adjustable means for indicating the amount of adjustment thereof.

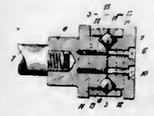
7. The combination with a grinding stone, of a hood therefor, a lens holding carriage slidably and pivotally connected to the hood, independent and separate means on the hood for impelling the carriage toward the stone and for limiting the movement of the carriage toward the stone, means for indicating the possible amount of movement of the carriage toward the stone, and a compensating device on the indicating means whereby the same may be set for different stones or to compensate for wear in any of the parts.

8. The combination with a grind stone having portions for plain and portions for bevel edging of a lens, of a lens carriage supported adjacent the stone, means for resiliently forcing the carriage in one direction transversely of the stone, and a plurality of means adapted to be independently and successively operated to control movement of the carriage over the plain and bevel edging portions of the stone in a direction opposite to that in which it is resiliently forced.

12. A lens-edging machine, including a support, a transversely shiftable carriage on the support, yielding means for actuating the carriage in one direction, means for shifting the carriage in the opposite direction against the yielding means and a cam for shifting the carriage against the action of the yielding means when the shifting means and coöperating parts are moved into inoperative position.

[Claims 2, 4 to 6, 9 to 11, and 13 not printed in the Gazette.]

1,269,681. MEANS FOR PROPELLING BICYCLES OR SIMILAR MACHINES. RAYMOND N. BURGEDORFF, Denver, Colo. Filed June 9, 1917. Serial No. 173,742. (Cl. 208—18.)



1. In combination with a machine having a pedal for propulsion thereof, of a circular shaped bearing secured to one extremity of the hub of a rear wheel, said bearing having a raceway therein and balls located in the raceway, a bar movably engaging said balls, means to retain the bar in such engagement, said bar being connected with said pedal.

[Claims 2 to 6 not printed in the Gazette.]

1,269,682. SPINNING AND DRAWING ROLL FOR TEXTILE OPERATIONS. HERMAN F. BUSCH, Millvale, Pa., assignor to Armstrong Cork Co., Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1917. Serial No. 154,121. (Cl. 154—43.5.)



1. A roll having a covering of artificial cork wound in convolute layers: substantially as described.

2. A roll having a covering of artificial cork wound in convolute layers, adjacent layers of the covering being cemented to each other, substantially as described.

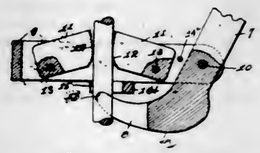
4. A spinning and drawing roll having a covering of artificial cork in thin sheet form wound upon itself in convolute layers, the adjacent layers being cemented to each other on both surfaces, substantially as described.

5. A spinning and drawing roll having a covering of artificial cork in thin sheet form wound upon itself in convolute layers, the adjacent layers being cemented to each other on both surfaces, and the inner layer being cemented to the rolls, substantially as described.

6. A spinning and drawing roll having a covering composed of relatively thin sheets cut from artificial cork and wound upon each other in convolute layers, substantially as described.

[Claim 3 not printed in the Gazette.]

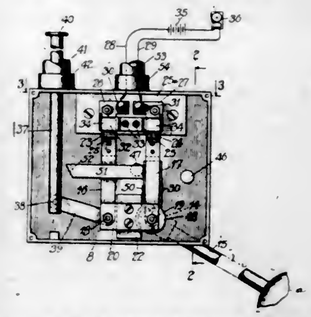
1,269,683. BOLT-PULLER. HARRY F. CLAYPOOL, East St. Louis, Ill. Filed Jan. 30, 1918. Serial No. 214,471. (Cl. 254—23.)



3. A bolt puller comprising an operating handle, a curved rocker portion carried by the lower end of the operating handle, fixed jaws carried by the curved rocker portion, a U-shaped frame pivotally carried by the handle and mounted above the fixed jaws, a pair of gripping jaws pivotally secured to the U-shaped frame, said gripping jaws being provided with inclined opposing faces, and stops carried by the U-shaped frame for limiting the movement of the inclined faces over each other.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,269,684. ELECTRIC SWITCH. JAMES W. COX, Wilmette, Ill., assignor to Pacific Flush Tank Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 8, 1915. Serial No. 12,813. (Cl. 175—309.)

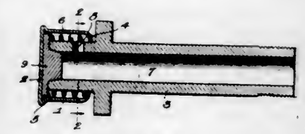


7. In a device of the class described, a casing, a pair of stationary contacts arranged thereon, a pair of movable contact members pivoted thereto, a hand operated rod connected to one of said pivoted contact members to move the same in one direction, a float pivoted on said casing, an arm connected to the float, means connected to the arm and engaging the last mentioned pivoted contact member to close the same, and means on said arm for operating the other pivoted contact member in both directions.

8. In a device of the class described, a casing, a pair of stationary contacts arranged thereon, a movable contact pivoted on the casing and adapted to engage one of said contact members, a manually operated rod engaging said pivoted contact member for operating the same in one direction, a shaft pivoted in the casing, a float rod fixed to said shaft, a float on the float rod, an arm secured to the shaft, a second contact member pivoted on the casing, means on said arm engaging the last said pivoted contact member for operating the same, and means on the last said pivoted contact member engaging the first mentioned pivoted contact member for operating the same.

[Claims 1 to 6 not printed in the Gazette.]

1,269,685. LUBRICATOR. NORMAN W. CUMMINS, Bridgeport, Conn., assignor to The Bassick Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Feb. 5, 1918. Serial No. 215,474. (Cl. 184—88.)



1. A lubricator for hollow bolts, comprising a cap body closed at one end and opened at its opposite end, the opened end being inturned to form a shoulder, a solid tapered plug arranged within the cap body and having a head seating against the closed end thereof, and a coiled spring confined between the head of the plug and the shoulder of the cap body.

2. A lubricator for hollow bolts having a lateral oil duct, comprising a sleeve-like body for covering the oil duct, said body closed at one end by an end wall and having its opposite end opened, means for reinforcing the

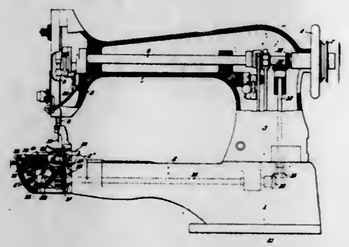
end wall and securing the body to the bolt, and means for yieldably urging the body onto the bolt.

3. A lubricator for hollow bolts, comprising a cap body closed at one end and having its opposite end opened, a reinforcing and securing plug arranged within the cap, and means for holding the plug in position.

4. A lubricator for hollow bolts, comprising a cap body closed at one end and having its opposite end opened, a cap-reinforcing plug disposed therein loosely against the closed end of the cap and having its inner end prepared for being driven into the hollow bolt, and means for yieldably securing the plug in position.

[Claims 5 and 6 not printed in the Gazette.]

1,269,686. ROTARY-HOOK SEWING-MACHINE. ALBERT H. DE VOE, Westfield, N. J., assignor to The Singer Manufacturing Company, a Corporation of New Jersey. Filed June 3, 1914, Serial No. 842,594. Renewed July 28, 1915. Serial No. 42,456. (Cl. 112—15.)



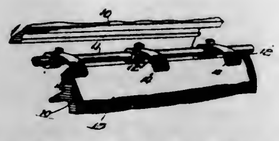
1. In a sewing machine, the combination with a loop-seizing element of a thread-case member and a hanger member therefor, one of said members being formed with a channel having overhanging lips and the other of said members having a portion entering and loosely embraced by said channel and engaging said overhanging lips, one of said members being normally stationary while the machine is in operation.

11. In a sewing machine, in combination, a thread-case, a loop-seizing member provided with a beak and laterally open throughout a space exceeding the width of the thread-case, a hanger by which the thread-case is suspended within the path of movement of said beak, a support for said hanger pivotally mounted substantially parallel with the axis of movement of said beak, and means for locking said support in operative position.

28. In a sewing machine, the combination with a loop-seizing member, of a thread-case provided in its upper side with a channel having overhanging lips, and a hanger having the form of a flat tongue and entering and loosely embraced by said channel and engaging said overhanging lips.

[Claims 2 to 10 and 12 to 27 not printed in the Gazette.]

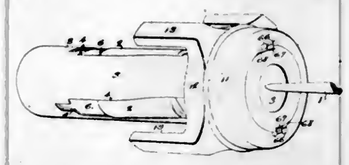
1,269,687. GRIPPER ATTACHMENT FOR PRINTING-PRESSES. SAMUEL E. DITTMAN, New York, N. Y., assignor to Miehle Printing Press & Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed August 27, 1915. Serial No. 47,575. (Cl. 101—412.)



1. The combination with a gripper finger of a printing press, of a pad member made of resilient material, and said pad member and said finger being provided with interengaging means adapted to removably connect said pad member with said finger and to hold said pad member from rotation with respect to said finger.

[Claim 2 not printed in the Gazette.]

1,269,688. TUBE-EXPANDER. THOMAS J. DIXON, Madison, Wis. Filed Apr. 2, 1917. Serial No. 159,158. (Cl. 153—82.)



1. In a tube expander in which is included a tubular body having a plurality of longitudinally extended radial slots; an expanding roller for each slot, a spring plate holder for each roller, a bearing member fixedly mounted on each end of the holder, the said bearing members slidably engaging the radial slots, the roller having end journals that engage the bearings, the ends of the said holder having extensions for engaging the inner surface of the tubular body, the said spring plate holder, the bearing and the roller being bodily endwise insertible into and removable from the tubular body, to and from the operative position and adapted, when placed in operative position, to hold the rollers at their innermost position and further adapted, when a tapering mandrel is inserted between the rollers to permit radial adjustment of such rollers.

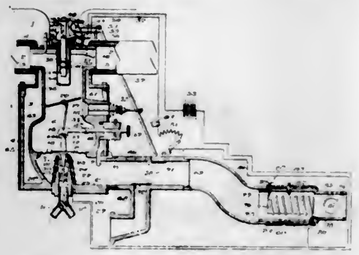
3. A tube expander comprising a tubular body having one or more longitudinally extended radial slots; each slot having a narrowed extension at each end, a flue sheet engaging member on the outer end of the said tubular body, an expanding roller holder located in each slot and including end portions for engaging the end extensions of the slots, an expanding roller mounted on the holder and means for normally forcing the holder inwardly under tension, the said holder, the roller and the tension means being insertible and removable as a unit into and from the tubular body, the said holder consisting of end bearing boxes having members for slidably engaging the end extensions of the radial slots and a flat spring member that constitutes the aforesaid tension means having a longitudinal slot through which the inner face of the roller projects, and end portions that embrace and secure the end bearing boxes and end extensions that engage the inner face of the tubular body when the parts are in the operative position.

5. In a tube expander having a tubular body formed with longitudinally and radially extended roller receiving slots, the opposite ends of which terminate in narrowed extensions, the said slots being arranged in a plane diagonal to the longitudinal plane of the roller; of a roller and a holder therefor for each slot comprising end bearing boxes, the said boxes being offset but in the longitudinal plane of the holder and slidably engaging the ends of the slots and including extensions for engaging the end extensions of the slot, a spring plate holder connected with the said boxes and having the ends projected beyond such boxes so that they engage the under face of the tubular body beyond the ends of the slots and a roller having center bearings for engaging sockets in the opposite bearing boxes.

[Claims 2 and 4 not printed in the Gazette.]

1,269,689. CARBURETER. GEORGE W. DONNING, Stamford, Conn., assignor to Donning Carbureter Corporation, Esopus, N. Y., a Corporation of New York. Filed Aug. 26, 1915. Serial No. 47,531. (Cl. 261—12.)

1. A carbureter including a chamber provided with an air-inlet and a mixture-outlet, means independent of the carbureter-chamber for heating air passing into the carbureter, and a jacket surrounding the chamber to provide a channel between the chamber and the jacket and closed against the chamber for housing a body of air independent of the air introduced into the chamber and means within the chamber and influenced by its contents for controlling the temperature of the air entering the channel whereby overheating of the chamber by the heated air in the channel is prevented.



4. A carbureter including a plurality of chambers, an air-jacket surrounding one of the chambers, valve-mechanism for controlling the flow of air between the chambers, an air-conduit communicating with one of the chambers and with the jacket, and a plurality of independently operable heating means within the air-conduit for heating air at different points therein and for influencing the temperature of the air in the jacket.

5. A carbureter including a mixing-chamber and an air-chamber, valve-mechanism between the chambers for controlling the flow of air from the latter to the former, an air-jacket disposed about the mixing-chamber, an air-conduit communicating with the air-chamber and with the jacket, heating means within the air-conduit, and a second heating means adjacent one end of the conduit for heating air preliminary to its passing into the air-chamber; said valve-mechanism operating, when in its closed position, to hold a portion of the air temporarily in the air-chamber; said heating means being effective to heat the air before it passes into the air-chamber, and, also, acting to influence the temperature of the air in the air-jacket.

10. A carbureter-structure including a mixing-chamber, an air-conduit communicating with the chamber and provided with a plurality of ports, valve-mechanism including closing elements for two of the ports and operable to close said air-conduit against the passage of air into the chamber through a portion of the conduit and at the same time opening at least two of the ports for the inflow of air through one of the ports from the outside into the air-conduit and chamber and for the outflow of air from a portion of the conduit through another of the ports into the outside atmosphere, means for operating said valve-mechanism and means for heating the contents of the air-conduit.

13. A carbureter including a mixing-chamber, an air-chamber, valve-mechanism interposed between the chambers for controlling the flow of air from said air-chamber into said mixing-chamber, a channel formed around the chambers, an air-conduit communicating with the air-chamber, heating means within the air-conduit, said air-conduit being provided with three ports, and valve-mechanism common to two of the three ports for controlling the same and operable to close the conduit at one side of one of the ports.

[Claims 2, 3, 6 to 9, 11, 12, and 14 to 18 not printed in the Gazette.]

1,269,690. DEVICE FOR DIFFUSING EXCESSIVE SHOULDER-FLESH. DORA E. DUFFY, Chicago, Ill. Filed Feb. 11, 1916. Serial No. 77,546. (Cl. 2—73.)

1. A device for dissipating excessive shoulder flesh adapted to be supported at its lower edge from a corset, a waist, a waist band, or other suitable support, consisting of a strip of flexible fabric extending transversely across the back to about the arm pits, and from a plane about midway between the waist line and shoulder blades, and thence upwardly to a plane about touching a line drawn across the shoulders of the wearer, and means for adjusting the tension of said strip for exerting a force dissipating excessive shoulder flesh downwardly from the shoulders, and away from the center of the back.



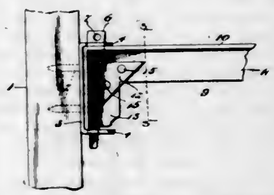
2. A device for dissipating excessive shoulder flesh adapted to be supported at its lower edge from a corset, a waist, a waist band, or other suitable support, consisting of a strip of flexible fabric extending transversely across the back to about the arm pits, and from a plane about midway between the waist line and shoulder blades, and thence upwardly to a plane about touching a line drawn across the shoulders of the wearer, and a lacing therein for producing and adjusting the tension of said strip.

3. A device for dissipating excessive shoulder flesh adapted to be supported at its lower edge from a corset, a waist, a waist band or other suitable support, consisting of a strip of flexible fabric extending transversely across the back to a point beneath the arm pits, and from a plane about midway between the waist line and shoulder blades and thence upwardly to a plane about touching a line drawn across the shoulders of the wearer, and means for adjusting the tension of said strip for exerting a force dissipating excessive shoulder flesh downwardly from the shoulders, and away from the center of the back.

4. A device for dissipating excessive shoulder flesh adapted to be supported at its lower edge from a corset, a waist, a waist band, or other suitable support, consisting of a strip of flexible fabric extending transversely across the back beneath and forwardly of the arm pits, and from a plane about midway between the waist line and shoulder blades, and thence upwardly to a plane about touching a line drawn across the shoulders of the wearer, and means for adjusting the tension of said strip for exerting a force dissipating excessive shoulder flesh downwardly from the shoulders, and away from the center of the back.

[Claims 5 to 9 not printed in the Gazette.]

1,269,691. CORNER-LOCK FOR BEDSTEADS. DARRELL F. DYKE, Chicago, Ill., assignor to The Seng Company, a Corporation of Illinois. Filed Sept. 20, 1917. Serial No. 192,247. (Cl. 5—55.)



1. In a corner-lock for bedsteads, the combination with a socket-plate adapted to be secured to a corner post, said socket plate comprising a vertical rear wall, and opposite walls disposed at an angle to the rear wall and each provided with a slot, of a bed-rail bent near its end to form an angular extension conforming to the angle formed by the vertical wall and one of the angularly disposed walls and provided in its horizontal portion with a slot coincident with that of the socket-plate, and a key passed

through the two slots and locking the end of the bed-rail within the socket-plate.

3. In a corner-lock for bedsteads, the combination with a socket-plate comprising a rear vertical wall and upper and lower horizontal flanges or walls, the latter being provided with vertically alining slots formed therein in advance of the rear wall, of a bed-rail bent near its end to form an extension disposed at a right-angle to its remaining portion and of a length agreeing with the distance between the upper and lower horizontal walls or flanges of the socket-plate so as to fit therebetween and having its horizontal portion provided with a slot coincident with and extending slightly in advance of the slot in the upper wall or flange of the socket-plate, and a tapered locking-key passed through the slots of the bed-rail and the socket-plate so as to lock and bind the bed-rail within the socket-plate.

5 In a corner-lock for bedsteads, the combination with a socket comprising upper and lower parallel forwardly disposed walls, the latter provided with vertically alining slots, of a bed-rail bent near its end so as to form an extension disposed at an angle to the remaining portion of the rail, said extension being of a length agreeing with the distance and fitting between said forwardly disposed walls of the socket, a slot formed in the horizontal portion of the rail and in line with the slots of the socket, and a tapered locking-key passed through the slots of the socket and of the bed-rail, whereby to lock and bind these two parts together.

7. In a corner-lock for bedsteads, the combination with a socket-plate comprising a rear wall and upper and lower forwardly disposed walls, of a bed-rail bent near its end to form an angular extension adapted to enter and conform to the angles in the socket-plate, and means for locking said rail in said socket-plate.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,269,692. CHECK-MARKER. CYRUS W. ELROD, Kansas City, Mo. Filed Nov. 27, 1916. Serial No. 133,835. (Cl. 33—198.)



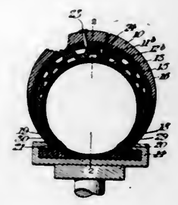
1. A check marker comprising a straight edge member, having a longitudinal guide rib and an edge flange back-turned and spaced from the body of the member to form a groove, and a pointer having an arched portion movable along the rib and a lip movable in the groove and having frictional contact with the lip, for the purpose set forth.

2. A check marker comprising a straight edge body member and a back-turned, yieldable clamp member at one end thereof; said straight edge member having a central, longitudinal guide rib and an edge flange back-turned and spaced from the body to form a groove and a pointer comprising an arched portion movable along the rib and having a lip at one end movable in the groove, and a point at the opposite end extending beyond the edge of the body member for the purpose set forth.

1,269,693. INNER LINING FOR PNEUMATIC TIRES. EDWARD HALL FAILE, Larchmont Manor, N. Y. Filed Nov. 5, 1915. Serial No. 59,763. (Cl. 152—18.)

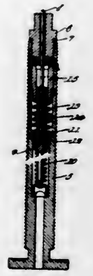
1. An inner lining for use between the inner tube and the casing of a pneumatic tire, including a layer of pliable, rubber composition molded with voids or air-spaces in the inner and outer faces thereof and adapted to lie in direct contact with the inner surfaces of the casing, and a layer of tough, strong, penetration-resisting canvas between said composition and the inner tube and secured to said composition and carrying the latter.

2. A pneumatic tire including an outer casing of substantially non-stretchable construction, an inner tube of elastic material, an interposed layer of thick, pliable composition molded with voids or air-spaces in the inner and outer surfaces thereof, and a layer of tough, strong, substantially non-stretchable, penetration-resisting material between said first mentioned layer and said inner tube, the first mentioned layer serving to permit relative bending movement of the casing and said second mentioned layer, the voids or air-spaces serving to make said first



mentioned layer more pliable and also serving to receive and retain small hard objects which may work their way through the casing, said first mentioned layer also serving to space the inner tube at a greater distance from the wearing surface of the tire, the opposite side edges of said second mentioned layer being unattached to each other or to the shoe, whereby said second mentioned layer may move in respect to the casing and assist in resisting the expansive force of the compressed gas in the inner tube.

1,269,694. TIRE-VALVE. WILLIAM CURTIS FAIRES, Mount Gilead, Ohio. Filed Sept. 27, 1917. Serial No. 193,489. (Cl. 137—53.)



A tire valve comprising a hollow externally screw-threaded stem having external longitudinal grooves arranged offset relative to each other, and said stem having an internal valve seat and a passageway therefrom to the outside, a spring-seated valve engaging said seat and having a passageway in communication with the first-mentioned passageway, and a spring-seated valve engageable with the first-mentioned valve over the passageway thereof.

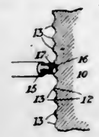
1,269,695. WALL-PLASTER. JAMES EDWIN FAIRFAX, Aiken, S. C., assignor of one-half to David William Gaston, Jr., Aiken, S. C. Filed Aug. 18, 1917. Serial No. 186,959. (Cl. 106—24.)

1. A plaster consisting of a mixture of tripoli, cement, mineral wool, and bluestone, in proportions substantially as specified.

4. A plaster consisting of a mixture of infusorial silica, cement, mineral wool, and copper sulfate in proportions substantially as specified.

[Claims 2 and 3 not printed in the Gazette.]

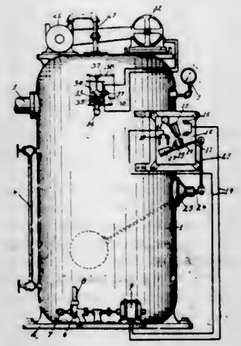
1,269,696. SOUND-RECORD. JOHN FLETCHER, Douglaston, N. Y., assignor to Operaphone Manufacturing Corporation, New York, N. Y., a Corporation of New York. Filed July 3, 1915. Serial No. 37,946. (Cl. 274—42.)



1. A sound record having thereon a spiral groove comprising a plurality of convolutions of uneven depth forming "hill and dale" undulations corresponding to sound waves, and successive convolutions of said groove being separated at all points by a substantially flat topped wall, and said groove having a transverse sectional form which at a point of maximum width is substantially in the form of a slightly flattened semicircle.

[Claims 2 and 3 not printed in the Gazette.]

1,269,697. AUTOMATIC VACUUM-MAINTAINING APPARATUS. CLAUDE A. FLINN, Battle Creek, Mich., assignor to Advance Pump & Compresser Company, Battle Creek, Mich., a Corporation of Michigan. Filed Sept. 30, 1915. Serial No. 53,378. (Cl. 230—24.)

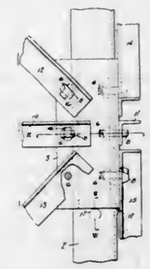


1. In a structure of the class described, the combination of a reservoir adapted to be connected to a vacuum system to receive the condensation therefrom, a liquid pump connected to said reservoir at the bottom thereof, a driving motor for said liquid pump, a control switch for said motor, a float within said reservoir having an operating connection to said switch, an air pump connected to said reservoir at the top thereof, the air pump connection being provided with a downwardly facing valve seat, a ball valve adapted to coact with said valve seat, an open cage supporting said ball valve below said seat so that said valve is raised against its seat should the reservoir become filled with liquid, a connection for said float to said valve so that said valve is held open by the float when the liquid in the reservoir is below a predetermined level, a driving motor for said air pump, a control switch for said air pump motor, and a pressure controlled actuating means for said air pump switch connected to said reservoir.

3. In a structure of the class described, the combination of a reservoir adapted to be connected to a vacuum system to receive the condensation therefrom, a liquid pump connected to said reservoir at the bottom thereof, a driving motor for said liquid pump, a control switch for said motor, a float within said reservoir having an operating connection to said control switch, means for producing a vacuum connected to the top of said reservoir, a valve for said connection, and a connection from said float to said valve so that said valve is held open by the float when the liquid in the reservoir is below a predetermined level.

[Claim 2 not printed in the Gazette.]

1,269,698. SPLICE-JOINT. PHILIP FOUKES, Pittsburgh, Pa. Filed Dec. 7, 1915. Serial No. 65,499. (Cl. 189—19.)

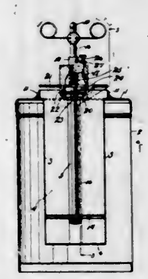


1. A splice joint for derricks and similar structures comprising an angle plate engaging the sides of the derrick leg, said angle plate being adapted to connect the members of the leg bracing, clips engaging the edges of said leg to clamp the angle plate in position thereon, said bracing clips and angle plate having registering holes therein and bolts in said registering holes for securing the clips to the angle plate and thereby clamping the angle plate on the derrick leg and fastening the bracing to the angle plate.

4. In a derrick or similar structure the combination of a leg of the derrick, diagonal braces and girts formed of rolled metal shapes, and a splice joint for fastening the diagonal braces and girts to the derrick leg, said splice joint having an angle plate engaging the sides and clips engaging the edges of said leg, with registering holes in the angle plate and clips, slotted holes in the ends of the diagonal braces and girts, and bolts extending through the slotted holes of the bracing and registering holes in the clips and angle plate, to clamp the parts in assembled relation.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,699. ICE-CREAM-DISPENSING MACHINE. PHILIP FRITZ, Grand Rapids, Mich. Filed Oct. 27, 1917. Serial No. 198,794. (Cl. 107—21.)



1. An ice cream dispensing device comprising a supporting top or cover having an opening therethrough, a

receptacle suspended from said cover below the opening, a brick carrying device located within the receptacle, means to elevate said device a predetermined amount from above the top or cover, and means adjustably mounted on said cover for engaging with said elevating means to limit the extent of elevation of the brick carrying device, substantially as described.

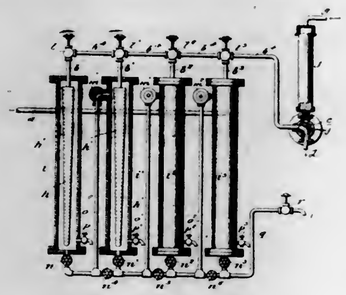
3. A dispensing device comprising an upper member having an opening therethrough, guide ribs on said member paralleling the sides of the opening, a stop at the rear side of the opening, a receptacle depending from the member below the opening, a brick carrying device within the receptacle, means operable at a point above said member for successively elevating said device a predetermined amount, and releasable means for holding the device in any position to which it may be raised, substantially as described.

5. A dispensing device comprising an upper member having an opening therein, a receptacle depending from the member below the opening, said receptacle having a vertical slot in its rear side, a carrying member located within the receptacle, a rod located back of said slot in the receptacle, means extending through the slot and connecting the rod and said carrying member, a housing on the upper member through and above which said rod slidably passes, and a lever mounted in the housing and extending through one side thereof through which the rod passes, said lever normally holding the rod against downward movement but freely permitting upward movement thereof, substantially as described.

7. A dispensing device containing the elements claimed in combination in claim 5, combined with a second lever mounted in the housing above the first mentioned lever and extending through the opposite side of said housing, said lever being mounted for movement in an upward direction and engaging with the rod to carry the same with it on such upward movement, and an adjustably mounted stop on the housing interposed in the path of movement of said second lever to determine the amount of upward movement thereof, substantially as described.

[Claims 2, 4, and 6 not printed in the Gazette.]

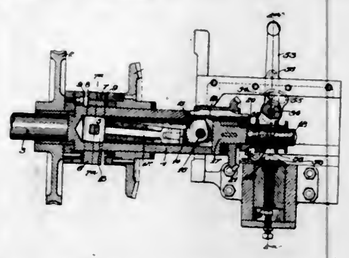
1,269,700. FILTERING PROCESS. ALBERT LEGRAND GENTER, Salt Lake City, Utah, assignor of one-half to The General Engineering Company, Salt Lake City, Utah, a Corporation of Utah. Filed Jan. 23, 1917. Serial No. 143,935. (Cl. 210—13.)



1. The process of continuously filtering and thickening the mixture being filtered, said process consisting essentially, in cleansing a filter medium *in situ* and utilizing the current of the mixture in one chamber to collect the solids cleansed from a filter medium therein and to convey the same to a succeeding filter chamber; and repeating the filtering and cleansing operations in said second filtering chamber.

[Claims 2 to 9 not printed in the Gazette.]

1,269,701. REVERSING CLUTCH MECHANISM. JAMES E. GLEASON and EDWARD W. BULLOCK, Rochester, N. Y., assignors to Gleason Works, Rochester, N. Y., a Corporation of New York. Filed Dec. 12, 1917. Serial No. 206,830. (Cl. 74—50.)



1. The combination with a pair of rotatable gear members, of a rotatable shaft, and a clutch device carried by the shaft and having swinging movement in opposite directions to engage alternately with said gear members.

4. The combination with a pair of oppositely rotating driving members, of a driven member, and a pivoted clutch device carried by the driven member and which is automatically swung about its axis intermittently to alternately engage the driving members.

7. The combination with a pair of oppositely rotating driving members, of a driven member, a clutch device carried by the driven member and comprising an annular element pivoted between said driving members so as to swing into engagement with either one and having oppositely directed teeth at its sides for alternate engagement with coöperating teeth on the driving members.

9. The combination with a pair of oppositely rotating driving members, of a driven member, a clutch device carried by the driven member and comprising an annular element pivoted between said driving members so as to swing into engagement with either one and having oppositely directed teeth at its sides for alternate engagement with coöperating teeth on the driving members, a relatively long arm carried by said clutch device having gear teeth at its free end, and an operating segment engaging said gear teeth and automatically movable in opposite directions intermittently.

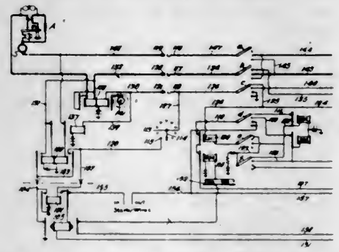
10. The combination with a pair of rotatable gear members having clutch teeth on their adjacent sides, of a rotatable shaft, and a clutch device carried by said shaft having movement to alternately engage the gear members and provided with a movably mounted clutch member having oppositely directed clutch teeth on its edges.

[Claims 2, 3, 5, 6, 8, and 11 not printed in the Gazette.]

1,269,702. MESSAGE-REGISTER CIRCUITS FOR MACHINE-SWITCHING TELEPHONE-EXCHANGE SYSTEMS. CHARLES L. GOODRUM, New York, N. Y., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed June 15, 1916. Serial No. 103,855. (Cl. 179—9.)

1. In a telephone exchange system, the combination with telephone lines of different classes, senders therein, message registers associated therewith, selector switches, two groups of connector switches, and finder switches for connecting said lines to the selector switches, said lines being grouped as called lines on said connectors according to the class to which they belong, control circuits adapted to coöperate in the setting of said switches by said senders, a relay associated with each control circuit and with each of the connectors of one group, means for operating either the relay in the control circuit or the relay in the connector upon the response of the called party, dependent upon the character of the called line, and means including the finder switch operated when the control circuit relay is operated to actuate the calling line message register.

2. In a telephone exchange system, the combination with telephone lines of different classes, senders therein, connecting circuits including selector and connector switches, said connector switches being divided into two groups and the lines being grouped as called lines therein according to the class to which they belong, non-numerical switches for associating said lines with said connecting circuits, a message register magnet for each line having two windings, one included in the line circuit and the other in the test wire of said non-numerical switch, said windings being differential when said line is extended to a connecting circuit, control circuits adapted to coöperate in the setting of said switches by said senders, a relay associated with each control circuit and with each of the connectors of one group, means for operating either the relay in the control circuit or the relay in the connector upon the response of the called party, dependent upon the character of the called line, and means permanently associated with the non-numerical switch actuated by the operation of said control circuit relay for reversing the flow of current in the calling line to operate said register.



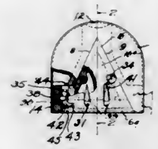
3. In a telephone exchange system, the combination with telephone lines of different classes, connecting circuits including a selector and connector switches, said connector switches being divided into two groups and the lines being grouped as called lines therein according to the class to which they belong, senders, finders for associating said lines with said connecting circuits, side switches for controlling said finders, a message register magnet for each line having two windings, one included in the line circuit and the other in the test wire of said finder, said windings being differential when said line is extended to a connecting circuit by a finder, control circuits adapted to coöperate in the setting of said switches by said senders, a relay associated with each control circuit and with each of the connectors of one group, means for operating either the relay in the control circuit or the relay in the connector upon the response of the called party, dependent upon the character of the called line, and means for advancing the finder side switch upon the operation of said control circuit relay to reverse the direction of current flow in the calling line to operate the message register.

7. In a telephone exchange system, selector switches, a plurality of connector switches, calling lines, called lines of different classes, a particular class of called lines being segregated on a particular connector switch, a plurality of connecting circuits terminating in said switches, means for extending calling lines to said connecting circuits, a group of repeating relays adapted to transmit impulses directly to the operating magnets of said switches, one of the relays being effective both in the establishment of a telephone connection and in its registration, and a controlling device associated with each of the particular connector switches and which may be substituted for said last mentioned relay in the establishment of a call which is ineffective in call registration.

8. In a telephone system, a calling line, a connecting circuit, selectively operable switches, an automatic switch for connecting the calling line to said connecting circuit, an auxiliary switch for controlling the operation of the automatic switch, called lines of different classes, a particular class of said lines being segregated at a particular selective switch, means for actuating the selective switches to extend said connecting circuit to any one of the called lines, release means for said switches, said release means being under the control of the calling line while a connection is being extended, a message register associated with the calling line, said register responsive to the actuation of the auxiliary switch, a line relay in said connecting circuit for supplying talking current to a called line, means controlled by a called line for operating said relay to actuate said auxiliary switch and to remove the control of said release means from the calling to the called line, and a line relay associated with said particular switch which may be substituted for said first relay to supply talking current when a connection is extended to a line of said particular class of lines.

[Claims 4 to 6 not printed in the Gazette.]

1,269,703. BENCH-STOP. HENRY A. GURRIES, Palo Alto, Cal. Filed Aug. 15, 1916. Serial No. 114,994. (Cl. 144—306.)



1. In a bench stop, a vertically adjustable dog comprising a center block and a V-block adjustably arranged on said center block.

4. In a bench stop, a vertically adjustable dog comprising a center block and a V-block adjustable upon said center block, and means arranged in the top of said center block for retaining a piece of work in said V-block.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,269,704. ORE-SEPARATING DEVICE. RODERICK W. HADDOCK, Independence, Oreg. Filed Oct. 5, 1916. Serial No. 123,976. (Cl. 83—54.)



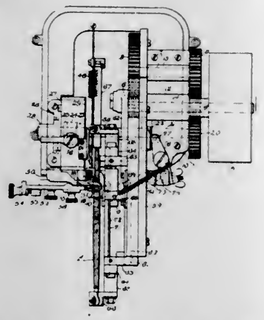
1. In an ore separating device, the combination of a main piping, a plurality of sectional short pipings positioned in the same plane as the main piping, said short piping being substantially parallel, U shaped elbows connected to the ends of said short piping, tubular members carried upon said short piping, short pipes connected to said tubular members, said short pipes extending at right-angles to each other, thus causing abrupt abutments for the particles of ore being drawn through said piping and pipes by air, so as to cause the minerals to be readily deposited in said tubular members.

2. In an ore separator, the combination of a piping having a material delivery means, an air forcing means communicating with said main piping, said piping having tubular members formed thereon and depending therebelow, a short pipe connected to said tubular members, one end of said last mentioned pipe projecting into said first mentioned pipe, baffle plates formed within said tubular members at points adjacent said first mentioned pipe, said baffle members extending downwardly into said tubular members, thus causing particles of refuse to be blown from said tubular members into said first mentioned pipe while allowing deposit of minerals to be retained in said tubular members.

3. In an ore separator, the combination of a main piping, tubular members extending below said main piping having a material delivery means, an air forcing means communicating with said main piping, caps detachably

carried upon the lower ends of said tubular members, an auxiliary piping communicating with the interiors of said tubular members and being connected to said main pipe, thus causing air to be forced through said auxiliary pipe from said main pipe, baffle plates formed in said tubular members adjacent the upper ends thereof, said baffle plates being formed upon the tubular members at sides opposite to the ends of said auxiliary pipe thereinto, said baffle plates extending downwardly toward the entrance ends of the auxiliary pipe, thus causing the air injected into said tubular members to be agitated below said baffle plates for quickly and thoroughly removing refuse particles from said tubular members and directing the same into said main pipe.

1,269,705. SAW-FILING MACHINE. FRANK H. HALL, Boston, Mass. Filed June 28, 1915. Serial No. 36,692. (Cl. 76—34.)

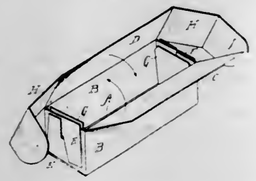


1. A saw filing macnine comprising two saw clamping devices, means for moving one of said devices relative to the other of said devices, and means for opening one of said devices during such movement.

11. A saw filing machine comprising a guide frame having a vertical guide, a member slidable in said guide and having a fixed jaw, an adjusting screw mounted in said member and having a slidable bearing, a cam operating against said bearing to move said member vertically, a spring closed jaw having an element slidable laterally on said member, adjustable means on said frame for limiting the closing movement of said jaw element, and a cam for operating said jaw element against the action of its spring.

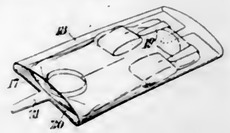
[Claims 2 to 10, 12, and 13 not printed in the Gazette.]

1,269,706. FOLDING BOX. WILLIAM J. HALL, Cincinnati, Ohio, assignor of one-half to Charles Mills, Cincinnati, Ohio. Filed Oct. 20, 1915. Serial No. 56,970. (Cl. 229—36.)



A folding box formed of a blank which contains the various parts of the box, viz. the bottom, the side-walls continuous with opposite edges of the bottom, locking flaps, one at each end of each side-wall and continuous with them, said flaps being notched, the two flaps at each end of the box being complementary to each other and adapted to interlock so as to hold the body of the box in shape for packing, a flap at one end of the bottom and adapted to occupy an upstanding position against the inside of the interlocked locking flaps at that end, a similar flap at the other end of the bottom and adapted to occupy a similar position against the inside of the interlocked locking flaps at the other end, a top flap continuous with one of the side-walls adapted to be folded down over the contents of the box after being packed, another top flap continuous with the other side-wall and adapted to be folded down over the other top flap first folded down, a closing flap at one end of this latter top flap adapted to occupy a position against the outside of the interlocked locking flaps at one end of the box, a similar closing flap at the other end of this top flap adapted to occupy a position against the outside of the interlocked locking flaps at the other end of the box and locking tongues continuous with each of these closing flaps and adapted to occupy positions between the interlocked locking flaps at each end of the box and the upstanding flaps on the inside thereof thereby securely locking the closed box without aid of extraneous fastening means and in a manner to permit opening of the box without destruction of any of its parts.

1,269,707. SHIRT-WRAPPER. JOHN HENDERSON, Chicago, Ill., assignor to Columbia Envelope Co., Chicago, Ill., a Corporation of Illinois. Filed Aug. 26, 1913. Serial No. 786,655. (Cl. 206—7.)

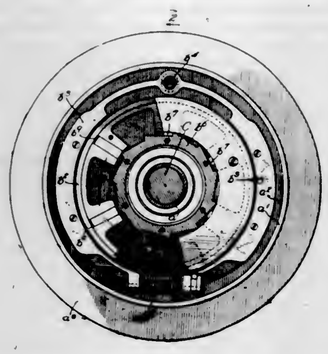


A shirt wrapper comprising an envelop open at its opposite ends and of substantially uniform cross sectional area throughout its length, said envelop having a back portion formed of stiff opaque paper and its front portion formed of thin flexible transparent paper, said front portion being secured to said back portion along the side edges thereof, said back portion having a single tab at one end thereof located centrally of the end and formed integrally with the back portion, and two tabs adjacent the other end of said back portion formed integrally therewith and arranged on opposite sides of the center line whereby successive backs may be formed from a continuous web of fabric without wasting the material.

1,269,708. COMBINED ENGINE-STARTER CLUTCH AND FLY-WHEEL. WILLIAM T. HENSLEY, Boundbrook, N. J., assignor, by mesne assignments, to Bound Brook Engine & Mfg. Co., a Corporation of Delaware. Filed July 24, 1914. Serial No. 852,844. (Cl. 192—20.)

1. A combined fly-wheel and clutch for connecting a motor generator with an internal combustion engine, comprising a fly-wheel fixed on the engine shaft, a clutch member loose on said shaft, arranged for connection with the motor generator, a ratchet connection between said member and fly-wheel, for communicating power from the motor through said fly-wheel to the shaft, and a friction connection between the fly-wheel and said member, for communicating power from the engine through said fly-wheel to the generator.

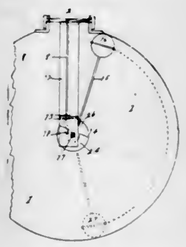
3. A combined fly-wheel and clutch for connecting a motor generator with an internal combustion engine, comprising a fly-wheel fixed on the engine shaft, a clutch member loose on said shaft, arranged for connection with the motor generator, a ratchet connection between said member and fly-wheel, for communicating power from the motor through said fly-wheel to the shaft, and a friction connection between the fly-wheel and said member, for communicating power from the engine through said fly-wheel to the generator, said friction connection including a wearing surface on said fly-wheel, a brake shoe mounted on said member, and yielding means for holding said shoe against said surface in opposition to centrifugal force.



6. A combined fly-wheel and clutch for connecting a motor generator with an internal combustion engine, comprising a fly-wheel fixed on the engine shaft, a clutch member loose on said shaft, arranged for connection with the motor generator, a ratchet connection between said member and fly-wheel, for communicating power from the motor through said fly-wheel to the shaft, and a friction connection between the fly-wheel and said member, for communicating power from the engine through said fly-wheel to the generator, said fly-wheel having a hub upon which said member is loosely mounted, and said member having sprocket teeth disposed a distance from the inner side of said wheel.

[Claims 2, 4, and 5 not printed in the Gazette.]

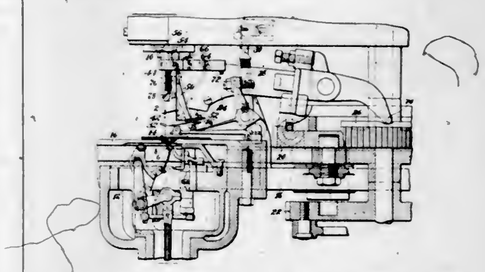
1,269,709. GAGE FOR LIQUID-CONTAINING TANKS. FREDERICK H. HICKE, La Crosse, Wis. Filed Dec. 6, 1917. Serial No. 205,804. (Cl. 73—82.)



3. The combination, in a gage for liquid containing tanks, of a gas tight cap attached to the wall of the tank over an opening therein; a dial in said cap having graduations marked thereon; a bracket firmly attached to the above mentioned cap; an operating device having a diagonal slot, a flange revolubly attached to the bracket, said device being secured to said flange; a spindle revolubly passing through the bracket and dial plate; a pointer attached to the upper end of the spindle to extend across the face of the dial; a hook formed on the lower end of the spindle to loosely engage the operating device; and means to hold said spindle in place; all substantially as set forth.

[Claims 1 and 2 not printed in the Gazette.]

1,269,710. SEWING-MACHINE. GEORGE S. HILL, Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Dec. 29, 1913. Serial No. 809,272. (Cl. 112—33.)



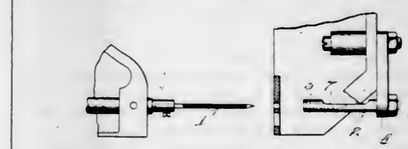
1. A sewing machine, having, in combination, stitch forming mechanism comprising a rotary needle carrier, and a thread cutting and holding device operated by the rotation of the carrier.

2. A sewing machine, having, in combination, stitch forming mechanism comprising a rotary needle carrier, a thread holding jaw, devices coöperating therewith to sever and hold the thread, and means through which the jaw is advanced into position to act on the thread by the rotation of the carrier.

3. A sewing machine, having, in combination, stitch forming mechanism comprising a rotary needle carrier, a thread cutting and holding device, a cam on the carrier, and connections for operating the cutting and holding devices from the cam.

[Claims 4 to 12 not printed in the Gazette.]

1,269,711. NEEDLE-GUIDE FOR SEWING-MACHINES. GEORGE HOEPNER, Chicago, Ill. Original application filed Oct. 27, 1916, Serial No. 128,104. Divided and this application filed Aug. 15, 1917. Serial No. 186,254. (Cl. 112—29.)



1. In a sewing machine, a work support, a reciprocable needle movable through said support from one side thereof, and a stationary needle guide mounted on the opposite side of said support and at some distance therefrom, said needle guide being constructed and arranged completely to surround the end of the needle.

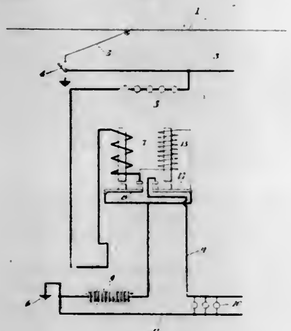
4. In a sewing machine, a work support, a reciprocable needle adapted to move back and forth through said support from one side thereof, a post mounted on the opposite side of and spaced apart from said support, said post having bored into the same a hole of about the same diameter as the needle to be guided, the side of the post in the vicinity of the rear end of the hole being cut away to provide an outlet for lint or other foreign matter.

[Claims 2 and 3 not printed in the Gazette.]

1,269,712. EMERGENCY LIGHTING SYSTEM. JOHN W. JEPSON, Depew, N. Y., assignor to Gould Coupler Company, a Corporation of New York. Filed July 8, 1914. Serial No. 849,642. (Cl. 171—313.)

1. An emergency lighting system for electric motive power cars or the like, having in combination with the

motive power mains a storage battery and regular lights connected in series across the motive power mains, a switch in the battery circuit, a coil in series with the battery for controlling the operation of said switch, a coil in shunt to said switch and in series with the first mentioned coil, an auxiliary light circuit, a switch operated by said second coil for connecting the auxiliary light circuit across the battery and a switch for disconnecting the connection between the regular lights and the motive power main and connecting them to the other side of the battery.

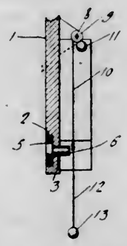


4. An emergency lighting system for electric motive power cars or the like, having in combination with the motive power mains a storage battery, a switch for connecting the battery across the motive power mains to be charged therefrom, a coil in series with the battery for controlling the operation of said switch, an auxiliary light circuit, a switch for connecting the auxiliary light circuit in circuit with the battery, a coil for operating the latter switch, and means for connecting said last mentioned coil in circuit with the battery, and connections whereby the closing of said first switch acts to shunt said second mentioned coil.

6. An emergency lighting system for electric motive power cars or the like, having in combination with the motive power mains a storage battery, a switch for connecting the battery across the mains to be charged therefrom, a coil in series with the battery for controlling the operation of said switch, a relatively high resistance connected in shunt to said switch, an auxiliary light circuit, and automatic means whereby the auxiliary light circuit may be connected in circuit with the battery.

[Claims 2, 3, 5, 7, and 8 not printed in the Gazette.]

1,269,713. EDUCATIONAL APPARATUS. DAISY D. HUSTON, Deepwater, Mo. Filed Apr. 20, 1918. Serial No. 229,817. (Cl. 35—2.)

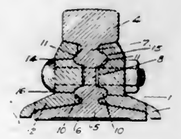


1. An educational appliance including a body, character bearing devices detachably mounted on the front of the body, and a series of objects suspended from the back of the body and movable to position either below or behind the body.

5. An educational appliance including a body, character bearing devices removably mounted on the front of the body, said devices being interchangeable, parallel partitions upon the back of the body, pulleys between the partitions, cords mounted on the pulleys and extending into the respective spaces between the partitions, a counterbalance secured to one end of each cord, a wire secured to the other end of each cord and a ball carried by the wire and movable to a position either below or behind the body.

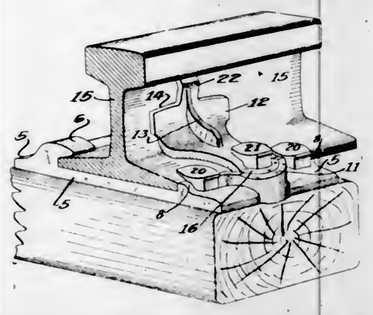
[Claims 2 to 4 not printed in the Gazette.]

1,269,714. COMBINED RAILROAD-RAIL AND JOINT. PETER KIMACK, St. Louis, Mo. Filed Aug. 3, 1917. Serial No. 184,194. (Cl. 239—14.)



A combined rail and joint comprising a rail provided with a ball, web, and base flange, said base flange being provided on its underneath surface with a smooth plain margin on each side, and with a series of zigzag depressions formed intermediate of and extending above said margins, and the web of said rail being provided on each side with a series of parallel longitudinal ribs, there being bolt openings between the ribs and spaced therefrom, and a pair of fish plates provided with recesses or grooves adapted to receive the ribs of the rail web, the said fish plates being povided with spike openings.

1,269,715. COMBINED RAIL ANTICREEPER, TIE PLATE, AND BRACE. PETER KIMACK, St. Louis, Mo. Filed Dec. 26, 1917. Serial No. 208,768. (Cl. 238—2.)



1. A rail anti-creeper comprising a tie plate provided on one end with hooked flanges for engaging one base flange of a rail, and on the other end with a rail bearing shoulder and spike openings intersecting said shoulder, a socket arranged between said spike openings, and a locking dog provided with a serrated face pivotally mounted in said socket.

2. A rail anti-creeper comprising a tie plate provided on one end with spaced hooked flanges and a spike opening and on the other end with a rail bearing shoulder and spike openings intersecting said shoulder and with a socket between the spike openings, and a locking dog pivotally mounted in said socket said locking dog being provided with a serrated edge adapted to engage a rail.

base flange and with a portion projecting beyond the serrated edge and overlying the top of the rail base flange.

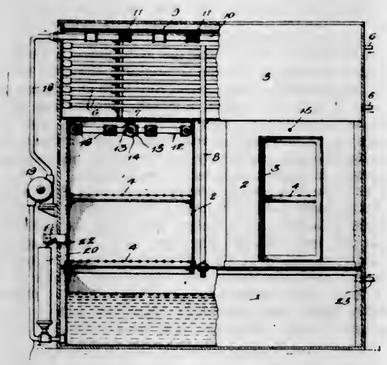
3. A rail anti-creeper comprising a tie plate provided with spike openings, hooked flanges on one end and a rail bearing shoulder on the other end and a socket between the spike openings, a locking dog provided with a cylindrical opening and a cam faced shoulder adapted to engage against the edge of the rail mounted in said socket, a rail bracing portion carried by said locking dog adapted to be seated beneath the ball of the rail, and serrated surface carried by the locking dog and located between the rail brace and the cam face shoulder.

4. A rail anti-creeper comprising a tie plate provided on its underneath surface with flanges, and on its top surface at one end with hooked flanges for engaging one base flange of the rail, and at its opposite end with a rail bearing shoulder and a socket, a pivoted locking dog mounted in said socket, said locking dog being provided with a serrated cam faced shoulder adapted to bear against an edge of the base flange and provided with a portion extending beyond the shoulder adapted to lie on top of the base flange, said locking dog being provided with a circular opening, and a spike seated in said opening for securing the locking dog to the rail.

5. A rail anti-creeper comprising a tie plate provided on one end with hooked flanges spaced apart and a spike opening between said flanges and on the other end with a rail bearing shoulder and spike openings intersecting said shoulder and with a socket between the spike openings the wall of the socket being a continuation of the rail bearing shoulder, and a locking dog pivotally mounted in said socket said locking dog being provided with a cam faced serrated shoulder adapted to engage the rail base flange.

[Claim 6 not printed in the Gazette.]

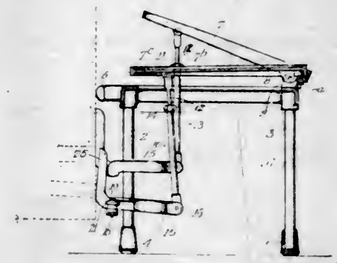
1,269,716. REFRIGERATING AND HARDENING CABINET. VICTOR L. KING, West Point, Miss. Filed June 19, 1917. Serial No. 175,601. (Cl. 62—101.)



4. A refrigerating device of the kind described comprising upper and lower tanks, an overflow pipe connecting the two tanks, ammonia or equivalent coils in the upper tank, a brine pipe therein provided with perforated laterals arranged above the ammonia pipes and discharging thereon, cabinets arranged between the two tanks and having free communication with the lower one, brine pipes with perforated laterals arranged respectively in the upper portion of each cabinet, and discharging therein, valves controlling passage of brine from the upper tank to the last mentioned brine pipes, said valves being exteriorly operated, and means for pumping brine from the lower collecting tank to the brine pipe of the upper tank.

[Claims 1 to 3 not printed in the Gazette.]

1,269,717. PEDAL ATTACHMENT FOR PIANOS AND THE LIKE. WALTER I. KIRK, Chicago, Ill., assignor to Lyon & Healy, Chicago, Ill., a Corporation of Illinois. Filed June 3, 1915. Serial No. 31,829. (Cl. 84—97.)



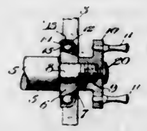
1. A device of the class specified comprising in combination a frame adapted to be set in position in front of the piano or other instrument, treadles pivotally connected at their forward ends to said frame, operating rods pivotally connected with said treadles and extended downwardly therefrom in a substantially vertical direction and clips for the pedals of the piano or other instrument, said clips when in position on said pedals grasping the pedals and extending lengthwise of the same to the front ends thereof, said clips being pivotally connected at their forward ends to the lower ends of said operating rods.

5. In a device of the class specified, a pedal engaging clip comprising a member constructed to engage the upper side of the toe portion of the pedal and having an integrally firmed cross piece engaging the under side of the pedal remote from the toe portion, said cross piece being provided with an adjustable device for engaging one side of said pedal.

6. In a device of the class specified, a pedal engaging clip comprising toe portions adapted to fit over and at the sides of the toe portion of the pedal, and a cross piece adapted to fit underneath the shank portion of the pedal, said cross piece being provided with a longitudinally extending slot and a screw having a member constructed to engage the pedal adapted to be adjusted in said slot.

[Claims 2 to 4 not printed in the Gazette.]

1,269,718. BALL-BEARING FOR HARPS. WALTER I. KIRK, Chicago, Ill., assignor to Lyon & Healy, Chicago, Ill., a Corporation of Illinois. Filed Dec. 13, 1915. Serial No. 66,477. (Cl. 64—36.)

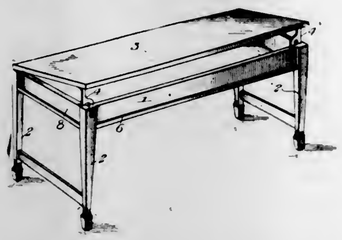


1. The combination with the side plates, of a spindle extending between the same, said spindle having one of its ends provided with a reduced portion which projects beyond the side plate at that end of the spindle, a cone shaped collar mounted upon the reduced end portion of said spindle, the ends of said collar being substantially flush with the sides of said plate, a member for engaging harp strings mounted on the reduced end portion of said spindle projecting beyond said collar and serving to clamp the collar in position, and an anti-friction bearing mounted in said plate and coöperating with said cone shaped collar.

2. The combination with the side plates of a spindle 5 extending between the same, said spindle having a reduced end portion 8 provided with a threaded portion 9, a col-

lar 6 mounted upon the reduced end portion 8 and of substantially the width of the end plate 3, a disk 10 provided with a threaded socket adapted to fit over the threaded end portion 9, said disk 10 having a hub portion adapted to fit against the outer end of the collar 6, said collar 6 having its inner end adapted to fit against the relatively large portion of the spindle 5, and an anti-friction bearing mounted in the inner side of said plate 3 and coöperating with the conical surface of the collar 6, said anti-friction bearing being concealed by the outer side of said plate 3.

1,269,719. BENCH-BRACKET. WALTER I. KIRK, Chicago, Ill., assignor to Lyon & Healy, Chicago, Ill., a Corporation of Illinois. Filed May 19, 1917. Serial No. 169,619. (Cl. 155—22.)



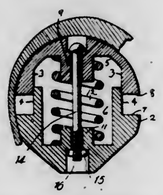
1. A device of the class specified comprising a body portion having a laterally extending shank adapted to be pivotally attached to the member on which the device is mounted, the body portion being extended in a substantially vertical manner and having its lower end constructed to provide a seat to rest upon a top portion of said member and having its other end provided with a surface adapted to form a seat for the member to be supported by the device.

2. A device of the class specified comprising a flat metallic body portion and a flat metallic shank, the body portion being substantially straight and having its opposite ends provided with laterally extending flanges, the flange at the end of said body portion remote from said shank being inclined.

3. A device of the class specified comprising a flat metallic body portion and a flat metallic shank, the body portion being substantially straight and having its opposite ends provided with laterally extending flanges, the end portion of said shank remote from said body portion being offset.

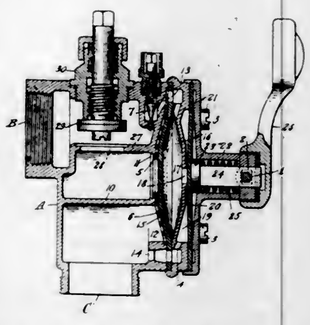
4. A device of the class specified comprising a flat metallic body portion and a flat metallic shank, the body portion being substantially straight and having its opposite ends provided with laterally extending flanges, the flange at the end of said body portion remote from said shank being inclined, and the end portion of said shank remote from said body portion being offset.

1,269,720. RESILIENT TIRE. JOHN HENRY KOSSMANN, St. Louis, Mo. Filed Feb. 7, 1918. Serial No. 215,847. (Cl. 152—8.)



An improved resilient-tire, consisting of base-sections having longitudinal grooves in their outer peripheries; bosses at the bases of said grooves opposite parallel guide-wings extending continuously the full length of said base-sections; stop-shoulders exterior of said guide-wings and also extending the full length of said base-sections; a series of cap-sections arranged to slide radially upon the said guide-wings of said base-sections, and when at the limit of their inward movement to rest throughout their lengths upon the said stop-shoulders; bosses formed on the interior of said cap-sections in alinement with opposite ones of said bosses at the bases of the grooves in said base-sections; springs mounted upon oppositely-alined bosses and bolts passing through perforations in the oppositely-alined bosses of the said base and cap-sections.

1,269,721. FLUSH-VALVE. GREGOR KUNTNY, Trenton, N. J., assignor to The Trenton Brass and Machine Co., a Corporation of New Jersey. Filed Mar. 8, 1915. Serial No. 13,046. (Cl. 137—93.)



1. A flush valve having a casing provided on one side with a main inlet port and a main discharge port, a regulating valve and port on the inlet side of the main inlet port, a timing port and valve on the inlet side of the regulating valve, a diaphragm extending over the port side of the casing and controlling the main ports, a plate outside the diaphragm forming a pressure chamber between it and the diaphragm and connecting with the timing port, a relief port in the plate, a diaphragm seating on the plate and forming a relief valve controlling the relief port, a cover outside the relief port diaphragm, and an operating member carried by the cover for controlling the diaphragm to open and close the relief port.

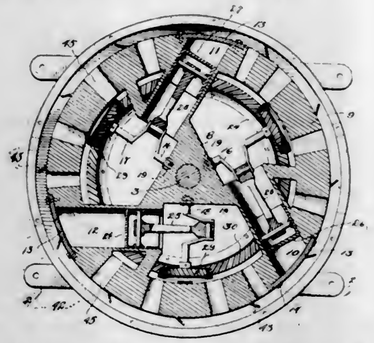
3. In a flush valve, the combination with a diaphragm controlling the main port, a pressure chamber controlling said diaphragm, and a relief port and its controlling means for said pressure chamber, of a regulating valve and port on the inlet side of the main port, means for operating said regulating valve from the outside of the flush valve and a timing port and valve for the pressure chamber on the inlet side of the regulating valve.

[Claims 2 and 4 not printed in the Gazette.]

1,269,722. VALVELESS ROTARY INTERNAL-COMBUSTION ENGINE. OWEN J. MCGANN, Wattsville, Ohio, assignor of one-half to George Sinclair, Hanoverton, Ohio. Filed Jan. 16, 1917. Serial No. 142,665. (Cl. 123—43.)

1. In an internal combustion engine, the combination with a casing, of a shaft rotatably mounted therein, a rotor secured to the shaft, cylinders carried by the rotor and extending tangentially with respect to the shaft, pistons operable in the cylinders, crank shafts extending at right angles to the first mentioned shaft and mounted in the rotor, piston rods connecting the crank shafts to the pistons, and gearing between the crank shafts and the casing to cause the rotation of the rotor upon the rotation of the crank shafts.

2. In an internal combustion engine, the combination with a casing, of a shaft rotatably mounted therein, a rotor secured to the shaft, cylinders carried by the rotor and extending tangentially with respect to the shaft, pistons operable in the cylinders, radially extending crank shafts extending at right angles to the first mentioned shaft and mounted in the rotor, piston rods connecting the crank shafts to the pistons, and gearing between the crank shafts and the casing to cause the rotation of the rotor upon the rotation of the crank shafts.



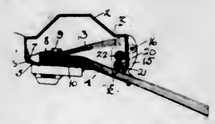
3. In an internal combustion engine, the combination with a casing, and a shaft rotatably mounted therein, a rotor secured to the shaft and extending tangentially with respect to the shaft, cylinders carried by the rotor, pistons operable therein, crank shafts mounted in the rotor and extending at right angles to the first mentioned shaft, a rack secured to the casing, and gears secured to the crank shafts and intermeshing with the rack, whereby the rotor and shaft will be actuated upon the operation of the pistons.

5. In an internal combustion engine, the combination with a casing, of a rotor operable therein, cylinders carried by the rotor, pistons operable in the cylinders, a shaft secured to the rotor, gearing between the pistons and casing to cause the rotation of the rotor upon the operation of the pistons, means for forcing air into the casing to cool the cylinders, and means operated by the exhaust to draw the air from the casing.

6. In an internal combustion engine, the combination with a casing, of a rotor operable therein, cylinders carried by the rotor, pistons operable in the cylinders, a shaft secured to the rotor, gearing between the pistons and casing to cause the rotation of the rotor upon the operation of the pistons, means for forcing air into the casing to cool the cylinders, and pipes connected to the casing and to the exhaust manifold to draw the air from the casing.

[Claim 4 not printed in the Gazette.]

1,269,723. HOLDER FOR TICKETS AND THE LIKE. MURDOCK MACDONALD, Cleveland, Ohio. Filed Oct. 9, 1916. Serial No. 124,488. (Cl. 101—113.)

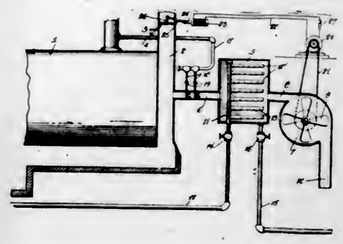


1. In a ticket holder of the character described, the combination of a casing, means adapted to hold a ticket pad therein with a portion thereof extending from said casing, actuating means adapted to move said pad into said casing, and printing means actuated upon such movement of said pad and adapted thereupon to print the date on the portion of said ticket normally lying outside of said casing.

13. The combination of a casing adapted to hold a pad of tickets, a rotatable printing roller mounted within said casing above the normal position of such pad of tickets, and a hinged side on said casing adapted to support such pad of tickets, said side being adapted, upon movement, to bring such pad of tickets in contact with said printing roller and to move such pad transversely of said roller.

[Claims 2 to 12 not printed in the Gazette.]

1,269,724. SMOKE-PURIFIER. WILLIAM W. MARTIN, Pittsburgh, Pa. Filed Aug. 15, 1916. Serial No. 115,043. (Cl. 261—17.)

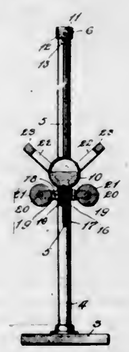


1. The combination with a flue, of a smoke washing means, a suction means connected with said smoke washing means, a damper positioned within said flue, and means for simultaneously closing said damper and operating the said suction means.

3. A smoke purifier comprising a stack, a smoke washing tank, a smoke pipe connecting said stack with said washing tank, injector pipes extending into said smoke pipe, means connecting said injector pipe with a steam boiler for furnishing steam thereto, said injector pipes adapted to discharge steam toward the outlet discharge end of said smoke pipe for driving the smoke into said washing tank, a suction fan coöperating with said washing tank and adapted to create a suction therethrough, a water supply pipe extending into said washing tank, a plurality of laterally extending spraying tubes carried by said water supply pipe and arranged one above the other for extending transversely through said washing tank throughout its entire height and constituting means for thoroughly washing the smoke within the washing tank, and a draining pipe carried by said washing tank.

[Claims 2 and 4 not printed in the Gazette.]

1,269,725. APPLICATOR FOR LIVE STOCK. GEORGE D. MAY, St. Louis, Mo. Filed Dec. 17, 1917. Serial No. 207,500. (Cl. 119—157.)

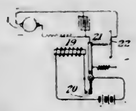


1. An applicator for live-stock comprising a pair of spaced vertical standards, medicament-applying means in-

cluding a tank disposed crosswise between and having connection with the standards, said means being bodily freely movable lengthwise of the standards by an animal passing therebeneath, and rollers carried by said means, said rollers being disposed slightly below, and longitudinally upon opposite sides of, the tank and being adapted for engagement by the animal in passing beneath or in elevating said means.

[Claims 2 to 8 not printed in the Gazette.]

1,269,726. WELDING METALS. RALPH D. MERSHON, New York, N. Y. Filed Apr. 3, 1917. Serial No. 159,393. (Cl. 219—10.)

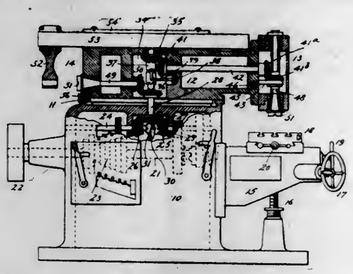


1. The method of welding herein described, comprising holding the parts together in the position in which they are to be united, connecting them to one terminal of a charged condenser, and then bringing the other terminal of the source into sudden contact with said parts, whereby the parts to be welded are subjected simultaneously to the heat of the discharge from said source and to the impact of the welding terminal.

2. The method of welding herein described, comprising holding the parts together in the position in which they are to be united, connecting them to one terminal of a charged condenser, and bringing the other terminal into contact with the parts at their point of juncture, whereby the heat of the resulting discharge and the impact of the welding terminal fuses together the contacting surfaces of the parts, and repeating the last step until the welding is complete.

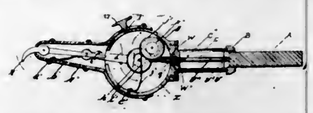
3. The method of welding herein described, comprising holding the articles together in contact with each other, connecting them to one terminal of a charged condenser, and striking rapidly recurrent blows with the other terminal upon the parts at the point where they are to be welded, the condenser being re-charged between successive blows of the welding terminal.

1,269,727. MILLING-MACHINE. ALEXANDER E. METZ, New York, N. Y. Filed Mar. 12, 1917. Serial No. 154,348. (Cl. 90—17.)



The combination in a milling machine, of a hollow base, a vertically adjustable work table on one side of said base, a head rotatably mounted on the top of said base having tool carrying heads on the opposite ends thereof, two independent gear trains in said rotating head for driving the tool holders carried by the respective heads, a vertical shaft extending through the base and into the rotatable head in its axis of rotation for positively driving either of said gear trains in any position of the rotatable head, means for optionally connecting one or the other of said gear trains to the vertical shaft, a driving shaft journaled within said base, changeable speed driving gearing also within the base between said driving shaft and said vertical shaft, and means forming a part of the driving gearing for reversing the direction of rotation of the vertical shaft.

1,269,728. UNIVERSAL INDICATOR. HAROLD C. MILLER, Saginaw, Mich. Filed July 19, 1915. Serial No. 40,806. (Cl. 33—172.)



1. In a device of the kind described, two casings, one of said casings being provided with circular recesses, hubs carried by the other casing and extending into the recesses, whereby pivotal adjustment of the two casings is obtained, means for adjustably securing the two casings together, a feeler carried by one of the casings, an index carried by the other casing, and an operative connection between the feeler and the index, substantially as described.

9. A test indicator comprising two casings each having a partly circular portion, the circular portion of one casing being partly inclosed within the partly circular portion of the other, the circular portions permitting relative adjustment of the casings, an index carried by one of the casings, means within said casing for operating the said index, a feeler carried by the second casing and normally opposing the motion of the said index, means operatively connecting the feeler with the index, and means for securing the casings in an adjusted position.

10. A test indicator comprising a casing, an index carried thereby, gear mechanism for moving the said index, spring means for operating the said mechanism, a second casing pivotally mounted upon the first casing, means for securing the casings in adjusted position, a lever carried by the said second casing and also operated by said gear mechanism, and a feeler member carried by the said second casing and normally opposing the motion of the said index.

14. A test indicator comprising a casing, an index extending thereinto, gear means engaging said index, a spring fastened to the gear means and casing to operate the gear means, a feeler, and means engaging the feeler to oppose the operation of the spring, substantially as described.

[Claims 2 to 8, 11 to 13, and 15 not printed in the Gazette.]

1,269,729. SAFETY APPLIANCE FOR AUTOMATIC HAMMERS. SAMUEL WILSON MORROW, Baltimore, Md., assignor to U. S. Safety Appliance Company, Baltimore, Md., a Corporation of Maryland. Filed Aug. 30, 1917. Serial No. 188,915. (Cl. 78—44.5.)

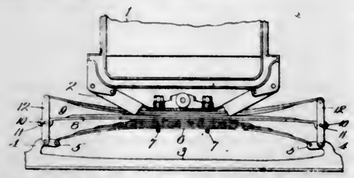


1. In a pneumatic hammer having a barrel, a shouldered set, a thimble with a coöperating shoulder to prevent escape of the set from the socket, means for holding the thimble consisting of a plurality of transverse keys, transverse slots in the thimble and registering slots in the barrel, and leaf springs partially encircling the thimble between the slots and bearing at each side of their centers

on the adjacent keys, the slots and keys having coöperating stop-surfaces transverse to the direction of reciprocation of the hammer.

[Claims 2 to 5 not printed in the Gazette.]

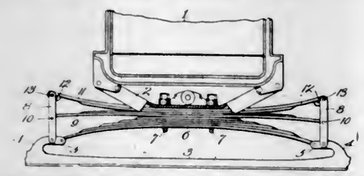
1,269,730. SHOCK-ABSORBER FOR MOTOR-CARS. JOHN R. MOUSLEY, Kansas City, Mo. Filed Sept. 6, 1917. Serial No. 190,275. (Cl. 267—27.)



1. The combination in a motor car of the type provided with a transverse body-supporting spring, of a pair of transverse springs rigid at intermediate points with the body-supporting spring, and swing frames pivoted at their lower ends on the axle and at their upper ends to one of the said pair of springs, and having play connections at intermediate points with the ends of the other of said pair of springs.

[Claims 2 to 4 not printed in the Gazette.]

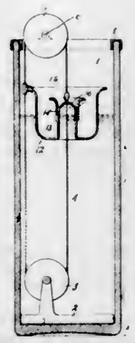
1,269,731. SHOCK-ABSORBER FOR MOTOR-CARS. JOHN R. MOUSLEY, Kansas City, Mo. Filed Sept. 17, 1917. Serial No. 191,877. (Cl. 267—27.)



1. The combination in a motor car provided with a body-supporting spring, of a pair of swing frames mounted upon the axle, and a pair of springs superposed with relation to the first-named spring, the uppermost of said springs having play connections with the upper ends of said swing frames and exerting upward and inward pressure thereon; the other of said pair of springs having connections with said swing frames intermediate the length of and exerting pressure on the latter.

[Claim 2 not printed in the Gazette.]

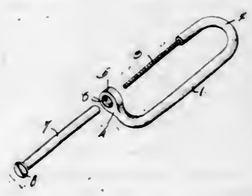
1,269,732. SANCTUARY-LAMP. BERNARD MULLER-THYM, Kansas City, Mo. Filed Nov. 5, 1917. Serial No. 200,453. (Cl. 67—51.)



3. A sanctuary lamp, comprising a vessel, a wick extending through oil in the vessel, means for suspending the wick from a point above the highest range of the flame therefrom, and automatic means for imparting upward travel to the wick.

[Claims 1, 2, 4, and 5 not printed in the Gazette.]

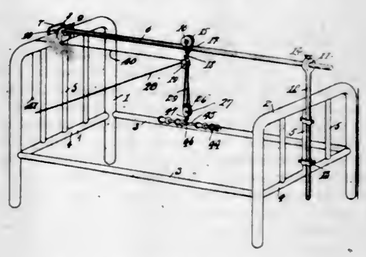
1,269,733. CHAIN-LINK. PETER E. NELSON, Luverne, N. D. Filed Nov. 14, 1917. Serial No. 201,987. (Cl. 59—85.)



1. A bar bent to form a link and having an opening in one end thereof the opposite end of the bar having a portion screw-threaded and arranged in longitudinal alinement with said opening, and a fastening member adapted to be passed through the opening and engaged with said extension.

[Claims 2 to 6 not printed in the Gazette.]

1,269,734. INVALID ELEVATING AND CONVEYING DEVICE. CLAIRE A. NOLAND, Monroe City, Mo. Filed Sept. 28, 1916. Serial No. 122,704. (Cl. 5—44.)



1. A lifting and conveying device for invalid bedsteads, which comprises a main supporting bar, means for clamping one end of the bar to the head section of a bedstead, telescopic members connected to and between the sides of the foot section of the bedstead, a vertical rod adapted to receive the other end of the main supporting bar, means for adjustably clamping the rod to the end of the bedstead, and means for adjustably connecting said vertical rod to one of the telescopic members.

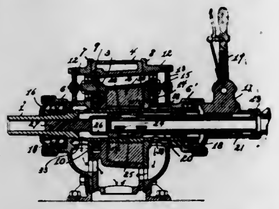
3. A lifting and conveying device for invalid bedsteads comprising an adjustably mounted supporting means, a pulley block suspended upon said supporting means, said pulley block comprising a pulley wheel, a patient supporting member, a cable passing over said pulley wheel and engaging said patient supporting member, said pulley block provided with a socket formed in one side thereof, a transversely movable clutch member fitting within said socket and provided with an upwardly extending lug formed upon the inner end thereof, a coil spring engaging said lug and fitting within said socket and adapted to normally urge said clutch member inwardly, and means formed upon the outer end of said clutch member for facilitating the withdrawal of said clutch member to an inoperative position.

4. A lifting and conveying device for invalid bedsteads comprising a main supporting member, a pulley block suspended upon said main supporting member, a patient supporting means extended from said pulley block, a cable

passing through said pulley block, a slidably mounted clutch member provided with teeth formed upon the bottom edge thereof engaging said cable, said pulley block provided with a socket formed therein, said socket provided with channel ways formed in the sides thereof, said clutch member provided with laterally extending ribs working within said channel ways for guiding said clutch member transversely through said pulley block and permitting said pulley block to firmly engage said lifting cable, said clutch member provided with an upwardly extending foot, a coil spring mounted within said pulley block and engaging said upwardly extending foot for yieldably urging said clutch member in engagement with said lifting cable, and gripping means formed upon said clutch member for facilitating the withdrawal of said clutch member out of engagement with said lifting cable.

[Claim 2 not printed in the Gazette.]

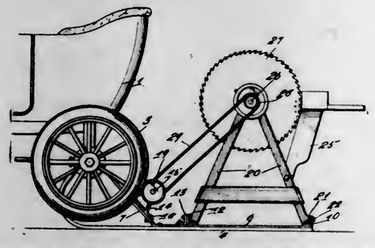
1,269,735. ROTARY STEAM-ENGINE. FREDERICK H. OGDEN, Newark, N. J. Filed Mar. 11, 1916. Serial No. 83,533. (Cl. 121—51.)



1. In a rotary engine, an annular chamber, pistons adapted to travel in said annular chamber, cylinder heads located within said chamber, being provided with cavities to allow the pistons to pass through, a central rotating member or hollow shaft extending through said chamber and to which said pistons are secured, a stationary steam sleeve located within said central rotating member or hollow shaft, provided with ports, and a sliding-balanced steam valve surrounding said steam sleeve located in said central rotating member, said balanced steam valve having sliding engagement with said stationary steam sleeve and central rotating member and further provided with ports designed to register with corresponding ports in the central rotating member and said steam sleeve, to introduce steam in the annular chamber to drive said pistons around within said annular chamber.

[Claims 2 to 7 not printed in the Gazette.]

1,269,736. POWER-FRAME. WILLIAM WESLEY PARMENTER, Redford, Mich. Filed July 23, 1917. Serial No. 182,270. (Cl. 74—106.)



1. A power frame of the class described comprising a number of side rails having upturned inner ends, a strap plate carried by said rails and provided with upwardly extending end portions, said end portions provided with a cradle-portion at the upper end thereof, said cradle-portion adapted to fit under the axle of a motor vehicle for supporting the same above its normal level, a power shaft, and friction wheels carried by said power shaft and adapted to frictionally engage the wheels of a motor vehicle with which said device is adapted to be used.

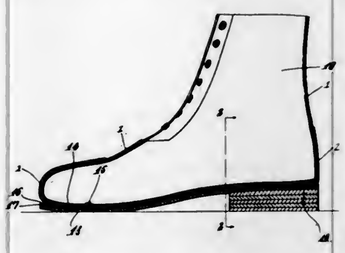
2. A power frame of the class described, comprising a plurality of rails, said rails provided with upwardly curved ends, cradle-portions supported upon the ends of said rails and adapted to fit under the axle of a motor vehicle whereby the axle of a motor vehicle will be lifted as said frame is swung upon said curved ends, a power shaft, friction drive wheels carried by said power shaft and adapted to frictionally engage the drive wheels of a motor vehicle.

4. A power frame of the class described comprising a plurality of rails, said rails comprising curved forward ends, strap plates carried by said rails and provided with cradle-portions at their upper ends, said strap plates provided with upwardly inclined forward ends, a plurality of brackets detachably mounted upon said inclined ends, a power shaft carried by said brackets, friction wheels carried by said power shaft and adapted to engage the drive wheels of a motor vehicle, a belt pulley secured to said power shaft, a machine frame supported upon said power frame, a machine shaft supported by said machine frame, a pulley carried by said machine shaft, and a belt on said belt pulley of the power shaft and said pulley of the machine shaft.

5. A power frame of the class described comprising a plurality of rails, driving means carried by said rails and adapted to engage the drive wheels of a motor vehicle, a plurality of transversely extending angle irons carried by said rails, and a machine frame seated upon said rails and held between said angle irons.

[Claims 3, 6, and 7 not printed in the Gazette.]

1,269,737. SHOE. THEODORE PAROBI, Dundee Lake, N. J. Filed July 27, 1917. Serial No. 183,037. (Cl. 36—30.)



A shoe consisting of an upper section and a lower section of leather, the lower section overlapping the upper section midway of the shoe, the overlapping portions on both sections being secured together, an inner sole to which the lower shoe section is secured, a moisture-proof lining having its opposite end edges projecting in line with the edges of the upper section and overlying said inner sole, a leather lining overlying the inner face of the lower section and upper section as well as said moisture-proof lining, and a similar moisture-proof lining as the first-moisture-proof lining placed between said inner sole and an outer sole attached thereto.

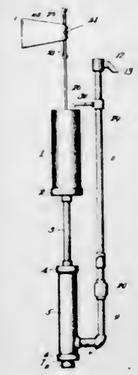
1,269,738. CARRYING DEVICE FOR RECEPTACLES. BEN PATTERSON, Cleveland, Ohio, assignor to The Patterson-Sargent Company, Cleveland, Ohio, a Corporation of Ohio. Filed July 13, 1916. Serial No. 109,018. (Cl. 220—24.)

A carrying device for a receptacle comprising a section of wire bent into substantially ring-shape for clamping engagement with the outer wall of the receptacle and provided intermediate its ends with a coiled resilient tension loop adapted to yield under tension on the wire in the direction of its length, one end of said wire section being bent to form an eye and its opposite end being bent downwardly and laterally curved to form a cam-shaped hook for insertion in and engagement with said eye, the cam of



said hook when the latter is inserted in said eye serving to draw said wire section into clamping engagement with the outer wall of the receptacle, and said loop permitting said wire section to yield during insertion of said hook, and a bail connected to said wire section at one end and at its opposite end connected to said loop.

1,269,739. FLUID-PUMP. LEWIS A. PAYTON, Haskew, Okla. Filed May 19, 1917. Serial No. 170,292. (Cl. 103—8.)



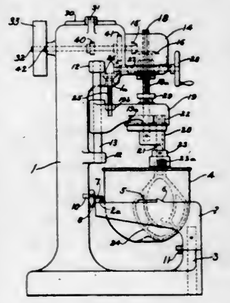
1. A pump comprising a water cylinder having a check-valve controlled intake, a standpipe connected to said cylinder, a cylinder having a check-valve controlled intake for air, a pipe connecting said cylinder with the water cylinder in a plane above the valve of the latter, a piston for operation in the air cylinder, to charge same with air in one stroke and compress such air in the other stroke and cause it to force water in the water cylinder to close the intake valve thereof and flow through said standpipe, and a leak pipe to convey water from the standpipe into the upper end of the cylinder having the intake for air.

[Claims 2 and 3 not printed in the Gazette.]

1,269,740. MIXING-MACHINE. BRYAN D. PINKNEY, Cincinnati, Ohio. Filed Oct. 30, 1917. Serial No. 199,248. (Cl. 259—107.)

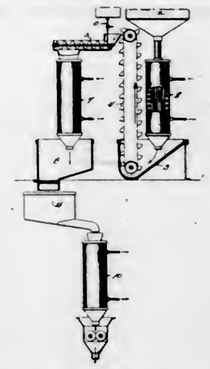
1. In a mixing machine, a vertical standard in combination with a can holder pivoted at the front of the machine so as to swing away from said vertical standard.

2. In a mixing machine, a vertical standard in combination with a can holder pivoted at the front of the ma-



chine so as to swing away from said vertical standard, a latch plate connected with said vertical standard, and co-operating latch means connected with said can holder.

1,269,741. METHOD FOR TREATING GRAIN. PETER PROVOST, Milwaukee, Wis. Filed Dec. 29, 1916. Serial No. 139,515. (Cl. 83—28.)

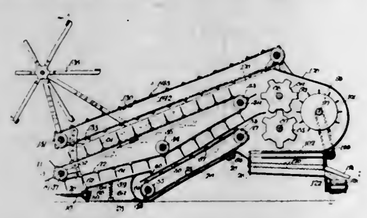


The herein described method of preparing grain for milling consisting in subjecting the grain to a cleaning operation, thereafter heating it while in motion, next causing said grain to be cooled slightly while traveling, then adding to the grain a supply of pure moisture, then subjecting the moistened grain as it travels to a second heating medium, thereafter collecting the cleaned, heated and moistened grain and retaining the same in a stationary bulk for a considerable period of time until the temperature thereof is lowered, said grain while in the stationary bulk being caused to sweat in cooling to force the crease dirt from its seams, then scouring the grain, next subjecting it to a third heating medium to toughen said grain preparatory to milling, and lastly subjecting it to a suitable milling operation.

1,269,742. SEED-HARVESTING MACHINE. HERBERT M. RHODES, Natchez, Miss. Filed Jan. 27, 1917. Serial No. 144,807. (Cl. 56—1.)

1. In a harvester, mechanism for cutting seed bearing plants near the base thereof, a suction device for collecting seeds shattered therefrom, and means for propelling said suction device over the surface of the ground and in close proximity thereto.

2. In a harvester, a gathering device for shattered seeds comprising a suction head having screening mechanism for separating the seeds from other portions of the plants and for preventing the separated portions of the plants from entering said head, and means for maintaining said suction head in a position relative to said harvester where shattered seeds occur.



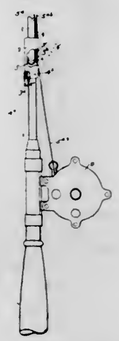
11. In a harvesting machine, a device for collecting shattered seed comprising a hollow tube having perforations therein, and means for removing foreign material from the surface of said tube.

20. In a harvesting machine, means for cutting seed-bearing stalks, and means for separating the stalks thus cut into different lots.

24. In a harvesting machine, a sickle, means positioned for engaging high growing plants as they are cut by said sickle, and means for separating lower growing plants from the lower portions of the stalks of said high growing plants.

[Claims 3 to 10, 12 to 19, 21 to 23, and 25 to 40 not printed in the Gazette.]

1,269,743. FISH-HOOK RETAINER. CLARENCE M. RICHMOND, Bellingham, Wash. Filed Feb. 25, 1918. Serial No. 219,070. (Cl. 43—28.)

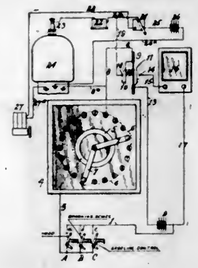


3. In a fish-hook retainer, in combination, a box, means to attach said box to a fish pole, means within said box engageable with a fish hook, a shelf within said box, a spring-retained, pivoted lid on said box, closable against the top of said shelf, and a notch in one edge of said lid.

[Claims 1 and 2 not printed in the Gazette.]

1,269,744. AUTOMATIC AUTOMOBILE-PROTECTOR. JOSEPH J. RILEY, Toledo, Ohio. Filed Nov. 26, 1915. Serial No. 63,396. (Cl. 123—198.)

1. In a device of the described character, a car, an alarm, an electric sparking device adapted for the ignition of an explosive charge in a combustion engine, controlling devices for starting the car, and means governed by said controlling devices for simultaneously rendering inoperative the sparking device and for starting but not silencing said alarm.



2. In a device of the described character, a car, a controlling device for starting the car, an alarm, a normally open electric circuit, means actuated by said controlling device for closing said circuit, a fuse in said circuit, and means controlled by the burning of said fuse for actuating the alarm.

3. In a device of the described character, a car, a controlling device for starting the car, a sparking mechanism adapted to ignite an explosive charge in a combustion engine, a normally open circuit, means actuated by said controlling device for closing said circuit, a fuse in said circuit, and means controlled by the burning of said fuse for rendering inoperative said sparking mechanism.

[Claims 4 to 6 not printed in the Gazette.]

1,269,745. GOLF-CLUB. WILLIAM ROBERTSON, Oakmont, Pa., assignor of one-half to Peter Robertson, New Hartford, N. Y. Filed Dec. 11, 1916. Serial No. 136,265. (Cl. 46—4.)



1. A golf club having a wooden head extending for the entire width of the club head and having the entire weighting of the club formed of a metal base-plate extending entirely beneath the wooden head and of varying thickness transversely of the club head.

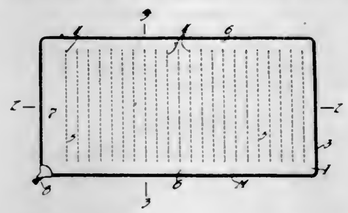
2. A golf club having a wooden head extending for the entire width of the club head and having a metal base-plate extending entirely beneath the wooden head, said base-plate being of greater thickness at its outer edge than that nearest the driving face of the club.

3. A golf club having a wooden head extending the entire width of the club head and having a metal base-plate extending entirely beneath the wooden head provided with an irregular shaped upper face formed with an upwardly-extending lug fitting beneath the lower face of the wooden head.

[Claims 4 and 5 not printed in the Gazette.]

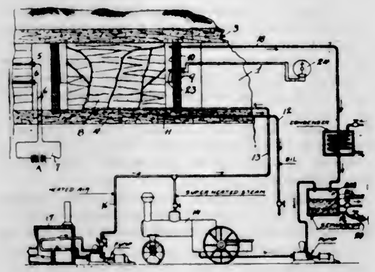
1,269,746. MATTRESS. WILLIAM BENJAMIN ROBESON, Port Huron, Mich. Filed Feb. 7, 1918. Serial No. 215,779. (Cl. 5—1.)

1. A mattress consisting of top and bottom walls secured together at their edges, said walls being directly connected so as to provide the mattress with transverse roll sections, the ends of which are spaced from the opposite side edges of the mattress, and continuous roll portions extending lengthwise of the mattress beyond and adjacent the ends of said transverse roll sections respectively, said roll portions being of substantially the same height as said transverse sections.



[Claims 2 to 9 not printed in the Gazette.]

1,269,747. METHOD OF AND APPARATUS FOR TREATING OIL-SHALE. LEBBEUS H. ROGERS, New York, N. Y. Filed Apr. 6, 1918. Serial No. 227,087. (Cl. 196—21.)



1. The method of treating oil-shale in its native position consisting in confining a body of said shale within an impervious wall and subjecting said shale to heat to destructively distil the same and withdrawing the resulting products.

7. Apparatus for distilling oil-shale comprising a wall having a removable metal lining and adapted to inclose a column of shale in its native rock bed, means for supplying heat to the shale within said wall, and means for conducting away the products formed therein.

10. A system for producing oil and other products from an oil-shale bed, consisting in removing portions of shale from said bed leaving columns of shale undisturbed and other portions of shale substantially surrounding said columns, providing each column with an impervious wall which is spaced therefrom and is reinforced by said surrounding rock, and subjecting said confined oil-shale to destructive distillation.

[Claims 2 to 6, 8, 9, and 11 not printed in the Gazette.]

1,269,748. CONNECTOR. RALPH R. ROOT, Cleveland, Ohio. Filed June 14, 1915. Serial No. 33,857. (Cl. 173—324.)

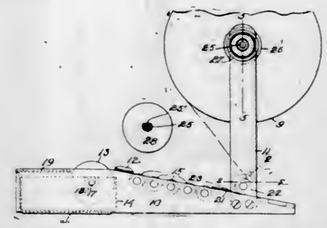


1. A connector comprising a sleeve-like body portion having socket slots in one end thereof, an extension from said body portion provided with projections which are adapted to coöperate with a socket, a body of insulating material within the body portion, a terminal member extending through said body of insulating material, means for securing a conductor to the terminal, and means for connecting a second terminal to the body portion, and in electrical connection with the extension before mentioned.

2. A connector comprising a body portion with a part thereof formed as a socket, said connector having another portion formed as a plug, a body of insulating material forming part of the connector, a terminal member mounted in said body of insulating material, the terminal member extending adjacent the socket portion of the connector, means for securing a conductor to said terminal member, and means for securing a terminal member upon the connector and in electrical connection with the plug portion thereof.

3. A connector comprising a body portion of metal and an extending arm of metal, the said arm being provided with projections which are adapted as a plug, a portion of the body end of the connector being formed with the slots which adapt it to act as a socket, insulating material within the body portion, a connector extending through the insulating material, said connector coöperating with the socket portion of the body portion, means for connecting a conductor to the terminal member, and means for connecting a conductor to the body portion and in electrical connection with the said arm.

1,269,749. TAPE-HANDLING MACHINE. JOHN F. RYAN, New Rochelle, N. Y. Filed Feb. 5, 1918. Serial No. 215,419. (Cl. 91—14.5.)



1. In a tape handling apparatus, a device for facilitating feed of the tape, comprising a series of closely adjacent rollers over whose crests the tape passes and which in combination constitute a support with movable surface on which the tape is exposed to contact with a feeding finger.

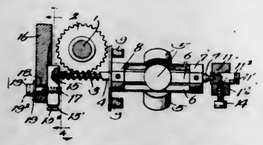
8. Tape handling apparatus having a holder for a supply roll of tape comprising a standard; a pin of two diameters, one for passing through the supply roll axially, and the other, smaller, passing through the standard, with a shoulder between its larger and smaller portions and fastening means on the latter portion; the parts being so adapted to each other in size that the supply roll is removable over said shoulder, whereby replacement of a supply roll need not vary the roll holding space.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,269,750. SHAFT-BEARING. HENRY G. SAAL, Chicago, Ill. Filed June 21, 1917. Serial No. 176,004. (Cl. 64—52.)

3. The combination with a rotatable shaft; of a bearing engaging an end of the shaft; a support for the bearing; a rotatable clamping screw extending longitudinally of the shaft and carried by and in threaded engagement with the bearing, this clamping screw being movable with the bearing with respect to the bearing support with which support the clamping screw has clamping engagement to hold the bearing in selected position; another rotatable screw in threaded engagement with the bearing support and disposed transversely to the shaft; and means

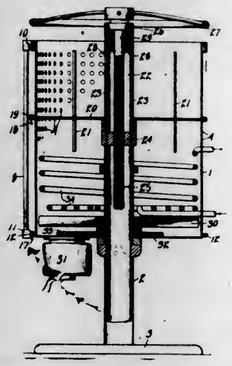
for adjusting said bearing on said bearing support transversely of the shaft, this adjusting means comprising two elements movable transversely of the shaft one a transversely grooved member and the other a head received in the groove of the grooved member to have thrusting engagement with said grooved member when moving in



either direction transversely of the shaft, one of these elements being in union with the adjusting screw to move therewith transversely of the shaft and the other in union with the bearing whereby the bearing is movable transversely of the shaft upon rotation of the screw.

[Claims 1 and 2 not printed in the Gazette.]

1,269,751. FABRIC STRETCHING AND DRYING APPARATUS. JOHN WESLEY SHELTON, Tucson, Ariz., assignor to Tucson Steam Laundry Co., a Corporation of Arizona. Filed Dec. 7, 1917. Serial No. 205,997. (Cl. 34—17.)



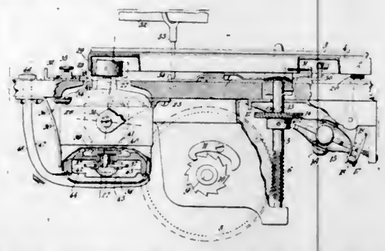
1. In a fabric stretcher and drier, the combination with a perforated drum, a post arranged centrally within the drum, means for stretching a piece of fabric about the drum, a fan journaled around the post within the drum, means for rotating said fan for forcing currents of air outward through the perforations in the drum, and means for heating said air currents.

5. In a fabric stretcher and drier, the combination with a drum having a series of notches around one end thereof, of an annular rod secured to the other end of the drum and also having a series of notches, a stationary rod having means for attaching one end of a piece of fabric thereto, an adjustable rod having means for attaching the other end of the fabric thereto, pawls mounted on the ends of said adjustable rod and adapted to engage the notches in the end of the drum and in said annular rod, respectively, means on said annular rod for connecting one edge of the fabric thereto, and an adjustable annular rod having means for connecting the other edge of the fabric thereto.

[Claims 2 to 4 and 6 to 17 not printed in the Gazette.]

1,269,752. DRIVING MECHANISM. WILLIAM GENTRY SHELTON, New York, N. Y. Filed Apr. 10, 1916. Serial No. 90,051. (Cl. 74—7.)

1. The combination with a talking machine comprising a record support, a spring motor for driving the support, a clutch mechanism between said spring motor and the support whereby the said support may run forward independently of the said spring motor, and a governor for controlling the forward movement of the said support, of an electric motor permanently attached to the talking machine, means carried thereby for engaging the said support and driving the same forward, and means operable at will for holding the electric motor idle or in driving relation with the record support.



3. The combination with a talking machine comprising a record turn-table disposed in a substantially horizontal position, a spring motor for driving the turn-table, a clutch mechanism between said spring motor and turn-table whereby the latter may run forward independently of said spring, and a governor for controlling the forward movement of the said support, of an independent motor comprising a supporting bracket secured to the talking machine, an electric motor and casing pivotally supported by said bracket, the shaft of the motor extending upwardly, a pulley mounted upon said shaft extension for engaging and frictionally driving the turn-table, and spring means acting upon the said motor casing for impelling the pulley to its work.

4. The combination with a talking machine comprising a table disposed in a substantially horizontal position, a record support mounted above such table, a spring motor for controlling the support, a clutch mechanism between said spring motor and support whereby the said support may run forward independently of said spring, and a governor for controlling the forward movement of the said support, of an independent motor comprising a supporting bracket secured to the under side of the table, an electric motor and casing pivotally supported by said bracket, the shaft of the motor extending through the table, and a pulley mounted upon said shaft extension for engaging and frictionally driving the record support.

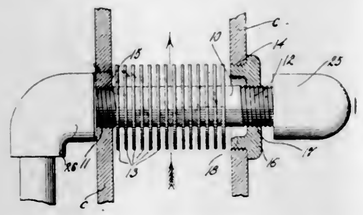
5. The combination with a record turn-table and a base plate, of a depending bracket secured to the base plate, a motor mounted on the bracket, a vertical power-shaft on the motor extending upwardly through the base plate, and a drive-wheel provided on the power-shaft and engaging the face of the record turn-table.

6. The combination, with a record turn-table having a depending annular flange and a base-plate; of a depending bracket secured to the base-plate; a motor mounted on the bracket, a vertical power-shaft on the motor, extending upwardly through the base-plate and a drive-wheel provided on the power-shaft and engaging the inner face of the depending annular flange of the record turn-table.

[Claim 2 not printed in the Gazette.]

1,269,753. FUEL-VAPORIZER. ORIE C. SHUM, Bedford, Iowa. Filed Nov. 26, 1915. Serial No. 63,593. (Cl. 237—241.)

The combination with the intake manifold of an internal combustion engine, of a heater secured transversely within the manifold, said heater comprising a hollow cylindrical body and having thereon spaced radiating ribs, said body being provided with screw threads near its outer ends, said manifold being provided with different diametered alined threaded holes, one of which is adapted to coöperate with one threaded end of the body, the larger of said manifold holes being of such diameter as will permit the heater with its assembled ribs to pass through, said body being adapted for connection with the



exhaust manifold so that heated gases may pass through and produce a heating of the ribs and thereby heat the gaseous fuel passing over said ribs.

1,269,754. BREAD-MAKING PROCESS. FREDERICK P. SIEBEL, Chicago, Ill., assignor to Siebel Institute of Technology, Chicago, Ill., a Corporation of Illinois. Filed Feb. 15, 1918. Serial No. 217,395. (Cl. 99—10.)

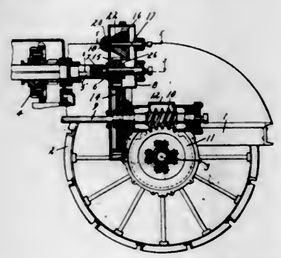
1. In the production of bread and similar baked food products, the steps of preparing a mash from water and malt, saccharifying this mash, separating the wort therefrom by draining off, cooling this wort to proper temperature, then mixing the same with yeast and after fermentation has set in adding the same to the dough in place of the sugar and yeast otherwise used in the manufacture of bread.

5. In dough for bread and similar baked products, a flour made from "brewers' grains" in place of other flour, and a fermenting wort in place of ordinary sugar.

10. In dough for bread and similar baked products, a liquid containing yeast which has been propagated therein as a substitute for the yeast usually used.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,269,755. TRACTOR-GEARING. JESSE C. SIMMONS, Big Rapids, Mich., assignor to The Four Drive Tractor Company, Big Rapids, Mich. Filed Aug. 28, 1917. Serial No. 188,661. (Cl. 74—7.)



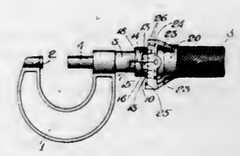
1. The combination of a variable speed gearing comprising a power shaft, a gear box, said power shaft being provided with an extension having a connection therewith permitting relative lateral movement disposed in said gear box, a driven shaft disposed through said gear box below said power shaft, a gear on said driven shaft, a pulley shaft disposed through said gear box above and transversely of said power shaft, a beveled gear on said pulley shaft, a pulley shaft driving gear having a beveled gear connected thereto and meshing with said pulley shaft gear, and a shiftable power gear splined upon said power shaft extension to be shifted into engagement with said driven shaft gear or with said pulley shaft driving gear.

4. In a tractor, the combination of a power shaft, a gear box, said power shaft being extended into said gear box, a driven shaft disposed through said gear box below said power shaft, a gear on said driven shaft, a pulley shaft disposed through said gear box above and transversely of said power shaft, a beveled gear on said pulley shaft, a pulley shaft driving gear having a beveled gear connected thereto and meshing with said pulley shaft gear, and a shiftable power gear splined upon said power shaft to be shifted into engagement with said driven shaft gear or with said pulley shaft driving gear.

7. The combination of a variable speed and reverse gearing, a driven shaft, a pulley shaft disposed transversely of said driven shaft, a gear on said driven shaft, a pulley shaft driving gear having driving connections with said pulley shaft, and a shiftable power gear adapted to be engaged with said driven shaft gear or with said pulley shaft driving gear.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,756. MICROMETER-GAGE. JOHN T. SLOCOMB, Providence, R. I., assignor to J. T. Slocomb Company, Providence, R. I., a Corporation of Rhode Island. Filed Jan. 5, 1917. Serial No. 140,681. (Cl. 33—165.)



1. A micrometer gage having, in combination, a frame provided with a cylindrical extension, a micrometer spindle adjustably mounted in the frame co-axially with the cylindrical extension, said frame and spindle being provided one with an index, and the other with a scale cooperating with the index to indicate the standard adjustment of the spindle in the frame, and supplementary devices adjustably mounted one directly upon the spindle, and the other upon the cylindrical extension of the frame for indicating the variations from the standard adjustment of the spindle in the frame.

2. A micrometer gage having, in combination, a frame, a micrometer spindle adjustably mounted in the frame, the frame and spindle being provided with index and scale, and a pair of coöperating members, one normally held in fixed position upon the frame, but adjustable about the axis of the spindle, and the other mounted upon the spindle for indicating variations from a predetermined adjustment of the spindle in the frame.

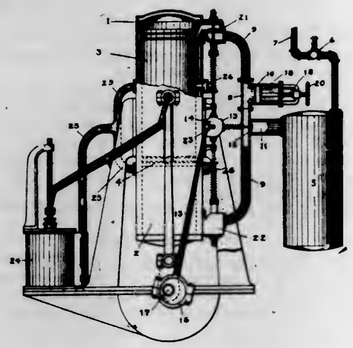
3. A micrometer gage having, in combination, a frame, a micrometer spindle adjustably mounted in the frame, and a pair of supplementary devices adjustably mounted one on the frame and the other on the spindle and provided one with an index and the other with a coöperating scale graduated in opposite directions from an intermediate point.

4. A micrometer gage having, in combination, a frame, a micrometer spindle adjustably mounted in the frame, a pair of supplementary members adjustably mounted one on the frame and the other on the spindle and provided one with an index and the other with a coöperating scale graduated in opposite directions from an intermediate point, and a stop for limiting the extent of variation.

5. A micrometer gage having, in combination, a frame, a micrometer spindle adjustably mounted in the frame, and a pair of coöperating members mounted upon the frame and spindle respectively, one of said members being provided with a shoulder of less depth axially than the pitch of the micrometer thread and arranged to engage the other member to limit the extent of rotational movement of the spindle in one direction only.

[Claims 6 and 7 not printed in the Gazette.]

1,269,757. APPARATUS FOR PROPORTIONING THE CHARGE OF FUEL AND AIR IN INTERNAL-COMBUSTION ENGINES. LYMAN S. STEVENS, Baltimore, Md. Filed May 25, 1915. Serial No. 30,310. (Cl. 123—97.)



1. In an internal combustion engine, a working cylinder, means of admitting air to said cylinder from the atmosphere at atmospheric pressure, a source of gaseous fuel, a conducting chamber intermediate between said source and said cylinder and means of controlling the entry and exit of gaseous fuel in said chamber in combination with means of varying the capacity of said chamber within the limits of its maximum or minimum to predetermine a definite charge for said cylinder and means of maintaining said capacity during the discharge from said chamber.

2. In an internal combustion engine, a working cylinder, means of admitting air to said cylinder from the atmosphere at atmospheric pressure, a source of gaseous fuel, a conducting chamber intermediate between said source and said cylinder and means of controlling the entry and exit of gaseous fuel in said chamber in combination with means of varying the capacity of said chamber, consisting of a chamber provided with means of changing the volume thereof within the limits of its maximum or minimum to predetermine a definite charge for said cylinder and means of maintaining said capacity during the discharge from said chamber.

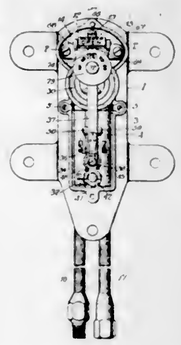
3. In an internal combustion engine, a working cylinder, means of admitting air to said cylinder from the atmosphere at atmospheric pressure, a source of gaseous fuel, a conducting chamber intermediate between said source and said cylinder and means of controlling the entry and exit of gaseous fuel in said chamber in combination with means of varying the capacity of said chamber, consisting of a chamber provided with means of changing the volume thereof within the limits of its maximum or minimum to predetermine a definite charge for said cylinder and means of maintaining said capacity during the discharge from said chamber and external means for making such regulation.

4. In an internal combustion engine, a working cylinder, means of admitting air to said cylinder from the atmosphere at atmospheric pressure, means of admitting fuel to said cylinder from a source of constant pressure consisting of an intermediate chamber provided with means of changing the capacity thereof to predetermine a definite charge for said cylinder, means of maintaining said capacity during the discharge from said chamber and means of controlling the flow of fuel in and out of said chamber.

5. In an internal combustion engine, means of proportioning the admixture of gaseous fuel and air, consisting of an adjustable gaseous fuel measure whereby a predetermined definite quantity of gaseous fuel is admitted to a given quantity of air to predetermine a definite charge for said cylinder and means of maintaining said capacity during the discharge from said chamber consisting of a chamber provided with means of changing the volume thereof.

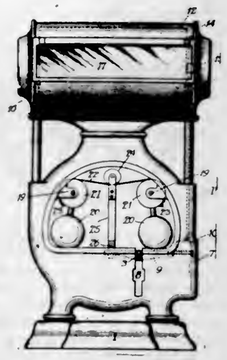
[Claims 6 to 15 not printed in the Gazette.]

1,269,758. INDICATOR FOR THERMOSTATS. JOHN H. SWAN, Chicago, Ill., assignor to Klipfel Manufacturing Co., Chicago, Ill., a Corporation of Illinois. Filed Dec. 6, 1915. Serial No. 65,379. (Cl. 236—8.)



A thermostatic valve mechanism, comprising a frame provided with an inlet channel having communication with a supply of fluid under pressure, an outlet channel having communication with a valve or damper operating motor, a valve for regulating the flow of fluid from said inlet channel to said outlet channel, a thermostatic element controlling said valve, an indicator for indicating the condition of said valve or damper operating motor, and pressure operated means in communication with said outlet channel for operating said indicator, said indicator comprising a drum journaled on said frame and connected to said pressure operated means.

1,269,759. WEIGHING-SCALE. WILLIAM G. TEMPLETON, Colorado Springs, Colo., assignor, by mesne assignments, to Toledo Scale Company, Toledo, Ohio, a Corporation of New Jersey. Filed Mar. 22, 1913. Serial No. 756,204. (Cl. 265—37.)



1. In a weighing scale, the combination of a frame, a pair of pendulums pivotally mounted therein, a flexible connection between the pendulums engaging the pendulum tangentially and held normally horizontal by the pull of the pendulums thereon, a load-receiver, and a connection from said flexible connection to the load-receiver.

2. In a weighing scale, the combination of a frame, a pair of pendulums pivotally supported thereon, a continuous flexible connection between the pendulums, a load receiver, and a freely sliding connection from said flexible connection to the load receiver

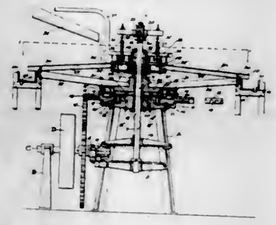
4. In a scale of the class described having a beam, platform and indicator, a pair of pendulums, disks rigidly connected to said pendulums, a continuous ribbon attached at its opposite ends to said disks and a link connected at one end to the beam and having at its other end an attachment to the ribbon which is movable longitudinally thereof.

6. In a weighing scale, a lever, a pair of pendulums, each provided with a disk, a flexible connection secured at its opposite ends to and passing partially around said disks and a laterally shiftable connection between said flexible connection and lever.

9. In a weighing scale and in combination with the frame thereof, a pair of pendulums pivoted in the frame, a pair of disks secured to and moving with the pendulums, respectively, a ribbon of flexible material secured to the disks and passing partially around the same, a link, a roller journaled on the link, and resting on the ribbon, and a load receiver connected to the link.

[Claims 3, 5, 7, 8, and 10 not printed in the Gazette.]

1,269,760. CONCENTRATOR. JOHN K. TURNER, Portland, Oreg., assignor to Lillie Turner, Portland, Oreg. Filed Sept. 12, 1917. Serial No. 190,961. (Cl. 83—87.)

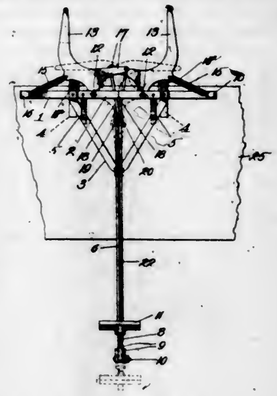


3. In a device of the character described the combination of a frame, a rotatable horizontal wheel in the frame, a circular mat upon the upper part of the wheel, means in the wheel to arrange the mat with its upper surface at a pre-determined outward pitch, means to convey water upon the central surface of the mat in a pre-determined place, a cam mechanism arranged below the hub of said wheel to raise and lower the hub in a manner to impart a jolting motion to the wheel while rotating, and a series of receiving boxes arranged in circular position below the rim of the wheel and in relation to the pitch of its surface to receive into the boxes the outward flow of the lightest substances into the first or nearest box in the line of outward flow and the heavier substances in their order of weight into the succeeding boxes serially opposed to the outward flow of said substances, substantially as described.

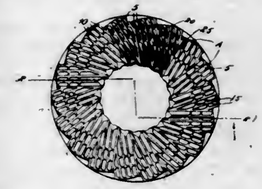
[Claims 1 and 2 not printed in the Gazette.]

1,269,761. BUNDLE-TOPPER. TUNIS VAN BRUNT, Kansas City, Mo. Filed Jan. 8, 1916. Serial No. 71,105. (Cl. 146—23.)

A bundle topper, comprising a suitable frame, a pair of blades pivoted to said frame at suitable distances apart and of angular form to provide a relatively wide space between a pair of their arms and an overlapping relation between their other pair of arms, a support adjacent the plane of the pivotal points of the blades to provide a resistance for a bundle while being cut by the blades, yielding means for holding the blades in open position, and means for effecting simultaneous pivotal operation of the said blades to cause them to perform their cutting function.



1,269,762. GRINDING-DISK. ALONZO A. WARNER, New Britain, Conn., assignor to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed Aug. 29, 1916. Serial No. 117,549. (Cl. 83—3.)



1. A grinding disk having a face provided with a plurality of segments defined by a series of primary cutting ribs; secondary ribs in each segment spaced apart to form straight grooves, the bottoms of said grooves being upwardly and spirally inclined toward the outer edge of said disk.

2. A grinding disk having a face provided with a plurality of segments defined by a series of primary cutting ribs; secondary ribs in each segment forming straight grooves, one or more transverse division walls in said grooves rising to the plane of the faces of said ribs dividing the grooves lengthwise into a plurality of sections, the bottom of each section being upwardly and spirally inclined toward the outer edge of said disk.

3. A grinding disk having a face provided with a plurality of segments defined by a series of primary cutting ribs; secondary cutting ribs in each segment forming grooves; a land of irregular surface formed in each groove in the plane of the faces of the ribs, the bottoms of the grooves being upwardly inclined toward said lands.

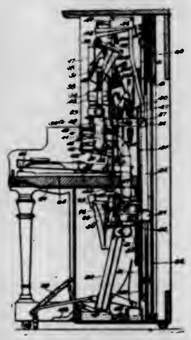
4. A grinding disk provided in one face with cutting ribs arranged in a plurality of segments, said cutting ribs being spaced from one another to form grooves between them, the bottoms of said grooves being upwardly and outwardly inclined, and one side of the bottom of said grooves being more abruptly inclined than the other.

5. An annular grinding disk having its face divided into a plurality of segments, primary cutting ribs defining said segments, all of said ribs being tangential to a circle of smaller diameter than the inner edge of the disk, secondary cutting ribs in each segment parallel with one of said primary cutting ribs and spaced apart

to form grooves, and lands arranged between and in the plane of the faces of said ribs, the bottoms of the sections of said grooves being upwardly and spirally inclined to the land at the outer end of each section.

[Claim 6 not printed in the Gazette.]

1,269,763. METAL PLAYER. WILLIAM A. WATSON, Malden, Mass. Filed Apr. 4, 1914. Serial No. 829,513. (Cl. 84—168.)



1. The combination with a partitioned seamless shell having an open side, of a cover for said open side, said cover having shelf-like projections provided with diaphragm-supported valves and with ports for the admission of air to actuate said valves.

7. In an instrument of the character described, an expression or choker bellows having a tension spring and a supplemental tension spring connected to its movable side to oppose collapsing, and a manually operable lever for varying the tension of said supplemental spring during playing.

8. In an automatic musical instrument, the combination with the motor and a regulator bellows therefor, of a coiled spring connecting the movable member of said bellows with a fixed point, means being provided whereby rotation of said spring will vary its tension.

20. In an automatic musical instrument, a tempo box having a floor provided with an elongated slot, a rod movable lengthwise of the box and having a slide valve connected to it, said rod having a pointer also connected to it beyond one end of the box, and a scale to coöperate with said pointer to indicate the position of the valve.

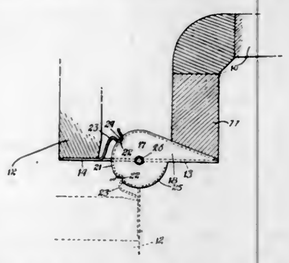
30. In an automatic musical instrument, a tempo valve box having a pair of valve boxes rigidly connected below it, valves for controlling the passageway through said boxes, diaphragm casings connected to each of said pair of boxes, and diaphragms in said casings for actuating the valves of said pair of boxes.

[Claims 2 to 6, 9 to 19, and 21 to 29 not printed in the Gazette.]

1,269,764. HINGE CONSTRUCTION. JAMES J. WEAVER, Galveston, Tex. Filed Aug. 22, 1917. Serial No. 187,723. (Cl. 16—111.)

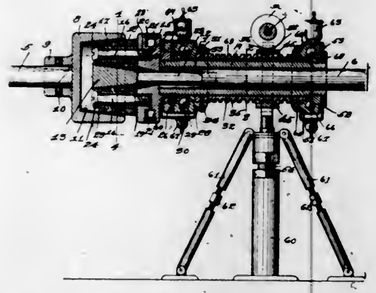
1. A hinge comprising a leaf having a partly circular portion formed at the inner part of the leaf, and having an extension therefrom across the end of the leaf, said partly circular portion and extension being bent into a plane at right angles to the leaf, a second leaf having a spring tongue formed thereon positioned to bear upon the edge portion of said partly circular portion of the first mentioned leaf, intermeshed knuckles formed on the leaves, a pintle therein, said partly circular portion being notched for the purpose described.

2. As an improved article of manufacture, a hinge comprising a blank having knuckle ears formed upon one edge, and having a diagonal end edge and partly circular inner corner edge thereadjacent, an arcuate slit being formed in the inner edge portion of the blank concentric with said semi-circular edge, the end portion of the blank outwardly of said slit, including a part extending toward the outer edge of the blank from said slit, being bent into a plane at right angles to the major portion of the blank,



and a second leaf having knuckle ears in staggered relation with those first mentioned and a transverse slit extending from the inner edge of the blank, the material outwardly of said slit being bent laterally and shaped to form a spring and wiper for engagement with the circular edge portion of the first mentioned member when assembled.

1,269,765. FRICTION-CLUTCH FOR SHAFTS. JOHN S. WERTIN, Cokedale, Colo. Filed Dec. 23, 1914. Serial No. 878,779. (Cl. 192—8.)



1. In a friction clutch of the type described, the combination with a pair of alined shafts spaced from each other, of a coned socket member carried by one of said shafts, a friction head carried by the other of said shafts, a chuck surrounding said head, coned rollers rotatably mounted on said chuck, means rotatably mounting said chuck on said head, and means effecting a longitudinal movement of both said chuck and said rollers.

4. A friction clutch of the type described including, in combination, a pair of shafts spaced from each other, a conically recessed socket member carried by one of said shafts, a conically formed friction head carried by the other of said shafts and disposed within said socket member, a cylindrical member splined on said second shaft, a chuck carried by said member, coned rollers carried by said chuck and adapted to be interposed between said friction head and said socket member to effect a gradual engagement of said shaft, and means for manually causing longitudinal movement of said cylindrical member to effect such movement of interposition.

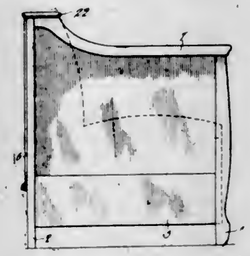
8. A friction clutch of the type described including in combination, a pair of shafts spaced from each other, a conically recessed socket member carried by one of said shafts, a conically formed friction head carried by the other of said shafts, cone shaped rollers surrounding said head, means for mounting said rollers upon the second-mentioned shaft, and means for moving said rollers longitudinally of said shaft to carry said rollers to position between said friction head and said socket member to effect a gradual engagement of said shafts.

12. The combination with a drive shaft and a driven shaft, of a hollow clutch member carried by the drive shaft, a sleeve mounted on the driven shaft, bearing plates carried by the sleeve, a second sleeve longitudinally movable on the driven shaft, bearing plates carried by the ends of the latter sleeve and coöperating with the other bearing plates, antifriction means between the coöperating plates, a chuck carried by said first sleeve, a plurality of friction rollers carried by said chuck to establish a driving connection between said driving and driven shafts and means for moving said sleeve to engage the roller with the hollow clutch member.

16. The combination with drive and driven shafts, of a hollow clutch member carried by the drive shaft, a second clutch member slidably arranged on the driven shaft and engageable with the hollow clutch member, a threaded sleeve movable along the driven shaft and operatively connected with the clutch member thereon, a worm wheel surrounding said sleeve and threadedly engaged therewith, said wheel adapted upon being rotated to cause sliding movement of said sleeve, a support, including bearing arms, a worm supported between said arms and meshing with the worm wheel surrounding said sleeve, means for actuating said worm to rotate said worm wheel, and plates carried by said support and engaged with opposite sides of the worm wheel to prevent said wheel from traveling longitudinally of said sleeve and driven shaft.

[Claims 2, 3, 5 to 7, 9 to 11, and 13 to 15 not printed in the Gazette.]

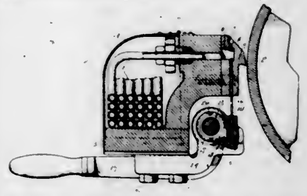
1,269,766. BED-DAVENPORT. THEODORE G. WEYER, Chicago, Ill., assignor, by mesne assignments, to The Seng Company, a Corporation of Illinois. Filed Aug. 4, 1915. Serial No. 43,614. (Cl. 5—48.)



1. In a davenport bed, the combination with a main-frame comprising opposite ends of a head-section fixedly mounted in the main-frame between the ends, a middle-section, a narrow spacing and hinging means loosely connected at opposite ends to the adjacent ends of the head and middle-sections, whereby the said middle-section is adapted to fold inwardly and over the head-section between the ends and the fronts of the two sections spaced apart by the spacing-section, a foot-section having its side rails pivoted to the ends of those of the middle-section and extended beyond their pivots a distance approximately agreeing with the length of the spacing and hinging means, whereby when the bed is folded the foot-section is positioned angularly with relation to the middle-section, the side bars of the foot-section extend below the middle-section and rest upon the head-section and the middle and head-sections are maintained in substantially parallel relation and combine to form an intermediate bedding-space, a seat carried by the middle-section and a back carried by the foot-section.

2. In a davenport bed, the combination, with the main-frame comprising opposite ends, of opposite horizontal supporting-rails secured to the inner surfaces of the ends of the main-frame and terminating short of the front of the same, hinge-members also connected to said ends and forming continuations of the supporting-rails and terminating at the front of the main-frame, a superimposed seat-frame, side-rails connected to the opposite ends thereof and terminating at their front ends, coincident with said supporting-rails of the main-frame and short of the front of the seat-frame, companion hinge-members secured to said seat-frame and terminating at the front thereof and forming continuations of the side-rails, a spacing-plate pivotally connected to each pair of hinge-members and having but a limited pivotal movement in each direction and serving to space the hinge-members apart, a sofa-back frame abutting the rear of the sofa-seat frame, legs connected to the back-frame and adapted to support the same when inverted in front of the main-frame, side-rails secured to the opposite ends of the back-frame and extending below the same and resting upon the supporting-rails of the main-frame, pivotal connections between the said rails and those of the seat-frame at points above the lower ends of the former, whereby a bedding-space is formed between the supporting-rails and side-rails of the seat-frame, and a woven-wire mattress-support connected to each pair of said rails and hinge-members.

1,269,767. CLEANING DEVICE FOR PRINTING-MACHINE INKING MECHANISM. BRUCE C. WHITE, New York, N. Y., assignor to R. Hoe and Co., New York, N. Y., a Corporation of New York. Filed Oct. 9, 1915. Serial No. 54,928. (Cl. 101—425.)



1. In an inking mechanism for printing machines, the combination with a plurality of unobstructed ink delivery nozzles, of an ink distributing surface to which the nozzles deliver, a plurality of separate cleaning devices, and means for operating the cleaning devices simultaneously for clearing the nozzles.

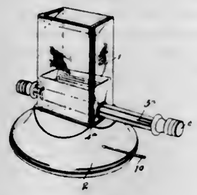
3. In an inking mechanism for printing machines, the combination with a plurality of ink delivery nozzles each having a series of small delivery orifices, of an ink distributing surface to which the nozzles deliver, a plurality of ejector pins dimensioned to snugly fit and close the orifices, and means for moving the pins into the nozzles.

[Claims 2 and 4 not printed in the Gazette.]

1,269,768. MATCH-STAND. ROBERT LEE WHITENER, Charlotte, N. C., assignor of one-half to Samuel Schwartz, Charlotte, N. C. Filed Jan. 3, 1918. Serial No. 210,111. (Cl. 206—22.)

1. A device of the character specified, comprising a holder of transparent material consisting of a body substantially rectangular in cross section and closed at its top and open at its bottom and having a hollow base at the bottom, said body of the holder having in its end walls registering circular openings, a hopper having a cylindrical portion at its bottom adapted to register with the openings, a plunger movable through the openings and through the cylindrical portion of the hopper, said plunger having oppositely arranged grooves at one end for receiving a match to remove the same from the holder, the ends of the plunger having a head detachably connected therewith for permitting the removal of the plunger when

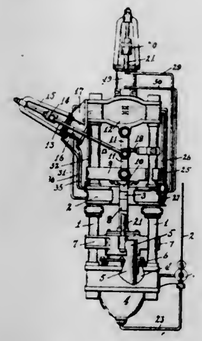
the head is detached to permit the removal of the hopper, said hopper being held in place in the holder by the plunger.



4. A device of the character specified, comprising a holder closed at its top and open at its bottom, a hopper having a cylindrical portion adapted to fit within the bottom to close the same, said holder having openings at the ends of the cylindrical portion for receiving a plunger to hold the hopper in place, the plunger having grooves for receiving individual matches.

[Claims 2 and 3 not printed in the Gazette.]

1,269,769. HYDRAULIC PRESS. LESLIE DENMAN WHITNEY, San Mateo, Cal. Filed Oct. 3, 1917. Serial No. 194,634. (Cl. 25—91.)



1. A press comprising a member with a pressure chamber; a plunger operating in said chamber from one direction; steam pressure connections including a toggle lever for operating said plunger, to effect the initial pressure; a second plunger operating in said chamber from the opposite direction; and hydraulic pressure connections for operating said second plunger to effect the final pressure.

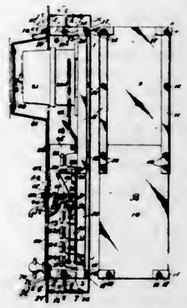
[Claims 2 to 7 not printed in the Gazette.]

1,269,770. METERING PANEL-BOARD AND CABINET THEREFOR. WILLIAM WURDACK, St. Louis, Mo. Filed Aug. 11, 1916. Serial No. 114,404. (Cl. 247—13.)

1. The combination with an inclosing cabinet, of a panel-board mounted securely within the cabinet, brackets fixed on the panel-board, a cover-section adapted to fit upon the cabinet and extend over the panel-board and its brackets, and members adapted to enter the cabinet at the front thereof for removably securing the cover-section rigidly in closing position on the cabinet, said members being detachably engageable with said brackets.

4. The combination with a cabinet, of a panel-board secured within the cabinet, a bracket on the panel-board, a cover-section fitting on the cabinet over the panel-board and its bracket, and means for removably securing the cover-section in closing position on the cabinet, said means including a hook on the cover-section adapted to detachably engage with said bracket.

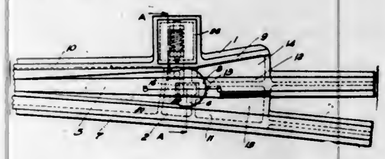
16. The combination with a cabinet, of a panel-board mounted within the cabinet, terminals mounted on the panel-board, an apertured cover-section fitting on the cabinet over the panel-board and said terminals, and housing-walls embracing said terminals, said walls being fixed



upon the panel-board and projecting from the panel-board to approximately the under face of the cover-section and providing a barrier to prevent access to said terminals through said aperture.

[Claims 2, 3, 5 to 15, and 17 to 21 not printed in the Gazette.]

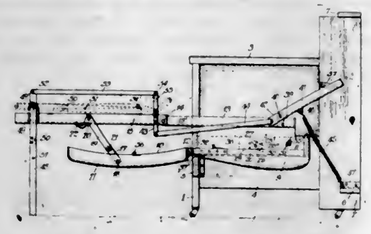
1,269,771. TONGUE-SWITCH STRUCTURE. ROBERT E. YOLTON, Birmingham, Ala., assignor to Kilby Frog & Switch Company, Birmingham, Ala., a Corporation of Alabama. Filed Feb. 25, 1918. Serial No. 219,165. (Cl. 104—115.)



1. In a tongue switch structure, a body having a rear end bearing seat for the switch tongue having a slot therein, a locking chamber below said seat, a spring box opening into said chamber, a switch tongue having a depending forwardly inclined tongue adapted to project through said seat into said chamber, a transversely oblique front wall for said chamber, a locking wedge having a straight, downwardly facing rear wedging surface and a transversely oblique front wedging surface, said surfaces respectively adapted to engage the tongue horn and the oblique front wall of said chamber, a locking rod loosely connected to the locking wedge and projecting through said opening into said spring box and having its end upturned and slotted, a guide pin removably seated in said switch box and in the slotted end of the lock rod, and spring means adjustable on said pin for urging said lock rod and locking wedge into operating position, substantially as described.

2. The combination with a switch tongue body having a slotted seat and a box at one side which has an opening therefrom to the space below said seat, a switch tongue having a rounded rear end mounted in said seat and having a depending horn adapted to project through said seat slot, a transversely movable locking wedge adapted to co-act with the switch body and tongue horn to force the horn rearwardly and downwardly, an operating rod connected to the wedge and movable in said box and having its outer end upturned and slotted, a pin adapted to be inserted in said slot, means to removably seat said pin in the side walls of said box, a coil spring surrounding the pin and engaging said upturned end of the lock bar at one end, and an adjustable spring seat on the pin engaging the other end of the spring, substantially as described.

1,269,772. SOFA-BED. JOHN A. ARTON, Chicago, Ill. Filed Nov. 30, 1914. Serial No. 874,586. (Cl. 5—50.)



1. In a sofa bed having an extension bed section with side members; the combination therewith of supporting legs for the ends of said members pivoted thereto and foldable to said members, retaining rails on the bed section adapted normally to engagement with the legs, and a flexible strip or rod to connect the said legs and by flexure to cause the disengagement thereof from said retaining rails.

3. In a sofa bed; a frame, a reversible seat pivotally connected thereto, a back hinged to the seat and movable as the seat is rotated, a bed section pivotally connected to the seat, and a flexible device to connect the back and said bed section.

6. In a sofa bed; a frame, a reversible seat pivotally connected thereto, a back hinged to the seat and movable as the seat is rotated, a primary bed section under the seat, a secondary section pivotally connected to the primary bed section, legs pivoted to the secondary bed section, links to connect the back and the secondary section, and means for mutual engagement between the links and said legs.

10. In a sofa bed; a frame, a reversible seat pivotally connected thereto, a back hinged to the seat and relatively movable as the seat is rotated, a primary bed section under the seat, a bedding holder with side members pivotally connected to the side bars of said primary bed section to provide extended long and short arms, a secondary bed section pivotally attached to the first bed section and having projections transversely extended therefrom, tie bars to connect the said projections with the short arms of the side members of the bedding holder, and a spring to connect the long arms thereof to the frame.

12. In a sofa bed having a frame and rear upwardly extended legs, a reversible seat connected thereto, a back hinged to the seat and forwardly overturnable as the seat is rotated, a hook on the back and an engaging device therefor on the said legs.

[Claims 2, 4, 5, 7 to 9, and 11 not printed in the Gazette.]

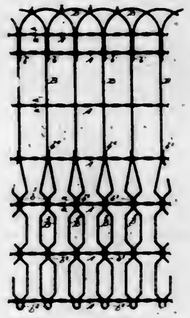
1,269,773. BOTTLE-CAP. WEBSTER E. BYRON BAKER, York, Pa., assignor to Henry W. Stokes, Philadelphia, Pa. Filed Apr. 4, 1917. Serial No. 159,639. (Cl. 215—10.)



2. A non-metallic self-supporting bottle cap moldable by heat and pressure into permanent crimped form and comprising the combination of a pliable sheet of paper exposed on the inside of the cap, and an agent exposed on the outside of the cap and moldable by heat and pressure and which when cool imparts rigidity and permanency of form to the cap and which consists of a sheet or coating of cellulose ester plastic adherent to the paper.

[Claim 1 not printed in the Gazette.]

1,269,774. WIRE FENCE. JOHN S. BARNES, Detroit, Mich. Filed Nov. 11, 1912. Serial No. 730,541. (Cl. 256—45.)



1. In a wire fence, a plurality of lateral wires, a plurality of separate independent pickets engaged to said lateral wires, each picket including a body portion and a turned back portion whose upper extremity terminates substantially midway between the upper and lower ends of the body portions of the pickets, the turned back portion and the respective body portion of each picket being directed toward each other at the points of intersection with said lateral wires.

3. In a wire fence, a plurality of lateral cables composed of strands of wire twisted together, a plurality of independent pickets severally supported between the strands of the cables, the upper end of each picket having an arched portion interlacing with the arched portion of the adjacent picket on each side thereof, the end of said arched portion being in contiguous relation with the body portion of an alternate picket and engaged therewith by looped strands of the lateral cables, the lower end of each of said pickets being formed with a return bend spaced from the body portion, the return bend portion being also engaged between the strands of the lateral cables.

6. In a wire structure, a plurality of lateral wires, a plurality of separate independent pickets engaged to said lateral wires, each picket including a body portion and a turned back portion, the upper extremity of the turned back portion terminating substantially midway between the upper and lower ends of the body portions of the pickets, one of said lateral wires connecting the upper extremities of the turned back portions with the body portions of the respective pickets, said turned back portion of each picket, below the lateral wire which connects the upper extremities of the turned back portion and body portions of the pickets, being directed toward said body portion at the points of intersection with the lowermost lateral wires so that the wire structure is more closely woven at its lower portion than at its upper portion.

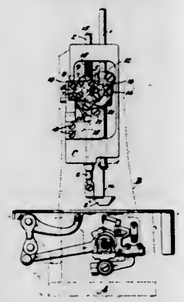
10. A wire fabric comprising longitudinal strands and transverse members, said transverse members being folded onto themselves at one end to form double portions, the double portions of said transverse members having deflections at intervals therein in the plane of the fabric, and the longitudinal strands being attached to the double portions of said transverse members intermediate said deflections the remaining ends of the said transverse members being secured with advance transverse members.

13. A wire fabric comprising longitudinal twisted strands and transverse members, each transverse member being folded onto itself at one end to form a double por-

tion, the double portions of the said transverse members having deflections at intervals forming a mesh effect in the plane of the fabric and a panel effect above the said double portions, the other end of each transverse member being bent over to the second advanced transverse member, the said transverse members being secured by the longitudinal twisted strands.

[Claims 2, 4, 5, 7 to 9, 11, and 12 not printed in the Gazette.]

1,269,775. PRESSER-FOOT-LIFTING MECHANISM FOR SEWING-MACHINES. WILLIAM L. BARRON, New York, N. Y., and FRITZ E. OSOL, Elizabeth, N. J., assignors to The Singer Manufacturing Company, a Corporation of New Jersey. Filed May 17, 1915. Serial No. 28,513. (Cl. 112—13.)



1. In a presser-foot lifting mechanism, the combination with a presser-bar, and a needle-bar, of a split collar embracing the presser-bar, a link connected to the needle-bar, and a cam-plate pivoted to the collar at one side of the split and operable on the collar directly on the other side of the split to circumferentially constrict and grip the split collar like a band about the presser-bar.

4. The combination with a presser-bar and a split collar embracing the same and carrying a stud, of a cam-plate pivoted upon the collar and adapted to act upon the stud to constrict the collar, and means for turning said plate upon its pivot to constrict the collar and subsequently imparting a bodily upward movement thereto.

12. In a sewing machine for darning and having stitch-forming mechanism including a needle in combination, a spring-pressed presser-bar, a presser-foot carried thereby, means for intermittently clamping said bar, said means acting positively to lower the presser-foot to a position substantially in contact with the material and then releasing the presser-bar to permit the foot to impinge against the material under the action of its own spring.

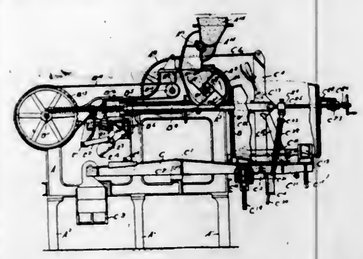
[Claims 2, 3, and 5 to 11 not printed in the Gazette.]

1,269,776. STEERING-WHEEL HEATER. WILLIAM P. BARTON, Salt Lake City, Utah. Filed Aug. 2, 1916, Serial No. 112,849. Renewed Jan. 8, 1918. Serial No. 210,945. (Cl. 219—19.)



A heating element for steering wheels consisting of a resistance wire; an asbestos covering therefor, which is given a tape form and held in place on said wire by rows of longitudinal stitches; fastening clamps on the ends of said asbestos covering; an electric switch electrically connected with said wire; a cylindrical casing; an insulating disk carried in said casing to which said switch is fastened; perforated metal strips having one end of each secured to said casing; and means to fasten said strips around the steering wheel shaft adjacent said steering wheel.

1,269,777. MACHINE FOR FILLING BARRELS, BAGS, AND PACKAGES. ADELMER M. BATES, Chicago, Ill., assignor to Bates Valve Bag Company, Chicago, Ill., a Corporation of West Virginia. Filed Feb. 2, 1914. Serial No. 815,920. (Cl. 100—57.)



1. A package filling machine comprising means for holding the package, means for loosely filling the package substantially full of material and means operative during the latter portion of the filling operation for forcing material into the package to completely fill it with compressed material.

9. A package filling machine comprising means for holding a package, a small filling passageway leading thereto positioned for registry with the package, a rotary filler, a housing therefor, an outlet leading from the housing to such passageway and a plunger reciprocating in such passageway past said outlet.

18. A package filling machine comprising means for holding the package, a small filling passageway leading thereto positioned for registry with the package, rotary means for loosely filling the package substantially full of material, a plunger and means operative during the latter part of the filling operation for reciprocating it to force material into the package to completely fill it with compressed material, a feed supply cut-off and means for simultaneously retracting the plunger and opening the supply cut-off, a scale beam on which the package rests and means reciprocating it the movement of the scale beam throwing the plunger out of operation when it is in a position closing the outlet.

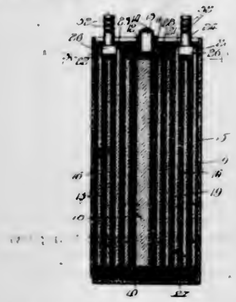
24. A barrel support for filling machines and the like comprising a cradle and three separate adjustable barrel supporting heads carried thereby, one of said heads being located adjacent one end of and directly beneath the barrels, the other two being separated one from the other and located adjacent the other end thereof.

36. In a package filling machine a scale beam, a horizontal track carried thereby, a package carrying cradle mounted at one end upon said track and free to travel therealong and supported at the other end by a lever pivoted at one end on the bracket and at the other end on the cradle and means for rotating said lever to slide said cradle along the track and to raise the load upon one end thereof.

[Claims 2 to 8, 10 to 17, 19 to 23, 25 to 35, and 37 to 43 not printed in the Gazette.]

1,269,778. STORAGE BATTERY. JULIUS BECKER, Chicago, Ill., assignor to John P. Mentzer, Chicago, Ill. Filed May 22, 1916. Serial No. 99,182. (Cl. 204—29.)

1. In a secondary cell, the combination with a cylindrical container, of an active element within the same, said active element comprising a pair of electrodes and an intermediate layer of separating material in conjunction with filling material at both the upper and lower ends of the container, the electrodes being spiraled together with their inner ends in close proximity, and the separating material comprising a layer of glass wool completely separating the electrodes at all points and being tightly compressed between the electrodes, the upper and lower edges of the layer of glass wool projecting beyond the upper and lower edges of the electrodes to thereby provide the filling material aforesaid, a terminal connected to each electrode, and electrolyte completely saturating the layer of glass wool, whereby the glass wool serves to separate the electrodes from each other, while at the same time carrying the electrolyte into intimate contact with all portions of the active faces of the electrodes, substantially as and for the purpose set forth.



2. In a secondary cell, the combination with a cylindrical container, of an active element within the same, said active element comprising a pair of electrodes and an intermediate layer of separating material, the electrodes being spiraled together with their inner ends in close proximity, and the separating material comprising a layer of glass wool completely separating the electrodes at all points and being tightly compressed between the electrodes, a terminal connected to each electrode, and electrolyte completely saturating the separating material, whereby the glass wool serves to separate the electrodes from each other, while at the same time carrying the electrolyte into intimate contact with all portions of the active faces of the electrodes, substantially as and for the purpose set forth.

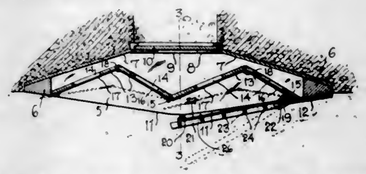
3. In a secondary cell, the combination with a container, of an active element within the same, said active element comprising two electrode sheets and an intermediate layer of separating material tightly spiraled together, the separating material being glass wool and completely separating the electrodes at all points, and electrolyte completely saturating the glass wool and wetting all faces of the electrodes, the capillary capacity of the glass wool carrying the electrolyte into contact with substantially all portions of the faces of the electrodes, substantially as and for the purpose set forth.

1,269,779. FISH-SCREEN FOR IRRIGATING-DITCHES. SCHUYLER C. BELL, Santa Fe, N. Mex., assignor of one-half to Stella Chamberlain Bell, Belen, N. Mex. Filed June 30, 1917. Serial No. 177,919. (Cl. 61—5.)

1. In a fish screen for irrigating ditches, a vertical wall having a plurality of angularly related sections, each section having an opening therein, an articulated screen, and means for adjusting said screen into position to overlie the openings in the wall sections or to a position in spaced relation to said wall sections.

3. In a fish screen for irrigating ditches, spaced horizontal walls, a head gate at one end of said walls and in spaced relation thereto, vertically disposed converging walls arranged in pairs between the horizontal walls, each of the vertical walls having an opening, a pair of screen plates for each pair of vertical walls, said plates being connected for relative movement and adapted to lie against the outer faces of said vertical walls over the openings therein, and manually operable means connected to one of said screen plates for moving the plates relative to each other and with respect to said vertical walls.

4. In a fish screen for irrigating ditches, a housing open upon one end and provided upon its opposite end with a head gate, screen plates mounted in the open side of the housing, vertically disposed rods fixed to the housing and adapted to be embedded at their lower ends in the bed of a stream, and a float bar connected to one of said rods for vertical movement relative thereto across the open side of the housing.

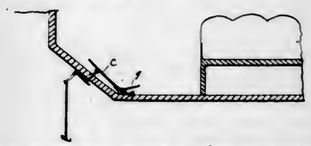


6. In a fish screen for irrigating ditches, a housing open upon one end and provided with a head gate on its opposite end, screen plates arranged in said housing, spaced vertical rods fixed to the housing and adapted to be embedded at their lower ends in the bed of a stream, a float bar connected at one of its ends to one of said rods for vertical movement with respect thereto, the other of said rods spacing the float bar from the open side of the housing, said float bar being vertically movable with respect to the housing in front of the screen plates.

7. In a fish screen for irrigating ditches, a housing open upon one end and provided with a head gate on its opposite end, screen plates arranged in said housing, spaced vertical rods fixed to the housing and adapted to be embedded at their lower ends in the bed of a stream, a float bar connected at one of its ends to one of said rods for vertical movement with respect thereto, the other of said rods spacing the float bar from the open side of the housing, a rigid connection between the lower ends of said vertical rods, and a plurality of spaced rods extending loosely over the float bar and resting at their lower ends upon the bed of the stream and in contact with said connection between the vertical rods, said float bar being vertically movable with respect to the latter rods and the housing in front of the screen plates.

[Claims 2 and 5 not printed in the Gazette.]

1,269,780. ACCELERATOR AUXILIARY PEDAL. EDGAR J. BLOOM, Tiffin, Ohio. Filed Jan. 18, 1918. Serial No. 212,398. (Cl. 74—81.)



1. An accelerator auxiliary pedal, comprising a pair of levers having their ends meeting at the ends where they are pivoted and operatively connected at their meeting ends so that pressure on one operates both.

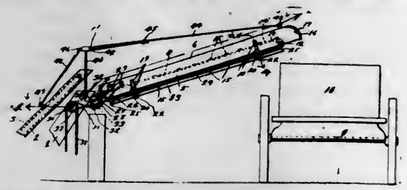
8. An accelerator auxiliary pedal, having in combination, a pair of levers each pivotally supported near their substantially meeting ends, means upon which one of the levers slidably fulcrums to cause the two to operate together, and a set screw adjustable to act as a stop for one of the levers and act as a speed regulating limit.

[Claims 2 to 7, 9, and 10 not printed in the Gazette.]

1,269,781. BINDER ATTACHMENT. FREDERICK J. E. BOLTON, Loraine, N. D. Filed Oct. 30, 1917. Serial No. 199,338. (Cl. 193—14.)

In combination, a binder frame, an extension elevating conveyer frame, coupling means connecting the binder frame and the frame of the elevating conveyer frame, said coupling means comprising a pair of connectors con-

nected to the binder frame, and in turn pivotally and adjustably connected to the conveyer frame, whereby the



conveyer frame may be adjusted in different relative positions to the binder frame, said connectors having transverse straps or plates extending toward each other and overlapping, and means comprising bolt and slot connections joining said transverse straps or plates.

1,269,782. SPARK-PLUG. CHESTER H. BRASELTON and FRED M. CARROLL, Dayton, Ohio, assignors, by mesne assignments, to Wolverine Spark Plug Company, Inc., a Corporation of New York. (Incorporated in 1916.) Filed Aug. 17, 1914. Serial No. 857,113. (Cl. 123—169.)



1. In a spark plug for internal combustion engines, the combination of a bushing; an electrode carrying insulator adapted to removably seat therein; and a fastening member having alined inwardly turned ends for coöperating with the bushing and the insulator to fasten the latter to its seat in the former when the fastening member is rotated about the axis of the inwardly turned portions.

2. In a spark plug for internal combustion engines, the combination of a bushing; an electrode carrying insulator adapted to removably seat therein; and a fastening member having alined inwardly turned ends a portion of said ends being farther from the axis of rotation of the fastening member than are other portions whereby when the fastening member is rotated about the axis of the inwardly turned ends with such portions in coöperation with the bushing and the insulator, the insulator will be forced to its seat in the bushing.

41. As an article of manufacture, an electrode carrying insulator for spark plugs adapted to seat in a bushing and provided with a fastening member yieldingly engaging the insulator so as to be removable therefrom, said fastening member being adapted to lock the insulator to its seat in the bushing when operated in coöperation with the insulator and bushing.

42. An article of manufacture comprising an electrode carrying insulator adapted to removably seat in a bushing and provided with a peripheral groove and a fastening member yieldingly engaging said insulator at points in said groove whereby said fastening member is removable from said insulator said fastening member being adapted to lock the insulator to its seat in the bushing when it is operated in coöperation with the insulator and bushing.

[Claims 3 to 40 not printed in the Gazette.]

1,269,783. SPARK-PLUG. CHESTER H. BRASELTON, Detroit, Mich., and FRED M. CARROLL, New York, N. Y., assignors to Wolverine Spark Plug Company, Inc., Detroit, Mich., a Corporation of New York. (Incorporated in 1916.) Original application filed Aug. 17, 1914, Serial No. 857,113. Divided and this application filed Aug. 18, 1916. Serial No. 115,578. (Cl. 123—169.)

1. In a spark plug, the combination of a bushing, provided with diametrically opposite L-shaped slots, the upper walls of the horizontal portions of said slots being downwardly inclined; an electrode carrying insulator adapted to removably seat in said bushing, said insulator having an annular upwardly-facing shoulder; a ring resting on said shoulder; and a resilient fastening member straddling said plug and having inwardly turned ends, adapted to have bearings in said slots, and eccentric portions disposed in diametrically opposite openings in said ring.



5. In a spark plug, the combination of a relatively fixed member; an electrode-carrying insulator adapted to removably seat therein; and a rotatable fastening member having inwardly-turned ends adapted to bear on said fixed member, said fastening member being of non-circular cross-section and the ends of said member being twisted, said twisted portions being adapted to exert pressure on the insulator to lock it to its seat when the fastening member is rotated.

20. In a spark plug, the combination of a bushing; an electrode-carrying insulator adapted to removably seat therein; an intermediate member adapted to transmit pressure to said insulator; and a crank-like resilient member rotatably engaging with the bushing and intermediate member and serving, when rotated, to force the insulator against its seat and hold it there by reason of the crank-like member assuming a substantially "dead center" relationship between the intermediate member and the bushing.

[Claims 2 to 4, 6 to 19, and 21 to 27 not printed in the Gazette.]

1,269,784. CIRCUIT-COUPLING FOR ELECTRICAL APPARATUS. FREDERICK E. CARLSON and JOSEPH F. LAMB, New Britain, Conn., assignors to Landers, Frary & Clark, New Britain, Conn., a Corporation of Connecticut. Filed May 24, 1916. Serial No. 99,694. (Cl. 173—259.)



1. In a hand portable electrical utensil, resistor terminals, a binding post electrically connected to one of said terminals, a member of a slip joint electrical coupling connected to the other terminal, in combination with circuit wires one of which is fastened to said binding post, and a complementary member of the slip joint coupling attached to the end of the other circuit wire.

4. An electrical appliance, a binding post connected to one terminal thereof, a member of a detachable coupling connected to the other terminal thereof, a sleeve of insulating material surrounding and protecting said binding post, and an inclosing shell fitting over said sleeve and apertured opposite said coupling member.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,269,785. ROAD CONSTRUCTION. CHARLES B. CHATFIELD, Grand Rapids, Mich. Filed Apr. 7, 1917. Serial No. 160,405. (Cl. 94—1.)



1. A roadway comprising a concrete width and a parallel granular material width, the adjacent edges of the concrete and granular widths being united by interposed binding material.

2. A roadway comprising a foundation, a concrete width, a parallel loose material side width, and intervening binding material.

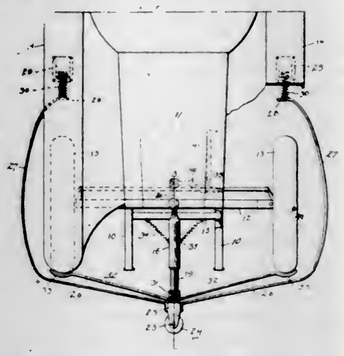
3. A road comprising a narrow concrete width provided with side widths formed of a granular fragmentary material adjacent thereto and extending laterally therefrom, said side widths diminishing in thickness from edges adjacent the concrete width to their outer edges, and a binding element introduced between the concrete and side widths.

4. A concrete road provided with extensions along its lower edge portion, fragmentary material forming widening means beside said road, intervening binding material between said concrete road and said extensions.

5. A concrete road formed of a base portion and a wearing surface thereon, fragmentary material extending laterally from said concrete road, and a binding element maintaining the portion of said material adjoining the side edge of the concrete in position with respect to said concrete road.

[Claims 6 to 13 not printed in the Gazette.]

1,269,786. FENDER FOR VEHICLES. HAMPAR E. CHOREBANIAN, Newburyport, Mass. Filed Apr. 26, 1917. Serial No. 164,734. (Cl. 180—83.)



1. In a fender, the combination with a vehicle, of a horizontal telescopic stem mounted on the front thereof and projecting forwardly in the center line of the vehicle, resilient means for maintaining the same in a forward position but permitting rearward movement under pressure, a horizontal rotatable roller mounted on the forward end of said stem, and laterally projecting wheel fenders secured to the stem.

2. In a fender, the combination with a vehicle, a horizontal telescopic stem mounted on the front thereto to swing transversely and projecting forwardly in the center line of the vehicle, balanced resilient means on opposite sides of the stem to maintain the latter in a normal intermediate position, resilient means on the stem for maintaining the same in the forward position but permitting rearward movement under pressure, an anti-friction wheel mounted on the forward end of said stem, and laterally projecting wheel fenders secured to the stem and extending around the front and sides of the vehicle wheels.

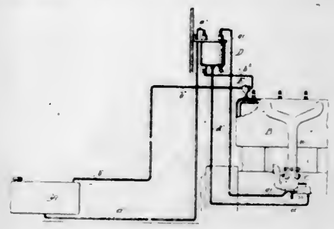
3. A fender for vehicles comprising a forwardly projecting horizontal telescopic stem adapted to move rearwardly and swing laterally to opposite sides of the vehicle, resilient means for resisting said rearward movement, other resilient means for holding the stem in a median position, a horizontally rotatable roller mounted in the forward end of said stem, and a strap or band secured to each side of the stem in rear of the roller and extending laterally across the front and around the wheels of the vehicle.

4. A fender for vehicles comprising a forwardly projecting horizontal stem movable rearwardly, resilient means for resisting said rearward movement, a roller mounted in the forward end of said stem, a strap or band secured on each side of said stem in rear of the roller and extending laterally around the front, side and rear of the front wheels of the vehicle, and resilient means acting on the rear ends of said bands for holding them in a forward position.

5. A fender for vehicles comprising a horizontal forwardly projecting socket adapted to swing toward either side of the vehicle, balanced resilient means on opposite sides of said socket to maintain it in a median position, a stem slidable in said socket and extending beyond the front of the same, a roller mounted in the forward end of said stem, resilient means within the socket tending to force the stem in a forward direction, straps secured to the stem in rear of the roller and extending laterally therefrom and around the front wheels, and brake means for the front wheel fixed to said stem.

[Claims 6 and 7 not printed in the Gazette.]

1,269,787. FUEL-FEED SYSTEM FOR EXPLOSIVE-ENGINES. EDMUND S. CHURCH, Chicago, Ill., assignor to Automatic Carburetor Co., Chicago, Ill., a Corporation of Illinois. Filed Nov. 3, 1916. Serial No. 129,266. (Cl. 158—36.)

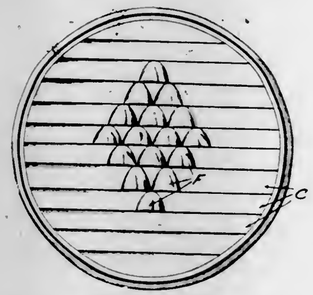


1. In fuel feeding devices for explosive engines, the combination of a reservoir for liquid fuel, a carbureter, a feed-tank disposed above the carbureter, a connection for conducting fluid under pressure from a working cylinder of the engine before it has been exhausted from the cylinder, to said reservoir to put the liquid in the reservoir under pressure, a connection through which liquid under pressure will be forced from the reservoir to said tank, and a connection through which liquid-fuel will flow by gravity from the tank to the carbureter.

10. In fuel feeding devices for explosive engines, the combination of a reservoir for liquid fuel, a carbureter, a feed tank connected to receive liquid fuel from the reservoir, means for supplying fluid under pressure into the reservoir to force the fuel to the tank, means for conducting liquid fuel from the tank to the carbureter, and a connection between the top of the tank and the carbureter for delivering vapor formed in the tank to the carbureter.

[Claims 2 to 9 not printed in the Gazette.]

1,269,788. COVER-GLASS FOR AUTOMOBILE-HEADLIGHTS. WILLIAM CHURCHILL, Corning, N. Y., assignor to Corning Glass Works, Corning, N. Y., a Corporation of New York. Original application filed Jan. 12, 1917, Serial No. 142,094. Divided and this application filed Dec. 3, 1917. Serial No. 205,221. (Cl. 240—48.4.)

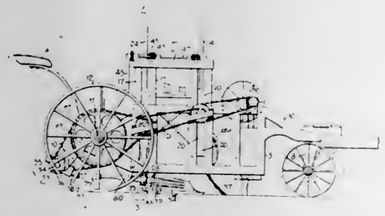


1. A cover glass having thereon a series of prisms to produce a downward bending of rays passing therethrough, and having superimposed upon the refracting faces of such prisms ungulas, the axes of such ungulas being at an angle to such refracting faces.

2. A cover glass having thereon a series of prisms to produce a downward bending of rays passing therethrough, and having a series of ungulas, the outer faces of which are inclined to the faces of the prisms, the ungulas being so placed upon the cover glass that rays passing therethrough are given a downward reflection both by the ungulas and by the prisms.

[Claims 3 to 7 not printed in the Gazette.]

1,269,789. BEET-HARVESTING MACHINE. JOHN COURTNEY, Albany, Oreg. Filed May 27, 1916. Serial No. 100,297. (Cl. 55—106.)



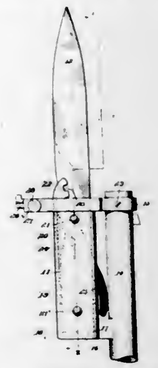
1. In a beet harvesting machine, spaced hanger bearings, longitudinally disposed beet pulling members each having a shaft journaled in one of said bearings and supporting said members at their rear ends, means pivotally supporting said members at their forward ends, and means for transversely adjusting the hanger bearings to move the rear ends of said members toward or from each other and maintain the rotative axes of said members at a predetermined angle with respect to each other.

2. In a beet harvesting machine, spaced pairs of vertically movable hangers, beet pulling means operatively mounted in said hangers, mechanism for operating said beet pulling means in the travel of the machine, and manually operable means connected to the hangers to vertically move the same and raise or lower the beet pulling means.

3. In a beet harvesting machine, spaced pairs of vertically movable hangers, harvesting rollers operatively mounted in the corresponding hangers to travel upon opposite sides of the beet row, means for rotating said rollers in the travel of the machine, means for transversely adjusting the hangers in each pair with respect to each other, and manually operable means connected to the hangers to move the same vertically and raise or lower the harvesting rollers.

4. In a beet harvesting machine, spaced vertically movable frames, a pair of hangers mounted in each frame and adjustable toward or from each other transversely of the machine, harvesting rollers rotatably mounted upon the corresponding hangers to travel upon opposite sides of the beet row, furrow opening plows mounted upon the forward hangers, mechanism operatively connected to the rollers to rotate the same in the travel of the machine, and manually operable means connected to said frames to move the same vertically and raise or lower the plows and the harvesting rollers.

1,269,790. WIRE-CUTTER ATTACHMENT. JOSEPH DANHOFFER, Youngstown, Ohio. Filed Mar. 16, 1918. Serial No. 222,955. (Cl. 42—90.)



2. A knife form of bayonet comprising a blade having a tang at one end and a handle carried by the said tang arranged with an opening therethrough, a transversely positioned attaching guard arranged at the base of the blade adjacent the handle, a lever extending through the said opening and guard with its ends projecting at opposite sides of the device, pivotal connections between the said lever, handle and tang, one edge of the blade and the adjacent end of the lever having coöperating wire-cutting notches, means within the passage adapted for maintaining the cutting members in their separated open arrangement, a stop-block slidably arranged in one end of the guard having a path of movement in the plane of said lever, and means carried by the guard adapted for maintaining said block in its adjusted position, the unnotched end of the lever being arranged at the opposite side of the device from the said block and cutting end of the lever adapted for grasping during the operation of the device.

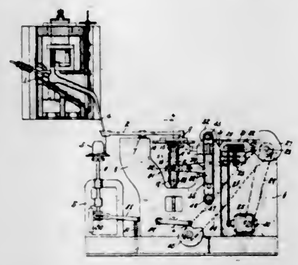
[Claim 1 not printed in the Gazette.]

1,269,791. PROCESS OF FORMING GLASS ARTICLES. EDWARD DANNER, Toledo, Ohio. Filed July 16, 1917. Serial No. 180,798. (Cl. 49—77.)

1. The process of forming glassware, which consists in directing a stream of glass to form successive contacting layers which coöperate to produce an article of predetermined shape, the glass stream being sufficiently plastic to permit a cohesion of the successive layers at the points of contact.

5. The process of forming glass articles, which consists in winding a glass bar in a heated cohesive state around a form in successive contacting layers to produce an article of predetermined shape.

11. The process of producing glass articles, which consists in winding a glass column in a flexible cohesive state in successive contacting layers around a form having a varying diameter lengthwise of its axis, and increasing the speed of winding in proportion to the reduction of the diameter of the form at the portion thereof where winding occurs.



12. The process of producing glass articles, which consists in flowing a column of glass in a flexible cohesive state from a source of supply in successive contacting layers around a form to produce an article of predetermined shape, and lowering the form with respect to the source of supply as the winding progresses to maintain the distance between the source of supply and the point on the form with which the column first has contact approximately constant.

13. The process of producing glass articles, which consists in winding a glass column in a flexible cohesive state in successive contacting layers to form an article of predetermined shape having a varying diameter lengthwise of its axis, and increasing and diminishing the speed of winding with the diminishing or increasing, respectively, of the article diameter.

[Claims 2 to 4, 6 to 10, and 14 to 16 not printed in the Gazette.]

1,269,792. METALLIC DERIVATIVES OF DIOXYDIAMINOARSENOBENZENE. JEAN DANYSZ, Sevres, France. Filed July 28, 1916. Serial No. 111,941. (Cl. 23—24.)

1. Process for the manufacture of a stable derivative of dioxydiaminoarsenobenzene by treating it with a mercury salt and an antimony salt.

2. Process for the manufacture of a stable derivative of dioxydiaminoarsenobenzene by treating it with a mercuric iodid and an antimony salt.

4. A stable derivative of dioxydiaminoarsenobenzene containing mercury and antimonyl.

5. A stable sodium derivative of dioxydiaminoarsenobenzene containing mercuric iodid and the antimonyl radical.

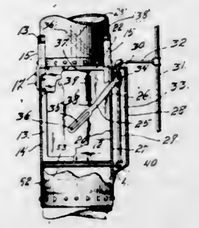
6. A stable derivative of dioxydiaminoarsenobenzene containing mercury and antimony.

[Claim 3 not printed in the Gazette.]

1,269,793. FLUSHING APPARATUS FOR GARBAGE-CHUTES. ERNEST P. DARGIN, Los Angeles, Cal., assignor of one-half to Charles S. Brown, Los Angeles, Cal. Filed Mar. 8, 1915. Serial No. 13,067. (Cl. 193—32.)

1. A garbage chute having a water supply pipe connected therewith to deliver water thereto, a valve in said pipe, a door slidably mounted, a crank arm connected at one extremity with the valve piece and at its opposite extremity with the door by means of a pin and a slot, and a spring connecting the door with the crank arm at a point between the pin and the valve.

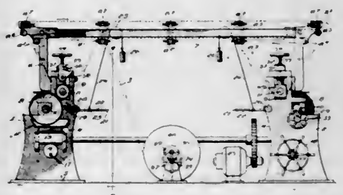
5. In a garbage chute, the combination with the body of the chute, of a door slidably mounted thereon and arranged to normally close an inlet opening for garbage, a water pipe having a valve housed adjacent the chute to deliver water escaping from the valve through a defect therein, into the chute, the door being composed of two spaced members, a crank arm connected with the valve piece and projecting into the space between the door members, a pin fast on the door and passing through a slot formed in the crank arm of sufficient length to permit the opening of the valve as the door is opened by a vertical movement, and a spiral spring having one extremity connected with the top of the door and the other extremity with the crank arm between the slotted portion of the latter and the valve, substantially as described.



7. A garbage chute having a water supply pipe connected therewith, a valve in said pipe, the said chute being provided with a door, means connecting the door with the valve, whereby opening and closing of the door opens and closes the valve, and means attached to said connecting means to facilitate closing the door.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,269,794. PRINTING-PRESS. CHARLES DAUSMANN, Brooklyn, N. Y. Filed May 19, 1916. Serial No. 98,601. (Cl. 101—157.)



1. In a printing apparatus of the character described, and in combination with a printing roll, and an impression roll, vertically adjustable bearings for the shaft of the impression roll, a plurality of vertically movable supports, a screw shaft in threaded engagement with each support and engaging the adjacent adjustable bearing, a rock shaft, studs upon the adjustable supports, slotted cams upon the rock shaft engaging said studs, whereby the supports and bearings may be raised and lowered, and means carried by the rock shaft for adjusting the same.

2. In a printing apparatus of the character described, and in combination with a printing roll, and an impression roll, vertically adjustable bearings for the shaft of the impression roll, a plurality of vertically movable supports, a screw shaft in threaded engagement with each support and engaging the adjacent adjustable bearing, a rock shaft, studs upon the adjustable supports, slotted cams upon the rock shaft engaging said studs, whereby the supports and bearings may be raised and lowered, and means carried by the rock shaft for adjusting the same, a second impression roll mounted for vertical adjustment, a printing roll coöperating therewith and means for guiding a web around said second impression roll in position for printing on the reverse side of the web.

1,269,795. PROCESS OF PRODUCING GAS AND PHOSPHATIC FERTILIZER MATERIAL. ALBERTO FRANCESCO DELACOURT, Genoa, Italy, assignor to Società Anonima Italiana Gio. Ansaldo & C., Genoa, Italy. Filed Apr. 11, 1918. Serial No. 228,034. (Cl. 252.)

2. A process which comprises gasifying lignite in the presence of phosphatic rock to slag the ash of the lignite.

3. A process which comprises gasifying fuel containing relatively large amounts of sulfids, in the presence of sufficient calcium phosphate material to slag the ash of the fuel, and to unite with the bulk of the sulfur oxid to produce a slag suitable for use as fertilizer, and a combustible gas.

[Claim 1 not printed in the Gazette.]

1,269,796. MANIFOLDING-BOOK. WILLIAM E. DUNNING, Alliance, Ohio, assignor to The McCaskey Register Company, (incorporated in 1914,) Alliance, Ohio, a Corporation of Ohio. Filed Nov. 23, 1914. Serial No. 873,485. (Cl. 282—24.)



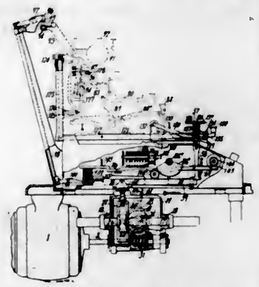
1. A manifolding book including a cover leaf having a pocket therein, a holder leaf flexibly connected to one edge of the cover leaf, a duplicating pad mounted on the holder leaf, a holder plate inserted in the pocket, said plate having a rectangular flange on one edge and a bar alongside the edge of the flange, and a triplicating book having one cover leaf entered between the flange and the bar with the bound edges of its leaves resting on the edge of the flange and the free edge of its cover leaf folded around the edge of the holder plate opposite the flange.

2. A manifolding book including a cover leaf having a pocket therein, a holder plate inserted in the pocket, said plate having a rectangular flange on one edge and a bar alongside the edge of the flange, and a triplicating book having one cover leaf entered between the flange and the bar with the bound edges of its leaves resting on the edge of the flange and the free edge of its cover leaf folded around the edge of the holder plate opposite the flange.

1,269,797. COMBINED TYPE-WRITING AND COMPUTING MACHINE. EMERSON C. EACHEL, Montclair, N. J., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Aug. 19, 1911. Serial No. 644,959. (Cl. 235—60.)

13. The combination with a set of number wheels, a set of numeral keys, a traveling carriage controlled by said keys, means operated by said keys for setting up the digits of a number to be computed, and a general operator for running into the number wheels the number so set up; of a series of tabulating keys for positioning the carriage variably, power-driven means for causing the operation of the general operator, and means operated by the tabulator keys for controlling the operation of said power-driven means, whereby the operation of tabulating the carriage effects the computation of a previously set up number.

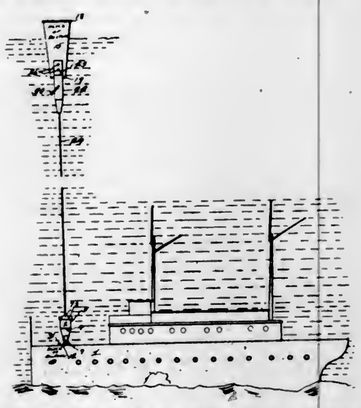
14. In a computing machine, the combination with a traveling carriage, and a key for positioning the same; of computing mechanism; a motor for driving said mecha-



nism; and connections between said key and said motor for starting the latter at the depression of the former.

[Claims 1 to 12 and 15 to 17 not printed in the Gazette.]

1,269,798. FLOAT OR SIGNAL-BUOY FOR SUNKEN VESSELS. JOHN P. EDMONDS, Scottsboro, Ala. Filed Feb. 6, 1918. Serial No. 215,623. (Cl. 9—9.)



1. The combination with a signal buoy, of a supporting socket therefor, being constructed from a single piece of sheet metal bent upon itself midway its ends forming sides arranged V-shaped, the edges of the sides having strengthening flanges, a rectangular sheet metal strap connecting the upper ends of said sides, and supporting legs connected to the sides, adapted to be secured to the deck of a vessel.

3. The combination with a signal buoy of a supporting socket therefor adapted to receive the lower end of said buoy, said supporting socket being constructed from a single piece of sheet metal bent upon itself midway its ends forming sides arranged V-shaped, the edges of the sides having strengthening flanges extending toward each other to prevent lateral movement of the lower end of the buoy, and a rectangular band being connected to the upper ends of the sides to hold them rigid, and means to support the socket on the deck of a vessel.

[Claim 2 not printed in the Gazette.]

1,269,799. SPRING-SEPARATOR. SIMEON G. EDMUNDS, Bluestem, Wash. Filed Aug. 28, 1916. Serial No. 117,198. (Cl. 81—3.)

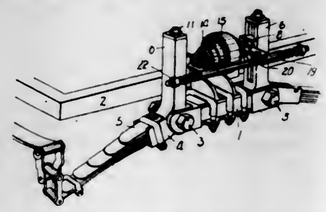
A device for separating the leaves of springs, comprising in combination, levers having their spring separating

ends and actuating ends, means pivotally connecting said levers between their ends, and mechanism for operating the actuating ends of said levers to effect separation of the leaves and then lock said leaves in a leaf separating position, said mechanism comprising a link having one end detachably connected with one of said handle levers, a dead center bell crank lever having one end pivoted to the remaining handle lever and having one arm adapted



to lie flat against said handle lever to which it is pivoted when said bell crank lever is in a locking position, the remaining arm of said bell crank lever being pivoted to the remaining end of said link in a manner to dispose the bell crank lever and link in a dead center locking position when said handle levers are locked, said bell crank lever having an extension projecting therefrom for manual operation, substantially as described.

1,269,800. SPRING FOR ROAD-VEHICLES. FREDERICK WILLIAM EDWARDS and ELLIOTT DERHAM EDWARDS, Sydney, New South Wales, Australia. Filed Nov. 21, 1916. Serial No. 132,623. (Cl. 267—19.)



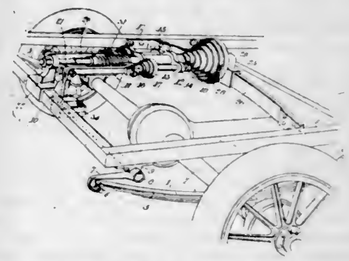
1. In a road vehicle springing system, the combination of two semi elliptic side springs mounted at their forward ends on the vehicle frame, two quarter elliptic platform springs shackled to the rear ends of said side springs, separate bell crank levers carrying the butts of said platform springs, and coiled springs having an abutment on a frame bracket and acting on said bell crank levers.

3. In a road vehicle springing system, the combination with half elliptic side springs, and quarter elliptic platform springs shackled thereto and mounted on separate bell crank levers, of rebound springs with limit checks adapted to check and limit the rebound movements of said platform springs.

6. In a road vehicle springing system, the combination of two semi elliptic side springs mounted at their forward ends on the vehicle frame, two quarter elliptic platform springs shackled to the rear end of said side springs, separate bell crank levers carrying the butts of said platform springs, coiled springs working against a frame bracket and acting on the bell crank levers, and shackled forks for the front ends of the side springs having cylindrical stems which are rotatably mounted in the brackets attached to the vehicle frame.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,269,801. VEHICLE SUSPENSION DEVICE. FREDERICK WILLIAM EDWARDS and ELLIOTT DERHAM EDWARDS, Sydney, New South Wales, Australia. Filed Nov. 21, 1916. Serial No. 132,624. (Cl. 267—19.)

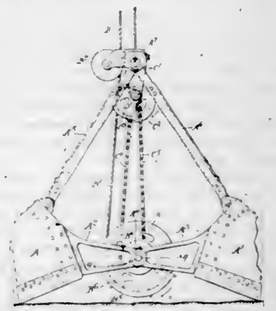


1. A rear wheel springing system for motor road vehicles wherein semi elliptic leaf springs have their forward eyes pivotally supported on the vehicle frame, comprising the combination of independent rock shafts, a lever fixed on each shaft and shackled to the rear end of one of the springs, a main buffer spring, a slide-head acting against the buffer spring, independent crank and link operative connections between the rock shafts and the slide-head, and cushion springs interposed in said connections, so constructed and arranged that minor road shocks are absorbed therein while axle movements of greater amplitude are transmitted through the slide head to the buffer spring, with the result that both side springs are caused to move simultaneously in the same direction.

4. In a rear axle spring system of the type described, the combination with side springs attached at their forward ends to the vehicle frame, of a tubular guide shaft, a slide head on the guide shaft, independent operative connections between the rear ends of said springs and the slide head, cushion springs interposed in said operative connections, a main buffer spring fixed on the tubular guide shaft and against which the slide head is moved by the operative connection, and means for adjusting the tension of the main buffer spring comprising a screw stem shaft working in the tubular guide shaft, the tubular shaft having a tapped portion co-acting with the screw stem shaft, fixed end bearings for the stem shaft, and means to restrain the tubular shaft against rotation while permitting it to have axial movement on rotation of the stem shaft.

[Claims 2 and 3 not printed in the Gazette.]

1,269,802. CLAM-SHELL EXCAVATOR. ASGER EILERSGAARD, Chicago, Ill., assignor to Link-Belt Company, Chicago, Ill., a Corporation of Illinois. Filed Dec. 23, 1915. Serial No. 68,320. (Cl. 37—30.)



1. An excavating bucket comprising two jaws pivoted one on the other, a power drum, a cable wound a plurality

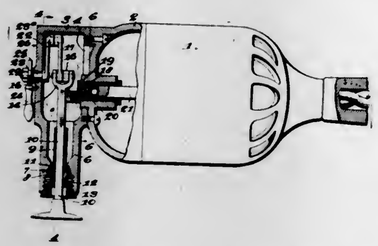
of times about it, a hub integral therewith, and a chain having one end anchored thereon, a movable anchorage for the other end of the chain and means responsive to the relative angular movement of the two jaws and to the rotation of the power drum for compensating for the change in the length of the lever arm through which the chain acts, resulting from the winding of one coil of chain upon another on the hub as the cable is wound off the drum.

6. A clam shell bucket comprising two pivoted bucket members, a closing drum mounted for rotation upon their pivot axis, a chain drum mounted for rotation with the closing drum, a controlling segment mounted for rotation concentric with the closing drum upon one of said bucket members, shear legs pivoted on the bucket members and pivoted together above the bucket member pivot axis, a pair of cams mounted for rotation upon the shear leg pivot axis, said cams being oppositely disposed, a closing chain anchored on the chain drum and on one of said cams, a controlling chain anchored on the controlling segment and the other cam, a cable wound about the closing drum, the relative positions of the parts being such that when the cable is wound about the closing drum the closing chain is wound about its cam and anchored on but not wound about the chain drum, and the controlling chain is anchored on but not wound about the controlling segment and the controlling cam.

10. Closing means for a clam shell bucket comprising a closing drum and means for rotating it, a compensating device removed from the closing drum, a hub mounted for rotation with the drum, a closing cable anchored at one end upon such hub and adapted to be wound about it and at the other end on the compensating device, a controlling cable mounted at one end on the compensating device, at the other end on a member adapted to rotate with the bucket as it is closed.

[Claims 2 to 5, 7 to 9, and 11 not printed in the Gazette.]

1,269,803. VIBRATOR. GEORGE P. ELMEN and GEORGE SHARPNACK, Lincoln, Nebr.; said Sharpnack assignor to said Elmen. Filed July 20, 1917. Serial No. 181,815. (Cl. 128—16.)

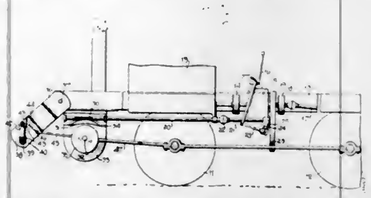


1. In a vibrator, a support, a driving shaft relatively fixedly located in said support, a crank disk on said shaft, an applicator arm having bearing in said support, and a variable-stroke connection between said crank disk, said arm and said support, whereby said arm may have a percussion stroke or a brushing stroke or any combination of these strokes within the extreme limits of the respective stroke imparted to it.

10. In combination with an electric motor having a casing and a driving shaft, a housing secured to said casing over the end of said driving shaft, a crank disk on said driving shaft, said housing having a bearing surface, a bushing having a bearing surface to coöperate with the bearing surface of the housing, means for maintaining said bushing seated in the housing, an applicator shaft reciprocably mounted in said bushing, a link connecting said applicator shaft with said crank disk, a lever having a stub shaft journaled in said housing, a link between said lever and said applicator arm, means whereby said lever may be shifted to change the position of said last named link to thereby vary the effective action of said crank disk on said applicator arm according to the position of said lever, and means connected with the stub shaft of said lever whereby said lever may be shifted from the outside of said housing.

[Claims 2 to 9 and 11 not printed in the Gazette.]

1,269,804. POWER-WINCH FOR AUTOMOBILE-TRUCKS. BERNHARD FAISST, Silica, Ark. Filed Sept. 24, 1917. Serial No. 192,967. (Cl. 254—166.)

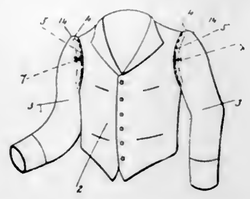


1. A power operated truck including a motor, a rear axle, a sectional drive shaft extending from the motor to the rear axle, a clutch connecting said sections, a driving wheel operatively connected to one of said sections between the motor and the clutch, a winding drum, a shaft therefor, a worm wheel on the shaft, a shaft having a worm engaging said worm wheel, a shaft section having a universal joint connection to the worm shaft, a gear wheel mounted upon said shaft section, and means for shifting said gear wheel into or out of engagement with the first named driving gear wheel.

4. A truck including an axle, a motor, a winding drum mounted on the truck and including a shaft driven by the motor, a shiftable cable guide mounted on the truck, and braces connecting said axle to the cable guide, the cable guide having a plurality of perforations and the braces having at their extremities means engaging in said perforations whereby the angle of the cable guide may be adjusted and whereby the braces will hold it in its adjusted position and against strain.

[Claims 2, 3, and 5 not printed in the Gazette.]

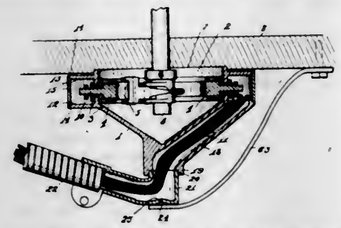
1,269,805. COMBINATION-GARMENT. MAX FELBERBAUM, Baltimore, Md. Filed Jan. 7, 1916, Serial No. 70,781. Renewed Dec. 18, 1917. Serial No. 207,795. (Cl. 2—94.)



The combination, with a vest, of sleeves provided with enlargements at their upper end portions, said enlargements having loosely gathered edges and elastic contracting devices so that their arm openings are expansible and are adapted to be fitted snugly over the material of the vest around its arm openings, and detachable fastening devices for connecting the sleeves positively with the vest.

1,269,806. TIMER FOR GAS-ENGINES. HAROLD J. GERPHEIDE, South Bend, Ind. Filed July 11, 1917. Serial No. 179,981. (Cl. 123—167.)

1. A timer casing having fixed contacts projecting through one wall thereof, a housing integral with the casing and inclosing the projecting portions of said contacts, an enlargement on the casing forming a channel in communication with the housing, and a conduit coupling in communication with the channel and having a slip-



joint connection with and axially of the casing, whereby the casing may have rotative movement without moving the coupling.

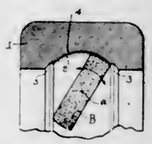
[Claims 2 and 3 not printed in the Gazette.]

1,269,807. METAL FORM FOR CONSTRUCTING SILO AND OTHER CEMENT WALLS. JOHN W. GOODWIN, Neodesha, Kans. Filed Dec. 5, 1917. Serial No. 205,645. (Cl. 25—131.)



In a metal form for molding cement segment wall sections, inner and outer sheet metal spring plates, means carried by the outer faces of both plates for giving said plate concentric curvature, angular brackets on the inner plate near its ends and adjacent its upper edge, angular straps on the outer plate near its ends, one arm of each strap extending the full height of the plate, and adjustable connections between said angular brackets and the angular straps for adjusting the inner and outer plates in spaced relation to each other, a transverse plate hingedly connected to each end of the inner plate and provided with adjustable connections with the corresponding end of the outer plate, whereby the end of the segment wall may be formed.

1,269,808. METHOD OF FORMING GROOVES IN BEARING-RINGS, &c. BUDD D. GRAY and ROBERT F. RUNGE, Philadelphia, Pa., assignors to The Hess-Bright Manufacturing Company, a Corporation of Delaware. Filed Feb. 2, 1917. Serial No. 146,077. (Cl. 51—4.)

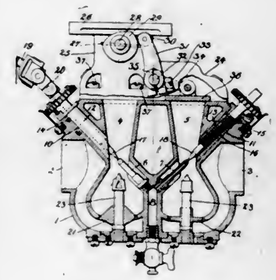


1. The method of forming grooves in metal stock, which consists in providing stock in comparatively soft condition, forming a groove therein with its sides cut away, hardening the metal, and subjecting the surface of the groove between the cut away portions to a finishing operation to produce a smooth accurate surface.

2. The method of forming grooves in bearing rings, which consists in providing a ring in comparatively soft condition, forming therein a groove of the general contour of the finished groove but with its side edges cut away, hardening the ring thus formed, and finally subjecting the intermediate surface of the groove between the cut away portions to a finishing operation to produce a smooth accurate surface.

3. The method of forming grooves in bearing rings, which consists in providing a ring in comparatively soft condition, forming therein a groove of the general contour of the finished groove, cutting away the sides of said groove and leaving the central portion thereof intact, hardening the ring thus formed, and finally subjecting said central portion to a finishing operation to produce a smooth accurate surface.

1,269,809. CARBURETER. CHARLES R. GREUTER. Saugus, Mass. Filed Aug. 25, 1915. Serial No. 47,284. (Cl. 261—41.)



1. A carbureter comprising a body having a plurality of venturis; fuel nozzles arranged to discharge into said venturis; needle-valves for controlling said nozzles; a hood applied to the carbureter body and constituting a chamber over the outlet ends of the two venturis; and a valve carried by said head and adapted to control the outlet end of one of said venturis, said hood being reversible with reference to the body so as to bring its discharge opening to one or the other side of the center, and to place its throttle valve over one or the other of the Venturi outlets at will.

2. A carbureter comprising in combination a body having two air passages; valves in said body for controlling the supply of carbureting liquid to said passages; connections for operating a definite one of said valves from a fixed control station; a supporting and connecting hood for said body having a tubular neck communicating with both said air passages, offset with reference to said hood, and adapted for attachment to an engine intake in different angular positions; means for connecting said body to said hood in two relatively reverse positions; and a valve for controlling one of said air passages and adapted to be mounted in said hood in two relatively reverse positions corresponding to the two positions of said body.

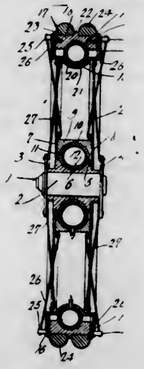
5. A carbureter comprising a body, a plurality of venturis in the body, a Venturi valve adapted to cut one of the venturis out of action, a hood, a throttle valve carried off center by the hood, means operated by the throttle valve for securing the Venturi valve in the closed position, means for securing the hood to the body with the throttle valve in a plurality of positions with reference to the body, and means for assembling the means for locking the Venturi valve in operative relation to the throttle valve mechanism in all positions of the throttle valve with reference to the body.

[Claims 3 and 4 not printed in the Gazette.]

1,269,810. VEHICLE-WHEEL. FRANK J. HAMROCK, Homestead, Pa. Filed Mar. 4, 1918. Serial No. 220,248. (Cl. 152—28.)

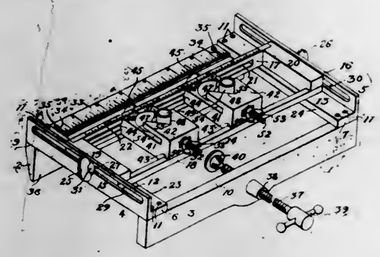
A spring wheel embodying a hub; a ring spaced from the hub; a cushion interposed between the hub and the

ring; a channel-shaped rim having openings in its side walls; a tread slidably received between the side walls of the rim and having lugs received for movement in the



openings; a cushion interposed between the tread and the rim; spokes connecting the lugs and the ring; and spokes connecting the hub with the rim.

1,269,811. DOWELING-JIG. WILLIAM H. HERITAGE, 175,723. (Cl. 77—62.)



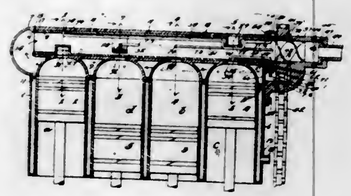
1. A doweling jig including a frame having an opening; a carriage slidably secured to said frame and adapted to be moved over said opening, said carriage and frame each having graduated portions adapted to register with each other; means for clamping material, to be drilled, to said frame so that a portion of said material is adjacent to the graduations thereon; and drill guiding members movably secured to said carriage and movable in directions transversely to the direction of movement of said carriage, said drill guiding members having portions adapted to register with the graduated portion on said carriage so that irrespective of the position of the carriage on the frame the drill guiding members can be moved directly over portions measured by the graduations on the fame, substantially as described.

3. A doweling jig including a frame having two longitudinally extending beams spaced apart and two transversely extending beams spaced apart; a carriage having its opposite ends slidably mounted on the respective transverse beams and having a graduated portion extending between said transverse beams; drill guiding portions mounted on said carriage and movable toward and from said transverse beams, said drill guiding members having portions adapted to register with the graduated portion of said carriage; a graduated plate mounted on one of said longitudinal beams and having a portion overhanging the inner surface of said latter beams to provide a stop for the uppermost surface of the material to be drilled; and means for clamping an adjacent surface of said material against the inner surface of the latter mentioned longitudinal beam, said graduated portion of the carriage and the graduations of said plate being adapted to register with each other, substantially as described.

7. A doweling jig including a frame, a carriage slidable transversely on said frame and having a graduated bar extending longitudinally of the frame and carriage, drill guiding means slidably mounted on said carriage transversely to the movement of said carriage on the frame and having portions designed to register with the graduations on the bar to indicate the distance between the drill guiding means and the distance of the drill guiding means from the transverse opposite ends of the frame, and means on said frame having graduations registering with the graduations on said bar, said latter means being located adjacent a surface of said frame against which the material to be drilled is secured, substantially as described.

[Claims 2 and 4 to 6 not printed in the Gazette.]

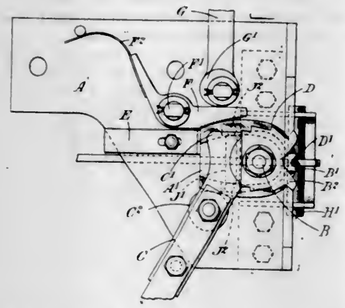
1,269,812. REVOLUBLE WATER-COOLED VALVE AND IGNITER FOR COMBUSTION-MOTORS. RAY E. HICKS, Merna, Nebr. Filed Dec. 15, 1915. Serial No. 66,953. (Cl. 123—59.)



1. In a rotary valve for a multiple cylinder internal combustion engine, a multiple of cylinders having ports at their upper ends, a transverse tubular valve casing connecting the upper ends of said cylinders and provided with lateral intake and exhaust ports for each cylinder, an elongated tubular valve mounted in said casing and provided with a plurality of pockets arranged in staggered relations and adapted to cooperate alternately with the intake ports, the ports of the cylinders and the exhaust ports, a bracket secured on the side of one of the end cylinders and provided with a tubular part having a bearing for one end of said tubular valve, a sparking mechanism on one end of the tubular valve, a sprocket keyed on said tubular valve between the tubular part of the bracket and the sparking mechanism, and means engaging the sprocket for imparting movement to the valve.

2. In a rotary valve, a multiple of cylinders arranged in parallelism, an elongated tubular valve casing sequentially and integrally connecting the upper ends of said cylinders, the upper end of each cylinder having a port of communication with said valve casing, said valve casing having diametrically oppositely disposed intake and exhaust ports for each cylinder, an elongated open ended tubular valve in said casing, a passage around the upper ends of said cylinders and having communication through said tubular valve, whereby cooling means may be passed therethrough, said tubular valve having a multiple of segmental pockets in staggered relations, to alternately register with the intake port, the ports of communication between the cylinders and the valve casing, and the exhaust ports, one end of said tubular valve having an extension, a bracket on the side of one end cylinder and provided with a tubular part axially alined with said casing, said tubular part being open ended to permit of the outflow of the cooling means and provided with a bearing at one end for the reception of the extension of the tubular valve, a sparking mechanism on said extension, a sprocket between the sparking mechanism and said tubular part of the bracket, and means engaging said sprocket for actuating said valve.

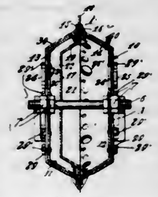
1,269,813. MANUFACTURE OF HORSESHOES. LEONARD ALBERT HINDLEY, HAROLD DOUGLAS HINDLEY, and WILLIAM STANFORD, Bourton, England; said Stanford assignor to said Leonard Albert Hindley and said Harold Douglas Hindley. Filed Apr. 27, 1917. Serial No. 164,834. (Cl. 59—61.)



1. In a process for making horseshoes, the steps consisting in, drilling round nailholes in the cold stock, heating the stock, "turning" the same whereby the round holes are made approximately oval and in the same heat drifting the holes to their final shape, substantially as set forth.

2. In a process for making horseshoes, the following steps consisting in, forming in the stock while cold nailholes the throughway of which is inclined to the face of the stock at approximately the angles required in the finished article, heating the stock, "turning" the stock, and drifting the nail-holes formed while the stock was cold to their final shape, substantially as set forth.

1,269,814. COMBINED SEEDER AND FERTILIZER-DISTRIBUTER. ERVIN H. HITCHCOCK, Wabun, New Ontario, Canada, assignor of one-half to George A. Dukelow, Wabun, New Ontario, Canada. Filed May 3, 1917. Serial No. 166,239. (Cl. 111—74.)



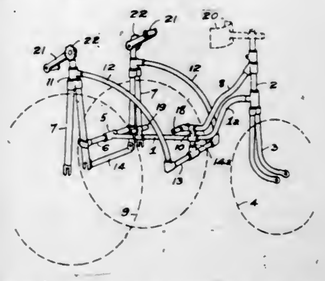
1. In a machine of the class described, a revoluble substantially cylindrical drum, a partition extending transversely of said drum and projecting beyond the periphery thereof, said drum having apertures in its side walls on opposite sides of said partition, and bands adjustably mounted on said side walls over said apertures and having openings to register with the openings in the side walls on the turning of the bands at predetermined distance, and means for holding said bands in adjusted position.

3. In a seed planter and fertilizer distributer, a revoluble drum composed of two sections, each in the form of a frustrum of a cone closed at their truncated ends and open at their other ends, the open ends of said sections being disposed toward each other and secured together, said sections having openings adjacent their adjoined edges, and bands movably mounted on the outer faces of said sections over said openings and having openings positioned to register with the section openings on the turning of said bands.

6. In a seed planter and fertilizer distributer, a revoluble drum composed of two sections, each in the form of a frustrum of a cone closed at their truncated ends and open at their other ends, the open ends of said sections being disposed toward each other and secured together, said sections having openings adjacent their adjoined edges, bands movably mounted on their outer faces of said sections over said openings and having a plurality of peripherally alined series of openings adapted to register with the section openings on the turning of said bands, means for holding said bands in adjusted position, one of said bands and one of said sections also having openings at diametrically opposite points to provide for the dropping of the contents of said sections twice during each revolution of the drum.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,269,815. TRICYCLE SPECIALLY APPLICABLE FOR INVALIDS OR THE LIKE. JAMES FRANCIS HOUGH, Southport, England. Filed Nov. 20, 1917. Serial No. 203,026. (Cl. 208—113.)



1. A hand driven tricycle comprising in combination, single vertical forks carrying the large front wheels, a separate driving handle for each front fork, a transverse rail connecting the inner members of the front forks, curved rails passing around the peripheries of the front wheels to the heads of the front wheel forks, a second rear transverse rail connecting the rear ends of the curved rails, a main backbone connected to the transverse rails and to the forks of the rear wheel, said rear forks, and a back rest carried from the rear forks by means of which the tricycle is steered.

3. A hand driven tricycle comprising in combination, single vertical forks carrying the large front wheels, a separate driving handle for each front fork, a transverse rail connecting the inner members of the front forks, curved rails passing around the peripheries of the front wheels to the heads of the front wheel forks, a second rear transverse rail connecting the rear ends of the curved rails, a main backbone connected to the transverse rails and to the forks of the rear wheel, a neck tube reinforcing the rear of the backbone and connected to the rear forks, said rear forks, and a back rest carried from the rear forks by means of which the tricycle is steered.

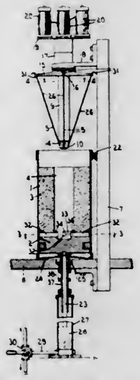
5. A hand driven tricycle comprising in combination, single vertical forks carrying the large front wheels, a separate driving handle for each front fork, a transverse rail connecting the inner members of the front forks, curved rails passing around the peripheries of the front wheels to the heads of the front wheel forks, a second rear transverse rail connecting the rear ends of the curved rails, a main backbone connected to the transverse rails and to the forks of the rear wheel, said rear forks, a back rest carried from the rear forks by means of which the tricycle is steered, and an additional steering handle pivotally carried from the rear transverse rail and linked to an arm on the rear fork.

[Claims 2 and 4 not printed in the Gazette.]

1,269,816. MACHINE FOR PACKAGING TUBULAR THREAD MASSES. CHARLES W. HUBBARD, Weston, Mass. Filed Jan. 9, 1918. Serial No. 210,981. (Cl. 28—9.)

1. In a machine for packaging yarn or thread wound in a tubular-shaped mass, the combination with a tubular

string inserter provided at one end with string-guiding eyes and at the other end with string-anchoring means to hold the ends of tying strings which extend through said eyes, of means to force a tubular thread mass over said inserter whereby the portion of each string between the anchoring means and said eyes is carried through the opening in the thread mass.

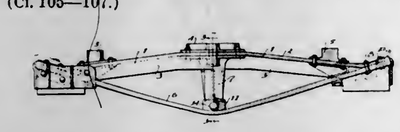


3. In a machine for packaging yarn or thread wound in a tubular-shaped mass, the combination with a yarn receiver in which said yarn or thread mass is wound, of a yarn support slidable longitudinally of the yarn receiver and provided with radial passages which open through the face thereof on which the yarn is supported, a tubular string inserter through which the tying strings extend and which have string-guiding passages at one end and string-anchoring means at the other end, and means to force the yarn package from the yarn receiver and over the string inserter, the radial passages in the yarn support providing means for drawing the strings from the string-guiding passages around under the yarn package.

5. In a machine for packaging yarn or thread in a tubular-shaped mass within an open-ended yarn receiver and on a yarn support which is slidable longitudinally in the yarn receiver, the combination with means to support said yarn receiver, of a plate having string-anchoring notches, a tubular string inserter extending axially from said plate and through which the tying strings extend, said strings extending from the end of the string inserter to said anchoring notches, means to force the yarn support longitudinally of the yarn receiver thereby to eject the yarn mass from said yarn receiver, and to force the tubular yarn mass over the string inserter whereby the strings are introduced through the yarn mass.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,269,817. TRUCK-BOLSTER. CHARLES F. HUNTOON, Chicago, Ill. Filed Sept. 8, 1917. Serial No. 190,365. (Cl. 105—107.)



1. A bolster for railway cars, comprising compression and tension members secured together at their ends, a truss block between said members, said truss block being formed to be removable from between the compression and tension members without disturbing the end connections between said members, and a wedge block inserted between one end of the truss block and the tension member.

4. A bolster for railway cars, comprising tension and compression members secured together at their ends, a truss block centrally located between said tension and compression members, one end of said truss block being inclined inwardly from its sides and a pair of wedge blocks being located between the inclined surfaces of said truss block and one of said members.

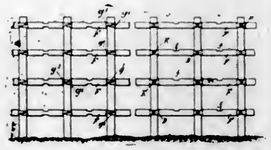
[Claims 2 and 3 not printed in the Gazette.]

1,269,818. CONCRETE-ROOFING-TILE MACHINE OR MOLD. EMIL R. JAHNA, Macon, Ga., assignor to Joseph H. Woolling, Indianapolis, Ind. Filed Mar. 10, 1917. Serial No. 153,900. (Cl. 25—42.)



A concrete tile making machine, a pallet therefor having a groove formed longitudinally in the upper side and terminating centrally of the pallet in a hole, said groove and hole being adapted to hold a tie-wire against movement during the process of tamping and forming the tile, said tie-wire terminating in an open eye-end to be embedded in the tile during the formation.

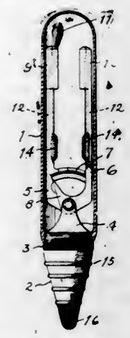
1,269,819. FENCING. WALTER CLAUDE JOHNSON, Colemans Hatch, England. Filed Apr. 13, 1917. Serial No. 161,736. (Cl. 256—34.)



1. A fence comprising spaced vertical staves, flat strips spanning the staves and elongated fastening elements embracing the staves and having medial extensions embracing the strips.

[Claim 2 not printed in the Gazette.]

1,269,820. ESTHESIOMETER. TOKUMITSU KARATSU, Los Angeles, Cal. Filed Aug. 20, 1917. Serial No. 187,072. (Cl. 128—28.)

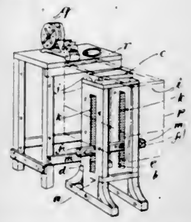


1. In an esthesiometer, a pair of pivotally connected sensibility detectors, a handle therefor, and a casing for the detectors having screw connection with the handle.

2. In an esthesiometer, blunt-headed surface sensibility detectors, needle points slidably mounted in the detectors, means for manually projecting the needle points from the detectors, and a pivotal joint connecting the detectors to adapt them for linear measurement.

[Claim 3 not printed in the Gazette.]

1,269,821. WORK-HOLDER FOR THE SEALING OF CARTONS. FRANK J. KAUFMAN, Columbus, Ohio, assignor to National Binding Machine Company, a Corporation of New York. Filed June 10, 1914. Serial No. 844,141. (Cl. 93—56.)



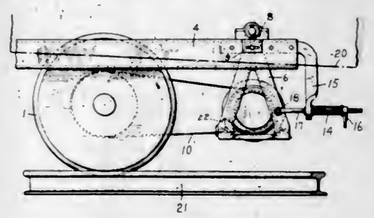
1. The combination to form a complete sealing and work-holding device for fiber cartons, of a bench for supporting the sealing materials, a stand for holding substantially on a level therewith and adjacent thereto, the fiber cartons to be sealed, said stand having a flanged cleat and a set of interchangeable heads adapted to fit on the top of the stand for the purpose of supporting and presenting to the bench cartons of different sizes for sealing, each of said heads being provided with a pair of flanged cleats adapted to engage the flanged cleat mounted on the stand, a blank positioning bar slidably mounted in said stand and underlying said flanged cleat, and a yielding bar locking member adapted to hold said bar in any desired operative position.

2. The combination to form a complete sealing and work-holding device for fiber cartons, of a bench for supporting the sealing materials, a stand for holding substantially on a level therewith and adjacent thereto, the fiber cartons to be sealed, said stand having a flanged cleat, a set of interchangeable heads adapted to fit on the top of the stand for the purpose of supporting and presenting to the bench cartons of different sizes for sealing, each of said heads being provided with a pair of flanged cleats adapted to engage the flanged cleat mounted on the stand, means provided on said stand to position the carton blanks in a predetermined relation for making up the bottom of the carton, said means being adjustable to adapt it for cartons of different sizes, and yielding means for securing said blank positioning means in any desired operative position.

3. The combination of a stand for holding cartons, said stand having a flanged cleat, and a set of interchangeable heads adapted to fit on the top of the stand for the purpose of supporting cartons of different sizes, each of said heads being provided with a pair of flanged cleats adapted to engage the flanged cleat mounted on the stand, a blank positioning bar slidably mounted on said stand and underlying said flanged cleat, and a yielding bar locking member adapted to hold said bar in any desired operative position.

4. The combination of a stand for holding cartons, said stand having a flanged cleat, a set of interchangeable heads adapted to fit on the top of the stand for the purpose of supporting cartons of different sizes, each of said heads being provided with a pair of flanged cleats adapted to engage the flanged cleat mounted on the stand, means provided on said stand to position the carton blanks in a predetermined relation for making up the bottom of the carton, said means being adjustable to adapt it for cartons of different sizes, and yielding means for securing said blank positioning means in any desired operative position.

1,269,822. DYNAMO SUSPENSION ON CAR-TRUCKS. PATRICK KENNEDY, Brooklyn, N. Y., assignor to Consolidated Railway Electric Lighting and Equipment Co., New York, N. Y., a Corporation of Maine. Filed Nov. 19, 1913. Serial No. 801,770. (Cl. 105—238.)



1. The combination with a dynamo and a car truck having extended side sills, of a swinging dynamo suspension carried by the extended side sills, said suspension being rigidly fastened to the dynamo and being journaled for swinging movement about an axis above the top line of the dynamo; substantially as described.

2. The combination with a dynamo and a car truck having extended side-sills, of a dynamo suspension comprising two end-frames each pivotally supported in a single bearing carried by the extended side-sill at that side of the truck and above the top line of the dynamo, and transverse members fastened to the end-frames and adapted to support the dynamo in position to be driven from the axle of the truck; substantially as described.

3. The combination with a dynamo and a car truck having extended side-sills, of a dynamo suspension comprising two end-frames each pivotally supported in a single bearing carried by the side-sill at the side of the truck and above the top line of the dynamo, and transverse members rigidly fastened to the end frames and to the dynamo to support the dynamo in position to be driven from the axle of the truck; substantially as described.

4. Means for suspending a dynamo from a car truck, comprising extended side sills, a suspension bearing block supported upon each extended side sill above the top line of the dynamo, a bearing pin in each block, transverse suspension members rigidly secured to the dynamo and end frames rigid with the transverse members and hung from the side pins, whereby the transverse members, the end frames and the dynamo move as a unit.

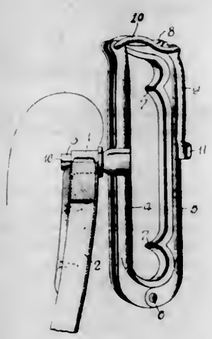
5. The combination with a dynamo, and a car truck having extended side-sills; of a dynamo suspension comprising two end-frames each pivotally supported in a single bearing carried by the side-sill at that side of the truck and above the top line of the dynamo, transverse members rigidly fastened to the end-frames and to the dynamo to support the dynamo in position to be driven from the axle of the truck; and automatic tensioning means for swinging the dynamo suspension and the dynamo as a unit in the bearings to automatically regulate the belt tension; substantially as described.

[Claims 6 to 11 not printed in the Gazette.]

1,269,823. VEHICLE-TOP BOW-HOLDER. FREDERICK KIEHLER, Detroit, Mich., assignor to Auto Specialties Manufacturing Company, St. Joseph, Mich., a Corporation of California. Filed Jan. 22, 1916. Serial No. 73,517. (Cl. 21—61.)

1. In a vehicle-top bow-holder, the combination of a socket member adapted to be secured to a vehicle body, means for embracing and holding the bows, a member forming the support for said means integral therewith and rotatively and slidingly adjustable longitudinally in said socket member, and means wholly concealed within said supporting member and exerting a force radial of the axis of rotation thereof to hold the same in adjusted position in said socket member.

2. In a vehicle-top bow-holder, the combination of a member adapted to be secured to a vehicle body and having a horizontally disposed socket, a loop member to embrace the bows comprising bars pivoted together at one end, a lever pivotally attached to the upper end of one bar to engage and lock the other and formed to conform to the outer side of said bar and provided with ears at its lower end projecting laterally from each side thereof, a



hollow stem formed integral with one of the bars and projecting laterally therefrom with its bore opening therethrough, said stem having a smooth outer surface and split longitudinally at its free end, and an expanding member wholly concealed within the bore of the stem and operable through the end of the bore which opens through the bar, to expand the stem within the socket member.

1,269,824. HORSESHOE-CALK. IGNACY KONCZEWSKI, Cleveland, Ohio. Filed Oct. 12, 1917. Serial No. 196,193. (Cl. 168—29.)

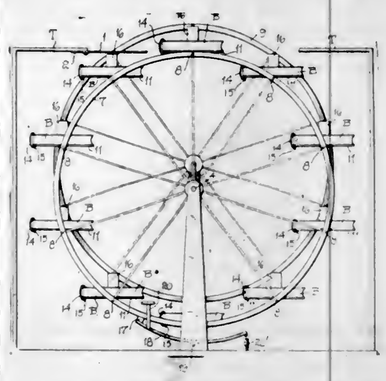


A horseshoe calk comprising a hollow hard metal member of substantially H-shape in cross-section and having a plurality of perforations through the sides thereof, said hollow member being closed at one end and open at the other end, means upon the closed end for attaching the member to a horseshoe, and a soft metal body molded within said hollow member filling said perforations and having an exposed surface at the open end of the hollow member.

1,269,825. BOOKCASE. JOHN J. LANODON, Pueblo, Colo. Filed June 27, 1917. Serial No. 177,388. (Cl. 45—79.)

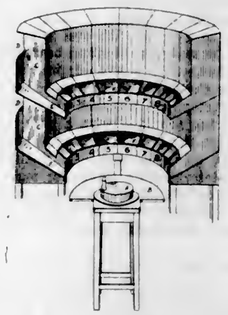
1. A device of the character described comprising a rotary member, a shaft loosely supported by said member, a shelf engaged with the shaft, a second rotary member positioned eccentrically with relation to the first named rotary member, said shaft being provided with a crank operatively engaged with the second rotary member whereby the shelf is maintained substantially horizontal upon rotation of the members, and an upwardly swinging leaf interposed in the line of travel of the shelf, said shelf being substantially flush with the leaf when the shelf is at the limit of its upward movement.

2. A device of the character described comprising a rotary member, a shaft loosely supported by said member, a shelf engaged with the shaft, a second rotary member positioned eccentrically with relation to the first named rotary member, said shaft being provided with a crank operatively engaged with the second rotary member whereby the shelf is maintained substantially horizontal upon rotation of the members, an upwardly swinging leaf interposed in the line of travel of the shelf, said



shelf being substantially flush with the leaf when the shelf is at the limit of its upward movement, and means co-acting with the leaf for preventing the same dropping below substantially the horizontal.

1,269,826. BOOT-HEEL-LIFT MAGAZINE. RONALD ALFRED LEE, Woollahra, near Sydney, New South Wales, Australia. Filed Apr. 16, 1917. Serial No. 162,490. (Cl. 211—7.)

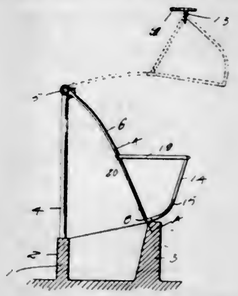


A self-feeding boot heel lift magazine comprising a plurality of single stock hoppers assembled in groups and having each a feeding opening in its rear wall while terminating at the forward end in a stock delivery food box open at the top, each hopper also having a door steeply sloping toward said open foot box permitting the stock to pass by gravity into said foot box within easy reach of the operator.

1,269,827. FEEDING-RACK. FREDRICK T. LEWIS and ELMER EMANUEL SAMUELSON, Chippewa Falls, Wis. Filed June 20, 1917. Serial No. 175,869. (Cl. 119—58.)

In combination, a base, a trough secured to the upper side of the base, an inverted U-shaped frame secured to the trough by the ends of its arms adjacent the rear portion of the trough, and a rack journaled to the web of the

frame and adapted to rest upon the upper edge of the trough when in operative position, and means for holding



the rack in raised position, as and for the purpose specified.

1,269,828. ICE-CARD HOLDER. THEODORE E. LOCKARD, Marshalltown, Iowa. Filed Aug. 10, 1917. Serial No. 185,480. (Cl. 40—156.)



An ice-card holder, comprising a shallow housing formed with a relatively large opening, said housing being formed with front and rear rabbets, a transparent plate filling said opening and mounted in the rear rabbet, a back plate removably mounted in said rear rabbet and covering said transparent plate, and a door hinged to the front of said housing and adapted to rest in the front rabbet at times and cover and conceal and be spaced from said transparent plate.

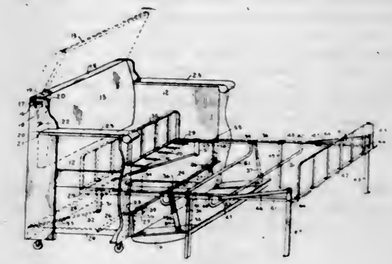
1,269,829. KNEE PAD AND PROTECTOR. JOSEPH A. LUMLEY, Chicago, Ill. Filed Mar. 9, 1917. Serial No. 153,594. (Cl. 2—130.)



1. A knee protector comprising a casing formed of flexible material and having one side open, a pair of spaced plates mounted within the casing, resilient means interposed between the plates, one of the plates being located at the open side of the casing and having a concaved side, and a knee-engaging pad positioned within the concavity in the mentioned side of the last-mentioned plate.

2. A protector of the class described comprising a casing formed of flexible material and having one side open, a pair of spaced plates mounted within the casing, one of the plates being located at the open side thereof and being of concavo-convex shape in cross section and having the concave surface thereof disposed outermost, a pad positioned within the concaved surface of the last-mentioned plate, and resilient means interposed between the plates.

1,269,830. DAVENPORT SOFA-BED. JOSEPH LUPPINO, Brooklyn, N. Y. Filed Sept. 15, 1915. Serial No. 50,807. (Cl. 5—49.)



1. In a davenport sofa bed, the combination with a stationary frame; of a movable sectional frame adapted to be folded up inside said stationary frame by folding over the sections of said movable frame successively all in the same direction, the folded movable frame being then rotated inside said stationary frame through an angle of approximately ninety degrees, one of said sections being provided wth a bracket adapted, when sad movable frame is so folded and rotated, to extend horizontally from said section and to support another of said sections.

2. In a davenport sofa bed, the combination with a stationary frame; of a movable sectional frame adapted to be folded up inside said stationary frame by folding over the sections of said movable frame successively all in the same direction, the folded movable frame being then rotated inside said stationary frame through an angle of approximately ninety degrees, one of said sections being provided with a rigidly attached bracket adapted, when said movable frame is so folded up and rotated, to extend horizontally from said section and to support another of said sections.

3. In a davenport sofa bed, the combination with a stationary frame provided with a pair of uprights; of a movable sectional frame adapted to be folded up inside said stationary frame by folding over the sections of said movable frame successively all in the same direction, the folding movable frame being then rotated inside said stationary frame through an angle of approximately ninety degrees, said movable frame comprising a bed member pivotally secured to said uprights, said bed member bearing a bracket adapted, when said movable frame is so folded up and rotated, to extend horizontally from said section and to support another bed member, a second bed-member pivotally secured to said uprights and bearing a support, a third bed member pivotally secured to said second bed member, and a fourth bed member pivotally secured to said third bed member and bearing a support.

5. In a davenport sofa bed, the combination with a stationary frame provided with a pair of uprights; of a movable frame comprising a bed-member pivotally secured to said uprights and bearing a head board, a second bed-member pivotally secured to said uprights and bearing a support, a slotted link suspended from said second bed-member, a seat member swingingly secured to said stationary frame and pivotally secured to said link, a third bed-member pivotally secured to said second bed-member, and a fourth bed-member pivotally secured to said third bed-member and bearing a foot board and a support; said

movable frame being adapted to be folded up inside said stationary frame by folding over the sections of said movable frame successively all in the same direction, the folding movable frame being then rotated inside said stationary frame through an angle of approximately ninety degrees.

7. In a davenport sofa bed, the combination with a stationary frame provided with a pair of uprights, of a movable frame comprising a bed-member pivotally secured to said uprights, a second bed-member pivotally secured to said uprights and bearing a support, a third bed-member pivotally secured to said second bed-member, a fourth bed-member pivotally secured to said third bed-member and bearing a support; said movable frame being adapted to be folded up inside said stationary frame by folding over the sections of said movable frame successively all in the same direction, the folding movable frame being then rotated inside said stationary frame through an angle of approximately ninety degrees; and a seat member swingingly secured to said stationary frame and connected with said movable frame by means of a slotted link.

[Claims 4 and 6 not printed in the Gazette.]

1,269,831. RAZOR-SHARPENING MACHINE. ROBERT COLFAX MCCALEB, Chicago, Ill. Filed Dec. 26, 1916. Serial No. 138,889. (Cl. 51—16.)



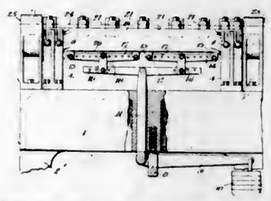
1. In a device of the class described, a supporting structure; a pair of tapered rollers journaled on the supporting structure to rotate in contact, and provided with intermeshing spiral abrading elements; and a blade holder mounted between the rollers to swing in a direction transverse to the axes of the rollers, the blade holder being disposed in the plane of the line of contact between the tapered rollers.

2. In a device of the class described, a base; standards mounted on the base; arms mounted to swing on the standards; a blade holder connected with the upper ends of the arms and operating between the rollers; interengaged friction members on the rollers; a supplemental bearing upstanding from the base; a friction wheel journaled on the bearing and engaging the friction member of one of the rollers; a projection on the wheel, the lower end of one of the arms being provided with a slot wherein the projection is slidably received; and means for rotating one of the rollers.

1,269,832. METHOD AND APPARATUS FOR ACCURATELY ALINING BEARINGS. ALBERT A. MARTELL, Woonsocket, R. I., assignor to The Taft-Peirce Manufacturing Company, Woonsocket, R. I., a Corporation of Rhode Island. Filed July 17, 1917. Serial No. 181,160. (Cl. 77—55.)

1. The method of manufacturing an engine bed and the like which comprises supporting the bed in a manner analogous to normal conditions when the bed is assembled; distributing an artificial load over the bed in such manner that the artificial load produces stresses in the bed analogous to the normal load adapted to be carried by the bed; then forming working surfaces on the engine bed while under the artificial load.

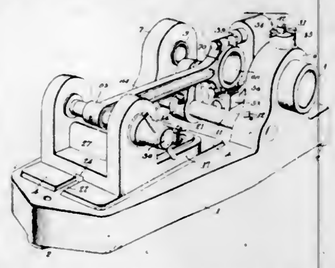
8. A device of the character described comprising in combination, a rigid bed member, supports carried by said bed member and adapted to comprise the mounts for the machine element being operated upon, means to distribute forces over a machine element mounted on said supports in such manner that said forces are analogous to the normal working load of said machine element, and devices



for forming work surfaces on said machine element while said element is sustaining the forces from said means.

[Claims 2 to 7 and 9 to 15 not printed in the Gazette.]

1,269,833. CONNECTING-ROD REAMER AND THE LIKE. ALBERT A. MARTELL, Woonsocket, R. I., assignor to The Taft-Peirce Manufacturing Company, Woonsocket, R. I., a Corporation of Rhode Island. Filed Oct. 5, 1917. Serial No. 194,853. (Cl. 77—62.)



1. The method of reaming connecting rod bearings and the like, comprising supporting the connecting rod by one bearing; compressing the connecting rod in the direction of its length; and then reaming the other bearing while the connecting rod is under compression.

5. The method of reaming connecting rod bearings and the like, comprising finishing the bearing on one end of the crank shaft; supporting the end of the crank shaft by a member fitting the finished bearing; then applying balanced forces against the other end of the connecting rod whereby said connecting rod is compressed under equal forces on opposite sides of the neutral axis; then reaming the other bearing while the connecting rod is under compression forces.

12. The method of reaming connecting rod bearings and the like, comprising finishing the bearings on one end of the crank shaft; supporting the end of the crank shaft by a member fitting the finished bearings; supporting the other end of the connecting rod upon a compensating cradle; then applying balanced forces against the other end of the connecting rod whereby said connecting rod is compressed under equal forces on opposite sides of the neutral axis; then reaming the other bearing while the connecting rod is under compression forces.

15. A device for accurately reaming connecting rod bearings and the like, comprising in combination, a base frame, means to support one end of the connecting rod to be reamed, means to support the other end of said connecting rod, devices to artificially load said connecting rod with compression forces in the direction of its length, and means to ream the crank shaft bearing of said connecting rod to a predetermined axis while under said compression forces.

32. A device of the character described, comprising a supporting pin adapted to fit the bearing in one end of a connecting rod and the like, reamer guides having an axis parallel with the axis of said pin, means to position a connecting rod in such manner that the crank shaft bearing is definitely positioned relatively to said predetermined axis, means to stress said connecting rod, and a reamer shaft coöperative with said reamer guides whereby the operation of said reamer shaft finishes the crank shaft bearing concentric with said predetermined axis.

[Claims 2 to 4, 6 to 11, 13, 14, 16 to 31, and 33 to 35 not printed in the Gazette.]

1,269,834. ROLLER-BEARING. ONESIME E. MICHAUD, St. Louis, Mo., assignor of one-half to Fritz A. Muller, McGehee, Ark. Filed Oct. 26, 1916. Serial No. 127,796. (Cl. 64—62.)



1. A roller bearing comprising an inner bearing ring, grooved rollers arranged around said ring with their grooves in circumferential alinement, a retaining ring lying in said grooves and surrounding said rollers, and a cage having separators between said rollers, said retaining ring surrounding said separators for holding said cage concentric with said inner bearing ring.

3. A roller bearing comprising an inner bearing ring, grooved rollers arranged around said ring with their grooves in circumferential alinement, a retaining ring lying in said grooves and surrounding said rollers, and a cage having separators between said rollers, with outwardly projecting portions between said grooves, said retaining ring embracing the outwardly projecting portions of said separators for holding said cage concentric with said inner bearing ring.

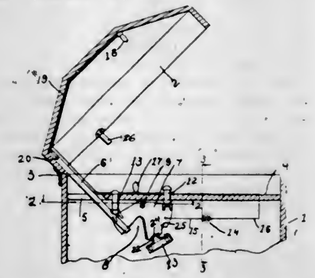
5. A retaining ring for bearings comprising grooved rollers, said retaining ring being adapted to lie in the grooves of the rollers, and having tenons projecting transversely at its ends, and a clip for securing the ends of said ring together, said clip consisting of a strip of sheet metal having a hole through it adapted to embrace said tenons, the ends of said strip being adapted to be bent around said retaining ring to hold it in securing position.

9. A retaining ring for bearings comprising grooved rollers, and a spacing cage, said retaining ring being adapted to lie in the grooves of the rollers, and having spaced marginal portions adapted to position said ring concentrically within it.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,269,835. [WITHDRAWN.]

1,269,836. PHONOGRAPH-LIGHT. OSCAR W. MOEHN, Burlington, Iowa. Filed Oct. 10, 1917. Serial No. 195,803. (Cl. 240—2.)



1. A phonograph lighting device comprising, the combination with a phonograph having a movable cover, a switch arm carried by the cover and movable therewith, a switch plate pivotally mounted and adapted to be engaged by the said switch arm, a source of current, conductors connecting the said source of current, switch arm and switch plate, the said switch plate being disposed to contact with the said arm when the cover is raised, and means to permit the plate to be moved out of engagement with the said arm when the said cover is raised.

3. The combination with a phonograph casing and a cover hingedly mounted thereon, a switch plate hingedly mounted on the casing, a switch arm carried by the cover and movable therewith to engage the said switch plate, a pair of buttons engageable with the said switch plate for engaging it and disengaging it with the said switch arm when the cover is opened, and means for maintaining the said switch plate in set position after being operated by one of the said buttons.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,269,837. HAIR-DRYING APPARATUS. MANSFIELD M. MOFFITT, San Antonio, Tex. Filed Sept. 22, 1917. Serial No. 192,673. (Cl. 34—26.)



4. In a hair drying device, a frame comprising a circular frame member adapted to be arranged about the head near the forehead thereof, a second frame member having its ends provided with eyes slidably engaging the first frame member near the forward portion thereof, both of said frame members being constructed of spring wire bent to form upstanding looped projections adapted to pass between and separate the hair, a connector connecting two of the looped projections at the rear to hold the frame members separated whereby the hair may pass between the frame members, the second frame member consisting of two sections having a slip joint, shoulder plates having a connecting rod, and disconnecting supports between the connecting rod and the shoulder strap or plates, and said frame, whereby the frame may be collapsed.

[Claims 1 to 3 not printed in the Gazette.]

1,269,838. DIRECTION-INDICATING SIGNAL FOR AUTOMOBILES. FLOYD N. MOORE, Peoria, Ill. Filed Apr. 14, 1917. Serial No. 162,013. (Cl. 177—327.)



1. In a signal, a casing having an opening in one side, a clear glass pane covering the opening, a colored ground glass pane arranged in the casing in spaced relation to the clear glass and defining between them a signal compartment, electric lamps arranged behind the colored glass, a plate in the shape of an arrow body arranged in the signal compartment in position to be visible through the clear glass in the day time, and to be visible in relief against the ground glass at night when the lamps are lighted, triangular plates rotatably mounted at the ends of the arrow plate, means for shifting the triangular plates in synchronism, at will, relatively to the arrow plate for producing the representation of an arrow pointing in one direction or the other, and means operating in unison with the triangular plates for controlling the circuit in which the lamps are included, whereby when the circuit is energized the lamps will be lighted upon movement of the triangular plates into arrow representing position.

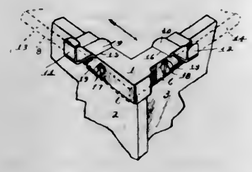
2. In a signal, a casing having an opening therein, a base plate arranged in the casing having upturned ends, an arrow plate in the shape of an arrow body arranged in the casing and visible through the opening and having an upright portion secured to the base plate whereby to support the arrow plate, triangular plates rotatably mounted on the arrow plate adjacent the ends of the latter, a shaft rotatably mounted relatively to the arrow plate, an armature fixed on the shaft, a lever fixed for movement with the shaft and projecting at one end between the triangular plates, a reach rod connecting the lever with the triangular plates for effecting a movement of the triangular plates in unison when the lever is moved, springs arranged on opposite sides of the lever and connected at their outer ends to the upturned portions of the base plate, and at their inner ends to the lever whereby to hold the latter normally in neutral position, electro-magnets mounted on the upturned end portions of the base plate on opposite sides of the armature, and means for energizing the magnets at will.

3. A signal including a base plate, an arrow plate mounted on the base plate, said arrow plate being in the form of the body of an arrow, triangular plates rotatably mounted adjacent the ends of the arrow plate, a lever pivotally mounted relatively to the arrow plate and projecting at one end between the triangular plates, a rod connecting the lever with the triangular plates for effecting a unity of movement between them when the lever is moved, means for normally retaining the lever in neutral position, an armature connected with the lever for moving the latter when the armature is shifted in one direction or another, and electro-magnets mounted on the base plate on opposite sides of the armature for effecting movement of the latter when either of the electro-magnets is energized.

4. A signal including an arrow plate having triangular plates rotatably mounted against its ends, a ground glass plate arranged behind the arrow plate, lamps arranged behind the ground glass plate for throwing the arrow plate into relief against the ground glass plate at night when the lamps are illuminated, means for operating the triangular plates at will for moving them into position representing an arrow pointing in one direction or another, said means including a lever, and means coöperating with the lever in controlling the circuit in which the lamps are included, whereby when the circuit is energized the lamps will be lighted upon movement of the lever for shifting the triangular plates into arrow representing position.

[Claims 5 to 7 not printed in the Gazette.]

1,269,839. CONNECTING-PIECE FOR THE WALLS OF SHOW-CASES AND THE LIKE. EDMUND MORRIS, Grand Rapids, Mich., assignor to Wilmarth Show Case Company, Grand Rapids, Mich., a Corporation of Michigan. Filed Sept. 4, 1917. Serial No. 189,490. (Cl. 211—25.)

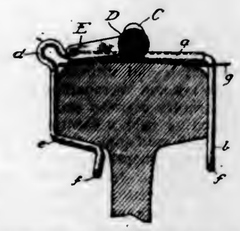


1. In a connecting piece for three walls, of the character described; a body portion having two angularly disposed pairs of parallel flanges, each pair being adapted to receive and hold an edge of one of said walls, the body portion having also slide bearings split longitudinally, whereby said bearings are adapted to be clampingly sprung on the slide members hereinafter named; slide members in said bearings adapted to adjustably hold angularly disposed edges respectively of the third wall; and means for springing said bearings clampingly on said members to secure them in their adjusted positions.

2. In a connecting piece for walls, of the character described; a body portion having means for holding one said wall, and having also a springingly compressible slide bearing; a slide member in said bearing and adapted to adjustably hold an edge of another wall; and means for springingly compressing said bearing clampingly on said member to secure it in its adjusted position.

3. In a connecting piece for walls, of the character described; a body portion having means for holding one said wall, and having also a slide bearing split longitudinally whereby it is adapted to be clampingly compressed on the slide member hereinafter named; a slide member in said bearing adapted to adjustably hold an edge of another wall; and screw clamping means adapted to compress said bearing to secure said member in its adjusted position.

1,269,840. RAIL-CLIP FOR MEASURING-TAPES. FREDERIC T. MORSE, Marceline, Mo. Filed Dec. 6, 1916. Serial No. 135,438. (Cl. 24—81.)



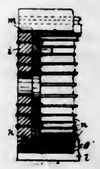
1. The combination with a tape measure, of a clip comprising a device to which a measuring-tape can be removably fastened, and means for securing the same to the ball of a track-rail.

4. A measuring-tape clip comprising transverse bearers which at one end are provided with integral loops or eyes, and a device supported by said bearers by means of which a tape measure can be removably secured thereto.

8. A measuring-tape clip comprising a plate, an eccentrically journaled boss mounted thereon between which and said plate a measuring-tape can be removably secured, and means for clamping said plate to a suitable support which are provided with eyes at one end.

[Claims 2, 3, and 5 to 7 not printed in the Gazette.]

1,269,841. BEATING-ENGINE. JAMES A. MUIR, Morristown, N. J. Filed Nov. 3, 1917. Serial No. 200,060. (Cl. 92—22.)



1. A beater roll including a plurality of spaced heads having dove-tailed transverse grooves in their peripheries, beater blades having dove-tail base portions fitting said grooves, wedges driven in between the bottoms of said grooves and the bases of said blades, fillets jammed in between the blades, and means to secure the fillets in their jammed-in relation to the blades.

[Claim 2 not printed in the Gazette.]

1,269,842. RESILIENT TIRE FOR AUTOMOBILE-WHEELS. WILLIAM A. NEAL, Lewisburg, W. Va. Filed Oct. 12, 1917. Serial No. 196,156. (Cl. 152—32.)

1. In a resilient tire, an outer casing, a wooden tube arranged adjacent the inner surface of said casing, said wooden tube comprising inner and outer sections semi-circular in cross section and having its opposite sides provided with sliding overlapped joints, a circular band between the adjacent faces of the inner parts of the outer casing, and resilient means between said band and the wooden tube.



4. In a resilient tire, an outer casing, a wooden tube, arranged therein adjacent its inner face, said wooden tube consisting of a pair of sections semi-circular in cross section, said sections of the wooden tube having slidable overlapped joints, two pairs of annular rings angular in cross section, each pair consisting of inner and outer rings, one carried by the inner face of each side of each section of the wooden tube, resilient rubber rings adjacent said overlapped joint and being held in place by the pairs of angular rings, means carried by one of said angular rings of each pair to engage its adjacent rubber ring, and a circular band between the adjacent faces of the inner parts of the outer casing, and springs between the band and said wooden tube.

[Claim 2 and 3 not printed in the Gazette.]

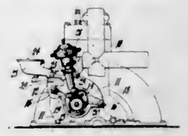
1,269,843. METHOD OF CANNING CORN. HARRY A. NELSON, Charlottesville, Va. Filed Aug. 9, 1917. Serial No. 185,309. (Cl. 99—8.)

1. An improvement in the method of canning corn comprising cooking the same from the center of the cob with the same rapidity with which it is cooked from the exterior thereof.

5. The method of canning corn on the cob comprising providing the cob with a central longitudinal bore, and then cooking the same within a hermetically sealed receptacle.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,269,844. AUTOMOBILE ATTACHMENT. CASIN W. OBERT, Brooklyn, N. Y. Filed May 1, 1915. Serial No. 25,330. (Cl. 123—166.)

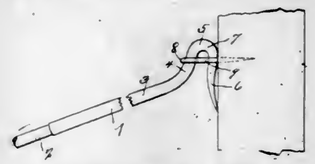


1. In a device of the character described the combination of a motor casing, a gear casing supported in the motor casing and having an upwardly extending duplex bracket forked in opposite directions, an elevated timer supported at its lower part by said gear casing and in its upper part by one branch of said fork, and an elevated offset oil filler connected with the other branch of said fork.

2. A device of the character described comprising a gear casing having an upward extension provided with a lateral projection constituting an elevated timer support and a lateral projection constituting a supplemental oil filler support, and a supplemental oil filler adapted to turn in said oil filler support.

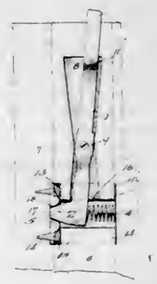
3. A device of the character described comprising a gear casing having an upward extension provided with a lateral projection constituting an elevated timer support and a lateral projection constituting a supplemental oil filler support, and an offset supplemental oil filler having a curved neck adapted to turn in said oil filler support.

1,269,845. STAPLE EXTRACTOR OR PULLER. ARTHUR OLINE, Minden, Nebr. Filed Dec. 15, 1916. Serial No. 137,149. (Cl. 254—28.)



In a staple extractor, a tool shank, substantially one half its length being rectangular in cross section, one end of said rectangular portion terminating in a loop, the side of the loop adjacent the shank being substantially at an obtuse angle to the tool shank, the other side of the loop tapering into a curved prong curved outwardly and in a direction from the side which is at an obtuse angle to the tool shank and adapted to engage under the crotch of the staple to give it an initial pull, the outer opposite faces of the sides of the loop being substantially in parallelism and constituting bearings, one to engage the crotch of a staple, the other engaging the face of a member into which the staple is driven, whereby a final pull may be exerted on the staple by means of said loop, the terminal of the prong constitutes means on which the extractor may be fulcrumed when exerting such a final pull.

1,269,846. AUTOMOBILE-DOOR LATCH. OSCAR E. OLSON, Flint, Mich. Filed Jan. 15, 1918. Serial No. 211,962. (Cl. 70—49.)

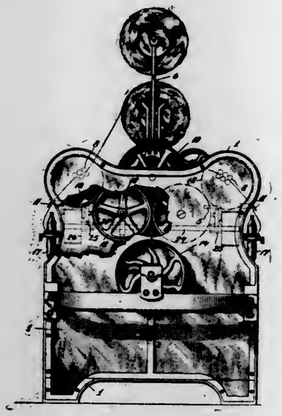


In a latch of the character described, the combination with a door having a recess, of a lever pivoted in said recess, a tubular casing arranged transversely of the door and having a slot through which said lever extends, a latch carried by the lever and adapted to be reciprocated thereby in the casing, one end of casing being open and the other end being closed, and resilient means interposed between the closed end of the casing and the latch-carrying end of the lever for yieldingly holding said latch so as to protrude from the open end of the casing.

1,269,847. SCAVENGER FOR SPINNING-MACHINES. OSCAR L. OWEN, Whitinsville, Mass., assignor to The Whitin Machine Works, Whitinsville, Mass., a Corporation of Massachusetts. Filed Aug. 31, 1911. Serial No. 646,981. (Cl. 118—19.)

1. In a spinning machine, the combination of end frame uprights connected by a roller-beam bearing delivery rolls, a row of thread-guides supported in advance of the roller-beam and separated therefrom by a space extending the length of the machine and defined by lateral walls, a pulley within said space near one end, a second pulley supported in projecting relation at the far end of the space, and a scavenger belt on said pulleys having a horizontal upper stretch running between said walls and adapted to

receive broken rovings from the delivery rolls directly by gravity and to deliver the same by gravity at its projecting end into a suitable receptacle placed outside of the machine.



3. In a spinning machine, a roller-beam bearing delivery rolls, and a row of thread-guides spaced in front of the roller-beam, in combination with a scavenger belt in said space having a horizontal upper stretch adjacent the roller beam, and gearing for driving said belt disposed behind and below the level of the roller beam.

18. In a spinning machine, the combination of roll-stands, delivery rolls carried thereby and supported above and in front of the bases of said stands, a row of thread guides spaced in front of said rolls and a flat smooth-surfaced conveyer belt having an upper stretch disposed substantially in a horizontal plane and extending substantially horizontally lengthwise of the machine in the rear of said thread guides and directly beneath said delivery rolls to receive broken rovings directly by gravity from said rolls and means for driving said belt at a speed not exceeding the speed of delivery of material from said rolls.

[Claims 2, 4 to 17, and 19 not printed in the Gazette.]

1,269,848. PROCESS OF MAKING RUBBER BALLS. RUSSELL PARKER, Brooklyn, N. Y., assignor to Parker, Stearns & Co., Brooklyn, N. Y., a Corporation of New York. Filed June 17, 1915. Serial No. 34,605. (Cl. 18—56.)

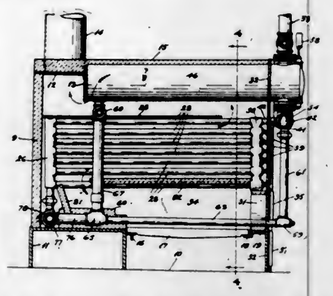
1. A process for making hollow rubber balls which consists in forcing a portion of the ball outwardly beyond its normal periphery by internal pressure to form a channeled radially extending projection thereon and then removing the projection to expose the channel whereby a radially extending open passage is formed in said ball.

3. A process for making hollow rubber balls which consists in forcing a portion of the ball outwardly beyond its normal periphery by internal pressure during vulcanization thereof whereby a radially extending exterior projection having an internal channel therein is formed, said channel being closed at its outer end, removing said projection to expose the end of said channel whereby a radially extending open passage is formed in said ball and coincidentally imparting a finish to said ball.

[Claim 2 not printed in the Gazette.]

1,269,849. WATER-TUBE BOILER. CHARLES H. PARMELEE, Seattle, Wash. Filed Nov. 21, 1916. Serial No. 132,713. (Cl. 122—264.)

1. In a water tube boiler, the combination of a plurality of upper longitudinal steam drums, a plurality of transverse horizontal headers detachably joined end to end, each connected to and arranged below one of the drums at the forward end thereof, rear and front substantially vertical headers arranged below said drums, a plurality of substantially horizontal water tubes connecting said vertical headers, pipe, connections between the front vertical headers and the transverse horizontal headers, and pipe connections extending from the rear ends of said steam drums and from the transverse horizontal headers to the rear vertical headers.



3. In a water tube boiler having front and rear substantially vertical headers with substantially horizontal water tubes connecting the same, a front horizontal transverse header connected to the front substantially vertical header, a rear horizontal transverse header connected to the rear substantially vertical header and pipe connections between the front and rear transverse headers, said front and rear transverse headers having their ends formed for ready connection with additional similar headers whereby the boiler may be enlarged.

5. A water tube boiler including front and rear substantially vertical headers connected by substantially horizontal longitudinal water tubes, a longitudinal steam drum above said water tubes, a transverse front horizontal header connected to the forward end of said steam drum and to the top of said front substantially vertical header, a transverse rear horizontal header connected to the bottom of the rear substantially vertical header, and pipe connections between the rear end of the steam drum and the front and rear transverse headers, said transverse headers having their ends formed for ready connection with additional similar headers whereby the boiler may be enlarged.

[Claims 2 and 4 not printed in the Gazette.]

1,269,850. STOVE-LID AND DAMPER. CLARENCE ERNEST STANHOPE PARTON, Lampasas, Tex. Filed Aug. 28, 1917. Serial No. 188,668. (Cl. 126—15.)



1. In combination, a stove-lid and damper having swivel connections to hold them concentric, and provided with spiral openings, whereby, as the damper is moved in one direction or the other, its opening is moved into and out of registration with the opening of the lid.

2. In combination, a stove lid having an elongated spiral opening, a damper, means for swivelly connecting the damper concentric on the lid, said damper having an elongated spiral opening similar to the first spiral opening, whereby, as the damper is moved in one direction or the other, both spiral openings are brought into and out of gradual registration, whereby the draft may be graduated to a finer or greater degree.

1,269,851. SPRING-GUN. ALFRED E. PLAUSCHINAT, Philadelphia, Pa. Filed Oct. 26, 1917. Serial No. 198,679. (Cl. 124—13.)

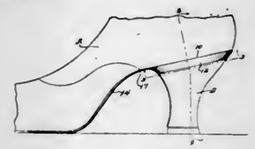


1. A pistol comprising a body, ejecting means including a plunger mounted for sliding movement in the body, a hand grip pivotally mounted on the body and provided with a reduced end projecting into the body, a lever having one end engageable with the said plunger, and its opposite end attached to the said reduced end of the hand grip, means supporting the lever for sliding movement through the body when the said handle is actuated on its pivot, and means mounted in the body to releasably hold the plunger in retracted position.

4. A gun comprising a body having a plunger mounted therein, spring means engageable with the plunger to normally urge it to forwardly projected position, and means mounted within the body and engageable with the plunger to move the latter to retracted position, the said means including a hand grip pivotally mounted on the said body, the said body having longitudinal slots formed in opposite sides thereof, and a lever included in the said means and slidably mounted in the said slot and connected to the said handle for movement in the said body when the handle is swung on its pivot.

[Claims 2 and 3 not printed in the Gazette.]

1,269,852. DETACHABLE HEEL. JOSEPH PLISCO, Roanoke, Va., assignor of one-half to Joseph Goldstein, Roanoke, Va. Filed Aug. 23, 1917. Serial No. 187,784. (Cl. 36—42.)



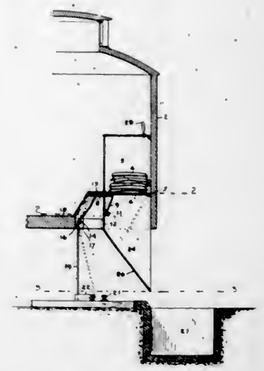
1. Means for detachably supporting heels on boots and shoes comprising a plate adapted for attachment to the heel part of a boot or shoe body, said plate having a marginal downturned flange adapted to receive therein the base part of a heel and adapted to be bent over against the underside of the plate to bind the free marginal edge of the flange about the base of the heel.

6. In a shoe, the combination of a shoe upper having an insole, a counter turned beneath the insole, and an outsole secured to the forepart of the upper and terminating in advance of the heel part, a heel having a flaring upper end, an attaching plate secured to the counter and the insole and provided with a depending flange adapted to embrace the flaring upper end of the heel, means for securing the forward end of the flange in overturned position against the lower side of the plate in advance of the heel for drawing the flange taut thereabout and retaining the heel from forward displacement from the flange, and a covering for the outsole extending over the forward portion of the plate and the downturned ends of the flange to house the same.

[Claims 2 to 5 not printed in the Gazette.]

1,269,853. AUTOMATIC MAIL-DUMPING DEVICE. FLORA POMEROY, San Francisco, Cal. Filed Mar. 6, 1917. Serial No. 152,910. (Cl. 258—25.)

In an apparatus of the character described, the combination, with a mail car, of a container therein for mail bags, a hinged bottom therefor, a latch supporting the free end of said bottom, a lever pivotally supported by the car and having an arm operatively engaging said latch to withdraw the same, and a depending arm, a shifter on the track adapted to engage said depending arm to move it



laterally with the motion of the train, to withdraw the latch and permit the contents of the container to drop, a chute below the car for guiding the dropping contents laterally, and a receptacle below the ground into which said contents are so guided.

1,269,854. TOY PISTOL. NAPOLEON BONAPARTE POTTER, Charleston, W. Va. Filed Apr. 3, 1918. Serial No. 226,481. (Cl. 42—57.)

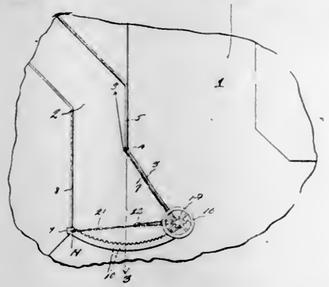


1. In a toy pistol, a barrel, an ejecting spring therein, a movable latch element projecting into the barrel to coact with a projectile inserted in the barrel to hold said projectile against the expelling action of the spring, and trigger controlled means including a shiftable member normally engaged upon the latch element intermediate of its ends and adapted to coact with the pistol barrel when shifted in one direction to move the latch element out of engagement with the projectile whereby the latter is released.

4. In a toy pistol, a barrel, an ejecting spring arranged therein, a resilient latch element fixed at one of its ends to the wall of the barrel and projecting into the barrel at its other end for engagement with a projectile to retain the latter within the barrel against the expelling action of the spring, said latch element being bowed intermediate of its ends, and trigger controlled means including a longitudinally movable member slidably engaged upon the latch element and movable upon the actuation of the trigger, from the bowed portion of said element beyond one end of said bowed portion, said member coacting with the barrel wall to move the latch element at its free end and release the projectile.

[Claims 2 and 3 not printed in the Gazette.]

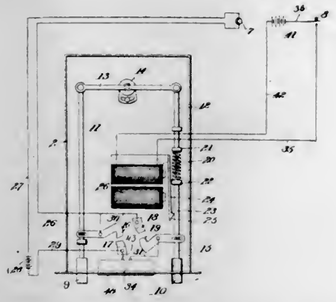
1,269,855. WATER-GATE. WILLIAM D. REHWALDT, Germania, Wyo. Filed Mar. 8, 1918. Serial No. 221,212. (Cl. 61—47.)



1. In combination, a main canal having a branch canal, a partition between the main and branch canals, a pair of segment racks projecting from the far wall of the branch canal, a water gate hingedly connected to the partition, a shaft mounted perpendicular in a bearing of the free end of the gate and provided with gears engaging the teeth of said racks, said racks being disposed above and below the gate, and a handle wheel carried by the upper end of the shaft for operating the shaft for adjusting the gate.

[Claim 2 not printed in the Gazette.]

1,269,856. ANNUNCIATOR. ADOLPH RENDLE, New York, N. Y. Filed July 19, 1917. Serial No. 181,498. (Cl. 177—334.)



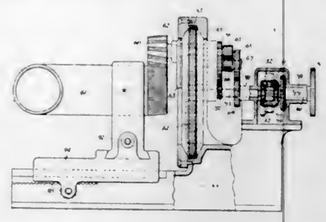
1. In an annunciator system, the combination with a signal casing, of an electric lamp therein, a distant signal box, a lamp in said box, an electric circuit including the distant signal lamp, a switch carried by the signal casing for controlling said circuit, a circuit including the signal lamp in the casing, a switch in said circuit, means carried by the casing for closing the switch in the distant lamp circuit, means on the distant signal box for closing the switch in the circuit to the lamp in the casing, and means carried by said casing for opening both switches.

[Claims 2 to 4 not printed in the Gazette.]

1,269,857. MILLING SCREW-THREADS. GEORGE RICHARDS, London, England. Filed Nov. 21, 1916. Serial No. 132,576. (Cl. 10—154.)

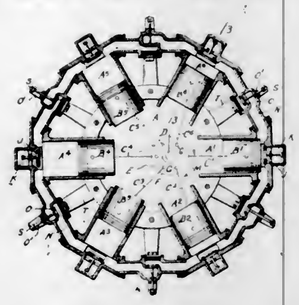
1. In milling screw-threads in the surface of a piece of work which is held stationary, the herein described method of working according to which a "hob," while making one revolution on its own axis, makes one complete planetary movement about the axis of the work, but partakes of no axial movement, substantially as set forth.

2. In a machine for milling screw-threads in the surface of a stationary piece of work, the herein described means for rotating the hob-carrying spindle simultaneously with causing it to traverse a circular path about the axis of the piece of work; such means comprising an eccentrically mounted trunnion, a hob spindle mounted therein and a sun-and-planet motion in operative connection with the said trunnion, substantially as set forth.



3. In milling screw-threads in the surface of a piece of work which is held stationary, the herein described means whereby the hob is advanced to the required depth to form the thread while traveling concentrically about the axis of the work; such means comprising an eccentrically mounted trunnion, a hob-spindle mounted therein, a stud carried by the hob-spindle, a toothed wheel fixed on the stud, a fixed and centrally mounted toothed wheel meshing with the toothed wheel carried by the stud, a toothed wheel formed on or attached to the trunnion, a centrally mounted pinion meshing with the toothed wheel carried by the trunnion, and differential gear through which the centrally mounted pinion is driven, substantially as set forth.

1,269,858. MULTICYLINDER INTERNAL-COMBUSTION ENGINE. ARCHIBALD NEWTON WESLEY RICHARDSON, Sydney, New South Wales, Australia. Filed July 28, 1917. Serial No. 183,347. (Cl. 123—53.)



1. An explosive engine comprising a plurality of cylinders, reciprocating pistons therein, a crank shaft to which the pistons are secured, a pipe connecting each of said cylinders to the next one in firing sequence, valves in said pipe, and means for reinforcing the exploded charge in one cylinder by the admission thereto of part of the charge fired in the next succeeding cylinder in firing sequence.

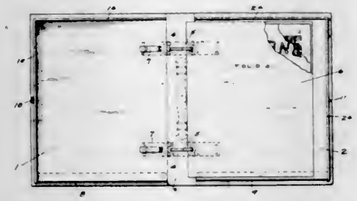
2. An explosive engine comprising a plurality of cylinders, reciprocating pistons therein, a crank shaft to which the pistons are secured, means for connecting each of said cylinders to the next one in firing sequence, valves within the means for connecting said cylinders and timed means for actuating said valves, and means for reinforcing the exploded charge in each cylinder by the admission thereto of part of the charge fired in the next succeeding cylinder in firing sequence.

3. An explosive engine comprising a plurality of cylinders, reciprocating pistons therein, a crank shaft to which the pistons are secured, a pipe connecting each of said cylinders to the next one in firing sequence, valves in said pipes, timed means for actuating said valves, cams on the crank shaft, and means interposed between said cams and valves whereby the latter are actuated, substantially as described.

4. In a multi-cylinder internal combustion engine, a central shaft, cylinders radially disposed about said shaft, valve controlled communication between each cylinder and the next succeeding cylinder in firing sequence, cams on said shaft, and a rod and lever mechanism whereby said valves are actuated by said cams, substantially as described.

5. In multi-cylinder two-cycle internal combustion engines, a central crank shaft, firing cylinders disposed radially about said crank shaft, pistons in said cylinders, connecting rods between said pistons, a common crank valve controlled communication between each of said cylinders and the next succeeding cylinder in firing sequence, cams on said shaft, and mechanical means whereby said valves are actuated by said cams, substantially as described.

1,269,859. MUSIC-HOLDER. SIDNEY H. RING, Clatskanie, Oreg. Filed June 13, 1917. Serial No. 174,558. (Cl. 129—1.)



1. A combination music holder comprising two box-like cover members, means hinging the same together, whereby they can be closed one upon the other in box-like form, arched holding prongs spaced apart at the hinged joint to receive the music, punching devices arranged opposite each of said prongs on one of said cover members, whereby to punch holes in the music at a space apart corresponding to the space between said prongs, said cover members being provided on their lower edges with projecting ledge members adapted to act as supports for the lower end of music placed therein, substantially as described.

2. A combination music holder and rack comprising two cover members of box-like form having meeting flange-like members around their inner faces at their upper and outer edges, a back member to the opposite edges of which said cover members are respectively hinged, whereby to be opened out flatwise into substantially the same plane of said back member, arched holding prongs mounted on said back member between said cover members and adapted to receive sheet music, whereby the same can be turned from one cover member to the other, said cover members having overlapping projecting ledge members on their lower ends adapted to act as supports for the lower ends of sheet music placed on said prongs when said holder is open substantially as described.

4. A combination music holder and rack comprising two cover members provided at their outer and top sides with flange-like members, a back member to the opposite edges of which said cover members are hingedly attached and adapted to open out flatwise into substantially the same plane, holding prongs mounted on said back member at a space apart and adapted to have sheet music mounted thereupon, punching devices mounted on one of said cover members opposite said prong members and at the same space apart and adapted for punching holes through music sheets to receive said prongs, said cover members being provided at their lower edges with projecting music supporting ledges, adapted to overlap each other when said cover members are closed together in box-like form, the flange-like members and the music supporting ledges on said cover members forming edge walls, whereby to wholly inclose said music when said cover members are closed together, substantially as shown and described.

[Claim 3 not printed in the Gazette.]

1,269,860. SPARK-PLUG. HERMAN F. SADGENBURY, Dayton, Ohio, assignor, by mesne assignments, to Wolverine Spark Plug Company, Inc., a Corporation of New York, (Incorporated in 1916.) Continuation of application Serial No. 660,059, filed Nov. 13, 1911. This application filed Nov. 10, 1913. Serial No. 800,161. (Cl. 123—169.)



1. In a spark plug for internal combustion engines, the combination of a fixed member having an opening; a bearing fixed relative to said member; an insulator adapted to seat in said opening and carrying an electrode; and a rotatable member adapted to rotate within said bearing and having a cam portion adapted when the rotatable member is rotated to force the insulator against its seat in the opening.

2. In a spark plug for internal combustion engines, the combination of a fixed member having an opening; an insulator carrying an electrode adapted to seat in said opening; bearings fixed relative to said fixed member; and rotative means mounted to rotate in said bearings and having a cam portion adapted to force the insulator to its seat when the rotatable means is rotated.

3. In a spark plug for internal combustion engines, the combination of a fixed member having an opening; an insulator carrying an electrode adapted to seat in said opening; bearings fixed relative to said fixed member; and rotative means mounted in said bearings and having a cam portion adapted to force the insulator to its seat when the rotatable means is rotated in one direction and to move the insulator from its seat by movement in the other direction.

4. In a spark plug for internal combustion engines, the combination of a bushing adapted to be removably secured in an engine cylinder and having a bearing fixed relative thereto; an insulator adapted to be removably secured in said bushing and carrying an electrode; and a rotatable member adapted to be removably journaled in said bearing and having a cam portion adapted to coact with the insulator when the rotatable member is rotated to move the insulator relatively to the bushing.

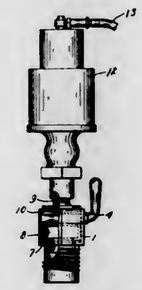
5. In a spark plug for internal combustion engines, the combination of a bushing adapted to be removably secured in an engine cylinder and having a bearing fixed relative thereto; an insulator adapted to be removably secured in said bushing and carrying an electrode; and a rotatable member adapted to be removably journaled in said bearing and having a cam portion adapted to coact with the insulator when the rotatable member is rotated to move the insulator in either direction relatively to the bushing.

[Claims 6 to 52 not printed in the Gazette.]

1,269,861. SPARK-PLUG ATTACHMENT FOR PUMPS. HERMAN F. SADGEBURY, Dayton, Ohio, assignor, by mesne assignments, to Wolverine Spark Plug Company, Inc., a Corporation of New York, (incorporated in 1916.) Filed Feb. 4, 1914. Serial No. 816,524. (Cl. 285—181.)

1. In combination, a hollow spark plug bushing forming an annular seat, a hollow removable member adapted

to seat therein and adapted to be connected to a pump, and means including a member rotatable about an axis at substantially right angles to the axis of the spark plug bushing, for forcing the removable member to the seat, said means and said member being so constructed and arranged that pressures applied to the seat at points adjacent the corresponding end portions of the rotatable member are maintained substantially equal under all conditions, whereby compensation is made for slight inaccuracies in construction or for the presence of foreign material.



2. In devices of the class described, the combination of a hollow bushing adapted to be removably secured in an opening in an engine cylinder; a hollow casing adapted to removably seat in the bushing; an open ended tube adapted to extend transversely through the casing; and a rotatable member journaled in the bushing and extending into the tube and having a portion extending into the tube with a periphery points of which are greater distances from the axis of the rotatable member than are other points so that upon rotation of the rotatable member the latter will engage the bottom of the tube in the casing and force the latter to its seat in the bushing.

3. In a device of the class described, the combination of a hollow spark plug bushing; a removable hollow member provided with a transverse tube passing from outside periphery to outside periphery of the member, the member having a seat formed near one end adapted to rest on a shoulder in the bushing; and a rotary member journaled in the bushing and having a portion whose periphery extends farther from the axis of the bearings at some points than at others for coöperating with the hollow removable member to force the latter to its seat in the bushing when the rotatable member is rotated.

4. In devices of the class described, the combination of a hollow bushing, a hollow open ended casing adapted to seat in the bushing, an open ended tube which is adapted to extend transversely through the casing and having a restricted portion, and a rotatable member journaled in the bushing and having a portion extending into the tube with a periphery points of which are greater distances from the axis of the bearings than are other points so that upon rotating the rotatable member the latter will engage the bottom of the tube at its resricted portion and force the casing to its seat in the bushing.

5. In devices of the class described, the combination of an open ended hollow cylindrical member having an annular seat, a second hollow member open at both ends and adapted to fit into the first hollow member and to seat therein, and means for forcing the members together, said means including a rotary member journaled in bearings in the first hollow member and arranged to turn about an axis at substantially right angles to the axis of said first hollow member, said means and said member being so constructed and arranged that substantially all pressure is transmitted from said rotatable member to the second hollow member substantially in the axis of the first hollow member, whereby the second member may tilt about an axis at right angles to that of the rotatable member to maintain equal pressures on opposite sides of the seat.

[Claims 6 to 12 not printed in the Gazette.]

1,269,862. SPARK-PLUG. HERMAN F. SADGEBURY, Dayton, Ohio, assignor to Wolverine Spark Plug Company, Inc., Detroit, Mich., a Corporation of New York, (incorporated in 1916.) Original application filed Nov. 10, 1913, Serial No. 800,161. Divided and this application filed July 1, 1916. Serial No. 107,188. (Cl. 123—169.)



1. In a spark plug, the combination of a relatively fixed member; an electrode carrying insulator adapted to removably seat therein; a single pressure applying element rotatable about an axis at a large angle to the axis of the insulator; and intermediate connections through which pressure is transmitted to said insulator to lock it to its seat when said pressure applying element is rotated.

2. In a spark plug, the combination of a relatively fixed member; an electrode carrying insulator adapted to removably seat therein; a single pressure applying element journaled in said fixed member, and rotatable about an axis transverse to the axis of the insulator; and intermediate connections through which pressure is transmitted to said insulator to lock it to its seat when said pressure applying element is rotated.

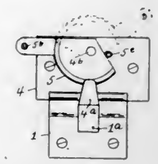
[Claims 3 to 24 not printed in the Gazette.]

1,269,863. SAFETY-PAPER. ERNEST EMIL SCHMIDT, Boston, Mass., assignor, by direct and mesne assignments, to Paramount Safety Paper Co., Chicago, Ill., a Corporation of Illinois. Filed Feb. 6, 1917. Serial No. 146,961. (Cl. 11—13.)

1. A safety paper comprising a paper coated with a composition including ox-gall which renders the paper permeable by the composition, said composition containing ingredients capable of being decomposed by acid and alkaline ink eradicators to release substances which will respectively react to indelibly stain the paper, and to render indelible commercial writing ink containing iron.

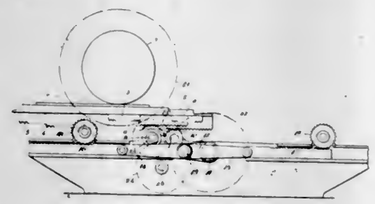
2. A safety paper comprising a paper coated with a composition containing sodium or potassium ferrocyanid, sodium or potassium iodid, glycerin, ox-gall, tapioca flour, and caustic soda.

1,269,864. WINDOW-HANGER. JOHN SCHOBERT, Duluth, Minn. Filed Jan. 5, 1917. Serial No. 140,702. (Cl. 16—48.)



A sash hanger comprising a plate adapted to be secured in operative position to the front of a window sash, a plate adapted to be secured in operative position to the front of a window frame, one of said plates having an eye formed therein, the other of said plates having a hook formed thereon adapted in operative position to engage said eye, a locking member mounted on said other of said plates and adapted in operative position to obstruct the passage between the point of said hook and the plate upon which it is formed, said locking member being adapted to move in a plane parallel with the front face of such window sash, said locking member being adapted in operative position to prevent the disengagement of said hook and eye and in retracted position to permit of the engagement and disengagement thereof, said plate having a stop formed thereon adapted to engage said locking member in retracted position, said locking member being adapted to be retained against said stop by gravity.

1,269,865. BED-MOTION FOR PRINTING-MACHINES. DAVID JOHN SCOTT and CARL EBERHARD DRANGE, Plainfield, N. J., assignors to Isabella Scott and David J. Scott, executors of Walter Scott, deceased, Plainfield, N. J. Filed July 10, 1914. Serial No. 850,101. (Cl. 74—98.)



1. A printing machine comprising coöperating printing members, one of which has a reciprocating movement, crank means operatively included in the machine, and connecting means between the crank means and the reciprocating member for effecting the reversal of the movement of the latter at each end of its stroke at a lagging crank ratio occupying one-half of the revolution of the crank means, whereby there is effected a minimum length of travel of the reciprocating means coupled with a maximum degree of uniformity of deceleration and acceleration of the bed during such reversals.

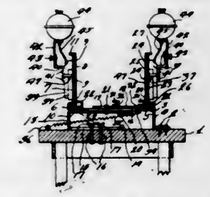
2. A printing machine comprising coöperating printing members, one of which has a reciprocating movement, crank means, means for rotating the crank at a uniform speed, and connecting means between the crank means and the reciprocating member for effecting the reversal of the movement of the latter at each end of its stroke at a lagging crank ratio occupying one-half the revolution of the crank means, whereby the rates of deceleration and acceleration of the reciprocating member during the reversals of movement are uniform and equal.

3. A printing machine comprising coöperating printing members, one of which has a reciprocating movement, crank means having a fixed throw operatively included in the machine, and connecting means between the crank means and the reciprocating member for effecting the reversal of the movement of the latter at each end of its stroke at a lagging crank ratio occupying one-half the revolution of the crank means, whereby there is effected a minimum length of travel of the reciprocating member coupled with a maximum degree of uniformity of deceleration and acceleration during such reversals.

[Claims 4 to 18 not printed in the Gazette.]

1,269,866. MACHINE FOR SEALING BREAD-WRAPPERS AND THE LIKE. RICHARD SEJNOHA, Wolsey, S. D. Filed Dec. 29, 1916. Serial No. 139,678. (Cl. 93—2.)

1. In a machine for sealing bread wrappers, the combination of a bed plate and a heated plate, of brackets on the bed plate to support the heated plate in a raised stationary position above the bed plate, said brackets having slots, a second heated plate having straps engaging upon said brackets, guide bars connecting said straps, a guide bar connecting said brackets, and U-shaped members under said brackets and having sliding connections with said straps through the slots of the brackets.

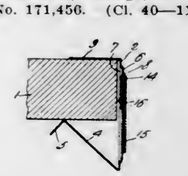


2. In a machine for sealing wrappers, the combination of a bed plate and a heated plate, of brackets on the bed plate to support the heated plate in a raised stationary position above the bed plate, said brackets having slots, a second heated plate having straps engaging upon said brackets, guide bars connecting said straps, a guide bar connecting said brackets, U-shaped members under said brackets and having adjustable connections with the bed plate and provided with sliding connections with said straps, a spring connecting said bed plate and one of the guide bars of said straps, and means for heating the opposing plates.

3. In a machine for sealing wrappers, a bed plate, brackets secured on the bed plate near one side and having portions arching across the bed plate toward the opposite sides thereof, said arching portions terminating in upwardly extending parts provided with a heating element, said arching portions having slots, straps on said arching portions provided with slots, longitudinal bars connecting said straps, a heating element carried by the straps, U-shaped brackets on the bed plate under the arching portions of the first brackets, means for adjustably securing the U-shaped brackets to the plate, whereby they may be adjusted toward the first bracket, headed pins carried by the upper parts of the U-shaped brackets and extending through the slots of the arching portions and said straps, whereby the straps are guided in their yieldable movements, and yieldable springs connected to one of the bars, and in turn to the bed plate, whereby the last named heating element may be held yieldably against the wrapper.

4. In a machine for sealing wrappers, the combination with a bed plate, of stationary and movable opposing brackets mounted upon the bed plate, the movable brackets being U-shaped and adjustably connected to the bed plate, the stationary bracket arching over and being adjustably connected to the upper parts of said U-shaped brackets, the arching portions terminating in upwardly extending parts provided with a heating element, straps engaging the arching portions and being adjustably connected thereto, said straps having upstanding parts provided with a heating element, longitudinal members connecting said straps, and yieldable means connected to one of the longitudinal members, and in turn to said bed plate, whereby the last named heating element may be held yieldably against the wrapper.

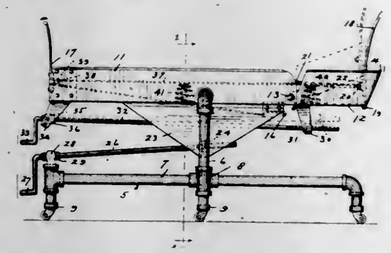
1,269,867. TAG-HOLDER FOR PRICING SYSTEMS. FRANK GROVER SHUMAN, Chicago, Ill. Filed May 28, 1917. Serial No. 171,456. (Cl. 40—11.)



A combined display-device and shelf-grip including, in a one-piece structure, a front plate bent at its upper edge to form a rearwardly extended top, and bent at its lower edge to form an upwardly and rearwardly inclined grip-

ping flange coöperating with the top in engaging a shelf, the plate being struck forwardly to form an advanced table, the constituent material of the table being bent to form a forwardly inclined lip at the lower edge of the opening; and a plate having a hook inserted into the opening and guided into the opening by the lip, the table forming a recess which receives the end of the hook, the table serving also, to stiffen the plate to prevent a distortion thereof when the top and the flange are separated to receive the edge of a shelf.

1,269,868. ADJUSTABLE BED. INGVALD SINJEM, Hayfield, Minn. Filed Feb. 12, 1917. Serial No. 147,976. (Cl. 5—12.)



1. A base comprising a longitudinal member and a transverse member intermediately connected, supporting legs at the ends of said two members, and a pair of standards on the ends of said transverse member and forming extensions of the respective supporting legs, in combination with a bed-body mounted on said standards.

3. A bed-body having a head section pivoted thereto for movement in a vertical plane, a head-plate pivoted to said head section for movement longitudinally of the bed-body, a link connecting the head plate and the bed-body, a bed-spring attached to said plate and the foot of the bed-body, and springs interposed between the bed-springs and head section.

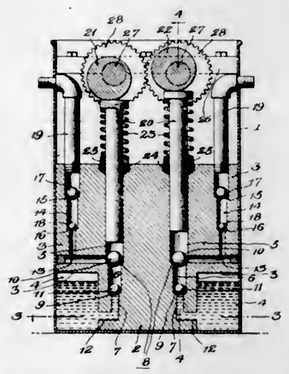
5. A bed-body having a head section pivoted thereto for movement in a vertical plane, a head-plate pivoted to said head section for movement longitudinally of the bed-body, a link connecting the head-plate and the bed-body, a tie-bar connecting the sides of the bed-body, an adjusting device for said head section, a bed-spring comprising upper and lower sections; said upper section being attached to the head-plate and the foot of the bed-body, and said lower section being attached to the foot of the bed-body and the tie-bar, and springs interposed between said two sections of the bed-springs and between said upper section and the head section of the bed-body.

[Claims 2 and 4 not printed in the Gazette.]

1,269,869. LUBRICATOR. BERNARD H. SKELLY, Bridgeport, Conn. Filed Nov. 28, 1917. Serial No. 204,442. (Cl. 184—27.)

1. In a force feed lubricator, a box-like casing opened at its top, a substantially T-sectioned body disposed therein and formed with spaced series of cylinders opening through its top, each cylinder having a valved inlet extending downwardly and opening laterally through the web of the body and a valved outlet extending laterally in the adjacent overhanging portion of the body and opening upwardly through its top, a delivery pipe threaded in the outlet of each cylinder and passing through the side of the casing, a plunger in each cylinder, the latter flaring at its upper end, a packing gland in the flared upper end of the cylinder about its plunger, a spring encircling the latter and seating on the gland for lifting the plunger, and means for depressing the plungers.

2. In a force feed lubricator, a box-like casing opened at its top, a substantially T-sectioned body disposed therein and formed with spaced series of cylinders opening through its top, each cylinder having a valved inlet extending downwardly and opening laterally through the web of the body and a valved outlet extending laterally in the adjacent overhanging portion of the body and opening upwardly through its top, spring-lifted plungers in the cylinders, and means for depressing the plungers.



3. In a force feed lubricator, a box-like casing opened at its top, a substantially T-sectioned body disposed therein and formed with spaced series of cylinders opening through its top, each cylinder having a valved inlet extending downwardly and opening laterally through the web of the body and a valved outlet extending laterally in the adjacent overhanging portion of the body and opening upwardly through its top, a delivery pipe threaded in the outlet of each cylinder and passing through the side of the casing, a plunger in each cylinder, and intergeared means for operating the series of plungers.

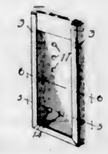
4. In a force feed lubricator, a box-like casing opened at its top, a substantially T-sectioned body disposed therein and formed with spaced series of cylinders opening through its top, each cylinder having a valved inlet extending downwardly and opening laterally through the web of the body and a valved outlet extending laterally in the adjacent overhanging portion of the body and opening upwardly through its top, a delivery pipe threaded in the outlet of each cylinder and passing through the side of the casing, a plunger in each cylinder, the latter flaring at its upper end, a packing gland in the flared upper end of the cylinder about its plunger, a spring encircling the latter and seating on the gland for lifting the plunger, and a cam for each series of plungers geared to the companion cam for depressing the respective plungers.

6. In a force feed lubricator, a casing, a body arranged therein to provide a continuous lubricant chamber, said body having overhanging lateral portions spaced above the bottom of the casing and provided with a spaced series of cylinders having valved inlets communicating with the chamber, a plunger in each cylinder, a rotatable cam over each series of plungers for operating the same, and intermeshing gears connecting the cams.

[Claims 5, 7, and 8 not printed in the Gazette.]

1,269,870. DIME-BANK. FRANK A. SMITH, Chicago, Ill. Filed Dec. 20, 1917. Serial No. 208,067. (Cl. 133—7.)

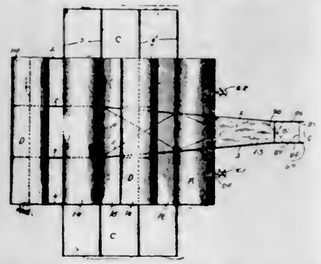
1. A device of the character specified comprising a box body and a cover, the body having its side edges and one end turned over upon the body to form flanges at said sides and end arranged in spaced relation with respect to the body, the cover being slidable between the flanges and the body, said cover having at its inner end a flange extending toward the bottom of the body, said flange being notched at its center, a U-shaped locking member secured to the body at the center thereof and extending toward the closed end and having resilient arms diverting slightly to engage the flange of the cover on each side of the notch, said cover having openings at the said diverging arms for permitting the insertion of a key for pressing the said arms toward each other.



4. A device of the character specified, comprising a box body having a sliding cover provided at its inner end with an inturned flange, the flange being cut away at its center, resilient arms secured to the box body and engaging the flange at opposite sides of the cut away portion when the cover is closed, the cover having openings near its inner end at the outer sides of the arms for permitting the insertion of a key to press the arms toward each other to release them from the flange.

[Claims 2 and 3 not printed in the Gazette.]

1,269,871. AEROPLANE. HARTVIG SORLEY, Macomb, Ill. Filed July 15, 1916. Serial No. 109,531. (Cl. 244—29.)



1. In an aeroplane, a supporting structure having a fixed supporting area, and stabilizing mechanism including shiftable planes, channel shaped transverse guiding tracks for said planes, and roller bearings along the lateral edges of said planes and accommodated in the channels of said tracks.

15. In an aeroplane, a supporting structure, and stabilizing mechanism including shiftable planes, tracks for guiding said planes, a rack fixed to each plane, and means for moving said planes, such means comprising a stabilizer frame having a track depending from the supporting body of the aeroplane, inter-connected gears journaled in said track structure or frame and protected thereby, a sector in geared relation with said gears, and a weight guided by said track and movable in vertical plane for actuating said sector.

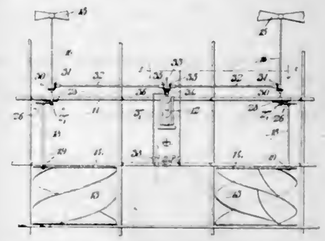
16. In an aeroplane, a plurality of main supporting surfaces, tilting auxiliary surfaces above said main surfaces, manual means for tilting said auxiliary surfaces, and friction means for preventing free movement of such auxiliary surfaces.

18. In an aeroplane, main supporting surfaces, auxiliary concaved surfaces disposed laterally above said main surfaces, a laterally disposed driving shaft, a driven shaft for each auxiliary surface, and intermediary shafts connecting said driving and driven shafts whereby said auxiliary surfaces may be simultaneously moved.

[Claims 2 to 14 and 17 not printed in the Gazette.]

1,269,872. PROPELLING MECHANISM FOR AEROPLANES. HARTVIG SORLEY, Macomb, Ill. Original application filed July 15, 1916, Serial No. 109,531. Divided and this application filed May 23, 1917. Serial No. 170,484. (Cl. 244—25.)

1. In an aeroplane, a motor, a plurality of propellers of both helicoidal and bladed screw type capable of rotating independently of each other, and means for establishing a driving connection between said helicoidal and screw propellers independent of said motor.

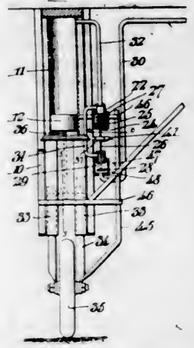


4. In an aeroplane, a motor, a plurality of propellers of the screw bladed type, a plurality of propellers of helicoidal type, and means for establishing a driving connection between said helicoidal and screw propellers when the former rotates in one direction.

5. In an aeroplane, a motor, laterally extending shafts connected with said motor and driven therefrom, longitudinally extending shafts in driven connection with said laterally extending shafts and carrying propellers, longitudinally extending jack shafts, gear connections between said jack shafts and said longitudinally extending shafts, helicoidal propellers each having a peripheral gear, and a gear and ratchet connection between said peripheral gears and said longitudinal jack shafts.

[Claims 2, 3, and 6 not printed in the Gazette.]

1,269,873. CARRIAGE STRUCTURE FOR AEROPLANES. HARTVIG SORLEY, Macomb, Ill. Filed May 23, 1917. Serial No. 170,485. (Cl. 244—2.)



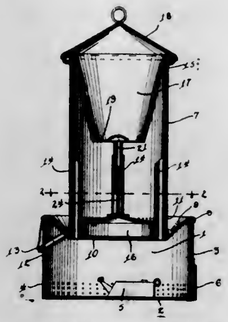
2. In an aeroplane, a movable supporting frame, an air cylinder, a piston in said cylinder, a connection between said piston and said frame, an air supply pipe communicating with said cylinder, a pair of valves in said pipe, one of said valves being a relief valve, the said valves being adapted to open and close alternately, a finger adapted when moved in one direction to actuate said valves, and a pair of stops carried by said frame and being adapted to operate said finger when said frame moves in one direction.

4. In an aeroplane, a body, a source of air supply on said body, cylinders depending from said body, pistons in said cylinders, wheel forks carried by said pistons, a pipe connecting said air source with each cylinder, valves in each pipe, a rod connecting the valves of each pipe, the said valves being arranged to close alternately upon reciprocation of said rods, one valve in each pipe being an exhaust valve, a finger on each rod, a bar secured to the

fork of each piston, a pair of lugs on each bar adapted to engage one at a time with said fingers, and means for automatically moving said valve to initial position when released by said lugs.

[Claims 1, 3, and 5 not printed in the Gazette.]

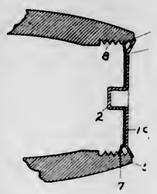
1,269,874. POULTRY DRINKING-FOUNTAIN. ELZEARD O. SOUCY, Rush City, Minn., assignor of one-half to Mathias Lalond, Rush City, Minn. Filed Nov. 2, 1915. Serial No. 59,273. (Cl. 119—73.)



1. A drinking fountain including a float chamber and a reservoir having an outlet into the float chamber, a lamp chamber supporting the float chamber, heat tubes in the float chamber communicating with the lamp chamber and having an outlet in the float chamber, and a float in the float chamber with a valve adapted to close the reservoir outlet, said heat tubes forming a guide for the float.

[Claims 2 to 4 not printed in the Gazette.]

1,269,875. SHELL-PLUG. LAC F. STAFFORD, Minneapolis, Minn., assignor to Fairbanks, Schock and Company, Minneapolis, Minn., a Corporation of Minnesota. Filed Feb. 11, 1918. Serial No. 216,616. (Cl. 102—26.)



1. In a shell plug the combination of an outer disk to seal the open end of an interiorly threaded shell, and an inner disk concentrically joined with said outer disk and having its perimeter formed into a helix for coöperation with the threads of the shell.

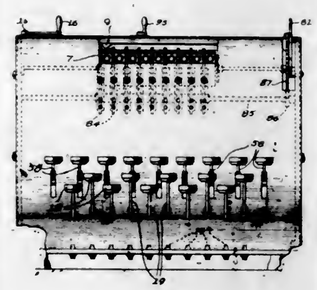
2. In a shell plug the combination of an outer disk to seal the open end of an interiorly threaded shell and an inner disk concentrically joined with said outer disk and having its perimeter formed into a helix for coöperation with the threads of a shell, said outer disk having formed in the center thereof a socket for turning the plug into a threaded shell.

3. In a shell plug the combination of an outer disk having a centrally located socket therein, the perimeter of said disk being turned back to seal an interiorly threaded shell, means welded to said outer disk for engagement with the threads of the interiorly threaded shell for drawing said outward disk into intimate contact with the outer end surface of said shell.

4. In a shell plug the combination of a dished disk having a centrally located socket therein, an inner disk having an aperture therein to clear said socket, said inner disk having its perimeter formed into a spiral to correspond with the threads of a shell to which the plug is to be applied, said two disks being welded together and concentrically mounted.

5. In a shell plug the combination of an outer shell sealing disk, an inner disk concentrically mounted therewith and suitably fastened thereto, said inner disk having means for screw engagement with the threads of an interiorly threaded shell.

1,269,876. CALCULATING-MACHINE. FRED W. STILWELL, Chicago, Ill., assignor of one-half to George M. Atwell, Chicago, Ill. Filed July 16, 1913. Serial No. 779,240. (Cl. 235—59.)



1. A calculating mechanism comprising two adding wheels arranged side by side; a rectilinearly-reciprocal plunger carried by one of said wheels and arranged to engage the other wheel, and two stationary cam members simultaneously engaging opposite end-portions of said plunger for moving said plunger into and out of engagement with said other wheel during the rotation of the plunger-carrying wheel.

3. A calculating mechanism comprising a master wheel; a shaft driven from said master wheel; a set of toothed counterwheels, a gear which on said shaft adapted to mesh with said counter wheels, a single series of order keys; means operable by an order key for shifting said gear wheel in either direction on said shaft into operative relation to the desired counter wheel; and other key-operated means for rotating said master wheel.

10. A calculating machine having, in combination, a rotatable element, a plurality of key levers, operating connections between said key levers and said element, a member for locking said element against rotation, a bar member for actuating said member, and means including a universal bar arranged to be moved by said key levers and cooperating with said bar to actuate said locking member to engage said rotatable element, and a part on said bar engaged by one of said operating connecting elements to withdraw said locking member from the rotatable element.

15. In a calculating mechanism, a master wheel; and means for rotating said wheel comprising an arm pivoted to swing on the axis of said wheel, means on said arm for engaging and moving said wheel, a universal bar attached to said arm, a plurality of key levers, members attached to said key levers and overlying said universal bar, whereby said bar is moved when one of said key levers is depressed, a spring for moving said bar in the opposite direction, and means for temporarily locking said universal bar to the member corresponding to a depressed key lever.

28. A calculating mechanism comprising a plurality of number wheels, a segmental gear wheel fixed to each of said wheels, a shaft on which said wheels are mounted, gear means for rotating said number wheels to accumulate, second gear means adapted to mesh with said segmental gears, a lever for moving said shaft to shift the segmental wheels from one of said gear means to the other, and means actuated by said lever for driving the second gear means.

[Claims 2, 4 to 9, 11 to 14, and 16 to 27 not printed in the Gazette.]

1,269,877. HAND SEED-PLANTER. GEORGE ALEXANDER STUAROCK, Port Townsend, Wash., assignor of one-fourth to R. E. Herring and Grace G. Herring, San Francisco, Cal. Filed Aug. 30, 1917. Serial No. 188,988. (Cl. 111—14.)



1. A hand planter comprising an elongated tube adapted to extend from a point near the waist line of the user, to the ground, the lower end of the tube being cut at an angle to provide a point and a rearwardly disposed open end, a drag comprising a receptacle, and pull chains attached to the receptacle and to the said tube.

2. A hand planter comprising an elongated tube having one end cut at an angle to provide a point, and an open end, ears disposed on the tube near the said open end and provided with pull chains extending rearwardly, and a rectangular box attached to the said pull chains and having its forward end inclined to provide a buffer plate in spaced relation from the said open end of the tube.

1,269,878. DIE CONSTRUCTION. GUIDO TANZI, St. Louis, Mo., assignor to Ginevra Macaroni Mold Company, St. Louis, Mo., a Corporation. Filed Sept. 10, 1917. Serial No. 190,510. (Cl. 107—14.)



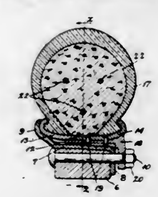
1. A tube forming die consisting of a conical member having an outer wall of substantially uniform thickness and an end wall on the entrance side, said end wall being provided with a plurality of openings therethrough which communicates with a tapering hole extending to the discharge side of the die, and a mandrel centrally arranged in said hole and carried by said end wall.

2. The method of making a tube-forming die which consists in drilling a plurality of holes from the entrance side of the die, and a hole from the discharge side into communication with said plurality of holes, and then closing in the outer wall to form a conical periphery and reduce the diameter of said hole.

3. The method of making a tube-forming die which consists in drilling a plurality of holes from the entrance side of the die and an annular hole from the discharge side into communication with said plurality of holes, and then closing in the outer wall against a mandrel arranged in said opening to make said hole and the periphery of the die conical.

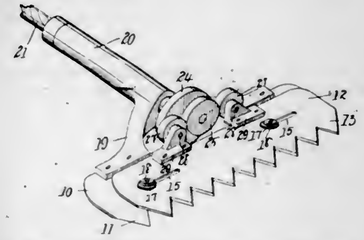
1,269,879. WHEEL-RIM. MELVIN G. TENNENT, Sedro Woolley, Wash. Filed Aug. 24, 1916. Serial No. 117,373. (Cl. 152—7.)

A wheel rim of the class described including an annular band permanently secured upon the periphery of a wheel felly and having an outwardly extending integral flange on one side forming a seat for a removable wheel rim section and an inwardly extending flange at the opposite side engaging the adjacent side of the felly, said band being provided with a plurality of spaced transverse peripheral depressions, a removable wheel rim including two separable telescopically joined annular sections, a plurality of spaced transversely disposed angular brackets secured on the inner face of one of the rim sections, one arm of each of which brackets is provided with a bolt hole and projects inwardly from one side of said section



toward the axis thereof and lies parallel with the adjacent side of the felly, said wheel rim being disposed to encircle said metal band with one of its sections seated on the outwardly extending integral flange of the band, said angular brackets being partially seated in the peripheral depressions of said band to space the wheel rim from the band, and bolts extending through the wheel felly, the inwardly extending band flange and said brackets to hold one section of said wheel rim in its telescopic engagement with the other section thereof, and to confine said section thereof in its seat on the integral flange of said band.

1,269,880. HEDGE-TRIMMER. WILLIAM H. TROWBRIDGE, Newark, N. J. Filed Oct. 8, 1917. Serial No. 195,217. (Cl. 56—16.)



1. In a trimming tool, a pair of toothed blades, one whereof is adapted to be reciprocated relative to the other, and means including a fly wheel and a driving member comprising spring fingers adapted to engage said fly wheel for releasably imparting reciprocatory movement to the movable blade.

2. In a trimming tool, a fixed toothed blade, a second toothed blade mounted on the first for reciprocatory movement with respect thereto, a handle bracket on the fixed blade, and means supported by said handle and including a fly wheel and a releasable driving means for imparting reciprocatory movement to the movable blade.

3. In a trimming tool, a fixed toothed blade and a reciprocable toothed blade, a handle bracket on the fixed blade, said handle being provided with a longitudinal bore, a shaft mounted for rotation in said handle, a fly wheel on said shaft, a roller eccentrically mounted on said fly wheel, a pair of rollers mounted on the reciprocable blade and between which the roller on the shaft is interposed, and a flexible shaft secured to said first named shaft for imparting relative movement thereto.

4. In a trimming tool, a pair of toothed blades, one fixed and the other reciprocable with respect thereto, the reciprocable blade having a pair of separated rollers

thereon, and the fixed blade having a handle bracket secured thereto and provided with a bore, rotatable means mounted to turn in the bore of the handle and comprising a fly wheel, and a roller eccentrically mounted thereon and adapted to be interposed between the two rollers upon the movable blade.

5. In a trimming tool, a handle, a fly wheel thereon, a pair of relatively reciprocable cutting blades thereon, means actuated from said fly wheel for causing relative reciprocatory movement of said blades, a flexible shaft extending out from said handle and adapted to rotate said fly wheel, and releasable driving means between said flexible shaft and fly wheel.

1,269,881. CUTTER FOR SECOND-GROWTH SAPLINGS AND THE LIKE. GEORGE H. ULRICH, Ladysmith, Wis. Filed Aug. 6, 1917. Serial No. 184,698. (Cl. 56—19.)



1. A land clearing tool, comprising a base, a substantially horizontal cutting edge at the forward portion of said base, a handle pivotally mounted on said base adapted to be grasped by a person standing, a blade supporting arm pivoted to said handle, a blade on said arm adapted to slide in a substantially horizontal plane in different positions of the handle to coact with said first cutting edge.

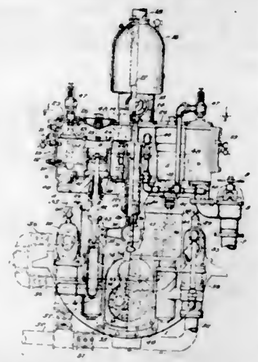
2. In a device of the class described, a base having at its forward end a cutting edge, a handle pivotally mounted on said base between the ends thereof adapted to be grasped by a person standing, an arm pivoted to said handle near the lower end thereof, extending downwardly and laterally, from the handle, a laterally extending, substantially, horizontal blade on the lower end of said arm, having a cutting edge adapted to coact with said first edge and a member extending rearwardly from said base to be engaged by the foot of the operator to prevent the tool from sliding.

3. In a device of the class described, a base having at its forward end, a substantially horizontal cutting edge, a handle pivotally mounted on said base between the ends thereof adapted to be grasped by a person standing, an arm pivoted to said handle near the lower end thereof, extending downwardly and laterally, from the handle, and a laterally extending, substantially horizontal blade on the lower end of said arm, having a cutting edge substantially V-shaped in outline adapted to coact with said first cutting edge.

1,269,882. COMBUSTION-ENGINE PUMP MECHANISM. HUBERT C. VERHEY, St. Louis, Mo., assignor to Busch-Sulzer Bros.-Diesel Engine Company, St Louis, Mo., a Corporation of Missouri. Filed Feb. 10, 1917. Serial No. 147,782. (Cl. 103—77.)

1. In an internal combustion engine marine power plant, the combination with the terminal part of the engine bed and superstructure, of a pumping organization secured to said terminal part and comprising divided pumping units disposed on opposite sides respectively of the vertical plane of the crank shaft, and an engine driven cross head member centrally disposed with respect to said units and connected to operate the plungers thereof.

8. In an internal combustion engine marine power plant, the combination of two upper and two lower pumping units divided on opposite sides of the engine, a cross head centrally disposed with reference to said units, a crank-shaft-driven connecting-rod disposed between the two lower units and a tail rod for the said cross head disposed between the said upper units.



11. In an internal combustion engine marine power plant, the combination with the terminal portion of the engine bed and superstructure, of a plate casting closing the engine crank case and provided with a forwardly projecting bonnet, a crank shaft pinion in said bonnet, a crank gear driven thereby also in said bonnet, a plurality of pumping units in the same transverse plane of said crank gear and operated by said gear, and an up-standing bracing structure between said bonnet and the pumping units.

14. In an internal combustion engine marine power plant, two or more pumping units mounted on the engine structure and in the same transverse engine plane, said units being normally connected to pump in multiple relation in the same circulatory system, an air chamber common to the deliveries of both said units, means for isolating either of said units from connection with said air chamber, and a cross head also disposed in the same transverse engine plane and connected to the plungers of both said pumping units.

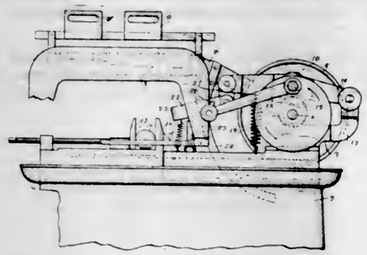
16. In a combustion engine power plant of the kind described, a plurality of pumping units all mounted on the engine structure and in the same transverse plane thereon, said units having valve chests for their respective inlet and outlet valves disposed on that side of the pumping cylinders which is opposite to the engine crank shaft, and having a single removable valve chest cover plate for both inlet and outlet valves.

[Claims 2 to 7, 9, 10, 12, 13, and 15 not printed in the Gazette.]

1,269,883. HACKSAW-MACHINE. HALLOCK WARDMAN, Racine, Wis. Filed May 3, 1917. Serial No. 166,231. (Cl. 29—73.)

1. In a hack saw machine, the combination, with a saw and its supporting frame, a drive shaft, a saw guiding frame swingingly mounted on said drive shaft, and means connected to the drive shaft and saw supporting frame for driving the saw, of means for raising the saw on its return stroke comprising a cam mounted on the drive shaft, a lever actuated by the cam, a quadrant arm carried by the saw guide frame, a block swingingly suspended from said lever, and gripping members carried by the block for frictionally engaging opposite sides of said arm.

3. In a hack saw machine, the combination, with a support, a saw carrying frame, a drive shaft, a saw guiding frame swingingly mounted on said drive shaft, and means connected to the drive shaft and saw supporting frame for driving the saw, of means for raising the saw on its return stroke comprising a cam mounted on the drive shaft, a swinging lever actuated by the cam, a quadrant arm carried by the saw guide frame, a swinging block, a link pivotally connecting said block with said lever, an adjustable support for the block, a spring connected to the free end of the block and to said support, and gripping members carried by the block for engaging the arm.



[Claims 2 and 4 not printed in the Gazette.]

1,269,884. PROJECTILE AND CANNON. PIOTR WARMINSKI, Baltimore, Md. Filed Jan. 19, 1918. Serial No. 212,600. (Cl. 102—29.)



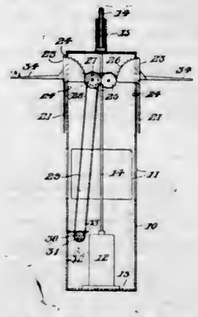
1. A device of the class described comprising in combination with a cannon having a barrel and a breech extension arranged with a bore, a torpedo comprising a casing positionable within the cannon, an explosive spiral steering tail upon the torpedo adapted for arrangement within the bore of the breech during the firing operation, the torpedo being provided with a chamber therein adapted for receiving an explosive material, a fuse between said chamber and the interior of the tail, and a firing pin at the nose of the torpedo.

2. A torpedo comprising a cartridge-shaped casing having a chamber therein, an explosive cap at the forward end of the chamber, a firing pin for said cap at the forward end of the casing, a threaded closure at the base end of the casing, a spiral tail centrally projecting from said closure axially of the torpedo arranged with an explosive chamber therein, and a fuse carried by said closure having its opposite end arranged within the casing and tail.

3. A torpedo comprising the substantially cartridge-shaped casing having a chamber therein, an exploding cap at the forward end of the casing, explosive material within said chamber, a firing pin for said cap carried by the forward end of the casing, a closure for the rear end of the casing, a spiral-shaped steering tail projecting from said closure having a chamber therein communicating with the interior of the casing, explosive material within the chamber of said tail, a threaded plug carried by the closure between the chambers of said casing and tail, and a fuse projecting through said plug contacting the explosive material within the said chambers and whereby the casing and tail are adapted for successive explosions.

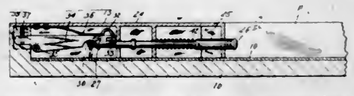
1,269,885. OBSERVATION DEVICE. PIOTR WARMINSKI, Baltimore, Md. Filed Feb. 15, 1918. Serial No. 217,385. (Cl. 244—19.)

1. An observation device comprising an upright car having windows in the sides thereof, a centrally arranged tube upon the top of the car, a motor centrally arranged upon the bottom of the car, a power-shaft for the motor centrally extending vertically through the car and tube projecting above the top of the latter, an elevating propeller upon the upper free end of the shaft, vertically positioned wings upon two opposite sides of the car, sustaining planes hinged upon the other two sides of the car above the plane of said wings, elevating means for the planes, and positioning stops for the latter adapted for engagement by the wings when in their outstretched horizontal arrangement.



2. A device of the class described comprising a car, elevating means therefor, sustaining planes hinged upon opposite sides of the car, segmental racks carried by said planes, meshing pinions operatively engaging the said racks, revolving means for the said pinions arranged within the car adapted for positioning the planes in their outstretched operative arrangement, outstretched stops upon the car above the said planes adapted for engagement by the latter during the descent of the car through the air, upright wings arranged adjacent the bottom of the car centrally positioned upon the sides thereof unprovided with said planes, and said wires for the said wings.

1,269,886. BASE-BALL-GAME APPARATUS. EDMOND M. WATKINS, New York, N. Y. Filed Mar. 2, 1917. Serial No. 151,969. (Cl. 46—61.)



An apparatus of the class described, comprising a board, and means located on said board for batting a ball, said means including a support, a spring-pressed plunger slidably mounted thereon, a sear adapted to hold said plunger in its retracted position, a lug attached to said sear, a spring-pressed lever fulcrumed to said support having a slot in which said lug is seated, and a trigger bearing against said lever.

1,269,887. TIE-CLASP. DANIEL WEILL, Camaguey, Cuba. Filed Nov. 17, 1917. Serial No. 202,661. (Cl. 24—250.)

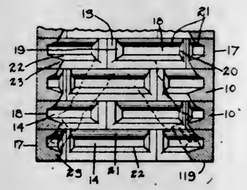


1. A clasp of the character described including a body bar, a jaw pivotally mounted upon one end of said bar and having spaced projections located at relatively opposite sides of its pivot, a lever pivoted upon said bar inwardly of the pivot of said jaw, said lever having a cam on its pivoted end to coact with the spaced projections on the jaw when the lever is moved in relatively opposite directions to thereby move said jaw to its open or closed positions.

2. A clasp of the character described including a body bar bifurcated at one end, a jaw pivotally mounted at one

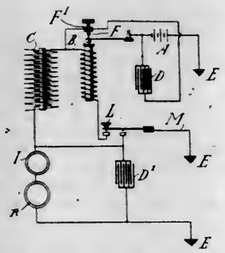
of its ends in the bifurcation of said bar, said pivoted end of the jaw being provided with a lip projecting on one side of its pivot and a lug on the oposite side thereof, a lever also pivoted in the bifurcated end of the body bar in spaced relation to the pivot of the jaw, said lever having a cam on its pivoted end to coact with the lip on the jaw in the movement of the lever in one direction and move the jaw to its open position, said cam coacting with the lug on said jaw when the lever is moved in an opposite direction to move the jaw to its clamping position.

1,269,888. CURB-BLOCK. WILLIAM WEIS, Perham, Minn. Filed Dec. 1, 1916. Serial No. 134,440. (Cl. 72—12.)



A curb block for wells comprising a body portion having a circumferential depression formed with an inclined lower surface and a curved wall extending from the top of the block inward to the inner part of the depression, and a ridge formed along the lower portion of said block projecting out beyond the same having a surface serving as an extension of said inclined lower surface of the body and also having an inwardly-sloping wall adapted to meet the previously-mentioned wall of another block positioned below it to form a regular continuous surface therewith.

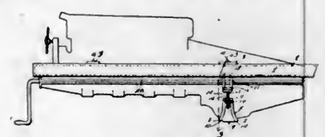
1,269,889. IGNITION APPARATUS FOR USE WITH INTERNAL-COMBUSTION ENGINES. SIDNEY JAMES WILLIAMS, Kensington, London, England. Filed June 12, 1916. Serial No. 103,138. (Cl. 123—148.)



1. An ignition apparatus for internal combustion engines, comprising a source of electric energy, a trembler, a primary coil in parallel with a non-trmbler coil, a high tension distributer, two condensers one connected to the primary coil and one to the non-trembler coil, a contact breaker connected to the valve shaft, in combination with an additional earth line between the earth lines of the two coils, and a depression stud on said additional earth line, substantially as described.

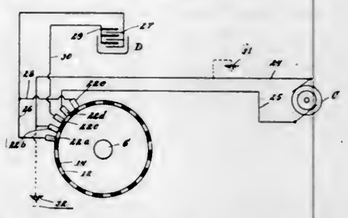
2. An ignition apparatus for internal combustion engines, comprising, in combination, a source of electric energy, a vibrator, an actuating coil for the vibrator adapted to be energized by current from said source, a transformer the primary coil of which is in parallel with the vibrator actuating coil, two earth lines one leading from the transformer primary coil and the other from the vibrator actuating coil, a distributer interposed in the earth line of the transformer primary coil, two condensers one connected to the vibrator actuating coil and the other connected to the transformer primary coil, a contact breaker for opening and closing the circuit through the vibrator actuating coil and adapted to be operated by a moving part of the engine, a normally open additional earth line between the two earth lines first-mentioned, and a manually operable circuit closing device for closing the additional earth line at will, substantially as described.

1,269,890. AUXILIARY SUPPORTING DEVICE FOR ENGINE-CASINGS. JOSEPH B. WOLF, Melrose, Iowa. Filed Feb. 21, 1918. Serial No. 218,551. (Cl. 74—56.)



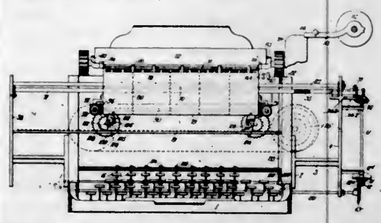
In an auxiliary supporting device for an engine casing, side bars of an automobile frame, an engine casing having lateral lugs secured to the upper flanges of said bars, an endless looped cradle engaging under the casing below said lugs, and connections between the cradle and the lower flanges of the side bars, said connections comprising T bolts engaging the end loops of the cradle, nuts on the lower ends of said bolts under the looped ends of said cradle, and looped brackets engaging the lower flanges of the side bars and having their looped ends engaging the T ends of the bolts.

1,269,891. CURRENT-RECTIFIER. FRED WOODSIDE and DOSS WRIGHT, Dillon, Mont. Filed Sept. 28, 1917. Serial No. 193,816. (Cl. 175—364.)



An alternating current rectifier, comprising a rotatable commutator, a holder pivotally mounted at one end, removable means for securing the opposite end of the holder in operative relation to the commutator, and a series of brushes carried by the holder and arranged on opposite sides thereof and in staggered relation.

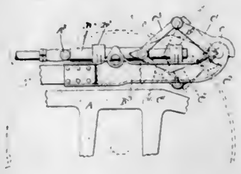
1,269,892. COMPUTING ATTACHMENT FOR TYPE-WRITERS. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Original application filed Apr. 1, 1907, Serial No. 505,492. Divided and this application filed Nov. 1, 1915. Serial No. 59,002. (Cl. 235—59.)



6. The combination with a series of computing wheels and numeral keys for driving said wheels successively, of a tens-carrying mechanism including a power-actuated device coöperative with any of said wheels at the operation of any numeral key, to turn the wheel of next higher denomination.

[Claims 1 to 5 and 7 to 13 not printed in the Gazette.]

1,269,893. ENGINE REVERSING-GEAR. OTIS W. YOUNG, Chicago, Ill., assignor to Pyle-National Company, Chicago, Ill., a Corporation of New Jersey. Filed Sept. 18, 1916. Serial No. 120,656. (Cl. 74—5.)



A locomotive reversing gear comprising a supporting frame, a reversing shaft rotatably mounted upon the frame, a crosshead slidable upon the frame along a line perpendicular to the axis of the reversing shaft, rocker arms mounted upon the shaft free to rotate independently, one rigidly and the other rotatably mounted on the shaft, links interposed between the free ends of the rocker arms and the cross head pivoted at a single axis upon the cross head, a controlling lever pivoted at one end, a connecting rod interposed between the control lever and the cross head.

1,269,894. CONCRETE TIE. MAXIM ZAVARKIN, East Brimfield, Mass. Filed Jan. 2, 1918. Serial No. 209,932. (Cl. 238—3.)



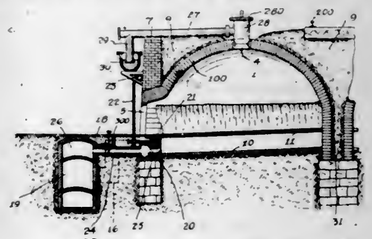
1. In a concrete tie, the combination with a rigid body having enlarged heads receptive of track-rails and an integrally formed connecting element therebetween, of beveled surfaces formed at the ends of said tie, metallic inserts arranged in pairs at the ends of said tie, and a pair of tie rods extending between said inserts embedded in the concrete.

2. In a concrete tie, the combination with an elongated body suited to receive track-rails, of spaced pairs of reinforcing metallic inserts near the ends of said body, said reinforcing inserts being comprised of two separate sections, the upper section having a central stem, a pair of upright guides formed with the lower section receptive of said stem and pairs of integral rigid arms formed with each section on adjacent portions, and interengaging corrugations on the contracting surfaces of said arms.

3. In a concrete tie, the combination with the body thereof, of a T shaped upper element having angularly disposed depending side arms, a lower element having outwardly extending arms, a plurality of corrugations formed upon the adjacent surfaces of all of said arms, and a pair of guides formed on said lower element adapted to make contact with the central stem of said T element.

4. In combination, a rigid body composed of two sections, one section having oppositely-inclined sides formed upon their inner edges with corrugations, an integral pair of central upwardly-extending portions, a second rigid body formed with oppositely-inclined sides formed with corrugations upon their outer edges engaging adjustably the corrugations on the first body, and having a depending central arm slidably mounted between the pair of upwardly-extending portions.

1,269,895. APPARATUS FOR CONVERTING BEEHIVE-OVENS INTO BY-PRODUCT COKE-OVENS. BERNHARD ZWILLINGER, New York, N. Y. Filed July 12, 1917. Serial No. 180,112. (Cl. 202—9.)



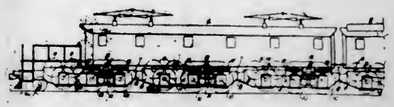
1. The combination with the walls of a row of coke ovens of bee hive design, and a wharf extending longitudinally in front of the same, of means for taking off by-products from the ovens, sets of combustion flues arranged beneath the floors of the ovens with their passages separate from the interiors thereof, a preheater extending lengthwise beneath the wharf, pipes for supplying said combustion flues with heating gas, and hot-air and waste-gas conduits extending outward and generally forward from the floor flues of the respective ovens to the preheater beneath the wharf, whereby the row of bee hive ovens is constituted a row of closed, by-product retort ovens.

5. The combination with a bee hive coke oven structure, of a set of combustion flues beneath the floor of the oven, said set of flues being divided in lateral halves and having their passages separate from the interior of the oven, an external preheater, hot-air and waste-gas conduits extending outward from the floor flues to the preheater, there being waste-gas educt conduits toward both sides of the oven and hot-air supply conduits approximately at the center at opposite sides of the division, and pipes for supplying heating gas to the combustion flues adjacent the outlets thereto of the hot-air conduits, whereby the oven is constituted a closed, by-product retort oven having divided uniflow heating.

13. The combination with an original non-recovery bee hive coke oven structure with its original walls, of a floor and a system of combustion flues arranged thereunder, means for taking off by-products from the top of the oven, external conduits for supplying the floor flues with air and gas for combustion and for conducting away the waste gases therefrom, and means for preheating the air, whereby the coke oven structure is converted from a non-recovery bee hive coke oven structure into a closed by-product retort oven, the oven being sealed.

[Claims 2 to 4 and 6 to 14 not printed in the Gazette.]

1,269,896. ELECTRIC LOCOMOTIVE. GEORGE C. ABBE, Lansdowne, Pa., assignor to The Baldwin Locomotive Works, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Nov. 9, 1917. Serial No. 201,063. (Cl. 105—259.)



1. The combination in a locomotive, of a plurality of coupled trucks, each having at least one pair of drivers adjacent one end and having its other end overhung and carried on the driver-supported end of another truck; and a motor carried on each truck.

2. The combination in a locomotive, of a plurality of coupled trucks, each having at least one pair of drivers

adjacent one end and having its other end overhung and supported on one end of a motor driven truck; and a motor carried on the overhung portion of the truck.

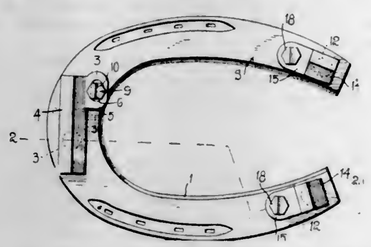
3. The combination in a locomotive, of a plurality of trucks, each having at least one pair of drivers mounted adjacent one end, the other end of each truck being overhung; motors mounted on the overhung portion of each truck, certain of said trucks having a projecting head at its overhung end and a bearing at its opposite end for vertically supporting the head on the overhung end of another truck; and means for coupling said trucks.

4. The combination in an electric locomotive, of a plurality of trucks, each having at least one pair of drivers mounted adjacent one end and each truck having its opposite end overhung; a motor on said truck; a swing bearing on one truck; a head on the overhung ends of certain of the trucks formed to be supported by a bearing on the other trucks; and draw bars connecting the head and their coöperative bearings.

5. The combination in an electric locomotive, of a series of trucks, each having one end vertically supported by an adjacent truck; motors carried by the trucks; and cabs arranged in sections and carried on said trucks.

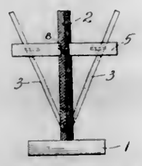
[Claims 6 to 8 not printed in the Gazette.]

1,269,897. CALK. CLARENCE A. BALDWIN and MARTIN SWENSON, Bloomfield, Conn. Filed Mar. 21, 1917. Serial No. 156,401. (Cl. 168—33.)



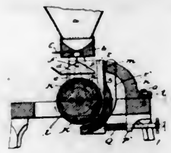
In combination with a horseshoe provided with a pair of transversely spaced threaded openings in the toe portion thereof, said openings being in offset relation in a direction longitudinally of the shoe, an elongated calk provided at one side of its longitudinal center with a depending shank insertible within the forward opening in the toe portion of the shoe, the inner marginal portion of the calk at its end portion remote from the shank being provided with a laterally directed ear, said ear having an elongated slot extending longitudinally of the calk, and a headed member directed through the slot in the ear and in threaded engagement with the second opening in the toe portion of the shoe.

1,269,898. CUTLERY-SHARPENER. EWART M. BALL, Eagle Pass, Tex. Filed June 14, 1917. Serial No. 174,724. (Cl. 76—88.)



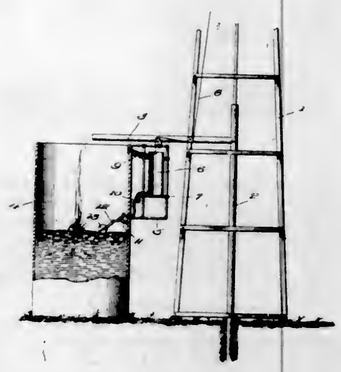
A cutlery sharpening device comprising a base, a sharpening blade mounted upon the base, said blade having a plurality of convergent abrasive faces, a pair of adjustable guide bars pivoted to and each standing at an angle to said blade and a horizontal block slidably mounted on the blade and connected to the bars, whereby vertical movement of the block upon the blade will vary the angle between the bars and the blade.

1,269,899. FEED-GRINDING MACHINE. MAGNUS BOODE, Lacombe, Alberta, Canada. Filed Mar. 1, 1916. Serial No. 81,358. (Cl. 83—14.)



In a feed grinding machine, the combination of a support having an opening therein, with a grinding roller journaled on said support within said opening, a feed hopper on said support above said roller, a swinging chute arranged below said hopper and adapted to discharge onto said roller, a bracket secured on said support, a concave shoe pivotally connected at its upper end to the hopper end of said bracket, said shoe supporting said chute, and means for adjusting the lower end of said shoe relative to said grinding roller.

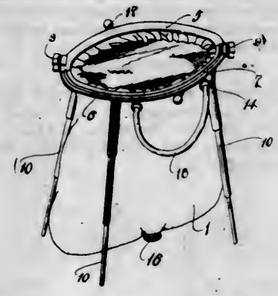
1,269,900. CONTROLLING MECHANISM FOR WINDMILLS. JOSEPH W. BRADFORD, King, Tex. Filed Aug. 7, 1917. Serial No. 184,933. (Cl. 103—101.)



The combination with a tank, and a pump discharging into the tank, of a container mounted for free vertical movement at the side of the tank, means for connecting the container with a gear-shifting mechanism whereby to control the operation of the pump, a conduit connecting the upper end of the container with the upper end of the tank, a conduit connecting the lower end of the container with the tank at a point below the upper end thereof, a cut-off valve for the lower conduit, and a float-controlled lever within the tank operating said valve.

1,269,901. FLUID-CONTAINER. RUA E. BURKE, Spokane, Wash. Filed Feb. 15, 1917. Serial No. 148,843. (Cl. 150—49.)

2. A liquid container having a flexible body portion, and curved, hinged, metallic jaws, a reversible clip pivoted on each jaw adapted to lock the jaws with a waterproof joint, said clips adapted to bridge the hinged joints when the jaws are outspread to hold them in the form of a continuous annular rim, and a plurality of sockets



on each jaw adapted to receive and retain detachable supporting legs, for the purpose described.

[Claim 1 not printed in the Gazette.]

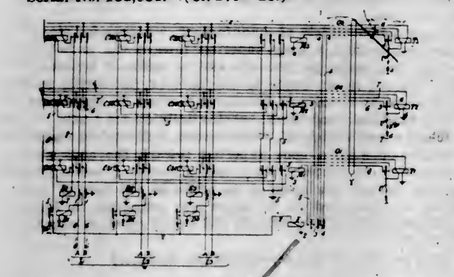
1,269,902. GUARD FOR DRINKING-GLASSES. WALTER H. BUTLER, Douglasville, Ga. Filed Mar. 8, 1918. Serial No. 221,208. (Cl. 210—16.)



1. A guard for drinking glasses and like receptacles adapted to be supported within the upper portion of the glass and having an opening, and a cover for closing such opening.

[Claim 2 not printed in the Gazette.]

1,269,903. MEANS FOR CONNECTING ELECTRIC LINES. LEONARD CHARLES BYGRAVE, London, England, assignor to The Relay Automatic Telephone Company, Limited, London, England. Filed Nov. 22, 1916. Serial No. 132,884. (Cl. 179—18.)

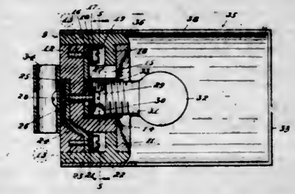


1. The combination of a group of electrical lines, a second group of lines, a connection-determining device associated with each of the lines of the second group, means for rendering inoperative the connection-determining devices of busy lines and means for rendering operative the connection-determining device of one idle line and one only when a connection is to be made and then only.

2. The combination of a group of electrical lines, a second group of lines, a number of connection-determining devices arranged in a definite order of precedence and associated one with each of the lines of the second group, means for rendering inoperative the connection-determining devices of busy lines, means for rendering that one of the connection-determining devices associated with idle lines which is first in precedence operative when a connection is to be made and then only and means for preventing the operation of such connection-determining devices of idle lines as are lower in the order of precedence.

[Claims 3 to 10 not printed in the Gazette.]

1,269,904. ELECTRIC LAMP. JACK CATHRILL, Hollywood, Cal., assignor to Libbie R. Fenn, Hollywood, Cal. Filed Feb. 6, 1918. Serial No. 215,624. (Cl. 240—60.)



1. In a portable electric lamp, a block of insulating material, formed with a tubular extension on one side thereof having a longitudinal slot, a conductor plate arranged in the bottom of said tubular extension projecting through the slot, a binding post engaging said plate, a threaded socket sleeve lining the tubular extension contacted by the conductor plate, a contact member arranged centrally of the socket extending through the contact plate and block and insulated from the plate and socket sleeve, a conductor plate connecting with said contact member on the rear face of said block extending to the forward face of the latter, a binding post connected to said last named conductor plate, an annular body member encircling the block having an inturned flange encircling the tubular extension and concealing the binding posts, a reflector annulus seated on the flange encircling the socket sleeve, and a spring clamp affixed to said block.

2. In a portable electric lamp, a block of insulating material, formed with a tubular extension on one side thereof having a longitudinal slot, a conductor plate arranged in the bottom of said tubular extension projecting through the slot, a binding post engaging said plate, a threaded socket sleeve lining the tubular extension contacted by the conductor plate, a contact member arranged centrally of the socket extending through the contact plate and block and insulated from the plate and socket sleeve, a conductor plate connecting with said contact member on the rear face of said block extending to the forward face of the latter, a binding post connected to said last named conductor plate, an annular body member encircling the block having an inturned flange encircling the tubular extension and concealing the binding posts, a reflector annulus seated on the flange encircling the socket sleeve, a spring clamp affixed to said block, and a reflector shield detachably connected to the annular body member.

1,269,905. FIBROUS MATERIAL AND METHOD OF MAKING THE SAME. ALBERT L. CLAPP, Braintree, Mass., assignor to Reginald W. Bird, Framingham, Mass. Filed July 29, 1915. Serial No. 42,592. (Cl. 92—3.)

1. The herein described process of making felt for roofing which consists in disintegrating scrap leather into a fine fibrous pulpy mass, adding a softening agent and then forming the mass into soft porous sheets of the desired thickness.

[Claims 2 to 8 not printed in the Gazette.]

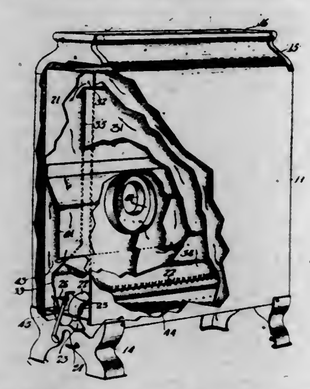
1,269,906. ART OF MANUFACTURING SHEATHING MATERIAL. CECIL M. CLARKE, Chicago, Ill. Original application filed Apr. 1, 1915, Serial No. 22,443. Divided and this application filed June 19, 1916. Serial No. 104,399. (Cl. 91—67.9.)

1. The method of producing surface-coated sheathing material which consists in applying a coating of material to certain portions of an adhesive-coated foundation sheet, removing the excess material from the sheet, and then applying to the unsurfaced portions of the sheet coating material of a color or characteristics differing from the first-referred-to coating material.

5. The method of producing surface-coated sheathing material which consists in directing a continuing stream of coating material upon the adhesive coating of an adhesive-coated foundation sheet to cover less than its entire surface and during such operation moving said sheet relative to said stream, whereby certain portions of said sheet are covered with the said coating material, thereupon subjecting the coating thus applied to suction action for removing the excess of said coating, and thereafter applying to the uncovered portions of said sheet, to adhere to said unsurfaced portions only, coating material of a color or characteristics differing from the first-referred-to coating material.

[Claims 2 to 4 not printed in the Gazette.]

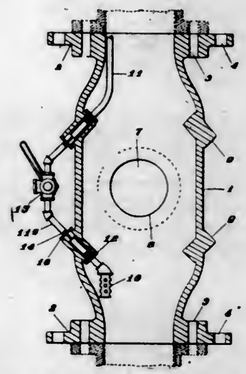
1,269,907. GAS-RADIATOR. ELNATHAN COLE, Los Angeles, Cal., assignor to Cole Manufacturing Company, a Corporation of California. Filed Oct. 13, 1917. Serial No. 196,521. (Cl. 126—91.)



1. A gas radiator comprising an outer shell open at the bottom and having an outlet opening at the top, a heating box within said outer shell spaced apart therefrom at the sides and top, a vertically disposed partition in said heating box extending from the bottom to a point near the top of said heating box, a burner on one side of said partition, a flue outlet in the wall of said heating box on the other side of said partition and extending through the outer shell, said heating box having openings in the bottom thereof on each side of the partition, and a deflector plate secured to the inner wall of said heating box above said flue outlet and extending downwardly and inwardly beyond the flue outlet.

2. A gas radiator comprising an outer shell open at the bottom and having an outlet at the top, a heating box within said outer shell spaced apart therefrom, a flue outlet in the rear wall of said heating box extending through the rear wall of the outer shell, a deflector plate secured to the rear wall of the heating box and extending inwardly and downwardly beyond the flue outlet, a partition in said heating box extending from the bottom of the box to a point near the top of the same and forming a passage between the upper end of the partition and the top of the heating box, said partition having a vertical portion below the flue outlet, an inclined portion below and adjacent to the lower edge of said deflector plate and a vertical portion above the inclined portion, and a burner in said heating box under the inclined portion of the partition, said heating box having openings in the bottom thereof on each side of the partition.

1,269,908. FITTING FOR STAND-PIPE SYSTEMS. WILLIAM F. CONRAN, Brooklyn, N. Y. Original application filed Mar. 26, 1917, Serial No. 157,558. Divided and this application filed Oct. 10, 1917. Serial No. 195,731. (Cl. 137—75.)



1. As a new article of manufacture, a fitting for standpipes, comprising a cylindrical body portion of large diameter and tapering at the ends to pipe size and arranged for attachment to pipe sections, a series of bosses on the body portion adapted to be bored and arranged to form stuffing-boxes, and a hand-hole and covering plate, substantially as set forth.

2. As a new article of manufacture, a fitting for standpipes, comprising a cylindrical body portion of large diameter and tapering at the ends to pipe size and having a flange at each end provided with two sets of holes, a series of bosses on the body portion adapted to be bored and arranged to form stuffing-boxes, and a hand-hole and covering plate, substantially as set forth.

3. As a new article of manufacture, a fitting for standpipes, comprising a body tapering toward the ends and terminating in flanges at each end, a series of bosses on the body adapted to be bored and arranged to form stuffing-boxes, and a hand-hole and cover, substantially as set forth.

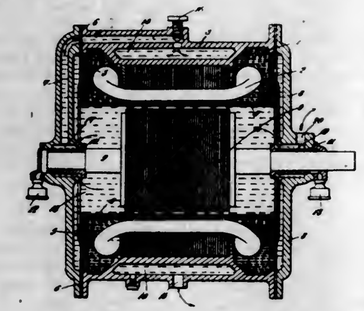
4. As a new article of manufacture, a fitting for standpipes, comprising a body tapering toward the ends and terminating in flanges at each end, a series of bosses on the body set at an angle to the axis of the fitting and adapted to be bored and arranged to form stuffing-boxes, and a hand-hole and cover, substantially as set forth.

5. As a new article of manufacture, a fitting for standpipes, comprising a body tapering toward the ends and terminating in flanges at each end, a series of bosses projecting through the body at an angle to the axis of the fitting and adapted to be bored and arranged to form stuffing-boxes, and a hand hole and cover, substantially as set forth.

[Claims 6 to 10 not printed in the Gazette.]

1,269,909. ELECTRIC MOTOR. THOMAS LANCELOT REED COOPER, London, England. Filed Feb. 20, 1918. Serial No. 218,380. (Cl. 172—36.)

1. An induction motor, adapted to be used under water, comprising a stator, with field windings, and a rotor in which the currents are generated by induction from the field, a closed water-tight closure around the windings of the stator, an insulating liquid in said water-tight closure in which said windings are immersed, said rotor being outside said insulating liquid-containing closure, said closure being responsive to pressure whereby substantial equilibrium may be reached between the contained liquid and outside water under the variations of pressure caused by the depth of immersion of the motor and heat of the motor.

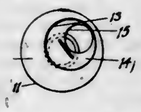


2. In a motor of the squirrel-cage induction type, the combination of a rotor, a stator provided with suitable windings, a tube disposed in the air gap and means in conjunction with the tube and stator for completing an inclosure for isolating the stator windings.

3. In a motor of the squirrel-cage induction type, the combination of a rotor, a stator provided with suitable windings, a steel tube disposed in the air gap and means in conjunction with the steel tube and stator for completing an inclosure for isolating the stator windings.

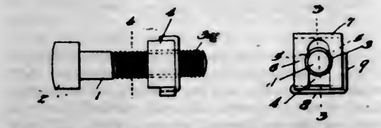
4. In a motor of the squirrel-cage induction type, a laminated stator, said stator having winding channels, windings disposed in said channels, an insulating fluid covering the windings, and means for sealing the laminæ in front of the windings against ingress of water.

1,269,910. EXHAUSTING DEVICE FOR DEPURATORS. THOMAS STEPHEN COPE and WILLIAM HENRY COPE, Coeur d'Alene, Idaho. Filed Sept. 5, 1917. Serial No. 189,719. (Cl. 230—13.)



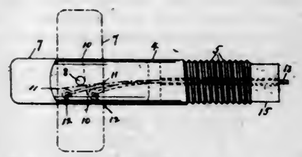
The combination with a running water fixture, an outlet pipe, and an air suction hose connected to the pipe and having a depurator at its free end, of a coupling nut between the fixture and outlet pipe and a water nozzle in the outlet pipe, said nozzle fashioned with a chambered head in said coupling nut, and an eccentric revoluble disk in said chambered head having an opening therein adapted to register or partly register with the opening in said nozzle.

1,269,911. NUT-LOCK. CHARLES HOWARD CRANE, Kansas City, Mo. Filed Oct. 13, 1917. Serial No. 196,410. (Cl. 151—29.)



The combination with a threaded bolt having diametrically opposed mutilated threads and a nut on the threaded bolt, of a bifurcated washer having a flange engaging one face of the nut, and straddling the mutilated threaded bolt, the ends of the bifurcated washer bent under to engage a face of the nut opposite the face engaged by the flange, and an angular, malleable tongue on one leg of the bifurcated washer bent across the two ends of the washer and having its end bent up against a third face of the nut, as described.

1,269,912. CLAMPING-BOLT. EVERETT E. DUNHAM, Seattle, Wash. Filed Jan. 17, 1918. Serial No. 212,358. (Cl. 85—3.)



A clamping bolt of the class described one portion of which is provided with a screw-thread and another portion of which portion is bifurcated by a slot that extends from one of its ends to a point near the inner end of said screw-thread, said bolt being provided with a hole that extends longitudinally from the inner end of said slot throughout the remainder of its length; a clamping bar pivotally mounted in the slot between the members of the bifurcated portion of said cylindrical portion, said clamping bar being provided with a slot that extends in a plane parallel with its broader sides from one of its ends to a point near its pivot; and a wire rod having one of its ends articulated with said clamping bar at a point within the slot thereof and disposed to extend from said point through said longitudinal disposed hole for a distance beyond the outer end thereof to adapt it to be manipulated to move in endwise directions to cause said clamping bar to swing on its pivot to different angular positions.

1,269,913. ORGANIC-MANGANESE-COMPOUND DEPOLARIZER. CARLETON ELLIS, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Long Island City, N. Y., a Corporation of New Jersey. Filed Oct. 18, 1915. Serial No. 56,449. (Cl. 204—38.)

2. The process of making an artificial oxid of manganese adapted for use as a depolarizing agent which comprises reacting on manganese dioxid with glycerin in the presence of an alkali and in decomposing the product of reaction; whereby hydrated manganese dioxid is obtained.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,269,914. PROCESS OF MAKING CONDUCTING HYDRATED BLACK MANGANESE DIOXID. CARLETON ELLIS and ALFRED A. WELLS, Montclair, N. J., assignors, by mesne assignments, to National Carbon Company, Long Island City, N. Y., a Corporation of New Jersey. Filed Dec. 2, 1915, Serial No. 64,790. Renewed Feb. 8, 1918. Serial No. 216,122. (Cl. 23—13.)

2. The process of making black conducting hydrated manganese dioxid which comprises oxidizing a manganese salt with sodium hypochlorite material in an acid solution not exceeding one half of one per cent. of acidity.

3. The process of making black conducting hydrated manganese dioxid which comprises subjecting a manganese salt in slightly acid solution to the oxidizing action of hypochlorite material and in progressively neutralizing the excess of acid to maintain a slight degree of acidity whereby the black product is formed in substantially quantitative yield.

7. In the process of making black conducting hydrated manganese dioxid the step which comprises treating a solution in which manganese sulfate is being oxidized and

sulfuric acid is thereby being liberated, with a neutralizing agent; whereby the solution is maintained slightly acid in character but not sufficiently acid to check the progress of the reaction.

[Claims 1, 4 to 6, and 8 not printed in the Gazette.]

1,269,915. PROCESS OF MAKING MANGANESE DIOXID. CARLETON ELLIS and ALFRED A. WELLS, Montclair, N. J., assignors to National Carbon Company, Long Island City, N. Y., a Corporation of New Jersey. Filed Dec. 6, 1916. Serial No. 135,405. (Cl. 23—13.)

1. The process of making a gray or ash colored higher oxid of manganese depolarizing material comprising heating a solution of hypochlorite and manganous chlorid slightly acidified with hydrochloric acid, and in collecting and grinding the precipitate.

7. The process of making an ash colored manganese dioxid which comprises oxidizing manganese chlorid in aqueous solutions slightly acidified with hydrochloric acid in the presence of hypochlorite oxidizing agent, and in maintaining the solution at the boiling temperature while diminishing the amount of free acid present, whereby a substantial amount of ashy gray precipitate is formed.

8. As a depolarizing material an ash colored higher oxid of manganese.

[Claims 2 to 6 not printed in the Gazette.]

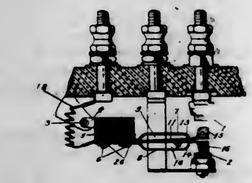
1,269,916. POLYACID-OF-MANGANESE-DIOXID DEPOLARIZER. CARLETON ELLIS, Montclair, N. J., assignor to National Carbon Company, Long Island City, N. Y., a Corporation of New Jersey. Filed Jan. 17, 1917. Serial No. 142,926. (Cl. 204—38.)

1. A galvanic cell containing free polymanganous acid substantially free from salts of polymanganous acid in the depolarizing mass.

5. A galvanic cell of the Leclanche type having a depolarizing agent consisting substantially of a poly acid of manganese dioxid substantially free from salts of polymanganous acid.

[Claims 2 to 4, 6, and 7 not printed in the Gazette.]

1,269,917. CONTACT-FINGER. OSCAR S. FIELD, Elizabeth, N. J., assignor to Hall Switch & Signal Co., a Corporation of Maine. Filed Sept. 30, 1916. Serial No. 123,011. (Cl. 175—281.)



1. The combination in a contact finger of clamping plates, a contact carrying spring, and means comprising insulating studs, for jointly clamping the contact carrying spring between said clamping plates and supporting the finger.

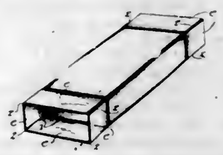
2. The combination in a contact finger of an upper clamping plate, having a limiting stop formed thereon, a clearance formed between the clamped end and the limiting stop to allow adjustment of the set in the contact spring, a lower clamping plate, a contact carrying spring, and means comprising insulating studs for jointly clamping the contact carrying spring between said clamping plates and supporting the finger.

3. In a contact finger clamping plates having limiting stops formed thereon, a clearance formed between the clamped end and the limiting stop to allow adjustment of the set in the contact spring, contact carrying springs inserted between said clamping plates, and means comprising insulating studs for jointly clamping said springs between said plates and holding the finger in position.

4. In a contact finger, clamping plates having limiting stops formed thereon, a clearance formed between the clamped end and the limiting stop to allow adjustment of the set in the contact spring, contact carrying springs having an initial set, and means comprising insulating studs for clamping said contact springs between said clamping plates so that said springs will engage the limiting stops, said means also supporting the contact finger.

5. In a contact finger, the combination of an upper and lower clamping plate having limiting stops formed thereon, a clearance formed between the clamped end and the limiting stop to allow adjustment of the set in the contact spring, contact carrying springs having an initial set inserted between said clamping plates, a terminal inserted between said contact carrying springs, and means comprising insulating studs for clamping the whole together and forming a means of support for the same.

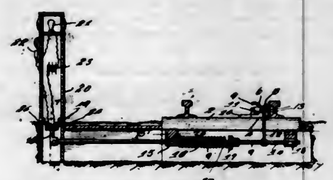
1,269,918. MOISTURE-PROOF PAPER PACKAGE OR CARTON. HERMAN FIETSCH, Jr., Chicago, Ill., assignor of one-half to Rueckheim Bros. & Eckstein, Chicago, Ill., a Corporation of West Virginia. Filed May 26, 1910. Serial No. 563,510. (Cl. 229—5.)



1. A collapsible, moisture proof carton comprising side walls and foldable end flaps, said side walls being connected to one another and to said end flaps by corner folds and said walls and flaps being formed of layers of paper stock, and an intermediate, thin, pliant layer of a waterproof fused cement uniting the layers of paper stock and extending without interruption through said corner folds, substantially as described.

2. A collapsible, moisture proof carton comprising side walls and foldable end flaps, said side walls being connected together and to said end flaps by integral corner folds and said walls and flaps being formed of layers of paper stock and an intermediate, thin, pliant layer of a fused cement uniting but not penetrating the layers of paper stock and extending throughout said side walls and said foldable end flaps and without interruption through said connecting corner folds, substantially as described.

1,269,919. RAILROAD-SIGNAL. EDGAR FOSTER, Vicksburg, Miss. Filed Sept. 16, 1916. Serial No. 120,492. (Cl. 246—23.)

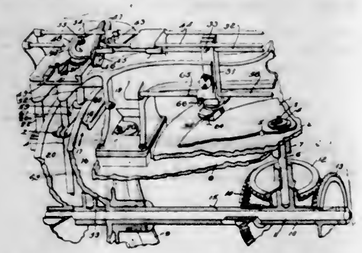


1. In a signal operating mechanism of the character described, the combination of a shaft, means for normally retaining said shaft in a set position, an arm keyed to said shaft, a roller, a plate pivotally connected to said arm and resting upon said roller, whereby when said plate is depressed it may ride over said roller for swinging said arm and turning said shaft.

2. In a signal operating mechanism of the character described, the combination of a shaft, means for normally retaining said shaft in a set position, an arm keyed to said shaft, a roller, a plate pivotally connected to said arm and resting upon said roller, whereby when said plate is depressed it may ride over said roller for swinging said arm and turning said shaft, and springs engaging said plate for yieldably retaining the same in a set position.

[Claims 3 to 6 not printed in the Gazette.]

1,269,920. CAM-PATH-GENERATING MACHINE. EDWARD E. FOSTER, Beverly, Mass. Filed Oct. 24, 1913. Serial No. 797,081. (Cl. 33—27.)

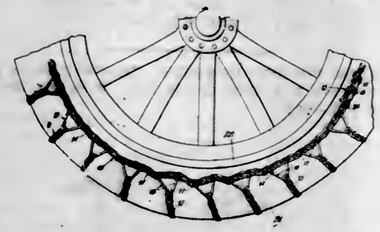


1. A cam path generating machine, having, in combination, a leader support, a tool, mechanism for relatively moving the leader support and the tool to transfer the point of operation of the tool around the leader, and means for varying the operation of said mechanism to generate a cam path having uniform motion sections, the sections having different rises.

15. A cam path generating machine, having, in combination, a leader support, a tool, an inclined plane for actuating the tool laterally of the leader carried by the support, and means for varying the inclination of the plane to generate a continuous cam path having differential rises therein, substantially as described.

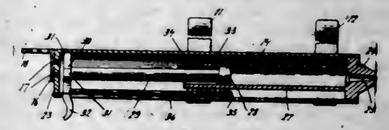
[Claims 2 to 14, 16, and 17 not printed in the Gazette.]

1,269,921. ANTISKIDDING DEVICE FOR AUTOMOBILES. MATHEW J. FRAMBACH, Melvin, Iowa, assignor of one-half to George A. Romey, Melvin, Iowa. Filed May 26, 1916. Serial No. 100,100. (Cl. 152—14.)



A non-skid device comprising side chains formed of longitudinally movable links, a plurality of substantially V-shaped connecting elements including terminal eyes engaging coupled pairs of said links, and cross chains connected to each opposite pair of the connecting elements, said terminal eyes bearing against the adjacent ends of the links which intervene between the links which are engaged by the connecting elements and operating to prevent the displacement of the connecting elements longitudinally of the side chains but leaving the links which are engaged by the connecting elements free to be displaced radially of the wheel to shorten the effective length of the side chains to cause the cross chains to frictionally grip the tire at an angle relatively to their normal position.

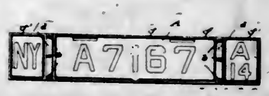
1,269,922. GUN. FRANK GADECKI, Mystic, Iowa. Filed Apr. 11, 1918. Serial No. 227,881. (Cl. 42—56.)



2. In a liquid gun, the combination with a cylindrical casing, means for connecting said casing to a support, a conical point affixed to one end of said casing, and a rigid head at the other end of said casing, of a tube formed with said conical point extending rearwardly into said casing, a plunger slidable within said tube, a plunger rod extending from said plunger toward the rear end of said casing, a block in which said plunger rod is fixed, means for operating said block, a rod engaged with said block extending parallel of said plunger rod, and beyond said tube, and a spring encircling said tube, one end of said spring being engaged with the inner end of said tube, and its other end engaged with the outer end of said rod whereby said plunger is normally held in a forward position.

[Claims 1 and 3 not printed in the Gazette.]

1,269,923. AUTOMOBILE LICENSE-TAG. JOSIAH B. GATHRIGHT, Louisville, Ky. Filed July 14, 1914. Serial No. 850,921. (Cl. 40—63.)

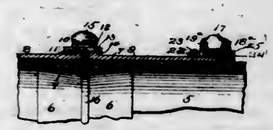


1. A license plate comprising a main member having permanently thereon and integral therewith the figures of the license number, and a second member having permanently thereon and integral therewith indicia of the year of the license, the said second member being removably and rigidly secured directly to an end of the main member and constituting a prolongation thereof.

4. A license plate comprising a main member having permanently thereon and integral therewith the figures of the license number and a character indicating the class of the vehicle, and supplemental members having permanently thereon and integral therewith indicia which include a character corresponding with the one on the main member for indicating the class of the vehicle, and characters indicating the year and territory of the licensee, the said supplemental members being removably and rigidly secured to edge of the main member.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,269,924. HOSE-COUPLING. JOSIAH BAKER GATHRIGHT, Louisville, Ky. Filed Oct. 18, 1917. Serial No. 197,228. (Cl. 137—90.)



1. In a mounting for hose, a plurality of rolling contact members extending entirely around the circumference of the hose and each of which is capable of universal rolling movement with respect to the hose.

4. In a hose support, the combination with a hose coupling, of a ball race at each end thereof and extending entirely therearound and a plurality of balls in each of said ball races which project circumferentially beyond the face of said coupling and each of which constitutes a rolling mounting for said coupling capable of permitting

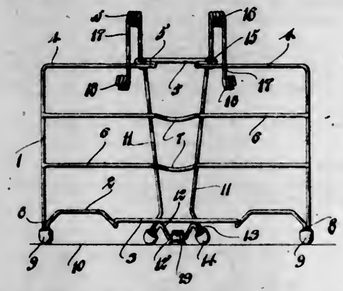
universal movement of said coupling with relation to the surface upon which it rests.

6. The combination with a hose coupling, of a ball race comprising two sides, one of which is adjustable with relation to the other, means for securing one of said sides to the hose coupling and means for binding the other of said sides in its adjusted position.

8. The combination with a hose, of a ball race comprising two sides, one of said sides having a threaded extension upon which the other of said sides is threaded and a lock nut threaded upon said extension for binding the last named side in adjusted position.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

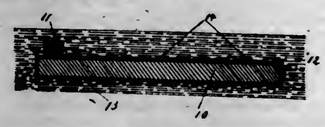
1,269,925. COLLAPSIBLE BOOK-HOLDER. NEWTON C. GAUNTT, Spokane, Wash., assignor, by direct and mesne assignments, to The Educo Company, Spokane, Wash., a Corporation. Filed May 21, 1917. Serial No. 169,960. (Cl. 45—57.)



1. A device of the character described, consisting of a forward book supporting frame formed of side, top, and bottom wires, the latter being provided with a book base or rest, the top wire being bent to provide an offset portion intermediate of its length and turns formed by doubling the offset portion upon itself, a rear supporting member formed of wires spaced apart each being looped or coiled about one of the turns of the offset portion to provide pivotal connection between the forward and rear members, and extensions of the spaced rear member wires extending upwardly and thence downwardly at an acute angle and having terminals adapted to engage the leaves of a book supported by the holder.

2. A device of the character described, consisting of a forward book supporting frame formed of side, top, and bottom wires, the latter being provided with a book base or rest, the top wire being bent to provide a rearwardly directed offset portion intermediate of its length and having turns formed in the offset portion by doubling the same upon itself, a rear supporing member formed of wires spaced apart each wire being looped or coiled about one of the said turns to provide pivotal connection between the forward and rear members of the device, and extensions of the spaced rear member wires extending upwardly, coiled to provide right angular coils, thence extending downwardly at an acute angle and having terminals adapted to engage the leaves of a book supported by the holder.

1,269,926. RUST PREVENTION. CARLOS IDAHO GESELL, Mamaroneck, N. Y. Filed Jan. 7, 1918. Serial No. 210,712. (Cl. 204—1.)

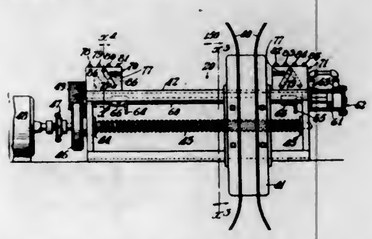


1. The method of preventing the corrosion of a metal consisting in the combination of covering it with a non-metallic coating of paint and making it the negative electrode of a voltaic cell, the said coating of paint giving access to the said metal of a limited amount of electrolyte.

5. A method of rust prevention consisting in holding in metallic contact with each other a body of iron covered with a non-metallic paint having holes or fissures in it and an unpainted body of zinc in sea water.

[Claims 2 to 4 not printed in the Gazette.]

1,269,927. ELEVATOR-DOOR-ACTUATING DEVICE. LUTHER E. GROAT, Los Angeles, Cal., assignor, by mesne assignments, of one-half to himself and one-half to Agda E. Ziegler, Los Angeles, Cal. Filed Apr. 8, 1916. Serial No. 90,014. (Cl. 187—52.)

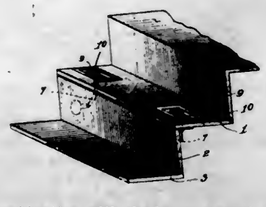


1. In a door actuating device, a sliding nut, means on said nut for engaging the door to be actuated, a screw for driving said nut, a door actuating motor for driving said screw, a dash-pot rod arranged in parallel relation to said screw, a dash-pot, a double acting piston in said dash-pot secured to said rod, and stops on said rod for engaging said nut at either limit of its travel.

3. In an elevator, a driving motor, a car, means by which said motor drives said car, a main controller, a door on each floor, door actuating means carried on said car, means carried by said door actuating means for opening and closing said doors, a series of interlock cams secured to the walls of the elevator shaft in which said car travels, an interlock switch carried by said car and so placed as to be closed by said interlock cams, means by which said door actuating means is inoperative at all times except when said interlock switch is closed, a main controller by which said driving motor is controlled, and means in said main controller for preventing the operation of said door actuating device except when said controller is in a position to open the circuit to said driving motor.

[Claims 2 and 4 not printed in the Gazette.]

1,269,928. FOLDING CAR-STEP. CHARLES J. HAND, Palisades Park, N. J. Filed Oct. 16, 1917. Serial No. 196,937. (Cl. 105—86.)



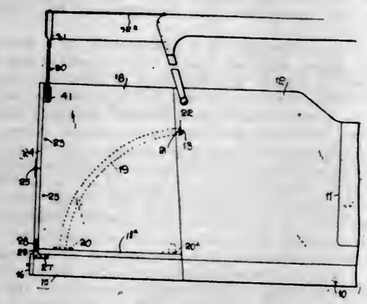
1. The combination with the lower step of a fixed flight, of a riser hinged along the forward edge of said fixed step and having a tread mounted thereon, and arcuate levers carried by the rear side of the riser and extending through the tread of the first fixed step.

4. The combination with the lower step of a fixed flight, of a riser hinged along the forward edge of said fixed step and having a tread mounted thereon, arcuate levers pivoted to the rear face of the riser and extending through the tread of the first fixed step, and means for locking the projected ends of the levers to the fixed step when the riser is in position.

6. The combination with the lower step of a fixed flight, of a riser hinged along the forward edge of said fixed step and having a tread mounted thereon, arcuate levers carried by the rear side of the riser and extending through the tread of the first fixed step, hand grips carried by the projecting ends of the levers, recessed elements in the tread of the fixed step to receive said hand grips when the riser is in extended position, a locking lip carried by said recessed elements, and a lug carried by the lever to engage the said lips to lock the levers in extended position.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,269,929. CONVERTIBLE AUTOMOBILE-BODY. WILLIAM C. HATTENDORF, Schaumburg township, Cook county, Ill. Filed June 30, 1917. Serial No. 177,899. (Cl. 21—7.)



1. A vehicle body having a floor and permanent side walls, and a rear extension comprising a bottom wall hinged to the floor of the body for movement from a vertical to a horizontal position, and auxiliary side walls hinged to the bottom wall to fold inward thereon, and supporting members on the inside faces of the auxiliary side walls for detachably connecting the auxiliary side walls to the permanent side walls, said means extending inward from the outer forward corner of the auxiliary side walls to the rear inner corner thereof and being attached to said side walls and acting to support the bottom, when the bottom is in a horizontal position.

3. A vehicle body having a floor and permanent side walls, and a rearward extension therefrom comprising a hollow bottom wall hinged to the floor of the body and open at its free end and adapted to contain spare parts, a lid for closing the open end of the hollow bottom, auxiliary side walls hinged to the bottom wall to fold inward thereon and having means at their outer forward corners for detachably engaging the upper rear corners of the permanent side walls, and an end gate hinged to the rear end of the bottom and adapted to be turned into a vertical position when the bottom is in a horizontal position or turned over upon the side walls, and means for holding said end gate in its operative position, said end gate being formed in two sections hinged to each other.

5. A vehicle body having a floor and side walls, and a rearward extension comprising a bottom wall hinged to the floor of the body, auxiliary side walls hinged to the bottom wall to fold inward thereon and having links for detachably connecting them to the permanent side walls of the body, an auxiliary bow formed in foldable sections, one end of the bow being pivotally connected to one end of the auxiliary side walls, the other end of the bow being connected to the other side wall, and a top section mounted on said bow and adapted to be detachably connected to the top of the automobile.

7. A vehicle body having a floor and side walls and a rear extension for said body comprising a bottom wall hinged to the floor of the body, and side walls hinged to the body to fold inward thereon, the inside faces of the side walls being provided with members projecting beyond the inside edges of the side walls, said members having laterally projecting pins, said permanent side walls of the body being formed with perforations into which said pins project.

[Claims 2, 4, and 6 not printed in the Gazette.]

1,269,930. SUIT OF ARMOR. JOSEPH CARTER HAWLEY, Blacksburg, Va. Filed Feb. 6, 1918. Serial No. 215,617. (Cl. 89—36.)



2. In a suit or coat of armor, a helmet section comprising hingedly united half parts, a body section, said body section having sleeves, separately consisting of sections, trunk, and trouser sections, all of said sections having overlapping joints, the overlapping parts, each consisting of movable edgewise elastically united portions.

[Claims 1 and 3 not printed in the Gazette.]

1,269,931. METHOD OF DRYING VARNISHED PATENT-LEATHER. ERNST HINTZ, Wiesbaden, Germany, assignor to Firm Cornelius Heyl, Worms, Germany. Filed Dec. 12, 1916. Serial No. 136,408. (Cl. 34—24.)

1. Method of drying varnished (patent) leather and the like consisting in exposing the material to be dried under exclusion of all atmospheric air or other oxidizing agent to the action of light of short wave length only and rich in ultraviolet rays.

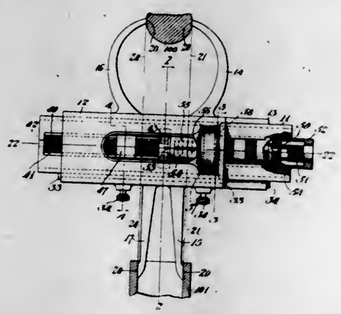
2. Method of drying varnished (patent) leather and the like consisting in exposing the material to be dried under exclusion of all atmospheric air or other oxidizing agent but in the presence of an inactive medium to the action of light of short wave length only and rich in ultraviolet rays.

1,269,932. COMBINATION INSIDE AND OUTSIDE MICROMETER-CALIPERS. ALFRED G. O. HIX, Los Angeles, Cal. Filed July 12, 1917. Serial No. 180,228. (Cl. 33—164.)

1. A caliper comprising a bar; two sliders each engaging said bar and movable axially thereon; two caliper jaws each fixed to one of said sliders; a spindle turning freely with relation to said bar but restrained to prevent axial movement with relation thereto; a nut fixed to the left hand slider and engaging a left hand thread on the left hand end of said spindle; a jacket fixed with relation to said bar; a sleeve right handedly threaded inside said jacket and sliding loosely on the right hand end of said spindle; a sliding key connecting the right hand end of said spindle to said sleeve; means by which said sleeve actuates the right hand slider; and calibration means by which the separation between the jaws can be accurately determined.

2. A caliper comprising a bar; two sliders each engaging said bar and movable axially thereon; two caliper jaws each fixed to one of said sliders; a spindle turning freely

with relation to said bar but restrained to prevent axial movement with relation thereto; a nut fixed to the left hand slider and engaging a left hand thread on the left hand end of said spindle; a jacket fixed with relation to said bar; a sleeve right handedly threaded inside said jacket and sliding loosely on the right hand end of said spindle; a sliding key connecting the right hand end of said spindle to said sleeve; a calibration tube fixed to said sleeve and projecting over said jacket; means by which said tube actuates the right hand slider; and calibration means by which the separation between the jaws can be accurately determined.



4. A combined inside and outside caliper comprising a bar; two sliders each engaging said bar and movable axially thereon; two outside caliper jaws each fixed to the top of one of said sliders; two inside caliper jaws each fixed to the bottom of one of said sliders, the contact surfaces of the inside and the outside jaw of each slider being in the same straight line which is at right angles to the axis of the caliper; a spindle turning freely with relation to said bar but restrained to prevent axial movement with relation thereto; a nut fixed to the left hand slider and engaging a left hand thread on the left hand end of said spindle; means for rotating said spindle; right hand thread means operated in conjunction with the right hand end of said spindle; means by which said right hand thread means moves the right hand slider; and calibration means by which the separation between the jaws can be accurately determined.

6. A combined inside and outside caliper comprising a bar; two sliders each engaging said bar and movable axially thereon; two outside caliper jaws each fixed to the top of one of said sliders; two inside caliper jaws each fixed to the bottom of one of said sliders, the contact surfaces of the inside and the outside jaw of each slider being in the same straight line which is at right angles to the axis of the caliper; a spindle turning freely with relation to said bar but restrained to prevent axial movement with relation thereto; a nut fixed to the left hand slider and engaging a left hand thread on the left hand end of said spindle; a jacket fixed with relation to said bar; a sleeve right handedly threaded inside said jacket and sliding loosely on the right hand end of said spindle; a sliding key connecting the right hand end of said spindle to said sleeve; a calibration tube fixed to said sleeve and projecting over said jacket; means by which said tube actuates the right hand slider; and calibration means by which the separation between the jaws can be accurately determined.

[Claims 3, 5, and 7 not printed in the Gazette.]

1,269,933. DISK-GRINDER. EDWARD HOLMES, Monmouth, Ill. Filed Oct. 11, 1917. Serial No. 195,924. (Cl. 51—7.)

1. The combination, in a disk grinder, of resilient suspension means secured to a single fixed point; supporting means detachably related to said suspension means; a revoluble member applied to the supporting means; carrying means mounted upon said revoluble member and adapted to receive a disk thereon; means for the adjustment of the supporting means adapted to bring the disk into contact with a grinding means; and means for controlling the revolution of the revoluble member.



2. The combination, in a disk grinder, of resilient suspension means secured to a single fixed point; supporting means detachably related to said suspension means; a revoluble member applied to the supporting means; carrying means removably mounted upon said revoluble member and adapted to receive a disk thereon; means for the manual operation of the supporting means adapted to bring the disk into contact with a grinding means; and means for controlling the revolution of the revoluble member.

3. The combination, in a disk grinder, of a suspended rod; a frame, attached to said rod, comprising two arms secured to a block provided with a transverse bore; a shaft loosely journaled in said bore and adapted to rotate therein; a saucer-shaped disk mounted upon said shaft for rotation therewith and adapted to receive thereon the disk to be ground; hand grips provided on the arms for the manual operation of the frame adapted to bring the disk into contact with a grinding wheel; a brake-drum upon the shaft; a brake-band adjacent thereto; a rod connected with the brake-band; and a handle mounted upon one of the hand grips and connected with said rod.

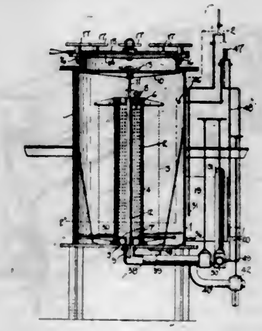
4. The combination, in a disk grinder, of a suspension rod; a helical expansion spring depending from said rod; a frame attached to said spring, comprising two arms secured to a block provided with a transverse bore; a shaft loosely journaled in said bore and adapted to rotate therein; a saucer-shaped disk mounted upon said shaft for rotation therewith and adapted to receive thereon the disk to be ground; hand grips provided on the arms for the manual operation of the frame adapted to bring the disk into contact with a grinding wheel; a brake-drum upon the shaft; a brake-band adjacent thereto; a rod connected with the brake-band; and a handle mounted upon one of the hand grips and connected with said rod.

5. The combination, in a disk grinder, of a suspended rod; a frame, attached to said rod, comprising two arms secured to a block provided with a transverse bore; a shaft loosely journaled in said bore and adapted to rotate therein, and provided with a square upper portion; a saucer-shaped disk adapted to receive thereon the disk to be ground and provided with a square central orifice adapted to receive the square portion of the shaft there through to seat said disk in fixed relation to the shaft; hand grips provided on the arms for the manual operation of the frame adapted to bring the disk into contact with a grinding wheel; a brake-drum upon the shaft; a brake-band adjacent thereto; a rod connected with the brake-band; and a handle mounted upon one of the hand grips and connected with said rod.

1,269,934. BEAM DYEING-MACHINE. EUGENE HOLT and LAFAYETTE HOLT, Burlington, N. C. Filed July 1, 1915. Serial No. 37,546. (Cl. 8—18.)

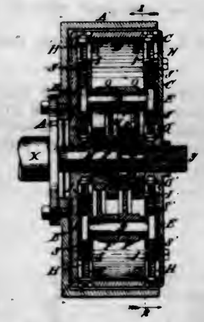
1. Yarn treating apparatus including a closed vat, a perforated beam mounted therein for holding a quantity of warped or wound yarn, a liquid circulatory system for circulating treating agents from within to without said beam and vice versa, means for introducing compressed air above the surface of the liquid level in the vat for simultaneously forcing the treating agents from the vat and for oxidizing the treating agents upon the yarn as the treating agents escape from the vat, and means for introducing compressed air into the bottom of the beam.

2. Yarn treating apparatus including a closed vat, a perforated beam mounted therein for holding a quantity of warped or wound yarn, a liquid circulatory system for filling the vat and beam, means for reversing the flow of



liquid in the circulatory system, and independent means for introducing compressed air into the top of the vat and the bottom of the beam.

1,269,935. AUTOMATIC GEARLESS POWER TRANSMISSION. WILLIAM D. M. HOWARD, San Francisco, Cal., assignor of one-half to Harry Leap, Camp Meeker, Cal. Filed Apr. 4, 1917. Serial No. 159,616. (Cl. 64—13.)



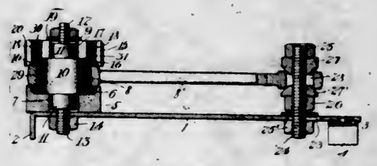
1. A power transmission device including a driving and a driven shaft axially in line, a transmission case with radially slotted ends, within which case the abutting shaft ends meet and are revoluble, eccentrics fixed to the driving shaft, similar pairs of eccentrics secured to the driven shaft, short pin shafts extending across the case into the slots, compression springs within the slots pressing upon the said pins, and straps connecting the eccentrics with the radially movable pins.

2. A power transmission device consisting of a transmission case having radially slotted ends, a driving and a driven shaft meeting axially within the case and freely and independently turnable therethrough, short transverse pins extending into the radial slots wth boxes slidable in the slots, and compression springs upon either side, eccentrics fixed at right angles upon the driving shaft, and other eccentrics upon the driven shaft, and straps surrounding the eccentrics and having their ends connected with the radially movable pins.

3. A means for transmitting power from a prime mover having constant speed, power and turning torque, to a variable load in a flexible manner, said means including a prime mover shaft and a load shaft journaled in an axial line, a pair of eccentrics fixed to the contiguous ends of each of said shafts, a case having radially slotted ends, pin shafts with boxes guided in the radial slots, eccentric straps connecting the eccentrics with said pin shafts, and compression springs acting upon the pin shaft boxes.

[Claim 4 not printed in the Gazette.]

1,269,936. DEVICE FOR BABBITTING CONNECTING-RODS. WILLIAM M. HOWARD, Blackville, S. C., assignor to W. G. Howard and Sons, Blackville, S. C. Filed Oct. 25, 1915. Serial No. 57,765. (Cl. 22—123.)



1. A babbitting device comprising a base plate, a piece to be babitted, means mounted on said base plate for securing at one end said piece, said means consisting of a recessed washer having an annular beveled portion below said piece, a two piece recessed washer having an annular rim and provided with pouring holes therethrough above the piece, a core firmly secured upon the first named washer, and means carried by the base plate for supporting the free end of said piece.

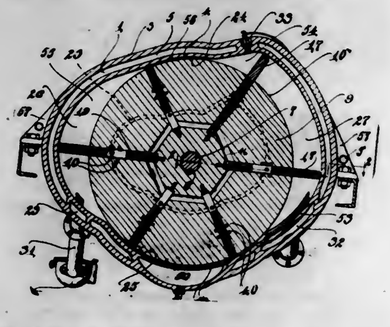
2. A babbitting device comprising a base plate, a piece to be babitted, means mounted on said base plate for securing at one end said piece, said means consisting of a recessed washer having an annular beveled portion below said piece, a two piece recessed washer having an annular rim and provided with pouring holes therethrough, a clamp surrounding said two piece washer for firmly binding the pieces together, a core firmly secured upon the first named washer within the eye of the piece to be babbitted thereby forming a space to receive the Babbitt metal, and means carried by the base plate for securing the free end of said piece in proper alinement.

3. A babbitting device comprising a base plate, a piece to be babbitted, means mounted on said base plate for securing at one end said piece, said means consisting of a washer below said piece, a two piece washer above the piece, a clamp for firmly securing the two piece washer together, a core firmly secured upon the first named washer and having an enlarged body portion with reduced upper and lower portions and threaded at each end thereof, a securing nut threaded to each end of the core, and means carried by the base plate for securing the free end of said piece in proper alinement.

4. A babbitting device comprising a base plate, a piece to be babbitted, means mounted on said base plate for securing at one end said piece, said means consisting of a recessed washer provided with an annular beveled portion below said piece, a two piece recessed washer having an annular beveled portion, and pouring holes therethrough above the piece, a core passing through the piece to be babbitted firmly secured upon the first named washer and provided with an enlarged body portion, reduced upper and lower portions and threaded at each end thereof, a securing nut secured at each end of the core for securing all of the said parts to the base plate, and means carried by the base plate for securing the free end of the said piece in proper alinement.

5. A babbitting device comprising a base plate, a piece to be babbitted, means mounted on said base plate for securing at one end said piece, and means mounted on the other end of the base plate for accurately holding the free end of said piece in proper alinement, said means consisting of a vertically extending threaded bolt having a securing nut threaded to each end thereof, a pair of intermediate conical shaped loose collars adapted to secure and center the said free end, and an adjusting nut positioned between one of the said loose collars and the base plate.

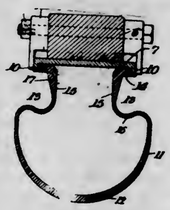
1,269,937. INTERNAL-COMBUSTION ENGINE. THOMAS A. HUTSELL, Spokane, Wash., assignor of one-fourth to Glenn S. Hardin, one-fourth to Samuel W. Hoag, and one-fourth to Roy E. Hutsell, Spokane, Wash. Filed Aug. 31, 1916. Serial No. 117,912. (Cl. 123—16.)



1. In an internal combustion engine, the combination of a casing, a rotor rotatably mounted therein, radial power blade receiving slots in the rotor, radially movable power blades mounted in said slots, a lubricating and power blade cushioning means comprising an oil passage through the casing wall, oil ducts in said rotor sides adapted to communicate with and convey oil from said passage to said power blade receiving sockets, additional oil passages interconnecting said slots, oil channels from said sockets leading to and through the outer ends of said power blades, charge intake means and gas exhaust means communicating with the interior of said casing, and means for igniting said charge.

[Claims 2 and 3 not printed in the Gazette.]

1,269,938. TIRE. WILLIAM O. JEFFRIES, Boston, Mass., assignor of one-half to Arthur F. Viano, Somerville, Mass. Filed Jan. 18, 1918. Serial No. 212,508. (Cl. 152—8.)

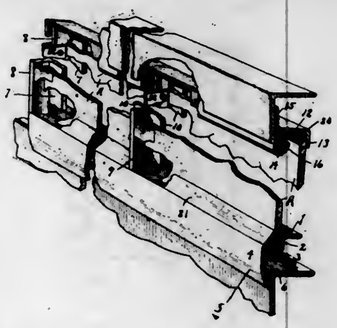


3. A vehicle wheel having, in combination, a rim and a plurality of U-shaped metallic segments fastened thereto, each of said segments consisting of a semi-circular tread portion and oppositely disposed side portions, each of said side portions consisting of an outwardly extending flange at the base thereof, a radially extending portion extending outwardly from said flange and a reversed curvilinear portion connecting said radial portion to said semi-circular portion.

[Claims 1 and 2 not printed in the Gazette.]

1,269,939. HINGE FOR CONTINUOUS SASHES. THOMAS H. KANE, Youngstown, Ohio, assignor to Trussed Concrete Steel Company, Detroit, Mich., a Corporation of Michigan. Filed Nov. 26, 1917. Serial No. 204,068. (Cl. 108—16.)

1. The combination of a window sash having a downwardly turned flange at its upper edge to constitute a pivot for the sash, and a supporting member for the sash having a bearing for the pivot constituted by an upturned lip to position the flange on the sash.

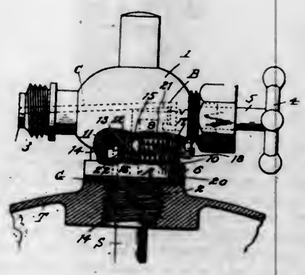


2. The combination of a window sash whose upper member comprises a laterally projecting web and a downwardly extending flange at the outer edge of the web constituting a longitudinal pivot, and a longitudinally extending bearing member to receive said flange to support the sash.

3. The combination of a window sash and a longitudinal pivot secured thereto parallel to the plane of the sash and along the upper edge of the sash, and a supporting member for said sash connected to the window casing along the upper transverse member thereof and constituting a longitudinal bearing for said pivot whereon said sash may swing.

[Claims 4 and 5 not printed in the Gazette.]

1,269,940. SAFETY OR BLOW-OFF VALVE. HENRY A. KEINER, Richmond Hill, and PETER NUSSBAUM, Brooklyn, N. Y., assignors to Keiner-Williams Stamping Company, a Corporation of New York. Filed Oct. 20, 1916. Serial No. 126,735. (220—110.)



A valve for pressure receptacles provided with channels therethrough, and having a bore in the walls thereof divided into two chambers, with a communicating passage between said chambers, a piston valve contained within one of said chambers and and adapted to close the passage between said chambers, the valve containing chamber being provided with a vent and the closed chamber having a passage extending therefrom through the wall of the controlling valve into the receptacle, the said piston valve comprising a piston acting as a closing member between the two chambers, a spring for holding the piston on its seat, and a plug having an opening therein through which the stem of the piston rides, said plug adapted to fit within the larger chamber and act as an adjustable abutment for the valve spring said plug being flattened on portions of its periphery to act as a vent for said chambers.

1,269,941. GAME APPARATUS. SIDNEY ERNEST KELLEY, Westfield, Mass. Filed Mar. 31, 1917. Serial No. 158,980. (Cl. 46—63.)



1. In a game apparatus, a board having thereon the simulation of a foot-ball field, and a marker spanning and slidingly arranged on said board over said field.

10. In a game apparatus, a board having thereon the simulation of a foot-ball field, such simulation comprising a series of transverse yard lines, and a longitudinally-extending row of yard spots, and a ball marker spanning and slidingly-arranged on said board, and consisting in part of feet to ride over said lines and spots, the field zones and yards lost to both sides being denoted on said field.

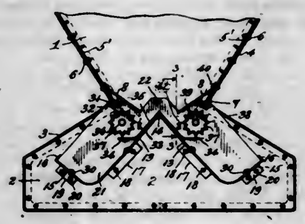
[Claims 2 to 9 not printed in the Gazette.]

1,269,942. TARGET. ALBIN KEMPINSKI, Corona, N. Y., assignor of one-half to Charles Dietrich. Filed Oct. 19, 1914. Serial No. 867,294. (Cl. 124—15.)



In an apparatus of the class described, a rack upon which objects may be secured in exposed position, resilient means at the base of each of said objects adapted to secure the same in said position until thrown down by impact, and restoring means comprising pivoted levers extending parallel with the bases of said objects and having fingers secured thereupon adapted to lift said objects and replace the same within said resilient means, and means for operating said pivoted levers.

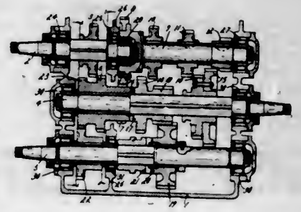
1,269,943. HOG-TROUGH. HENRY M. LEONARD, Topeka, Kans. Filed Jan. 20, 1916. Serial No. 73,253. (Cl. 119—54.)



1. In a feeding apparatus, a hopper having a bottom outlet, an inclined wall at said outlet, a ribbed feeding roller horizontally opposite said wall and spaced therefrom, a flat horizontal feeding platform extending outwardly from said wall below said roller, a trough in position to receive feed from said platform, said roller being exposed in said trough for actuation by the animal being fed, and an apron having a depending skirt portion between said roller and wall which restricts the feed passage and prevents flow of the feed to the upper portion of the roller.

[Claim 2 not printed in the Gazette.]

1,269,944. GEARING. HOWARD M. LEONARD, Jackson, Mich. Filed Oct. 15, 1917. Serial No. 196,648. (Cl. 74—58.)



1. The combination of a driving shaft, a driven shaft, an intermediate shaft disposed in alinement with said driving shaft, a driving gear splined to said driving shaft, a driven gear rotatable on said driven shaft, a pair of gears connected to said driven gear, a gear on said intermediate shaft meshing with one of said gears connected to said driven gear, variable speed gears on said intermediate shaft, coacting variable speed gears splined to said driven shaft, coacting clutch members for said driven gear and one of said shifting gears, a second driven shaft, a reversing gear rotatably mounted on said second driven shaft and meshing with the other of said pair of gears connected to said driven gear, said driving gear being adapted to coact with said driven gear or said reversing gear, coacting gears on said driven shafts, the gear on the second driven shaft being rotatable thereon, and a clutch for connecting the said gear on said driven shaft thereto.

3. The combination of a driving shaft, a driven shaft, an intermediate shaft disposed in alinement with said driving shaft, a driving gear splined to said driving shaft, a driven gear rotatable on said driven shaft, a pair of gears connected to said driven gear, a gear on said intermediate shaft meshing with one of said gears connected to said driven gear, variable speed gears on said intermediate shaft, coacting variable speed gears splined to said driven shaft, coacting clutch members for said driven gear and one of said shifting gears, a second driven shaft, a reversing gear rotatably mounted on said second driven shaft and meshing with the other of said pair of gears connected to said driven gear, said driving gear being adapted to coact with said driven gear or said reversing gear, and driving connections for said driven shafts.

7. The combination of a driving shaft, a driven shaft, an intermediate shaft, a driving gear splined to said driving shaft, a driven gear rotatable on said driven shaft, a pair of gears connected to said driven gear, a gear on said intermediate shaft meshing with one of said gears connected to said driven gear, coacting variable speed gears on said intermediate and driven shaft, a reversing gear meshing with the other of said pair of gears connected to said driven gear, said driving gear being adapted to coact with said driven gear or said reversing gear, and driving connections for said driven shafts.

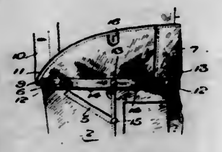
10. The combination of a driving shaft, a driven shaft, an intermediate shaft, a driving gear splined to said driving shaft, a driven gear rotatable on said driven shaft, driving connections therefor to said intermediate shaft, coacting variable speed gears on said intermediate and driven shafts, a reversing gear, and a gear coacting therewith connected to said driven gear, said driving gear being adapted to coact with said driven gear or said reversing gear.

[Claims 2, 4 to 6, 8, and 9 not printed in the Gazette.]

1,269,945. COMBINATION-GARMENT. JOHN I. MCDONALD, St. Joseph, Mo. Filed Oct. 1, 1917. Serial No. 194,246. (Cl. 2—144.)

1. A combination garment comprising a jacket, trousers having side and hip pockets which are overlapped by the skirt of the jacket, means connecting the jacket and

trousers together, and separate means for fastening the skirt of the jacket to the trousers below the connection



aforesaid, whereby the mouths of all the hip and side pockets may be sealed by the skirt portion of the jacket.

[Claims 2 and 3 not printed in the Gazette.]

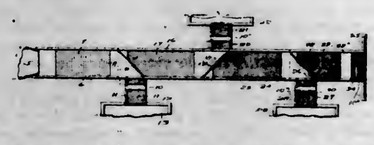
1,269,946. PLASTIC MATERIAL. CHRESTEN TORBEN MADSEN, Oakland, Cal. Filed Sept. 11, 1917. Serial No. 190,857. (Cl. 106—24.)

1. A process of making a composition of the character described, which consists in impregnating fibrous materials with a liquid having resinous, mucilaginous and terebic constituents, and mixing said impregnated fibrous material with a mineral cement.

6. A composition of matter composed of four parts cement, four parts slaked lime, two parts sand, and four parts sawdust, said sawdust having been treated in a liquid made by boiling two parts mallows, one part fir needles, and four parts eucalyptus gum leaves and bark, in water.

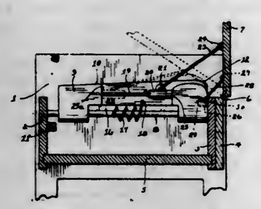
[Claims 2 to 5 not printed in the Gazette.]

1,269,947. PROCESS FOR WASHING AND SEPARATING MATERIALS. HARTSON A. MARK, Oshkosh, Nebr. Filed Sept. 10, 1917. Serial No. 190,544. (Cl. 83—56.)



The herein described method of washing and screening materials which consists in feeding such materials, together with water, into a trough spanned by a screen, the water being in such quantity as to travel both above and below the screen and impart a forward movement to that portion of the material which lies above the screen and laterally deflecting the material which remains above said screen and which is washed down by the water.

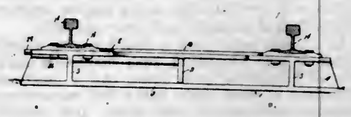
1,269,948. PIANO-BENCH. CHRISTIAN H. MARTIN, Columbus, Ohio, assignor to John R. Gammeter, Akron, Ohio. Filed June 30, 1916. Serial No. 106,920. (Cl. 155—22.)



7. A piano bench comprising a supporting body, a seat hingedly mounted in connection with said body to assume a lower or upper position, wings extending transversely across said body in coöperative relation with said seat and hingedly mounted to be engaged on their upper surfaces by said seat to cause its movement to its upper position, said wings being also slidable transversely of said body, means for automatically elevating said wings by movement of said seat about its hinges, locking means for holding said wings elevated while the seat is elevated, said wings being slid out of their locking position during the act of lowering the hinged seat and spring means for automatically lowering said wings upon again elevating said seat.

[Claims 1 to 6 not printed in the Gazette.]

1,269,949. RAILWAY-TIE. HOWARD F. MAXIM, Locke Mills, Me. Filed Mar. 18, 1918. Serial No. 223,179. (Cl. 238—5.)



1. A railway tie comprising a base consisting of a top, a bottom, an upright web connecting them, and transverse webs also connecting said top and bottom, the top having pairs of longitudinal slots near each end on opposite sides of the longitudinal web; and a top plate overlying said base and provided with rail-channels across its upper face near its ends and with upright bolt-holes at opposite sides of each channel adapted to come opposite the slots in the base.

2. In a railway tie, the combination with a skeleton base having a flat top and near each end of the same two pairs of longitudinal slots; of a top plate overlying said top and having near each end a transverse rail-channel with upright bolt-holes on opposite sides thereof adapted to register with said slots, and bolts engaging said holes and slots.

5. In a railway tie, the combination with a skeleton base having a flat top and near each end of the same two pairs of longitudinal slots; of a top plate overlying said top and having near each end a transverse rail-channel with upright bolt-holes on opposite sides thereof adapted to register with said slots, bolts engaging said holes and slots, the top of said base near one end being provided with a longitudinal channel enlarged at its inner end into a recess, a longitudinal shaft rotatably mounted in said channel and having its inner end threaded within said recess and its inner extremity rotatably connected with the base and its outer end squared, and a nut engaging said threaded portion and slidable within the recess, the upper portion of the nut engaging said top plate, for the purpose set forth.

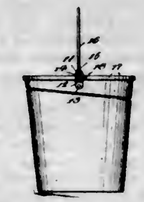
7. In a railway tie, the combination with a base having a flat upper face and at each end thereof a longitudinal channel, a recess at the inner end of the latter and side notches at the inner extremities of the recess; of a shaft rotatably mounted in said channel, threaded at its inner portion within said recess and squared at its outer end, a plate engaging said notches and within which the inner extremity of the shaft is journaled, a nut mounted on said threaded portion and movable in said recess, a rail-carrying plate overlying said base and having a cavity with which said nut removably engages, and means for fastening said plate to the base after adjustment.

[Claims 3, 4, and 6 not printed in the Gazette.]

1,269,950. MILK-PAIL. PIETER M. MILLENAAR, Lutherville, Md. Filed July 14, 1914. Serial No. 850,982. (Cl. 220—22.)

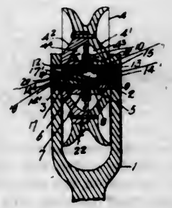
A receptacle including a cylindrical body, diametrically opposite securing elements mounted adjacent the upper edge thereof and having their upper ends offset and provided with slots and arranged in spaced relation with the outer surface of the body, a bail having the respective ends thereof pivotally mounted in the slots, semi-circular cover sections, eyes carried by the sections and movably mounted in the slots and arranged so that the sections

can be lifted and swung from the body, and flanges depending from the outer edges of the sections and arranged



to engage the outer surface of the body and also lie within the space between the securing elements and the outer surface of the body.

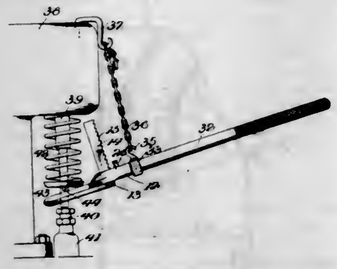
1,269,951. TROLLEY-WHEEL AND BEARING THEREFOR. FREDERICK LIVINGSTONE MORRIS, Hamilton, Ontario, Canada. Filed Aug. 28, 1916. Serial No. 117,380. (Cl. 64—26.)



1. In a trolley, the combination with a bearing support and the wheel, of an annular chamber within the wheel, a sleeve secured at the ends in the support forming a bearing on which the wheel rotates, and provided with a central radial passageway a pin extending through the sleeve and suitably secured therein and provided with a flattened portion, a scoop extending upwardly from the center of the sleeve and passageway, said scoop communicating with the recess formed by the flattened portion of the pin, the sleeve being provided with perforations disposed on each side of the central passageway leading from said recess to the outside bearing surface of the sleeve.

[Claim 2 not printed in the Gazette.]

1,269,952. VALVE-SPRING LIFTER. THOMAS O. MOUNTAIN, El Paso, Tex., assignor to C. W. Mace, El Paso county, Tex. Filed Feb. 21, 1917. Serial No. 150,176. (Cl. 29—87.1.)

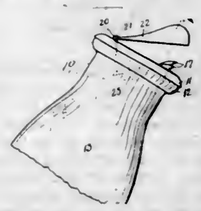


1. A device of the character described including a main jaw, means for pivotally supporting the said jaw suspended, and a second jaw adjustable with respect to the main jaw independently of said first-mentioned means for supporting the main jaw under the weight of a load.

11. A device of the character described including a main jaw provided with a recessed shank, a supporting jaw adjustable with respect to the main jaw and having a shank slidably connected therewith, a pawl mounted in the recess of said shank, yieldable means associated with the said pawl normally urging the pawl to engage the shank of the supporting jaw for holding the supporting jaw at adjustment, and means slidably connected to the shank of the main jaw and formed to co-act with the pawl with the said means reciprocable for retracting the pawl and adapted to be projected to normal position by the tension of the said yieldable means upon the pawl.

[Claims 2 to 10 and 12 not printed in the Gazette.]

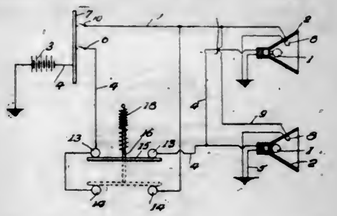
1,269,953. CAP FOR CONTAINERS. EUGENE NAPOLI, New York, N. Y. Filed Aug. 8, 1917. Serial No. 185,172. (Cl. 215—90.)



2. A dispensing cap for containers, comprising a cup-like body adapted to fit in the neck of a container and formed with a top rim or flange portion adapted to overlie the top end of the container, a dispensing spout rising from the bottom of said body within the periphery of said rim and projecting thereabove, a sector plate secured upon said rim opposite said spout, a cover plate hinged to said rim, said cover plate being deformed to compensate for the projecting spout, and a weighted arm integrally united with said cover plate at an angle, said weighted arm being adapted to swing across the cavity behind said spout and being heavier than said cover plate to swing the same into closed or open position upon the rim accordingly as the cup-like body occupies a horizontal or inclined position.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,269,954. ELECTRIC-LIGHTING SYSTEM AND CONTROL. OMAR I. NIGH, Washington, D. C. Filed Mar. 2, 1916. Serial No. 81,702. (Cl. 171—97.)



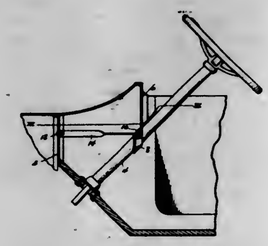
1. The combination with a motor driven vehicle having a treadle controlling means, of a lighting means, and a switch control for the lighting system located within a foot length of said treadle, said switch operable independently of said treadle control but by the foot and simultaneously with the operation of the treadle, substantially as set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,269,955. AUTOMOBILE BRACING ATTACHMENT. ROBERT E. O'NEIL, Kansas City, Mo. Filed July 3, 1917. Serial No. 178,490. (Cl. 21—192.)

1. The combination with the instrument board, dash-board and steering column of an automobile having the said steering column intersecting the lower margin of said instrument-board, of brace means secured to the dash-

board and connected with said instrument-board and steering column upon opposite sides of said steering column.

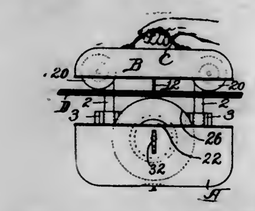


2. The combination with the instrument-board, dash-board and steering column of an automobile having the said steering column intersecting the lower marginal portion of said instrument-board, of a brace comprising a rigid U-shaped member secured at one end to the dash-board and having the ends of its leg portions secured to the lower marginal portion of said instrument-board at the opposite sides of said steering column.

3. The combination with the instrument-board, dash-board and steering column of an automobile having the said steering column intersecting the lower marginal portion of said instrument-board, of a yoke member carried by said instrument-board and embracing said steering column, and a brace member secured at one end to said dash-board and at its opposite end to said instrument board and yoke member.

4. The combination with the instrument-board, dash-board and steering column of an automobile having the steering column intersecting the lower marginal portion of said instrument-board, of a yoke member embracing said steering column, and a brace member comprising a rigid U-shaped member secured at one end to said dash-board and having the ends of its leg portions extending to the lower margin of said instrument-board and provided with bolts securing the ends of said yoke and said leg portions to said lower margin of the instrument-board.

1,269,956. AERIAL-INSULATION-REPAIRING DEVICE. GEORGE T. PARR, St. Paul, Minn., assignor to Peter J. Lavalle, St. Paul, Minn. Filed May 22, 1916. Serial No. 99,175. (Cl. 91—41.)



1. In a device for insulating electrical conductors while strung aerially, comprising, a receptacle for holding insulating compound, a cover having downwardly extending bars, guide-ways secured to said receptacle adapted to receive said bars, carrying wheels freely journaled in said cover, locking means secured to said bars, adapted to automatically lock said cover and receptacle closed, or in open position, a rotary brush journaled in said receptacle adapted to be held in spring contact with the conductor, and means on the side of said receptacle for holding said brush in depressed position out of engagement with the conductor while applying or removing the device from the conductor.

[Claims 2 to 4 not printed in the Gazette.]

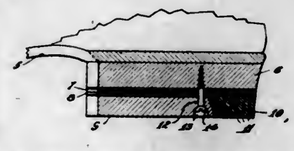
1,269,957. CEMENTATION COMPOUND AND METHOD OF MAKING SAME. GEORGE W. PRESSELL, Philadelphia, Pa., assignor to E. F. Houghton & Co., Philadelphia, Pa., a Corporation of Pennsylvania. Filed Mar. 12, 1917. Serial No. 154,319. (Cl. 148—25.)

1. Carburizing material comprising a carbonaceous base grain having energizing material frictionally adherent thereto and a coating of a highly active carburizing agent intimately bonded therewith.

5. The herein described method of making carburizing material, which consists in mixing granules of carbon material with suitable energizing agents in a dry and finely powdered state, thoroughly mixing said energized carbonaceous material with a tacky binder, adding a mixture of finely divided carbonaceous material and an energizing agent, thoroughly mixing the several ingredients, and drying the material in granular form.

[Claims 2 to 4 not printed in the Gazette.]

1,269,958. SHOE-HEEL. JESSIE E. PRICE, Los Angeles, Cal. Filed May 21, 1917. Serial No. 170,026. (Cl. 36—35.)

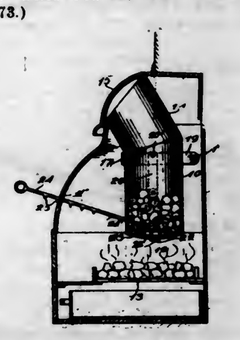


1. In a cushion heel, the combination of a lift, a sheet of resilient material on the under side of the lift, a resilient tread member formed on the edge of said sheet, reinforcing fiber in said tread member, and a non-resilient tread member overlapping the sheet and having an inwardly curved cutout portion on its edge partly encircling the edge of the resilient tread member.

4. A cushion heel, comprising, a lift, a sheet of resilient material on the under side of said lift, a resilient tread member on the edge of said sheet and having its outer edge formed in continuation of the edge of the lift, fabric reinforcement strips throughout said resilient sheet and tread member, and a non-resilient tread member covering said resilient sheet and having an outer edge conforming to the edge of the lift on the opposite sides of the resilient tread member.

[Claims 2 and 3 not printed in the Gazette.]

1,269,959. STOVE-MAGAZINE. JOHN H. PRINGLE, Sac City, Iowa. Filed Oct. 12, 1915. Serial No. 55,536. (Cl. 126—73.)



The combination with a stove including a fire box, of a magazine extending vertically in the fire box, of the stove and open at its lower end, a collar secured about the magazine, depending arms having their upper ends connected with the collar, a yoke having a bridge extending beneath

the magazine and having upwardly extending arms pivotally connected with the lower ends of the depending arms, and a closure disk connected with the bridge of the yoke, the disk being concaved in cross section and having its edge portions engaging the lower end of the magazine and closing the lower end of the magazine.

1,269,960. CONVEYER. WOJCIECH PRZEDNOWEK, Cromwell, Manitoba, Canada. Filed July 20, 1917. Serial No. 181,695. (Cl. 198—4.)

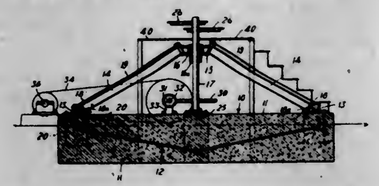


1. In a conveyer, the combination with a belt having at spaced intervals a plurality of transverse slots, strips disposed upon each side of said belt, said strips having slots registerable with the slots through said belts, a series of blocks disposable on said belt surface, stems formed with said blocks, and means for securing said stems within the mentioned slots in said belt and strips.

3. In a conveyer, the combination with an endless belt, and a plurality of carrier blocks, of strips disposed between said carrier blocks and the surface of said belts, elongated slots formed transversely through said belt, stems formed with said blocks receivable in the mentioned slots, each of said blocks having an opening upon one side, and a corresponding stem rigidly engaged with the opposite side of said blocks whereby all of said blocks in one row are engaged together.

[Claim 2 not printed in the Gazette.]

1,269,961. PUMPING POWER. HENRY SANGUINETTI, Bakersfield, Cal. Filed July 24, 1917. Serial No. 182,383. (Cl. 74—36.)

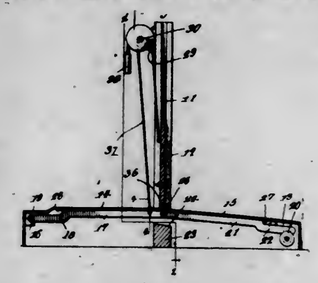


5. A pumping power, comprising in combination a base embodying a pair of crossed base members, in the form of a symmetrical cross, of reinforced concrete, four diagonal struts based on the ends of the cross members and extending diagonally inwardly and upwardly to a central point above the point of intersection of the base members, a central bearing carried by the struts, a vertical pump shaft in the bearing, pump eccentrics on the shaft above the bearing, a worm wheel on the shaft below the bearing, a drive shaft on the base, and a worm on said shaft meshing with the worm wheel.

[Claims 1 to 4 not printed in the Gazette.]

1,269,962. AUTOMATICALLY-OPERATED DOOR. GUSTAVE O. SAUERMANN, Kenesaw, Nebr. Filed June 15, 1915. Serial No. 34,279. (Cl. 268—8.)

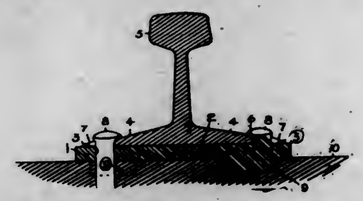
1. In a device of the kind described, a pair of standards, a door slidable in said standards, a support, a pair of hingedly secured platform sections in connection with said support, the abutting edges of said support and said platform sections being rounded so that when the platform sections are moved the rounded edges will be in engagement with each other, a rotatable shaft carried by said supports having a pair of sheaves mounted thereon, cables connected at one end to the door and trained over the respective sheaves, counterweights connected to the other end of the cables, means operatively connecting said platform sections with said shaft whereby when a weight depresses said platform sections, the shaft will be rotated to raise the door, said door closing by gravity and raising the platform sections when the weight is removed.



2. In combination, a vertically sliding door, a shaft above the door, a cable attached at one end to the door and passing around the shaft, a counterweight at the other end of the cable, a platform section at each side of the door, the two sections being hinged at their inner ends, and a cable having an end attached to the shaft and wound thereon, and having its opposite end connected with one of the platform sections, whereby when a weight depresses either platform section, the door slides upwardly into open position, said door closing by gravity and raising the platform sections when the weight is removed.

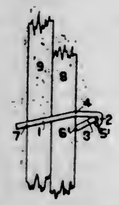
[Claim 3 not printed in the Gazette.]

1,269,963. IRON CASTING. WILBERT C. SCHADE, Meadville, Pa. Filed Oct. 3, 1916. Serial No. 123,590. (Cl. 238—2.)



A tie-plate comprising an iron casting having incorporated therein a metal reinforcement of fabric substantially co-extensive with the area of the tie-plate.

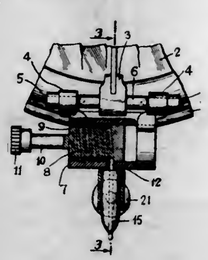
1,269,964. CLAMPING DEVICE FOR THE CONNECTION OF POLES, BALKS, AND THE LIKE. TAMIS CORNELIS SCHENK, Amsterdam, Netherlands, assignor to Johannes Wilhelmus Albertus de Wild, Rotterdam, Netherlands. Filed Oct. 18, 1916. Serial No. 126,400. (Cl. 24—243.)



A clamping device for connecting poles and balks comprising a U-shaped clamp, obliquely extending legs on said

clamp extending beyond the poles, hook-shaped portions at the end of said legs and a locking piece inserted in said hook-shaped portions with one edge thereof bearing against the outer pole so that said locking piece can turn on said edge into locking position against the obliquely extending legs of the clamp when the latter is turned about its contact edge with the inner pole.

1,269,965. SOUND-BOX. CHARLES H. SHAW, Babylon, N. Y., assignor to The Aeolian Company, a Corporation of Connecticut. Filed May 6, 1915. Serial No. 26,331. (Cl. 274—37.)



1. The combination, with a sound-box, of a stylus-wire, a rotatable part on which the wire is wound, a rotatable part having a spiral groove wherein the wire is located.

2. The combination, with a sound-box, of a stylus-wire, a rotatable part on which the wire is wound and by which it is adjustable, the stylus bar, and means for operatively securing the free end of the wire to said bar, the rotatable part having a spiral groove wherein the wire is located.

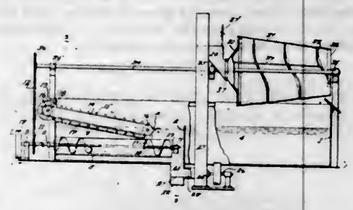
12. The combination, with a sound-box; of a hollow, cylindrical casing arranged substantially tangentially of and connected to said sound-box; and a spool mounted within said casing and adapted to have a stylus-wire wound spirally around it; said casing being provided between its ends with an opening to deliver the free end of the wire into operative playing position, and said spool being arranged for both rotary and endwise movement in said casing to respectively feed the wire through said opening and bring its successive convolutions into alinement with the same.

13. The combination, with a sound-box; of a hollow, cylindrical casing connected thereto; a stylus-bar having a rocking mounting intermediate its ends on said casing; a spool mounted within said casing and adapted to have a stylus-wire wound spirally around it, said casing having a delivery opening for the wire intermediate its ends; and wire-holding means carried by the free end of the stylus-bar and having an axial opening which registers with the first-named opening; said spool being arranged for both rotary and endwise movement in said casing to respectively feed the wire through said openings into operative playing position and bring its successive convolutions into alinement with same.

[Claims 3 to 11 not printed in the Gazette.]

1,269,966. APPARATUS FOR TREATING RAISINS. ARTEMAS P. SHEPARD, Fresno, Cal. Filed Feb. 19, 1918. Serial No. 218,032. (Cl. 146—14.)

1. An apparatus for the washing of raisins and the like, comprising a fluid containing tank for the receiving of raisins to be washed, means therein for conveying the raisins longitudinally thereof and for maintaining the same agitated to permit the lighter particles to separate therefrom, means for removing the lighter particles from the surface of the fluid in said tank and for discharging the same exteriorly of said tank, a sump for receiving the raisins after the same are conveyed longitudinally of the tank, a screen within said sump and on which the raisins are deposited, a trap below said screen for receiving the foreign material passing therethrough, and a pump for removing the raisins from the surface of said screen.



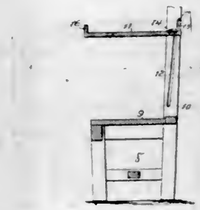
2. An apparatus for washing raisins and the like, comprising a fluid containing tank, a trough extending longitudinally thereof for receiving the raisins to be washed, said trough open at its top and at its discharge end, a screw conveyer in said trough for conveying the raisins therein longitudinally thereof and maintaining the same in agitation, an endles elevating conveyer extended into the fluid within said tank for removing therefrom the foreign material in suspension therein, a settling tank adjacent said washing tank, a centrifugal pump for removing the washed raisins and fluid from said washing tank, a screen associated with said settling tank and onto which said pump discharges, the fluid with the sediment contained therein passing through said screen, the sediment settling within said settling tank and the excess fluid overflowing into said washing tank.

3. An apparatus for the washing of raisins and the like, comprising a liquid containing washing tank for receiving the raisins to be washed, means within the tank for conveying raisins therein longitudinally thereof and for maintaining the same in agitation, whereby the released lighter foreign particles will float to the surface of the liquid therein, means within said tank for removing the floating particles from the surface of the liquid therein, a settling tank adjacent said washing tank, a screen associated with the settling tank, a duct connecting the base of the washing tank and discharging into said screen, and a centrifugal pump within said duct for withdrawing the raisins and fluid from said washing tank and for depositing the same on said screen, the raisins passing over said screen and the fluid and foreign particles passing through the screen, the foreign particles settling in said settling tank and the excess water therein overflowing from said tank into said washing tank.

4. An apparatus for washing raisins and the like, comprising liquid containing washing and settling tanks, means within the washing tank for agitating and conveying raisins deposited therein longitudinally thereof, means within said tank for removing therefrom foreign material separated from the raisins and floating on the surface of the liquid therein, means for removing the washed raisins from said tank and for conveying the same to a point within the sphere of said settling tank, a screen for receiving said raisins, and means for further washing the said raisins when supported by said screen, whereby the foreign particles removed therefrom and said wash water pass into said settling tank permitting the settling of the foreign material in said tank and the excess water in said tank to overflow into said washing tank.

1,269,967. COMBINED CHAIR AND TABLE. JOHN H. SILL, Towanda, Pa. Filed Mar. 26, 1918. Serial No. 224,791. (Cl. 155—6.)

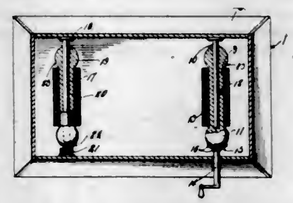
2. As a new article of manufacture, a combined chair and table consisting of a chair seat, uprights at the rear side edges of the seat, a cross-bar connecting the uprights adjacent their upper ends, each upright being provided on its inner face with a groove extending from a point adjacent the seat to a point adjacent the cross-bar, the upper ends of said grooves being curved forwardly and terminating below and in a plane at the front of the cross-bar, a pin projecting upwardly from the upper face of the cross-bar, and a back member located between the uprights and provided at its side edges near its lower end with pins to engage the grooves in the upright members, and



on its rear face at its upper end with a rearwardly projecting rail, the latter having a recess to receive the pin on the cross-bar.

[Claim 1 not printed in the Gazette.]

1,269,968. TOY. DORA E. SMALL, Norwood, Ohio. Filed Nov. 13, 1917. Serial No. 201,827. (Cl. 46—37.)



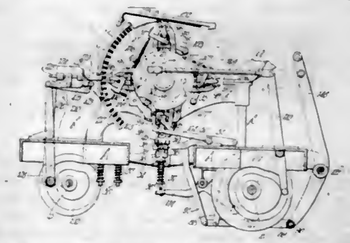
1. As a new article of manufacture, a toy comprising a casing, said casing provided with a wide base and inclined walls, a top plate provided with an aperture formed therein, a transparent plate fitted within said aperture, a winding spool carried within said casing, an unwinding spool also positioned within said casing, an operating crank carried by said winding spool, a belt secured to said spools, and a coil spring secured to said casing and engaging said unwinding spool for unwinding said belt from said winding spool when said winding spool is released.

2. As a new article of manufacture, a toy comprising a casing, a winding spool, an unwinding spool, each spool provided with a ball-portion at each end thereof for producing a reduced shank, a belt secured at one end to said unwinding spool, a return spring coöperating with said casing, a plurality of gripping fingers radiating from said operating crank, said fingers conforming to the contour of one of said ball-portions of said winding spool, and fitting snugly thereover, and means for attaching said fingers to said winding spool.

3. A toy comprising a casing, a winding spool, an unwinding spool, a belt secured at its respective ends to said spools, each spool provided with a ball-portion at each end thereof, said ball-portions provided with inwardly curved inner ends for producing a reduced shank portion for said spools, and said inwardly curved inner ends constituting a guide for holding said belt upon the shank portions of said spools and preventing the injury of the edges of said belt as the same is wound upon said spools.

4. A toy comprising a winding spool, an unwinding spool, a belt secured at its respective ends to said spools, each spool provided with an enlarged portion at each end thereof, each spool also provided with a reduced shank portion intermediate the enlarged end portion for constituting a means for winding said belt thereon, and said enlarged ends constituting a means for preventing injury to the edges of said belt and holding said belt in proper alinement upon said spools.

1,269,969. WRAPPING-MACHINE. ELMER L. SMITH and ARTHUR E. PHELON, Springfield, Mass., assignors to Package Machinery Company, Springfield, Mass., a Corporation of Massachusetts. Filed Aug. 6, 1917. Serial No. 184,644. (Cl. 93—7.)



1. A wrapping machine, comprising, a feeding turret, a plurality of pockets thereon, each adapted to receive and carry groups of articles to be wrapped in stacks, a second turret, means to transfer groups of articles from the first to the second turret, means to wrap the articles while on the latter, and means engageable with each group of articles prior to said transfer to insure that the articles are properly alined in stack form.

6. A wrapping machine, comprising, a turret movable step by step, a plurality of pockets on the turret in which articles may be held for wrapping, each pocket comprising relatively movable parts normally held in coöperating engagement to grip articles to be wrapped and positively hold them from movement in all directions, means to successively open said pockets to receive articles and wrappers therefor, means to wrap the articles while held in said pockets, and means to successively open said pockets to discharge the wrapped articles therefrom.

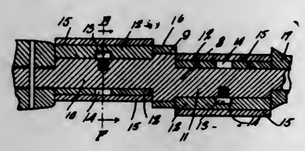
8. A wrapping machine, comprising, a turret movable step by step, a plurality of pockets in which the articles with the wrappers may be positioned, means to wrap the articles except for tubular end extensions, means to fold the tubular end extensions flat against the ends of the articles in a plurality of overlapping folds, including fingers provided with slots, said fingers being movable while the turret is at rest to form end folds and arranged so that extensions of the wrapper are positioned in said slots, and means to hold said fingers in their moved positions until the articles have been carried past the fingers on movement of the turret, whereby said extensions are laid flat against the ends of the articles.

19. In a wrapping machine, means to wrap the sides and ends of articles, such as assembled disks, bottles and the like, including means to form an overlapped gummed seam in the wrapper, a discharge apparatus comprising a support upon which the wrapped articles are deposited and along which the articles are carried, means to deposit the wrapped articles on said support, means associated with the latter yieldingly engageable with the wrapped articles to hold the gummed seam from opening, and other means on said support to prevent the wrapped articles from rolling during their movement thereon, whereby the disengagement of said yieldable means with the gummed seam is prevented.

20. In a wrapping machine, means to wrap the sides and ends of articles, such as assembled disks, bottles and the like, a discharge mechanism, comprising two spaced arms movable toward and away from one another, means to deliver the wrapped articles in line with said arms, means to move the latter together to grip the ends of the articles placed in line therewith, means to receive articles from said arms, means to move the arms to releasing position for the articles to be delivered to the receiving means, means to carry the articles through the latter, and a common actuating means for the arms and carrying means to operate each in properly timed relation with the other.

[Claims 2 to 5, 7, and 9 to 18 not printed in the Gazette.]

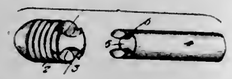
1,269,970. EARTH-BORING TOOL. NEWTON H. SMITH, Hamilton, Ill., assignor of one-half to William C. Howell, Keokuk, Iowa. Filed May 20, 1916. Serial No. 98,832. (Cl. 255—74.)



2. An earth boring tool including an auger, a core revoluble therewith and having oppositely offset eccentric portions, a sleeve mounted for rotation upon each of said offset portions, said sleeves having eccentric core receiving openings, means for limiting the rotation of the sleeves, said sleeves being concentric with the axis of rotation of the core when at one limit of their movement and eccentric thereto when at the other limit of their movement, and packing rolls mounted for rotation upon the sleeves.

[Claims 1, 3, and 4 not printed in the Gazette.]

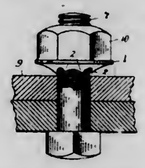
1,269,971. SET-SCREW. OSCAR A. SMITH, Cleveland, Ohio, assignor, by mesne assignments, to The National-Acme Company, Cleveland, Ohio, a Corporation of Ohio. Filed Mar. 25, 1916. Serial No. 86,561. (Cl. 85—9.)



1. A headless machine set screw having a portion of its threads cut away to form a driving portion or tang gradually thickening outward from the axis of the screw to the threads thereof carried by such driving portion or tang whereby the driving portion or tang is of greater width at the threaded periphery of the screw than it is at the axis thereof, thereby to bring the strains of setting the screw on the thicker portion of the tang.

[Claims 2 to 6 not printed in the Gazette.]

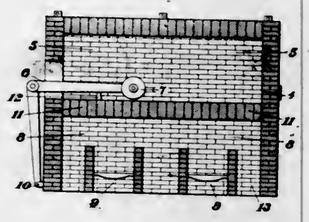
1,269,972. NUT-LOCK. WALTER K. STAFFORD, Newton, Mass. Filed Mar. 14, 1916. Serial No. 84,096. (Cl. 151—3.)



1. A nut lock comprising a washer having inwardly projecting spurs, the spurs being formed with curves of a comparatively short radius, each spur having one edge formed by a segment of a circle whose diameter is slightly shorter than that of the bolt for which the nut lock is designed, and the other formed by a segment of a circle considerably smaller in diameter than the other but whose center is outside the periphery of said bolt, whereby every two adjacent spurs are oppositely directed to present themselves to the bolt in a partially tangential direction.

2. A nut lock comprising a washer having inwardly projecting spurs formed at their edges with curves of comparatively short radius, the washer and spurs being given a conical contour, and each alternate spur being more sharply conical than the adjacent spurs.

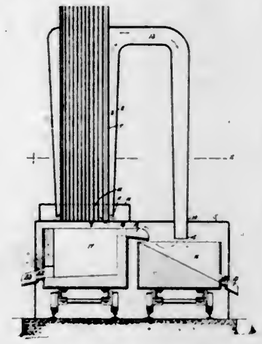
1,269,973. WIRE-ANNEALING FURNACE. JOHN COOK ST. CLAIR, Johnstown, Pa. Filed Nov. 2, 1917. Serial No. 199,990. (Cl. 263—3.)



1. In a wire annealing furnace having openings in one end, a series of sheaves supported on jointed arms adapted to be individually withdrawn or placed into the furnace chamber through said openings, and perforations in line with said openings at the other end through which the wire is drawn from the furnace.

[Claims 2 to 7 not printed in te Gazette.]

1,269,974. SMELTING-FURNACE. THOMAS ARTHUR M. STEVENSON, Winston-Salem, N. C. Filed Mar. 29, 1917. Serial No. 158,230. (Cl. 266—14.)

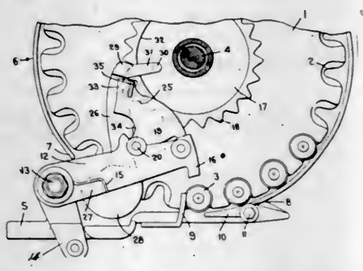


1. In a smelting furnace, a compartment having an opening, a shaft having double walls forming an air space, the inner wall being connected with the compartment at the opening, there being an opening in the outer wall of the shaft adjacent the compartment serving as a cold air inlet leading to the air space, a crucible car in the compartment, means for directing slag from the crucible car, and an air duct leading from the air space at the top of the shaft to the interior of the compartment.

2. In a smelting furnace, a compartment having a shaft opening and opposite sides with an outlet opening in each of its said sides, a shaft connected with the compartment at the shaft opening, tracks in the compartment adjacent one of the said sides and disposed at an angle relatively thereto, a crucible car on the tracks, tracks in the compartment adjacent other of the said sides and disposed at an angle thereto, a fore-hearth car in the compartment on the last mentioned tracks, means for directing slag from the upper portion of the crucible car to the fore-hearth car, a spout at the bottom of the crucible car fitting one of the outlet openings in the compartment, a spout at the bottom of the fore-hearth car fitting the other outlet opening in the compartment, and an air duct leading from the shaft to the interior of the compartment.

[Claims 3 and 4 not printed in the Gazette.]

1,269,975. BATTERY-FEED FOR LOOMS. EDWARD S. STIMPSON, Hopedale, Mass., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass., a Corporation of Maine. Filed Aug. 14, 1916, Serial No. 114,682. Renewed Mar. 11, 1918. Serial No. 221,863. (Cl. 139—85.)



2. An automatic weft replenishing loom comprising a rotary hopper provided with equi-distant peripheral bobbin seats, a ratchet wheel connected to and rotating with the hopper and having the same number of teeth as there are bobbin seats, a transferrer pivotally mounted adjacent the hopper, and a dog pivotally mounted on the transferrer and provided with two teeth to coöperate with the teeth of the ratchet wheel, the first of said teeth acting upon each upward movement of the transferrer to engage a tooth of the ratchet wheel and rotate said ratchet wheel and the second of said teeth acting upon the conclusion of the effective movement of the first tooth to engage the next successive tooth of the ratchet wheel and give a further rotation to said ratchet wheel thus to bring a bobbin into proper discharging position.

[Claims 1 and 3 not printed in the Gazette.]

1,269,976. SUSPENSION LIFT-BRIDGE. JOSEPH B. STRAUSS, Chicago, Ill. Filed May 3, 1913. Serial No. 765,225. (Cl. 14—42.)



1. A bridge comprising separated supports, a movable suspension device connected with said supports and spanning the space between them and varying in length when moved to open and close the bridge, a vertically movable bridge span connected with said suspension device, operating mechanism for varying the position of said suspension device so as to lift said bridge span, and means associated with the suspension device for compensating for the difference in length thereof when moved to its various positions.

2. A bridge comprising two supports on opposite sides of the space to be spanned by the bridge, a suspension device connected with said supports and spanning the space between them, a bridge span connected with said suspension device, operating mechanism connected with said span so as to lift it, said suspension device provided with an intermediate section detachably attached to the remaining portion of the suspension device and means for detaching said intermediate section from the remaining portion of the suspension device so that the bridge span may be moved upwardly.

3. A bridge comprising separated supports, a movable suspension device connected with said supports and spanning the space between them, a vertically movable bridge span connected with said suspension device, counterbalancing material connected with said suspension device for counterbalancing the bridge span, and mechanism for moving the bridge span, and thereby operating the suspension device.

4. A bridge comprising separated supports, a movable suspension device connected with said supports, a vertically movable span connected with said suspension device, a counterbalance at each end of said suspension device for counterbalancing the bridge span, and mechanism to lift said span, and thereby operating the suspension device.

[Claims 5 to 14 not printed in the Gazette.]

1,269,977. BED CORNER-IRON. CARL F. STREIT, Cincinnati, Ohio. Filed Feb. 12, 1915. Serial No. 7,738. (Cl. 5—55.)



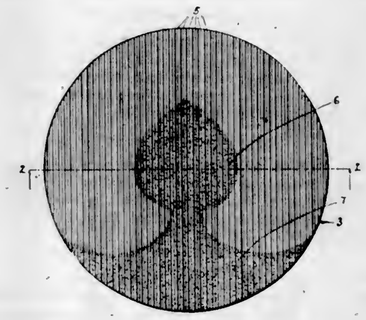
1. A pair of bedstead sections, each having secured thereto a bracket formed from a single sheet metal blank and comprising a supporting flange, a longitudinal rail supporting extension and a transverse rail supporting extension, the longitudinal extensions being intermeshingly engaged and secured together to form a rigid unit.

3. A bracket as an article of manufacture formed from an integral blank providing a single supporting flange with opposite laterally extended side walls each terminating with rail supporting extensions relatively transverse to one another and providing parallel horizontal limbs overlappingly secured together as a web for said extensions.

6. A bed corner bracket formed from an integral blank comprising a supporting flange, two opposite parallel walls at right angles to said supporting flange, one of said walls having a rail supporting angle extension projecting at right angles to the wall, and the second wall providing an angle rail supporting extension having a flange extending toward and connecting with said first-named rail supporting extension.

[Claims 2, 4, and 5 not printed in the Gazette.]

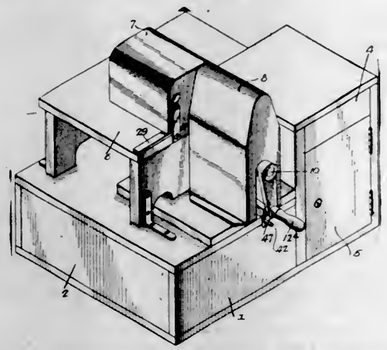
1,269,978. LENS FOR AUTOMOBILE-HEADLIGHTS. JOHN B. SUESS, Seattle, Wash. Filed Oct. 8, 1917. Serial No. 195,467. (Cl. 240—48.4.)



A lens of the class described, which consists of a glass plate one side of which is smooth and whose other side throughout its whole active area is provided with integral triangular prisms, the surfaces of said prisms being matted at the central portion in a horizontal line substantially one-third to the distance across said lens, said surfaces of

said prisms being also matted throughout the area of the lower portion, the shape of the aren of said lower matted portion being such that its middle portion extends upwardly to merge with the bottom edge of said central portion.

1,269,979. DATING AND MUTILATING MACHINE. STEPHEN B. TILY, Bala, and MARTIN O. REHFUSS and JOHN G. REHFUSS, Philadelphia, Pa., assignors to John Wanamaker, Philadelphia, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 26, 1915. Serial No. 4,492. (Cl. 101—90.)



1. The combination in a sales recording machine of a pair of substantially parallel shafts; two coacting feed wheels respectively mounted on said shafts; a chute opening to the rear of the feed wheels; two coöperating cutting members mounted at one side of the chute; and guide fingers extending from the opening of the chute forwardly on either side of the upper feed wheels in position to receive the ends of slips cut off by said members.

7. The combination in a mutilating machine of a slip-supporting table; a pair of feed wheels each having a slip-limiting abutment; a pair of coacting cutting disks mounted with their most forward point of engagement immediately adjacent the plane of the table and in advance of a straight line between said abutments so as to be within the notch in the sides of a sales slip whose straight side rests against the feed wheel abutments; means for actuating said feed wheels and cutting disks; and means for impresaing the slip as it is passed through the machine.

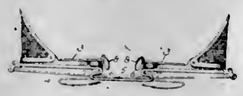
[Claims 2 to 6 not printed in the Gazette.]

1,269,980. PAINT. EMMA TUFTS, Berkeley, Cal. Filed May 26, 1917. Serial No. 171,200. (Cl. 134—39.)

1. A paint consisting of white lead, turpentine and carbolic acid combined in about the proportiona described.

[Claim 2 not printed in the Gazette.]

1,269,981. GOGGLES. GEORGE L. TULLY and PITT H. HERBERT, Southbridge, Mass., assignors to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed June 3, 1914. Serial No. 842,559. (Cl. 88—41.)



1. In a device of the character described, the combination with a pair of lens-receiving frames, of a connecting member for said frames disposed a distance above the centers thereof and comprising a horizontal crosspiece terminating at each end into oppositely extended parallel arranged loops located in the rear of and concealed by the front crosspiece, said loops being disposed in substantially parallel alinement with the axis of the lenses and secured directly to the lens frames at a point above the center thereof and in substantially horizontal alinement with the center crosspiece, whereby the loops afford satisfactory in and out and twisting adjustment of the lens frames relative to each other while substantially concealed by the frontal crosspiece.

[Claim 2 not printed in the Gazette.]

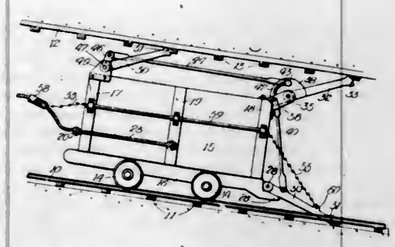
1,269,982. LIFE-PRESERVER. GEORGE W. UPTON, Warren, Ohio. Filed June 1, 1914. Serial No. 842,268. (Cl. 9—17.)



1. In a life preserver, the combination of a buoyant member adapted to float vertically consisting of a middle, connecting element, a float at the upper end and a weight at the lower end with means at the top and bottom for attachment of the user's arms or shoulders and feet respectively.

2. The combination in a life preserver of a buoyant member adapted to float vertically and consisting of a rod a float at the upper end and a weight at the lower end and capable of being retained in temporary attachment by and with the user's arms and legs respectively.

1,269,983. SAFETY-STOP FOR MINE-CARS. SIMON VERBITSKY, St. Clair, Pa. Filed Jan. 29, 1918. Serial No. 214,297. (Cl. 188—76.)



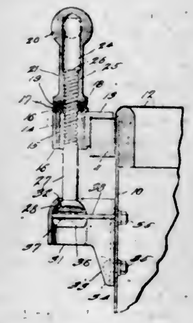
1. In a safety stop for mine cars, the combination with a trackway, a car movable thereon, and a haulage cable engaged with said car, of an overhead track substantially parallel with the track over which the car travels, levers hingedly engaged at the rear of said car at the top and bottom thereof, the lower levers being capable of engaging with the main track, and the upper levers with the overhead track, springs operatively engaged with said levers whereby they are extended outwardly into engagement with the main tracks and the overhead track simultaneously, and means engaged with said cable whereby said levers are held normally out of operative position.

2. In a safety stop for inclined railways, the combination with a trackway, a plurality of cross strips arranged above said trackway, parallel therewith, a car movable on said trackway, and a haulage cable engaged therewith, of a pair of levers pivotally engaged with said car at the lower rear corners thereof, adapted to engage with said trackway when extended, a second pair of levers engaged with the upper rear corners of said car adapted to engage with said cross strips, operative connections between the first and second named levers, means for causing operation of said levers, and means for holding said levers closely adjacent to said tracks said holding means being engaged with said cable in such manner that should said cable become loosened, said holding means will operate all of the said levers.

3. In a safety stop, the combination with an inclined railway, a plurality of transversely disposed strips, arranged above said railway, a car movable on said railway, below said strips, a cable engaged with said car, levers pivotally attached at the rear of said car normally adjacent thereto, means for extending said levers upon slackening of the cable, levers pivotally arranged at the front end of said car, said levers being contactable with said strips, and connections between both pairs of said levers whereby they are operated in unison.

4. In a safety stop for inclined railways, the combination with a trackway, a plurality of transverse strips arranged thereabove parallel to said trackway, a car operatable on said trackway and below said strips, and a haulage cable attached to said car, of a pair of levers hingedly engaged at the lower rear portion of said car, said levers having ends adapted to contact with said trackway, a second pair of levers engaged at the upper rear portion of said car, said levers being engageable with said transverse strips, connections between the first and second named levers whereby they are operated in unison, means for normally holding the levers closely adjacent to the ends of said car, a third pair of levers hingedly engaged at the front upper ends of said car, said third levers having a head engageable with said transverse strips, link connections between said second and third pair of levers, means whereby said third pair of levers are given a lesser motion than said second pair of levers, and flexible connections between the first named pair of levers and said cable, said flexible connections being so arranged that should the cable be loosened all of said levers will operate to stop said car.

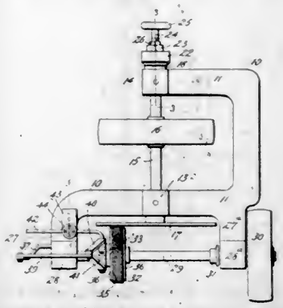
1,269,984. TENSIONING DEVICE FOR TYMPANA. CHARLES B. WANAMAKER, Indianapolis, Ind., assignor to Leedy Manufacturing Company, Indianapolis, Ind., a Corporation of Indiana. Filed Dec. 9, 1916. Serial No. 136,120. (Cl. 84—10.)



1. A tensioning device for tympana, comprising a supporting thimble carried by the head ring, a hollow threaded hand nut supported upon the thimble, an upwardly presented threaded shank passed through the thimble and into the nut, and a support carried by the main body of the tympanum and resisting upward displacement of said shank.

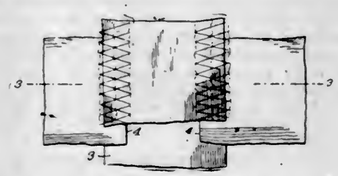
2. A tensioning device for tympana, comprising a supporting thimble carried by the head ring, a hollow threaded hand nut suported upon the thimble, an upwardly presented threaded shank passed through the thimble and into the nut and provided at it lower end with a ball head, and a support carried by the main body of the tympanum and provided with a ball pocket receiving the ball head of the threaded shank and resisting upward displacement of said shank.

1,269,985. CHANGEABLE-SPEED MECHANISM. EBENEZER S. WATERMAN, Walla Walla, Wash. Filed May 12, 1917. Serial No. 168,192. (Cl. 24—26.)



A changeable speed mechanism including two shafts supported at right angles to each other, a frictional disk on one of said shafts, a frictional pulley on the other shaft engageable with said frictional disk and movable longitudinally on its shaft to and from the center of the frictional disk, and means for longitudinally moving said frictional pulley, locking means for holding the pulley in a determined position comprising a rod secured at one end to said means and lying parallel with the pulley shaft, a bearing mounted on a fixed support through which said rod is adapted to slide, and a screw threaded in said bearing and adapted to be clamped against said rod to hold it immovable and the friction pulley in its adjusted position with relation to the friction disk.

1,269,986. SEAM STRUCTURE FOR GARMENTS. JOHN P. WEIS, Nyack, N. Y., assignor, by mesne assignments, to Metropolitan Sewing Machine Corporation, Dover, Del., a Corporation of Delaware. Filed Feb. 1, 1917. Serial No. 145,826. (Cl. 2—41.)



1. As a new article of manufacture, a garment having spaced edges at its seam, an overlapping strip and an underlapping strip secured along their edges to the spaced edges of the garment seam, both the garment and the strips having greater elasticity in one direction than in another, the strips having their greater elasticity transverse to the greater elasticity of the garment.

14. As a new article of manufacture, a garment having spaced edges at its shoulder seam, and a strip ex-

tending lengthwise of such seam with its edges entirely beyond the spaced edges of the garment seam and stitched flat thereupon with the raw edges of the strip covered by such stitches, both the garment and the strip having greater elasticity in one direction than in the other, the strip having its greater elasticity transverse to the greater elasticity of the garment.

[Claims 2 to 13, 15 and 16 not printed in the Gazette.]

1,269,987. LUMBER-PILER. FREDERICK O. WERDEN, Philadelphia, Pa. Filed Sept. 6, 1916. Serial No. 118,674. (Cl. 193—8.)



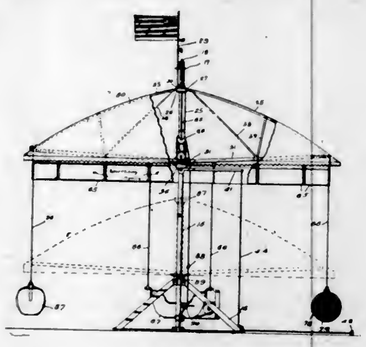
1. In a lumber piler, the combination with a solid base, of a front rocker rail and a fixed rear rail, paralleling each other, secured to said base, extendible standards secured to said front rocker rail, a standard rigidly secured to said fixed rear rail intermediate of the standards on said front rail, an extendible rack bar operatively secured to said intermediate standard, means for extending said extendible standards and said rack bar, a horizontal shaft journaled in said extendible standards and rack bar, bolsters, knuckles secured to said bolsters and to said front rail providing means to maintain the equilibrium of the device of various heights and means for maintaining the elevation of said extendible standards at various heights.

6. In a lumber piler, the combination with a solid base, of front and rear rails thereon, a plurality of standards on said front rail having extendible sections, means for elevating and lowering said sections, a horizontal shaft journaled in said sections, said standards and their extendible sections providing supports for a lumber conveyer, a lumber conveyer comprising chain links riveted together to form sections, said sections being bolted together to form endless chains, a horizontal shaft journaled on said front rail and connected to a suitable source of power, sprockets secured to said shaft and actuated thereby, idler sprockets loosely mounted on the upper horizontal shaft, said conveyer chain being mounted on said sprockets, brackets secured to said extendible sections, journals secured to said brackets and on said horizontal shafts, said sprockets being provided with hubs, said hubs fitting snugly against said journals thereby preventing lateral movement of said sprockets on said shafts and means secured to said extendible sections to receive the lumber, either for piling or returning.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,269,988. CYCLE-FLIER. GRANVILLE G. WESTERFIELD, Des Moines, Iowa, assignor to The Cycle-Flyer Company, Des Moines, Iowa, a Corporation of Iowa. Filed Mar. 28, 1917. Serial No. 157,888. (Cl. 46—27.)

1. In a cycle flier, the combination of a central supporting post, a rotating element mounted to rotate thereon, a cap piece mounted on the upper end of said post, said cap piece having a flange for engagement with the end of the post, a spring within the end of the post tending to lift said cap piece to disengage said flange from the post end, and a ball between the spring end and said cap piece, said cap piece being connected to said rotating element so as to rotate therewith, and means associated with said cap piece and said rotating element for lifting the latter.



4. In a cycle flier, the combination of a central supporting post, a rotating element mounted to rotate thereon, a cap piece mounted on the upper end of said post, said cap piece having a flange for engagement with the end of the post, a spring within the end of the post tending to lift said cap piece to disengage said flange from the post end, a ball between the spring end and said cap piece, said cap piece being connected to said rotating element so as to rotate therewith, a sheave carried by said cap piece, a rope passing over said sheave, a windlass on the lower part of said post, and a releasable connection between said rope and said windlass.

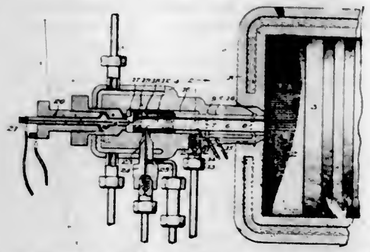
7. In a cycle flier, the combination of a central supporting post, a rotating element mounted to rotate thereon, a cap piece mounted on the upper end of said post, said cap piece being connected to said rotating element so as to rotate therewith, means associated with said cap piece and said rotating element for lifting the latter, a bearing surrounding said central post and on which said rotatable element rests, and removable means for supporting said bearing at the desired height on said post, so that by the removal of such means the bearing may be dropped.

10. In a cycle flier, the combination of a central supporting post, a rotating element mounted to rotate thereon, a bearing supporting said rotating element from said post, and a brake member vertically movable on said supporting post, said brake member and rotating element having coöperating brake surfaces which are normally disengaged but may be engaged upon such vertical movement upward and which when so engaged lift the rotating element from said bearing, said brake member being disposed with relation to said post so that it produces a balanced action around the post.

13. In a cycle flier, the combination of a central supporting post, and a rotating element rotatably mounted on said post, said rotating element comprising a central tubular member surrounding said central supporting post, a plurality of compression members radiating from a lower point on said tubular member, a plurality of tension members radiating from a higher point on said tubular member, said tension members being oblique and meeting and being connected with said compression members at their outer ends, a fabric covering resting on said tension members and hooked thereto near the outer ends of the latter, and struts connecting intermediate points on said tension and compression members and bowing the tension members upward to stretch said fabric cover, and a plurality of cars hung from the outer ends of said tension members.

[Claims 2, 3, 5, 6, 8, 9, 11, 12, 14, and 15 not printed in the Gazette.]

1,269,989. COMBINATION IGNITION AND FUEL-INJECTING SYSTEM. FRED L. WILLIAMS, San Francisco, Cal. Filed Feb. 26, 1916, Serial No. 80,667. Renewed Feb. 26, 1918. Serial No. 219,342. (Cl. 123—33.)

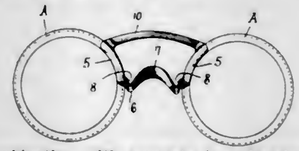


1. The method of injecting and igniting fuel in engines of the "Diesel" type which comprehends the injection in different chambers of two fuel charges, igniting one of said charges, and utilizing the pressure and heat thus obtained to drive the other charge into the main combustion chamber and simultaneously igniting said charge.

3. A method of injecting and igniting fuel in internal combustion engines, which consists in injecting into a temporary reception chamber provided with spray openings a charge of fuel during a time interval in the movement of the piston when the pressure in the cylinder is low, and then injecting into a primary combustion chamber which communicates with the temporary fuel reception chamber and the main compression chamber of the cylinder a small charge of fuel to generate sufficient pressure to drive the main fuel charge out of the temporary receiving chamber into the main compression chamber and to simultaneously ignite the said charge.

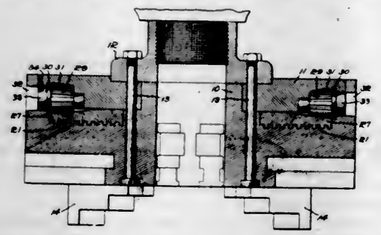
[Claims 2 and 4 to 10 not printed in the Gazette.]

1,269,990. SPECTACLES. FREDERICK WILLSON, Reading, Pa., assignor to T. A. Willson & Co., Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Jan. 28, 1918. Serial No. 214,111. (Cl. 88—43.)



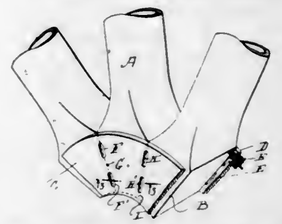
In combination with separate lens framings, a one-piece sheet metal connection comprising a lower nose-conformed bridge strip, an upper bracing strip, and uniting side strips conformed to the respective lens framings.

1,269,991. CHUCK. CLARENCE FREDERIC WOODFORD, Windsor Locks, and OLIN S. ROCKWELL, Warehouse Point, Conn., assignors to E. Horton & Son Company, Windsor Locks, Conn., a Corporation of Connecticut. Filed Jan. 6, 1915. Serial No. 729. (Cl. 279—116.)



A chuck having radial guides, jaw carriers movable along said guides and means to actuate said carriers, said carriers having undercut longitudinal bores therein, jaw-engaging screws in said bores retained therein by the overhanging portions thereof and projecting above the carriers, the carriers being peripherally flanged about the outer ends of said bores and having removable screw retaining means at their inner ends.

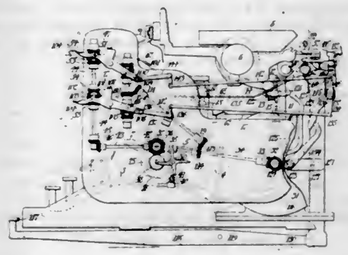
1,269,992. METAL VEHICLE-WHEEL. HARRY R. WOODROW, New York, N. Y., asignor to Thomas E. Murray, New York, N. Y. Filed Oct. 19, 1917. Serial No. 197,382. (Cl. 219—10.)



1. The method of electrically welding together the spokes and flange plates of a metal vehicle wheel, which consists, first, in juxtaposing the inner frusto-wedge shaped ends of the spokes to form a nave, second, placing against each face of said nave an annular flange plate having radially disposed elongated projections on its inner side, to cause said projections to lie over the joints of said nave, and third, placing said nave and flange plates between electrodes and subjecting said nave and plates to pressure and a welding current, whereby simultaneously the said flanges are welded to said nave faces, and the juxtaposed faces of said spokes are welded together by fused metal from said flange plate projections entering between said spoke faces.

2. A metal vehicle wheel, comprising spokes having frusto-wedge shaped inner ends placed in juxtaposition to form a nave, and flange plates disposed on opposite sides of said nave and electrically welded thereto; the said spokes being united by metal extruded from said flange plates and entering the joints of said nave.

1,269,993. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Oct. 1, 1912. Serial No. 723,288. (Cl. 235—62.)

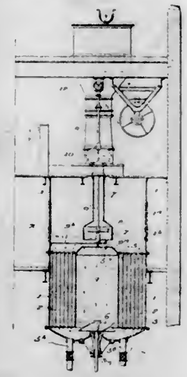


1. In a typewriting machine, the combination with numeral keys and a plurality of gangs of computing wheels, of a typewriter carriage, a tabulating mechanism comprising stops for positioning said carriage, keys for operating said tabulating mechanism, lugs carried by said stops for separately connecting said numeral keys to said wheels, and means for disabling said connections when said tabulating keys are operated.

9. In a typewriting machine, the combination with a traveling carriage, numeral keys, and computing wheels, of a rack stop, a series of key-operated stops, means for controlling the connection between said wheels and keys by said rack stop, and means for breaking said control by the operation of a key-operated stop.

[Claims 2 to 8 and 10 to 31 not printed in the Gazette.]

1,269,994. PROCESS AND APPARATUS FOR MIXING DRY LIME WITH LIQUIDS. JAMES WALTER ADAMS and OTTO HENRY EGGE, Spreckels, Cal. Filed Feb. 24, 1917. Serial No. 150,860. (Cl. 127—17.)



1. The process of applying a hygroscopic powder in a dry state to a fluid which comprises the mechanical distribution of a dry powdered material evenly over a substantially smooth horizontal part of the surface of the fluid to be treated without contact by the powdered material with the damp air in contact with the remainder of the surface of the fluid.

4. An apparatus for applying powdered material in a dry state to a fluid which comprises a main treatment chamber adapted to contain a fluid to be treated, a series of cooling tubes in the lower portion of said chamber providing a central well, a perforate cover plate over the upper end of said well, circulating means for forcing the liquid upwardly through said cooling tubes from which it is adapted to flow over and downwardly through said perforate cover plate, a downwardly projecting distributing casing over said cover plate, and a distributing device within said casing adapted to project particles of material evenly over the fluid over said cover plate.

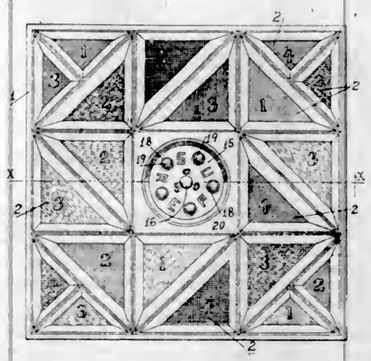
9. An apparatus for applying hygroscopic powdered material in a dry state to a fluid which comprises a main chamber adapted to contain a fluid to be treated, a downwardly projecting distributing casing adapted to extend into the fluid within said chamber, and a distributing device within said casing and adjacent the surface of the fluid for evenly projecting dry particles of powdered material into said fluid, comprising a rotary propeller member mounted to rotate on a vertical axis, the fluid within said chamber having a central flowing movement toward a point beneath said distributing casing and downwardly therefrom.

[Claims 2, 3, and 5 to 8 not printed in the Gazette.]

1,269,995. GAME APPARATUS. GEORGE C. ANDERSON, Springfield, Ill. Filed May 10, 1917. Serial No. 167,689. (Cl. 46—63.)

2. In a game apparatus, the combination of a base having a pit; a column central to the pit; a counter-carrying member adapted to rotate and wabble on the column and adapted to come to rest in an approximately vertical position in the pit upon cessation of the rotation of said counter-carrying member.

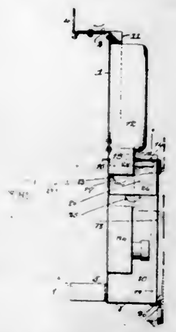
7. In a game apparatus, the combination of plaques each having color fields, letter fields, a tally field and a credit field; trays of the same colors as the color fields of the plaques; a rotative counter-carrying member adapted to discharge counters into the trays; and movable indicators adapted to indicate on the respective plaques the tally resulting from the distribution of the counters into the trays.



10. In a game apparatus, in combination with a series of colored trays adapted to receive counters, and means for distributing counters indiscriminately in the trays; a combination plaque and score card exhibiting the same colors as the trays; and characteristic tally-devices complemental to the combination plaque and score card and settable in different positions thereon to show the exact score of the holder thereof at any stage of the game, independently of pencil and paper or other extraneous tally-device.

[Claims 1, 3 to 6, 8, 9, and 11 not printed in the Gazette.]

1,269,996. METER AND INSTRUMENT SUPPORT. PERCY H. BARTLETT, Philadelphia, Pa. Filed Nov. 14, 1917. Serial No. 201,899. (Cl. 247—17.)



5. A box of sheet metal, comprising a back plate, side and bottom flanges integrally formed thereon and constituting the side and bottom wall plates of said box, a top wall plate for said box, a flange on said top wall plate overlapping the edges of said side wall plates, there being a clearance between said flange and said edges, a front wall plate entering at one end into said clearance, and means for detachably securing said front wall plate to said bottom wall plate.

6. A meter support and an inclosing box for apparatus to be used conjointly with the meter, comprising a metal back plate, and a box thereon partly covering said plate, and having a removable top wall plate; there being a recess in the edge of said wall plate adapted to receive and to be closed by the casing of said meter.

7. An inclosing box for electrical apparatus having in its wall a plurality of openings for the passage of circuit leads to said apparatus, and an adapter plate having a single opening registering with one of said wall openings the said plate extending over and covering the remainder of said wall openings, and means for securing said adapter plate on the inner side of said wall.

[Claims 1 to 4 and 8 to 10 not printed in the Gazette.]

1,269,997. DRIVING-CHAIN. GOTTFRIED BAUMANN, Manchester, England, assignor to Hans Renold Limited, Manchester, England. Filed Aug. 17, 1917. Serial No. 186,718. (Cl. 74—32.)



1. A link unit for driving chains of the silent type, comprising a plurality of link plates formed with slotted stud holes and with gear teeth, and a pair of bushes connecting said link plates through the slots of the stud holes and providing bearing surfaces for the link unit, said link plates being formed in such manner that when placed close together on the bushes a slot is left between them leading from the link arch into the stud holes.

3. A link unit for driving chains of the silent type, comprising a pair of link plates with gear teeth and with stud holes slotted at their outer faces, and a pair of segmental bushes connecting said link plates together through the slots of the stud holes, each link plate having an indentation therein on one face extending from the link arch to the two stud holes, the link plates being assembled on the segmental bushes with such indentations facing one another, whereby an oil passage is formed leading from the link arch to both of its stud holes.

4. In a driving chain, the combination of a plurality of gear link units, studs pivotally connecting said link units through stud holes therein, and means for securing said studs in position, each gear link unit consisting of a plurality of gear link plates and a pair of bushes connecting said link plates, the link plates being formed in such manner as to leave an oil passage in the link unit between the assembled link plates thereof, and leading from the arch of the link unit to the holes thereof through which said studs are passed.

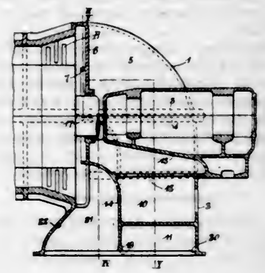
5. As an article of manufacture, a gear link plate for use in a chain, and consisting of a metal blank formed with gear teeth, with stud holes therein, and with an indentation on one lateral face of the link plate constituting a depression on that face extending across it from one stud hole to the other and from each stud hole into the link arch.

6. As an article of manufacture, a gear link plate for use in a chain, and consisting of a metal blank formed with gear teeth, with stud holes and slots therein adapted for the reception of segmental bushes, and with an indentation on one lateral face of the link plate constituting a depression on that face extending across it from one stud hole to the other and from each stud hole into the link arch.

[Claim 2 not printed in the Gazette.]

1,269,998. STEAM-TURBINE. KARL BAUMANN, Urmston, England, assignor, by mesne assignments, to The Westinghouse Electric & Manufacturing Company, a Corporation of Pennsylvania. Filed Feb. 1, 1915. Serial No. 5,584. (Cl. 121—58.)

1. A steam turbine of the type in which the fluid discharged from the last row of moving blades changes its direction of flow in passing to the turbine exhaust port, comprising a rotor element, a stationary casing inclosing the rotor and having an exhaust port formed therein, a plurality of exhaust passages formed within the casing, and located between the last row of blades mounted on the rotor and the exhaust port, each exhaust passage at any



given instant receiving steam from less than the total number of blades.

[Claims 2 to 4 not printed in the Gazette.]

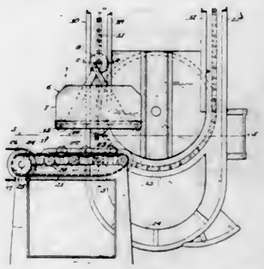
1,269,999. MOTION-PICTURE REEL. WALTER BECKWITH, Los Angeles, Cal. Filed Oct. 8, 1917. Serial No. 195,397. (Cl. 242—70.)



1. A reel for motion picture films, comprising a fixed side; a laterally movable wing hinged thereto; a fixed hub section carried by the fixed side; and a movable hub section carried by the wing and coöperating with the fixed hub section to form a film clamp.

2. A reel for motion picture films, constructed as described in claim 1, in combination with a circumferential arm carried by one hub section and overhanging the periphery of the other hub section when the hub sections coöperate to form a film clamp.

1,270,000. TRAY-DISCHARGE FOR CONVEYERS. ORLANDO J. BOOS, HORACE BOOS, and HENRY BOOS, Los Angeles, Cal. Filed Nov. 24, 1915. Serial No. 63,340. (Cl. 193—8.)



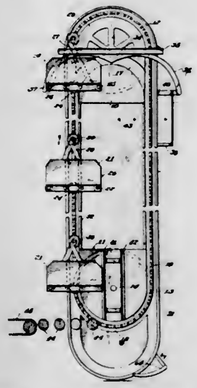
1. A discharge mechanism for conveyers comprising the combination with a vertically movable carriage and a series of rods projecting horizontally therefrom, of a plurality of horizontally extending rollers supported

only at their ends, between which said rods are adapted to pass on downward movement of the carriage to deposit an article supported on said rods upon the rollers, and means for rotating said rollers from their supported ends to advance the article deposited thereon in a horizontal direction.

5. In a discharge mechanism for conveyers, the combination with a plate mounted to traverse a vertical and horizontal path of travel having a series of horizontally extending spaced rods thereon, of a series of rollers between which the rods pass on the vertical movement of the plate and beneath which the rods pass on the horizontal movement of the plate.

[Claims 2 to 4 not printed in the Gazette.]

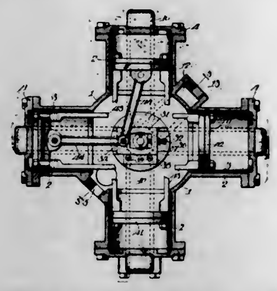
1,270,001. CONVEYER MECHANISM. ORLANDO J. BOOS, HORACE BOOS, and HENRY BOOS, Los Angeles, Cal. Filed Dec. 15, 1915. Serial No. 67,035. (Cl. 193—8.)



1. In a conveyer, an endless conveyer chain, a sprocket wheel over which said chain passes, a carrier pivotally suspended from one of the links of the chain, and means to steady the carrier as it passes from one lead of the chain to the other, said means comprising a body having a slot formed therein, a roller mounted on the carrier to ride through said slot, and a deflector to force the roller into the slot.

[Claims 2 and 3 not printed in the Gazette.]

1,270,002. MULTIPLE-PISTON REGISTERING-MEASURE. ALLEN A. BOWSER, Fort Wayne, Ind. Filed May 19, 1917. Serial No. 169,691. (Cl. 73—30.)



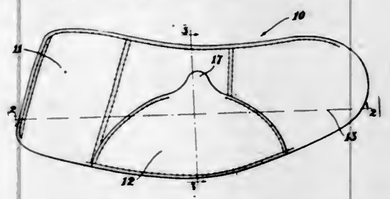
1. A metering device having an inlet chamber and opposite cylinders extending therefrom with a passage from the outer end of each cylinder to the chamber and means forming a discharge passage, of a rotary valve for controlling the said passages, an adjustable crank pin carried by the valve, pistons connected in pairs and to said crank pin for rotating the valve by their reciprocation, and a register-operating shaft having a forked arm engageable with said crank pin for rotating the shaft when the valve is rotated.

3. In a metering device of the class described, a cylinder and piston, a rotary valve, a stroke varying block for the piston adjustable on the valve and having a projecting crank pin, a register shaft, and an arm connected to the register shaft and having a forked extremity to engage the end of the crank pin permitting the adjustment of the said block carried by the valve.

5. A metering device having opposite cylinders, a rotatable valve, and connected pistons reciprocating in the cylinders and which are adjustably connected to the valve for varying the piston strokes and for rotating the valve by their reciprocation.

[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

1,270,003. COMBINATION ARCH-SUPPORT. ROSE S. CARLING, Los Angeles, Cal. Filed July 23, 1917. Serial No. 182,249. (Cl. 36—71.)



An arch support comprising an insole, a flexible sheet substantially straight on its inner marginal edge and semi-circular on its outer margin from the ends of the straight edge; there being a flap at the center of the semi-circle and the sheet being stitched along its straight edge to the inner edge of the insole and along its circular edge from the ends of the straight edge to near the flap, thus forming a pocket having an entrance under the flap; and stuffing inserted into the pocket through said entrance.

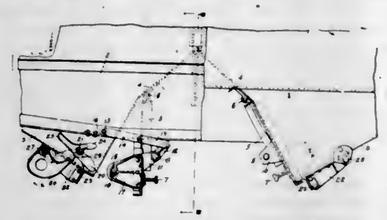
1,270,004. DISPLAY-STAND. THOMAS S. CHAPPELL, Pittsburgh, Pa., assignor to McKenna Brass and Manufacturing Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Aug. 13, 1917. Serial No. 185,821. (Cl. 211—24.)



1. In an article of the character described, the combination of a base having a bore therethrough, a coupling member having a tubular projection adapted to enter said bore, a seat above said projection, a sleeve extending upwardly from said seat and an annular ledge within said sleeve, a bolt extending through the bore in said base and threaded into and through the tubular extension of the coupling member, and an upright member within the sleeve of the coupling member and having an internally threaded bore for the reception of the upper end of said bolt.

[Claims 2 to 6 not printed in the Gazette.]

1,270,005. DUMP-CAR-DOOR-OPERATING DEVICE. CHARLES H. CLARK, Crafton, Pa. Filed Apr. 14, 1916. Serial No. 91,029. (Cl. 105—185.)



1. A hopper bottom car having a swinging door provided with door swinging means, and mechanism independent of said means and including a floating lock pin for maintaining the door in closed position against the pressure of the lading, substantially as described.

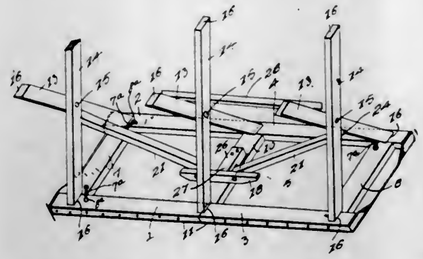
3. In a hopper car having a bottom door adapted to swing open under lading pressure, a swinging locking latch carried by a portion of the car adjacent its door, a floating keeper carried by the door and arranged to engage said latch to automatically swing the same to locking position during closing movements of the door, and means for locking said latch in lading sustaining position.

7. Locking mechanism for the doors of hopper bottom cars comprising a floating keeper, a swinging latch cooperating therewith and means for locking said latch in locking position.

11. In a center sill car having twin hopper doors provided with a cross member located below said sill and connecting said doors together, a rotary shaft arranged across the rear side of said doors and provided with a crank arm below said sill, a toggle link connection between said crank arm and said sill for swinging said doors to closed position, and means independent of said shaft and links for holding the doors in closed position against lading pressure.

[Claims 2, 4 to 6, 8 to 10, and 12 to 17 not printed in the Gazette.]

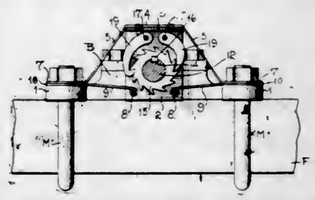
1,270,006. PAPERING-BOARD. ISRAEL L. CLARK, Riverside, R. I. Filed Nov. 7, 1916. Serial No. 130,103. (Cl. 45—116.)



1. A paper hanging board comprising a knocked down frame, including side bars, the under sides of the side bars being provided with apertures, legs consisting of a pair of bars pivoted centrally together, dowel pins at the upper ends of the legs adapted to extend into the apertures in the under sides of the side bars of the frame, a flexible cover for said frame, and secured to the side bars, a clip on the central brace of the frame and brace bars removably connected to the clip and engaging the end legs of the table to hold the whole against wabbling.

2. In a paper hanging board comprising a knocked down frame, including a pair of side bars, cross bars removably connected between the side bars and a flexible cover connecting the side bars and forming a top for the device, legs detachably secured to the frame, and metallic angle bars positioned on top of said flexible cover at the longitudinal edges thereof and engaging the cover and the upper side edges of the side bars and extending the whole length of the side bars, as and for the purpose specified.

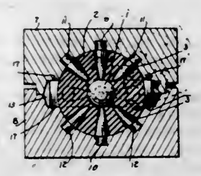
1,270,007. CRANK ATTACHMENT. CURTIS A. CLOYED, Cedar Vale, Kans. Filed Dec. 3, 1917. Serial No. 205,160. (Cl. 74—33.)



1. In combination with the shaft of a starting crank of an internal combustion engine and a beam arranged transversely of said shaft, a safety attachment comprising a frame substantially in the form of an inverted U, side members of the frame being provided with openings through which the shaft is loosely directed, a ratchet wheel arranged within the frame and through which the shaft is disposed, said shaft being provided with a channel disposed longitudinally thereof and the ratchet being provided with a key extending within the channel of the shaft, arms secured to the upper portion of the frame and extending beyond opposite sides thereof, members interposed between and supported by the lower end portions of the side members of the frame, oppositely directed arms pivotally engaged with said members, anchoring members carried by the arms and positioned at opposite sides of the shaft, the pair of arms extending from each side of the frame being engaged with one of the anchoring members.

[Claim 2 not printed in the Gazette.]

1,270,008. METHOD OF MAKING RESILIENT BALLS AND APPARATUS THEREFOR. HENRY Z. COBB, Winchester, Mass., assignor to Revere Rubber Company, a Corporation of Rhode Island. Filed Jan. 10, 1917. Serial No. 141,557. (Cl. 154—17.)



1. A mold for bodies of elastic material comprising mold sections having symmetrical cavities therein which register with each other, and tapering pins extending radially from the surfaces of said cavities toward a common center.

3. A mold for spherical bodies of elastic material comprising mold sections having semi-spherical cavities therein, tapering pins extending radially from the surfaces of said cavities toward the center thereof, equatorial ring sections adapted to be seated in recesses in said mold sec-

tions, and pins extending from said ring sections toward said center.

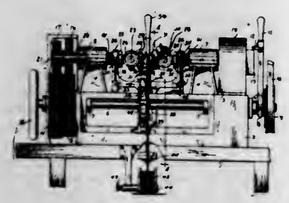
4. A method of molding elastic bodies having converging openings, comprising placing moldable material in a mold having tapering radial pins converging toward a common center, and symmetrically located at substantially equal distances apart throughout the entire mold cavity, allowing said material to harden or set, and then withdrawing said material over said pins.

6. A method of molding spherical bodies of elastic material having converging openings therein, comprising locating a hard spherical ball accurately upon a series of radial tapering pins within a sectional mold and extending inward from six symmetrical points, surrounding said ball with molding material, allowing said material to harden or set, and then removing the molded body by withdrawing the same over said pins.

9. A mold for spherical bodies of elastic material comprising mold sections forming collectively a spherical cavity, and sets of pins extending into said cavity from the walls of the sections, one set of said pins being symmetrically located and equally spaced and terminating at equal distances from the center of the cavity, and another set of said pins being symmetrically located and equally spaced and terminating at equal distances from the center of the cavity but at a greater distance than the first set.

[Claims 2, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,270,009. BALL-WINDING MACHINE. HENRY Z. COBB, Winchester, Mass., assignor to Revere Rubber Company, a Corporation of Rhode Island. Filed Mar. 7, 1917. Serial No. 152,964. (Cl. 242—3.)



1. A machine for winding a strand about a ball or core by means conjointly imparting a resultant movement to said ball or core about a fixed center to present different parts thereof to the point of winding, comprising means for exerting a force adapted to produce a component movement of the ball or core about a fixed axis, and means for exerting a force adapted to produce a second component movement about an axis oblique to said first axis.

4. In a ball winding machine, means for winding a strand about a ball or core, and means for turning the latter successively about three different axes at angles to the winding axis.

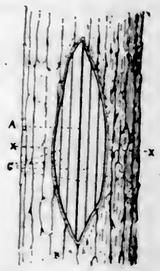
7. In a ball winding machine, means for moving the ball or core about a fixed axis; means for moving the ball or core about a second axis, means for moving the ball or core about a third axis, and means for moving the ball or core about a fourth axis.

12. In a ball winding machine, a rotary winding head adapted to hold and rotate the ball being wound, gripping rollers carried by said winding head, and means for turning said rollers independently of each other, alternately, and also simultaneously.

19. In a ball winding machine, opposed ball holding heads, tapering gripping rollers carried by said heads, means for turning said rollers simultaneously to rotate the ball, and means for stopping a plurality of said rollers to cause the ball to turn on axes at angles to the winding axis.

[Claims 2, 3, 5, 6, 8 to 11, 13 to 18, and 20 to 31 not printed in the Gazette.]

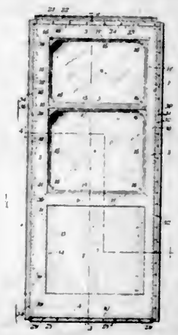
1,270,010. METHOD OF TREATING DECAYED SPOTS AND CAVITIES IN LIVING TREES. JAMES FRANKLIN COLLINS, Providence, R. I. Filed Mar. 24, 1917. Serial No. 157,257. (Cl. 47—36.) (Dedicated to the public.)



1. A method of filling a cavity in a tree which consists in securely fastening to the back and sides of the cavity strips of wood arranged longitudinally of the tree and of a length equal to that of the portion of the cavity in which they are placed, filling the remainder of the cavity with like strips with their adpacent sides and ends overlapping and binding them securely in place.

2. A method of filling a cavity in a tree which consists in securely fastening to the back and sides of the cavity waterproofed or antiseptic strips of wood arranged longitudinally of the tree and of a length equal to that of the portion of the cavity in which they are placed, filling the remainder of the cavity with like strips with their adjacent sides and ends overlapping and binding them securely in place; the joints or spaces between the strips are filled with a suitable waterproof and antiseptic plastic and adhesive substance, or a mixture of such substances.

1,270,011. SLIDABLE METALLIC DOOR. WALTER L. CONWELL, Montclair, N. J., assignor to Elicon Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1914. Serial No. 875,482. (Cl. 189—53.)



1. In a metallic door, door edge and panel-opening frames each with open bounding edges, door side sheets on opposite sides of said frames connected to and connecting both frames and provided with panel openings, attachment means on each frame, complementary door edge-forming members and a panel-receiving member secured, respectively, to the attachment means of the first and second mentioned frames, said door edge-forming members being constantly maintained inseparable from said door edge frame in a direction transversely thereof, a panel, and retaining means therefor.

2. In a metallic door, door edge and panel-opening frames, each comprising separate fitted strips opposed to

the strips of the other frame, said strips having spaced flanges, the flanges of the strips in one frame being oppositely directed to those of the opposing strip of the other frame, opposed unitary door side sheets connected to and connecting both frames, complementary door edge-forming members and a panel-receiving member secured to and connecting the flanges of the first and second mentioned frames, respectively, to close the space between said flanges, a panel, and retaining means therefor.

3. In a slidable metallic door, an upper door edge frame member provided with spaced upwardly directed flanges having depressed borders, door side sheets on opposite sides of said frame member secured thereto and a door edge member projected between the depressed border portion of said spaced flanges and secured thereto and having a longitudinally grooved portion beyond the outer edges of said flanges.

4. In a slidable metallic door, a lower door edge frame member provided with spaced downwardly extending flanges having depressed borders, door side sheets on opposite sides of said frame member secured thereto, and a door edge-forming member lapping and secured to the depressed borders of said flanges and bottom borders of said side sheets, embracing the latter, closing the space between said flanges and extending therebelow with reduced width.

5. In a metallic door, a door edge frame channel having a web and spaced flanges, door side sheets wholly external to said channel and extending with the flanges thereof toward a door edge, said sheets and flanges being inset intermediate the width of the flanges to form external and internal shoulders, and a door-edge-forming strip interlocked with said shoulders against separation from said channel transversely thereof.

[Claims 6 to 29 not printed in the Gazette.]

1,270,012. METALLIC DOOR. WALTER L. CONWELL, Montclair, N. J., assignor to Elicon Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1914. Serial No. 875,483. (Cl. 189—53.)



1. In a metallic door, a structure having hollow stiles and rails and a panel, a shade pocket in one of said stiles or rails, and combined shade brackets and guides arranged on opposite sides of said panel, the bracket portions thereof complementing said pocket and the guide portions being provided with shade guideways and extending away from said pocket.

2. In a metallic door, spaced and opposed door side sheets having registering panel openings, one sheet having a shade-pocket opening adjacent the panel opening, a depressed pocket-forming sheet connecting borders of the pocket opening, and combined shade-bracket and guide members of sheet metal arranged on opposite sides of the panel opening adjacent the pocket opening and formed to have guideways and attachment members, the bracket portions being alined with end portions of said pocket opening and the guide portions extending away therefrom.

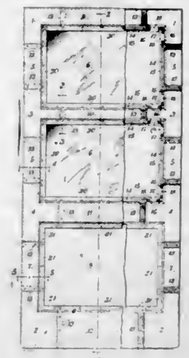
3. In a metallic door having opposed side sheets with registering panel openings, one sheet containing a shade pocket, combined shade-bracket and guide members on opposite sides of one of said panel openings and connected to said pocketed sheet, the bracket portions of said members complementing portions of said pocket.

4. In a metallic door having opposite side sheets with registering panel openings, one sheet having a pocket opening, a curved pocket-forming sheet and pocket end-closing pieces affixed to borders of said pocket opening, conjoined plural part combined shade-bracket and guide members of sheet metal provided with guideways and attachment members, arranged on opposite sides of the panel opening in the sheet having the pocket opening and adjacent the pocket, the bracket portions complementing portions of the latter, reinforcement members for some of said attachment members, and means securing the latter and the reinforcement members to the pocketed door sheet.

5. In a metallic door having opposed side sheets, one sheet having a shade pocket, two-part pressed combined shade-bracket and guide members arranged on opposite sides of the panel opening in the pocketed sheet, the bracket portions complementing portions of said pocket, one part of each bracket and guide member having a Z-shaped cross section and the other a zig-zag section, both sections terminating on one side in attachment flanges and on the opposite side being bent to form guideways and merging depressed bracket portions, both member parts contacting and being united in said guideways and depressed bracket portions.

[Claims 6 to 14 not printed in the Gazette.]

1,270,013. SECTIONAL CAST-METAL DOOR WITH INTERCHANGEABLE PARTS. WALTER L. CONWELL, Montclair, N. J., assignor to Elicon Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1914. Serial No. 875,484. (Cl. 189—53.)



1. A sectional door comprising corner-pieces and intermediate connection members having angularly disposed legs forming panel-opening corners, and complementary sections of less length than the distance between the panel-opening corners toward which they extend, said sections being interposed between the ends of opposing legs and having the same outside cross sectional dimensions and outline as those legs, thereby forming stiles and rails of uniform cross section longer than the individual stile-and-rail-forming parts.

2. A sectional door comprising corner-pieces and intermediate connection members having angularly disposed legs, complementary sections connecting alined legs and having the same outside cross sectional dimensions as those legs, and integral means on some of the parts se-

cured to other parts in a manner preserving uniformity of cross section in said sections and the legs contiguous thereto.

3. In a sectional door, corner-pieces and intermediate connection members having angularly disposed legs and being spaced from each other, and complementary sections, of the same thickness as the divergent legs of said corner-pieces and intermediate connection members, and mortise and tenon joints between the outer ends of said legs and the ends of said complementary sections.

4. In a sectional door, principally tubular corner-pieces and intermediate connection members having diverging legs, and substantially tubular complementary sections interlocked with said legs, said sections and the legs contiguous thereto having cross sectional perimeters of sufficiently exact correspondence in proportions to cause the tubular portions of said corner-pieces, intermediate connection members and complementary sections to be in end to end abutment and held from telescoping.

5. In a sectional door, a door frame comprising corner-pieces and intermediate connection members having angular tubular portions forming diverging legs, said legs being reduced beyond the extremities of their tubular portions to form shoulders and tenons, and tubular complementary sections held by said shoulders from telescoping with the tubular portions of said legs and being entered by said tenons.

[Claims 6 to 15 not printed in the Gazette.]

1,270,014. METALLIC DOOR WITH INTERLOCKING PARTS. WALTER L. CONWELL, Montclair, N. J., assignor to Ellcon Company, New York, N. Y., a Corporation of New York. Filed Dec. 4, 1914. Serial No. 875,485. (Cl. 189—53.)



1. In a metallic door, spaced door side sheets having panel openings and depressed borders adjacent the door edges and the panel openings, said borders being parallel with stile and rail faces of the opposite door sides, door edge and panel opening outlining frames of metal free from bending strains and comprising members narrower in cross section between said depressed side sheet borders, strips lapping and embracing said depressed sheet borders and the narrower portions of said frame members, and a removable panel.

2. In a metallic door, spaced and opposed door side sheets, a door edge outlining frame comprising strips connecting said side sheets, and finishing strips interlocking with and slidable longitudinally of said frame strips and formed to ultimately interlock with themselves, said finishing strips having isolated guideways at opposite sides thereof with entrances from the door sides through which edge portions of said frame strips and side sheets pass to be interlockingly enveloped by the guideway walls.

3. In a metallic door, spaced and opposed door side sheets having border flanges, a door edge-outlining frame of extruded metal interposed therebetween comprising channel-shaped strips connecting and connected by said side sheets, the flanges of each channel strip having internal and external interlock walls, and slidable finishing strips of extruded metal with interlock flanges and guideways adapted to interlock transversely with said channel-shaped strip interlock walls and side sheet flanges, said finishing strips having beveled ends and each being slidable longitudinally of one of said channel-shaped strips to ultimately miter with an adjacent finishing strip, all of said finishing strips thereupon interlocking with each other against longitudinal movement.

4. In a metallic door, opposing door side sheets having inset borders parallel with stile and rail faces of the opposite door sides and extending about panel openings in said opposing side sheets, a panel opening-outlining frame comprising strips maintaining said inset side sheet borders widely separated from each other and having partially inset sides in continuous contact with said side sheets, a panel-holding frame comprising other strips each flange in opposite directions to receive said panel-opening frame and to form panel abutments, means uniting both frames and a removable panel.

5. In a metallic door, opposed side sheets forming registering panel openings, a panel opening-outlining frame spacing said sheets, said frame comprising solid strips spaced from the door edge, a separate panel-holding frame comprising other strips of practically J-shaped cross section forming a channel which receives said solid strips substantially throughout their lengths, the flange representing the normal top of each J forming a panel abutment, means affixing said J-shaped strips to said solid strips, a removable panel, cushioning means therefor positioned by the abutment flanges, a retaining frame comprising strips and means coöperating with said solid strips to draw said retaining strips toward said panel.

[Claims 6 to 17 not printed in the Gazette.]

1,270,015. GAS-MIXING DEVICE. CHARLES A. COUCH, Springfield, Mass., assignor, by mesne assignments, to Fuel Economy Company, Springfield, Mass., an Associated Trust of Massachusetts. Filed July 5, 1917. Serial No. 178,821. (Cl. 48—180.)



1. A gas mixing device comprising a conical shaped member, the apex portion of which is slitted and formed with fingers having curved end portions, the base portion having a flanged portion for securing the device within the pipe at the coupling or union connection.

2. A device for mixing the elements of illuminating gas comprising a cone-shaped member the undivided sides of which are slitted to form finger-like elements, said elements having a permanent twist or curve imparted thereto to increase the size of the openings or slits, and for imparting a rotary motion to gas as it flows through the device, means for securing the cone within a gas pipe, whereby as the gas flows through the cone a rotary motion will be imparted thereto as it leaves the curved ends of the finger-like elements and the slits.

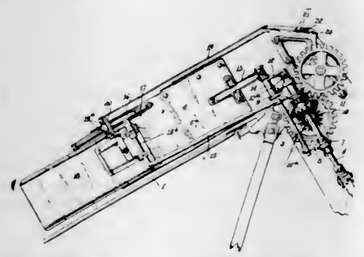
3. In a device for mixing together the substances composing illuminating gas, comprising, in combination, a truncated cone-shaped member, the base portion of which is formed with radiating fingers, said fingers designed for clamping between the ends of adjacent pipe sections or the pipe union, as described, and the apex portion of the cone having finger-like elements, the end portion of which are curved in the same direction to impart a rotary motion to the gas as it flows through the cone shaped member.

4. A gas mixing device consisting of a shell of cone shape, the apex of which is removed to form a contracted opening through the shell, the apex being slitted to provide finger-like elements, the base portion having radially arranged fingers constituting a flange to engage the adjacent ends of pipe sections for securing the mixing device in place, and a gauze secured to the base portion of the cone to cause an even flow of the gas through the cone.

5. A cone-shaped mixing device for gaseous substance and having finger-like portions with curved ends for imparting a rotary motion to the gaseous substance as it flows therethrough and means on the device for securing the same within a pipe at its joints in the pipe connections.

[Claim 6 not printed in the Gazette.]

1,270,016. BUTT-ADJUSTER MECHANISM FOR GRAIN-BINDERS. WILLIAM H. CRANE, Poughkeepsie, N. Y., assignor to Moline Plow Company, a Corporation of Illinois. Filed June 1, 1916. Serial No. 101,108. (Cl. 56—36.)



1. In a grain binder, the combination of a frame, a butt adjuster supported thereby and replaceable at will by a butt adjuster of different type, a driving shaft, and operative connections between the shaft and the first mentioned butt adjuster, said connections being formed to be broken to permit the removal of the first mentioned butt adjuster, and means whereby the driving shaft may be operatively connected with a butt adjuster of different type when the latter is substituted for the other.

3. In a grain binder, the combination of a frame constructed to support interchangeably either a vibratory butt adjuster or a traveling butt adjuster, and a driving member mounted in the frame and having provision for operative connection alternately with either form of butt adjuster according to the particular one for the time being in use.

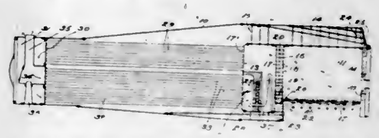
6. In a grain binder, the combination of a frame, a vibratory butt adjuster supported thereby and replaceable at will by a traveling butt adjuster, a butt adjuster driving shaft mounted in the frame, a crank on said shaft operatively connected with the vibratory butt adjuster for operating it, and a pinion on the shaft in position to be operatively connected with the traveling butt adjuster when the latter is substituted for the other.

9. In a grain binder, the combination of a frame, an arm detachably connected with the frame and provided with a bearing, a traveling butt adjuster sustained by the frame and having its upper roll journaled in said arm, said traveling butt adjuster being replaceable at will by a vibratory butt adjuster, a butt adjuster driving member mounted in the frame and operatively connected with said roll for operating the same, and means for operatively connecting the driving member with the vibratory butt adjuster when the latter is substituted for the other.

[Claims 2, 4, 5, 7, 8, 10, and 11 not printed in the Gazette.]

1,270,017. STEAM-BOILER AND APPLIANCES. CHARLES W. CROWELL, Salisbury, N. C. Filed Oct. 31, 1914. Serial No. 869,647. (Cl. 122—74.)

1. A steam boiler having a fire box, a fire chamber and a smoke box arranged in advance of each other, all being substantially circular in cross section, a group of flues extending from said fire box to said fire chamber, and a second group of flues extending from said fire chamber to said smoke box forming a forward passage, a third group of flues forming a rearward passage from said smoke box to a combustion chamber within said fire chamber, and a fourth group of flues forming a forward passage to an inclosed member in said smoke box, having an outlet thence through a stack.



5. A steam boiler having inner and outer shells spaced apart, both being substantially cylindrical with portions removed at their bottoms forming an opening for grates, a grate situated therein, said shells having a mud frame extending around the edges of said opening and between said shells and secured thereto, a fire chamber in said inner shell extending forward from said mud frame, a fire box being above said grates and two flue sheets forming a water wall between said fire chamber and fire box having heating flues secured therein, a man hole formed in said flue sheets through said water space below said grates and above said mud frame for gaining admission into the fire chamber.

9. The combination in a steam boiler having a fire box and a fire chamber consisting of a substantially cylindrical shell having three flue sheets, front, rear, and intermediate spaced apart therein, the fire chamber being in front of the fire box, heating flues extending forward from said front flue sheet, other heating flues extending from said rear flue sheet to said intermediate flue sheet, a water wall consisting of two heads spaced apart and secured in the rear end of said shell, a grate opening being provided between said water wall and said rear flue sheet, a grate secured therein, a man hole tube extending from rear flue sheet to said intermediate flue sheet for entrance to said fire chamber, a portion of said shell extending between said rear and intermediate flue sheets being removed sufficient to prevent mud from settling around said man hole tube, and to make it easy in building and repairing same, other openings being made in said shell between said rear and intermediate flue sheets to allow water to circulate through the top thereof, and openings being formed in said shell between said rear heads for the circulation of water there between said construction being removable through the rear end of boiler.

11. A steam boiler comprising an inner and an outer shell, the inner shell having a grate opening in a portion of its bottom, a fire box and a fire chamber formed therein, flues extending between said fire box and fire chamber, other flues leading from said fire chamber, a combustion chamber formed in a portion of said fire chamber and means for heating and delivering air or other fluid agent into said combustion chamber from the outside of the boiler.

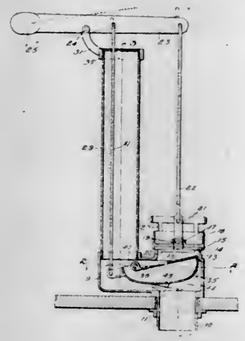
[Claims 2 to 4, 6 to 8, 10, and 12 to 31 not printed in the Gazette.]

1,270,018. FLUSHING-VALVE. ANDREW F. CURTAIN, Medford, Mass. Filed Apr. 4, 1917. Serial No. 159,773. (Cl. 4—5.)

1. A water-closet having, in combination, a flushing valve comprising a valve proper, a lever connected with the valve proper for actuating it, a valve control member pivoted within the body portion of the flushing valve arranged to receive the force of the water when the valve is opened and to hold the valve open for a predetermined length of time, and connections between the lever and the valve control member.

3. A water-closet having, in combination, a flushing valve comprising a valve, a hollow valve control member having a relatively large inlet and a relatively small out-

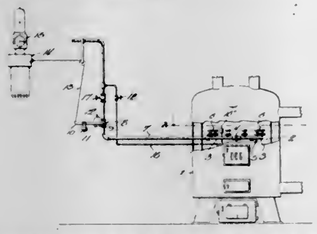
let, situated within the body portion of the flushing valve, and connections between the valve control member and the valve, the construction and arrangement of these parts being such that when the valve has been unseated to permit water to fall on the valve control member, the



valve is thereby held unseated by the force of the water thereagainst until the force of the water is insufficient to hold the valve unseated, whereupon the weight of the water in the valve control member holds the valve unseated for a predetermined time.

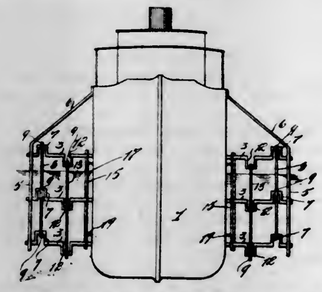
[Claim 2 not printed in the Gazette.]

1,270,019. GAS-BURNER ATTACHMENT FOR HOT-AIR OR HOT-WATER FURNACES. RUDOLPH J. DAASE, Milwaukee, Wis. Filed Nov. 26, 1917. Serial No. 204,005. (Cl. 126—116.)



A gas burner comprising a coil made up of a plurality of pipe sections to permit its insertion in disassembled form through the fuel supply door of a furnace, unions for connecting the pipe sections, and a single supply pipe and burners carried by the coil.

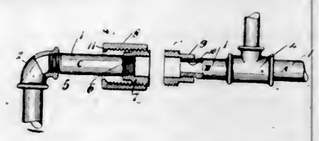
1,270,020. TORPEDO-GUARD. GIOVANNI DANOVARO, Welland, Ontario, Canada. Filed Mar. 12, 1917. Serial No. 154,396. (Cl. 114—240.)



2. A torpedo guard comprising a plurality of nets positioned one in front of the other for interposition in the probable paths of torpedoes, and means for imparting to each of said nets a continuous oscillatory movement in its own plane.

[Claims 1 and 3 to 9 not printed in the Gazette.]

1,270,021. RIGID PIPE-UNION. JOHN J. DELEHANTY, Norwood, Ohio. Filed Jan. 31, 1914. Serial No. 815,666. (Cl. 285—13.)



A pipe coupling adapted to be interposed between two pipe members without distorting the latter comprising two externally and internally threaded terminal members and an internally threaded sleeve adapted to be mounted on one of said members, said sleeve having a reduced opening at one end and an inclined annular wedge surface thereabout, a similar inclined annular wedge surface at the rear of the terminal member upon which the sleeve is to be mounted, said terminal members adapted to be screwed in spaced relation upon opposing ends of pipe members, said sleeve being adapted to screw upon both terminal members and to bridge the space between them, the said wedge surfaces being adapted to engage each other to prevent leakage.

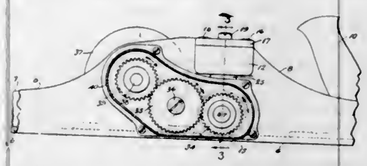
1,270,022. DEMOUNTABLE RIM FOR WHEELS. ALFRED M. DOERFLER, Medford, Mass. Filed June 2, 1916. Serial No. 101,400. (Cl. 152—21.)



1. A demountable wheel rim having parts separated by a split in said rim, each of said parts having upon it pieces coöperating with one another to form a wedge shaped cleat and a wedge shaped cap fitting over said cleat for uniting the separate pieces thereof and thereby holding together the separated parts of the rim.

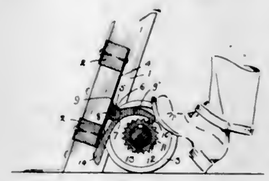
[Claims 2 to 6 not printed in the Gazette.]

1,270,023. JACK-PLANE. GEORGE F. DYER and EARL B. SCHWENK, Seattle, Wash. Filed Apr. 26, 1917. Serial No. 164,801. (Cl. 145—5.)



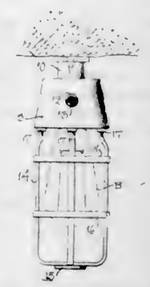
A plane of the class described comprising a base plate provided with parallel flanges extending upwardly from its opposite side edges, each flange provided intermediate its ends with a lateral offset portion provided with a vertical slot registering at the lower ends with the transverse slot formed in the base, a transverse plate removably secured to the top edges of the lateral offset portions of said flanges and covering the upper ends of said slots, a journal bearing block slidably fitted in each vertical slot, adjusting screws fitted through said plate and engaging the said blocks whereby said blocks may be adjusted to different positions with relation to the base, a transverse cylinder located between and journaled to each block, a plurality of cutting blades removably secured to said cylinder, an electric motor secured upon said base and having one end of its shaft extending through one of said side flanges, gear wheels associated with one end of the cylinder and with the extended end of the shaft whereby when the motor is energized said cylinder shall be rotated, and a housing secured to the exterior of one side flange and completely covering said gears.

1,270,024. HAND-TRUCK. ADOLPH O. EVENSON, Duluth, Minn. Filed Sept. 17, 1917. Serial No. 191,769. (Cl. 21—65.)



The combination with a hand truck having an axle with wheels non-rotatably fixed thereto, of a ratchet wheel fixed to the axle intermediate of the wheels, a pawl suspended from the truck above the ratchet wheel and means whereby the pawl is operated in one direction by gravity and in the opposite direction manually.

1,270,025. ELECTRIC-LIGHT FIXTURE. JOHN ORWEN GILL, Barnesboro, Pa. Filed Nov. 7, 1917. Serial No. 200,818. (Cl. 240—102.)

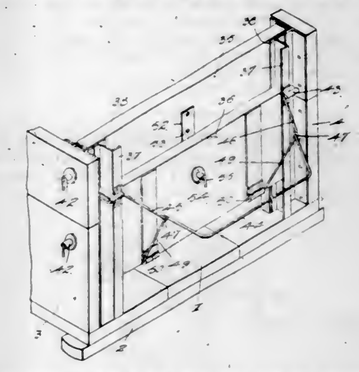


1. An electric light fixture including a housing open at one end, a bulb socket fixed within the housing to the opposite end thereof, the body wall of said housing being provided with openings on opposite sides thereof through which circuit wires extend for connection to said socket, a lamp bulb guard and means for detachably connecting the guard to the open end of the housing, and means on the closed end of the housing for the connection of said housing to a supporting bolt whereby the housing, the lamp bulb and the guard may be removed as a unit from connection with said bolt without disconnecting the circuit wires from the bulb socket.

[Claim 2 not printed in the Gazette.]

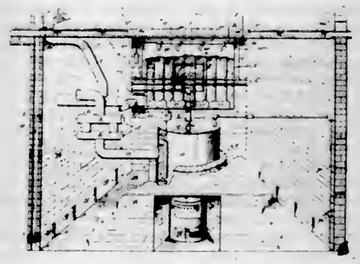
1,270,026. WAGON END-GATE. CHARLES F. GRAEBER, GUY I. DUNAWAY, and ALFRED P. GRAEBER, Lytton, Iowa. Filed Nov. 16, 1915. Serial No. 61,791. (Cl. 21—21.)

In a wagon bed structure, side boards, metal bars secured to the inner surfaces of said side boards near their rear ends and bent to form vertically extending portions spaced from the inner surfaces of the side boards, an end gate, angle irons secured to the rear surface of said end gate and having sides extending parallel with and in spaced relation to the ends of said end gate, said spaced guides fitted between the spaced portions of said first named bars and said side boards, angle irons secured to the inner surface of the side boards and engaging the rear surface of said end gates, angle bars comprising a pair of



parallel portions and a perpendicular portion joining the parallel portion attached to the outer surfaces of said first named angle irons, an auxiliary end gate slidably supported by said last named angle irons, means carried by said last named angled irons and connected to said auxiliary end gate for moving the auxiliary end gate, and locking means carried by said auxiliary end gate to prevent accidental movement of the auxiliary end gate.

1,270,027. COMBINED STEAM AND HOT-AIR HEATING SYSTEM FOR BUILDINGS. CHARLES R. HANSEN, Cedar Rapids, Iowa. Filed May 1, 1917. Serial No. 165,755. (Cl. 237—49.)



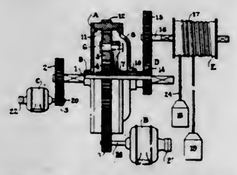
1. A combined steam and hot air heating system comprising a hot air room provided with a hollow side wall having a series of inlets at its bottom portion for the admission of partially heated fresh air into the room, a steam boiler within the room, a smoke flue heater connected to said boiler and suspended between the boiler and said wall, a steam coil heater suspended from the ceiling, a casing provided with a series of radiator sections suspended from the ceiling of said room, a main hot air distributing pipe connected to one end of the said casing, and a fan connected with the rear portion of the casing for forcing the heated air from said room to the several rooms of the building.

5. A combined steam and hot air heating system for buildings comprising a hot air room provided with a hollow side wall having a series of inlets at its bottom for the admission of partially heated fresh air into the room, a steam boiler furnace within the room, a smoke flue heater connected to the furnace and suspended between said furnace and wall, a steam coil heater connected to

said furnace and suspended from the ceiling of the room, a casing suspended from the ceiling of the room, a plurality of steam heated radiator sections carried within the casing and connected to the furnace, an air moistener suspended within the casing and surrounding said radiator sections, an air purifying and disinfecting tank connected with the outside of the furnace and provided with a series of outlet openings at its upper end portion, a main hot air distributing pipe connected with the casing at one end of said casing, and a fan connected to the rear portion of the casing for forcing the heated air to the various rooms of the building.

[Claims 2 to 4 not printed in the Gazette.]

1,270,028. DRIVING MECHANISM. CLARK T. HENDERSON, Milwaukee, Wis., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis., a Corporation of Wisconsin. Filed June 1, 1914. Serial No. 842,186. (Cl. 172—152.)



1. The combination with a variable load mechanism to be driven, of a plurality of driving motors therefor of different capacities, the motor of lesser capacity being of a constant speed type and a planetary gear operatively connecting said mechanism and said motors, said gear being operable by said motors jointly with its gear parts in a fixed relation for high speed drive of said mechanism and also operable by said motor of lesser capacity, with the motor of greater capacity inert, for slow speed drive of said mechanism, whereby stopping of the latter motor and continued operation of the former motor provides for reduction of the speed of said mechanism to a substantially uniform value under varying load conditions.

2. The combination with a variable load mechanism to be driven, of a plurality of driving motors therefor of different capacities, the motor of lesser capacity being of a constant speed type, a planetary gear operatively connecting said mechanism and said motors, said gear being operable by said motors jointly with its gear parts in a fixed relation for high speed drive of said mechanism and also operable by said motor of lesser capacity, with the motor of larger capacity inert, for slow speed drive of said mechanism and limit means for said mechanism providing for arrest of the motor of larger capacity to reduce the speed of said mechanism to a substantially uniform value under varying load conditions and for subsequent arrest of said small motor to arrest said mechanism.

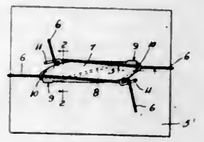
3. The combination with a variable load mechanism to be driven, a planetary gear having its planet gear member connected thereto, a relatively small driving motor for the central gear member of said planetary gear and a relatively large driving motor for the remaining gear member of said planetary gear, said last two mentioned gear members being operable at full speed of their respective motors to drive said mechanism by non-planetary operation of said planet gear member and said second mentioned gear member being operable by its respective motor, with said third mentioned gear member stationary, to drive said mechanism by a planetary operation of said planet gear member.

1,270,029. TRAY ATTACHMENT FOR HIGH CHAIRS. EVERETT J. HEULE and GRANT GRAHAM, Superior, Wis., assignors to Webster Manufacturing Company, Superior, Wis., a Corporation of Wisconsin. Filed Apr. 13, 1918. Serial No. 228,458. (Cl. 155—12.)

In combination with a high chair, a wooden tray adapted to rest upon the arms of the chair and having curved arms pivoted to the back of the chair to permit the tray to be swung upwardly and downwardly, a metal tray adapted to be seated within the wooden tray, said metal tray having at each end and near its rear side downwardly extending lugs notched at their rear ends and having at its front a depending lug provided with an opening, the wooden tray having pins for engaging the notches and the openings.



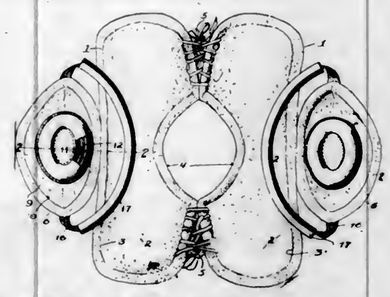
1,270,030. CORD-FASTENER. SYDNEY J. HILL, Minneapolis, Minn. Filed Sept. 13, 1917. Serial No. 191,113. (Cl. 24—18.)



5. A cord fastener comprising a plate and a spring wire secured diagonally across one side thereof, the ends of said wire being reversely bent upon themselves to form primary hooks and the ends of said primary hooks being reversely bent upon themselves to form secondary hooks, said hooks extending in a plane substantially parallel to the plate with their loop portions projecting beyond the edge thereof, said hooks adapted to be sprung laterally from the plate to permit a cord to be passed laterally between the plate and hooks, said primary hooks adapted to receive and press the end portions of the cord onto the edge of the plate and said secondary hooks adapted to receive and further hold the end portions of the cord held by the opposite primary hooks.

[Claims 1 to 4 not printed in the Gazette.]

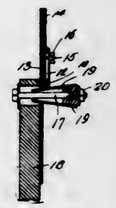
1,270,031. SHOULDER-PAD AND THE LIKE. RICHARD JACKSON, Jr., Canton, Ohio. Filed May 19, 1917. Serial No. 169,765. (Cl. 2—190.)



1. A pad of the character described, comprising an outer section of heavy leather and an inner section of felt or like material secured thereto, an elastic incased in a tube to prevent chafing of the said elastic upon the body of the wearer and to secure said pad over a vulnerable part of the wearer's body.

2. A pad of the character described, comprising an outer section of heavy leather and an inner section of felt or like material secured thereto, a cushion upon the inner surface of said pad, elastic attaching means incased in a tubing to prevent chafing upon the body of the wearer, said cushion provided with a central depression and arranged to be located over a vulnerable part of the wearer's body.

1,270,032. SAW-FILING GAGE. ARTHUR JOHNSON, Burton, Ohio. Filed Aug. 8, 1917. Serial No. 185,145. (Cl. 33—202.)



1. In a filing gage for a circular saw provided with a central opening, a support, a standard having an arcuate recess, a cone adapted to engage in the said saw opening, means for securing said cone to said support, the end of said standard being adapted to rest upon said cone, and an extensible arm upon said standard.

2. In a filing gage for a circular saw, a support, a cone adapted to fit in the central opening of the saw, means for securing said cone to said support, a standard having an arcuate cut at one end adapted to rest upon said cone, and an arm adjustably mounted upon said standard.

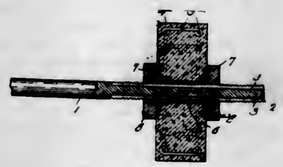
[Claim 3 not printed in the Gazette.]

1,270,033. FISH-HOOK. EDWARD S. KNOWLES, San Francisco, Cal. Filed Jan. 2, 1917. Serial No. 140,246. (Cl. 43—30.)



A fish lure comprising a spoon having a detent and two openings therein, a hook passing through one of said openings and a link having an open hook to connect with the fish hook, and passing through the other opening in the spoon and bearing upon the detent for rigidly holding the hook detachably against the spoon, said link being released from the hook upon being turned laterally and being then removable from the spoon.

1,270,034. BAR-BELL. DONALD G. KRUDOP, Manhattan, Kans. Filed Mar. 9, 1918. Serial No. 221,492. (Cl. 46—69.)



2. In a device of the character described, a bar having its end portions threaded, weight members mounted on said bar adjacent each end thereof, each of said members being provided with a thimble extending through the center thereof and slidably receiving the bar, and locking collars threaded on the end portion of the bar and engaging each end of said thimble so as to prevent movement of said weight member longitudinally of the bar.

[Claims 1, 3, and 4 not printed in the Gazette.]

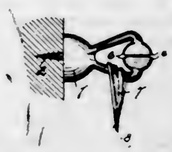
1,270,035. WRITING IMPLEMENT. FREDERICK W. KUEHN, St. Louis, Mo. Filed Oct. 25, 1917. Serial No. 198,423. (Cl. 120—43.)



7. In a fountain pen having a casing, a connecting member, jaws within said connecting member, a nib having a plurality of longitudinal slits at its point and corrugations upon both faces whereby the pen may be fed with writing fluid upon both of its faces.

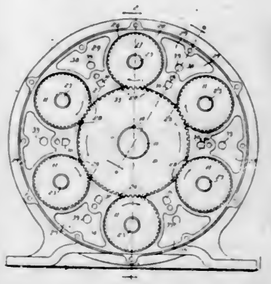
[Claims 1 to 6 and 8 not printed in the Gazette.]

1,270,036. NAPKIN AND TOWEL HOLDER. ALFRED LECLAIRE, Maisonneuve, Quebec, Canada. Filed Apr. 30, 1917. Serial No. 165,332. (Cl. 45—32.)



As a new article of manufacture, a holder such as described, comprising a single piece of material having a semi-globular body portion at one end thereof having its flat side disposed outwardly, a fastening element extending axially from the said flat side of the body portion, arms extending from the side of the body portion opposite the fastening device, said arms being disposed in the same vertical plane and diverging toward their free terminals, heads of semi-globular formation provided upon the terminal of the arms with their flat sides disposed in horizontal planes one above the other and spaced slightly apart, the edges of said flat sides being beveled, as and for the purposes set forth.

1,270,037. ENGINE. GEORGE I. LEONARD, Chicago, Ill., assignor to Leonard Valveless Engine Company, a Corporation of Maine. Filed Sept. 6, 1917. Serial No. 189,958. (Cl. 121—54.)

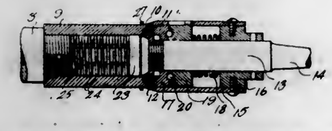


1. An engine comprising, in combination, intermeshing gears, a casing for said gears, inlet ports in said casing for admitting fluid under pressure into the intermeshing portions of said gears, and exhaust-ports in the side walls of said casing opposite the ends of said gears

and extending close to the line of mesh of the gears on the low-pressure side.

[Claims 2 to 5 not printed in the Gazette.]

1,270,038. DEVICE FOR TRIMMING GASKETS AND THE LIKE. AXEL C. V. MALM and FRANK H. POORMAN, Dayton, Ohio, assignors to The Malm Machine Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 8, 1917. Serial No. 185,111. (Cl. 164—57.)



1. In a device of the character described, a cutter block, means for rotating the same, a cutter arranged to cut in a circular path described about the axis of said cutter block, and means for imparting axial movement to said cutter to bring the same into coöperative relation with said cutter block.

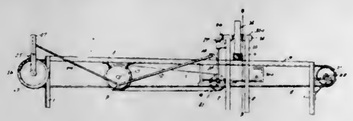
3. In a device of the character described, a cutter block, means for rotating the same, a nonrotatable cutter arranged in longitudinal alinement with said cutter block and having a cutting edge arranged to cut in a circular path described about the axis of said cutter block, means for moving one of said members toward and from the other, and means for supporting the work in a position to be acted upon by said cutter when the latter is moved into operative relation with said cutter block.

11. In a device of the character described, coöperating trimming members, one of said members having inner and outer cutters and the other of said members having a part constituting a cutter block coöperating with said cutters, means for rotating one of said members and means for imparting axial movement to one of said members to bring the two members into coöperative relation.

25. In a device of the character described, means for supporting and rotating the article to be trimmed, and a cutter mounted for movement lengthwise of the axis of rotation of said article and having two cutting edges, one extending substantially parallel to said axis and the other extending transversely of said axis.

[Claims 2, 4 to 10, and 12 to 24 not printed in the Gazette.]

1,270,039. SLICING-MACHINE. HERBERT G. MILLER, The Dalles, Oreg., assignor of one-half to Pacific Evaporator Company, Portland, Oreg., a Corporation of Oregon. Filed July 20, 1916. Serial No. 110,282. (Cl. 146—7.)



1. In a slicing machine, the combination of a knife; devices for feeding material along the cutting edge of the blade; and means for moving the blade and material into cutting relation a plurality of times during the traverse of the material along the cutting edge of the blade.

11. In a slicing machine, the combination of a cutting device; and a rotary feeding device adapted to hold the material by engaging the walls of openings therein, said devices cutting by relative movement thereof in one direction and feeding by relative movement along each other in another direction.

13. In a slicing machine, the combination of a cutting device; and a rotary feeding device adapted to receive the material to be sliced and to invert the same in carrying it to slicing position to present the inverted face for slicing, said devices being timed relatively to each other to make a plurality of cuts on the inverted face of the material with each cycle of the feeding device.

26. In a slicing machine, the combination of a cutting device having reciprocating movement; and a rotary feeding device feeding along and across the cutting device in the plane of movement of the cutting device, said devices being timed relatively to each other to make a plurality of cuts with each cycle of the feeding device.

30. In a slicing machine, the combination of a reciprocating cutter; a feeding device comprising an endless belt having pins thereon adapted to receive the material at the top; a guide for retaining the material on the pins as the material is inverted by the movement of the belt, said belt extending along the cutting edge of the reciprocating cutting device; means for subjecting the material to the action of a liquid comprising an endless belt having pins thereon adapted to be brought successively into alinement with the pins of the feeding device to effect the transfer of the material from one to the other; a receptacle; and mechanism for guiding the belt of said means through said receptacle, said mechanism comprising a guide spaced from the belt adapted to retain the material thereon in its passage through the receptacle.

[Claims 2 to 10, 12, 14 to 25, and 27 to 38 not printed in the Gazette.]

1,270,040. CORING-TOOL. HERBERT G. MILLER, The Dalles, Oreg. Filed June 29, 1917. Serial No. 177,707. (Cl. 146—6.)



1. In a coring tool, a curved guide plate adapted to enter a cylindrical opening and a seed pocket cutting blade struck up from an intermediate portion of the guide plate, the blade projecting from the plate and providing a discharge slot through the plate, said blade having a curved cutting edge; and a handle on the plate.

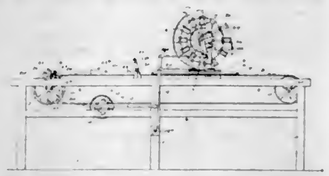
2. In a coring tool, a curved guide plate open at one side and adapted to enter a cylindrical opening; a guide extending circumferentially from the plate and a seed pocket cutting blade having a curved edge extending from said plate.

3. In a coring tool, a curved guide plate open at one side and adapted to enter a cylindrical opening; a guide extending circumferentially from the plate and a seed pocket cutting blade struck up from an intermediate portion of the guide plate, the blade projecting from the plate and providing a discharge slot through the plate, said blade having a curved cutting edge; and a handle on the plate.

4. In a coring tool, a curved guide plate adapted to enter a cylindrical opening, said plate being open at one side; guides extending circumferentially from said plate adjacent to the front and rear ends of the plate and a seed pocket cutting blade extending from said plate at a point between the guides, said blade having a curved cutting edge; and a handle on the plate.

1,270,041. SLICING-MACHINE. HERBERT G. MILLER, The Dalles, Oreg., assignor to Pacific Evaporator Company, Portland, Oreg., a Corporation of Oregon. Filed July 7, 1917. Serial No. 179,112. (Cl. 146—11.)

1. In a slicing machine the combination of a knife; a carrier in which a piece to be sliced is placed; and means controlled by the material being sliced for advancing the carrier upon the completion of the slicing of the piece.



4. In a slicing machine the combination of a knife; a rotary carrier on which a piece to be sliced is placed, the carrier receiving the material in the upper part of its periphery and advancing it to a lower portion of its periphery and inverting it to be sliced; and means controlled by the material being sliced for advancing the carrier upon completion of the slicing of the piece.

6. In a slicing machine the combination of a knife; a carrier on which a piece to be sliced is placed; means controlled by the material being sliced for advancing the carrier on the completion of the slicing of the piece; a conveyer receiving the material and means for advancing said conveyer in relation to the slicing to deposit the material in rows.

11. In a slicing machine the combination of a tray carrier; a slicer adapted to cut material and deposit the same on trays on the tray carrier; means for advancing the carrier; and devices controlled by a tray on the carrier controlling the means to prevent a deposit of material on the ends of the trays.

15. In a slicing machine the combination of a tray carrier; a pulley forming a support for the carrier; a slicer adapted to cut material and deposit the same on trays on the tray carrier; a ratchet wheel locked with said pulley; a rock arm carrying a pawl and adapted to operate on said ratchet wheel; a reciprocating mechanism for actuating the slicer; a rock arm; a pawl carrier adapted to limit the action of the pawl on the ratchet wheel; and a cam in the path of the ends of the trays for actuating the pawl carrier to control the travel of the tray carrier to prevent the deposit of material on the ends of the trays.

[Claims 2, 3, 5, 7 to 10, and 12 to 14 not printed in the Gazette.]

1,270,042. FILTER. ALFRED J. MOISANT, New York, N. Y., assignor, by mesne assignments, to General Research Laboratories, a Corporation of New York. Filed Oct. 27, 1916. Serial No. 127,985. (Cl. 210—16.)



1. A filter comprising a casing having an upstanding outlet pipe in the bottom thereof, a filter member secured to the upper end thereof, an imperforate screen member surrounding the filter member and having its lower end disposed below the top of the outlet pipe, and a foraminous screening member surrounding the screen member, with an intervening space and extending below the screen member.

[Claims 2 to 5 not printed in the Gazette.]

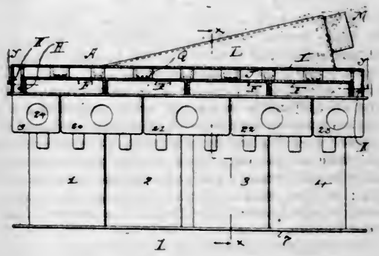
1,270,043. ROOF-LATCH. JOHN S. MURPHY, Brooklyn, N. Y. Filed Aug. 2, 1916, Serial No. 112,666. Renewed May 2, 1918. Serial No. 232,159. (Cl. 25—131.5.)



2. A roof latch comprising an arch member having apertured ends, a reciprocating bar arranged to extend through one of the apertures in each end, said bar having a beveled surface adjacent the outer end, and a pivotally mounted support for each of said bars whereby the bars may be moved in or out according to the position of said support.

[Claim 1 not printed in the Gazette.]

1,270,044. ENGINE-HOUSING. THOMAS E. MURRAY, New York, N. Y. Filed Jan. 10, 1917. Serial No. 141,548. (Cl. 123—195.)



1. An engine housing, comprising a plate having an opening for a cylinder, a cylinder secured to said plate and registering with said opening, and an inverted box-shaped cylinder head secured upon said plate and covering said cylinder opening; the said plate and cylinder head being each struck up from sheet metal and electrically welded together.

2. An engine housing comprising a plate having an opening for a cylinder, a cylinder secured to said plate and registering with said opening, an inverted box-shaped cylinder head secured upon said plate above and covering said cylinder opening, and a jacket secured on said cylinder head; the said plate, cylinder head and jacket being each struck up from sheet metal and electrically welded together.

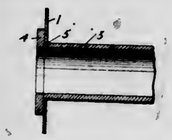
3. An engine housing, comprising a cylinder, a supporting plate therefor, an inverted box-shaped cylinder head secured upon said plate and covering said cylinder, and a jacket on said head; each of said parts being struck up from sheet metal and electrically welded together.

[Claims 4 to 16 not printed in the Gazette.]

1,270,045. METHOD OF WELDING THE BUTT-END OF A TUBE TO A PLATE OF THIN METAL HAVING AN OPENING. THOMAS E. MURRAY, New York, N. Y. Filed Nov. 1, 1917. Serial No. 199,777. (Cl. 78—82.)

1. The method of securing the butt end of a tube to a plate of thin metal having an opening wherewith the longitudinal central axis of said tube is concentric, which

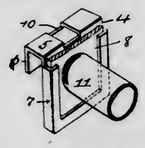
consists in, first, electrically welding a ring of metal to said plate surrounding and concentric with said opening,



and second, electrically welding said tube to said united plate and said ring.

[Claims 2 and 3 not printed in the Gazette.]

1,270,046. ADAPTER DEVICE FOR PIPES AND BOXES. THOMAS E. MURRAY, New York, N. Y. Filed Nov. 1, 1917. Serial No. 199,778. (Cl. 285—26.)



1. An adapting device for pipe connection to a box having an opening in one of its walls, comprising a plate having an opening in line with said wall opening, means for securing said plate to said wall, a plate having an opening in line with said first-named plate slidable on the outer face thereof, means for supporting said slidable plate, and means for securing a pipe to said slidable plate in registry with the opening therein.

2. An adapting device for pipe connection to a box having an opening in one of its walls, comprising a plate having an opening in line with said wall opening, means for securing said plate to said wall, an under-cut three-sided frame on the outer side of said plate, and a plate slidable in said frame; the said slidable plate having an opening in line with said wall opening, and means for securing a pipe to said slidable plate in registry with the opening therein.

3. An adapting device for pipe connection to a box having an opening in one of its walls, comprising a plate having an opening in line with said wall opening and hooked at its upper edge to engage the upper edge of said wall, an undercut three-sided frame on the outer face of said plate, and a plate slidable in said frame; the said slidable plate having an internally threaded opening in line with said wall opening.

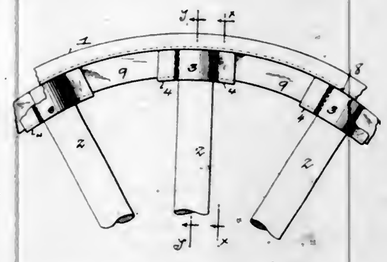
8. An adapting device as in claim 1, the said slidable plate having a tongue extending over the upper edge of said wall, a cover for said box extending over said tongue, and means for locking said cover upon said box.

[Claims 4 to 7 not printed in the Gazette.]

1,270,047. VEHICLE-WHEEL. THOMAS E. MURRAY, New York, N. Y. Filed Nov. 1, 1917. Serial No. 199,779. (Cl. 21—177.)

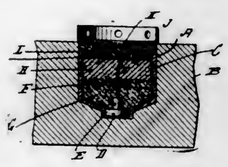
1. A metal vehicle wheel, comprising a metal rim and a spoke socket, the said socket being formed of two half sections of sheet metal, each half section comprising a semicircular middle portion, and wing portions on each side of and integral with said middle portion, the said half sections being disposed with their respective concavities opposite one another, and having their respective wing portions electrically welded together, and the said socket being electrically welded at a longitudinal edge to said rim.

2. A metal vehicle wheel, comprising a metal rim and a spoke socket, the said socket being formed of two half sections of sheet metal, each half section comprising a semicircular middle portion, and wing portions on each side of and integral with said middle portion, each of said wing portions having a flange, the said half sections being disposed with their respective concavities opposite one another, and having the edges of the flanges of their wing portions electrically welded together, and the said socket being electrically welded at a longitudinal edge to said rim.



3. In combination with a wheel rim, two sockets as in claim 2, electrically welded at their longitudinal edges to the inner surface of said rim, and a stay piece entering at its ends between the wing portions of said sockets.

1,270,048. ELECTRIC FUSE-PLUG. THOMAS E. MURRAY, New York, N. Y. Original application filed Dec. 29, 1916, Serial No. 139,503. Divided and this application filed Dec. 10, 1917. Serial No. 206,401. (Cl. 175—277.)



1. A fuse plug of the type wherein the contacts are respectively a threaded shell and a plate at one end of said plug, and a fuse strip connecting said contacts, a mass of insulating material within said shell, comprising a layer of dense solid material and a layer of dry comminuted material, a cover cap for said shell having a central opening, and a flange around said opening, the body portion of said flange being embedded in said layer of dense solid material, and the end of said flange entering said layer of dry comminuted material.

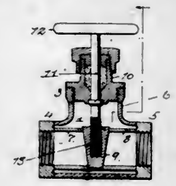
2. A fuse plug of the type set forth in claim 1, having a blowing point localized in said layer of dry comminuted material and within the areas circumscribed by said flange.

3. A fuse plug of the type set forth in claim 1, there being a plurality of layers of dense solid insulating material and an intervening layer of dry comminuted material, the said fuse strip having its terminals connected to said contacts within the said layers of dense solid material.

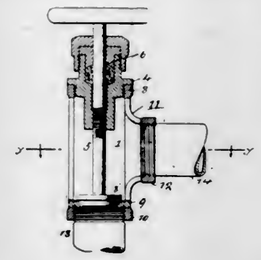
1,270,049. VALVE. THOMAS E. MURRAY, New York, N. Y. Filed Feb. 16, 1918. Serial No. 217,491. (Cl. 137—5.)

1. A tubular valve shell, reinforcing rings welded to the faces of the opposite ends thereof, an inwardly extending tube section carried by each of said rings, a valve seated between the inner ends of said tube sections, and means for operating said valve.

2. A tubular valve shell having a lateral tubular projection, reinforcing rings respectively welded to the end face of said projection and to the faces of the opposite ends of said shell, a cover on said projection ring, an inwardly extending tube section carried by each of the rings on the ends of said valve shell, a valve seated between the inner ends of said tube sections, and a valve stem extending through said cover.



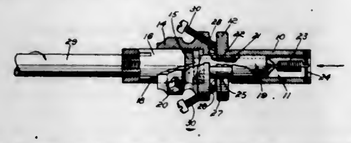
1,270,050. VALVE. THOMAS E. MURRAY, New York, N. Y. Filed Feb. 16, 1918. Serial No. 217,492. (Cl. 137—4.)



2. A tubular valve shell having a lateral tubular projection, reinforcing rings respectively welded to one end of said shell and to the end of said tubular projection, a cover on the ring welded to said shell, a valve stem extending through said cover, a valve carried by said stem, a disk having an opening forming a seat for said valve welded to the opposite end of said shell, and a reinforcing ring welded to said disk.

[Claims 1 and 3 not printed in the Gazette.]

1,270,051. TAP AND DIE HOLDER. AXEL E. OGREN, Derby, Conn. Filed Sept. 21, 1917. Serial No. 192,480. (Cl. 10—89.)



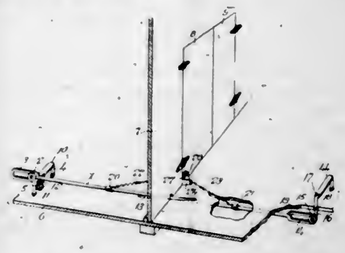
1. A holder of the character described, comprising a head havig a socket for a tool and a clutch member, a sliding clutch member having a shank passing through the base of the head, a body, adapted for attachment to a machine, in which the shank has longitudinal movement but is locked against rotation, a coil spring attached to the shank and to the body, and a connection between the head and the sliding clutch member corresponding with a predetermined length of thread to be cut, the cutting of a thread causing longitudinal movement of the head and sliding clutch member relatively to the body and reversal of the work causing the clutch members to engage and the tool to unthread after which the head and sliding clutch member are returned to their normal position by the spring.

6. A holder of the character described, comprising a head having a clutch member and rearwardly extending pins, a sliding clutch member having a shank passing through the base of the head, a body in which the shank has longitudinal movement but is locked against rotation and which is provided with a flange having notches terminating in shoulders adapted to be engaged by the pins, a coil spring attached to the shank and to the body, and adjusting screws in the head which bear against the flange and determine the longitudinal adjustment of the pins relatively to the body.

11. A holder of the character described, comprising a head having a socket for a tool and a clutch member, a sliding clutch member having a shank passing through the base of the head, a body in which the shank has longitudinal movement but is locked against rotation and which is provided with shoulders, pins extending from the head and engaging the shoulders, and a coil spring attached to the shank and to the body.

[Claims 2 to 5 and 7 to 10 not printed in the Gazette.]

1,270,052. DOOR OPENING AND CLOSING MECHANISM. WILLLIAM A. OLEEN and OLOF H. OLEEN, Columbia City, Oreg. Filed Nov. 3, 1915. Serial No. 59,436. (Cl. 268—9.)



1. In a door opening and closing mechanism, the combination of pivotal wheel engaging members adapted to be placed on opposite sides of a door, each member pivoted at one end to a fixed support, a lever arm projecting from one of said members on the opposite side of its pivotal axis, a rigid operating rod extending continuously between said members and having a longitudinal slot in each end, a pivot projecting from one of said members into the slot at one end of said rod for operating the same, a like pivot on the lever arm of the other member engaging the slot in the opposite end of the rod, resilient means for holding the first member in operative position, the second named member being operatively maintained through the weight of said arm and the end of the attached operating rod, the slots in said rod being sufficiently long to permit the wheel engageable members to return to position after being operated without moving the rod and also permit the rod when moved to slide inactively on the pivot of the non-operating member, a door, and independent flexible connections between the door on each side and the operating rod on the same side.

[Claim 2 not printed in the Gazette.]

1,270,053. REINFORCING MEMBER FOR TIRE-BEADS AND METHOD OF MAKING SAME. LOUIS M. REAM, Thompson, Conn. Filed Sept. 27, 1917. Serial No. 193,402. (Cl. 28—5.)

1. A reinforcing ring for tire beads comprising a metallic core made of an annular loop welded to produce a continuous ring, and a separate wire wound about the core in spiral form to make a plurality of plies, the ends of the winding wire being secured independently of each other and independently of the securing of the core member itself.

2. A reinforcing ring for tire beads comprising a continuous annular core and a smaller wire having its inner end secured to the core and wound about the same in a spiral form and having its outer end secured to a previously laid portion of the winding.

3. A reinforcing ring for tire beads consisting of a continuous annular comparatively large core and a comparatively fine winding secured at its inner end to the core and wound about the same spirally to entirely cover the core, and making a plurality of layers about the core.

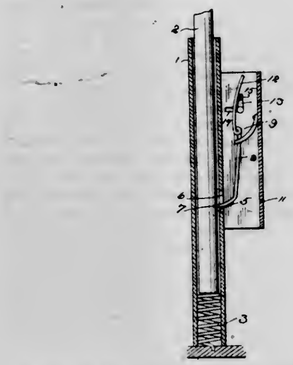


8. A reinforcing ring for tire beads comprising a core having a plurality of annular rings side by side, a winding wire having its inner end caught between the core rings, said wire being wound in spiral form about the plurality of rings.

14. The method of making reinforcing rings for tire beads consisting of independently butt-welding into annular rings a plurality of core wires, holding these wires adjacent and catching between them the inner ends of a plurality of fine wires, winding such fine wires together about the set of core wires until the core wires are entirely inclosed with a plurality of plies of winding and thereafter securing in place the outer ends of the winding wires against prevoiusly laid portions thereof.

[Claims 4 to 7 and 9 to 13 not printed in the Gazette.]

1,270,054. UMBRELLA-LOCK. GOUVERNEUR CEALES RHOER, Little Rock, Ark. Filed July 31, 1917. Serial No. 183,779. (Cl. 70—14.)



A staff socket, comprising in combination, a tubular element, a spring cushion in the body of said element, a vertical rib formed longitudinally throughout the length of the socket, a staff adapted to seat within the socket element and having a vertical groove to coöperate with said rib to prevent rotation of the staff, a lock casing mounted upon the socket element, a transverse pin extending across the casing, a spring latch mounted on said pin and having an end projecting through the wall of the socket element, said latch consisting of a spring wire element coiled to provide a bearing to receive the transverse pin, an upwardly projecting member to coact with a key, a downwardly extending element carrying said projecting end, and a spring to force the downwardly extending element toward the wall of the socket element, a key for controlling the spring latch, and a lug provided on the staff for engagement by said latch when the staff is depressed in the socket element against the action of said spring.

1,270,055. ARTIFICIAL LEATHER AND PROCESS OF PRODUCING THE SAME. WALTER W. RICHARDS, Wilmington, Del., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del., a Corporation of New Jersey. Filed Nov. 16, 1912. Serial No. 731,653. (Cl. 91—68.)

1. An artificial leather comprising a pyroxylin-coated fabric having the odor of leather and containing an empyreumatic substance.

2. An artificial leather comprising a pyroxylin-coated fabric having the odor of leather and containing musk.

5. An artificial leather comprising a pyroxylin-coated fabric having the odor of leather and containing musk and an essential oil.

7. An artificial leather comprising a pyroxiyin-coated fabric having the odor of leather and containing an em pyreumatic substance, animal oil and an essential oil.

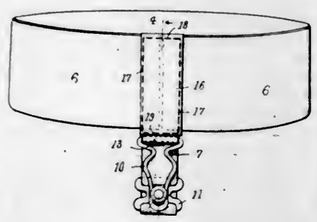
10. The process which comprises dissolving pyroxylin in a solvent, adding thereto an empyreumatic substance, musk and an essential oil, coating a fabric therewith, and drying the coated fabric.

[Claims 3, 4, 6, 8, and 9 not printed in the Gazette.]

1,270,056. PLASTIC PACKING COMPOSITION. JOHN D. RILEY and JOHN L. LOVELL, Conneaut, Ohio. Filed Mar. 19, 1917. Serial No. 155,835. (Cl. 106—8.)

A plastic metallic packing composition including a mixture of Babbitt metal and flake graphite united by fusion and reduced to a finely comminuted state, to produce particles each of which contains graphite as a lubricating medium, and asbestos fiber saturated with a mixture of cylinder oil and beeswax and thoroughly commingled with said metallic particles.

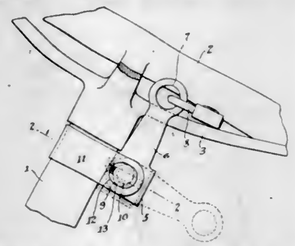
1,270,057. MAN'S GARTER. HAROLD C. ROOD, Bridgeport, Conn. Filed Mar. 18, 1918. Serial No. 223,066. (Cl. 241—6.)



1. A man's garter of the class described, comprising a relatively wide leg band of elastic material, a depending supporting tape attached to one side of the adjoining end portions of said leg band and stitched to the two adjoining ends, the tape being extended downward to support a button and having its lower portion looped to support a clasp and stitched to its intermediate portion, and a finishing strip covering the attached end of the tape and stitched to the end portions of the leg band, the lower end portions of the strip depending below the elastic being stitched to the tape.

2. A man's garter of the class described, comprising a relatively wide leg encircling member of elastic material, a depending clasp supporting tape covering one side of the adjoining end portions of said leg encircling member and stitched to the respective ends by rows of stitches running along the edge portion of the tape and crosswise of the two adjoining end portions of the leg band, the tape being extended downward to support a clasp and its end portion being stitched to its intermediate portion beneath the leg band, and a finishing strip covering the attached end of the tape and the end portions of the leg encircling members and stitched thereto by parallel rows of stitches, the lower end portions of the strip depending below the elastic being stitched to the loop of the tape.

1,270,058. LOCKING MEANS FOR STEERING-WHEELS. JAMES H. SAGER, Rochester, N. Y., assignor to J. H. Sager Company, Rochester, N. Y., a Corporation. Filed June 25, 1917. Serial No. 176,760. (Cl. 70—129.)



1. A locking means for steering wheels comprising a locking member adapted to engage the steering wheel, an attaching member of U shape fitting about the steering column, a pin connecting the arms of the U-shaped member, having a movement transversely of its length toward the free ends of the arms to interlock with said arms, and also having the locking member pivoted thereon, and means carried by the pin for engaging the steering column to hold the pin interlocked with the attaching member.

2. A locking means for steering wheels comprising a locking member adapted to engage the steering wheel, a U shaped attaching member fitting about the steering column, a pivot pin on which the locking member is pivoted, interlocked with the ends of the attaching member, and a set screw passing through said pin to engage the steering column in order to maintain the pin interlocked with the attaching member.

3. A locking means for steering wheels comprising a U shaped attaching member fitted about the steering column, a pivot pin interlocking at its ends with the ends of the U shaped attaching member, a set screw passing through said pin to engage the steering column and to hold the pin interlocked with the attaching member, and a locking member pivoted to the pin to engage the steering wheel and having a portion to cover the outer end of the set screw when the locking member is holding the steering wheel.

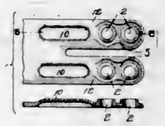
4. A locking means for steering wheels comprising a U-shaped attaching member having eyes at its end, a pivot fitted in said eyes and formed with surrounding grooves which permit the pin to move laterally in the eyes to interlock with the attaching member, means carried by said pin to engage the steering column to lock the pin and the attaching member to the column, and a locking member mounted to turn on the pivot pin to engage the steering wheel.

5. A locking means for steering wheels comprising a U shaped attaching member, a pivot pin interlocking with the arms of said member, means on said pin for engaging the steering column to hold the pin interlocked with the attaching member, and a U shaped locking member pivoted on the pin, having its arms adapted to straddle an arm of the steering wheel, and having also a portion to cover the operating portion of the means which secures the pin interlocked with the attaching member.

1,270,059. METHOD OF FORMING PIN-EYES IN METAL BARS. FREDERIC SCHAEFER, Pittsburgh, Pa. Original application filed Dec. 18, 1916. Serial No. 137,618. Divided and this application filed June 2, 1917. Serial No. 172,519. (Cl. 29—164.)

1. The method of forming pin eyes in metal bars, which comprises subjecting a bar to a die pressing or forging operation to form holes therein and reduce the thickness of the metal in the vicinity of said holes and extrude the metal in both directions from the body of the bar adjacent the holes to provide extended bearing surfaces.

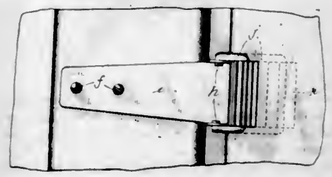
9. The method of making a connecting bar, which comprises subjecting a single sheet of metal to a die pressing or forging operation to form ears at the ends of the metal sheet to form recesses in said ears and reduce the thickness of the metal in the vicinity of said recesses and extruding the metal in both directions from the body of the ears adjacent the recesses and to reduce the thickness of the metal near the center of the ears and increase its



thickness at the edges, subjecting the ends of the bar to a second operation to cut out the metal in the bottom of the recesses and between the ears, and then bending the plate to form a tubular body with oppositely disposed ears at its ends having pin eyes in alinement.

[Claims 2 to 8 not printed in the Gazette.]

1,270,060. FASTENING DEVICE FOR DOORS, &c. GEORGE SCHARF, Crown Point, Ind. Filed Feb. 25, 1918. Serial No. 218,956. (Cl. 70—49.)

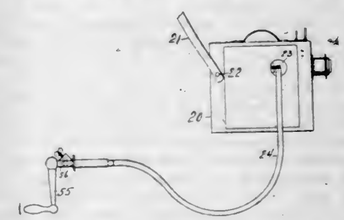


1. The combination with a frame having an abutment, of a spring member secured thereto and acting toward the abutment, a link member pivoted to the spring member and having its free end swinging toward and away from the abutment, a cushion member mounted on the free end of the link member, and a movable member adapted to be forced against the abutment by the cushion member when the link member is turned in the proper position, substantially as and for the purpose described.

2. The combination with a frame having an abutment, of a leaf spring member secured on the outer face of the frame and having ears turned up therefrom extending over the side opposite the abutment, a U-shaped link member pivoted to the ears, a cushion member pivoted on the bottom of the U-shaped link member, and a movable member adapted to be forced against the abutment by the cushion member when the link member is turned in the proper position, substantially as and for the purpose described.

3. In fastening devices for doors, etc., the combination with a spring member adapted to be secured to a frame, of a link member pivoted thereto, and a cushion member mounted on the other end of the link member, said cushion member having a plurality of sides at different distances from its pivotal axis, for the purpose described.

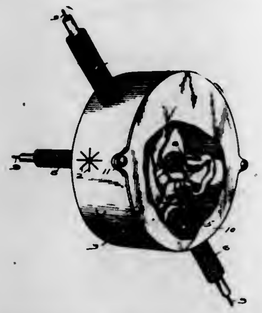
1,270,061. FLEXIBLE SHAFT FOR MOVING-PICTURE CAMERAS. EBERHARD SCHNEIDER, New York, N. Y. Filed May 22, 1915. Serial No. 29,727. (Cl. 88—16.)



1. In combination with a cinematograph, a flexible operating shaft therefor and means for turning said shaft independent of the cinematograph.

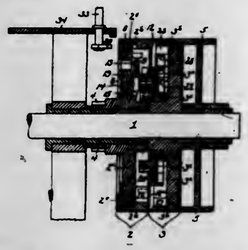
2. In combination with a cinematograph, a flexible operating shaft therefor, a handle connected for turning said shaft and otherwise mounted independently of the cinematograph.

1,270,062. TERMINAL BOX. FREDERICK L. SCHULZ and WILLIAM KRAFT, Toledo, Ohio. Filed Aug. 21, 1916. Serial No. 116,033. (Cl. 247—7.)



A closed terminal box having sheet metal walls, a plurality of sets of cuts radiating from a common point in the inclosing walls of the terminal box forming sharp engaging corners of the sheet metal in the apices of the radiating cuts when punched to open the box to receive the terminals.

1,270,063. STOP-MOTION DEVICE. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed Apr. 24, 1916. Serial No. 93,143. (Cl. 74—46.)

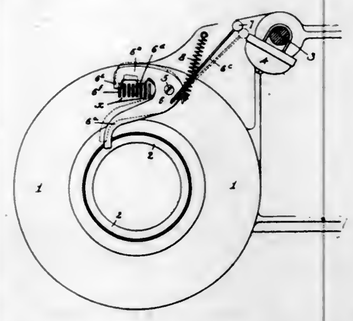


1. A clutching and releasing device in which are combined a plurality of pulleys each comprising a central web member and a rim member rotatably mounted thereon, means for normally locking together the web and rim members of each pulley, a movable unclutching member, and means whereby said unclutching member is caused to effect the unlocking of the web and rim members of the plurality of pulleys.

11. The combination, in a clutching and releasing device, of a plurality of pulleys disposed side by side and of the same diameter, whereby a belt can be readily shifted from one to the other, each of said pulleys comprising a web member and a rim member rotatably mounted thereon, means for locking each web member to its rim member, each of said web members having an unclutching member movable therewith, means whereby arrest of said movement is caused to release the web and rim members of its respective pulley, and means whereby such arrest of movement of the unclutching member of one pulley is caused to effect like arrest of movement of the unclutching member of the adjoining pulley.

[Claims 2 to 10 not printed in the Gazette.]

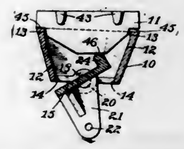
1,270,064. DEFECTIVE-NEEDLE ALARM FOR KNITTING-MACHINES. ROBERT W. SCOTT, Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated, a Corporation of Massachusetts. Filed June 21, 1916. Serial No. 104,910. (Cl. 66—7.)



5. The combination of the needles of a knitting machine with an emergency device having an actuating member consisting of a pivoted lever having two arms, one of which overlaps the normal path of the needles, resilient means acting on said lever to maintain said arm in such overlapping relation, a machine element acting on the other arm of said lever to limit the extent of the movement due to such resilient means, and a movable member of the machine also acting upon said second arm of the lever to withdraw the other arm of the same from the path of the needles at intervals.

[Claims 1 to 4 not printed in the Gazette.]

1,270,065. FORCED-DRAFT FURNACE-GRATE. LEE HOWARD SIMMONS, Goldsboro, N. C., assignor to Simmons Forced Draft Company, a Corporation of North Carolina. Filed Jan. 30, 1917, Serial No. 145,442. Renewed Apr. 29, 1918. Serial No. 231,536. (Cl. 110—74.)



1. A forced draft furnace grate comprising a plurality of hollow grate bars, fire bars located transversely of said grate bars, said grate bars provided with pivotal bottoms, a rod connected with all of the bottoms of said bars for tilting simultaneously the said bottoms and said bottoms rocking the said fire bars located on said grate bars when said bottoms are tilted.

3. A forced draft furnace grate comprising a plurality of hollow grate bars arranged in a front and rearward series, said grate bars having openings in their bottoms, a manifold provided with a plurality of openings for supporting the inner adjacent ends of said grate bars the openings in the manifold registering with the openings in the bottoms of said grate bars, means for supplying air to said manifold, a rock shaft located transversely of said manifold, two rods connected with said shaft, pivotal bottoms in said grate bars and connected to the two said rods whereby a movement of said rock shaft will simultaneously tilt the bottoms of said grate bars, fire bars located on said grate bars and means on said pivotal bottoms to contact with and rock said fire bars with relation to the said grate bars when said rock shaft is operated.

7. A forced draft furnace grate comprising in part a hollow grate bar, and a plurality of transversely disposed fire bars in said grate bar and a pivotal bottom in said grate bar provided with an upward extension adapted to rock said transversely extending fire bars when said bottom is tilted.

[Claims 2, 4 to 6, and 8 to 11 not printed in the Gazette.]

1,270,066. MANIFOLDING-BOOK. CHARLES L. SPENCE, Sturgis, Mich. Filed Jan. 5, 1915. Serial No. 655. (Cl. 282—22.)



1. A book of the character described comprising series of original, duplicate and triplicate sheets, the original and duplicate sheets of each series being detachably united at one end and the duplicate being transparent and provided with a detachable stub and the triplicate sheet of each series being located beneath the original and duplicate sheets and also provided with a stub; and a sheet of transferring material coated on both sides and adapted to be interposed between the duplicate and the triplicate sheets of each series, the triplicate sheet being notched to permit convenient access to the original sheet of the series therebeneath.

2. A book of the character described comprising series of original, duplicate and triplicate sheets, the original and duplicate sheets of each series being detachably united at one end and the duplicate being transparent and provided with a detachable stub projecting beyond the adjacent end of the original sheet, and the triplicate sheet of each series being located beneath the original and duplicate sheets and also provided with a stub; and a sheet of transferring material coated on both sides and adapted to be folded between the duplicate and the triplicate sheets of each series, the triplicate sheet being notched to permit convenient access to the original sheet of the series therebeneath, the sheet of transferring material being adapted to be folded or dropped between the sheets at the free ends thereof.

3. A book of the character described comprising series of original, duplicate and triplicate sheets, the original and duplicate sheets of each series being detachably united at one end and comprised within a unitary leaf, the duplicate being transparent and provided with a detachable stub and the triplicate sheet of each series being located beneath the original and duplicate sheets and also provided with a stub, and a sheet of transferring material coated on both sides and adapted to be inserted between the duplicate and triplicate sheets of each series, the triplicate sheet being notched to permit convenient access to the original sheet of the series therebeneath.

4. A triplicate manifolding pad comprising series of original, duplicate and triplicate sheets of paper and an interleaving sheet of transferring material coated on both sides, the original and duplicate sheets of each series being detachably united at one end and formed from a unitary leaf, the duplicate sheet being provided with a detachable stub, and having the body portion thereof transparent, the triplicate sheet of each series also having a stub and provided with a notch, and means fastening the sets together to form a book or pad.

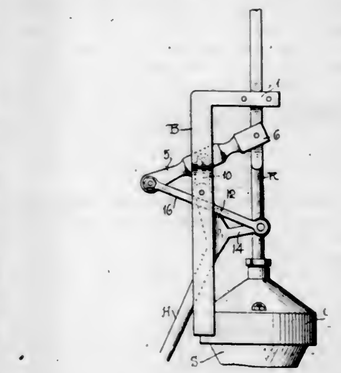
5. A triplicate manifolding pad comprising series of original, duplicate and triplicate sheets of paper and an interleaving sheet of transferring material coated on both sides, the original and duplicate sheets of each series being detachably united at one end and formed as parts of a unitary leaf, the duplicate sheet being provided with a detachable stub and having the body portion thereof transparent, the triplicate sheet of each series also having a stub and being provided with a notch and the carbon sheets being notched or shortened to permit access through said sheet and the triplicate sheet to the original of the series therebeneath.

1,270,067. SHIRT-COLLAR. EDWARD SPIEGEL, Brooklyn, N. Y. Filed Apr. 1, 1918. Serial No. 225,865. (Cl. 2—67.)



A turn down shirt collar comprising a band portion and a turn down part of cloth secured thereto, said turn down portion having two layers of material inclosing an inner stiffening lining terminating in a cord located on the exterior edge thereof and confined by the fold of the cloth over the same substantially as shown and described.

1,270,068. PUMP-OPERATING DEVICE. FRANK STEVENS and FREDERICK C. SPICKER, Roundup, Mont. Filed June 6, 1917. Serial No. 173,252. (Cl. 74—5.)



1. In combination with a reciprocatory member and a bracket, a lever pivotally engaged at one end portion with the reciprocatory member, a rigid link pivotally supported by the bracket and pivotally engaged with the lever intermediate the length thereof, a handle member pivotally engaged with the bracket, the pivotal connection between the handle member and the bracket and the rigid link and the bracket being common, an arm carried by the pivoted end portion of the handle member and disposed in a direction away from the lever, and a rigid link pivotally engaged with a free end portion of the arm of the operating handle and with the outer end portion of the lever.

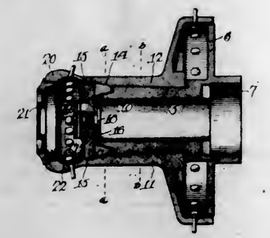
[Claim 2 not printed in the Gazette.]

1,270,069. VEHICLE-HUB. WILLIAM J. STEWART, Chicago, Ill. Filed Feb. 23, 1917. Serial No. 150,405. (Cl. 21—31.)

1. A vehicle hub comprising in combination with a permanent hub part, the outer wall of which tapers inwardly, the said outer wall having clearance spaces therein, of a sleeve inclosing the permanent hub part having its inner wall tapering inwardly, and clearance spaces formed therein, and means for connecting the said parts so as to comprise a complete hub.

3. In a vehicle hub, a permanent hub part having an inwardly tapering outer wall, having clearance spaces therein, an outwardly tapering frusto pyramidal projection on the end of the permanent hub part, a sleeve in-

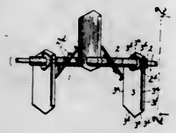
closing said part having an inwardly tapering inner wall having clearance spaces therein, an outwardly tapering seat on the inner wall of the sleeve adjacent the end of the inwardly tapering wall, screw threads on the inner wall of the sleeve in close proximity to the said seat, a disk, flanges thereon being polygonal in shape, fitting and coinciding with the space between the seat on the sleeve and the frusto pyramidal projection on the permanent hub part, and means engaging the said screw threads for locking the disk in position.



5. In a vehicle hub, a permanent hub part, a sleeve, an outwardly tapering seat on the inner wall thereof, a frusto pyramidal projection on the end of the permanent hub part tapering outwardly, a disk, flanges of polygonal shape thereon fitting and coinciding with the space between the said seat and frusto pyramidal projection internal threads carried by the sleeve adjacent the seat, a locking nut, peripheral screw threads engaging the internal threads, a screw connecting the nut and disk, means carried by the end of the sleeve for securing a dust cap thereto, and means for mounting spokes on the sleeve.

[Claims 2 and 4 not printed in the Gazette.]

1,270,070. FERTILIZER-DISTRIBUTER. STARLEY S. SWANSON, Bellevue, Ohio. Filed Sept. 20, 1917. Serial No. 192,407. (Cl. 275—3.)



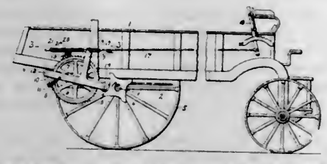
1. An oblong hexagonal distributer blade including similarly shaped angular ends.

3. A fertilizer distributer, comprising an angular driving shaft, and angularly extending abutting sleeved flanges and distributer blades removably mounted thereon.

5. A fertilizer distributer, comprising a rotatable angular shaft, blade spacing abutting bearing sleeves having similarly shaped angular openings mounted thereon and provided with circumferentially inclined flanges, and similarly inclined distributer blades attached to said flanges.

[Claims 2 and 4 not printed in the Gazette.]

1,270,071. FEEDING MECHANISM FOR FERTILIZER-DISTRIBUTERS. STARLEY S. SWANSON, Bellevue, Ohio. Filed Sept. 20, 1917. Serial No. 192,408. (Cl. 74—54.)



1. In feeding mechanism for fertilizers, the combination with rotatable and oscillatory feeding elements; of a continuously rotating driving element intermittently actuating said elements, and longitudinally movable means for resiliently actuating and controlling said oscillatory feeding element relative to and independently of said driving element.

[Claims 2 to 5 not printed in the Gazette.]

1,270,072. EXPLOSIVE BOMB. HARVEY A. THACKER, Lenvenworth, Kans. Filed Jan. 5, 1917. Serial No. 140,700. (Cl. 102—2.)



4. A device of the class described comprising an intermediate cylindrical portion, a concavo-convex top cap detachably secured on the upper extremity of the cylindrical portion, a hollow conical end portion detachably fastened on the lower end of the cylindrical portion, an intermediate box fitted within the cylindrical portions, two tubes extending in opposite directions from the box and secured respectively at their outer ends to the top cap and end portion, a time fuse fitting through one of said tubes, a detonating bar extending through the other tube, the lower end of the detonating bar being enlarged and provided with a shock receiving plate, a safety mechanism on the lower end of the detonating bar above the enlarged end and balancing mechanism arranged above the top cap.

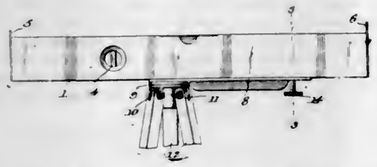
[Claims 1 to 3 not printed in the Gazette.]

1,270,073. LEAK-LOCATING DETECTOR FOR PNEUMATIC TIRES. LOUIS THIEM, Toledo, Ohio. Filed Jan. 2, 1918. Serial No. 210,053. (Cl. 73—51.)



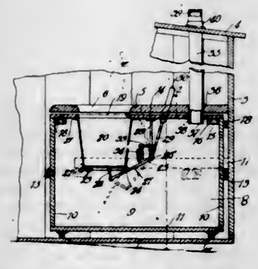
A device of the kind and for the purpose described, comprising a collapsible and inflatable sack having a reduced neck portion and a nozzle having a hollow stem portion inserted into and non-leakably secured to the neck portion of the sack and a coupling nipple portion, adapting the nozzle to be secured to the free end portion of the valve stem of an inner tube of an auto tire, interchangeably with the cap of the stem.

1,270,074. LEVEL. ABRAM VEENSTRA, Paterson, N. J. Filed Nov. 15, 1916. Serial No. 131,495. (Cl. 33—72.)



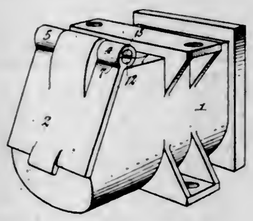
A sight level comprising a support, a plate member carried thereby, a pin projecting upwardly from the plate, a body portion, a level mounted therein, a plate member below the body, supporting the latter and having an aperture through which the pin passes, the body being provided with a recess permitting rotatable and tilting movement, an arm carried by the plate member last named, and a thumb screw passing through the arm and engaging the body for varying the angular position thereof.

1,270,075. DRY CLOSET. CARL V. VOELKER, Wilkes-Barre, Pa. Filed Feb. 17, 1916. Serial No. 78,866. (Cl. 4—32.)



In combination with a dry closet, a receptacle slidably arranged beneath the seat thereof, a removable top for said receptacle having an opening formed therein, a tubular element secured to the underside of said top adjacent said opening, a closure snugly engageable with the lower end of the tubular element, a substantially bell crank shaped lever mounted on the underside of the top having one end connected to the closure and the remaining portion thereof off-set laterally and extended through said top and seat, and spring means engaged with the lower portion of said lever for normally maintaining said closure in engagement with the lower end of the tubular element.

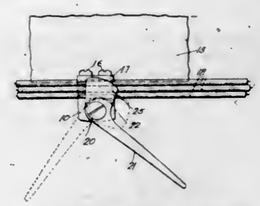
1,270,076. HINGE FOR JOURNAL-BOXES AND THE LIKE. GEORGE L. WAITT, Buffalo, N. Y. Filed Jan. 19, 1918. Serial No. 212,752. (Cl. 16—106.)



1. A hinge for pivotally connecting two members comprising coöperating hinge-knuckles arranged on said members and having their axes in line and one of said knuckles being provided in its outer end with a socket and an inwardly projecting lug, a hinge pintle extending through said hinge knuckles and having a head which is arranged in said socket and has a longitudinal pass whereby the same can clear said lug for entering said socket and a seat on the outer end for engaging with the inner side of said lug, and a spring surrounding said hinge pintle and bearing at one end against the bottom of said socket and at its other end against said head.

2. A hinge for pivotally connecting two members comprising coöperating hinge-knuckles arranged on said members and having their axes in line and one of said knuckles being provided in its outer end with a socket and an inwardly projecting lug, a hinge pintle extending through said hinge knuckles and having a head which is arranged in said socket and has a longitudinal groove in its side which receives said lug as the head is inserted in or removed from the socket, and a transverse notch in its outer end which receives said lug for holding the pintle against turning, and a spring arranged in said socket around the pintle and interposed between the bottom of said socket and the inner side of said head.

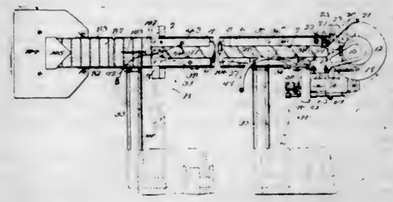
1,270,077. TERMINAL CLAMP FOR COIL-WINDING MACHINES. AUGUST A. WALL, Brooklyn, N. Y. Filed Mar. 11, 1918. Serial No. 221,872. (Cl. 24—134.)



1. A wire clamp for coil winding machines, comprising a block adapted to be secured to the machine and provided with an abutment, and a clamping lever pivoted on the said block and having an eccentric cam disposed opposite the said abutment to clamp the wire or wires in place between the abutment and the eccentric cam, the clamping lever having a holding down plate projecting beyond the cam and adapted to overlie the clamped portions of the wire or wires to hold the same against the block.

[Claims 2 and 3 not printed in the Gazette.]

1,270,078. FILLED-CAN-CLOSING APPARATUS. IVAR F. WARME, Syracuse, N. Y., and JOHN C. TALIAFERRO, Baltimore, Md., assignors to Continental Can Company, Incorporated, Syracuse, N. Y., a Corporation of New Jersey. Filed July 27, 1914. Serial No. 853,559. (Cl. 113—115.)



1. An apparatus for delivering filled cans to a plurality of closing machines including a supporting ledge, a guide rail adjacent the ledge along which the cans are fed, said guide rail having an opening therein through which the cans may pass to the closing machine, a feed cylinder having a thread thereon disposed so as to move the cans along

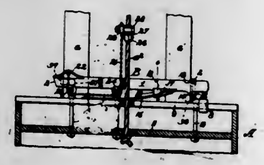
the guide rail and through the opening therein, and means for closing the opening to cause the cans to pass to another closing machine.

11. The combination of a plurality of closing machines, a support for the cans, a guide rail along which the cans are fed to the closing machines, said guide rail having an opening therein through which the cans are adapted to pass to one of said closing machines, a rotating feed cylinder having a thread thereon for moving the cans along said guide rail and through said opening, means for closing said opening, a rotating feed table for delivering the filled cans onto the feed cylinder, a conveyer mounted beneath the feed cylinder, guiding rails for directing the closed cans from a closing machine to the conveyer, said guiding rails including devices for setting the cans on end on said conveyer.

13. An apparatus for delivering filled cans to a plurality of closing machines including a support, a guide rail having an opening through which the cans may pass to a closing machine, a feed cylinder having two threads spirally interwound thereon, the distance between the threads being greater than the diameter of the cans to be conveyed, a reciprocating gate for closing said opening, said reciprocating gate being timed relative to the movements of the feed cylinder so that the cans fed by one of the threads only will be caused to pass through said opening, while the cans fed by the other thread are carried across the opening when the gates are closed.

[Claims 2 to 10 and 12 not printed in the Gazette.]

1,270,079. DUMB-WAITER SAFETY DEVICE. FREDERICK WELLER, New York, N. Y. Filed Jan. 17, 1918. Serial No. 212,255. (Cl. 187—81.)



1. The combination of a dumbwaiter box, a suspension cable, a stationary rail along which the box moves, a clutch lever mounted on the box and adapted to engage the rail, a flexible element separate from the suspension cable and connected with the lever, a connection between the flexible element and cable for permitting the latter to twist without affecting the flexible element, guides on the box for the flexible element, whereby the cable when under normal tension holds the clutch lever released, and spring means for throwing the clutch lever into engagement with the rail when the cable breaks or its tension slackens, the flexible element extending downwardly from the lever to and under the guides and upwardly from the latter to the said cable.

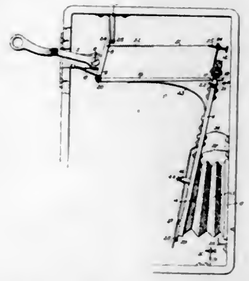
2. The combination of a dumbwaiter box, a fixed rail along which the box moves, and a safety device including a clutch member movable into and out of engagement with the rail, said member having teeth adapted to grip the rail when the member is in one position, and a projection adjacent the teeth and coöperating with the rail when the member is in normal position to guide the movement of the box and prevent the teeth from gripping the rail.

4. The combination of a dumbwaiter box, a fixed rail on which the box moves, a clutch lever fulcrumed on the box and adapted to engage the rail, a suspension cable for the box, connecting means between the cable and lever for holding the latter normally released from the rail, a spring on the box to throw the lever into clutching position, and a slotted bracket on the box and into the slot of which the lever extends, said lever having in its top edge a recess held in engagement with one end of the slot by the spring and a stop lug on the bottom edge of the lever to prevent longitudinal movement thereof in the bracket.

5. The combination of a dumbwaiter box, a suspension cable therefor, a sleeve fixed on the cable and having a bearing shoulder, a slip loosely engaged around the sleeve and bearing on the shoulder, a flexible element having a swiveled connection with the clip, a safety device mounted on the box and connected with the said element, and guide means on the box for the portion of the element intermediate the safety device and said clip.

[Claims 3 and 6 to 9 not printed in the Gazette.]

1,270,080. TELEPHONE TIMER AND SWITCH. ALBERT A. WELLS, Detroit, Mich. Filed May 4, 1917. Serial No. 166,290. (Cl. 179—164.)



3. In a telephone timer and switch, a circuit, a movably mounted member, a switch in the circuit and mounted on the member, a second member for operating the switch when the first member reaches a predetermined point relatively to the second member, a telephone receiver hook, a second switch in the circuit operable by the telephone receiver hook, means by which the telephone receiver hook is adapted to move the first member away from the second member, resilient means connecting the telephone receiver hook with the first member for moving the first member in the direction of the second member, and means for retarding the movement of the first member in the last mentioned direction.

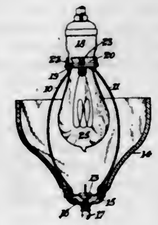
6. In a telephone timer and switch, a circuit, a movably mounted member, a switch in the circuit and mounted on the member, a second member for operating the switch when the first member reaches a predetermined point relatively to the second member, a telephone receiver hook, a second switch in the circuit operable by the telephone receiver hook, means by which the telephone receiver hook is adapted to move the first member away from the second member, means for moving the first member in the direction of the second member, a bellows having an end secured to the first member, and valved means for permitting the entrance of air into the bellows and for retarding the escape of air therefrom.

11. In a telephone timer and switch, a telephone receiver hook, a circuit, transmitting means, a normally open switch in the circuit, means by which an upward movement of the telephone receiver hook on the removal of the telephone receiver is adapted to close the switch, and automatic means for opening the switch after it has been closed for a predetermined time.

17. In a telephone timer and switch, a telephone receiver hook, a circuit, a transmitting means in the circuit, a switch in the circuit, a second switch in the circuit, means by which a movement of the telephone receiver hook in one direction is adapted to close both switches, automatic means operable by the telephone receiver hook for opening the first switch after it has been closed a predetermined time which is actuated when the second switch is closed.

[Claims 1, 2, 4, 5, 7 to 10, 12 to 16, and 18 to 21 not printed in the Gazette.]

1,270,081. LIGHTING-FIXTURE. EDWIN L. WHITE, Brooklyn, N. Y. Filed Aug. 28, 1917. Serial No. 188,548. (Cl. 240—111.)

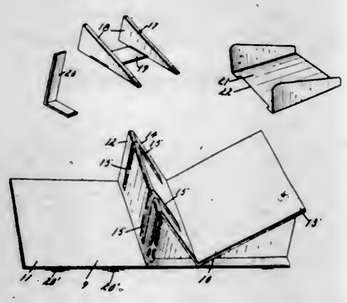


1. A device for supporting a bowl in lighting fixtures, comprising a divided ring, an arm depending from one end of each ring section, a member to which the lower ends of said arms are attached, said divided ring being adapted to surround the lower part of a lamp socket, and means for locking the same in such position.

2. A device for supporting a bowl in lighting fixtures, comprising a divided ring, an arm depending from one end of each ring section, a member to which the lower ends of said arms are attached, said rings being adapted to surround the lower part of a lamp socket, and a clamping member provided with a plurality of spaced fingers having projections to catch under said ring sections.

[Claims 3 and 4 not printed in the Gazette.]

1,270,082. BINDER DEVICE. GEORGE P. WIGGINTON, Kalamazoo, Mich., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Original application filed Feb. 2, 1917, Serial No. 146,105. Divided and this application filed Aug. 27, 1917. Serial No. 188,424. (Cl. 45—57.)



1. In a device of the class described, the combination of a pair of holders having side and end members disposed oppositely and with their end members adjacent, the side member of one holder being disposed horizontally and its coacting end member being disposed vertically and at right angles thereto, the side member of the other holder being oppositely inclined and disposed at right angles to its coacting end member.

2. In a device of the class described, the combination of a pair of holders having side and end members disposed oppositely and with their end members adjacent, the side member of one holder being disposed horizontally and its coacting end member being disposed vertically, the side member of the other holder being oppositely inclined, the horizontally disposed side member being extended below the other holder and constituting a base.

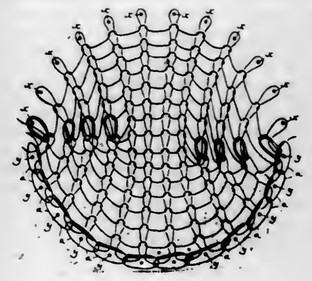
3. A device of the class described, comprising a pair of holders having side and end members disposed oppositely and with their end members adjacent, the side member of one holder being disposed horizontally and extended below the other holder and constituting a base.

6. In a device of the class described, the combination with a pair of holders comprising side and end members disposed oppositely with their end members adjacent, the side member of one holder being disposed horizontally and its coacting end member being disposed vertically, the side and end members of the other holder being disposed to provide a trough, and a binder member support removably associated with said holders.

7. In a device of the class described, the combination of a holder comprising side and end members, the side member being disposed horizontally and the end member vertically and at right angles thereto, said side member being provided with clips adapted to receive a sheet abutment at either longitudinal edge thereof, an angled sheet abutment removably engaged with said clips to project upwardly at either edge of said side member and at right angles thereto, and a tapered support adapted to be disposed on said holder side member in a transverse or longitudinal relation thereto, all coacting for the purpose specified.

[Claims 4 and 5 not printed in the Gazette.]

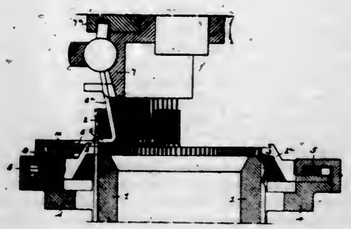
1,270,083. HOSIERY. LOUIS N. D. WILLIAMS, Ogontz, Pa. Filed June 10, 1915. Serial No. 33,246. (Cl. 66—4.)



1. A stocking having a seamless toe pocket at the front end of the foot web, and having, between the top of the toe pocket and the forward end of the instep web, a chain of stitches distinct from those of said toe pocket and instep web and interlocked with the sinker wales of said webs and with each other in line with said sinker wales, through which stitches are drawn the first course of stitches at the beginning of said toe pocket and the first course of stitches at the front end of the instep portion of the foot web.

[Claim 2 not printed in the Gazette.]

1,270,084. UNITING KNITTED WEBS. LOUIS N. D. WILLIAMS, Ogontz, Pa. Filed Feb. 15, 1917. Serial No. 148,756. (Cl. 66—4.)



4. The mode herein described of producing upon the needles of a knitting machine a closed toe upon the foot

web of a stocking, said mode consisting in feeding the knitting yarn first to every other needle of one half of the machine and then to the needles alternating therewith, and during each feed forming loops of yarn which bridge alternate needles, engaging said loops with retainers which continue such retention during the production of a toe pocket by reciprocating knitting upon the needles of said half of the machine, then discharging the loops from said retainers onto a set of transfer points, then delivering said loops from said transfer points to the hitherto inactive needles of the other half of the machine, and then knitting the foot web upon the full set of needles.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

1,270,085. GRAVEL-BOTTOM FOR WAGON-BEDS. WILLIAM H. WILTSHIRE, Gillespieville, Ohio. Filed Sept. 8, 1917. Serial No. 190,374. (Cl. 21—20.)



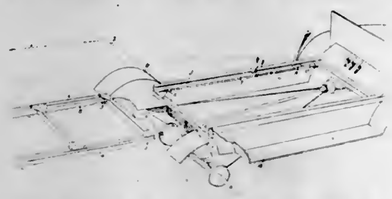
1. The herein described wagon body comprising side and end panels, movable longitudinal bottom planks filling the horizontal space between the bottom edges of the side panels, and disconnectible interlocking means coöperating with the side panels and each two adjacent planks serving to hold the planks from independent endwise movement.

4. The combination with a wagon body comprising side panels and a series of bottom planks between the side panels, of a plate secured to the bottom of each plank and having a slot therein, means secured to one of the side panels and coöperating with the slotted plate adjacent thereto to prevent the endwise movement of the plank bearing such adjacent plate, said slotted plate having means coöperating with the next adjacent slotted plate throughout the series of planks and plates except the last, and means removably connected to the opposite side panel having interlocking coöperation with the last plate of the series substantially as set forth.

5. In a wagon body, the combination of spaced side bars, independently movable bottom planks in said space, separable link devices connected to the several planks, and means coöperating with said link devices serving to prevent all movement of the planks endwise or laterally.

[Claims 2 and 3 not printed in the Gazette.]

1,270,086. DETACHABLE AUTOMOBILE-BODY. WILLIAM HENRY WOCHNER, Falls City, Nebr. Filed Nov. 6, 1917. Serial No. 200,531. (Cl. 21—7.)

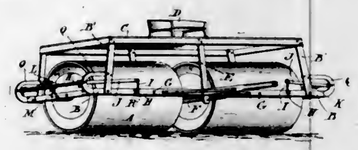


1. In a device of the character described, a frame adapted to be mounted on the chassis of an automobile, said frame having channel irons on the sides, each of said side channel irons having a bottom section with an inclined portion in the rear and an inclined portion near the front, said inclined portions extending substantially in parallel planes at different levels, a second frame adapted to be connected with the bottom of an automobile body, and means arranged on said second mentioned frame adapted to engage said inclined portions for pressing said frame against the upper part of said side frames when said frames are in position on a chassis, and means for locking said second frame against accidental disengagement.

2. In a device of the character described, the combination of a chassis of an automobile with a frame rigidly secured thereto and having a pair of substantially U-shaped channel irons on the side facing each other and a transverse bar at the front, each of said channel irons having an inclined portion near the front and an inclined portion near the rear whereby elevating platforms are produced, a frame having side channel irons adapted to be connected to an automobile body, anti-friction members connected to said side channel irons near the front and near the rear whereby when said last mentioned frame is telescoped over the first-mentioned frame said anti-friction means will pass up said inclined ways and will rest upon the respective elevated planes for pressing the lower part of the second mentioned frame against the upper part of the first mentioned frame, and locking means for holding said second mentioned frame interlocked with said first mentioned frame.

3. In a device of the character described, a pair of channel guide members adapted to be connected to the chassis of an automobile, a pair of channel guide members adapted to be connected with the body of said automobile, a guide connected with each of said last mentioned channel irons, said guide and one leg of the last mentioned channel irons being capable of telescoping into the first mentioned channel irons, means for causing the second mentioned channel irons to press against the upper part of the first mentioned channel irons, and a locking screw of locking the second mentioned channel irons in engagement with the first mentioned channel irons, whereby said body is locked on said chassis.

1,270,087. LAND-ROLLER. GEORGE WRIGHT, Chatham, Ontario, Canada. Filed Aug. 5, 1916. Serial No. 113,403. (Cl. 55—47.)



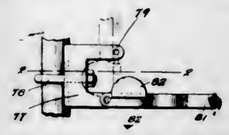
1. The combinations of right and left hand coiled springs encircling a shaft mounted on brackets secured to the outer ends of a main frame, one end of said springs being attached to a ratchet wheel set in the middle of said shaft with means to hold said springs in tension, their opposite ends being secured to levers projecting from the ends of said shaft; an inner frame comprising an end piece and arms projecting at right angles therefrom parallel with sides of main frame, with means to hang said inner frame from the said main frame, and connecting rods with means to connect the above mentioned levers by the said connecting rods to the ends of aforesaid inner frame.

2. The combination with a roller and frame of a square journal boxing at inner end of roller having a circular hole longitudinally through its center of sufficient size to admit the shaft of the roller with means to secure said boxing to inner ends of said shaft, and brackets secured to the frame, the outer ends of said brackets terminating in circular pivots that fit into perforations made on opposite sides of the square part of above mentioned journal boxing.

[Claims 3 and 4 not printed in the Gazette.]

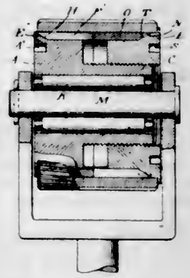
1,270,088. AUTOMOBILE-STEERING-WHEEL LOCK. ROBERT E. ADKISON, St. Louis, Mo. Filed Nov. 5, 1917. Serial No. 200,312. (Cl. 70—129.)

The combination with an automobile steering column and the steering wheel associated therewith, of a block adapted to be positioned on the steering column adjacent to the steering wheel, a U-bolt adapted to coöperate with said block to grip the steering column, the legs of which U-bolt pass through said block, nuts on the ends of the legs of said U-bolt, a steering wheel engaging arm hinged to the lower end of said block, the free end of said arm being bifurcated and adapted to engage one of the spokes of the steering wheel when swung upwardly into a position substantially parallel with the steering



column, ears projecting from the sides of said arm, which ears are adapted to overlie the nuts on the ends of the U-bolt when the arm occupies a wheel engaging position, ears on the upper end of the block, which ears are adapted to be engaged by the arm while in wheel engaging position, and the perforations in said ears being adapted to receive the shackle of a padlock or like locking device.

1,270,089. EXPANDING MANDREL. WILLIAM P. AIKIN, Watertown, N. Y., assignor to International Burr Corporation. Filed Dec. 10, 1917. Serial No. 206,511. (Cl. 125—19.)

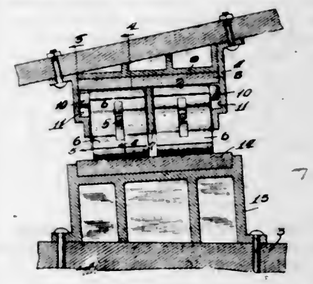


2. An expanding mandrel for burs comprising two hollow sections having threaded connection with each other, and each having a cylindrical circumference with a flaring beveled flange portion at its outer end, split rings with their inner faces cylindrical, one mounted upon each section and adapted to engage the cylindrical circumference thereof, said rings having beveled portions adapted to have a wedging action against the beveled flanges of said sections, the beveled portion on the circumference of one of said sections terminating in a cylindrical shoulder adapted to be engaged by the shell of a bur, and serving to limit the lateral movement of the latter in one direction.

[Claim 1 not printed in the Gazette.]

1,270,090. ROLLER BOLSTER-BEARING. PAUL K. ALDRICH, Chicago, Ill., assignor, by mesne assignments, to Allen McKenzie, Chicago, Ill. Filed July 1, 1916. Serial No. 107,069. Renewed Nov. 14, 1917. Serial No. 202,072. (Cl. 64—65.)

1. A bolster roller bearing comprising a frame casting adapted to be secured to a body bolster, another frame casting adapted to be secured to a truck bolster, wear plates mounted in said respective frame castings, roller elements disposed within said first mentioned frame casting adapted to bear upon the wear plate of said second mentioned frame casting to sustain the weight of the body bolster through said wear plate of said first mentioned frame casting, and longitudinally disposed retaining means extending through cored out recesses in said roller elements to retain the same associated with the body bolster frame casting.



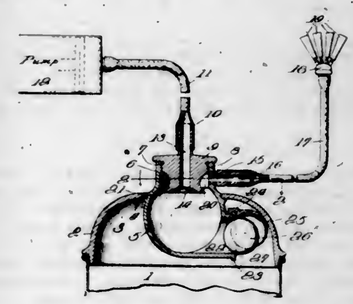
2. In a bolster bearing of the class described, a body bolster frame casting, means extending parallel the line of movement of said elements and centrally therethrough to retain the same connected in said casting, roller elements releasably engaged therewith, a truck bolster frame casting, and wear plates recessed within said respective frame castings against which said roller elements bear in sustaining the weight of the body bolster upon the truck bolster.

6. In a bolster bearing of the class described, roller means and mechanism extending longitudinally through said means and parallel the line of movement thereof, to retain the same in operative position.

9. In a bolster bearing of the class described, a frame casting, roller elements mounted to roll longitudinally therein and means secured through said roller elements parallel the line of movement thereof to retain said elements in operative relation with said casting.

[Claims 3 to 5, 7, and 8 not printed in the Gazette.]

1,270,091. MILKING-MACHINE. GEORGE V. ANDREW, Harvard, Ill. Filed May 7, 1917. Serial No. 167,050. (Cl. 31—98.)



1. In a milking machine, a spherical vacuum chamber having a neck, a head detachably mounted in said neck having an annular groove forming an annular milk receiving chamber, the lower end of said neck being provided with an annular spreader for delivering the milk from said receiving chamber to the inner wall of said spherical vacuum chamber, said spherical vacuum chamber being provided with a lateral milk outlet, and a ball valve for closing said outlet.

2. A milking machine, comprising a cover member having a central threaded opening, a substantially spherical member having a threaded portion mounted in said opening, said spherical member having a vertically disposed neck at its upper end, and a laterally disposed milk outlet at its lower end, a ball valve for closing said milk outlet,

a head member arranged within said neck having a centrally disposed air outlet and provided with an annular groove forming in conjunction with the neck an annular milk receiving chamber, said neck having a milk inlet, and a spreader formed on the lower end of said head for forcing the milk from said milk receiving chamber outwardly against the inner wall of said spherical vacuum chamber.

3. A milking machine, comprising a spherical shaped vacuum chamber, and means for delivering milk into and against the upper portion of the inner wall of said chamber, said vacuum chamber being provided wth a laterally disposed milk outlet, a valve cage detachably mounted on said outlet, and a ball valve loosely mounted in said cage having a seat in said outlet.

1,270,092. ADJUSTABLE COAL-BORING AUGER. FREDERICK W. ARMSTRONG, Clinton, Ind. Filed Apr. 15, 1916. Serial No. 91,407. (Cl. 255—69.)



1. The improved bit head herein described comprising a body portion, a spiral rib on said body portion having a reaming-bit socket therein that extends longitudinally thereof from the front end of the rib and to the normal rear side of the rib, and a set-screw arranged in said rear side of the rib and extending to said socket, as and for the purposes set forth.

2. In a bit head of the character described, a body portion and two spiral ribs of different length thereon, each rib having a reaming-bit socket therein that extends longitudinally from the front end of the rib and to the normal rear side of the rib, the front end of the longer one of said ribs coinciding with the front end of said body portion, there being a pilot-drill socket in said body portion, said reaming-bit sockets being adapted to securely support the reaming-bits at different distances from the pilot-drill and permit short and stout reaming-bits and a relatively long pilot-drill, as and for the purposes set forth.

1,270,093. PROCESS FOR MAKING SILICIC ACID OR HYDRATED SILICA. WILLIAM C. ARSEM and JAMES G. E. WRIGHT, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed Aug. 23, 1917. Serial No. 187,739. (Cl. 23—1.)

1. The process of preparing silicic acid which consists in forming a silicate of ammonium and decomposing said silicate to split off ammonia, leaving silicic acid.

3. The process of preparing silicic acid which consists in adding to a solution of ammonium chlorid a solution of a silicate of an alkali metal, removing the resulting precipitate, purifying the same and drying at an elevated temperature.

5. The process of preparing silicic acid as a fine voluminous powder which consists in adding at room temperature a solution consisting of one part of commercial water glass and three parts of water by weight to a second solution consisting of one part of ammonium chlorid and eight parts of water by weight, heating the mass to boiling to form silicic acid by decomposition, cooling the mixture, filtering the precipitates, washing to remove chlorids and drying the precipitate at about 100 to 150° C.

[Claims 2 and 4 not printed in the Gazette.]

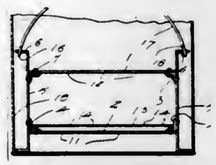
1,270,094. SUBMARINE CHASER. JOSEPH A. ARSENAULT, Berlin, N. H. Filed Nov. 3, 1917. Serial No. 200,150. (Cl. 114—66.)



3. In a submarine vessel of the type described, the combination with a hull having a transverse channel across its bottom and an arched headway on its top, windows in the sides of the hull and headway and in the ends and top of said headway; of search lights carried at various points upon the exterior of the hull and within said channel, and handles projecting from the searchlights to the interior for directing the beams of light from said searchlights.

[Claims 1 and 2 not printed in the Gazette.]

1,270,095. STERILIZER. HERMINE BAEHR, Baltimore, Md. Filed June 12, 1917. Serial No. 174,288. (Cl. 53—1.)

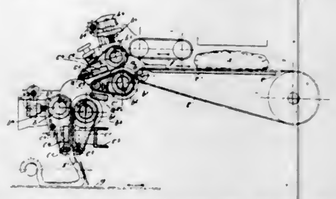


1. An invertible sterilizer comprising supports, plates having openings of different sizes and the openings of one plate differing in size from the opening of the other plate and said plates secured to the supports in relatively spaced relation and in spaced relation with the ends of the supports to provide legs at both ends of said supports, and a tray arranged between the supports and adapted to rest upon the lowermost plate in either position of the device.

4. An invertible sterilizer comprising supports consisting of vertical bars, brackets secured to the bars on the inner faces thereof and arranged in spaced relation with each other and the ends of the bars, top and bottom plates secured to the brackets and having openings of different sizes and the openings of one plate differing in size from the openings of the other plate, and a tray arranged within the supports and located between said plates and adapted to rest upon the lowermost plate in either position of the device.

[Claims 2 and 3 not printed in the Gazette.]

1,270,096. APPARATUS FOR TREATMENT OF DOUGH. GEORGE RALPH BAKER, London, England. Filed Feb. 14, 1917. Serial No. 148 562. (Cl. 107—9.)



1. In apparatus for the treatment of dough, the combination of a pair of adjacently positioned traveling stretching bands or webs between which the dough is passed to produce a sheet and a pair of gaging rollers at the intake ends of said bands about which the bands pass.

one of said rollers of a pair being provided with means to positively control the width which the sheet of dough may attain.

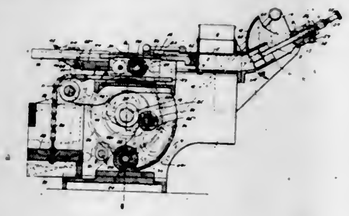
3. In apparatus for the treatment of dough, the combination of a pair of adjacently positioned traveling endless stretching bands or webs between which the dough is passed to produce a sheet, a gaging roller at the intake end of each band about which it passes, means on one of said rollers for positively controlling the width which the sheet of dough may attain, means for relatively adjusting the bands and gaging rollers as a whole and means for adjusting the delivery ends of said bands independently of the first mentioned adjustment.

6. In apparatus for the treatment of dough, the combination of a plurality of pairs of adjacently positioned traveling endless bands or webs arranged in tandem formation and driven at successively increasing speeds, between which bands the dough is passed to produce a sheet, a gaging roller at the intake end of each band and about which said bands pass, and means on one of the rollers of each pair of bands for positively controlling the width which the sheet of dough may attain.

8. In apparatus for the treatment of dough the combination of a plurality of pairs of adjacently positioned traveling endless bands or webs between which the dough is passed to produce a sheet, a gaging roller at the intake end of each band about which the latter passes, lateral flanges on one of said rollers for positively controlling the width the sheet of dough may attain, the pairs of rollers and bands being driven at successively increasing speeds and being so relatively located that the sheet of dough is acted on by at least two of said pairs of bands and rollers, means for driving said rollers, supports for the sheeting surfaces of said bands and means for relatively adjusting the bands of each pair.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,270,097. MACHINE FOR DIVIDING DOUGH AND LIKE PLASTIC SUBSTANCES. GEORGE RALPH BAKER, London, England. Filed Mar. 9, 1917. Serial No. 153,617. (Cl. 107—15.)



1. In a dough divider the combination with a plunger and a measuring device adapted to receive dough by the action of the plunger, of means for differentially actuating said plunger comprising two racks, one connected with the plunger and the other under action of a load and a pinion interposed between said racks and meshing with both of same and means for bodily moving the pinion.

3. In a dough divider the combination of a compression chamber, a plunger therein, a measuring device adapted to receive dough from said chamber by the action of the plunger, means for differentially actuating said plunger according to the amount of dough remaining in the compression chamber said means comprising two racks one connected with the plunger and the other under the action of a weight, a pinion interposed between said racks and meshing with both, a slide carrying said pinion and means for giving said slide invariable movements and means for arresting active movement of the plunger, said means permitting return of the plunger and differential actuating means to normal position in whatever position the plunger is arrested.

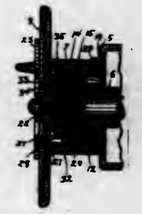
4. In a dough divider the combination of a plunger and relatively movable measuring device comprising pockets and pistons working therein, a movable member cooperating with said pistons to limit their inward movement and means for producing resilient or cushioning movement of said movable member.

6. In a dough divider the combination of a plunger a relatively movable measuring device, two racks, one connected with the plunger and the other under the action of a load, a pinion interposed between and in mesh with both said racks, means for giving said pinion bodily movments of constant amplitude, a one-way gripping device adapted to arrest movement of said plunger and means for actuating said gripping device in timed relation with the movements of the measuring device.

7. In a dough divider the combination of a plunger, a relatively movable measuring device comprising pockets and pistons working therein, two racks one connected with the plunger and the other under action of a weight, a pinion interposed between and in mesh with both said racks, means for giving said pinion bodily movements of constant amplitude, means actuated in timed relation with the movements of the measuring device for arresting active movements of the plunger, a movable member coöperating with the measuring device pistons to limit their inward movement and means for producing resilient or cushioning movement of said movable member.

[Claims 2 and 5 not printed in the Gazette.]

1,270,098. INDICATOR FOR DISPENSING APPARATUS. LINNAEUS E. BAKER, Fort Wayne, Ind., assignor to Wayne Oil Tank and Pump Company, a Corporation of Indiana. Filed Dec. 22, 1916. Serial No. 138,299. (Cl. 235—91.)



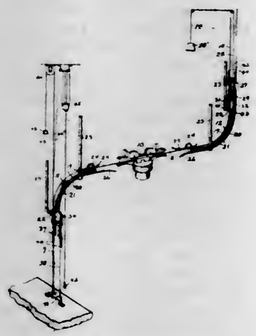
1. In apparatus of the class described, in combination with a mechanism having an oscillating shaft; a collar fixed on the end of the shaft having a projection; a housing supported in axial alinement with the pump-shaft; a drag-ring having two lugs one of which is adapted to be engaged upon its opposite sides by the projection on the collar as the latter is oscillated; an internally notched member arranged in axial alinement with the pump-shaft; a drag-plate having shoulders thereon spaced apart adapted to be engaged alternately by the other of said lugs on the ring; a pawl in pivotal connection with the drag-plate and engaging the notched member; a detent device engaging the notched member; a dial on the front of the housing having an annular series of indicating characters thereon; and an index in fixed relation with the notched member and adapted to register with said characters successively accordingly as the notched member is progressed.

[Claims 2 to 5 not printed in the Gazette.]

1,270,099. TRAVELING AND ELEVATING PARCEL-CARRIER. JAMES L. BALDWIN, Chicago, Ill. Filed Aug. 13, 1912. Serial No. 714,911. (Cl. 186—8.)

1. A track comprising a horizontal section with a vertical section at one end below the horizontal section and a vertical section at the other end above the horizontal section, a car to travel on said track, a combined catcher and thrower for the car guided to travel parallel to the lower vertical section of the track comprising a suitable frame with buffer springs and a pull cord and counter weight to operate said combined catcher and thrower, a combined

catcher and elevator for the car guided to travel parallel to the upper vertical section of the track comprising a suitable frame with buffer springs and a pull cord for operating said combined catcher and elevator.



4. In a device of the class described, a track comprising a horizontal section with a vertical section at one end below the horizontal section and a vertical section at the other end above the horizontal section, a car to travel on said track, a combined catcher and thrower for the car guided to travel parallel to the lower vertical section of the track, a combined elevator and catcher for the car guided to travel parallel to the upper vertical section of the track and suitable pull cords to operate said combined catcher and thrower and said combined elevator and catcher.

7. In a store service apparatus, the combination with substantially vertical and substantially horizontal ways for guiding a car upwardly and laterally to a station at a higher level, said ways being connected by an intervening track curve, an elevator in parallel relation to said upward way for supporting a car, a car adapted to travel on said ways and curve, propelling means for lifting said elevator and yielding counterpoise means adapted to hold said elevator in a raised position when the car is removed therefrom, while free to yield to the combined weight of the elevator and car to permit the descent of the latter.

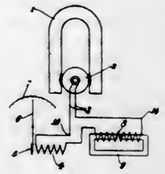
10. In a store service apparatus, the combination with upward and substantially horizontal ways united by a curved connection to form communication between upper and lower stations, of an elevator in parallel relation to said upward way for supporting a car thereon, the wheels of which car are arranged to successively engage said ways during its travel, a car adapted to be supported by said elevator when its wheels are in contact with said upward way, counterpoise means for holding said elevator at its topmost level when the car is not resting thereon, but adapted to permit its descent when weighted by the car, propelling means at said lower station for lifting said elevator and propelling means at said upward station for returning said car to said elevator.

[Claims 2, 3, 5, 6, 8, 9, and 11 to 13 not printed in the Gazette.]

1,270,100. METHOD AND APPARATUS FOR DETERMINING THE FIELD STRENGTH OF DYNAMO-ELECTRIC MACHINES. EDWIN C. BALLMAN, St. Louis, Mo., assignor of one-half to Stahl A. Whitten, St. Louis, Mo. Filed Apr. 3, 1916. Serial No. 88,693. (Cl. 175—183.)

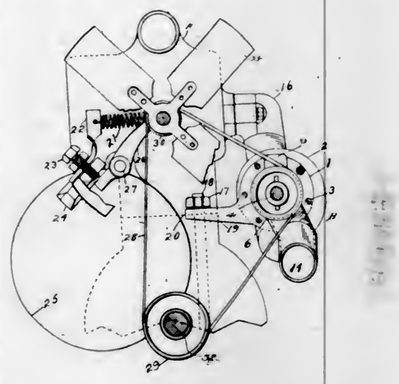
5. The method of determining the field strength of a dynamo-electric machine, comprising connecting in circuit with the machine a reactance whose magnetic reluctance is substantially constant, and measuring the current in the circuit.

15. An apparatus for determining the field strength of dynamo-electric machines, comprising current measuring means, and a reactance in circuit with said measuring means, said reactance being constructed so that its coefficient of reactance is substantially constant, the resistance of said circuit being small compared to the reactance thereof.



[Claims 1 to 4 and 6 to 14 not printed in the Gazette.]

1,270,101. WATER-CIRCULATOR. ELI A. BASEL, Kansas City, Mo. Filed June 22, 1916. Serial No. 105,236. (Cl. 123—175.)



1. A self-contained water circulating device for internal combustion engines comprising a water conduit casing provided with means for detachably securing the same to the engine, a second conduit casing provided with means for securing the same to said first casing, the adjoining portions of said casings coöperating to form a housing, a shaft provided with an impeller member operating within said housing, each of said casings being formed with a bearing portion and the bearing portions of said casings being arranged in alinement for journaling the opposite ends of said shaft, and means for driving said shaft from the engine.

[Claim 2 not printed in the Gazette.]

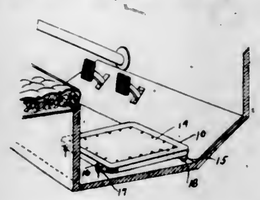
1,270,102. ADJUSTABLE CRUTCH. ARTHUR BELL, Nyack, N. Y. Filed Feb. 14, 1918. Serial No. 217,144. (Cl. 135—50.)

A crutch including upper and lower sections slidably connected together, said lower sections comprising a pair of legs extending in parallelism for a portion of their lengths, and having their lower ends directed inwardly and secured together, said upper section comprising a shoulder rest having the end portions thereof engageable at times with the upper ends of said legs, a second short pair of legs depending from said shoulder rest and disposed between the parallel portions of said first mentioned legs and corresponding in length to said parallel portions, a transverse brace connecting said first mentioned legs above the inwardly directed lower ends thereof and serving as a support for the lower ends of said short legs



and a hand grip connecting and bracing the lower end of said short leg.

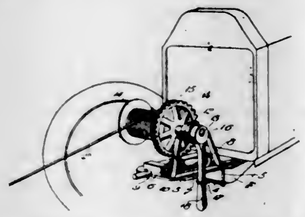
1,270,103. FOOT-REST. MORRIS F. BELL, Fulton, Mo. Filed Jan. 23, 1917. Serial No. 143,984. (Cl. 180—1.)



1. An automobile foot rest comprising a frame open at its center and having the walls of said opening stepped, a plurality of layers of heat insulating material disposed upon the various steps within said frame, the uppermost layer being flush with the top of said frame, and securing members passed through the uppermost layer into said frame.

2. An automobile foot rest comprising a heat insulating pad, securing members on one end of said pad engageable with other securing members carried by the floor of an automobile, and spacing members at the opposite end of said frame whereby said frame will be supported with one end above and in spaced relation to the floor whereby a heat insulating air space will be provided.

1,270,104. AUTOMOBILE-PULLER. HENRY CLAY BENTON and JOSEPH RICHARD VEST, Huntington, W. Va. Filed Sept. 5, 1917. Serial No. 189,837. (Cl. 254—166.)



1. The herein described automobile puller comprising a framework adapted for attachment to the frame of the motor vehicle, a sleeve journaled in the framework and having through it an eccentric bearing, a cross shaft journaled in this bearing and carrying a drum, a cable attached to said drum and adapted to be wound thereon, a worm gear fast on the shaft, a worm driven by the main shaft of the vehicle, and a lever projecting radially from said sleeve and having a weighted handle at its outer end, the position of said lever with respect to the sleeve being such that when the lever is raised and thrown back against the radiator the gear is thrown into mesh with the worm for the purpose set forth.

[Claim 2 not printed in the Gazette.]

1,270,105. COMPOSITION OF MATTER FOR CLEANING. ERNEST C. HILTON, New York, N. Y. Filed Sept. 8, 1917. Serial No. 190,375. (Cl. 87—5.)

The herein described composition normally in semi-liquid form and to be used for removing dirt and other extraneous matter from articles, consisting of borax soap, salsoda, borax, ammonia, and a detergent consisting of volcanic ash, alkali and soap stock in about the proportions specified.

1,270,106. EYEGLASS-HOLDER. FREDERICK R. BISHOP, North Attleboro, Mass., assignor to The Bishop Company, Inc., North Attleboro, Mass. Filed Feb. 9, 1918. Serial No. 216,344. (Cl. 242—98.)



1. In an eye glass holder, the combination of a flat casing, a fixed central shaft in said casing having its opposite sides flattened at one end, and a spring-wound stamped metal cord reel in said casing mounted rotatably on said shaft, one end of said reel having stamped therein a circular recess at whose center the flattened end of said shaft is located; together with a lug stamped from the wall of said recess and extending into the latter, and a J-shaped pawl in said recess having in one end a notch into which said lug projects to pivotally mount said pawl, the other end of said pawl being weighted and the inner curved edge of said pawl having a projecting lug to engage the flattened sides of said shaft to normally prevent winding movement of the reel.

[Claim 2 not printed in the Gazette.]

1,270,107. STRETCHER. JOHN LATSON BOARDMAN, Butte, Mont. Filed Dec. 7, 1917. Serial No. 206,047. (Cl. 21—80.)



1. A stretcher including a frame presenting longitudinal side elements, a rigid, depressed, longitudinal central frame member, flexible supporting material secured along its side edges to said side elements, and means connecting said material along the median line thereof with said depressed member of the frame to stay the supporting material along the depressed central line thereof, elevated

above the said depressed frame member, said stay means permitting limited lateral sway of the said material along said elevated median line, relatively to the said depressed frame member.

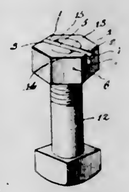
2. In a stretcher, a frame presenting longitudinal side bars, a depressed central longitudinal runner bar, transverse members pivotally connecting said side bars and runner bar, flexible supporting material connected along its side edges with the side bars, and means to stay the said flexible material along a longitudinal central line above the runner bar.

7. In a stretcher, a frame presenting a rigid, depressed longitudinal member, depressed flexible supporting material in the frame, means connecting said material along the median line thereof with said depressed frame member and permitting lateral sway of the material along its median line relatively to said rigid member, and strap elements to strap an injured person on the stretcher, said strap elements being secured to said supporting material at opposite sides of the depressed portion thereof independently of the frame members.

[Claims 3 to 6 not printed in the Gazette.]

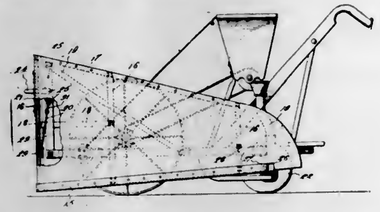
1,270,108. NUT-LOCK. RUFUS R. BOLT, Canton, Ohio. Filed Oct. 25, 1916. Serial No. 127,649. (Cl. 151—6.)

In a device for the purpose set forth, the combination,



a bolt having its shank grooved longitudinally from its outer end, two of the diagonally opposite corners provided by the walls of the groove being beveled outwardly, a nut for the bolt, said nut having its outer face channeled, a locking bar pivoted within the channel adjacent one of the sides of the nut, said bar having a tail portion extending outwardly of its pivot beyond the side of the nut, said nut below the tail being grooved to receive the said tail, and the locking bar being beveled in opposite directions from the center of its inner edge to its outer edge whereby to present two oppositely inclined surfaces arranged in the path of engagement with and corresponding to the angles of the beveled corners at the diagonally opposite ends of the groove in the bolt.

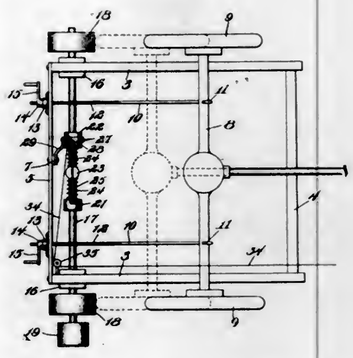
1,270,109. ATTACHMENT FOR GRAIN-DRILLS. JOHN F. BOYD and JOHN FRAZIER, Rushville, Ind. Filed Feb. 2, 1918. Serial No. 215,132. (Cl. 97—13.)



3. A device of the class described, comprising a U-shaped base rail, a U-shaped top rail, uprights supporting the top rail in downwardly and rearwardly inclined position with respect to the base rail and a U-shaped hood supported on the frame structure, the wings of said hood being tapered rearwardly and downwardly, and means engaging the rearward ends of the limbs of the base rail for pivotally supporting the device on a grain drill; the hood being provided with a vertical slot at the forward end thereof for the passage of the draft clevis of the drill.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,270,110. POWER DEVICE. HAVEL BRICKER and ESTELL FISHER, Pittsford, Mich. Filed June 2, 1917. Serial No. 172,511. (Cl. 74—106.)



1. A power device of the character described comprising an open work frame having inclined tracks to support the driving axle of an automobile, drive gearing upon the frame adapted for frictional driving engagement with the wheels of said axle, hooked rods upon the frame to engage the axle for adjusting the same upon the tracks and holding said axle in working position, and screw gearing coöperating with the rods for adjusting and locking the same.

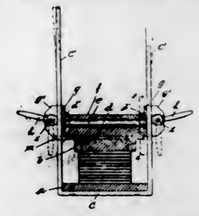
3. A power device of the character described comprising a frame structure having inclined track rails to support the rear axle of an automobile, a transverse power shaft journaled on said frame and adapted for driving engagement with the wheels of the axle, means upon the frame for holding the axle and wheels in position, a centrifugal governor carried by the power shaft and including a member movable against resistance by centrifugal force when the shaft exceeds a certain speed, a regulating device controlled by said member, and a cord or wire connected with said regulating member and adapted for connection with a fuel feed device of the automobile motor, for controlling the speed of the motor and power shaft.

[Claim 2 not printed in the Gazette.]

1,270,111. SOLE-PRESS. GEORGE E. BRITTAIN, Haverhill, Mass., assignor to Irving L. Keith, Haverhill, Mass. Filed Apr. 20, 1917. Serial No. 163,407. (Cl. 100—57.)

1. A sole-press comprising a base member having a pair of standards mounted at opposite sides thereof, a pressing member vertically movable between said standards, a pair of clips arranged to slide in said standards, respectively, a rigid connection between said clips, a lever pivoted on each clip having an eccentrically disposed face at one end arranged to be moved into engagement with the corresponding standard with increasing force as the opposite end of the lever is thrown upwardly, and a clamping device mounted on said rigid connection and arranged to force said pressing member downwardly.

2. A sole-press comprising a base member having a pair of standards at opposite sides thereof, a pressing member vertically movable between said standards, a pair of clips mounted to slide on the inner sides of said standards and having laterally projecting guiding ears to hold the same against transverse movement thereon, frictional locking devices connected to said ears and arranged to engage the outer sides of said standards, respectively, to hold said clips against upward movement thereon, and a clamping device mounted on said clips and arranged to force said pressing member toward said base member.



3. A sole-press comprising a base member, a pressing member arranged thereover, a pair of standards of resilient material mounted on said base member at opposite sides of said pressing member and set to extend slightly divergently from said base member, each standard having inner and outer side faces, a pair of guiding clips mounted to slide on said inner faces and having connecting means to hold them against separation, a dog pivoted on each pair of clips and having an ecentrically disposed face at one end arranged to be frictionally engaged by the outer face of the corresponding standard, when said clips are in positions adjacent the upper ends of said standards and the opposite end of the dog is lowered, to sustain said clips in raised position, and to be moved into locking engagement with the standards when said opposite end is raised, and clamping means on said clip-connecting means for forcing said pressing member downwardly.

1,270,112. FENCE ATTACHMENT. JERRY F. BROWN, Sterling City, Tex. Filed Nov. 21, 1917. Serial No. 203,177. (Cl. 256—1.)



1. An attachment for fences comprising a back bar, a plurality of knife blades attached to said back bar and extending outwardly and downwardly from the back bar at an acute angle thereto.

4. The combination with an ordinary fence including ordinary fence posts, of a supporting bar attached to said posts, a plurality of knife blades, said knife blades positioned with their sharpened edges upwardly and extending outwardly and downwardly from the back bar at acute angles thereto, attaching plates formed upon said knife blades and positioned substantially at right angles to the blades, said attaching blades being secured to said supporting bar, the upper surface of each knife being sharpened and corrugated.

[Claims 2 and 3 not printed in the Gazette.]

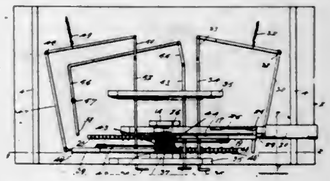
1,270,113. SLEEVE-HOLDER. MICHAEL J. BUHKE, Bakersfield, Cal., assignor to Martin Coyne, Bakersfield, Cal. Filed Jan. 17, 1918. Serial No. 212,208. (Cl. 24—15.)



1. In a sleeve holder, the combination of an arm encircling band, and snaps attached thereto on its inner face for gripping the sleeve and disposed so as to be covered by said band.

[Claims 2 to 4 not printed in the Gazette.]

1,270,114. MUSIC-TURNER. THOMAS F. BURNS, Oklahoma, Okla., assignor of one-half to Robert P. Cruse, Anadarko, Okla. Filed Sept. 1, 1916. Serial No. 118,061. (Cl. 84—17.)

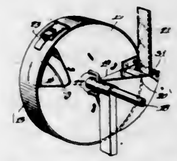


1. A music leaf turner comprising a base, a plurality of music leaf supporting arms pivoted to said base, means for securing leaves of music to the arms, a shaft secured to said base, a gear journaled on said shaft, an operating arm formed on said gear, a cam formed on said shaft, a sleeve slidable on said operating arm, a rod secured to said sleeve and having its free end bent to form a ring, said ring engaging the periphery of the cam to operate the sleeve upon the operating arm, an extension formed on said sleeve, spring pressed bell crank arms pivoted to the leaf supporting arms and adapted to be separately engaged by the extension to turn the leaves of music upon operating the operating arm.

3. A music leaf turner comprising a base, leaf-supporting arms pivoted to said base, spring-actuated members pivoted to said arms, means selectively engaging said spring-actuated members to turn the leaf-supporting arm from one side of the base to the other, said spring actuated members adapted to move on their pivots, when engaged by said means, in one direction and to return to their initial position when disengaged, so that said means may selectively engage the members, and means engaging the spring-actuated members simultaneously to return the leaf-supporting arms to their initial position.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,115. REWINDER FOR MOTION-PICTURE FILMS. HEZEKIAH CARPENTER, Haxtum, Colo. Filed July 11, 1917. Serial No. 179,950. (Cl. 88—18.7.)



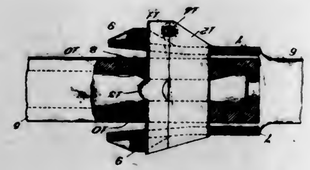
1. In a device of the class described, a casing and reel, one wall of said casing being cut along a radial line, and the adjacent wall portion being deflected outwardly to form an inclined guiding member for deflecting the film toward the reel.

2. In a device of the class described, a casing and reel, one wall of said casing being cut along a radial line and a portion of the wall being deflected adjacent the line of the cut, and a rotatable member engaging the film as it enters the deflected portion of the casing.

1,270,116. DRAW-BAR-YOKE KEY. CHARLES A. CARSCADIN, Chicago, Ill., assignor to National Car Equipment Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 18, 1917. Serial No. 143,001. (Cl. 213—42.)

1. In a railway draft rigging, the combination of a drawbar, a yoke, and a key connecting said drawbar and yoke, said key being freely movable with respect to said yoke and constrained to follow the lateral movements of said drawbar.

4. A drawbar yoke key comprising two sections, one of said sections having a medially disposed projecting portion, and means for connecting said sections.



5. A drawbar yoke key comprising two sections, one of said sections having a medially disposed projecting portion, registering depressions in adjacent portions of said sections, and a pin to engage said depressions whereby said sections are constrained to move as a unit.

[Claims 2 and 3 not printed in the Gazette.]

1,270,117. SCREEN-FASTENER. THEODORE E. CHARLBERG, Moline, Ill. Filed Aug. 10, 1917. Serial No. 185,571. (Cl. 16—18.)



The combination with a frame of a screen and the vertical side members thereof, of a plurality of plate members secured to opposite sides of the frame on the inner surface thereof, said plate members being each provided with a flanged member having a slot extending from the interior portion thereof to the outer edge, means carried by the frame of a window for engaging said slots and a curved member extending from the end of the plate member and deflected from the main surface thereof over the flanged portion to a point adjacent to the exposed edge and the upper free corner thereof.

1,270,118. [WITHDRAWN.]

1,270,119. PENCIL-SHARPENER. CLAUDE ASTOLFO CONOVER, Newburgh, N. Y. Filed Nov. 13, 1917. Serial No. 201,877. (Cl. 120—93.)

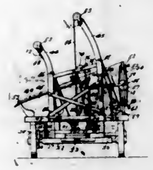


1. A pencil sharpener of the character described comprising a clamping member formed with a clamping section for fitting the end of a pencil, a threaded section, and a sharpening member comprising a cutter, and a casing, said cutter and casing being formed with threads for interlocking with the threads of said threaded section.

6. In a pencil sharpener of the character described, a supporting member comprising a clamping section for clamping the end of a pencil, a threaded section, a casing divided into parts, each of said parts having a threaded base, and a knife arranged in said casing having a threaded base, said knife having a flange extending from one edge projecting between said sections whereby when the sections and knife are screwed into said threaded section the casing and knife will be clamped together and the knife held against independent rotation.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,270,120. AUTOMATIC STACKER AND UNLOADING BARGE. JULIAN C. CONWAY, Rogerstown, Tex. Filed Oct. 12, 1917. Serial No. 196,235. (Cl. 214—76.)



1. In a loading and unloading device, a body, a truck having traction wheels, standards thereon, a shaft journaled on the truck, means for communicating the motion of the traction wheels to the said shaft, drums on the said shaft, one of which is freely rotatable thereon, means for coupling one of the drums to the shaft, means for communicating the motion of the shaft to the other drum, a disk rotatable on the shaft, means for communicating the motion of the disk to the shaft when moving in one direction and for permitting independent movement of the drum with relation to the disk when turning in one direction, means for rotating the disk, cables wound on the drum operating over the standards, and means for connecting the cables to the body of the divice whereby the motion of the cables is communicated to the said body.

5. In a loading and unloading device, a truck including traction wheels and a body thereon, a shaft journaled on the truck, a drum rigidly connected to the shaft, a drum free to rotate on the shaft, said drum having a flange on its surface terminating in shoulders, a member on the shaft adapted to contact the shoulders, means for operating the freely movable drum independently of the shaft, cables wound on the said drums, members on the said standards over which the cables operate, and members on the body engaged by the cables whereby the movement of the cable is communicated to the body.

7. In a loading and unloading device, a truck and a body, said truck having traction wheels, a shaft journaled on the truck, means for communicating the motion of the traction wheels to the said shaft, a drum fixed on the shaft to rotate therewith, a drum movable freely on the shaft, means for communicating the motion of the shaft to the last mentioned drum, a disk rotatable on the shaft, means for coupling the disk to the freely movable drum whereby the motion of the disk is communicated to the drum, means for rotating the disk, cables wound on the drums, and means for communicating the motion of the cables to the body for elevating and tilting the said body.

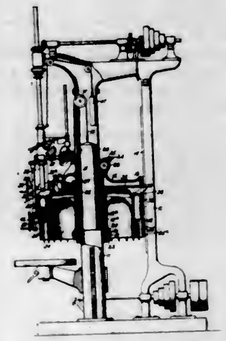
[Claims 2 to 4 and 6 not printed in the Gazette.]

1,270,121. MACHINE-DRILL. CHARLES EUGENE COX, Venice, Cal., assignor of one-fourth to Burnham F. Crossman, Los Angeles, Cal. Filed May 17, 1917. Serial No. 169,222. (Cl. 77—25.)

1. The combination of a tool chuck, a spindle adapted for driving engagement with the chuck, and holding means to retain the chuck in driving engagement with the spindle, said holding means being carried by the chuck and disengageable from the spindle to release the chuck therefrom and adapted to sustain the released chuck in position to be again engaged with the spindle.

3. The combination of a chuck having clutch elements, relatively fixed frame, a drive spindle having mating clutch elements, and latch means mounted on the chuck and swingable into engagement with the spindle to hold the chuck in clutch with the spindle or to an outer position engaged from the spindle and into engagement with said frame to support the chuck.

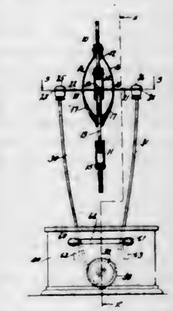
6. The combination of a chuck, means having a bore in which the chuck is adapted to turn, a spindle adapted to have driving engagement with the chuck, said chuck and spindle being movable longitudinally relatively to the first means, holding elements pivoted on the chuck at the rear end and movable therewith to a position at the rear of the said bore or within the same, and spring means acting on said elements and arranged to swing the same laterally outward into engagement with the first mentioned means, at the rear end of the bore thereof, to



sustain the chuck in position to be engaged by the spindle, the forward movement of the chuck serving to swing said holding elements laterally inward against the tension of the spring means and into engagement with the spindle to hold the chuck in driving engagement with the spindle.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,122. TOY. WILLIAM T. CRAMP, Poughkeepsie, N. Y. Filed Jan. 24, 1918. Serial No. 213,531. (Cl. 46—40.)

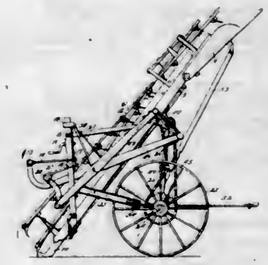


4. In a toy, a pair of posts under tension in a direction from each other, an endless cord attached to the free ends of the posts and held under tension by the posts, the cord having two members normally held stretched between the posts and connected with each other approximately at the middle, and two manikins of which one is heavier than the other and each having a body provided with articulate legs and pivoted arms terminating in integral hands, the opposite hands of the two manikins being integral and provided with openings through which extend the said members of the cord, the said cord members being normally parallel between the hands and the posts and converging between the hands and the connected middle portions.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

1,270,123. HAY-LOADER. JOSEPH DAIN, Ottumwa, Iowa, assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Filed Apr. 11, 1908, Serial No. 426,559. Renewed Nov. 27, 1916. Serial No. 133,817. (Cl. 56—64.)

1. A hay-loader, comprising a wheel frame, standards rising from the opposite end portions thereof, brackets supported by the upper end portions of said standards, an elevator-frame to which said brackets are connected, cranks at opposite sides of the elevator-frame having sleeves journaled in said brackets and extending inwardly beyond said standards, sprocket-wheels mounted on said sleeves between and adjacent to said standards, and chains actuated by the forward movement of the loader and operating over said sprocket-wheels for rotating the cranks.



3. In a hay-loader, the combination of wheeled supports comprising carrying-wheels, an axle, uprights journaled on the axle between the carrying-wheels, braces connecting said uprights, a shaft supported at its outer ends, sprocket-wheels mounted on said axle between said uprights and the adjacent carrying-wheels, means operated by forward movement of the carrying-wheels for driving said sprocket-wheels, sprocket-wheels mounted on the shaft, and chains connecting the sprocket-wheels on the shaft with those on the axle.

9. In a hay-loader, the combination of a wheel-frame, an elevator-frame supported intermediately thereby, hay elevating means coöperating with said elevator frame, bearings underneath and at opposite sides of the elevator frame, means carried by the wheel-frame for supporting said elevator-frame and bearings, cranks having journals fitted in said bearings, sprocket-wheels at opposite sides of the machine between said bearings and mounted on said journals to rotate therewith, sprocket-wheels carried by the wheel-frame at opposite sides of the machine, and rotated by the forward movement of the loader, and chains at opposite sides of the machine respectively connecting the latter sprocket-wheels with the sprocket-wheels carried by the journals.

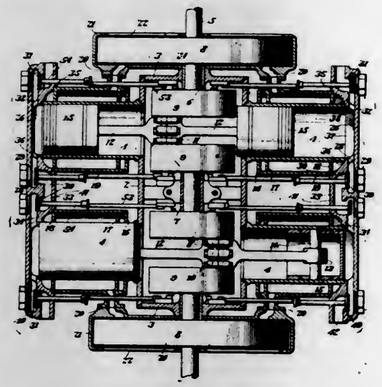
[Claims 2, 4 to 8, and 10 to 13 not printed in the Gazette.]

1,270,124. INTERNAL-COMBUSTION ENGINE. BENJAMIN H. DAVIDSON, Tampa, Fla., assignor of one-half to W. H. Kendricks, Hillsborough county, Fla. Filed Jan. 23, 1917. Serial No. 144,032. (Cl. 123—171.)

2. In an internal combustion engine of the horizontal opposed type, a crank case, batteries of cylinders extending outwardly from said crank case, an air jacket surrounding each cylinder, a crank shaft extending at both ends beyond said crank case, wheels fast on said crank shaft at opposite ends of the crank case and each embodying lateral draft air suction blades, a housing for each of said wheels having communication with a plurality of said air jackets, and cylinder head blocks in communication with said air jackets and formed with air inlet orifices arranged to admit air directly against the cylinder head walls.

4. In an internal combustion engine of the horizontal opposed type, a crank case, batteries of cylinders extending outwardly from said crank case, an air jacket surrounding each cylinder, a crank shaft extending at both ends beyond said crank case, wheels fast on said crank shaft at opposite ends of the crank case and each embodying lateral draft air suction blades, a housing for each of said wheels having communication with a plu-

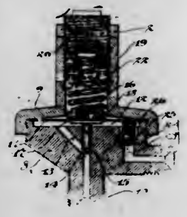
rality of said air jackets, cylinder head blocks in communication with said air jackets and formed with air inlet orifices, each cylinder head block being formed with gas inlet and exhaust passages, and inlet and exhaust valves mounted in and carried by said head block and controlling said intake and exhaust passages.



6. In an internal combustion engine of the horizontal opposed type, a crank case, batteries of cylinders extending outwardly from said crank case, an air jacket surrounding each cylinder, a crank shaft extending at both ends beyond said crank case, wheels fast on said crank shaft at opposite ends of the crank case and each embodying lateral draft air suction blades, a housing for each of said wheels having communication with a plurality of said air jackets, cylinder head blocks in communication with said air jackets and formed with air inlet orifices, intake and exhaust valves mounted in and carried by said head blocks and having inwardly extending stems, push rods for said stems having their inner ends arranged in the crank case, a cam plate having a fixed relation to the crank shaft, and shoes having a pivotal mounting on the inner ends of oppositely extending push rods, said shoes coöperating with said cam plate, said cam plate being formed with a cam groove having outer and inner runs which intersect each other at one point and in which said shoes travel.

[Claims 1, 3, 5, and 7 not printed in the Gazette.]

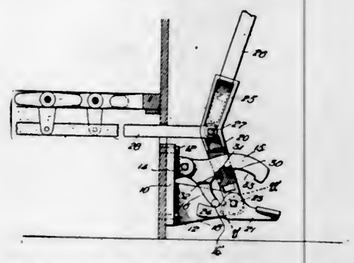
1,270,125. TERMINAL CHECK-VALVE FOR FORCE-FEED LUBRICATING SYSTEMS. LOUIS DECK, Fort Wayne, Ind., assignor to McCord and Company, Chicago, Ill., a Corporation of New Jersey. Filed Oct. 22, 1913. Serial No. 796,642. (Cl. 184—36.)



1. A terminal check valve comprising a casing having an oil chamber with inlet and outlet ports, a spring-pressed diaphragm in said oil chamber, a valve normally closing said discharge port and having a connection to said diaphragm, whereby it is arranged to be moved thereby, a check valve in said inlet port, and a spring compressed between said check valve and said diaphragm.

2. A terminal check valve comprising a two-part casing formed with an oil chamber and inlet and outlet ports leading thereto and therefrom, a diaphragm clamped between the sections of said casing and exposed to the oil pressure within said chamber, a pin valve attached to said diaphragm and normally closing said outlet port, a spring adjusting plug adjustably applied to one of the case sections, a spring compressed between said adjusting plug and said diaphragm and exerting a force tending to hold said valve closed, a check valve in said inlet port, and a coiled spring compressed between said check valve and said diaphragm.

1,270,126. SHAKING AND DUMPING DEVICE FOR FURNACE-GRATES. HENRY V. DOCKRAY, Zanesville, Ohio, assignor to H. V. Dockray Brass & Iron Company, Zanesville, Ohio, a Corporation of Ohio. Filed Nov. 17, 1917. Serial No. 202,619. (Cl. 126—169.)



1. In a device of the class described, a pivotally mounted lever, a pivotally mounted arm, said elements including interengaging portions, a pedal for lifting the arm and permitting limited movement of the lever, and a second pedal for further elevating the arm and permitting the movement of the lever to a greater extent.

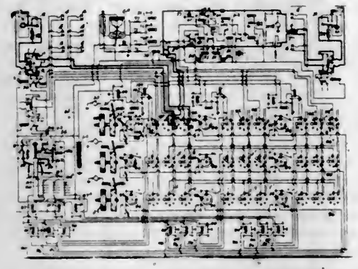
2. In a device of the class described, a pivotally mounted lever and means for connecting the latter with a grate, a pivotally mounted arm and means associated therewith for controlling the extent of movement of the lever and permitting a shaking or a dumping operation by said lever, said means including a projecting member carried by the lever and said arm being provided with a plurality of cutaway portions, either of which is engaged by said projection, and a plurality of pedals controlling the movement of the arm with reference to said projection.

3. In a device of the class described, a supporting member adapted to be carried by a furnace wall, a lever pivotally connected therewith and adapted for pivotal connection with a grate, a plurality of pedals pivotally connected with the supporting member, a pivotally mounted arm provided with a plurality of cutaway portions on one edge thereof, means carried by the arm for coöperation with said pedals, and a projection carried by the lever for coöperation with either of said cutaway portions, the degree of movement of the arm with reference to the projection being controlled by the respective pedals.

1,270,127. TELEPHONE-EXCHANGE SYSTEM. FRANCIS W. DUNBAR, Chicago, Ill., assignor, by mesne assignments, to Kellogg Switchboard & Supply Company, a Corporation of Illinois. Filed Mar. 3, 1905. Serial No. 248,242. (Cl. 179—27.)

1. A telephone exchange system including telephone lines extending from sub-stations to an exchange, call signal devices operable by the apparatus at the stations of calling subscribers, a plurality of groups of link circuits for uniting telephone lines in conversation, each link circuit including manually controlled terminals serving to act upon circuits of said call signal devices to effect effacement of the signals occasioned thereby, and select-

ing mechanism for each group of link circuits for interchangeably associating the call signal devices with calling telephone lines and jointly acted upon by the link circuits of its group.



2. A telephone exchange system including telephone lines extending from substations to an exchange, call signal devices operable by the apparatus at the stations of calling subscribers, a plurality of groups of link circuits for uniting telephone lines in conversation, each link circuit including manually controlled terminals serving to act upon circuits of said call signal devices to effect effacement of the signals occasioned thereby, selecting mechanism for interchangeably associating said groups of link circuits with calling telephone lines and automatic means for connecting a link circuit of a group with a calling line.

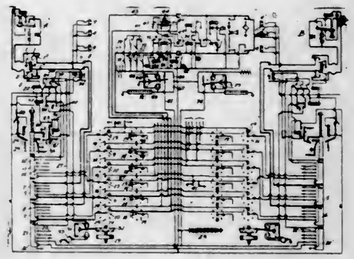
42. A telephone exchange system including telephone lines extending from sub-stations in multiple to different board sections at an exchange, call signal devices operable by the apparatus at the stations of calling subscribers, link circuits for uniting telephone lines in conversation including manually controlled terminals serving to act upon circuits of said call signal devices to effect effacement of the signals occasioned thereby, said link circuits being divided into groups, selecting mechanism at the exchange and operable by the apparatus at a calling subscriber's station serving to select an incompletely occupied group of link circuits for association with a calling line, a circuit fraction for each group of link circuits and complemental to the circuit arrangement of the selecting mechanism serving in one electrical condition to permit the continuation of the operation of the selecting mechanism and in another electrical condition to cause the selecting mechanism to cease its operation, electro-magnetic apparatus for each group of link circuits and jointly governed by the link circuits of its group determining the electrical character of said circuit fractions, whereby the associations of groups of link circuits with calling lines may be determined, automatically operated selecting mechanism associated with the telephone lines and said link circuits for effecting connection between the answering ends of idle link circuits of selected groups and calling lines, said electro-magnetic apparatus including a polarized relay whose armature governs the capacity of each group of link circuits for association with a calling line, a Wheatstone bridge circuit for the said relay, one side of the bridge circuit including a manually adjustable resistance, the other side including sectional resistances adapted for inclusion in circuit abreast, and a relay for the link circuit of each group, the relays of all the operative link circuits controlling the circuit relation of the sectional resistances, the said polarized relay being included in bridge of its circuit.

84. In a telephone call distributing system, the combination with a group of lines, a group of finder switches to which said lines are multiplied, means actuated in initiating a call from any of said lines for establishing an abnormal condition of the multiple terminals thereof and for causing the movement of all said switches, and means actuated by the first arriving switch for stopping its movement and restoring the normal electrical condition of the multiple terminals of said line, whereby the travel of the remaining switches is not arrested.

85. In a telephone call distributing system, the combination with a plurality of distributing switches each having stationary terminals and a movable switch member, of a plurality of telephone lines multiplied to symmetrically disposed stationary terminals on each switch, the movable members of said switch being disymmetrically arranged with relation to the stationary terminals of any given line, a connecting cord circuit connected with the movable member of each switch, means for effecting the movement of said movable members, and mechanism responsive to the initiation of a call in any line adapted to cause one of said switches to connect with the stationary terminals of such line.

[Claims 3 to 41 and 43 to 83 not printed in the Gazette.]

1,270,128. TELEPHONE SYSTEM. FRANCIS W. DUNBAR, Manchester, Vt., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill., a Corporation of Illinois. Original application filed Mar. 3, 1905, Serial No. 248,242. Divided and this application filed Jan. 21, 1918. Serial No. 212,920. (Cl. 179—27.)



1. A telephone system including a calling subscriber's line and a called subscriber's line, a non-numerical individual trunking switch for said calling subscriber's line, trunk lines for selection by said individual switch, a secondary non-numerical trunking switch for each of said trunk lines, connecting circuits for selection by said secondary switches, subscriber controlled means for initiating the operation of his said individual switch and a selected one of said secondary switches to extend the subscriber's line to one of said connecting circuits, and means for then extending the connection to said called subscriber's line.

5. A telephone system including subscribers' telephone lines, groups of primary switches for said lines, secondary switches accessible to said primary switches, a group of connecting circuits accessible to said secondary switches, and means controlled over the two sides of a calling line in series to operate one of said primary switches and one of said secondary switches to connect to one of said connecting circuits, and operator controlled means for extending connection from said connecting circuit to a called one of said lines.

8. The combination with a number of groups of trunk line terminals, of selective apparatus for connecting therewith adapted to test said groups of terminals one after the other to select a group containing an idle trunk line.

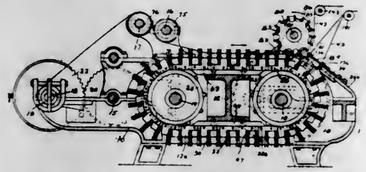
15. A telephone system including a plurality of subscribers' telephone lines, an automatic trunking switch individual to each of said subscribers' lines, secondary trunking switches accessible to said first trunking switches, trunk circuits accessible to said secondary trunking switches, subscriber controlled means for successively operating his individual trunk switch and one of said secondary trunking switches to extend a connection from the calling one of said lines to an idle one of said trunk circuits, and means for then completing the connection to a called one of said lines.

28. A telephone system including a subscriber's line, an automatic switch individual thereto, a second sub-

scriber's line, means including said individual switch for extending a connection from said first subscriber's line to said second subscriber's line, means for extending a connection from said second subscriber's line to said first subscriber's line, an operating relay for said switch connected to said first line, and a cut-off relay for disconnecting said operating relay from said first subscriber's line when said switch is used to extend the connection to the second subscriber's line, said cut-off relay also being operable to disconnect said operating relay from said subscriber's line when the second subscriber's line is connected to the said first subscriber's line.

[Claims 2 to 4, 6, 7, 9 to 14, 16 to 27, and 29 to 33 not printed in the Gazette.]

1,270,129. MACHINE FOR MAKING WIRE FABRIC. JOHN W. DWIGGINS, Marion, Ind., assignor to Parrish-Alford Fence & Machine Company, Knightstown, Ind., a Corporation. Filed Sept. 17, 1917. Serial No. 191,818. (Cl. 140—6.)



1. A machine for making wire fabric, including an endless series of successive twister mechanisms having in each a set of slotted twisters, sprocket wheels on which said series of twisting mechanisms is mounted so as to elevate the twisting mechanisms at the front of the machine and convey them rearwardly horizontally, a transversely reciprocatory shifting bar in front of the machine, and fingers secured to said bar for guiding the wires to the twisters as they rise at the front of the machine, said fingers being alternately long and short and arranged so that the long fingers will guide the wires to the alternating twisters in one twisting mechanism and the short fingers will guide the wires to the alternating twisters in the following twisting mechanism at the same time.

4. A machine for making wire fabric, including an endless series of slotted twisters arranged in rows transversely and longitudinally of the machine, means for conveying said twisters from the front toward the rear of the machine, fingers for guiding the wires to the twisters at the front of the machine, a succession of shifting bars extending transversely of the machine at the front thereof and to which said fingers are secured, means for reciprocating one of said sections for a uniform distance, and means connecting said reciprocating section with the next adjacent section of the shifting bar arranged to reciprocate the latter section for a distance differing from the distance of reciprocation of the first-mentioned section.

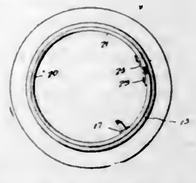
7. A machine for making wire fabric, including an endless series of slotted twisters arranged in rows transversely and longitudinally of the machine, means for conveying said twisters from the front toward the rear of the machine, transverse reciprocatory fingers for guiding the wires to the twisters at the front of the machine, a rotary drum mounted transversely and above the front part of the machine, and plates carried by said drum with slots therein for registering with the slots in the twisters, the slots in said plates being wide mouthed and obliquely beveled for engaging the two obliquely disposed mesh wires for each twister and bringing them together and forcing them down into the bottom of the slot in the twister.

9. A machine for making wire fabric, including an endless series of slotted twisters arranged in rows transversely and longitudinally of the machine, means for conveying said twisters from the front toward the rear of the machine, means for guiding mesh wires to said twisters, a rotary drum extending transversely of the machine at the front part thereof, pulleys on a higher level than said drum over which the line wires pass to the machine, and plates on said drum provided with slots registering with the twisters in said machine for receiving the line wires and forcing them into the slots in the twisters.

13. A machine for making wire fabric and the like, including a series of transversely extending twisting mechanisms having each a bar for supporting the parts of the twister mechanism, a pair of circular chain supports, a pair of sprocket wheels, endless chains operating on said sprocket wheels to which said twister bars are secured in succession, each of said chains having two series of L-shaped links offset from each other so that there will be space between the angular projections of said links, a twister bar located in the space between the angular projections of adjacent links and arranged so that when the chain travels in a straight line said bar will be pinched between the angular projections of the adjacent links, means for securing said bar to the face of the angular projection of one of each pair of links, and a third set of links pivotally connected with and overlapping the adjacent pairs of each of said series of links above mentioned, substantially as set forth.

[Claims 2, 3, 5, 6, 8, and 10 to 12 not printed in the Gazette.]

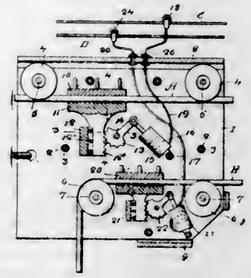
1,270,130. DEMOUNTABLE RIM. CHARLES EDELEN, Bardstown, Ky. Filed Oct. 13, 1917. Serial No. 196,453. (Cl. 152—21.)



1. A rim comprising a plurality of telescoping members one of said members carrying a projecting device and the other of said members being provided with an opening receiving said projecting device, an expansible ring provided with an opening also receiving said projecting device, said ring including flanges engaging the edges of the telescoping members, and a locking member comprising a hook provided with a cam portion adjacent to the bill of the hook and adapted to separate the approaching ends of the annular ring member and to expand the latter, and a pin on one of said approaching ends for coöperation with said hook.

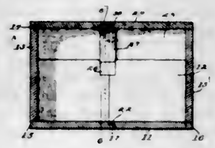
[Claim 2 not printed in the Gazette.]

1,270,131. TRAMWAY-CARRIAGE. JAMES THOMAS THADDEUS ELLIS, Southern Pines, N. C. Filed Oct. 29, 1917. Serial No. 199,179. (Cl. 212—111.)



A device of the class described comprising a frame, supporting wheels carried thereby for engaging the supporting cable, hoisting wheels thereon engaging the hoisting cable, gripping means for each cable, each including stationary and movable jaws, teeth on said movable jaw, a segmental lever having teeth thereon engaging with said teeth, a magnet, an armature therefor connected with the lever, and a trolley connected with each magnet.

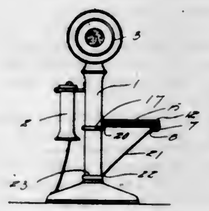
1,270,132. CONCRETE BURIAL-VAULT. JAMES ELMORE and CHARLES W. JOY, Miller, Nebr. Filed Oct. 20, 1917. Serial No. 197,727. (Cl. 72—7.)



1. A concrete vault comprising a hollow body and formed in two sections, the confronting ends of the said sections having interengaging tongues and grooves, the ends projecting above the sides to provide surfaces inclined from the sides to the center and the said center being straight, slabs comprising the top of the vault and of a length equaling the length of the sections upon which they are arranged, interengaging tongues and grooves between the slabs comprising the top and the edges of the body upon which they rest, a removable arch seated in pockets in the confronting sides of the body member and supporting the confronting ends of the top slabs, and interengaging tongues and grooves at the said confronting ends of the top slabs.

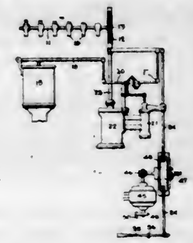
[Claim 2 not printed in the Gazette.]

1,270,133. NOTE-PAD ATTACHMENT FOR TELEPHONES. ADOLPH EMERMAN, Cleveland, Ohio. Filed Aug. 29, 1917. Serial No. 188,839. (Cl. 281—44.)



A note pad attachment for telephones comprising a rectangular plate, said plate provided intermediate its ends and centrally of its side longitudinal edges with a transverse slot, a tongue at one end of the slot and bent downwardly and back upon itself to provide a clip, a split clamping ring hingedly secured to one side longitudinal edge of the plate and in direct alinement with the slot, an arm, an attaching portion at one end of the arm to detachably engage the clip formed at one end of the slot, a split ring hingedly secured to the lower free end of the arm in direct alinement with the first named ring and in a plane below the latter, one end of said plate being curved upwardly and inwardly to overlie the upper side of the plate, said inwardly curved portion provided with a pair of spaced slots, a tongue formed on the wall of one of the slots, and a note pad retaining member arranged under the overlying portion of the plate and having an extension extending through the other slot to facilitate the raising of the note pad retaining member.

1,270,134. SHIP PROPULSION. WILLIAM L. R. EMMET, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 5, 1916. Serial No. 89,018. (Cl. 172—8.)

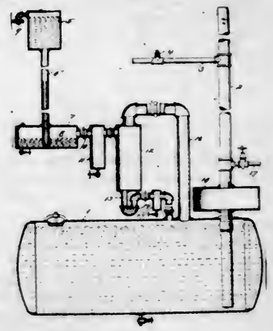


5. A system of ship propulsion comprising a prime mover, a propeller on each side of the ship adapted to be driven by power developed by said prime mover, an adjustable speed governing mechanism for approximately maintaining any normal operating speed of said prime mover, and means for limiting the power developed by said prime mover upon a change in the direction of motion of the ship.

10. A system of ship propulsion comprising a prime mover, an alternating current generator coupled to said prime mover, a propeller on each side of the ship, an alternating current motor coupled to each propeller and adapted to be electrically connected to said generator, an adjustable speed governing mechanism for approximately maintaining any normal operating speed of said prime mover, and means responsive to a substantial difference in load between the motors on the two sides of the ship for adjusting said speed governing mechanism for a lower speed limit.

[Claims 1 to 4, 6 to 9, and 11 to 15 not printed in the Gazette.]

1,270,135. STATIONARY CHEMICAL-MIXING FIRE-EXTINGUISHER SYSTEM. JOHN W. ENRIGHT, New Orleans, La. Filed Jan. 17, 1918. Serial No. 212,303. (Cl. 169—24.)



1. In a stationary chemical mixing fire extinguisher system, a tank for an alkaline solution, a distributing pipe rising therefrom, an elevated acid receptacle located externally of the tank, a mercury vessel below said receptacle, a pipe between said receptacle and said vessel, the mercury in the latter columning in said pipe to provide a trap for the acid, an acid reservoir, a pipe between said vessel and said reservoir, a pipe to conduct acid from said reservoir to said tank and having a mercury seal arranged therein and a second pipe extending between said tank and said reservoir to transmit elastic fluid pressure

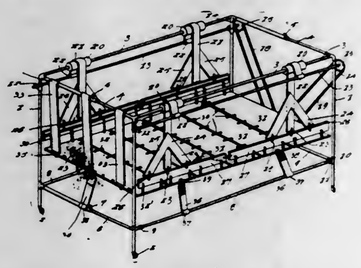
thereto, the tank and the distributing pipe being normally charged with elastic fluid under pressure which acts on the mercury in said vessel to cause the same to normally function as an acid trap.

2. In a stationary chemical mixing fire extinguisher system, a tank for an alkaline solution, an elevated acid receptacle located externally of the tank, a mercury vessel interposed in the outlet of said receptacle, a distributing pipe leading from the tank, the tank and the distributing pipe being normally charged with elastic fluid under pressure, means for transmitting the pressure of said elastic fluid to the mercury in said vessel, thereby to cause said mercury to normally function as a trap in preventing the discharge of acid from said receptacle and means for conducting the acid from said vessel to said tank when, owing to a fall of pressure, the mercury ceases to function as a trap.

3. In a stationary chemical mixing fire extinguisher system, a tank for an alkaline solution, an elevated acid receptacle located externally of the tank, a mercury vessel interposed in the outlet of said receptacle, a distributing pipe leading from the tank, the tank and the distributing pipe being normally charged with elastic fluid under pressure, means for transmitting the pressure of said elastic fluid to the mercury in said vessel, thereby to cause said mercury to normally function as a trap in preventing the discharge of acid from said receptacle and means for conducting the acid from said vessel to said tank when, owing to a fall of pressure, the mercury ceases to function as a trap, said means including an acid reservoir and a mercury seal normally interrupting the communication of said reservoir and said tank.

[Claims 4 to 12 not printed in the Gazette.]

1,270,136. PATIENT'S TRANSPORTING AND TREATING APPARATUS. FANNIE FINLEY, Chaffee, Mo. Filed Mar. 1, 1917. Serial No. 151,829. (Cl. 5—44.)

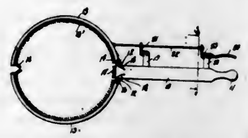


1. A device of the class described comprising a support including side and end bars, posts connecting the side and end bars, shafts journaled to the posts, sprocket wheels carried by one end of each of the shafts, means for rotating the shafts and wheels, a plurality of bands removably connected together constituting a support, strips secured to the shafts, supporting strips removably connected to the ends of the bands and to the first named strips, whereby upon the rotation of the shafts the bands will be raised and lowered, and means connected to the support and to the bands for holding the same against swinging movement during the raising and lowering movements.

2. A device of the class described comprising a frame including spaced corner posts, side and end bars connected to the upper ends of the corner posts, said end bars being adjustably mounted on one another, shafts journaled to the end posts and arranged parallel to the side bars, sprocket wheels carried by one end of the shafts, a plurality of bands, means for removably connecting the bands together to form a support, supporting strips, means for removably connecting the supporting strips to the ends of the bands, connecting strips, the ends of the connecting strips being secured to the shafts and their free ends being connected to the upper edges of the supporting strips, and means trained over the sprocket wheels of the shafts to rotate the shafts for moving connecting strips for raising and lowering the bands, and means for holding the bands against swinging movement during the lifting and lowering action.

3. A device of the class described including a supporting structure having corner posts, side bars secured to the corner posts, said side bars being movable to permit the supporting structure to be placed around a bed, shafts journaled to the corner posts, means carried by the shafts through the medium of which the shafts may be rotated, a plurality of bands, means for connecting the bands together, supporting strips removably connected to the ends of the bands, connecting strips removably secured to the upper edges of the supporting strips and to the shafts, whereby upon rotation of the shafts the bands will be lifted vertically with relation to the supporting structure, and means secured to the supporting structure and to the bands for holding the bands against swinging movement during the lifting or lowering action.

1,270,137. PASTEURIZER-COIL BRUSH. HARRY FORDE, Toronto, Ontario, Canada. Filed Oct. 4, 1917. Serial No. 194,752. (Cl. 15—13.)



1. A brushing device including a handle, a pair of semicircular brushing elements mounted thereon to define when the brushing elements are brought together a complete circle, resilient means urging the brushing elements toward each other, and means mounted on the handle engaging one of the elements to move the same away from the other.

3. A brushing device including a handle, a pair of semicircular brushing elements mounted thereon to define when brought together, a complete circle, resilient means for urging the brushing elements toward each other, a pair of laterally extending ears on the handle, one ear forming a guide, a bell crank mounted on the other ear, and a rod connecting said bell crank to one of the brushing elements whereby to move the same away from each other.

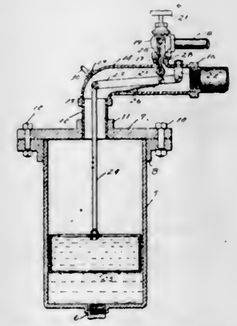
4. A brushing device including a handle, two pairs of apertured ears on one end of the handle, and at opposite sides of the handle, a pair of semi-circular brushing elements, each being pivotally connected at one end thereof between a pair of ears, studs penetrating said ears and brushing elements and extending therebeyond and a coil spring surrounding each stud, each spring having one end connected to one of the associated brushing elements, and its other end connected to the handle to urge said brushing elements toward each other.

[Claim 2 not printed in the Gazette.]

1,270,138. AUTOMATIC PUMP CONTROL FOR BOILER FEED. WALTER L. FOSTER, Whittier, Cal. Filed June 16, 1917. Serial No. 175,085. (Cl. 137—101.)

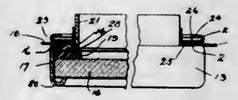
1. A regulator for pumps comprising an equalizing chamber having a steam connection and a water connection, said steam connection comprising a pipe having a port in the wall thereof communicating with a steam pump, a valve controlling said port, a lever for operating said valve detachably mounted in said pipe, a spring secured to said lever and tending to hold said valve closed, and a bucket float in said equalizing chamber connected to said lever and tending to open said valve.

2. A regulator for pumps comprising an equalizing chamber, having a stem connection, and a water connection, said steam connection comprising a pipe having a port in the wall thereof communicating with a steam pump, a valve controlling said port, a lever for operating said valve detachably mounted in said pipe, a spring secured to said lever and tending to hold said valve closed, a bucket float in said equalizing chamber connected to said lever and tending to hold said valve open, said bucket being disposed with its opening below said steam connection.



3. A regulator for pumps comprising an equalizing chamber, having a steam connection, and a water connection, said steam connection comprising a pipe having a port in the wall thereof communicating with a steam pump, a valve controlling said port, a lever for operating said valve detachably mounted in said pipe, a spring secured to said lever and tending to hold said valve closed, and a bucket float in said equalizing chamber connected to said lever and tending to open said valve, said bucket float disposed with its opening below said steam connection.

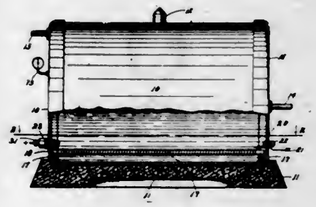
1,270,139. FACE-PROTECTOR. HARRY FULFORD, Cranston, R. I. Filed Feb. 23, 1918. Serial No. 218,712. (Cl. 2—149.)



1. A lens frame formed of sheet metal and having a narrow base portion on a plane substantially parallel with that of the lens, two flanges extending in opposite directions from opposite edges of said base, a lens seated on said base and the outer edge of said flange being rolled inwardly over that of said lens to bind it in place, the inner flange extending through a corresponding opening in the flexible projecting material, a binding plate lying against said material and said inner flange being rolled outwardly over said material and plate to bind the whole to said base portion.

2. A lens frame formed of sheet metal and having an outer and an inner flange formed on opposite edges of a narrow base portion, the latter having an open center portion, said base being provided with an annular groove formed from the outer side inwardly, a lens seated on said base within the outer flange, the latter being rolled over that of the former, the inner flange extending through a corresponding hole in the protecting material, a binder ring positioned on said material having an annular depression on one face forming a rib on its opposite face, said rib registering with the groove in said base, and the edge of said inner flange being rolled over said ring with its edge entering said groove in said ring with a gripping pressure whereby said protecting material is bound locked and sealed air-tight about said frame.

1,270,140. ELECTRIC BOILER. JOHN N. FULLER, Philadelphia, Pa. Filed Dec. 1, 1917. Serial No. 204,908. (Cl. 219—38.)



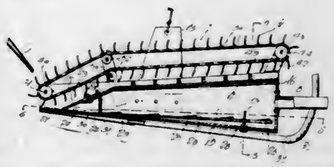
A heater comprising a casing, inlet and outlet pipes communicating therewith, a support upon the inner side of each end of said casing provided in its upper edge with a recess, a rod entirely inclosed within said casing and having its ends seating within said recesses, a wire coiled about said rod and having one end secured to said casing, said casing being of conducting material and said rod being of insulating material, a member threaded through one side of said casing, and a contact member passing through and insulated from said member and connected with the other end of said wire.

1,270,141. DRESS-FASTENER. JULIUS R. FULLER, Kansas City, Mo. Filed July 19, 1917. Serial No. 181,506. (Cl. 24—201.)



The herein described separable fastener consisting of two parts adapted to be connected to the respective garments parts, one of the parts comprising a base having on opposite sides integral extension members reaching toward the center of the base and the other part consisting of a substantially flat member of approximately the same size and shape as the main portion of the base and being adapted to interlock therewith by first passing one end of the latter member beneath one of the extensions of the base, and having a peripheral notch through which the other extension is adapted to pass preliminary to a relative rotation between the two parts.

1,270,142. GOLD-DREDGE. LORENZO R. GAGE, Sr., Hoquiam, Wash. Filed Apr. 27, 1917. Serial No. 165,021. (Cl. 37—45.)



1. In a precious metal dredge, a suction conduit, and a box-like suction head communicating at its rear end with said conduit, the front end of said head being inclined downwardly and forwardly and having at its lower edge an indet, the sides and bottom of said head being extended forwardly beyond said inlet to provide a shovel lip.

[Claim 2 not printed in the Gazette.]

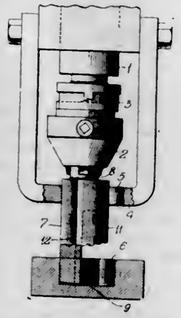
1,270,143. BEAD-CHAIN. WILLIAM J. GAGNON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Oct. 18, 1916. Serial No. 126,310. (Cl. 173—28.)



1. As a new article of manufacture, a bead-chain consisting of hollow balls and connecting dumb bell links, at least one series of chain elements being of insulating material, substantially as described.

2. As a new article of manufacture, a bead-chain consisting of hollow balls and connecting dumb bell links, the balls of the chain being of insulating material.

1,270,144. TOOL FOR BORING POLYGONAL HOLES. JAMES J. S. GALLIMORE, Detroit, Mich. Filed May 21, 1917. Serial No. 169,863. (Cl. 77—61.)



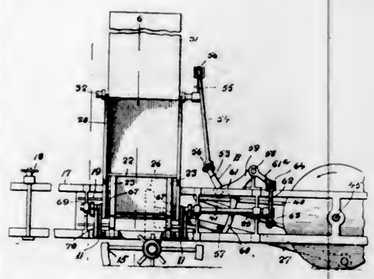
1. A tool for boring polygonal holes including a guide having a polygonal opening, a part adapted to be rotated within said polygonal opening and to simultaneously contact the walls thereof at three points, one of said points of contact being equi-distant from the other two and at a distance from each substantially equal to the shortest diameter of said polygonal opening, and said other two points being a greater distance apart than the distance between adjacent angles of the polygonal opening, said rotatable part having a cutting edge on its lower end.

3. A tool for boring polygonal holes including a guide having a polygonal opening, a part adapted to contact the walls of said polygonal opening at points defining the three angles of a triangular figure the two sides of which figure are substantially equal in length to the shortest diameter of said polygonal opening, and the base line of which triangular figure is greater in length than any one side of said polygonal opening, said part being provided with a cutting portion at its lower end.

7. A tool for boring polygonal holes including a guide having a polygonal opening, a part adapted to contact the walls of said polygonal opening at points defining the three angles of a triangular figure, said tool being cut away at its lower end inwardly from one of said contact points substantially toward the axis of rotation of said part, to provide clearance and a cutting edge.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,270,145. BALING-PRESS. JOHN W. GARWOOD, Lawton, Okla. Filed Aug. 1, 1917. Serial No. 183,926. (Cl. 100—25.)



1. In a baling press, a press box, a condenser chamber having arcuate side walls extending across the press box and downwardly adjacent to one side thereof, levers fulcrumed adjacent to the bottom of the press box, an apron carried by said levers and operable between the side walls of the condenser chamber, and means for imparting to said apron an intermittent swinging movement, said apron having guide lugs and the side walls of the condenser chamber being provided with arcuate slots engaged by said lugs.

3. In a baling press, a press box, a condenser chamber having arcuate side walls and a stationery end wall, levers fulcrumed adjacent to the bottom of the press box, an apron carried by said levers and operable between the side walls of the condenser chamber, driving brackets connected with the apron and the levers, lugs carried by the apron at the side edges thereof, a rock shaft supported adjacent to the press box, and having radial arms, links connecting said arms with the driving brackets, and means for actuating the rock shaft to produce a swinging movement of the levers carrying the condenser apron, the side walls of the condenser chamber being provided with arcuate slots for the passage of the lugs at the side edges of the apron.

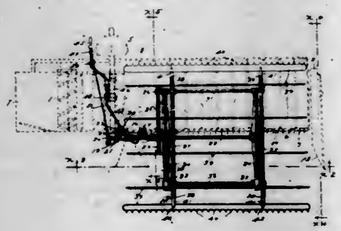
4. In a baling press, a press box, a main plunger movable therein, a pitman actuating said plunger, a condenser chamber including side walls extending across the press box and downwardly adjacent to one side thereof, levers fulcrumed adjacent to the bottom of the press box, an apron carried by the levers and operable between the side walls of the condenser chamber, driving brackets connected with the levers and apron, means for actuating the apron carrying levers including a rock shaft and suitable connections, and means for actuating the rock shaft including a roller on the pitman of the main plunger, a bifurcated lever having a long and a short arm disposed in the path of the roller, an arm connected with and extending angularly with respect to the bifurcated lever, an arm extending radially from the rock shaft, and a link having universal connections with said arms.

6. In a baling press, a press box, a condenser chamber supported above and adjacent to one side thereof, a swingingly supported apron operable in said chamber between the side walls thereof, a plunger supported for vertical movement in the condenser chamber, a rock shaft supported adjacent to the top of the condenser chamber, an arm extending from said rock shaft, a link connecting the arm with the plunger, and means for so actuating the rock shaft that at the downward limit of the movement of the plunger, the pivot connection between the link and the arm will be past the center of the line of thrust thereby locking the plunger at the downward limit of its movement; the means actuating the rock shaft including an arm extending radially therefrom, a bell crank, a link having universal connections with one arm of the bell crank and with the arm extending from the rock shaft, rods pivotally connected with the other arm of the bell crank, one of said rods having a terminal cam head and the other rod having a terminal hook, a spring connecting said rods together, guide members in the direction of which the rods will be forced by the spring, and a crank having a wrist pin alternately engaging the cam head of one rod and the hook member of the other rod.

7. In a baling press, a press box, a condenser chamber supported above and adjacent to one side thereof, a swingingly supported apron operable in said chamber between the side walls thereof, a plunger supported for vertical movement in the condenser chamber, a rock shaft supported adjacent to the top of the condenser chamber, an arm extending from said rock shaft, a link connecting the arm with the plunger, and means for so actuating the rock shaft that at the downward limit of the movement of the plunger, the pivot connection between the link and the arm will be past the center of the line of thrust thereby locking the plunger at the downward limit of its movement; the means actuating the rock shaft including an arm extending radially therefrom, a bell crank, a link having universal connections with one arm of the bell crank and with the arm extending from the rock shaft, rods pivotally connected with the other arm of the bell crank, one of said rods having a terminal cam head and the other rod having a terminal hook, a spring connecting said rods together, guide members in the direction of which the rods will be forced by the spring, a crank having a wrist pin alternately engaging the cam head of one rod and the hook member of the other rod, and trip means for throwing the rod having the terminal hook out of engagement with the wrist pin of the crank.

[Claims 2 and 5 not printed in the Gazette.]

1,270,146. HARVESTER-REEL. WILLIAM S. GEER, Burbank township, Kandiyohi county, Minn. Filed July 15, 1915. Serial No. 39,973. (Cl. 56—22.)



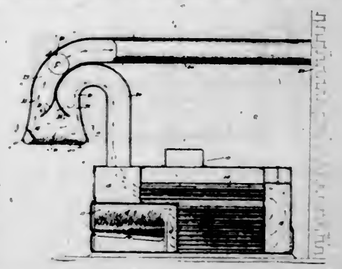
1. A harvester reel, and means supporting the reel for compound vertical and horizontal adjustments, said means including a pivoted lock segment, a lever fulcrumed on the lock segment and a latch for securing the lever to the lock segment, whereby the lever may be held in different adjustments and the lock segment against pivotal movement.

3. A harvester reel including a frame and traveling blades, and means supporting the reel frame for compound vertical and horizontal adjustments and for oscillation in a vertical plane, said means including a pivoted primary lock segment, a primary lever fulcrumed on the lock segment, a latch for securing the lever to the lock segment and a secondary lever and cooperating lock segment carried by the primary lever.

5. Reel mechanism for harvesters comprising a frame mounted for bodily vertical and horizontal movements and for oscillatory movement in a vertical plane, blades mounted on the frame for substantially horizontal operative traveling movement, a primary lock segment pivotally mounted for vertical swinging movement, a primary lever fulcrumed at the center of the primary lock segment for imparting said vertical and horizontal movements to the frame, a secondary lock segment carried by the primary lever, and a secondary lever fulcrumed at the center of the secondary lock segment for imparting said oscillatory movement to the frame, said two levers having latches coöperating with the respective lock segments.

[Claims 2, 4, and 6 not printed in the Gazette.]

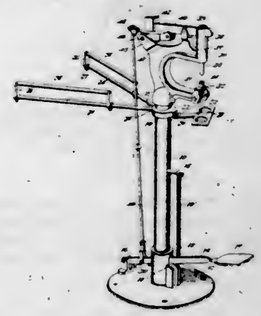
1,270,147. STEAM-BOILER ATTACHMENT. ALEXANDER GOLLINGE, New York, N. Y., assignor of forty one-hundredths to Otto Richard Burger, New York, N. Y. Filed Nov. 21, 1917. Serial No. 203,123. (Cl. 183—106.)



2. A separator, comprising an upwardly extending flue terminating in a downwardly curved gooseneck, a chimney flue having a downwardly curved inlet end, a drum depending from the adjacent curved ends of the said gooseneck and the said inlet end of the chimney flue, and perforate retarding and deflecting plates in the said drum at the junction of the said gooseneck and the said inlet end of the chimney flue with the said drum, the said plates being curved outwardly and downwardly in opposite directions to restrict the throats of the said flues, the lower edges of the said plates terminating a distance from the bottom of the said drum and the lower edges being serrated.

[Claim 1 not printed in the Gazette.]

1,270,148. RIVETING-MACHINE. FREDERICK D. GOODLAKE, Memphis, Tenn. Filed Feb. 1, 1918. Serial No. 214,967. (Cl. 218—2.)

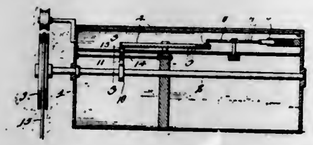


1. In a device of the class described, a standard, a base on which said standard is mounted, a pivotally mounted lever supported upon the base, a frame carried by the standard, a punch mounted in the frame, a pivoted lever controlling the punch, an angle lever, an idler carried thereby engaging the lever controlling the punch, a rod connected with said angle lever and with the lever first named and an upstanding member carried by the frame and provided with a bore for the punch and provided with a slot intersecting the bore and guiding the lever controlling the punch.

3. In a device of the class described, a base a standard carried thereby, a frame carried by the standard, a punch mounted in said frame, operating means for said punch, a ring member adjustably carried by the standard, arms radiating from said ring member, adjustable brackets carried by each of said arms, and a roller supported between the brackets of each arm.

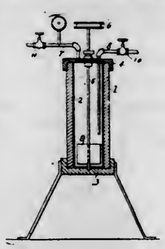
[Claims 2 and 4 not printed in the Gazette.]

1,270,149. MEASURING DEVICE. RODNEY R. GROCE, Parkersburg, W. Va. Filed May 16, 1917. Serial No. 169,014. (Cl. 33—134.)



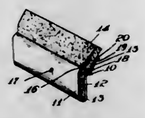
A measuring device comprising a support, a shaft journaled thereon, a pulley mounted upon the shaft, a dial journaled upon the support and having its center located above the axis of the shaft whereby the shaft is diametrically disposed with relation to the dial, said dial being provided with teeth located at its underside, a lever pivoted at a point between its ends and at a point between the shaft and the dial, an eccentric mounted on the shaft, a spring for holding one end of the lever in engagement with the eccentric, and a spring pressed pawl mounted at the other end of the lever and engaging the teeth of the dial.

1,270,150. METHOD OF MANUFACTURING SODIUM HYDROSULFITE. ARNE K. GYZANDER, Westbrook, Me. Filed Apr. 14, 1917. Serial No. 161,952. (Cl. 23—13.)



The process of converting salts of sulfurous acid, into hydrosulfites, which consists in subjecting them to the action of hydrogen gas, under pressure.

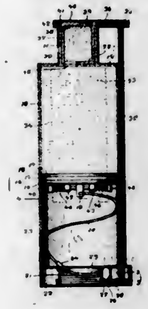
1,270,151. WEATHER-STRIP. DAVID H. HARNLY, Chicago, Ill., assignor to The Protecto Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 15, 1917. Serial No. 142,441. (Cl. 20—69.)



1. In a weather-strip, in combination, a centrally folded metal strip having an outstanding flange at one edge and an instanding flange at the other edge, and a strip of soft material held between the folds of the metal strip and projecting obliquely outward therefrom between the said outstanding and instanding flanges.

2. In a weather-strip, in combination, a centrally folded metal strip having an outstanding flange at one edge, an outwardly curved portion immediately adjacent the said outstanding flange and an instanding flange at the other edge, and a strip of soft material held between the folds of the metal strip and projecting obliquely outward therefrom between the said outstanding and instanding flanges.

1,270,152. NON-REFILLABLE BOTTLE. JOHN T. HARRISON, Asbury Park, N. J. Filed Aug. 31, 1917. Serial No. 189,163. (Cl. 215—64.)



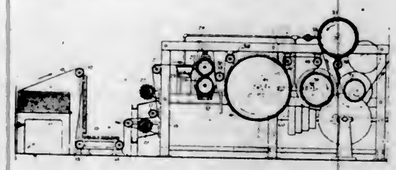
1. A bottle of the class described embodying a member mounted for vertical movement within said bottle, means for controlling the movement of said member and means carried by said member for destroying the bottle when the member reaches a predetermined position.

3. A bottle of the class described embodying a member mounted for vertical movement therein, means for controlling the movement of said member, normally retracted spring actuated elements carried by said member and means for automatically releasing said elements when the member reaches a predetermined position.

7. A bottle of the class described embodying a resiliently mounted member capable of movement therein, means for controlling the movement of said member and means carried by said member for destroying the bottle when the member reaches a predetermined position.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,270,153. METHOD FOR SPONGING, SETTING, AND FINISHING FABRICS. ERNST HEIDLER, Garfield, N. J., assignor to Columbia Conditioning Company, Inc., New York, N. Y., a Corporation of New York. Filed Aug. 9, 1916. Serial No. 113,883. (Cl. 26—2.)



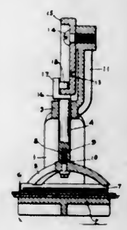
1. The herein described method of sponging, setting and finishing fabrics in open width, which consists in imparting a continuous traveling motion to the piece of fabric in the direction of the length thereof, and while in motion subjecting the fabric to the action of steam, moistening it with water, fixing and setting the fibers of the fabric, ironing the piece of fabric on both sides by passing it around cylinders rotating in the opposite direction of the travel of the piece of fabric, and finally cooling it and simultaneously supplying it with a natural amount of moisture.

3. The herein described method of sponging, setting and finishing fabrics in open width, which consists in imparting motion, to the fabric in the direction of the length thereof, sponging the fabric, fixing and setting the fibers of the sponged fabric, ironing the fabric on both sides, moistening and heating the fabric and subjecting the fabric to alternate cooling and stretching devices.

6. The herein described method of sponging, setting and finishing fabrics in open width which consists in imparting a continuous traveling motion to an unrolled piece of fabric in the direction of the length thereof, and subjecting the piece of goods to the following operations in the sequence stated, namely, brushing both faces of the fabric, heating it by subjecting it to the action of steam, sponging it with water, heating it while passing around a heated surface, ironing it on both faces by heated cylinders running in the opposite direction of the travel of the fabric, allowing the fabric to accumulate in folds, subjecting the fabric to tension, supplying steam to the fabric, cooling the fabric gradually and supplying it with a natural amount of moisture by passing it over moistened rollers and spreading it in a transverse direction, and finally winding up the fabric in finished condition.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,270,154. TIRE-VULCANIZER. CHARLES B. HEIM, Marco, Ind. Filed Apr. 5, 1918. Serial No. 226,845. (Cl. 18—18.)



1. In a vulcanizing device, the combination with a frame having a base, and a socket, of a shaft vertically slidable through said socket, a clamping foot carried by the lower end of the shaft, means to adjustably attach the clamping foot to the shaft, a pivotally mounted lever, said lever having a cammed head, and means to connect the lever with the shaft whereby when the lever is moved in one direction the clamping foot and shaft will be lowered, and the shaft and clamping foot raised when the lever is swung in the opposite direction.

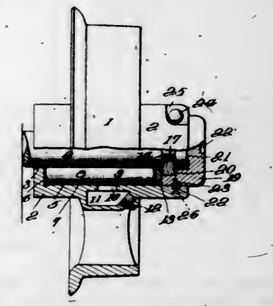
3. In a vulcanizing device, the combination with a frame having a socket, and a bracket extending upwardly from said socket, of a clamping foot, a shaft extending through said socket, means to adjustably attach the clamping foot to the lower end of the shaft, a lever pivotally attached to said bracket, a cammed head on said lever, a laterally extending flange around the edge of said head, an extension on the shaft, and means carried by the extension adapted to overlap said flange and ride thereon when the lever is operated to raise or lower the shaft and clamping foot.

[Claims 2 and 4 not printed in the Gazette.]

1,270,155. ROLLER-BEARING MINE-CAR WHEEL. FREDERIC HELMICK, Fairmont, W. Va., assignor to Helmick Foundry Machine Company, Fairmont, W. Va., a Corporation of West Virginia. Filed Apr. 16, 1918. Serial No. 228,934. (Cl. 105—67.)

1. A car wheel having a hub provided with an opened outer end, a hub cap arranged within the outer end of said hub, said hub and cap having tangentially arranged registering grooves and pins extending through said grooves for locking said hub cap in position.

2. The combination with an axle having an annular groove, of a wheel provided with a hub having roller bearings mounted upon said axle, said hub having an opened outer end, a sectional locking ring arranged within the groove of said axle, a hub cap arranged within the outer end of said bore having a seat to receive the outer portion of said sectional ring, and means for locking said hub cap within the bore of said hub.



3. The combination with an axle having an annular groove at its outer end, of a wheel having a hub provided with a bore to receive said axle, said bore being enlarged to form a roller bearing chamber, a grease reservoir formed in said wheel, said bore having an annular groove communicating with said grease reservoir, a sectional locking ring arranged within the groove of said axle, and a hub cap secured within the end portion of said hub having a seat to receive said locking ring.

[Claims 4 to 8 not printed in the Gazette.]

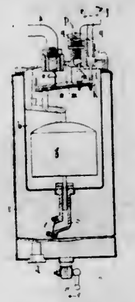
1,270,156. CLOTHES-RACK. GORDON R. HENDERSON, Tifton, Ga. Filed Dec. 14, 1917. Serial No. 207,155. (Cl. 68—34.)



1. A clothes rack comprising a base, a standard hinged thereto, upper and lower arms hinged to each side of the standard, the upper arms being of substantially twice the length of the lower arms, said standard having a lower portion of reduced thickness for forming spaces for receiving the lower arms when the same are in lowered position, pivoted braces for holding said arms in raised position, and fastening means on said arms.

2. A clothes rack comprising a base, a standard pivoted thereto so that said base may be swung with its upper portion against the rear edge of the standard, a block at the upper end of said standard on the rear face thereof, said base having openings therein so that the same may be secured to a wall, arms hinged to said standard at the sides thereof and at the front and rear, pivoted braces for holding said arms in raised position, said standard having cut away portions for receiving said braces when the arms are in inoperative position, and catches carried by said arms.

1,270,157. LIQUID-FUEL-SUPPLY APPARATUS FOR INTERNAL-COMBUSTION ENGINES. JOSEPH HIGGINSON and HUBERT ARUNDEL, Stockport, England, assignors to Stewart Warner Speedometer Corporation, Chicago, Ill., a Corporation of Virginia. Filed Nov. 18, 1916. Serial No. 132,187. (Cl. 158—36.)

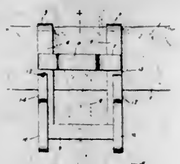


1. In liquid fuel supply means of internal combustion engines, in combination, an intermediate vessel, a suction connection between said vessel and the engine inlet branch, a fuel inlet to the vessel, an air inlet to the vessel, a valve upon said suction connection, a float within said vessel in operative connection with said valve, an automatic disk valve of practically negligible weight in said suction connection, and means restricting the opening movement of said disk under the suction action to an exceedingly small amount, as set forth.

6. In a construction such as defined in claim 1, a suction outlet port from the vessel being of very large diameter relatively to the movement of the disk valve which controls said port.

[Claims 2 to 5 not printed in the Gazette.]

1,270,158. TOOL-HOLDER. MORTON S. HILL, Brooklyn, N. Y. Filed Nov. 27, 1917. Serial No. 204,299. (Cl. 224—25.)

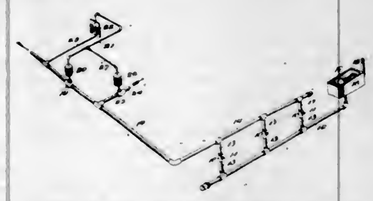


2. A tool holder of the character described comprising a pair of hook members, a supporting body for said hook members, said hook members extending upwardly, a bracket forming a socket, said bracket being adapted to support a tool in such a manner as to be removed vertically while the arrangement of the hook members is such as to require the tools to be removed vertically.

[Claim 1 not printed in the Gazette.]

1,270,159. AUTOMATIC CONTROL FOR HUMIDIFYING APPARATUS. WILLIAM B. HODGE, Charlotte, N. C., assignor to Stuart W. Cramer, Charlotte, N. C. Filed Mar. 21, 1916. Serial No. 85,617. (Cl. 261—39.)

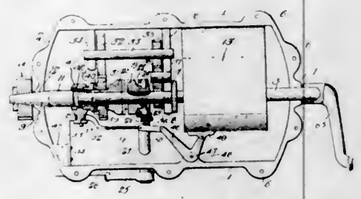
3. In a humidifying system, a source of pressure supply, a distributing line for said pressure supply, and means for exhausting the working pressure in the line simultaneously with the shutting off of the main pressure from said source.



5. A humidifying system comprising sources of air pressure and liquid to be sprayed and one or more spray heads each connected to both said sources and each having an air orifice in aspirating relation to a liquid orifice, a pneumatically-operated shut-off valve in the air-line leading to said heads and an automatic humidity regulator controlling the operation of said valve and simultaneously and inversely controlling a vent in the section shut off thereby.

[Claims 1, 2, 4, and 6 to 9 not printed in the Gazette.]

1,270,160. ENGINE-STARTER. ROBERT L. HOGG, Charleston, S. C. Filed June 5, 1917. Serial No. 172,997. (Cl. 123—187.)



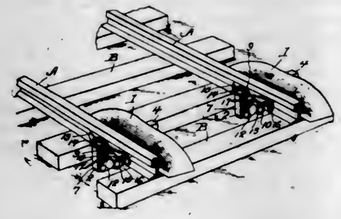
2. An engine starter comprising a driving shaft, a driven shaft, means operatively connecting the driven shaft with the crank shaft of an internal combustion engine, spring means for rotating said driving shaft, means for preventing the rotation of the driving shaft in one direction, means for locking the driving and driven shafts together and for releasing said locking means engaging the driving shaft, a counter-shaft extending parallel to and in spaced relation to the driving and driven shafts, means operatively connecting the counter-shaft with the driving shaft, a gear rotatably mounted upon the driven shaft for independent movement, means operatively connecting said gear with the counter-shaft, a sliding clutch section keyed to said driven shaft, a rigid clutch section carried by said gear rotatably mounted on the driven shaft, a leaf spring normally holding said sliding clutch section out of engagement with the rigid clutch section, a bell crank pivotally secured to the bottom of the casing, a presser foot pivotally carried by one end of the bell crank and engaging the outer side of the coil spring, and means connecting the free end of the bell crank with the leaf spring, so that when the spring expands caused by the unwinding thereof, said bell crank will overcome the tension of the leaf spring and interlock the sliding clutch section and rigid clutch section carried by the rotatable gear together, as and for the purpose specified.

[Claims 1 and 3 not printed in the Gazette.]

1,270,161. CAR-REPLACER. BURNICE V. JACKSON, Birmingham, Ala. Filed Mar. 2, 1918. Serial No. 220,017. (Cl. 104—163.)

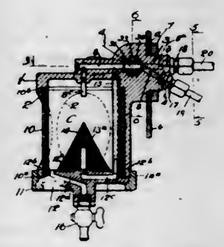
1. A device of the class described comprising a replacer block, a clamping member comprising a bar having one end pivoted to the block and its other end passing under the rail, an upwardly extending projection on said last named end, means pivoted on said end for engaging the flange of the rail, and a wedge member adapted to be driven between the upwardly projecting end and the rail.

2. A device of the class described comprising a replacer block having a hole in one of its faces, a bar having an upwardly extending member at one end thereof, a lug thereon engaging with the hole, an upwardly extending



part on the other end of the bar having a slot therein, a lever pivoted to the bar and having a slot therein for engaging the lower flange of the rail, a keeper pivoted to said bar and engaging with said lever, and a wedge member adapted to be driven between the last mentioned upwardly extending part and the rail and having the beveled edge engaging with the slot in said upwardly extending part.

1,270,162. SIGHT-FEED AND DIRT-SCREEN FOR VACUUM FEED DEVICES. WEBB JAY, Chicago, Ill. Filed Sept. 16, 1916. Serial No. 120,571. (Cl. 210—16.)



1. A screening device for suction-lifted liquid fuel supply, comprising a screen chamber, a conical screen or sieve erected in said chamber; a liquid inlet pipe to said chamber arranged to discharge downward above the apex of the screen, and an outlet pipe opening under the screen.

5. In a screening device for suction-lifted liquid fuel supply, in combination a skeletoned or apertured chambered body having a separable lining within the same, inlet and outlet passages extending in juxtaposition in said body at a location at which they may both be pierced without piercing said separable lining, and a turn-cock device having its seat traversing both said ducts at a juxtaposed extent for controlling both said ducts, and having a by-pass passage which connects the inlet and outlet ducts at a position of the turn-cock at which it cuts off communication of both said ducts with the chamber.

9. A screening device for suction-lifted liquid fuel supply, comprising in combination with a screen chamber casing having an inlet discharging in the upper part of the chamber and an outlet having its receiving mouth at the lower part of the chamber, a screen positioned within the casing between the inlet and the outlet, the inlet passage being more restricted than the outlet passage.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

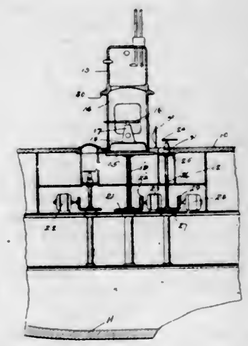
1,270,163. UNIVERSAL DIRECTION CONTROL FOR VEHICLE-HEADLIGHTS. EDWARD JESURUN, Palo Alto, and ROWLAND LYTTLE, Los Angeles, Cal. Filed May 17, 1917. Serial No. 169,175. (Cl. 240—61.)



1. In combination with a vehicle headlight mounted to turn vertically and horizontally, a controlling member mounted to turn vertically and horizontally, a flexible wire connected to said operating member and to said headlight to turn said headlight horizontally in motion of said controlling member horizontally, a flexible wire connected to said operating member and to said headlight to turn the headlight vertically in motion of said operating member vertically and a tubular flexible casing for guiding said flexible wire to enable same to transmit pushing as well as pulling motion to enable turning of the headlight horizontally in either direction and vertically in either direction by means of said two wires.

[Claim 2 not printed in the Gazette.]

1,270,164. MECHANISM FOR THE OPERATION OF SUBMARINE ARMAMENT. JOHAN E. JOHANNESSEN, Brooklyn, and OSBORNE A. WAAGE, New York, N. Y., assignors of one-third to Dutee W. Flint, Providence, R. I., and one-ninth to Johan A. Sether, one-ninth to Olaf C. Hoff, and one-ninth to Charles J. Christiansen, Brooklyn, N. Y. Filed Feb. 23, 1917. Serial No. 150,450. Renewed Apr. 11, 1918. Serial No. 228,040. (Cl. 114—16.)



1. In a submarine, a turret having a water-tight observation chamber and a lower gun-carrying platform connected thereto, and means for raising the turret and platform to bring the gun on the latter into position for action.

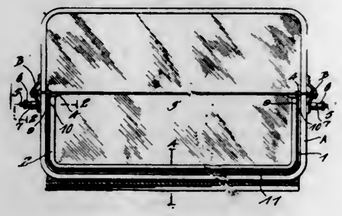
3. In a submarine vessel, a turret having a portion above the deck and a portion below the deck carrying a gun, means for elevating said turret to expose its gun for action, and for lowering the gun within the hull and closing the opening.

7. In a submarine, a turret having a water-tight observation chamber and a lower gun-carrying platform connected thereto, means for raising the turret and platform to bring the gun on the latter into position for action, a plurality of endwise slidable main bolts connected to the deck and adapted to extend through the side wall of

the turret when depressed, tension bolts connected to the turret and adapted to engage said main bolts to apply a downward tension on the turret to make a water-tight joint about the same.

[Claims 2 and 4 to 6 not printed in the Gazette.]

1,270,165. WIND-SHIELD ATTACHMENT. CLARENCE VERNE JOHNSON, Yates Center, Kans. Filed June 25, 1917. Serial No. 176,827. (Cl. 21—148.)



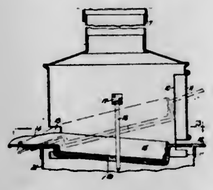
1. The combination with a windshield having a pair of upright posts provided with grooves in their inner sides; of a U-shaped frame removably fitted between said posts and received in said grooves, a pane-carrying frame disposed within said U-shaped frame and pivoted at its upper end thereto so as to deflect the air downwardly and means coöperative with said posts for maintaining said pane-carrying frame in its angularly adjusted positions.

3. The combination with a windshield having a pair of upright posts provided with grooves in their inner sides; of a U-shaped frame removably fitted between said posts and received in said grooves, a pane-carrying frame disposed within said U-shaped frame, pivot bolts projecting outwardly from the sides of said pane-carrying frame adjacent the upper edge thereof and extending through said U-shaped frame and said posts; and coöperating friction members carried by said frames for maintaining the pane-carrying frame in its angularly adjusted positions.

4. The combination with a windshield having a pair of upright posts provided with grooves in their inner sides; of a U-shaped frame removably fitted between said posts and received in said grooves, a pane-carrying frame disposed within said U-shaped frame, pivot bolts projecting outwardly from the sides of said pane-carrying frame adjacent the upper edge thereof, said bolts extending through said U-shaped frame and said posts and provided at their outer ends with nuts, coiled springs surrounding said bolts and disposed between said nuts and the outer sides of said posts, and corrugated disks arranged in opposing relation and carried by said frames for maintaining the pane carrying frame in its angularly adjusted positions.

[Claim 2 not printed in the Gazette.]

1,270,166. ASH-SIFTER. PHILIP KEMPLER, Newburgh, N. Y. Filed Dec. 21, 1917. Serial No. 208,246 (Cl. 83—60.)



1. A device of the class described comprising a hood having diametrically opposite openings in the sides thereof, a door screening one of said openings and leaving the lower part of said opening open through the entire width, a sifter having a spout adapted to project through the non-screened opening of the hood, and a handle for said sifter adapted to enter the door screened opening, substantially as and for the purpose set forth.

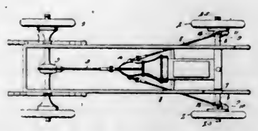
2. A device of the class described comprising a hood having a pair of diametrically opposite openings, a door screening one of said openings and leaving the lower part of the opening exposed through its entire width, a brace within the hood disposed transversely of said opening, a rod depending from said brace, a sifter having a spout adapted to engage the unscreened opening of the hood, said hood having a slot extending from the door screened opening to the lower edge of the hood, and a handle associated with said sifter adapted to engage the exposed part of the door screened opening through the slot, said sifter having an opening adapted to be engaged by the rod, said sifter being adapted to oscillate on said rod within the hood and move longitudinally of same when the door is open, substantially and for the purpose set forth.

3. A device of the class described comprising a hood having a door screened opening through which ashes may be charged into the hood, and a sifter mounted to oscillate in said hood, said sifter being inclined toward the door screened opening to facilitate the loading of the ashes into the sifter.

4. In a device of the class described, a hood having a side door through which ashes may be charged into the hood, a sifter having a spout adapted to project out of the hood, and a handle for the sifter adapted to project out of the door screened opening.

5. A device of the class described comprising a hood having a pair of diametrically opposite openings, a door screening one of the openings and leaving the lower part of said screened opening open through the entire width, a brace disposed transversely of the openings, a rod dependent from said brace, a sifter having a spout adapted to project through the unscreened opening of the hood, a handle for said sifter adapted to enter the lower part of the screened opening, said sifter having an elongated opening through which the rod projects when said sifter engages the hood, said rod constituting a pivot on which the sifter may be oscillated and moved longitudinally when the door is open, and lugs associated with the hood for engaging an ash barrel to present the lower edge of the hood within and below the upper edge of the barrel, whereby the spout and the handle of the sifter may be brought into engagement with the upper edge of the barrel, substantially as and for the purpose set forth.

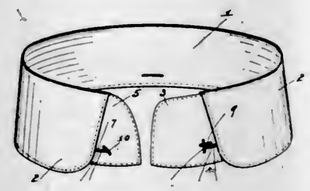
1,270,167. FOUR-WHEEL DRIVE MECHANISM. CHARLES W. KENNEDY, Clarence, Mo. Filed Oct. 6, 1917. Serial No. 195,114. (Cl. 74—101.)



1. The combination with a motor vehicle steering wheel, of a combined steering wheel knuckle and housing, a ring gear having a fixed relation to the inner face of the steering wheel, a front wheel driving shaft embodying a plurality of sections connected by a universal joint, and a pinion fast on one section of said driving shaft, and meshing with said ring gear, said combined knuckle and housing embodying a substantially vertical hollow cylindrical portion and also comprising a substantially horizontal cylindrical and hollow portion, said vertical and horizontal portions communicating with each other and forming housings for said universal joint and pinion, and adapting the last named parts to be run in lubricant.

2. The combination with a motor vehicle steering wheel, of a combined steering wheel knuckle and housing, a ring gear having a fixed relation to the inner face of the steering wheel, a front wheel driving shaft extending obliquely of the chassis of the vehicle and consisting of long and short sections connected by a universal joint the pivotal axis of which is in line with the axis of movement of the steering wheel, and a pinion fast on the shorter section of said driving shaft meshing with said ring gear, said combined knuckle and housing embodying a substantially vertical hollow cylindrical portion and also comprising a substantially horizontal cylindrical and hollow portion, said vertical and horizontal portions communicating with each other and forming housings for said universal joint and pinion, adapting the last named parts to be run in lubricant.

1,270,168. COLLAR. RICHARD OAKLEY KENNEDY, Troy, N. Y., assignor to Cluett, Peabody & Co. Inc., Troy, N. Y., a Corporation of New York. Filed Apr. 12, 1917. Serial No. 161,584. (Cl. 2—69.)



2. A collar provided with a buttonhole in one of its ends, and having the usual buttonhole-stitches along the edges of said buttonhole, and bar-stitches at the outer end of said buttonhole at substantially right angles to the line of the buttonhole, and having in addition thereto bar-stitches substantially parallel with the line of the buttonhole along one side of the buttonhole at the outer end thereof.

[Claims 1, 3, and 4 not printed in the Gazette.]

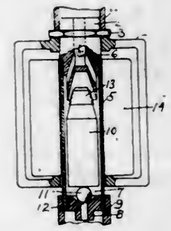
1,270,169. VELOCIPEDE. MARCUS KESTER, Olney, Ill. Filed Mar. 2, 1918. Serial No. 220,016. (Cl. 208—42.)



2. In a velocipede, a body of the form of an animal having rear legs rigid therewith and rear wheels journaled in said legs, a steering post of the form of the head, breast and forked front legs of the animal all rigidly connected, a front wheel journaled in said front legs, a steering pivot bolt connecting said body and said steering post, and a steering handle loop having its forward free ends pivotally connected with the mouth portion of said head and a rear part-circular portion concentric with said pivot bolt, said breast and the lower part of the neck being cylindrical, and the forward part of said body lapping these cylindrical parts and provided with a semi-circular top edge concentric with said pivot and a vertical front edge alined with said pivot.

[Claim 1 not printed in the Gazette.]

1,270,170. ELECTROMAGNETIC VALVE. JOHN MCLEAN KINGSBURY, New York, N. Y. Filed Feb. 4, 1918. Serial No. 215,343. (Cl. 137—4.)

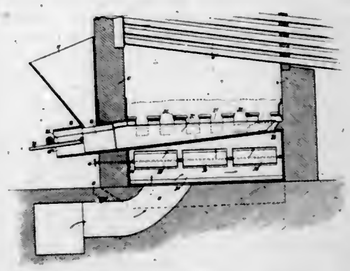


1. An electromagnetic valve comprising an actuating winding, and an iron frame which surrounds said winding and forms part of a magnetic circuit therefor, an axial opening through said winding and frame forming a fluid chamber, a loosely fitting armature consisting of two parts, one of which is a spherical ball, both parts thereof being immersed in the fluid in said chamber and adapted to move freely therein.

2. An electromagnetic valve comprising an actuating winding, and an iron frame which surrounds said winding and forms part of a magnetic circuit therefor, an axial opening through said winding and frame forming a fluid chamber, a loosely fitting armature consisting of two parts, one of which is a spherical ball, both parts thereof being immersed in the fluid in said chamber and adapted to move freely therein, one part of the armature resting on the spherical ball part, said ball part in turn resting on the influent side of a valve seat in said chamber, and adapted to control the flow of fluid through an opening in said valve seat.

[Claim 3 not printed in the Gazette.]

1,270,171. MECHANICAL STOKER. HARRISON EDWARD KLEFFEL, New York, N. Y. Filed Nov. 16, 1917. Serial No. 202,374. (Cl. 110—44.)



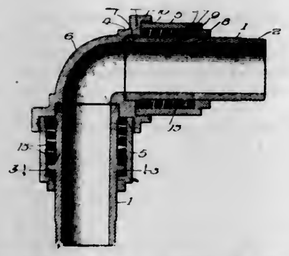
1. In a mechanical stoker, the combination of a grate structure having a central retort, the top of which is horizontal and the bottom of which is provided with upwardly and rearwardly inclined flanges but being otherwise open, and a plunger arranged in said retort whose top is parallel to the top of the retort and whose bottom is upwardly inclined and coöperating with said flanges constitutes the real bottom for the retort.

3. In a mechanical stoker, the combination of a suitably arranged retort from which extend laterally a plurality of branch retorts the tops of which are in substantially the same horizontal plane, the walls between the adjacent branch retorts constituting air trunks, and a reciprocating plunger in the main retort serving when reciprocated to convey the coal upward and rearward along the main retort and laterally from the main retort into the branch retorts.

5. In a mechanical stoker, the combination of a rigid grate structure including a main retort from which extend a series of lateral branch retorts, the wall structure between adjacent branch retorts constituting air trunks the tops of which lie in the same horizontal plane, and a plunger in the main retort, the bottom of the plunger being upwardly and rearwardly inclined whereby the plunger is lifted at each rearward reciprocation while the top of the plunger is horizontal and hence always parallel to the horizontal plane aforesaid irrespective of the vertical distance below it.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

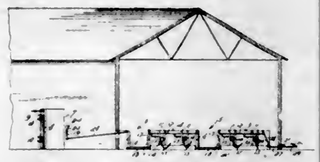
1,270,172. PACKLESS SWING-JOINT. JACOB B. KNUDSEN, Chicago, Ill. Filed Nov. 3, 1916. Serial No. 129,307. (Cl. 285—167.)



1. A swing joint for pipes comprising a hollow coupling having an enlarged bore at its end, a pipe section having its end fitting within said enlarged bore, with its inner surface flush with the inner surface of the coupling, the enlarged bore forming a bearing for the inner end of the pipe section, an annular squared flange on said pipe section spaced from the end thereof, a hollow swivel member of greater diameter than the pipe section fitting over said pipe section and flange and having one end drawn in to intimately surround the pipe section, a squared shoulder formed on said drawn-in portion, the opposite faces of said pipe section, flange and squared shoulder having concentric grooves formed therein, a ring of softer metal interposed between said faces, an annular flange on the coupling member forming a shoulder and having a threaded, integrally formed collar thereon engaging the threaded portion of the swivel member, and a spring surrounding said pipe section, surrounded by said swivel member and interposed between the shoulder on the coupling member and the squared flange on the pipe section to force one of the faces of said pipe section flange toward the squared shoulder on the swivel member, the contracted end of said swivel member forming an additional bearing for the pipe section beyond the annular flange thereon.

2. A swing joint for pipes comprising a hollow coupling having an enlarged bore at its ends, a pipe section having its end fitting within said enlarged bore, with its inner surface flush with the inner surface of the hollow coupling, the enlarged bore forming a bearing for the inner end of the pipe section, an annular squared flange on said pipe section apaced from the end thereof, a hollow swivel member of greater diameter than the pipe section fitting over said pipe section and flange and having one end drawn in to intimately surround the pipe, a squared shoulder formed on said drawn-in portion, a friction-reducing ring of softer metal than the pipe and swivel member surrounding the pipe and interposed between the flange on the pipe section and the flange on the swivel member, an annular flange on the coupling member forming a shoulder and having a threaded, integrally formed collar thereon engaging the threaded portion on the swivel member, and a spring surrounding said pipe section, surrounded by said swivel member and interposed between said flange on the coupler and the flange on the pipe section to force one of the faces of the flange on the pipe section and the squared shoulder on the swivel member into engagement with said ring, the contracted end of said swivel member forming an additional bearing for the pipe section beyond the annular flange thereon.

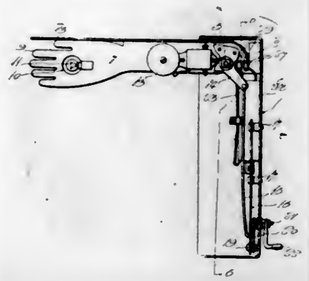
1,270,173. ANIMAL-RELEASING DEVICE. ERNEST A. KRAMER, Grant Park, and HENRY KRAMER, deceased, Grant Park, Ill., by John D. Kramer, executor, Grant Park, Ill., assignors of one-sixth to Ernest A. Kramer, one-sixth to John D. Kramer, and one-sixth to Marguerite Kramer, Grant Park, Ill., one-sixth to Henry Kramer, Jr., Crete, Ill., one-sixth to Dorothy A. Kramer, Chicago, Ill., and one-sixth to Fred W. Kramer, Kingdom, Cal. Filed Mar. 10, 1917. Serial No. 153,976. (Cl. 119—115.)



1. In a device of the character described, the combination with halter retaining means and a movably mounted door of a latch formed in a pair of pivotally connected sections, a latch bar pivoted to one section to maintain the other section in an extended form, one of the sections being pivotally mounted adjacent the door so as to normally hold the door in a closed position and also operably connected to the halter retaining means, unitary actuating means for releasing the latch and the halter retaining means simultaneously, and the latch bar being operable at times to permit the free section of the latch to be folded against the other section and consequently permit the door to be opened and leave the halter retaining means unmoved.

[Claims 2 to 4 not printed in the Gazette.]

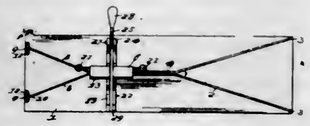
1,270,174. TURNING AND STOPPING SIGNAL FOR MOTOR-VEHICLES. JAMES KRUPP, Milwaukee, Wis. Filed Feb. 6, 1918. Serial No. 215,643. (Cl. 116—31.)



3. A turning and stopping signal comprising a casing having an open side and a removable side, a signal arm pivoted in said casing for outward swinging through said open side thereof, an L-shaped slide in said casing located in a plane at right angles to said removable side, open-ended guides for the vertical arm of said slide, the ends of said guides being normally closed by said removable side of the casing, connecting means between said slide and said arm for projecting the latter upon actuation of the former, and an operating crank for said slide having a wrist pin, the horizontal arm of said slide having a longitudinal slot in which said wrist pin is slidably received.

[Claims 1 and 2 not printed in the Gazette.]

1,270,175. PIPE-CUTTER. JOHN B. LAMBE, Graettinger, Iowa. Filed July 30, 1917. Serial No. 188,569. (Cl. 164—45.)

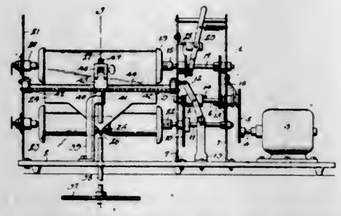


1. A device of the character described including a supporting base plate, a rigidly mounted pipe receiving sleeve on the base plate, a movably mounted pipe receiving sleeve on the base plate arranged in alinement and in spaced relation with the first sleeve, cutting means, and common means mounted on the base plate and positioned beneath the pipe section receiving sleeve so as to support the latter in spaced relation to the plate and being also designed to pivotally support the cutting means in guiding movement thereof when swung downwardly so as to pass between the sleeves.

4. A device of the character described including a supporting base plate, spaced transversely arranged bars on the base plate provided with recesses in their upper edges and intermediate their ends, posts formed on the inner ends of the bars, a cutter pivotally mounted on the upper ends of the posts, cutter guides formed on the opposite ends of the bars, a pipe supporting sleeve, a pair of rods having their outer ends connected to the base plate and having portions thereof offset and connected at their free ends to the inner ends of the sleeve so as to maintain the outer end of the sleeve above the recesses in the adjacent cross bar, another sleeve, and supporting rods therefor having their inner ends pivotally connected to the opposite end of the base plate and their opposite ends connected to the adjacent end of the last mentioned sleeve so as to dispose the outer edge of the sleeve above the recess in the adjacent transverse bar, substantially as described.

[Claims 2 and 3 not printed in the Gazette.]

1,270,176. NAVIGATING APPARATUS. ALBERT E. LARRABEE, Bristol, Pa. Filed July 3, 1917. Serial No. 178,434. (Cl. 114—144.)

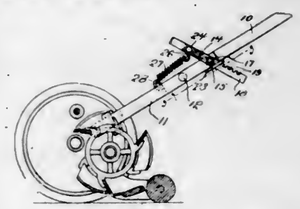


1. In ship navigating apparatus, the combination with a movable chart, of driving means responsive to the speed of the ship's engine for effecting the movement of said chart, an index element shiftable across said chart, and flexible connections extending from said element to a rudder-controlling helm, whereby upon the movement of the latter said element will be synchronously actuated.

5. In ship-steering mechanism of the class described, the combination with the rudder-operating helm of a ship, of a movable chart having a course line disclosed thereon, a motor for effecting the movement of said chart, means for varying the speed of said motor in direct proportion to the speed of the ship's engine, and a slidable and pivotally mounted index element operable to register with the course line of said cart upon the operation of the helm, whereby the movement of the ship's rudder may be regulated by the indications upon said chart.

[Claims 2 to 4 and 6 not printed in the Gazette.]

1,270,177. LAWN-MOWER ATTACHMENT. CHARLES LEDERER, Sr., Pierce, Nebr. Filed Oct. 20, 1917. Serial No. 197,662. (Cl. 56—19.)

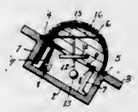


1. In a device of the class described, a bail portion adapted for connection with a lawn mower or the like, a handle having pivotal connection with the bail at a point spaced from the end thereof, a toothed member having pivotal connection with the end of the bail, means carried by the handle for engaging the toothed member, and resilient means connected with the toothed member and with the end of the handle for holding the toothed member in engagement with the engaging means.

4. In a device of the class described, a plurality of members spaced apart and constituting a bail adapted for connection with a lawn mower, a handle having pivotal connection with said members at a point spaced from the end thereof, a forked member provided with notches on one edge thereof, said forked member having pivotal connection with the end portions of the bail, adjusting means for said pivotal connection last named, and a spring connected with the forked member at a point spaced from its pivotal connection with the members of the bail, said spring being connected with the end of the handle.

[Claims 2 and 3 not printed in the Gazette.]

1,270,178. AERONAUTICAL COMPASS. GEORGE E. LEHTINEN, East Jaffrey, N. H. Filed Nov. 20, 1916. Serial No. 132,416. (Cl. 33—215.)

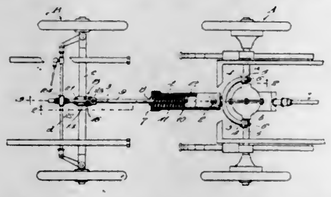


An indicator for indicating the direction of travel and degree of inclination of aeroplanes, including a circular casing open at the top, a peripheral flange formed at the open top of the casing, said casing having an annular groove at its upper end, a hemispherical transparent shell having a peripheral flange which is seated in the groove of the casing, a pair of spaced standards mounted within the casing, a ring having oppositely extending trunnions journaled in the standards, a disk mounted within the ring and having oppositely extending trunnions journaled therein, the trunnions of the disk and ring being at relative right angles, a pin mounted centrally in the disk, a weight depending from the lower end of the pin, and a magnetized needle pivotally mounted upon the upper end thereof.

1,270,179. COUPLING AND STEERING DEVICE FOR VEHICLES. RICHARD WADE LLOYD, Verndale, Minn. Filed July 12, 1917. Serial No. 180,179. (Cl. 21—137.)

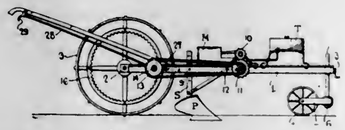
A combined coupling and steering device for motor vehicles comprising a tubular member having axle engaging means at one end thereof to be connected to the rear axle of a vehicle, a cap threaded upon the other end of said member and having a central opening therein, a rod extending through said opening and having one end disposed in said member and provided with a head, a coil spring surrounding said rod and disposed between said member and said cap, a removable pin extending

through said member in advance of said head for limiting the forward movement of said rod, a lug depending from said rod near the rear end thereof, a clamp for attach-



ment to the front axle of another vehicle and provided with a socket to receive said lug, and another clamp to be attached to the steering rod of said other vehicle and provided with means to receive the rear end of said rod.

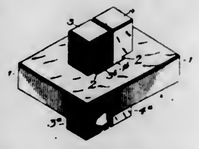
1,270,180. AGRICULTURAL IMPLEMENT. ROYAL L. MCCUNE, Vero, Fla. Filed Oct. 20, 1917. Serial No. 197,697. (Cl. 180—19.)



1. In an agricultural implement, the combination with the frame carrying said implement and having a caster wheel at its front and a driving wheel at its rear, and a motor mounted on said frame; of a countershaft journaled in the frame and connected with the driving wheel, a power clutch element fast on said shaft and driven by the motor, a driven clutch element splined on said shaft, yielding means holding it normally out of engagement with the power element, fast and loose wedges for sliding it into such engagement, a thumb-latch on one of the machine handles, and connections between said latch and the loose wedge.

2. In a motor driven agricultural implement whose driving wheel is connected with a counter-shaft, the combination with a power clutch element loose on said shaft and connected with the motor, a second clutch element splined on said shaft, yielding means between the elements for holding them normally out of engagement, a wedge fast on the frame, a second wedge having a slot slidably mounted on the counter-shaft between the first wedge and the hub of the driven clutch element, a spring drawing the movable wedge normally forward to permit the expansive spring to disengage said clutch elements, a thumb latch adjacent one of the machine handles, and a rod connecting the movable wedge with said thumb latch.

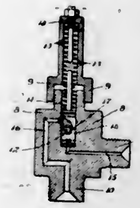
1,270,181. PUZZLE. AARON MCELVEEN, Stilson, Ga. Filed Nov. 20, 1917. Serial No. 203,000. (Cl. 46—41.)



2. A device of the character described, comprising a major member having an opening; and a plurality of minor members adapted to be received thereinto, said minor members having reduced sections between their ends and being formed of materials whose natural colors contrast with each other, one at least of said members being formed of resilient material, the opening of the major member being of a size to simultaneously receive the reduced portions only of the minor members.

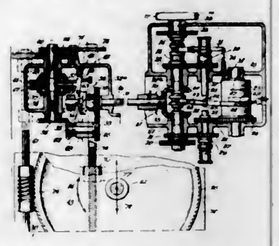
[Claims 1 and 3 not printed in the Gazette.]

1,270,182. FORCE-FEED LUBRICATING SYSTEM. ROBERT L. MCINTOSH, Chicago, Ill., assignor to McCord and Company, Chicago, Ill., a Corporation of New Jersey. Filed Jan. 2, 1913. Serial No. 739,608. (Cl. 184—36.)



The combination with a locomotive, of a lubricating system therefor, comprising an oil pump driven from the running parts of said locomotive, oil delivery conduits leading from said pump, and terminal valve mechanisms, each of which has one part for controlling the discharge of oil from its conduit to the corresponding cylinder and another part exposed to the pressure of the oil in the conduit, but cut off by said first-noted part, from materially effective back pressure from the cylinder, and yielding means operative to close said valve mechanism in opposition to a predetermined oil pressure that at least equals the maximum variable fluid back pressure from the cylinders, but permitting said valve mechanism to open under an oil pressure that exceeds said maximum predetermined pressure.

1,270,183. GEAR-CUTTING MACHINE. MAX MAAG, Zurich, Switzerland. Filed Aug. 2, 1916. Serial No. 112,714. (Cl. 90—9.)

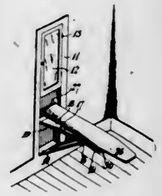


3. In a gear cutting machine working according to the rolling principle, in combination, a cutting tool, a tool holder, a support for the work piece, means for moving the tool holder, a main control-drum, an auxiliary control-drum, means adapted to impart a revolving movement and a longitudinal travel to the support for the work piece and actuate said main drum, the latter controlling thereby the direction of said movements, and means for transmitting the movement of the main drum to the auxiliary drum and adapted to rotate the latter in both directions, while the main drum is constantly rotating in the same direction, substantially as described.

9. In a gear-cutting machine working according to the rolling principle, in combination, a cutting tool, a tool holder, a support for the work piece, a main control-drum, an auxiliary control-drum, a shaft carrying the auxiliary drum and rigidly connected thereto, means for driving the drums, means adapted to so control the motion of the auxiliary drum by the main drum, that the auxiliary drum is rotated in two directions, while the main drum is constantly rotating in the same direction, a worm, a screw threaded shaft working together with a screw threaded part of said support, a gear adapted to transmit the motion of the shaft carrying the auxiliary drum to said screw threaded shaft, a second gear actuated by the last mentioned gear and driving said worm, said second gear comprising two bevel wheels and a planet bevel gear working together with these two bevel wheels, and a locking device controlled by the auxiliary drum acting together with the planet gear, the arresting of the latter causing a rotation of the worm, which is then held stationary as soon as the planet gear is released, substantially as described.

[Claims 1, 2, and 4 to 8 not printed in the Gazette.]

1,270,184. COMBINED TABLE AND IRONING-BOARD. WILLIAM E. MAGARRELL, Los Angeles, Cal., assignor to Always Ready Ironing Board Co., Los Angeles, Cal., a Corporation of California. Filed Oct. 10, 1916. Serial No. 124,913. (Cl. 45—51.)



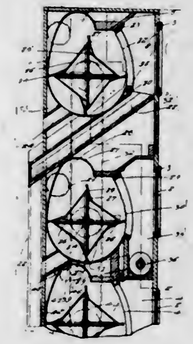
1. A combined ironing board and table comprising a casing having front slots and back slots formed therein at either side thereof; an ironing board having pins at either side of one end so located that they will slide in said back slots; a table having pins at either side thereof so located that they will slide in said front slots; an upper door closing the upper portion of the front of said casing; a lower door closing the lower portion of front of said casing; hinges connecting the bottom of said lower door with the lower portion of said casing; hinges connecting the top of said door with said table; and means by which said table supports said ironing board in its extended position.

6. A combined ironing board and table comprising a casing having front slots and back slots formed therein at either side thereof; an ironing board having pins at either side of one end so located that they will slide in said back slots; a table having pins at either side thereof so located that they will slide in said front slots; leaves folding over the top of said table when said table is folded into said casing; means for supporting said leaves in an extended position when said table is in an extended position; an upper door closing the upper portion of the front of said casing; a lower door closing the lower portion of front of said casing; hinges connecting the bottom of said lower door with the lower portion of said casing; hinges connecting the top of said door with said table; and a cross bar secured to the under side of said ironing board in such a position as to be engaged and supported by the outer edge of said table.

9. A household convenience comprising a cabinet adapted to be secured to a wall; a table of proper width to fold inside said cabinet; means for detachably securing one end of said table in said cabinet; leaves hinged to the side of said table; means for supporting said leaves in their extended position; means for supporting the other end of said table with relation to said cabinet; an ironing board of proper size to be contained entirely within said cabinet; and means by which said table supports said ironing board when it is extended.

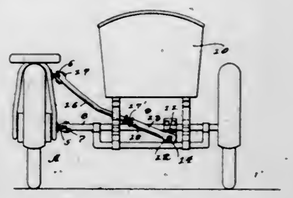
[Claims 2 to 5, 7, 8, and 10 not printed in the Gazette.]

1,270,185. SIFTING-MACHINE. WALTER F. MATTHES, Austin, Tex. Filed Nov. 14, 1916. Serial No. 131,246. (Cl. 83—50.)



A sifting machine comprising a casing having a door way formed in one wall thereof, a hanger secured within said casing from the top wall thereof, a longitudinally extending beam secured to the hanger, a metallic member having one end secured to the beam and being bent to form a receptacle having an offset portion and an opening, and an inlet pipe connected to the offset portion of the receptacle, a screen closing the opening of the receptacle and forming a receiving chamber between the same and the casing, an agitator journaled in the receptacle and adapted to receive crushed grain from the pipe to throw the same upwardly in the offset portion to mix it and later catch the grain falling from the offset portion and throw it against the screen, an inclined chute in said casing having its upper end disposed adjacent the lower edge of the screen and extending the entire width of the receiving chamber, and a second chute connected to the opening of the receptacle.

1,270,186. SHOCK-ABSORBING COUPLING. JOHN E. MERZ, Indianapolis, Ind. Filed Oct. 6, 1917. Serial No. 195,152. (Cl. 208—27.)



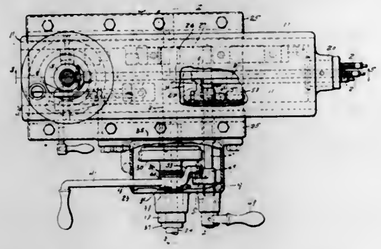
1. The combination with a motorcycle having a side car associated therewith, of a housing pivotally connected with the running gear of said side car, cushioning means within said housing, and a rod swingingly connected with the frame of said motorcycle and engaging said cushioning means.

2. The combination with a motorcycle having a side car associated therewith, of a clamp on the running gear of said car, a housing pivotally connected with said clamp, a rod pivotally connected with the frame of a motorcycle extending within said housing, and springs within said housing engaged therewith and with said rod.

3. In a device of the class described, a tubular housing, a guide within said housing, a nut adjustably mounted within an end of said housing, a rod slidably mounted in said nut and guide extending exteriorly of the housing, a collar on said rod within said housing, a spring on

said rod terminally engaged with said collar and guide, and a second spring on said rod terminally engaged with said collar and nut.

1,270,187. STOP MECHANISM FOR MACHINE-TOOL TURRETS. WILLIAM K. MILLHOLLAND, Indianapolis, Ind. Filed Mar. 6, 1917. Serial No. 152,582. (Cl. 29—65.)



1. In a turret bed for a lathe including a driving means secured thereon, a driving shaft, a worm slidably keyed on said shaft, a gear loosely mounted on said driving means in position to be engaged by said worm, a clutch keyed to said driving means in a position to engage said gear, and means for causing said clutch to engage said gear by means of which the drive of said turret will be controlled comprising a sleeve, cam teeth on one end thereof, a yoke movable and rotatable on said driving means, cam teeth on one end of the yoke for engagement with the cam teeth on the sleeve, a lever attached to the yoke for manually rotating the same, an arm attached to the opposite side of said yoke from the lever, and means engaging said arm for temporarily holding the yoke against rotation.

5. In a lathe having a turret bed slidably mounted thereon, means for driving said turret bed, a clutch mechanism on said driving means, a shaft having a projection thereon in position to release said clutch mechanism, a second shaft, means on the second shaft for partially rotating the first shaft, a projection on the second shaft, a stop screw in position to engage and operate said last projection to release said clutch whereby the forward movement of said turret bed will be arrested and means to manually lower said second projection out of the path of said stop screw, whereby additional forward movement of the turret table may be obtained.

10. In a lathe having a turret bed slidably mounted thereon, a shaft having a pinion in position to engage and drive said turret bed, a gear loosely mounted on said shaft and driven by a worm drive, a clutch keyed to said shaft in position to engage said gear, a handle having cam teeth thereon in position to engage the cam teeth on the bearing of said shaft for causing said clutch to engage said gear and drive said turret bed, an arm mounted on said collar, a second shaft having a projecting member secured thereon in position to engage said arm for holding said gear in engaged position and a stop screw adapted to cause said second mentioned shaft to turn whereby said projecting member will disengage said arm and release said clutch whereby the forward movement of said turret bed will be arrested.

[Claims 2 to 4 and 6 to 9 not printed in the Gazette.]

1,270,188. GAUZE-ROLLER. MARY LOUISE MOCHON, Lead, S. D. Filed Feb. 21, 1918. Serial No. 218,516. (Cl. 242—96.)

1. A gauze roller comprising a pair of handles each having one end enlarged and terminating into a circular head, which heads are each provided with a pair of relatively spaced inwardly extending bores, a pin removably carried by each head having one end fitted in one of the bores and the free ends of each pin adapted to be moved into the other bore of the adjacent handle, said circular enlargements permitting the handle to be rolled along a

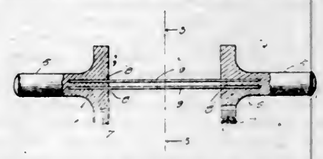
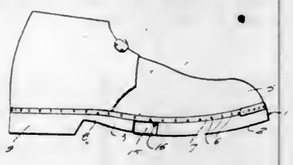


table top or other support, as and for the purpose specified.

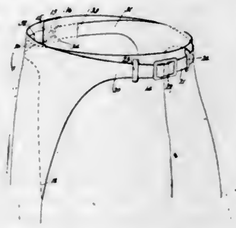
[Claim 2 not printed in the Gazette.]

1,270,189. FLEXIBLE WOODEN SHOE-SOLE. JOHN J. MOLLOY, Georgetown, Mass. Filed Sept. 11, 1917. Serial No. 190,771. (Cl. 36—33.)



A wooden sole for shoes comprising a tread portion, an instep and heel portion combined, a shoe upper secured to said portions for hingedly connecting the instep and tread portions together, said tread and instep portions having coöperating recesses upon the outer faces thereof, a protector plate disposed within said recesses and overlying the connection between said tread and instep portions, and right angled flanges formed upon the ends of the protector plate and secured to the tread portion.

1,270,190. TROUSERS. ISAAC L. MORRIS, White Plains, N. Y. Filed Jan. 15, 1918. Serial No. 211,937. (Cl. 2—143.)

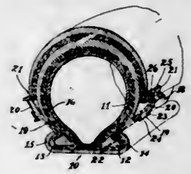


1. As an article of manufacture, trousers provided at the front with flies and having a back of unbroken continuity, the front and back having side portions, of which the side portions of the front overlie the side portions of the back thereby forming side slits, the front having openings at the flies, the front terminating in back straps connected with each other at the back of the trousers, the sides of the back terminating in front straps passing through the said openings in the flies and extending exteriorly across the same, and a fastening device detachably connecting the ends of the said front straps with each other.

[Claim 2 not printed in the Gazette.]

1,270,191. TIRE-TREAD FASTENER. LULAN S. MORSE, Oceanpark, Cal. Filed May 31, 1917. Serial No. 172,061. (Cl. 152—17.)

1. In a fastener for re-tread members, the combination with a pneumatic tire, of a re-tread adapted to be positioned thereover, fastening elements disposed at intervals along the marginal edges of the re-tread, plates forming part of said fastening elements and by which the re-tread is secured in position around the tire, and a pair of separate links of adjustable lengths connecting said re-tread with said plates whereby the re-tread may be adapted to tires of various sizes and may have circumferential movement in relation thereto.



2. A fastener for tire re-treads comprising an angle plate adapted to be fixed to the edge of the re-tread, a plate adapted to be detachably secured to the wheel upon which the tire is mounted, and a pair of link connecting members of adjustable lengths provided to secure the angle plate and the plate together in a flexible manner to secure the retread over tires of various sectional dimensions.

3. A fastener for tire re-treads, comprising an angle plate, one leg of which is secured to the side of said re-tread and the other leg of which extends outwardly from the tire, a plate detachably secured to the wheel upon which said tire is mounted, said plate having an out-turned flange corresponding to the out-turned leg of the angle plate, and connecting members mounted through the out-turned leg of the angle plate and adapted to be adjustably and yieldably connected to the up-turned flange of the plate to secure the re-tread upon tires of various sectional diameters.

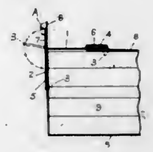
4. A fastener for re-treads comprising an angle plate, one leg of which is fixed to the outer face of a retread member and along one marginal edge thereof, the other leg extending outwardly from the retread and being formed with a pair of perforations spaced in relation to each other, semi-rigid connecting members positioned through said perforations and having heads which hold them in connection with the angle plate, and a plate having out-turned opposite ends, one of which is formed with perforations through which the ends of the connecting members may pass and be bent against removal, the opposite end being positioned in engagement with a clencher rim upon which a tire is mounted and over which the retread is positioned.

1,270,192. INVALID'S BED. RICHARD E. NEEDHAM, Youngstown, Ohio. Filed June 19, 1917. Serial No. 175,656. (Cl. 5—13.)



An invalid's bed, a mattress therefor and having an opening the wall of which flares upwardly, a plug, the circumference of which tapers to conform to the flaring wall in the mattress, a portion of the circumference of the plug having an annular recess, buttons secured in said recess, a cover fitted over the upper portion of the plug and having a series of sockets adapted to engage said buttons, the outer faces of the buttons being flush with the tapering circumference of the plug, and a handle secured to the outer end of the plug.

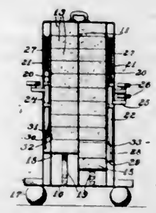
1,270,193. BAND-IRON CONNECTOR. LEON J. NELSON, Omaha, Nebr. Filed Jan. 22, 1916. Serial No. 73,668. (Cl. 24—23.)



5. A band-iron connector comprising an integral metal plate having a vertical portion and a horizontal portion joining the upper end of the vertical portion, the horizontal portion having means for securing thereto the end of a piece of band-iron and having a central slot adjoining the end of the vertical portion, a tongue coextensive laterally with said slot and extending continuously from the vertical portion above the plane of the horizontal portion, and the vertical portion having guiding means adapted to receive slidably a strip of band-iron extending alongside the same and said tongue and through said slot, whereby the strip may be tightened, clamped to said tongue and secured thereto by bending the same and the tongue simultaneously and while the strip is under tension.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,270,194. SUGAR-DISPENSING APPARATUS. OLAF NYBAK, Bashaw, Alberta, Canada. Filed Apr. 13, 1917. Serial No. 161,832. (Cl. 211—8.)

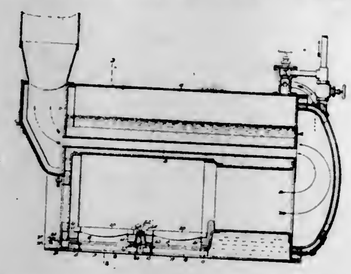


1. A sugar dispensing apparatus including a double-walled compartment, a pivoted bottom therefor, yieldable means normally holding the bottom horizontally for supporting a column of sugar units, a plunger operating in the space between said walls and coöperating with the bottom to tilt the latter when the plunger is depressed, thereby discharging the lowermost unit, one wall of the compartment having an opening, a plug normally disposed within the space between the walls and adapted to be engaged by said plunger at a predetermined interval to move said plug within the opening to support the columns of units while one of said units is being discharged, means for operating said plunger and automatically returning the same to normal position subsequent to each operation, and means for removing the plug from said opening on return of the plunger to normal position.

4. A sugar dispensing apparatus embodying a base, a double walled compartment mounted upon the base, a pivoted bottom for said compartment and spaced from said base, a manually operable member operating in the space between said walls and adapted when depressed to tilt said bottom to discharge the lowermost sugar unit therefrom, an element adapted to support the column of units immovably while the lowermost unit is being discharged, said element being directly engaged by the manually operable member and moved into active position when said member is depressed, and means for automatically separating the element from the said column with the return of said manually operable member to normal position.

[Claims 2 and 3 not printed in the Gazette.]

1,270,195. BOILER. ROBERTO FRITZ EMIL OKRASSA, Antigua, Guatemala. Original application filed July 28, 1916, Serial No. 111,845. Divided and this application filed Dec. 23, 1916. Serial No. 138,686. (Cl. 122—151.)

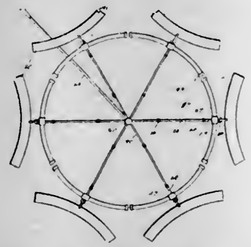


1. A boiler, comprising a shell, a tubular fire box, open annular frames, one behind the other and connecting the bottom of the fire box with the bottom of the said shell, the frames being spaced apart to form a transverse water channel and the shell and the fire box having openings in register with the openings in the said frames, and a hollow transversely extending reinforcing and grate-supporting member arranged above the space between the adjacent frames and having flanges attached to the opposite end members of said frames.

5. In a boiler, the combination of a shell, a fire box, longitudinal and transverse water channels between the bottom of the fire box and the bottom of the shell, and an agitating device in each of the said channels.

[Claims 2 to 4 not printed in the Gazette.]

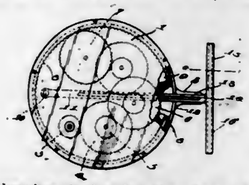
1,270,196. TIRE-HEATER. LOUIS M. PALMERO, Seguin, Tex. Filed July 24, 1917. Serial No. 182,533. (Cl. 263—5.)



In a tire heater of the class described, a pipe, means to supply a combustible mixture thereto, a series of burner pipes arranged for radial movement and having tire supporters and also each having a nipple, said first named pipe also having a series of nipples corresponding in number to the burner pipes, connecting pipes having elbows at their ends swivelly connected to the nipples of the first named pipes and the burner pipes, a standard, an element vertically movable on the standard, and connections between said elements and the burner pipes to simultaneously radially adjust the latter.

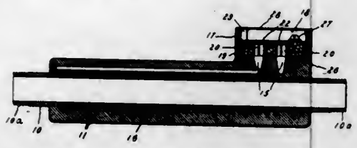
1,270,197. WINDOW-CLEANER. GEORGE A. PARKER, Linoleumville, N. Y. Filed Feb. 27, 1917. Serial No. 151,273. (Cl. 15—59.)

1. In a window cleaner of the class described, the combination with a substantially cylindrical casing having an ear projecting from one side and an opening in its wall adjacent said ear, a pin carried by the ear, a wheel rotatably mounted within the casing and having a wrist pin, and means for driving this wheel; of an arm pivoted at one end on the wrist pin and extending through said opening in the casing, its body being slotted and the slot standing astride said pin, and a cross bar at the outer end of said arm carrying a wiper, for the purpose set forth.



2. In a cleaning device for the glass of wind shields on automobiles, the combination with a casing having an ear on one side provided with a pin, the casing adapted for attachment to the frame of the wind shield with the ear overlying the outer face of its glass, a driving wheel rotatably mounted within said casing and having a wrist pin, a power gear within said casing, and a train of gears connecting the power gear with the driving wheel so as to reduce the speed of rotation of the latter; of means adapted to be connected with a rapidly rotating part of the machine for driving said power gear, an arm pivoted at one end on said wrist pin and having a slotted body slidably mounted over the pin in the ear, and a glass-wiper carried by the other end of the arm.

1,270,198. ELECTRIC WATER-HEATER. LEON F. PARKHURST, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 23, 1916. Serial No. 133,071. (Cl. 219—64.)



1. The method of making an electric heating device comprising sheathed wire formed with a resistance core inclosed in a metal sheath with an intervening layer of insulating material, which consists in winding the sheathed wire on a metal tube and then casting a metal jacket around the sheathed wire and the tube.

2. An electric heating device comprising a cast metal tube having therein a passage for water, a sheathed resistance unit cast directly in the metal tube, said tube being in good thermal relation with the unit and the water flowing through the passage.

4. An electric heating device comprising a metal tube surrounded by a sheathed resistance wire formed of a core wire inclosed in a metal sheath with an intervening layer of insulating material, and a jacket composed of a material having a lower melting point than said tube cast around the tube and the sheathed wire.

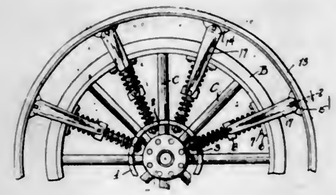
6. An electric heating device comprising a copper tube surrounded by a sheathed resistance wire comprising a core wire inclosed in a metal sheath with an intervening layer of insulating material, and a jacket of aluminum cast around the tube and the sheathed wire.

8. An electric heating device comprising a metal tube, a sheathed wire having a core wire inclosed in a metal sheath with an intervening layer of insulating material, and a metal jacket cast around the tube and the sheathed wire, the casting being provided with an integral housing for the terminals of the sheathed wire.

[Claims 3, 5, and 7 not printed in the Gazette.]

1,270,199. SPRING-WHEEL. ANDREW PERNULA, Oneida, Wash. Filed Mar. 15, 1916. Serial No. 84,405. (Cl. 152—28.)

In combination with a wheel having a hub, felly and spokes, a rim surrounding and spaced apart from the felly, a plurality of radially extending guide rods fixed to the felly between the said spokes, the ends of the guide rods being extended through the space between the spokes and terminating in close proximity to the hub, resilient means mounted on the guide rods and connected to the said rim to support the said rim, said means including springs coiled about the said rods, and a ring provided



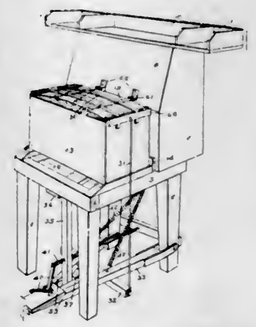
with a plurality of circumferentially spaced openings, the said openings each adapted to receive one of the said spokes, the said ring also having a plurality of apertures arranged between the said openings for the spokes to receive the ends of the said guide rods and nuts mounted upon the guide rods and engageable with the inner surface of the said ring.

1,270,200. AIRSHIP. CHARLIE PETERSON, Florence, Wis., assignor of one-fourth to Harvey Bowman, Florence, Wis., and one-fourth to Charles Erieson, Commonwealth, Wis. Filed June 15, 1917. Serial No. 174,948. (Cl. 244—2.)



An air-ship having a pontoon below the same to float the air-ship on water, said pontoon having compressed air receiving chambers in its ends and a gasolene storage chamber between said compressed air receiving chambers, and a tube extending through the gasolene receiving chamber and connecting the compressed air receiving chambers, and compressed air operated shock absorbing devices having pneumatic connection with said compressed air receiving chambers.

1,270,201. BOX-PRESS. HENRY E. PETERSON, Seattle, Wash. Filed Aug. 20, 1917. Serial No. 187,248. (Cl. 100—57.)



1. A box press comprising a support having a shelf adapted to hold a box, a press frame secured to said support by yielding pivots, and means for exerting a downward pull on the opposite ends of said press frame at substantially medial points.

2. A box press comprising a support having an upwardly extending rear portion and a shelf adapted to hold a box, springs rigidly secured at one end to said rear portion, a press frame articulated with the free ends of said springs to form yielding pivots, and means for exerting a downward pull on the opposite ends of said press frame at substantially medial points whereby said press frame will automatically adjust itself to fit the top of a box.

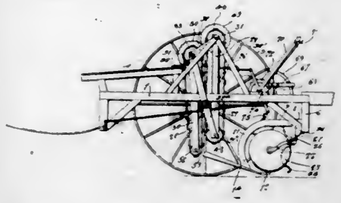
5. A press of the class described comprising a support having a shelf adapted to hold a box, a press frame secured to said support by yielding pivots said press frame having two longitudinally extending spring members that extend lengthwise of the cover boards of a box, and means for exerting a downward pull in the opposite ends of said press frame at substantially medial points.

7. A press of the class described comprising a supporting frame having a shelf adapted to receive a fruit box, a foot lever on the bottom of said supporting frame, rods extending upwardly from said foot lever on opposite sides of said frame and a press frame hinged by a yielding joint to said supporting frame and connected to said rods whereby it may be turned from an upright into a horizontal position, said press frame comprising longitudinally extending flat resilient members, cross bars on the ends of said members, springs associated with said cross bars, and stop means on said frame and co-acting with said springs to hold box cover boards and end cleats.

9. A box press comprising a support having a shelf adapted to hold a box, a press frame pivoted on said support and adapted to be lowered onto the top of a box, a foot lever pivoted on said support, rods articulated with the ends of said press frame and connected with said foot lever, means to normally raise said foot lever, a stop on said support, a brace arm pivoted on said foot lever and engageable with said stop to hold said foot lever in a depressed position, a spring to normally hold said brace arm out of engagement with said stop, a bell crank lever on said foot lever and a spring connecting said bell crank lever with said brace arm, said last named spring being strong enough to overcome the force of said first named spring and raise said brace arm when said bell crank lever is depressed.

[Claims 3, 4, 6, and 8 not printed in the Gazette.]

1,270,202. PEANUT-HARVESTER. PRESTON D. PHILLIPS, Bullard, Tex., assignor of one-half to Herbert L. Phillips, Washington, D. C. Filed Apr. 21, 1916. Serial No. 92,674. (Cl. 55—51.)



1. In a peanut harvester, the combination of an uprooting blade, a carrier carried by said blade for receiving plants therefrom, a pair of pivotally hung vertical elevators for receiving plants from said carrier, a hand lever, and means connecting said hand lever to said uprooting blade and said elevators for moving said elevators upon movement of said blade and carrier for positioning them in proper relation to the carrier.

5. In a peanut harvester, the combination of a supporting frame, a beam pivotally connected to said supporting frame, an uprooting blade carried by the lower free end of said beam, a plurality of colters detachably supported by said beam, and a pair of resilient vine guiding fingers supported by said supporting frame forwardly of said colters, and flexible means connecting said guiding fin

gers to said beam for moving the fingers synchronously with the movement of the beam.

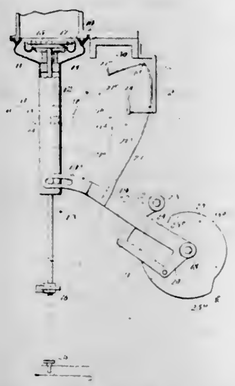
6. In a peanut harvester, the combination of an uprooting blade, a pivotally hung elevating means for receiving plants from said uprooting blade, means for adjusting the position if said blade and for moving the elevator upon movement of the blade, for positioning the elevator in proper plant receiving relation to the blade.

7. In a peanut harvester, the combination of a pivotally mounted supporting beam, an uprooting blade carried by said beam, pivotally hung elevating means for receiving plants from said blade, means for pivotally moving said beam to adjust the position of said blade, and means connecting said beam moving means and said elevating means for moving the elevating means upon movement of the blade for positioning the elevating means in proper relation to the blade.

8. In a peanut harvester, the combination of a supporting structure, a beam pivotally connected to said supporting structure, an uprooting blade connected to the lower end of said beam, pivotally hung elevating means for receiving plants from said blade, a hand lever, a bar connected to said hand lever, an adjustable rod connected to said beam, an adjustable rod connecting said bar to said elevating means whereby said elevating means and beam will be moved in unison by said hand lever for positioning said elevating means in proper relation to said blade at different adjusted positions of the blade.

[Claims 2 to 4. 9, and 10 not printed in the Gazette.]

1,270,203. AUTOMATIC PHOTOGRAPHIC APPARATUS. GEORGE N. PIPER, Cleveland, Ohio, assignor, by mesne assignments, to T. E. Stewart, trustee, Cleveland, Ohio. Filed June 30, 1916. Serial No. 106,741. (Cl. 95—89.)



1. In an automatic photographing apparatus, a camera box in which a photographic plate is adapted to be exposed, a finishing cup arranged adjacent the camera box and adapted to receive the plate after exposure, means for causing a relative movement between the cup and plate, and an ejector exterior to the cup for moving the plate away from the cup after such relative movement.

3. In an automatic photographing apparatus, a camera box in which a photographic plate is adapted to be exposed, a cup adjacent the camera box and adapted to receive the plate after the exposure, means for causing the cup and the plate to move away from the camera box and for causing a relative movement between the cup and plate whereby the plate is temporarily positioned above the cup, and an ejector exterior to the cup for moving the plate away from the cup.

6. In an automatic photographing apparatus, a receptacle for a photographic plate, means for moving the receptacle, and for causing relative movement between the receptacle and plate, means comprising a spring for moving the plate away from the receptacle, and means whereby energy is stored in the spring by said movement of the plate and receptacle, and whereby the spring is released by said relative movement between the plate and receptacle.

[Claims 2, 4, and 5 not printed in the Gazette.]

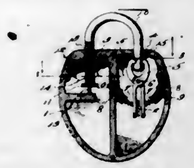
1,270,204. HORSESHOEING-STOOL. CLIFTON PINEGAR, Steprock, Ark. Filed Oct. 5, 1917. Serial No. 194,900. (Cl. 168—44.)



1. A device of the character described including a base, a perpendicular standard thereon and provided adjacent its upper edge with a series of teeth, a frame slidably mounted on the standard, a dog pivotally mounted on the frame and engageable with any one of the teeth, a weighted handle for operating the dog, opposed hoof-clamping members pivotally mounted on opposite sides of the frame, a coil-spring having one end rigidly secured to one of the clamping members and the other end movable through the other clamping member, and means for adjustably regulating the tension of the spring.

[Claim 2 not printed in the Gazette.]

1,270,205. PADLOCK. GYORGY PONGRACZ, Ohley, W. Va. Filed Jan. 12, 1918. Serial No. 211,664. (Cl. 70—108.)



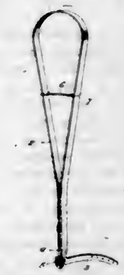
A lock comprising a casing having a key opening, a shackle movably mounted in the casing and having ends located in the paths of movement of the grippers and provided at the opposite sides of one end with notches, gripper members pivoted upon a single pivot and located within the casing and having end portions lying at the opposite sides of the key opening, curved pins mounted upon the gripper members, longitudinally curved tubes located in the casing, the curvature of the pins and the tubes being on arcs struck from the center of the pivot bolt of the gripper members and springs bearing at their inner ends against the gripper members and at their outer ends against the casing said springs surrounding the pins and having end portions housed within the tubes.

1,270,206. DETACHABLE HANDLE. ISAAC C. POPPER, New York, N. Y. Filed Nov. 2, 1917. Serial No. 199,879. (Cl. 65—32.)



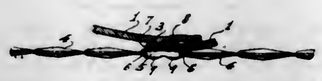
As an article of manufacture, a detachable handle comprising two members pivoted together, one terminating in a hook which conforms to and embraces the upper and inner beaded edge of the article to be held, and the other member terminating in two jaws, which approximately cross or intersect the hook and terminate in abrupt ends adjacent to the end of the hook and a distance therefrom approximately equivalent to the thickness of the metal in the utensil, and made to engage and fulcrum upon the outer surface of the utensil at a point adjacent to the bead and within the compass of the hook, whereby bearing is had not only upon the bead but upon the adjacent outer surface of the utensil so that a rigid grip is provided upon the article to be held when one or both handles are grasped.

1,270,207. SUSPENSION DEVICE FOR UMBRELLAS AND THE LIKE. AGNES A. PRESTON, Brooklyn, N. Y. Filed Jan. 25, 1917. Serial No. 144,433. (Cl. 224—28.)



A support for carrying an umbrella comprising a strap formed into a loop with a portion beyond the loop formed into a cross strap held at a point intermediate its ends by the end of the loop and extending at right angles to the loop, the ends of the strap forming the loop being held together and the cross strap and loop held in fixed relation to each other by a single permanent union.

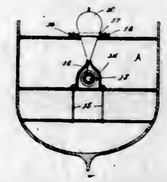
1,270,208. CENTER ATTACHMENT FOR CHAINS. JOHN A. PRYOR, East Orange, N. J. Filed Mar. 1, 1917. Serial No. 151,680. (Cl. 63—22.)



A pocket-to-pocket vest watch chain comprising a series of interconnected links, a center attachment device having an outwardly presented face provided with ornamental characteristics, an eye-member connected with each end of said center attachment device whereby the same may be connected in said chain by and between a pair of intermediate links thereof, and means on the back of said center attachment device adapted to engage and clasp the same to the marginal edge of the overlapping panel of a vest with which said chain is worn, the same comprising a hook-portion secured to and extending outwardly from the back of said center attachment device, the free end of said hook-portion extending longitudinally of said center-attachment device, and being spaced slightly away from the rear surface thereof to receive the vest edge between the said hook-portion and said center attachment device.

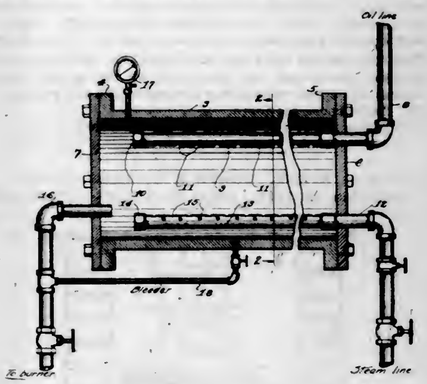
1,270,209. MEANS FOR LOCATING SUNKEN VESSELS. JOHN A. PUTNAM, Hardin, Mont. Filed Sept. 12, 1917. Serial No. 191,069. (Cl. 9—9.)

1. Means for indicating the position of a sunken vessel, said vessel having an opening for the reception of said buoy, an annulus surrounding said opening and constituting a seat for said buoy, comprising an air-tight buoy, means carried by said annulus for holding said buoy seated thereon, and a cable having one end fixed, and its opposite end secured to the buoy whereby the latter assumes a position upon the surface of the water subsequent to the release of the buoy from the vessel.



2. Means for indicating the position of a sunken vessel, comprising an air-tight buoy, a vessel having an opening for the reception of said buoy, an annulus surrounding said opening and constituting a seat for said buoy, means carried by said annulus for holding said buoy seated thereon, a casing mounted upon the vessel beneath said opening, a drum journaled within the casing, and a cable wound about said drum and having one end extended through a restricted opening in the casing and secured to said buoy, whereby said cable is unwound from the drum subsequent to the release of the buoy from the vessel.

1,270,210. CRUDE-OIL EXPANDER. SEBASTIAN H. RAMELLI, Los Angeles, Cal. Filed May 11, 1917. Serial No. 167,899. (Cl. 158—36.)



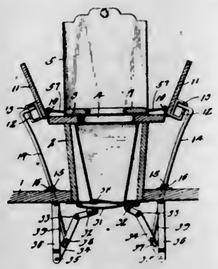
1. In an oil expander, an expansion chamber, an oil spray conduit in the upper part of said chamber, a steam spray conduit disposed below said oil spray having perforations directing steam upwardly, and a discharge outlet for feeding the expanded oil to a burner.

[Claim 2 not printed in the Gazette.]

1,270,211. TOILET FOR RAILWAY-CARS. PETER F. REILLY, Briarcliff Manor, N. Y. Filed Feb. 17, 1917. Serial No. 149,281. (Cl. 4—17.)

1. In a dry closet, the combination with an upright bowl whose lower end registers with a hole in the floor, a top overlying the upper end of said bowl and having an opening therein, an upper door hinged at its outer edge to said top and adapted to swing downward over the opening therein, and a lower door hinged at its outer edge beneath said floor and adapted when swung upward to close the opening therein; of a movable platform overlying the floor forward of said bowl, a rock shaft mounted in bearings on said floor and having a crank connected with such

platform, and arms rising from and depending from said rock shaft and connected with the upper and lower doors respectively whereby depression of the platform will rock the shaft and swing the upper door open and the lower door simultaneously closed, for the purpose set forth.

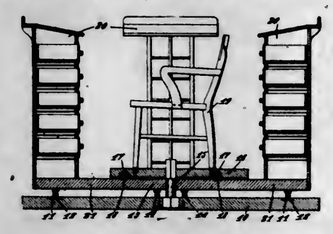


2. In a closet of the class described, the combination with an upright bowl, a top plate thereon having an opening, a seat hinged on a transverse line across the rear of said top and itself having an opening, and a spring for normally raising said seat; of a pair of doors hinged along their outer edges to the side edges of said top and adapted when open to permit the descent of said seat and when closed to contact at their inner edges, and means for swinging said doors.

8. In a dry closet, the combination with a supporting floor having an opening, and a bowl mounted on said floor and registering with the opening therein; of a pair of doors hinged along their outer edges to the bottom of said floor on opposite sides of its opening, one door being transversely curved and the other of skeleton formation, and operating mechanism for swinging said doors open so that the curved door moves slightly in advance of the skeleton door and the free edge of the latter scrapes across the upper face of the former in the act of opening, for the purpose set forth.

[Claims 3 to 7 not printed in the Gazette.]

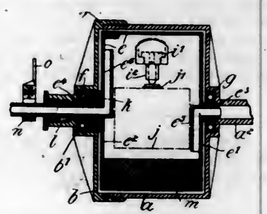
1,270,212. STAND. JOSEPH S. RICHESON, Oronoco, Va. Filed Jan. 24, 1917. Serial No. 144,231. (Cl. 45—26.)



A structure of the character described comprising a base, a standard extending from said base and constituting a pivot pin, a platform mounted upon the upper portion of said standard and held against rotation thereon, a turn-table rotatably mounted upon said pivot pin between said base and platform, anti-friction means carried by said platform and engaging the upper face of said turn-table, anti-friction means carried by said turn-table and engaging said base, a support mounted upon said platform, and cabinets carried by said turn-table for moving about said platform when said turn-table rotates upon the pivot pin.

1,270,213. FLOAT-RESERVOIR FOR CARBURETERS. GEORGES ROESCH, Paris, France. Filed June 29, 1917. Serial No. 177,730. (Cl. 137—104.)

1. A fuel reservoir for carbureters comprising a casing, a receptacle pivotally mounted in the casing and counterweighted to be maintained in an upright position therein, a fuel inlet connection to the casing, means for admitting fuel from the casing to the receptacle and maintaining a constant fuel level therein, and a fuel outlet connection from the said receptacle.

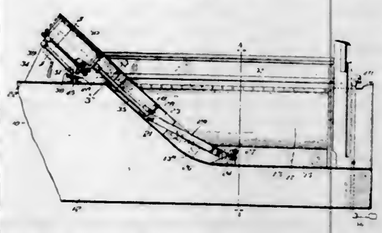


2. A fuel reservoir for carbureters comprising a casing, a receptacle pivotally mounted in the casing and counterweighted to be maintained in an upright position therein, a fuel inlet connection to the casing, means for admitting fuel from the casing to the receptacle and maintaining a constant fuel level therein, a fuel outlet connection from the said receptacle, and means for making communication between the interior of the receptacle and the amosphere.

3. A fuel reservoir for carbureters comprising a casing, a fuel receptacle within the same, a fuel inlet connection in the casing, a valve operating in the walls of the receptacle for controlling the admission of fuel thereto from the casing, a lever pivotally mounted within the receptacle, a float carried by said lever and adapted through the same to control the said valve to maintain a constant level of the fuel within the receptacle, a pipe connection at one side of the receptacle extending approximately to the bottom thereof and by which the receptacle at this side is pivotally mounted in the casing, the said pipe connection being a fuel outlet, a pipe connection at the opposite side of the receptacle extending approximately to the top thereof and by which the said receptacle is pivotally connected at its opposite side in the said casing, the last aforesaid pipe connection making communication between the interior of the receptacle and the atmosphere, and a counter-weight by means of which the receptacle is maintained in an upright position within the casing.

[Claims 3 and 4 not printed in the Gazette.]

1,270,214. LOCOMOTIVE-TENDER. EDWARD RYAN, Chicago, Ill., assignor to Locomotive Stoker Company, Pittsburgh, Pa., a Corporation of Pennsylvania. Filed Oct. 11, 1916. Serial No. 125,118. (Cl. 105—260.)



1. In a locomotive tender, in combination, a fuel bin having a floor, a slope sheet at the back of the bin and terminating above the floor, a fuel pusher reciprocable over the floor, a motor back of the slope sheet, and connection btween the motor and pusher.

2. In a locomotive tender, in combination, a fuel bin having a floor, a slope sheet at the back of the bin, a fuel pusher reciprocable over the floor, a motor back of and covered by the slope sheet and axially parallel therewith, and connection between the motor and pusher.

3. In a locomotive tender, in combination, a fuel bin having a floor, a slope sheet at the back of the bin, a fuel pusher reciprocable over the floor, a motor back of the slope sheet and axially parallel therewith, connection between the motor and pusher, means for controlling the motor, and adapted to normally stop the motor at the completion of its advance stroke.

4. In a locomotive tender, in combination, a fuel bin having a floor, a slope sheet at the back of the bin, a fuel pusher reciprocable over the floor, a motor back of the slope sheet and axially parallel therewith, connection between the motor and pusher, means for controlling the motor and comprising a valve movable under the influence of the motive fluid for causing the advance stroke of the motor.

5. In a locomotive tender, in combination, a fuel bin having a floor, a slope sheet at the back of the bin, a fuel pusher reciprocable over the floor, a motor back of the slope sheet and axially parallel therewith, connection between the motor and pusher, means for controlling the motor and comprising a manually controlled tubular valve reciprocable therein, a hollow laterally ported valve stem reciprocable in the fluid service pipe and opening through the valve.

[Claims 6 to 12 not printed in the Gazette.]

1,270,215. OILING DEVICE FOR TROMBONE-SLIDES. ANTHONY D. SANUY and CHARLES ENGELBERT, Fort Totten, N. Y. Filed June 1, 1917. Serial No. 172,144. (Cl. 84—8.)



1. The combination with the tubes of a trombone and the slide mounted thereon, of transverse hollow braces connecting the inner ends of the arms of the slide, one of said braces being arranged to contain a supply of oil, and the other brace having communication with the interior of the slide, said braces being connected at their intermediate portions and formed with a communicating oil opening, a valve seated in the opening, and means carried by one of the braces for actuating the valve.

[Claim 2 not printed in the Gazette.]

1,270,216. CLEANING DEVICE. CECIL L. SAUNDERS, Ithaca, N. Y. Filed Apr. 8, 1918. Serial No. 227,301. (Cl. 13—7.)



1. The combination with a moving perforated surface and means for producing suction therethrough, of a perforated stripping-plate arranged in proximity and conforming to said perforated surface, and means moving relatively to the perforated surface for pressing the material to be cleaned against the perforated plate.

6. The combination with a moving perforated surface and means for producing suction therethrough, of a device having spaced edges arranged in proximity to the perforated surface, and means moving relatively to the perforated surface constructed and arranged to press the material to be cleaned against the spaced-edge device and to remove therefrom the material held back by the edges.

11. The combination with a rotatable perforated cylinder and means for producing suction therethrough, of a perforated stripping-plate arranged in proximity to and conforming to the contour of said cylinder, a belt constructed and arranged to move relatively to the perforated surface for pressing the material to be cleaned against the perforated stripping-plate, and means for mechanically removing the lint cotton from the perforated surface.

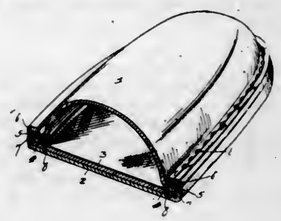
[Claims 2 to 5, 7 to 10, and 12 not printed in the Gazette.]

1,270,217. FOUNTAIN SCRUBBING-BRUSH. ERNEST E. SCHLAVIN, Wrenshall, Minn. Filed Sept. 26, 1917. Serial No. 193,241. (Cl. 15—51.)



A fountain scrubbing brush including brush means, liquid containing means mounted thereabove, valve means between the container and brush means for controlling the flow of liquid to the brush means, a cross head for adjusting the valve means and having openings therein, a tubular handle connected to the brush means and provided with openings, a sectional knob on the handle provided with openings, a pair of handle levers pivotally mounted in the knob and having their outer handle portions arranged through the openings of the knob, guide eyes mounted on the brush means beneath the valve handle, and cables arranged in the tubular handle and having their upper ends connected to the inner ends of the handle levers and their lower portions trained through the openings in the main handle and the guide eyes and connected to the openings in the wing-like handle.

1,270,218. SHOE. JACOB N. SCHWANDER, Baltimore, Md., assignor to John J. MacMaster, Rochester, N. Y. Filed Dec. 26, 1917. Serial No. 208,752. (Cl. 36—16.)



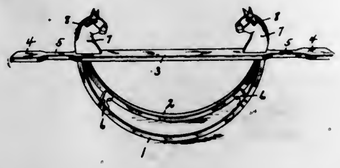
1. A shoe having an outer sole and a vamp, both having reflexed margins, a row of stitches passing through and uniting said reflexed margins, and a second row of stitches passing through and uniting the outer sole and one of said reflexed margins and the vamp, within the edge of the other of said reflexed margins.

3. A shoe having an outer sole and a vamp, both having reflexed margins, a row of stitches passing through and uniting said reflexed margins, an inner sole located between the outer sole and the reflexed margin thereof, and a second row of stitches passing through and uniting the outer and inner soles, the reflexed margin of the former and the vamp, within the edge of the reflexed margin of the vamp.

5. A shoe having an outer sole and a vamp, the margins of which are reflexed, with the inner edge of the former extending beyond that of the latter, a row of stitches passing through and uniting said reflexed margins, and an inner row of stitches passing through and uniting the vamp with the reflexed margin of the outer sole, within the edge of the reflexed margin of the vamp and maintaining the portion of the vamp between said row of stitches in position to form a bead or shed to house the reflexed margin of the vamp.

[Claims 2, 4, and 6 to 8 not printed in the Gazette.]

1,270,219. TEETER. WILLIAM TEFFT SCHWARZ, Syracuse, N. Y., assignor to Mabel L. Schwarz, Syracuse, N. Y. Filed Jan. 29, 1918. Serial No. 214,282. (Cl. 46—22.)



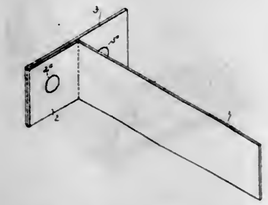
1. A teeter comprising an arcuate supporting member, and a teeter board secured thereto and extending across the supporting member and beyond the same at both ends to form seats beyond the termination of the opposite ends of the arcuate supporting member.

2. A teeter of rigid, unitary, self-contained structure comprising an arcuate supporting member, and a teeter board secured to and extending diametrically of the supporting member and projecting beyond the supporting member at both ends to form seats beyond the termination of the opposite ends of the supporting member.

3. A teeter comprising an arcuate supporting member, and a teeter board secured thereto and extending across the supporting member and beyond the same at both ends to form seats beyond the termination of the opposite ends of the arcuate supporting member, and handle bars carried by the teeter ~~board and positioned~~ adjacent the seat portions thereof.

[Claims 4 to 8 not printed in the Gazette.]

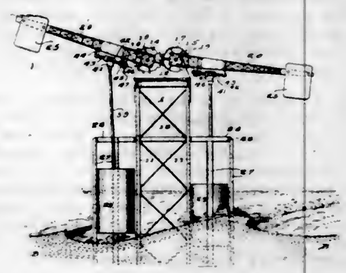
1,270,220. ADVERTISING DEVICE. GEORGE S. SHAAK, Avon, Pa. Filed Jan. 16, 1918. Serial No. 212,085. (Cl. 88—29.)



A device of the character described formed from a continuous piece of material bent to provide a stem, an arm disposed at right angles thereto and projecting to one side of said stem, the material being then folded back upon itself to provide a second arm disposed in parallel relation with the first arm and projecting to the other side of the stem a distance corresponding to the length of said first arm.

1,270,221. POWER-GENERATING APPARATUS. WILLIAM P. SHADE, Hollidaysburg, Pa. Filed Oct. 13, 1917. Serial No. 196,489. (Cl. 253—11.)

1. In a device of the class described, a pair of drive shafts, a plurality of arms through which said shafts are passed, a ratchet connection between said drive shafts and arms, weights on said arms, vertically movable floats beneath said arms, stems pivotally connected with said floats and extending above the same, internally threaded sleeves carried by said stems, threaded shafts passing through said sleeves mounted to turn on said arms, and means operable to turn said threaded shafts.

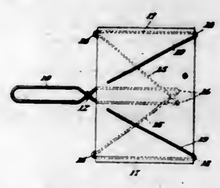


2. In a device of the class described, a float comprising a casing having a ballast compartment therein, a stem extending within said casing connected therewith above said compartment, and resilient members extending radially from said stem and connected with said casing.

3. In a device of the class described, drive shafts, means operable to turn said shafts in one direction, open topped cylindrical bodies mounted to reciprocate beneath said means, stems extending above the tops of said bodies pivotally connected therewith, means for yieldably holding said stems in axial alinement with said bodies, and sleeves swingingly connected with said stems slidably connected with said means.

[Claim 4 not printed in the Gazette.]

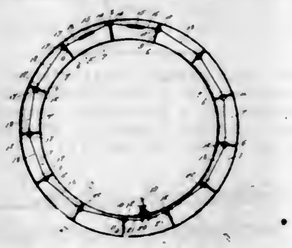
1,270,222. FLYCATCHER. CLIFFORD SHATALBOE, Indianapolis, Ind. Filed Sept. 28, 1917. Serial No. 193,783. (Cl. 43—1.)



In a device of the class described, a handle portion of wire or the like including a plurality of prongs the ends of which are bent to form wings for supporting a sheet of adhesive paper, the prongs being first deflected at an angle with each other and in opposite directions, then deflected upwardly from the plane of the wings proper, then deflected longitudinally with reference to the prongs, and finally deflected at an acute angle with reference to said prongs, and to a point adjacent the shank portions of the prongs, and barbs carried by the ends of said deflected members and projecting in a direction opposite to the aforesaid upwardly turned portions, whereby a sheet of paper is engaged on opposite edges and on both sides by the deflected elements and is retained against movement in all directions.

1,270,223. INNER TUBE. VLADIMIR SHAVITCH, Carmel, Cal. Filed Aug. 10, 1917. Serial No. 185,535. (Cl. 152—22.)

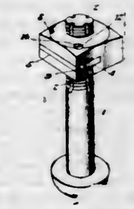
2. A pneumatic tube having spaced inner partitions dividing the said tube into a plurality of air compartments, each of said compartments having an opening, a metallic flange collar in the opening, a valve having a stem passing through the collar, a compressible element upon the inner face of the valve, helical springs secured to the opposite walls of one of the compartments, a flexible connection between the springs and the valves adjacent thereto, a flexible connection between the remaining valves,



an air inlet valve in one of the compartments, a spring pressed plunger passing through the valve and connected to the flexible element of the valves in the said compartment.

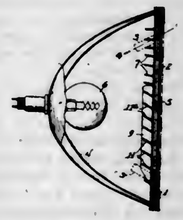
[Claim 1 not printed in the Gazette.]

1,270,224. NUT-LOCK. MILLARD F. SHUYLER, St. Louis, Mo., assignor of one-half to Thomas F. Maguire, St. Louis, Mo. Filed Mar. 2, 1917. Serial No. 152,082. (Cl. 151—5.)



In combination with a bolt having its shank provided with longitudinally extending right angularly disposed grooves, and a nut for the bolt, of a locking plate having both of its ends widened and one of its widened ends pivotally connected with the nut, its other widened end terminating in an inturned tooth which is adapted to engage in one of the grooves of the bolt and the inner edge of the plate adapted to frictionally contact with the shank of the bolt when the said tooth is in such engaging position, and means comprising a threaded element for locking the plate upon the nut in bolt-engaging position.

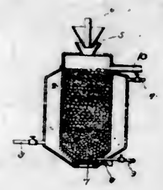
1,270,225. ANTIGLARE ATTACHMENT FOR HEADLIGHTS. ROBERT L. SLONAKER, Wheeling, W. Va. Filed Nov. 2, 1917. Serial No. 199,945. (Cl. 240—48.4.)



1. An anti-glare attachment for headlights, composed of a single sheet-metal blank and comprising two concentric circular rings, the outer of said rings constituting a rim adapted for seating adjacent to the outer edge of the headlight glass, and the inner of said rings defining a central opening in the axial line of the headlight, a plurality of horizontal louvers struck up from said blank and occupying the entire field above the uppermost portion of said inner ring, and a plurality of vertically disposed louvers struck up from said blank and extending from the lowermost of said horizontal louvers to said rim, the louvers at opposite sides of the inner ring being inclined in opposite directions.

[Claims 2 to 6 not printed in the Gazette.]

1,270,226. PROCESS OF MAKING ALUMINUM CHLORID. DILLON F. SMITH and HARRY ESSEX, Pittsburgh, Pa., assignors to Gulf Refining Company, Pittsburgh, Pa., a Corporation of Texas. Filed June 22, 1917. Serial No. 176,325. (Cl. 23—13.)



2. The process of making aluminum chlorid which comprises subjecting material containing alumina to the action of carbon in amounts sufficient to reduce said alumina and form aluminum carbid in an electric furnace until a crude reaction mixture containing aluminum carbid and dissociated aluminum carbid is produced, subjecting such reaction mixture to the action of a gas comprising chlorin at a temperature at which action will take place and aluminum chlorid will vaporize and condensing and recovering the vapors produced.

9. The method of making aluminum chlorid which comprises reacting with a solid charge comprising aluminum carbid with a gas comprising chlorin while maintaining such charge at the reaction temperature by means of the heat generated in the reaction.

10. The method of making aluminum chlorid which comprises reacting with a solid charge comprising aluminum carbid, carbon and alumina with chlorin while maintaining such charge at the reaction temperature by means of the heat generated in the reaction of the carbid and the chlorin.

14. The process of making aluminum chlorid which comprises reacting with chlorin upon a charge mixture containing sufficient aluminum carbid to permit the reaction to go forward without supply of heat.

18. In the manufacture of aluminum chlorid, the process which comprises passing chlorin over crude aluminum carbid under cooling conditions.

[Claims 1, 3 to 8, 11 to 13, and 15 to 17 not printed in the Gazette.]

1,270,227. STORM-WINDOW. GEORGE B. SMITH, New Canaan, Conn. Filed June 2, 1916. Serial No. 101,870. (Cl. 20—40.5.)



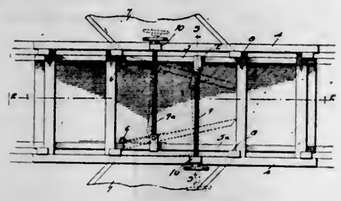
2. In a device of the class described, a frame for connection with a support having an open front and back, a

foldable hood pivotally connected with said frame, and a swingingly mounted sash spaced from the front of said hood.

3. In a device of the class described, a frame for connection with a support having an open front and back, a foldable hood within said frame pivotally connected therewith, a sash frame within said hood adjacent the front thereof, and a sash spaced from the front of said frame and hingedly connected therewith.

[Claims 1 and 4 not printed in the Gazette.]

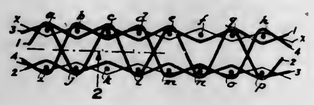
1,270,228. HEAD-GATE. SAMUEL WASHINGTON SMITH, Cedarville, Cal. Filed Mar. 16, 1918. Serial No. 222,905. (Cl. 61—46.)



2. A device of the character described, comprising in combination with the trough having lateral openings, of gates for closing the openings and hinged to the trough at the downstream side of the openings, and independent means for opening and closing each gate and for holding it in adjusted position, said means comprising a threaded rod for each gate and connected to the gate at one end, and a nut on the trough through which the rod passes.

[Claim 1 not printed in the Gazette.]

1,270,229. PILE FABRIC. JOHN W. SOHN, Roxborough, Pa., assignor to A. T. Baker & Company, Manayunk, Philadelphia, Pa., a Copartnership composed of Alfred T. Baker and Alfred T. Baker, Jr. Filed Mar. 28, 1917. Serial No. 157,891. (Cl. 139—71.)



1. A pile fabric composed of two backing fabrics comprising weft threads and pile warp threads, all interwoven with the weft threads of both backings by extending over, under and over successive wefts of each backing and thence extending across to, and similarly interwoven with, the other backing, the pile threads being arranged in sets of eight, four of which engage the weft threads of one backing fabric in respectively the same way in which the other four engage the corresponding weft threads of the other backing fabric, one of the four pile threads of each half set engaging the weft threads of one backing fabric in the same way in which another pile thread of the same half set engages the corresponding weft threads of the other backing fabric, whereby the pile threads bind themselves in throughout a large part of the fabric and the fullness of the tufted face is increased proportionately to the increase in the number of pile threads and with a saving of ground warp.

2. A pile fabric composed of two backing fabrics comprising weft threads and pile warp threads all interwoven with the weft threads of both backings by extending over, under and over successive wefts of each backing and thence extending across to, and similarly interwoven with, the other backing, the pile threads being arranged in sets of eight, four of which engage the weft threads of one backing fabric in respectively the same way in which the other four engage the corresponding weft threads of the other backing fabric, one of the four pile threads of each half set engaging the weft threads of one backing fabric in the same way in which another pile thread of the same half set engages the corresponding weft threads of the other backing fabric, whereby the pile threads bind themselves in throughout a large part of the fabric and the fullness of the tufted face is increased proportionately to the increase in the number of pile threads and with a saving of ground warp.

1,270,230. PILE FABRIC. JOHN W. SOHN, Roxborough, Pa., assignor to A. T. Baker & Company, Manayunk, Philadelphia, Pa., a Copartnership composed of Alfred T. Baker and Alfred T. Baker, Jr. Filed Mar. 28, 1917. Serial No. 157,892. (Cl. 139—71.)



1. A pile fabric composed of two backing fabrics comprising weft threads and pile warp threads all interwoven with the weft threads of both backings and extending between the backings, there being in a repeat eight pairs of weft threads, the pile threads being arranged in sets of eight, each of said pile threads extending over one, under two and over one weft thread of one backing and thence extending across to and interwoven in a similar manner with four weft threads of the other backing, the eight pile threads of a set all interweaving differently with the eight pairs of weft threads of each repeat so that one pile thread of each half set crosses from one backing to another between every two adjacent weft threads of each backing, whereby an even distribution of the cut pile ends in the finished fabric is effected.

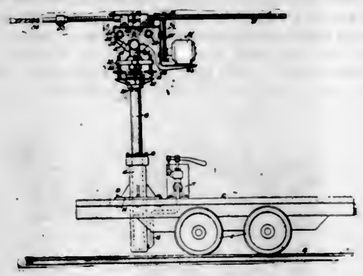
2. A pile fabric composed of two backing fabrics comprising weft threads and pile warp threads all interwoven with the weft threads of both backings and extending between the backings, there being in a repeat eight pairs of weft threads, the pile threads being arranged in sets of eight, each of said pile threads extending over one, under two and over one weft thread of one backing and thence extending across to and interwoven in a similar manner with four weft threads of the other backing, four adjacent pile warp threads interweaving with one backing in respectively the same way as the next four adjacent warp threads interweave with the opposite backing, the eight pile threads of a set all interweaving differently with the same combination of weft threads of each backing, thereby effecting an even distribution of the cut pile ends in the finished fabric, and also causing the pile threads to bind in each other throughout a large part of the fabric, thus effecting a saving of ground warp.

[Claim 3 not printed in the Gazette.]

1,270,231. GANG-DRILL FOR CUTTING COAL. DANIEL B. STAUFT, Uniontown, Pa. Filed Nov. 9, 1916. Serial No. 130,313. (Cl. 255—51.)

1. The herein described self-contained gang drill comprising a truck, a vertically adjustable telescopic support carried by the truck, a carrier frame secured at the upper end of the support and extending transversely of the line of movement of the truck, a saddle adjustable longitudinally of the frame, and drilling devices and power means therefor carried by the saddle.

4. In a coal drill, the combination of a vertical support, a T-head having its vertical axis in alinement with said support, drilling devices supported upon said head and a universal connecting means between the head and the support, said connecting means including a head plate rigidly secured to the upper end of the support, said head plate having a hemispherical seat and a supporting flange surrounding the same, an adjusting head secured to the first mentioned head and lying mainly in a plane perpendicular to the axis thereof, a ball secured to the two heads and fitted in said seat, and a series of adjusting screws acting between said adjusing head and the flange of the head plate, whereby the axis of the first mentioned head may be varied as desired with respect to the axis of the support.



5. The herein described coal drill comprising an upright support, a head at the upper end of the support having a normally vertical axis, means to adjust the head as desired with respect to the vertical axis of the support, a carrier frame fixed to the head and including a plurality of rigid spaced parallel members, a saddle supported on and movable longitudinally of said members, means to lock the saddle in any position to which it may be adjusted along said members, and drilling means carried by said saddle.

6. The herein described supporting means for coal drills, the same comprising a carrier frame including a plurality of spaced parallel bars, a guide member parallel to and spaced from said bars, a saddle comprising a body embracing said bars and supported upon said guide member, said body having a web extending between said bars in the plane of said guide member, and gripping means embracing said bars and coöperating with said web to lock the saddle in position.

[Claims 2 and 3 not printed in the Gazette.]

1,270,232. ELASTIC-FLUID TURBINE. CHRISTIAN STEENSTRUP, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Nov. 9, 1917. Serial No. 201,017. (Cl. 253—77.)



1. In an elastic fluid turbine, the combination of a ring of buckets, and a bucket cover fastened thereon, said cover having transverse corrugations whereby it may expand and contract to a certain amount without putting undue stress on the buckets.

[Claims 2 and 3 not printed in the Gazette.]

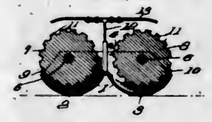
1,270,233. ROTARY TOOTH-BRUSH. MAX STOORMAN, New York, N. Y. Filed Apr. 3, 1917, Serial No. 159,429. Renewed Mar. 2, 1918. Serial No. 220,106. (Cl. 15—37.)

1. In a rotary tooth brush, the combination of a pair of spaced parallel coaxial disks each having a convex outer surface, the disks having sets of bristles extending from each toward the other, a stem rigidly connected at one end to one of the disks and having a set of bristles extending laterally therefrom between the sets of bristles carried by the disks, the other end of the stem being connected to the other disk and serving to hold the disks in definite spaced relation to each other, and a curved handle rigidly connected to one of the disks and serving to rotate the same around the axis of the stem.



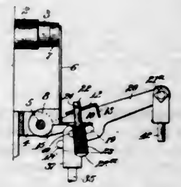
2. In a rotary tooth brush, the combination of a head and a curved shank shaped handle rigidly secured thereto and serving to reciprocate or rotate the head, said head comprising a pair of spaced coaxial members having convex outer surfaces with thin edges, means extending between the members and rigidly secured thereto, and sets of bristles secured upon the inner surfaces of the coaxial members and the exposed surface of the connecting means between them.

1,270,234. HOG-OILER. HENRY STORJOHANN, Garwin, Iowa. Filed July 17, 1917. Serial No. 181,021. (Cl. 119—157.)



A hog oiler comprising a base bent to form two troughs, end plates secured thereto, fluted rollers journaled in the end plates, pawls forming extensions for the outer ends of the base plate which engage the flutings of the rollers to prevent their reverse movement, a cover and an extensible upright extending from the central partition between the two troughs to the cover for detachably and adjustably holding the latter.

1,270,235. STARTER FOR ELECTRIC MOTORS. GEORGE H. WHITTINGHAM, Pikesville, Md., assignor to Monitor Controller Company, Baltimore, Md., a Corporation of Maryland. Filed Dec. 10, 1914. Serial No. 876,601. (Cl. 175—281.)



1. In an automatic starter for electric motors, a shaft, a plurality of contact fingers pivotally mounted on said shaft, a swinging frame also pivotally mounted on said shaft, a resilient connection between said swinging frame and each of said contact fingers, and means for swinging said frame about said shaft.

3. In an automatic starter for electric motors, a pivotally mounted contact finger having an offset end and a slot in said end, a swinging frame for actuating the finger having a part overlapping said offset end, a rod pivotally

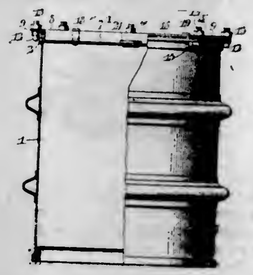
suspended from said overlapping part of said frame and extending through the slot in the finger, a spring surrounding said rod and adapted to press the overlapping parts of the finger and frame toward one another, and means for swinging said frame about its axis.

4. In a device of the class described, the combination of two members pivotally mounted on a common axis, and having overlapping portions, a rod passing freely through such portions and loosely connecting them, and a transverse pin extending through one end of said rod and resting on one of said members, said rod being capable of rocking on said pin, said pin having its end bent over, and one of said members having an opening into which said bent over end fits.

6. In a device of the class described, a plurality of pivotally mounted contact fingers, and an actuating device therefor, said device consisting of a frame formed in two sections, each section comprising a body portion, and an arm portion, said last mentioned portions, when the device is assembled, lying side by side to form a single lever, and electromagnetic means for moving said lever.

[Claims 2, 5, and 7 to 9 not printed in the Gazette.]

1,270,236. REMOVABLE CLOSURE FOR CONTAINERS. FREDERICK W. ECKFELDT, Norristown, Pa., assignor to John T. Lewis & Bros. Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Jan. 29, 1917. Serial No. 145,069. (Cl. 220—60.)



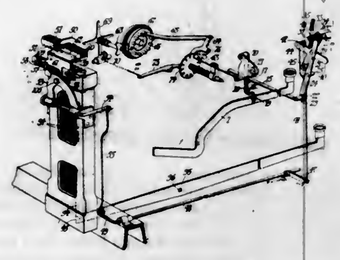
1. In a container having an unrestricted opening, the combination of an exterior flange surrounding said opening and provided with a plurality of slots; a flanged closure adapted to cover said opening, said closure flange being pierced by a plurality of openings, one of which is adapted to register with each of the slots of the container flange; a plurality of L-shaped bolts rotatably secured one within each opening of the closure flange, and adapted to pass through the slots in the container flange and engage the same when they are turned, and a nut on the upper end of each bolt to prevent its removal from the closure flange, and to provide means for tightening the bolt, whereby said closure is clamped to the container.

[Claims 2 and 3 not printed in the Gazette.]

1,270,237. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed July 5, 1912. Serial No. 707,666. (Cl. 235—59.)

1. In a combined typewriting and computing machine, the combination with a letter-feeding carriage and computing mechanism, of zone-controlling means for determining the effectiveness of said computing mechanism, said zone-controlling means comprising a tappet, and an actuator to be operated by said tappet, said actuator including a pair of members overlapping and adjustable lengthwise to each other to provide a variable bearing surface for said tappet, relative movement between said tappet and said actuator being effected by connecting one of said parts for movement with said carriage.

3. In a combined typewriting and computing machine, the combination with a letter feeding carriage, computing mechanism, and numeral keys, of a rack bar, means including a lever governing the connection between said numeral keys and computing mechanism, a stop adjustable on said rack bar arranged to move said lever to connect said keys to said mechanism at a column determined by the point where the stop is located, and a part adjustable on said lever to vary the number of letter spaces over which said connection is operative.



16. In a combined typewriting and computing machine, the combination with numeral keys and a traveling carriage, of a tappet on said carriage, an adjustable cam extending part way along the travel of said tappet, computing mechanism, links extending from said keys to control said computing mechanism, and means for disconnecting said links at said keys by making said tappet effective on said cam in the travel of said carriage.

[Claims 2, 4 to 15, and 17 to 20 not printed in the Gazette.]

1,270,238. SPRING STRUCTURE. WILLIAM A. FALLS, Detroit, Mich. Filed May 28, 1917. Serial No. 171,383. (Cl. 5—29.)



1. A spring structure, comprising upper and lower frames, coiled border springs connected to the inner sides of said frames, coiled inner springs disposed therebetween and U-shaped floating cross strips arranged in pairs with the lateral channeled portions extending toward each other and receiving and containing the lower convolutions of said border and inner springs, said strips being substantially uniform throughout for adjustably receiving and variably spacing said lower convolutions of said springs and having upwardly extending reinforcing flanges extending above and reinforcing said lower convolutions of said border and inner springs.

[Claim 2 not printed in the Gazette.]

1,270,239. HOG-DEHAIRING STRUCTURE. ROBERT E. JORDAN, Chicago, Ill. Filed July 13, 1917. Serial No. 180,465. (Cl. 17—11.)

1. A beater structure including a mounting, a reinforcing element secured thereto and extending radially therefrom and having a swinging movement in respect to the mounting, and a flexible beater-element hingedly connected to the mounting and having a swinging movement in respect thereto and in relation to the reinforcing element and bendable beyond the limits of the mounting and against the reinforcing element.

2. As an article of manufacture, a beater structure including a mounting, a series of flexible reinforcing elements carried thereby and extending radially from the mounting and having a swinging movement in respect thereto beyond the limits thereof, and a series of flexible beater-elements hingedly connected to the mounting and having a swinging movement on their axes in respect to the mounting and a bending action in respect to the reinforcing element beyond the limits of the mounting.



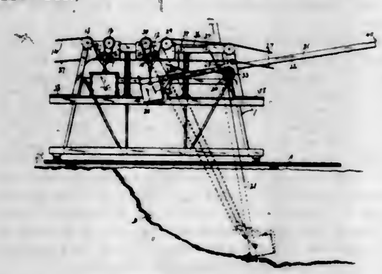
3. As an article of manufacture, a mounting including radiating portions, a reinforcing element mounted on one of the portions and radiating from the mounting, and a flexible beater-element also radiating from the mounting, hingedly connected thereto, and having a bending action in respect to and against the reinforcing element.

4. As an article of manufacture, a beater structure including a mounting comprising radiating portions, a reinforcing element connected to one of the portions and radiating from the mounting, a flexible beater-element normally arranged in substantial parallelism to the reinforcing element, and a hinge connection between the mounting and the beater-element.

5. As an article of manufacture, a beater structure including a mounting comprising radiating portions, a reinforcing element connected to one of the portions and radiating from the mounting, a flexible beater-element normally arranged in substantial parallelism to the reinforcing element, a hinge connection between the mounting and the beater-element, and an independent connection between the mounting and the reinforcing element.

[Claim 6 not printed in the Gazette.]

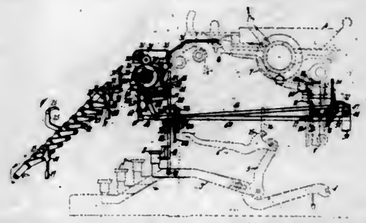
1,270,240. TRENCHING APPARATUS. THOMAS F. MOORE, Westfield, N. J., assignor to Moore Trench Machine Company, Westfield, N. J., a Corporation of New York. Filed Sept. 25, 1917. Serial No. 193,075. (Cl. 214—141.)



1. Trenching apparatus comprising, in combination with a track along the trench line, a power device and an anchorage, both stationed on the track some distance apart, said anchorage having a sheave thereon, a car movable along and upon the track between said power device and anchorage and provided with separate pairs of sheaves, separate fall blocks, one for each pair of sheaves, separate devices on the car for supporting and releasing the fall blocks upon and from the car, a cable passed around the anchorage-sheave and having one end connected to the power device and its other end passed around the sheaves of one pair and the sheave of the corresponding fall block and attached to said fall block, another cable connected at one end to the power device and having its other end passed around the sheaves of the other pair and that of the corresponding fall block and attached to the last-named fall block.

[Claims 2 and 3 not printed in the Gazette.]

1,270,241. COMBINED TYPE-WRITING AND COMPUTING MACHINE. BURNHAM C. STICKNEY, Elizabeth, N. J., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Oct. 13, 1911. Serial No. 654,535. (Cl. 235—59.)



1. The combination of numeral keys, a carriage, a master wheel, a gang of computing wheels, one of said master wheel and gang elements being connected to said carriage, means to enable the numeral keys to drive the master wheel, means for automatically effecting connection between the master wheel and the computing wheel of next lower denomination, during the down stroke of each numeral key and after the wheel at the master wheel has been turned by said keys, and independently of the letter feeding movement of the carriage, and means for causing the master wheel and computing wheels to travel together during the ensuing letter-feeding movement of the carriage.

10. In a computing machine, the combination with computing mechanism, a master wheel therefor, and keys for driving said master wheel, of trip means to disconnect said keys and master wheel on the down-stroke of any key and after said key has driven said master wheel, and overthrow-preventing means for said master wheel operated by said trip means.

18. In a computing machine, the combination with computing wheels, of a master wheel, numeral keys to drive said master wheel, means for disconnecting said keys from said master wheel, means to reciprocate said master wheel, an overthrow lock for said master wheel, and a universal member controlling said reciprocating means and said lock, said member operated by each key immediately after said key is disconnected from the master wheel.

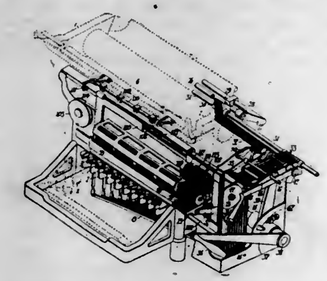
30. The combination with two primary elements, to wit, a series of computing wheels and a master wheel for driving said computing wheels *seriatim*, of a carriage for controlling said primary elements, one of said primary elements traveling continuously with the carriage means enabling the second of said primary elements to travel to anticipate the traveling movement of the first of said elements, and means for moving both said primary elements together when the first of said elements moves with said carriage.

[Claims 2 to 9, 11 to 17, 19 to 29, and 31 to 56 not printed in the Gazette.]

1,270,242. COMBINED TYPE-WRITING AND COMPUTING MACHINE. BURNHAM C. STICKNEY, Elizabeth, N. J., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed May 24, 1912. Serial No. 699,377. (Cl. 235—60.)

1. The combination with a plurality of computing heads, each including a set or group of computing wheels, of

mechnaism for indexing the series of digits of a number, means for transferring such indexed numbers to said computing heads, said means including a series of racks individual to the several wheels of a set, means for causing a relative movement between said racks and said computing heads to enable the several computing heads to be operated successively by said racks, an accumulating computing head, and means for bringing said accumulating head successively into driving relation with each of said first-mentioned heads, so that the one can be driven from the other.

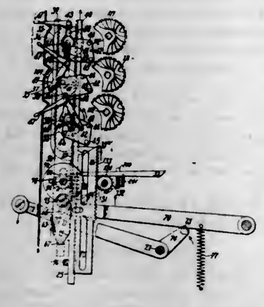


5. The combination with a computing head comprising a plurality of computing wheels, of a second computing head normally out of coöperative relation with said first computing head, a series of rack bars for operating one of said computing heads, cam mechanism for shifting said rack bars from a normal inactive position to an active position, a floating frame for supporting one of said computing heads, cam mechanism for shifting said frame, and a general operator for actuating said cam mechanisms.

20. In a computing machine, the combination with a primary computing head, of carrying members therefor initially settable by said computing head, a secondary computing head actuable simultaneously with said primary computing head, carrying members therefor initially settable by said secondary computing head, and carrying assisting mechanism including gears common to all of said carrying members.

[Claims 2 to 4, 6 to 19, and 21 not printed in the Gazette.]

1,270,243. COMBINED TYPE-WRITING AND COMPUTING MACHINE. BURNHAM C. STICKNEY, Elizabeth, N. J., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed July 26, 1912. Serial No. 711,633. (Cl. 235—60.)



1. In a computing machine, the combination with a plurality of computing heads, of mechanism for indexing or setting up all the digits of a number to be computed, means for transferring the number so indexed to any active computing head, resilient means individual to each computing head to set or prime each head so that it tends to assume an addition state or a subtraction state, under the action of said resilient means, for receiving indexed numbers, and means permitting said resilient means to bring each head to an active state, irrespective of any other head, during the time said transferring means is in action.

23. In a computing machine, the combination with a series of computing heads, of actuating devices for engagement with said heads and common to all of them, and means for selectively rendering any of said computing heads active with respect to said actuating devices, either to perform addition or to perform subtraction, so that the number to be computed may be run up on the active computing head.

40. The combination, with a plurality of separated registers, all arranged in a common plane; of a single set of U-shaped actuating members for said registers straddling all of them, so as to drive them all at the same time and in either of two directions; a single setting mechanism associated with said actuating members for controlling the extent of movement thereof, thereby to cause said actuating members to run the same number simultaneously into all of said registers; and means individual to each register for controlling both its effectiveness to be driven by said actuating members and the direction of such drive.

[Claims 2 to 22 and 24 to 39 not printed in the Gazette.]

1,270,244. SHAFT-LOG. JOHN H. WATTS and FRANK D. BROWN, Havana, Ill., assignors to Ezra J. List, Havana, Ill. Filed Mar. 17, 1917. Serial No. 155,592. (Cl. 64—54.)



1. In combination with a propeller shaft, a shaft log permanently mounted through which the shaft extends, said log having a cylindrically curved end wall forming a recess, the curve of the said wall being described by rotating a line about an axis lying perpendicular to a vertical plane, itself lying parallel to the axis of rotation of said shaft, a bearing for the shaft having a surface complementary to the said curved wall and seated upon said wall, and means to secure the bearing and log in fixed relation.

5. A shaft-log including in its construction a part to be secured upon the bottom of a boat having a cylindrically curved surface, a part having a surface complementary thereto, one of the said parts being slotted, and a member extending through the slot and adjustable in the other part adapted to secure both parts in rigid relation.

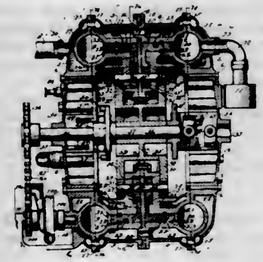
7. A shaft-log including in its construction a part to be secured upon the bottom of a boat having a cylindrically curved surface, a part having a surface formed complementary thereto, a gasket interposed between the two surfaces, a shaft bearing carried by the second named part, one of said parts being slotted, and a member extending through the slot and adjustable in the other part adapted to secure both parts in rigid relation.

[Claims 2 to 4, 6, and 8 to 10 not printed in the Gazette.]

1,270,245. INTERNAL-COMBUSTION ENGINE. OSCAR C. BEARD, Los Angeles, Cal., assignor of one-fourth to Richard P. Beard, Union, W. Va. Filed June 19, 1916. Serial No. 104,527. (Cl. 123—14.)

1. In an internal combustion engine, the combination of an annular cylinder, means for alternately opening and closing the bore of the cylinder, with a piston adapted to revolve in the cylinder and borne upon a rotor revolving

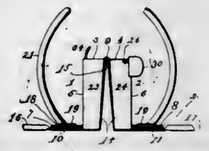
in an annular chamber concentric and continuous with the cylinder and operatively connected with a driving



shaft by means of a member rotatably seated in the casing of the chamber.

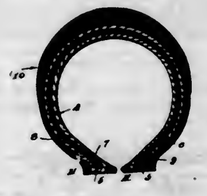
[Claims 2 to 4 not printed in the Gazette.]

1,270,246. LOOSE-LEAF BINDER. JOHN BYSTROM, Chicago, Ill. Filed Oct. 9, 1916. Serial No. 124,552. (Cl. 129—17.)



A loose-leaf binder comprising, in combination, counterpart longitudinal frame members having primary portions hinged together, said portions being arranged to abut against each other when the binder is closed, each of said primary portions having a secondary integral portion formed at right angles thereto in cross-section, a longitudinally slidable locking member slidably held upon one of said secondary portions, said member consisting of an angle-bar adapted to fit in the angle formed by the intersection of said primary and secondary parts and having a slot therein for the reception of a detent and a detent upon the other of said secondary portions for engaging said slidable locking member.

1,270,247. TIRE AND METHOD OF MAKING THE SAME. OLIVER H. CLOYD, Peoria, Ill., assignor, by mesne assignments, to Crown Tire & Rubber Company, Ralston, Nebr., a Corporation of Nebraska. Filed Feb. 17, 1916. Serial No. 78,910. (Cl. 154—14.)



1. In a method of constructing a tire shoe, the steps which consist in arching a formed strip of tire fabric to create a ring or band, connecting the ends of the same, arching said band throughout its length to form the shoe with the edges of the fabric separated, placing a ring upon each side portion thus disposed, carrying one of the side portions through its respective ring and drawing it at an angle to the plane of the shoe over upon the arched portion terminating its edge at the ring at the opposite side of the shoe, carrying the other portion through its ring and drawing it at an angle to the plane of the shoe and at an angle to the direction in which the first portion is drawn, and laid upon the same and terminating the edge thereof at the ring at the opposite side.

4. In a method of constructing a tire shoe, the steps which consist in forming an endless band of fabric, arching the same circumferentially and carrying the resulting side portions inward toward each other, placing a bead ring against each portion, carrying one of the portions through its respective ring and upon the arched portion with its strands lying diagonally of those of the latter, carrying the opposite portion through its ring and placing the same upon and with its strands extending diagonally of those of the portion just laid down and terminating its edge adjacent the ring at the opposite side.

6. In a method of constructing a tire shoe, the steps which consist in outwardly arching circumferentially throughout its length an endless band of fabric made up of parallel strands, extending the opposite portions of the band parallel to one another, placing a ring at the outer side of each portion, drawing the portions through their adjacent rings and back over the arched portion and upon one another with the strands of alternate layers lying at an angle to each other.

9. In a method of constructing a tire shoe, the steps which consist in placing an endless band of fabric made up of parallel strands upon a ring-shaped core, arching said band circumferentially over said core and carrying the portions of the band down at each side of the core, placing a ring upon each portion, carrying each portion through its adjacent ring, recurving said portions upon the arched portion and upon one another and with the strands of a ply last laid down lying at an angle to those of a next preceding one.

11. A tire shoe comprising in its construction a single endless band of friction material made up of parallel cords, the ends of the cords constituting the edges of the band, said band having a width of measurement substantially three times the measurement of the circumference of the tire taken transversely and arched throughout for substantially one third its width along its medial longitudinal portion, a bead ring at each outer side of the band, the portions of the band outward from the arched portion being recurved and extended through their respective rings, one of the said portions lying upon the said arched portion with its cords extending at an angle to those of the said arched portion, its edge terminating at an opposite ring, the other portion lying upon the portion just laid down with the cords lying at an angle to those last laid down, the edge of the same terminating at the other ring.

[Claims 2, 3, 5, 7, 8, and 10 not printed in the Gazette.]

1,270,248. PAPER-PACKAGE. WILLIAM MCCORKINDALE and HENRY C. AVERY, Holyoke, Mass. Filed Jan. 8, 1916. Serial No. 70,943. (Cl. 206—57.)



1. A package of towels formed to closely fit within a casing having a single opening and arranged when inserted to close said opening and yieldable holding devices on the package arranged when the package is pushed into the casing to automatically snap into engagement with devices within the casing to support the package therein.

5. A towel package, for use with a dispenser having a single open end, made to substantially fill the dispenser and when inserted therein to close said open end, and means on the package operable as the latter is inserted in the dispenser to automatically engage a part thereof, said means and part being relatively movable in one direction by the insertion of the package in another direction and relatively movable in an opposite direction after the package has been positioned in the dispenser to prevent removal of the package from the latter.

7. A towel package comprising a plurality of sheets packed one on the other, a supporting member from which the upper ends of the sheets are hung and projections extending downwardly in diverging relation from said member beyond the sides of the package to automatically engage supporting devices on the casing, said projections and member being constructed and arranged to yield as the package is moved past said devices in one direction and to snap past the latter to prevent movement of the package in the other direction.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

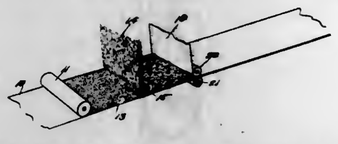
1,270,249. FOLDABLE TENT-BED. WILLARD E. MARSH, Fort Worth, Tex. Filed Sept. 10, 1917. Serial No. 190,418. (Cl. 5—5.)



4. In a sheltered cot, the combination with a cot comprising parallel beams provided with legs and supporting a canvas mat, of a tent like shelter superimposed upon the structure, of closure curtains arranged at each end of the shelter, of mosquito bar drop curtains provided within the closure curtains, of a stepped brace provided in slots formed in the cot beams, of canvas pockets sewed into the shelter, struts having one end inserted in the pocket with the other end supported against the stepped bracket, and fastener cords attached to each end of the shelter and adapted to fasten to the canvas mat, the whole structure adapted to undergo a tightening up action by the occupant's weight upon the bed and by pushing the struts forward on the stepped brace to tighten up the shelter.

[Claims 1 to 3 and 5 to 8 not printed in the Gazette.]

1,270,250. REINFORCED IMPERVIOUS PAPER AND METHOD OF MAKING SAME. ALBERT F. SCHWENKBERGER, Quincy, Mass., assignor to Safepack Paper Mills, Brockton, Mass., a Corporation of Massachusetts. Filed July 18, 1914. Serial No. 851,701. (Cl. 154—2.)



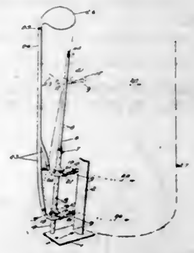
1. The herein described method which consists in treating paper with a composition to produce a sticky surface, applying loose unspun textile fiber upon such surface to reinforce the paper and protect said surface, and applying a second layer of sheet material to said surface to make a two ply wrapping.

2. The herein described method which consists in treating paper with a pitch composition to render the same impervious with a sticky surface, applying loose unspun cotton fiber upon such sticky surface to reinforce the paper and protect said surface, and applying a second layer of sheet material to said surface to make a two ply wrapping.

3. The herein described method which consists in treating paper with composition to render it waterproof with a sticky surface, applying carded unspun textile fiber to said surface, and applying a second layer of paper to said surface to make a two-ply wrapping.

4. A wrapping or like material composed of two layers of paper with an intermediate filling of sticky composition to render the same waterproof, and loose disconnected textile fiber filaments embedded in said sticky composition for the purpose stated.

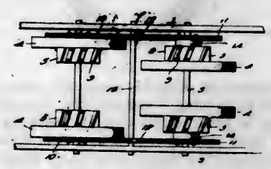
1,270,251. SKIRT-MARKER. LETHA B. SMITH, Portland, Oreg., assignor of one-half to Tom P. Randall, Oregon City, Oreg. Filed Oct. 12, 1914. Serial No. 866,326. (Cl. 33—9.)



1. A skirt marker of the character shown and described, comprising a flat supporting base plate adapted to rest flatwise upon the floor having an upstanding curved plate member over and against which the skirt moves, an adjustable curved plate supporting standard upon said base adjacent said upstanding member, one or more brackets adjustably mounted upon said standard, one or more nozzle members supported in said adjustable brackets and projecting to points adjacent said upstanding member, and an operating bulb and flexible tube connections to said nozzles adapted for forcing marking powder through said nozzles.

2. A skirt marker of the character shown and described, comprising a base adapted to rest flatwise upon the floor having an upstanding curved plate member over and against which a skirt can be moved, a supporting standard mounted upon said base and composed of two graduated members adjustable relative to each other, one or more supporting brackets adjustably mounted upon said standard, one or more nozzle members adjustably supported in said brackets and projected toward said upstanding member, said nozzles having means for clearing the discharge openings thereof, and a bulb with flexible tubular connections to said nozzles adapted to force marking powder through said nozzles, substantially as shown and described.

1,270,252. WHEEL. JOHN A. GALVIN, Spalding, Nebr. Filed May 25, 1917. Serial No. 170,932. (Cl. 180—21.)



1. A tractor wheel consisting of a cylindrical member, an interrupted cylindrical member adjacent thereto and comprising a blank, rim-parts coincident with the rim of the cylindrical member and tabs at the extremities of said parts, the tabs on one part projecting toward the tabs on the other along the edges of said blank, and means for connecting each complete member with its contiguous interrupted member.

3. A tractor wheel consisting of a circular member and an oblong member having its ends curved to correspond with the circumference of the other member and means for securing the two members together.

5. A wheel consisting of a circular member and an oblong member having its ends curved to correspond with the circumference of the other member, said oblong member being formed of two blanks forming the sides thereof, each of said blanks having a tab at each corner adapted to be bent at right angles to engage the tabs on the other blank, the tabs on one end of one blank being extended and extending around the curved ends of the blanks so as to be secured to the other tabs on the other side to form the edges of the member and means for securing the tabs together.

7. In a tractor, the combination with front and rear axles, and a drive shaft between them; of a pair of tractor wheels on the front axle, each having a complete and an interrupted portion, a similar pair of wheels on the rear axle, each having similar portions but with their complete portions out of alinement with any part of the front wheels, and connections between the drive shaft and both pairs of wheels for causing their rotation.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

REISSUES.

14,486. CUTTER. LUCIAN W. BUGBEE, Southbridge, Mass., assignor to American Optical Company, Southbridge, Mass., a Voluntary Association of Massachusetts. Filed Feb. 19, 1917. Serial No. 149,692. Original No. 1,202,156, dated Oct. 24, 1916, Serial No. 90,129, filed Apr. 10, 1916. (Cl. 33—26.)



1. In a machine of the character described, the combination with a tool spindle, of a tool head mounted thereon, and having a face inclined with respect to the spindle, a stud projecting centrally from said face, a second tool head rotatably mounted on the stud, interlocking members on the said heads for securing the same in relative rotatively adjusted position, means for resiliently holding the heads in said interlocking relation while permitting of disengagement thereof when desired, and a plurality of tools carried by the second head, each of which may be brought into the same predetermined relation to the tool spindle by relative rotation of the head.

2. In a lens cutter, the combination with a cutter spindle, of means for pivotally supporting the spindle, former engaging members carried by the upper portion of the spindle, a former engaging shoe upon the spindle, a head on the lower portion of the spindle, a supplemental head pivotally secured to the main head, and a plurality of cutters so mounted in the supplemental head that each of the operative portions of the cutters at one adjustment of the supplemental head will lie in the same relative position to the former engaging shoe, substantially as and for the purpose described.

3. In a device of the character described, the combination with the tool arm, of a head carried thereby, a second head mounted for rotative adjustment relative to the first, and a plurality of tools carried by said second head and provided with cutting points, said tools being so arranged that the operative point of each when in one adjusted position will lie in axial alinement with the main tool spindle, substantially as and for the purpose described.

4. In a machine of the character described, the combination with a tool spindle, of a head carried thereby, and rotatable about the axis thereof, a tool shank carried by the head and having a tool angularly mounted thereon, the point of the tool extending into alinement with the axis of the tool spindle extended, means for locking the head and tool at a plurality of points about the axis of the tool spindle, said head having means thereon for indicating the result of said adjustment.

5. In a machine of the character described, the combination with a tool spindle, of a tool head mounted thereon and having an inclined face, a stud projecting centrally from said face, a second tool head rotatably mounted on the stud, interlocking members on the said heads for securing the same in relative rotatively adjusted position, means for resiliently holding the parts in said interlocking relation while permitting of disengagement thereof when desired, and a plurality of tools carried by the second head, each of which may be brought into the same predetermined relation to the tool spindle by relative rotation of the head, and means for rotating the two heads in unison about an axis at an angle to that of the stud, substantially as and for the purpose described.

6. In a device of the character described, the combination with a tool spindle, of a main head rotatably mounted on the spindle, means for locking the main head at any one of a plurality of positions on said spindle, an auxiliary head carried by the main head, and turning about an axis intersecting the axis of the spindle, and a plurality of cutters carried by the auxiliary head and adapted to be moved into axial alinement with the spindle upon suitable movement of the auxiliary head, substantially as and for the purpose described.

7. In a device of the character described, the combination with a tool spindle, having a former engaging portion and a main head, of an auxiliary head carried by the main head and mounted for movement about an axis different from the axis of the spindle, and a plurality of cutters carried by the last mentioned head and so disposed in the head that the operative portion of each cutter will at one adjustment of the head be brought into axial alinement with the spindle, substantially as and for the purpose described.

8. In a device of the character described, the combination with a tool spindle, of a main head rotatably mounted upon the spindle, means for locking the main head in any one of a plurality of positions on said spindle, an auxiliary head carried by the main head and turning about an axis intersecting the axis of the spindle, interlocking members on the said heads for securing the same in relative rotatably adjusted position, means for resiliently holding the heads in said interlocking relation while permitting of disengagement thereof when desired, and a plurality of cutters carried by the auxiliary head and adapted to be moved into axial alinement with the spindle upon suitable movement of the auxiliary head substantially and for the purpose described.

14,487. DENTAL PROCESS. HENRY WARD BABCOCK, Onarga, Ill. Filed Feb. 26, 1918. Serial No. 219,328. Original No. 1,248,242, dated Nov. 27, 1917, Serial No. 176,982, filed June 26, 1917. (Cl. 32—9.)



1. A method of crowning teeth, which consists in reducing the crown of the tooth, providing a jacket having

a cavity of larger size than the prepared crown, and placing in the cavity a matrix of gold, the matrix having a marginal flange extending to the peripheral surface of the jacket, placing gold amalgam in the matrix, pressing the prepared crown into the matrix to express the surplus amalgam, removing the matrix and jacket and heating to evaporate the mercury, and afterward cementing the jacket to the prepared crown.

2. A method of crowning teeth, which consists in reducing the crown of the tooth, providing a jacket having a cavity of larger size than the prepared crown, and placing in the cavity a matrix of metal, placing gold amalgam in the matrix, pressing the prepared crown into the matrix to express the surplus amalgam, removing the matrix and jacket and heating to evaporate the mercury, and afterward cementing the jacket to the prepared crown.

3. A method of crowning teeth which consists in reducing the peripheral surface of the crown of the tooth to form a prepared crown approximately circular in cross section and having the vertical section of a Gothic arch, and in forming an annular shoulder between the prepared crown and the root of the tooth, providing a jacket having a cavity of larger size than the prepared crown, placing in the cavity a matrix of metal, placing gold amalgam in the matrix, pressing the prepared crown into the matrix to express the surplus amalgam, removing the matrix and jacket and heating to evaporate the mercury and afterward securing the jacket to the prepared crown.

4. A method of crowning teeth, which consists in reducing the peripheral surface of the crown of the tooth to form a prepared crown approximately circular in cross section, and in forming an annular shoulder between the prepared crown and the root of the tooth, providing a jacket having a cavity of larger size than the prepared crown, placing gold amalgam in the matrix, pressing the prepared crown into the matrix to express the surplus amalgam, removing the matrix and jacket and heating to evaporate the mercury and afterward securing the jacket to the prepared crown.

5. A method of crowning teeth, which consists in reducing the peripheral surface of the crown of the tooth to form a prepared crown approximately circular in cross section, providing a jacket having a cavity of larger size than the prepared crown, placing in the cavity a matrix of metal, placing gold amalgam in the matrix, pressing the prepared crown into the matrix to express the surplus amalgam, removing the matrix and jacket and evaporating the mercury and afterward securing the jacket to the prepared crown.

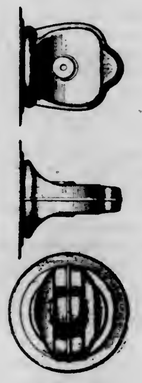
6. A jacket crown for teeth of porcelain having a cavity of a size to receive the prepared crown of the natural tooth and having at the open end of the cavity a surface encircling the cavity and approximately perpendicular to the axis of the cavity and adapted to abut a shoulder formed between the natural tooth crown and the root, and having within the cavity a matrix of metal having a marginal flange fitting the said end surface of the porcelain jacket crown.

7. A jacket crown having a cavity of a size to receive the prepared crown of a natural tooth, and having the said cavity lined with a matrix of metal.

8. A tooth crown comprising a jacket crown having a cavity to receive a natural crown and a lining matrix formed to fit said cavity.

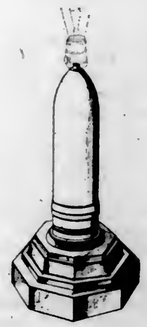
DESIGNS.

52,106. CASING FOR SIGNAL APPARATUS. LUIGI ANGIULLI, New York, N. Y., and ERNEST T. MONTELEONE, Jersey City, N. J. Filed Apr. 15, 1918. Serial No. 228,776. Term of patent 7 years.



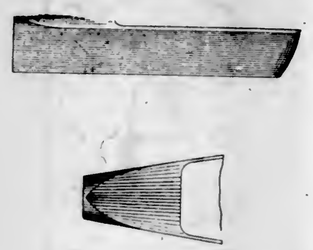
The ornamental design for a casing for signal apparatus as shown.

52,107. LAMP-BODY. WALTER J. AVERY, Cambridge, Mass. Filed Dec. 27, 1917. Serial No. 209,183. Term of patent 7 years.



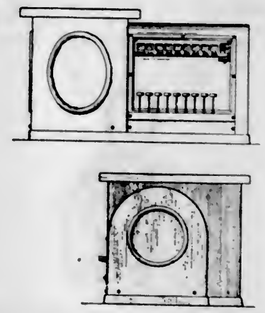
The ornamental design for a lamp body as shown.

52,108. AUTOMOBILE-BODY. STUART G. BAITS, Detroit, Mich., assignor to Hudson Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Dec. 30, 1916. Serial No. 139,952. Term of patent 14 years.



The ornamental design for an automobile body as shown.

52,109. COMPUTING-SCALE CASING. JAMES WILLIAM BALL, Logansport, Ind., assignor to Frank R. Greene, Chicago, Ill. Filed Mar. 21, 1918. Serial No. 223,841. Term of patent 14 years.



The ornamental design for a computing scale casing as shown.

52,110. DESIGN FOR A ROPE-THIMBLE. JOHN B. BAXTER, Troy, N. Y., assignor to Covert Manufacturing Co., Troy, N. Y., a Corporation of New York. Filed Dec. 17, 1917. Serial No. 207,634. Term of patent 14 years.



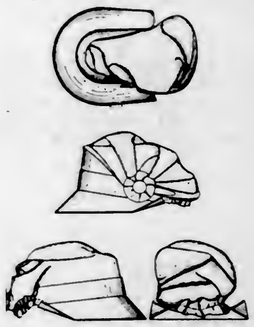
The ornamental design for a rope thimble, as shown.

52,111. MIRROR, BRUSH, OR SIMILAR TOILET ARTICLE. WILLIAM S. BECHTOLD, Newark, N. J. Filed Apr. 13, 1918. Serial No. 228,478. Term of patent 14 years.



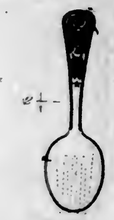
The ornamental design for a mirror, brush, or similar toilet article, as shown.

52,112. HAT OR SIMILAR ARTICLE. SOL GREENBERG, Chicago, Ill. Filed Feb. 4, 1918. Serial No. 215,864. Term of patent 3½ years.



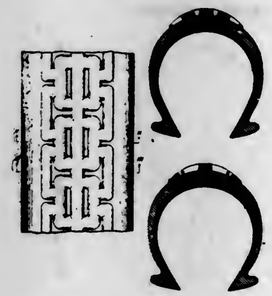
The ornamental design for a hat or similar article, as shown.

52,113. HANDLE FOR A SPOON, FORK, OR SIMILAR ARTICLE. HARRISON HEBBARD, East Orange, N. J., assignor to Dominick & Haff, New York, N. Y. Filed Apr. 11, 1918. Serial No. 228,068. Term of patent 7 years.



The ornamental design for a handle for a spoon, fork, or similar article as shown.

52,114. VEHICLE-TIRE. CHARLES J. HODGES, Elyria, Ohio, assignor to The Long-Wear Rubber Company, Elyria, Ohio, a Corporation of Ohio. Filed Apr. 20, 1918. Serial No. 229,865. Term of patent 14 years.



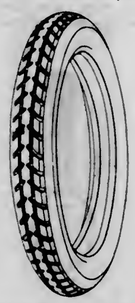
The ornamental design for a vehicle tire, substantially as shown.

52,115. PAIR OF OVERALLS. THEODORE PISARRO, Brooklyn, N. Y. Filed Feb. 27, 1918. Serial No. 219,518. Term of patent 14 years.



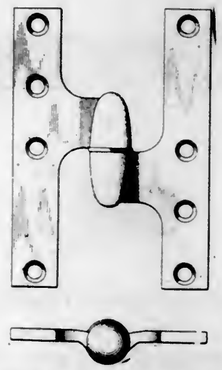
The ornamental design for a pair of overalls as shown.

52,116. VEHICLE-TIRE. BENJAMIN H. PRATT, Milwaukee, Wis. Filed Dec. 22, 1917. Serial No. 208,525. Term of patent 3½ years.



The ornamental design for a vehicle tire as shown.

52,117. DOOR-HINGE. OSCAR C. RIXSON, New Rochelle, N. Y. Filed Apr. 18, 1918. Serial No. 229,454. Term of patent 14 years.



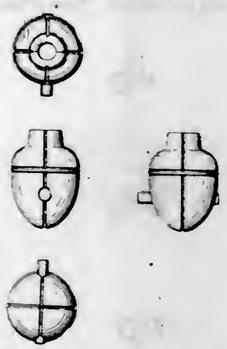
The ornamental design for a door hinge, as shown.

52,118. ARTICLE OF MANUFACTURE. MARY LA FETRA RUSSELL, New York, N. Y. Filed Oct. 26, 1917. Serial No. 198,733. Term of patent 7 years.



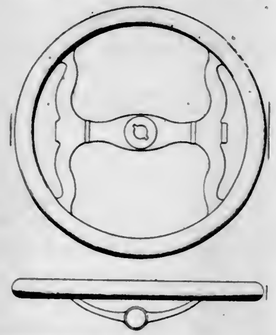
The ornamental design for an article of manufacture substantially as shown and described.

52,119. CASING FOR AN ELECTRIC SWITCH. RALPH A. SCHOENBERG, now by judicial change of name Ralph A. Belmont, New York, N. Y. Filed Feb. 7, 1918. Serial No. 215,912. Term of patent 14 years.



The ornamental design for a casing for an electric switch, as shown.

52,120. AUTOMOBILE STEERING-WHEEL. GRANT E. SMITH, Poughkeepsie, N. Y. Filed Jan. 22, 1917. Serial No 143,870. Term of patent 14 years.



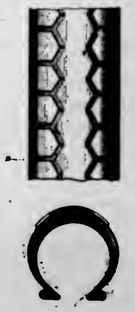
The ornamental design for an automobile steering wheel, as shown.

52,121. GLASS BOWL. MAURICE A. SMITH, Jeannette, Pa., assignor to McKee Glass Company, Jeannette, Pa., a Corporation of Pennsylvania. Filed Nov. 14, 1917. Serial No. 202,065. Term of patent 7 years.



The ornamental design for a glass bowl, as shown.

52,122. TIRE-CASING. SAMUEL ROSS VASBINDER, Fulton, Ill. Filed Apr. 18, 1918. Serial No. 229,440. Term of patent 3½ years.



The ornamental design for a tire casing, as shown.

51,123. NOSE BRIDGE-AND-BRACE PIECE FOR SPECTACLES. FREDERICK WILLSON, Reading, Pa., assignor to T. A. Willson & Co., Inc., Reading, Pa., a Corporation of Pennsylvania. Filed Apr. 17, 1918. Serial No. 229,209. Term of patent 14 years.



The ornamental design for a nose bridge-and-brace piece for spectacles as shown.

52,124. CARRIER FOR CASSEROLES AND LIKE CONTAINERS. LOUIS WOJIDKOW, Brooklyn, N. Y., assignor to New York Stamping Company, Brooklyn, N. Y., a Corporation of New York. Filed Apr. 24, 1918. Serial No. 230,595. Term of patent 14 years.



The ornamental design for a carrier for casseroles and like containers as shown.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 18, 1918.

(PUBLISHED JULY 10, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 86,170. (CLASS 39. CLOTHING.) UNION SPECIAL MACHINE COMPANY, Chicago, Ill. Filed Apr. 23, 1915. Under ten-year proviso.

DOUBLE STITCH

Particular description of goods.—For Trousers, Overalls; Dress, Negligée, and Work Shirts; Shirt-Waists, Knitted Underwear, Hosiery, Aprons, Bathing-Suits, Bibs, Bonnets; Boots and Shoes and Slippers Made of Leather, Rubber, and Canvas, and Combinations Thereof; Gloves and Mittens, Hats and Caps, Outer and Under Skirts, Rain-Coats, Sweaters, Coats and Overcoats, Vests, Cloaks, Collars and Cuffs, Corsets, Jackets, Fascinators, Jerseys, Knee-Pants, Jumpers, Leggings, Mackinaws, Moccasins, Mufflers, Oil-Clothing, Night-Shirts and Pajamas, Bath Robes and Wrappers; Textile Underwear—viz., Chemises, Drawers, Underskirts, Corset-Covers, Corset-Waists, Brassières, Nightgowns; Uniforms—viz., Coats, Vests, Trousers, Hats, Caps, and Overcoats—and Athletic Underwear—viz., Gymnasium-Suits, Undershirts, Drawers, and Trunks.

Claims use since about Sept. 15, 1893.

Ser. No. 90,143. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) LAUTZ BROS. & CO., Buffalo, N. Y. Filed Oct. 27, 1915. Under ten-year proviso.

MINERS'

Particular description of goods.—Soap.

Claims use since prior to 1878.

Ser. No. 94,360. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) PRODUCTS SYNDICATE, INC., Boston, Mass. Filed Apr. 12, 1916.

BY-R

Particular description of goods.—Leather Impregnated with Nitrocellulose Cement.

Claims use since about Feb. 1, 1916.

Ser. No. 95,780. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CENTRAL CALIFORNIA CANNERIES, San Francisco, Cal. Filed June 10, 1916.

Tiger Lily



Particular description of goods.—Canned Fruits and Canned Vegetables.

Claims use since September, 1894.

Ser. No. 97,291. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) JACOB DOLL & SONS, New York, N. Y. Filed Aug. 11, 1916. Under ten-year proviso.

Doll

Particular description of goods.—Pianos and Player-Pianos.

Claims use since December, 1890.

Ser. No. 98,117. (CLASS 39. CLOTHING.) MITCHELL BROS. COMPANY, Chicago, Ill. Filed Sept. 20, 1916.

Lucille

Particular description of goods.—Women's Shirt-Waists.
Claims use since on or about Jan. 1, 1902.

Ser. No. 99,268. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) Mrs. J. WILLIOT FILS, La Garenne-Colombes, France. Filed Nov. 11, 1916.



Particular description of goods.—Coffee Substitutes—Namely, Chicory.
Claims use since the beginning of the year 1897.

Ser. No. 100,559. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) RICHARDSON CORPORATION, Rochester, N. Y. Filed Jan. 12, 1917.

MAID OF HONOR

Particular description of goods.—Cocoa, Crushed Fruits, Fruit-Syrups, Sundaes, and Shelled Nuts, All Used as Desserts or Foods or in the Preparation Thereof.
Claims use since June 9, 1916.

Ser. No. 100,658. (CLASS 38. PRINTS AND PUBLICATIONS.) WILLIAM TUCKER, New York, N. Y. Filed Jan. 16, 1917.



Particular description of goods.—Booklets Published Annually.
Claims use since February, 1915.

Ser. No. 100,944. (CLASS 44. DENTAL, MEDICAL, AND SURGICAL APPLIANCES.) THE A. T. VAN ALSTYN CO., Grand Rapids, Mich. Filed Jan. 25, 1917.



The drawing is lined for shading and not for color.
Particular description of goods.—Sanitary Belts, Suspensories, Abdominal Supporters, Sanitary Napkins and Bandages.
Claims use since the year 1916.

Ser. No. 103,005. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) AUTOMATIC RECORD COMPANY, Chicago, Ill. Filed Apr. 16, 1917.



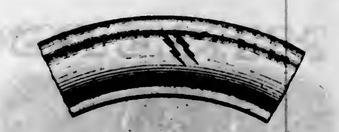
Particular description of goods.—Fonts of Type.
Claims use since Apr. 13, 1917.

Ser. No. 103,651. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) R. H. MACY & Co., New York, N. Y. Filed May 8, 1917.



Particular description of goods.—Ribbons.
Claims use since Apr. 1, 1917.

Ser. No. 104,007. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) JOSEPH M. GILBERT, Andover, Mass., assignor to Carlisle Cord Tire Company, Inc., New York, N. Y., a Corporation of New York. Filed May 22, 1917.



The trade-mark consisting of the conventional representation of lightning, the section of the tire shown not forming a part of said trade-mark.
Particular description of goods.—Automobile-Tires of Rubber and Fabric.
Claims use since Nov. 15, 1916.

Ser. No. 104,446. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) ARROW-GRIP MANUFACTURING CO., Glens Falls, N. Y., assignor to Arrow-Grip Manufacturing Company, Glens Falls, N. Y., a Corporation of New York. Filed June 15, 1917.



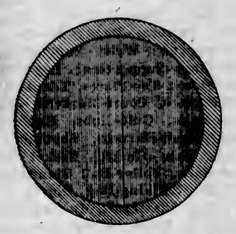
Particular description of goods.—Devices to be Attached to Vehicle-Wheels to Prevent Skidding, Comprising Chains and Means for Attaching Said Chains to Spokes of the Wheels.
Claims use since Feb. 10, 1917.

Ser. No. 105,521. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) R. I. JOHNS, Long Island City, N. Y. Filed Aug. 7, 1917.

ELASTIC

Particular description of goods.—Portable Houses.
Claims use since May 11, 1917.

Ser. No. 106,020. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CURTIS OLIVE CORPORATION, Bloomington and Long Beach, Cal., assignor to The Curtis Corporation, San Bernardino, Cal., a Corporation of California. Filed Sept. 4, 1917.



The mark consists of a red disk surrounded by a green annulus, as shown in the drawing.
Particular description of goods.—Canned Artichokes, Pimentos, and Fish.
Claims use since Oct. 20, 1916.

Ser. No. 106,164. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) JAMES H. RHODES & COMPANY, Chicago, Ill. Filed Sept. 10, 1917.



Particular description of goods.—Chamois-Skins and Sponges.
Claims use since the beginning of the year 1911.

Ser. No. 106,750. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CROWN MARGARIN COMPANY, East St. Louis, Ill. Filed Oct. 13, 1917.

VEGACO

Particular description of goods.—Oleomargarin.
Claims use since July 1, 1917.

Ser. No. 106,904. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) AMERICAN GRAPHOPHONE COMPANY, Bridgeport, Conn., assignor to Columbia Graphophone Manufacturing Company, Bridgeport, Conn., a Corporation of Delaware. Filed Oct. 23, 1917.

Columbia Grafonola

Particular description of goods.—Talking-Machines, Talking-Machine Records, Talking-Machine Needles, and Automatic Stops for Talking-Machines.
Claims use since on or about July 15, 1917.

Ser. No. 107,539. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE ANSTED & BURK CO., Springfield, Ohio. Filed Nov. 23, 1917.



Particular description of goods.—Cornmeal.
Claims use since Jan. 1, 1915.

Ser. No. 107,589. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) DURLACQUE MANUFACTURING COMPANY, St. Louis, Mo. Filed Nov. 24, 1917.

DURLACQUE

Particular description of goods.—A Chemical Cleaning Compound of General Application.
Claims use since June 12, 1917.

Ser. No. 108,562. (CLASS 37. PAPER AND STATIONERY.) BOOBUM & PEASE COMPANY, New York, N. Y. Filed Jan. 21, 1918.

B&P

Particular description of goods.—Bond-Paper.
Claims use since Feb. 5, 1917.

Ser. No. 108,632. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) EDLOW CHEMICAL COMPANY, Elizabeth, N. J. Filed Jan. 25, 1918.



Particular description of goods.—Hair Color-Restorative.
Claims use since Aug. 1, 1917.

Ser. No. 108,732. (CLASS 27. HOROLOGICAL INSTRUMENTS.) THE WADSWORTH WATCH CASE COMPANY, Dayton, Ky. Filed Jan. 31, 1918. Under ten-year proviso.

WADSWORTH

Particular description of goods.—Watchcases and Watch-Movements.
Claims use since June, 1890.

Ser. No. 108,801. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE MARVEL ACCESSORIES MANUFACTURING CO., Cleveland, Ohio. Filed Feb. 4, 1918.



Particular description of goods.—Portable Rubber-Tire-Vulcanizing Outfits Consisting of Vulcanizers, Rubber Patches, Rubber Cement and Repair Materials, Combustible Heating Units for Vulcanizers, &c.
Claims use for the word "Senior" since about November, 1915, and the sunburst design and monogram since about Apr. 24, 1916. The word, design, and monogram as presented in the drawing have been used since about November, 1917.

Ser. No. 108,802. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE MARVEL ACCESSORIES MANUFACTURING CO., Cleveland, Ohio. Filed Feb. 4, 1918.



Particular description of goods.—Rubber-Tire-Vulcanizing Outfits Consisting of Portable Vulcanizers, Rubber Patches, Rubber Cement and Repair Materials, Combustible Heating Units for Vulcanizers, &c.
Claims use for the word "Junior" since about November, 1915, and for the sunburst design and monogram since about Apr. 24, 1916. The word, design, and monogram as presented in the drawing have been used since about November, 1917.

Ser. No. 108,873. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) A. J. REACH COMPANY, Philadelphia, Pa. Filed Feb. 7, 1918.



Particular description of goods.—Base-Balls, Base-Ball Gloves, Base-Ball Mitts, Body-Protectors, Base-Ball Bats, Masks, Bat-Bags, Uniform-Bags; Elastic Bandages—Namely, Ankle-Supporters, Wrist-Supporters, Knee-Cap Supporters, and Elbow-Supporters; Leg-Guards, Bases, Home-Plates, Box-Plates, Tee-Plates, Tennis-Rackets, Tennis-Balls, Racket-Presses, Court-Markers, Racket-Covers, Tennis-Nets, Golf-Balls, Golf-Clubs, Rugby Foot-Balls, Soccer Foot-Balls, Head-Harness, Shoulder-Pads, Knee-Pads, Elbow-Pads, Shin-Guards, Basket-Balls, Basket Ball-Goals, Volley-Balls, Volley-Ball Standards, Medicine-Balls, Striking-Bags, Striking-Bag Gloves, Striking-Bag Swivels, Striking-Bag Platforms, Boxing-Gloves, Indoor Base-Balls, Playground-Balls, Indoor Bats, Indoor Bases, Hand-Balls, Hand-Ball Gloves, Caddy-Bags.
Claims use since Jan. 1, 1918.

Ser. No. 108,898. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) THE STAMFORD ELECTRIC & MANUFACTURING COMPANY, Stamford, Conn. Filed Feb. 8, 1918.



Particular description of goods.—Electric Motors, Electric Generators, Electric Transformers, Electric Switches, Electric-Motor Starters and Controllers.
Claims use since Nov. 24, 1917.

Ser. No. 109,107. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) OKLAHOMA OIL & AUTO SUPPLY CO., Ardmore, Okla. Filed Feb. 18, 1918.



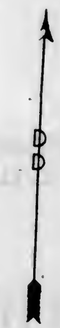
Particular description of goods.—A Rubber Patch for Use in Repairing Blow-Outs, Punctures, and Torn Places in the Inner Tubes of Bicycle-Tires.
Claims use since April, 1917.

Ser. No. 109,174. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) THE GOODYEAR TIRE & RUBBER COMPANY, Akron, Ohio. Filed Feb. 23, 1918.



The inclosing band is red, and the circular central portion is white.
Particular description of goods.—Elastic Vehicle-Tires.
Claims use since January, 1918.

Ser. No. 109,196. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) DICKS DAVID CO., INC., New York, N. Y. Filed Feb. 25, 1918.



Consisting of an arrow associated with two "D's," all in red.
Particular description of goods.—Anilin Dyes and Dyestuffs Generally.
Claims use since the first part of December, 1917.

Ser. No. 109,217. (CLASS 38. PRINTS AND PUBLICATIONS.) THE DENVER ALFALFA MILLING & PRODUCTS CO., Hartman, Colo. Filed Feb. 26, 1918.

MEALOLOGY

Particular description of goods.—A Monthly Periodical.
Claims use since Sept. 1, 1916.

Ser. No. 109,268. (CLASS 39. CLOTHING.) FALLS CITY MILLS CO., Louisville, Ky. Filed Feb. 28, 1918.



Particular description of goods.—Men's, Women's, and Children's Hosiery.
Claims use since Jan. 1, 1916.

Ser. No. 109,424. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed Mar 7, 1918.



Particular description of goods.—Checks with Numbers on Them to Indicate the Amount of Purchase of Soda-Water, Refreshments, &c., or to Identify the Holder by Number. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 20, 1917.

Ser. No. 109,433. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) CLARA STELLA STANNARD, Springfield, Mass. Filed Mar. 7, 1918.

LITTLE GIANT

Particular description of goods.—Expansion-Sleeves, Said Expansion-Sleeves Consisting of Lead Tubes Slotted from Both Ends Longitudinally and Employed Where a Screw or Bolt is Desired to be Inserted in Material in Which No Thread Can be Cut. The Lead Socket Being Inserted in an Opening Prepared for its Reception Expands as the Bolt or Screw Cuts its Own Thread Interiorly While Being Inserted, Thus Forcing the Side Walls of the Socket Outwardly Against the Walls of the Opening in Which the Socket is Inserted.
Claims use since Apr. 15, 1903.

Ser. No. 109,483. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) THE TURNBULL ELEVATOR MFG. CO., Toronto, Ontario, Canada. Filed Mar. 9, 1918.

TEMCO

Particular description of goods.—Munition-Gages.
Claims use since Jan. 1, 1915.

Ser. No. 109,645. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) ROBERT F. CLARK, Salt Lake City, Utah. Filed Mar. 19, 1918.

TORPLEX

Particular description of goods.—Coal and Wood Cooking and Heating Stoves.
Claims use since Jan. 1, 1918.

Ser. No. 109,700. (CLASS 38. PRINTS AND PUBLICATIONS.) ON THE SQUARE PUBLISHING COMPANY, St. Paul, Minn. Filed Mar. 21, 1918.

On The Square

Particular description of goods.—Monthly Magazines.
Claims use since about Jan. 1, 1918.

Ser. No. 109,713. (CLASS 39. CLOTHING.) ELDER MANUFACTURING CO., St. Louis, Mo. Filed Mar. 22, 1918.

TOM SAWYER

Particular description of goods.—Boys' Coats and Pants, Neckties, Trench-Coats, Wash-Suits, Children's Combination-Garments Known as Coveralls, Novelty Overalls, and Soldier-Suits.
Claims use since Dec. 1, 1917.

Ser. No. 109,807. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) GROSVENOR SWAN KINNEY, New York, N. Y. Filed Mar. 26, 1918.

MAGIC

Particular description of goods.—A Mechanical Vulcanizer for Use in Connection with Tires and Tubes.
Claims use since the 15th day of July, 1916.

Ser. No. 109,816. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) STELIOS N. SAKORRAPHOS, Pittsburgh, Pa. Filed Mar. 26, 1918.

Threptol

Particular description of goods.—A Medicinal Tonic for the Nervous System, for Purifying the Blood, and an Aid to Digestion.
Claims use since Jan. 1, 1918.

Ser. No. 109,841. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE CROWN PERFUMERY COMPANY, New York, N. Y. Filed Mar. 28, 1918. Under ten-year proviso.

Crab-Apple BLOSSOMS (MALUS CORONARIA)

Particular description of goods.—Perfumes.
Claims use since July, 1886.

Ser. No. 109,870. (CLASS 39. CLOTHING.) KOPS BROS., New York, N. Y. Filed Mar. 29, 1918.

SUSPENSION

Particular description of goods.—Corsets.
Claims use since Mar. 1, 1918.

Ser. No. 109,879. (CLASS 43. THREAD AND YARN.) HOWARD F. SALISBURY, Providence R. I. Filed Mar. 29, 1918.



Particular description of goods.—Yarns.
Claims use since Feb. 15, 1918.

Ser. No. 109,889. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) METAL HOSE & TUBING CO., Brooklyn, N. Y. Filed Mar. 30, 1918.

TRIPLEXD

Particular description of goods.—Fabric-Covered Rubber Hose with Metal Lining.
Claims use since Aug. 15, 1914.

Ser. No. 109,952. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) S. N. SWAN & SONS, Freeport, Ill. Filed Apr. 3, 1918. Under ten-year proviso.

Burdett

Particular description of goods.—Wind, String, and Percussive Musical Instruments—Namely, Pianos and Organs.
Claims use since 1866.

Ser. No. 109,959. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) SCHOENHOFEN COMPANY, Chicago, Ill. Filed Apr. 3, 1918.

Edelweiss

Particular description of goods.—Root-Beer.
Claims use since Feb. 1, 1918.

Ser. No. 109,978. (CLASS 39. CLOTHING.) HAMBURGER & CO., INC., Baltimore, Md. Filed Apr. 4, 1918.



Particular description of goods.—Children's Dresses.
Claims use since October, 1915.

Ser. No. 110,003. (CLASS 15. OILS AND GREASES.) LA DETTE R. CROSS, Syracuse, N. Y. Filed Apr. 5, 1918.

"SOLVOL"

Particular description of goods.—Motor-Fuel Composed of Gasolene and Benzol.
Claims use since on or about Mar. 27, 1918.

Ser. No. 110,091. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA PACKING CORPORATION, San Francisco, Cal. Filed Apr. 10, 1918.

Del Monte

Particular description of goods.—Canned Rice, Canned Oysters, Canned Shrimp, Canned Lobster, Canned Crab, Canned Spaghetti, Canned Soup, Canned Tamales, Canned Ravioli, Peanut-Butter, Olive-Oil, Salad-Dressing, Meat-Sauces, Pickles, Mince-Meat, Noodles, Macaroni, Tapioca, Rolled Oats, Gelatin, Dry Rice, Table-Syrup, Glacé Fruits.
Claims use since Oct. 1, 1891.

Ser. No. 110,184. (CLASS 5. ADHESIVES.) THE SUPERFIX RUBBER COMPANY, Elyria, Ohio. Filed Apr. 13, 1918.

SUPERFIX

Particular description of goods.—Rubber Cement.
Claims use since Mar. 20, 1918.

Ser. No. 110,202. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) E. I. DU PONT DE NEMOURS & COMPANY, Wilmington, Del. Filed Apr. 15, 1918.

DU-LITE

"Du-Lite" in an oval.
Particular description of goods.—Ready-Mixed Paint.
Claims use since Feb. 20, 1918.

Ser. No. 110,246. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE HARRIS COMPANY, INC., New York, N. Y. Filed Apr. 16, 1918.



Particular description of goods.—Cotton Piece Goods.
Claims use since the year 1895.

Ser. No. 110,247. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE HARRIS COMPANY, INC., New York, N. Y. Filed Apr. 16, 1918.

SILVER LEAF

Particular description of goods.—Cotton Piece Goods.
Claims use since the year 1895.

Ser. No. 110,273. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) PETER A. FRASSE & Co., INC., New York, N. Y. Filed Apr. 17, 1918.

OCNS

Particular description of goods.—Steel Bars and Plates.
Claims use since March, 1917.

Ser. No. 110,274. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) PETER A. FRASSE & Co., INC., New York, N. Y. Filed Apr. 17, 1918.

ONS

Particular description of goods.—Steel Bars and Plates.
Claims use since March, 1917.

Ser. No. 110,275. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) PETER A. FRASSE & Co., INC., New York, N. Y. Filed Apr. 17, 1918.

EHCC

Particular description of goods.—Steel Bars and Plates.
Claims use since March, 1917.

Ser. No. 110,276. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) PETER A. FRASSE & Co., INC., New York, N. Y. Filed Apr. 17, 1918.

ECNS

Particular description of goods.—Steel Bars and Plates.
Claims use since March, 1917.

Ser. No. 110,277. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) PETER A. FRASSE & Co., INC., New York, N. Y. Filed Apr. 17, 1918.

ENS

Particular description of goods.—Steel Bars and Plates.
Claims use since March, 1917.

Ser. No. 110,286. (CLASS 38. PRINTS AND PUBLICATIONS.) THE RENULT PRESS, INC., New York, N. Y. Filed Apr. 17, 1918.

The New York Observer

No claim being made, however, to the exclusive use of the words "New York" except as when associated with the mark shown in the drawing.
Particular description of goods.—Newspapers.
Claims use since Nov. 6, 1915.

Ser. No. 110,334. (CLASS 32. FURNITURE AND UPHOLSTERY.) SEALY MATTRESS CO., Sugar Land, Tex. Filed Apr. 19, 1918.

Airlite

Particular description of goods.—Mattresses.
Claims use since Feb. 1, 1918.

Ser. No. 110,368. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) COLUMBIA FASTENER COMPANY, Chicago, Ill. Filed Apr. 22, 1918.

VANITY

Particular description of goods.—Dress-Fasteners.
Claims use since Mar. 28, 1918.

Ser. No. 110,415. (CLASS 26. MEASURING AND SCIENTIFIC APPLIANCES.) JOSEPH W. JONES, New York, N. Y. Filed Apr. 24, 1918.

VICTOMETER

Consisting of the coined word "Victometer."
Particular description of goods.—Tachometers.
Claims use since Apr. 1, 1918.

Ser. No. 110,470. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS NOT INCLUDING ELECTRICAL APPARATUS.) THE DEIS-FERTIG CO., Dover, Ohio. Filed Apr. 27, 1918.

DEFCO

Particular description of goods.—Gas-Mantles.
Claims use since Jan. 1, 1914.

Ser. No. 110,560. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) BARRIGA, SAMPER & CIA., New York, N. Y., and Bogota, Colombia. Filed Apr. 30, 1918.



Particular description of goods.—Preserved Fruit-Juices—to wit, Juices of Orange, Lemon, Lime, Pineapple, Curuba, Grape-Fruit, Guava, Grapes, and Watermelon for Use in Making Soft Drinks.
Claims use since Mar. 2, 1918.

Ser. No. 110,563. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CRABBS REYNOLDS TAYLOR CO., INCORPORATED, Crawfordsville, Ind. Filed Apr. 30, 1918.



Particular description of goods.—Stock Feeds.
Claims use since May, 1916.

Ser. No. 110,590. (CLASS 40. FANCY GOODS, FURNISHINGS, AND NOTIONS.) SAMSTAG & HILDER BROS., New York, N. Y. Filed May 1, 1918.

HAIRLOX

Particular description of goods.—Hair-Pins of All Kinds.
Claims use since Apr. 20, 1918.

Ser. No. 110,592. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) SOUTHERN TURTLE-GRIP COMPANY, Houston, Tex. Filed May 1, 1918.

TURTLE-GRIP



Particular description of goods.—Patches for Repairing Inner Tubes Used in the Tires of Automobiles, Motor-Cycles, and the Like.
Claims use since Feb. 15, 1918.

Ser. No. 110,705. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) ALBERT F. HUGHES, Cleveland, Ohio. Filed May 6, 1918.

Over the Top

Particular description of goods.—Varnishes.
Claims use since about Apr. 22, 1918.

Ser. No. 110,763. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WEST COAST PACKING CO., Long Beach, Cal. Filed May 7, 1918.

ETSO

Particular description of goods.—Canned Sardines.
Claims use since Mar. 15, 1918.

Ser. No. 110,764. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WEST COAST PACKING CO., Long Beach, Cal. Filed May 7, 1918.

CREEL

Particular description of goods.—Canned Sardines.
Claims use since Mar. 15, 1918.

Ser. No. 110,782. (CLASS 5. ADHESIVES.) KLIX MANUFACTURING COMPANY, Chicago, Ill. Filed May 9, 1918.

Klix

Particular description of goods.—Cement for Joining Films for Cameras.
Claims use since Jan. 16, 1918.

Ser. No. 110,783. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) EDGAR P. LEWIS, Boston, Mass Filed May 9, 1918.

SMUDGE

Particular description of goods.—Candy.
Claims use since February, 1906.

Ser. No. 110,816. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) MEYER BROS. COFFEE AND SPICE Co., St. Louis, Mo. Filed May 10, 1918.

Oh Boy

Particular description of goods.—Roasted Coffee.
Claims use since Jan. 5, 1918.

Ser. No. 110,824. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) SMITH & NESBLE CO., INC., New York, N. Y. Filed May 10, 1918.

U&I



Particular description of goods.—Canned Sardines.
Claims use since Dec. 14, 1917.

Ser. No. 110,940. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) G. H. WETTERAU & SONS GROCER CO., St. Louis, Mo. Filed May 16, 1918.

FREEDOM

Particular description of goods.—Canned Salmon, Canned Peas, Canned Corn, and Canned Tomatoes.
Claims use since June 1, 1915.

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TRADE-MARK REGISTRATIONS GRANTED

JUNE 18, 1918.

122,000. HULLED CORN, DRIED AND CANNED. GEORGE H. ALLEN, Clinton, N. Y.
Filed November 5, 1917. Serial No. 107,145. PUBLISHED APRIL 2, 1918.

122,001. MACARONI, NOODLES, SPAGHETTI, AND VERMICELLI. THE AMERICAN MACARONI CO., Milwaukee, Wis.
Filed March 2, 1918. Serial No. 109,311. PUBLISHED APRIL 2, 1918.

122,002. CERTAIN NAMED CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS. APOTHECARIES HALL COMPANY, Waterbury, Conn.
Filed December 22, 1917. Serial No. 108,090. PUBLISHED APRIL 2, 1918.

122,003. MACARONI, VERMICELLI, AND NOODLES. THE ATLANTIC MACARONI CO., Long Island City, N. Y.
Filed January 24, 1918. Serial No. 108,604. PUBLISHED APRIL 2, 1918.

122,004. CANDIES AND CHOCOLATES. D. AUERBACH & SONS, New York, N. Y.
Filed February 1, 1918. Serial No. 108,737. PUBLISHED APRIL 2, 1918.

122,005. UNBLEACHED SHEETING. BALTIMORE BARGAIN HOUSE, Baltimore, Md.
Filed December 8, 1916. Serial No. 99,786. PUBLISHED DECEMBER 11, 1917.

122,006. CANNED EVAPORATED MILK. G. BATCHELLER HALL CO., Seattle, Wash.
Filed February 16, 1918. Serial No. 109,020. PUBLISHED APRIL 2, 1918.

122,007. CANNED PEAS AND CANNED SAUERKRAUT. BIG FOUR CANNING COMPANY, Stanley, Wis.
Filed March 2, 1918. Serial No. 109,315. PUBLISHED APRIL 2, 1918.

122,008. BRASSIÈRES. BIRDSEY-SOMERS COMPANY, New York, N. Y.
Filed December 6, 1917. Serial No. 107,782. PUBLISHED MARCH 26, 1918.

122,009. DRESSES. JULIUS D. BOOTH & SON, INC., New York, N. Y.
Filed January 24, 1918. Serial No. 108,607. PUBLISHED APRIL 2, 1918.

122,010. FLAVORING EXTRACTS FOR FOOD PURPOSES. BOYCE EXTRACT CO., INC., New York, N. Y.
Filed February 4, 1918. Serial No. 108,784. PUBLISHED APRIL 2, 1918.

122,011. CANNED FRUITS, CANNED VEGETABLES, AND CANNED SALMON. BROCKTON PUBLIC MARKET, Brockton, Mass.
Filed November 24, 1917. Serial No. 107,584. PUBLISHED FEBRUARY 5, 1918.

122,012. HALF-HOSE. ROY A. BURD, Louisville, Ky.
Filed January 10, 1918. Serial No. 108,423. PUBLISHED MARCH 19, 1918.

122,013. CANNED SARDINES. IWAN BURGER, New York, N. Y.
Filed March 2, 1918. Serial No. 109,314. PUBLISHED APRIL 2, 1918.

122,014. HOSIERY. CARSON, PIRIE, SCOTT & CO., Chicago, Ill.
Filed February 18, 1918. Serial No. 109,052. PUBLISHED MARCH 19, 1918.

122,015. DRIED PRUNES, DRIED PEACHES, DRIED APRICOTS, DRIED PEARS, RAISINS, DRIED APPLES, AND DRIED PITTED PLUMS. CASTLE BROTHERS, San Francisco, Cal.
Filed January 15, 1917. Serial No. 100,609. PUBLISHED JANUARY 22, 1918.

122,016. BOOTS AND SHOES MADE OF RUBBER AND FABRIC. CONVERSE RUBBER SHOE CO., Malden, Mass.
Filed February 7, 1916. Serial No. 92,681. PUBLISHED APRIL 2, 1918.

122,017. VEGETABLE-OIL PRODUCT FOR SALADS AND COOKING. THE N. K. FAIRBANK COMPANY, Union township, near Guttenberg, N. J., and Chicago, Ill.
Filed January 26, 1918. Serial No. 108,650. PUBLISHED APRIL 2, 1918.

122,018. COMPOSITION SOLES AND HEELS. THE FEDERAL RUBBER COMPANY, Cudahy, Wis.
Filed December 22, 1917. Serial No. 108,098. PUBLISHED MARCH 26, 1918.

122,019. FISH-MEAL USED AS POULTRY AND STOCK FOOD. FISH CANNERS' BY-PRODUCTS COMPANY, Seattle, Wash., and Ketchikan, Territory of Alaska.
Filed October 10, 1917. Serial No. 106,696. PUBLISHED MARCH 12, 1918.

122,020. CERTAIN NAMED FOODS. FRIEDRICH & KEMPE CO., INC., Red Wing, Minn.
Filed February 4, 1918. Serial No. 108,793. PUBLISHED APRIL 2, 1918.

122,021. SWEETMEAT-BUTTER. GORDON, WOLF, COWEN CO. INC., New York, N. Y.
Filed February 21, 1918. Serial No. 109,150. PUBLISHED APRIL 2, 1918.

122,022. ALIMENTARY PASTES, COVERING ALL KINDS OF MACARONI. GUANO & RAGGIO, INC., Philadelphia, Pa.
Filed February 28, 1918. Serial No. 109,272. PUBLISHED APRIL 2, 1918.

122,023. LEATHER BOOTS AND SHOES AND BOOT AND SHOE SOLES OF LEATHER. HOLLAND SHOE CO., Holland, Mich.
Filed July 31, 1917. Serial No. 105,377. PUBLISHED NOVEMBER 6, 1917.

122,024. WEARING-APPAREL—NAMELY, CHILDREN'S PETTICOATS. E. H. HORWOOD & CO., Hoboken, N. J., and New York, N. Y.
Filed January 24, 1918. Serial No. 108,614. PUBLISHED MARCH 19, 1918.

122,025. WORK-SHIRTS, OVERALLS, TEXTILE JACKETS, AND TEXTILE JUMPERS. JOHN E. HURST & COMPANY, Baltimore, Md.
Filed February 8, 1918. Serial No. 108,888. PUBLISHED MARCH 19, 1918.

122,026. MEN'S SUITS, OVERCOATS, TROUSERS, VESTS, BOYS' SUITS, TROUSERS, AND KNICKERBOCKERS. HARRY JACOBSON COMPANY, INC., New York, N. Y.
Filed November 15, 1917. Serial No. 107,393. PUBLISHED MARCH 26, 1918.

122,027. MEN'S COLLARS. GEO. P. IDE AND COMPANY, Troy, N. Y.
Filed February 19, 1918. Serial No. 109,115. PUBLISHED MARCH 19, 1918.

122,028. LIQUID VEGETABLE SAUCE FOR SEASONING FOODS. JOHNSEN & KILDAL, INC., New York, N. Y.
Filed December 20, 1917. Serial No. 108,074. PUBLISHED MARCH 5, 1918.

122,029. COMPOUND USED IN THE PREPARATION OF JELLIES AND DESSERTS. JAMES A. MCATEER & SONS INC., Pittsburgh, Pa.
Filed February 12, 1918. Serial No. 108,958. PUBLISHED APRIL 2, 1918.

122,030. COFFEE AND TEA. THE H. D. LEE MERCANTILE CO., Salina, Kans., and Kansas City, Mo.
Filed March 2, 1918. Serial No. 109,326. PUBLISHED APRIL 2, 1918.

122,031. CHOCOLATE CANDIES. MAGRUDER-WOOD CHOCOLATE CO., INC., Syracuse, N. Y.
Filed October 26, 1917. Serial No. 106,975. PUBLISHED FEBRUARY 5, 1918.

122,032. EDIBLE OLIVE-OIL. MANUEL CARAGOL & SON, INC., New York, N. Y.
Filed February 28, 1918. Serial No. 109,277. PUBLISHED APRIL 2, 1918.

122,033. BABIES' BIBS. SARAH K. METZENDORF, New York, N. Y.
Filed February 6, 1918. Serial No. 108,852. PUBLISHED MARCH 26, 1918.

122,034. METALLIC HARDENERS FOR CONCRETE. THE NATIONAL BUILDERS COMPANY, Cleveland, Ohio.
Filed February 28, 1917. Serial No. 101,798. PUBLISHED MAY 8, 1917.

122,035. SOFT AND STIFF FUR-FELT HATS. NO NAME HAT MANUFACTURING COMPANY, Orange, N. J., and New York, N. Y.
Filed October 12, 1917. Serial No. 106,742. PUBLISHED MARCH 26, 1918.

122,036. MEN'S SCARFS AND NECKTIES. EUGENE OPPENHEIMER, New York, N. Y.
Filed January 26, 1918. Serial No. 108,653. PUBLISHED MARCH 19, 1918.

122,037. RUBBER SOLES FOR BOOTS AND SHOES. O'SULLIVAN RUBBER COMPANY, Portland, Me., and New York, N. Y.
Filed November 22, 1917. Serial No. 107,535. PUBLISHED MARCH 19, 1918.

122,038. MIXED FEED COMPOSED OF VARIOUS GRAINS, ALFALFA, AND MOLASSES. M. C. PETERS MILL CO., Omaha, Nebr.
Filed February 21, 1918. Serial No. 109,158. PUBLISHED APRIL 2, 1918.

122,039. POULTRY FEED — NAMELY, SCRATCH FEED, CHICK FEED, AND MASH FEED. M. C. PETERS MILL CO., Omaha, Nebr.
Filed February 9, 1918. Serial No. 108,927. PUBLISHED APRIL 2, 1918.

122,040. COATS, TROUSERS, VESTS, AND OUTER OR OVER COATS. ED. V. PRICE & COMPANY, Chicago, Ill.
Filed January 8, 1917. Serial No. 100,449. PUBLISHED MARCH 19, 1918.

122,041. WHEAT BISCUIT-FLOUR. RAVALLI CEREAL & FLOUR MILL COMPANY, Missoula, Mont.
Filed February 25, 1918. Serial No. 109,206. PUBLISHED APRIL 2, 1918.

122,042. HATS. ROSENWALD-WIMPFHEIMER, INC., New York, N. Y.
Filed February 8, 1918. Serial No. 108,896. PUBLISHED MARCH 19, 1918.

122,043. BOOTS AND SHOES MADE WHOLLY OR IN PART OF LEATHER OR TEXTILE MATERIAL. SLATER & MORRILL, INCORPORATED, South Braintree, Mass.
Filed February 1, 1918. Serial No. 108,757. PUBLISHED MARCH 19, 1918.

122,044. HOSIERY. SOCIETY MAID HOSIERY CO. INC., New York, N. Y.
Filed February 15, 1918. Serial No. 109,015. PUBLISHED MARCH 19, 1918.

122,045. CHILLED AND FROZEN BEEF, OFFAL, PORK, AND MUTTON IN BOXES AND BAGS. SWIFT & COMPANY, Chicago, Ill.
Filed November 8, 1917. Serial No. 107,250. PUBLISHED APRIL 2, 1918.

122,046. WHEAT-FLOUR. W. P. TANNER-GROSS AND COMPANY, INC., New York, N. Y.
Filed March 2, 1918. Serial No. 109,347. PUBLISHED APRIL 2, 1918.

122,047. CERTAIN NAMED CLOTHING. TOONE & WELLS LTD., Leicester, England.
Filed May 23, 1917. Serial No. 104,034. PUBLISHED MARCH 19, 1918.

122,048. CERTAIN NAMED CLOTHING. UTICA-DUXBAK CORPORATION, Utica, N. Y.
Filed August 13, 1917. Serial No. 105,633. PUBLISHED MARCH 26, 1918.

122,049. CANDY KNOWN AS CHOCOLATE NOUGAT BAR. WEBER-SCHLITZ CANDY CO., Milwaukee, Wis.
Filed March 31, 1917. Serial No. 102,637. PUBLISHED APRIL 2, 1918.

122,050. FRESH CITRUS FRUITS. WINTER PARK CITRUS GROWERS ASSOCIATION, Winter Park, Fla.
Filed December 19, 1917. Serial No. 108,068. PUBLISHED APRIL 2, 1918.

LABELS

REGISTERED JUNE 18, 1918.

20,657.—*Title:* "AROMINTS LICORICE." (For Mint Candy.) THE AROMINT MANUFACTURING COMPANY, Cincinnati, Ohio. Filed May 18, 1918.

20,658.—*Title:* "AROMINTS CINOS." (For Mint Candy.) THE AROMINT MANUFACTURING COMPANY, Cincinnati, Ohio. Filed May 18, 1918.

20,659.—*Title:* "BEST BUTTONS FOR SOFT OR STIFF CUFFS." (For Pads for Displaying Buttons.) THE BAER AND WILDE CO., Attleboro, Mass. Filed May 24, 1918.

20,660.—*Title:* "SAXON." (For Apple Cider.) GEORGE BLAUFUSS, Napa, Cal. Filed May 28, 1918.

20,661.—*Title:* "EGGO, A PURE RICE. CORN, MILK, AND EGG PRODUCT." (For a Substitute for Eggs.) THOS. J. BRYSON, Macon, Ga. Filed March 26, 1918.

20,662.—*Title:* "SUPER SIX." (For Electric Batteries.) BURGESS BATTERY COMPANY, Madison, Wis. Filed May 20, 1918.

20,663.—*Title:* "CALIFORNIA FIG NUTS DE LUXE." (For a Food Compound.) CALIFORNIA FIG-NUT CO., Orange, Cal. Filed April 2, 1918.

20,664.—*Title:* "KLONDIKE GOLD." (For Wheat-Flour.) CENTENNIAL MILL COMPANY, Seattle, Wash. Filed May 10, 1918.

20,665.—*Title:* "CENTENNIAL." (For Flour.) CENTENNIAL MILL CO., Memphis, Tenn. Filed May 17, 1918.

20,666.—*Title:* "CHARDEAU." (For Wine.) THE CHARDEAU COMPANY, New York, N. Y. Filed May 20, 1918.

20,667.—*Title:* "SALVO." (For a Non-Intoxicating Beverage.) THE CHICAGO CONSOLIDATED BREWING & MALTING CO., Chicago, Ill. Filed May 28, 1918.

20,668.—*Title:* "RED RIBBON." (For String-Beans.) WILLIAM CLUFF COMPANY, San Francisco, Cal. Filed October 1, 1915.

20,669.—*Title:* "GOLDEN BROWN." (For Health-Bread.) WILLIAM N. CRENSHAW, Spokane, Wash. Filed May 7, 1918.

20,670.—*Title:* "PULVOIDS, NO. 373 NATRIUM COMPOUND HIGH TENSION, DR. M. C. THRUSH." (For Pulvoids Representing a Compound of Potassium Nitrate, Sodium Nitrate, Sodium Bicarbonate, Nitroglycerin, Fluid Extract Crataegus Oxyacantha.) THE DRUG PRODUCTS CO., INC., New York, N. Y. Filed May 22, 1918.

20,671.—*Title:* "REX LIQUID CEMENT." (For a Liquid Cement.) THE REX SPECIALTY CO., Jersey City, N. J. Filed November 22, 1917.

20,672.—*Title:* "LOVELEE." (For Hair-Nets.) S. GLEMBY, INC., New York, N. Y. Filed May 25, 1918.

20,673.—*Title:* "LIBERTY BREAD." (For Bread.) THE HAMMERSCHLAG MANUFACTURING COMPANY, Garfield, N. J. Filed April 20, 1918.

20,674.—*Title:* "UTA-FRUTA BERRIJU." (For Fruit Beverage.) HEWLETT-WILSON BEVERAGE CO., Salt Lake City, Utah. Filed May 9, 1918.

20,675.—*Title:* "JOLLY TRAVELER." (For Candies.) HONOLULU CRACKER CO., Honolulu, Hawaii. Filed November 12, 1917.

20,676.—*Title:* "ARROW—'IT HITS THE SPOT.'" (For a Non-Intoxicating Cereal Beverage.) KAMM & SCHELLINGER CO., Mishawaka, Ind. Filed May 22, 1918.

20,677.—*Title:* "MANHATTAN." (For Cocoa.) MANHATTAN BAKING POWDER CO., New York, N. Y. Filed May 6, 1918.

20,678.—*Title:* "LOYALTY." (For Condensed Milk.) MIDDLE STATES CONDENSED MILK CORP., Canastota, N. Y. Filed May 19, 1918.

20,679.—*Title:* "MILLER STANDARD." (For Cartons Containing Hot-Water Bottles.) THE MILLER RUBBER CO., Akron, Ohio. Filed February 28, 1918.

20,680.—*Title:* "PACKARD BRIGHT-O." (For Shoe and Leather Dressings.) PACKARD DRESSING CO., Stoughton, Mass. Filed April 15, 1918.

20,681.—*Title:* "PACKARD GLYCERINE." (For a Shoe-Dressing.) PACKARD DRESSING CO., Stoughton, Mass. Filed April 15, 1918.

20,682.—*Title:* "PACKARD CREAM-O." (For Shoe and Leather Dressings.) PACKARD DRESSING CO., Stoughton, Mass. Filed April 15, 1918.

20,683.—*Title:* "PACKARD CLEAN-O." (For Shoe and Leather Dressing.) PACKARD DRESSING CO., Stoughton, Mass. Filed April 18, 1918.

20,684.—*Title:* "BOSTON, 1915." (For Cake and Pastry Flour.) POTTER & WRIGHTINGTON, Boston, Mass. Filed April 6, 1918.

20,685.—*Title:* "B-SLYM." (For a Pharmaceutical Preparation.) RE-JUVENATING CO., Philadelphia, Pa. Filed May 27, 1918.

20,686.—*Title:* "SPRYNG-DEW." (For a Pharmaceutical Preparation.) RE-JUVENATING CO., Philadelphia, Pa. Filed May 27, 1918.

20,687.—*Title:* "B-FLUFFY." (For a Pharmaceutical Preparation.) RE-JUVENATING CO., Philadelphia, Pa. Filed May 27, 1918.

20,688.—*Title:* "RE-JUVENATING COLD CREAM." (For a Pharmaceutical Preparation.) RE-JUVENATING CO., Philadelphia, Pa. Filed May 27, 1918.

20,689.—*Title:* "B-YOUNG." (For a Pharmaceutical Preparation.) RE-JUVENATING CO., Philadelphia, Pa. Filed May 27, 1918.

20,690.—*Title:* "RE-JUVENATING TISSUE CREAM." (For a Pharmaceutical Preparation.) RE-JUVENATING CO., Philadelphia, Pa. Filed May 27, 1918.

20,691.—*Title:* "MORNING GLOW CREME." (For a Facial Cream.) CLAIRE REAVES, Kansas City, Mo. Filed May 2, 1918.

20,692.—*Title:* "BONNIE-B-BUTTONS." (For Buttons.) SILVERBERG IMPORT CO. INC., New York, N. Y. Filed November 9, 1917.

20,693.—*Title:* "SUNSET." (For Canned Sardines.) SOUTHERN CALIFORNIA FISH CO., Port Los Angeles, Cal. Filed May 28, 1918.

20,694.—*Title:* "JIM DANDY." (For Lemons.) JESSE D. SPENNETTA, Orange, Cal. Filed May 22, 1918.

20,695.—*Title:* "JIM DANDY." (For Oranges.) JESSE D. SPENNETTA, Orange, Cal. Filed May 22, 1918.

20,696.—*Title:* "XTRAGOOD." (For Canned Salmon.) STRAITS PACKING CO., Seattle, Wash., and Skowl Arm, Territory of Alaska. Filed May 9, 1918.

20,697.—*Title:* "SALVUS DENTAL CREAM." (For Dental Cream.) BURTON E. TURNEY, Bridgeport, Conn. Filed May 10, 1918.

20,698.—*Title:* "EL MORO." (For Canned Peaches.) VANOMAR PRODUCERS, INC., Van Nuys, Cal. Filed May 7, 1918.

20,699.—*Title:* "MARIAN." (For Canned Peaches.) VANOMAR PRODUCERS, INC., Van Nuys, Cal. Filed May 7, 1918.

20,700.—*Title:* "REDONDO." (For Canned Peaches.) VANOMAR PRODUCERS, INC., Van Nuys, Cal. Filed May 7, 1918.

20,701.—*Title:* "CASA BLANCA." (For Canned Peaches.) VANOMAR PRODUCERS, INC., Van Nuys, Cal. Filed May 7, 1918.

20,702.—*Title:* "CORONADO." (For Canned Peaches.) VANOMAR PRODUCERS, INC., Van Nuys, Cal. Filed May 7, 1918.

20,703.—*Title:* "LA CAÑADA." (For Canned Apricots.) VANOMAR PRODUCERS, INC., Van Nuys, Cal. Filed May 7, 1918.

20,704.—*Title:* "BUENA VISTA." (For Canned Peaches.) VANOMAR PRODUCERS, INC., Van Nuys, Cal. Filed May 7, 1918.

20,705.—*Title:* "COVE." (For Canned Sardines.) VAN CAMP SEA FOOD CO., San Pedro, Cal. Filed May 28, 1918.

20,706.—*Title:* "WALKER'S RED HOT TAMALES." (For Tamales.) WALKER PROPERTIES ASSOCIATION, Austin, Tex. Filed March 21, 1918.

20,707.—*Title:* "WALKER'S RED HOT CHILE CON CARNE." (For Chilli-Con-Carne.) WALKER PROPERTIES ASSOCIATION, Austin, Tex. Filed March 21, 1918.

PRINTS

REGISTERED JUNE 18, 1918.

4,900.—*Title:* "BRONCHAL-EASE." (For Bronchal-Ease.) THE BRONCHAL-EASE COMPANY, Cincinnati, Ohio. Filed May 9, 1918.

4,901.—*Title:* "THE MINERAL WAX TWINS, CLEAN AND GOOD." (For Carbon-Paper and Type-Writer Ribbons.) THE COLUMBIA CARBON COMPANY, Dayton, Ohio. Filed May 16, 1918.

4,902.—*Title:* "HAYS SUPERSEAM GLOVES." (For Leather Gloves.) THE DANIEL HAYS COMPANY, Gloversville, N. Y. Filed May 28, 1918.

4,903.—*Title:* "W. L. DOUGLAS WAS FREQUENTLY REQUIRED TO HAUL LEATHER AND OTHER MATERIALS IN A WHEELBARROW." (For Shoes.) W. L. DOUGLAS SHOE CO., Brockton and Boston, Mass.; Portland, Me.; New York, N. Y.; Denver, Colo.; Buffalo, N. Y.; and Philadelphia, Pa. Filed May 15, 1918.

4,904.—*Title:* "HOME." (For Food Products.) GRIGGS, COOPER & COMPANY, St. Paul, Minn. Filed May 7, 1918.

4,905.—*Title:* "ICY HOT SOLDIER BOY." (For Heat-Insulated Bottles and Carafes.) THE ICY HOT BOTTLE COMPANY, Cincinnati, Ohio. Filed April 22, 1918.

4,906.—*Title:* "ICY HOT ESKIMO BOY." (For Heat-Insulated Bottles and Carafes.) THE ICY HOT BOTTLE COMPANY, Cincinnati, Ohio. Filed April 22, 1918.

4,907.—*Title:* "GATES HALF SOLE TIRES." (For Tires.) THE INTERNATIONAL RUBBER COMPANY, Denver, Colo. Filed May 14, 1918.

4,908.—*Title:* "PACKING IN P. A. SMOKEJOY EVERY LITTLE OLD NOW-AND-AGAIN!" (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 22, 1918.

4,909.—*Title:* "YOU'RE SMOKE-SET FOR KEEPS WHEN YOU PICK P. A. FOR YOUR PET PAL." (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 22, 1918.

4,910.—*Title:* "P. A. IS SUCH A PEACH OF A PAL." (For Smoking-Tobacco.) R. J. REYNOLDS TOBACCO COMPANY, Winston-Salem, N. C. Filed May 22, 1918.

DECISIONS
OF THE
COMMISSIONER OF PATENTS
AND OF
UNITED STATES COURTS IN PATENT CASES.

DECISIONS OF THE U. S. COURTS.

Court of Appeals of the District of Columbia.

MCAFEE *v.* GRAY.

Decided January 7, 1918.

INTERFERENCE—PRIORITY.

Evidence considered and found sufficient to prove priority for M. by reason of certain testimony to the effect that when he reduced the invention to practice he was acting independently and not under the direction of G., the senior party.

Mr. A. M. Houghton and *Mr. C. W. Fairbank* for the appellant.

Mr. J. Edgar Bull for the appellee.

SMYTH, *C. J.*:

This is an appeal from an award of priority to Gray of an invention for the refining of high-boiling constituents of petroleum-oils, particularly lubricating oils. The issues are defined in seven counts, of which counts 1, 4 and 6 are typical. They read:

1. The method of purifying high boiling constituents of petroleum which consists in heating the same in the presence of aluminum chlorid to a temperature of from 150° F. to about 212° F. for a period of from two to six hours.

4. In the purification of high boiling mineral lubricating oils, the process which comprises heating such oil with dry aluminum chlorid to a temperature around 150° F., allowing the oil to cool and separating the oil from the chlorid sludge.

6. The process of bleaching, stabilizing and purifying lubricating oils which comprises producing an internal condensation attended with deposition of carbon and saturation of unsaturated groups by warming such oil with a catalytic chemical and thereafter treating the oil with sulfuric acid.

Stated in general terms, the invention embraces a process by which lubricating-oil is purified and the color improved thereby.

McAfee and Gray, at the time of the invention, were highly-educated chemists, both having received the degree of Ph. D., one in 1910 and the other in 1895. They were employed by The Texas Company, a concern engaged in the refining of petroleum with headquarters at Houston, Tex. It had a laboratory at Bayonne, N. J., and another at Port Arthur, Tex. McAfee was engaged at Bayonne during the summer of 1912 and while there made, as he claims, a special study of petroleum, particularly the lubricating fractions. Later he was transferred to Port Arthur where, according to his testimony, he made the invention in controversy. Gray asserts that McAfee was his assistant at Port Arthur and that he gave him, as such, a disclosure of the general plan of the invention together with instructions from time to time sufficient to enable McAfee to work out the details revealed by the counts. McAfee, on the other hand, denies this and asserts that, so far at least as the invention is concerned, he was not Gray's subordinate. He also urges that he disclosed the invention to Gray long before any of the dates on which the latter claims to have conceived it. The Examiner of Interferences decided in favor of Gray, and was overruled by the Examiners-in-Chief, who, in turn, were reversed by an Assistant Commissioner.

Gray, while asserting that he conceived the invention, does not claim to have, himself, reduced it to practice, but contends that what McAfee did in that regard inures to Gray's benefit because McAfee, as he asserts, was his assistant acting in pursuance of his instructions. It will be seen, therefore, that the question is which one originated the invention.

McAfee, being the junior party, has the burden of clearly showing that he, acting independently, is the inventor. He testified that on December 4, 1912, he conceived the invention when he observed the saturating action of aluminum chlorid on petroleum-oil; that his conception was largely the result of work which he had done during the preceding summer; that The Texas Company, for which he was working, was particularly interested in the manufacture of lubricating-oils with as little color as possible; that connecting his work of the previous summer with the aluminum-chlorid reaction which he had noticed on December 4, he conceived the idea—

that it might be possible to lower the iodin values of lubricating oils, and therefore improve their color, by warming with aluminum chlorid.

For the purpose of refreshing his memory with regard to this he produced a memorandum made by him at the time of the experiments related. Later on, January 15, 1913, he treated—

a comparatively large quantity of lubricating oil with a certain amount of aluminum chlorid to a certain temperature for a definite time, all of these conditions—

he said—

having been previously established as being the proper conditions from my preliminary work on hand samples.

Upon this point he refreshed his memory also from a note-book made at the time of the treatment. He further said that he received absolutely no in-

structions from Gray or any other person relating to the treatment of lubricating-oil in any manner until after February 4, 1913, the date on which Gray conceived the invention, if his claim be correct. This testimony, as we understand the record, is in no material respect contradicted. Is there any corroboration of it? The memorandums used by McAfee, while strengthening his testimony, do not have the effect of corroborating it within the meaning of the law. It was the same witness who spoke through the memorandums and in the person of McAfee.

This brings us to consider the testimony of George H. King, a stillman under McAfee, who is put forward as a corroborating witness. He stated that on February 5, 1913, he assisted McAfee in performing the process for purifying lubricating-oils by warming the oil with aluminum chlorid from 150° F. to 212° F. from two to six hours, and further said that he first acted as stillman for McAfee on January 22, 1913. On that date he needed, according to his testimony, some lubricating-oil to oil machinery, and began looking around for it. He asked Mr. McAfee for a sample of oil and was told by him—

to filter the sample from a five gallon which was sitting inside of his building.

"I filtered," he said—

as much as a four ounce sample and used it for lubricating purposes.

The oil before filtering was a brick-red, afterward a very light color. Asked if he understood the process on that date, January 22, he said he did not, but that he understood it thoroughly on February 5, the date on which he first assisted McAfee in performing it. In criticism of King's testimony, it is claimed by Gray that the filtering of these oils was a difficult problem worked out only after careful experimentation and that—

it is unreasonable to presume that this filtration could have been made by the stillman King who had no chemical knowledge or skill in manipulation and, at that, through the medium of filtering paper.

But in one of the letters which passed from McAfee to Gray it is stated that—

a four ounce sample, however, which has been kept stoppered since treating shows 15 color on filtering through filter paper,

and Gray in his amended specifications tells us that—

a sample is then drawn from the still and after being filtered through paper is examined as to its color.

He is not therefore in a position to claim that the filtration could not be accomplished "through the medium of paper." And as this operation of filtration does not require chemical knowledge, certainly there is nothing in the record which shows that it does, we think that King's testimony is not discredited on the theory advanced by Gray. King, when interrogated as to how he came to remember that it was on February 5 he assisted McAfee in performing the process referred to above, said that he did so—

because we * * * heated—

the oil—

about three hours, shut fire off, and allowed mixture to run over night, something which we had not done before and have not done since.

He also said that he had performed many times the process of warming lubricating-oil with dry aluminum chlorid from about 150° F. to about 212° F.; that he was able to recognize the oil made by this process before it was filtered; that the unfiltered oil which Mr. McAfee gave him on January 22, 1913, was exactly the same as the oil made by that process; that since February 5 he many times filtered oil which he knew to be made by the process just defined; that he always found it to have a light color; and, finally, that there was no difference between the color of the oil filtered by him under the direction of Mr. McAfee on January 22, 1913, and the oil which he knew to be made by the process just referred to, being the process defined in the counts. He fixes January 22 as the date upon which he received the oil from McAfee, because, as he asserts, on the second night after he commenced his work with the latter, the still blew up, and McAfee's note-book shows that this happened on January 23. King was not cross-examined. This is a significant circumstance and tends to show that Gray did not believe that he could develop that King was lacking in the knowledge which his answers implied, and hence was not telling the truth. If King was, as Gray claims, a mere stillman who "had no chemical knowledge or skill in manipulation" it could have been easily disclosed by an intelligent cross-examination. We believe that King told the truth and therefore fully corroborated the testimony of McAfee as to the work done on January 22 and February 5, 1913.

As to the date on which the invention was reduced to practice, McAfee, in his report to Gray March 4, 1913, shows that he had accomplished the reduction some time before. The exact date is not disclosed, nor is it material in the view which we take of the matter. Gray does not deny that McAfee reduced the invention to practice, nor does he contend that he did any work on the process himself, his theory being that the reduction to practice was accomplished by McAfee acting in pursuance of his directions, and therefore, on the doctrine of principal and assistant, he is entitled to the benefit of McAfee's work.

With respect to the origin of the invention, Gray testified that he did not conceive it before the 3d of February, 1913. On that date, according to him, McAfee was in his office with several samples, one a standard white oil which had been treated with anhydrous aluminum chlorid and which was considerably lighter in color than standard white oil. At this time McAfee also showed him a sample which he declared, according to Gray, was the residue which had been left in the still after the manufacture of gasolene by means of anhydrous aluminum chlorid. This residue was a light green in color. Gray further said that in ordinary operations a residue from distilling paraffin gas-oil down and leaving a small percentage in the still, would have been very dark in color. This product, however, was very light, being, as we have related, a light green. He talked the matter over with McAfee and later wrote him to treat a sample of gas-oil in the same manner that lubricating-oils had been treated, and then distil it with aluminum

chlorid, holding the temperature of the still as low as possible "to make the maximum yield of gasolene." The letter containing these instructions was written by Gray on February 4, 1913. This letter, according to Gray, revealed the plan which led to the invention. We do not think so. As we read it, there is nothing in it which discloses any thought on his part of improving the color of lubricating-oil. On the other hand, it clearly shows that what he had in mind did not relate to lubricating-oils but to a process by which, as he writes—

to obtain maximum yield of gasolene having a final distillation point of 350.

This is the only testimony upon which Gray relies to show conception by him on February 4. It is entirely insufficient. Besides, the record shows that almost two years after the date on which he now claims he conceived the invention, he was not at all clear about it. In his preliminary statement made in June, 1914, he said that he conceived it January, 1913, and he repeated this in November, 1914, when he made his preliminary statement as to the added counts 6 and 7. This uncertainty necessarily lessens the weight which his testimony upon the subject would otherwise have. True, McAfee was not always consistent, but he adhered rigidly to his first statement with respect to the date upon which he claims to have conceived the invention. Gray, in our opinion, has completely failed to show conception by him on the date claimed, February 4, 1913. But even if it were otherwise, it would be immaterial if McAfee had conceived the invention in December or January before. McAfee's testimony on this point, which is fully corroborated by King, clearly establishes that on December 4, 1912, or at latest in January, 1913, it matters not which since in either event it would be ahead of the date of conception claimed by Gray, he conceived the thought that the color of lubricating-oil might be improved by heating it in the presence of aluminum chlorid. This is the idea for which he claims a patent. There is no material contradiction either of his testimony or of King's. And while this in itself would not warrant us in holding the testimony conclusive, we must do so unless the record discloses some good reason why we should not, (*United States* v. *Leu Huen*, 118 Fed., 442–457; *Quock Ting* v. *United States*, 140 U. S., 420; *Cavanagh* v. *Wilson*, 70 N. Y., 177–179; *Wait* v. *McNeil*, 7 Mass., 261; *Murphey* v. *Virgin*, 47 Nebr., 692,) and we perceive none. We are also of the opinion that when McAfee reduced the invention to practice he was acting independently of Gray, and therefore he, and not Gray, is entitled to the benefit of what he accomplished. It follows that McAfee should be given priority as to counts 1, 2, 3, 4 and 5.

This leaves counts 6 and 7 to be considered. They call for the treatment of oil produced by the process of the other counts, before filtration with sulfuric acid. McAfee in his report to Gray, June 13, 1913, said:

Dr. Dengler has apparently solved the difficulty completely and satisfactorily. He treats the oil containing the suspended solid with fuming sulfuric acid * * * and the color is further apparently improved.

This is an admission on the part of McAfee that Dengler was the inventor of the process covered by counts 6 and 7. Gray does not claim to have made the invention himself, but asserts that he put Dr. Dengler to work with instructions and, therefore, that whatever Dengler discovered in pursuance of those instructions belongs to him. There is nothing in the instructions which he gave to Dengler that would indicate the steps pursued by the latter as described in McAfee's report. Gray's testimony on this point is:

I had given instructions for another man to be placed on this work to hasten it. This party was Dr. Dengler.

But he nowhere says that he gave Dengler any plan by which the latter could solve the difficulty which confronted him. Hence we do not think Gray is entitled to what Dengler discovered. Dr. Dengler when he made his invention reported it to McAfee and McAfee, as we have seen, revealed it to Gray on June 13. McAfee, therefore, was in possession of the invention before Gray, and, as between him and Gray, Dengler not being before us so that his rights can be passed upon, McAfee is entitled to priority.

The decision of the Assistant Commissioner is reversed and priority of invention as to all the counts is awarded to Almer M. McAfee.

Reversed.

THE
OFFICIAL GAZETTE
OF THE
United States Patent Office.

Vol. 251—No. 4. TUESDAY, JUNE 25, 1918. Price—$5 per year.
[PUBLISHED JULY 18, 1918.]

The OFFICIAL GAZETTE is mailed under the direction of the Superintendent of Documents, Government Printing Office, to whom all subscriptions should be made payable and all communications respecting the Gazette should be addressed. Issued weekly. Subscriptions, $5.00 per annum; single numbers, 10 cents each.
Printed copies of patents are furnished by the Patent Office at 5 cents each. For the latter, address the Commissioner of Patents, Washington, D. C.

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Issue of June 25, 1918.

Patents	509—No.	1,270,253	to No. 1,270,761,	inclusive.
Designs	None.			
Trade-Marks	70—No.	122,051	to No. 122,120,	inclusive.
Labels	None.			
Prints	None.			
Reissues	2—No.	12,488	to No. 14,489,	inclusive.
Total	581			

Unlicensed Use by the United States of Patented Inventions—Compensation Secured by Suit in Court of Claims.

(Public—No. 182—65th Congress.)

(H. R. 10854.)

An act making appropriations for the naval service for the fiscal year ending June thirtieth, nineteen hundred and nineteen, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled:

* * * * * * *

The act entitled "An act to provide additional protection for the owners of patents of the United States, and for other purposes," approved June twenty-fifth, nineteen hundred and ten, shall be, and the same is hereby, amended to read as follows, namely:

"That whenever an invention described in and covered by a patent of the United States shall hereafter be used or manufactured by or for the United States without license of the owner thereof or lawful right to use or manufacture the same, such owner's remedy shall be by suit against the United States in the Court of Claims for the recovery of his reasonable and entire compensation for such use and manufacture: *Provided, however,* That said Court of Claims shall not entertain a suit or award compensation under the provisions of this act where the claim or compensation is based on the use or manufacture by or for the United States of any article heretofore owned, leased, used by, or in the possession of the United States:

"*Provided further,* That in any such suit the United States may avail itself of any and all defenses, general or special, that might be pleaded by a defendant in an action for infringement, as set forth in title sixty of the Revised Statutes, or otherwise:

"*And provided further,* That the benefits of this act shall not inure to any patentee who, when he makes such claim, is in the employment or service of the Government of the United States, or the assignee of any such patentee; nor shall this act apply to any device discovered or invented by such employee during the time of his employment or service."

* * * * * * *

Approved July 1, 1918.

Notice—Assistant Examiner Examination.

The Civil Service Commission has announced an open competitive examination for the position of Assistant Examiner in the Patent Office on August 21 and 22, 1918. Qualified persons are urged to enter this examination. Entrance salary, $1,500 per annum.

Application blanks and information as to where the examination will be held may be obtained from the Civil Service Commission, Washington, D. C.

Notice.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 26, 1918.

In order that the public may have the benefit of the full time in trade-mark cases, the date of actual publication of the OFFICIAL GAZETTE will be the effective date from which the thirty-day period prescribed by the Trade-Mark Act will be computed. The actual date of publication will be found in each weekly number under the date of issue on the first page.

J. T. NEWTON,
Commissioner.

Notice—Photostat Copies.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 10, 1918.

Owing to difficulties encountered in obtaining the services of competent typists notice is hereby given that in order to avoid delays the Patent Office reserves the right to furnish photostat copies in lieu of type-written copies, in filling orders for copies of its records, on and after August 1, 1918, unless otherwise specifically directed.

J. T. NEWTON,
Commissioner.

Printed Copies of Patents.

A printed copy of the complete specification and drawings of any patent published herein can be obtained for five cents.

APPLICATIONS UNDER EXAMINATION.

Condition at Close of Business June 21, 1918.

Room No.	Divisions and subjects of invention.	Oldest new application and oldest action by applicant awaiting office action.		No. of applications awaiting action.
		New.	Amended.	
314	1. Closure Operators; Fences; Gates; Harrows and Diggers; Plows; Railway Gates; Planting; Scattering Unloaders; Trees, Plants, and Flowers.	May 10	May 27	151
128	2. Bee Culture; Curtains, Shades, and Screens; Dairy; Label Pasting and Paper Hanging: Paper Files and Binders; Medicines; Pneumatics; Presses; Tents, Canopies, Umbrellas, and Canes; Tobacco.	Mar. 19	Apr. 5	260
175	3. Annealing and Tempering; Electric Heating and Rheostats; Electrochemistry; Heating; Metal-Founding; Metallurgical Apparatus; Metallurgy; Plastic Metal Working.	Apr. 22	Apr. 29	211
234	4. Conveyers; Elevators; Excavating; Hoisting; Material or Article Handling; Pneumatic Despatch; Pushing and Pulling Implements; Railway Mail Delivery; Store-Service; Traversing Hoists.	May 14	June 1	179
167	5. Bookbinding; Harvesters; Jewelry; Music	Mar. 23	May 10	220
318	6. Bleaching and Dyeing; Chemicals; Explosives; Fertilizers; Liquid Coating Compositions; Plastic Compositions; Preserving; Substance Preparation.	Mar. 7	Mar 27	387
312	7. Educational Appliances; Games and Toys; Optics; Velocipedes	Feb. 19	May 15	310
131	8. Beds; Chairs; Flexible-Sheet Securing Devices; Furniture; Kitchen and Table Articles; Store Furniture; Supports.	May 11	May 20	269
221	9. Air and Gas Pumps; Hydraulic Motors; Motors, Fluid; Motors, Fluid-Current; Pumps; Marine Propulsion.	Jan. 28	May 22	406
235	10. Carriages and Wagons; Motor Vehicles	Feb. 28	May 8	572
154	11. Boot and Shoe Making; Boots, Shoes, and Leggings; Button, Eyelet, and Rivet Setting; Harness; Leather Manufactures; Nailing and Stapling; Spring Devices; Whips and Whip Apparatus.	Apr. 6	May 21	206
322	12. Journal-Boxes, Pulleys, and Shafting; Machine Elements	Feb. 18	Mar. 15	682
329	13. Ammunition and Explosive Charge Making; Bolt, Nail, Nut, Rivet, and Screw Making; Button Making; Chain, Staple, and Horseshoe Making; Driven, Headed, and Screw-Threaded Fastenings; Gear Cutting, Milling, and Planing; Metal Drawing; Metal Forging and Welding; Metal Rolling; Metal Tools and Implements, Making; Metal Working; Needle and Pin Making; Nut and Bolt Locks; Turning.	Feb. 23	Apr. 29	535
323	14. Compound Tools; Cutting and Punching Sheets and Bars; Farriery; Metal-Bending; Sheet-Metal Ware, Making; Tools; Wire Fabrics and Structure: Wire-Working.	Apr. 9	Apr. 29	170
308	15. Bread, Pastry, and Confection Making; Coating; Fuel; Glass; Laminated Fabrics and Analogous Manufactures; Paper-Making and Fiber Liberation; Plastic Block and Earthenware Apparatus; Plastics.	May 22	May 23	230
112	16. Electric Signaling-A; Radiant Energy; Telegraphy; Telephony	Feb. 18	Mar. 18	497
307	17. Ornamentation; Paper Manufactures; Printing; Type Casting; Sheet Material Associating or Folding; Sheet Feeding or Delivering; Type Setting.	Apr. 17	May 3	112
229	18. Fluid-Pressure Regulators; Injectors and Ejectors; Liquid Heaters and Vaporizers; Miscellaneous Heat-Engine Plants; Speed Responsive Devices; Steam and Vacuum Pumps; Steam-Engines; Steam-Engine Valves.	Apr. 11	Apr. 8	343
236	19. Dampers, Automatic; Furnaces; Heating Systems; Stoves and Furnaces; Domestic Cooking Vessels	Apr. 1	Apr. 1	381
179	20. Artificial Body Members; Builders' Hardware; Cutlery; Dentistry; Locks and Latches; Safes; Undertaking.	May 8	June 7	162
212	21. Brakes and Gins; Carding; Cloth-Finishing; Continuous-Strip Feeding; Cordage; Felt and Fur; Knitting and Netting; Silk; Spinning; Weaving; Winding and Reeling.	Mar. 5	Apr. 26	226
249	22. Aeronautics; Firearms; Ordnance	Mar. 18	May 14	292
217	23. Acoustics; Coin-Handling; Horology; Recorders; Registers; Sound Recording and Reproducing; Time-Controlling Mechanism.	Apr. 11	May 13	286
144	24. Apparel; Apparel Apparatus; Sewing-Machines; Garment Supporters	May 4	May 20	204
315	25. Agitating; Butchering; Centrifugal Bowl Separators; Mills; Threshing; Vegetable Cutters and Crushers; Gas Separation.	May 1	May 11	160
105	26. Electricity, Generation; Motive Power	Dec. 8	Apr. 1	491
214	27. Brushing and Scrubbing; Grinding and Polishing; Laundry; Washing Apparatus	Apr. 15	May 23	263
225	28. Internal-Combustion Engines	Mar. 11	May 9	399
147	29. Boring and Drilling; Coopering; Fire-Escapes; Ladders; Wheelwright-Machines; Wooden Buildings; Wood-Sawing; Wood-Turning; Woodworking; Woodworking Tools.	Feb. 23	Mar. 1	453
152	30. Illuminating-Burners; Illumination; Liquid and Gaseous Fuel Burners; Type-Writing Machines	Mar. 21	May 20	370
172	31. Alcohol; Ammonia, Water, and Wood Distillation; Charcoal and Coke; Gas, Heating and Illuminating; Hides, Skins, and Leather; Hydraulic Cement and Lime; Mineral Oils; Oils, Fats, and Glue; Sugar and Salt.	Apr. 3	Apr. 18	229
278	32. Gas and Liquid Contact Apparatus; Heat Exchange; Packaging Liquids; Refrigeration	Jan. 3	May 1	649
70	33. Bridges; Hydraulic Engineering; Masonry and Concrete Structures; Metallic Building Structures; Paving; Roofs.	Apr. 13	May 13	207
304	34. Railways; Railway Rails and Joints; Railway Rolling Stock; Railway Ties and Fasteners	May 31	June 3	93
57	35. Buckles, Buttons, Clasps, Etc.; Card, Picture, and Sign Exhibiting; Signals; Toilet	Feb. 14	Jan. 26	533
204	36. Driers; Geometrical Instruments; Measuring Instruments; Photography; Force Measuring	Apr. 25	Apr. 30	457
107	37. Electric Lamps; Electricity, Circuit Makers and Breakers; Electricity, Conduits; Electricity, General Applications.	Jan. 29	Feb. 7	686
378	38. Animal Husbandry; Earth Boring; Fishing and Trapping; Stationery; Stone-Working; Wells	June 1	May 28	113
220	39. Water Distribution; Multiple Valves	Feb. 16	Mar. 11	375
273	40. Baggage; Bottles and Jars; Check-Controlled Apparatus; Cloth, Leather, and Rubber Receptacles; Deposit and Collection Receptacles; Metallic Shipping and Storing Vessels; Package and Article Carriers; Paper Receptacles; Special Receptacles and Packages; Wooden Receptacles.	Mar. 25	Apr. 3	474
125	41. Railway Draft Appliances; Resilient Tires and Wheels	Mar. 18	Apr. 25	293
114	42. Electricity, Conductors; Railway Signaling; Electricity-Transmission to Vehicles; Electric Signaling.	Jan. 16	Jan. 19	629
382	43. Baths and Closets; Dispensing; Dispensing Beverages; Electricity, Medical and Surgical; Fire-Extinguishers; Sewerage; Surgery; Water Purification.	Mar. 22	May 18	199
253	44. Air-Guns, Catapults, and Targets; Ammunition and Explosive Devices; Boats and Buoys; Ships	Apr. 22	May 16	163
379	45. Clutches; Lubrication; Motors; Railway Brakes	Mar. 2	Mar. 18	323

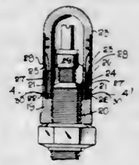
Oldest new case, Dec. 8; oldest amended, Jan. 19.
Total number of applications awaiting action **14,850**

163	TRADE-MARKS, DESIGNS, LABELS AND PRINTS:			
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	Designs	Mar. 30	May 24	530
	Labels and Prints	May 28	May 25	133

PATENTS

GRANTED JUNE 25, 1918.

1,270,253. DUST-CAP FOR TIRE-VALVES. ALBERT E. AKER, Eldorado, Kans. Filed Nov. 24, 1917. Serial No. 203,750. (Cl. 152—12.)

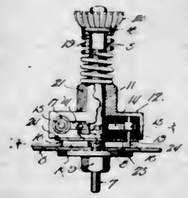


1. A dust cap for the valves of pneumatic tires comprising a base section and a cap section, the base section being interiorly screw-threaded to engage with the valve stem of a pneumatic tire, one of said sections having a reduced portion over which the other section fits, said base section being formed with longitudinal grooves, and resilient detents mounted upon the cap section, fitting in said grooves, and detachably engaging the base section.

3. A dust cap for the valves of pneumatic tires comprising an interiorly screw-threaded base section formed with grooves extending inward from one end, the grooves opening upon the inside face of the base, the base being also formed with circumferentially extending slots opening from the face of the section into said grooves, and a cap section reduced in diameter at one end to fit within the base section, and formed upon its face with longitudinally extending recesses, the reduced portion of the cap section having longitudinally extending grooves disposed below said recesses, and outwardly bowed spring tongues mounted upon the cap section and extending down in said recesses and grooves and formed with outwardly projecting detents adapted to engage in said slots in the base section when the cap section is forced home into the base section.

[Claim 2 not printed in the Gazette.]

1,270,254. CUTTING-TOOL. CHRISTOPHER BACH, Jr., Milwaukee, Wis. Filed May 3, 1916. Serial No. 95,029. (Cl. 164—7.1.)

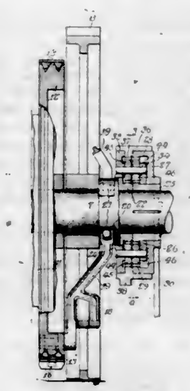


1. A cutting tool comprising a body shaft, a cutter head carried thereby and longitudinally movable thereon, an expansile spring on the body shaft and engaging the cutter head, an adjustable holding member for the spring carried by the shaft and means for revolving the cutter head.

[Claims 2 to 11 not printed in the Gazette.]

1,270,255. CLUTCH-OPERATING MEANS. WENDELL ADDISON BARKER, Chicago, Ill. Filed June 2, 1917. Serial No. 172,360. (Cl. 192—14.)

1. In a clutch-operating means, the combination with a continuously rotating shaft, and a winding drum loose on said shaft, of a gear fast on said shaft, a lever pivoted on said gear, a clutch strap secured at one end to said gear and at its other end to one arm of said lever and adapted to engage said drum, a cam sleeve loose on said shaft and carrying a cam engaging the other arm of said lever, a planetary gear transmission mechanism intermediate said shaft and cam sleeve normally rotating the latter in the same direction and at the same speed as said shaft, and means for effecting a rotative movement of an element of said transmission mechanism while said shaft is rotating whereby to accelerate or retard the rotative movement of said cam sleeve relatively to that of said shaft.



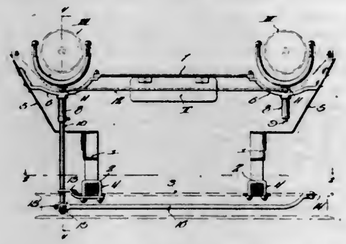
3. In a clutch operating means, the combination with a continuously rotating shaft, and a winding drum loose on said shaft, of a gear fast on said shaft, a lever pivoted on said gear, a clutch-strap secured at one end to said gear and at its other end to one arm of said lever and adapted to engage said drum, a cam sleeve loose on said shaft and carrying a cam engaging the other arm of said lever, a planetary gear transmission mechanism concentric with said shaft intermediate the latter and said cam sleeve and normally rotating the latter in the same direction and at the same speed as said shaft, said transmission mechanism including an angularly shiftable internal gear, and manually operable means for shifting said internal gear in either direction during the rotation of said shaft whereby to accelerate or retard the rotative movement of said cam sleeve relatively that of said shaft.

4. In a clutch operating means, the combination with a continuously rotating shaft, and a winding drum loose on said shaft, of a gear fast on said shaft, a lever pivoted on said gear, a clutch-strap secured at one end to said gear and at its other end to one arm of said lever and adapted to engage said drum, a cam sleeve loose on said shaft and carrying a cam engaging the other arm of said lever, a gear on said cam sleeve, a sleeve fast on said shaft and carrying a gear of the same size as said cam-sleeve gear, a spider journaled on said sleeves and carrying two series of planetary gears meshing with said sleeve gears respectively, a stationary internal gear meshing with one series of planetary gears, an angularly shiftable internal gear meshing with the other series of planetary gears, and manually operable means for shifting said last named internal gear in either direction during the rotation of

said shaft whereby to accelerate or retard the rotative movement of said cam sleeve relatively to that of said shaft.

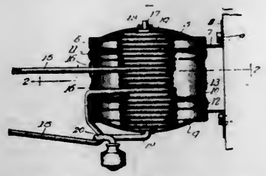
[Claim 2 not printed in the Gazette.]

1,270,256. DIRIGIBLE HEADLIGHT. ANTON A. BORSSE and GEORGE PIRC, Sheboygan, Wis. Filed Jan. 9, 1918. Serial No. 210,960. (Cl. 240—62.)



The combination with a vehicle including an axle, spring clips, a connecting rod and fenders, of a bracket secured to one of said fenders, a lamp standard rotatable in said bracket, a lamp on one end of the standard, a crank on the other end of the standard, a second bracket secured to one of said spring clips, said bracket slidably and rotatably receiving the lower end of said standard, a plate secured to said axle, a post swiveled in said plate, an extensible lever adjustably secured in said post, a rod connecting said crank and one end of the lever, and a connection between the other end of said lever and said connecting rod.

1,270,257. CLOTHES-LINE REEL. CHARLES A. BOYER, Warsaw, Ind., assignor to The Hugro Manufacturing Company, Warsaw, Ind., a Corporation of Illinois. Filed Jan. 18, 1917. Serial No. 142,971. (Cl. 242—101.)

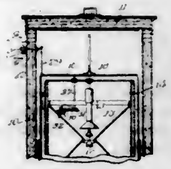


3. In a clothes line reel, an inclosing casing comprising a pair of end covers having integrally formed supporting members thereon, a body portion consisting of a cylindrical piece of metal held together by means of an outwardly extending tongue formed on one end of said member and overlapping the other end of said member, a reel mounted within said casing, and an operating handle therefor having a reverse twist forming a U-shaped structure adapted to receive the line to thereby hold the same taut when desired.

[Claims 1 and 2 not printed in the Gazette.]

1,270,258. ACETYLENE-GENERATOR. ROBERT D. BRADEN, Chicago, Ill., assignor to Oxweld Acetylene Company, Chicago, Ill., a Corporation of West Virginia. Filed Feb. 7, 1916. Serial No. 76,563. (Cl. 48—38.)

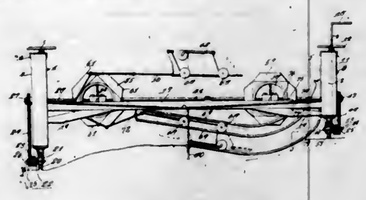
1. The combination with an acetylene generator having a gas bell, of a pivoted holder mounted in the carbid hopper of the generator and adapted to retain a reserve portion of the carbid charged into the hopper after the main body of the carbid has been fed to the generation chamber, a shouldered disk rigid with said holder, a pawl normally engaging the shoulder of said disk to thereby lock said holder in carbid-receiving position, and means actuated by the gas bell under an abnormal downward movement thereof for dislodging said pawl from the shoulder of said disk, whereby to permit said holder to tilt to dumping position.



2. The combination with an acetylene generator having a gas bell, of a pivoted holder mounted in the carbid hopper of the generator and adapted to retain a reserve portion of the carbid charged into the hopper after the main body of the carbid has been fed to the generation chamber, a peripherally shouldered disk rigid with said holder, a detent pawl riding on the periphery of said disk and normally engaging the shoulder thereof to thereby lock said holder in carbid-receiving position, a spring normally pressing said pawl on the periphery of said disk, and means actuated by the gas bell under an abnormal downward movement thereof for dislodging said pawl from the shoulder of said disk, whereby to permit said holder to tilt to dumping position.

3. The combination with an acetylene generator having a gas bell, of a pivoted holder mounted in the carbid hopper of the generator and adapted to retain a reserve portion of the carbid charged into the hopper after the main body of the carbid has been fed to the generation chamber, a peripherally shouldered disk rigid with said holder, a detent pawl pivoted intermediate its ends and having its nose normally engaging the shoulder of said disk to thereby lock said holder in carbid-receiving position, a push-rod connected to the heel of said pawl and adapted to be depressed by the gas bell to retract said pawl from locking engagement with said disk, and a spring urging said push-rod upwardly and said pawl into engagement with the periphery of said disk.

1,270,259. ROAD-GRADER. WILLIAM F. BRINTON, Washington, Iowa. Filed Mar. 3, 1917. Serial No. 152,277. (Cl. 180—41.)



1. In an excavating apparatus of the class described, the combination with a plurality of end frames, side rails connecting said end frames, means for raising and lowering said side rails, and means for periodically moving said end frames laterally.

2. In an apparatus of the class described, the combination of a plurality of end frames, means for facilitating the movement of said end frames laterally, adjusting blocks slidably mounted upon said end frames, adjusting rods carried by said end frames and engaging said blocks for raising and lowering the same to a desired position, and a gage rod carried by one of said blocks for permitting the height of said blocks to be determined by the operator of said apparatus.

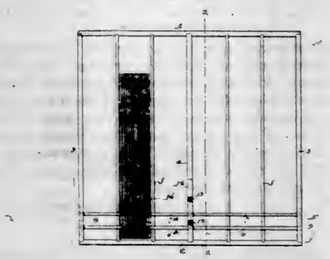
3. A supporting frame for an excavating machine comprising a pair of end frames, propelling means carried by said end frames and adapted to move said frame laterally at certain intervals, adjusting blocks slidably mounted upon said end frames, side rails carried by said adjusting blocks, adjusting rods carried by said end frames and engaging said adjusting blocks and adapted to raise or lower said adjusting blocks upon said end frame for regulating the height of said side rails upon said end frames.

4. An excavating machine of the class described, comprising a pair of end frames, each end frame provided with vertically extending channel irons upon each side edge thereof, and adjusting blocks slidably mounted upon said channel irons, side rails connected to said adjusting blocks, adjusting rods carried by said end frames, and connected to said adjusting blocks for raising or lowering said adjusting blocks upon said end frames, traction wheels supporting said end frames, and a driving means coöperating with said traction wheels to periodically and progressively move said end frames laterally and at a predetermined distance.

5. An excavating machine of the class described, comprising end frames, side rails slidably mounted upon said end frames, traction wheels supporting the lower ends of said end frames, a driving gear and means coöperating with said driving gear and also coöperating with said traction wheels for periodically and progressively moving said frame in a lateral direction.

[Claims 6 to 8 not printed in the Gazette.]

1,270,260. FILING-CABINET. THOMAS D. BROWN, New York, N. Y., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed Feb. 1, 1917. Serial No. 145,946. (Cl. 211—16.)



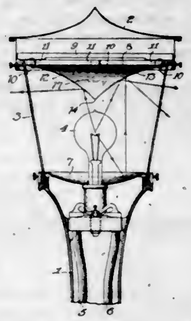
1. An article of the class described, comprising a frame, a receptacle in the frame, a pivot for the receptacle, said pivot member being removable without removing the receptacle from the frame, a second member passing through the receptacle, and means whereby the second member may be removed without removing the receptacle from the frame.

3. An article of the class described, comprising a frame having a central partition and side members, a rod carried in a socket in each side member, each rod engaging a socket in the partition, said rods being in alinement, means for securing the ends in the partition, a plurality of receptacles pivoted to each rod, a second rod carried in a socket in each side member, and each engaging a socket in the partition, and means for securing the ends of the second rod in the partition, said latter rods engaging slots in the receptacles.

[Claims 2 and 4 not printed in the Gazette.]

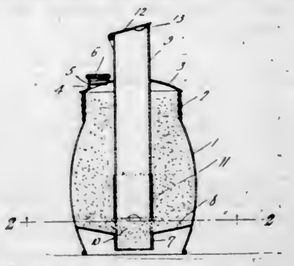
1,270,261. LIGHTING-FIXTURE. FRANK BRUEGGEMAN, Chicago, Ill., assignor of one-half to William I. Bell, Chicago, Ill. Filed Jan. 28, 1918. Serial No. 214,167. (Cl. 240—92.).

1. A lighting fixture of the character described comprising, in combination, a source of light, a reflector being so curved and disposed as to cause predetermined downwardly directed rays to be reflected upwardly within the range of a superimposed reflector, a superimposed reflector comprising oppositely and laterally extended parabolically curved reflecting surfaces having their juncture in an extended line in the vertical plane of said light and at substantially right angles to its axis, to receive all of said upwardly reflected rays, together with all of the upwardly inclined direct rays within the arc bounded by said superimposed reflectors and reflect them laterally, while permitting all of the direct lateral rays radiating in an arc between said upper and lower reflectors to be distributed laterally.



2. A lighting fixture for street lamps in which is combined a source of light supported from beneath, a reflector located beneath the level of said light, said reflector formed to cause downwardly directed rays within a given arc to be reflected upwardly within the range for a superimposed reflector, a superimposed reflector comprising oppositely and laterally extended parabolically curved reflecting surfaces having their juncture in a horizontal line located in the vertical plane of said light to receive all of said upwardly reflected rays, together with all of the upwardly inclined direct rays within the arc bounded by said superimposed reflectors, the space between said upper and lower reflectors being such as to permit the greater portion of the direct trays to be projected laterally.

1,270,262. SUGAR-DISPENSER. ALFRED L. BUCKLAND, Marietta, Minn. Filed Feb. 18, 1918. Serial No. 217,893. (Cl. 221—98.)



A dispensing device including a body having a depression in the center of the bottom thereof, a cap detachably engaging the body and having a filling opening, a tube extending through and removable with the cap, one end portion of the tube being fitted snugly and removably within the depression, there being an aperture in the tube and close to the depression, a sleeve slidable on the apertured portion of the tube and movable against the bottom of the body to seal the lower end of the tube, and a weighted closure upon the outer end of the tube.

1,270,263. WRENCH. ERICK H. BURNSON, Wahpeton, N. D. Filed Feb. 21, 1918. Serial No. 218,541. (Cl. 81—61.)

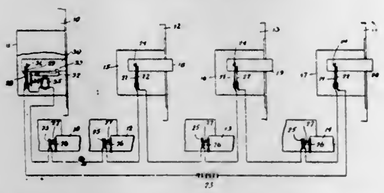
1. In a wrench of the character described, a handle provided at one end with an annular supporting frame,

a cylindrical socket-head rotatably mounted in said frame and provided at one end with an outwardly directed annular flange for positively limiting movement of the head through the frame, said head being provided intermediate its ends with an outer annular channel, a locking plate mounted on the frame and engaging into said channel so as to rotatably support the socket-head in the frame, the upper portion of the body of the socket head being cut to produce a ratchet member, a dog mounted on said locking plate for engagement with the ratchet member, a bolt inserted through said dog and the locking plate and removably secured to the handle, said bolt serving to detachably secure the plate to the handle and to rockably support the dog, and a spring secured in the bolt and engaging the dog so as to hold it in engagement with said ratchet member.



2. In a wrench of the character described, a handle provided at one end with an annular supporting frame, a socket head rotatably mounted in said frame, a plurality of socket members fitting snugly in the head and in one another, said socket members being provided with interengaging lugs and recesses, and the socket head being provided with a recess to receive a lug carried by the outermost one of said socket members, whereby movement of the socket members through the socket-head in one direction is positively prevented, and a securing member carried by the socket head and movable across the upper ends of the socket members so as to prevent movement thereof through the head in the other direction, said member being movable out of engagement with the socket members so as to permit removal of one or more thereof whereby the size of the socket produced in said socket head may be varied to accommodate nuts of different sizes.

1,270,264. INTERLOCKING DOOR SYSTEM. LE GRAND C. BUSH, Binghamton, N. Y., assignor to International Time Recording Company of New York, Endicott, N. Y., a Corporation of New York. Filed Sept. 29, 1917. Serial No. 193,904. (Cl. 70—79.)



1. In an interlocking door-system for the purpose set forth, in combination, a plurality of doors, including a main door, bolts for locking the said doors, and electromagnetic mechanism associated with the main door and controlled by the other doors to permit advancement of the bolt of the main door only when the other doors are closed and their bolts advanced.

2. In an interlocking door-system for the purpose described, in combination, a main door having a recording lock and a plurality of subordinate doors having plain locks, an electromagnetic means for preventing locking-actuation of the recording lock if any subordinate door is open or unlocked.

3. In an interlocking door system for the purpose described, in combination, a main lock, means normally preventing but shiftable to permit locking actuation of the main lock, a plurality of subordinate locks, and electromagnetic mechanism controlled by locking actuation of all the subordinate locks to shift said means and thereby permit locking actuation of the main lock.

[Claims 4 to 7 not printed in the Gazette.]

1,270,265. SPRING-MOTOR WINDING-SPINDLE. PLINY CATUCCI, Newark, N. J., assignor, by mesne assignments, to Otto Heineman Phonograph Supply Co., Inc., New York, N. Y., a Corporation of New York. Filed Apr. 26, 1917. Serial No. 164,594. (Cl. 64—89.)



1. A winding spindle for spring motors comprising a main shaft section and an extension section, there being a universal joint connection between the sections thereof, a screw thread on said extension section, and a removable section carrying a crank, a screw threaded bore in said section coöperating with the screw threaded portion of the extension section to actuate the mechanism.

2. A winding spindle for spring motors comprising a main shaft section and an extension section, there being a universal joint connection between the sections thereof, in combination with means for holding said sections in normal axial alinement, a screw thread on said extension section and a removable section carrying a crank, a screw threaded bore in said section coöperating with the screw threaded portion of the extension section to actuate the mechanism.

8. A winding spindle for spring motors comprising a main shaft section and an extension section, there being a universal joint connection between the sections thereof, a screw thread on said extension section, a short blunt stud on the screw threaded extension adapted to engage the bottom of the bore of the crank, and a removable section carrying a crank, a screw threaded bore in said section cooperating with the screw threaded portion of the extension section to actuate the mechanism.

[Claims 3 to 7 and 9 to 12 not printed in the Gazette.]

1,270,266. TREATMENT OF INSOLUBLE ALUMINA. HOWARD F. CHAPPELL, New York, N. Y., assignor to Mineral Products Corporation, New York, N. Y., a Corporation of Maine. Filed Mar. 1, 1916. Serial No. 81,357. (Cl. 23—13.)

2. The method of converting the alkali-insoluble alumina of calcined alunite into water-soluble compounds, which comprises calcining the alumina with alkali and alkali earth, and recovering the water-soluble compounds from the calcine; substantially as described.

4. The method of converting the alkali-insoluble alumina of calcined alunite into water-soluble compounds, which comprises washing and filtering the calcined alunite, mixing about 100 parts of the filter cake with about 210 parts of sodium carbonate and about 110 parts of calcium oxid, calcining the mixture at about 900° C., and recovering the water-soluble compounds from the calcine; substantially as described.

[Claims 1, 3, and 5 not printed in the Gazette.]

1,270,267. PASTE-TUBE HOLDER. KENNETH A. CRISMON, Salt Lake City, Utah. Filed June 26, 1917. Serial No. 177,061. (Cl. 221—60.)

1. In tube holders, a supporting casing, a key rotatably mounted therein and adapted to have the flattened end portion of a collapsible tube secured thereto, and a resilient compressing member carried by the casing and normally forced toward the key, said member being so disposed as to exert pressure upon a tube being wound upon the key, so as to expel the contents thereof and form the body portion of the tube into a flattened strip extending longitudinally of the key so as to be easily wound onto said key.

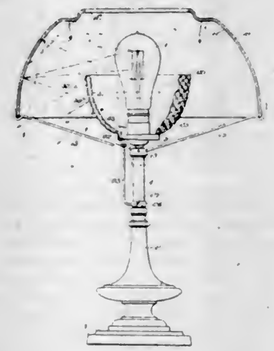


3. In tube holders, a casing, a key rotatably mounted therein and provided with means for receiving and holding the flattened end portion of a compressible tube, and means adapted to engage a tube as it is wound upon said key so as to compress the same and expel the contents thereof.

5. In tube holders, a casing, a key rotatably mounted therein and provided with a central longitudinally extending slot, said key being removable from the casing, and a resilient tube engaging member carried by the casing and normally pressed toward said key so as to engage a compressible tube wound upon the same and compress said tube so as to expel the contents thereof.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,270,268. LIGHT-DISTRIBUTING DEVICE. DAVID CROWNFIELD, Cambridge, Mass. Filed Oct. 18, 1917. Serial No. 197,357. (Cl. 240—81.)



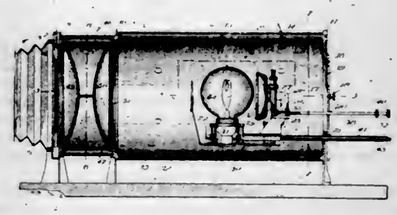
1. A lighting fixture adapted for indirect lighting having a source of light, a reflector adapted to partially surround the light source and a shade partially surrounding the reflector and adapted to expose a zenith sector of the sphere of illumination, and means adjusting the relative position of said shade and reflector whereby to permit light reflected from the shade to be dispersed by reflection from the outer surface of said reflector.

5. A lighting fixture adapted for indirect lighting, having a source of light, a translucent shade covering a zone surrounding the light source and exposing a zenith sector of the sphere of illumination, a reflector adapted to be moved into and out of surrounding relation to and beneath the light source, and means for illuminating the under surface of said shade in any position of said reflector.

11. In a lighting fixture, a standard, a source of light thereon, an outer shade mounted on said standard in relation to said light source, a supporting member, means adapted to slide vertically on the standard, a connection between said supporting member and sliding means, and a reflector mounted on and adapted to be positioned by said sliding means and supporting member, the upper part of the shade having means to reflect light over its lower portion.

[Claims 2 to 4, 6 to 10, 12, and 13 not printed in the Gazette.]

1,270,269. LAMP-HOUSE FOR PROJECTION-CAMERAS. HUGH DAVIS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Nov. 28, 1916. Serial No. 133,969. (Cl. 240—44.)



In a lamp house for projection apparatus, the combination with a casing having two guide rods therein and a detachable door provided with an aperture, of a lamp carriage slidable on the guide rods and detachable upwardly therefrom, a lamp adjustable on a horizontal pivot on the carriage and an operating rod for both adjusting the lamp and moving the carriage extending closely through the aperture in the door so that the lamp, operating rod and door may be removed together.

1,270,270. PROCESS FOR REFINING DEFIBRINATED-BLOOD ANTITOXIN. MARION DORSET, Washington, D. C., and ROBERT R. HENLEY, Takoma, Park, Md. Filed Feb. 27, 1918. Serial No. 219,524. (Cl. 167—10.) (Dedicated to the public.)

3. The process of eliminating from defibrinated blood antitoxin, the hemoglobin, cell residues and bacteria, by coagulation of the hemoglobin with heat, and removal of the congulated hemoglobin, the cell residues and the bacteria by filtration, without injury to the serum albumins, serum globulins and antibodies, followed by precipitation of the serum globulins, serum albumins and antibodies by acids and removal by filtration and by solution and neutralization of the precipitate, thereby obtaining a refined, concentrated and sterile antitoxin.

4. As a new product, a sterile solution of hog cholera serum albumins, globulins and antibodies removed by heat and filtration, and by acidification and filtration from the inert hemoglobin cell residues and harmful bacteria of phenolized hog cholera defibrinated blood antitoxin.

[Claims 1 and 2 not printed in the Gazette.]

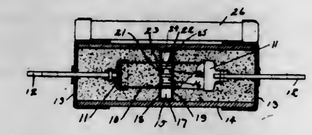
1,270,271. PROCESS FOR THE SEPARATION OF BLOOD-SERUM. MARION DORSET, Washington, D. C., and ROBERT R. HENLEY, Takoma Park, Md. Filed Mar. 25, 1918. Serial No. 224,675. (Cl. 167—10.) (Dedicated to the public.)

1. The process of adding to the defibrinated blood a neutral chemical salt to cause the contraction of the cells whereby their volume is diminished and the volume of clear fluid is increased without precipitation of the serum globulins or other soluble constituents.

2. The process of adding to blood, in which the formation of fibrin has been prevented, a neutral chemical salt

to cause the contraction of the cells whereby their volume is diminished and the volume of clear fluid is increased without precipitation of the fibrinogen, serum globulins or other soluble constituents.

1,270,272. FUSE. LOUIS W. DOWNES and RALPH CLIFTON PATTON, Providence, R. I., assignors to D & W. Fuse Company, Providence, R. I., a Corporation of Rhode Island. Filed Oct. 12, 1916. Serial No. 125,187. (Cl. 175—273.)



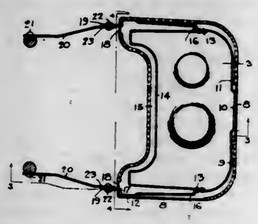
1. In an electric fuse, the combination of a main fuse link and an auxiliary fuse link connected together electrically in parallel, an air chamber formed about said main link for a portion of its length, said auxiliary fuse being of a capacity sufficient to prevent the drawing out of an arc within the air chamber upon the melting of the main fuse link before the auxiliary link finally opens the circuit.

3. In an electric fuse, a cylindrical fuse link, a filling of arc suppressing material in said fuse, and an air drum formed on the outside and on the inside of said cylinder said drums registering with each other.

5. In an electric fuse, a casing, a cylindrical fuse link mounted in said casing, an air chamber formed on the inside and about the outside of said link, the walls of said link being weakened between said chambers.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

1,270,273. TRAY AND FRAME. WILLIAM A. DUNLAP, Pittsburgh, Pa. Filed May 5, 1915. Serial No. 26,098. (Cl. 155—12.)

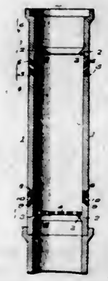


4. The combination with a tray having a depending flange, said flange having inturned portions at the front, and at the rear corners of the tray respectively, said depending flange having also notches adjacent said inturned portions respectively at the rear of said tray, a supporting frame having a body portion adapted to engage beneath the body of the tray and to engage said depending flange at the front of said tray and also to engage within the inturned portion of said flange at the same point, said frame having also resilient arms adapted to be snapped within said notches at the rear of the tray, each of said arms having off-sets adapted to engage within the depending flange and within the inturned portions respectively of said flange at the rear corners of the tray.

[Claims 1 to 3 not printed in the Gazette.]

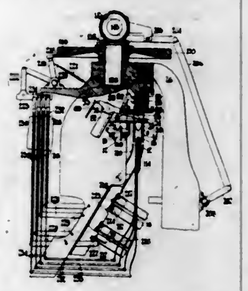
1,270,274. RAIN-CONDUCTOR. DAVID DUNN, Philadelphia, Pa. Filed June 5, 1917. Serial No. 172,865. (Cl. 210—4.)

2. A water conductor section having therein a strainer, and in the opposite end portions of the side wall thereof matched passages, and matched plugs adapted to be fitted in either of said passages to close the same, one of said plugs having therethrough an opening which is in communication with the interior and of the conductor and the atmosphere.



[Claim 1 not printed in the Gazette.]

1,270,275. TYPOGRAPHICAL COMPOSING AND DISTRIBUTING MACHINE. WILLIAM EBENEZER ELLIOTT, Liverpool, England, assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed July 1, 1914. Serial No. 848,347. (Cl. 199—15.)



1. In a typographical composing machine, the combination with a relatively fixed assembler, a stationary chute delivering thereto, and containing means for inverting matrices passing therethough, and a stationary column of magazines with their respective escapements, of an assembler entrance constructed to discharge the matrices into said chute at a common point, and escapement-actuating means together adjustable between the said chute and column to place any one of the magazines in delivering connection with the said assembler, and distributing mechanism including means for restoring the inverted matrices to their original position before they are returned to the selected magazine.

17. In a typographical machine, the combination of a plurality of magazines, a distributer therefor, and selecting mechanism for connecting the distributer to one or another of the magazines, with a matrix formed with a projecting tooth to control the operation of the selecting mechanism.

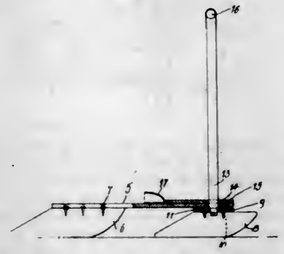
39. In a typographical machine, the combination of a composed line of matrices, a single distributer, and means for separating the matrices of the composed line edgewise in a lateral direction into separate series and delivering such series one after another to the distributer.

50. In a typographical machine comprising matrices of different forms, the combination of a plurality of magazines, a single distributer, means for directing the distributed matrices into one or another of the magazines, and mechanism controlled by the matrices prior to their delivery to the distributer to govern the action of said means.

60. In a typographical machine comprising matrices of different forms, the combination of a distributer, means for presenting the matrices thereto for distribution, mechanism to arrest the presentation of a matrix differing in form from one undergoing distribution, and means for rendering said arresting mechanism inactive, said means being controlled in their initial operation by the arrested matrix and in their final operation by the matrix undergoing distribution.

[Claims 2 to 16, 18 to 38, 40 to 49, and 51 to 59 not printed in the Gazette.]

1,270,276. SLED. ERIC H. EWERTZ, Wollaston, Mass. Filed Jan. 20, 1917. Serial No. 143,435. (Cl. 21—94.)



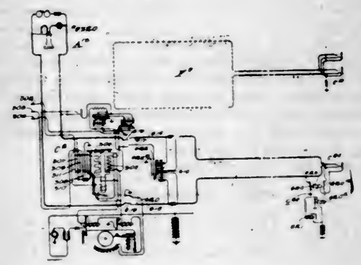
1. A sled having, in combination, a platform, a rear runner fast to said platform, a front runner in alinement with said rear runner, a sleeve extending through said platform and having a cylindrical flange at its lower end, a flange fast to the upper edge of said front runner and bearing against substantially the entire under surface of said flange and a pivot fast to said front runner, extending through said sleeve and upwardly thereabove to a substantial distance and constituting a handle whereby said front runner may be rotated.

2. A sled having, in combination, a platform, a rear runner fast to said platform, a front runner in alinement with said rear runner, a sleeve extending through said platform and having a cylindrical flange at its lower end, a flange fast to the upper edge of said front runner and bearing against substantially the entire under surface of said flange, the flange on said front runner having a rearward extension, a pivot fast to said front runner, extending through said sleeve and upwardly thereabove to a substantial distance and constituting a handle whereby said front runner may be rotated, and a pair of stops fast to said platform and adapted to be engaged by said rearward extension.

3. A sled having, in combination, a platform constituting a foot rest, a rear runner fast to said platform, a front runner in alinement with said rear runner, a pivot fast to said front runner, extending through said platform and upwardly thereabove to a substantial distance and constituting a handle whereby said front runner may be rotated and a foot-hold fast to the upper surface of said platform foot rest and in alinement with each of said runners whereby one foot of the user may be positioned upon said platform.

1,270,277. TWO-WIRE AUTOMATIC AND MANUAL TELEPHONE-EXCHANGE TRUNKING SYSTEM. EDWARD D. FALES, La Grange, Ill., assignor to Automatic Electric Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 17, 1910, Serial No. 549,816. Renewed Nov. 10, 1917. Serial No. 201,397. (Cl. 179—27.)

1. A telephone system comprising automatic switches, line circuits for said switches, one of said switches being a connector, a line relay individual to and controlling said connector for finding the called line, means for energizing said relay over two sides of the line circuit in series, said called line having a jack, and a line signal associated with said jack.



2. A telephone system comprising automatic switches, line circuits for said switches, one of said switches being a connector, a line relay individual to and controlling said connector for finding the called line, means for energizing said relay over two sides of the line circuit in series, a non-numerical trunking switch for said called line for use only when said called line is used as a calling line, a jack for said called line, and means for using said jack to call the line manually.

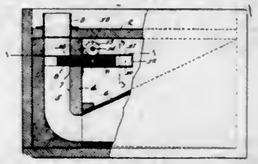
3. A telephone system comprising automatic switches, line circuits for said switches, one of said switches being a connector, a line relay individual to and controlling said connector for finding the called line, means for energizing said relay over two sides of the line circuit in series, means whereby said line may also be called manually, and means whereby said line may call only manually.

29. In a telephone system, a called line, an A operator's board, a B-operator's board, automatic switches for extending connection from said B operator's board to the called line, a signal on said A operator's board, and means controlled by said B operator to operate said signal when said automatic switches attempt to make connection with a busy line.

30. In a telephone system, a calling line, an A-operator's board, a B operator's board, automatic switches for extending connection from said B operator's board to the called line, a visual signal on said A operator's board, and means controlled by said B operator for intermittently operating said signal when said automatic switches attempt to make connection with a busy line.

[Claims 4 to 28 not printed in the Gazette.]

1,270,278. SOUND-MODIFIER FOR TALKING-MACHINES. PINCUS FARB, Newark, N. J., assignor to Sonora Phonograph Corporation, a Corporation of New York. Filed Feb. 1, 1917. Serial No. 145,944. (Cl. 181—27.)



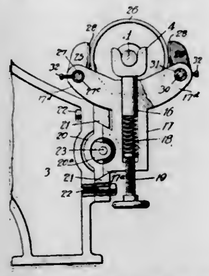
1. A talking machine, having a passage communicating with an amplifier, a slide for adjusting the size of the passage, a guide for the slide, racks, having perforations, carried by the slide, pinions engaging the perforations on the racks, the shaft of the pinions extending outside of the casing, and a crank coöperating with the shaft for adjusting the size of the passage.

4. A talking machine, having a passage communicating with an amplifier, a slot in said passage having an open-

ing inside of the passage, a panel composed of fibrous material, carried in the slot, a tray in which the panel rests, rigidly secured to the passage and communicating with the slot, said tray having side walls and flanges on the side walls engaging the top of the panel, a stop carried at the extremity of the tray to limit the outward movement of the panel, two parallel metal racks, having perforations carried on the flanges of the tray, two parallel pinions having teeth engaging the perforations in the racks, a shaft, carried in fixed bearings, upon which the pinions are mounted, said shaft extending outside of the casing, and a crank handle for the shaft to operate the panel for opening and closing the passage.

[Claims 2 and 3 not printed in the Gazette.]

1,270,279. TENSION MECHANISM FOR PAPER-ROLLS, &c. JEFFREY T. FERRES, Los Angeles, Cal. Filed Jan. 15, 1916. Serial No. 72,256. (Cl. 242—75.)

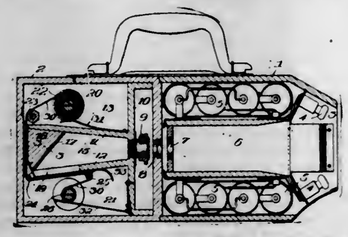


8. In combination with a roll and its shaft, a friction wheel thereon, a pair of pivoted shoes in the form of levers whose similar arms support and apply friction to the bottom of the wheel and whose other arms are movable against opposite sides of said wheel with a pressure proportionate to the weight of the roll, a bracket having oppositely extending arms in which the shoes are pivoted, and having a bearing for the shaft including a yoke having a stem movable in the bracket, a spring bearing against such stem, and an adjusting screw coöperating with the spring.

13. In combination with a roll provided with a shaft, a free-running bearing in the form of a yoke engaging said shaft, adjustable and elastic means for pressing the yoke upward to support a predetermined part of the weight of the roll, and frictional bearing members arranged to support the remaining portion of the weight of the roll and supply friction proportionate to such remaining portion of the weight.

[Claims 1 to 7, 9 to 12, and 14 not printed in the Gazette.]

1,270,280. PHOTOGRAPHIC CAMERA. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Dec. 14, 1916. Serial No. 136,893. (Cl. 95—31.)



In a photographic camera, the combination with a lens, an exposure chamber, a film feeding chamber on one side of the exposure chamber and a film winding chamber on the other side thereof, the exposure and film winding chambers having a communicating opening, of a mirror at the back of the exposure chamber arranged to direct light from the lens through the said opening, devices for feeding film from one film chamber to the other in rear of the mirror and means for supporting the film with its sensitive side toward the opening.

1,270,281. CAMERA-BACK. WILLIAM F. FOLMER, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Jan. 31, 1918. Serial No. 214,576. (Cl. 95—1.1.)



1. The combination with a camera back comprising a body portion having a cavity therein and an opening to permit designations to be made therethrough upon a contained sensitive element and a front plate on the body portion provided with an opening registering with that in the body portion of a sliding door guided in the cavity to close both openings, and a clamp arranged between the body portion and plate and projecting through the opening in the latter to engage the sensitive element, said clamp being actuated by the opening movement of the door.

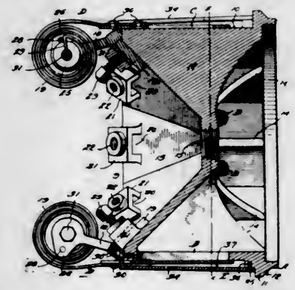
2. The combination with a camera back comprising a body portion having a cavity therein and an opening to permit designations to be made therethrough upon a contained sensitive element and a front plate on the body portion provided with an opening registering with that in the body portion, of a sliding door guided in the cavity to close both openings, and a spring clamp carried on the inner side of the front plate and having a flange projecting through the opening in the latter to engage the sensitive element, said clamp being actuated against the latter by the opening movement of the door.

3. The combination with a camera back comprising a body portion and a front plate secured thereto, said parts having registering openings to permit designations to be made therethrough upon a contained sensitive element, of a sliding door confined between said members to open and close the openings therein and a spring clamp adapted to engage the sensitive element through the openings and provided with a tongue securing it to the inner side of the front plate, said clamp also being provided with lateral cam flanges adapted to be engaged by the door to actuate the clamp when the door is moved to open position.

4. The combination with a camera back comprising a body portion and a front plate secured thereto, said parts having registering openings to permit designations to be made therethrough upon a contained sensitive element, of a spring clamp secured to the inner side of the front plate and adapted to engage the sensitive element through the openings therein, said clamp being provided with lateral cam flanges and a sliding door for the openings coöperating with the cams on the clamp to actuate the latter when the door is opened, said door being provided with shoulders yieldably coöperating with the cams to maintain the door in adjusted position.

1,270,282. AUTOMATIC VALVE. CHARLES FRECH, Steelton, Ontario, Canada. Filed Dec. 15, 1916. Serial No. 137,227. (Cl. 103—66.)

1. In an automatic valve, a valve drum with its major portion polygonal in cross section and having ports leading from its interior and open at the faces of the major portion, flaps for controlling the passage of fluid through said ports, coil springs connected to said flaps for yieldably holding them in position, adjustable means for regulating the tension of said springs and connecting said springs to said valve drum whereby limited longitudinal adjusted movement of the said flaps is permitted.

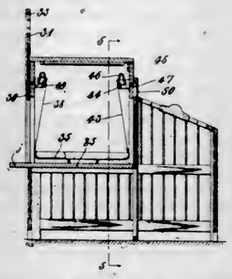


3. In an automatic valve, a valve drum with its major portion polygonal in cross section and having ports leading from its interior and open at the faces of the major portion, flaps for controlling the passage of fluid through said ports, said flaps provided with longitudinal openings which are out of alinement with said ports and permit passage of fluid through the flaps when they are in an outward position, coil springs connected to said flaps for yieldably holding them in engagement with the faces of the major portion, adjustable means for adjusting the tension of said springs and connecting said springs to said valve drum whereby limited longitudinal adjusted movement of said flaps is permitted.

5. In an automatic valve, a valve drum with its major portion polygonal in cross section and having ports leading from its interior and open at the faces of the major portion, flaps for controlling the passage of fluid through said ports, yokes adjustably connected to said drum, coil springs carried by said yokes and connected to said flaps, and means carried by said yokes to hold the fiber of the springs under tension.

[Claims 2, 4, 6, and 7 not printed in the Gazette.]

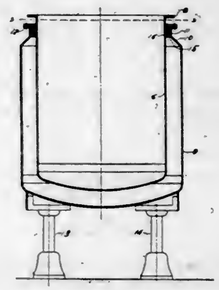
1,270,283. TRAP-NEST. CHARLES EDWARD GLANDER, Jersey City Heights, N. J. Filed May 24, 1917. Serial No. 170,613. (Cl. 119—49.)



1. In a device as described, in combination, a four-sided latticed frame, a box secured upon one corner of said frame, a platform extending alongside said box flush with the bottom thereof and with its front side, but projecting beyond the opposite side of said box, a gate-way mounted upon said platform thereabove at its projecting end, a gate-way mounted at the opposite end of said platform, a gate adapted to project, when in open position, below said platform, a gate adapted to project above said platform when in open position, said gates working in the respective gate-ways, means for severally holding said gates in closed position, and depressible means in said box releasing said holding means whereby both gates move by gravity downwardly.

[Claims 2 to 4 not printed in the Gazette.]

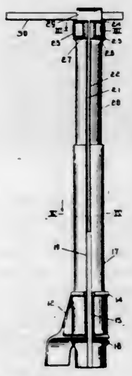
1,270,284. KETTLE-JACKET-CONNECTING MEANS. RUDOLF F. GOECKE, Elyria, Ohio, assignor to The Elyria Enameled Products Company, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 21, 1916. Serial No. 85,619. (Cl. 220—142.)



2. In a device of the class described, the combination of an enameled kettle, a jacket for said kettle in which the kettle is adapted to fit, leaving a space between the walls of the kettle and the jacket, said space being provided with a mouth, a plurality of lugs connected to the kettle wall adjacent said mouth, said lugs being spaced apart and being mounted at intervals around the periphery of said mouth and all in substantially the same plane, an annular member placed upon said lugs and extending around the kettle, a mass of packing placed around said kettle wall on said lugs and annular member and between the kettle and jacket, a second annular member placed over said packing and apparatus to draw said second annular member in a direction parallel to the kettle walls only to compress and hold the packing in the cell without injury to the enamel.

[Claim 1 not printed in the Gazette.]

1,270,285. BAND-SAW MILL. GEORGE E. GOOD, Rochelle, Ill. Filed July 16, 1917. Serial No. 180,804. (Cl. 143—159.)



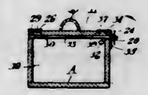
1. A band saw mill embodying a saw blade, a frame, a guide adjustable as to the frame and coacting with the

blade, slotted brackets connected to the frame and guide adjacent the blade, and relatively telescopic shield members mounted by the brackets, said members having registering slots held against relative rotation and the slots of said members movable into and out of registry with the bracket slots.

4. A saw mill having a saw blade, a guide for the blade, a bracket mounted on the guide and forming a bearing having a slot, and a shield also having a slot, said shield being shiftable in the bearing to have the slot of the shield register with the slot of the bearing for admitting edgewise entry of the blade therein, whereby shifting of the shield to bring the slot of the shield out of registry with the slot of the bearing brings the slot of the shield away from the cutting edge of the saw blade.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,270,286. BOX. EDWARD CRUIKSHANK GRANT, Ottawa, Ontario, Canada. Filed Aug. 24, 1917. Serial No. 188,022. (Cl. 217—56.)



A box comprising a body portion and a removable lid, a locking member co-acting with the box comprising an angle plate having a keyhole slot in one arm, pins in the other arm adapted to engage with the lid and lateral wall of the body portion of the box, a bolt engaging with the keyhole slot, and a nut engaging with the bolt having the inner end provided with a cylindrical shoulder to co-act with the upper end of the keyhole slot, the outer face of the nut having a cylindrical portion provided with peripheral slots and a cotter pin engaging with the bolt adapted to be embraced by the said slots.

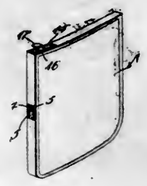
1,270,287. SCREEN. GLENN F. GREENWELL, Glendale, Ky. Filed Mar. 19, 1918. Serial No. 223,400. (Cl. 156—14.)



1. In apparatus of the character described, comprising relatively stationary holding devices arranged near one end of a window frame or the like and having oblique faces, longitudinally adjustable blocks arranged near the lower ends of the frame and having oblique faces, pairs of clamping bars coacting with the oblique faces of the holding devices and blocks with the bars in each pair being tapered in cross-section, and a section of wire screen having its end portions arranged between the bars in the pairs.

2. In apparatus of the character described, relatively stationary holding devices arranged near one end of a window frame or the like and having oblique outer faces, guide frames secured to the window frame near its opposite end and extending longitudinally thereof, longitudinally adjustable blocks arranged within the guide frames and having oblique faces, screws engaging the guide frames and serving to shift the blocks, pairs of clamping bars coacting with the oblique faces of the holding devices and the blocks, and a section of wire screen having its end portions arranged between the bars in the pairs of the same.

1,270,288. PUSH-BUTTON LATCH. ARCHIBALD B. GRUBER, San Bernardino, Cal. Filed Feb. 7, 1918. Serial No. 215,809. (Cl. 70—42.)



1. A push button latch comprising a hollow casing having one side totally or partially closed, a latch bolt slidable longitudinally in said casing and having a longitudinal slot, the rear end wall of said slot being beveled, said bolt having a notch adjacent said side, the ends of said notch forming shoulders, a coiled spring for said bolt to normally hold the same projected, a tube extending at right angles to said casing and having one end projecting through the aforesaid side thereof and into said notch to provide a stop coacting with one of said shoulders for limiting the movement of said bolt, and an operating plunger slidable in said tube and having its inner end beveled and extending into the slot of said bolt into engagement with the beveled rear wall of said slot.

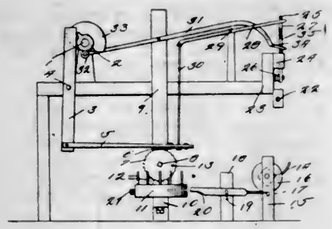
2. A push button latch comprising a casing having one side totally or partially closed, a latch bolt slidable longitudinally in said casing and having a longitudinal slot, the rear wall of said slot being beveled at both sides of the bolt, said bolt having a notch in each side adjacent said slot, the ends of said notches forming shoulders, a coiled spring for said bolt to normally hold the same projected, a tube at an angle to said casing, said tube having its inner end projecting through the aforesaid side of said casing and into the notch of said bolt to provide a stop for coaction with said shoulders to limit the movement of the bolt, an operating plunger slidable in said tube and having its inner end beveled and extending into the slot of said bolt into engagement with the beveled rear wall thereof, and a push knob having a stem connected to the other end of said plunger.

3. A latch comprising a casing having therein a sliding latch bolt, a tubular guide extending laterally from said casing and having its outer end turned inwardly, a plunger slidable in said guide for operating said bolt, outward movement of said plunger being limited by said inturned outer end of said guide, a stem extending from the outer end of said plunger beyond said guide, and a push button on the outer end of said stem having a socket in its inner end in which said guide is receivable when said button is pushed inwardly to operate said plunger.

1,270,289. BALE-TIE COUNTER. JULIUS GUFFY, Peoria, Ill. Filed May 1, 1916. Serial No. 94,774. (Cl. 235—91.)

1. Mechanism of the character described for bale tie making machines including, in combination, counting means to be operated, an intermittently operated mechanism for actuating said means including a part adapted to normally rest against each tie in the process of forming whereby the mechanism is maintained in its actuating position, said part when unengaged with a tie adapted to move said operating mechanism to an inoperative position.

4. In mechanism of the character described for a bale tie making machine, the combination of mechanism including an actuating portion having an unremitting motion and a part normally engaging each tie during process of forming, means to be actuated, said actuating portion being normally in position to engage said means, said part when not engaging a tie adapted to automatically remove the actuating part from its operative position.



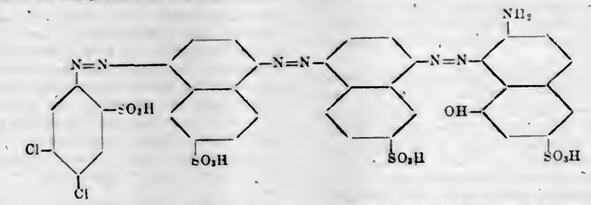
[Claims 2, 3, and 5 to 10 not printed in the Gazette.]

1,270,290. GRAY AZO DYES. CARL HAGEMANN, Leverkusen, near Cologne, Germany, assignor to Synthetic Patents Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 27, 1914, Serial No. 874,216. Renewed Apr. 16, 1918. Serial No. 228,978. (Cl. 8—1.)

1. The herein described new trisazodyes which are after being dried and pulverized in the shape of their alkali metal salts dark powders soluble in concentrated sulfuric acid generally with a reddish-gray to bluish to greenish coloration; yielding upon reduction with stannous chlorid and hydrochloric acid an aromatic amino compound, diamins and an ortho-diamino-oxy-naphthalene sulfonic acid; dyeing cotton from reddish-gray to greenish-gray shades fast to light, substantially as described.

2. The herein described new trisazodyes which are after being dried and pulverized in the shape of their alkali metal salts dark powders soluble in concentrated sulfuric acid generally with a reddish-gray to bluish to greenish coloration yielding upon reduction with stannous chlorid and hydrochloric acid an aromatic amino sulfonic acid, daimins and an ortho-dimaino-oxy-naphthalene sulfonic acid; dyeing cotton from reddish-gray to greenish gray shades fast to light, substantially as described.

11. The herein described new trisazodye having in a free state most probably the formula:



which is after being dried and pulverized in the shape of its alkali metal salt a dark powder soluble in concentrated sulfuric acid with a grayish coloration; yielding upon reduction with stannous chlorid and hydrochloric acid 4.5-dichloroanilin-2-sulfonic acid, 1.4-naphthylene-diamin sulfonic acid and 1.2-diamino-8-naphthol-6-sulfonic acid; dyeing cotton grayish shades fast to light, substantially as described.

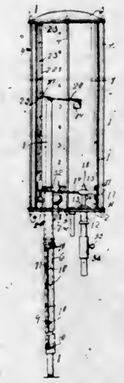
[Claims 3 to 10 not printed in the Gazette.]

1,270,291. LIQUID-FUEL-MEASURING TANK. VIRGIL L. HELM, Fort Worth, Tex., assignor of three-sixteenths to J. J. Parker, three-sixteenths to E. R. Purdy, and four-sixteenths to H. K. McCollum, Fort Worth, Tex. Filed Jan. 5, 1917. Serial No. 140,723. (Cl. 221—95.)

2. A liquid measuring tank comprising a cylindrical body of transparent material, having a scale of gallons marked thereon, a cap and a base therefor, a discharge pipe in said base, and a supply pipe, a valve for opening and closing said pipe, means for automatically locking said valve closed, an overflow gage pipe vertically movable through said base, means for positioning said gage pipe at any required position in said tank, and means operatively connected to said overflow pipe and to said valve for automatically unlocking said valve to be automatically actuated by the liquid rising in said tank.

4. A liquid measuring tank comprising an upright body having a scale of gallons marked thereon, a cap and a base for said body, a gage pipe vertically movable through said base, means for positioning said gage pipe in said tank relative to said scale, a discharge in said base, a valve for opening and closing said discharge, means for locking said valve closed, a vertically movable rod having stops thereon registering with said scale of gallons operatively connected with said locking means, and a lever fulcrumed on said gage pipe and carrying a float on one arm and having a hook on the other arm adapted to engage said rod and the stops thereon, said lever to be actuated by liquid rising in said tank against said float.

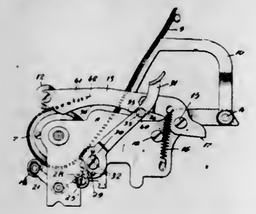
5. A liquid measuring tank comprising an upright body having a scale of gallons marked thereon, a cap and a base for said body, a gage pipe vertically movable through said base, means for positioning said pipe in said tank relative to said scale, a discharge in said base, a valve for opening and closing said discharge and provided with an upwardly projecting stem, a stationary lock for said stem, a key for locking said stem in said lock, a vertically movable rod in said tank having stops registering with said scale, a three-armed lever fulcrumed in said tank having



the main arm pivotally connected to said rod and having one arm pivotally connected to said key and carrying a weight on the third arm, and a lever fulcrumed on the upper end of said gage pipe and carrying a float on one end and having a hook on the other end adapted to engage said rod and the stops thereon, said lever to be actuated by liquid rising in said tank against said float.

[Claims 1 and 3 not printed in the Gazette.]

1,270,292. PLATEN AND PRESSURE FEED MEANS. EDWARD B. HESS, Brooklyn, N. Y., assignor to Royal Typewriter Company, Inc., New York, N. Y., a Corporation of New York. Filed May 10, 1917. Serial No. 167,641. (Cl. 197—138.)



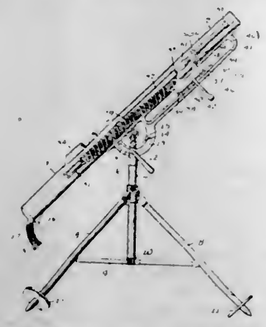
1. In a front strike typewriting machine: a platen, an overhead pressure roll above the line of print normally in engagement with the platen, releasing means for elevating the overhead pressure roll into a sustained paper guiding position, lower pressure feed means located below the line of print and normally in engagement with the platen, releasing means for said lower pressure feed means, and an actuating member for sequentially releasing both of said releasing means in the order in which they are named to admit, at will, of the release of the upper roll independently of the lower roll.

3. In a front-strike typewriting machine, a platen, lower pressure feed means located below the line of print and normally in engagement with the platen, releasing means for said lower pressure feed means, an overhead pressure roll above the line of print also normally in engagement with the platen, releasing means for said overhead pressure roll, an actuating member operating both releasing means, and means permitting the actuating member to independently operate the releasing means of the lower pressure feed means or the releasing means of the overhead pressure roll at will.

27. In a front strike typewriting machine: a platen, an overhead pressure roll above the line of print and normally in engagement with the platen, releasing means for said overhead pressure roll, lower pressure feed rolls located below the line of print and normally in engagement with the platen, releasing and locking means for said lower pressure feed means, and an actuating member for operating both releasing means in the order in which they are named to admit, at will, of independent operation of the first named releasing means.

[Claims 2, 4 to 26, and 28 not printed in the Gazette.]

1,270,293. APPARATUS FOR THROWING GRENADES. SEYMOUR L. HOEXTER and LOUIS E. SHAW, New York, N. Y.; said Shaw assignor to said Hoexter. Filed Feb. 19, 1918. Serial No. 218,035. (Cl. 124—1.)

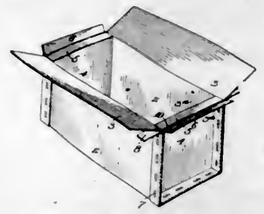


1. A grenade thrower comprising a trough and spring-operated driving means having means for compressing a lateral releasing lever on a grenade placed in the rear of the trough.

19. A grenade thrower comprising a trough, a stand, a pivotal connection between the trough and stand, means for indicating a fixed elevation, driving springs, and means for variably tensioning said springs.

[Claims 2 to 18 not printed in the Gazette.]

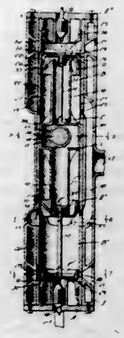
1,270,294. SHIPPING-BOX. CHARLES HOFMAN, Rochester, N. Y., assignor, by mesne assignments, to Bertha Virginia Hofman, Rochester, N. Y. Filed May 24, 1916. Serial No. 99,501. (Cl. 229—23.)



1. An article of manufacture, comprising a box having a body portion comprising bottom, side, and top members made of a single folded piece of material the ends of which overlap to reinforce each other along the middle of the top, end pieces each of which comprises an end wall having integral inner wall members adjacent the inner surfaces of the body portion and integral outer walls adjacent the outer surfaces of the body portion, said outer walls being provided with reinforcing extensions overlying the ends of the adjacent outer wall, and having said inner and outer walls and their extensions secured to the body portion and to each other by suitable fastening means.

2. An article of manufacture, comprising a box having a body portion comprising bottom, side, and top members made of a single folded piece of material the ends of which overlap to reinforce each other along the middle of the top, end pieces each of which comprises an end wall having integral inner wall members adjacent the inner surfaces of the body portion and integral outer walls adjacent the outer surfaces of the body portion, said outer walls being provided with reinforcing extensions overlying the ends of the adjacent outer wall, and having said inner and outer walls and their extensions secured to the body portion and to each other by suitable fastening means, and a reinforcing strip between said inner and outer walls adjacent the end of the body portion.

1,270,295. INTERNAL-COMBUSTION ENGINE. ALLAN S. HUSTED, Chicago, Ill. Filed Apr. 26, 1915. Serial No. 23,852. (Cl. 123—66.)



1. In an internal combustion engine, the combination with a cylinder and power piston, of a scavenging piston interposed between the power piston and the head of said cylinder and adapted to engage the latter to thereby expel the burnt gases, a piston rod connected to the said scavenging piston and passing through the head of the power piston, an air piston carried by said piston rod, an air cylinder within which said air piston operates, said air cylinder having its axis coinciding with the axis of the main cylinder, said scavenging piston being movable with the power piston on its power stroke and independently movable thereof on its return stroke, the air in the said air cylinder being compressed on the power stroke of said power piston.

4. In an internal combustion engine, the combination with a power cylinder, a power piston, of an auxiliary piston, said power piston having an interior air cylinder, an air piston working in said air cylinder adapted alternately to compress the air therewithin and be impelled by the expansion thereof, and a piston rod connecting said auxiliary piston and said air piston, said air cylinder being provided with a plurality of air ports near the outer end thereof, some of said air ports being uncovered on the outer side of said air piston when the latter is at the limit of its stroke after the air has expanded.

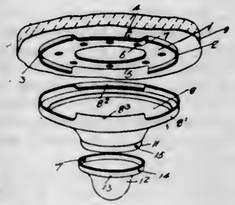
6. In an internal combustion engine, the combination with a cylinder, power piston, and auxiliary piston between the cylinder head and the power piston, said auxiliary piston being movable independently of the power piston on its return stroke, of means for returning the auxiliary piston to the cylinder head in advance of the return stroke of the power piston, and means for separating the auxiliary piston from the cylinder head a short distance during the return stroke of the power piston to provide a compression space, said last named means including a sleeve having ports adapted to register with the cylinder intake and exhaust ports.

13. In an internal combustion engine, the combination with a power cylinder having a plurality of exhaust ports adjacent the head thereof, and a plurality of intake ports adjacent the outer limit of travel of the power piston, and a power piston, of an auxiliary piston, and a sleeve valve, said power piston being connected with the crank shaft, and having contained within itself an air cylinder which coacts with the auxiliary piston, and provided adjacent the inner end thereof with a plurality of air release holes and passages, the latter extending through the metal of the power piston to its periphery, and adapted to register with corresponding holes in said sleeve valve to thereby furnish additional means of exit for air from said air cylinder.

15. In an engine of the character described, the combination with a cylinder and power piston, of a sleeve slidably mounted within said cylinder between the power piston and the walls of the cylinder, said cylinder being provided with intake and exhaust ports and said sleeve controlling said ports, of a scavenging piston within said cylinder, said sleeve being provided with by-passes to thereby permit transference of gases from one side of said scavenging piston to the other.

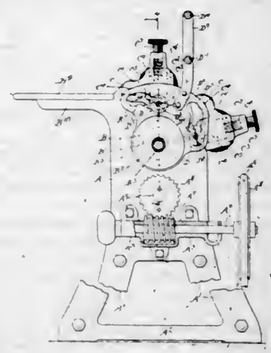
[Claims 2, 3, 5, 7 to 12, 14, and 16 to 18 not printed in the Gazette.]

1,270,296. ELECTRIC-FIXTURE CANOPY. AUBREY EDWIN JEUNE, Toronto, Ontario, Canada. Filed Dec. 8, 1916. Serial No. 135,819. Renewed Nov. 19, 1917. Serial No. 202,870. (Cl. 240—87.)



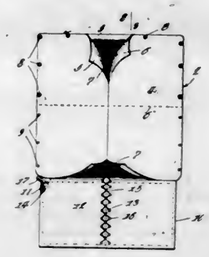
In an electric canopy, a circular base member having recesses in the diametrically opposite peripheral portions, of a canopy member adapted to encircle and inclose the base member having horizontally inwardly extending opposing flange portions adapted to pass through such recesses when the canopy is placed in position and to be carried between the base member and ceiling by circumferential movement.

1,270,297. IRONING-MACHINE. FRANCIS T. JOHNSON, Chicago, Ill. Filed June 16, 1917. Serial No. 175,077. (Cl. 68—9.)



An ironing machine comprising an ironing roller and a guiding roller in opposition to the ironing roller, means for moving said guiding roller toward and from the ironing roller consisting of a rotatable slotted member having an inclined cam slot portion and at either end of such inclined cam slot a cam slot portion normal to the line of movement of the roller such portions serving to lock the guiding roller in place in either the operative or the inoperative position.

1,270,298. SANITARY PILLOW. WALTER JONES, Daylight, Tenn. Filed Dec. 5, 1917. Serial No. 205,543. (Cl. 5—15.)



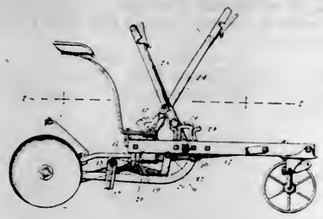
1. A pillow composed of a casing filled with soft material and having its inner wall slit longitudinally to form a filling opening, fastening elements carried by the side edges and one end of said casing, an extension pocket carried by the other end of said casing, an inflation bag disposed in said pocket, means for securing said bag in said pocket, a filling tube projecting through said pocker, said pocket being foldable against one face of the casing, and means for holding said pocket in operative position.

[Claim 2 not printed in the Gazette.]

1,270,299. DISK HARROW. LEE H. KAUPKE, Rock Island, Ill., assignor to Rock Island Plow Company, Rock Island, Ill., a Corporation of Illinois. Filed June 3, 1914. Serial No. 842,544. (Cl. 55—81.)

1. In a disk harrow, a disk gang pivotally mounted at its inner end, and means including a longitudinally fixed

draw bar for applying a depressing pressure to the pivotal point of said gang.



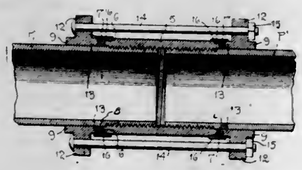
3. In a disk harrow, a pair of disk gangs, a pair of draw bars pivotally connected to the inner ends of said gangs, means for angling said disks about said pivotal connections, a saddle plate spanning said draw bars, and means controlled by a hand lever for exerting a depressing pressure on said saddle plate.

7. In a disk harrow, a disk gang pivotally mounted at its inner end about a vertical axis, said pivotal point being held against movement in the direction of the line of draft, and lever mechanism for applying a depressing pressure to the pivotal point of said gang.

9. In a disk harrow, a disk gang, means for variably applying pressure to said gang, said means including a drawbar connected at one end to said gang and held against longitudinal movement, an operating member, and an intermediate lever fulcrumed at a mid-point and having one end thereof operatively connected to said operating member and the other end thereof engaging with said draw-bar.

[Claims 2, 4 to 6, 8, and 10 not printed in the Gazette.]

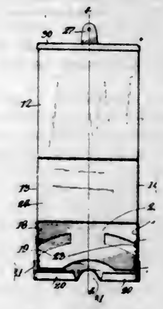
1,270,300. PIPE-COUPLING. EDWARD KING and FRANK WELSH, Granville, Ohio. Filed Apr. 9, 1917. Serial No. 160,729. (Cl. 285—182.)



The herein described pipe coupling including a sleeve adapted to be connected to the ends of the pipe sections, compressible gaskets for engagement against the ends of the sleeve and of a normal diameter corresponding to the diameter of the sleeve, collars engaged upon the respective pipe sections each having an annular shoulder on one of its side faces to engage one of the gaskets, adjustable means connecting the collars to cause the same to exert an axial compressing pressure against the respective gaskets, and a contractile metal band engaged upon each gasket and overlapping upon the end of the sleeve and upon the shoulder of the adjacent collar.

1,270,301. MATCH-BOX. BENJAMIN B. KONSYNSKI, Hammond, Ind. Filed July 28, 1917. Serial No. 183,272. (Cl. 206—28.)

1. A match safe comprising a receptacle having a rear wall, side walls and a front wall, the rear wall and one side wall being provided with securing flanges, the lower portion of the front wall and the lower portion of the rear wall being separate from the side walls and bent to provide an outlet neck and a match receiving trough at the bottom of the outlet neck beneath the free end of the front wall, the side portions of the free end portion of the front wall being cut to provide a neck and head



constituting a resilient baffle extending in operative relation to the match receiving trough.

[Claim 2 not printed in the Gazette.]

1,270,302. DEVELOPING APPARATUS FOR PHOTOGRAPHIC FILMS. ROBERT KROEDEL, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Apr. 26, 1917. Serial No. 164,664. (Cl. 95—90.5.)



1. In a roll film developing apparatus, the combination with a support provided with film retaining guides and a roll holding box detachably coöperating with one end of the support to form a roll holding chamber communicating with said guides, of a developing tray adapted to receive the support and to retain the roll holding box in place thereon.

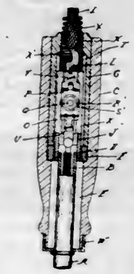
2. In a roll film developing apparatus, the combination with a support provided with film retaining guides and a roll holding box detachably coöperating with one end of the support to form a roll holding chamber communicating with said guides, the opposite end of the support having an inclined face, of a developing tray adapted to receive the support and to retain the roll holding box in place thereon, one end of the tray being provided with an undercut wall to lock against the inclined end face of the support.

3. In a roll film developing apparatus, the combination with a developing tray, of a film supporting member therein having film retaining devices on its under side and provided with a tortuous passage opening at its top through which developer may be poured upon the film.

4. In a roll film developing apparatus, the combination with a developing tray, of a film supporting member therein having parallel film guides on its under side adapted to hold a film strip by its edges and a channel above and between the guides, said member being provided with a tortuous passage opening at its top and communicating with the channel to permit developer to be poured upon the film.

5. In a film roll developing apparatus, a film support having a longitudinal channel therein and converging film guides on opposite sides thereof adapted to hold a film strip by its edges in a curved position wherein it will be exposed to developer introduced into the channel.

1,270,303. HANDLE AND TERMINAL CONNECTION FOR ELECTRICALLY-HEATED INSTRUMENTS. FRANK KUHN and JAY A. HAND, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 25, 1917. Serial No. 144,369. (Cl. 247—12.)



1. The combination with a hollow handle, of an internally-threaded bearing anchored within said handle, a hollow shank having a threaded collar for engaging said internally-threaded bearing and inwardly-extending ears upon opposite sides thereof, a metallic shank secured to and projecting from said ears and insertible through said internally-threaded bearing, a flexible conductor secured to the end of said metallic shank and connectors mounted upon opposite sides of and insulated from said metallic shank for connecting the ends of said flexible conductor with conductors passing through said hollow shank.

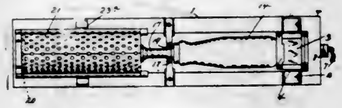
2. The combination with a hollow handle, of an internally-threaded bearing anchored within said handle, a hollow shank having a threaded collar for engaging said internally-threaded bearing, a flat metallic plate secured to said collar and projecting therefrom, being insertible through said internally-threaded bearing, a flexible conductor, an insulator block secured to the end of said flat plate and forming an anchor connection for the end of said flexible conductor, and connectors mounted upon opposite sides of said flat plate and insulated therefrom, forming connections between said flexible conductor and conductors passing through said hollow shank, said parts being also insertible through said internally-threaded bearing.

3. The combination with a hollow handle, of an internally-threaded bearing anchored within said handle, a hollow shank having a threaded collar engageable with said internally-threaded bearing, a flat metallic shank having one end secured to said collar, an insulator block secured to the opposite end and grooved for engagement with the ends of a flexible conductor entering the outer end of said hollow handle, insulator strips on opposite sides of said flat shank, and connectors rigidly mounted on said shank and insulator strips forming connection between said flexible conductor and conductors passing through said hollow shank, being adapted to be inserted through said internally threaded bearing.

1,270,304. SOLDERING-IRON STAND. FRANK KUHN and JAY A. HAND, Detroit, Mich., assignors to American Electrical Heater Company, Detroit, Mich., a Corporation of Michigan. Filed Feb. 21, 1918. Serial No. 218,399. (Cl. 219—23.)

1. A soldering-iron stand comprising a base, means carried by said base for supporting a soldering-iron, and a guard upon said base for the heated portion of the iron, said guard being movable relative to said base to facilitate engagement of the iron therewith and its disengagement therefrom.

2. A soldering-iron stand comprising a base, means upon said base for supporting a soldering-iron, and a guard for the heated portion of the iron mounted upon said base and movable into or out of a position above the iron respectively through engagement of the latter with its supporting means and disengagement of the iron from said means.

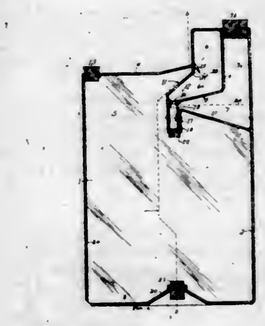


7. A soldering-iron stand comprising a base, a socket member pivotally mounted thereupon, electrically and mechanically engageable by a soldering-iron, and a support upon said base for an intermediate portion of a soldering-iron.

11. A soldering-iron stand comprising a base, a socket pivotally mounted upon said base and electrically and mechanically engageable by a soldering-iron, means supplementary to said socket carried by the base for supporting a soldering-iron upon the latter, a pair of opposed pivotal members upon the base constituting a guard housing for the heated portion of the iron, said members being adjustable out of the path of the iron when the same is swung upwardly about the pivotal axis of the socket, stops carried by the base limiting swinging movement of said pivotal members from each other, and arms carried by said pivotal members engageable by the iron when swung downwardly about the pivotal axis of the socket to swing said members into a coacting relation above the iron.

[Claims 3 to 6, 8 to 10, 12, and 13 not printed in the Gazette.]

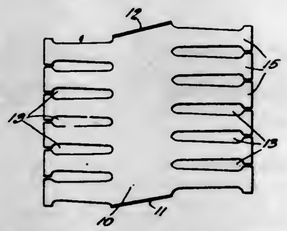
1,270,305. BOTTLE. HENRY E. LENT, Park Rapids, Minn. Filed June 27, 1917. Serial No. 177,385. (Cl. 215—70.)



4. A bottle having in its upper end an outlet duct and means for closing the same, and below said outlet duct and communicating therewith a pouring chamber, and at one side of said outlet duct a measuring chamber having a side port through which to receive liquid from the contents of the bottle when the latter is in an inverted position, and a dose chamber forming an extension of the measuring chamber and being of a size to hold the measured dose when the bottle is in upright position; said dose chamber having in its bottom a port leading into the pouring chamber and a gravity closed valve arranged to close said port when the bottle is inverted, and a fixed shield guarding the port between the main space in the bottle and the measuring chamber, to prevent the measured liquid from splashing back into the bottle when the bottle is being righted to normal position.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,270,306. PRESSED-STEEL TRUCK-WHEEL. JOSEPH LEDWINKA, Philadelphia, Pa., assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa., a Corporation of Pennsylvania. Filed Feb. 21, 1917. Serial No. 150,085. (Cl. 21—69.)



1. A pressed steel wheel having central hub sleeves disposed end to end and secured together, each having spoke portions formed integrally therewith at the ends thereof, the spokes at the proximate ends of the sleeves being secured together.

2. A pressed steel wheel composed of sections each including a tubular hub sleeve portion and spokes integral therewith at each end thereof, said sections assembled side by side with the tubular sleeves disposed end to end and secured together, and the spokes at adjacent ends of the sleeve portions of the sections being secured together.

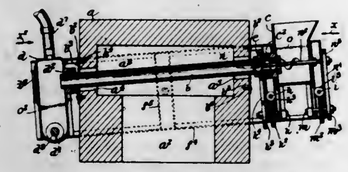
3. A pressed steel wheel having central hub sleeves disposed end to end, each having spoke portions formed integrally therewith at the ends thereof, the spokes at the proximate ends of the sleeves being channel shaped and secured togther.

4. A pressed steel wheel composed of sections each including a tubular hub sleeve portion and spokes integral therewith at each end thereof, said sections assembled side by side with the tubular sleeves disposed end to end, and the proximate spokes of the sections being channel shaped and secured together and a rim structure secured to the outer ends of the spokes.

5. A pressed steel wheel structure composed of central hub sleeve portions disposed end to end and each having integral spoke portions at the ends thereof, the two sets of integral spoke portions adjacent each other being secured together.

[Claims 6 to 16 not printed in the Gazette.]

1,270,307. APPARATUS FOR TREATING CERTAIN MINERAL OR CHEMICAL PRODUCTS. CHARLES J. LEYES, Jersey City, N. J. Filed Feb. 20, 1917. Serial No. 149,840. (Cl. 263—34.)



1. In an apparatus of the class described, a heater, a conveyer passing through said heater, a frame mounted in connection with said heater and provided in its opposite end portions with a supply hopper and a receiver box with which said conveyer communicates, one end of said frame being higher than the other and said frame being adapted to be tilted in a vertical plane, independent of the heater, and said conveyer consisting of tube or tubes having conveyer screws mounted in the end portions thereof that communicate with the supply hopper and movable with said frame.

2. In an apparatus of the class described, a furnace, the opposite sides of which are provided with apertures, conveyer tubes passing through said apertures and adapted to be tilted vertically therein, a frame mounted in connection with said heater and provided in its opposite end portions with a supply hopper and a receiver box with which said conveyer tubes communicate, said frame and conveyer tube being vertically movable independent of said heater, and means for passing finely divided material deposited in said supply hopper into said conveyer tubes.

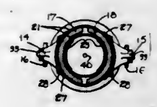
3. In an apparatus of the class described, a furnace provided in its opposite side walls with apertures one of which is higher than the other, a frame mounted in connection with said furnace and adapted to be tilted in a vertical plane independent thereof, said frame being provided in its opposite end portions with a supply hopper and a receiver box, and conveyer tubes passing through said furnace and through said apertures and communicating with said hopper and said receiver box and vertically movable with said frame.

7. In an apparatus of the class described, a heater, a frame pivoted in connection with said heater and movable in a vertical plane independent thereof and provided in its opposite end portions with a supply hopper and a receiver box, and a conveyer passing through said hopper and connected with the end portions of said frame and communicating with the supply hopper and receiver box and vertically movable with said frame independent of the heater.

9. In an apparatus of the class described, a heater, a frame mounted in connection with said heater, one of said parts, the frame or the heater, being vertically movable with reference to the other, said frame being also provided at its opposite ends with a supply hopper and a receiver box, a conveyer passing through said heater and communicating with said hopper and said receiver box, and means connected with said frame and with said hopper for rotating said conveyer.

[Claims 4 to 6 and 8 not printed in the Gazette.]

1,270,308. TEAT-CUP. KENNETH K. MCLEOD, St. Paul, Minn. Filed Aug. 5, 1916. Serial No. 113,380. (Cl. 31—102.)



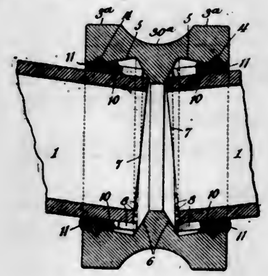
1. A teat cup comprising a hollow body portion, a flexible tube attached to said body portion by an annular band, a pair of arms pivoted in lugs on said annular band and terminating in segmental annular members extending above said body portion and attached to said flexible tube, and means for terminating the inward movement of said arms embodying a screw for each arm passing loosely through the lower portion of same and screwed into a boss on the lower portion of said teat cup.

2. A teat cup comprising a hollow body portion, a pair of arms pivoted to the sides of said body portion and terminating in segmental annular members extending above said body portion, a flexible tube attached to said body portion and said annular members, and means for terminating the movement of said arms.

1,270,309. PIPE-JOINT. JAMES R. MCWANE, Birmingham, Ala. Filed Nov. 8, 1917. Serial No. 200,902. (Cl. 285—165.)

1. A prepared self-tightening joint structure for pipe comprising bell and spigot portions with a series of wedge blocks for constituting a backing for sealing lead, and the bell having a basic portion against which the blocks abut and at an angle to the diameter of the pipe to cause the blocks to move toward the mouth end of the bell under forces directed laterally of the length of the pipe, thereby being self-tightening under deflection of the laid pipe.

2. A prepared self-tightening joint structure for pipe comprising bell and spigot portions with the basic end of the bell presenting a wall at an angle approximating thirty degrees, (30°) to the diameter of the pipe, a series of blocks for location in the bell about the spigot end of a pipe introduced therein and engaging the angle wall, and lead filling between the outer ends of the blocks and the mouth of the bell.



6. A prepared joint structure adapted for internal calking of bell and spigot pipe joints for assemblage preliminary to the introduction of the spigot end of a pipe into the bell end thereof, comprising a bell pipe end, a series of metal filler blocks introduced into the basic portion of the bell and having a lead strip connecting the outer ends of the blocks, lead packing between the lead strip and the mouth of the bell, and a temporary plug for substitution by the spigot end of the pipe to be introduced into the bell and against which the lead is calked, said plug having an exterior taper located opposite the installed blocks, whereby they become lodged in the bell in a circular series tapering toward the longitudinal center line of the bell at the basic end thereof, and whereby the lead may be automatically calked by the forcible introduction of the spigot end of the pipe.

7. A prepared joint structure for plain end pipe including a coupling sleeve with bells at opposite ends, a series of filler blocks in each end, a lead strip connecting the outer ends of the blocks of each series, and lead packing between each lead strip and the mouth of the respective bell.

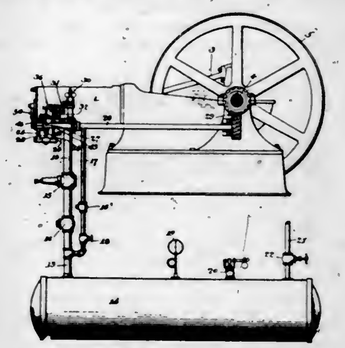
8. A prepared joint structure for plain end pipe including a coupling sleeve with bells at opposite ends, a series of filler blocks in each end, a lead strip connecting the outer ends of the blocks of each series, and lead packing between each lead strip and the mouth of the respective bell, said bell ends each having its inner end engaged by the blocks and sloping at an angle to the diameter of the pipe to cause the blocks to move toward the mouth end of the bell under forces directed laterally to the length of the pipe thereby being self-tightening under deflection of the laid pipe.

[Claims 3 to 5 not printed in the Gazette.]

1,270,310. APPARATUS FOR COMPRESSING ELASTIC FLUIDS. MILTON MCWHORTER, Playas, N. Mex. Filed July 3, 1916, Serial No. 107,403. Renewed May 15, 1918. Serial No. 234,763. (Cl. 230—32.)

1. In combination, a cylinder having exhaust and intake ports, a piston in said cylinder, valves for said ports respectively, means to supply a combustible mixture to the intake port, speed-controlled means to shut off the supply of mixture to the intake port, means to ignite the mixture, a receiver, and a pipe line connecting the exhaust port to the receiver, said pipe line being provided with a check valve and with an air inlet valve.

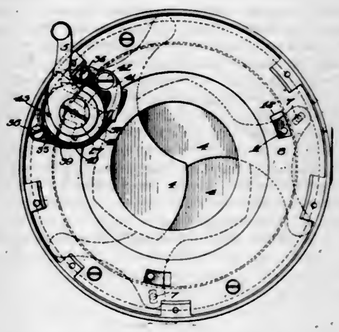
3. In combination, a receiver, a cylinder having an intake port and a main exhaust port and an auxiliary exhaust port, valves for the intake port and main exhaust port respectively, a piston in the cylinder adapted to open and close the auxiliary exhaust port, means to supply a combustible mixture to the intake port, speed-controlling means to shut-off the supply of mixture, means to ignite the mixture, a receiver, and a pipe line connecting the exhaust ports to the receiver, said pipe line being provided between the main exhaust port and receiver with a check valve and an air inlet valve, and said pipe line being provided between the receiver and auxiliary exhaust port with a second check valve.



5. In combination, a gas engine cylinder, a receiver for compressed gas, a conduit connecting the gas engine cylinder and the receiver, a check valve in said conduit opening toward the receiver, an atmospheric air inlet valve in said conduit between the check valve and the gas engine cylinder, and a speed-controlled cut-off for the motive fluid supply of the gas engine.

[Claims 2 and 4 not printed in the Gazette.]

1,270,311. PHOTOGRAPHIC SHUTTER. PAUL J. MARKS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 14, 1918. Serial No. 217,288. (Cl. 95—63.)

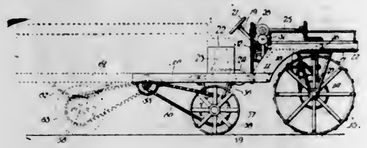


1. In a shutter, the combination with a casing, shutter blades, and a blade ring for actuating the latter, of a pivot fixed to the casing, a master member rotatable thereon and coöperating with the blade ring, a rotatable spring casing surrouding the pivot and carried by the shutter casing, a coil spring within the spring casing having one end connected thereto and the other end connected to the master member and means for adjustably securing the spring casing in different positions to vary the tension of the spring.

2. In a shutter, the combination with a casing, shutter blades, and means for actuating the latter, of a fixed table within the casing, a pivot fixed to the casing to extend through the table, a master member rotatable on the pivot and coöperating with the blade ring, a rotatable spring casing surrounding the pivot and having a bearing in the table, said spring casing being provided with ratchet teeth, a flat spiral spring within the spring casing

having one end connected thereto and the other end connected to the master member, and a pawl on the table coöperating with the ratchet teeth to hold the spring casing in different positions of rotary adjustment.

1,270,312. VEHICLE. ERNST MEIS, Peru, Ill. Filed Oct. 29, 1917. Serial No. 198,925. (Cl. 180—81.)

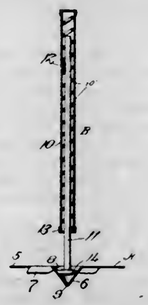


1. In a vehicle the combination with steering mechanism comprising a manually operable steering column, of a power shaft, a friction disk fixed thereon, a clutch member rotatable on said column, a worm gear fixed on said member, a clutch member splined on said column, a pedal lever, elements controlled by said lever for transmitting power from the power shaft to said worm gear, and devices for simultaneously joining said clutch members.

2. In a vehicle the combination with a steering column, of a clutch member rotatably mounted on the column, a clutch member splined on the column, duplicate bell cranks corresponding ends of which engage an annular channel formed in said splined clutch member, a foot lever for each bell-crank, and links connecting the opposite ends of said bell-cranks to their respective foot levers, the bell-cranks engaging slots provided in the links.

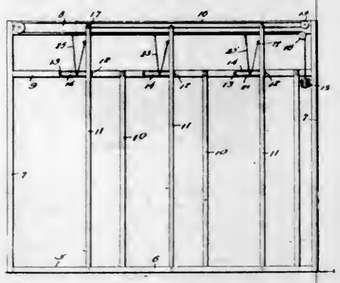
3. In a vehicle the combination with a manually operable steering column, and a power shaft, of a primary friction disk on the power shaft, a worm shaft at right angles to the power shaft, a pair of foot levers pivoted on the worm shaft, a cross shaft paralleling the worm shaft journaled in the upper end of each foot lever, a secondary friction disk fixed on the inner end of each cross shaft opposite the primary friction disk, a gear wheel fixed on each end of the worm shaft, a pinion on the outer end of each cross shaft meshing with one of said gear wheels, a clutch member rotatable on said column, a worm gear fixed on said member, a worm pinion on the worm shaft meshing with the worm gear, a clutch member splined on the steering column and annularly channeled, duplicate bell-cranks corresponding ends of which engage said channel, said bell-cranks being pivoted on a common axis, and links each slotted at one end and pivoted by the opposite end to one of the foot levers, the opposite ends of the bell-cranks being pivoted in the slots of said links.

1,270,313. AERIAL TOP. ETHEL E. MILLER, Cleveland, Ohio. Filed Sept. 21, 1917. Serial No. 192,565. (Cl. 244—2.)



The combination of a wheel body forming a top having a central hollow conical portion constituting a boss providing at its apex a spinning point, spinning means for imparting a rotary impulse to the top and having a plunger, a fibrous circular disk on the end of the plunger and having a beveled edge to frictionally wedge in the hollow in the conical boss, and radial wings on the body concentrically of the boss.

1,270,314. STANCHION. FRANK C. NEELY, Clarinda, Iowa. Filed Feb. 19, 1917. Serial No. 149,559. (Cl. 119—148.)



1. In a stanchion, a frame, a plurality of vertical rigid bars mounted thereon, a cross bar mounted on the frame adapted to limit the upward movement of the animal's head, a plurality of movable bars pivotally mounted on the frame, pulleys mounted on the frame, a flexible element passing around the pulleys and operatively connected with the movable bars, a third pulley mounted on the frame around which the extremity of the flexible element passes, a weight carried by the flexible element, latch members pivotally mounted on the cross bar, flexible elements detachably connected with the first named flexible element and the moving bars and having sliding engagement with the latch members.

[Claims 2 to 4 not printed in the Gazette.]

1,270,315. BOTTLE-CAP REMOVER. LAFAYETTE E. OSGOOD, Endeavor, Pa. Filed Oct. 22, 1917. Serial No. 197,930. (Cl. 215—9.)

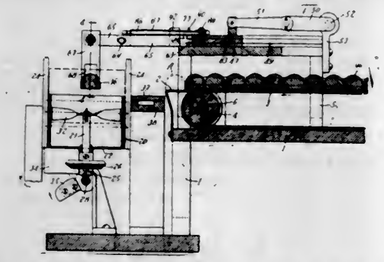


4. The combination with a bottle neck having an exterior groove therein, said groove being formed with a serrated lower edge, and a crimped cap applied to the mouth of the bottle neck, of a non-rotatable ring seated in the lower end of the groove and having an upper cam edge and a lower serrated edge for engagement with the serrated edge of the groove, and a rotatable ring loosely mounted within the groove above the non-rotatable ring, said rotatable ring being provided with a finger engaging flange and a lower cam edge so that by rotating the ring to bring the cam edges of the two rings into coöperative relation the rotatable ring can be moved longitudinally upon the bottle neck to forcibly unseat the crimped cap from position.

[Claims 1 to 3, 5, and 6 not printed in the Gazette.]

1,270,316. CANDY-COATING MACHINE. HENRY G. OSTERBERG, Brighton, Mass., and AUGUST F. OSTERBERG, Auburn, N. Y. Filed July 23, 1917. Serial No. 182,143. (Cl. 91—4.)

1. A machine of the class described having, in combination, a coating receptacle, an agitator arranged in said receptacle, means adapted to feed centers to a position over said receptacle, and means for elevating said receptacle relatively to said agitator to dip the center thereabove.

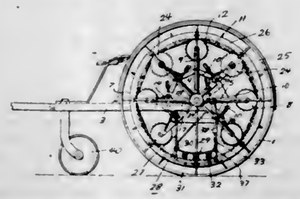


2. In a machine of the class described a slide, means adapted to reciprocate said slide, a pair of arms pivotally mounted on said slide, coöperating gripping fingers secured to said arms, and means operated by the reciprocation of said slide adapted to open and close said fingers.

10. A machine of the class described having, in combination, a slide, means to reciprocate said slide, a pair of arms pivotally mounted on said slide to move toward and away from each other, coöperating gripping fingers secured respectively to said arms, cam blocks slidably mounted on said slide, adapted to contract said pivoted arms, pivoted members carried by said slide, adapted to engage said cam blocks during the reciprocations of said slide to move said cam blocks with said slide for a portion of the movement thereof, and stops adapted to be engaged by said pivoted members to release said members from said cam blocks.

[Claims 3 to 9 and 11 to 13 not printed in the Gazette.]

1,270,317. ROTARY HARROW. HEMAN E. OWENS, West Clarksville, N. Y. Filed Feb. 18, 1918. Serial No. 217,876. (Cl. 97—38.)



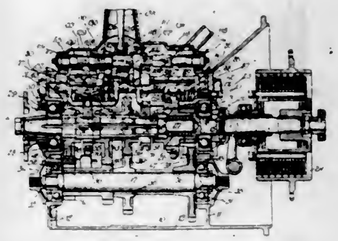
1. In a rotary harrow, a wheeled supporting structure, a drum mounted therein, a flexible endless member mounted to move around said drum, outwardly projecting teeth carried by said member, means connected to actuate said endless member, and spring cushioned means for projecting the teeth of said endless member into operative position for engaging the ground.

4. In a rotary harrow, a wheeled supporting structure, a drum mounted therein, a flexible endless member mounted to move around said drum, outwardly projecting teeth carried by said member, means connected to actuate said endless member, and means for projecting the teeth of said endless member into operative position for engaging ground, said projecting means comprising two members, one slidable relatively to the other and having coiled springs positioned between them, the slidable member being arranged outside and yieldable inwardly.

6. In a rotary harrow, a supporting frame, ground wheels supporting said frame, a skeleton drum fixedly mounted therein and including a plurality of radially adjustable sprocket wheels, endless sprocket chains passing over said wheels, toothed rods connecting said chains, and a connection between one of said ground wheels and said sprocket wheels whereby the chains are driven by the turning of the ground wheels.

[Claims 2, 3, 5, and 7 not printed in the Gazette.]

1,270,318. TRANSMISSION MECHANISM. CLARK W. PARKER, Detroit, Mich., assignor to Cadillac Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Aug. 17, 1916. Serial No. 115,551. (Cl. 74—59.)



1. In a transmission mechanism, the combination with alined driving and driven shafts, gears loosely mounted thereon, a countershaft, and a plurality of gears secured thereto and adapted to mesh with said other gears, of a double clutch member adapted to provide an overrunning connection between one of said alined shafts and either of a pair of gears thereon, another double clutch member for providing an over-running clutch connection between the same shaft and another gear loosely mounted thereon, or for directly connecting the two alined shafts, resilient means for selectively operating said clutch connections, a single clutch member between one of said alined shafts and another of said gears thereon, and resilient means connecting said operating means with said single clutch member whereby the latter may be engaged with and disengaged from its complementary gear with an engaging or disengaging movement of either of said double clutch members.

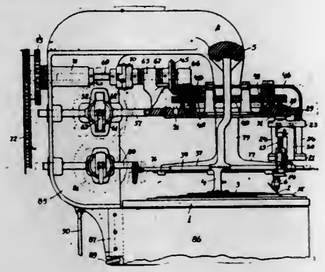
3. In a transmission mechanism, the combination with alined shafts, and a parallel countershaft, of means connecting said shafts whereby a plurality of indirect drives and a direct drive may be obtained between said alined shafts, said means comprising a pair of clutch devices adapted to be selectively shifted, another clutch device, means for shifting said latter device with either of said former devices, resilient connections between said devices and said shifting means.

7. In a transmission mechanism, the combination with a pair of shiftable double clutch members, and a single clutch member, of means for selectively shifting said double clutch members, and means for shifting said single clutch member with one movement of either of said other members.

15. In a transmission mechanism, the combination with alined driving and driven shafts, and a parallel countershaft, of means for forming a plurality of indirect and direct connections between said alined shafts, comprising shiftable clutch members, forks for said members, shiftable carriers provided with arms, one of said forks being pivotally mounted on each of said carriers, resilient means for limiting the pivotal movement of said fork, a rotatable and axially movable shaft having a finger adapted to be selectively connected with each of said arms by a rotational movement of the shaft and to shift the arms by an axial movement thereof, means for imparting a rotational and axial movement to said shaft, another carrier provided with a pivotally mounted shifting fork, said lattermentioned carrier having an arm, a pivotally mounted cam follower connected with said arm, said axially movable shaft being provided with a plurality of cam faces, said cam faces being brought into operative relation with said follower by different rotational movements of said shaft and to operate said follower by an axial movement of the shaft.

[Claims 2, 4 to 6, and 8 to 14 not printed in the Gazette.]

1,270,319. MACHINE FOR CUTTING SOLES. ERNEST L. PATTEN, Malden, Mass. Filed Feb. 19, 1917. Serial No. 149,412. (Cl. 12—25.)



1. A sole cutting machine comprising a work table, a knife, means for moving the knife in an oblong path, a leader controlling the path of the knife, and means for periodically shifting the knife moving means in the direction of the major axis of the path, for lengthening and shortening the path of the knife.

5. A sole cutting machine comprising a work table, a knife, means for moving the knife in an oblong path and for controlling the course of the knife, and means for synchronously shifting said means comprising a shaft and face plate, the face plate having a dovetail groove diametrically therein, a dovetail block slidable in said groove, a crank pin projecting from said block parallel with said shaft, a pinion turning on said pin, a rack carried by the face plate in mesh with said pinion, a pitman connected with said pin and said means, a hand wheel on said pin adapted for forcibly rotating said pinion, a friction plate resting against a face of said wheel, and a cam carried by the outer extremity of said pin and disposed for pressing said friction plate against the face of said wheel and thereby locking the pinion and hence the crank pin at any desired point of adjustment.

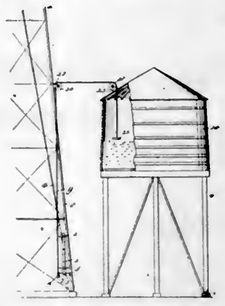
7. A sole cutting machine comprising a fixed work table having vertical ways, a frame slidable in said ways, a knife, means for moving the knife in an oblong path, said means including a shaft and sprocket wheel, said knife and knife moving means, shaft and sprocket wheel being supported by and rising and falling with said frame, a power driven sprocket wheel having stationary bearings below said frame, a sprocket chain joining said sprocket wheels, an idler resting against said chain, a bell-crank lever carrying said idler and having a stationary pivot, and a projection from said frame adapted to engage said bell-crank lever and to cause its idler to flex said chain and thereby take up the slack therein as said frame descends, said frame having means for forcibly reciprocating it.

[Claims 2 to 4, 6, and 8 not printed in the Gazette.]

1,270,320. CUT-OUT DEVICE FOR WINDMILLS. PHIL M. PENNINGTON, Bellevue, Tex. Filed Nov. 27, 1917. Serial No. 204,226. (Cl. 103—86.)

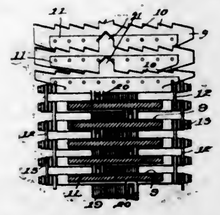
1. A cut-out device for windmills comprising a lever pivotally mounted on the tower of a windmill and having connection with the clutch thereof, whereby when the lever is horizontal the windmill is cut out and when the lever is vertical, the windmill is in the operative position, a latch attached to the tower of the windmill and having means for engaging the lever to hold it in the vertical position, a water tank, a float therefor, and devices conjoined with the float and with the latch whereby, when the tank is supplied with water to a predetermined level, the latch is automatically released from the lever.

2. A cut-out device for windmills comprising a lever pivotally mounted on the tower of a windmill and having connection with the clutch thereof, whereby when the lever is horizontal the windmill is cut out and when the lever is vertical, the windmill is in the operative position, a latch attached to the tower of a windmill, the latch being resilient and having a depression formed therein so that the lever may be engaged there-by and held in



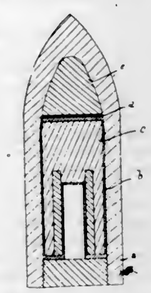
the vertical position, a weight attached to the free end of the latch, a water tank, a float therein, a cable connecting the float with the free end of the latch, and pulleys over which the cable passes, whereby when water reaches a predetermined level in the tank, the latch is released from the lever.

1,270,321. CULTIVATOR-BLADE. JESSE R. PORTER, Buffalo, N. Y., assignor of one-half to Edward Michael, Buffalo, N. Y. Original application filed July 22, 1912, Serial No. 710,743. Divided and this application filed Aug. 28, 1915. Serial No. 47,750. (Cl. 97—62.)



A rotary earth working implement comprising a plurality of blades arranged in an endless series, each blade having a transverse row of teeth, the tooth in the central part of the row being comparatively long while the other teeth on opposite sides of the central part of the said row of teeth are shorter than said long tooth.

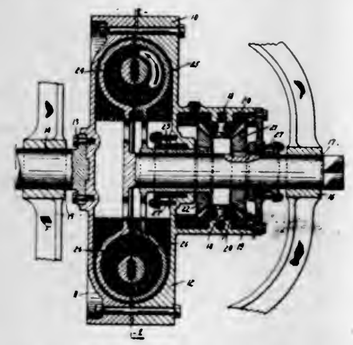
1,270,322. BURSTING CHARGE FOR PROJECTILES. FERDINANDO QUARTIERI and ETTORE MOLINARI, Milan, Italy. Filed Aug. 31, 1914. Serial No. 859,494. (Cl. 102—29.)



1. A bursting charge for projectiles, proof against premature bursting upon impact, said bursting charge comprising a forward and a rearward portion both made from the same sensitive explosive, said forward portion having been rendered insensitive to shock by a rearrangement of the atoms in the molecules relative to the rearward portion.

2. A bursting charge for projectiles, proof against premature bursting upon impact, said bursting charge comprising a forward and a rearward portion both made from the same sensitive explosive, said forward portion having been rendered insensitive to shock by gelatinizing.

1,270,323. POWER-TRANSMITTING APPARATUS. CARLTON R. RADCLIFFE, New York, N. Y. Filed Aug. 11, 1916. Serial No. 114,413. (Cl. 74—34.)



2. In a power transmitting apparatus, the combination with driving and driven shafts, of a planetary gearing connecting the same, and an automatically acting hydraulic clutch for causing one element of the gearing to become a fulcrum for certain other elements thereof, said clutch including two members, one of said members being connected with the element which becomes a fulcrum and the other one with said driven shaft.

3. In a power transmitting apparatus, the combination with driving and driven shafts, of a gearing connecting the same, and an automatically acting hydraulic clutch for changing the normal speed of one element of the gear in relation to the other elements thereof, whereby the same is caused to become a fulcrum for certain other elements of the gearing, said clutch including two members, one of said members being connected with the element which becomes the fulcrum and the other one with said driven shaft.

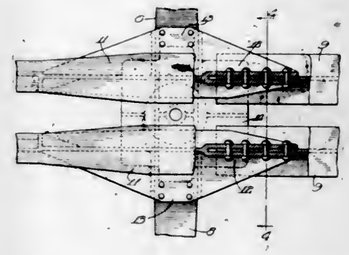
5. In a power transmitting apparatus, the combination with driving and driven shafts, of a gearing connecting the same, and means for causing automatically one element of the gearing to become the fulcrum for certain other elements thereof, said last named means being connected with said gearing so as to cause the power consumed in producing the fulcrum to be converted into useful work for aiding the motion of said driven shaft.

[Claims 1, 4, and 6 to 31 not printed in the Gazette.]

1,270,324. UNDERFRAME FOR CARS. ARTHUR K. READING, Davenport, Iowa, assignor to The Bettendorf Company, Bettendorf, Iowa, a Corporation of Iowa. Filed Jan. 12, 1918. Serial No. 211,468. (Cl. 105—76.)

1. In car construction, an underframe including a center sill consisting of a metallic I-beam, and a draft sill consisting of a metallic I-beam having a bifurcated end portion adapted to engage with opposite sides of the central web of the end of said center sill.

4. In car construction, an underframe including a center sill consisting of a metallic beam having a vertical web, a draft sill consisting of a metallic beam having a vertical web located in substantial alinement with the web of the center sill, the rear end of said draft sill web being bifurcated to embrace the forward end of said center sill web and being securely riveted thereto.



7. In car construction, an underframe including a center sill consisting of a metallic beam having a vertical web and a top flange, a draft sill consisting of a metallic beam having a vertical web located in substantial alinement with the web of said center sill, and having a top flange in substantial alinement with the top flange in substantial alinement with the top flange of said center sill, the vertical web of one of said beams being bifurcated at its end so as to embrace the end of the vertical web of the other of said beams, the two inter-engaging ends being securely riveted together.

[Claims 2, 3, 5, and 6 not printed in the Gazette.]

1,270,325. MONOAZO DYESTUFFS OF THE PYRAZOLONE SERIES ABLE TO BE CHROMATED AND PROCESS OF MAKING SAME. EMIL REBER, Basel, Switzerland, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Filed Sept. 11, 1917. Serial No. 190,720. (Cl. 8—1.)

1. The herein described process for the manufacture of monoazodyestuffs of the pyrazolone series consisting in combining the diazoderivative of an anthranilic compound with an oxyaryl substituted pyrazolone.

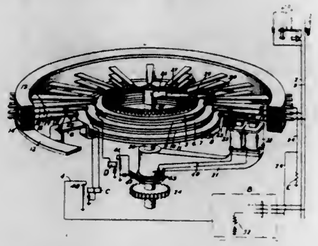
2. As new products, the herein described monoazodyestuffs of the pyrazolone series, being combination products of diazoderivatives of anthranilic compounds with oxyaryl substituted pyrazolones and the sodium salts of which constitute yellow to orange-brown powders, soluble in water with greenish-yellow to orange-yellow coloration and difficultly soluble to insoluble in alcohol and soluble in concentrated sulfuric acid with greenish-yellow to orange-red coloration and dyeing wool in an acid bath yellow to orange tints turning, when subsequently chromated, to yellow, orange and red-brown tints fast to light, fulling and potting.

3. As a new article of manufacture, the herein described dyestuff being the combination product of the diazoderivative of anthranilic acid with 1-(5'-sulfo-3'-carboxy-2'-oxy)-phenyl-3-methyl-5-pyrazolone, forming a sodium salt which constitutes a yellow-brown powder, soluble in water to a greenish yellow solution, somewhat difficultly soluble in alcohol and soluble in concentrated sulfuric acid to a greenish yellow solution, and which dyes wool in an acid bath yellow tints turning to brownish-yellow, when subsequently chromated.

1,270,326. CALL-FINDER FOR AUTOMATIC AND SEMI-AUTOMATIC TELEPHONE SYSTEMS. JOHN NEWBERRY REYNOLDS, Greenwich, Conn., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Dec. 13, 1916. Serial No. 136,644. (Cl. 179—18.)

1. The combination with telephone lines, of a call finder comprising a set of movable terminals for each line, stationary contacts each being common to one terminal in each set, mechanical actuating means for causing one terminal of each set to successively engage their common

contact, electromagnetic actuating means for causing the other terminals in each set to engage with their common contacts, and a relay controlled by a circuit through the first-mentioned terminals and contact for operating said electromagnetic means.



2. The combination with telephone lines of a call finder comprising a set of movable terminals for each line, stationary contacts, each being common to one terminal in each set, mechanical actuating means for causing the corresponding terminals in each set to successively engage their said common contact, electromagnetic actuating means for causing the other terminals in each set to engage their common contacts, and means for moving said mechanical and electrical actuating means in unison from set to set.

3. The combination with telephone lines of a call finder comprising a set of movable terminals for each line, stationary contacts, each common to one terminal in each set, a rotatable shaft, mechanical means operated by the rotation of said shaft for causing the engagement of a terminal in each set in succession with their common contact, and electromagnetic means associated with said shaft for causing the engagement of the other terminals in each set with the other common contacts respectively.

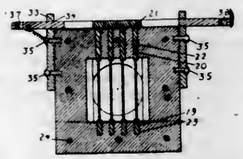
4. The combination with telephone lines, of a call finder comprising a set of movable terminals for each line, stationary contacts each common to a series of terminals in each set, mechanical means for causing the engagement of one terminal in any set to their common contact, a relay controlled through said terminals and their common contact, and an electromagnet controlled by said set for causing the engagement of the other terminals in any set with their common contacts, and means for moving said mechanical means and electromagnet from set to set.

5. The combination with telephone lines of a call finder comprising a movable test terminal for each line, movable line terminals for each line, corresponding stationary contacts common thereto, mechanical means for causing the test terminals to engage in succession with their common contact, testing means successively controlled through said test terminals and their common contact, electromagnetic means controlled by said testing means for causing the corresponding line terminals to engage in succession with the other common contacts, and a circuit controlling means actuated by the circuit through said line terminals and their common contacts.

1,270,327. THROTTLING-VALVE. EDWARD EDWARD RICHARDSON, Toledo, Ohio. Filed June 6, 1916. Serial No. 101,959. (Cl. 277—1.)

1. A valve comprising a casing, a plurality of shutter members therein, one or more other shutter members therein, said members being located in approximately a straight line, and the members of the two groups occurring alternately, and means for operating the members of the one group in one direction and the members of the other group in another direction.

6. A valve comprising a casing, a plurality of shutter members therein, one or more other shutter members therein, the members of the two groups occurring alternately, and means for operating the members of one group in one direction and the members of the other group in another direction, said means including a body attached to each member and a reciprocating member acting directly on each body.



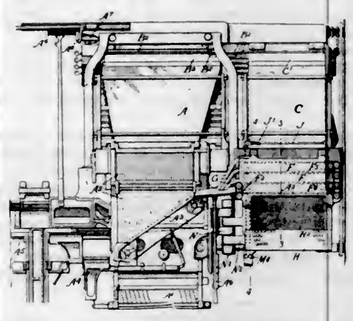
10. A valve comprising a casing, a plurality of shutter members therein, one or more other shutter members therein, the members of the two groups occurring alternately, the shutter members being in approximately a straight line, a reciprocating bar slotted longitudinally, a body on each of said members, the bodies on the members of the one group engaging with one side of said slot and the bodies on the members of the other group engaging with the other side of said slot.

13. A valve comprising a casing, a plurality of shutter members therein, one or more other shutter members therein, the members of the two groups occurring alternately, and means for operating the members of the one group in the one direction and the members of the other group in another direction, said means including a body attached to each member and a single actuating member attached directly to all of said bodies.

14. A valve comprising a casing, a plurality of shutter members therein, one or more other shutter members therein, the members of the two groups occurring alternately, said members being in approximately a straight line, and means for operating the members of the one group in the one direction and the members of the other group in the other direction, said operation being by a single member.

[Claims 2 to 5, 7 to 9, 11, 12, and 15 not printed in the Gazette.]

1,270,328. TYPOGRAPHICAL MACHINE. JOHN R. ROGERS, Brooklyn, N. Y., assignor to Mergenthaler Linotype Company, a Corporation of New York. Filed Feb. 12, 1917. Serial No. 148,056. (Cl. 199—19.)



1. In a typographical machine, the combination of two series of matrix magazines, distributing mechanism cooperating continuously with all the magazines of both series, two separate keyboards, one for each series, and means for operatively connecting said keyboards to different selected magazines of the respective series, whereby matrices may be drawn from different magazines of either series alone, or of both series simultaneously, and mixed together in the same line.

8. In a typographical machine, the combination of a series of main matrix magazines, a series of supplemental matrix magazines arranged at the side thereof, a channeled raceway common to all of the main magazines and adapted to receive the matrices therefrom, a main assembling belt onto which the matrices from the raceway are delivered, short channeled throats to receive the matrices from the several supplemental magazines, the lowermost throat discharging its matrices directly onto an extended portion of the main assembling belt, and a separate and independent belt to receive the matrices from each remaining throat and discharge them onto the main assembling belt.

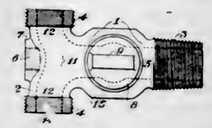
13. In a typographical machine, the combination of an inclined matrix magazine, and an endless assembling belt disposed horizontally along the discharge end of the magazine and having both of its opposed stretches located substantially in its plane of inclination.

24. In a typographical machine, the combination of a plurality of matrix magazines each having a series of escapements and divided into pairs, a common series of actuating reeds divided into sets, each constantly connected with the escapements of the corresponding magazines of the different pairs, matrix locking devices, one for each magazine, means for moving the locking devices of any pair of magazines simultaneously to active or inactive position, and means whereby the movement of one pair of locking devices to inactive position effects the movement of another pair to active position.

30. In a typographical machine, the combination of a main magazine, a supplemental magazine arranged at the side thereof, assembling devices coöperating with each magazine, and separate supporting frames upon which the assembling devices of the respective magazines are mounted, the said supporting frames arranged to turn about a common pivot.

[Claims 2 to 7, 9 to 12, 14 to 23, 25 to 29, and 31 to 34 not printed in the Gazette.]

1,270,329. CORPORATION-COCK. MILTON J. RUARK, Baltimore, Md. Filed Dec. 13, 1917. Serial No. 206,886. (Cl. 137—69.)



1. A corporation cock in the form of a T having a seat for a tapping machine tool intermediate the arms of the T.

2. A pipe fitting in the form of a T having the end of the shank tapered and threaded and the arms of the T threaded, and a seat for a tapping machine tool at the end of the shank opposite the tapered thread and intermediate the arms of the T.

3. A corporation cock consisting of a T having the end of the shank tapered and threaded, the arms of the T being threaded, a point of engagement for a tapping machine tool intermediate the arms of the T and in substantial alinement with the axis of the shank, and a valve in the shank of the T.

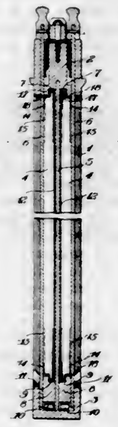
5. A distribution system including a main, a corporation cock tapped into the main and made in the form of a T, a service pipe connected to each arm of said T, the pipes being laid in a single ditch and connected to adjoining houses.

6. A corporation cock in the form of a T having the end of the shank threaded and tapered, the ends of the arms threaded, and a valve in the shank.

[Claim 4 not printed in the Gazette.]

1,270,330. CUT-FILM HOLDER. ALFRED A. RUTTAN, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Feb. 7, 1918. Serial No. 215,763. (Cl. 95—68.)

1. A film retaining frame for photographic plate holders having a rib and an adjacent shoulder on an end rail, said rib approximating the thickness of a plate and adapted to engage with the plate retaining groove of a plate holder.

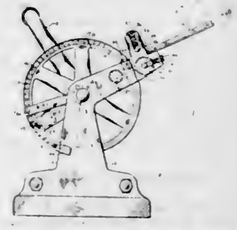


2. A film retaining frame for photographic plate holders having its end rails formed of doubled sheet metal in the nature of channels or moldings having ribs approximating the thickness of a plate and adapted to engage with the plate retaining grooves of a plate holder.

3. A film retaining frame for photographic plate holders having its end rails formed of doubled sheet metal in the nature of channels or moldings having ribs approximating the thickness of a plate and adapted to engage with the plate retaining grooves of a plate holder, the side rails of the frame being secured between corner extensions on said end rails.

4. The combination with a photographic plate holder having a back, an end rail provided with a plate retaining groove and an opposed spring pressed follower provided with a plate retaining groove, of a detachable frame adapted to hold a cut film sheet against the back, the end rails of the frame being provided with ribs and with adjacent shoulders, said ribs being adapted to fit within the plate retaining grooves of the holder in the manner of a plate.

1,270,331. DUPLICATOR. ALOIS BENJAMIN SALIGER, New York, N. Y., assignor to Beck Duplicator Company, a Corporation of New York. Filed July 7, 1916. Serial No. 108,037. (Cl. 101,132.)



1. In a duplicator, the combination with a stationary frame and a rotary frame, a stop on one of said frames adapted to engage with the other of said frames and prevent the complete revolution of said rotary frame, of a duplicating surface mounted on one of said frames, and a pair of rollers mounted on the other of said frames, one of said rollers being adapted when rotating in one direction to bring paper in contact with said duplicating surface and said rollers being adapted when said first named

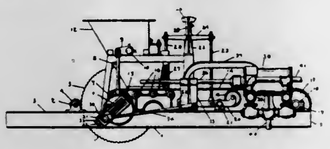
roller is rotating in the other direction to remove said paper from contact with said duplicating surface.

4. In a duplicator, the combination with a stationary frame and a rotary frame, of a duplicating surface mounted on one of said frames, means mounted on the other of said frames and adapted to bring paper in contact with said duplicating surface, an adjustable stop rotatably mounted on one of said frames and adapted to prevent the complete rotation of said rotary frame, and a series of depressions in one of said frames adapted to be engaged by said stop.

9. In a duplicator, the combination with a stationary frame and a rotary frame, a stop on one of said frames adapted to engage with the other of said frames and prevent the complete revolution of said rotary frame, of rollers mounted upon one of said frames and adapted to bear a strip of duplicating material, ratchets on said rollers, pawls adapted to engage with said ratchets, and means adapted when in one position to hold said pawls in engagement with said ratchets and when in another position to remove said pawls from engagement with said ratchets, and a roller mounted on the other of said frames and adapted when rotating in one direction to bring paper in contact with said duplicating surface and when rotating in the other direction to remove said paper from contact with said duplicating surface.

[Claims 2, 3, 5 to 8, and 10 to 18 not printed in the Gazette.]

1,270,332. FEEDING DEVICE. JOHN C. SCHAFFER, Tiffin, Ohio. Filed Apr. 26, 1915. Serial No. 24,175. (Cl. 83—73.)

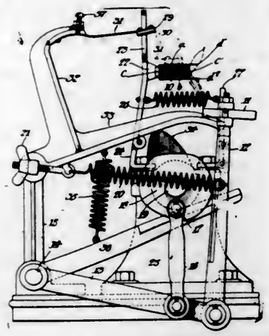


1. Mechanism for mixing a plurality of substances in given proportions comprising a belt conveyer, means for operating the same, a device for feeding one substance to be mixed and have adjustable operating connections with said conveyer operating means, a supply hopper having adjustable discharge means for feeding another substance to be mixed, and automatic weighing means coacting with the conveyer to regulate the charge of the latter mentioned substance supplied to the conveyer relatively to the adjustment of the first named feeding device.

2. Mechanism for mixing a plurality of substances in given proportions comprising a belt conveyer, means for operating the same, a liquid measuring device for feeding one substance to be mixed and having adjustable operating connections with said conveyer operating means, a supply hopper having adjustable discharge means for feeding another substance to be mixed, and adjustable weighing means disposed to sustain a portion of the traveling belt conveyer and extending to operate the adjustable discharge means from the hopper to regulate the charge of the latter mentioned substance supplied to the conveyer relatively to the adjustment of the liquid measuring device.

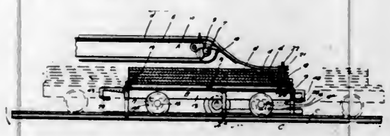
1,270,333. MACHINE FOR MAKING MATCH-BOX SHUCKS. HENRY C. SCHUMACHER and WILLIAM A. WINTERS, Barberton, Ohio, assignors to The Diamond Match Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 30, 1916. Serial No. 117,610. (Cl. 93—40.)

1. The combination with the mandrel and the final cover-folding mechanism of a machine for making paper-covered veneer shucks, of a friction member movable upon and from the top fold of the cover, a spring arm supporting said member, a lever for supporting said arm, and means for positively raising and yieldingly lowering the said lever, whereby the said friction member is caused to exert a transverse drawing action on the cover, said means including a spring and connections whereby the tension of the spring is augmented during the lowering of the said lever.



2. The combination with the mandrel and the final cover-folding mechanism of a machine for making paper-covered veneer shucks, of a friction member movable upon and from the top fold of the cover, a spring element supporting said member, a bell-crank lever to one arm of which said element is attached, a rock arm below the other arm of the lever, a spring coupling the said rock arm and the adjacent lever arm, and a cam mounted to act upon the coupled arms in opposition to the force of the spring.

1,270,334. APPARATUS FOR HANDLING PLASTER-BOARD OR THE LIKE. JOHN SCHUMACHER and JOSEPH E. SCHUMACHER, Los Angeles, Cal. Filed May 12, 1917. Serial No. 168,215. (Cl. 271—84.)



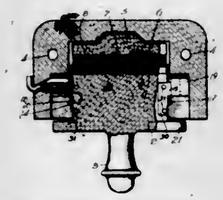
1. In output discharge means, a member from which output in unstacked relation is successively delivered, a member for receiving said output successively and maintaining said output in stacked relation, and means for successively presenting said output-receiving member in position for reception of output and in positive timed relation to the delivered output; said output-receiving member being adapted for reciprocation, and said means operating to reciprocate said member and being adapted to cause the traveling of said member at differential speeds during its travel in output-receiving direction and in its travel to output-receiving position.

3. In output discharge means, a member from which output in unstacked relation is successively delivered, a member for receiving said output successively and maintaining said output in stacked relation, and means for successively presenting said output-receiving member in position for reception of output and in positive timed relation to the delivered output; said last-named means comprising mechanism for moving said output-receiving member at first in step with said delivery member and then at a higher rate of speed during travel in output-receiving direction and being adapted to return said output-receiving member to output-receiving position at a still higher rate of speed; said member being provided with means for engaging the output.

6. In apparatus of the character disclosed, an output delivery member adapted to successively deliver flexible units in sheet form, a member adapted for reciprocation beneath the point of delivery of such units, and means for reciprocating said last-named member; said reciprocating means being adapted to move said reciprocatory member to output-receiving position and then move said reciprocatory member in step with said delivery member during a portion of its forward travel and increase the rate of speed of said reciprocatory member during the remaining portion of its forward travel.

[Claims 2, 4, 5, and 7 not printed in the Gazette.]

1,270,335. FUSE DEVICE. EDMUND O. SCHWEITZER and ALFRED HERZ, Chicago, Ill. Filed Dec. 17, 1914. Serial No. 877,697. (Cl. 175—277.)



2. In a fuse device, a plug member comprising an insulating body member and an outer insulating block member, a fuse having a reduced central portion lying between said members and having terminal portions extending beyond said members, a baffle of refractory material lying upon one of said members substantially centrally thereof, facings of refractory material secured upon the members and engaging opposite sides of the fuse on each side of the baffle member, and means for pressing the facings against the fuse.

5. In a fuse device, compression blocks having portions thereof in the form of interfitting baffle plates, a fusible link having a reduced central portion adapted to be blown, said reduced portion lying between the compression blocks and being bent back and forth between the baffle plates, said fuse having terminal portions extending out beyond the compression blocks, said terminal portions being of relatively greater capacity, and terminal members for clamping the terminal portions of the fuse.

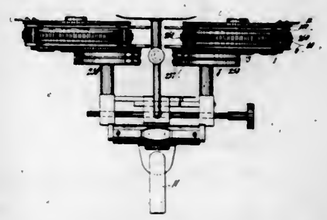
10. In a fuse device, a socket member and a plug member, coöperating terminals on said members, the stationary terminals on said socket member being loosely received within recesses therein whereby they automatically adjust themselves to the contacts on said plug member.

12. In a fuse device, a plug member comprising a prismatic block having side faces, a fuse member extending from end to end over the top of said block, the ends of said block being relatively narrow and having substantially parallel faces, and metal clips secured to the side faces of the block adjacent the end faces of the block, each of said clips having an ear extending over the adjacent end to form a fuse terminal, and each clip having an ear extending outwardly from the edge of the adjacent end to form a switch blade.

[Claims 1, 3, 4, 6 to 9, 11, and 13 not printed in the Gazette.]

1,270,336. REFRACTOMETER. NATHAN A. SHIGON, New York, N. Y. Filed July 1, 1915. Serial No. 37,447. (Cl. 88—22.)

1. In combination, a frame provided with a sight opening, two disks carrying spherical lenses mounted on a common axis within said frame, means for manually revolving one of said disks, means coöperatively connecting said disk to the other disk, and adapted to successively bring the lenses of said other disk in line with said sight opening as the first mentioned disk is turned through one revolution, and an independently revoluble supplementary disk mounted on said common axis, said supplementary disk carrying supplementary plus and minus spherical lenses, and adapted to be brought into line with said sight opening, and provided with a free opening, and an opaque portion adapted to be brought into line with said sight opening.



3. In combination, two disks carrying spherical lenses mounted on a common axis, means for revolving said disks with respect to each other so as to bring different lenses on said disks together automatically, and a revoluble supplementary disk mounted on said common axis, said supplementary disk carrying supplementary plus and minus spherical lenses, said supplementary disk being made of opaque material, and having a part thereof intermediate the respective lenses thereof of sufficient size to cover the lenses of said two disks in the line of vision of the patient's eye.

4. In combination, a frame, comprising a pair of spaced plates provided with alined openings, two disks mounted on a common axis between said plates, and respectively provided with lenses adapted to be brought successively in line with said openings, means mounted on one of said plates adapted to coöperatively connect one of said disks to the other, and adapted to successively bring the lenses of said other disk in line with said openings as said first mentioned disk is turned through one revolution, means for manually turning said first disk, an independently revoluble supplemental disk mounted on said common axis exteriorly of said frame, and adapted to be readily removed without dissasembling said frame, said supplemental disk carrying lenses to be used in combination with the lenses of said other disks.

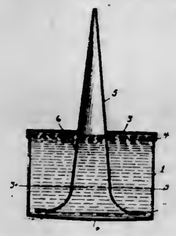
6. In a refractometer having a pair of reversely disposed frames, one for each eye, arranged side by side, frame plates for each of said frames having a central arbor, and alined openings therein disposed between said arbor and the inner edges of said plates, revoluble disks carrying spherical lenses, and mounted on said arbor between said plates, said lenses adapted to be successively revolved before said openings when said disks are revolving, markings on said disks to indicate the lenses in registration with the said openings, a supplemental opening in one of said plates to view said markings, a scale on said plate, a perforated revoluble disk having a toothed periphery, mounted on said plate, and having its perforation in registration with said openings on said plates, and a plurality of relatively small gears for turning said perforated revoluble disk meshing with said toothed periphery thereof, said gears clearing said supplemental opening, and said scale of said plate, and projecting in proximity to the outer edge of said plate for manual manipulation, and means on said revoluble disk for holding lenses or other testing appliances therein.

[Claims 2, 5, and 7 not printed in the Gazette.]

1,270,337. OIL-CAN. LAWRENCE C. SIEWERT, Trempealeau, Wis. Filed Nov. 15, 1916. Serial No. 131,483. (Cl. 221—48.)

1. An oil can having a nozzle projecting into the body of the can to within a short distance of the bottom and sides thereof to receive the oil equally from any part of the can when the latter is tilted to dispense the oil.

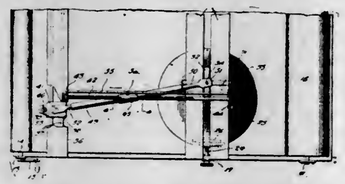
3. An oil can having a centrally disposed nozzle which extends into the can, the inner portion tapering and having its inner end flared and extending about parallel with



the bottom, terminating close to the said bottom and the sides of the can.

[Claim 2 not printed in the Gazette.]

1,270,338. PATTERN-DRAFTING MACHINE. CHARLES A. SNIDER, Boise, Idaho. Filed May 24, 1917. Serial No. 170,708. (Cl. 33—18.)



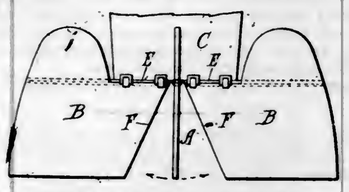
6. A pattern drafting machine including a marker mounted for rectilinear movement, means for moving a strip of paper beneath the marker, a rotatable element, means operable by movement of said element for moving the marker, means for varying the ratio of movement between the element and the marker, means operable by movement of and in proportion to the movement of the paper for rotating said element, and means for varying the ratio between the movement of the paper and said element.

7. A pattern drafting machine including a marker mounted for rectilinear movement, means for moving a strip of paper beneath the marker in a direction at right angles to the direction of movement of said marker, an element mounted for rectilinear movement, means for transmitting motion from said element to the marker, means for varying the ratio of movement between said element and said marker, a rotatable element, means for converting rotary movement of said element into rectilinear movement of the first mentioned element, means operable by and in proportion to the movement of the paper for rotating said rotatable element, and means for varying the relative rate of movement between the paper and said rotatable element.

8. A pattern drafting machine including a marker mounted for rectilinear movement, means for moving a strip of paper beneath the marker in a direction at right angles to the direction of movement of said marker, a sliding element mounted for rectilinear movement in a direction parallel to the direction of movement of the marker, an oscillatable member fulcrumed for transmitting movement from the sliding element to the marker, said fulcrum being adjustable to vary the rate of movement between said sliding member and marker, a rotatable member, means for transmitting rotary motion of said member to rectilinear movement of the sliding element, means operable by and in proportion to the rate of movement of the paper for rotating said rotatable member, and means for varying the rate of movement between said paper and said rotatable member.

[Claims 1 to 5 and 9 to 11 not printed in the Gazette.]

1,270,339. AEROPLANE. JAMES S. SPAINHOUR, Hempstead, N. Y., assignor of one-half to Sidney F. Beckwith, Hempstead, N. Y. Filed June 9, 1917. Serial No. 173,681. (Cl. 244—29.)



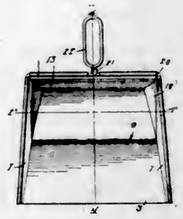
1. An aeroplane having mounted on its rear end a rudder and a plurality of elevators, said rudder and said elevators being identical in shape and size, the plane of the elevators intersecting the rudder and the inner edges of the elevators flaring outward to permit the rudder to swing freely between them.

2. An aeroplane having mounted on its rear end a rudder and a plurality of elevators, said rudder and said elevators being identical in shape and size, and being interchangeable.

5. An aeroplane having a vane hinged thereto, the hinge comprising a pin fastened to a part of the frame of said vane, a tube surrounding said pin and loops surrounding said tube and fastened one loop to the frame of the vane and the other to the frame of the aeroplane.

[Claims 3 and 4 not printed in the Gazette.]

1,270,340. DUST-PAN. FERDINAND O. SPAULDING, Fairfield, Me. Filed Feb. 23, 1917. Serial No. 150,509. (Cl. 65—20.)



3. A dust pan comprising a front blade and a receptacle carried at the rear thereof, the meeting portions of the said blade and the receptacle providing a ridge transversely across the pan, side flanges integrally connected to the blade and extending rearwardly and upwardly above the said receptacle at each end thereof whereby openings are provided at each end of the said receptacle, the rear wall of the receptacle having its marginal edge rolled and contacting with the ends of the said flanges, the marginal edges of the said flanges also being rolled, a brace wire received by the said rolled edges of the flanges and the said wall, the margin of the said rear wall being notched whereby the said wire may be twisted, and a handle projecting rearwardly from the said notch.

[Claims 1 and 2 not printed in the Gazette.]

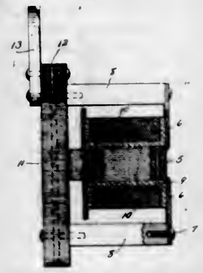
1,270,341. SHOE-FASTENER. ORVILLE J. SPREEN, St. Louis, Mo. Filed Oct. 3, 1916. Serial No. 123,523. (Cl. 24—225.)



As a new article of manufacture a shoe fastener of the concealed type, the hook of which is made from a single piece of flat material of rectangular form bent to form a

substantially U-shaped hook, the limbs of which are of different lengths, the shorter limb being perforated to provide a means for attaching to a piece of material and to be concealed in the hemmed edge of the same, and an eye formed of a single piece of material capable of being bent to form a rectangle, the free ends serving to pierce and clench the eye ~~on an opposing piece~~ of material.

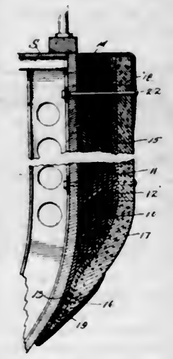
1,270,342. ELECTRIC VIBRATOR. RUDE STOCKINGER, Manitowoc, Wis. Filed Aug. 7, 1917. Serial No. 184,872. (Cl. 175—338.)



1. A vibrator comprising a magnetic base plate composed of laminæ secured together by a binding rivet, spaced non-magnetic supporting members having their inner ends fixed to the base plate, a laminated core having certain of its laminæ bent laterally and secured to said supporting members, whereby the core is resiliently supported between the supports, and magnet windings surrounding the core, substantially as described.

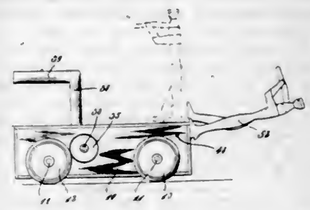
[Claim 2 not printed in the Gazette.]

1,270,343. BULLET-SHIELD. FRANCISZEK SZMYT, Collinsville, Okla. ~~Filed Sept.~~ 12, 1917. Serial No. 190,962. (Cl. 114—9.)



A projectile resisting armor consisting of an inner layer of rubber inclosing a plurality of spaced sheets of reinforcing fabric whereby the rubber layer is also arranged in a plurality of sheets, the innermost rubber sheet being of greater dimensions vertically than the remaining sheets, and an intermediate layer of felted cotton covering the outer rubber sheets and a portion of the lower extremity of the inner rubber sheet, an outer layer of cork saturated in oil and covering the cotton layer, the upper and lower portions of the innermost rubber sheet enveloping the top and bottom portions of the cotton and cork layers, and means to hold said layers together.

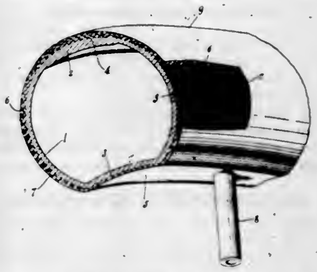
1,270,344. FIGURE WHEELED TOY. JOHN TERLECKY, Easton, Pa. Filed June 9, 1917. Serial No. 173,696. (Cl. 46—45.)



1. The combination with a truck mounted upon wheels, of a slotted block slidably arranged in said truck, means for normally maintaining said block in a forward position, a figure pivoted at the rear of said truck, said figure being operable by said block, a shaft mounted transversely in said casing, a plurality of arms engaged with said shaft, pins passing through the mentioned slot in said block with which said arms are contactable and by which said block is movable rearwardly, and a friction wheel on said shaft engaged with the periphery of one of the wheels of said truck.

[Claims 2 to 4 not printed in the Gazette.]

1,270,345. SOFT-BASE VULCANIZING-TUBE. JAMES D. TEW, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 17, 1917. Serial No. 155,564. (Cl. 18—45.)

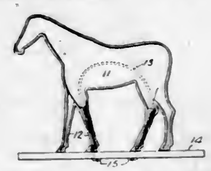


1. An annular tire-vulcanizing tube having a fabric reinforced body and an integral relatively soft and flexible base.

4. An annular tire-vulcanizing tube having a rubber lining, a relatively soft and flexible base wall provided with a single layer of reinforcing fabric, and a plurality of superimposed layers of reinforcing fabric in the tread and side walls, all parts being integrally vulcanized together.

[Claims 2 and 3 not printed in the Gazette.]

1,270,346. PAPIER-MÂCHÉ TOY ANIMAL AND THE LIKE AND METHOD OF MAKING SAME. ORIGENE A. THIBAULT, Victoriaville, Quebec, Canada. Filed Nov. 9, 1917. Serial No. 201,135. (Cl. 46—40.)



1. A toy animal comprising a body and leg portions, and a pair of reinforcing members of arcuate form extending

longitudinally each through the body and through one front and one hind leg.

2. A toy animal comprising a hollow body and legs, and continuous reinforcing members passing longitudinally through the body and legs and bedded throughout their length in the material of the body and legs.

3. A toy animal comprising a hollow body and legs, and a pair of reinforcing members each continuous through a fore leg, the hollow body and a hind leg, and bedded throughout their length in the material of the body and legs and projecting through the ends of the legs, and a base secured to the animal by the projecting ends of said reinforcing members.

[Claims 4 to 6 not printed in the Gazette.]

1,270,347. ORNAMENTAL PIN OR BADGE. ARTHUR GARFIELD TRIMBLE, Pittsburgh, Pa. Filed Mar. 26, 1918. Serial No. 224,790. (Cl. 40—1.5.)



2. A badge comprising a body portion in the form of an annulus having its inner edge provided with an eye and a pendant connected to said eye and surrounded by the body portion consisting of a numerical designation and provided with a transverse panel having a conventional inscription associated with said designation, and a bezel inclosing the annulus and secured thereto.

[Claims 1 and 3 to 5 not printed in the Gazette.]

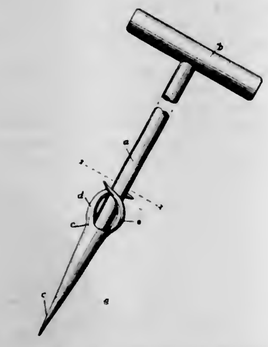
1,270,348. COTTON MATERIAL WITH WHITE-EFFECT THREADS AND PROCESS OF MAKING IT. HANS WALTHER, Leverkusen, near Cologne, Germany, assignor to Synthetic Patents Co., Inc., New York, N. Y., a Corporation of New York. Filed Nov. 5, 1914. Serial No. 870,492. (Cl. 8—5.)

2. The process of producing silk white effect goods dyed with sulfur colors which comprises subjecting mixed cotton and silk goods to tannin and subsequently dyeing the goods with sulfur colors in a bath containing a metal sulfid.

3. A textile material having white effects, and comprising a mixture of cotton and silk, the latter being mordanted with tannin, the cotton only of said mixture being dyed with sulfur colors, substantially as described.

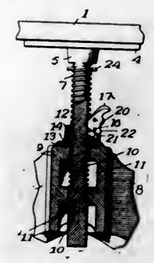
[Claim 1 not printed in the Gazette.]

1,270,349. HAY AND COTTON TRIER. HERMAN WATERHOLTER, Portland, Oreg. Filed Sept. 27, 1917. Serial No. 193,611. (Cl. 83—15.)



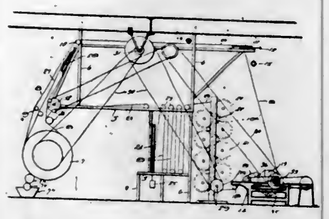
An instrument of the character described comprising a conical shank portion tapered to a point, and provided with arms at its inner end on opposite sides, said arms extending spirally and inwardly about the shank but spaced therefrom, their free ends substantially inclosing a space about said shank, whereby a sample of the material is held when the instrument is withdrawn from the mass.

1,270,350. CHAIR. EDWARD G. WATKINS, Gardner, Mass., assignor to Heywood Brothers and Wakefield Company, a Corporation of New Jersey. Filed June 12, 1913. Serial No. 773,197. (Cl. 155—41.)



In a revolving chair, the combination with a spider having a vertical bore, and providing an annular concave seat surrounding the upper end of said bore, of a threaded spindle turning loosely in said bore, a chair seat on the upper end of said spindle, and a nut threaded on said spindle, said nut having a convex under surface corresponding to the outer circumferential portion of said annular concave seat, and adapted to be supported by the latter to carry the weight of the chair seat, said nut being recessed inwardly of said convex surface, whereby to cooperate with the inner circumferential portion of said concave seat in forming an annular space, surrounding said spindle for the retention of lubricant.

1,270,351. BLANKET WASHING AND DRYING MACHINE. EDWARD WHITE, Hawthorne, N. J. Filed Apr. 25, 1916. Serial No. 93,558. (Cl. 101—425.)

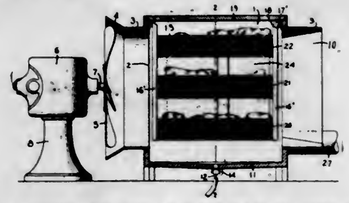


1. In combination with the impression cylinder and printing roller of a textile printing machine, an endless web or blanket adapted to travel upon said impression cylinder, means for applying liquid to and scrubbing said blanket, and means for moistening said blanket preliminary to its passage over said scrubbing means.

4. In combination with the impression cylinder and printing rollers of a textile printing machine, an endless web or blanket adapted to travel upon said impression cylinder, means for applying liquid and scrubbing said blanket, means for moistening said blanket preliminary to its passage over said scrubbing means, drying means for said blanket arranged intermediate the scrubbing means of the impression cylinder, and a plurality of rows of rollers arranged between the drying means and the impression cylinder for supporting and cooling the blanket prior to its return to the impression cylinder.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,270,352. VENTILATING AND COOLING APPARATUS. JAMES A. WILLIAMS, Roxbury, Mass. Filed Jan. 4, 1915. Serial No. 420. (Cl. 62—133.)



1. A cooling and ventilating apparatus comprising an ice receiving chamber having an inlet aperture the wall of which is adapted to receive and inclose the blades of an electric fan, an ice receptacle removably supported in said ice receiving chamber consisting of a supporting frame having a series of horizontal superposed reticulated ice containers so disposed that a blast of air from a fan through the said ice receiving chamber will impinge directly upon the ice in said containers and an outlet for said ice receiving chamber located directly opposite said inlet aperture, a plurality of vertical diverging vanes within said outlet for distributing the cooled air throughout the room.

[Claims 2 and 3 not printed in the Gazette.]

1,270,353. MOP-HOLDER. FERDINAND R. WOLTER, Minneapolis, Minn. Filed May 12, 1917. Serial No. 168,191. (Cl. 15—56.)



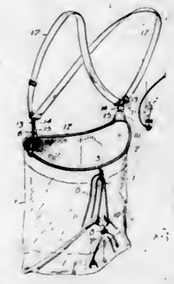
2. A mop-head comprising a slotted extension having a cross-head on one end thereof, a yoke member having its arms slidably mounted in the slots of said cross-head and its extremities provided with hook portions, a clamping bar capable of being detachably engaged by said hook members that serve to move the bar into coöperative clamping engagement with the cross-head, and means for maintaining the yoke in an adjusted position for holding the clamping bar in a clamping position, said means including a link adapted to coöperate with the yoke.

5. A mop-head comprising a slotted tubular extension, a cross-head at one end of the extension, a compressible member disposed in said extension, a clamping bar to cooperate with said cross-head in securing a mop-cloth to the mop-head, a yoke member adapted to engage with the clamping bar, said yoke having its arms extending through the slots in the tubular extension and engageable with one end of the compressible member, and an adjustable operating lever and a link carried on the mop-head, said link and lever being adapted to compress the compressible member for shifting said yoke and to hold said clamping bar into a substantially yieldably coöperative clamping relation with the cross-head in a plurality of positions, and a notched element carried by the extension to cooperate with the lever in the holding positions.

[Claims 1, 3, 4, and 6 not printed in the Gazette.]

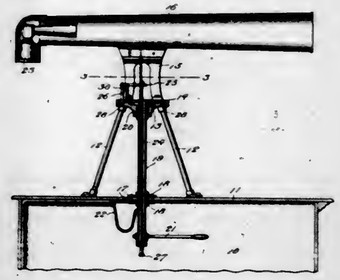
1,270,354. PICKING-BAG. EARL WOODRUM, Glencove, Wash. Filed June 20, 1917. Serial No. 175,838. (Cl. 150—2.)

A picking bag comprising a body portion having open upper and lower ends, a stiffening loop for maintaining the upper end in open position, a hook carried by the loop, the end of the hook being bent back upon the body portion thereof to provide a relatively narrow space between the end and the body portion, a draw string secured to the central portion of the bag near the bottom on one side of the bag, strengthening tabs having eyelets, said strengthening tabs being disposed at the opposite edges of the bag, eyelets carried by the bag between said strengthening tabs and the point where the string is secured, the ends of the string passing through said last-named eyelets and



then through the eyelets in the strengthening tabs for drawing the lower end of the bag together, said string being adapted to be wound about the hook at any point between the strengthening tabs and the ends of the string for frictional suspension from the hook.

1,270,355. SIGNALING DEVICE. JESSE A. WRIGHT, Seaford, Del. Filed May 9, 1916. Serial No. 96,388. (Cl. 248—30.)



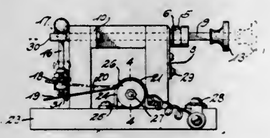
1. In a device of the class described, a base, a turn table mounted thereon, a hollow shaft journaled in said base and connected with the table to rotate the latter, means for operating the shaft, the lever mounted for locking movement, a locking pin carried by one end of the lever, a spring operating to normally hold the pin in engagement with said table and base to hold these parts fixed relatively, a vertically adjustable rod arranged within said hollow shaft and having one end connected with the opposite end of the lever to effect a release of said pin.

[Claim 2 not printed in the Gazette.]

1,270,356. AUTOMATIC CIRCUIT-BREAKER. GEORGE B. WURSTER, Tuckahoe, N. Y., assignor to W. R. Ostrander & Company, New York, N. Y., a Corporation of New York. Filed Sept. 17, 1917. Serial No. 191,698. (Cl. 175—273.)

2. An automatic circuit breaker comprising, a base, a spring operated circuit closing member movably supported on said base, a latch mounted on the base for holding said member in the circuit-closed position, a heating coil mounted on the base and a composite thermostatic bar having a coiled portion closely engaged about the heating coil and a laterally extending arm for operating the latch aforesaid.

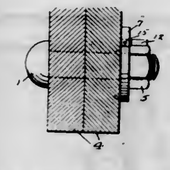
4. An automatic circuit breaker comprising a base, spaced contacts on said base, a bracket mounted on the base, a plunger slidably guided in said bracket, a contact on said plunger for connecting the contacts on the base, said plunger having an operating handle at its outer end and having a beveled inner end with a locking notch in rear thereof, a latch pivoted on the base having an arm adapted to be displaced by the beveled inner end of the plunger and to engage in the holding notch in rear of



such beveled end, said latch also having a laterally projecting trip arm, a spring for shifting the plunger in the direction of separating the contacts, a heating coil mounted on the base and a composite thermostatic bar coiled about said heating coil and anchored at one end to the base and having a laterally projecting arm at its opposite end disposed in position to engage the trip arm of the latch.

[Claims 1 and 3 not printed in the Gazette.]

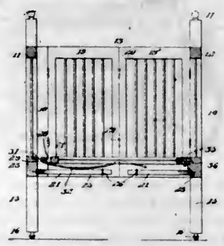
1,270,357. NUT-LOCK. WILLIAM W. WYMORE, Marmarth, N. D. Filed Nov. 2, 1915. Serial No. 59,268. (Cl. 151—57.)



In a nut lock of the class described, the combination of a bolt having a nut screwed thereon, a thickened locking washer positioned upon said bolt, said washer having pointed projections upon its inner surface, said nut engaging said washer for holding said projections in engagement with a support, thus holding said washer against rotation, said washer having its edges cut away to form substantially parallel outwardly extending portions, thus forming an elongated outwardly extending lug, said lug having a lateral opening projecting therethrough, said lug also having transverse openings projecting therethrough and registering with said lateral opening, a flat locking key having a reduced stem projecting therefrom, said stem having a transverse opening formed therethrough, said lug projecting beyond the periphery of said nut, said flat key bearing upon one of the side surfaces of said nut, said stem projecting through the lateral opening of said lug, a transverse pin passing through said lug and said stem, thus holding said locking key and washer in a set engagement with each other, said pin holding said stem from rotating, thus causing said flat key to bear upon the nut and hold the same from rotating, thus positively locking said nut upon said bolt.

1,270,358. FOLDABLE BED. FRANK ZAREMBA, Maywood, Ill., assignor of one-half to Peter Laskawy, Chicago, Ill. Filed Feb. 28, 1918. Serial No. 219,592. (Cl. 5—58.)

1. A bed comprising sides, supporting members inwardly carried by the ends of one of said sides, foldable ends hingedly connected between said supporting members and the ends of the opposite side, a bottom hinged to the said supporting members adapted for horizontal arrangement in restraining relation between the said ends when the device is operatively arranged, means adapted for retaining the bottom in its open arrangement, springs engaging the said bottom adapted for automatically closing the same between the said supporting members upon



releasing the said retaining means, and closing springs for the ends connected between the sections of the ends and the said sides, whereby the ends are adapted for automatically folding between the sides when released by the folding of the bottom.

[Claims 2 and 3 not printed in the Gazette.]

1,270,359. FOLDABLE GAME. WILLIAM ZARLING, Milwaukee, Wis., assignor of one-half to Albert A. Plautz, Milwaukee, Wis. Filed June 21, 1916. Serial No. 104,834. (Cl. 46—61.)



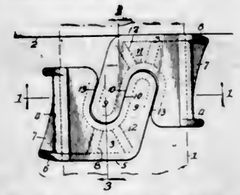
2. A foldable game board, comprising bottom sections, upstanding side members connected thereto, end members extending transversely across the opposite ends of the side members and the interposed bottom sections, said bottom sections and end members having a dowel pin connection with each other, longitudinally extending central members interposed between the bottom sections and having upstanding inclined grooved portions for returning balls from the rear to the front portion of the game, and means for clamping the parts together.

9. A foldable game board, comprising a plurality of bottom sections placed in endwise and sidewise position in pairs with relation to each other and having transverse reinforcing end strips which project beyond the opposite side edge portions of the said sections, longitudinally extending central members interposed between pairs of the bottom section and resting on some of the projecting end strips and having upstanding inclined grooved portions for returning balls from the rear to the front portion of the game, side members resting upon some of the projecting end portions of the transverse strips, end members connected to the end portions of the side members and the bottom sections therebetween, said end members and bottom sections having a dowel pin connection therebetween, means for clamping the parts together, a transverse member positioned between the side members, a plurality of numbered slidable members carried by the transverse member and yieldingly held in their lower position with the numbered portions covered, and means releasably holding the numbered members in their lower position.

[Claims 1 and 3 to 8 not printed in the Gazette.]

1,270,360. RAIL-ANCHOR. TORRIS H. ALFREDS, Chicago, Ill., assignor to The P. & M. Co., Chicago, Ill., a Corporation of Illinois. Filed Mar. 4, 1918. Serial No. 220,297. (Cl. 238—4.)

1. An anti-creeper, comprising two members each having means engaging one side only of the rail base, and each having a tie-abutting flange and a portion in the same horizontal plane as the corresponding portion on the other member, said portions having substantially vertical wedging surfaces which coöperate to draw said jaws toward each other when said members are moved longitudinally with reference to each other.



2. A two-part anti-creeper, each part comprising a transverse member having a tie-abutting flange projecting therefrom, a jaw at one end and a rearward extension at the other end, said extensions being at the same distance beneath the base of the rail.

3. An anti-creeper, comprising two parts each consisting of a transverse member having a tie-abutting projection thereon, a jaw at one end, and a rearward extension at the other end.

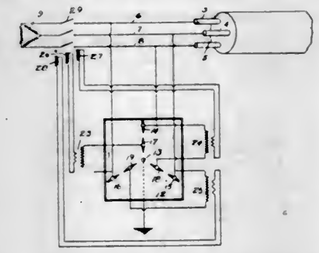
4. A rail anchor, comprising two parts each consisting of a plate having a jaw at one side, a reinforcing flange therefor constituting a hammering face, said flange extending downwardly to form a tie-abutting projection, and a rearward extension having an inclined wedging surface.

5. An anti-creeper, comprising duplicate parts each having a tie-abutting flange at one end and a rearward projection which coöperates with the projection of the other part substantially beneath the middle of the rail base, whereby either part may constitute the tie-abutting part and whereby either part may be driven into the other part to effect coöperation of the two.

[Claim 6 not printed in the Gazette.]

1,270,361. [WITHDRAWN.]

1,270,362. ELECTRIC-CABLE-PROTECTING APPARATUS. SYDNEY N. BARUCH, San Francisco, Cal. Filed Oct. 23, 1916. Serial No. 127,129. (Cl. 175—294.)

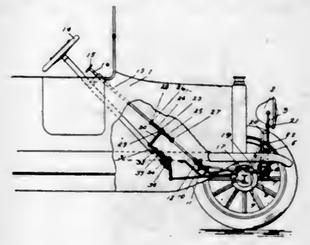


1. The combination with an electric circuit including an electric cable, a circuit connecting one cable conductor to ground, three spaced conductors in said ground circuit whereby two air gaps in series are formed, a local circuit connecting the intermediate spaced conductor with a second cable conductor and means for opening the cable circuit connected to the local circuit,

[Claim 2 not printed in the Gazette.]

1,270,363. AUTOMATIC DIRIGIBLE HEADLIGHT FOR MOTOR-VEHICLES. JOHN EKIN BATCHELDER, Jackson, Cal. Filed Nov. 25, 1916. Serial No. 133,466. (Cl. 240—61.)

The combination with headlights of a vehicle swiveled for lateral movement, of a means for operating the same both manually and automatically, such means comprising an operating rod arranged to be turned by hand to move the lights laterally at will, and means connected between the steering mechanism and such rod for turning the same when the vehicle is steered in one direction or



the other, such means comprising a sleeve on the rod, spiral springs connected with the sleeve and with the rod, and means interposed between the sleeve and steering mechanism whereby when the steering mechanism is operated the sleeve will be turned.

1,270,364. LEGGING. JAMES C. BEARD, Binghamton, N. Y., assignor to Lewis M. Weed Co. Inc., a Corporation of New York. Filed Jan. 21, 1918. Serial No. 213,004. (Cl. 36—2.)



1. In a legging having overlapping side flaps,—spaced resilient stiffening members with suitably joined ends secured adjacent to the edge of the outer one of said flaps and extending substantially the entire length of said flap, said members being of such form and material as to readily yield to flexure both perpendicularly to and along a plane parallel to said flap.

3. In a legging having overlapping side flaps,—an elongated U-shaped piece of spring wire secured to one of said flaps adjacent to the edge thereof, one of the ends of said wire being curved toward the other of said ends, and a sheet metal member inclosing the ends of said wire and so pressed around said curved end as to be retained in suitable relation to said ends.

[Claims 2 and 4 not printed in the Gazette.]

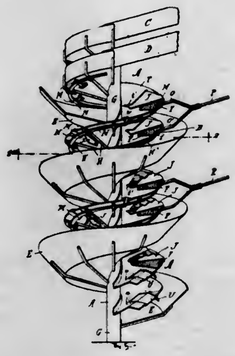
1,270,365. ADJUSTABLE SPIRAL SEPARATOR. JOHN H. BECKER, Hazleton, Pa., assignor to Anthracite Separator Company, a Corporation of Pennsylvania. Filed Oct. 11, 1917. Serial No. 195,915. (Cl. 83—54.)

2. A spiral separator composed of alternate smooth and frictional surfaced portions and means for moving sections of the one sort over those of the other sort so as to vary the character of the exposed surface.

4. A separator comprising a spiral runway composed of alternate smooth and frictional surfaced portions, means for moving sections of the one sort over those of the other sort so as to vary the character of the exposed surface and means for locking said moving means in different positions.

6. A separator comprising a spiral runway which is provided at intervals along its length with fixed plates,

pivoted plates overlapping said fixed plates, the fixed and pivoted plates having surfaces of widely differing frictional coefficients, spiral carriers connecting said pivoted plates whereby several of them may be moved at one operation.

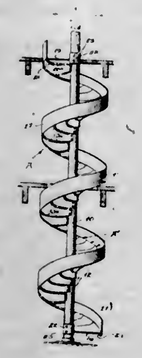


8. A separator comprising a spiral runway which is provided at intervals along its length with frictional surfaced plates, pivoted smooth plates overlapping the frictional surfaced plates, spiral carriers connecting several of said pivoted plates for moving them in unison to simultaneously vary the exposed area of the frictional plates and means for locking said carrier in different adjusted positions.

9. A separator comprising a plurality of segmental plates the lower radial edges of one segment joining the upper edges of the next segment to form a spiral runway, frictional plates detachably secured to the outer portion of certain of the segmental plates, pivoted plates having a comparatively smooth surface overlapping said frictional plates and means for simultaneously moving several of said pivoted plates.

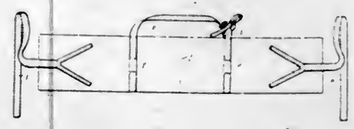
[Claims 1, 3, 5, and 7 not printed in the Gazette.]

1,270,366. SPIRAL CHUTE. CHARLES M. BEND, St. Paul, Minn., assignor to Minnesota Manufacturers' Association, North St. Paul, Minn., a Corporation of Minnesota. Filed Nov. 16, 1914. Serial No. 872,369. (Cl. 193—42.)



In a spiral chute, a central supporting column, a spiral slideway passing around the column and composed of a series of identical sections secured at their inner ends upon said column, each section presenting a sliding surface gradually decreasing in pitch from its inner toward its outer end, and connecting and reinforcing flanges turned back from the edges of the sliding surface, the transverse-sections throughout the entire length of said flanges being inclined downward at the same pitch, thus securing the greatest reinforcing effect against downward stress at the inner end of the section where weight is concentrated.

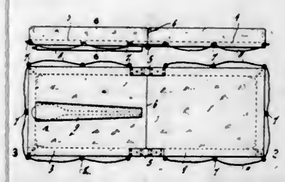
1,270,367. LIFE-SAVING PILLOW. ALEXANDER BINNIE, New Plymouth, New Zealand. Filed July 21, 1916. Serial No. 110,553. (Cl. 9—13.)



1. A life saving pillow comprising two sections foldably connected together at the middle of the pillow and sufficiently long to encircle the body to the wearer circumferentially, each of said sections being of the same length as an ordinary pillow and of half the thickness of an ordinary pillow, whereby when in folded position the sections will form a pillow of ordinary size, a tape extending across one section and secured thereto throughout its length with the exception of a part intermediate its ends, a tape loop carried by said tape and folded between the sections when the sections are used as a pillow, another tape extending across the other section and secured thereto throughout its portion which extends across the section with the exception of its middle, said last named tape having an extending portion adapted to rest between the sections when the device is used as a pillow and to engage the loop when the device is used as a life preserver, and tapes secured near the free ends of the sections for securing the device about a person's body when the pillow is used as a life preserver, said last named tapes being adapted to rest beneath the unsecured portions of the other tapes when the sections are folded to form a pillow and to pass through the unsecured portions when the device is used as a life preserver for preventing vertical movement of the tapes.

[Claim 2 not printed in the Gazette.]

1,270,368. LIFE-SAVING MATTRESS. ALEXANDER BINNIE, New Plymouth, New Zealand. Filed July 21, 1916. Serial No. 110,554. (Cl. 9—13.)

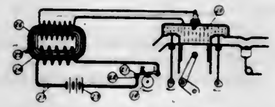


1. A combined life preserver and mattress comprising two frames, each of which consists of an end bar and two side bars only, the free ends of the side bars of one frame being hingedly connected to the free ends of the side bars of the other frame, a buoyant pad carried by each of said frames, and a cover inclosing said frames and pads.

3. A life-saving mattress comprising a plurality of compartments hinged together and each consisting of an independent solid framework, a buoyant material and a cover inclosing said framework and buoyant material, and means for holding the compartments in their open or unfolded position.

[Claim 2 not printed in the Gazette.]

1,270,369. ART OF ILLUSTRATING PHENOMENA. CHARLES F. BISHOP, Rochester, N. Y., assignor to North East Electric Company, Rochester, N. Y., a Corporation of New York. Filed June 26, 1917. Serial No. 177,014. (Cl. 35—12.)



1. The improvement, in the art of illustrating phenomena, which consists in the use of kinetographic pictures in which actual but inherently invisible phenomena are indicated by arbitrary symbols which occupy different positions in successive views to illustrate movement suggestive of assumed characteristics of such phenomena.

2. The improvement in the art of illustrating phenomena, which consists in the use of kinetographic pictures representing an electrical diagram in which stationary conductors are represented by stationary lines, while electrification of such conductors is indicated by symbols which occupy different positions along said lines in successive views to illustrate movement suggestive of the assumed flow of an electric current.

1,270,370. MOUNTING OF PICTURES. AUGUSTUS BONING, London, England. Filed July 28, 1914. Serial No. 853,683. (Cl. 41—32.)



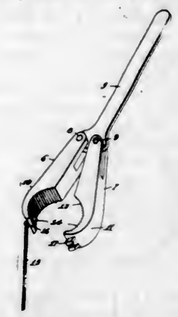
1. The method of making an art-plaque, which consists in embedding a picture in the face of a plaque, and then obscuring the plaque-surface uniformly with the adjacent portions of the picture-surface up to the contour of the actual pictorial representation which it is desired to exhibit, and simultaneously obliterating the junction-line between plaque- and picture-faces, all by the application of an opaque coating, in such manner that the said representation illusively appears to be executed directly upon the material of the coated plaque.

2. The method of making an art-plaque, which consists in casting a plaque upon the back of and around a picture, leaving the face of the latter flush with the surrounding plaque-surface, and in then rendering ocularly identical the face of the plaque and the whole of the adjoining picture-surface up to the contour of the actual pictorial representation which it is desired to exhibit, and simultaneously obliterating the junction-line between plaque- and picture-faces, all by the application of a monochrome coating of oil-paint, in such manner that the said representation illusively appears to be executed directly upon the material of the coated plaque.

1,270,371. PIPE-TONGS. RALPH M. BRANDON, Los Angeles, Cal. Filed Sept. 17, 1917. Serial No. 191,863. (Cl. 81—66.)

1. A pipe tong comprising a shank, a pair of oppositely curved arcuate jaws thereon arranged to nearly encompass a cylindrical pipe, a pair of oppositely inclined sets of gripping teeth on the inner arcuate faces of said jaws arranged to normally contact the surface of a pipe encircled by the jaw, means for detachably connecting the outer ends of the jaws together, and spaced pivot pins attaching the jaws to the shank on opposite sides thereof in such position that on rocking the shaft in one direction diametrically opposite gripping teeth on the pair of jaws will grip the pipe while the other sets of teeth will be free to slide on the pipe, and when the shank is rocked in the opposite direction the action of the sets of teeth will be reversed.

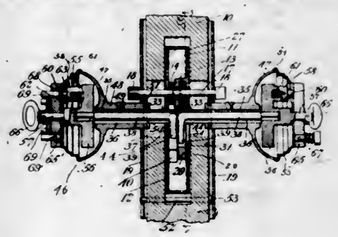
3. A pipe tong comprising a shank, a pair of opposed arcuate jaws thereon, a set of ratchet teeth on each of the jaws having their gripping edges extending toward the inner ends of the jaws, a second set of ratchet teeth on each of said jaws having their gripping edges extending toward the outer ends of the jaws, portions of both



sets of teeth on each jaw adapted to contact a pipe disposed between the jaws, the opposed portions of the sets of teeth being adapted to alternately grip the pipe, and means for connecting the outer ends of the jaws around a pipe.

[Claims 2 and 4 not printed in the Gazette.]

1,270,372. LOCK. IGNATZ BREIRATHER, Plymouth, Wis. Filed Jan. 16, 1915, Serial No. 2,634. Renewed Jan. 3, 1918. Serial No. 210,229. (Cl. 70—58.)



1. A lock of the class described comprising a housing, a sliding bolt, resilient means engaged therewith tending to hold the bolt in retracted position, stationary knobs, means for shooting the bolt, including a member movable within each knob and a device to hold said movable member at a predetermined position in its movement.

2. A lock of the class described comprising a housing, a sliding bolt, stationary knobs, means to operate the bolt including separate members movable in respective knobs, a detent operative to hold said movable member in each knob at a predetermined position in its movement, means to release said detent, and means to move the said separate members.

3. A lock of the class described comprising a housing, a lock bolt movable therein, stationary knob members fixed with relation to the housing, movable members in the knobs, operative connections between the movable members and the lock bolt, a key head connected with each movable member and located exteriorly of the knob for manipulation, an eccentric aperture being formed at the outer side of the knob, a detent carried by each of said movable members in the knobs, constructed and arranged to engage in said aperture, and a plurality of devices carried exteriorly of the knob, at least one of which is constructed for manipulation to release said detent.

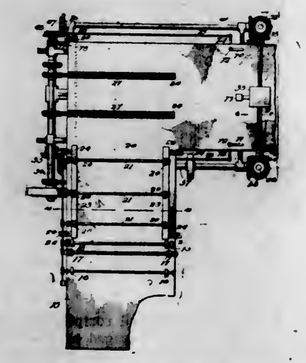
4. A lock of the class described comprising a housing, a lock bolt movable therein, stationary knob members

fixed with relation to the housing, movable members in the knobs, operative connections between the movable members and the lock bolt, a spring pressed detent carried by said movable member and arranged to bear against the inner side of the knob for sliding movement under operating action of the movable member, an opening being formed in the knob in the path of the detent, a revoluble member carried exteriorly of the knob, at least one releasing member carried thereby for engagement in said opening, and means within the knob to operate said movable member therewithin.

5. A lock of the class described, comprising a housing, a sliding bolt therein, said housing having a key-receiving opening closely adjacent an inner end portion of the bolt, a key member having a bit to engage the end of the bolt upon rotation to shoot the bolt, a cam device constructed, arranged and mounted for rotation to engage and shoot the bolt and having a portion constructed and arranged to be engaged by a bit upon rotation the reverse of that above indicated for shooting the bolt to operate the cam to shoot the bolt, resilient means tending to move the bolt to retracted position, means to operate the key member and means to hold the key member releasably in operative position at either limit of its movement.

[Claims 6 and 7 not printed in the Gazette.]

1,270,373. SHEET-METAL-SEAMING MACHINE. JOHN W. BROWN and WILLIAM HESS, Philadelphia, Pa.; said Hess assignor to said Brown. Filed June 9, 1917. Serial No. 173,809. (Cl. 113—54.)

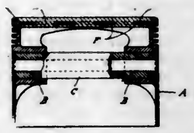


1. In a sheet metal seaming machine, the combination of a bed plate, means for delivering sheets of metal on the bed plate and including edging devices for the sheets, means for advancing the sheets over the bed plate a distance less than the distance between the formed edges of the sheets, a combined seamer and presser arranged to move transversely across the bed plate at a second like advanced distance from said advancing means, means for simultaneously advancing the sheets over the bed plate and moving the seamer and presser into an initial position for use, and other means for simultaneously actuating the delivery means to overlap succeeding sheets on the bed plate and to actuate the seamer and presser for crushing the advanced overlapping sheet ends together.

6. In a sheet metal seaming machine, the combination of a bed plate, feeding means for moving sheets one at a time laterally upon one end of the bed plate, beading means for crimping beads across the opposite ends of the sheets simultaneously with the feeding of the sheets, advancing means for intermittently moving the sheets along the bed plate a distance sufficient to bring the bead on the inner end of a sheet on the bed plate in line with the bead on the forward end of a sheet in the feeding means, the beading means being adapted to form the beads in the inner end of the sheets of less size than that of the beads on the forward ends of the sheets for interlocking the beads of adjacent sheets by the feeding of the succeeding sheets upon the bed plate, and seaming means for pressing the interlocked beads together.

[Claims 2 to 5 not printed in the Gazette.]

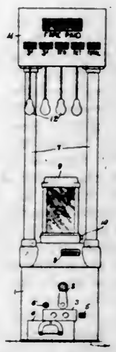
1,270,374. PISTON FOR USE IN INTERNAL-COMBUSTION ENGINES. JOHN BUCHANAN, Stoke, Coventry, England. Filed Dec. 4, 1917. Serial No. 205,417. (Cl. 74—85.)



1. The herein described piston for internal combustion engines having holes in its crown and a recess therein which is undercut, in combination with a layer of aluminium which fills said holes within and without, substantially as and for the purpose set forth and shown.

[Claim 2 not printed in the Gazette.]

1,270,375. FARE-BOX. FLOYD A. BURKITT, Dayton, Ohio, assignor to The Recording and Computing Machines Company, Dayton, Ohio, a Corporation of Ohio. Filed Aug. 11, 1917. Serial No. 185,788. (Cl. 235—32.)



1. In a coin registering mechanism, a hopper comprising an inclined rotatable disk to lift the coins therefrom, a differential operating mechanism, a cam arm depending therefrom, a cam slot therein, a pair of jaws pivoted on the frame, a pin eccentrically located on said jaws and traveling in said slot, resilient means between said jaws, a coin eliminating finger connected at one end to said resilient means and adapted at its other end to be interposed in the path of a coin to deflect said coin, a ratchet on one end of said differential mechanism, a pawl coöperating with said ratchet, means to lock and unlock said differential mechanism and accompanying mechanism, and resilient means to return said mechanism to inoperative position, whereby when said coin has actuated the differential mechanism, said differential mechanism will be locked together with the coin eliminating mechanism to eliminate a coin and after the coin has been eliminated said mechanism will be unlocked and returned to its normal position.

11. In a coin registering mechanism, a hopper comprising an inclined rotatable disk to lift coins therefrom, a differential operating mechanism, a cam, a slot therein, a U-shaped member pivoted on the frame, a pin on said U-shaped member traveling in said slot, a finger pivoted on said frame, a lug on said finger, a helical spring between one of said U-shaped arms and said lug, a locked compartment for eliminated coins, another compartment for coins not eliminated, whereby coins of predetermined denomination are eliminated and placed in another receptacle and coins of another denomination are not eliminated.

[Claims 2 to 10 not printed in the Gazette.]

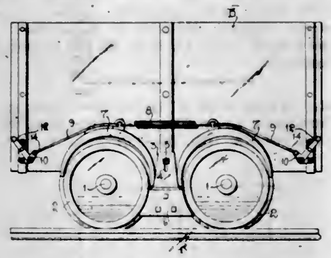
1,270,376. NECKBAND PORTION FOR NECKTIES AND METHOD OF PRODUCING THE SAME. HOWELL CHENEY, South Manchester, Conn. Filed Mar. 16, 1918. Serial No. 222,873. (Cl. 2—11.)



5. The method of making a neckband portion for neckties, which consists in forming a strip composed of a plurality of sections of two types, sections of one type alternating with sections of the other type, and one type differing from the other in that it has separated plies, alternate separated ply sections being of one length and the other separated ply sections being of a shorter length, and then severing the sections composed of separated plies, the lines of severance of two plies of each successive separated ply section being relatively displaced so as to form on each end of each neckband portion so formed two extensions of unequal length.

[Claims 1 to 4 not printed in the Gazette.]

1,270,377. CAR-BRAKE. JOHN CHABALA, Cuddy, Pa. Filed Feb. 9, 1918. Serial No. 216,278. (Cl. 188—60.)



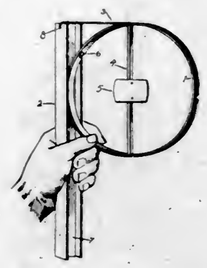
1. In combination with a vehicle body, a pair of supporting wheels at a side of the body and in longitudinal alinement, a block positioned between the wheels and supported by the body for swinging movement and vertical movement, a pair of oppositely directed shoes engaged with the block and overlying the wheels, and means engageable with each of the shoes for causing the same to engage the adjacent wheel and to elevate the block to engage both of the wheels.

3. In combination with a vehicle body, a pair of supporting wheels at a side of the body and in longitudinal alinement, a block positioned between the wheels and supported by the body for swinging movement and vertical movement, a pair of oppositely directed shoes engaged with the block and overlying the wheels, means engageable with each of the shoes for causing the same to engage the adjacent wheel and to elevate the block to engage both of the wheels, and a retractile member interposed between and engaged with the shoes for normally maintaining the same in released position.

5. In combination with a vehicle body, a pair of supporting wheels at a side of the body and in longitudinal alinement, a block positioned between the wheels and supported by the body for swinging movement and vertical movement, a pair of oppositely directed shoes engaged with the block and overlying the wheels, levers supported by the side of the car adjacent opposite ends thereof, and rods pivotally engaged with the shoes and the levers, the end portions of the rods engaged with the levers being downwardly directed.

[Claims 2 and 4 not printed in the Gazette.]

1,270,378. RETURNING HOOP. FRANK COBARUBIA, Sacramento, Cal. Filed Nov. 14, 1917. Serial No. 202,056. (Cl. 46—61.)



1. The combination, in a toy, of a hoop having a concave groove around the out side of the rim, and an ovate-oblong hole in the rim, substantially as described.

2. In a toy, the combination of a hoop with a handle, the said handle having a groove in one side and an elastic cord fastened to one end, by passing through a hole in the handle, and having its other end detachably connected to said hoop substantially as described.

3. The combination, in a toy, of a hoop having a concave groove around the out side of the rim, said hoop being provided with a stanchion, to which is attached a variegated fan, adapted to be detachably fastened to the inside of the rim in such manner that the fan will be in the center of the described area of the hoop, and at right angle to the planes of its sides, all to be operated in conjunction with a grooved handle and elastic cord, substantially as specified.

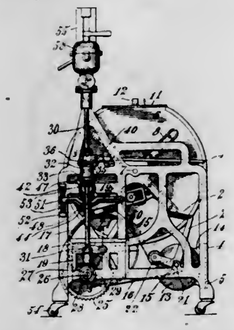
4. In a toy, the combination of a hoop having an ovate-oblong hole, with a grooved handle and elastic cord, disposed to be operated in conjunction with each other, a knot on the end of the elastic cord adapted to be inserted in the ovate-oblong hole, said cord being wound around the hoop, following the concave groove, the said hoop being then placed in the groove in the handle to be tossed away, the unwinding cord giving the hoop a reverse movement causing it to return to the operator, all substantially as set forth.

1,270,379. GEARING FOR WASHING MACHINES. JAMES L. COFFIELD, Dayton, Ohio. Filed Oct. 9, 1917. Serial No. 195,631. (Cl. 74—50.)

1. In an improved gearing for washing machines, a frame, a clothes receptacle mounted therein; one [illegible] of said frame having provision for supporting a reduction gear on the inner side thereof, a reduction gear so mounted on the inner side of said side frame, an upright shaft supported in bearings immediately upon the outer side of said side frame, driving gears interposed between said upright shaft and the reduction gears in bearings on said side frame, a clutch-controlled gear mounted in bearings on said side frame and arranged to transmit the power from said upright shaft, a transmission gear mounted in a bearing in said side frame and meshing with said clutch-controlled gear, and a suitable connection between said transmission gear and the clothes receptacle for imparting movement to said clothes receptacle.

6. A washing cylinder, a supporting frame comprising side frame members one of which is constructed and arranged to wholly support the driving mechanism thereof,

driving mechanism comprising reduction gears mounted on the interior of said side frame member, an upright transmission shaft mounted in bearings on the exterior of said side frame member, said shaft being operatively connected respectively to said reduction gears and to said washing cylinder, a gear on said upright shaft connecting it with the washing cylinder and being freely rotatable on said upright shaft, and clutch devices on said upright shaft connecting said gear with said shaft.



8. In a driving gear for washing machines, the combination of an oscillating clothes receptacle, a frame supporting said clothes receptacle including two side frame members, driving means, and a wringer supporting member, said driving means and wringer supporting member being mounted wholly on one of the side frame members and removable as a unit therewith.

9. In a driving gear for washing machines, an oscillating clothes container, side frame members in which it is mounted, a main driving shaft, an upright shaft geared thereto, connections between the upright shaft and the clothes container for imparting an oscillating movement to the latter from the rotary movement of the driving shaft, and a wringer supporting member, said wringer supporting member and the elements of the driving gear being mounted wholly on one of the side frame members and removable therewith as a unit.

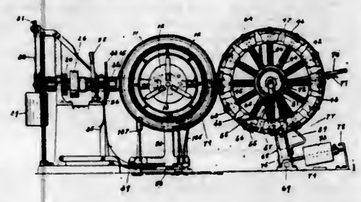
10. In a driving gear for washing machines, a supporting frame comprising two side frame members, a washing receptacle mounted between said side frame members, a wringer, driving means for said washing receptacle, driving means for said wringer, and a main driving mechanism common to both the driving means of the washing receptacle and the driving means of the wringer, said main driving mechanism being supported wholly on one of the said side frame members, and the driving means for the washing receptacle, and the driving means for the wringer being likewise mounted upon the same side frame member.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,270,3[illegible]. MACHINE AND METHOD FOR APPLYING RUBBER TREADS TO PNEUMATIC TIRES. FRANCIS B. CONVERSE, Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y., a Corporation of New York. Filed Mar. 10, 1916. Serial No. 83,402. (Cl. 154—10.)

1. In a pneumatic-tire forming machine, the combination of a rotatable tire core, a tread-applying wheel having an operative circumference exceeding that of the core, mounted in rolling relation thereto, and means for securing a tire tread in longitudinally-stretched condition on the periphery of said wheel.

11. In a machine for applying rubber treads to pneumatic-tire carcasses, the combination of a rotary core chuck, and a tread-stretching wheel operatively related thereto and having a segmental rim, and means for radially adjusting the segments to expand and contract the circumference of said wheel, a plurality of said segments being provided with tread-strip clamps.



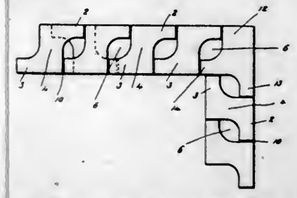
19. In a machine for applying rubber treads to pneumatic-tire carcasses, the combination of a rotary core, and a tread-stretching wheel adapted to roll a tread-strip onto a tire-carcass on said core, said wheel having a rim composed of radially-adjustable segments, clamps on said rim for the two ends of the tread strip, tape guides on the segments, a measuring tape supported on the guides and having one end fixed opposite one of said clamps, and a spring attached to the other end of the tape for keeping the latter taut.

30. In a machine for applying rubber treads to pneumatic-tire carcasses, the combination of a rotary tire core, a tread-applying wheel movable into and out of operative rolling relation thereto, a support pivoted in line with a diameter of said core and carrying a tread-stitching device, a segmental track for said support, and means for locking the support to said track in the operative and inoperative positions of the stitching device.

31. The method of applying wearing tread strips to pneumatic tire carcasses which consists in preparing a rubber tread strip of a length less than the circumference of the finished tire and containing the desired amount of material for the tread, stretching said strip to its ultimate length before application to the carcass, and progressively wrapping said strip on the carcass.

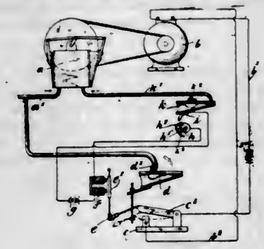
[Claims 2 to 10, 12 to 18, 20 to 29, and 32 not printed in the Gazette.]

1,270,381. WALL FOR BUILDINGS. CHARLES CLINTON CORNELIUS, Grove City, Pa. Filed Nov. 26, 1917. Serial No. 204,013. (Cl. 72—39.)



In a building, walls arranged at an angle to each other and formed of main blocks, each main block having rectangular front and rear portions which form the outer and inner faces of the walls, and a transverse middle portion which connects the adjacent and overlapping parts of the said front and rear portions; and corner blocks each having a corner portion, a rectangular front portion which projects from one outside angle of the corner portion and which overlaps the rear portion of the adjacent main block on one wall, said corner block having also a rectangular rear portion which projects from its inside angle and which overlaps the front portion of the adjacent main block of the other wall, the last said rear portion being adapted to engage with both of the adjacent blocks and being arranged at an angle to the said front portion of the corner block and at the same end of the corner block, air spaces being formed between the middle portions of the main blocks and between the corner blocks and the middle portions of the adjacent main blocks.

1,270,382. AUTOMATIC CONTROLLING DEVICE FOR THE MOTORS OF PNEUMATICS. JOHN A. WESER, New York, N. Y.; Elsie L. Weser, administratrix of said John A. Weser, deceased, assignor to Weser Bros. Inc., New York, N. Y., a Corporation of New York. Filed June 27, 1916. Serial No. 106,098. (Cl. 103—85.)



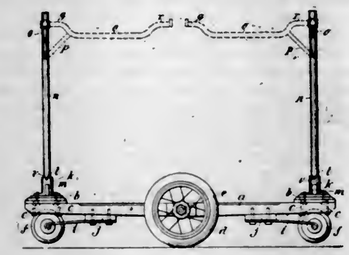
1. In combination with an air pump, an electric driving motor therefor, a switch to control the motor, means to open the switch, devices operable automatically to initiate the closing of the switch after a definite lapse of time and means to control the time interval.

3. In combination with an air pump, an electric driving motor therefor, a switch to control the motor, a pneumatic connected with the pump and operatively connected with the switch, devices operable automatically to initiate the closing of the switch after a definite lapse of time and means to control the time interval.

4. In combination with an air pump, an electric driving motor therefor, a switch to control the motor, means operated by the pump to open the switch, a pneumatic connected with the pump and devices operable automatically by said pneumatic to initiate the closing of the switch.

[Claims 2 and 5 to 8 not printed in the Gazette.]

1,270,383. AMBULANCE-STRETCHER VEHICLE. THOMAS CRAWFORD, Bristol, England. Filed July 25, 1917. Serial No. 182,628. (Cl. 21—80.)



1. A stretcher vehicle embodying a base frame mounted on a plurality of wheels, a stretcher support formed on said base frame, a socket at each end of said base, vertical standards seated in said sockets, and laterally extending cantaliver arms mounted on said standards, said cantaliver arms serving to support a stretcher above the stretcher adapted to be supported by the base frame, and said standards being rotatable to bring the cantaliver arms into substantial alinement, when the upper stretcher is removed therefrom, to allow the stretcher supported upon the base frame to be removed therefrom or replaced thereon without interference by the cantaliver arms.

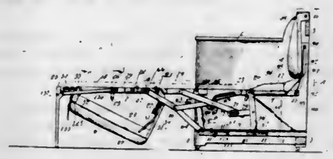
2. A stretcher vehicle embodying a base frame mounted on a plurality of wheels, a stretcher support formed on said base frame, a socket at each end of said base, vertical standards seated in said sockets, laterally extending cantaliver arms mounted on said standards, said cantaliver arms serving to support a stretcher above the stretcher adapted to be supported by the base frame, and said standards being rotatable to bring the cantaliver arms into substantial alinement, when the upper stretcher is removed therefrom, to allow the stretcher supported upon the base frame to be removed therefrom or replaced thereon without interference by the cantaliver arms, and means for locking the standards against rotation while the upper stretcher is supported on the cantaliver arms.

3. A stretcher vehicle embodying a wheeled base, a plurality of stretcher supports mounted upon the wheeled base for supporting a stretcher directly thereon, a plurality of standards positioned in upstanding relation on said base and mounted for axial rotation, each of said standards being provided with a laterally extending cantaliver arm, which arms serve to support a second stretcher above the one supported by the base, and means for locking the standards against rotation when the upper stretcher is supported thereby, said standards being adapted to be released and rotated to bring the cantaliver arms into substantial alinement, when the upper stretcher is removed, to allow of the removal of the lower stretcher without interference by said cantaliver arms.

4. A stretcher vehicle embodying a wheeled base provided with means for carrying a plurality of stretchers directly thereon, standards rotatably mounted in upstanding position on said base, and each of which is provided with oppositely extending lateral arms, which arms are adapted to support stretchers above those supported directly upon the base, and means for locking the standards against rotation while the upper stretchers are supported thereby, said standards being rotatable, after the upper stretchers are removed, to a position wherein the normally laterally extending arms of both standards are in substantial alinement, whereby the lower stretchers may be removed without interference by said arms.

5. A stretcher vehicle embodying a base frame mounted on a plurality of wheels, a stretcher support formed on said base frame, a socket at each end of said base, vertical standards detachably seated in said sockets, and laterally extending cantaliver arms mounted on said standards, said cantaliver arms serving to support a stretcher above the stretcher adapted to be supported by the base frame, and said standards being rotatable to bring the cantaliver arms into substantial alinement, when the upper stretcher is removed therefrom, to allow the stretcher supported upon the base frame to be removed therefrom or replaced thereon without interference by the cantaliver arms, the standards being removable from the sockets, when the vehicle is not in use, to allow of the compact storing of a plurality of such vehicles.

1,270,384. SOFA-BED. FRED M. DAVIS, Chicago, Ill., assignor to Pullman Couch Company, Chicago, Ill., a Corporation of Illinois. Filed July 15, 1915. Serial No. 39,997. (Cl. 5—51.)



1. In a device of the class described, a frame, a back having its upper part turnably connected thereto, a foldable sectional bed bottom mounted in said frame and comprising a long section disposed horizontally, a pair of links disposed one in front of the other whereon said section is swingably mounted, and a short section joined to said long section, said frame and short section having coacting guide means arranged and adapted to control the relative movement of said sections in folding and unfolding, and said short section having cam means movable upward therewith for coacting with the lower part of said back and serving to swing the back clear of the bed bottom in changing the device to and from its bed form, said

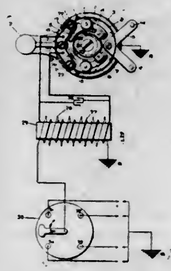
cam means including a guide track part with which said back part coacts reciprocatably, the cam track part being so formed and inclined as to effectually urge the back forward in folding and unfolding the device.

2. A sofa bed comprising a frame, a foldable sectional bed bottom carried thereby, mechanism for swinging the sections backwardly and forwardly in folding and unfolding the bed bottom respectively, a seat carried by the foot section, stop means on each side of said frame for arresting the folding of the foot section and seat, outwardly movable plungers on the rear part of the seat for engaging said frame when the device is folded, yielding means urging said plungers outward, a push button on the front of said seat and connecting means for said push button and plungers whereby the latter may be retracted manually when the device is to be unfolded.

6. In a sofa bed, the combination with a frame, a folding bed bottom mounted thereon, means for swinging the parts or sections of the bed bottom to and from their bed position in unfolding and folding the device respectively, a seat carried by one of the sections, and stop means on said frame for limiting the folding of the device, of automatic locking means adapted for manual release, comprising latch means mounted movably on the seat, and manual control means disposed acessibly on or adjacent to the normally front part of said seat and communicating operatively with said latch means.

[Claims 3 to 5 not printed in the Gazette.]

1,270,385. INTERRUPTER MECHANISM FOR IGNITION-DYNAMOS. ALFRED CHINA DE LORME, Newark, N. J., assignor to Splitdorf Electrical Company, a Corporation of New Jersey. Filed Apr. 20, 1916. Serial No. 92,440. (Cl. 123—166.)



1. An interrupter for ignition dynamos comprising a pair of interrupter levers and a single cam for causing said levers to alternately and independently open the same circuit.

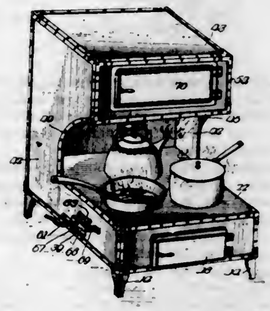
2. An interrupter for ignition generators comprising a pair of interrupter levers electrically connected together, and a single cam for actuating said levers to alternately and independently open the same circuit.

3. An interrupter for ignition generators comprising a casing, a pair of brackets secured to said casing insulated therefrom and from each other and carrying contacts, a pair of interrupter levers carrying contacts adapted to engage said first mentioned contacts, a single cam for operating said levers alternately and independently, and a circuit including all of said contacts in series, substantially as described.

[Claims 4 to 12 not printed in the Gazette.]

1,270,386. COOKING APPARATUS. FOREST V. DETWILER, Chicago, Ill. Filed Mar. 30, 1914. Serial No. 828,135. (Cl. 126—39.)

1. A cooking apparatus embodying a hollow base having stove openings in its top, partitions within the base arranged to form a burner chamber below the stove openings, said partitions spaced from the upright walls of the base and coöperating with said walls to form insulation spaces, a reversible burner arranged in the said chamber and spaced above the bottom thereof, said partitions terminating short of the top of the base of the apparatus, a tapering deflector supported by and depending from the top of the base above the burner for distributing the heated air to the stove openings, additional deflectors arranged within the base to extend across the top of the base and diverging from one side to the opposite side of the base, said deflectors being secured to the said top to prevent warping thereof and engaging the partitions in the base to confine the heated air within the area of the stove openings, an outlet other than the stove holes leading from the base, means whereby access may be had to the interior of the base, and a tray adapted to be inserted into the burner chamber beneath the burner and withdrawn therefrom.

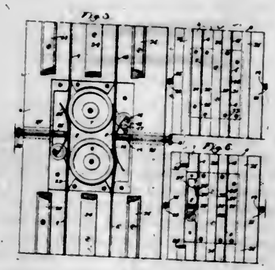


2. A cooking apparatus embodying a hollow base having stove openings in its top, partitions within the base arranged to form a burner chamber below the stove openings, said partitions spaced from the upright walls of the base and coöperating with said walls to form insulation spaces, a reversible burner arranged in the said chamber and spaced above the bottom thereof, said partitions terminating short of the top of the base of the apparatus, a tapering deflector supported by and depending from the top of the base above the burner for distributing the heated air to the stove openings, additional deflectors arranged within the base to extend across the top of the base and diverging from one side to the opposite side of the base, said deflectors being secured to the said top to prevent warping thereof and engaging the partitions in the base to confine the heated air within the area of the stove openings, an outlet other than the stove holes leading from the base, means whereby access may be had to the interior of the base, a tray adapted to be inserted into the burner chamber beneath the burner and withdrawn therefrom, and guides formed on the partitions intermediate the burner and bottom of the chamber and beneath which guides the tray is adapted to slide.

1,270,387. RETAINING MEANS FOR WINDOW-SASHES. DANIEL J. DUNBAR, Philadelphia, Pa. Filed Aug. 10, 1917. Serial No. 185,413. (Cl. 16—114.)

1. The combination of a window frame having a longitudinally extending groove, a window sash, a strip projecting edgewise from the sash and secured thereto throughout its length, said strip slidably fitting within said groove and bridging the parting between the side edge surface of said sash and the adjacent side surface of said frame, means for engagement with one side surface of the strip, and means automatically operative upon an opposite side surface of said strip for pressing said first side surface of the strip into engagement with said first means, substantially as described.

3. The combination of a window frame having a groove formed therein and a cavity with which the groove communicates, a roller mounted in said cavity, a sash, a strip projecting edgewise from the sash and secured thereto within its length, said roller having its axis substantially parallel to the plane of movement of said sash, the projecting portion of said strip being adapted to slide within said groove and through said cavity and bridging the parting between the side edge surface of said sash and the adjacent side surface of said frame, and means for pressing the projecting portion of said strip into engagement with said roller, substantially as described.



4. The combination of a window frame having a groove formed therein and a cavity with which the groove communicates, a roller mounted in said cavity, a sash having a strip projecting therefrom and secured thereto within its length, said strip being designed to slide within said groove and through said cavity, and a spring adapted to press a side surface of said strip into engagement with said roller, substantially as described.

7. The combination of a window frame having a groove formed therein and a cavity with which the groove communicates, a roller mounted in said cavity, a sash having a strip projecting therefrom and designed to slidably fit within said groove and through said cavity, a spring adapted to press said strip into engagement with said roller, said roller and spring being mounted within said cavity, a threaded bushing within said frame, an adjusting screw mounted in said bushing and having a portion adapted to engage said spring to vary the intensity of pressure of the latter against said strip, substantially as described.

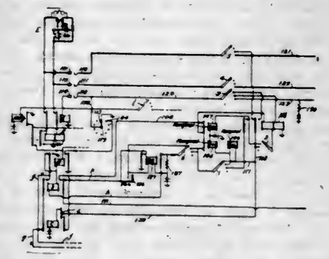
10. The combination of a window frame having a groove formed therein and a cavity with which the groove communicates, a strip projecting from said frame, means for engagement with said strip, a sleeve having a slot, a block mounted within the sleeve, a spring having one end extending through said slot and into the block and adapted at its other end to engage and press said strip against said means, and a screw extending through said block and adapted to laterally engage the spring, substantially as described.

[Claims 2, 5, 6, 8, and 9 not printed in the Gazette.]

1,270,388. TELEPHONE-EXCHANGE SYSTEM. BERT G. DUNHAM, Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y., a Corporation of New York. Filed Nov. 20, 1916. Serial No. 132,373. (Cl. 179—18.)

1. In a telephone exchange system, the combination with telephone lines, line relays for said lines, automatic finder switches, an extended starter wire for associating an idle finder with said lines, release circuits therefor, a relay associated with each finder for rendering its release circuit inoperative, means actuated by the energization of any line relay for operating the relays of the finders through which the starter wire is extended, of a device for preventing the operation of said means, and means for operating said device automatically actuated when all of said finders are busy.

2. In a telephone exchange system, the combination with telephone lines, line relays for said lines, automatic finder switches, an extended starter wire for associating an idle finder with said lines, off-normal contacts associated with said finders, release circuits for said finders, a relay associated with each finder for rendering its release circuit inoperative, means actuated by the energization of any line relay for operating the relays of the finders through which the starter wire is extended, of a relay for preventing the operation of said means, and a circuit for said relay including the off-normal contacts of all of said finders in series.



3. In a telephone exchange system, the combination with telephone lines, line relays for said lines, automatic finder switches, side switches therefor, an extended starter wire for associating an idle finder with said lines, release circuits for said finders, a relay associated with each finder for rendering its release circuit inoperative, and means actuated by the energization of any line relay for operating the relays of the finders through which the starter wire is extended, of a slow relay for preventing the operation of said means, and a circuit for said relay including side-switch arms of all of said finders in series.

4. In a telephone exchange system, the combination with telephone lines, line relays therefor, automatic finder switches, an extended starter wire for associating an idle finder with said lines, off-normal contacts therefor, release circuits for said finders, a relay (*b*) associated with each finder for rendering its release circuit inoperative, a circuit for operating the relay (*b*) of the finder allotted to the calling line group closed upon the energization of line relay of a line in such group, a circuit closed by said relay and including the relays (*b*) of the finders through which the starter wire is extended, of a relay (180) for preventing the closure of said circuit, and a circuit for said relay including off-normal contacts of all the finders in series.

1,270,389. GAS CUT-OFF FOR BUILDINGS. FREDRICK EITAPENC, Binghamton, N. Y. Filed Oct. 12, 1915. Serial No. 55,543. Renewed Nov. 17, 1917. Serial No. 202,645. (Cl. 137—92.)



1. In a gas cut off, the combination with a gas pipe and a valve therein normally tending to close and setting means at a distance connected to said valve to normally hold it open, said means including a resilient catch and a frangible member bearing upon said catch and holding

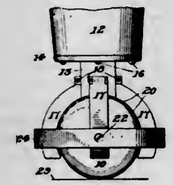
it under tension and in position to hold the other parts of the setting means and the valve in open position, said frangible member when broken releasing said setting means and permitting the valve to close.

6. In a gas cut-off, a box having a glass mounted on the face thereof, a lever within said box, a spring catch or trigger held under tension by pressure thereon of said glass to maintain said lever in elevated position, a cut-off valve casing, a turn pin passing through said casing, a valve arm projecting from the pin within the casing, a valve on the arm, a valve seat in the casing, a connection from said pin to the lever to hold the valve open, and a weight for closing the valve when the glass is ruptured and the catch released.

8. In a gas cut-off, a box, and a lever within said box, a spring trigger also in said box to support when under tension said lever in raised position, a frangible side for said box bearing on said trigger and placing it under tension and in position to support said lever, a cut-off valve casing, a shaft or turn pin passing through said casing, an arm on the shaft within the valve casing, a valve on said arm, a weighted arm on one end of said shaft without the casing tending to close said valve, a connection between said shaft and the lever, and a fusible link in said connection.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,270,390. FURNITURE-CASTER. ANTONI ELWERTOSKI, Dumont, N. J., assignor of one-third to Tomasz Szalewicz, Fort Edward, N. Y. Filed Nov. 10, 1917. Serial No. 201,248. (Cl. 16—151.)



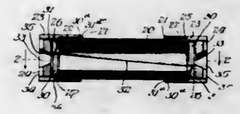
1. A caster comprising a spherical member, an attaching plate, a post carried by said plate, arcuate cages swingingly carried by said post having longitudinal grooves in their inner faces, anti-friction balls within said grooves normally in contact with said spherical member, and a retaining annulus outwardly arranged and connecting said cages.

2. A caster comprising a spherical member, an attaching means, outwardly movable arcuate cages carried by said attaching means having longitudinal grooves in their inner faces extending substantially from end to end thereof, anti-friction balls within said grooves normally in contact with said spherical member, and retaining means for said cages to hold the anti-friction balls into contact with said spherical member.

3. A caster comprising a spherical member, an attaching plate, a post carried by said plate having an axial bore therethrough, arcuate cages swingingly carried by said post having longitudinal grooves on their inner faces, anti-friction balls within the said grooves in contact with said spherical member, a closure plug for said bore and a retaining annulus outwardly arranged connecting the said cages.

1,270,391. INCLOSED SAFETY-FUSE. ALFRED L. EUSTICE, Chicago, Ill., assignor to Economy Fuse & Manufacturing Company, Chicago, Ill., a Corporation of New York. Filed May 3, 1915. Serial No. 25,344. (Cl. 175—273.)

1. In an inclosed safety fuse, the combination of a casing, a ferrule at the end of said casing, a washer within said ferrule and having a recess in its periphery, a fuse link having its end clamped between the outer face of said washer and said ferrule, an abutment flange within said ferrule and against which said washer is seated, and an alinement tongue formed in said abutment flange and engaging the recess of said washer, whereby the latter is alined in a predetermined position.



2. In an inclosed safety fuse, the combination of a casing, an abutment thimble fitting over the end of said casing, said abutment thimble having an inwardly-extending flange engaging the end of said casing, an alinement tongue projecting from said abutment flange, a ferrule sleeve fitting over said abutment thimble and having a portion extending beyond the end of said casing, a washer within the outer portion of said ferrule sleeve and engaging said abutment flange, said washer having an alinement recess in its periphery, said alinement recess being engaged by said alinement tongue, a fusible link within said casing and extending through the recess of said washer, the end of said link being bent over the outer face of said washer, and a ferrule plug having threaded engagement with the outer portion of said ferrule sleeve and bearing against the bent-over end of said link, whereby the latter is securely clamped in position between the outer face of said washer and said plug and the washer is brought into firm engagement with said abutment flange.

5. In an inclosed safety fuse, the combination of a casing having an exterior groove near its end, an abutment thimble fitting over the end of said casing, said abutment thimble having an inwardly-extending abutment flange engaging the end of said casing, an interiorly threaded ferrule sleeve fitting over the abutment thimble and having a shoulder engaging the outer end of said abutment thimble, the inner edges of said abutment thimble and said ferrule sleeve being crimped into the groove in said casing, whereby said abutment thimble and ferrule sleeve are securely locked in position, a washer within the outer portion of said ferrule sleeve and engaging said abutment flange, said washer having an aperture therethrough, a fusible link within said casing and passing through the aperture of said washer, the end of said link being bent over the outer face of said washer, and a plug having engagement with the threaded interior of the outer portion of said ferrule sleeve and bearing against the bent-over end of said link, whereby the latter is securely clamped in position between the outer face of said washer and said plug and the washer is brought into firm engagement with said abutment flange.

[Claims 3 and 4 not printed in the Gazette.]

1,270,392. FIRE-EXTINGUISHING COMPOSITION HAVING LOW FREEZING-POINT. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Aug. 12, 1914. Serial No. 856,349. (Cl. 23—5.)

2. A fire extinguishing composition composed of carbon tetrachlorid, trichlormethane, and pentachlorethane.

[Claim 1 not printed in the Gazette.]

1,270,393. COMPOSITION HAVING A LOW FREEZING-POINT. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Oct. 20, 1914. Serial No. 867,579. (Cl. 23—5.)

A solution having a low freezing point comprising carbon tetrachlorid and anisol dissolved therein.

1,270,394. FIRE-EXTINGUISHING COMPOSITION HAVING A LOW FREEZING-POINT. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Oct. 20, 1914. Serial No. 867,581. (Cl. 23—5.)

2. A fire-extinguishing composition having a low freezing point, comprising a solvent and acetophenone dissolved therein.

3. A fire extinguishing composition comprising a non-inflammable solvent and acetophenone dissolved therein, said composition having a freezing point substantially lower than that of the solvent.

[Claim 1 not printed in the Gazette.]

1,270,395. FIRE-EXTINGUISHING COMPOSITION HAVING A LOW FREEZING-POINT. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Oct. 20, 1914. Serial No. 867,583. (Cl. 23—5.)

1. A fire extinguishing composition having a low freezing point, comprising a stable fire extinguishing solvent and oil of peppermint dissolved therein.

2. A fire extinguishing composition having a low freezing point, comprising carbon tetrachlorid and oil of peppermint dissolved therein.

1,270,396. FIRE-EXTINGUISHING COMPOSITION HAVING A LOW FREEZING-POINT. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Oct. 20, 1914. Serial No. 867,586. (Cl. 23—5.)

1. A fire extinguishing composition having a low freezing point, comprising a non-inflammable solvent and a camphor substitution product dissolved therein.

2. A fire extinguishing composition having a substantially lower freezing point than the fire extinguishing substance thereof and comprising carbon tetrachlorid and a camphor substitution product dissolved therein.

1,270,397. FIRE-EXTINGUISHING COMPOSITION HAVING A LOW FREEZING-POINT. GEORGE E. FERGUSON, New York, N. Y., assignor to Pyrene Manufacturing Company, a Corporation of Delaware. Filed Oct. 20, 1914. Serial No. 867,587. (Cl. 23—5.)

1. A fire extinguishing solution having a low freezing point comprising a carbon and chlorin compound and an organic acid dissolved therein.

3. A solution having a low freezing point comprising carbon tetrachlorid and propionic acid dissolved therein.

[Claim 2 not printed in the Gazette.]

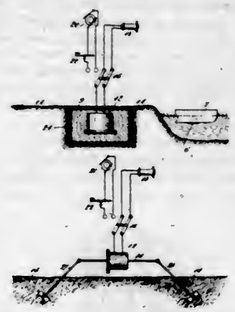
1,270,398. METHOD AND APPARATUS FOR TRANSMITTING AND RECEIVING SOUND-WAVES THROUGH GROUND. REGINALD A. FESSENDEN, Brookline, Mass., assignor to Submarine Signal Company, Portland, Me., a Corporation of Maine. Filed Oct. 7, 1915. Serial No. 54,556. (Cl. 177A—352.)

1. A signaling means comprising a liquid body inserted in the earth, and means in operative relation to said liquid body and adapted to set up vibrations therein whereby signals may be sent and received through the earth.

4. A method of signaling which comprises originating vibrations in a liquid body in contact with the ground and receiving said vibrations in a second liquid body also in contact with the ground and transforming said vibrations into electrical impulses.

9. A sound transmitter and receiver and a tank containing fluid, said transmitter and receiver being located in said tank and said tank being packed in damp ground whereby fluid contact will be made between the vessel and the ground.

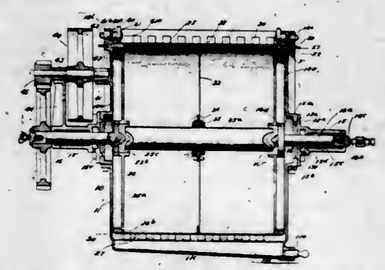
13. The apparatus above described for determining the direction and location of noises, which consists in two sound-receiving mechanisms and means whereby they may be rotated about a vertical axis, and means whereby they may be rotated about a horizontal axis, and liquid means whereby a good physical contact is made between said mechanisms and the ground.



14. A signaling system comprising a container sunk in the ground and filled with liquid, a transmitter and receiver submerged in the liquid in said container, and a second container filled with liquid and having a transmitter and receiver submerged in said liquid whereby the path of the vibrations proceeding from either transmitter will be both through the ground and also through liquid.

[Claims 2, 3, 5 to 8, and 10 to 12 not printed in the Gazette.]

1,270,399. AMALGAMATOR. BENJAMIN Q. P. FOSS, San Francisco, Cal., assignor to The Foss International Ore Reduction Company, San Francisco, Cal., a Corporation of Arizona. Filed June 27, 1914. Serial No. 847,591. (Cl. 83—67.)



1. In a device of the class described, a casing, a mixing member rotatably mounted in said casing, said casing being provided with a semi-cylindfical portion, the inner surface thereof closely fitting a portion of said mixing member and adapted to hold amalgamating material to partially submerge said mixing member, and means to insure contact between the ends of said mixing member and said casing above the level of said material.

2. In a device of the class described, a casing, a mixing member rotatably mounted therein, means to insure a substantially fluid-tight contact between a portion of said casing and the ends of said mixing member, said means comprising a packing strip.

3. In a device of the class described, a casing, a mixing member rotatably mounted therein, means to insure a substantial fluid-tight contact between a portion of said casing and the ends of said mixing member, said means comprising a packing strip, and means to maintain said packing strip in contact with said mixing member.

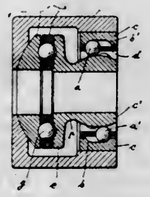
4. In a device of the class described, a casing, a mixing member rotatably mounted therein, means to insure a substantial fluid-tight contact between a portion of said casing and the ends of said mixing member, said means comprising a packing strip, means to maintain said pack-

ing strip in contact with said mixing member, said means comprising a follower strip, and screw threaded adjusting members coacting therewith.

6. In a device of the class described, a casing adapted to contain amalgamating fluid, a mixing member rotatably mounted in said casing and adapted to be partially submerged in said fluid, said mixing member comprising a shell mounted on end webs, said webs having peripheral flanged portions, packing strips carried by said casing, said peripheral flanges of said webs being adapted to contact with said packing strips above said fluid.

[Claims 5 and 7 to 11 not printed in the Gazette.]

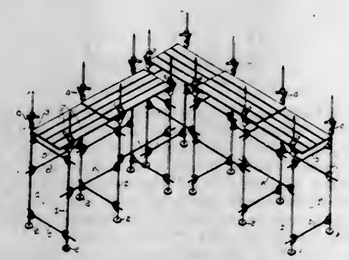
1,270,400. BALL-BEARING. WALTER FOWLER, Doncaster, England. Filed Aug. 25, 1917. Serial No. 188,212. (Cl. 64—59.)



1. In the berein described ball-bearing, the combination, with a radial ball-bearing comprising two concentric members whereof the outer one is internally grooved and the inner one formed as a portion of a sphere, of an axial ball-bearing comprising a ring formed with a spherical seat and a grooved face in conjunction with a correspondingly grooved flange formed integral with the inner member of the radial ball-bearing, all substantially as set forth.

2. In a combined radial and axial ball-bearing, a body formed as a portion of a sphere for constituting the inner member of the radial bearing, and, integral therewith, a radial flange having a grooved face for constituting the inner member of the axial ball-bearing, substantially as set forth.

1,270,401. SCAFFOLD. ALFRED W. FRENCH, Chicago, Ill. Filed Sept. 1, 1916. Serial No. 117,985. (Cl. 20—81.)



1. A scaffolding comprising four or more columns adapted to form a skeleton tower, parallelogrammatic in plan, put-logs connecting the columns in pairs and bracing the same as tower elements and forming platform supports, and individual climbing means for each column each connected to one end of the put-log and having a lost motion connection so that either end of the put-log may be shifted vertically a substantial distance independently of the other end thereof, said climbing means being operable from a platform carried by said put-log.

4. In combination, a platform, a series of columns located at the corners of the platform, independently operable climbing means on each column, said climbing means being provided with operating members adapted to be operated from the platform to raise one corner of the platform at a time, putlogs connected at each end to the climbing means and having lost motion connection with the climbing means, said platform being laid across said putlogs, and a series of braces rigidly interconnecting said columns below the climbing means to form a rigid tower for supporting the platform.

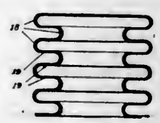
9. A brace for engaging a column, said brace comprising a rod, a forked member having an offset hub member and offset claw members, said rod extending through said hub and past the side of said column, a column engaging member comprising a collar, a lever pivoted on said collar, one end of said lever being adapted to engage the column and the other end being adapted to engage said rod and cam means on the rod between the hub and the collar for forcing the lever into engaging position with respect to said column and said rod.

12. In combination, a plurality of columns, said columns comprising sections of pipe extending vertically, braces between said columns, said braces comprising a bifurcated engaging member for engaging one side of the column and a central engaging member for engaging the other side of the column at each end of said brace, and cam means for causing said engaging means to press firmly upon opposite sides of said column, the bifurcated and the central engaging members of one end of each brace being adjustable relative to the length of said brace independently of the cam means.

13. In combination, a vertical column comprising a piece of pipe or the like, a gripping member embracing said column, said gripping member comprising a pair of castings, laterally extending lugs on said castings, said lugs having an open slot therein and lying substantially parallel to each other, a putlog between the lugs of adjacent gripping members, said putlog comprising a pair of angle bars having pins at their outer extremities for engaging said slots and means for adjustably clamping said angle bars together.

[Claims 2, 3, 5 to 8, 10, 11, 13, 14, and 16 not printed in the Gazette.]

1,270,402. PROCESS OF MAKING CORRUGATED WALLS. WESTON M. FULTON, Knoxville, Tenn., assignor to The Fulton Company, Knoxville, Tenn., a Corporation of Maine. Filed Nov. 20, 1916. Serial No. 132,460. (Cl. 29—148.)



3. The process of shaping a blank comprising rotating said blank, displacing the grain of said blank helically by moving a spinning tool across and in contact with said blank, and varying the thickness of said blank by varying the pressure of the tool thereon.

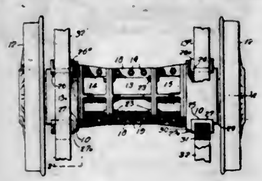
4. The process of shaping a blank comprising rotating said blank, displacing the grain of said blank helically by moving a spinning tool across and in contact with said blank, and reducing the thickness of said blank at intervals by increasing the pressure of the tool thereon.

17. The process of making corrugated walls comprising rotating a tubular blank, moving a spinning tool across and in contact with said blank under such pressure as will displace the grain of said blank helically and thereafter corrugating said blank.

[Claims 1, 2, and 5 to 16 not printed in the Gazette.]

1,270,403. LOCOMOTIVE DRIVING-BOX AND CONTROLLING CONNECTION THEREFOR. HENRY BANHARD FURSTONBURG, Shreveport, La. Filed July 3, 1917. Serial No. 178,472. (Cl. 105—17.)

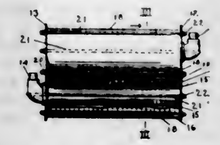
1. In a construction of the character described, the combination with the locomotive axle and its driving boxes, of a lateral take-up device including two side sections and a single central section joined to one another around the axle and together occupying the entire space between the inner faces of the driving boxes, and of which the side sections are of such width as that when removed, spaces are provided permitting of inward lateral shifting of the driving boxes free of their fastenings without necessitating removal of the central section.



5. In a device of the character described, the combination with a locomotive axle, frame jaws, and binder, the latter of which is provided with a shoe and a wedge flanged to engage the frame jaws, of a driving box having inner and outer side flanges forming grooves between them receiving said shoe and wedge, of which the inner flanges extend beyond the inner face of the frame jaws, the outer face of the box and the outer ends of its outer flanges being of less width than that of the space between said frame jaws, for the purpose described.

[Claims 2 to 4 not printed in the Gazette.]

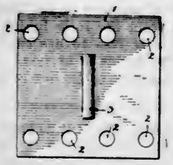
1,270,404. RESPIRATOR. HERBERT GARNETT, Toledo, Ohio. Filed Mar. 22, 1916. Serial No. 85,784. (Cl. 128—42.)



1. A respirator air purifier embodying perforate members providing a central chamber, and thereabout an enveloping chamber of fibrous material, there being nozzle connection to the central chamber supplied by air flow radially of said chamber.

2. A respirator air purifier embodying perforate cylinders providing a central chamber, and thereabout a chamber having therein air purifying means, said latter chamber having perforate cylindrical walls, and a housing for the cylinders providing foul air intake, said purifier restricting exhalation to the purifying means and intake.

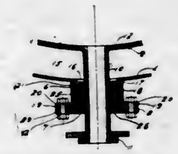
1,270,405. FLOOR AND WALL SCREED-ANCHOR. ALBERT T. GIBSON, Chicago, Ill., assignor to United States Spot Ground Corporation, Omaha, Nebr., a Corporation of Nebraska. Filed Sept. 12, 1917. Serial No. 190,949. (Cl. 72—105.)



1. A device of the class described, comprising a plate, said plate having a plurality of apertures adapted to receive an adhesive, said plate also having a pair of spaced apart slots connected by a channel, and a wire passing through said slots and in said channel and secured to a ground strip to hold said ground strip connected to said plate.

2. A device of the class described, comprising a flat plate having a pair of spaced apart slots, a channel formed in said plate and projecting from its outer face and connecting said slots, means on said plate adapted to be engaged by an adhesive to support said plate, a ground strip on the outer side of said plate and a wire secured to said strip and extending through the slots and longitudinally through the channel in said plate.

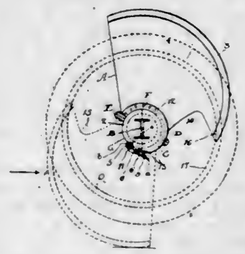
1,270,406. FLUID-JACKETED KETTLE. RUDOLF F. GOECKE, Elyria, Ohio, assignor to The Elyria Enameled Products Company, Elyria, Ohio, a Corporation of Ohio. Filed Mar. 21, 1916. Serial No. 85,620. (Cl. 220—142.)



1. In a device of the class described, the combination of an enameled kettle, an enameled tube leading into said kettle, a flange on the end of the tube, a jacket about said kettle provided with an opening through which the tube projects, said opening being larger than the flange on the tube, a chamber being formed between the kettle and the jacket walls, an annular collar around the opening in the jacket wall forming a packing cell or pocket, a flange on the outer edge of said collar, an annular member in the bottom of the packing cell next to the jacket wall formed of two pieces detachably connected together, a mass of compressible packing in said cell next adjacent said annular member, a hollow cylindrical-shaped metal packing member next to the compressible packing, said member being provided with an annular recess on the outside edge, a flat ring and means to connect said ring to the flange on the packing pocket wall, said ring projecting in to the recess in the metal packing member.

[Claim 2 not printed in the Gazette.]

1,270,407. MOTOR-VEHICLE JACK. JOSEPH GRAINGER and WILLIAM HENRY STROHM, Toronto, Ontario, Canada. Filed Sept. 11, 1917. Serial No. 190,758. (Cl. 254—86.)



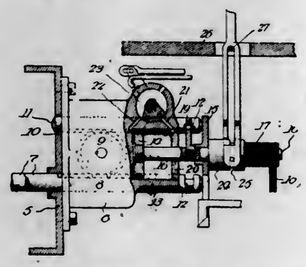
2. In a motor-vehicle, the combination with an axle thereof; and a wheel carried thereby provided with one or more studs; of a bearing member eccentrically mounted on said axle; a jack provided with a tread eccentric to the axis of said wheel and journaled on said bearing member and further provided with a lug which, when the jack is moved downwardly, will be brought into the path

of movement of the studs carried by said wheel one of which will contact therewith during the rotation of said wheel and so move the jack around its axis to jack up the wheel.

4. In a motor-vehicle, the combination with the axle thereof, and a wheel carried thereby provided with one or more studs; of a bearing member eccentrically mounted on said axle and provided with radially disposed flanges spaced apart which are formed to provide two pairs of shoulders; a jack provided with a tread eccentric to the axis of said wheel and journaled on said bearing member between the flanges thereof, and further provided with a lug which, when the jack is moved downwardly, will be brought into the path of movement of the studs carried by said wheel, for the purpose specified; a bar carried by said jack and normally resting in contact with one pair of said shoulders; a frame movably mounted on said bar and designed to be positioned beyond each side of said bearing member; another bar movably mounted on said frame designed to perform the function of a bolt to rest in the notch formed in said flanges; springs carried by said frame to keep said bolt in said notches, and a screw carried by said frame and designed to lock said bolt in place; said bar designed to be brought into contact with the other pair of said shoulders of said bearing member to limit the downward movement of said jack.

[Claims 1 and 3 not printed in the Gazette.]

1,270,408. EMERGENCY-LEVER. EDWARD E. GRAY, Plano, Ill., assignor to Gray Pneumatic Gear Shift Company, a Corporation of Illinois. Filed Aug. 18, 1913. Serial No. 785,228. (Cl. 74—39.)



1. An emergency shifting lever comprising a hand hold at one end, a forked gripping device at the other, and an intermediate slotted portion in the handle and forks adapted to engage a fixed pivot pin at any distance from the end.

2. A removable lever having gripping means at one end and a slotted intermediate portion with slots extending from the sides of the forks by which the lever can be adjustably pivoted on any fulcrum pin.

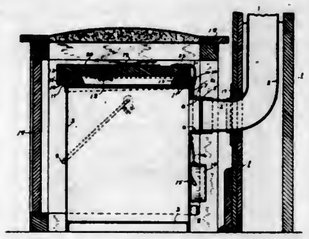
3. A lever having a hand hold at one end, a releasable gripping device comprising a forked extremity at the other end, and a slotted intermediate portion extending in the handle and in both of the forks by means of which the lever can be adjustably pivoted on any fulcrum pin within the limits of the slot.

4. A lever having a yoke at the lower end and slots opening from opposite sides of the yoke and extending up the lever to form a continuous fulcruming slot.

5. A lever having a yoke at one end, with slots opening from opposite sides of the yoke and extending to and up the lever whereby the yoke can be placed over a fulcrum and the lever rotated and moved to engage the fulcrum in the lever portion of the slot.

1,270,409. COMBINATION PORTABLE SANITARY CLOSET AND SEAT. PHILIP J. HAAS, Omaha, Nebr. Filed Apr. 15, 1915. Serial No. 21,546. (Cl. 4—32.)

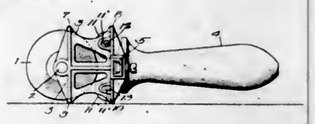
1. In a portable closet, the combination with a self supporting excrement receptacle provided with a vent pipe and a top cover movably mounted thereon, of a movable and independent casing member detached from said excrement receptacle and provided with an open bottom and an opening in the wall thereof, said wall opening



being traversed by said receptacle vent pipe; and a resilient member carried by said casing member and adapted to engage said receptacle top cover whereby the latter seals said receptacle.

[Claims 2 and 3 not printed in the Gazette.]

1,270,410. PROOFING-INKER. HORACE W. HACKER, Chicago, Ill. Filed June 8, 1917. Serial No. 173,484. (Cl. 91—48.)



1. A hand operated proofing inker including a form inking roller; a frame in which said roller is mounted to turn; a handle upon the frame, there being openings in end portions of the frame between the form inking roller and the handle; and a distrbuting roller having a shaft loosely disposed in said openings and in which openings said shaft is free to move toward and from the handle and the form inking roller.

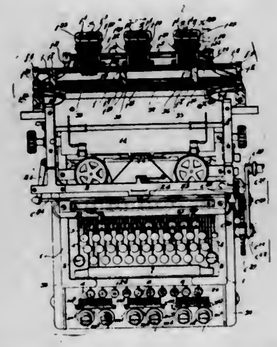
4. A hand operated proofing inker including a form inking roller; a frame in which said roller is mounted to turn; a handle upon the frame, there being two pairs of openings in end portions of the frame and upon opposite sides of the general plane occupied by the handle and the axis of rotation of the form inking roller; and two distributing rollers each having a shaft operating in a pair of openings and in which openings said shafts are movable toward and from the handle and the form inking roller, sides of said openings of each pair adjacent the form inking roller being generally oblique to said plane and extending away from the form inking roller.

7. A hand operated proofing inker including a form inking roller; a frame in which said roller is mounted to turn; a handle upon the frame, there being openings in end portions of the frame between the form inking roller and the handle; and a distributing roller having a shaft loosely operating in said openings, a side of at least one of said openings adjacent the form inking roller being generally oblique to the general plane occupied by the handle and the axis of rotation of the form inking roller and extending away from the form inking roller whereby the distributing roller is free to descend from the form inking roller when the device is at rest.

[Claims 2, 3, 5, 6, and 8 to 12 not printed in the Gazette.]

1,270,411. COMBINED TYPE-WRITING AND COMPUTING MACHINE. FREDERICK A. HART, Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Dec. 10, 1908. Serial No. 466,836. (Cl. 235—60.)

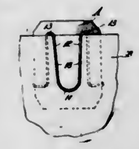
1. In a combined typewriter and computing machine, the combination with registers having decimal orders, of a traveling carriage, and interchangeable like and unlike decimal order selectors carried by said carriage for controlling the selection of numbers to be added, which are printed in columns or on horizontal lines.



15. The combination with registers having decimal orders, decimal order selecting means individual to each register, and like and unlike decimal order selectors for coöperation with said decimal order selecting means for controlling the denominational selection of numbers to be cross-added.

[Claims 2 to 14 and 16 to 25 not printed in the Gazette.]

1,270,412. CARD-HOLDER. FLOYD C. HEDRICK, Kentland, Ind. Filed Sept. 25, 1916. Serial No. 122,094. (Cl. 40—11.)



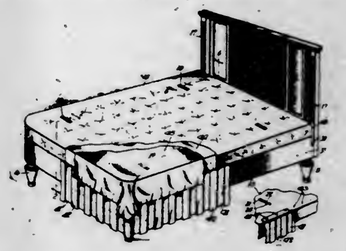
A card holder formed of a single length of spring wire bent backwardly and forwardly upon itself to form four substantially parallel arms lying in the same plane, the innermost arms adapted to be sprung outwardly from said outermost arms, crimps on the innermost arms, and card gripping fingers on the terminals of the outermost arms, said fingers being formed by bending the ends of the wire outwardly in the plane of the arms and then backwardly each upon and in contact with itself and finally bending the terminals of said wire again outwardly forming thereby an eye in the terminal of each finger to provide a relatively broad faced gripping surface for engaging the face of a card and holding it securely against the outwardly bent portion of the finger.

1,270,413. NECKTIE. MICHAEL HEYMAN, Cincinnati, Ohio. Filed Jan. 24, 1918. Serial No. 213,459. (Cl. 2—11.)



A necktie with the material folded lengthwise and stitched together, and provided with a lining extending the width of the folded tie from side to side and permanently secured to one of the back folds and extending across the seam of the back folds, without attachment to the other back fold and lying loosely under the seam joining the folds.

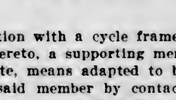
1,270,414. BED. CHARLES S. HOIT, Chicago, Ill. Filed Dec. 23, 1915. Serial No. 68,317. (Cl. 5—4.)



1. In a bed, the combination of a box mattress, comprising an upper yielding part and a rectangular box frame therebelow extended at one end beyond the yielding part, said yielding part adapted to receive an upholstered part equal in length to the yielding part; a detachable head board attachable to the said lower part, thus leaving a deep space between said head board and upholstered portion and a part of the box mattress to accommodate bed clothing and detachable legs secured to the lower box portion of said mattress.

2. A bed comprising a box-mattress structure having an interior supporting frame; a leg secured at each corner under the frame and a series of mattress-holding devices upon the upper surface of said box-mattress structure spaced inwardly from the marginal edges thereof to hold the superimposed mattress in place on the box-mattress in the absence of the usual bed frame parts projecting above the mattress.

1,270,415. CYCLE-LOCK. WILLIAM H. HUMBERT, Louisville, Ky. Filed Mar. 10, 1917. Serial No. 154,005. (Cl. 70—90.)



1. In combination with a cycle frame, a plate adapted to be secured thereto, a supporting member pivotally secured to the plate, means adapted to be moved into engagement with said member by contact of the member therewith, locking means adapted to be engaged with said engaging means to prevent movement thereof when it is engaged with the said member, and means associated with the engaging means and adapted to hold said locking means out of engagement except when the engaging means is engaged with the supporting member.

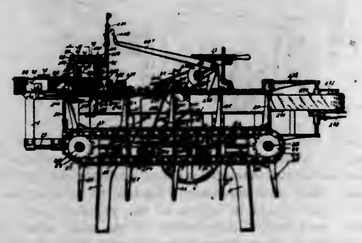
2. A base plate, a member pivotally connected thereto and adapted to be swung in a plane parallel therewith, a dog pivotally mounted on said plate and adapted to be engaged with said member to prevent movement thereof, a spring actuated element adapted to be engaged with said dog to prevent movement thereof and a part associated with the dog adapted to restrain said element when the dog is not engaged with the swinging member.

3. A base plate, a swinging member mounted thereon, a dog adapted to be moved by the contact thereof into locking engagement with said member, a bolt adapted to be moved into locking engagement with said dog, a tumbler associated with the dog adapted to restrain said bolt except when the dog engages with the swinging member, and means for retracting the bolt.

4. A base plate, a swinging member mounted thereon, a dog pivotally mounted on said plate and adapted to be

moved into locking engagement with said member, a spring impelled bolt adapted to be engaged with said dog, and a tumbler adapted in one position to hold said bolt in retracted position, all so constructed and arranged that when said member is swung into a given position it will contact with a part of the dog and of the tumbler moving the dog into engagement with the member and moving the tumbler out of engagement with the bolt.

1,270,416. **WRAPPING-MACHINE.** HARRY L. JOHNSON, Battle Creek, Mich., assignor to Johnson Automatic Sealer Company, Limited, Battle Creek, Mich. Filed Jan. 30, 1915. Serial No. 5,257. (Cl. 93—7.)



5. In a machine of the class described, the combination of a wrapping conveyer for carrying the articles to be wrapped through the machine, paper feed ways, means for delivering a sheet of paper upon said paper feed ways, means for delivering an article to be wrapped into position adjacent said paper feed ways, a plunger adapted to engage the article to be wrapped to force it against the sheet of paper and to force the article and the sheet of paper between the paper feed ways to the conveyer, paper retaining members adapted to rest upon the sheet of paper on the paper feed ways, and means for lifting said paper retaining members and holding them in elevated position while the plunger is at the outer limits of its movement.

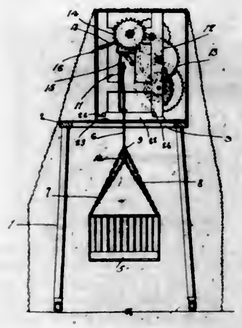
30. In a wrapping machine, the combination of an article feed conveyer, a wrapping conveyer, a reciprocating plunger carrying the articles to be wrapped from said feed conveyer to said wrapping conveyer, a paper feed means comprising paper feed ways disposed between said conveyers one at each side of said plunger so that the plunger reciprocates between them, paper feed rollers coacting with said paper feed ways to carry the paper below the said article feed conveyer and plunger, driving means for said rollers, connected supporting links for said rollers, and supporting rollers arranged in openings in said paper feed ways to support the paper below said rollers.

35. In a wrapping machine, the combination of a conconveyer, a rotary end folder having a pair of fingers, the front finger being adapted to engage a flap, the rear finger being adapted to engage an adjacent flap and fold it forwardly upon the first flap, and means for driving said conveyer and folder whereby the conveyer is driven at a uniform speed and said folder with variable speed.

36. In a structure of the class described, the combination comprising a wrapping mechanism comprising a conveyer, a feed conveyer independent of said wrapping mechanism conveyer for supplying cartons to said wrapping mechanism, a paper feed mechanism for supplying sheets of paper to said wrapping mechanism in operative position relative to said carton, means for driving said paper feed mechanism, automatic means actuated by the cartons rendering said driving means operative as long as the supply of cartons on said feed conveyer is continuous, and means for automatically rendering said driving means inoperative when the supply of cartons to said feed conveyer is interrupted.

[Claims 1 to 4, 6 to 29, and 31 to 34 not printed in the Gazette.]

1,270,417. **SWINGING CRADLE.** LUTHER P. JONES, Russellville, Ala., assignor of one-half to Charles Womble, Franklin county, Ala. Filed Sept. 30, 1916. Serial No. 123,039. (Cl. 5—57.)



4. The combination with a horizontal open supporting frame, transverse bars extending across the supporting frame in parallelism and having recessed ends and provided with longitudinal slots extending through the recessed terminals of the bars, a motor having a frame provided with legs and connecting rods, the legs being arranged in the said slots and the rods fitting in the recesses and holding the legs against movement longitudinally of the said slots, and clamping screws mounted on one of the said bars and extending across the longitudinal slot for causing such bar to clamp the legs, and a cradle located beneath the open supporting frame and suspended from the motor.

[Claims 1 to 3 and 5 not printed in the Gazette.]

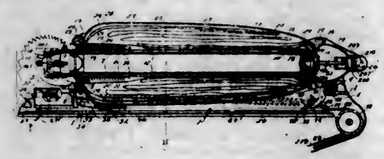
1,270,418. **CONDIMENT-HOLDER.** FRED E. KAEMPF, Gladstone, Mich. Filed Aug. 22, 1917. Serial No. 187,513. (Cl. 65—45.)



A device of the class described comprising, in combination, a container divided to provide a plurality of compartments, a spout extending from each compartment to provide an outlet therefor, a perforated cap for each spout, a perforated slide rotatably carried by each cap for closing and opening the outlets, an ear directed laterally from each slide, a link pivotally connecting each ear whereby the simultaneous operation of each slide is effected, a loop intermediately formed in said link for manipulating the slides, a downturned lug formed on one of said slides, and stops carried by the perforated cap carrying the slide formed with a down-turned lug, said stops engaging said lug at either of its limits of movement substantially as described.

1,270,419. **SAFETY APPLIANCE FOR FLYING-MACHINES.** JULIAN H. KENDIG, Pittsburgh, Pa. Filed Sept. 20, 1911, Serial No. 650,435. Renewed Nov. 16, 1917. Serial No. 202,307. (Cl. 244—21.)

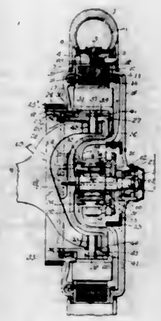
1. A safety device for aeroplanes comprising a projectile, a folded parachute secured thereto, a fastening cable for the parachute, means mounted on the aeroplane structure for projecting the projectile and the parachute in folded position thereabout clear of the aeroplane, and means opening the parachute after it has traveled in folded condition a predetermined distance.



30. A safety device for aeroplanes comprising in combination a gun mechanism mounted on the aeroplane, a hollow projectile therefor closed at one end, an annular seat at the other end thereof, a frangible cap for closing the open end of the projectile adapted to bear against said seat, a packing between the seat and the cap, an elastic adhesive seal about the edge of the cap, a parachute secured to the projectile, a fastening cable for the parachute, a charge of compressed fluid in the projectile, and means for breaking the frangible cap to release the fluid under compression.

[Claims 2 to 29 and 31 to 80 not printed in the Gazette.]

1,270,420. **ELECTRIC-VEHICLE WHEEL.** JOHN MCLEAN KINGSBURY, Great Falls, Mont., assignor to Kingsbury Gas-Electric Motor Car Company, Great Falls, Mont., a Corporation of Montana. Filed Apr. 12, 1915. Serial No. 20,629. (Cl. 172—287.)



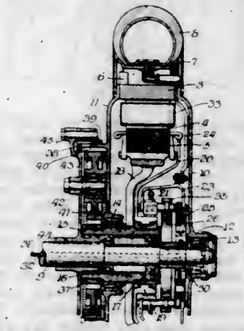
1. In combination, an axle, a rotatable ring mounted thereupon, said ring comprising a series of annular laminations, annular frame rings for clamping said laminations together, said frame rings having off-set interlocking fingers lying at the same radial distance from the center of the ring, and means connecting said frame rings with said axle.

3. In combination, a wheel rim, a motor armature connected to said rim, a vehicle axle, a motor field member connected to said axle, said field and said armature being concentric with each other, a commutator lying within said field and being concentric therewith, said armature, field and commutator lying substantially in the same plane, and leads connecting the armature and commutator, said leads forming the sole driving connection between armature and commutator.

10. In combination, a vehicle wheel rim, a motor armature concentric with and secured to said rim, a vehicle axle, a field frame pivotally connected to said vehicle axle, said frame having a central depressed portion, a stub axle connected to said portion, a commutator rotatably mounted on said stub axle, an outer disk secured to said motor armature and having bearings upon said stub axle, an inner disk having bearings upon said field frame, and means for preventing the entry of dust to said bearings and to said commutator.

[Claims 2 and 4 to 9 not printed in the Gazette.]

1,270,421. **ELECTRIC-VEHICLE CONSTRUCTION.** JOHN MCLEAN KINGSBURY, Great Falls, Mont., assignor to Kingsbury Gas-Electric Motor Car Company, Great Falls, Mont., a Corporation of Montana. Filed June 10, 1915. Serial No. 33,301. (Cl. 172—287.)



1. In combination, a motor field element, a relatively stationary shaft, a rotatable sleeve mounted on said shaft, a motor armature element secured to said sleeve, a pair of disks secured to said first motor element, said disks having bearings concentric with said shaft, one of said bearings being upon said sleeve, a central gear mounted on said sleeve and an internal gear mounted on one of said disks, a relatively stationary idler gear meshing with said other gears, a stationary cover plate or disk for covering the side of said gears, said idler gear having pivotal mounting in said cover plate, a cylindrical flange extending from the adjacent disk and inclosing said gears, said flange forming a brake drum and a brake band secured to said cover plate or disk for retarding the motion of said motor field element.

2. In combination, a rotatable motor field, a rotatable armature coöperating therewith, a commutator, a spider secured to said field and rotatable therewith, a stationary shaft for said field and armature, a rod secured to but insulated from said spider, a brush for said commutator, said brush being secured to said rod, a collector ring secured to said rod and rotating with said spider and field, a stationary brush mounted on said shaft and cooperating with said collector ring.

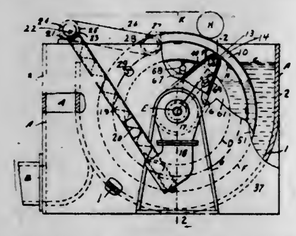
4. In combination an annular field, a shaft, a sleeve having bearings upon said shaft, a pair of side plates for inclosing said field, said plates having bearings upon the sleeve and the shaft respectively, a gear secured to said sleeve, said gear being concentric with said shaft, a cylindrical flange on one of said plates, an internal gear secured to said plate within said flange, said internal gear being concentric with said shaft, a plate for covering the side of said internal gear, said plate being secured rigidly to said shaft, a bearing stud secured to said plate, a connecting gear having a bearing on said stud and meshing with said first gear and said internal gear, and a brake band for engaging said flange, said brake band being secured to said stationary plate.

[Claim 3 not printed in the Gazette.]

1,270,422. **SAVE-ALL.** ERNEST W. LINDQUIST, Lawrence, Mass. Filed Mar. 15, 1918. Serial No. 222,659. (Cl. 92—36.)

1. In a save-all for paper stock the combination with a vat, and an outer screened cylinder revoluble therein, of one or more inner revoluble screened cylinders, a clear

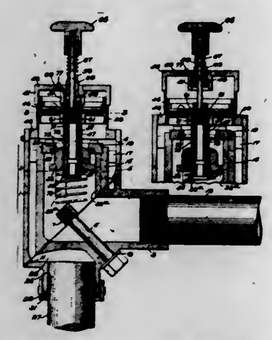
water conveyer which passes from the inner cylinder to outside the vat, and means to remove the screened stock from the inner cylinder or cylinders.



12. In a save-all for paper stock the combination with a vat having oppositely disposed bearings, of a fixed spray water inlet pipe which passes through the center of one bearing, a fixed clear water conveyer which extends out through the center of the other bearing, one or more spray pipes parallel with the clear water conveyer supported thereby and by the spray water inlet pipe, an inner screened cylinder revoluble about the spray water pipes, a sleeve fixed thereto concentric with the spray water inlet pipe and extending out through the vat, driving means at the outer end thereof, a scraper outside of the inner screened cylinder carried in supports fixed to the bearings, a conveyer from such scraper to a point outside the vat, an annular shoe revoluble about one bearing, a sleeve which extends through the other bearing, and an outer screened cylinder fixed to such shoe and sleeve revoluble outside the inner cylinder and the scraper, together with driving means fixed to the outer end of the last named sleeve.

[Claims 2 to 11 not printed in the Gazette.]

1,270,423. VALVE FOR WATER-CLOSETS AND OTHER USES. ELBERT E. LOCHRIDGE, Springfield, Mass. Filed Aug. 13, 1915. Serial No. 45,401. (Cl. 137—93.)



1. A valve mechanism comprising a fitting divided into sections, one of said sections carrying a main valve and a control valve, and the other of said sections having outlet and inlet members, and means adjustably connecting said sections having provision permitting said members to exchange places with one another.

2. A valve mechanism comprising a fitting divided into sections, one of said sections having chambers therein, and also having a main valve for controlling the communication between said chambers, the other section having an inlet member communicating with one of said chambers and an outlet member communicating with the other chamber, and means adjustably connecting said sections having provision permitting said members to exchange places with one another without loss of communication with their respective chambers.

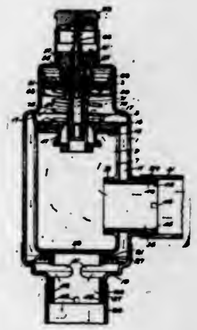
5. A valve mechanism comprising a casing having passages therein, a valve for controlling the communication between said passages, a cylinder, a piston therein, a sleeve connecting said valve with said piston, a tubular valve for controlling the admission of fluid from one of said passages to said cylinder, and means for enabling the gradual escape of fluid from said cylinder including a duct in the head of the cylinder, a passage in said tubular valve, and a port in said sleeve.

7. A valve mechanism comprising a casing having passages therein, a valve for controlling the communication between said passages, a cylinder, a piston therein, a sleeve connecting said valve with said piston, a tubular valve for controlling the admission of fluid from one of said passages to said cylinder, and adjustable means for enabling the gradual escape of fluid from said cylinder including a duct in the head of the cylinder, a passage in said tubular valve, and a port in said sleeve.

9. A valve mechanism comprising a fitting having an inlet passage and an outlet passage, a reversible body portion operatively interposed between said inlet and outlet passages to permit reversal of function of said passages, said reversible body portion carrying a main water actuated valve for separating said inlet and outlet passages and a manually controllable valve controlling the admission or exclusion of water from the valve operating portion of said main valve.

[Claims 3, 4, 6, 8, and 10 to 18 not printed in the Gazette.]

1,270,424. VALVE. ELBERT E. LOCHRIDGE, Springfield, Mass. Filed Feb. 14, 1916. Serial No. 78,097. (Cl. 137—93.)



1. The combination with a casing of a wall therein dividing the same into chambers, and inlet and outlet tubes extending across one of said chambers, one of said tubes having a closed end and an apertured side wall, and the other of said tubes having open ends and a closed side wall, said tubes being interchangeable according to the desired direction of delivery of fluid from said casing.

2. The combination with a casing of a wall therein dividing the same into inner and outer chambers, and inlet and outlet tubes crossing said outer chamber and tapped to said wall, one of said tubes having communication with said inner chamber and no communication with said outer chamber, and the other of said tubes having communication with said outer chamber and no communication with said inner chamber, said tubes being interchangeable according to the desired direction of delivery of fluid from said casing.

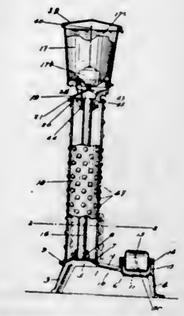
7. The combination with a casing of a wall dividing the same into chambers, said casing and wall having registering ports therein, and inlet and outlet tubes adapted to interchangeably fit said ports to control the direction of flow of fluid to and from said casing.

8. The combination with a casing of a wall therein dividing the same into chambers, said casing and wall having ports therein and inlet and outlet tubes entered into said ports for controlling the direction of fluid flow to and from said casing.

9. The combination with a casing 1 of a wall 7 therein dividing the same into chambers 9 and 11, and interchangeable tubes 35 and 37, one to conduct fluid to one of said chambers in either of its positions, and the other to conduct fluid from the other chamber in either of its positions.

[Claims 3 to 6 not printed in the Gazette.]

1,270,425. RUBBING-POST FOR ANIMALS. RALPH C. LOWES, Peoria, Ill. Filed Jan. 11, 1915. Serial No. 1,504. (Cl. 119—157.)



12. A hog oiler comprising a stationary shaft, a rubbing sleeve loosely embracing the same, a reservoir for the containing of a desired medicament, and means operable on movement of said sleeve for delivering medicament from said reservoir.

15. A device of the character described, including in combination, a stationary support, a cylindrical rubbing member loosely embracing said support and capable of being tilted on its lower end, a receptacle for containing material, and connections between said receptacle and said rubbing member for discharging material from said receptacle on to the rubbing member when the rubbing member is tilted.

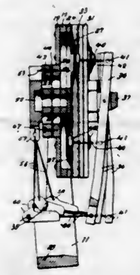
18. A hog oiler comprising a stationary shaft, a rubbing sleeve loosely embracing the same, a reservoir for the containing of a desired medicament, and means operable on movement of said sleeve for releasing medicament from said reservoir.

[Claims 1 to 11, 13, 14, 16, and 17 not printed in the Gazette.]

1,270,426. PNEUMATIC MOTOR. FRANK G. LYNDE, Newark, N. J., assignor to Lauter Company, Newark, N. J., a Corporation of New Jersey. Filed June 16, 1916. Serial No. 103,918. (Cl. 230—36.)

1. A pneumatic motor for player pianos comprising a support provided with a wind passageway, a driven shaft, a pair of flexible circular diaphragms fixed to the support and having their centers free to vibrate, a lever extending substantially at right angles to the lines of movement of the diaphragms pivoted intermediate its length and operatively connected to said shaft to rotate the same, a connection with each of said diaphragms adjacent its center and with said lever attached thereto on opposite sides of its fulcrum, said connection including means for adjusting the lever relative to each diaphragm, and valvular mechanism designed to open the diaphragms alternately to the wind passageway whereby the air tension in said passageway will act promptly against the circular diaphragms thereby to cause the diaphragms to actuate the driven shaft through the levers.

2. A pneumatic motor for player pianos comprising a board containing a wind passageway, a pair of flexible diaphragms fastened to said board on one side thereof and positioned relatively close to each other whereby relatively large diaphragms may be mounted within a limited space, another diaphragm overlapping said pair of diaphragms whereby two blanks of diaphragms may be disposed relatively close to each other and one back of the other, a single shaft operatively connected to be driven by said diaphragms and valvular means for connecting said wind passageway with the diaphragms to actuate the same.



4. A pneumatic motor for player pianos including a supporting member provided with a passageway for pneumatic power, a bank of pneumatics supported from said member, a second bank of pneumatics disposed substantially parallel to the first named bank of pneumatics and positioned relatively close thereto, a bank of valvular elements mounted on the opposite face of the supporting member, each element designed to control the passage of power from the passageway to a pair of said pneumatics, a single driven shaft and driving mechanism operatively connected to said pneumatics and said driven shaft and designed to actuate the same by the movement of said pneumatics.

10. A pneumatic motor for player pianos including a flat board with pair of pneumatics disposed side by side, substantially confined within the outlines of the board, diaphragms constituting the movable sides of each of said pneumatics and substantially coextensive with the adjacent face of the board, the active part of each of said diaphragms constituting the sector of a sphere, a lever and connections including adjustable pivots between the parts of said diaphragms having the greatest travel and said lever, said active part and the connection of the lever therewith being readily accessible whereby the active part may be readily replaced, and said connection including a readily removable pivotal joint with the lever whereby the separation of the connection at the joint will permit the ready removal of the diaphragm and connection as a unit, a shaft, a crank connection between said shaft and lever whereby the pulsation of the pair of diaphragms will assist to rotate the shaft.

17. A pneumatic motor for player pianos, including a supporting board containing a passageway adapted to be connected to a source of pneumatic power, a plurality of pneumatics disposed in one face of the support and arranged in pairs, a single lever support carried by the supporting board on the side thereof having the pneumatics, a plurality of levers, one for each pair of pneumatics and connected with said pneumatics to be actuated thereby, said levers being all fulcrumed to said single lever support whereby the removal of the support will carry with it all the levers, a crank-shaft, driving connections between said levers and said shaft and valvular means actuated by said shaft for alternately opening the pneumatics of each set to said passageway.

[Claims 3, 5 to 9, 11 to 16, and 18 not printed in the Gazette.]

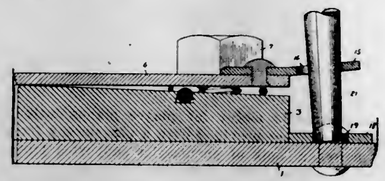
1,270,427. ADVERTISING DEVICE. ARTHUR R. MCCREARY, Kansas City, Mo. Filed Apr. 5, 1917. Serial No. 159,990. (Cl. 40—96.)



1. In a device of the character described comprising spaced drums, a belt operating over said drums and comprising a plurality of links; said links comprising opposite side and end rails, and connecting plates having backturned edges forming facing pockets for pivotally receiving the inner edges of the side rails of adjacent links to connect the latter for the purpose set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,270,428. SHIP-HATCH. ALEXANDER MCDOUGALL, Duluth, Minn. Filed Sept. 22, 1917. Serial No. 192,690. (Cl. 114—201.)



1. In a ship hatch the combination with a low flat hatch coaming having an upper surface inclined downwardly from the hatch opening, a packing embedded within such surface and a hatch cover, of hatch bolts passing through the cover and engaging the coaming outside of the packing.

2. A ship's hatch comprising in combination a low flat coaming about the hatch, said coaming having an upper surface inclined downwardly from the hatch and carrying a packing embedded within the inclined surface, a hatch cover covering the entire opening and the upper surface of the coaming, bolts passing through the hatch cover and into the coaming outside of the packing and a row of upstanding guiding pegs fixed to the deck adjacent each end of the hatch and intermediate of same for guiding the hatch covers as they are moved to and from the hatches.

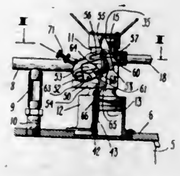
3. A ship's hatch comprising in combination a low flat coaming, said coaming having an upper surface inclined downwardly from the hatch and carrying a resilient packing embedded within the inclined surface, a hatch cover for coöperatively engaging the coaming, bolts passing through the cover and into the coaming outside of the packing, flexible removable cords placed intermediate of the cover and the coaming, one between the packing and the innermost edge of the coaming and the other outside of the bolts and adjacent the outer edge of the hatch, means for sliding the hatch cover to and from the hatch and means for guiding the cover as it is being operated.

11. In combination, a hatch coaming having an upper face inclined downwardly away from the hatch and having bolt holes therein, a hatch cover operated as a single unit, normally resting upon the innermost edges of the coaming and having holes therein registerable with the holes in the coaming, a clip having a hole therethrough, fastened centrally to each forward and after edge of the hatch cover and by which the cover may be drawn to and from the coaming, a hole supported by the deck upon which the hatch is located adjacent the coaming on each forward and after side thereof beneath the clips and substantially registering with the holes in the clips, whereby a hand bar may be placed through the holes in the clips and engaged in the hole on the deck for adjusting the hatch cover to place.

12. In combination a ship's hatch coaming having bolt holes therein, a hatch cover operated as a single unit normally resting upon the coaming and having holes therein registerable with the holes in the coaming, a clip having a hole therethrough fastened centrally to each forward and after edge of the hatch cover by which the cover may be drawn to and from the coaming or adjusted while upon the coaming, a hand bar extendible through the holes in the clips, means below the clips and supported by the deck of the ship for engagement with the end of the hand bar to hold same against movement while adjusting the hatch cover to its proper position.

[Claims 4 to 10 not printed in the Gazette.]

1,270,429. PULSATOR FOR MILKING-MACHINES. ARTHUR CHICESTER MACARTNEY, Bloomfield, N. J., assignor to Empire Cream Separator Company, Bloomfield, N. J., a Corporation of New Jersey. Filed Feb. 27, 1915. Serial No. 10,904. (Cl. 31—101.)



1. In pulsator mechanism for milking apparatus, the combination of a pulsator valve, vacuum operated mechanism for reciprocating said valve, a control valve for controlling the action of the vacuum on said operating mechanism, a pivoted actuating member for said valve, a valve actuating lever having a spring connection with said valve actuating member and a separable movable member having a locking portion for preventing premature movement of said valve.

6. In pulsator mechanism for milking apparatus, the combination of a casing, a pulsator valve mounted to reciprocate in said casing, a cylinder, a piston working in said cylinder and operatively connected to said pulsator valve, means including a movable valve member pivoted to a fixed support for connecting said cylinder at one side or the other of said piston with a source of vacuum, a slotted lever, a pin carried by said pulsator valve and projecting through the slot in said lever, a spring pressed pitman pivoted at one end to said valve member and having its other end carried by said slotted lever, and locking mechanism for preventing the movement of said valve member until the pulsator valve has reached the predetermined limit of its stroke.

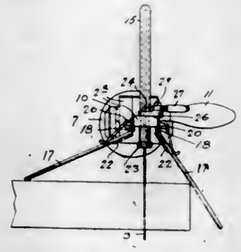
11. In milking apparatus, the combination of a milk pail, a cover therefor, a valve casing mounted on said cover, a pulsator valve reciprocating vertically in said casing, automatic vacuum operating mechanism for reciprocating said valve, and a carrying handle for said milk pail and valve mechanism attached to the upper end of said valve casing.

13. In pulsator mechanism for milking apparatus, the combination of a milk pail cover, a casing mounted thereon having bores therein, in one of which reciprocates a piston and in the other of which reciprocates a pulsator valve, said piston and pulsator valve being connected, the bore in which the piston reciprocates being closed at the bottom by a portion of said pail cover.

17. In apparatus of the character described, the combination of a milk pail cover, a casing mounted thereon, vacuum operated mechanism in said casing, a vacuum pipe leading to said casing, a branch leading from said vacuum pipe to an opening in said milk pail cover, said branch including a flexible pipe section.

[Claims 2 to 5, 7 to 10, 12, 14 to 16, and 18 not printed in the Gazette.]

1,270,430. TOOL-GUARD. EMANUEL A. MARTIN, Pittsburgh, Pa. Filed Sept. 21, 1916. Serial No. 121,436. (Cl. 143—159.)



1. In a portable rotary-disk cutting-tool, the combination of a rotary cutting-disk and a longitudinally-divided guard for covering the cutting portions of said disk, the divided portions of said guard being adapted to swing laterally out of the way of the cutting path of the disk.

3. In a portable rotary-disk cutting-tool, the combination of a rotary cutting-disk and a guard inclosing the cutting portion of said disk comprising swinging guard members arranged to separate in order to permit of the cutting operation.

8. In a portable rotary cutting-disk tool, the combination of a rotary cutting-disk mounted in a frame, a guard for inclosing the cutting portion of said disk comprising hinged swinging guard-members, one member each side of said disk, a spreader interposed between said guard-members, and means carried by the frame for actuating said spreader.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,270,431. CALENDAR. ALTHEA MILLER, New York, N. Y. Filed Aug. 4, 1916. Serial No. 113,067. (Cl. 40—115.)



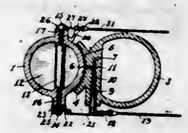
1. The combination of a month-day disk bearing digits for representing the days of the month, the digits being in such sequence and with such spacing that one set of digits for representing the month days from 1 to 9 inclusive also will form parts of two digit month-day designations, a cover having an opening through which two consecutive digits may be seen, and means for setting the disk, substantially as described.

[Claim 2 not printed in the Gazette.]

1,270,432. CARBURETER. OLNEY B. MONOSMITH, Lorain, Ohio. Filed Feb. 16, 1917. Serial No. 148,944. (Cl. 261—50.)

1. In a carbureter, the combination of an air tube, a fuel chamber, a valve for controlling the flow of the fuel from the chamber to the air tube, a butter-fly valve in the air tube, the pivotal point of the butter-fly valve being decentered whereby it tends to close, and mechanism for opening the fuel control valve and permitting inrushing air to open the butter-fly valve and closing the latter with the closing of the former, substantially as described.

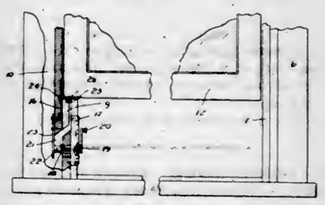
2. In a carbureter, the combination of an air tube, a fuel chamber, a conduit leading from the fuel chamber to the air tube, a fuel control valve in the conduit, a butterfly valve in the air tube, the butterfly valve having one edge covering the outlet of the condnit when in closed position, and mechanism for opening the fuel control valve and permitting the opening of the butterfly valve and closing the latter with the closing of the former, substantially as described.



3. In a carbureter, the combination of an air tube, a fuel chamber, a valve for controlling the flow of fuel from the chamber to the air tube, a butterfly valve in the air tube, the butterfly valve being fixed to a shaft, a lever for operating the fuel control valve, a pivotally supported arm actuated by the lever, the arm carrying a lug, and the lug being adapted to coöperate with the shaft of the butterfly valve to permit the butterfly valve to open when the fuel control valve is opened but to close it when the fuel control valve is closed, substantially as described.

[Claim 4 not printed in the Gazette.]

1,270,433. WINDOW FRAME AND SASHES. LOUIS NEES, Minneapolis, Minn., assignor of one-half to Robert J. Cheney, Minneapolis, Minn. Filed June 15, 1917. Serial No. 174,849. (Cl. 20—46.)



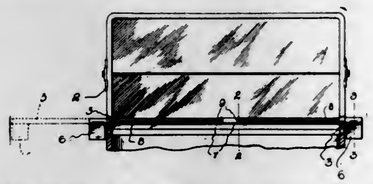
1. The combination with a window frame having vertical inner, outer and intermediate sash stops, upper and lower window sashes mounted between the sash stops for vertical sliding movement, one side of the window frame having a movable section, the respective intermediate sash stop being sectional with the section thereof extending over the movable section of the window frame secured thereto, means detachably connecting the window sashes to the movable section of the window frame for horizontal swinging movement, and means for adjusting the movable section of the window frame horizontally to carry the window sashes into and out of interlocking engagement with opposite sash stops.

[Claim 2 not printed in the Gazette.]

1,270,434. SIGNALING DEVICE FOR AUTOMOBILES. CHARLES J. NIISSLE, Brady, Tex. Filed Nov. 24, 1915. Serial No. 63,260. (Cl. 116—31.)

A direction indicator for vehicles comprising a tube adapted to be secured transversely to the wind shield of a vehicle and having its ends projecting beyond the sides of said wind shield and having slots in the lowermost portions thereof, the outer ends of said slots being open, said tube being also provided with other slots arranged in a different plane from the first named slots, a rod slidable in each end of said tube and having a signal plate

at its outer end normally engaged in the adjacent open ended slot, a bolt carried by the inner end of each of said



rods and extended through one of the second named slots toward the driver's seat of the vehicle, and means on said bolt for securing the rod in adjusted position.

1,270,435. WHEEL. LOUIS H. PERLMAN, New York, N. Y. Filed Feb. 23, 1917. Serial No. 150,486. (Cl. 152—21.)



1. In a demountable rim structure, the combination with a rim base, of a cap plate set into said base and a rim lock receiving member formed separately from and fixed to said cap.

[Claims 2 to 4 not printed in the Gazette.]

1,270,436. DUMMY-RIFLE. MILTON B. REACH, Springfield, Mass., assignor, by mesne assignments, to A. G. Spalding & Bros., Jersey City, N. J., a Corporation of New Jersey. Filed Apr. 21, 1917. Serial No. 163,669. (Cl. 42—1.)

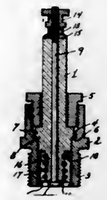


4. A dummy rifle comprising a stock, a bolt, a handle thereon, a casing having a longitudinal and lateral slot in which the handle works, and means for placing the bolt under resistance substantially equivalent to that offered by a cartridge in a regulation rifle, said means consisting of a spring pressing upon the bolt, substantially as described.

6. A dummy rifle comprising a stock, a casing secured to said stock of channeled form secured with its open lower side against the stock, a bolt guided in the casing and having a handle, said casing having a guide slot with a lateral extension to receive the handle, said casing with its bolt and the handle being attachable to or detachable from the stock as one body and when removed permitting access to the bolt through its open under side, and stop means for the bolt to hold it to the casing, substantially as described.

[Claims 1 to 3 and 5 not printed in the Gazette.]

1,270,437. SPARK-PLUG. WALTER REPPIN, Newark, N. J. Filed Nov. 21, 1913, Serial No. 802,193. Renewed Nov. 16, 1917. Serial No. 202,426. (Cl. 123—169.)



1. A spark plug comprising an insulating body reduced at its lower end, a chambered casing surrounding the reduced portion of said body, a central electrode extending through said insulating body, a number of electrodes consisting of open rings secured to the reduced portion of the insulating body insulated from each other and from the central electrodes so as to form a series of gaps, all electrodes secured to the outside of the reduced portion of the insulating body having their sparking surfaces within the chamber of said casing.

[Claim 2 not printed in the Gazette.]

1,270,438. TEMPERATURE-CONTROLLING DEVICE. ALFRED ROESCH, Brooklyn, N. Y., assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y., a Corporation of New York. Filed May 6, 1913. Serial No. 765,737. (Cl. 236—8.)

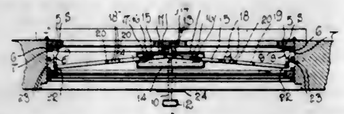
1. In a device of the character described the combination of an element to be heated, a plurality of means for heating same, independent fluid operated means for controlling each of said heating means, a sensitive member adapted to be affected by the temperature of said element and an actuating device common to all of said controlling means and connected directly with said sensitive member so as to be directly operated thereby.

5. In a device of the character described the combination of an element to be heated, a plurality of pipes for conducting a plurality of heating mediums to said element, a valve in each of said pipes for controlling the flow of said heating mediums therethrough, additional fluid operated valves for controlling the valves in said pipes, a sensitive member arranged to be affected by the temperature of said element and a single movable lever directly connected with said sensitive member and arranged to be directly actuated thereby to operate said additional valves whereby the valves in said pipes are operated.

6. In a device of the character described, the combination of a tank arranged to be heated, a connection from said tank to a source of heat supply, a second connection from said tank to another source of heat supply, a valve in each of said connections, additional valves, connections from said additional valves to each of said first named valves, a single lever adapted to actuate each of said additional valves whereby said first named valves are operated and a sensitive member adapted to be affected by the temperature of said tank and to actuate said lever.

[Claims 2 to 4, 7, and 8 not printed in the Gazette.]

1,270,439. SHUTTER-OPERATING DEVICE. WALTER ROGERS, West Annapolis, Md. Filed Mar. 16, 1918. Serial No. 222,920. (Cl. 16—24.)



1. A device for opening and closing shutters including a rectilinearly movable operating member, elements connected to the respective shutters for movement relative thereto, means operatively connecting said elements to the operating member, whereby in the movement of said member in one direction the shutters are closed and in the movement of said member in an opposite direction the shutters are opened, and a keeper element fixed to one of the shutters with which the operating member is adapted to coact to lock the shutters in their closed positions.

2. A device for opening and closing window shutters including a rectilinearly movable operating rod, levers mounted for sliding pivotal movement and operatively connected to one end of said rod, members connected to the respective shutters for movement relative thereto, and means operatively connecting the levers to said members whereby in the movement of the rod in one direction the shutters are closed and in the movement of said rod in an opposite direction the shutters are opened.

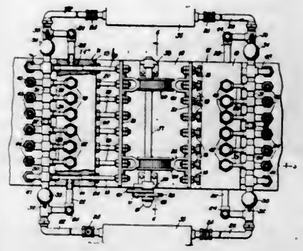
3. A device for opening and closing window shutters including a rectilinearly movable operating rod, levers mounted for sliding pivotal movement and operatively connected to one end of said rod, members connected to the respective shutters for movement relative thereto, and bars connected at one of their ends to said members and adjustably connected at their opposite ends to the respective levers and whereby the shutters are closed upon a movement of the rod in one direction and opened when the rod is moved in an opposite direction.

4. A device for opening and closing window shutters including a rectilinearly movable operating rod, levers mounted for sliding pivotal movement and operatively connected to one end of said rod, members connected to the respective shutters for movement relative thereto, bars connected at one of their ends to said members and adjustably connected at their opposite ends to the respective levers and whereby the shutters are closed upon a movement of the rod in one direction and opened when the rod is moved in an opposite direction, and latch means for holding the rod against movement when the shutters are open.

5. A device for opening and closing window shutters including a rectilinearly movable operating rod, levers mounted for sliding pivotal movement and operatively connected to one end of said rod, members connected to the respective shutters for movement relative thereto, bars connected at one of their ends to said members and adjustably connected at their opposite ends to the respective levers and whereby the shutters are closed upon a movement of the rod in one direction and opened when the rod is moved in an opposite direction, latch means for holding the rod against movement when the shutters are open, and a keeper element fixed to one of the shutters, said rod having an angular terminal finger to engage in said keeper upon a turning movement of the rod to lock the shutters in their closed positions.

1,270,440. FORCE-FEED LUBRICATOR. JOHN C. ROSS, Akron, Ohio. Filed Mar. 27, 1917. Serial No. 157,727. (Cl. 184—27.)

1. A device of the character described including a body having a circulating pump chamber and a plurality of feed pump chambers formed therethrough, pistons mounted to reciprocate in the inner portions of said chambers, means for reciprocating the pistons, a lubricant supply tank communicating with the circulating pump chamber, a manifold connected with the feed pump chambers intermediate the ends thereof and communicating with the outer end of the circulating pump chamber, discharge pipes leading from the outer ends of the feed pump chambers, and a steam pipe extending axially through the manifold and terminating beyond the ends thereof.

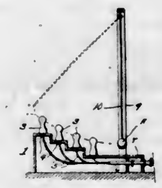


2. A device of the character described including a body having a circulating pump chamber and a feed pump chamber formed therein, pistons mounted to reciprocate in said chambers, means for reciprocating the pistons, a supply tank communicating with the circulating pump chamber, a connection between the circulating pump chamber and the feed pump chamber, a discharge pipe leading from the feed pump chamber, an overflow pipe leading from the said connection and communicating with the tank, a pressure valve arranged in said overflow pipe, and a pressure dome at the upper end of said pipe.

3. A device of the class described including a body having circulating pump chambers and feed pump chambers formed therein, pistons mounted to reciprocate in said chambers, a supply tank communicating with one of the circulating pump chambers, a second supply tank communicating with the other circulating pump chamber, a manifold connecting the first mentioned circulating pump chamber with some of the feed pump chambers, a second manifold connecting the second circulating pump chamber with the remaining feed pump chambers, means common to both manifolds for closing the inner ends thereof, discharge pipes leading from the respective feed pump chambers, and means for reciprocating the pistons for simultaneously delivering lubricant from both tanks.

[Claims 4 and 5 not printed in the Gazette.]

1,270,441. GAME APPARATUS. JOSEPH ROY, Woonsocket, R. I. Filed Aug. 7, 1917. Serial No. 184,907. (Cl. 46—59.)

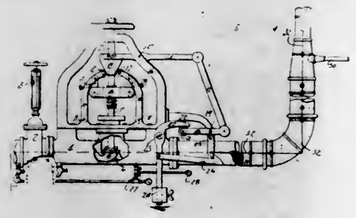


1. A game apparatus comprising a base casing having a top wall the rear portion of which is formed into steps that extend upwardly toward the rear end of the casing and also having apertures in the steps, transverse series of pins removably arranged on the steps, setting means movable in the front portion of the casing, cords con-

nected to the lower ends of the pins and the setting means, and means arranged to be swung in the arc of a circle to knock over the pins.

[Claim 2 not printed in the Gazette.]

1,270,442. AUTOMATIC FIRE-EXTINGUISHER SYSTEM. MARTIN S. RUNSVOLD and NELS NELSSKOO, Everett, Wash. Filed July 22, 1916. Serial No. 110,658. (Cl. 169—22.)



1. An automatic fire extinguisher system including pressureless dry pipe mains and distributing mains, an automatically operated valve, whereby the extinguishing fluid is admitted to the mains, gravity actuated levers, a nut screwed onto the stem of the valve, a cam slidably mounted on said stem and connected to said levers, means coöperating with said cam and connected with said nut, whereby the said nut is raised.

2. An automatic dry pipe fire extinguisher system which includes a quick opening valve, a movable valve stem, a nut screwed onto said stem, pivoted levers, links pivoted to the levers and said nut, and a gravity actuated cam mounted on said stem and coöperating with said levers, whereby the levers are moved and the said nut and stem are raised.

1,270,443. CHUCK. JOSEPH H. RUSBY, Nutley, N. J. Filed Dec. 13, 1915. Serial No. 66,408. (Cl. 279—69.)



1. A chuck comprising a spindle, a base fixed in respect to the spindle, an inclosing shell longitudinally movable on the base, tool gripping jaws operatively supported on the base for rotation in unison with the base and spindle, and longitudinal complemental grooves and ribs between the shell and jaws which permit of relative sliding motion.

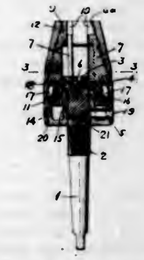
3. In a chuck the combination of a spindle, a supporting base fixed in respect to the spindle, an inclosing shell consisting of sections relatively turnable and whereof one is provided with longitudinal grooves and movable lengthwise on the base, tool gripping jaws slidably seated in said grooves, and supporting posts for the jaws and said jaws pivotally connected with said supporting posts and said supporting posts operatively connected with said base, and the other shell section having a screw and thread connection with the spindle.

6. A chuck comprising a base, an inclosing shell consisting of sections relatively turnable and of which one is longitudinally movable on the base, tool gripping jaws operatively supported on the base, longitudinal grooves in said shell, said jaws slidably seated in said grooves, and spring means operatively connecting said jaws and said base.

11. In a chuck the combination of a supporting base, an inclosing shell, tool gripping jaws adapted to be closed by the shell, channeled-supporting posts movably connected with the base, pins bridging the channel portion of the posts, and springs coiled on said posts and having one of their ends in the channel portion of the posts and the other of their ends in contact with the base.

[Claims 2, 4, 5, 7 to 10, and 12 to 16 not printed in the Gazette.]

1,270,444. CHUCK. JOSEPH H. RUSBY, Nutley, N. J. Filed Dec. 1, 1917. Serial No. 204,960. (Cl. 279—69.)



1. A chuck comprising a rotatable spindle, a base fixed in respect to the spindle, radially extendible and contractible jaws supported to rotate in unison with the base and spindle, said spindle and base being of less diameter than the radial diameter of the jaws when radially contracted, and a jaw operating shell inclosing said base and jaws, said shell being of contracted diameter for operative support on said spindle.

3. A chuck comprising a rotatable spindle and a base, jaws operatively supported on the base, a jaw operating shell inclosing the jaws, base and part of the spindle with space between the spindle and peripheral wall of shell, and a tightening tool-receiving transverse port extending through said peripheral wall of the shell.

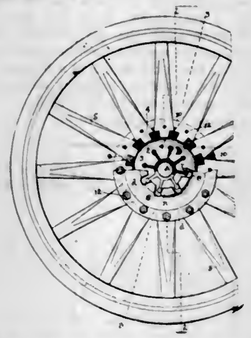
6. A two-way chuck comprising the combination of a threaded spindle, a base fixed in respect to the spindle and provided with radial projections and undercut grooves, jaws provided with extending feet and radially slidable in the undercut grooves, a jaw shell rotatably fixed and longitudinally movable in respect to the spindle and having a contracted extension with annular space between it and the spindle, and an operating shell rotatably connected with the jaw shell and spindle and having a tapped contracted neck engaging the threaded portion of the spindle and arranged in the space between it and the jaw shell extension.

8. A chuck comprising the combination of a tapering jaw shell provided with grooved slots and a fixed covering cap, a base arranged in the jaw shell provided with radial undercut grooves alined with said slots, jaws arranged in the slots and provided with feet working in the grooves of the slots and in the undercut grooves, and an operating shell turnably connected with the jaw shell and having a contracted neck.

[Claims 2, 4, 5, 7, and 9 not printed in the Gazette.]

1,270,445. SPRING-CUSHIONED AUTOMOBILE-WHEEL. WILLIAM SCHOELLKOPF, Cleveland, Ohio. Filed Apr. 16, 1917, Serial No. 162,336. Renewed May 4, 1918. Serial No. 232,660. (Cl. 152—43.)

1. A wheel comprising a single resilient member at the center thereof having a bore axially through the same and slots radiating from said bore, side plates for said wheel having slots radially therein, and a bushing in said bore having vanes engaged in the slots of both said member and the side plates.

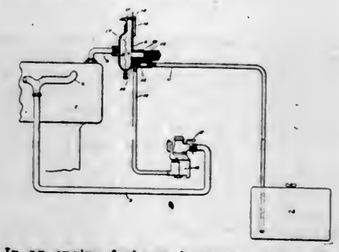


2. A wheel having radially-slotted side plates, a rubber body clamped at its peripheral edge between said plates having a radially-slotted bore, a bushing having radial vanes extending into the radial slots of said plates and body, nuts secured upon said bushing in engaging relation with said plates, and caps affixed to said plates and covering said nuts.

5. A wheel having a rigid frame comprising the spokes and the rim and a pair of plates bulged outwardly in their body portion to form a chamber between them and having flat outer portions provided with inwardly projecting lugs oppositely in abutting relations between said spokes and bolts locking said spokes and plates together, the said plates having radial slots in their inner portion, in combination with a central resilient rubber body occupying said chamber between said plates and having slots in which said spokes are seated and interlocked therewith, a tubular bushing having radial vanes interlocked with said body and engaged at their respective ends in the radial slots in said plates.

[Claims 3 and 4 not printed in the Gazette.]

1,270,446. ENGINE-FUEL-SUPPLY SYSTEM. CARL F. SCHULZ, Jersey City, N. J. Filed Dec. 28, 1915. Serial No. 69,127. (Cl. 158—36.)



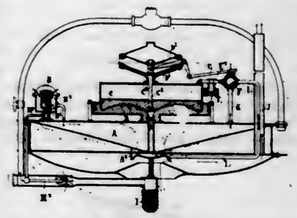
1. In an engine fuel supply system, an engine, a fuel tank, a carbureter connected to said engine, a pumping device divided into two separate compartments by a flexible diaphragm, one compartment being connected to said engine and the other to said tank, said diaphragm being responsive to the suction of said engine whereby fuel is drawn from the tank to the compartment connected thereto, a feed pipe leading from this compartment to said carbureter, and a double acting valve at the top of said compartment responsive to the engine suction for preventing air entering said compartment while said engine is running but adapted to establish atmospheric pressure in the chamber when said engine is idle, for the purpose described.

6. In an engine fuel supply system, an engine, a fuel tank, a carbureter connected to said engine, a unitary pumping device having a suction chamber and a fuel reservoir with a flexible corrugated diaphragm therebetween acted on by the suction of said engine whereby the movement of said diaphragm draws fuel from said tank into the fuel reservoir of the pumping device and a feed pipe to carry the fuel from the fuel reservoir in the pumping device to said carbureter.

7. In an engine fuel supply system, an engine, a fuel tank, a carbureter connected to said engine, a unitary pumping device having a suction chamber and a fuel chamber with a diaphragm therebetween adapted to be acted on by the suction of said engine whereby the movement of said diaphragm draws fuel from said tank into the fuel chamber of the pumping device, a feed pipe to carry the fuel from the fuel chamber of the pumping device to said carbureter and an adjustable relief valve opening from said fuel chamber to a fuel tank pipe to limit the amount of fuel to be carried in the fuel chamber of the pumping device.

[Claims 2 to 5 not printed in the Gazette.]

1,270,447. APPARATUS FOR COMPRESSING GAS OR AIR. CHARLES SCOTT-SNELL, Ridgway, Wimbledon, England, assignor of one-half to Sibleys Limited, London, England. Filed Feb. 5, 1918. Serial No. 215,529. (Cl. 67—91.)



1. An apparatus for furnishing compressed fluids to burners comprising a reservoir adapted to be heated and also adapted to receive the fluid to be compressed, a cylinder, a piston arranged in said cylinder, a passage connecting one end of the cylinder with said reservoir for conducting heated air to the cylinder to move said piston in one direction, a second passage connecting the other end of the cylinder to the reservoir for conducting fluid displaced by the piston in its movement under the influence of the heated fluid to said reservoir, means for permitting the heated fluid to exhaust from the cylinder, means for admitting a fresh charge of fluid to the end of the cylinder connected to the second passage when the heated fluid exhausts, a third passage connecting the reservoir to the burner, and a valve operated by pressure in the reservoir for controlling the fluid admitted to the third passage.

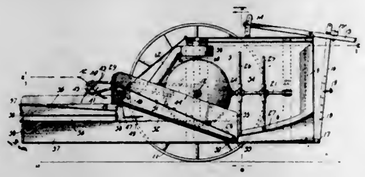
12. In an apparatus of the class described, a reservoir adapted to be heated, a cylinder, a piston located in said cylinder, a pipe connecting said reservoir to said cylinder for conducting fluid heated in said reservoir to said cylinder, means for admitting fresh fluid to the cylinder, a passage for conveying fluid compressed by the piston to said reservoir, a condenser, pipes connecting said condenser to both ends of the cylinder, and a valve arranged in the first named pipe and controlled by the piston, for simultaneously shutting off the passage of heated fluid to the cylinder, and permitting the heated fluid from the cylinder to exhaust into the condenser.

[Claims 2 to 11 not printed in the Gazette.]

1,270,448. PEA-HARVESTER. FRANK V. SCOTT, Elizabeth City, N. C. Filed June 15, 1917. Serial No. 174,995. (Cl. 56—1.)

1. A pea harvester comprising a wheeled vehicle having an opening to receive the tops of the pea vines, a beater mounted on one side of said opening and operable

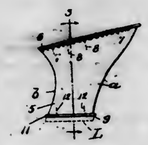
through the travel of the vehicle, conveyers for carrying the material received in the vehicle located on both sides of the beater, a screen for separating the peas from the material, a blower associated with the screen, and means for operating the screen, conveyers and blower through the travel of the vehicle, substantially as set forth.



2. A pea harvester comprising a wheeled vehicle having an opening to receive the tops of the pea vines and adapted to collect the material therefrom at the end of the vehicle, a beater operable through the travel of the vehicle, a conveyer for carrying the collected material to the rear end of the vehicle, means for spreading the material from the conveyer, a screen for separating the peas from said material, a blower associated with the screen, and means for operating the conveyer, spreading means and blower through the travel of the vehicle, substantially as set forth.

[Claims 3 to 8 not printed in the Gazette.]

1,270,449. HEEL FOR BOOTS AND SHOES. ELIEL L. SHARPNECK, Winthrop, Mass., assignor to S. M. P. Wood Heel Company, a Corporation of Massachusetts. Filed Dec. 4, 1916. Serial No. 134,875. (Cl. 36—34.)



1. A heel for boots and shoes comprising a heel body having at its upper end a member having a marginal lip extending downward over the perimeter of the heel body, confining the upper edge of said body and terminating at the perimetric surface of said body close to said edge.

4. A heel for boots and shoes comprising a heel body having at its upper end a plate extending outward beyond the heel body and having its margin turned inward to confine an edge portion of said body, and a second plate located against the lower end of said heel body and having its margin turned up outside said body, the margins of said respective plates spaced apart.

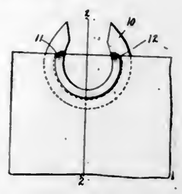
[Claims 2 and 3 not printed in the Gazette.]

1,270,450. PROCESS OF WATERPROOFING AND ORNAMENTING OBJECTS. DAVID F. SHOPE, Portland, Oreg. Filed Nov. 28, 1917. Serial No. 204,320. (Cl. 91—68.)

2. In a process of the character described a method which consists in applying a minimum amount of a suitable waterproofing composition in a plastic state upon the finished surface of an object, as follows, first, by applying said composition to a suitable portion of the surface at a time by means of a brush or stubby broom wielded in the operation with a movement as in scrubbing until the minimum amount of the composition is rubbed upon and into the surface and adheres thereto uniformly, second, causing the composition, while slowly setting or hardening, to adhere thoroughly upon the treated surface in a manner to close all pores and form the composition into a coating over the treated surface, impervious to moisture, accomplished by means of a suitable brush having stiff bristles and with it striking the composition all over its surface with impinging blows through the bristles, before the setting takes place, third, after the last step, to sprinkle, cast or blow upon the composition, while yet plastic, mica, ground to a desired fineness, until the same has firmly adhered to the composition in a manner to leave the exposed mica parts naturally brilliant without further treatment thereof, substantially as described.

[Claim 1 not printed in the Gazette.]

1,270,451. PAPER-CLIP. ANNA LOUISE SKILLMAN, Pluckemin, N. J. Filed Dec. 18, 1915. Serial No. 67,542. (Cl. 24—259.)



A paper clip, comprising a horseshoe shaped blank terminating in a pair of freely extending spaced fingers, said blank having an arcuate slot subdividing its body into two concentric arcute sections bendable at their bases and on the long axis of the blank, said slot terminating short of the bases of said fingers at such a suitable distance only as to preserve the unity of the blank.

1,270,452. NAILING-STRIP FOR CONCRETE FENCE-POSTS. ARTHUR B. SMITH, Eden, N. Y. Filed July 27, 1916. Serial No. 111,697. (Cl. 256—49.)

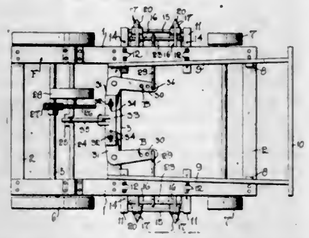


1. A nailing strip comprising a plate bent to provide a longitudinal channel having its side walls disposed at an angle, a longitudinally extending ridge formed in the central portion of the channel formed by bending the said plate inwardly to provide an exterior groove, a plurality of fastening elements adapted to be secured to the said ridge, the said ridge being provided with a plurality of apertures for receiving said fastening elements, and a clench plate extending across the said channel and adapted to receive the ends of the said fastening elements when the same are driven through the said apertures.

3. A nailing strip for concrete fence posts, comprising a strip of metal bent to form a longitudinal channel having its side walls flared outwardly, the said fence post being provided with a longitudinal dove tail groove receiving the said strip and having the flared walls in contact with the walls of the groove, the longitudinal edges of the said side walls being embedded in the concrete beyond the bottom of the said groove, a central longitudinal ridge formed on the said plate and extending inwardly of the said groove, a clench plate mounted in the groove and in contact with the bottom wall thereof, the said side walls of the channel being engaged by the marginal edges of the said clench plate, and staples extended through the said ridge and engaging with the said clench plate.

[Claim 2 not printed in the Gazette.]

1,270,453. AGRICULTURAL MACHINE. EARL C. SMITH, Augusta, Ga. Filed Mar. 9, 1918. Serial No. 221,530. (Cl. 97—45.)



1. A machine of the class described comprising a portable frame, a pair of arms extending laterally from the frame, a rod interposed between and supported by said arms, ground working elements engaged with the rod and having swinging movement in a direction laterally to the direction of travel of the body, a second rod connecting the ground working members whereby the same are caused to swing in unison and in the same general direction, a pitman engaged with said last named rod, and means for reciprocating the pitman.

3. A machine of the class described comprising a portable frame, rock arms depending from opposite sides thereof, bell crank levers mounted upon the frame, one of said levers being operatively engaged with the arm at one side of the frame and the second lever with the arm at the opposite side of the frame, a rigid link connecting said bell crank levers whereby the same are caused to rock in unison but in reverse directions, and means coacting with the link for imparting movement to the levers, the connections between the rigid link and the bell crank levers being adjustable.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,454. SHADE-BRACKET. HENRY C. SMITH, Philadelphia, Pa. Filed Aug. 7, 1916. Serial No. 113,439. (Cl. 156—24.)



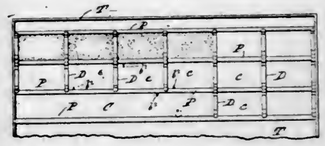
1. A shade bracket consisting of an attaching member comprising a plate having resilient fingers projecting therefrom, a pair of arms and a guide or cross rod mounted between said arms, and a shade roller support slidably mounted on said guide or cross rod and frictionally engaging the resilient fingers.

2. A shade bracket consisting of an attaching member comprising a plate having resilient fingers projecting therefrom, a pair of arms and a guide or cross rod mounted between said arms, and a shade roller support slidably mounted on said guide or cross rod, said support comprising a body having a pintle opening therein, an extension adapted to engage the front face of the plate, an upwardly projecting leg, a top wall projecting from said leg at right angles thereto, and overlying the guide rod, said wall being of sufficient width to engage the resilient fingers whereby the support will be held in any adjusted position, and a lug projecting downwardly from the top wall parallel with the leg, said lug and leg having holes therein for registration with the guide rod.

3. The combination in a shade bracket of a plate having holes therein for the passage of attaching means, upwardly projecting integral resilient fingers, an arm formed integral with each end of the plate, a guide rod mounted in said arms, and a shade roller support slidably and rotatably mounted upon the guide rod and adapted to engage the resilient fingers, whereby the support will be held in an adjusted position, said support adapted to be rotated about the guide rod to cause said support to be disengaged from said fingers when it is desired to slide the same along the guide rod for obtaining an adjustment.

4. The combination in a shade bracket of a plate having integral arms, and integral resilient fingers situated within the space between said arms, a rod carried by said arms, and a shade roller support rotatably and slidably mounted upon said rod and adapted to engage the resilient fingers for holding the support in an adjusted position, and adapted to be rotated to disengage the fingers, so that said support may be moved along the guide rod.

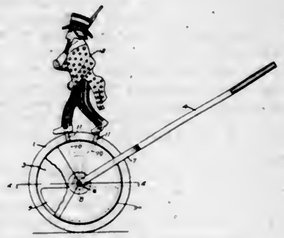
1,270,455. APPARATUS FOR MAKING ICE. HARRY J. SMITH, New York, N. Y. Filed Feb. 26, 1917. Serial No. 150,912. (Cl. 62—164.)



2. In ice forming apparatus of the character designated, the combination of a tank, a plurality of coil-partitions arranged in parallelism therein, and hollow metallic divisional members interposed between and contacting directly with the opposed metallic sides of adjacent coil partitions, each of said divisional members being formed with a perforate head piece and being provided with an air blast pipe supported upon and extending through said head piece to the bottom of the divisional member through the lower side wall of which said air blast pipe opens, and also being provided with a steam injection pipe supported upon and extending through said head piece to the lower portion of said divisional member.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,270,456. FIGURE WHEELED TOY. CHARLIS H. B. STACY, Foxboro, Mass. Filed Aug. 11, 1917. Serial No. 185,725. (Cl. 46—45.)



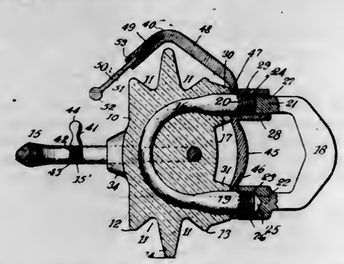
2. A toy comprising a closed rotatable member, a figure balancing weight movably mounted within said member, figure supporting arms on the weight permitting free rocking motion, a figure on the arms, and a handle for the rotatable member.

[Claims 1, 3, and 4 not printed in the Gazette.]

1,270,457. STRAIN-INSULATOR PROVIDED WITH DETACHABLE AND ADJUSTABLE ARCING MEANS. LOUIS STEINBERGER, Brooklyn, N. Y. Filed Nov. 14, 1916. Serial No. 131,219. (Cl. 175—30.)

1. An insulator provided with arcing pole members secured respectively to supports on the opposite sides of the insulator body, said pole members being mounted for bodily adjustment to and from each other.

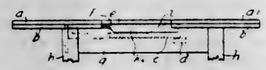
2. An insulator provided with a detachable arcing member having an extensible pole member detachably and adjustably secured thereto.



9. An insulator having a body portion of insulating material, strain members partially embedded in the body portion and projecting respectively from each side thereof, arcing means consisting of a pole member on one of the strain members and another pole member bodily removable therefrom and adjustably supported upon a frame removably secured to the other strain member.

[Claims 3 to 8, 10, and 11 not printed in the Gazette.]

1,270,458. EXPANDING TABLE. FRANK WILLIAM SYRED, High Wycombe, England. Filed July 23, 1917. Serial No. 183,196. (Cl. 45—112.)

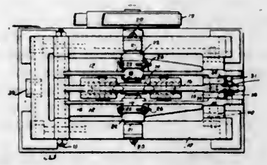


1. In an expanding table, the combination of a frame carried by the legs, the said frame having side rails, a top divided into two sections, means for enabling each of the said sections to slide with respect to the side rails so that the said sections can be brought together or separated, means for limiting the sliding action of the said sections, a loose leaf, a recess in the side rails of sufficient size to enable the loose leaf to rest within the same and to come below the sectional top of the table, runners attached at one end to one of the sections of the top, means beneath the other section of the top for supporting the said runners, recesses in the said runners, to receive the additional leaf and to allow it to rest beneath the sectional top of the table, inclined surfaces at the ends of the cut away portions of the runners remote from the top section to which the said runners are attached, and inclined surfaces to the cut away portions of the side rails facing in an opposite direction to the inclines on the cut away portions on the runners, all for the purposes set forth.

2. In an expanding table, the combination of a frame carried by the legs, side rails to the said frame, a top divided into two sections, rabbeted portions coming below the two sections of the top, grooves in the side rails and the legs for the reception of the said rabbeted portions for enabling the sections of the top to be brought together or separated, means for limiting the sliding action of the said sections, a loose leaf, a recess in the side rails of sufficient size to enable the loose leaf to rest within the same and to come below the sectional top of the table, runners attached at one end to one of the sections of the top, a bridge beneath the other section of the top for supporting and guiding said runners, recesses in the said runners to receive the additional leaf and to allow it to rest beneath the sectional top of the table, inclined surfaces at the ends of the cut away portions of the runners remote from the top section to which the said runners are attached, and inclined surfaces to the cut away portions of the side rails facing in an opposite direction to the inclined surfaces on the cut away portions on the runners, all for the purposes set forth.

3. In an expanding table, the combination of a frame carried by the legs, side rails to the said frame, a top divided into two sections, rabbeted portions coming below the two sections of the top, grooves in the side rails and the legs for the reception of the said rabbeted portions for enabling the sections of the top to be brought together or separated, means for limiting the sliding action of the said sections, a loose leaf, a recess in the side rails of sufficient size, to enable the loose leaf to rest within the same and to come below the sectional top of the table, runners attached at one end to one of the sections of the top, a bridge beneath the other section of the top for supporting and guiding the said runners, recesses in the said runners to receive the additional leaf and to allow it to rest beneath the sectional top of the table, inclined surfaces at the ends of the cut away portions of the runners remote from the top section to which said runners are attached, and inclied surfaces to the cut away portions of the side rails facing in an opposite direction to the inclined surfaces on the cut away portions on the runners, and means beneath the loose leaf for preventing the lateral displacement thereof, all substantially as described, and for the purposes set forth.

1,270,459. BEAD-TRIMMING MACHINE. RYLAND L. TAFT, Hartford, Conn., assignor to The Hartford Rubber Works Co., a Corporation of Connecticut. Filed Apr. 14, 1917. Serial No. 161,988. (Cl. 164—60.)



1. In a machine for removing flash from a bead, spaced idler disk cutters, a disk shear coacting with the cutters and having its shearing face extending into the space between the cutters, a disk guide for the bead disposed between the cutters, means connecting the guide and cutters for movement as a unit toward and away from the shear, and means for independently driving the shear.

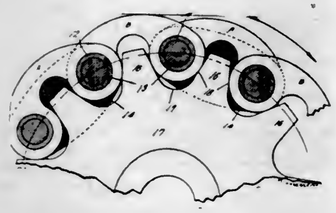
3. In a machine for removing flash from a bead, spaced disk cutters, a disk shear coacting with the cutters, a disk guide for the bead disposed between the cutters and having an axial opening, and axial projections on the cutters entering said opening and connecting the guide and the cutters for movement as a unit toward and away from the shear.

7. In a machine for removing flash from a bead, spaced idler disk cutters, a disk shear coacting with the cutters and having its shearing face extending into the space between the cutters, pivoted arms to which the cutters are secured, a guide for the bead disposed between the cutters, means for moving said arms on their pivots to adjust the cutters radially with respect to the shear, means for locking the arms in adjusted position, and means for independently driving the shear.

9. In a machine for removing flash from a bead, spaced idler disk cutters, a disk shear coacting with said cutters and having its shearing face extending into the space between the cutters, spindles to which the cutters are attached, a shell carrying each spindle and having screw threads on the outside, a housing in which the shell is turnably mounted, a threaded member in the housing engaging the screw threads of the shell, manual screwing of the shells into or out of the housings serving to move the cutters toward or away from each other axially, means for causing the threaded members to bind upon and clamp the shells in adjusted positions, and means for independently driving the shear.

[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,270,460. CHAIN. ARTHUR B. TAYLOR, Detroit, Mich. Filed Oct. 15, 1917. Serial No. 196,599. (Cl. 74—31.)



1. A chain composed of a plurality of composite U-shaped links comprising alternate hard and soft metal laminæ, said links being in a staggered relation with their ends overlapping and pivotally interconnected and each composite link having its hard and soft laminæ symmetrically arranged with respect to the medial plane of the link.

3. A chain composed of a plurality of composite U-shaped links comprising alternate hard and soft metal laminæ, said links being in a staggered relation with their ends overlapping and pivotally interconnected.

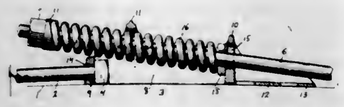
4. A chain composed of a plurality of composite U-shaped links comprising interspersed hard and soft metal laminæ, said links being in a staggered relation with their ends overlapping and pivotally interconnected.

10. A chain composed of a plurality of U-shaped links in a staggered relation with their ends overlapping and pivotally interconnected, said links having rounded working faces at their ends for engagement with the sprocket teeth of which they are astride, and a sprocket the teeth of which have plane faces oblique to the radii and engaged by rounded ends of the links which are astride such teeth.

15. A chain composed of a plurality of U-shaped links in a staggered relation with their ends overlapping and pivotally interconnected, and pivot pins projecting through overlapping links, each pivot pin being rigid against turning with relation to alternate ones of those links of which it forms the pivoted interconnection so that all the wear is between such pin and the other links, said links having rounded working faces at their ends for engagement with the sprocket teeth of which they are astride, and a sprocket the teeth of which have plane faces oblique to the radii and engaged by rounded ends of the links which are astride such teeth.

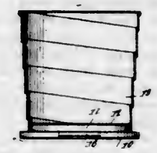
[Claims 2, 5 to 9, 11 to 14, and 16 not printed in the Gazette.]

1,270,461. LUG. EMIL C. TECKTONIUS, Racine, Wis., assignor to E. C. Tecktonius Manufacturing Company, Racine, Wis., a Corporation of Wisconsin. Filed July 24, 1916. Serial No. 110,876. (Cl. 217—92.)



An integral hoop or band lug for tanks or similar structures composed of side walls, front and rear walls and an arch connecting the side walls between the front and rear walls, the rear wall being provided with an aperture elongated in the direction of a diameter of a tank or similar structure and wide enough to freely receive a hoop or band so that the rear wall serves as an abutment for a spring surrounding a hoop or band to take the entire strain put upon the hoop or band, an aperture being provided between the front wall and the arch through which the end of the hoop or band, with the spring surrounding the same, can freely pass in a line tangent to the structure to which the lug is applied although the hoop or band may pass through the elongated aperture in the rear wall at different distances from the structures to which the lug may be applied depending upon the sizes or diameters of the structures, and the front wall being provided with an aperture in a line with the elongated aperture in the rear wall to receive the stationary end of a hoop or band.

1,270,462. DRINKING-CUP. STEPHEN THUERINGER, Makoti, N. D. Filed Oct. 19, 1917. Serial No. 197,471. (Cl. 65—58.)



2. In a device of the character described the combination of a container and a receptacle for fitting in the container having a body portion formed of a flat strip of resilient material coiled in overlapping spirals normally in a set-up position and moving of its own resiliency from a collapsed position to a set-up position when withdrawn from the container.

5. A device of the character described comprising a hollow base, a body carried by the base, a false bottom resting upon the base within the body, a sliding plate passing through the hollow base, auxiliary sliding plates positioned in the body and having their inner end portions overlapping the first mentioned plate and provided with cut-outs forming seats, latches extending from the first mentioned plate and fitting into the seats to hold the auxiliary plate against inward movement, links pivotally and slidably connected with one end portion of the first mentioned plate and extending longitudinally thereof, links pivotally and slidably connected with the opposite end portions of the first mentioned plates and pivotally engaged by the first mentioned links, and arms pivotally connected with the end portions of the second mentioned links and connected with the false bottom whereby movement of the first mentioned plate in one direction and inward movement of the auxiliary plate will move the links and arms to raise the false bottom.

[Claims 1, 3, 4, and 6 to 8 not printed in the Gazette.]

1,270,463. ADJUSTABLE CRUTCH. JOHN P. TONOLLI, Duluth, Minn. Filed Nov. 13, 1917. Serial No. 201,746. (Cl. 135—49.)



1. A crutch of the character described comprising an upper body portion, a lower body portion pivotally and longitudinally adjustably attached to the upper portion

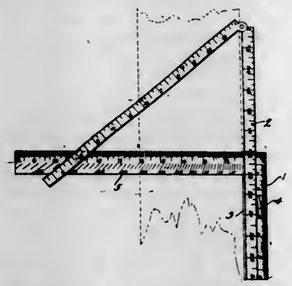
and a lower end portion slidably adjustably attached to the lower body portion.

2. A crutch of the character described comprising an upper body portion, a lower body portion, means pivotally and longitudinally adjustably uniting said two portions and a ground engaging portion slidably adjustably carried by the lower body portion whereby both last mentioned portions may be folded approximately within the upper body portion.

3. A crutch of the character described comprising an upper body portion having depending side members, a single hole adjacent the end of each side member, a series of holes spaced upwardly from each single hole, a lower body portion comprising spaced side members, single holes adjacent the upper ends of the last mentioned side members, a series of holes spaced downwardly from each of said single holes, a handle intermediate of the upper ends of the lower body portion, a bolt passing through both body portions of the crutch and through the handle, short bolts passing through the holes in the lower ends of the depending side members and through the contacting portions of the lower body side members and a slidably adjustable ground engaging end piece intermediate of the lower ends of the lower body portion substantially as and for the purpose described.

[Claims 4 and 5 not printed in the Gazette.]

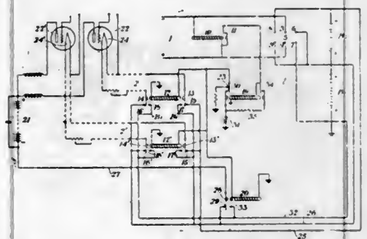
1,270,464. SQUARE AND MITER DEVICE. JOHN TOOMEY and JOSEPH OLDHAM, North Adams, Mass. Filed May 23, 1917. Serial No. 170,480. (Cl. 33—95.)



A combination tool of the class described consisting of a body member having arms arranged at an angle to each other, a second member adapted to be attached to one of said arms to provide an extension therefor, said second member consisting of a relatively stationary section and a freely movable section arranged for cooperation with the other of said arms of the body member for determining the angle with respect thereto, said other body member arm being provided with graduations with which the freely movable section coöperates, and clamping means on said first mentioned body member arm for holding the extension member in place thereupon.

1,270,465. AUTOMATIC SWITCHING MEANS. JOHN F. TOOMEY, New York, N. Y., assignor to American Telephone and Telegraph Company, a Corporation of New York. Filed Sept. 13, 1916. Serial No. 119,938. (Cl. 171—314.)

1. The combination of a source of charging energy, two batteries serially connected and a plurality of vacuum tube repeaters, each repeater comprising a filament, and a positive electrode, a source of direct current energy whose positive terminal is connected to said positive electrodes in multiple, relays individual to said repeaters for connecting said filaments in multiple with either of said batteries when the other of said batteries is being charged, and a relay common to said plurality of repeaters for connecting the negative terminal of said source of direct current energy to that battery terminal to which the positive terminals of said filaments are connected.



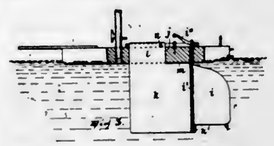
3. The combination of a source of charging energy, two batteries serially connected, switching means to connect said source with either of said batteries, an energy consuming device adapted to be supplied by either of said batteries, a relay for connecting said energy consuming device to said batteries alternatively, and a second relay for controlling the operation of said first named relay.

8. In a system of distribution, the combination of two sources serially connected and a load, said load comprising a vacuum tube structure including a heated filament and a plate, an auxiliary source to produce a potential difference between the filament and the plate, switching means for connecting either of said first sources to the filament to heat the same and a separate switching means controlled by said first switching means to connect a pole of the auxiliary source to one side of the filament.

10. In a system of distribution, the combination of two sources serially connected and a load, said load comprising a plurality of vacuum tubes each including a heated filament and a plate, an auxiliary source to produce a potential difference between the filaments and the plates, a plurality of switching devices for connecting either of said first sources to the filaments to heat the same and a switching means controlled by said first switching means for connecting a pole of the auxiliary battery to the filament through said switching devices.

[Claims 2, 4 to 7, and 9 not printed in the Gazette.]

1,270,466. TOY SAILING-CRAFT. CHARLES M. VAN BUREN, Paterson, N. J. Filed Nov. 14, 1917. Serial No. 202,036. (Cl. 46—37.)



1. A toy sailing craft including a sail-rigged body or hull member and a straight-course-maintaining member, one of said members being arranged above the other and one having a longitudinal upright slit and the other a longitudinal upright fin portion removably arranged in said slit in rigid relation to the member having such slit.

2. A toy sailing craft including a sail-rigged broad-beamed slab-like body or hull member and a straight-course-maintaining member, one of said members being arranged above the other and one having a longitudinal upright slit and the other a longitudinal upright fin portion removably arranged in said slit in rigid relation to the member having such slit.

3. A toy sailing craft including a sail-rigged body or hull member and a straight-course-maintaining member, one of said members being arranged above the other and one having a longitudinal slit penetrating it and the other a longitudinal upright fin portion protruding through the slit and a removable pin penetrating the protruding portion of the fin and preventing withdrawal of the fin from said slit.

4. A toy sailing craft including a sail-rigged body or hull member having a longitudinal upright slit, a depending plate having an upstanding fin portion removably arranged in said slit, and a rudder pivotally supported in the rear edge portion of said plate.

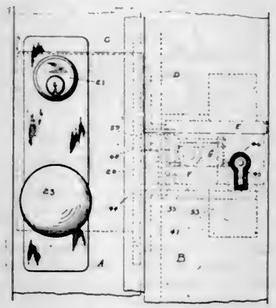
1,270,467. BUTTON. ARTHUR VOGELSANG, Waterbury, Conn., assignor to Waterbury Button Company, a Corporation of Connecticut. Filed Feb. 8, 1918. Serial No. 216,071. (Cl. 24—90.)



1. A button comprising a metallic shank and a head united thereto, the button-head having divergent passages entering from its lower surface, and the shank consisting of divergent prongs, frictionally engaged in said passages, and an eye portion external to the button-head uniting said prongs of the shank adjacent to the eye; and a binding plate confining said prongs in close proximity to one another at a point adjacent to the eye substantially as and for the purpose described.

[Claim 2 not printed in the Gazette.]

1,270,468. LOCK. HENRY G. VOIGHT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Dec. 10, 1915. Serial No. 66,104. (Cl. 70—69.)



1. The combination with a door and door frame, of a bolt on the door for locking the latter to said frame, and an electrical shut-out device on the door frame coöperating with said bolt to lock the door; substantially as described.

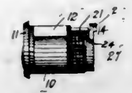
15. The combination with a door and door frame, of a lock on the door having a bolt, a key for actuating said bolt, means in said lock for dogging said bolt in its protracted position so that the key cannot retract the same, and electromagnetic means on the door frame for controlling said dogging means; substantially as described.

35. The combination with a lock and a key therefor, of distance controlled means for preventing the operation of said lock by said key.

[Claims 2 to 14 and 16 to 34 not printed in the Gazette.]

1,270,469. LOCK. HENRY G. VOIGHT, New Britain, Conn., assignor to Sargent & Company, New Haven, Conn., a Corporation of Connecticut. Filed Jan. 26, 1916. Serial No. 74,461. (Cl. 70—93.)

1. In a pin tumbler lock, a casing, a key plug, radial pin tumblers coöperating with said casing and key plug, said key plug movable in an endwise direction, and a rollback carried by and movable with said key plug; substantially as described.



2. In a pin tumbler lock, the combination with a casing, a key plug, a plurality of pin tumblers coöperating with said casing and key plug, two keys for said lock, said key plug movable endwise by one key but immovable endwise by the other key, and a rollback fixed to said key plug at the rear of the lock and movable therewith; substantially as described.

18. In a cylinder lock, the combination of a casing, a key plug rotatable in the casing, a rollback fixed to the rear end of the key plug, a sleeve in the casing surrounding said key plug, pin tumblers coöperating with the key plug, sleeve and casing, a key for racking said pin tumblers so as to release the key plug from the sleeve and rotate said rollback in a definite plane, another key for racking said pin tumblers so as to rotate the key plug and sleeve together, and a cam device for thrusting the key plug and sleeve rearwardly at a definite point in the rotation of said sleeve and key plug by said second key, and for moving said key plug and sleeve forwardly again as they are turned back to the initial position; substantially as described.

[Claims 3 to 17 not printed in the Gazette.]

1,270,470. ENVELOP-MOISTENER. LLOYD B. WAGGONER, San Diego, Cal. Filed Oct. 22, 1917. Serial No. 197,935. (Cl. 91—54.4.)



1. A supporting member, a wick-clamp and a wick-shield at one end of the supporting member, and a bottle clamp near the opposite end of the supporting member, both clamps and the shield being on the same side of the supporting member.

2. A moistener comprising a support formed from a blank of metal and having an upper arm and a lower arm in parallel relation to one another, said lower arm being formed with a pair of spring clamping elements and a pair of wick-engaging elements, a wick having one end portion engaged by said wick-engaging elements, and a reservoir having the other end of said wick depending thereinto and being normally supported by said spring clamping elements.

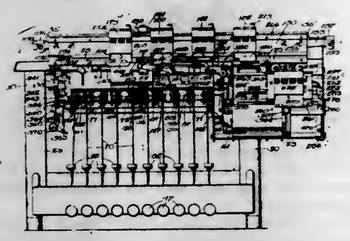
4. A supporting member comprising spaced elements connected at one end, and a wick and a bottle clamp carried by one of the said elements and disposed in spaced relation.

[Claims 3 and 5 not printed in the Gazette.]

1,270,471. CALCULATING-MACHINE. JOHN C. WAHL, Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del., a Corporation of Delaware. Filed Mar. 15, 1916. Serial No. 84,340. (Cl. 235—59.)

20. In a calculating machine, the combination of a set of numeral keys, a lock for said numeral keys, a floating lever determining the effectiveness of said lock, a main carriage, an adjustable cam on said main carriage, a roller coöperating with said cam, said cam and roller connection serving to determine the position of a point in said floating lever, a cross decimal carriage, and means

connecting said decimal carriage to a second point in said floating lever whereby the position of the same and the effectiveness of said lock is determined by the joint action of the two said carriages.



21. In a calculating machine, the combination of a main carriage, a plurality of vertical totalizers having a series of connecting locations mounted thereon, a cross decimal carriage, means to intermittently connect and disconnect said cross decimal carriage with said connecting locations, a set of numeral keys, a lock for said numeral keys controlled jointly by the position of said decimal carriages, a part of the control for said lock being simultaneously adjustable with a connecting location, whereby an adjustment of the point of connection of said cross totalizer also simultaneously adjusts the point of operation of said lock.

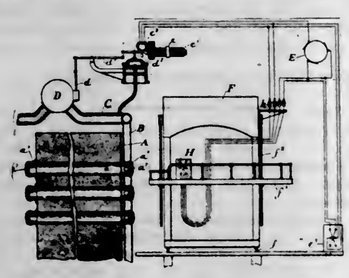
26. In a calculating machine, the combination of a main carriage, a tabulating device for said main carriage, means to prevent the rebound of said main carriage when the same is tabulated, a cross decimal carriage adapted to be intermittently connected to said main carriage, and means to prevent the rebound of said cross carriage when the same is tabulated through the intermediation of said main carriage.

44. In a calculating machine, the combination of a cross decimal carriage, a set of keys, a universal member moved by any of said keys, a lever engaged by said cross carriage when in its normal position, and a lock for said universal member controlled by the position of said lever.

45. In a calculating machine, the combination of a main carriage, a cross decimal carriage, a spring tending to return said cross decimal carriage to its normal position, and a latch operating independent of the position of said main carriage and adapted to hold said cross carriage displaced from its normal position.

[Claims 1 to 19, 22 to 25, 27 to 43, and 46 not printed in the Gazette.]

1,270,472. CONTROL MECHANISM FOR GAS-GENERATING APPARATUS. ARTHUR W. WARNER, Sewickley, Pa., assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa., a Corporation of New Jersey. Filed Feb. 3, 1915. Serial No. 5,866. (Cl. 48—173.)



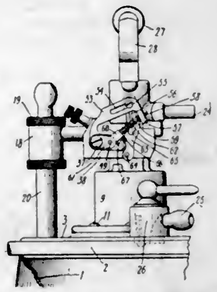
1. In gas generating apparatus, the combination of a retort and a retort lid, an exhauster for the retort, a regulator for varying the action of the exhauster, and regulator controlling means having position adjacent to the retort lid, whereby the lid and the controller may be manipulated by a single operator.

3. In gas generating apparatus, the combination of a plurality of retorts and retort lids, an exhauster common to the retorts, a regulator for varying the action of the exhauster, a charging machine adapted to be moved to position for coöperating with any retort, the machine having an operator's station movable therewith and from which the lid of the retort to be charged is accessible, and a controller for the exhauster regulator, said controller located on the charging machine and accessible from the operator's station.

8. In gas generating apparatus, the combination of a retort heating structure, retorts located in said structure and spaced apart horizontally and vertically and accessible from the exterior of the furnace structure, a retort charging machine adjustable both horizontally and vertically relatively to said structure for serving the several retorts, an exhauster common to the several retorts, and means located on the charging machine and movable horizontally and vertically therewith for controlling the operation of the exhauster.

[Claims 2 and 4 to 7 not printed in the Gazette.]

1,270,473. PULSATOR FOR MILKING-MACHINES. ROBERT WARNOCK, Bloomfield, N. J., assignor to Empire Cream Separator Company, Bloomfield, N. J., a Corporation of New Jersey. Filed Aug. 7, 1915. Serial No. 44,176. (Cl. 31—101.)



1. In pulsator mechanism for milking apparatus, the combination of a pulsator, vacuum operating means for actuating the same and valve mechanism actuated by said vacuum operating means, said valve mechanism including a valve seat, a valve carrier and a valve carried by said carrier and held in sliding engagement with said seat at all times by the action of the vacuum.

5. In pulsator mechanism for milking apparatus, the combination of a pulsator valve, vacuum operating means for actuating the same, and control valve mechanism for controlling the action of the vacuum on said operating means, said control valve mechanism including a valve seat, a valve carrier having a recess therein, and a valve mounted in said recess, said valve being so formed that it cannot be inserted in said recess in improper position.

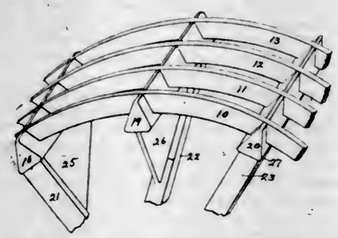
11. In pulsator mechanism for milking apparatus, the combination of a casing having a vacuum outlet port, a connection from said port to a source of vacuum, an atmospheric inlet opening, two connected inlet ports, a common connection from both of said ports for teat cups, and a pulsator valve working in said casing acting in one position to cover one of said inlet ports and place the second inlet port in communication with the vacuum outlet port, said valve acting in another position to cover said second inlet port and admit atmospheric pressure to said first inlet port.

17. In milking apparatus, a milk pail, a milk pail cover, a pipe connected to said cover, an air filter mounted in said pipe, a check-valve casing connected to said pipe and a connection to said check valve casing through which air may be exhausted from said milk pail through said air filter and check valve.

24. In pulsator mechanism for milking apparatus, the combination of a valve seat having a vacuum port therein, a valve carrier resting upon and movable over said seat and a valve carried by said carrier and held in engagement with said seat at all times by the action of the vacuum.

[Claims 2 to 4, 6 to 10, 12 to 16, 18 to 23, and 25 to 28 not printed in the Gazette.]

1,270,474. TRACTION-WHEEL. HENRY O. WIESE, Perry, Iowa. Filed Oct. 31, 1916. Serial No. 128,750. (Cl. 21—216.)



1. A traction wheel, comprising spaced tread rings, and traction lugs separately formed and loosely carrying said tread rings.

2. A traction wheel, comprising spaced tread rings, and traction lugs separately formed and provided with notches adapted loosely to receive said tread rings, said lugs being adapted to be expanded into contact with said rings.

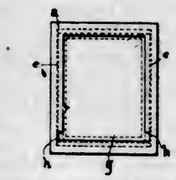
3. A traction wheel, comprising spaced tread rings, traction lugs separately formed and loosely carrying said rings, and spokes integral with and carrying said traction lugs, said lugs and spokes being adapted to be expanded to contact the lugs with said rings.

4. A traction wheel, comprising spaced tread rings, traction lugs loosely carrying said rings, and spokes integral with and carrying said traction lugs, said spokes being separate from and adapted for attachment adjustably to a hub and also integrally braced to said lugs.

5. A traction wheel, comprising spaced tread rings, traction lugs loosely carrying said rings, and spokes integral with and carrying said traction lugs, said spokes being formed with bases separate from and adapted conjunctively to be adjustably secured to a hub.

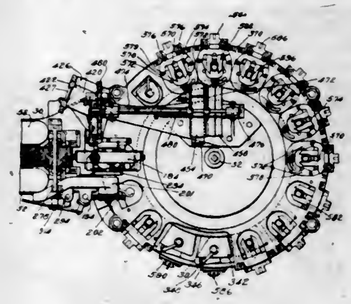
[Claim 6 not printed in the Gazette.]

1,270,475. PICTURE-FRAME. FREDRIK WILKENSON, Gottenborg, Sweden. Filed May 18, 1916. Serial No. 98,254. (Cl. 40—159.)



A picture frame of rectangular outline and comprising rabbeted side and end rails for the reception of a glass and picture, the confronting faces of the rabbeted portion of said rails being formed with grooves to produce one continuous groove extending entirely around the frame for the reception of a backing plate, said side rails being formed with notches disposed at opposite points and intermediate the ends of said grooves formed in the side rails whereby a backing plate may be inserted and locked in the grooves.

1,270,476. MACHINE FOR SORTING SHOE-STOCK. ERASTUS E. WINKLEY, Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed Jan 24, 1916. Serial No. 73,899. (Cl. 83—92.)



1. A machine for sorting shoe stock, having in combination, means for subjecting a plurality of pieces in succession to a like presure over a portion only of their areas, a movable carrier for advancing the pieces one by one to said pressure means, means for automatically supplying said carrier with pieces, and means for automatically removing the pieces from the carrier after they have been operated upon.

11. A machine for operating on pieces of shoe stock, having in combination, a support for lifts or the like; means for supplying a lift to the support when in a definite position; means for operating on the lift on the support in another position; a carrier for moving the support from one of said positions to the other; a lift-holding device, associated and movable with the lift support, for holding the lift thereon; and means, located at the position where the lift is supplied to the carrier, and adapted, when the carrier is in that position, to coöperate with the lift-holding device to actuate the latter.

21. A power driven machine for operating on blanks of sheet material, having in combination, driving mechanism, means for feeding the blanks one by one through the machine, a feeler mounted to reciprocate into and out of the path of the blanks, and a connection between the feeler and the driving mechanism whereby any irregularity in the motion of the feeler will disconnect the driving mechanism and stop the machine.

31. A power driven machine for operating upon pieces of stock having, in combination, a driving mechanism, a movable carrier for supporting and advancing a series of pieces, means for detecting the position of each piece upon the carrier, means responsive to said detecting means or to abnormal load conditions for throwing out said driving mechanism.

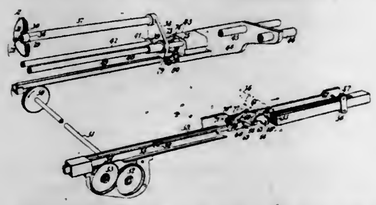
41. A sorting machine having, in combination, a rotary carrier movable step-by-step through a supply station, a grading station and a plurality of sorting stations, means located at the supply station for automatically and successively supplying the carrier with pieces to be sorted, means located at the grading station for separately and successively detecting a characteristic of the pieces as they are advanced, holding means and delivering means disposed at each storing station, and means controlled by said detecting means for causing said delivering means to deliver the pieces to the respective holding means.

[Claims 2 to 10, 12 to 20, 22 to 30, 32 to 40, and 42 to 49 not printed in the Gazette.]

1,270,477. WATERPROOF GLUE. WILLIAM W. WOOD, Tacoma, Wash. Filed July 25, 1917. Serial No. 182,770. (Cl. 87—17.)

A process of making waterproof glue consisting of mixing together one gallon of saturated solution of silicate of soda, two gallons of blood, three gallons of water and one tenth of a fluid ounce of spirits of ammonia, the ammonia aiding in expediting the vaporization of the volatile portions from the joined objects upon which the finished product is placed, said ingredients being thoroughly mixed and subject to a heat of a temperature above 150° F. and not exceeding 200° F. which is a sufficient temperature to cause the mixture to be of such a consistency as adapted to be applied to the surfaces of objects.

1,270,478. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Dec. 24, 1910. Serial No. 599,183. (Cl. 235—63.)



1. In a combined typewriting and computing machine, the combination with a typewriter carriage carrying a projection, and a computing carriage having a hook to engage said projection, so that said computing carriage is controlled by said typewriter carriage in the computing zone; of means for disconnecting and re-connecting said carriages during the travel of the typewriter carriage in opposite directions, including means for automatically depressing and raising said hook.

12. The combination of a typewriter carriage, a rack connected thereto, a computing carriage also having a rack, and a connecting train including gears constantly meshing with said racks, and also including an idle gear to cause the carriages to move in opposite directions.

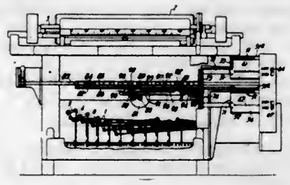
14. In a combined typewriting and computing machine, the combination with a typewriter carriage and a lug on said carriage, of a computing machine carriage, a catch for intercepting said lug to move bodily therewith to cause said computing machine carriage to travel therewith in each direction, means for freeing said catch from said lug during the return movement of the typewriter carriage, and means for freeing said catch from the freeing device.

28. In a combined typewriting and computing machine, the combination with a typewriter carriage and a computing carriage, of a hook for connecting them together, a fixed lug for automatically releasing said hook, a bar connected to said hook, and an intermediate member pivoted on said bar overlying said hook and adapted to strike said lug to swing said hook to ineffective position.

[Claims 2 to 11, 13, 15 to 27, and 29 to 32 not printed in the Gazette.]

1,270,479. COMBINED TYPE-WRITING AND COMPUTING MACHINE. WALTER WRIGHT, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Original application filed Mar. 22, 1909, Serial No. 485,046. Divided and this application filed Aug. 14, 1917. Serial No. 186,106. (Cl. 235—62.)

1. In a computing attachment for typewriters, the combination with a typewriter carriage, of a device arranged to move with the typewriter carriage, a plurality of computing mechanisms, individual actuators therefor, and means whereby, through the continued movement of said device with the typewriter carriage, repeated intermittent movements may be produced of each actuator relative to its corresponding computing mechanism, substantially as described.



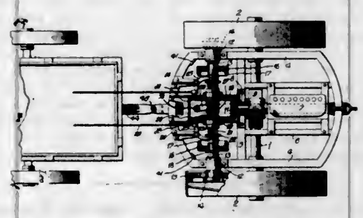
5. In a combined typewriting and computing machine, the combination with a traveling carriage, of a cross-adding device comprising two united totalizers traversable by said carriage, and a silencer for making said carriage ineffective on said totalizers.

8. The combination with a letter-feeding carriage, of a plurality of cross-computing mechanisms, each including a traveling element, and automatic mechanism effective intermittently for connecting said traveling elements simultaneously to said carriage to be advanced thereby, and releasing them to return independently thereof during a single run of said carriage, with provisions whereby any one of said cross-computing mechanisms may be brought to zero independently of any other.

18. In a computing machine, the combination with a key-controlled drive-shaft, of a series of computing heads, a master-wheel for each of said computing heads, a shaft to which each of said master-wheels is splined, means to connect each of said master-wheel shafts to said drive-shaft, and means to move the master-wheels simultaneously along their shafts.

[Claims 2 to 4, 6, 7, 9 to 17, and 19 to 36 not printed in the Gazette.]

1,270,480. TRACTOR. LEO MCCLOSKEY, Maidstone, Ontario, Canada. Filed Aug. 17, 1917. Serial No. 186,681. (Cl. 180—12.)



1. In a tractor, the combination of an axle, traction wheels revoluble upon said axle, a frame fixed on the axle, a power plant on the frame, power transmitting mechanism on the frame for transmitting motion from the power plant to said traction wheels, a draw-bar pivoted intermediate its ends to the axle to turn thereon and having engagement with the frame forwardly and rearwardly of said axle, and means for attaching a trailing device to the rear end of said draw-bar.

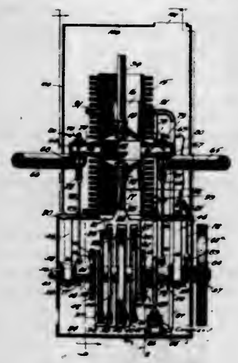
2. In a tractor, the combination of an axle, traction wheels revoluble upon said axle, a frame fixed on the axle, a power plant on the frame, power transmitting mechanism on the frame for transmitting motion from the power plant to said traction wheels, a draw-bar pivotally attached to the axle midway between said wheels and beneath said frame, and means for jointedly connecting a trailing device to the rear end of the draw-bar whereby a short turning radius is secured due to the pivotal connection of the forward end of the draw-bar with the axle and the pivotal connection of the trailing device to its rear end.

3. In a tractor, an axle, traction wheels at the ends thereof, a frame secured upon said axle between said wheels, a draw bar pivotally connected to said axle intermediate its ends and movable below said frame in contact with the front and rear thereof, a power plant on one end of said frame, motion transmitting mechanism on the opposite end of said frame including a drive shaft and clutches adapted for imparting movement to said traction wheels, and means for attaching a trailing device to the rear end of said draw-bar.

4. In a two wheeled tractor having a single right axle and traction wheels rotatable upon the ends thereof, a frame rigidly secured to said axle, a power plant on said frame in a plane at one side of said axle, transmission mechanism on said frame in a plane at the other side of said axle, clutches associated with said transmission mechanism and normally establishing a driving relation between said power plant and said traction wheels, a draw-bar extending diametrically across the frame from front to rear in contact with the lower side thereof and embracing and pivotally attached to the axle to turn upon vertical pivots on the axle, and means for pivotally attaching a trailer device to the end of the draw-bar.

5. In a two-wheeled tractor having a single axle and traction wheels at the ends thereof, of a frame secured intermediate its ends on said axle, a power plant on one end of said frame, transmission mechanism on the opposite end of said frame and adapted to be operated thereby and impart movement to said traction wheels, a draw-bar divided intermediate its ends with said divided ends connected by straps extending above and beneath the axle, a member on the axle having studs passing through openings in the straps to pivotally connect the draw-bar to the axle, said draw-bar engaging the underside of said frame near its forward and rear portions to support the ends of said frame so that said frame may turn relative to said draw-bar upon the pivotal connection of the bar to the axle and is prevented from tilting relative thereto, clutches associated with said transmission mechanism, and normally establishing a driving relation between said power plant and said traction wheels, and controlling means for shifting said clutches.

1,270,481. INTERNAL-COMBUSTION ENGINE. CHARLES J. MENASCO, Birmingham, Ala., assignor of one-half to Howard A. Moseley, Birmingham, Ala. Filed Jan. 10, 1917. Serial No. 141,632. (Cl. 123—51.)



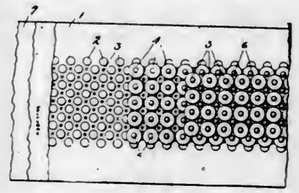
1. In an internal combustion engine, the combination of a working cylinder, opposed pistons therein, having depending piston rods, brackets carried by said rods and movable toward and away from one another, a power shaft between said brackets, a cam secured to said shaft at an intermediate point, a pair of sleeves rotatable upon said shaft at opposite sides of said cam, and having geared connections with the shaft, a cam carried by each sleeve, rollers carried by said brackets and engaging relatively opposite sides of said shaft and sleeve cams, and means carried by said sleeves for moving the pistons in one direction and controlling the same in such movement.

5. In an internal combustion engine, the combination of a working cylinder, opposed pistons therein, a power shaft, and connections between said pistons and said power shaft, including piston actuated cams connected to the power shaft, piston returning cams also connected to the power shaft, and means for checking movement of one of said pistons during a portion of each cycle of movement of the other piston.

6. In an internal combustion engine, the combination of a working cylinder, opposed pistons therein, a power shaft, and connections between said pistons and said power shaft including piston actuated cams carried by the power shaft, certain of which are secured to said shaft, and sleeves on the shaft to which the other cams are connected, having geared connection with the shaft.

[Claims 2 to 4 and 7 to 10 not printed in the Gazette.]

1,270,482. ARMOR FOR PNEUMATIC TIRES. CHARLES E. BATES, Chester, Pa. Filed Dec. 4, 1916. Serial No. 134,873. (Cl. 152—18.)



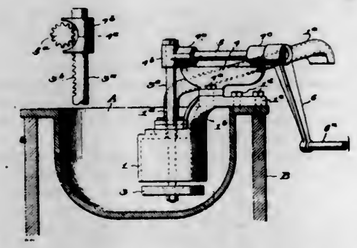
1. An armored inner liner for pneumatic tires comprising a base, a plurality of disks spaced apart and in staggered relation to each other rigidly secured to said base, other disks loosely mounted on rivets in said base between said first-mentioned disks, said second-named disks overlying said first-named disks, a third set of disks secured loosely on rivets in said base between said second-named disks and extending over the spaces between said second-named disks, and means secured to the inner side of said base for preventing chafing of an inner tube.

2. An inner liner for pneumatic tires comprising a base of flexible material, a plurality of metallic disks rigidly secured to said base in longitudinal rows, each of said rows being in staggered relation to the adjoining rows, thereby leaving longitudinal rows of substantially star-shaped spaces between said disks, a second plurality of metallic disks of greater size than said first-named disks and loosely mounted on rivets secured in alternating rows of said spaces and adapted to overlie said first-named disks, a third plurality of disks of the same size as said second-named disks loosely mounted on rivets secured in the remaining rows of spaces and adapted to overlie said second-named disks, and a flexible cover member secured to the under side of said base to prevent chafing of an inner tube.

1,270,483. METAL-PUMP. HENRY F. BECHMAN, Battle Creek, Mich., assignor to Duplex Printing Press Company, Battle Creek, Mich., a Corporation of Michigan. Filed Dec. 24, 1913. Serial No. 808,570. (Cl. 22—70.)

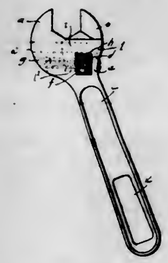
In a molten metal pumping apparatus, the combination of a melting pot; a bracket attached to the top and one side of the pot and depending thereinto; a pump cylinder attached to and suspended from the inner end of said bracket within the pot; a piston in the cylinder; a rod connected with the piston and provided with gear teeth cut therein; a second bracket mounted upon the first bracket adjacent the pump and provided with inner and outer bearings for a horizontal shaft and with a vertical sleeve adjacent the inner bearing for guiding the toothed portion of the piston rod, said sleeve also

having an opening in its side adjacent the inner bearing; a manually operable shaft mounted in said bearings; a



pinion on the inner end of said shaft lying partly within the opening in said sleeve and engaging the teeth of the piston rod through said opening; and a discharge spout connected with said pump cylinder, substantially as described.

1,270,484. WRENCH. HENRY G. BONNEY, Philadelphia, Pa. Filed Dec. 17, 1917. Serial No. 207,428. (Cl. 81—165.)

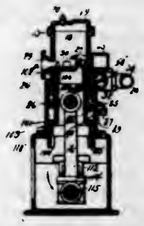


In a wrench, the combination with a head provided with a fixed jaw, an adjustable jaw and parallel transverse grooves in which said adjustable jaw is adapted to fit slidingly and to travel to and fro therethrough, of a parallel transverse channel provided directly above the upper groove, a parallel transverse channel cut through the dividing web of said grooves, said channels forming duplicate bearings for said adjustable jaw, an adjusting screw, an aperture in the face of said head in which is positioned a nuried member interiorly threaded to engage the exterior threads of said adjusting screw, the lower portion of said adjustable jaw being cut away for a part of its length to permit of its movement over said nuried member to the extent of the widest separation of the jaws, the remaining portion of the lower part of said jaw forming a tapped nut through which the said adjusting screw operates to move said jaw to any desired position.

1,270,485. THREE-CYLINDER GAS OR VAPOR ENGINE. GASTON A. BRONDER, Brooklyn, N. Y. Filed May 21, 1914. Serial No. 840,055. (Cl. 123—59.)

1. In a machine of the character described the combination of three cylinders, each comprising a power barrel and a pump barrel, a piston for each cylinder comprising a power end and a pump end, a main valve for a fuel mixture and a valve for air coacting with each pump barrel, the volumes of the fuel mixture and air having a predetermined ratio, a receiver connecting a pump barrel with a coacting power barrel, the volume of said receiver somewhat less than the volume of air admitted for each stroke into the pump barrel.

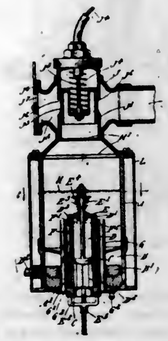
2. In a gas engine the combination of a cylinder comprising a power barrel and a pump barrel, a piston for the cylinder, a valve for the admission of a fuel mixture to the pump barrel, a valve for the admission of air to the pump barrel, the valve for the admission of the fuel mixture being open a predetermined length of the stroke of the piston, and the valve for the admission of air being open for the remainder of the stroke.



3. In an engine of the character described the combination of three cylinders, a reciprocating piston in each cylinder, a pump barrel formed with each cylinder, a valve chamber for the operating fluid of the engine connected to each pump barrel, a valve for each valve chamber, an air inlet valve for each pump barrel, and a receiver interposed between each cylinder and the valve chamber of the pump barrel of one of the other cylinders.

4. In an engine of the character described the combination of three cylinders, a reciprocating piston in each cylinder, a pump barrel formed with each cylinder, a valve chamber for the operating fluid of the engine connected to each pump barrel, a valve for each valve chamber, an air inlet valve for each pump barrel and a receiver interposed between each cylinder and the valve chamber of the pump barrel of one of the other cylinders and a crank for each piston, the cranks distributed so that the crank of the second piston precedes and makes an angle of one hundred and twenty degrees with the crank of the first piston and the crank of the third piston precedes and makes an angle of one hundred and twenty degrees with the crank of the second piston and the crank of the first piston precedes and makes an angle of one hundred and twenty degrees with the crank of the third piston.

1,270,486. CARBURETING APPARATUS FOR INTERNAL-COMBUSTION ENGINES. ROBERT MELVILLE BROWN, London, England. Filed June 13, 1917. Serial No. 174,476. (Cl. 261—78.)



1. In a carbureter, the combination of, a mixing-chamber, a fuel-container, an air-admission tube (D) which extends into the mixing-chamber at one end and at the other end is in free communication with the atmosphere, fuel-feed capillary conduits set around the said tube and extending from the fuel-container up the same with their

discharging mouths in the direction of the engine-suction, the tube being provided with radial passages situated one at the top of each fuel-feed conduit which radial passages communicate between the interior of the tube and the mixing-chamber, and means at the inner end of the tube beyond the said radial passages to offer resistance to the air drawn in from the outer end of the tube, for the purpose set forth.

2. In a carbureter, the combination of, a mixing-chamber, a fuel-container, an air-admission tube (D) which extends into the mixing-chamber at one end and at the other end is in free communication with the atmosphere, fuel-feed capillary conduits set around the said tube and extending from the fuel-container up the same with their discharging-mouths in the direction of the engine-suction, the tube being provided with radial passages situated one at the top of each fuel-feed conduit which radial passages communicate between the interior of the tube and the mixing-chamber, and a suction-valve (E) which opens in the direction of the engine-suction and is yieldingly-controlled to close the inner end of the tube at a point beyond the radial air-passages, for the purpose set forth.

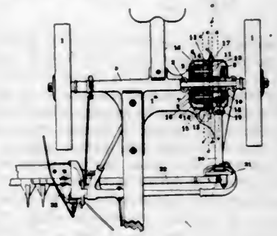
3. In a carbureter, the combination of, a mixing-chamber, a fuel-container, an air-admission tube (D) which extends into the mixing-chamber at one end and at the other end is in free communication with the atmosphere, fuel-feed capillary conduits set around the said tube and extending from the fuel-container up the same with their discharging-mouths in the direction of the engine-suction, the tube being provided with radial passages situated one at the top of each fuel-feed conduit which radial passages communicate between the interior of the tube and the mixing-chamber, and a suction-valve (E) which opens in the direction of the engine-suction and is yieldingly-controlled to close the inner end of the tube at a point beyond the radial air-passages, the stem of which is free relatively to the valve but carries an abutment for a spring above the valve, which spring is in compression between the valve and the said abutment, the said stem being carried down through the bottom of the carbureter where it is provided with adjusting nuts (E^5) for ready adjustment of the pressure of the spring, for the purpose set forth.

6. In a carbureter, the combination of, a mixing-chamber having a bottom for collecting the heavier particles of fuel-spray, the said bottom being so constructed as to prevent these from passing by gravity out to the external atmosphere and having return draining means to the fuel-container, a fuel-feed capillary conduit extending from the fuel-container to a point in the mixing-chamber which is above the bottom of the said chamber and has its mouth directed to discharge in the direction of the engine-suction, an atomizing-conduit having its discharge-outlet close to the discharge-outlet of the fuel-conduit but approximately at right-angles thereto to discharge the fuel laterally outward into the surrounding mixing-chamber in the form of a spreading jet and having its other end in direct communication with the external atmosphere without communicating with the mixing-chamber at any point between the discharge end of the atomizing-conduit and that at which the external atmosphere is admitted to the atomizing-conduit, the height of the discharge end of the fuel-feed conduit from the bottom of the mixing-chamber being such as to insure that the said spreading jet shall not impinge against this bottom, and means for admitting air to the mixing-chamber under the action of the engine-suction, the air-admission points being so placed that the incoming air does not come into the path of the heavier particles of fuel which fall to the draining bottom of the mixing-chamber, for the purpose set forth.

[Claims 4, 5, and 7 to 9 not printed in the Gazette.]

1,270,487. GEARING FOR MOWING-MACHINES. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Dec. 11, 1913. Serial No. 806,094. (Cl. 56—75.)

1. The combination with the reciprocating variably loaded, working device, the frame, the two ground wheels, the axle rotated by the wheels, and the prime power wheel driven by the axle, of the train of power-transmitting devices interposed between said prime power wheel and the reciprocating working device to drive the latter, each of the devices of said transmitting train being held bodily fixed longitudinally of the axle and at a fixed distance radially therefrom and all of the parts of the said train being operatively connected together permanently to maintain at all times a power-transmitting relationship with each other, and means optionally interposed between the frame and the devices of the said transmitting train to prevent transmission of power from the prime power wheel to the reciprocating working device without moving any of the devices of said train from power-transmitting relation with all of the others.



4. The combination of a frame, an axle journaled thereon having supporting wheels with which it revolves in a forward direction, a reciprocating, variably loaded, working device, a crank shaft to transmit power to the reciprocating working device, a bevel pinion on the crank shaft, a bevel gear loosely mounted on the axle and permanently meshing with the bevel pinion on the crank shaft, a gear wheel fixed bodily, in one position on the axle, a train of gear wheels supported on the axle and rotatable in relation to the axle, the bevel gear and the said fixed gear, all the wheels of the said train being permanently connected to each other, to the fixed gear and to the bevel gear to maintain at all times a power-transmitting relationship and each wheel of said train being held bodily fixed in position longitudinally of the axle, and a stop carried by the frame for stopping the rotation bodily of the gears of the said train.

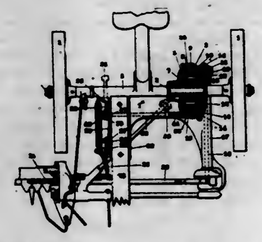
5. The combination of a frame, an axle journaled therein having supporting wheels with which it revolves in a forward direction, a reciprocating variably loaded, working device, a crank shaft to convey power to the reciprocating working device, a bevel pinion on the crank shaft, a bevel gear mounted loosely on the axle and meshing with the bevel pinion on the crank shaft, an internal gear rigidly mounted on the axle, a pinion loose on the axle and permanently connected rigidly to the loose bevel gear, intermediate gears meshing with and driven by the fixed internal gear and permanently meshing with said loose pinion, said intermediate gears being mounted on axes eccentric to the axle and adapted to rotate bodily around the axle when not transmitting power to the loose bevel gear and to be held bodily stationary relatively to the frame when rotating to transmit power, and a movable stopping device on the frame for holding said intermediate gears from rotating bodily around the axle.

[Claims 2, 3, and 6 to 9 not printed in the Gazette.]

1,270,488. MOWER. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Sept. 22, 1914, Serial No. 862,904. Renewed Jan. 19, 1918. Serial No. 212,839. (Cl. 56—74.)

1. In a mower, the combination of a frame, an axle journaled thereon, ground wheels operating substantially as described to rotate the axle, a cutter, a train of power transmitting gearing mounted on the axle in constant operative relation and permanently connected with the cutter to operate the latter by power from the ground

wheels, and means to raise the cutter and to automatically check the transmission of power thereto.

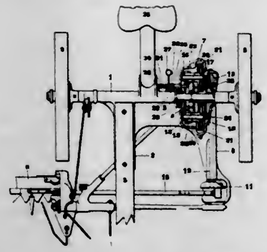


2. In a mower, the combination of a frame, an axle journaled thereon, ground wheels operating substantially as described to rotate the axle, a cutter, a train of power transmitting gearing mounted on the axle in constant operative relation and permanently connected with the cutter to operate the latter by power from the ground wheels and means to raise the cutter and to automatically and simultaneously check the transmission of power to the cutter when the latter is raised.

3. In a mower, the combination of a frame, an axle journaled thereon, ground wheels operating substantially as described to rotate the axle, a cutter, a train of power transmitting gearing mounted on the axle in constant operative relation and permanently connected with the cutter to operate the latter by power from the ground wheels, a rotatable member loosely mounted on the axle and carrying a portion of the gearing, a lever connected with the cutter and operable to raise the latter at will, and means actuated by the lever to check the transmission of power to the cutter when the latter is raised.

[Claims 4 to 11 not printed in the Gazette.]

1,270,489. MOWER. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 10, 1914, Serial No. 866,109. Renewed May 17, 1918. Serial No. 235,055. (Cl. 56—75.)

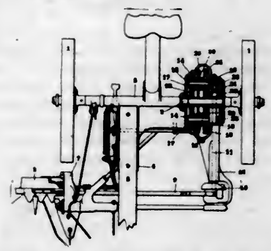


1. In a mower, the combination of an axle, ground wheels supported on the axle and adapted to rotate therewith in a forward direction a reciprocating cutter, a train of power transmitting devices in constant engagement with each other and with the cutter and adapted to operate the latter by power from the ground wheels when one of said devices is held immovable, said train comprising a bevel gear loosely mounted on the axle and permanently connected with the cutter, a second gear loosely mounted on the axle, a member permanently secured on the axle and rotatable therewith, gearing supported on said member and in constant engagement with the bevel gear and second gear, and means to hold the second gear immovable during operation of the cutter.

2. In a mower, the combination of an axle, ground wheels supported on the axle and adapted to rotate therewith in a forward direction, a reciprocating cutter, a train of power transmitting devices in constant engagement with each other and with the cutter and adapted to operate the latter by power from the ground wheels when one of said devices is held immovable, said train comprising a bevel gear loosely mounted on the axle and permanently connected with the cutter, a second gear loosely mounted on the axle, a member rotatable with the axle and rigidly secured thereon between the bevel gear and the second gear, gearing supported on said member and in constant engagement with the bevel gear and second gear, and means to hold the second gear immovable during operation of the cutter.

[Claims 3 and 4 not printed in the Gazette.]

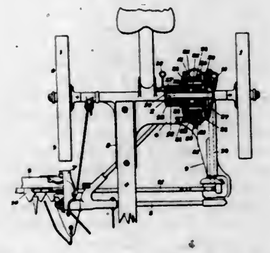
1,270,490. MOWING-MACHINE. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 12, 1914, Serial No. 866,346. Renewed May 17, 1918. Serial No. 235,056. (Cl. 56—75.)



1. In a mower, the combination of an axle having supporting wheels with which it revolves in a forward direction, a cutter, a crank shaft, a train of power transmitting devices supported on the axle in constant engagement with each other and with the crank shaft and adapted to actuate the latter to operate the cutter by power from the ground wheels when one of said devices is held against rotation around the axle, said train comprising a bevel gear loosely mounted on the axle, a bevel pinion on the crank shaft and in permanent mesh with the bevel gear, a spur gear rigidly secured on the axle and rotatable constantly therewith, a notched member loosely mounted on the axle, gearing supported on said member in continuous mesh with the spur gear, and a stop operable at will to engage with a notch in said member to hold the latter immovable while the cutter is in operation.

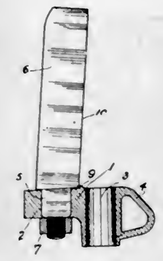
[Claim 2 not printed in the Gazette.]

1,270,491. MOWER. THEOPHILUS BROWN, Moline, Ill., assignor to Deere & Company, Moline, Ill., a Corporation of Illinois. Filed Oct. 27, 1914. Serial No. 868,870. (Cl. 56—75.)



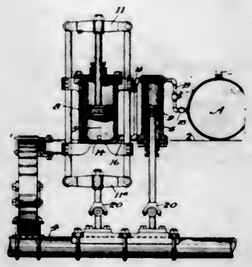
In a mowing machine, the combination of a frame, an axle journaled thereon having supporting wheels with which it revolves in a forward direction, a reciprocating cutter, a crank shaft to operate the cutter, a bevel pinion on the crank shaft in constant mesh with a bevel gear loosely mounted on the axle, an internal gear loosely mounted on the axle, a member loosely mounted on the axle, an arm extending from said member and in constant engagement with a stop on the frame to hold said member in a fixed position against rotation, a plurality of gears supported on said member and in constant engagement with the internal gear and a pinion on the bevel gear, and a clutch secured on the axle to revolve therewith, said clutch being operable at will to connect the internal gear and axle to transmit power from the latter to the cutter.

1,270,492. BRUSH-CUTTING KNIFE. GEORGE A. CAMERON and JAMES MCKAY, Stewart, British Columbia, Canada. Filed Dec. 4, 1917. Serial No. 205,406. (Cl. 30—11.)



A brush cutting knife comprising, a cutting blade, a gripping handle, a socket member having apertures in which the blade and the handle are respectively secured, said apertures being arranged so that the blade axis is to the rear of the handle axis, an inclined guard member projecting from the end of the socket, and a guard member on the upper face of the socket adjacent to and disposed to cover the joint between the blade shoulder and the socket member.

1,270,493. VEHICLE AIR-CUSHION COMPRESSOR. JOHN J. CAMPODONICO, Stockton, Cal. Filed Apr. 13, 1915. Serial No. 21,035. (Cl. 230—27.)



1. In an air compressor for vehicles, a pair of independent vertical cylinders of varying size connected to the vehicle body and each disposed completely exteriorly of the other and having a completely closed compression end, pistons, each piston having a rod in connection with the vehicle axle and but one of the rods being directly connected to said axle, a pipe leading from the compression end of the larger cylinder to the compression end of the smaller cylinder to conduct air compressed in the larger cylinder to the compression end of the smaller cylinder, a receiver, and means to conduct air from the compression end of the smaller cylinder into the receiver, the compression ends of the respective cylinders facing in opposite directions.

2. In an air-compressor for vehicles, a pair of vertical cylinders arranged in end to end relation and connected to the vehicle body, said cylinders having a completely closed head common to each, a piston in each cylinder, a cross head connected to the outer end of each piston rod, rods connected to the ends of the cross heads and disposed exteriorly of the cylinders, means to connect one of the cross heads to the vehicle axle, a pipe connection between the compression ends of the cylinders extending across said head and leading into the cylinders on opposite sides of said head, a receiver, and a connection between the compression end of one cylinder and said receiver.

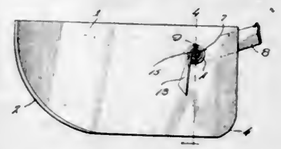
1,270,494. GARMENT-FASTENER. HOLGER CHRISTIANSEN, Erie, Pa. Filed June 5, 1915. Serial No. 32,307. (Cl. 24—73.)



1. A garment fastener comprising buttons each of which is provided upon one lateral face with a bead and upon the other face with a socket, the socket of one button being adapted to receive and frictionally retain the bead of the other button, a flexible member connecting said buttons and curved pins carried by said buttons, said pins being curved over upon relatively opposite lateral faces of said buttons.

2. A folding garment fastener comprising buttons each of which is provided upon one lateral face with a bead and upon the other face with a socket, the socket of one button being adapted to receive and frictionally retain the bead of the other button when the device is folded, a flexible member connecting said buttons, and curved pins carried by said buttons and, in the folded position of the device, having their pointed extremities disposed inwardly and between the relatively adjacent faces of said buttons.

1,270,495. RUNNER FOR WHEELBARROWS. MERTON V. CHRISTENSEN, Hendricks, Minn. Filed May 31, 1917. Serial No. 172,068. (Cl. 21—68.)

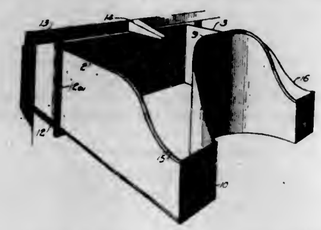


A runner for wheelbarrows comprising a runner member proper, said runner member provided with an opening formed in the top thereof, a shaft extending through said opening, a sleeve mounted within said opening and surrounding said shaft, cotter pins passing through said shaft and fitting upon opposite sides of said sleeve for holding said shaft against longitudinal movement through said runner member proper, a brace mounted upon each side of said runner member, each brace comprising a member formed from sheet metal having a rolled upper end snugly fitting around said shaft, the lower end of said brace being twisted and having its lower edge extending at right angles to the longitudinal axis of the brace and bearing flat against sides of said runner for thoroughly bracing the same and preventing lateral shifting movement of said runner upon said shaft, said braces engaging said runner member substantially below said opening.

1,270,496. WORKING-DRAWER FOR JEWELRY WORKERS. ARTHUR C. CIMAGLIA, Mount Vernon, N. Y. Filed Aug. 8, 1917. Serial No. 185,216. (Cl. 29—1.)

1. A device of the character described comprising a drawer having its front face curved toward the interior

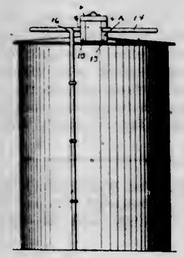
and the central portion of said face somewhat higher than the sides for the purpose shown and described.



7. A device of the character described comprising a working bench, a drawer slidingly supported beneath said bench having its front face curved toward the interior and its central portion somewhat higher than the sides for the purpose shown and described, and a working pin fixed at the front of said bench approximately over the center line of said drawer.

[Claims 2 to 6 not printed in the Gazette.]

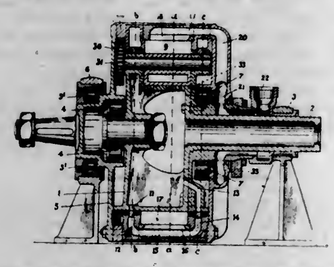
1,270,497. OIL-TANK PROTECTOR. WOLF COHEN, Fort Worth, Tex. Filed Jan. 19, 1915. Serial No. 3,160. (Cl. 220—121.)



1. The combination with an oil tank having an opening in its top, a hood of insulating material covering and hermetically sealing said opening, a gas conveying pipe disposed above the top of the tank and bent concentrically with the latter and insulated throughout its length from said tank, one end of said pipe being carried through the hood and extended downwardly within the tank, a bell secured to the last named end of the pipe, and the other end of said pipe being directed laterally and then downwardly in spaced relation to the side of the tank and embedded in the earth at its lower end.

[Claim 2 not printed in the Gazette.]

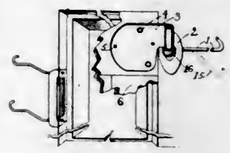
1,270,498. ROTARY ENGINE, PUMP, COMPRESSOR, AND THE LIKE. BRUCE CONKLIN, London, England. Filed Mar. 10, 1917. Serial No. 153,903. (Cl. 121—65.)



1. In a rotary engine a stationary inner element or drum an outer rotating casing concentrically mounted in relation thereto with an intervening annular space a plurality of rotary abutments in the stationary drum a plurality of vanes in the rotary casing a chamber in said drum means concentric with the axis of rotation of the engine for introducing the working fluid to said chamber in the drum means for effecting the distribution of said working fluid simultaneously to both sides of the expansion chambers and means for maintaining the said expansion chambers constantly open to the atmosphere so that the low pressure fluid is continually exhausted therefrom.

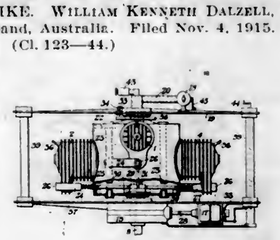
[Claims 2 to 4 not printed in the Gazette.]

1,270,499. HINGE. FRED A. COOK, Longview, Ill. Filed Feb. 12, 1917. Serial No. 148,202. (Cl. 16—106.)



In a hinge of the class described, having a crooked metallic bar, tempered, so the bar can be bent to any desired angle, having threads at one end, to be embedded in a plastic wall, all but the threaded end, said threaded end to project outwardly from the wall, to engage a second member having a circular plate shoulder, to engage the wall and having a screw threaded engagement in the circular plate, connecting the two members together, the said circular plate of the second member having a shoulder and arm supporting a pivot pin and a third member of a flat ear shaped wing, having a socket to encircle the pivot pin of the second member forming a hinge thereby substantially as set forth.

1,270,500. MULTICYLINDER ROTARY INTERNAL-COMBUSTION ENGINE FOR AEROPLANES AND THE LIKE. WILLIAM KENNETH DALZELL, Barcaldine, Queensland, Australia. Filed Nov. 4, 1915. Serial No. 59,509. (Cl. 123—44.)

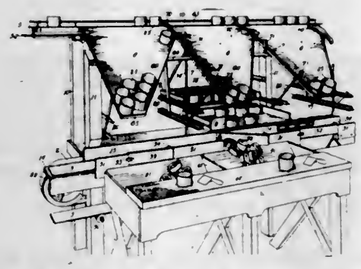


1. A rotary engine comprising a plurality of rotating cylinders, a drum integral with said cylinders, a hollow casing forming a bearing for said drum, transverse pipes on the inside of said drum, said drum having ducts communicating with said hollow casing and with said transverse pipes, inlet valves for said cylinders, and further pipes communicating with said transverse pipes and with said inlet valves.

2. A rotary engine comprising a plurality of rotating cylinders, a drum integral with said cylinders, a hollow casing forming a bearing for said drum, transverse pipes on the inside of said drum, said drum having ducts communicating with said hollow casing and with said transverse pipes, inlet valves for said cylinders, further pipes communicating with said transverse pipes and with said inlet valves, a transverse power shaft having one bearing in the drum, a support for said engine, said shaft having its other bearing in said support, a gear integral with said shaft, an opposing gear integral with said drum and an intermeshing gear mounted on said support, said intermeshing gear connected to a current generator.

3. A rotary engine comprising a plurality of rotating cylinders, a drum integral with said cylinders, a hollow casing forming a bearing for said drum, transverse pipes on the inside of said drum, said drum having ducts communicating with said hollow casing and with said transverse pipes, inlet valves for said cylinders, further pipes communicating with said transverse pipes and with said inlet valves, a transverse power shaft and a current generator having a differential planetary connection with said shaft and said drum.

1,270,501. MECHANISM FOR PACKING CANS. OTTO B. DOHM, Blaine, Wash. Filed Aug. 21, 1917. Serial No. 187,449. (Cl. 193—2.)



1. In a device for use in filling cans, an empty-can conveyer and a series of containers for receiving said empty cans therefrom, a material conveyer and a series of bins for receiving the material therefrom, one of said sets of mechanisms having its parts located above the corresponding parts of the other set.

2. In a device for use in filling cans, an empty-can conveyer and a series of containers for receiving said empty can therefrom, a material conveyer and a series of bins for receiving the material therefrom, one of said sets of mechanisms having its parts located above the corresponding parts of the other set, and a filled-can receiving means located between the containers of said other mechanisms.

7. In a device for use in filling cans, a series of inclined can holding aprons having one lower corner cut away on a bevel to thereby deliver the cans to a position of limited width, and material holding bins located beneath the cut away portions of the aprons.

8. In a device for filling cans, a material holding bin, means for supporting can receiving trays above and back of said bin, and an inclined empty can holding apron above and extending over the trays and cut away to narrow its lower end.

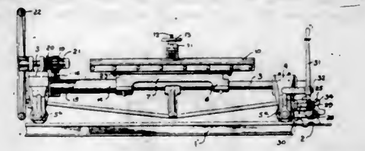
9. A device of the character described having elevated inclined aprons or hoppers for the empty cans, fish bins beneath the lower edges of said aprons, tray supports between said aprons and bins, a working bench at the outer side of the bins and an inspection bench at the opposite side of the device.

[Claims 3 to 6, 10, and 11 not printed in the Gazette.]

1,270,502. CONVEYER-TRUCK. CHARLES E. DRUM, Detroit, Mich., assignor to Springfield Body Corporation of New York, New York, N. Y., a Corporation of New York. Filed Mar. 22, 1917. Serial No. 156,585. (Cl. 105—32.)

1. A conveyer truck comprising a plurality of supporting wheels, a platform, positively acting means for tilting the platform about the longitudinal axis of the truck and for holding it in the tilted position and means for rotating the platform in its plane irrespective of the position it is caused to occupy by the tilting means.

2. A conveyer truck, comprising a longitudinal shaft, a platform mounted thereon, a sleeve surrounding the shaft and connected to the platform and means for rotating the sleeve about the shaft and for holding it in any position to which it may be rotated.



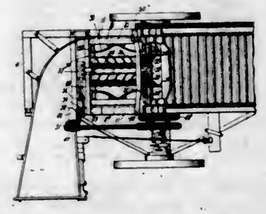
3. A conveyer truck, comprising a longitudinal shaft, a platform mounted thereon, a sleeve surrounding the shaft and connected thereto at one end, a pinion carried by the opposite end of the sleeve and a worm engaging the pinion and adapted by its rotation to cause rotation of the sleeve.

4. A conveyer truck, comprising a longitudinal shaft, a pair of transversely disposed yokes attached to the shaft adjacent its ends, supporting wheels carried by the yokes adjacent their extremities, a platform mounted upon the shaft and adapted to be tilted about it and means permitting the rotation of the platform in its plane irrespective of the position to which it is tilted.

5. A conveyer truck, comprising a tiltably mounted platform, a bearing ring carried upon the underside thereof, a flanged supporting spider engaging the under surface of the bearing ring and a clamping ring bearing against the flange upon the spider and adapted to force it into contact with the bearing ring with adjustable pressure.

[Claims 6 to 10 not printed in the Gazette.]

1,270,503. BEET-TOPPING DEVICE. CHARLES I. DUNBLAZIER, Moline, Ill. Filed Aug. 14, 1917. Serial No. 186,175. (Cl. 146—7.)



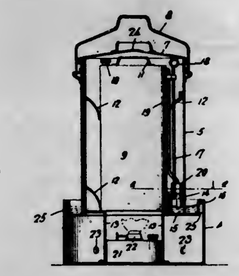
1. In a beet harvester, the combination of a topping means including a frame pivotally mounted for vertical movement a pair of spirally ribbed rollers mounted therein for movement toward and away from each other, resilient elements for urging the rollers toward each other, means for rotating the rollers in opposite directions, and a cutting means located at one end roller and therebetween for severing the tops from the beets.

2. In a beet harvester, the combination of a topping mechanism including a frame, a horizontal shaft pivotally supporting one end of the frame to permit vertical adjustment thereof, a pair of bevel gears mounted on said shaft, a pair of spirally ribbed rollers mounted in the frame for movement toward and away from each other, a bevel gear rotatable with each roller for engagement with one of the bevel gears of the shaft, means for retaining the bevel gears in engagement as the rollers are adjusted toward or away from each other, a resilient means for urging the rollers toward each other, and a cutting mechanism located between and adjacent one end of the rollers to sever the tops from the beets.

1,270,504. DRINKING-FOUNTAIN. ANTHONY F. EFFRIG, Perkasie, Pa. Filed Dec. 27, 1917. Serial No. 209,100. (Cl. 119—73.)

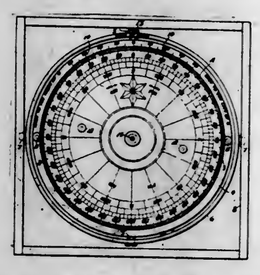
In a watering device, a cylindrical body having a reduced upper portion, a trough formed at the juncture of

the said reduced portion with the base of the body and extending entirely around the latter, the outer walls of said trough being spaced from the body wall, a lamp in said base below the said trough, uprights in said base, a



tank arranged concentrically within said reduced upper portion and resting upon said uprights, inwardly projecting arms in said upper portion engaging the sides of said tank, a cover for said upper portion, and a communication between said tank and said trough.

1,270,505. SHADOW-DIAL COMPASS. JOHN M. FIELDS, San Francisco, Cal. Filed Dec. 18, 1917. Serial No. 207,625. (Cl. 33—61.)

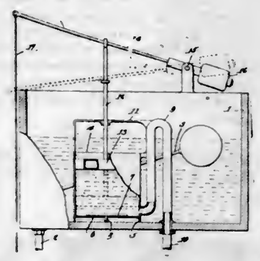


1. An instrument of the character described comprising an inner and an outer gimbal ring, said outer ring having a lubber line marked thereon and said inner ring having a variation scale formed thereon graduated from zero in alinement with the lubber line to 40° on each side, and a dumb card turnably mounted in the inner ring, said card being graduated from zero south to 180° north on each side.

2. An instrument of the character described comprising an inner and an outer gimbal ring, said outer ring having a lubber line marked thereon and said inner ring having a variation scale formed thereon graduated from zero in alinement with the lubber line to 40° on each side, a central post carried by the inner ring; a dumb card turnably mounted on said post, said card being graduated from zero south to 180° north on each side, and means for securing the card against turning movement about the post.

3. An instrument of the character described comprising an inner and an outer gimbal ring, said outer ring having a lubber line marked thereon and said inner ring having a variation scale formed thereon graduated from zero in alinement with the lubber line to 40° on each side, a central post carried by the inner ring, a dumb card turnably mounted on said post, said card being graduated from zero south to 180° north on each side, a shadow pin adapted to be supported by the central post and a pair of clamping screws carried by the inner ring adapted to secure the card against turning about the post.

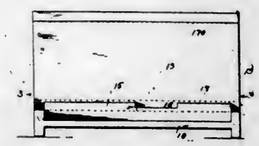
1,270,506. FLUSH-VALVE. CEPHAS V. FITE, Charlotte, N. C., assignor of one-half to Walter W. Watt, Charlotte, N. C. Filed Oct. 3, 1916. Serial No. 123,555. (Cl. 4—5.)



1. The combination with a tank having an inlet, of a cylinder within the tank and formed with an open upper end located below the water level of the tank, said cylinder provided with a valved inlet, a siphon having its short arm connected to the lower portion of the cylinder and its long arm constituting an outlet from the tank, a combined float and piston mounted in the cylinder, and operating means connected thereto.

[Claims 2 and 3 not printed in the Gazette.]

1,270,507. BEEHIVE. GEORGE FLEMING, Nelson, British Columbia, Canada. Filed July 17, 1916. Serial No. 109,867. (Cl. 6—1.)



1. A hive body comprising a chamber between spaced inner and outer walls, said chamber being closed at its bottom and said bottom closure being provided with a plurality of vertically extending air passages situated between said inner and outer walls, and the exterior casing of the hive body being provided with vertically spaced openings.

2. The combination of a bottom board, a hive body resting thereon, the bottom board within its sides being spaced below the hive body, and said hive body comprising a chamber between spaced inner and outer walls, said chamber being closed at its bottom and said bottom closure being provided with a plurality of vertically extending air passages situated between said inner and outer walls, and the exterior casing of the hive body being provided with vertically spaced openings.

1,270,508. WEIGHING-SCALE. CHARLES F. FOGG, New York, N. Y. Filed Mar. 29, 1916. Serial No. 87,502. (Cl. 265—62.)

1. A casing, a rod extending diametrically within the same and mounted to move vertically therein and adapted to support an article to be weighed, a pair of weighted levers fulcrumed in said casing and on a common fulcrum connected to said rod to swing in opposite directions and to be raised in opposition to the weight of such article, means operatively connected with said rod for indicating the weight of such article, a cylinder in said casing, a plunger carried on said rod and movable in said cylinder to prevent violent movements of said rod, and weights, and means for varying the yielding resistance of said cylinder and plunger to such movements.

2. A casing, a rod mounted to move vertically therein and adapted to support an article to be weighed, a pair of levers fulcrumed in said casing and connected to said rod to swing in opposite directions and to be raised in opposition to the weight of such article, weights adjustably mounted on said levers, means operatively connected with said rod for indicating the weight of such article, said weights having cavities therein adapted to contain material to be added to or taken from said weights to vary their amount.



4. A casing, a bar fixed therein, a pair of segmental hubs thereon having their upper faces inclined inwardly to form an angle, a lever for each hub having a circular opening therein matching to and inclosing such hub, an arm in each of such openings having a knife-edge received in such angle, a rod movable vertically in said casing between said levers and having a slot through which said bar passes, a weight on each of said levers, connections from said rod to said levers to swing the latter in opposite directions by movements of said rod, means on said rod for supporting an article to be weighed, and means actuated by the movements of said rod for indicating the weight of such article.

6. A casing, a rod movable vertically therein, having a slot and adapted to support an article to be weighed, a bar extending transversely of said casing through such slot, two weighted levers fulcrumed on said bar on opposite sides of said rod, connections from said levers to said rod and arranged to swing said levers in opposite directions by movements of said rod, a shaft extending transversely of said casing and through such slot, a drum on said shaft, flexible connections from said rod to said drum for rotating said drum and shaft through movements of said rod, means operated by said shaft for indicating the weight of such article, a sleeve loosely mounted on said shaft, flexible connections from said rod to said sleeve for rotating the latter through movements of said rod, and means operated by said sleeve for indicating the weight of such article.

7. A casing, a rod movable vertically therein, having a slot and adapted to support an article to be weighed, a bar extending transversely of said casing through such slot, two weighted levers fulcrumed on said bar on opposite sides of said rod, connections from said levers to said rod and arranged to swing said levers in opposite directions by movements of said rod, a shaft extending transversely of said casing and through such slot, a sleeve loosely mounted on said shaft, flexible connections from said rod to said sleeve for rotating the latter through movements of said rod, and means operated by said sleeve for indicating the weight of such article.

[Claims 3 and 5 not printed in the Gazette.]

1,270,509. PUNCH-BOARD. CHARLES GIERATZ, Milwaukee, Wis., assignor to Protective Board Company, not incorporated, a Copartnership composed of Paul C. Weber, M. J. Fishbach, Walter Fishbach, Elmer Fishbach, and Charles Gieratz, Milwaukee, Wis. Filed Apr. 27, 1917. Serial No. 164,829. (Cl. 46—56.)

2. A device of the class described comprising a plate having a transverse opening formed therethrough, a covering for one end of the opening, an indicating device in the opening, and a member disposed across said opening to prevent the insertion of an article therethrough.

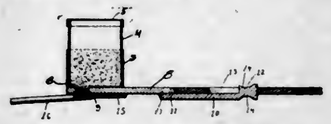
5. The combination with a plate having a transverse opening formed therethrough, and an indicating device in said opening, of a member disposed across said opening to prevent the insertion of an article therethrough, and an elongated projection carried by the member to force the indicating device from said opening.



8. In a device of the class described, a punch board comprising a pair of plates having alined openings therein, an additional plate disposed between the pair of plates and having an opening of larger diameter than the first mentioned openings and alined therewith, a covering over the outer end of the opening in one of said pair of plates, an indicating member in the last mentioned openings, a disk in the opening in the additional plate, and a stud carried by the disk and engageable with the indicating member to force the same through said covering and out of its opening.

[Claims 1, 3, 4, 6, and 7 not printed in the Gazette.]

1,270,510. POISON-WHEAT DISTRIBUTER. ALBERT H. GOODMAN, Oakland, Oreg. Filed Sept. 6, 1917. Serial No. 190,018. (Cl. 221—119.)

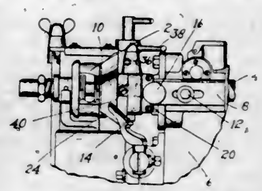


1. A dispensing device comprising a hopper a shank having the hopper mounted thereon, a spout projecting forwardly from the end of the shank beneath the hopper, and means arranged for reciprocatory movement in the said shank and beneath the said hopper to eject a predetermined quantity of the material in the hopper through the said spout.

3. A dispensing device comprising a shank having an elongated slot at one end, a plunger arranged in the slot and provided with an opening, one end of the said shank being thickened to provide a closure for the opening when the plunger is in retracted position, means for holding a quantity of the material to be dispensed above the plunger, and a spout fastened beneath the end of the said shank and having open communication with the opening in the said plunger when the latter is projected forwardly.

[Claim 2 not printed in the Gazette.]

1,270,511. HEEL-TRIMMING MACHINE. JOSEPH GOULDBOURN, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J., a Corporation of New Jersey. Filed May 11, 1915. Serial No. 27,369. (Cl. 12—88.)



1. In a heel trimming machine, the combination with a heel trimming cutter, of shoe positioning means including a guide for engaging the edge of the toplift to determine the position of the heel with reference to the cutter, said positioning means having a portion arranged for substantially translational movement to adjust the width of

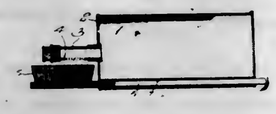
the effective guiding surface of the toplift guide, and said parts being constructed and arranged to insure a substantially uniform width of said guiding surface throughout the peripheral extent of the toplift guide for any position of said adjustment.

3. In a heel trimming machine, the combination with a heel trimming cutter, of shoe positioning means including a guide arranged to be engaged by the edge of the toplift for positioning the heel with reference to the cutter, said positioning means having a portion arranged for adjustment to vary the width of the effective guiding surface of the toplift guide, and unitary mechanism connected with said adjustable portion and movable relatively thereto for effecting said adjustment.

5. In a heel trimming machine, the combination with a heel trimming cutter, of a guide arranged to be engaged by the edge of the toplift for positioning the heel with reference to the cutter, a tread rest adjustable with reference to said guide to vary the width of the effective guiding surface of the guide, means independent of the tread rest and connected thereto for adjusting said rest, and means for maintaining the tread rest in the same angular relation to the guide in all positions of its adjustment.

[Claims 2, 4, and 6 to 10 not printed in the Gazette.]

1,270,512. TOOTH-POWDER CAN AND BRUSH-HOLDER. CHARLES NOEL GREAZA, St. Paul, Minn., assignor of one-fourth to Carl Rosenberger, New York, N. Y. Filed Oct. 5, 1917. Serial No. 194,933. (Cl. 221—61.)



2. A tooth powder can having a powder outlet at its upper end and having a vertical groove in one of its sides to receive the handle of a tooth brush to properly position the bristles of the brush for receiving the powder from said outlet.

[Claim 1 not printed in the Gazette.]

1,270,513. CRANK-HOLDER FOR AUTOMOBILES. ANDREW J. GWIN, Winnfield, La., assignor of one-half to Annie F. Gwin, Winnfield, La. Filed Sept. 14, 1917. Serial No. 191,381. (Cl. 74—33.)

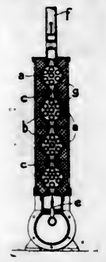


1. A crank holder for automobiles comprising a supporting arm mounted adjacent the crank handle of the engine, a locking member pivoted to said arm and disposed in alinement therewith when in inoperative position, a second locking member pivoted to the first named locking member and coöperating therewith to form an opening for receiving said crank handle, and yieldable means carried by said arm and engaging a portion of the first named locking member for yieldably retaining the same in inoperative position.

[Claim 2 not printed in the Gazette.]

1,270,514. HEATER FOR CENTRAL HEATING SYSTEMS. EMIL HAEFELY, Basel, Switzerland. Filed Sept. 15, 1916. Serial No. 120,263. (Cl. 122—356.)

A central heater composed of a heat source and independent superimposed and interconnected heating elements for a heat transmitting medium, such as water, oil, air, steam and so forth, placed above said heat source and constituting each a unit structure comprising a separate circumferential casing and a bundle of separate heating pipes therein the casings of the heating elements having longitudinal upper and lower connecting throats serving as assembling connectors between the superimposed heating elements as well as contractors for the upward flowing hot gas stream from the heat source to cause the same to be distributed over all the heating pipes of the bundle, in combination with hollow terminal interconnecting pieces for the pipe bundles of the heating elements, substantially as described.



1,270,515. PROCESS OF PRODUCING POTASSIUM AND PHOSPHORUS COMPOUNDS. EDWARD W. HASLUP, Bronxville, N. Y., and BENJAMIN A. PEACOCK, Philadelphia, Pa.; said Peacock assignor to said Haslup. Filed Oct. 29, 1917. Serial No. 199,171. (Cl. 23—22.)

2. The process of recovering combined potassium mixed with combined phosphorus from a mixture of potassium bearing silicate and phosphate rocks which consists in finely dividing said rocks; treating the finely divided rock mixture with sulfuric acid; confining the acidulated mixture in a closed vessel from which the heat of reaction is prevented from escaping until a temperature above 150° C. has been reached and until a substantial portion of said silicate is decomposed; extracting the soluble compounds thus produced with water; adding an acid-neutralizing reagent to the crude solution thus obtained to precipitate the combined aluminum present and to render neutral the potassium and phosphorus compounds contained in said solution; and separating out said last named compounds, substantially as described.

[Claims 1 and 3 not printed in the Gazette.]

1,270,516. EYEGLASSES AND SPECTACLES. THOMAS M. HEARD, Jr., Sioux City, Iowa. Filed Sept. 16, 1916. Serial No. 120,446. (Cl. 88—47.)



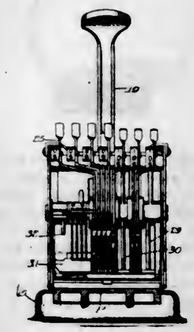
2. In articles of the class described, lenses, rims of flexible material mounted on the lenses and having inwardly-extending parts, the lenses having notched edges to receive said parts, and supporting members secured to said inwardly extending parts.

5. In articles of the class described, bevel-edged lenses, rims of flexible material having grooves to receive the edges, V-shaped parts formed integrally with and extending inwardly from the rims, the edges of said parts being grooved, the lenses being provided with V-shaped notches to receive the ears, and the edges of the lenses adjacent the notches being beveled to enter the grooves of said parts, and supporting members secured to said parts.

10. In a pair of eye-glasses or receptacles, the combination of a pair of rims provided with inwardly extending bridge supporting portions at their inner ends, a bridge whose ends are fastened to the inwardly extending bridge supporting portions, and lenses whose inner ends are cut into and fit around the bridge supporting portions of the rims.

[Claims 1, 3, 4, and 6 to 9 not printed in the Gazette.]

1,270,517. CHECK-PROTECTOR. CARL M. HEDMAN, Chicago, Ill., assignor to Hedman Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Aug. 7, 1916. Serial No. 113,441. (Cl. 101—20.)



1. In a device of the class described the combination of a plurality of adjustable ordered marking elements, each having a plurality of type thereon, a platen, means for moving the marking elements toward the platen, a plurality of arcuate grooves in the platen, the several grooves in the platen lying in arcs of equal circles having their centers at different points in a line in the medial transverse plane of the platen, and a plurality of arcuate ridges on each of the type carried by the marking elements, the ridges of each type lying in the arcs of equal circles having their centers at different points along a medial line extending transversely of the type, the curvature of the type ridges being the same as the curvature of the platen grooves.

16. In a structure of the class described, the combination with a platen, of a plurality of separate type sectors, means for rotatably supporting said type sectors side by side in position to co-act with said platen, means for adjusting said type sectors upon said shaft to bring the desired type into position to co-act with said platen and coacting means on said platen and the peripheries of said type sectors for automatically alining the selected type as said type are brought into co-acting relation with said platen.

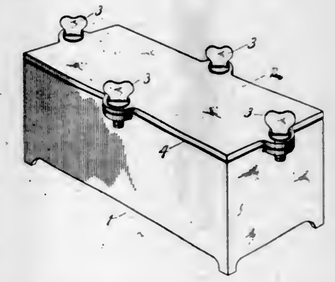
[Claims 2 to 15 not printed in the Gazette.]

1,270,518. READY-MADE DECORATION. WILLIAM J. HELLER, Easton, Pa. Filed Oct. 28, 1915. Serial No. 58,342. (Cl. 156—10.)



A ready made decoration for draping buildings comprising a heading, means arranged at proper intervals on the heading for attaching the same in position and a decorative fabric arranged in folds or plaits secured to said heading, providing when in place a similarity to draped colors, substantially as described.

1,270,519. BOX FOR TREATING METALLIC ARTICLES BY HEAT. JOHN C. HENDERSON, Washington, D. C., assignor to Driver-Harris Company, Harrison, N. J., a Corporation of New Jersey. Filed July 8, 1916. Serial No. 108,101. (Cl. 263—49.)



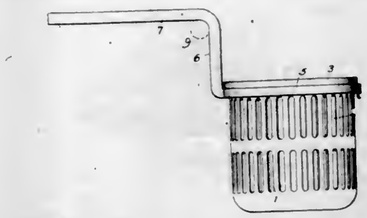
1. A closed container for use in heat treatment consisting of a non-warping heat-resisting metallic box composed of an alloy containing chromium and a metal classified with iron in Mendelejeff's table and of substantially the same atomic weight as iron, and a cover for said box.

2. A closed container for use in heat treatment consisting of a non-warping heat-resisting metallic box composed of an alloy containing from five to thirty per cent. of chromium and a metal classified with iron in Mendelejeff's table and of substantially the same atomic weight as iron, and a cover of similar material for said box.

4. A closed container for use in heat treatment consisting of a non-warping heat-resisting box composed of an alloy containing from five to thirty per cent. of chromium and from fifty to ninety per cent. of a metal classified with iron in Mendelejeff's table and of substantially the same atomic weight as iron, a cover, and securing means for said box, said cover and securing means being made of an alloy similar to the alloy of said box.

[Claim 3 not printed in the Gazette.]

1,270,520. MEANS FOR HEAT-TREATING METALLIC ARTICLES. JOHN C. HENDERSON, Washington, D. C., assignor to Driver-Harris Company, Harrison, N. J., a Corporation of New Jersey. Filed Feb. 1, 1918. Serial No. 214,851. (Cl. 266—2.)

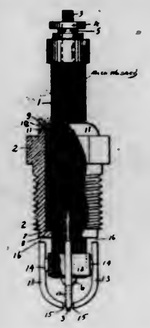


1. A carrier for articles to be subjected to heat treatment at high temperatures, composed of a heat resisting and substantially non-oxidizing alloy of low heat conductivity and being of sufficient bulk to retain a large amount of residual heat for a considerable period after being subjected to the action of high temperature and heated thereby.

2. A carrier for articles to be subjected to heat treatment at very high temperatures, consisting of a cast perforated basket composed of a highly refractory and substantially non-oxidizing alloy containing nickel and chromium and of low heat conductivity.

[Claims 3 and 4 not printed in the Gazette.]

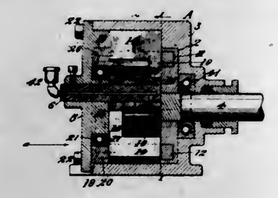
1,270,521. SPARK-PLUG. WALTER L. HILL, Wichita, Kans. Filed Aug. 7, 1917. Serial No. 184,877. (Cl. 123—169.)



1. A spark plug comprising a threaded shell provided with a lower flanged portion and a central mica insulation extending through said shell and a shoulder on said insulation supported by said lower flanged shell portion, and an upper flange on said shell adapted to be tightly crimped upon said insulation as specified; said insulation comprising a plurality of mica washers of varying diameters, an electrode passed through said washers, said electrode having a shoulder near the lower end thereof and below which extends a portion of said electrode and a threaded upper end portion of said electrode and a nut screwed thereupon and adapted to coact with said shoulder portion to solidly compact the mica washers therebetween into an integral insulation; and a band rigidly attached to the lower portion of said insulation and a plurality of vertical bars attached to said band, the upper end of each bar being separated from the base of the plug by a gap and the lower end of said contact bar curving inwardly toward but separated by a gap from the protruding end of said electrode.

[Claim 2 not printed in the Gazette.]

1,270,522. ROTARY PUMP. JACOB JACOBSEN, San Francisco, Cal., assignor of one-third to William Samuels and one-third to Bruno W. Henning, San Francisco, Cal. Filed Apr. 7, 1917. Serial No. 160,395. (Cl. 103—44.)

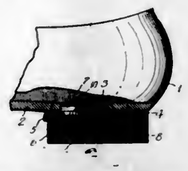


1. A rotary pump comprising a cylindrical casing, a rotary piston eccentrically disposed therein and radially slotted, one end of each slot being opened, a bearing pin rotatably seated in each slot and provided with a slot also opening through the end of said pin in registry with the piston slot, vanes insertible through the open ends of the respective pin and piston slots and slidably supported by said pins for radial movement, and concentrically arranged means connecting the vanes.

2. A rotary pump comprising a cylindrical casing, a piston eccentrically positioned within the casing and driven from a shaft extending through one side of the casing, a stationary shaft secured in the opposite end of the casing and centrally positioned therein, said shaft extending through one end of the piston, a plurality of vanes turnably mounted on the stationary shaft extending through slots formed in the piston, and turnably mounted slotted members in the piston opened at one end and forming guides for the vanes and provided with closed ends journaled in the piston.

[Claims 3 to 5 not printed in the Gazette.]

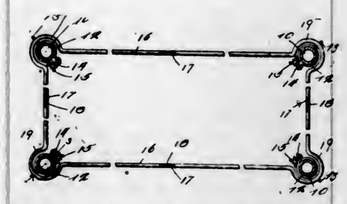
1,270,523. DETACHABLE RUBBER HEEL. JOHN A. KAISER, Detroit, Mich. Filed Dec. 13, 1917. Serial No. 206,890. (Cl. 36—36.)



1. The combination of a heel plate having a depending flange the entire width thereof, a rubber heel adapted to have the edge thereof sprung into engagement with the flange of said heel plate, and fastening means for attaching said heel to the plate and adapted to be held in a locked position by the sprung edge of said heel.

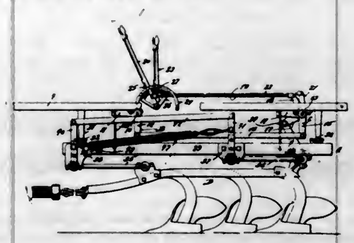
[Claims 2 and 3 not printed in the Gazette.]

1,270,524. CURTAIN-ROD FOR BEDS. CATHERINE J. KANE, Arlington, N. J. Filed Oct. 16, 1917. Serial No. 196,935. (Cl. 5—41.)



A curtain support for a bed comprising a rectangular frame formed of detachably connected right-angular corner sections, bands adjustably and removably engaged around the posts of the bed, hook member carried by the bands, and loops formed in the angles of the corner sections for engagement around the bands and supporting engagement with the hooks.

1,270,525. TRACTION-PLOW. HENRY W. KARDELL, St. Louis, Mo., assignor to Kardell Tractor & Truck Company, a Corporation of Delaware. Filed Mar. 12, 1917. Serial No. 154,229. (97—30.)



1. A traction plow comprising a supporting frame, a plow proper, a pair of stirrups by which said plow proper is suspended from said frame for vertical movement relative thereto, the axis of one of said stirrups being adjustable vertically relative to the axis of the other stirrup.

5. In a traction plow, a main frame, a plow frame suspended from said main frame movable vertically relative thereto, a plow proper suspended from said plow frame and movable vertically relative thereto, an operating lever having connection with said plow frame, a quadrant movable with said operating lever, and a second operating lever having connection with said plow proper, said last named operating lever being provided with means for engaging said quadrant.

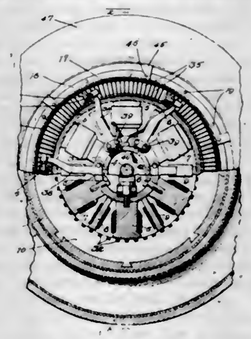
[Claims 2 to 4 not printed in the Gazette.]

1,270,526. PHONOGRAPH-NEEDLE. LEWIS C. KEEN and JOHN M. KLEVAN, Philadelphia, Pa. Filed Oct. 3. 1917. Serial No. 194,541. (Cl. 274—38.)



As an improved article of manufacture, a double pointed sound reproducing needle or stylus formed with a cylindrical enlargement intermediate of its ends, said enlargement presenting spaced annular shoulders affording stops to limit the movement of either end of the needle into a holder.

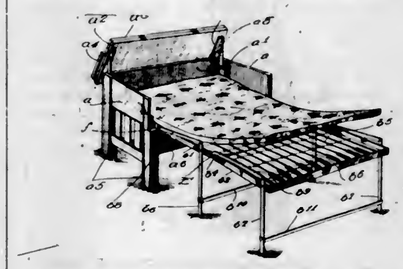
1,270,527. ELECTRIC-VEHICLE WHEEL. JOHN McLEAN KINGSBURY, Great Falls, Mont., assignor to Kingsbury Gas-Electric Motor Car Company, Great Falls, Mont., a Corporation of Montana. Filed Mar. 8. 1915. Serial No. 13,041. (Cl. 172—287.)



The improvement herein described, comprising an electric motor wheel, having in combination a radially thin ring member, adapted to receive a wheel tire member on its outer periphery, a laminated ring armature secured to its inner periphery, a stationary field within the armature, bearings secured to the field one at each side, cover plates coöperating with said bearings for rotatably mounting the armature and bolted at their outer edges to said ring member, the cover plates serving to clamp the laminations of the ring armature solidly together and to said ring member, a flat commutator mounted on the ring armature, brushes for engaging the commutator carried by radial arms mounted on the stationary field, the armature, field, commutator, brushes and arms being wholly inclosed by said cover plates.

1,270,528. FOLDING BED. CARL R. KLOK, Chicago, Ill., assignor, by mesne assignments, to United Table-Bed Company, a Corporation of Illinois. Filed Mar. 31, 1913. Serial No. 757,784. (Cl. 5—17.)

1. A folding bed comprising a body which in itself is a complete article of furniture, a three-section transversely folding bed-frame whereof the inner end-section is always right-side-up and horizontal, having devices intermediate the head and foot of the bed to connect the sections together, means on said body to support the said permanently right-side-up inner end-section a fixed height from the floor, serving to hold the inner end-section stationary within said body while the other sections are being folded thereon to bring the outer end-section right-side-up below the inverted middle section, folding legs coöperating with said body to support the frame at a height which will be sufficient for a bed of ordinary height with a mattress of a thickness to fold readily with the frame, the middle section being entirely outside of said body when the bed is unfolded, thereby to permti use of said middle section as a seat for entering and leaving the bed, and means on said frame to support the mattress, said sections being each approximately one-third the length of the bed, the outer end-section and the middle section being supported entirely by and horizontally above said inner end-section when the bed is folded, and said body being of a shape and construction to preclude use thereof either as a bed or a seat when the sections are folded together and having means to entirely conceal the bed frame therein.



4. In a folding bed, the combination of (1) a bed-frame provided with a flexible mattress support, said frame including end and intermediate sections, the end sections forming the head and foot of the bed, and all of the sections being pivotally connected to fold together and form with the mattress and bedding a rectangular bundle consisting of a flattened roll wherein one end section is disposed between an intermediate section and the other end section, with the sides of the bed forming the ends of the roll, so that said bundle in length is substantially the same as the transverse dimension of the bed and in width is approximately one-third of the length of the bed, whereby the head and foot and middle sections are brought together and superimposed in substantially horizontal layers by the folding of said frame, and with a portion of said flexible support overlying the mattress at the top of said bundle; (2) a structure for supporting and inclosing said bundle for storage therein, adapted to prevent use of said frame as a seat except when the sections thereof are unfolded, having means for maintaining one of said sections permanently right-side-up for a mattress thin enough to fold with the frame and to receive thereon the other sections and form the lower portion of said bundle when the bed is completely folded, thereby to sustain the entire weight of said bundle at the bottom thereof, and also to support a portion of the bed when said frame is unfolded, serving to hold said one section horizontal during the unfolding of the other sections, said structure in itself forming an article of furniture which precludes use thereof either as a bed or a seat when said three-layer bundle with its said top uppermost is finally inclosed therein; and (3) folding legs for said bed-frame, coöperating with said means to support the bed-frame in a plane lower than the storage position of said bundle and approximately at the ordinary seating height when the bed is in position for use.

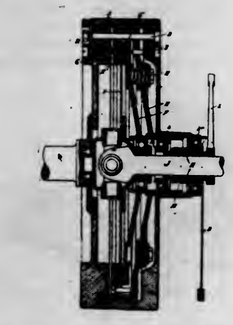
7. The folding bed structure, as set forth in claim 4, in which said frame has a transverse spreader on the folding portion thereof in position to partly form the

front of said bundle, and said structure having a rectangular table top and fixed legs at the four corners thereof, the front table legs being unconnected across the front of the table when said frame is unfolded except through the medium of said spreader which is then immediately outside of said table.

8. The folding bed structure, as set forth in claim 4, in which said permanently right-side-up section forms one end of the frame, and said article of furniture being of a size and shape to permit use of the middle section of the frame as a seat in entering and leaving the bed.

[Claims 2, 3, 5, 6, and 9 not printed in the Gazette.]

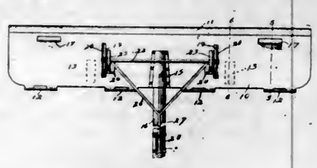
1,270,529. DISK CLUTCH. ISAAC KOECHLIN, Levallois-Perret, France, assignor to Societe Anonyme Des Automobiles & Cycles Peugeot, Paris, France. Filed June 12, 1916. Serial No. 103,320. (Cl. 192—7.)



1. A disk clutch containing in combination, a driving shaft, a flywheel in two parts forming a continuous casing mounted upon said shaft, two plates disposed inside said flywheel, means for assembling said plates, means whereby the flywheel produces the movement of the assembled plates, a driven shaft, a disk keyed to said shaft and disposed between said assembled plates, the disk having one side normally in contact with one of said plates, a third plate disposed between the two assembled plates and normally in contact with said second side of said disk, means whereby the flywheel drives the third plate, springs disposed between the third plate and the plate of the assembled pair which is not in contact with the disk, two threaded collars screwed one upon the other and mounted upon the driven shaft, means for producing the rotation of one of these collars, means for preventing the rotation of the other collar and means whereby the longitudinal displacement of said collars is transmitted to the assembled plates and the third plate, substantially as described and for the purpose set forth.

2. A disk clutch containing in combination, a driving shaft, a flywheel in two parts forming a continuous casing mounted on said shaft, bolts for assembling these two parts of the flywheel, two plates disposed within the flywheel and traversed by said bolts, assembling bolts for the said two plates, a driven shaft, a disk keyed to said shaft and disposed between said assembled plates, the disk having one side normally in contact with one of said plates, a third plate disposed between the two assembled plates, traversed by the flywheel assembling bolts, and normally in contact with the second side of said disk, springs disposed between the third plate and the plate of the assembled pair which is not in contact with the disk, cylindrical extension pieces each being attached to one of these two latter plates respectively, these pieces surrounding the main shaft, threaded collars screwed one upon the other and mounted upon the driven shaft, ball bearings disposed between said collars, abutments provided on said collars, means for producing the rotation of one of said collars, means for preventing the rotation of the other collar, and abutments disposed on the two parts of the flywheel for limiting the movement of the plates in contact with the disks, substantially as described and for the purpose set forth.

1,270,530. PAPER-HANGING TOOL. CHARLES W. LIKINS, Oakland, Cal. Filed Aug. 8, 1917. Serial No. 185,073. (Cl. 216—4.)



1. A tool of the class described comprising coöperating clamping jaws, a handle secured to one of said jaws, pivot ears carried by one of said jaws and extending through the other jaw, a pivot shaft connecting said ears and extending longitudinally of said jaws, a rocking frame mounted upon said shaft and including sides the free extremities of which are bent inwardly and curved to engage said other jaw when said frame is rocked whereby to adjust said jaws toward each other to clamping position, and means carried by said handle and connected to said frame for rocking the same.

2. A tool of the class described comprising coöperating clamping jaws, a handle secured to one of said jaws, pivot ears carried by one of said jaws and extending through the other jaw, a pivot shaft connecting said ears and extending longitudinally of said jaws, a rocking frame mounted upon said shaft and including sides the free extremities of which are bent inwardly and curved to engage said other jaw when said frame is rocked whereby to adjust said jaws toward each other to clamping position, means carried by said handle and connected to said frame for rocking the same, and springs carried by one of said jaws and engaging the other jaw to normally retain the same in inoperative positions.

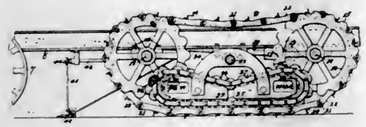
3. A tool of the class described comprising coöperating clamping jaws, a handle secured to one of said jaws, pivot ears carried by one of said jaws and extending through the other jaw, a pivot shaft connecting said ears and extending longitudinally of said jaws, a rocking frame mounted upon said shaft and including sides the free extremities of which are bent inwardly and curved to engage said other jaw when said frame is rocked whereby to adjust said jaws toward each other to clamping position, means carried by said handle and connected to said frame for rocking the same, springs carried by one of said jaws and engaging the other jaw to normally retain the same in inoperative positions, and stop lugs carried by one of said jaws and extending parallel to the free longitudinal edge thereof and against which the end of a strip of paper is engaged to properly aline the same.

4. A tool of the class described comprising coöperating clamping jaws, a handle secured to one of said jaws, pivot ears carried by one of said jaws and extending through the other jaw, a pivot shaft connecting said ears and extending longitudinally of said jaws, a rocking frame mounted upon said shaft and including sides the free extremities of which are bent inwardly and curved to engage said other jaw when said frame is rocked whereby to adjust said jaws toward each other to clamping position, means carried by said handle and connected to said frame for rocking the same, springs carried by one of said jaws and engaging the other jaw to normally retain the same in inoperative positions, and stop lugs carried by one of said jaws and extending parallel to the free longitudinal edge thereof to properly aline the same, said free longitudinal edge of the last named jaw being rounded to prevent tearing of said strip of paper.

6. A tool of the class described comprising normally opened coöperating clamping jaws, a handle for said jaws, a rocking frame supported by one jaw and having portions thereof engageable with the other jaw to adjust the same to clamping position, means connected to said frame for rocking the same to adjust said jaws, and a notched plate carried by said handle, the notches of which are engageable by a portion of the last named means for retaining the same in adjusted positions.

[Claim 5 not printed in the Gazette.]

1,270,531. TRACTOR. HOLMAN HARRY LINN, Morris, N. Y. Filed Dec. 1, 1916. Serial No. 134,294. (Cl. 21—150.)



1. In a vehicle, the combination with a frame, of a plurality of axles carried thereby, wheels carried by the axles, endless traction belts carried by the wheels, rock-plates pivoted with the frame and arranged within the endless traction belts, separate track-blocks pivotally connected with each rock-plate, and anti-friction elements disposed between the track-blocks and the corresponding endless traction belt.

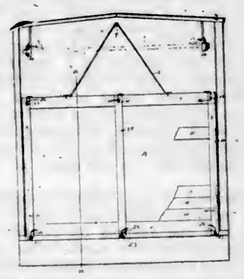
2. In a vehicle, the combination with a frame, of a plurality of wheels rotatively connected therewith, endless traction belts carried by the wheels, forked rock-plates pivotally mounted in the frame and arranged near the lower portions of the endless traction belts, separate track-blocks pivoted between their ends to the ends of each rock-plate, rollers arranged between the track-blocks and the corresponding endless traction belt, and means to retain the rollers suitably spaced.

3. In a vehicle, the combination with a frame; of a plurality of wheels rotatively connected therewith; endless traction belts carried by the wheels, each of which comprises a plurality of pivoted sections, each section having interior spaced longitudinal flanges; rock-plates pivoted with the frame and arranged near the lower portions of the endless traction belts; separate track blocks pivoted with each rock-plate and arranged inwardly of and near the lower portion of the corresponding endless traction belt; rollers disposed between the track-blocks and the lower portion of the corresponding endless traction belt and adapted to pass between the longitudinal flanges of the sections thereof to be guided by the flanges, said rollers also surrounding said track-blocks; and an endless chain having pivotal connection with the rollers for retaining the same in suitable spaced relation.

4. In a vehicle, the combination with a frame; of a plurality of wheels rotatively connected therewith; endless traction belts carried by the wheels, each of which comprises a plurality of pivoted sections, each section having interior spaced longitudinal flanges; forked rock-plates pivoted with the frame and arranged within the endless traction belts; separate track-blocks pivoted with the ends of each forked rock-plate; adjustable track-members carried by the outer ends of the track-blocks; means to move the track members toward and away from the track-blocks; a set of rollers surrounding the track-blocks and track-members and adapted to pass between the longitudinal flanges of said sections; and an endless belt pivotally connecting the rollers in said set for retaining them suitably spaced.

1,270,532. PARTITIONING AND STABILIZING APPLIANCE. JOHN W. LIPPINCOTT, Little Rock, Ark., assignor of one-half to Carrie A. Lippincott, Little Rock, Ark. Filed Dec. 3, 1917. Serial No. 205,231. (Cl. 105—15.)

1. The combination in a freight car of chains disposed lengthwise therein and adjustable as to height anchored to each end thereof, with a multiplicity of means for partitioning freight when loaded in said car and said chains engaging said means, thus stabilizing the said means and the freight within the car.

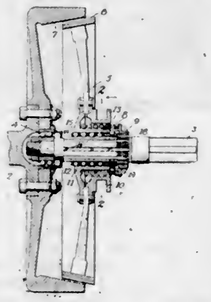


2. The combination in a freight car of chains longitudinally disposed therein and suitably anchored thereto, with a multiplicity of various means for stabilizing and partitioning freight when loaded in said car, and suitable means for stowing said means when not in use.

4. In a freight car, detachable door bars, and means for supporting one or more at various heights, grain proofing detachable aprons, and a multiplicity of stabilizing and partitioning appliances, in combination with tension chains anchored to each end and disposed lengthwise of said car to engage said stabilizing and partitioning appliances by means of retaining pins chained to said stabilizing and partitioning appliances being inserted into links of said tension chains, and suitable chain jacks for compressing freight when loaded between said stabilizing and partitioning appliances and an end of said car or when loaded between two of said stabilizing and partitioning appliances.

[Claim 3 not printed in the Gazette.]

1,270,533. CLUTCHING MECHANISM. NATHANIEL LOMBARD, Worcester, Mass., assignor to Lombard Carburetor Company, Worcester, Mass., a Corporation of Massachusetts. Filed Jan. 19, 1916, Serial No. 73,049. Renewed Apr. 26, 1918. Serial No. 231,023. (Cl. 192—8.)



1. In a clutching mechanism, a driving member and a driven member, one of said members comprising two sections adapted for relative movement to render said clutching mechanism operative or inoperative, an anti-friction element disposed for rolling movement relative to both of said sections, when the same are moved relatively to one another, and guiding means on each section for said anti-friction element, said guiding means coöperating with said anti-friction element to constrain the rotation of said sections in unison.

5. In a clutching mechanism, a driving member and a driven member, one of said members being constituted by a pair of sections, means for moving one of said sections

relatively to the other section, an anti-friction element disposed for rolling movement relative to both of said sections when the movable section is moved to render the clutching mechanism operative or inoperative, and means coöperating with said anti-friction element to prevent relative rotational movement between said sections.

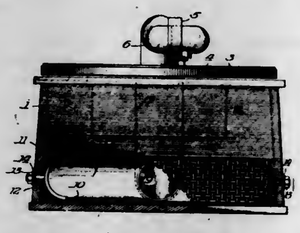
7. In mechanism of the character described, a power transmission member comprising a longitudinally fixed and a longitudinally movable section, adapted for rotation in unison, anti-friction means interposed between said sections and in longitudinal rolling contact with each, as said movable section is moved, and means for maintaining a predetermined relation between the movement of said anti-friction means and the movement of said movable section.

10. In mechanism of the character described, a power transmission member comprising a pair of sections rotatable in unison and adapted for relative longitudinal movement, and anti-friction means interposed between said sections and in longitudinal rolling contact with each at a plurality of opposing points, whereby a force tending to produce relative rotation between said sections transfers the friction between said parts to a lesser number of points.

12. In a mechanism of the character described, a power transmission member, comprising telescoping sections capable of relative axial movement, said sections having matching longitudinal grooves on their opposing surfaces, balls interposed between said sections for rolling movement in the grooves of each section when relative axial movement between said sections is effected, said balls and grooves coöperating to prevent relative rotational movement between said sections, and a ball retaining member interposed between said sections and adapted to hold said balls in spaced relation.

[Claims 2 to 4, 6, 8, 9, and 11 not printed in the Gazette.]

1,270,534. PHONOGRAPH. GEORGE W. LORIMER, Piqua, Ohio. Filed Oct. 6, 1915. Serial No. 54,328. (Cl. 274—2.)



1. A non-collapsible horn, the walls of which are maintained under tension to improve the quality of the tone.

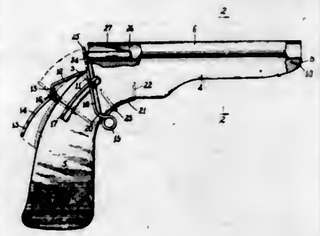
5. In a phonograph, the combination with the casing thereof, of a partially flattened horn of flexible material in the base thereof, the small end of said horn being circular and the large end thereof being oval, semi-circular brackets fitting within the ends of said oval, extensions thereon passing through the walls of said casing and means on the outside of said walls for drawing said brackets apart to maintain said horn under tension.

10. In a phonograph, the combination with the casing thereof, of a horn, one end of which is supported by said casing, and adjustable means supporting the other end of said horn under tension and out of contact with said casing.

[Claims 2 to 4, 6 to 9, and 11 to 13 not printed in the Gazette.]

1,270,535. TOY PISTOL. OLIVER C. MADISON, Omaha, Nebr. Filed Sept. 18, 1917. Serial No. 192,008. (Cl. 124—12.)

2. In a toy pistol, an integral grip and stock, a tubular open-breeched barrel secured upon the stock, a spring-actuated hammer movable to strike a projectile extending from the breech of the barrel, and a trigger-piece engageable with the hammer to retain the same in cocked position, the trigger-piece being disposed wholly upon the rear edge of the grip and movable toward the same to release the hammer.



4. A toy pistol comprising an integral wooden grip and stock having flat parallel sides, a tubular open-breeched barrel secured to the stock, a resilient tongue secured in the rearward portion of the barrel and adapted to frictionally engage a projectile to retain the same therein, a spring-actuated hammer having a head-portion adapted to strike the end of a projectile projecting from the breech of the barrel, and a trigger-piece disposed wholly upon the rearward edge of the grip and adapted to releasably engage the hammer to retain the same in cocked position.

[Claims 1 and 3 not printed in the Gazette.]

1,270,536. CLEANING DEVICE. CHARLES A. MAHER, Wallowa, Oreg. Filed July 19, 1917. Serial No. 181,576. (Cl. 15—26.)



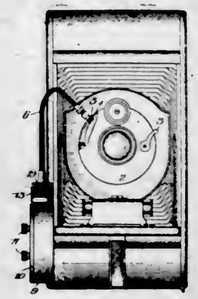
1. In an article of the character described, a brush back having a handle, a pair of studs permanently secured to the back in spaced relation to each other, a sponge rubber pad, a transverse strap secured to the inner face of the pad and projecting at its ends beyond the same to form tabs, and socket members mounted in said tabs for engagement with the studs to detachably fasten the pad to the back.

2. In an article of the character described, a brush back having a handle, a pair of studs permanently secured within the back in spaced relation to each other, a sponge rubber pad, a flexible strap secured in a recess of the pad so as to be flush with one face thereof and extended beyond said pad to form attaching tabs, and socket members mounted in said tabs for engagement with the studs to detachably fasten the pad to the back, the pad being cut away at the points of location of the tabs to form finger-receiving recesses for free accessibility to the tabs.

1,270,537. SHUTTER-ACTUATING DEVICE. PAUL J. MARKS, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 9, 1916. Serial No. 113,901. (Cl. 161—26.)

1. In a shutter actuator, the combination with a time controlled mechanism of a casing for the time controlled mechanism comprising a body portion and a detachable disk shaped rotatable cover, the latter being adapted to set the time controlled mechanism when rotated on the body portion and being provided with a pin detachably coöperating with the slotted setting member when the cover is in place.

2. In a shutter actuator, the combination with a time controlled mechanism of a casing for the time controlled mechanism comprising a body portion and a disk shaped rotatable cover, the latter being adapted to set the time controlled mechanism when rotated on the body portion, and a latch coöperating with the cover to hold the time controlled mechanism set.



3. In a shutter actuator, the combination with a time controlled mechanism, a casing therefor having a tubular guide extending from the exterior to the interior thereof to receive the inner operating member of a cable release and having a socket at its exterior end adapted to receive the outer operating member thereof, said guide being provided with transverse guiding grooves in the region of the socket, a sliding clip movable in the grooves to interlock the said outer operating member and socket, and a plunger driven by the time controlled mechanism and operating in the tubular guide and adapted to engage and move the inner operating member.

4. In a shutter actuator, the combination with a casing, and means for coupling it to the controlling member of a shutter, of a time controlled mechanism in the casing embodying a guide in alinement with the coupling means, a driver movable therein, a lever, a main spring for vibrating the lever, a retarding device, a link for transmitting motion to the latter from the lever, and a link connecting the lever and driver.

5. In a shutter actuator, the combination with a casing comprising a body portion and a rotary cover, and means for coupling the body portion to the controlling member of a shutter, of a time controlled mechanism in the casing embodying a driver in alinement with the coupling means, a main spring, a retarding device and a lever directly connected to the driver, the retarding device, the spring and the rotary cover of the casing.

[Claims 6 to 8 not printed in the Gazette.]

1,270,538. SWIVEL CONNECTION. RALPH E. MILLER, Parshall, N. D. Filed Nov. 8, 1917. Serial No. 200,973. (Cl. 255—25.)



1. In a swivel connection of the character described, the combination of a water pipe provided with a lateral pump connection and having suspension means at the upper end thereof, a packing barrel surrounding the water pipe, packing interposed between the barrel and pipe, a sleeve fitted upon the lower end of the barrel and provided at an intermediate point in its length with an interior flange surrounding the water pipe and providing an abutment for the packing of the barrel, a bearing collar fitted upon the lower end of the water pipe and engaging the flange of the sleeve, and a head fitted in the lower end of the sleeve and provided with a pipe section arranged in alinement with the water pipe, said head engaging the lower end of the water pipe and maintaining the pipe section in communication with the water pipe.

2. In a swivel connection of the character described, the combination of a water pipe having a lateral pump connection and provided at its upper end with suspension means, a packing barrel surrounding the water pipe, packing interposed between the barrel and water pipe, a sleeve fitted upon the lower end of the barrel and provided with an interior annular flange surrounding the water pipe and providing an abutment for the lower end of the packing, a bearing collar threaded upon the lower end of the water pipe and engaging the flange of the sleeve, a lock nut for holding the bearing collar in an adjusted position, a head threaded in the lower end of the sleeve and provided with a pipe section arranged in alinement with the water pipe, said head being adapted to be brought into loose engagement with the water pipe to maintain the water pipe and pipe section in communication, and a lock nut for holding the head in an adjusted position.

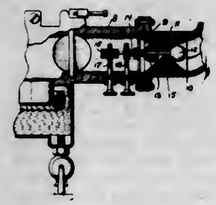
3. In a swivel connection of the character described, the combination of a water pipe having a lateral pump connection and provided at its upper end with suspension means, a packing barrel surrounding the pipe, packing fitted within the barrel and the pipe, a sleeve applied to the lower end of the barrel and provided at an intermediate point in its length with an interior annular flange which surrounds the water pipe and provides an abutment for the lower end of the packing, a bearing collar applied to the lower end of the water pipe for engagement with the flange, a head fitted within the lower end of the sleeve and provided with a pipe section arranged in alinement with the water pipe, said head serving to hold the water pipe and pipe section in communication, and one of the members being provided with a seat loosely receiving the other member.

4. In a swivel connection of the character described, the combination of a water pipe having a lateral pump connection and provided at its upper end with suspension means, a packing barrel surrounding the water pipe, packing fitted between the barrel and pipe, a sleeve applied to the lower end of the barrel and provided at an intermediate point with an interior annular flange surrounding the water pipe and providing an abutment for the lower end of the packing, a bearing collar applied to the lower end of the water pipe for engagement with the flange of the sleeve, a lock nut for the bearing collar, said lock nut and water pipe having a tapered end, and a head fitted in the lower end of the sleeve and provided with a pipe section arranged in alinement with the water pipe, said head being provided with a conical seat adapted to receive the tapered end of the water pipe and lock nut thereon.

5. In a swivel connection of the character described, the combination of a water pipe having a lateral pump connection and provided at its upper end with suspension means, a packing barrel surrounding the water pipe, packing fitted between the barrel and pipe, a sleeve applied to the lower end of the barrel and provided at an intermediate point with an interior annular flange surrounding the water pipe and providing an abutment for the lower end of the packing, a bearing collar fitted upon the lower end of the water pipe and engaging the flange of the sleeve, a lock nut for the bearing collar, the lower end of the water pipe and lock nut being tapered, a head threaded adjustably within the lower end of the sleeve

and provided with a pipe section arranged in alinement with the water pipe, said head being provided with a conical seat adapted to loosely receive the conical end of the water pipe and lock nut thereon, and a lock nut for holding the head in an adjusted position.

1,270,539. MIXER. WILLIAM J. MILLER, Detroit, Mich. Filed Dec. 6, 1917. Serial No. 205,712. (Cl. 48—180.)



1. The combination with a manifold connection, of a member mounted therein and provided with end openings tapering inwardly to form a restricted passage, and spherical bodies supported by said member in the ends of the passage thereof.

2. The combination with a carbureter and manifold connection, of a member in said manifold connection provided with a restricted passage, and bodies in the restricted passage of said member adapted to be manually adjusted.

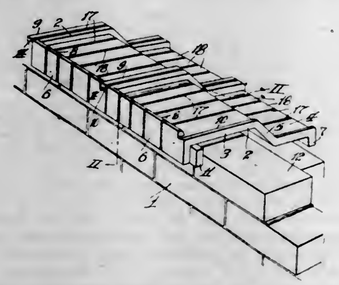
1,270,540. APPARATUS FOR DRYING FOODSTUFFS. ELIZABETH G. MORSE, Reading, Mass. Filed Sept. 7, 1917. Serial No. 190,258. (Cl. 34—17.)



1. As an article of manufacture, a receptacle for drying vegetables, fruits or other food stuffs, said receptacle being formed of longitudinally and transversely extending wires bent to form the bottom and sides of said receptacle, said transverse and longitudinal wires being interlaced where they form the bottom of the receptacle and a plurality being bent inwardly at the edges of said receptacle to furnish supporting means for a receptacle of smaller size.

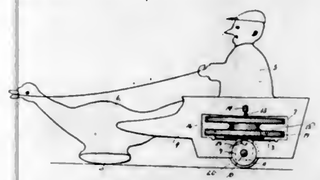
[Claims 2 and 3 not printed in the Gazette.]

1,270,541. WALL-COPING. JOHN C. MUELLER, St. Louis, Mo. Filed Feb. 13, 1915. Serial No. 8,065. (Cl. 72—86.)



A wall coping comprising an upper deck and a lower deck, a step down portion adjoining said decks, said decks inclining in the same direction, an upturned portion extending along the upper end of said upper deck, a vertically formed front wall leading to the top of said upturned portion, said vertically formed front wall terminating at the highest point of the top surface of said upturned portion.

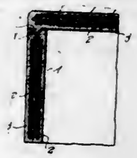
1,270,542. WHEELED TOY. FRED W. NANFELDT, New Haven, Conn. Filed Mar. 19, 1918. Serial No. 223,255. (Cl. 46—45.)



4. A wheeled toy comprising a profile body formed with a longitudinal slot, a vertically arranged shaft fixed to one side of the body and crossing said slot, a driving wheel loosely mounted on said shaft, said driving wheel formed with an annular groove, the lower portion of the wheel formed with a cord perforation, an axle mounted in said body, a driving disk fixed to said axle and engaged by said driving wheel, and wheels on the opposite ends of the axle.

[Claims 1 to 3 not printed in the Gazette.]

1,270,543. COFFIN. MARCOS NAVARRETE, Naco, and IGNACIO MARTINEZ, Douglas, Ariz. Filed Dec. 4, 1916. Serial No. 135,034. (Cl. 27—8.)

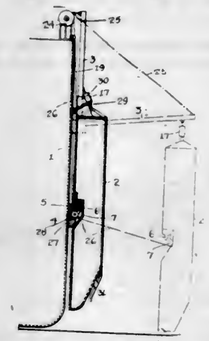


1. The process of constructing a monolithic structure, consisting in (first) providing a foraminous metal element and placing it vertically, (second) providing a permeable textile fabric element and supporting the latter on the upper edge of said foraminous metal element so that it rests against the opposite sides of said foraminous metal element, (third) providing a cementitious substance that is capable of permeating said foraminous metal element and textile fabric element, (fourth) applying said cementitious substance to said formainous metal element and textile element in such manner that a portion thereof permeates said elements, and (fifth) allowing or causing said cementitious substance to solidify and thus permanently unite with said foraminous metal element and textile fabric element.

2. In combination, a foraminous metal frame formed with a substantially vertical wall, a piece of textile fabric arranged on and over the top of said vertical wall and extending down both sides of said wall and a monolithic element enveloping and extending through said foraminated metal frame and said piece of textile fabric and uniting therewith to form a monolithic walled member.

1,270,544. PROTECTIVE CAISSON FOR SHIPS. JOHN F. NEWSOM and JOHN B. NEWSOM, Palo Alto, Cal. Filed Oct. 12, 1917. Serial No. 196,122. (Cl. 114—240.)

1. The combination of a protective device for a ship, an arm pivoted to the ship by a ball and socket joint, a movable member on the arm attached to the protective device, and means for controlling the position of the movable member on the arm, comprising a guide sheave mounted in the ball member of said socket joint.



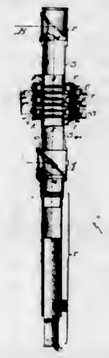
7. The combination of a protective device for a ship, an arm mounted on the side of the ship by a ball and socket joint, a portion of said socket being detachably secured to the ship, a movable carriage on said arm, means for moving said carriage, a clevis secured to the carriage adapted to support the protective device and means for releasing the detachable portion of the socket.

10. The combination of a protective device for a ship having a recess formed therein, an arm pivoted to a ship, means on said arm attached to the protective device for moving same toward or away from the hull of the ship, a supporting member secured to the hull of the ship below the arm and means mounted in the recess on the protective device to interlock with said supporting member.

14. The combination of a protective shield for a ship, a hollow arm mounted on said ship by a ball and socket joint, a movable carriage on said arm attached to the shield, pulleys mounted adjacent both ends of said arm and a cable passing over said pulleys and attached to said carriage to move the same in all positions of the arm.

[Claims 2 to 6, 8, 9, and 11 to 13 not printed in the Gazette.]

1,270,545. RANGE-FINDER. PERLEY G. NUTTING, Rochester, N. Y. Filed May 31, 1916. Serial No. 100,847. (Cl. 88—2.7.)



1. In a range finder, the combination with means for directing one of two sets of rays of light emanating from an object at an angle to each other in the same general direction as the other set to produce two images viewable from the same point of observation, of a plurality of deflecting members of relatively different power for selectively bending the rays of one image into coincidence with those of the other to cause the images to register, and means for operating one deflecting member to a neutral position while another is in use.

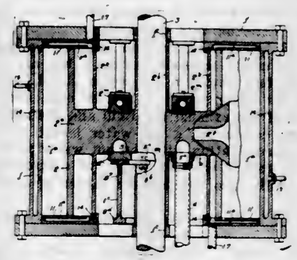
2. In a range finder, the combination with a pair of reflectors for directing rays of light from an object into position to enable an observer to see two separate images thereof, of a plurality of deflecting members of different power independently movable in the path of the rays of one image for bending the rays and causing coincidence of the images, and indicating means movable with each of the deflecting members to determine the distance of the object when the images are in coincidence.

3. In a range finder, the combination with means for directing one of two sets of rays of light emanating from an object at an angle to each other in the same general direction as the other set to produce two images viewable from the same point of observation, of a plurality of deflecting members of relatively different power for selectively bending the rays of one image into coincidence with those of the other to cause the image to register, each deflecting member being movable to a neutral position in the path of the rays.

4. In a range finder, the combination with means for directing one of two sets of rays of light emanating from an object at an angle to each other in the same general direction as the other set to produce two images viewable from the same point of observation, of a plurality of deflecting members of relatively different power for selectively bending the rays of one image into coincidence with those of the other to cause the images to register, each deflecting member comprising a pair of complementary lenses of the same focal length, one of which is movable relatively to the other in a direction laterally of their common axis.

[Claim 5 not printed in the Gazette.]

1,270,546. ROTARY MOTOR. JOHN M. O'GRADY, Chicago, Ill. Filed July 30, 1915. Serial No. 42,679. (Cl. 123—17.)

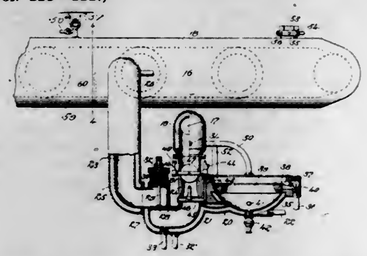


1. In a rotary motor comprising a cylindrical rotor, a piston hinged thereto and adapted to fold into the cylindrical surface of said rotor, a stationary casing having a partially cylindrical wall with an outwardly bulging portion forming an expansion chamber, said piston being dimensioned to fold out from the rotor for contact with said bulging wall, an adjustable end wall extending in a plane perpendicular to the axis of rotation, and formed to fit the outline of said stationary casing, and means for adjusting said wall in the direction of said axis of rotation against the end of the rotor and its piston.

2. In a rotary motor comprising a cylindrical rotor, a piston hinged thereto and adapted to fold into the cylindrical surface of said rotor, a stationary casing having a partially cylindrical wall with an outwardly bulging portion forming an expansion chamber, said piston being dimensioned to fold out from the rotor for contact with said bulging wall, said rotor having an annular wall within its outer cylindrical wall and spaced therefrom to form a chamber for cooling fluid, the end wall of the casing having an annular flange positioned to register with said annular wall for closure of the cooling chamber,

and conduits leading through said casing in registration with said chamber of the rotor to permit circulation of cooling fluid theerthrough.

1,270,547. CARBURETER. MARSHALL J. PALMATIER, Globe, Ariz. Filed July 20, 1917. Serial No. 181,765. (Cl. 123—122.)



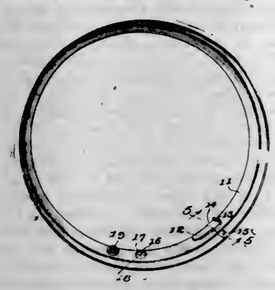
1. In an internal combustion engine, the combination with an exhaust manifold having a hot air jacket, an intake manifold having a hot water jacket, a carbureter having a hot water jacket, a hot air connection between the jacket of the exhaust manifold and the mixing chamber of said carbureter, and a hot water jacket for said connection communicating with the hot water jacket of said carbureter.

5. In an internal combustion engine, the combination with an exhaust manifold having a hot air jacket, an intake manifold having a hot water jacket, a carbureter having a hot water jacket, a hot air connection between the jacket of the exhaust manifold and the mixing chamber of said carbureter, a hot water jacket for said connection communicating with the hot water jacket of said carbureter, means for feeding water to the jacket of the exhaust manifold to generate steam, and a baffle plate in the hot air jacket of the exhaust manifold forming a steam chamber therein and arranged adjacent said hot air connection whereby to permit of only the vapor from the steam entering said connection.

7. In an internal combustion engine, the combination with an exhaust manifold having a hot air jacket, an intake manifold having a hot water jacket, a carbureter having a hot water jacket, a hot air connection between the jacket of the exhaust manifold and the mixing chamber of said carbureter, a hot water jacket for said connection communicating with the hot water jacket of said carbureter, and an air inlet valve for controlling the admission of air into the hot air jacket of said exhaust manifold.

[Claims 2 to 4 and 6 not printed in the Gazette.]

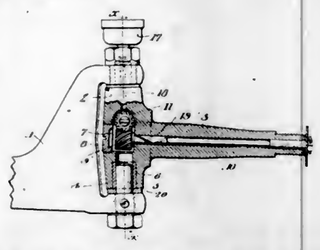
1,270,548. DEMOUNTABLE RIM. LOUIS H. PERLMAN, New York, N. Y. Original application filed Dec. 4, 1916, Serial No. 135,072. Divided and this application filed Feb. 23, 1917. Serial No. 150,485. (Cl. 152—21.)



1. A transplit demountable rim having an integrally formed tool receiving socket at one end portion, the other end portion being adapted to receive part of an operating tool, the socket being formed to receive a radially introduced fulcrum post and to hold said post rigidly in a radially extending position.

[Claims 2 and 3 not printed in the Gazette.]

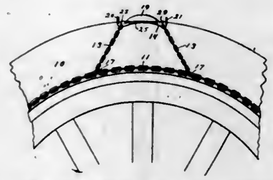
1,270,549. SPEEDOMETER-DRIVE. JOHN G. PERRIN, Detroit, Mich. Filed Oct. 27, 1913. Serial No. 797,444. (Cl. 235—96.)



1. An article of manufacture including a combined steering knuckle and wheel spindle adapted to constitute a housing for a speedometer drive, said wheel spindle having a bore extending axially therethrough and adapted to contain a driving shaft of the speedometer drive, said knuckle having a vertically extending bore open to the spindle bore and having a portion thereof enlarged to form a pocket and adapted to contain a gear connection with the driving shaft, the lower portion of said spindle bore being enlarged to form a bearing for a spindle pivot bolt and the upper portion of said spindle bore constituting an oil passageway for feeding a lubricant to said pocket and bearing.

2. An article of manufacture including a combined steering knuckle and wheel spindle adapted to constitute a housing for a speedometer drive, said wheel spindle having a bore extending axially therethrough and adapted to contain a driving shaft of the speedometer drive, said knuckle having a vertically extending bore open to the spindle bore and having a portion thereof enlarged to form a pocket and adapted to contain a gear connection with the driving shaft, the lower portion of said spindle bore being enlarged to form a bearing for a spindle pivot bolt and the upper portion of said spindle bore constituting an oil passageway for feeding a lubricant to said pocket and bearing, said spindle also provided with an opening in the side thereof, adapted to contain an insert carrying a driven shaft forming part of the gear connection.

1,270,550. ANTISKID DEVICE FOR TIRES. FRED C. POLING, Menlo, Iowa, assignor to Goode Anti-Skid Chain Manufacturing Company, Des Moines, Iowa, a Corporation of Arizona. Filed July 31, 1916. Serial No. 112,274. (Cl. 152—14.)

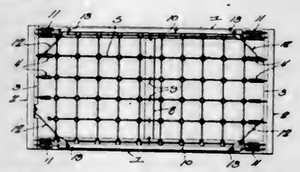


1. A non-skid attachment for tires, comprising a plate formed with a relatively large aperture in its central portion, said plate being formed with longitudinal and transverse corrugation forming ribs on one face thereof which ribs are adapted to engage a tire and elevate the plate relative thereto.

2. An improved article of manufacture, having an arcuate plate formed with a relatively large oblong aperture in its central portion, said plate also being formed with parallel longitudinal flanges adjacent the side margins of said aperture, said flanges being formed with their outer margins on arcs eccentric to the face of the plate.

3. An improved article of manufacture, having a plate formed with transversely arranged flanges adjacent its ends, the perpendicular surfaces of said flanges being curved on parallel arcs.

1,270,551. CUSHION-SEAT. JOHN M. RICHARDSON, Milwaukee, Wis. Filed Oct. 27, 1917. Serial No. 198,787. (Cl. 155—25.)



1. The herein described method of constructing cushion seats which consists in first laying a sustaining spring, in holding the spring in sagged position, in placing a suitable filler thereon, in covering the filler, and finally in releasing the spring.

3. A device of the class described comprising a frame, a sustaining spring carried thereby, means for temporarily sagging the spring to assist in securing a cushion seat thereon, and means for preventing the edges of the spring from sagging, substantially as described.

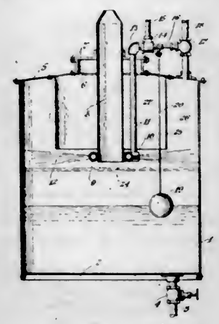
6. A device of the class described comprising a frame, a sustaining spring carried thereby, a cushion seat formed thereon, and means for releasably retaining the spring in sagged position while said cushion seat is being formed, said means comprising a transverse bar engageable with the sides of the frame, and means carried thereby for engaging said spring substantially as described.

7. A device of the character described comprising a frame, a sustaining spring carried thereby, a strip disposed at the side of said spring, resilient means engaging the frame and the ends of said strip to retain the same in position, and a brace for said strip.

8. A device of the character described comprising a frame, a sustaining spring carried thereby, a flexible flat strip disposed at the side of said spring, means resiliently securing the ends of said strip to the frame, and means for preventing the flexing of said strip in more than one plane.

[Claims 2, 4, and 5 not printed in the Gazette.]

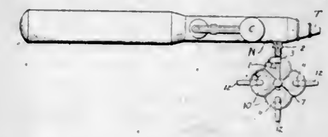
1,270,552. WATER-HEATER. WALLACE E. ROSS, Northville, Mich. Filed Apr. 16, 1917. Serial No. 162,280. (Cl. 257—50.)



1. A water heating apparatus comprising a receptacle having the bottom thereof provided with a hot water outlet connection, a permanent cover on said receptacle, a steam exhaust pipe centrally thereof, and extending into said receptacle, an annular nozzle at the lower end of said steam exhaust pipe, a water supply pipe extending through the cover of said receptacle and connected to said nozzle, a steam supply pipe connected to the cover of said receptacle, valves carried by said water and steam supply pipes outside of said receptacle, and having a common stem, a crank on the stem of said valves, a float within said receptacle having a rod connected to said crank, and adapted to control the admission of water to said receptacle, and a depending apron carried by said cover providing an annular steam compartment and a steam trap.

[Claims 2 and 3 not printed in the Gazette.]

1,270,553. AIR-BRUSH. JOHN ROUGE, New York, N. Y. Filed Mar. 16, 1918. Serial No. 222,883. (Cl. 91—45.)



1. An air brush attachment comprising a support having at one end means for fastening it to the handle of the air brush, an upright post pierced with a transverse opening adjustably mounted on the other end of said support, and a cellular cup rotatably mounted on the post beneath said support, for the purpose set forth.

4. In an air brush attachment, the combination with a cellular color cup, an outlet tube in each cell thereof having a radially projecting nozzle at its upper end and an inlet port near its lower end, and a plug removably closing its lower extremity; of an upright post on which said cup is rotatably mounted, and means for supporting the post from the air brush structure.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,270,554. COMBINED SHIPPING BOX OR CARTON AND VASE FOR NATURAL FLOWERS AND THE LIKE. MAURICE RUBEL, Chicago, Ill. Filed June 9, 1915. Serial No. 33,084. (Cl. 206—1.)



1. A combined shipping carton and vase for flowers, having a water-tight vase section and a removable blossom section, the bottom portion of the blossom section overlapping and surrounding the upper portion of the vase section, whence the blossom section extends upward above the top of the vase section far enough to inclose the blossoms of the bouquet, and whereby when said blossom section is removed the blossoms are left projecting from and exposed above the top of the vase section, the overlapping portions of said sections being flared or tapered so as to prevent the blossom section from moving upward away from the vase section.

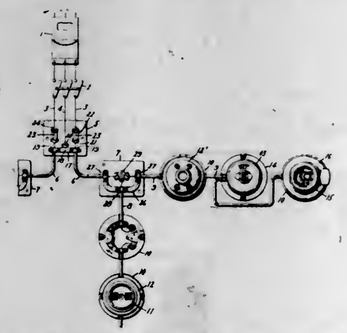
2. A combined shipping carton and vase for flowers having a water-tight tubular vase-section adapted to receive the stems of a bouquet, a tubular blossom section the bottom portion of which has removable engagement with the

top portion of the vase section, whence the blossom section extends upward above the top of the vase-section far enough to inclose the blossoms of a bouquet, a removable cap for closing the upper end of the blossom-section, and means for normally preventing the longitudinal movement of said tubular sections relatively to each other, the overlapping portions of said tubular sections being flared or tapered.

3. A combined shipping carton and vase for flowers, having, in combination, a water-tight vase-section adapted to receive the stems of the flowers, and a section for covering the blossoms of the flowers, the bottom portion of the blossom section and the upper portion of the vase-section overlapping each other and being tapered, complementarily, and means for normally preventing the unintentional longitudinal movement of said sections relatively to each other.

4. A combined shipping carton and vase, having, in combination, a blossom section and a watertight vase-section, said sections being tubular and the blossom section overlapping and surrounding the upper portion of the vase section, said overlapping portions being tapered downward, and the blossom-section being of larger diameter than the vase section, whereby the blossom section may be slipped down so as to surround the vase section for the insertion of the stems and slipped upward when the blossoms are to be confined.

1,270,555. WIRING SYSTEM. HOWARD R. SARGENT, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Aug. 24, 1914. Serial No. 858,199. (Cl. 173—324.)



1. A fitting for use in a metal sheath wiring light or power circuit comprising an insulating base, a metal strip part secured to said base having at its ends screw clamps for holding and making electrical connection to the sheaths of two pieces of such wiring, and another metal part secured to said base having binding means for the connection of conductors within the sheaths of the pieces of wiring aforesaid, said parts also having means for securing another fitting to that aforesaid and making connection to its electrical parts.

2. A fitting for use in a metal sheath wiring light or power circuit comprising an insulating base, a metal strip secured to said base having a screw clamp for holding the sheath of such wiring, and other metal parts secured to said base having binding means for the connection of conductors within the sheath of such wiring, said latter parts also having means for securing another fitting to that aforesaid and making connection to its electrical parts.

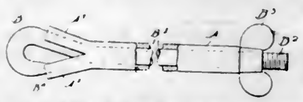
1,270,556. POST-HOLE AUGER. JOHN SCHARLIE, Janesville, Wis. Filed Jan. 19, 1918. Serial No. 212,549. (Cl. 255—65.)

1. In a device of the described class, the combination of a vertical tubular member provided near its lower end with a plurality of slots, a plurality of inturned lugs formed at the upper ends of said slots, a spiral spring located in said tubular member, and adapted to bear at its upper end against said inturned lugs, a vertical rod located in said tubular member provided near its lower end with a pair of nuts or disks against the upper one of which pair of nuts or disks said spiral spring is adapted to bear, a plurality of blades, an arm or lever attached to the upper end of each of said blades, the free or outer ends of said arms or levers being located between said nuts or disks whereby as said rod is forced downwardly by the recoil of said spring said blades are adapted to separate or to be thrown apart, all substantially as and for the purpose specified.



2. A structure as recited in claim 1, in combination with a handle on the tubular member, a lever pivotally attached to said handle, a pair of nuts or disks attached to the upper end of said rod, the short arm of said lever being located between and adapted to bear against said nuts or disks, an aperture formed in said handle, a hooked member attached to said lever and adapted to enter said aperture, whereby said lever is retained when down and said blades are securely retained in their closed position.

1,270,557. SAFETY BULL-LEADER. CHARLES SCHOETTLE, Phillips, Wis., assignor to Friedley-Voshardt Company, Chicago, Ill., a Corporation of Illinois. Filed Mar. 6, 1914. Serial No. 822,803. (Cl. 119—152.)



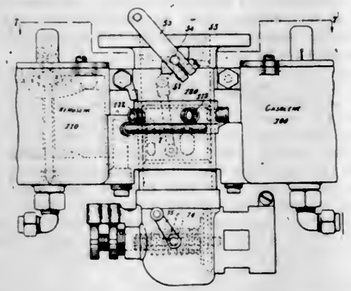
1. A device for the purpose indicated comprising a tube, a hook having a shank which extends slidably through said tube, the end of the tube being split to form a guard for closing the opening of the hook, and the inner edge of such guard being approximately alined with the axis of the tube, and locking means at the other end of the shank for securing the hook against sliding in the tube.

[Claim 2 not printed in the Gazette.]

1,270,558. CARBURETER. WILLIAM SCOTT, Medford, Mass. Filed July 20, 1914. Serial No. 851,956. (Cl. 261—18.)

1. A carbureter having, in combination, a mixing chamber provided with a gasolene supply and having an inlet at one end and an outlet at the other, the inlet being provided with a high-speed valve and a low-speed valve, and locking means for locking both valves closed for starting.

2. A carbureter having, in combination, an elongated mixing chamber having a main air inlet at one end, a discharge outlet at the other, air openings between its ends, jets in the air openings, and means for supplying the jets with different fuels.



5. A carbureter having, in combination, a mixing chamber provided with a lateral air opening having a gasolene jet in the opening and with a lateral opening having a kerosene jet in the opening, and a sleeve for closing the gasolene jet opening with the opening of the kerosene jet opening.

6. A carbureter having, in combination, a mixing chamber having an air inlet at one end and a discharge outlet at the other end, and provided with lateral air openings each having a gasolene jet, each of said air openings being arranged out of line with all the other air openings.

9. A carbureter having, in combination, a mixing chamber, a source of fuel supply, a pipe leading therefrom and embracing the mixing chamber, jets in the pipe, lateral air openings in the mixing chamber registering one each with the jets, and means for covering and uncovering the lateral openings *seriatim*.

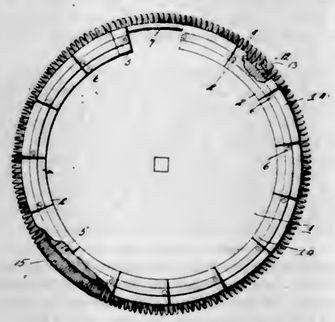
[Claims 3, 4, 7, 8, and 10 not printed in the Gazette.]

1,270,559. CLUTCH-FACING. SUMNER SIMPSON, Bridgeport, Conn., assignor to The Raybestos Co., Bridgeport, Conn., a Corporation of Connecticut. Filed Sept. 19, 1917. Serial No. 192,232. (Cl. 91—70.)

1. A clutch facing having a wearing surface of uniform character and density throughout a substantial depth, the essential body portion of said wearing surface being formed of unwoven felted short asbestos fiber, and a comminuted adhesive binder permanently uniting the fiber into a solid compact mass.

[Claims 2 and 3 not printed in the Gazette.]

1,270,560. PACKER-RIM. JOHN CRIST SINDT, Peetz, Colo. Filed Dec. 10, 1915, Serial No. 66,126. Renewed Nov. 20, 1917. Serial No. 203,057. (Cl. 97—64.)

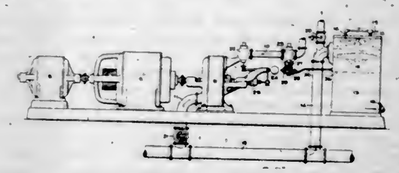


1. A detachable packer rim comprising a plurality of hingedly connected similarly constructed sections, said sections provided with concave grooves formed upon the outer faces thereof, and a coiled spring fitting within said concave grooves and extending around the periphery of said sections and projecting beyond the outer edge of said sections for producing a sub-surface packer.

4. A packer of the class described comprising a plurality of similarly constructed hingedly secured sections constituting a chain-like structure having its ends spaced, a bridge plate spanning said spaced ends, a sectional coil spring carried by said sections, said sections having the convolutions on one end thereof threaded into the convolutions on the adjoining end of the other section for permitting the tension of said spring to be adjusted, and means for connecting the other ends of said sections.

[Claims 2 and 3 not printed in the Gazette.]

1,270,561. POWER SYSTEM. ARTHUR R. SMITH, Schenectady, N. Y., assignor to General Electric Company, a Corporation of New York. Filed Apr. 9, 1917. Serial No. 160,640. (Cl. 171—315.)



1. In a power system, the combination of a main condensing unit comprising an elastic fluid engine and a generator driven thereby, an auxiliary, a non-condensing engine and a motor for driving the auxiliary, said motor being connected to said generator, a feed water heater, means for conveying exhaust from the non-condensing engine to the feed water heater, and means controlled by the temperature of the feed water for regulating the admission of elastic fluid to the non-condensing engine.

3. The combination of a feed water heater, an elastic fluid engine, a load driven thereby, conduit means for conveying the exhaust from the engine to the feed water heater and means controlled by the temperature of the feed water for regulating the admission of elastic fluid to the engine.

4. The combination of a feed water heater, a load, an elastic fluid turbine, and a motor connected to the load, conduit means for conveying the exhaust from the turbine to the feed water heater, and a temperature responsive means and a speed governor for regulating the admission of elastic fluid to said turbine, said temperature responsive means being controlled by the temperature of the feed water, and said governor being set for a speed at least equal to the no load speed of the motor.

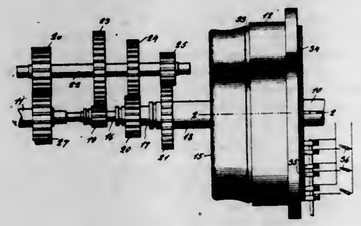
[Claims 2 and 5 not printed in the Gazette.]

1,270,562. VARIABLE-SPEED-TRANSMISSION MECHANISM. JOHN B. SPITZ, Elgin, Ill., assignor of one-fourth to Walter G. Royer and three-eighths to Reuben G. Royer, Elgin, Ill. Filed May 3, 1915, Serial No. 25,643. Renewed Dec. 4, 1917. Serial No. 205,433. (Cl. 74—59.)

1. The combination of a driving clutch member having on its face a series of concentric annular channels which are V-shaped in cross-section, a series of driven clutch members having outstanding flanges on one side dimensioned and shaped to fit in the respective channels, independently rotatable and longitudinally slidable shafts carrying the respective driven clutch members, means for effecting a driving connection between the driving clutch member and the respective driven clutch members, a driven shaft, and a variable speed gearing between the shafts of the driven clutch members and the driven shaft.

10. The combination of a driving clutch member having on one side a series of concentric annular magnet coils, means for independently energizing the magnet

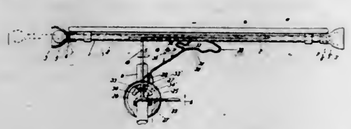
coils, a series of driven clutch members having concentric annular armatures opposite the respective magnet coils, independently rotatable and longitudinally slidable shafts carrying the respective driven clutch members, a driven shaft, and a variable speed gearing between the shafts of the driven clutch members and the driven shaft.



12. The combination of a driving clutch member having on one side a series of concentric annular grooves, rings closing the outer ends of the grooves, said rings being V-shaped in cross-section, magnet coils seating in the grooves, means for independently energizing the magnet coils, a series of driven clutch members having concentric annular armatures dimensioned and shaped to fit respectively in the channels formed by the rings, independently rotatable and longitudinally slidable shafts carrying the respective driven clutch members, a driven shaft, and a variable speed gearing between the shafts of the driven clutch members and the driven shaft.

[Claims 2 to 9 and 11 not printed in the Gazette.]

1,270,563. DIRECTION-SIGNAL FOR MOTOR-VEHICLES. WILSON D. STOUT and FRANK F. STOUT, Los Angeles, Cal. Filed May 28, 1917. Serial No. 171,430. (Cl. 177—339.)



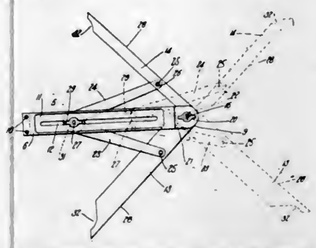
1. A direction signal for vehicles comprising a cylindrical tubular casing extending transversely to the vehicle and provided with a longitudinal slot, two tubes mounted to slide in the respective end portions of said casing, electric signal lamps mounted on the outer ends of the respective sliding tubes, flexible electric conductors connected to said lamps and extending longitudinally in the respective sliding tubes and through the slot in said casing and having sufficient slack outside the casing to provide for the motion of the tubes, an operating member mounted to slide in said casing between the said sliding tubes and adapted to engage either of said sliding tubes to move the same outwardly while leaving the other sliding tube stationary, means extending through said slot in the casing and connected to said operating member to move the arms in either direction, and a tension spring connecting said sliding tubes to draw both of them inwardly.

3. A direction signal for vehicles comprising a cylindrical tubular casing extending transversely to the vehicle and provided with a longitudinal slot, two tubes mounted to slide in the respective end portions of said casing, electric signal lamps mounted on the outer ends of the respective sliding tubes, flexible electric conductors connected to said lamps and extending longitudinally in the respective sliding tubes and through said slot in the casing, an operating member mounted to slide in said casing between said sliding tubes and adapted to engage either of said sliding tubes to move the same outwardly, and having operating means extending through said slot in the casing, for moving said operating member in either direction to push either sliding tube outwardly without moving the other sliding tube, a tension spring connecting said sliding tubes to draw both of them inwardly, and resilient means on the inner end of each of said sliding tubes for engaging said operating member to cushion the impact on the said sliding tubes in outward movement thereof.

4. A direction signal for vehicles comprising a cylindrical tubular casing extending transversely to the vehicle and provided with a longitudinal slot, two tubes mounted to slide in the respective end portions of said casing, electric lamps mounted on the outer ends of the respective sliding tubes, flexible electric conductors connected to said lamps and extending longitudinally in the respective sliding tubes and through said slot in the casing, an operating member mounted to slide in said casing between said sliding tubes and adapted to engage either of said sliding tubes to move the same outwardly without moving the other of said sliding tubes, operating means extending through said slot in the casing and connected to said slide, manually operated means connected to said operating means to move either of said sliding tubes outwardly, so as to bring the corresponding signal lamp to signaling position, a manually controlled spring catch adapted to hold said signal lamp in such signaling position, a tension spring connecting said sliding tubes to draw both of them inwardly and resilient stop means for each of said sliding tubes for arresting the inward movement thereof, by a cushion action, when either of the said sliding tubes is drawn inwardly by said tension spring on release of said catch.

[Claim 2 not printed in the Gazette.]

1,270,564. ANGLE-FINDER. ROBERT J. SWEEZEY, Cliftondale, Mass. Filed Apr. 26, 1916. Serial No. 93,782. (Cl. 33—91.)



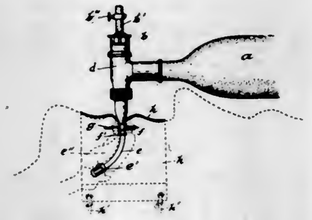
1. An implement of the class described having, in combination, a stock, a pair of blades, pivotally attached to said stock adjacent to one end thereof, and a screw constituting the pivot for both of said blades, a shoulder on said screw constructed and arranged to secure one of the blades pivoted on said screw at a predetermined angle to said stock, the other of said blades being free to move on said screw.

5. An implement of the class described having, in combination, a stock, a pair of blades pivotally attached to said stock, a screw constituting a pivot for both of said blades, a shoulder on said screw constructed and arranged to secure one of the blades pivoted on said screw at a predetermined angle to said stock, the other of said blades being free to move on said screw, and means constructed and arranged to secure said free blade at a predetermined angle with respect to the other blade.

[Claims 2 to 4 not printed in the Gazette.]

1,270,565. PHARYNGEAL INHALER. CHARLES K. TETER, Cleveland, Ohio, assignor to The Teter Manufacturing Company, Cleveland, Ohio, a Corporation of Ohio. Filed Oct. 17, 1914. Serial No. 867,103. (Cl. 128—13.)

1. In an inhaling appliance, the combination with a curved tube adapted to fit into the pharynx of the patient, of means for preventing mouth breathing associated therewith, and an outwardly-opening valve associated with said tube and adapted to permit the exhalations from the patient's lungs, substantially as set forth.



4. In an inhaler of the class described, the combination with a tube curved and flattened to fit within the mouth and pharynx of the patient, of an abutment thereon formed of relatively soft material for engagement with the teeth of the patient, and means for preventing mouth-breathing, substantially as set forth.

9. A pharyngeal inhaling appliance comprising a flattened tube shaped to fit within the mouth and pharynx of the patient, an inner labial shield and a depressing apron for the lips of the patient, an adjustable exhaling valve, and a gas bag positioned immediately adjacent to said tube through which the gas-supply is adapted to be directed, substantially as set forth.

12. In an inhaling device of the class described, the combination with a tubular pharyngeal member shaped to fit within the mouth and pharynx of the patient, of an associated inner labial shield fitting between the lips and gums of the patient, an apron fitting exteriorly about and covering the patient's mouth, means for securing the same in place and an exhaling valve, substantially as set forth.

14. In an anesthetizing inhaler, the combination with a pharyngeal inhaler tube, of means for supplying gas thereto, an outwardly opening valve associated with said tube, and a mouth-covering through which said tube extends, equipped with means for positively fastening said covering to the face of the patient, substantially as set forth.

[Claims 2, 3, 5 to 8, 10, 11, and 13 not printed in the Gazette.]

1,270,566. MEANS FOR TEACHING THE ALPHABET AND SPELLING. JENNIE L. THOMSON, Tunkhannock, Pa. Filed Mar. 18, 1918. Serial No. 223,074. (Cl. 35—9.)

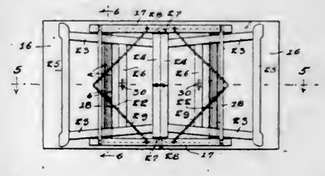


4. A plurality of sets of faceted pieces for use in teaching, each piece in a set having on one face thereof a given word and a given group of identifying characters respectively associated with the letters of the word, the pieces in each set respectively having said characters and the letters of said word repeated thereon, one such character and one such letter to a piece, the repeated character being in each instance on said face of the respective piece and the repeated letter on a different face thereof but otherwise occupying the same relative positions as the corresponding character in the character-group and letter in the word occupy, the word on one set being different from that on any other set of pieces in the series.

[Claims 1 to 3 not printed in the Gazette.]

1,270,567. [WITHDRAWN.]

1,270,568. FOLDING TABLE. ALFRED R. ULP, Richmond, Va. Filed Dec. 19, 1916. Serial No. 137,850. (Cl. 45—116.)



1. In a folding table, a top frame comprising side rails having grooves in their inner faces and cross bars secured on the under faces of the side rails and securing said side rails together in spaced and parallel relation, a table top mounted on the top frame, and leg frames each comprising a pair of legs, and top and bottom bars connecting the same, the top bars having trunnions operating in the grooves in the inner faces of the side rails of the top frame.

2. In a folding table, a top frame comprising side rails having grooves in their inner faces and cross bars secured on the under faces of the side rails and securing said side rails together in spaced and parallel relation, a table top mounted on the top frame, and leg frames each comprising a pair of upwardly convergent legs, a bottom bar, a top bar having terminal trunnions operating in the grooves in the inner faces of the side rails of the top frame, and an intermediate cross bar having a V-shaped recess; and V-shaped yokes pivoted on the side rails of the top frame and having apices adapted to be secured in the recesses formed in the cross bars of the leg frames.

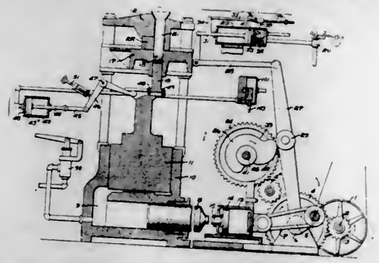
3. In a folding table, a top frame comprising side rails having grooves in their inner faces and cross bars secured on the under faces of the side rails and securing said side rails together in spaced and parallel relation, a table top mounted on the top frame, and leg frames each comprising a pair of upwardly convergent legs, a bottom bar, a top bar, having terminal trunnions operating in the grooves in the inner faces of the side rails of the top frame, an intermediate cross bar having a V-shaped recess; and V-shaped yokes pivoted on the side rails of the top frame and having apices adapted to be secured in the recesses formed in the cross bars of the leg frames, and means for securing the apices of the yokes in the recesses of the cross bars when the table is extended for use.

4. In a folding table, a top frame including side rails, a folding top slidably connected with said top frame, and leg frames having top bars slidably connected with the side rails of the top frame, said leg frames being foldable flat-wise with respect to the table top, between said rails of the top frame, the top bars of the leg frames when thus folded being disposed midway between the ends of the top frame; each of said leg frames having downwardly divergent legs which, when the frames are folded, may be wedged between the side rails of the top frame.

1,270,569. PRESS. PRESTON UPHAM, Boston, Mass., assignor to International Pavement Company, Hartford, Conn., a Corporation of Connecticut. Filed Aug. 23, 1911. Serial No. 645,616. (Cl. 138—10.)

A press comprising, in combination, a bed plate carrying bearings, a horizontal shaft rotatably mounted in said bearings and providing a crank, a crank pin for said crank, a connecting rod connected at one end to said crank pin; an elastic fluid pressure cylinder connected to the other end of said connecting rod and rectilinearly slidable longitudinally of said bed plate, a piston in said cylinder, a piston rod connected to said piston, a displacing plunger connected to said piston rod, a hydraulic cylinder receiving one end of said displacing plunger, a ram above said displacing plunger and vertically reciprocable in said hydraulic cylinder, means for

maintaining a constant amount of liquids in said cylinder and means providing for the constant admission of elastic



pressure fluid between said piston and the rear of said elastic pressure fluid cylinder.

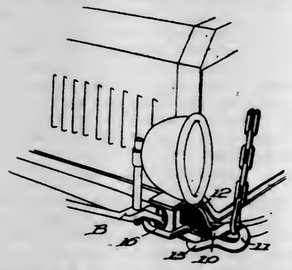
1,270,570. COASTING-SPROCKET. HENRY E. VAN NESS, Elmira, N. Y. Filed Jan. 21, 1918. Serial No. 212,969. (Cl. 208—9.)



5. A ball clutch including in combination, a rotatable driving member, a driven member mounted for rotation about the same axis and having a flange at the side of the driving member, both of said members being held against axial displacement, adjacent sides of said members each formed with an angles recess, a ball in one of said recesses the shallow end being formed with a seat for the ball fitting substantially one quarter of the surface thereof and the deep end of the other recess having a similar seat whereby the ball when resting on both seats connects the members for rotation without any substantial end thrust.

[Claims 1 to 4 and 6 not printed in the Gazette.]

1,270,571. AUTOMOBILE-LIFTING APPLIANCE. OLAF A. VICTEL and MAURICE E. PORTER, Tolley, N. D. Filed Jan. 30, 1918. Serial No. 214,455. (Cl. 57—127.)

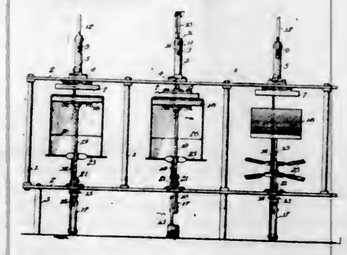


2. A lifting hook of the type described having a body provided at one end with an opening and having at its opposite end a pair of engaging surfaces approximately at right angles to one another, and a laterally offset hook extending from the last mentioned end of the body and disposed in a plane parallel to the plane of the body for the purposes mentioned.

4. A lifting hook of the type described, comprising an apertured body an engaging face at one end substantially at right angles to the longitudinal axis of the body, said body having an inclined extension provided with an angular portion disposed approximately parallel to the said engaging face, and a hook carried by and offset laterally with respect to the said body, for the purpose described.

[Claims 1 and 3 not printed in the Gazette.]

1,270,572. PACKAGE-SEALING MACHINE. EMERY L. WALKER, Milwaukee, Wis., assignor to Kieckhefer Box Company, Milwaukee, Wis. Filed Jan. 19, 1917. Serial No. 143,255. (Cl. 93—36.)



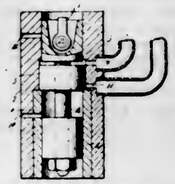
1. In a box end sealing machine the combination with a pair of relatively movable platens, a supporting structure therefor whereby relative motion may be imparted to the platens so that a box form may be placed upon one of said platens without interference from the other platen, means for moving and locking one of said platens whereby said platens are adapted to seal the overlapping ends of a box structure placed therebetween by pressing the overlapping ends between them, one of said platens being within the box form and the other platen without, the outer configuration of said latter platen being such as to permit a portion of the folded end of the box form to remain exposed for purposes of manual manipulation of the end flaps of said box form during the time the platens are being moved into their limiting sealing position.

2. In a box end sealing machine the combination with a pair of relatively movable platens, a supporting structure therefor whereby relative motion may be imparted to the platens so that a box form may be placed upon one of said platens without interference from the other platen, means for moving and locking one of said platens whereby said platens are adapted to seal the overlapping ends of a box structure placed therebetween by pressing the overlapping ends between them, one of said platens being within the box form and the other platen without, the outer configuration of said latter platen being such as to permit a portion of the folded end of the box form to remain exposed for purposes of manual manipulation of the end flaps of said box form during the time the platens are being moved into their sealing position, the said platen which is adapted to be within the box form having edge portions substantially parallel to the sides of the box form to permit folding of the box flaps into their limiting sealing position.

3. In a box end sealing machine the combination with a pair of relatively movable platens, a supporting structure therefor whereby relative motion may be imparted to the platens so that a box form may be placed upon one of said platens without interference from the other platen, means for moving and locking one of said platens whereby said platens are adapted to seal the overlapping ends of a box structure placed therebetween by pressing the overlapping ends between them, one of said platens being within the box form and the other platen without, the outer configuration of said latter platen being such as to permit a portion of the folded end of the box form to remain exposed for purposes of manual manipulation of the end flaps of said box form during the time the platens are being moved into their sealing position, the said platen which is adapted to be within the box form having edge portions substantially parallel to the sides

of the box form to permit folding of the box flaps into their limiting sealing position, said outer platen having cut-away portions to accommodate the fingers when pressing the said overlapping ends together.

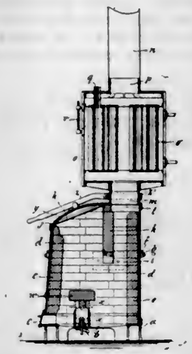
1,270,573. PUMP. ALEXANDER GROUNDWATER WALLS, Paisley, Scotland, assignor to Walter McGee & Son, Limited, Paisley, Scotland. Filed Nov. 21, 1917. Serial No. 203,114. (Cl. 184—27.)



1. In a pump of the character described, in combination, a chamber having inlet and outlet ports, a piston movable in said chamber and adapted to control the said inlet port, said piston having a reduced extension, and a valve mounted on said extension coaxially with said piston and movable on said extension, said valve being adapted to control the said outlet port.

2. In a pump of the character described, in combination, a chamber having inlet and outlet ports, a pair of pistons movable in said chamber and adapted to control the inlet ports, a rod connecting said pistons, and a valve disposed intermediate said pistons and coaxial therewith, said valve slidable on said rod and adapted to control the outlet ports.

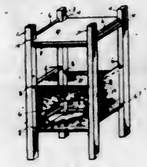
1,270,574. REFUSE-DESTRUCTOR. GEORGE WATSON, London, England. Filed Mar. 17, 1916. Serial No. 84,825. (Cl. 110—18.)



A combined portable refuse destructor furnace and water heater comprising a chimney, an incinerating chamber, an arched partition in the upper part of said chamber arranged with respect to the walls of the chamber to form therewith on one side a garbage chute and on the other side an outlet flue, a grate for said chamber, a mushroom shaped air feeding stool thereon, and a water heater interposed between the outlet flue and the chimney.

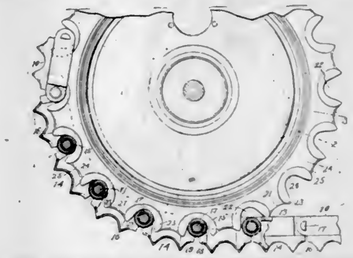
1,270,575. KNOCKDOWN BASKET-STAND. HARRY J. WHEELER, Kansas City, Mo., assignor to Ira Ashline and Walter J. Brockhouse, Kansas City, Mo. Filed June 18, 1917. Serial No. 175,265. (Cl. 45—31.)

In a knockdown basket stand, the combination, of vertically extending standards having flat inner sides, oppositely disposed horizontally extending supporting rods penetrating the one inner side of said standards, oppositely disposed horizontally extending clamping rods penetrating the other of the inner sides of said standards, a plate interposed between said rods and having its corners cut away to receive the inner sides of said stand-



ards, a strip of fabric connected between opposite-disposed supporting rods and passing under the below adjacent supporting rods, and a strip of fabric connected between oppositely disposed clamping rods and passing under the below adjacent clamping rods and overlapping said first mentioned strip and thereby forming with said first mentioned strip and said standards a basket portion.

1,270,576. TRACK-LAYING TRACTOR. ROLLIN H. WHITE, Cleveland Heights, Ohio, assignor to The Cleveland Tractor Company, Euclid, Ohio, a Corporation of Ohio. Filed Jan. 31, 1918. Serial No. 214,589. (Cl. 21—150.)



1. In a track laying tractor, a track belt comprising a plurality of similar pivoted-together links, each of which is formed with a ground-engaging shoe, two longitudinal ribs projecting upward from said shoe and extending at their ends beyond both ends of the shoe, and a sleeve which extends between and joins said ribs near one end of the link, whereby a pocket is formed on the upper face of each shoe between said ribs,—the parts of the shoe at both ends thereof between said ribs being cut away to leave a recess through which dirt that enters said pocket may flow out.

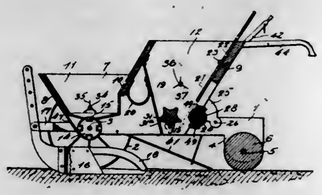
3. In a track laying tractor, the combination of a track belt comprising a plurality of links pivoted together, each having on its upper side a pocket and each having through the bottom of the link at both ends of the pocket a recess communicating with said pocket, a driving sprocket over which said track belt runs, said sprocket having a plurality of teeth adapted to enter said pocket, each tooth being at its ends approximately as wide as the pocket, and having between said ends a narrow rib, which is knife-edged along its outer edge.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,577. PLANTER. OSCAR L. WILLIAMS, Coosada, Ala. Filed July 27, 1916. Serial No. 111,710. (Cl. 221—120.)

1. An implement of the character described comprising a container, a yieldable place forming one wall of said container, a vertically adjustable plate forming a second

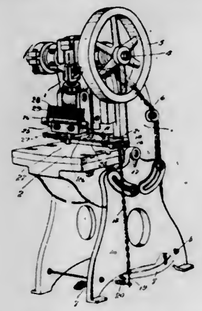
wall for said container, said plates being arranged in spaced relation to provide an outlet opening therebetween, and revolving distributing rollers at the bottom of the



container, the vertically adjustable plate when moved downwardly extending between the rollers.

[Claim 2 not printed in the Gazette.]

1,270,578. SAFETY APPLIANCE FOR PUNCH-PRESSES. ALEXANDER F. WINTERS and ALVIN H. POATER, Grand Rapids, Mich., assignors to Winters & Stryker, Grand Rapids, Mich., a Firm consisting of Alexander F. Winters and Albert Stryker. Filed July 2, 1917. Serial No. 178,210. (Cl. 74—105.)



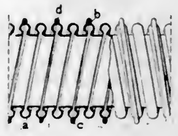
1. A guard appliance for punch presses or the like adapted for application thereto above the bed and between the vertical housing castings thereof, including spaced apart brackets adapted to extend in front of said housing castings, means to adjust said brackets with respect to each other to thereby force them against the inner sides of the housing castings, a shaft rotatably mounted on the front ends of the brackets, a guard member fixed to and located in front of the shaft, means attached to the shaft normally elevating the guard, and means adapted to connect said shaft and the foot lever of the press to lower the guard on depression of said foot lever.

2. A guard appliance for punch presses or the like adapted for application thereto above the bed and between the vertical housing castings thereof, including spaced apart brackets adapted to locate at their rear ends between said housing castings and extend in front thereof, means to adjust said brackets toward or away from each other to thereby force them against the inner sides of said housing castings, a shaft rotatably mounted on the front ends of the brackets, rods connected to and extending in front of the shaft, means for adjusting the rods toward or away from each other, a guard member attached to and located between the front ends of the rods, different lengths of guard members being used with different positions of the rods on the shaft thereby adapting one size of appliance for different sizes of presses, means attached to the shaft normally turning the same to elevate the guard member, and means attached to the shaft and adapted to be connected to the foot lever of the punch press to lower the guard member on depression of said foot lever.

3. A guard appliance for punch presses and the like, comprising a pair of spaced brackets, a rod connecting the same and adjustable to vary the distance between the brackets whereby said brackets may be adjusted to bear against spaced apart vertical housing castings of a punch press, a shaft rotatably carried by the brackets, means tending to rotate said shaft in one direction, a guard member positioned a distance in front of the shaft, means connecting the same thereto, and means for rotating the shaft in the opposite direction to change the normal position of said guard member, substantially as described.

[Claims 4 to 7 not printed in the Gazette.]

1,270,579. SPIRAL METALLIC HOSE. EMIL WITZENMANN, Pforzheim, Germany. Filed Mar. 9, 1914. Serial No. 823,322. (Cl. 137—75.)



In a spiral metallic hose, in combination, a spirally wound single corrugated metal tape undulated in cross section and bent outwardly at its longitudinal edges to present flanges extending radially outward of the body from outermost portions of the undulations, the contiguous flanges forming an exterior spiral joint for the hose, a second tape having in cross section the contour of an inverted U and spirally wound around the first-named tape and engaging the said flanges to tightly clasp and hold the same together and form a tight joint therebetween, and a tightening wire inclosed by said second tape, the said flanges and second tape forming an exterior radially disposed protective rib which extends beyond the circular outline of all other portions of the undulated hose, and the second tape alone being adapted to serve as a shoe.

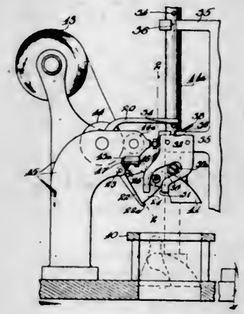
1,270,580. PAPER HOLDER AND CUTTER. GEORGE F. WOLF, Baltimore, Md. Filed Dec. 27, 1916. Serial No. 139,127. (Cl. 211—32.)



A paper holder and cutter comprising a body, a cutting blade secured to and extending slightly above the upper front edge of said body, a frame hinged to the upper edge of said body and having an inclined surface at the front thereof, a cuting blade extending across the front of said frame adjacent to the said inclined surface and adapted to rest on the front edge of the body just back of the cutting blade thereon, a spring detachably secured to and extending across the said body back of the cutting blades, and rollers in said body upon which the paper rests.

1,270,581. ENVELOP-MAKING MACHINE. IRVIN L. YOUNG, Chicago, Ill. Filed Oct. 16, 1917. Serial No. 196,873. (Cl. 93—61.)

1. In an envelop making machine, a reciprocatory blank-folding plunger, a pivoted patch carrier mounted on the plunger, means for swinging the patch carrier outward from the plunger to patch-receiving position and alongside the plunger into patch-delivering position, said carrier, while in the last mentioned position having its portion which carries the patch flush with the working face of the plunger, and means for delivering a patch to the carrier when in receiving position.



7. In an envelop making machine, a reciprocatory blank-folding plunger, a pivoted patch carrier mounted on the plunger, means for swinging the patch carrier outward from the plunger to patch-receiving position and alongside the plunger into patch-delivering position, said means comprising an arm projecting from the carrier and having an abutment, and a cam slot in a part stationary relative to the plunger in which slot the abutment seats, said carrier while in the last mentioned positioned having its portion which carries the patch flush with the working face of the plunger, and means for delivering a patch to the carrier when in receiving position.

[Claims 2 to 6 not printed in the Gazette.]

1,270,582. SHOCK-ABSORBER. FRANK ZALANKA, Hartford, Conn. Filed Jan. 7, 1918. Serial No. 210,640. (Cl. 267—27.)



1. A supporting member, a member supported thereby, one of said parts having spring qualities, a shock absorbing member of C-shape composed of a plurality of leaves disposed and arranged to resist expansion to a greater degree than contraction whereby said supporting and supported members may approach each other from a certain position more readily than they may separate from such position, and means for securing the ends of said absorber to said supporting and supported members.

2. A supporting member, a member supported thereby, one of said parts having spring qualities, a shock absorbing member of C-shape composed of leaves of different lengths with the short length outside and the longer length on the inside, and means for securing the ends of said absorber to said supporting and supported members to resist separation of the latter.

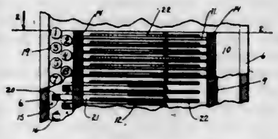
1,270,583. STIRRER FOR MOLTEN-BRASS MIXTURES. FRANK D. ZINNO, Waterbury, Conn., assignor to Waterbury Mfg. Co., Waterbury, Conn., a Corporation. Filed May 6, 1918. Serial No. 232,719. (Cl. 259—144.)

1. A stirrer for molten brass mixtures, comprising a handle, a brass core mounted upon the lower end thereof, and an envelop of refractory material applied over the brass core.



2. A stirrer for molten brass mixtures, comprising a handle, a brass core mounted upon the lower end thereof and formed with a plurality of retaining-points, and an envelop of refractory material applied over the core and retained thereon by the said points.

1,270,584. PHONOGRAPH-DISK-RECORD HOLDER AND EJECTOR. GEORGE E. ADAMS, Salt Lake City, Utah, assignor of one-third to Daniel Alexander and one-third to Hammond O. Williams, Salt Lake City, Utah. Filed Mar. 19, 1917. Serial No. 155,896. (Cl. 211—16.)



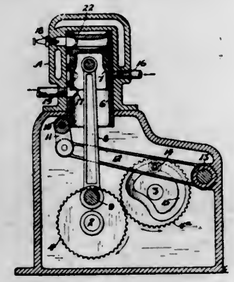
1. In a disk record cabinet, substantially as set forth, the combination of a casing including a horizontal series of flat T-shaped rack elements mounted to provide a corresponding series of horizontally disposed compartments, each adapted to receive an individual disk record in flatwise sliding position; an ejector element slidingly mounted in each compartment at the rear thereof to engage an inserted record; and selective means operatively engaging the individual ejector elements for moving any of said ejector elements forwardly at will to project a desired record, substantially as described.

2. In a disk record cabinet, substantially as set forth, the combination of a casing providing a series of horizontally disposed compartments, each adapted to receive an individual disk record in flatwise sliding position; an ejector arm for each compartment, having a free inner end slidingly mounted therein at the rear thereof, to peripherally engage an inserted disk record in its own plane, and at its outer end projecting toward one side of said casing; an individual selective push bar for each of said ejector arms, operatively engaging the outer ends thereof for swinging the inner end of any of said ejector arms forwardly at will to project a desired record; and a fulcrum element disconnected from but common to all of said ejector arms, substantially as described.

1,270,585. INTERNAL-COMBUSTION ENGINE. PHILIP AVILLA, San Francisco, Cal. Filed Dec. 26, 1916. Serial No. 138,787. (Cl. 123—66.)

1. In an internal combustion engine, a cylinder having a transfer port in its side wall adjacent its head, a

sparker in the port, a tubular outer piston reciprocal in the cylinder and provided with a solid head having a pocket in its outer face opposing the cylinder head, said piston also having a port through its side and disposed in such proximity to the piston head as to permit communication through the transfer port with the space between the heads of the cylinder and piston as the latter approaches its inward limit of movement, communication with said piston pocket being shut off when the piston is at its inward limit of movement whereby the gases confined within the piston pocket may serve as a cushion for the piston, an inner piston reciprocal in the outer piston, means for operating the piston, and an inlet and an outlet in the cylinder.



2. In an internal combustion engine, a cylinder having a transfer port in its side wall adjacent its head, a sparker in the port, a tubular outer piston reciprocal in the cylinder and provided with a solid head having a pocket in its outer face opposing the cylinder, said piston also having a longitudinal series of ports through its side, the innermost port being disposed in such proximity to the piston head as to permit communication through the transfer port with the space between the heads of the cylinder and piston as the latter approaches its inward limit of movement, communication with said piston pocket being shut off when the piston is at its inward limit of movement whereby the gases confined within the piston pocket may serve as a cushion for the piston, an outlet in the cylinder over which the outermost piston port moves when the piston is at its inward limit of travel, an inner piston reciprocal in the outer piston to uncover the outermost port thereof, means connecting the pistons for timed movement, and an inlet for the cylinder opened and closed by the outer piston.

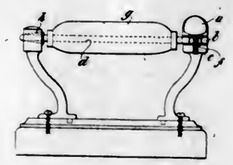
1,270,586. BOOT OR SHOE HEEL. RICHARD S. AYRES, Brookline, Mass. Filed June 3, 1915. Serial No. 31,865. (Cl. 36—34.)



1. As an article of manufacture, an integral boot or shoe heel comprising a substantially solid mass of pulp material molded and compressed into a non-laminated heel approximately in its final finish form, being made of wear-resisting pulp material, including a sufficient leather ingredient in finely divided particles to enable the outer surface of the molded heel to receive a leather-like polish and finish, and constituting a shoe heel capable of treatment with heel edge trimming and finishing machines.

2. As an article of manufacture, a boot or shoe heel, consisting in a substantially solid non-laminated mass of pulp material, made from a pre-determined mass of plastic pulp, and compressed into the form of a completed boot or shoe heel, said pulp material including wood pulp, leather pulp, a suitable binder and a waterproofing substance.

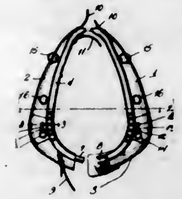
1,270,587. HAND-IRON. MARY JOSEPHINE BAKER, Fethard, Ireland. Filed Apr. 24, 1917. Serial No. 164,277. (Cl. 68—26.)



1. In a hand iron, the combination of a body portion, two uprights, one of such uprights being provided with a hole and the other with a projection, an insulating handle having protruding from one end thereof a rod adapted to fit into the beforementioned hole in one of the uprights, and having protruding beyond the other end thereof a plate adapted to fit over the projection on the other upright, and means for securing the said plate in position substantially as described.

2. In a hand iron, the combination of a body portion, two uprights, one of such uprights being provided with a hole directed in the longitudinal axis of the iron and tapering outward toward the body thereof, the other upright being provided at the top with a projecting stepped portion, an insulating handle, a rod projecting from one end of said handle and adapted to fit into the before mentioned tapering hole, a plate protruding beyond the other end of the insulating handle and adapted to fit over the stepped portion on the second upright, an internally screw threaded hole in the said stepped portion, and a thumb screw adapted to screw into the said hole and hold the plate and handle securely in position, substantially as described.

1,270,588. HORSE-COLLAR. CLYDE T. BARGER, Hayes, Ill. Filed June 4, 1917. Serial No. 172,741. (Cl. 54—18.)



1. A horse collar comprising a pad including half sections, each section being provided with a tubular casing near its inner edge, a length of piping received in each casing and shaped to conform to the curve of the casing, and a padding interposed between the proximate surfaces of the piping and casing.

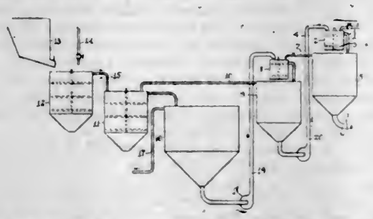
2. A horse collar comprising a pad including half sections, each section being provided with a tubular casing near its inner edge, a length of piping received in each casing and shaped to conform to the curve of the casing, a padding interposed between the proximate surfaces of the piping and casing, the ends of the piping being extended beyond the ends of the casings, one end being adapted for the reception of the corresponding end of the other piping, and a fastening element for maintaining the meeting ends of the piping in fixed position.

3. A horse collar comprising a pad including complementary sections adapted to be connected together, a tubular casing attached to the front of each section, adjacent the proximate edges thereof, the said casing having a plurality of openings formed therein, and a length of piping received in each casing and having openings alined with the openings in the said casing.

4. A horse collar comprising a pad including complementary sections adapted to be connected together, a tubular casing attached to the front of each section, adjacent the proximate edges thereof, the said casing having a plurality of openings formed therein, a length of piping received in each casing and having openings alined with the openings in the said casing, the lower ends of the lengths of piping being projected beyond the ends of the casings, and means for connecting the projected ends together when the pad sections are secured.

5. A horse collar comprising a pad including complementary sections adapted to be connected together, a tubular casing attached to the front of each section, adjacent the proximate edges thereof, the said casing having a plurality of openings formed therein, a length of piping received in each casing and having openings alined with the openings in the said casing, the lower ends of the length of piping being projected beyond the ends of the casings, means for connecting the projected ends together when the pad sections are secured, and hooks arranged in pairs, each pair being received in the adjacent openings in the said sections and piping, and fastening elements carried by the said hooks.

1,270,589. METHOD OF TREATING BRINE. EDWIN O. BARSTOW, Midland, Mich., assignor to The Dow Chemical Company, Midland, Mich., a Corporation of Michigan. Filed May 12, 1917. Serial No. 168,149. (Cl. 23—13.)



1. In a method of treating brine containing both calcium and magnesium chlorids, the steps which consist in adding thereto an excess of lime, so as to precipitate all of such magnesium chlorid as hydrate and leave a substantially pure calcium chlorid solution; and then separating such precipitate and adding more such brine thereto to convert any admixed calcium hydrate to magnesium hydrate.

3. In a method of treating brine containing both calcium and magnesium chlorids, the steps which consist in adding thereto an excess of lime, so as to precipitate all of such magnesium chlorid as hydrate and leave a substantially pure calcium chlorid solution; and then separating such precipitate and adding sufficient more such brine to present an excess of magnesium chlorid and thereby convert any admixed calcium hydrate to magnesium hydrate, the solution, with reduced content of magnesium chlorid, resulting from such last step being used as the brine in such first step.

6. The method of treating brine containing both calcium and magnesium chlorids, which consists in causing a current thereof and a counter-current of sludge, resulting from the addition of lime to such brine, to encounter each other intermittently.

7. The method of treating brine containing both calcium and magnesium chlorids, which consists in causing a current thereof and a counter-current of sludge, resulting from the addition of lime to such brine, to encounter each other intermittently, the resulting solution constituting the brine to which the lime is thus added.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,590. EYEGLASS-MOUNTING. EARLE J. R. BEATTEY, Providence, R. I., assignor to Universal Optical Corporation, Providence, R. I., a Corporation of Rhode Island. Filed July 29, 1916. Serial No. 111,983. (Cl. 88—47.)

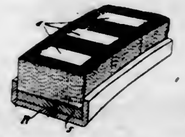


1. An auxiliary spring clamp for eyeglass mountings comprising a pair of resilient arms connected by a bridge member, one or both of said arms being provided with inwardly projecting members for engaging corresponding holes in the lens by spring pressure, and the ends of said projecting members being beveled to facilitate their ready entrance to and withdrawal from said holes.

2. An auxiliary spring clamp for eyeglass mountings comprising a bridge member having oppositely disposed resilient arms, projections extending inwardly from one or both of said arms for extending through the screw openings of the usual lens straps for engaging corresponding apertures in the lens.

3. An auxiliary spring clamp for eyeglass mountings comprising a pair of opposing resilient arms connected by a bridge member, said arms being provided with inwardly turned portions adapted to extend through the screw openings of the usual lens strap, the same being provided with an opening in the bridge portion to permit of its being positioned on the mounting strap.

1,270,591. CUSHION-TIRE AND METHOD OF MAKING THE SAME. MAX BECK, New York, N. Y. Filed Mar. 9, 1918. Serial No. 221,472. (Cl. 154—12.)



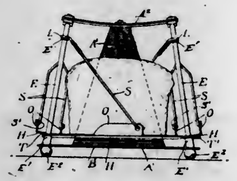
1. The combination with a rim having side flanges, of a rubber base strip fitted snugly between the flanges and upon the rim, and an annular series of blocks resting at their inner ends on the base strip, each block extending from one flange to the other and including a rubber core extending radially from the rim and alternate layers of fabric and rubber extending around the core, the outer edges of said layers and the outer ends of the cores of the blocks forming the tread surface of the tire.

2. A cushion tire including a rubber base strip and an annular series of blocks vulcanized together and to the base strip, the side faces of the blocks being flush and each block including a rubber core extending radially from the base strip, and alternate layers of fabric and rubber wrapped around each core, the outer edges of the said layers and the outer ends of the cores forming the entire tread surface of the tire.

3. The herein described method of making a cushion tire which consists in placing waterproofed intermeshing cords between thicknesses of unvulcanized rubber, pressing the rubber upon and between the cords to form a single strip of cords and rubber, wrapping the strip about a rubber core to form an elongated body consisting of a central core and surrounding layers of cords and rubber, then cutting the body into blocks of equal lengths, assembling the blocks on end and close together upon a rubber base strip seated on a wheel rim, the cores of the blocks

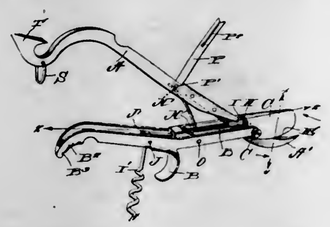
extending radially from the base strip and the outer ends of said cores and the outer edges of the layers of rubber and cords forming the tread of the tire, and finally vulcanizing the entire structure.

1,270,592. TOASTER. EDWARD H. BERNS and GEORGE DANZ, Monroe, Mich. Filed Dec. 6, 1917. Serial No. 205,844. (Cl. 53—5.)



A toaster, comprising a frame having inclined corner posts, a top and a bottom plate supported by said posts, a conical heat radiating member fastened at its ends to said plates, each post having a shouldered portion above the bottom plate, a beading upon each post a short distance from the upper end thereof, a swinging toast supporting member pivotally mounted upon each post and supported by the shoulder thereon, forked members made of wires each twisted to form an eye at their longitudinal centers and pivotally mounted upon a post and having a bearing upon the beading thereon, the ends of the forked members terminating in hooks connected to said swinging toast supporting members.

1,270,593. CAN-OPENER. JULES D. BISCAYART, Atlanta, Ga., assignor of one-half to Fernand Cailleteau, Atlanta, Ga. Filed Dec. 10, 1917. Serial No. 206,523. (Cl. 30—3.)

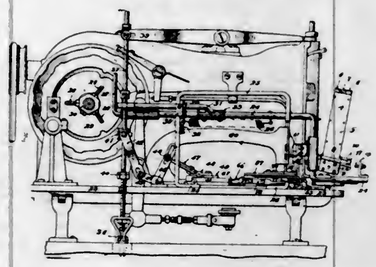


A can opener, comprising a plate bent U-shaped in cross section and having a convexed shearing edge, said plate provided with an elongated slot, a handle made of a plate bent U-shaped and having two forwardly projecting portions between which said slotted plate is positioned, a cutting jaw, and a handle bent U-shaped and to which said jaw is fastened, the latter having a shoulder adapted to engage the end of said slot to limit the movement of the jaw in one direction.

1,270,594. BUTTON-PLACING DEVICE FOR SEWING-MACHINES. JULIUS J. BRELL, New York, N. Y. Filed Aug. 11, 1916. Serial No. 114,308. (Cl. 112—32.)

1. In a machine of the class described, means for holding a button, means for turning said button in said holder, means for reciprocating said button-turning means forward and away from the button holder, means for elevating the button-turning means when said means has reached its forward position and means for lowering said button-turning means whereby said button-turning means rotates the button on its rearward movement.

2. In a machine of the class described, means for holding a button in the path of a needle, and means for turning the button in said holder, said means comprising a pivoted finger provided with a point at its end, means for reciprocating said finger, a projection extending from said finger, a cam and means for reciprocating the same to cause it to engage the projection so that when the finger reaches its forward position it is raised and then lowered to wipe the button on its return movement and to turn the same so that the holes in said button are in proper registration with the path of the needle.



6. In a machine of the class described, means for sewing on buttons, a chute for delivering buttons to said button sewing means, means for individually delivering a button to said button sewing means comprising a pivoted finger and a cam movable beneath said finger, means for reciprocating said cam, said means comprising a reciprocating frame with projections to engage the cam, a bracket in which a portion of said frame is mounted, means for reciprocating said frame in one direction comprising a rotatable shaft with radially extending projections for contacting with a portion of said frame and means for reciprocating said frame in another direction, said means comprising a spring extending from said frame to the bracket in which said frame is mounted.

7. In a machine of the class described, a button chute for delivering buttons individually to button attaching means, a pair of jaws for holding the buttons delivered by said chute, a slide for forcing the buttons delivered by the chute between said jaws, a reciprocating finger for moving between the jaws, and means for elevating the finger clear of the button when the finger has reached the limit of its forward movement and causing the finger to contact with and rotate the button on its rearward movement.

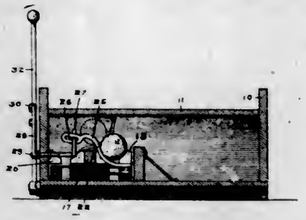
8. In a machine of the class described, means for sewing on buttons, means for feeding buttons to the button sewing mechanism, said button feeding means including, a bracket, a bar slidably mounted therein, a spring adapted to draw said bar in one direction, a pawl adapted to hold said bar in its forward position against the tension of the spring, a rotatable shaft, a plurality of radially extending projections on said shaft for intermittently engaging and moving the bar forward against the tension of the spring and means for releasing the pawl so that the bar may be drawn rearwardly by said spring.

[Claims 3 to 5 not printed in the Gazette.]

1,270,595. BALL-RELEASE FOR GAME APPARATUS. GEORGE L. CHATFIELD, Indianapolis, Ind., assignor to Briant Manufacturing Company, Indianapolis, Ind., a Corporation. Filed June 30, 1917. Serial No. 177,870. (Cl. 46—66.)

3. The combination with a game apparatus including an alley for the pitched balls, of a ball return race-way comprising a fixed and a movable section, means for arresting the returning balls at a determined position, and means arranged near the player end of the alley for actuating the movable race-way for discharging the balls therefrom.

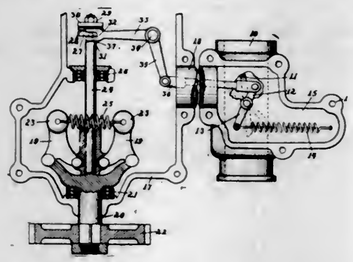
5. The combination with a game apparatus including an alley for the pitched balls, of a ball return race-way comprising a fixed and a movable section, means for pivotally mounting said movable section, a ball receiving section arranged adjacently to said movable section, and means for oscillating the movable section for discharging the balls from the latter into said receiving race-way.



7. The combination with a game apparatus including an alley for the pitched balls, of a ball return race-way comprising a fixed and a movable section, means for pivotally mounting said movable section, a ball receiving section arranged adjacently to said movable section, means for oscillating said movable section for dumping the balls from the latter into the receiving race-way, and a pocket arranged exteriorly of the apparatus and communicating with the end of the ball receiving race-way for rendering the balls in the latter accessible to the player.

[Claims 1, 2, 4, and 6 not printed in the Gazette.]

1,270,596. HYDROCARBON-MOTOR. HAROLD D. CHURCH, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed Jan. 27, 1913. Serial No. 744,450. (Cl. 264—15.)



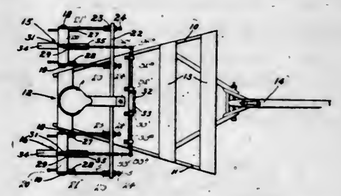
1. In a hydrocarbon motor, the combination with the intake pipe and the throttle valve therein, of a governor having a rotating part, a non-rotating device actuated by said rotating part as the governor operates, connections from said device to the throttle valve, and a spring tending to close said valve and adapted to take up lost motion in said connections including the lost motion between said rotating part and said non-rotating device.

10. In a hydrocarbon motor, the combination with the intake pipe and the throttle valve therein, of a governor, connections between said governor and said throttle valve whereby said governor positively maintains said valve in open position when the governor is in its rest positon, a spring tending to close said valve, means whereby said throttle valve is yieldingly closed, and means whereby said throttle is positively closed by said governor even though said yielding means fails.

[Claims 2 to 9 not printed in the Gazette.]

1,270,597. CORNER-FINISHER FOR IRRIGATION. JAMES M. COOK, Anaheim, Cal. Filed Oct. 29, 1917. Serial No. 199,088. (Cl. 37—5.)

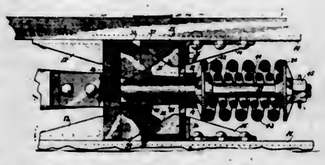
1. In a device of the class described, an axle, a plate fixed upon the axle, trunnions extending from the axle, a frame in which the trunnions are mounted horizontally, cutting blades upon the ends of the plate, bands connecting the ends of the plate on each side of the plate to make a wheel, wings extending from the ends of the plate in



opposite directions and forming housings to gather dirt, means for holding the plate from rotating while the dirt is being gathered, and means for releasing the plate to dump the dirt.

[Claim 2 not printed in the Gazette.]

1,270,598. DRAFT-GEAR FOR RAILWAY-CARS. WALTER H. COTTON, Chicago, Ill. Filed Apr. 4, 1916. Serial No. 88,849. (Cl. 213—64.)

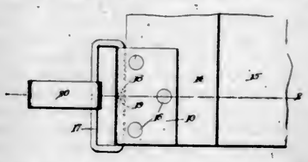


1. In a draft gear for railway cars, in combination, a forward follower, a rearward apertured follower having internal friction faces oblique to the line of draft, a bar attached to the forward follower and extending through the rearward follower and having a spring seat at its rearward end, a sleeve on the bar and projecting through the rearward follower and having wedging faces at its forward end, a spring seat at the rear end of the sleeve, a spring reacting between the two spring seats, and a pair of triangular wedge blocks seated against the forward follower and interposed between the wedging faces of the sleeve and the frictional faces of the rearward follower.

3. In a draft gear for railway cars, in combination, a pair of opposed sill-engaging followers, a draw-bolt attached to and projecting backwardly from the forward follower and having an abutment at its rear end, a spring seated on the abutment, and friction elements reacting between the two followers and bearing upon the forward end of the spring.

[Claims 2 and 4 not printed in the Gazette.]

1,270,599. SUPPORT FOR JAIL-HAMMOCKS. WALTER D. COUCH, Atlanta, Ga., assignor to Couch Bros. Manufacturing Co., Atlanta, Ga., a Corporation of Georgia. Filed Oct. 2, 1916. Serial No. 123,413. (Cl. 5—32.)

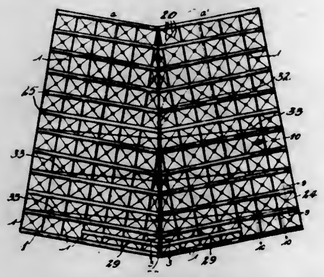


A support for a hammock comprising in combination, a piece of sheet metal bent along its middle part to form two flat and parallel sections connected by a curved portion, said flat sections adapted to receive the ends of a

hammock in the space between them, a rectangular link having one of its sides seated in the said curved portion and a hook member slidingly and rotatively mounted on the opposite side of said link.

1,270,000. [WITHDRAWN.]

1,270,601. MULTIPLE AEROFOIL CONSTRUCTION. AUGUST CROSS, Jersey City, N. J. Filed Apr. 9, 1918. Serial No. 227,433. (Cl. 244—23.)



1. An aeroplane structure comprising, in combination, a series of front struts; a corresponding series of back struts; a series of rows of concavo-convex ribs; a series of transverse front spars; and a series of transverse back spars; the ribs connecting the front and back spars, and said spars also connecting the ribs and struts; the struts and rib being fixed together with the concave edges of the ribs downward, the struts inclining downwardly and rearwardly relatively to a plane intersecting the under ends of each series of ribs; a leading bar transverse to the front ends of each series of ribs; a trailing wire transverse to the rear ends of each series of ribs; a series of vertical tension rods severally connecting a forward connection of a rib, front spar and front strut with a rear connection of a rib, back spar and back strut; and at the forward portion of the several quadrangular spaces formed by an upper rib, a lower rib, two front spars and two front struts, a central coupling from which four diagonally-disposed reinforcing wires extend into connection with the corner unions at each such space, which unions are severally formed by the connection of a front strut, a front spar, and a front end portion of a rib.

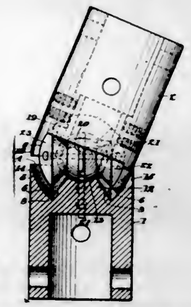
6. In the structure of claim 1, the vertical lifting wires being connected at each end adjacent a connection of a rib, strut and spar to the end of a fixture provided at its other end with a polygonal opening for passage of a spar therethrough, the fixture comprising adjacent said opening a flat, angular extension bearing on a wall of the spar; each vertical lifting wire comprising in its length means for tensioning it lengthwise.

[Claims 2 to 5 and 7 not printed in the Gazette.]

1,270,602. UNIVERSAL JOINT. ROBERT WILLIAM DAVIS, East Orange, N. J. Filed June 23, 1917. Serial No. 176,479. (Cl. 74—19.)

1. In a universal joint, the combination, with two supplemental members, each having diametrically opposite prongs and concavo-spherical recesses between said prongs, the ends of the prongs of one member fitting in said recesses of the other member, of a spider comprising a sphere arranged between the two members, and radiating lunes on said sphere fitting between the lateral faces of the prongs.

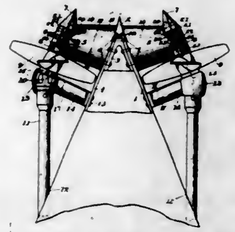
2. In a universal joint, the combination, with two supplemental members, each having diametrically opposite prongs and concavo-spherical recesses between said prongs, the ends of the prongs of one member fitting in said recesses of the other member, of a spider comprising a sphere arranged between the two members, and radiating lunes on said sphere fitting between the lateral faces of the prongs, and means for locking the members together against relative axial movement.



10. In a universal joint, the combination, with two supplemental members each having diametrically opposite prongs which join at their base forming a U-shaped internal rib with conical lateral faces and a concavo-spherical inner face at its base, there being concavo-spherical recesses in each member one at each side of the base of said U-shaped prongs, the ends of both prongs of each member fitting and extending into the recesses of the other member when the joint is straight, of a spider comprising a sphere arranged between the two members, and radiating lunes on said sphere fitting the lateral faces of said prongs.

[Claims 3 to 9 not printed in the Gazette.]

1,270,603. PROPULSION OF VESSELS. ROBERT WILLIAM DAVIS, East Orange, N. J. Filed June 23, 1917. Serial No. 176,480. (Cl. 115—37.)



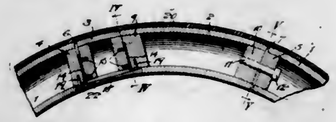
1. The combination with the hull of a vessel, of a propeller mounted in fixed bearings at one side of the prow thereof, the axis of the propeller being arranged substantially parallel to the adjacent side of the prow, a shaft arranged parallel to the longitudinal axis of the vessel, a universal joint coupling the propeller to said shaft and means for lubricating said bearings and the universal joint.

6. The combination with the hull of a vessel, of arms extending in opposite directions from the prow thereof, propellers journaled in said arms and disposed with their axes substantially parallel to the adjacent sides of the prow, shafts disposed parallel to the longitudinal axis of the vessel, universal joints coupling said shafts to the propellers, housings for said universal joints, and arms fastened to the sides of the hull and supporting said housings, said latter arms being elliptical in cross-section with front and rear edges for the purpose specified.

13. The combination with the hull of a vessel, of a rigid arm projecting therefrom, a propeller shaft made in two sections, a combined radial and thrust bearing on said arm in which bearing one section of the shaft is journaled, a propeller mounted on a portion of said section projecting from said bearing, said shaft section carrying all the thrust or axial tension and no torque on the bearing side of the propeller, said propeller-carrying section of the shaft having an extension at the other side of the propeller from the bearing which extension carries torque but no thrust, the other section of the shaft also carrying torque but no thrust, and a coupling connecting said shaft sections.

[Claims 2 to 5 and 7 to 12 not printed in the Gazette.]

1,270,604. APPARATUS FOR MAKING INNER TUBES FOR TIRES. HENRY DECH, Trenton, N. J., assignor to Mercer Tire Company, Trenton, N. J., a Corporation of New Jersey. Filed Nov. 20, 1916. Serial No. 132,397. (Cl. 18—45.)

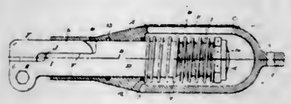


1. A sectional core for the manufacture of inner tubes, comprising a large curved segment, a small curved segment radially removable, and an intermediate sized curved segment distortable with respect to the large segment.

9. A sectional core for the manufacture of inner tubes, comprising a plurality of segments adapted when in abutting engagement to form an annulus, one of said segments being provided with a stud protruding from one end thereof and having an elongated head, another segment being provided with an end wall having an elongated aperture therein fitted to receive the head of the stud when the first mentioned segment is twisted on its axis so as to project laterally away from the plane of the core as a whole, whereby the said segment bearing the stud may be removed when in said twisted position and be locked to the other segment when both are lying in the same plane.

[Claims 2 to 8 not printed in the Gazette.]

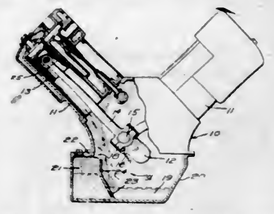
1,270,605. AUTOMATIC-RELEASE COUPLING. THOMAS SIDLEY DOWNHAM, Toronto, Ontario, Canada. Filed Oct. 9, 1917. Serial No. 195,654. (Cl. 21—75.)



1. An automatic-release coupler comprising a cored draw-bar casing having an opening in one side and provided with coupling means at one end thereof; a draw-bar mounted to operate within said casing and projecting beyond one end thereof; a latch-mechanism pivoted to the exposed end of said draw-bar and having one portion thereof normally extending into said casing, and elastic means co-acting with said draw-bar and designed to be displaced during the relative movement of said draw-bar and casing to absorb force and ultimately to permit of the release of said latch-mechanism if the force reaches a predetermined amount.

2. An automatic-release coupler comprising a cored draw-bar casing having an opening in one side and provided with coupling means at one end thereof; a draw-bar mounted to operate within said casing and projecting beyond one end thereof; a latch-hook comprising an arm and a bill; a pin whereby said arm is pivoted to the exposed end of said draw-bar so as to be spaced apart from a portion of said draw-bar to provide a space for a coupling element; the said bill designed to normally extend into said casing and rest upon said draw-bar; a coiled spring mounted on the inner end of said draw-bar and designed to rest at one end internally against said casing, and means mounted on the inner end of said draw-bar to adjust tension of said spring.

1,270,606. LUBRICATING SYSTEM. CHARLES A. F. DUCORRON, Los Angeles, Cal., assignor to Homer Laughlin Engineers Corporation, Los Angeles, Cal., a Corporation of California. Filed Feb. 12, 1917. Serial No. 148,163. (Cl. 184—6.)



1. In a lubricating system for internal combustion engines, the combination of a crank case, a crank shaft adapted to rotate within said case, engine cylinders mounted upon and disposed at right angles to the longitudinal axis of said crank shaft and at angles to the vertical, piston rods mounted upon said crank shaft and adapted to reciprocate pistons within the cylinders, resilient means mounted adjacent the lower ends of the piston rods whereby oil may be lifted from the crank case and supplied to the cylinders, and means embodied within the pistons whereby oil is elevated from the lower wall of the piston to the upper wall thereof.

2. In a lubricating system for internal combustion engines, the combination of a crank shaft, a crank case within which said shaft rotates, pistons reciprocally mounted in relation to said shaft, resilient means mounted adjacent the outer ends of the cranks on said shaft whereby oil lying in the crank case will be thrown upwardly into the path of travel of said pistons, and means controlled by the gas pressure against the pistons whereby the oil delivered thereto may be uniformly distributed over the outer cylindrical periphery of the pistons.

4. In a lubricating system for engines, the combination with a cylinder, a piston therein, and a rotary member, of a resilient helical oil elevating member adapted to pass through a body of oil on revolving the rotary member to throw the oil upwardly and outwardly and into the cylinder in the path of travel of the piston.

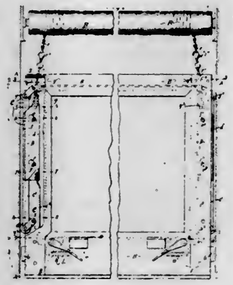
5. In a lubricating system for engines, the combination with a piston having annular piston ring channels thereabout, of an oil conduit connecting with one of said channels, a lubricating channel formed upon the opposite side of said piston from said conduit connection and at the other end of said piston, said channel being in communication with the piston ring channel by means of said oil conduit, and automatic means whereby the oil is forced through said channels during the performance of the engine.

[Claims 3 and 6 to 10 not printed in the Gazette.]

1,270,607. WINDOW AND SASH THEREFOR. OLIVER M. EDWARDS, Syracuse, N. Y. Filed Apr. 23, 1907. Serial No. 369,785. (Cl. 189—78.)

1. The combination of a sliding window sash movable in guideways in the window frame and two sets of means carried by the sash for holding the sash from sliding movement in the guideway, the sets operating independently of each other, one set operating to transmit force to the sash in an edgewise direction and the other operating to coact with the guideway and force the sash bodily in a direction at an angle to the direction of movement in which the former set acts, substantially as and for the purpose set forth.

2. The combination of a sliding window sash movable in guideways in the window frame, two sets of means carried by the sash for holding the sash from sliding movement in the guideway, the sets operating independently of each other, one set operating to transmit force to the sash in an edgewise direction and the other operating to coact with the guideway and force the sash bodily in a direction at an angle to the direction of movement in which the former set acts, the manual means connected to one set for releasing the holding of the window from said set without releasing the other sets, substantially as and for the purpose described.



3. In a window the combination, substantially as set forth, of a frame provided with a guideway, a sash adapted to move in such guideway, a plurality of separately movable holding means, each adapted to coact with the sash at one edge portion thereof, a portion of each of such plurality of holding means being adapted to be connected with sash balancing means and be separately movable thereby, and sash balancing means adapted to be connected with the movable portions of such holding means.

4. The combination of a sliding window sash movable in guideways in the window frame, two sets of means carried by the sash and holding the sash from sliding in the guideway, the sets operating independently of each other, one set operating to transmit force to the sash in an edgewise direction and the other set operating to coact with the guideway and force the sash in the direction at a right angle to the direction in which the former set acts, sash balancing means connected to the holding means and operating to normally hold the same in operative position, and manually operable means connected to one set of holding means to move said set out of operative position without releasing the other set, substantially as and for the purpose specified.

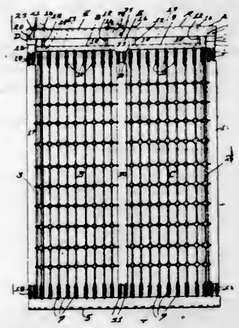
[Claims 5 to 30 not printed in the Gazette.]

1,270,608. BED-BOTTOM. HAROLD O. ERSIN, Anoka, Minn. Filed May 8, 1916. Serial No. 96,035. (Cl. 5—69.)

1. In a spring mattress, the combination with the main frame of a pair of independent spring mattress sections resiliently supported at their ends in said main frame, a resilient selvage extending longitudinally between the mattress sections and means for connecting the ends of said selvage in said frame, said means being adjustable to vary the tension of said selvage.

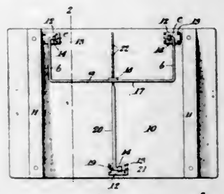
2. In a spring mattress, the combination with the main frame, of a pair of independent spring mattress sections resiliently supported at their ends in said main frame, a selvage resiliently supported longitudinally at each of the outer side edges of said sections, and means for independently regulating the longitudinal tension of said selvage.

3. In a spring mattress, the combination with the main frame, of a mattress fabric resiliently supported at its ends in said frame, a selvage resiliently supported longitudinally at the opposite borders of said fabric and



means for independently regulating the longitudinal tension of said selvage.

1,270,609. DRAWING-BOARD SUPPORT. SAMUEL BEN EZRA, Hartford, Conn. Filed Oct. 25, 1916. Serial No. 127,644. (Cl. 45—131.)



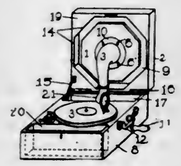
1. Means for attachment to the back of a drawing board for supporting the same upon a table at different angles to the top of the table and freely movable over the surface thereof, said means comprising a U-shaped bail adapted to be hinged to the under side of the drawing board at the upper edge thereof, and a brace bar adapted to be hinged at one end near the lower edge of the board and having a plurality of notches in its other end in any one of which notches the bail may engage and be held at an angle to the board and the board at the desired inclination, said bail and brace bar being wholly within the edges of the board and foldable against the under side thereof to permit the board to rest flat upon the table.

2. An attachment for drawing boards comprising a bail hinged to the under side of the board at the upper edge thereof, a brace bar hinged in the center of the said side of the board near the lower edge and having a series of notches on the under side of the free edge, and a lug on said bail to engage any one of said notches and support said bail and the board at various inclinations, said bail and brace being foldable against the under side of the board within the lateral edges thereof to permit the board to rest flat upon a suitable support.

3. Means for supporting a drawing board at an inclination to the working table, said means comprising a bail made of wire bent into a substantial U-shape and having the terminal ends of the arms bent inwardly to form hinge pins, a hinge member for each hinge pin adapted to be secured to the under side of the drawing board near the upper edge thereof, a similar hinge member adapted to be secured near the bottom of the board at the center thereof comprising a securing plate and a socket and having an outwardly projecting lug on said plate and spaced a short distance from the socket, a brace bar having one end bent at a right angle to engage said socket and be retained

therein by said lug, the opposite end of said bar being flattened and having a series of notches in one edge adapted to engage the ball and hold the latter at different angles to vary the inclination of the drawing board, said bail and brace bar being foldable against the inside of the board.

1,270,610. RADIAL SOUND-AMPLIFIER. CARL FREDRICK WILLIAM FORSSBERG, Brooklyn, N. Y. Filed Jan. 11, 1916. Serial No. 71,474. (Cl. 274—2.)



1. A phonograph including a casing and a cover provided with a top and sides, a soundboard secured in said cover within said sides and top by means of cleats or bobbins located within the periphery of said soundboard, providing a uniform clearance about and beneath said periphery, there being an aperture through said soundboard within the edges thereof for projecting sound against the top of said cover.

2. A phonograph comprising a casing and a cover, a soundboard secured in the cover, uniformly spaced from the top and sides thereof, and a normally rigid amplifying tube secured to said soundboard, there being an aperture in said soundboard providing an inlet for projecting sound from said amplifying tube directly against the top of said cover.

3. A phonograph comprising a casing and a cover, a soundboard secured in the cover, spaced from the top and within the sides thereof, and additions in the corners of the sides providing in combination with the sides a uniform sound projecting space about the entire periphery of said soundboard.

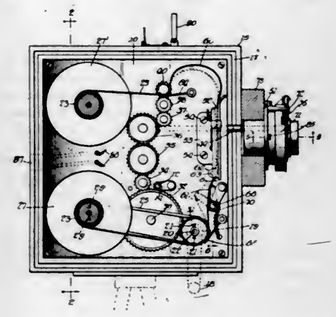
4. A phonograph including a casing and a cover, a soundboard or disk secured in spaced manner within the top of the cover and concentrically therewith, there being an aperture through the center of said soundboard and a uniform marginal space about the soundboard between the periphery thereof and all sides of said cover, and a normally rigid amplifying tube secured directly to said aperture upon said soundboard, substantially as described.

1,270,611. NEWSPAPER-HOLDER. HERMAN T. GAY, Baltimore, Md., assignor of four-tenths to John Frederick Nauman, Baltimore, Md. Filed Sept. 29, 1916. Serial No. 122,895. (Cl. 129—38.)



In a newspaper holder, the combination of a handle, a tube rigidly fixed thereto, said tube having a continuous longitudinal slot above said handle and at its upper end a curved or angular opening furnishing an insert for the newspaper, and a rod rigidly attached to said handle concentrically of said tube, said rod having a projecting guiding end to coöperate with the insert end of said tube, the construction being such that a folded newspaper may be slipped over the projecting guiding end of said rod into the insert of the tube and carried down the slotted tube to said handle.

1,270,612. CAMERA. WILLIAM M. GREEN, Evanston, Ill. Filed Apr. 29, 1916. Serial No. 94,471. (Cl. 88—18.)

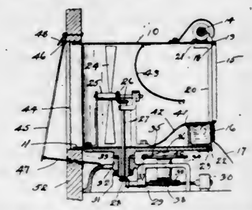


1. In combination with a moving picture camera, having a film strip and means for intermittently moving said film, of a shutter; a camera lever, movable in synchronism with the movement of the film to operate said shutter; a shutter moving arm, and a casing containing the said shutter and supporting said arm, rotatable to move said arm out of the path of said camera lever.

2. In combination with a moving picture camera, having a film strip and means for intermittently moving said film, of a shutter; a camera lever, movable in synchronism with the movement of the film to operate said shutter; a shutter-moving arm projecting from the shutter casing in the path of said lever; a casing, containing said shutter and supporting said arm, rotatable to move said arm out of the path of said lever, and means to secure the casing in selected position.

3. In combination with a moving picture camera, having a film strip and means for intermittently moving said film, of a shutter; a camera lever; a cam for operating the said lever, movable by the means employed to move said strip, in synchronism therewith to open said shutter; automatic means to close said shutter; a shutter-moving arm projecting from said casing; a casing containing said shutter and supporting said arm, rotatable to move said arm out of the path of said lever; means to hold the shutter either open or closed indefinitely when the operating arm is moved out of the path of said lever and means to secure the casing in selected position.

1,270,613. VENTILATOR AND AIR-PURIFYING APPARATUS. FRANK A. GUSTAVSON, Seekonk, Mass. Filed May 31, 1917. Serial No. 171,858. (Cl. 98—27.)



An air-purifying and ventilating apparatus comprising a casing, means in said casing for carrying a deodorizing

agent, means for drawing air into said casing from a plurality of different sources at successive intervals of time, forcing the air into contact with the deodorizing agent and out of the casing.

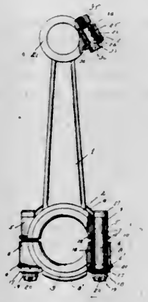
1,270,614. FILM-SPOOL. JOHN S. HARMON, Rochester, N. Y., assignor to Eastman Kodak Company, Rochester, N. Y., a Corporation of New York. Filed Aug. 27, 1917. Serial No. 188,319. (Cl. 242—71.)



1. In a sheet metal film spool, the combination with a pair of semi-cylindrical shells assembled to form a tubular center or core and provided at their extremities with inwardly turned flanges jointly forming a slot at one end of the spool for the reception of a winding key, the slot extending transversely of the seam between the shells, of flanges secured to the ends of the core and operating to hold the shells together.

[Claim 2 not printed in the Gazette.]

1,270,615. ADJUSTING MEANS. WALTER H. HARRISS, Oakland, Cal. Filed Feb. 8, 1917. Serial No. 147,485. (Cl. 64—55.)



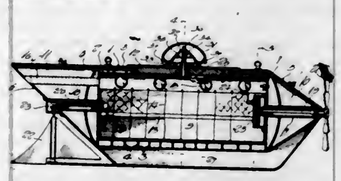
1. Means for adjustably holding the parts of a two piece bearing comprising lugs on each part of said bearing, the lugs of one of said parts having recesses formed on their inner faces, tubular sleeves in threaded engagement with the lugs of the other of said parts, enlarged heads on said sleeves adapted to seat in said recesses, and extending beyond the lugs containing said recesses, bolts extending through the lugs of said first mentioned part and through said sleeves, and provided on their opposite ends with opposed clamping means for holding the said parts together.

4. Means for adjusting two adjacent parts comprising a tubular sleeve in threaded engagement with one of said parts and having one end abutting against the other of said parts, said first mentioned part having a conical recess, a bolt extending through said sleeve and engaging the other of said parts, a locking nut in threaded engagement with said bolt and abutting against the end of said sleeve, a locking nut for said sleeve, a conical face for said last mentioned nut having radial slits, said face being adapted to set in the aforesaid recess.

[Claims 2 and 3 not printed in the Gazette.]

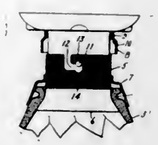
1,270,616. LIFE-BOAT. WILLIAM J. HAZELTON, Pontiac, Mich. Filed Nov. 5, 1917. Serial No. 200,398. (Cl. 9—4.)

1. A life-boat comprising a hollow cylindrical hull having a cone-shaped front end and a downwardly and forwardly inclined rear end, hollow transverse bulkheads extending across the front and rear portions of said hull and dividing the same into a non-rotatable passenger compartment extending approximately throughout the length of the hull, and a pair of air compartments at the ends of said hull, a metal lining for said passenger compartment spaced inwardly from the hull by a plurality of annular ribs, a door in the top of said compartment, a pair of tubes extending through said bulkheads to the ends of the hull and located at the axis of the latter, front and rear shafts extending through said tubes, packing means to prevent entrance of water through said tubes, independent means for rotating said shafts, a marine propeller secured on said front shaft, a substantially triangular rudder under the inclined end of the hull and having a vertical operating shaft operatively associated with said rear shaft, a pair of rigid horizontal wings extending longitudinally along the sides of the hull and terminating at the point of its front end, said wings having openings along their edges and decreasing in width toward said front end of the hull, and a hollow keel extending along the boat bottom and inclining upwardly to said point of the front end, said keel also decreasing in width toward said end.



2. An air supply device for air tight life boats comprising a vertical tube to communicate at its lower end with the interior of the boat, a hollow dome having a conical bottom whose apex is joined to the upper end of said tube, said tube communicating with the interior of said dome, a plurality of downwardly opening check valves between the apex and base of said bottom for admitting air but excluding water, similar check valves in the lower extremity of said dome, and means for supporting said dome with said lower extremity a slight distance above the boat, whereby air may enter and be confined under said conical bottom.

1,270,617. SHADE-MOUNTING. ENGELHARDT W. HOLST, Boston, Mass., and GILBERT WRIGHT, Schenectady, N. Y., assignors to General Electric Company, a Corporation of New York. Filed May 28, 1914. Serial No. 841,683. Renewed Apr. 8, 1918. Serial No. 227,374. (Cl. 240—114.)



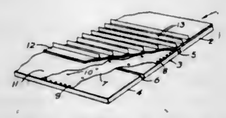
1. A lamp shade mounting comprising telescoping parts one associated with the lamp and the other with the shade, said parts having mutually corresponding engagement means adapted, when engaged, to limit relative turning of the parts and requiring for their disengagement relative longitudinal movement of said parts and a rotatable collar threaded on one of said parts adapted to engage with the other to prevent such relative movement thereof.

3. A lamp shade mounting comprising telescoping parts one associated with the lamp and the other with the shade, said parts having mutually corresponding engagement means adapted, when engaged, to prevent sufficient relative longitudinal movement of the parts for the removal of one from the other and requiring for their disengagement a preliminary relative longitudinal movement of the parts and a subsequent relative turning thereof, and a rotatable collar associated with one of said parts which normally engages the other so as to prevent even the preliminary longitudinal movement aforesaid.

6. A lamp shade mounting comprising a part associated with the lamp and having external projections, a sleeve having an expanding lower end adapted to fit within a shade and having an externally threaded upper portion adapted to fit about said part associated with the lamp, said upper portion having bayonet slots therein for receiving and engaging the aforesaid projections, a collar threaded on said sleeve for securing the shade thereon, and another collar also threaded on said sleeve adapted to be screwed down over and against said projections so as to conceal them and also lock said sleeve securely on said part associated with the lamp.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,618. RUBBER-SET RIFFLE FOR ORE-CONCENTRATORS AND THE LIKE. JOE HORN, Los Angeles, Cal. Filed Dec. 4, 1917. Serial No. 205,425. (Cl. 83—88.)



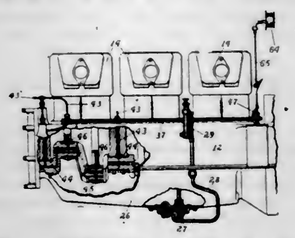
1. In a concentrating table or the like, a wooden deck, a sheet of fibrous material attached to the deck, a coat of adhesive material applied to the said sheet of fibrous material, strips of water-proof material applied to the adhesive material and riffle plates driven into the cracks between the strips of water-proof material.

2. In an ore concentrating table, a water-proof deck, strips of water-proof material stuck to the water-proof deck edge to edge, and riffles in the cracks between the strips of water-proof material.

3. A riffle construction comprising a suitable deck, strips of water-proof material glued to the deck, and riffles in the cracks between the strips of water-proof material.

4. As an article of manufacture, a cloth of fibrous material, a coat of adhesive material applied to the cloth, strips of water-proof material applied to the adhesive material and riffle plates driven into the cracks between the strips of water-proof material.

1,270,619. MOTOR-OILING SYSTEM. RUSSELL HUFF, Detroit, Mich., assignor to Packard Motor Car Company, Detroit, Mich., a Corporation of Michigan. Filed May 2, 1913. Serial No. 765,112. (Cl. 184—6.)



1. The combination with a motor, of an oiling system having main and auxiliary feeds, and a valve normally closing the auxiliary feed, said auxiliary feed being freely open except for said valve, and a throttle control lever mounted adjacent said valve and acting directly upon the valve to thereby control said auxiliary feed.

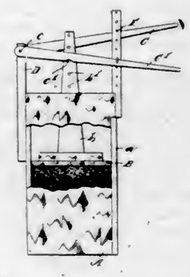
2. In a motor vehicle, the combination with the motor, the oiling system thereof including main and auxiliary feeds and a valve normally checking said auxiliary feed, said valve being mounted on the motor at the rear end thereof and having an adjustable push button, of a throttle control lever mounted on the vehicle body adjacent said valve and adapted to operate upon said push button.

4. In a hydrocarbon motor, the combination with the oiling system thereof including a main supply pipe, branches from said pipe to the main bearings of the motor, another branch from said pipe to the cylinder walls, and a valve in said latter branch, said latter branch being freely open except for said valve, of a throttle control lever mounted adjacent said valve and having a part adapted to control said valve.

7. In a hydrocarbon motor, the combination with the oiling system thereof including means for feeding oil under pressure, a main supply pipe, branches from said pipe to the main bearings of the motor, another branch from said pipe to the cylinder walls, and a valve in said latter branch, said latter branch being freely open except for said valve, of a throttle control lever mounted adjacent said valve and having a part adapted to control said valve and admit oil into the latter branch regardless of the oil pressure in the system.

[Claims 3, 5, 6, and 8 not printed in the Gazette.]

1,270,620. LEVER-PRESS. CHARLES W. JUDD, Lowell, Mass., assignor to Gordon C. Bixby, Lowell, Mass. Filed July 19, 1917. Serial No. 181,467. (Cl. 100—4.)



1. In a lever press, the combination of a box, a plunger having a stem and a pair of levers fulcrumed on said box and arranged on opposite sides of said stem, said stem being adapted to be engaged by said levers independently of each other.

2. In a lever press, the combination of a box, a plunger having a stem, a pair of levers, each fulcrumed on said box, and arranged on opposite sides of said stem, and a series of projections on opposite sides of said stem, the projections of each series adapted to be engaged singly by the lever at the same side of said stem.

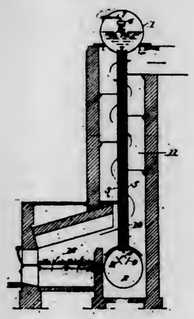
3. In a lever press, the combination of a box, a plunger having a stem, a pair of levers fulcrumed on said box and arranged on opposite sides of said stem, said stem being adapted to be engaged by said levers independently of each other, a post secured to said box in alinement with said fulcrum and stem and provided with holes and a pin adapted to be passed through a hole above said lever post to prevent the rising of said plunger.

4. In a lever press, the combination of a box, a plunger having a stem, a pair of levers, each fulcrumed on said box, and arranged on opposite sides of said stem, and a series of projections on opposite sides of said stem, the projections of each series adapted to be engaged singly by the lever at the same side of said stem, the under sides of said levers having grooves to receive said projections.

1,270,621. STEAM-BOILER. PAUL KESTNER, Lille, France. Filed Sept. 17, 1912. Serial No. 720,780. (Cl. 122—408.)

1. In a steam generator comprising superposed drums and heated evaporation tubes and non-heated return

tubes connecting them, means located within the lower drum whereby each rapidly downward flowing column of water as this enters the lower drum is converted into a slowly moving column whose direction of flow toward the bottom of the drum is maintained, all for the purposes set forth.

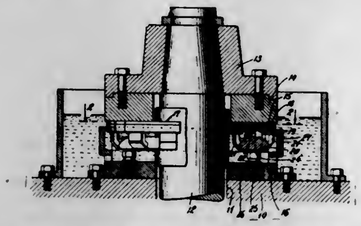


4. A steam generator comprising superposed drums, heated evaporation tubes and non-heated return tubes connecting said drums, means located in the lower drum to divide the columns of water as these enter the drum and means for thereafter insuring the downward movement of said divided column, all for the purposes set forth.

5. A steam generator comprising superposed drums, heated evaporation tubes and non-heated return tubes connecting said drums, and a retarding and guiding means comprising an inverted V-shaped bar or plate located in the lower drum at a position vertically below and near to the return tubes, and angularly disposed plates located on each side of and at some distance from the V plates and tilted so that their lower edges are closer together than their upper edges all for the purposes set forth.

[Claims 2 and 3 not printed in the Gazette.]

1,270,622. THRUST-BEARING. ALBERT KINGSBURY, Pittsburgh, Pa. Original application filed Apr. 5, 1916. Serial No. 89,000. Divided and this application filed Aug. 29, 1917. Serial No. 188,723. (Cl. 64—25.)



1. A tiltable bearing shoe comprising a bearing member, a supporting member, and a plurality of integral webs supporting the bearing member.

8. A unitary bearing shoe comprising a relatively flexible member having a concave bottom surface, a rigid supporting member having a convex top surface and a plurality of integral webs spacing the aforesaid members apart.

[Claims 2 to 7 not printed in the Gazette.]

1,270,623. HAIR-WAVER. HARRY H. KLEIN, New York, N. Y. Filed July 10, 1917. Serial No. 179,624. (Cl. 132—18.)

1. A hair waver comprising a body consisting of a core having lateral shoulders or projections thereon and having cord-attaching means at one end, and a yielding cover tightly applied to said core and engaging said shoulders, and a flexible cord integral with said cover.

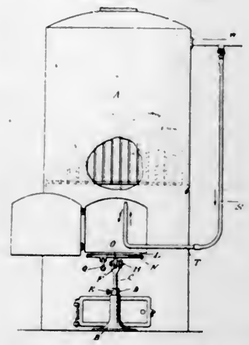


4. A hair waver comprising a body consisting of a core made up of a plurality of resilient strands bent near their opposite ends to separate their intermediate portions and to form lateral shoulders, a filler located between the separated portions of said strands and a fabric cover tightly wound upon said core engaging said shoulders and holding said strands in close relation to each other adjacent said shoulders, and a flexible cord integral with said cover.

6. A hair waver comprising a body consisting of a core having cord-attaching means at one end and a braided cover for the core, said cover being applied by braiding one layer from one end of the core to a point adjacent the opposite end and then reversing the direction and braiding a second layer upon the first, and a flexible cord produced by continuing the braiding operation beyond the core.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,270,624. ADJUSTABLE MIRROR FOR BOILERS. GEORGE F. KNOLLMANN, Evansville, Ind. Filed Nov. 5, 1917. Serial No. 200,410. (Cl. 88—1.)



A device for facilitating cleaning of boilers, consisting of a mirror having lugs extending from the back thereof, a handle pivoted between said lugs, an adjustable post having an adjustable pivotal connection with the mirror, and means for holding said post at different elevations.

1,270,625. POLE. ORVILLE MARSHALL KNOX, Knoxboro, N. Y. Filed Aug. 8, 1917. Serial No. 185,127. (Cl. 189—26.)

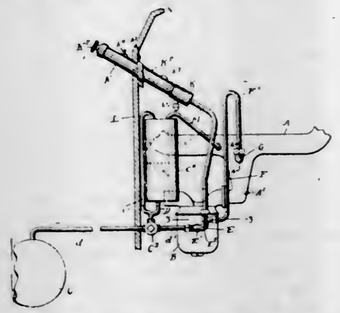
1. A pole comprising an elongated member angular in cross section, imposed reinforcing members angular in cross section and secured to the opposite faces of the pole and to each other and extending from the lower end of the pole, the upper ends of the plates terminating an equal distance below the upper ends of alternate plates, the flanges of the plates being of a width to extend entirely across the flanges of the body.

2. A pole comprising an elongated member angular in cross section, and imposed reinforcing members angular in cross section and secured to the opposite faces of the pole and to each other and extending from the lower end of the pole, the upper ends of the plates terminating an equal distance below the upper ends of alternate plates, the flanges of the plates being of a width to extend entirely across the flanges of the body, the body and plates being formed of steel and the casings of cast iron secured to the outer faces of the lower of the first named plates,



said cast iron plates being angular in cross section with the flanges thereof of a width to extend entirely across the flanges of the body.

1,270,626. PRIMER FOR INTERNAL-COMBUSTION ENGINES. HENRY KOCOUREK, Jersey City, N. J., assignor to Leander H. La Chance and Martin Taylor, administrators of John K. Stewart, deceased. Filed Mar. 17, 1917. Serial No. 155,389. (Cl. 123—180.)



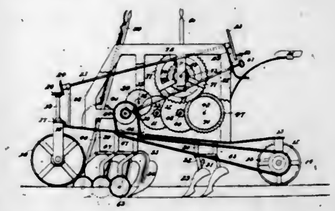
1. In an internal combustion engine, in combination with the intake to the cylinder or cylinders, a liquid-fuel container, a duct therefrom to said intake; means for trapping a charge of liquid fuel in said duct between two charges of air in the duct; means beyond the air charge which is beyond the liquid fuel charge for resisting the discharge of the contents into said intake, adapted to yield to permit such discharge upon a predetermined pressure being reached, and means behind the other air charge for producing such pressure.

3. In an internal combustion engine, in combination with the intake to the cylinder or cylinders, a liquid fuel supply container, a conduit from said container to said intake; a check valve in said conduit seating against back flow toward the container; an air force pump discharging into the conduit between said check valve and said intake, said pump having a free air inlet independent of any liquid-fuel-holding cavity of the device for filling with air in its retracting stroke; said conduit extending beyond the pump connection therewith above the highest level to which it is filled with liquid fuel from the container, whereby an air space is obtained in said conduit beyond the liquid fuel supplied thereto; and means beyond said air space for resisting discharge from the conduit into the intake, adapted to yield upon a predetermined pressure.

6. In an internal combustion engine, in combination with the intake of the cylinder or cylinders thereof, a liquid fuel container, a conduit therefrom to said intake; a check valve in said conduit seating against back flow toward the container; an air force pump discharging into said conduit beyond the check valve, the container having in its base the communicating portions of said conduit and the pump discharge duct, including the check valve chamber and seat; the portion of the pump discharge duct antecedent to the check valve chamber being extended through the container for connection with base above the check valve.

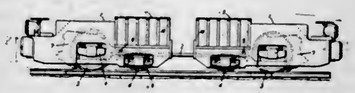
[Claims 2, 4, 5, and 7 to 9 not printed in the Gazette.]

1,270,627. MOTOR-PLOW. KONSTANTY KUCHARSKI, Thurber, Tex. Filed June 6, 1916. Serial No. 101,976. (Cl. 208—163.)



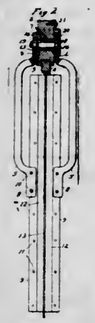
A device of the class described including a wheel-supported platform, a pair of spaced skeleton frames secured to and rising vertically from the opposite side of the platform, a motor shaft journaled in the said skeleton frames adjacent the rear ends thereof, a plurality of driving drums secured upon said shaft, a spring in each drum and each spring having one end secured to its respective drum and its other end to the shaft, a driving gear secured to each of the drums and the shaft, a second shaft journaled in said skeleton frames forward of the motor shaft, pinions secured to said second shaft and meshing with the drum gears, a third shaft journaled in said frame beyond said second shaft, a toothed stop wheel secured to said third shaft, a brake lever slidably supported by one of the skeleton frames and having one end normally engaging the tooth stop wheel, means for connecting the third shaft in operative relation with the driving shaft, means for connecting the wheels of the platform in operative relation to the third shaft whereupon rearward sliding movement of the brake lever will cause the motor shaft to rotate the gears and shafts and propel the wheel platform, and a winding mechanism for said springs of the drum.

1,270,628. STORAGE-BATTERY LOCOMOTIVE. CARL W. LARSON and GEORGE H. SHAPTER, Erie, Pa., assignors to General Electric Company, a Corporation of New York. Filed Apr. 13, 1917. Serial No. 161,883. (Cl. 105—267.)



A storage battery locomotive having two pivotally connected units, each unit comprising a stepped frame having two large driving wheels, a motor for driving the same, two undriven wheels of smaller diameter than said first mentioned wheels mounted under the stepped down portion of said frame, and a storage battery of sufficient capacity to supply said motor rigidly mounted on said stepped down portion of the frame so that substantially all the weight thereof is carried by the undriven wheels; the height of said battery being proportioned so as not to be substantially higher than the stepped up portion of said frame.

1,270,629. WINDOW-CLEANING DEVICE. JOSEPH R. LE CLAIR, Wyandotte, Mich., assignor of one-half to Felix A. Perry, Wyandotte, Mich. Filed Mar. 9, 1917. Serial No. 153,706. (Cl. 15—59.)



1. In a window cleaning device, the combination of a pair of opposed bracket arms each having a transverse head adapted to be slidably engaged with a slot in a window frame upon opposite sides respectively of said window, each of said arms carrying a flexible wiping strip engaging a corresponding face of the window glass, means to retain said heads against angular movement in said slots, and yieldable means connecting said heads and retaining said wiping strips engaged with said glass.

2. In a window cleaning device, the combination of a pair of opposed heads each having a lateral projection adapted to be slidably engaged with a slot in a window frame upon opposite sides respectively of said window, a depending bracket arm on each of said heads carrying a flexible wiping strip engaged with the corresponding face of the window glass, a spring engaged with each of said heads, and a tie member extending through said slot and heads and engaged with said springs for exerting tension upon said heads and arms to retain said wiping strips yieldably engaged with said glass.

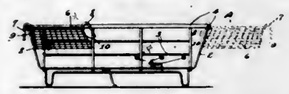
3. In a window cleaning device, the combination of a pair of opposed heads each having a lateral projection adapted to be slidably engaged with a slot in the upper rail of a window frame upon opposite sides respectively of said rail, a depending bracket arm on each of said heads carrying a wiping strip engaged with a face of the window glass, a depression in each of said heads and a leaf spring seated in each of said depressions, and a bolt extending through said slot, heads and springs, and confining the latter under tension to yieldably retain said wiping strips engaged with said glass.

1,270,630. COMPOSITION FOR REPELLING RODENTS AND INSECTS. JEAN IGNAZ LEIST, Brooklyn, N. Y. Filed Oct. 15, 1913. Serial No. 795,243. (Cl. 167—6.)

The herein described composition of matter consisting of 25 parts of hydrated lime, 25 parts of plaster of Paris, 10 parts of marble dust, 8 parts of asbestine material, 2 parts of whiting, 2 parts of clay, 2 parts of magnesium carbonate, 8 parts of casein, 2 parts of cement, 10 parts of powdered alum, 3 parts of powdered borax and 3 parts of thymol, and a sufficient quantity of cold water mixed therewith to form a plastic mass, which is adapted to harden upon exposure to the atmosphere.

1,270,631. DISH AND SILVERWARE DRAINER. ISABEL L. LEWIS, Syracuse, N. Y. Filed Nov. 28, 1916. Serial No. 133,030. (Cl. 141—11.)

2. A dish and silverware drainer comprising a main basket having an outwardly and upwardly inclined side wall, and a supplemental basket having means for attachment to the upper edge of said inclined wall, and also having a wall inclined upwardly and outwardly and a wall inclined upwardly and inwardly and arranged to lie respectively against the inner and outer faces of the inclined wall of the main basket when the supplemental basket is supported by said wall of the main basket inside and outside of the main basket respectively, substantially as and for the purpose specified.



3. A dish and silverware drainer comprising a main basket having outwardly and upwardly inclined side walls, and a supplemental basket having means for attachment to the upper edge of said walls, the supplemental basket having opposing walls inclined in parallel planes, one of said inclined walls being arranged to rest on the inner side of one of the walls of the main basket when the supplemental basket is supported within the first-mentioned basket and the other of the opposing walls of the supplemental basket being arranged to rest against the outwardly and upwardly inclined outer face of one of the walls of the main basket when the supplemental basket is supported on the outside of the main basket, substantially as and for the purpose set forth.

[Claim 1 not printed in the Gazette.]

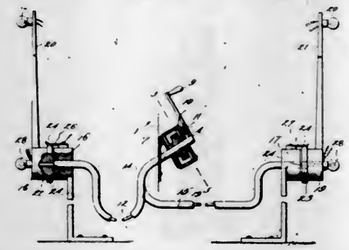
1,270,632. GAME. EDNA W. LOCKE, Lewisburg, Ohio. Filed Apr. 25, 1917. Serial No. 164,486. (Cl. 46—39.)



A game of the character described including a hoop having a slot therein, a pair of straps rigidly connected at points substantially intermediate their ends, the upper portion of one of the straps being slidably arranged through the slot of the hoop and adapted for engagement with a support for suspending the hoop, a buckle connected with the upper portion of the other strap for adjustably receiving the upper portion of the first strap, a plate having a slot therein, a bell movably suspended from the plate, the lower portion of one of the straps being adjustably engaged through the slot in the plate for suspending the bell within the hoop, a buckle connected to the outer end of the lower portion of the other strap for adjustably engaging the lower portion of the strap which passes through the slot in the plate, and another strap connected to the hoop at a point opposite the slot for maintaining the hoop in a substantially rigid position.

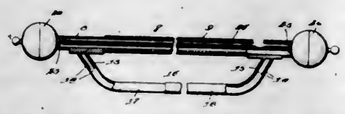
1,270,633. AUTOMOBILE-SIGNAL. WALTER C. LOK and KARL H. LOK, Toledo, Ohio. Filed Jan. 12, 1917. Serial No. 142,065. (Cl. 116—31.)

In a device of the character described comprising pivoted direction indicating blades at the front and rear of a vehicle, means for moving said blades to selective positions comprising a casing secured upon the vehicle, a pair of shafts journaled entirely through said casing, one of said shafts having one end prolonged, intermeshing gears secured upon said shaft within said casing, a handle secured upon said prolonged end, a spring pressed detent on the under side of said handle the adjacent wall of said casing being provided with a plurality of depressions engageable by said detent, said depressions corresponding to the positions assumed by said signal blades, a torsion shaft secured to the other end of the shaft provided with a handle, and a torsion shaft secured to the corresponding end of the first named shaft, said torsion shafts being di-



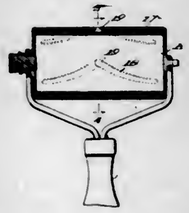
rected one toward the front and the other toward the rear of the vehicle and secured to the pivots of said blades.

1,270,634. ADJUSTABLE WINDOW SHADE AND CURTAIN SUPPORT. WILLIAM A. J. LOWE and GEORGE W. OVERSTREET, Bristol, Tenn. Filed May 9, 1917. Serial No. 167,527. (Cl. 156—27.)



A curtain support comprising a tube, sections slidably received in the ends of the tube, a spring connected with the sections and housed in the tube, spring fingers mounted on the sections and disposed at acute angles with relation to the longitudinal dimensions of the sections, the fingers on one section converging toward the fingers on the other section and a longitudinally extensible element having end portions adapted to receive the fingers.

1,270,635. BEARD-SOFTENER. KNUTE E. LJUNGSTROM, Washington, D. C. Filed Dec. 20, 1917. Serial No. 208,113. (Cl. 15—50.)

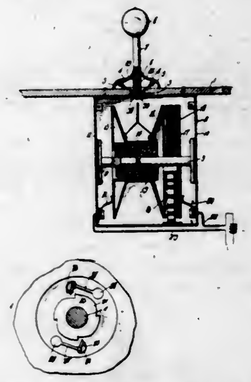


1. A beard softener comprising a handle having prongs, provided with bearings, a hollow cylindrical roller having an imperforate annular wall and a trunnion at one end engaging one of said bearings and a filling spout at its opposite end forming another trunnion, and engaging the other bearing, means for normally closing said filling spout, and a yielding contact sleeve supported around the periphery of said roller.

2. A beard softener including a hollow revoluble roller having a filling opening, and an imperforate annular wall, a yielding contact sleeve upon said roller and engaging said wall, said sleeve having grooves in its inner face adjacent to the outer face of the roller, and being provided with openings therethrough, and in communication with the said grooves, for the purpose described.

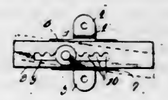
1,270,636. ELECTRIC-LIGHT EXTENSION. ROSS H. MCDANIEL, Peru, Ind. Filed Apr. 14, 1917. Serial No. 162,123. (Cl. 173—367.)

1. An electric light extension comprising a shaft, means for supporting the shaft, a rotatable spool mounted on the shaft, a portable light, a length of wire connected to the light and to the said spool, a coil spring having one end fixed to the spool to rewind the same after the wire has been unwound from the spool, means for governing the speed of the rotation during rewinding of the spool, the said means including a ratchet, a pair of pawls movable toward or away from the ratchet, and weighted arms carried by the pawls.



2. An electric light extension comprising a rotatable spool having a length of wire connected thereto and wound upon the same, a coil spring having one end fixed to the spool and adapted to be wound when the said wire is unwound from the spool whereby the said spool may be rotated to wind the said wire when the said spring is released, a fixed ratchet, and weighted arms carried by the spool and provided with pawls adapted to engage the said ratchet for governing the speed of rotation during rewinding of the said spool.

1,270,637. WINDOW-SHADE HOLDER. JOHN MCQUENEY, Manheim, Pa. Filed Jan. 29, 1916. Serial No. 75,129. (Cl. 156—24.)

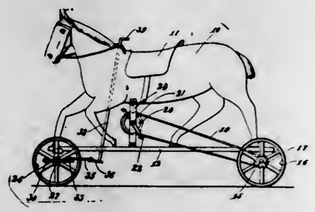


In a shade fixture, the combination with a bracket having a bearing for the roller-trunnion and a long shank provided with a longitudinal slot notched along its upper edge; of a horizontal casing having means for attachment to the window frame and channeled to closely fit said shank when the latter stands horizontal, the upper flange of said channel being cut away at the inner end of the casing and the lower flange cut away at the outer end thereof to permit said shank to tilt, a rivet in the wall of the casing passing through said slot, said notches selectively engaging such rivet when the shank stands horizontal and disengaging it when the shank is tilted, and a head at the inner extremity of the rivet, all for the purpose set forth.

1,270,638. RIDING-HORSE FOR BOYS' TOYS. FRANK MAJEWSKI, Chicago, Ill. Filed Jan. 2, 1918. Serial No. 209,924. (Cl. 208—42.)

2. In a toy, the combination with a figure representing a horse, a platform upon which said horse is mounted, an axle at the rear of said platform, wheels rigidly engaged upon said axle, a pair of dirigible wheels at the front of said platform, means for steering said wheels, a pair of pedals below said figure, and a sprocket driven thereby, of a second sprocket rigid upon said axle, a chain between said sprockets, said chain passing through said platform,

a pair of opposed sliding blocks having beveled end surfaces movable in said platform between the upper and lower elements of said chain, a wedge for separating said



sliding blocks and means for operating said wedge, whereby said chain may be clamped against motion to said platform.

[Claim 1 not printed in the Gazette.]

1,270,639. SEWING-AWL. JOHN W. MALCOM, Bunn, Ark. Filed July 18, 1917. Serial No. 181,329. (Cl. 223—37.)



A sewing awl comprising a handle provided in one end with a socket, a needle holder in said socket, a spool supporting pin extending laterally from said handle, a set screw parallel with said pin and extending into said socket and engaging said needle holder, the head of said screw being provided with a hole serving as a thread guide.

1,270,640. GOGGLES. EDWIN GEORGE JOSEPH MARKHAM, Watrous, Saskatchewan, Canada. Filed Mar. 28, 1917. Serial No. 158,028. (Cl. 2—149.)



1. An eye protector comprising a carrier adapted to extend across and in contact with the face of the user, said carrier having circular openings formed therein that are adapted to register with the eyes, a shield formed as a cone secured to and projecting outwardly from the edge of each opening, the outer end of each of the shields being provided with a relatively small circular sight opening therein, and a lens secured in each of said shields, said sight opening serving as a small stop opening for the lens, the shield being formed to have its axis coincide with the axis of the lens and optical axis of the eye.

[Claims 2 and 3 not printed in the Gazette.]

1,270,641. CAP FOR VALVES. HARRY MARTIN and JOHN R. WHITE, Milford, Utah. Filed Dec. 17, 1917. Serial No. 207,567. (Cl. 152—12.)

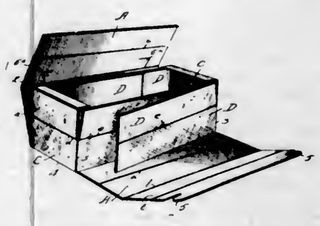


1. The combination with a valve casing open at one end, a normally seated spring pressed valve in the casing having a stem projecting toward the open end of the casing, and a cap adapted to fit over the open end of the casing to close the same when the valve is seated and having a shank on its outer end adapted to engage said valve stem when the cap is inverted, of a sleeve rotatably mounted upon the outer end of the cap adapted to be secured over the outer end of the valve casing while the cap and its shank are held from turning to maintain the stem of the valve in open position.

3. The combination with a valve casing open at one end and having interior and exterior threads thereat, an internal nut threaded into the open end of the casing and carrying a normally seated spring pressed valve having a stem projecting above the nut, and a cap detachably threaded over the outer end of the stem to close it and having a shank on its outer end adapted to engage against said valve stem to depress the same and open the valve when the cap is inverted, said shank having a kerf in its outer end for interlocking engagement with the internal nut to position and remove the same, of a sleeve rotatably mounted upon the outer end of the cap and provided upon its inner end with an inturned flange for locking the sleeve on the cap, said sleeve having internal threads at its outer end and conforming in internal diameter to that of the cap for threaded engagement over the open end of the casing when the cap is inverted and having outlet openings in its sides beyond the end of the cap, said cap being adapted to be turned upon the end of the casing independently of the cap to advance said shank against the valve stem and hold the latter depressed, and being adapted to be turned with the cap from the end of the casing simultaneously with the internal nut to withdraw the latter from the casing.

[Claim 2 not printed in the Gazette.]

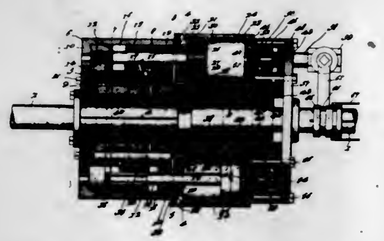
1,270,642. PAPER-CURRENCY WRAPPER. THOMAS PUGH MARTIN, Jr., Oklahoma, Okla. Filed Oct. 23, 1916. Serial No. 127,143. (Cl. 229—34.)



1. The improved wrapper comprising a rectangular center or base, side pieces projecting from said base and scored to fold at their juncture therewith also on three lines parallel to said juncture score, end pieces projecting from said base and scored to fold at their juncture therewith also on two lines parallel to their juncture score, said end pieces having lateral wings scored to fold at their juncture with said end pieces and also on a line continuous with the middle score line of the end piece, said line dividing the wing into lateral halves and said wings being joined to the end pieces for only their inner half, and said lateral half of the wing being substantially equal to the distance between any two adjacent score lines in said side and end pieces, the construction providing a container foldable to different capacities of which one is substantially twice the cubical capacity of the other.

[Claims 2 and 3 not printed in the Gazette.]

1,270,643. FLUID TRANSMISSION. MARK H. MASSUERE, Cheyenne, Wyo. Filed Mar. 12, 1917. Serial No. 154,204. (Cl. 192—18.)



1. The combination of a driver and follower, a drive drum mounted in connection with said driver, a driven drum fixed to move with said follower and providing an annular way, an annular series of cylinders provided in said drive drum, pistons reciprocating in said cylinders, rods connected to said pistons and extending into the way in said driven drum, cross-heads carried on said rods, a cam track in said way traversed by said cross-heads for reciprocating said pistons, means for admitting fluid to said cylinders, a compression chamber communicating with said several cylinders, valves between said compression chamber and cylinders and means for controlling the exhaust of fluid from said compression chamber, substantially as described.

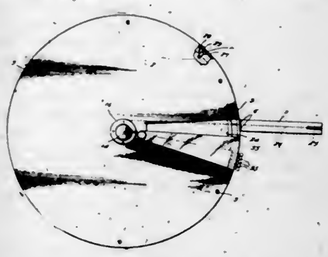
3. In a device of the character described, the combination of drive and driven elements, a cylinder fixed to move with one of said elements, a cam track fixed to move with the other of said elements, a head for said cylinder having a perforation, a piston in said cylinder, a rod connected to said piston and operating through the perforation in said head, a cross head on said rod traveling in said cam track, guides supported from said cylinder head for receiving said cross head, means for admitting fluid to said cylinder, a compression chamber communicating with said cylinder, a valve between said compression chamber and cylinder and means for regulating the discharge of fluid from said compression chamber, substantially as described.

7. In a device of the character described, the combination of drive and driven elements, a drum having a hub fixed at one end to rotate with one of said elements and providing a bearing at its other end for loosely receiving the other of said elements, a second drum having a hub journaled on and rotatable independently of said first-named hub, a series of cylinders in said second-named drum, pistons traveling in said cylinders, means carried by said first-named drum for causing the reciprocation of said pistons, means for admitting a transmission fluid to said cylinders, an annular compression chamber common to and having communication with all of said cylinders, check valves for permitting the transmission fluid to pass from said cylinders into said compression chamber but preventing back flow into said cylinders, means fastened to said second-named drum and compression chamber and made fast on the other of said elements, and controllable valve means for regulating the discharge in any predetermined quantities of the transmission fluid from said compression chamber, substantially as described.

9. In a device of the character described, the combination of drive and driven elements, a drum fixed to rotate with one of said elements and including spaced concentric members forming an annular channel, pairs of offset rings in said channel providing a cam track, a second drum fixed to rotate with the other of said elements, a circular series of cylinders in said second drum with their axes arranged parallel to said elements, a common head for all of said cylinders, rods on said pistons working through said heads, a cross head carrying means for operating in said cam track, guides for said cross heads, means for admitting a transmission fluid to said several cylinders, a compression chamber common to all of said cylinders, check valves between said cylinders and compression chamber, and means for regulating the discharge of the transmission fluid from said compression chamber, substantially as described.

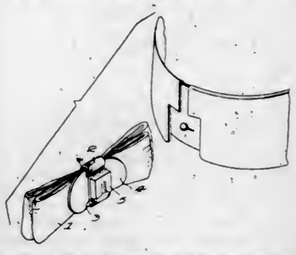
[Claims 2, 4 to 6, and 8 not printed in the Gazette.]

1,270,644. COMPUTING-MACHINE. ROMANUS J. MATTINGLY, Zurich, Kans. Filed Jan. 9, 1917. Serial No. 141,407. (Cl. 235—88.)



In combination with a computing machine having a way formed in the top thereof for exposing a portion of the computing means, a housing supported on the top of said casing adjacent said way, and a plurality of superposed computing arms pivotally mounted in the housing, said arms being provided with means for maintaining the same in spaced relation and for facilitating movement thereof.

1,270,645. TIE. LEONIDAS K. MIHELAKOS, Chicago, Ill. Filed Dec. 5, 1917. Serial No. 205,581. (Cl. 2—82.)



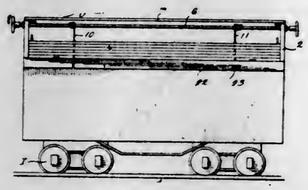
3. In combination, a bow tie having an intermediate transverse piece secured at one end thereto, a slotted concave strip receiving said transverse piece therethrough, a clip carried on the free end of the transverse piece, and a substantially square hooked portion engaged with said strip and adapted to receive the clip thereover.

[Claims 1, 2, and 4 not printed in the Gazette.]

1,270,646. COAL-CAR COVER. GEORGE B. MILLER, Gloversville, N. Y. Filed Mar. 15, 1918. Serial No. 222,664. (Cl. 105—78.)

1. In a car cover, the combination with guides leading up the car sides and converging thence to a point above

the transverse center of the car body; of flexible panels whose ends are mounted in said guides, winding rollers journaled in brackets carried near the apexes of said guides, cables leading from said rollers to the respective panels, and means for operating said rollers from the ends of the car.

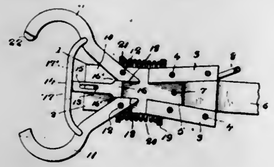


2. In a car cover, the combination with guides leading up the car sides and converging thence to a point above the transverse center of the car body; of flexible panels whose ends are mounted in said guides, a board supported at the apexes of said guides and extending the full length of the car, winding rollers mounted in bearings beneath said board and having manual operating wheels at their ends, pawl-and-ratchet mechanism for holding the rollers against movement in one direction, and cables attached to the rollers and leading to the respective panels, for the purpose set forth.

5. The herein described car whose sides have double walls producing upright pockets therein, guides carried by its ends and leading obliquely upward from the top of said pockets, a foot board extending longitudinally of the car above the upper ends of said guides, flexible panels whose extremities are movably mounted in said guides and whose bodies are adapted to be housed within said pockets, operating mechanism for raising and lowering said panels, and covers for closing the panels when they are lowered into said pockets.

[Claims 3 and 4 not printed in the Gazette.]

1,270,647. ANIMAL-CATCHER. MARTIN I. MILLER, Gwynneville, Ind. Filed July 31, 1917. Serial No. 183,736. (Cl. 119—154.)

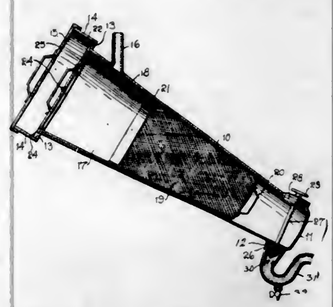


1. In a device of the character described, a frame, a pair of curved arms pivoted upon said frame and adapted to close upon one another, contact surfaces on said arms, said surfaces being parallel when the arms are open and converging when the arms are closed, a trigger adapted to be moved against said converging surfaces to open the arms, and a part on said trigger having parallel sides for engaging the parallel surfaces of the arms to hold the arms open, and spring means for closing said arms.

[Claims 2 to 5 not printed in the Gazette.]

1,270,648. GREASE-TRAP. WILLIAM S. MILLS, Florence, S. C. Filed Mar. 9, 1918. Serial No. 221,539. (Cl. 4—35.)

1. A grease trap of the character described, comprising an exterior imperforate casing closed at one end and having a cover at the other end and having an inlet opening adjacent the last named end of the casing and an outlet opening adjacent the other end of the casing, and a grease strainer having an imperforate portion formed with an opening adapted to register with the inlet opening of the casing and with a wire gauze portion, the strainer fitting the interior of the casing.

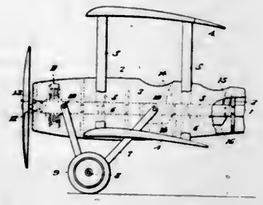


2. A grease trap of the character described, including an outer casing tapered longitudinally and downwardly inclined and closed at its smaller end, a cover for closing the upper end of the casing, an outlet pipe leading from the small end of the casing, an inlet pipe leading into the side of the casing adjacent the large end thereof, and a strainer disposed within and fitting the casing having an imperforate portion provided with an opening adapted to register with the opening of the waste pipe and having a portion formed of wire gauze.

3. A grease trap of the character described comprising a tapered outer casing having an outlet at its small end, a cover closing the large end of the casing, the casing being formed with an inlet inward of the cover, a strainer removably disposed within and fitting the casing and having an elongated opening adapted to register with the inlet opening of the casing, and means permitting the removal of the casing but holding the casing from rotation and with its inlet opening registering with the inlet opening of the casing.

[Claims 4 to 6 not printed in the Gazette.]

1,270,649. AIRPLANE CONSTRUCTION. JAMES JOSEPH MURRAY, New York, N. Y. Filed Aug. 17, 1917. Serial No. 186,787. (Cl. 244—30.)

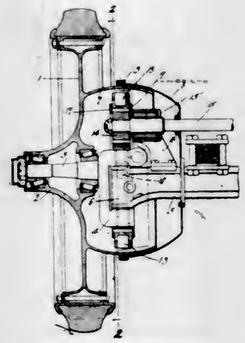


1. In airplane construction, the combination of a closed body having a cock pit, one or more seats arranged in said cock pit, master beams extending longitudinally within said body and arranged at opposite sides of said seats, an engine mounting interposed between and fastened rigidly to said master beams, a landing base embodying axle supporting hangers fastened rigidly to said master beams, an aerial supporting surface, and struts connecting said aerial supporting surface directly to said master beams.

2. In airplane construction, the combination of a pair of master beams arranged in spaced relation to each other and extending substantially parallel to the normal line of flight, a body frame comprising a plurality of hoops encircling said master beams and fixedly secured thereto, a landing base embodying V-shaped members having the upper extremities thereof fixedly connected to said master beams, an aerial supporting surface, means connecting said supporting surface directly to said master beams, and an engine mounted between said master beams and directly supported thereby.

3. In airplane construction, the combination of a pair of master beams arranged in spaced relation to each other and extending substantially parallel to the normal line of flight, a body frame comprising a plurality of hoops encircling said master beams and fixedly secured thereto, a landing base embodying a frame which is fixedly secured to said master beams, an aerial supporting surface, and means connecting said supporting surface directly to said master beams.

1,270,650. DRIVE MECHANISM FOR MOTOR-VEHICLES. CLIFTON R. NORTON, U. S. Army. Filed Dec. 29, 1917. Serial No. 209,487. (Cl. 74—101.)



1. In drive mechanism for motor vehicles, the combination with a wheel mounted for angular adjustment during its rotation, of a straight unbroken drive shaft, a ring gear connected to and revoluble with the wheel, and a drive pinion fixed on the shaft and constantly in mesh with said ring gear.

2. In drive mechanism for motor vehicles, the combination with an axle and a wheel mounted for angular adjustment relative thereto during its rotation, of a straight unbroken drive shaft, a ring gear revoluble with the wheel, and a drive pinion fixed on the shaft and constantly meshing with said gear to rotate the wheel during its angular adjustment.

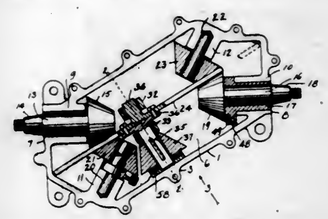
3. In drive mechanism for motor vehicles, the combination with an axle and a wheel mounted for pivotal movement relative to the axle, of a straight unbroken drive shaft, a pinion fixedly mounted thereon, a ring gear constantly in mesh with the pinion, and a universal driving connection between said gear and the wheel.

7. In drive mechanism for motor vehicles, the combination with a wheel mounted for pivotal movement, of a straight unbroken drive shaft, a drive pinion fixed thereon, an outer gimbal connected to the wheel and revoluble therewith, an inner gimbal connected to the outer gimbal, said inner gimbal constituting a gear constantly meshing with the pinion.

8. In drive mechanism for motor vehicles, the combination with a wheel mounted for pivotal movement, and a drum extending from the wheel, of a straight unbroken drive shaft, a drive pinion fixed on said shaft, and gimbals mounted within and connected to the drum, one of the gimbals constituting a gear constantly in mesh with the pinion.

[Claims 4 to 6 not printed in the Gazette.]

1,270,651. FRICTION TRANSMISSION-GEAR. ISAAC N. MYERS, Glendale, Cal. Filed Jan. 9, 1918. Serial No. 211,047. (Cl. 74—26.)



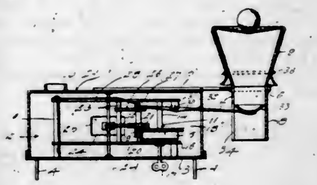
1. A gear case, a driving shaft rotatably mounted in the gear case, a driven shaft rotatably mounted in the gear case, a friction bevel gear fixed upon the driven shaft, a friction disk mounted to contact with the friction driving gear and the friction driven gear, and means for supporting the friction disk against the friction gears.

2. A gear case, a driving shaft rotatably mounted in the gear case, a driven shaft rotatably mounted in the gear case, a friction bevel gear fixed upon the driven shaft, a friction disk mounted to contact with the friction driving gear and the friction driven gear, means for supporting the friction disk against the friction gears, and means for moving the disk relative to the gears to vary the speed.

6. A friction transmission gear comprising a gear case, a driving shaft rotatably mounted in the gear case, a driven shaft rotatably mounted in the gear case in a line parallel with the driving shaft, a driving bevel friction gear fixed upon the driving shaft, a driven bevel friction gear fixed upon the driven shaft, a two-faced friction disk mounted in contact with the driving and driven gears on the diagonal line relative to the lines of the shafts and crossing said lines, means for moving the disk to vary the speed of the driven shaft relative to the driving shaft, supporting friction gears in opposition to the driving and driven gears, a reversing friction gear carried by the disk to move to and from the driven friction gear, means for tightening and loosening the pressure between the disk and the driving and driven gears.

[Claims 3 to 5 not printed in the Gazette.]

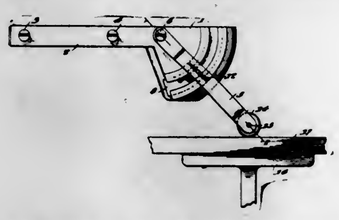
1,270,652. RAIN-ALARM. ANTHONY OBENING, Calumet, Mich. Filed Jan. 3, 1918. Serial No. 210,175. (Cl. 116—15.)



4. A rain signal comprising a casing, a spring alarm mechanism arranged in the casing, a bell, a clapper carried by the spring alarm mechanism for engaging the bell, a resilient arm engaging the clapper to prevent movement thereof, an operating lever pivoted in the casing and extending outward of the same, means operatively connecting the inner end of the operating lever with the resilient arm, a cup-shaped member carried by the outer end of the arm, a funnel secured to the casing and receiving the free end of the arm and the cup-shaped member, a tissue paper partition arranged over the funnel, means detachably holding the tissue paper in position, and a weight for resting upon said tissue paper, as and for the purpose specified.

[Claims 1 to 3 not printed in the Gazette.]

1,270,653. WORK-HOLDER. HERMAN OTTO, Grass Lake, Mich. Filed Aug. 28, 1917. Serial No. 188,630. (Cl. 144—249.)

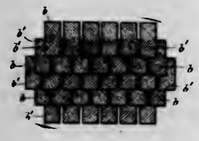


1. A work holder of the class described comprising a base, a holding arm pivotally mounted upon said base, a thickened portion formed on said base and extending above the same, said thickened portion provided with a substantially T-shaped slot formed therein, said arm provided with a cut out portion fitting around and over said thickened portion, and means carried by said arm and working in said slot for locking said holding arm in a set position.

2. A work holder of the class described comprising a base, said base provided with a substantially arch-shaped outwardly extending rib portion formed upon the outer face thereof, said arch-shaped rib portion provided with a substantially inverted T-shaped slot extending centrally thereof, a holding arm pivotally mounted upon said base and provided with a notched portion formed upon the under face thereof and fitting snugly around said rib portion of said base for constituting a reinforcement for said arm, said arm provided with an integral inwardly extending T-shaped portion fitting in said T-shaped slot for constituting a guide for said arm, and a clamping screw passing through said T-shaped portion and engaging the inner face of said substantially T-shaped slot for firmly locking said holding arm in a set position upon said base.

3. A work holder of the class described comprising a base, a holding arm pivotally mounted on said base, a thickened portion formed on said base and projecting therefrom, said thickened portion provided with a substantially inverted T-shaped slot formed therein extending throughout the entire length thereof, said arm provided with a cut out portion upon the inner face thereof, said cut out portion fitting snugly around said thickened portion of said base and constituting an efficient means for relieving strain from the pivot point of said holding arm when pressure is brought to bear upon the outer end thereof, a substantially T-shaped projection carried by said holding arm and fitting within said substantially T-shaped slot, a roller carried by the outer end of said holding arm, and a clamping screw passing through said substantially T-shaped projection and engaging the inner face of said slot for firmly binding said holding arm in a set position upon said base.

1,270,654. COVERING FOR ROOFS AND SIDE WALLS. FREDERICK C. OVERBURY, New York, N. Y., assignor to The Flintkote Company, Boston, Mass., a Corporation of Massachusetts. Filed Sept. 3, 1914. Serial No. 860,012. (Cl. 108—7.)



1. A covering element, for roofs and side walls, provided on its outer face with a layer of weather-proof waterproof material, said material being formed in two parallel strips of different colors between and parallel to the top and bottom edges of the element, whereby said element may be laid to expose either of said strips.

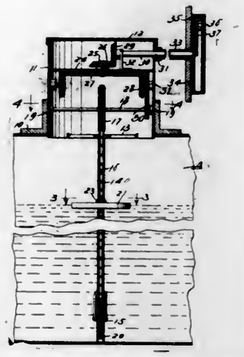
2. A covering element for roofs and side walls, consisting of a shingle formed of weather-proof waterproof material having between and parallel with its top and bottom edges two parallel strips of facing material of different colors, said strips being substantially equal in width, whereby when said shingles are laid in overlapping horizontal rows the upper strips of each may be covered, and only the lower strips exposed.

3. As a new article of manufacture, a roofing element, comprising a waterproof body of fibrous material having a weatherproof coating of different colors on opposite end portions of one of its surfaces.

4. As a new article of manufacture, a shingle of flexible material having a coating of different colors on opposite end portions of one of its surfaces.

[Claims 5 to 8 not printed in the Gazette.]

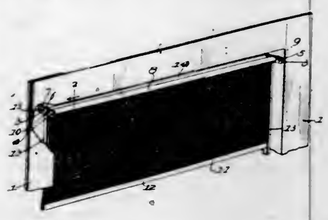
1,270,655. INDICATOR. ROY J. PAGE, Franklin, Nebr. Filed Apr. 3, 1917. Serial No. 159,567. (Cl. 73—82.)



1. A gage of the character described comprising a cylindrical body adapted for detachable mounting upon a tank, a shaft horizontally disposed and journaled within the body, a guide depending from the body interiorly of the tank, a float slidable on the guide, a guide wheel on said guide, a sprocket wheel fixed to the shaft, an endless chain trained over the guide and sprocket wheel and having one stretch connected with the float, and an indicator having gear connection with the shaft for operation thereby.

[Claims 2 and 3 not printed in the Gazette.]

1,270,656. WINDOW-SCREEN. EMIL E. PEDO, Cleveland, Ohio. Filed May 31, 1917. Serial No. 172,017. (Cl. 156—39.)



In a window screen, in combination with a window frame, a pair of relatively flat plates secured transversely to the inner surfaces of opposite sides of the frame adjacent the head thereof, a spring roller operatively mounted between the plates, a piece of screening having one end

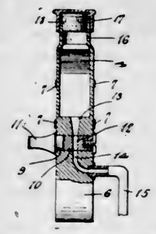
connected to the roller and windable on the roller, channel shaped guides secured vertically to the opposite sides of the frame and arranged to abut the lower edge of the plate and the sill of the frame for guiding the movement of the piece of screen and for coöperating therewith in preventing the passage of insects through the frame, an elongated transverse bar carried by the outer end of the piece of screening and operating between the guides to serve dual for the purpose of acting as a weight to hold the piece of screening taut when in an extended position and for coöperating with the sill of the frame for preventing the passage of insects through the frame, and a guide roller mounted between the plates and coöperating with the screening for preventing the same from spreading during actuation.

1,270,657. KEY-INDICATOR FOR PIANOS AND ORGANS. WALTER J. PETERS, Raleigh, W. Va., assignor of one-half to J. W. Field, Norton, Va. Filed Jan. 7, 1916. Serial No. 70,853. (Cl. 84—150.)



The herein described means for teaching music comprising inscriptions on the faces of the white keys of a keyboard, the inscription on each key including the letter name thereof, a word or words indicating the line or space on the staff where the corresponding note occurs, and flat and sharp symbols, near the side edges of the key adjacent the ends of the contiguous black keys which respectively constitute the sharp and flat notes of the key in question.

1,270,658. AXLE-LUBRICATING DEVICE. CORBETT L. QUINN, Pink Hill, N. C., assignor of one-fourth to Zenon J. Quinn, one-fourth to Leman H. Quinn, and one-fourth to James W. Quinn, Pink Hill, N. C. Filed Feb. 6, 1917. Serial No. 146,892. (Cl. 184—45.)



An axle lubricating device comprising a substantially V-shaped receptacle adapted to be disposed between the spokes of a wheel permitting the apex thereof to rest against the hub, said apex portion being of solid formation and having a transverse opening and vertical passages in communication therewith, one of said passages connected with the interior of the receptacle and the other passage extending laterally and opening outwardly of the receptacle, a tube connecting the last named passage with the hub, and a valve plug having an opening located in the transverse opening and adapted to be turned to register the opening thereof with the passages, and means securing the receptacle to the spokes.

1,270,659. WORKS SUCH AS RETAINING-WALLS, PIERS, AND WHARVES. SYLVAIN LOUIS RAVIER, Paris, France. Filed Feb. 24, 1916, Serial No. 80,142. Renewed Apr. 18, 1918. Serial No. 229,414. (Cl. 72—76.5.)

1. The herein described process of strengthening earth walls consisting in driving interlocking piles adjacent the face of the wall of earth to be strengthened, and then driving anchoring members at an inclination to the piles through openings formed in said piles and into the earth in rear of the piles.



4. The herein described method of strengthening earth walls of streams consisting in driving a plurality of interlocking perforated piles adjacent the front face of the wall of earth to be strengthened, removing the earth from the front of the piles to the first perforation therein, inserting a tube through said exposed perforation and into the earth wall, inserting another tube through the first mentioned tube and feeding concrete through the second mentioned tube to the first mentioned tube and withdrawing the second mentioned tube as the concrete fills the first mentioned tube, further removing earth from the front of the piles, and inserting tubes filled with concrete in other of the perforations in the piles.

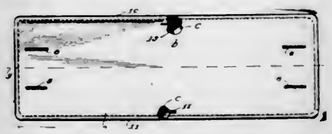
5. The herein described method of strengthening earth walls of streams consisting in driving a plurality of interlocked piles formed with openings, removing a portion of the earth from the front of the piles, driving an inclined anchoring member through the opening exposed by the removal of the earth and into the earth in rear of the piles, subsequently removing a further portion of the earth in front of the piles to expose other openings, and subsequently driving other inclined anchoring members through the openings and into the earth in rear of the piles.

6. In wall strengthening means, the combination of a plurality of substantially vertical piles adjacent the face of the wall of earth to be strengthened, said piles having openings, and tubes driven through the openings and into the wall of earth in rear of the piles, said tubes being filled with concrete to form anchors for the piles.

7. In wall strengthening means, the combination of a plurality of substantially vertical piles adjacent the face of the wall of earth to be strengthened, said piles having openings, and headed perforated tubes driven through the openings and into the wall of earth in rear of the piles, said tubes being filled with concrete which projects through the perforations in the tubes and forms anchors for the piles.

[Claims 2 and 3 not printed in the Gazette.]

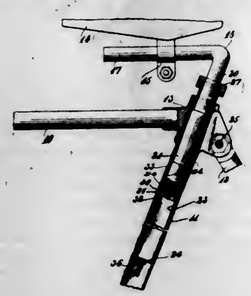
1,270,660. DETACHABLE SHIRT-CUFF. CHARLES L. E. REBERT, Los Angeles, Cal. Filed June 25, 1917. Serial No. 176,861. (Cl. 2—79.)



A detachable and reversible cuff for shirts, the combination of a sleeve of a shirt provided with a wrist band having an attaching button secured thereto, a cuff comprising a rectangular body formed of a plurality of pieces of fabric having button holes at approximately each of its corners extending therethrough, and being further provided on its upper and lower longitudinal edges at substantially

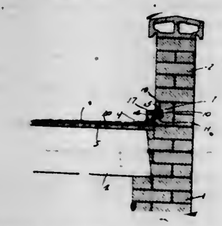
the center thereof with other button holes, said button holes extending one through one face or ply only and the other through the other face or ply only, and adapted to engage with the cuff attaching means on the wrist band, whereby when the cuff body is folded longitudinally upon itself the cuff can be secured to the sleeve of the shirt and the attaching button concealed from view.

1,270,661. PNEUMATIC SADDLE-POST AND PUMP. LOWERRE B. REED, Rutherford, N. J. Filed Mar. 2, 1917. Serial No. 151,935. (Cl. 208—155.)



In combination, with a bicycle frame including the diagonal strut, carrying a tubular head at its upper end, an elongated tubular casing snugly and frictionally fitting the tubular strut in adjustable relation therein, an elongated piston slidably mounted in said tubular casing and having an integral angular horizontal bar carrying the bicycle seat, a leather cup piston secured to the lower end of said piston, said tubular casing being formed with a longitudinal series of lateral parts, and said tubular strut being formed with a single port, with which any of the other ports is adapted to communicate, said integral horizontal bar serving also as a pump handle, the lower end of said tubular casing being closed, and a valve projecting below the closed end of said casing for discharging the air pumped from said tubular casing.

1,270,662. DUPLEX FLASHING-BLOCK. FELIX D. RENAUD, Chicago, Ill. Filed Jan. 2, 1918. Serial No. 209,883. (Cl. 108—26.)



1. A flashing structure comprising a flashing block having a longitudinally arranged groove or recess spaced above the bottom of the block, a flashing strip extending across the bottom of said groove downwardly along the wall of the block below the groove and then in a direction substantially parallel with the bottom of the block, and a shield formed substantially L-shaped with one leg positioned in said groove, and the other leg resting on the lower horizontal part of the flashing strip.

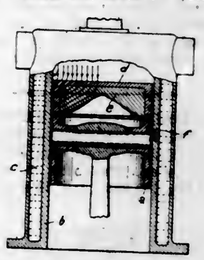
2. A roof construction embracing in combination with a roof connecting roof strips, a vertical wall or member formed near the roof level with a recess to receive the flashing ends of said strips, said strips having a section extending horizontally in said recess and then vertically against the back wall thereof, and a flashing block fitting in said recess between the top of the recess and said flashing strips, said block holding the vertical section of said flashing strip in position.

3. A roof construction embracing in combination with a roof including roofing strips, a vertical wall or member formed adjacent the roof level with a recess, a flashing block fitted into said recess, said flashing block having a groove extending longitudinally thereof substantially midway the height thereof, and a counter flashing strip engaging said first mentioned strips extending into said groove, one of the layers of said counter flashing strip extending up the vertical wall of said groove, and a shield having a vertical leg fitting against the counter flashing strip and a horizontal leg fitting into said recess and substantially fitting the same, said last mentioned leg being arranged in said recess above the counter flashing strip.

4. A flashing structure comprising a flashing block provided with a longitudinally arranged groove or recess in one face, a notch in one corner and a lug on the opposite corner for fitting in a similar notch on the next block whereby the blocks may be alined when in use, said recess being spaced above the bottom of the block for receiving the flashing ends of roofing strips, and a shield member formed substantially L-shaped in cross section, whereby one leg may fit into said recess and the opposite leg rest on said flashing strips.

[Claim 5 not printed in the Gazette.]

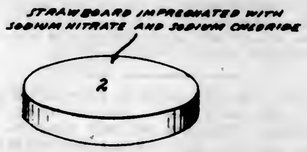
1,270,663. PISTON FOR INTERNAL-COMBUSTION ENGINES. ALOIS RIEDLER, Berlin, Germany. Filed Oct. 12, 1917. Serial No. 196,277. (Cl. 74—85.)



1. A piston of the kind referred to, comprising a bottom part, a shaft part joining the bottom part and a heat conductor made of a good heat conducting material and arranged within the shaft part, the end wall and the peripheral surface of said heat conductor being in contact with the piston bottom and shaft respectively.

2. A piston of the kind referred to, comprising a bottom part, a shaft part joining the bottom part and a heat conductor made of a good heat conducting material and arranged within the shaft part, the end wall and the peripheral portion of said heat conductor being in contact with the piston bottom and shaft respectively and the contacting surfaces of the heat conductor, the piston bottom and shaft being provided with grooves.

1,270,664. COMPOSITION FUEL. SAMUEL I. ROSE, Cleveland, Ohio, assignor to The Marvel Accessories Manufacturing Company, Cleveland, Ohio, a Corporation. Filed May 1, 1916. Serial No. 94,545. (Cl. 44—1.)

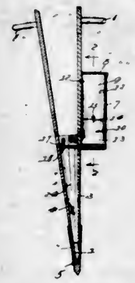


1. A composition fuel consisting solely of a carboniferous material impregnated with nitrate of sodium and chlorid of sodium.

2. A composition fuel consisting wholly of a compressed cake of straw-board impregnated with nitrate of sodium and a small percentage of chlorid of sodium.

3. A composition fuel consisting of a compressed cake of straw-board treated with a solution of four parts of nitrate of sodium and one part of chlorid of sodium and eight parts of water.

1,270,665. HAND-PLANTER. BERRY SLUSHER, Roark, Ky. Filed Sept. 20, 1917. Serial No. 192,357. (Cl. 111—97.)



1. A hand planter comprising a wedge-shaped member having openings at either end, a pair of plates attached to this member, one rigidly connected therewith and the other having hinged connection, a receptacle carried by the rigidly connected plate, a grain-ejecting plate having pivotal connection with the hingedly connected plate, the grain-ejecting plate entering the receptacle and being provided with apertures by means of which the grain is withdrawn from the latter and dropped into the wedge-shaped member, and flexible pieces attached to the wedge-shaped member and to the edges of the plates and extending to a point above that at which the grain-ejecting plate is connected.

[Claim 2 not printed in the Gazette.]

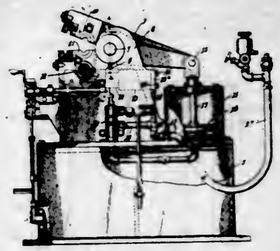
1,270,666. SHOE-DRIER. EDWARD GOULDAR SMITH, Albury, New South Wales, Australia. Filed Jan. 15, 1918. Serial No. 211,943. (Cl. 34—26.)



A shoe drier comprising a container constructed to conform to substantially the shape of the shoe, a covering member of moisture absorbing material arranged on the exterior of the container, said container having an opening in the top through which heating elements can be passed, and a closure member threaded into said opening, said closure member being in the form of a handle used in applying and removing the container.

1,270,667. ROCK-DRILL SHARPENER. WILLIAM A. SMITH, Denver, Colo., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo., a Corporation of Delaware. Filed June 13, 1917. Serial No. 174,580. (Cl. 76—5.)

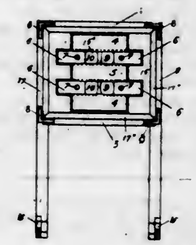
1. In drill sharpening apparatus of the character described, the combination with work gripping mechanism including a swinging member, of fluid actuated means for moving the member to grip the work, and means bearing directly against the member to open the apparatus when the means for moving it to gripping position is inactive.



6. In drill sharpening apparatus of the character described, the combination with a base, of a swinging lever fulcrumed thereon, coacting jaws, one of which is carried by the lever, cylinders of different capacities mounted on the base in angular relation to each other, pistons in the cylinders, and means operated by the pistons for respectively moving the lever in different directions.

[Claims 2 to 5 not printed in the Gazette.]

1,270,668. EDUCATIONAL DEVICE. CORA J. SPOOR and PAUL A. TRAUTMAN, Des Moines, Iowa. Filed May 7, 1917. Serial No. 167,116. (Cl. 35—2.)



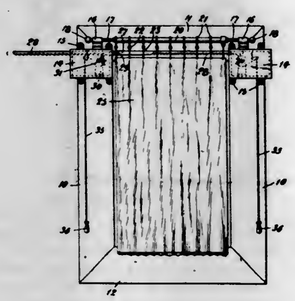
An educational device comprising a plate, a pair of disks rotatably mounted on said plate on the rear surface thereof, said disks having corresponding indicating characters on their front and rear surfaces adjacent to their edges, said disks being so arranged that their peripheries at one point are adjacent to each other, a second pair of disks rotatably mounted on the rear surface of said plate, below the respective disks of the first pair, having corresponding indicating characters on their front and rear surfaces, handles on said disks, said plates having openings whereby the adjacent portions of each pair of disks may be viewed from the front of the plate, and adjustable cover members on said plate, each being adapted in one position of its movement to cover the visible portion of one of said disks.

1,270,669. CURTAIN-HANGER. BAZYLI STASZKO, Hatfield, Mass. Filed Mar. 23, 1918. Serial No. 224,295. (Cl. 156—20.)

1. In a curtain hanger, the combination with a pair of hollow casings secured to the frame of the window, a telescopic bar mounted on said casings, and means slidable on said bar for supporting the curtains, of a rack-bar slidable longitudinally in said casings, means for actuating said rack-bar in either direction, and means carried by said rack-bar for actuating the curtains.

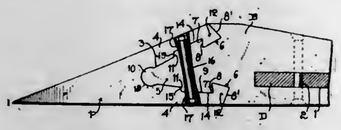
2. In a curtain fixture, the combination with a pair of opposed hollow casings rigidly engaged with the window frame, a curtain support rail mounted thereon, and a curtain slidably engaged with said rail, of a rack-bar

slidable longitudinally in said casings, levers pivoted in said casings, a plurality of pawls operatively engaged on the surface of said levers, means for actuating said levers whereby the teeth of said pawls engage with the teeth of said rack-bar, and operative connections between said rack-bar and the curtains.



3. In a curtain fixture, the combination with a pair of hollow opposed supports secured to the frame of the window at the top thereof, a support bar carried by said casings, rings slidably engaged on said support bar and means for attaching a curtain to said rings, of a rack-bar slidable longitudinally in said casings, said rack-bar having oppositely formed ratchet teeth at the ends thereof, levers rotatably mounted in said casings, pawls pivotally attached to the sides of said levers, stop pins preventing said pawls from operating in one direction, springs propelling said pawls against said stop pins, means for holding said levers normally out of engagement, means for actuating said levers, whereby said pawls are caused to engage in said ratchet teeth, and means carried by said rack-bar for moving the curtain laterally of the window frame.

1,270,670. EXCAVATING-TOOTH. JAMES C. STONE, Russellville, Ala. Filed Mar. 30, 1918. Serial No. 225,698. (Cl. 37—56.)



A device of the class described comprising a base and a point, the rear portion of the point being provided with diverging arms, the forward end of the base being provided with an extension snugly fitting between the diverging arms of the point, the edge of the extension at the inner ends thereof being provided with recesses and the outer ends of the arms of the point being provided with ribs fitting within the recesses of the extension, substantially the forward half portion of each of the edges of the extension being inwardly offset whereby a transverse shoulder is provided substantially midway of such edge, the coacting face of an arm of the point having a complemental offset portion to afford a shoulder to contact with the shoulder of the extension, the outer end portion of the extension of the base being provided with a tenon, the inner end portions of the opposed faces of the arms of the point being provided with a mortise to snugly receive the tenon of the extension, and a holding bolt disposed through the extension of the body and the arms of the point, said bolt being positioned inwardly of the shoulder formed on each edge of the extension of the body by the inwardly offset portion thereof.

1,270,671. ELECTRIC SWITCH. GEORGE B. THOMAS, Bridgeport, Conn., assignor to The Bryant Electric Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Dec. 6, 1915. Serial No. 65,364. (Cl. 175—287.)



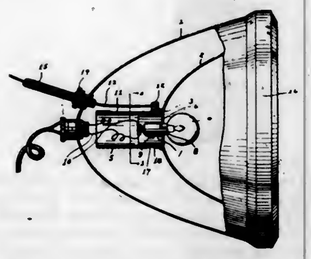
1. In an electric switch, a switch frame, an oscillating switch piece pivoted thereon, a reciprocating plate in sliding contact with the switch frame, a spring abutment moving therewith, a switch spring under compression between said abutment and the free end of the oscillating switch piece and means for displacing said reciprocating plate to shift the abutment end of the switch spring from one side to the other of the axis of oscillation of the switch piece.

2. In an electric switch, a switch frame, an oscillating switch piece pivoted thereon, a reciprocating plate in sliding contact with the switch frame, a spring abutment moving therewith, a switch spring under compression between said abutment and the free end of the oscillating switch piece and means for displacing said reciprocating plate to shift the abutment end of the switch spring from one side to the other of the axis of oscillation of the switch piece, together with means for limiting the extent of movement of said reciprocating plate.

6. In an electric switch, a switch frame having at its opposite ends upstanding webs grooved to form guide ways, and intermediate said end webs two pairs of lateral upstanding lugs forming stops, a pair of lateral bearing lugs projecting from opposite sides of the frame between the pairs of stops, the body of the frame being longitudinally slotted between said bearing lugs substantially as described.

[Claims 3 to 5 not printed in the Gazette.]

1,270,672. HEADLIGHT. HOMER H. TRAVIS, Columbus, Ohio. Filed Dec. 22, 1916. Serial No. 138,301. (Cl. 240—44.)



In combination with a reflector having an opening formed in the rear portion thereof, a sleeve engaged in said opening provided with a longitudinally extending way and an opening, a tubular member slidable in said sleeve and having an opening formed therein adapted to aline with said opening in the sleeve, a lug carried by said member received in the longitudinal way, a second sleeve carried by the tubular member for receiving an electric lamp therein, and lamp engaging means on said second sleeve positioned adjacent the opening formed in the slidable member.

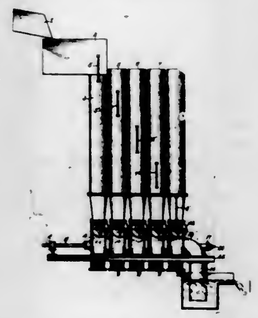
1,270,673. NECK AND WRIST WEAR. GEORGE W. VAN DECAR, Troy, N. Y. Filed Feb. 13, 1918. Serial No. 216,861. (Cl. 2—67.)



1. A band for shirts, collars and the like composed of a plurality of plies of fabric with a strip of celluloid permanently secured between the plies, said plies completely inclosing said strip whereby a nonshrinkable band structure is provided and said strip prevented from removal from said band.

2. A band for shirts, collars and the like composed of a plurality of plies of fabric with a strip of celluloid permanently secured between the plies by stitching through the fabric and the celluloid whereby a nonshrinkable unitary band structure is provided.

1,270,674. HYDRAULIC MOTOR. PEDRO VIDELA, Santiago, Chile. Filed Oct. 4, 1916, Serial No. 123,671. Renewed Dec. 1, 1917. Serial No. 205,004. (Cl. 253—110.)

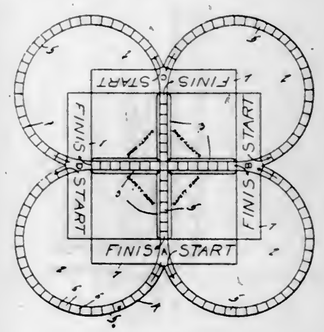


1. A hydraulic motor of the character described, comprising a plurality of independent turbines arranged in a line and in communication so that the discharge from one turbine will pass to the next turbine, stand pipes connected to the casings of the various turbines for maintaining a head of water in the various turbines, means acting as a discharge for the last turbine, and means acting as an inlet member for the first turbine.

2. In a hydraulic motor of the character described, a plurality of turbines provided with independent casings, tubular members connecting the center of the various casings, a stand pipe for each casing in free communication with the upper part of the various casings, a rotor arranged in each casing provided with an eye discharging into the means acting as a communicating member between the casings so that the water passing through one rotor will be discharged in the next adjacent casing, means for directing water to the first stand pipe, and means for directing the water away from the last casing.

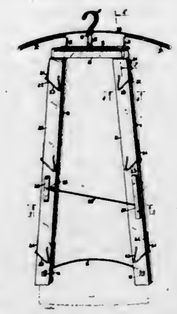
3. In a hydraulic motor of the character described, a plurality of casings arranged in line, tubular members connecting the centers of said casings together, a stand pipe for each casing in free communication therewith, a rotor partially filling each casing and arranged so that the eye will discharge in said tubular members, a shaft extending through said casings connected with said rotors for receiving power therefrom, means for leading water from the last casing, and means for directing water to the first stand pipe whereby the various casings will be filled with water and the stand pipes filled to different heights for producing different heads of water for the successive rotors.

1,270,675. FOUR-LEAF-CLOVER GAME. NEWMAN A. WEPLER, Valley Station, Ky. Filed Feb. 26, 1916. Serial No. 80,666. (Cl. 46—63.)



A game comprising a board having at the margin of its playing surface a path delineating a four leaf clover, straight intersecting paths extending across the center of the board and forming a safety zone, said straight paths merging into said marginal path and forming a danger zone, transverse lines dividing the paths into spaces adapted to receive game pieces, and a starting and finishing path at each merging point of the straight and marginal paths, a pair of said starting and finishing paths extending parallel with each of said straight intersecting paths.

1,270,676. GARMENT STRETCHER AND PRESSER. LAWRENCE J. WIDNESS, Brooklyn, N. Y. Filed June 12, 1917. Serial No. 174,231. (Cl. 223—19.)



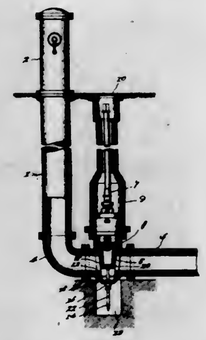
2. In a garment presser and stretcher, side bars, a clamp at the upper end of the side bars and to one member of which the upper ends of the side bars are pivoted, wings hinged to the side bars, flexible loops mounted on the side bars, and spring clips carried by the said loops for clamping the wings in closed position, the free ends of the clips being bent to form handles to facilitate operating them.

[Claims 1 and 3 not printed in the Gazette.]

1,270,677. ANTIFREEZING HYDRANT. MICHEL S. YASSUKOVITCH, New York, N. Y. Filed Dec. 20, 1917. Serial No. 208,101. (Cl. 137—13.)

1. The combination with an underground water service pipe, a stock for delivering water to the surface, and a

connection between said water service pipe and stock, of a hollow valve for controlling the passage of water to said connection and stock, said valve having an opening through which the water in said stock and connection may pass to the hollow interior thereof, and a drain pipe detachably suspended from and movable with said hollow valve, substantially as described.



2. The combination with an underground water service pipe, a stock for delivering water to the surface, and a connection between said water service pipe and stock, of a hollow valve for controlling the passage of water to said connection and stock, said valve having an opening through which the water in said stock and connection may pass to the hollow interior thereof, a drain pipe having its open upper end in free communication with the hollow interior of said valve, means whereby said drain pipe is detachably suspended from said valve so as to move therewith, said drain pipe having an eduction port for the escape of the water, and means whereby said eduction port may be closed, substantially as described.

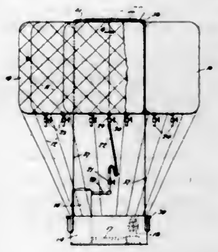
3. The combination with an underground water service pipe, a stock for delivering water to the surface, and a connection between said water service pipe and stock, of a hollow valve for controlling the passage of water to said connection and stock, said valve having an opening through the side thereof through which the water in the stock and connection may pass to the interior thereof, a drain pipe having its open upper end disposed in communication with the lower part of the hollow interior of said valve, means whereby said pipe is loosely suspended from said valve and caused to move therewith, the lower end of the drain pipe being closed and an eduction port provided in the side thereof, and a stuffing box slidingly receiving said drain pipe and adapted to mask said eduction port, substantially as described.

4. The combination with an underground water service pipe, a stock for delivering water to the surface, and a connection between said water service pipe and stock, of a hollow valve for controlling the passage of water to said connection and stock, said valve having an opening through which the water in said stock and connection may pass to the hollow interior thereof, said valve also having a threaded bore in its base opening into the hollow interior thereof, a pair of spaced perforated disks screwed into said bore, a third perforated disk of a smaller diameter loosely imprisoned between said first-named disks, a drain pipe having its open upper end attached to and supported by said third loose disk, said pipe having an eduction port, and means whereby said port may be closed, substantially as described.

5. The combination with an underground water service pipe, a stock for delivering water to the surface, and a connection between said water service pipe and stock, of a hollow valve controlling the passage of water from said service pipe to the connection and stock, said valve having a drain opening in the side thereof which when the valve is closed occupies a position substantially on a level with the lowest point in said connection whereby all of the water in said stock and connection may be allowed to pass through said opening and into the interior of said valve when the latter is closed, and a drain pipe having its open upper end in communication with the bottom of the hollow interior of said valve, said open upper end being disposed close to the lower part of said drain opening whereby to quickly carry off all of the waste water passing into the valve interior, substantially as described.

[Claims 6 to 8 not printed in the Gazette.]

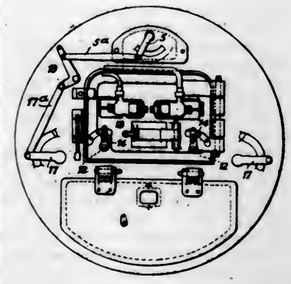
1,270,678. BALLOON. MAXIM ZAVARKIN, East Brimfield, Mass. Filed Mar. 9, 1918. Serial No. 221,410. (Cl. 224—3.)



1. In a balloon, a plurality of segmental gas holders arranged in a circle, a cylindrical holder adjacent to the inner ends of said segmental holders, a car suspended by said holders, means in said car for supplying gas, flexible connection between said means and said holders, inlets to all of said holders, a slide valve at the upper side of said cylindrical holder and a pair of opposed cords extending from said valve to said car whereby said valve may be manually actuated.

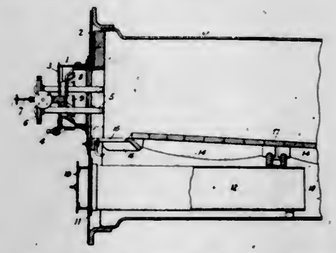
[Claim 2 not printed in the Gazette.]

1,270,679. FURNACE. CORNELIS ZULVER, London, England, assignor of one-half to Launcelot Eustace Smith, South Shields, England. Filed June 25, 1917. Serial No. 176,854. (Cl. 158—1.)



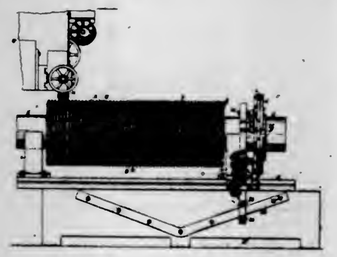
In combination with a furnace front having a fuel supply opening therein, spaced walls extending partly about said opening and forming an air space therebetween, both inner and outer walls having openings in the upper parts of same, a slide valve controlling admission of air through the outer wall openings, a handle on the exterior of the furnace for operating said slide, dampers for controlling the supply of air to the under sides of the furnace grates, handles for operating said dampers, a bell-crank lever, and links connecting said slide handle and a damper handle to be simultaneously operated from said bell-crank lever, substantially as described.

1,270,680. FURNACE. CORNELIS ZULVER, London, England, assignor of one-half to Launcelot Eustace Smith, South Shields, England. Filed June 25, 1917. Serial No. 176,853. (Cl. 158—1.)



In a furnace, the combination with a furnace front having a fuel supply opening, a baffle formed with air inlet openings, with means to inclose said baffle, of a plate closing the ashpit of the furnace, and air supply tubes attached to said plate and extending into the ashpit, substantially as described.

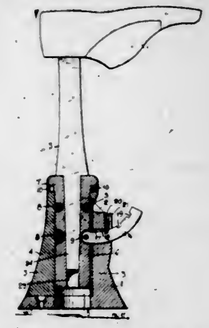
1,270,681. APPARATUS FOR GROOVING SUGAR-CANE-CRUSHING ROLLERS. ENRIQUE ABARCA, San Juan, Porto Rico. Filed Nov. 2, 1917. Serial No. 199,961. (Cl. 90—13.)



An apparatus as characterized comprising a permanently positioned cutting tool; a support for a crushing roller, said support embodying standards having bearings for said roller; means for moving said support and said roller carried thereon lengthwise of said roller under said cutting tool; and means for mechanically rotating said roller coincident to the movement of said support under said cutting tool, said means embodying a pattern member substantially disposed in a plane parallel with the axis of said roller, and a crank-like member rigidly engaging said roller and operatively engaging said pattern member to be oscillated thereby during the longitudinal movement of said support and said roller.

1,270,682. STAND FOR SHOEMAKERS. TAHVAN E. AHO, Crosby, Minn. Filed Sept. 1, 1917. Serial No. 189,309. (Cl. 12—123.)

1. A shoemaker's stand comprising a base provided with an upstanding bracket the inner face of said bracket being substantially flat and unobstructed, inwardly and upwardly directed ears carried by the upper portion of the bracket at opposite sides thereof, a tubular block adapted to rest upon the base when in substantially a vertical position, a face of said tubular block being substantially flat and unobstructed and adapted to contact with the inner face of the bracket, a sleeve extending within the block and rotatably supported by said block, the periphery of the sleeve being provided with an annular groove, a pin disposed through the ears of the bracket and through the block for pivotally supporting the block, said pin also extending within the annular groove of the sleeve and serving to hold said sleeve against endwise movement, and a last standard engaged with the sleeve.



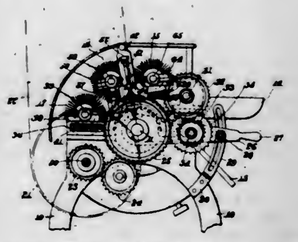
[Claim 2 not printed in the Gazette.]

1,270,683. CLOTH-CUTTING KNIFE. JOSEPH APPELBAUM, New York, N. Y., assignor to Twin Blade Co. Inc., New York, N. Y. Filed Nov. 2, 1917. Serial No. 199,989. (Cl. 164—47.)



A knife as characterized having the opposite ends thereof provided each with an end cutting edge and a recess for receiving a fastening bolt adjacent said end cutting edge, the longitudinal edges of said knife being sharpened for separating the cloth in advance of the cutting edges of said knife.

1,270,684. BLACKING-MACHINE. JOHN W. AULSON, Lynn, Mass., assignor to Merrow Machine Co., Salem, Mass., a Corporation of Massachusetts. Filed Apr. 14, 1917. Serial No. 162,819. (Cl. 91—40.)



2. In a device of the class described, the combination of a frame; a revoluble bed roll thereon; a fixed member secured to the upper part of each end of said frame and provided with an upwardly extending arm; a slidable

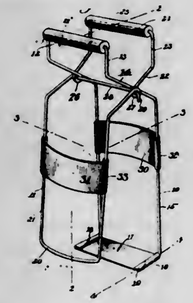
member on said arm; means for adjusting said slidable member; a pan to contain liquid; a feed roll therein; a revoluble liquid receiving brush on said slidable members; a revoluble finishing brush on said fixed members; and a revoluble intermediate brush also mounted on said slidable members between the outer brushes.

4. In a device of the class described, the combination of a frame; a revoluble bed roll thereon; a fixed member secured to the upper part of each end of said frame and provided with an upwardly extending arm; a slidable member on said arm; means for adjusting said slidable member; a pan to contain liquid; a feed roll therein; a revoluble liquid receiving brush on said slidable members; a revoluble finishing brush on said fixed members; a revoluble intermediate brush mounted on said slidable members between the outer brushes; a support for each end of the intermediate brush shaft provided with a threaded shank extending through an ear on said slidable member; and clamping nuts on said threaded shank on opposite sides of said ear.

9. In a device of the class described, the combination of a frame; a revoluble bed roll thereon; a member secured to each end of said frame and provided with an upwardly extending arm; a slidable member on said arm having a forwardly extending slotted ear and a rearwardly extending ear with a cylindrical hole therein parallel to said arm; a bearing provided with a threaded shank extending through said slot; a clamping nut for said shank; a bearing having a threaded shank extending through said hole; nuts on said shank on opposite sides of said ear; means for adjusting said slidable member on said arm; revoluble brushes supported by said bearings; a pan to contain liquid; and a feed roll therein adapted to deposit liquid on the revoluble brush coacting therewith.

[Claims 1, 3, and 5 to 8 not printed in the Gazette.]

1,270,685. JAR-LIFTER. CHRISTOPHER F. BARAGER, Honesdale, Pa. Filed Sept. 29, 1917. Serial No. 194,007. (Cl. 65—26.)

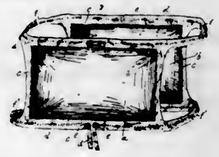


1. A jar lifter embodying a pair of tongs, each of said tongs including a pair of parallel standards, oppositely located curved connecting strips positioned intermediate the ends of each pair of standards, a laterally and inwardly extending platform located at the extremity of one jaw of said tongs to provide a jar support and the other jaw terminating short of the platform to define a pusher element.

[Claim 2 not printed in the Gazette.]

1,270,686. LIFE-SAVING JACKET. ORPHEUS BEAUMONT, Puketeraki, New Zealand. Filed Feb. 1, 1918. Serial No. 214,953. (Cl. 9—20.)

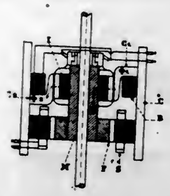
1. A life-saving jacket comprising in combination two pockets of textile fabric, tubular hems at the upper and lower edges of each pocket, draw-strings passing through the said tubular hems, and serving to connect the two pockets and a permanent stuffing of light filling material in the said pockets.



3. A life-saving jacket comprising in combination two similar pockets of textile fabric, tubular hems at the upper and lower edges of each pocket, draw-strings passing through the said tubular hems and respectively passing one from each corner of one pocket to the corresponding corner of the other pocket, eyelets near the middle of each tubular hem through which the ends of the draw-strings pass outside of the hems, and a stuffing of light filling material in the said pockets.

[Claim 2 not printed in the Gazette.]

1,270,687. ALTERNATING-CURRENT GENERATOR AND GROUP-CONVERTER. GEORGES BELFILS, Paris, France. Filed Sept. 5, 1917. Serial No. 189,864. (Cl. 171—252.)



In combination a homopolar alternating current machine having a rotor mounted upon a shaft, a continuous current machine having its armature mounted upon the same shaft, a single frame in which is mounted both the stator of the alternating current machine and the pole pieces of the continuous current machine and a field coil common to both machines, substantially as described.

1,270,688. FERTILIZER. HENRY BLUMENBERG, Jr., Oro Grande, Cal., assignor to Golden State Portland Cement Company, Los Angeles, Cal., a Corporation of California. Filed Mar. 4, 1918. Serial No. 220,369. (Cl. 71—9.)

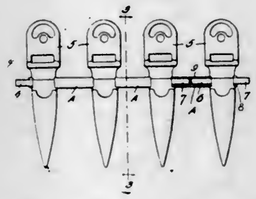
2. A fertilizer consisting of calcium carbonate, three parts, and calcium sulfate one part.

[Claim 1 not printed in the Gazette.]

1,270,689. GUARD-FINGER. JOSEPH C. BROWN, Clark, Wyo. Filed Dec. 1, 1917. Serial No. 204,859. (Cl. 56—43.)

1. The combination of guard fingers each having laterally extending arms and provided with a recess formed concentric to the inner end of each arm, a detachable tubular member having a bore therethrough that is sector-shaped in cross-section for receiving adjacent arms and adapting said member to be removably mounted on the arms and interposed between adjacent fingers, said member being approximately sector-shaped in cross-section and serving to retain adjacent fingers in substantially fixed alinement when assembled on the arms and the end portions of the member are in contact with the walls of their respective recesses to prevent rotative movement between the member and arm and therefrom independent finger movement.

2. The combination of guard fingers each having laterally extending arms that are approximately sector-shaped in cross-section, a tubular member having a bore therethrough that is substantially sector-shaped in cross-section to permit said member to be removably mounted upon adjacent and alining arms and serving as a wearing and spacing member when interposed between two adjacent



guard fingers, said member being approximately sector-shaped in cross-section, and said guard fingers being formed with a recess having a configuration similar to the cross-section of said member for closely receiving the ends of the interposed member and for maintaining them against rotary movement.

1,270,690. BICYCLE-LOCK. ABRAHAM B. BURGER, Portland, Oreg. Filed June 5, 1917. Serial No. 172,961. (Cl. 70—90.)



The combination of a bicycle lock casing formed in two sections, a shackle member slidably seated in the lower portion of the channeled section and provided with an integrally formed handle and lug integrally formed on said handle, a coiled spring having its ends secured to the lock and lug, a lock spring having one end secured to the upper portion of a lock and the free ends thereof passed through openings formed in the side of the lock in looped formation by which the handle is held in a raised position, a dog pivotally secured to, and seated in the opposite and lower portion of the lock casing, a small bowed spring interposed between the dog and the lock casing substantially as herein shown and described.

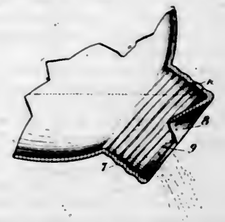
1,270,691. RAIL-TIE. ROBERT T. BURRILL, Winchester, N. H. Filed May 25, 1917. Serial No. 170,927. (Cl. 238—4.)



1. A tie including a hollow metallic body having the top and side walls cut away adjacent the respective ends to provide rail receiving recesses, means for reinforcing the body at the recesses, rail supporting blocks arranged in the respective ends of the body and positioned beneath the recesses, the tops of the ties being provided with slots on opposite sides of each recess, bearings mounted on the upper surface of the tops and right angularly bent bolts journaled in the bearings and engaging the slots for preventing longitudinal movement of the blocks and adapted for retaining rails on the tie.

2. The combination with a hollow tie having rail receiving recesses adjacent the respective ends thereof and further provided with slots on opposite sides of each recess, blocks insertible in the body and positioned beneath the recesses, rails arranged in the recesses and supported by the blocks, of brackets mounted on the upper surface of the tie upon opposite sides of each recess and in staggered relation, right angled bolts having rail engaging portions journaled in the brackets for retaining the rails in position and having the opposite portions arranged through the slots and in close relation with the respective ends of each block for preventing movement of the blocks and also for preventing accidental longitudinal movement of the rail engaging portions in the brackets.

1,270,692. CANTEEN-MOUTHPIECE. WILLIAM S. BUTTON, Riverside, Cal. Filed June 8, 1916. Serial No. 102,503. (Cl. 65—13.)



A closed vessel, comprising a body portion, a cylindrical neck formed with said body portion, a communicating passage-way through said neck and to the body portion, a crescent-shaped concave lip shield adapted to partially obstruct the passage-way through the neck, a drinking orifice formed beneath the lip shield, and means whereby an inflow of air may be maintained to the body of the vessel while a liquid is passing out through the drinking orifice.

1,270,693. NURSING-NIPPLE. EDWIN M. CALDWELL, Edgewood, R. I., assignor to Davol Rubber Company, Providence, R. I., a Corporation of Rhode Island. Filed Feb. 19, 1917. Serial No. 149,424. (Cl. 128—18.)



1. A nipple composed of a base, a neck, a head and a dome surmounting the head, the dome being of less diameter than the head to form an annular contracted part in connection therewith, the nipple being formed with a series of discharge passages disposed throughout its circumference and radially thereof and located at the points of juncture between the head and dome.

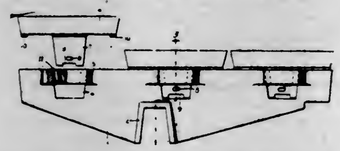
4. A nipple having a closed end and formed with a substantially annular groove below said end, and having a series of discharge passages extending radially of the nipple and through said groove.

[Claims 2, 3, and 5 not printed in the Gazette.]

1,270,694. ADJUSTABLE SURFACE GRATE-BAR. COLIN CAMPBELL, Rutherford, N. J. Filed Oct. 27, 1917. Serial No. 198,845. (Cl. 126—168.)

1. A grate bar of the character described, comprising a supporting bar having openings extending from the upper

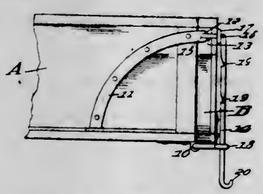
surface, a surface bar for each of said openings, each of said surface bars having a depending lug substantially fitting said opening, said lugs being formed with an aperture for receiving retaining pins, and a transversely arranged notch at the bottom of each of said lugs for receiving a removable tool, said notches being above the bottom of the openings in said supporting bar.



2. A grate bar of the character described, comprising a supporting bar having openings extending from the upper surface, said openings being provided with restricted end sections, a surface bar for each of said openings provided with a depending lug adapted to fit into and engage said restricted sections whereby a comparatively small amount of the lugs are in engagement with the supporting bar so as to permit an easy removal.

3. A grate bar of the character described, comprising a supporting bar having a plurality of openings extending from the upper surface downwardly and then laterally in opposite directions so that there will be a transverse aperture through the bar intersecting said openings, a surface bar for each of said openings, each of said surface bars having a depending lug substantially filling the respective openings, each of said lugs being formed with an aperture for receiving a retaining pin, said aperture in said lug being opposite the transverse aperture in the supporting bar whereby the retaining pin may be easily placed in position and removed.

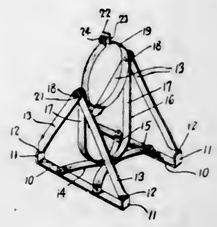
1,270,695. TAIL-GATE LOCK. ALBERT CARLSON, Chicago, Ill. Filed Apr. 27, 1917. Serial No. 164,937. (Cl. 21—21.)



The combination with a wagon body and tail gate therefor, of hinge members secured on the bottom of the body, a pintle carried by the hinge members and provided at its end with a locking hook, a bracket secured to the side wall of the body on the exterior thereof, a sectional hanger rod comprising two sections hingedly connected together, the two sections being of different lengths and the smaller section being pivotally connected with the bracket, and an eye on the tail gate near the upper edge thereof, the hanger rod passing slidably through the eye and having a hook at the free end of the longer section and being provided further with notches between the said hook and the point of connection between the two sections, whereby the tail gate may be extended to full open position, to intermediate positions between that and the closed position or locked in the closed position by having the hanger rod broken at the jointed connection between its two sections and having the longer section engage the said hook on the pintle.

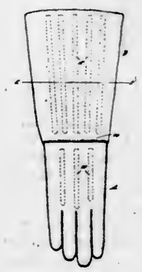
1,270,696. BARREL-STAND. CHARLES A. CARLSON, Stillman Valley, Ill. Filed Feb. 2, 1918. Serial No. 215,130. (Cl. 248—56.)

A barrel stand comprising a pair of spaced side members, each member being formed from a length of flat material and having a triangular configuration, a transversely disposed plate connecting said members and secured to the base thereof, the diverging portions of said members being twisted at an appropriate point in their length to lie edgewise in a vertical plane with their extremities overlapped, a substantially U-shaped element arranged with its closed end reposing upon the said plate and se-



cured thereto in any suitable manner, an adjustable annulus disposed between the limbs of the U-shaped elements, trunnions projecting from said annulus and passed through the limbs of said elements and the overlapped extremities of the side members whereby said annulus is supported for rotation and means associated with said trunnions for holding the parts operatively associated and the annulus in any given position.

1,270,697. ARM-SHIELD. BYRON V. CHAPMAN, Newberry, S. C. Filed Nov. 11, 1916. Serial No. 130,806. (Cl. 2—104.)



The combination with a glove having a gauntlet, of a series of rigid strips secured upon the back of the gauntlet, and a second series of rigid strips upon the back of the glove, the ends of each series terminating short of the line of juncture of the gauntlet with the glove, whereby the glove may be folded transversely.

1,270,698. JUICE-ASEPTICIZING PROCESS. HERBERT COFFMAN, Nazareth, Pa. Filed Apr. 16, 1917. Serial No. 162,508. (Cl. 99—8.)

5. A juice preserving process consisting in extracting juice from fruit, bottling the juice and passing carbon dioxid gas through the juice to replace the air within the bottles within thirty minutes after the extraction of the juice from the fruit, immediately sealing the bottles, and then placing the bottles in water at about 145° F. for twenty-five minutes, then removing and cooling the bottles, and after forty-eight hours repeating the heating step at the same temperature for about fifteen minutes.

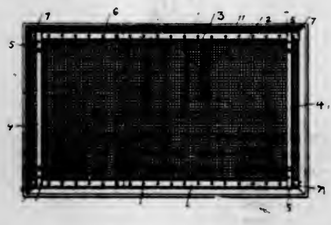
[Claims 1 to 4 not printed in the Gazette.]

1,270,699. THIMBLE. SOPHIA COLBURN, Fort Worth, Tex. Filed July 10, 1917. Serial No. 179,745. (Cl. 223—51.)



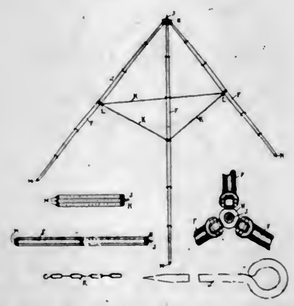
The combination with a thimble having an opening in its side wall and a cutting member having a shank, of flanges on each side of said opening and a head on the shank having curved faces engaging with the inner wall of the thimble, said shank engaging said flanges.

1,270,700. INCUBATOR-FRAME. CHARLES D. CONKLIN, Judson, Minn. Filed Aug. 10, 1917. Serial No. 185,600. (Cl. 119—43.)



An incubator tray embodying fixed end and side walls, and supplemental walls paralleling the respective fixed walls of the tray, the side supplemental walls having openings in their length in coincident position, straps embracing the side supplemental walls and secured to the end supplemental walls, and pins to hold the end supplemental walls in adjusted position.

1,270,701. CONSTRUCTION OF TENTS. PERCY EDWARD CORRELL, Adelaide, South Australia, Australia. Filed Apr. 14, 1916. Serial No. 91,061. (Cl. 135—1.)

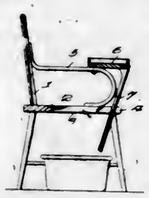


1. An improved tent comprising a cover tapering to a point and having an eyelet in its point and eyelets in its lower edge, and a framework comprising three poles pivotally attached to a headpiece provided with an upwardly projecting spike and coupled by lengths of chain, each pole comprising two series of progressively telescoping elements of light gage metal joined to form a pole of which the cross-section diminishes progressively from its center toward its ends, successive elements being provided with an automatic locking device whereby such elements are automatically secured in position when extended, such locking device consisting of a dog or dogs carried by a spring within the inner element and adapted to engage the outer element when projected by said spring through a slot or slots in the inner element: and pegs adapted to engage the eyelets in edge of fabric.

4. A tent comprising a plurality of poles hinged to a head piece having a pin projecting from its upper face, and a cover formed of a plurality of triangular sections of fabric secured together to form a pyramidal body reinforced on the inner side at sundry of the seams and having an eyelet in its peak to receive the pin of the head piece, the lower edge of the body being reinforced and provided with a plurality of eyelets to receive anchoring pegs.

[Claims 2 and 3 not printed in the Gazette.]

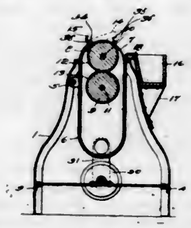
1,270,702. NURSERY-CHAIR. WILLIAM P. COSTELLO, Great Falls, Mont. Filed Nov. 24, 1917. Serial No. 203,709. (Cl. 4—32.)



1. In a chair of the character described, having an opening formed in the seat thereof, a table pivotally mounted thereon, a depending guard carried by said table and adapted for arrangement adjacent the opening in the chair, at times.

[Claim 2 not printed in the Gazette.]

1,270,703. BOBBIN-STRIPPER. ARTHUR H. COTTINGHAM, Union, S. C. Filed Sept. 24, 1917. Serial No. 192,992. (Cl. 19—15.)



1. A device of the character described including bobbin stripping means having a stripping fillet thereon, means for actuating said bobbin stripping means, gage-bars for receiving the ends of the bobbin and permitting the roving on the intermediate portion of the bobbin to be brought into contact with the stripping fillet, and means to adjust said gage-bars whereby to regulate the position of the bobbin to and from said stripping fillet, substantially as described.

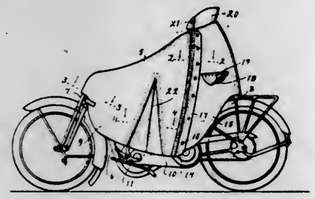
3. In a device of the character described, the combination of a bobbin stripping means, means for actuating said bobbin stripping means, a gage-bar constructed to receive and form a stop for one end of a bobbin, means to adjust said gage-bar to and from said stripping means, a second gage-bar having a supporting surface for the other end of the bobbin whereby to hold the bobbin extending in contact with the stripper fillet, means for adjusting said second named gage-bar to and from said stripping means, and means for carrying off the roving after it has been

removed from the bobbin by said stripping means, substantially as described.

6. In a device of the character described, the combination of a framework, a casing supported in said framework and having an open upper end, a stripping roll rotating in said casing, a shaft journaled in said framework for supporting said stripping roll, a cleaning roll rotating in said casing in contact with said stripping roll, a shaft journaled in said framework and supporting said cleaning roll, means for adjusting said stripping roll shaft to move the stripping roll toward or away from said cleaning roll, means for driving said stripping roll, means for driving said cleaning roll at a speed higher than and in a direction opposite to the direction of rotation of said cleaning roll, suction-producing means connected to said casing for creating a draft therethrough to draw off the stripped material, gage-bars extending across the opening in said casing and adapted to receive the ends of the bobbin to hold the same in contact with said stripping roll, and means for adjusting said gage-bars to and from said stripping roll, substantially as described.

[Claims 2, 4, and 5 not printed in the Gazette.]

1,270,704. CYCLE RAIN-COAT AND COVER. ROY V. CREERY, Racine, Wis. Filed Feb. 26, 1917. Serial No. 151,065. (Cl. 2—60.)



2. A wet weather garment for cyclists comprising a cape fitting over the operator and the body portion, handle bars, and upper part of the front fork of the machine, said cape having a side opening extending from the neck to the bottom edge, one edge of said opening having two flaps, the other edge of said opening fitting between said flaps, means for detachably securing said last named edge between the flaps, said cape also having a protected opening in the side adjacent the side opening to permit the operator to release said securing means, and means for detachably securing the cape to the machine, said side opening permitting the operator to get out of the garment without detaching it from the machine.

[Claim 1 not printed in the Gazette.]

1,270,705. SPANNER FOR THE REMOVAL OF SPARKING-PLUG VALVE-CAPS OF INTERNAL-COMBUSTION ENGINES. JOHN CROAD, Gosport, England. Filed Nov. 20, 1917. Serial No. 203,036. (Cl. 81—90.)

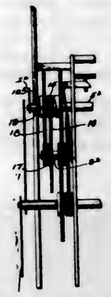


1. In a spanner for removing interiorly and exteriorly threaded plug sockets having spanner engaging means thereon, in combination, a handle, a head on said handle, having means thereon for engaging said spanner engaging means, a bolt provided with a thread adapted to fit the interior screw thread of said socket, an unthreaded portion on said bolt substantially corresponding in length to the thickness of the spanner head, and means on said bolt for engaging the upper side of said spanner head and for holding said head in engagement with the spanner engaging means on the screw threaded socket.

3. In combination, in a spanner for removing and inserting spark plug sockets, having spanner engaging recesses therein, a spanner having a head provided with projections adapted to fit said recesses, there being a slot in said head, and a bolt provided at one end with a thread adapted to fit a spark plug recess and at the other end with a head adapted to pass through the slot in the spanner head, and when screwed down to hold the spanner head in engagement with said socket.

[Claim 2 not printed in the Gazette.]

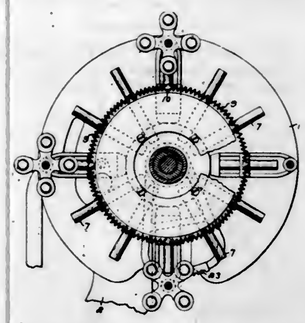
1,270,706. CLOCK. JOSEPH F. DUNN, New York, N. Y. Filed Aug. 7, 1914. Serial No. 855,610. (Cl. 58—16.)



4. In an alarm clock, an alarm setting and releasing mechanism, an alarm hour indicator, an alarm minute-indicator, and gearing connecting the said indicators for causing the two to move concurrently to indicate the hour and minute at which the alarm will be released.

[Claims 1 to 3 not printed in the Gazette.]

1,270,707. MAGAZINE FOR WEFT-REPLENISHING LOOMS. RANDOLPH CROMPTON, Chatham, and WILLIAM E. WOODMAN, Worcester, Mass. Filed Sept. 25, 1915. Serial No. 52,709. (Cl. 139—85.)



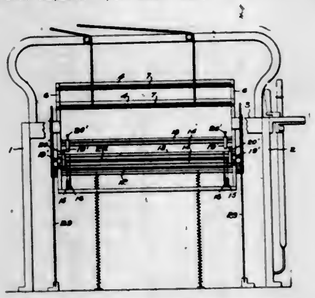
1. A weft replenishing loom provided with a magazine having a subsidiary magazine adapted to hold a plurality of bobbins, and means to check said second mentioned magazine when turned manually to a given position.

5. A magazine for a weft replenishing loom having a bobbin tip holder having a wire extension wrapped thereabout and shaped to provide a guide portion 34 for the thread.

9. A weft replenishing loom provided with a magazine adapted to hold a plurality of bobbins mounted for rotation, and a gear coöperating with said magazine, one of said parts being provided with a socket and the other being provided with a plunger, whereby said magazine may be held in desired position.

[Claims 2 to 4, 6 to 8, and 10 to 16 not printed in the Gazette.]

1,270,708. WARP STOP-MOTION FOR LOOMS. RANDOLPH CROMPTON, Chatham, Mass. Filed Nov. 18, 1915. Serial No. 62,235. (Cl. 139—92.)



1. Loom stopping mechanism comprising in combination, a heddle frame having supporting cross members, a series of double heddle devices of loop form supported upon said cross members for movement thereabout, and means operatively connected with said heddle frame for clamping said heddle devices through movement of said frame.

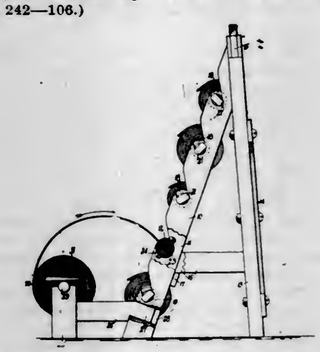
2. Loom stopping mechanism comprising in combination, a heddle frame having supporting cross members, a series of double heddle devices of loop form supported upon said cross members for movement thereabout, and means operatively connected with said heddle frame for clamping said heddle devices upon the ascent of the heddle frame.

5. Loom stopping mechanism comprising in combination, a heddle frame having supporting cross members, a series of double heddle devices of loop form supported upon said cross members for movement thereabout, means operatively connected with said heddle frame for clamping said heddle devices upon movement of the heddle frame in one direction, and means also operatively connected with said frame for releasing said heddle devices upon movement of the heddle frame in the opposite direction.

9. Loom stopping mechanism comprising in combination a heddle frame having an upper supporting cross member and a pair of lower cross members, a series of double heddle devices of loop form supported upon said uppermost cross member and passed between said pair of lower cross members, and means to impart relative clamping movement to said lower cross members.

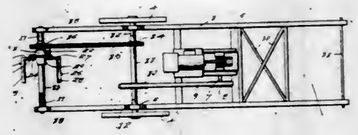
[Claims 3, 4, 6 to 8, and 10 to 27 not printed in the Gazette.]

1,270,709. DISPLAY-RACK. J FRANK DARLING, New York, N. Y. Filed Sept. 19, 1917. Serial No. 192,091. (Cl. 242—106.)



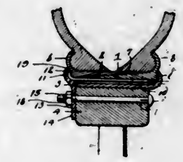
In a device of the character set forth, the combination with a main display rack, of a removable feeding device comprising a pair of bearing blocks and a horizontal shank connected to each block, each shank having a downwardly inclined tenon coöperating with a similarly inclined mortise in the main rack and constituting means for temporarily maintaining the feeding device in operative connection with the display rack.

1,270,710. ROTARY HOE. CARL L. DELAPLAIN, Mansfield, Ark. Filed Jan. 13, 1917. Serial No. 142,181. (Cl. 97—71.)



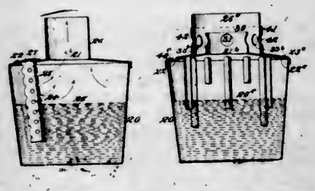
In a rotary hoe structure, a supporting frame, an axle carried by said frame, a sleeve rotatably mounted upon said axle, a shaft carried by one end of said frame, a sleeve rotatably mounted upon said shaft, a rotary earth working tool adjustably mounted upon said shaft carried sleeve for rotation therewith, a prime mover, means connecting said prime mover and said axle carried sleeve, means connecting said axle carried sleeve and said shaft carried sleeve, a handle carried by the frame at the end opposite to said shaft, said prime mover and rotary earth working tool positioned upon opposite sides of said axle for substantially balancing said frame upon said axle.

1,270,711. DEMOUNTABLE RIM. HUSTON R. DUGGER, Murphy, Tex. Filed Feb. 1, 1918. Serial No. 214,970. (Cl. 152—21.)



A demountable rim embodying an inner section and an outer section of approximately equal transverse extent, said sections having laterally inclined meeting faces, and a plurality of latches extending transversely of the inner face of the inner section of the rim, and lying in contact therewith, each of said latches being pivotally connected to the inner section of the rim adjacent to one of the side edges thereof and being provided at its free end with a hook to engage the opposite side edge of the outer section of the rim, said outer section of the rim having a bulging shoulder for engagement with the hook of the latch.

1,270,712. ORCHARD-HEATER. EMANUEL W. DUNN, Oakland, Cal. Original application filed Sept. 9, 1912. Serial No. 719,291. Divided and this application filed Dec. 15, 1913. Serial No. 806,782. (Cl. 158—91.)

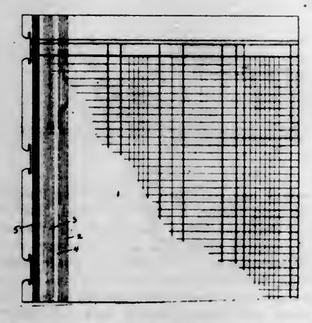


1. An orchard heater comprising a fuel receptacle having a cover and provided with a combustion opening,

means for taking air directly from the atmosphere and discharging the same outwardly within the receptacle and at progressively different levels as the fuel is consumed.

[Claims 2 to 20 not printed in the Gazette.]

1,270,713. LOOSE-LEAF BOOK. WILLIAM HOWARD EDWARDS, Grand Rapids, Mich. Filed July 9, 1915. Serial No. 38,887. (Cl. 281—41.)



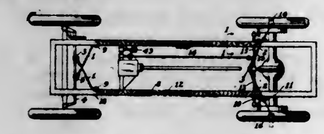
1. A leaf for loose leaf books having the hinge portions softened by creasing with a plurality of alternating creasings lengthwise of the grain of the paper and parallel to the hinge edge which creases have been reversed.

3. In a loose leaf book, the combination of covers; resilient leaf holding elements extending between the covers; and a loose leaf body, the leaves of which have protuberances adjacent to the leaf holding elements, said protuberances being nested and in register when the edges of the leaves are in alinement perpendicularly to the faces of the leaves, and moving into and out of register as the leaf holding elements are flexed in the operation of the book, producing an increased thickness in the leaf body.

8. In a loose leaf book, the combination of covers; resilient leaf holding elements extending between the covers and adapted to be deflected upwardly as the book is opened; and a leaf body, the leaves of which have a swell adjacent to and in front of said elements and strips along the hinge portion and in front of the swell softened.

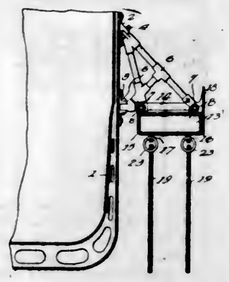
[Claims 2 and 4 to 7 not printed in the Gazette.]

1,270,714. AUTOMATIC AUTOMOBILE-SIGNAL. FREDERICK J. ENGLISH and GEORGE FLOCK, New York, N. Y., assignors of one-third to Harry Jacobson, New York, N. Y. Filed Mar. 21, 1916. Serial No. 85,569. (Cl. 196—31.)



In a device of the class described, in combination an automobile body having a frame, a pair of spaced-apart signal blades pivotally mounted upon said body at its rear end, cables for operating said blades, angularly-arranged pulleys mounted on said frame over which said cables are trained so as to extend at a downward inclination, parallel tubes secured to said frame, said cables passing through said tubes, coiled springs forming intermediate resilient connections for said cables, a coiled spring fixedly secured to said frame at one end, a portion of one of said cables being movable externally of one tube and having the other end of said last-named spring secured thereto, and means connected to the free ends of said cables for pulling either of said cables and slacking the other so as to operate but one signal blade at a time.

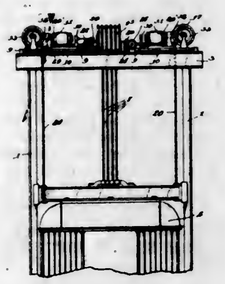
1,270,715. SHIP-ARMOR. MELVIN JOSEPH FELLAND, Great Falls, Mont. Filed May 7, 1917. Serial No. 166,906. (Cl. 114—240.)



3. A ship armor including a plurality of substantially triangular supporting arms detachably secured to the sides of the ship, rigid means engaged with the bottoms of the arms for bracing the same in spaced apart relation, adjustable truss means engaged with said arms, pontoons carried by the arms, shields arranged upon the outer sides of said pontoons, and a plurality of spaced armor plates loosely suspended from the pontoons.

[Claims 1 and 2 not printed in the Gazette.]

1,270,716. SAFETY APPARATUS FOR ELEVATORS. STEPHEN ALBERT FLANNERY, San Francisco, Cal. Filed Jan. 16, 1917. Serial No. 142,690. (Cl. 187—71.)

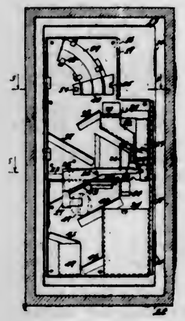


1. In safety apparatus for elevators, the combination with the car, hoisting drum, and hoisting cables, of auxiliary drums, cables having their lower ends connected to the car and their upper extremities connected to said auxiliary drums respectively, driving connections between said hoisting drum and auxiliary drums whereby all of said drums may operate in unison, and electroresponsive devices under the control of said hoisting cables and operable to hold said auxiliary drums against rotation in the event of the breaking of one of said hoisting cables.

4. In safety apparatus for elevators, the combination with the car, hoisting drum, and hoisting cables, of auxiliary drums, cables having their lower ends connected to the car and their upper extremities connected to said auxiliary drums respectively, driving connections between said hoisting drum and auxiliary drums whereby all of said drums may operate in unison, electro-responsive devices for holding said auxiliary drums against rotation in the event of the breaking of one of the hoisting cables, an electric circuit including said devices, electroresponsive devices controlling said circuit, a circuit including said hoisting cable and said last named electroresponsive devices, and signal lamps under the control of said last named electroresponsive devices.

[Claims 3 and 5 not printed in the Gazette.]

1,270,717. COIN-CONTROLLED LOCK FOR LOCKERS. SUMPTER LEE FLOWERS, Burns, Oreg. Filed Jan. 4, 1917. Serial No. 140,568. (Cl. 194—32.)



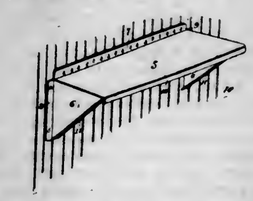
4. In a lock, a manually operable bolt, a rocking detent thereon, a stop for detent engagement, and a gravity key for releasing said detent to permit inward bolt movement, the weight of a coin releasing said detent to permit outward bolt movement and to deliver a key exteriorly of said lock.

8. In a lock, a manually operable bolt, a rocking detent thereon, a stop for detent engagement in either outer or inner bolt positions, a gravity key, means on said bolt for holding said key when said bolt is in inner position, means for delivering said key exteriorly of said lock when said bolt is moved outwardly, a coin chute carried by said bolt and covering the coin slot when said bolt is in outward position, and means for forcing a coin out of said chute when said bolt is moved outwardly, said detent being released to permit outward bolt movement by the weight of a coin and to permit inward bolt movement by the weight of said key.

12. In a lock of the class described, a manually operable bolt, a rocking member thereon, a stop for member engagement in either outer or inner bolt positions, a gravity key having channels on opposite sides thereof arranged in parallelism along arcuate lines, means on said bolt when in inner position for holding said key, means for delivering the key exteriorly of the lock when the bolt is moved outwardly, a key chute, and a tumbler, said chute and tumbler having arcuate ribs fitting certain of said key channels.

[Claims 1 to 3, 5 to 7, and 9 to 11 not printed in the Gazette.]

1,270,718. REVERSIBLE HANGING SHELF. HARRY R. FORD, Jacksonville, Fla. Filed Oct. 6, 1917. Serial No. 195,096. (Cl. 248—19.)



2. A reversible shelf constructed from a single sheet of flat metal bent upon itself to provide end brackets, the outer edges of the brackets being inclined and having inturned flanges, the rear edges of the brackets having outturned flanges provided with perforations, and the shelf between the brackets having its edges flanged in opposite directions and its inner flange perforated.

[Claim 1 not printed in the Gazette.]

1,270,719. WELL-SHOOTING TORPEDO. HENRY L. FRANKLIN, Goose Creek, Tex. Filed Oct. 29, 1917. Serial No. 198,963. (Cl. 102—4.)



1. In a torpedo of the class described, a casing, an explosive charge and a fire charge therein, a percussion cap, a hammer positioned for longitudinal movement within said casing having contact with the percussion cap, means for limiting the outward movement of the hammer, a guiding element secured to said hammer and a weight slidable along the guiding element for contact with the hammer.

2. The combination with a torpedo including a casing provided with a sleeve at one end thereof, of a hammer mounted for sliding movement within said casing and guided within said sleeve, a flange carried by the hammer and engageable with the sleeve to limit its movement in one direction, a guiding element secured to the hammer and a weight slidable along the guiding element for contact with the hammer.

1,270,720. JUMP-RING COUPLING. WILLIAM J. GAGNON, Bridgeport, Conn., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn., a Corporation of Connecticut. Filed Mar. 21, 1918. Serial No. 223,780. (Cl. 24—116.)



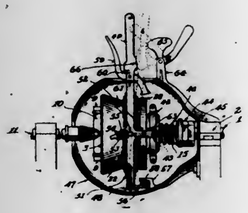
3. A jump ring coupling having at one end an open cup to receive the end ball of a bead chain, the cup bottom being centrally apertured to receive the end ball chain link, and the side of the cup being slit from said aperture to the margin of the cup to permit the passage of the chain link therethrough to said aperture, said slit being of less diameter than the chain link and being flanked at the aperture by sharp corners serving to prevent the accidental reëntry of the link into said slot.

[Claims 1 and 2 not printed in the Gazette.]

1,270,721. CLUTCH. HARVEY V. GIBSON, Peoria, Ill. Filed Feb. 15, 1916. Serial No. 78,528. (Cl. 192—9.)

1. In a clutch, the combination of two abutting clutch parts adapted to rotate relatively to one another and also adapted to be rotated in unison, one being a driving and the other a driven part, a member carried on one of the parts and rotated by it and adapted for movement in a

direction parallel to the axis of its rotation and to engage the other of the parts and adapted and arranged whereby it is ejected therefrom under overload, means to elastically hold the member in engagement with said other part means carried by and rotatable with one of the clutch parts and adapted for movement in either direction about the axis of rotation thereof and having a part adapted to engage and hold the member disengaged, elastic means acting on said means to hold it in the path of the member when it is in its ejected position, and adapted during either direction of its rotation to be retarded in its said rotation with the clutch to move it about the axis of the part of the clutch on which it is carried to release the member.



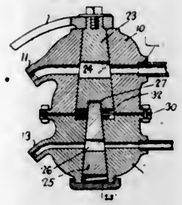
5. In a clutch, the combination of a driving and a driven part each including a friction device adapted to be brought into frictional engagement, a member carried by and rotatable with one of the parts and adapted to engage the other of the parts, means to elastically maintain such engagement, said member adapted by its construction to be ejected against said means due to an overload imposed upon the clutch part with which it engages, means carried by one of the parts and rotatable therewith and adapted for a movement in either direction about the axis thereof and including an extension, means to elastically hold the last described means substantially midway between its limits of movement and with its extension in the path of the member when ejected, a lever operatively engaging one of the parts and adapted to move its friction portion into engagement with the other to gradually take up the load while the driving part is in constant rotation, and a lever adapted at will to engage the means having the extension and cause its movement relatively to the part carrying it to remove said extension from the path of the member and permit the reëngagement of the same to carry the load.

9. In a clutch, the combination of two rotatable clutch parts, a member adapted to connect the two said parts in driving relation and arranged for movement parallel to the axis of its rotation and ejected from one of them under overload, said member having an extension on one of its surfaces, means carried by one of the parts and adapted for a limited movement in either direction about the axis of rotation of the part carrying it and including an extension adapted to have endwise engagement with the extension of the member, a pair of opposed springs acting in opposite directions upon the member and arranged to hold the same midway between the limits of its movements upon said member, the extension of the said means when in the described position lying in the path of movement of the member to engage it after its ejection, said means adapted to be engaged in either direction of its rotation to move it relatively to the member carrying it to shift its extension from behind the extension of the member and permit the latter to reëngage.

17. In a clutch, the combination of two engaging clutch parts one of them adapted to separate from the other under overload, means rotatable with one of said parts adapted to have rotative movement in either of two directions with respect to the said part, including a portion to engage said part for holding it separated from the other part, pair of springs engaging the said means and opposed to one another adapted to hold said means elastically midway between its extremes of movement as its position for holding the clutch parts separated, said means adapted to be manually rotated to release the separated clutch part.

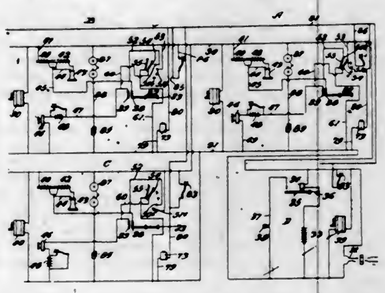
[Claims 2 to 4, 6 to 8, and 10 to 16 not printed in the Gazette.]

1,270,722. VALVE FOR TRAIN-PIPES. ISAAC W. GILLETTE, Lewiston, Idaho. Filed Feb. 2, 1918. Serial No. 215,127. (Cl. 277—19.)



In a device of the class described, a two-part valve casing each part being provided with a tapered bore, the reduced end of one of the bores being adjacent to the enlarged end of the other of said bores, each of said parts being provided with inlets and outlets, a valve plug for each part of the casing, the plugs being provided with ports, and one of said plugs telescoping into the enlarged end of the other of the plugs and being rotatable with said plug last named, and means for operating said plugs simultaneously and independent resilient devices for holding each of the plugs to its seat.

1,270,723. TELEPHONE SYSTEM. FRANK L. GOHEEN, Grouse, Idaho. Filed June 5, 1917. Serial No. 173,001. (Cl. 179—33.)

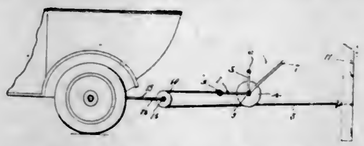


1. In a party line telephone system, the combination with the main leads thereof, of a plurality of subscribers' sets, each set including a talking and listening circuit, a switch at each set for connecting said talking and listening circuits, manually controlled means for actuating said switches, a rod, a disk having a peripheral notch, an enlargement on the rod adapted to pass through the notch to dispose the enlargement at the opposite sides of the disk when said disk is in a normal position, an auxiliary lead extending between the subscribers' sets, means at each subscriber's set for controlling energization of said auxiliary lead, means at each subscriber's set operable by energization of said auxiliary lead for intermittently rotating the disks whereby to dispose the notches out of alinement with the enlargement thereby preventing return of the switch actuated to open position and for preventing movement of the remaining switches to closed position, and means operable by rotation of the disks for connecting the talking and listening circuits of the called subscriber only with the main lead.

3. A subscriber's set for lock out party line telephone systems, including a casing having an opening in its front wall, a dial plate covering said opening, and having a central opening therein, a shaft mounted for rotation and extending through said opening, a hand carried by the extremity of said shaft for movement across the face of the dial, a disk stationarily mounted within the casing, a plurality of pairs of spaced contacts arranged circumferentially around the disk, a contact arm fixedly carried by said shaft for engagement with one disk of each pair, a sleeve encircling the shaft in insulated relation thereto, a second contact arm carried by the sleeve for engagement with the other contacting pair, a disk carried by said sleeve having a peripheral notch, a rod slidably mounted in a direction axially of the disk, a circular enlargement carried by said rod for movement through the notch, a second enlargement carried by the rod, a pair of normally spaced contacts engageable by the second enlargement when the rod is moved, one of said contacts acting to urge the rod forwardly to normally retain the enlargement at one side of the disk, a ratchet wheel carried by the sleeve, a pawl mechanism for rotating the ratchet wheel, an electromagnet for actuating the pawl, a contact finger engaging the sleeve, and a second contact finger engaging the shaft.

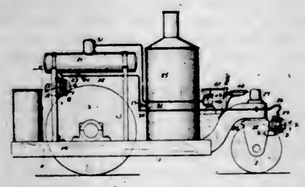
[Claim 2 not printed in the Gazette.]

1,270,724. DEVICE FOR MANUALLY MOVING AUTOMOBILES. LYMAN B. GOUD, Wheeling, W. Va. Filed Aug. 17, 1917. Serial No. 186,719. (Cl. 254—65.)



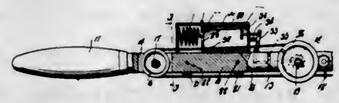
In a device as set forth, the combination, of a ball member, said ball member having an enlarged bearing, a shaft carried by the enlarged bearing, a drum mounted upon the said shaft, a substantially inverted U-shaped member formed integrally with the bearing of said ball member and at right-angles thereto and over the drum, a connecting rod having one end forked, a pulley rotatably carried by the forked end of said connecting rod, a cable connected to said ball member intermediate its ends and extending over said pulley, said cable being wound about said drum and having one end extending away from the drum and adapted for connection with an anchor, and a crank handle mounted upon said shaft for manually rotating said drum.

1,270,725. STREET-ROLLER. JOHN GRATTON, San Francisco, Cal. Filed Apr. 26, 1915. Serial No. 23,972. (Cl. 94—4.)



In combination with a working roller of a street rolling machine, a perforated distributing roller supported adjacent to, and contacting with, the working roller, a lubricant receptacle, a boiler, and a compressed air pump all carried by the street rolling machine, means for conducting compressed air from the pump to the lubricant receptacle, means for conducting lubricant from said receptacle to the distributing roller, means for conducting steam from the boiler to the distributing roller, and valves controlling the passage of either steam or lubricant exclusively, as desired, to the distributing roller.

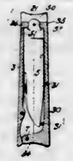
1,270,726. FISHING-ROD. EDGAR LEE HALEY, Crofton, Ky. Filed Oct. 4, 1917. Serial No. 194,739. (Cl. 43—36.)



2. A fishing rod, a housing carried by the rod, a reel having an axle rotatably connected with the rod, a spring engaging the axle to rotate the axle and reel carried thereby, a ratchet carried by the axle, a pawl normally engaging the ratchet, a plunger extending from the pawl into the housing, a piston slidably mounted in the housing and releasably held in a set position out of engagement with the plunger, resilient means engaging the piston to move the same into engagement with the plunger when moved from a set position, and means upon the line for engaging the piston to move the same from a set position when the line is moved rearwardly in the housing, the piston when released being moved forwardly by the resilient means to engage the plunger and move the latch to a releasing position to permit the spring to rotate the axle and reel to wind the line upon the reel.

[Claims 1 and 3 to 7 not printed in the Gazette.]

1,270,727. KNIFE CONSTRUCTION. HENRY HANSTEIN, Poughkeepsie, N. Y. Filed Nov. 14, 1917. Serial No. 202,002. (Cl. 30—10.)



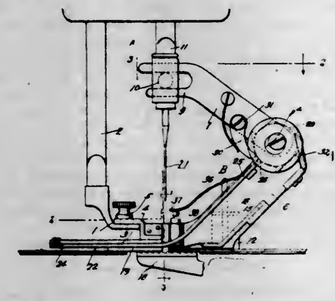
1. An implement holder, comprising two substantially alike half sections, one a relatively fixed section and the other an opposing half section, means for pivoting an implement in one end of the said relatively fixed half section, said end having provision whereby the said implement may be located in either an extended or in a closed position, the said relatively fixed half section having a longitudinal recess to receive the said implement when the same is in the closed position, means for hinging the other or opposing half section to that end of the relatively fixed half section which is opposite the end to which the implement is hinged, the said hinged half section also having a recess whereby, when said half sections are closed together, the same will incase said implement, when such implement is in the closed position, the said implement having a shouldered butt at the hinged end, and resilient latch elements carried by the half members and coöperative with the shouldered butt for retaining the implement either in the extended or inclosed positions.

2. An implement holder, comprising two substantially alike half sections, one a relatively fixed section and the other an opposing half section, means for pivoting an implement in one end of the said relatively fixed half section, said end having provision whereby the said implement may be located in either an extended or a closed position, the said relatively fixed half section having a longitudinal recess to receive the said implement when the same is in the closed position, means for hinging the

other or opposing half section to that end of the relatively fixed half section which is opposite the end to which the implement is hinged, the said hinged half section also having a recess whereby, when said half sections are closed together, the same will incase said implement, when such implement is in the closed position, the said implement having a shoulder butt at the hinged end and resilient latch elements carried by the half members and cooperative with the shouldered butt for retaining the implement either in the extended or inclosed positions, and a cam latch connection between said half sections for holding the said sections together or separated according to the position of the hinged half section.

[Claim 3 not printed in the Gazette.]

1,270,728. HEMSTITCHING ATTACHMENT. ERNEST CHARLES HARRIMAN, Northampton, Mass. Filed Mar. 28, 1918. Serial No. 225,224. (Cl. 112—4.)



1. The combination of a needle bar and cloth feeder of a sewing machine, with an attachment comprising a lateral feeder for the cloth, a punch, means operated by the needle bar for actuating the lateral feeder, and a yielding element movable intermittently to a position between the punch and needle bar, whereby the latter on certain strokes operate the former, said means including a swinging arm, and a cam device actuated by the arm for controlling the movement of the lateral feeder and punch.

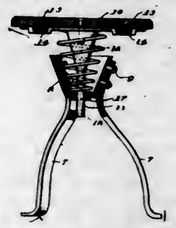
5. A sewing machine including a needle bar, a presser bar and a cloth feeder, in combination with an attachment including a frame fastened to the presser bar, a guide plate on the frame for the cloth, there being a die hole in the guide plate, a punch guided by the frame, means movable to a position between the needle bar and punch, whereby the former operates the latter, and means operated by the needle bar for moving the said means into and out of operative relation with the needle bar, whereby the needle bar moves on certain strokes without operating the punch.

9. A sewing machine including a presser bar, a needle bar, and a cloth feeder, in combination with an attachment including a frame carried by the presser bar, a vertical post on the frame, a fixed bracket engaging the post for steadying the frame, a lateral feeder mounted on the frame, a punch on the frame, and means operated by the needle bar for actuating the lateral feeder and the punch.

[Claims 2 to 4 and 6 to 8 not printed in the Gazette.]

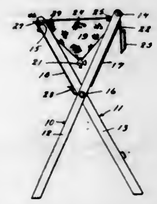
1,270,729. STOOL. ORLAN A. HARRIS, Long Prairie, Minn. Filed Mar. 13, 1917. Serial No. 154,548. (Cl. 155—25.)

A stool of the character set forth, comprising legs, a hollow frusto-conical pedestal secured to and between the confronting faces of the legs and having an apertured bottom, a shaft secured to the seat and depending therefrom, the upper end of the shaft conforming to the contour of the pedestal and the lower end being provided with a series of apertures and of substantially circular form in cross section, the circular portion of the shaft loosely protruding through the opening in the bottom of the pedestal, means passing through the openings of the shaft for effecting the vertical adjustment thereof, and a spring embracing the shaft and contacting at one end



with the seat and at its opposite end with the bottom wall of said pedestal, and adapted to arrange the seat at any desired angle with respect to said base irrespective of the conditions of the ground surface.

1,270,730. FOLDING WASHSTAND. SUE S. HAYDON, Harrodsburg, Ky. Filed Mar. 23, 1918. Serial No. 224,106. (Cl. 4—27.)

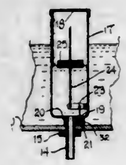


1. A folding wash stand comprising a pair of frames pivoted together intermediate their ends, a cross bar at the upper end of each frame, a basin of flexible material disposed between said frames and having its opposite sides secured to said cross bars, a plate secured upon the outer side of the upper portion of each of said frames and forming an inclosure for the basin when the device is folded, and a U-shaped yoke having the ends of its arms pivotally connected to the upper end of one of said frames, said yoke embracing the upper end of the other of said frames and means for preventing disengagement of said yoke from the last mentioned frame.

2. A folding wash stand comprising a pair of frames pivotally connected intermediate their ends, a cross bar at the upper end of each of said frames, a basin of flexible material disposed between the upper ends of said frame and having its opposite sides connected to said cross bars, a U-shaped yoke pivoted upon the upper end of one of frames and embracing the other frame and engaging within notches in the edges of said other frame, and spring members secured upon said other frame and extending across said recesses for preventing withdrawal of said yoke.

3. A folding wash stand comprising a pair of rectangular frames, crossed and pivotally connected with each other, a cross bar at the upper end of each of said frames, a plate extending across each of said frames from a point adjacent the pivot point to a point adjacent the cross bar, a basin of flexible material disposed between the upper ends of said frames and protected by the plate, the ends of said basin being secured upon the cross bars, a yoke having the ends of its arms pivoted at the upper end of one of said frames, said yoke embracing the upper ends of the other of said frames and being engageable within notches in the edges thereof, and spring clips holding said yokes in said notches whereby accidental displacement thereof is prevented.

1,270,731. AUTOMATICALLY-CONTROLLED WATERING-FOUNTAIN. JOSEPH F. HEALY, Irene, S. D. Filed Feb. 5, 1917. Serial No. 146,790. (Cl. 137—104.)



A float controlled valve structure including a float chamber, the bottom wall of which is formed with a discharge opening and an inlet opening disposed to one side of the discharge opening, the inlet opening forming a valve seat, an outwardly opening valve coacting with said seat and controlling the inlet opening, a lever pivotally mounted on the wall of the float chamber adjacent its lower end and above said inlet opening, a link pivoted to the lever extending through the inlet opening and connected to the valve, a vertically disposed screw-threaded stem pivotally connected to the lever, and a float having screw-threaded engagement with the stem along the length thereof.

1,270,732. FIBROUS COMPOSITION AND PROCESS FOR MAKING THE SAME. GEORGE A. HENDERSON, St. Albans, W. Va. Original application filed Nov. 30, 1915, Serial No. 64,285. Divided and this application filed July 30, 1917. Serial No. 183,598. (Cl. 106—31.)

1. The process of treating fibrous vegetable material, forming comminuted fibrous particles of exactly uniform thickness but of irregular lengths and breadths, expanding the particles by conveying the same through an open ended vat containing hot binding and preservative agent to expand the pores of the fiber, and to convert the remaining moisture in the particles into steam and to impregnate the pores of the material with a binding preservative agent, the quantity of which shall be predetermined by measuring and mixing a portion of the ingredients together in such manner that there is present merely sufficient preservative-binder to fill the pores of the vegetable material, to coat the particles thereof, to fill the voids between the particles and to bind them to each other, drawing the steam vapors out of the vat during said impregnation, and then compressing the material into shape.

5. A plastic composition of hard-wood particles of uniform thickness, and of irregular lengths and breadths, from which sap, cellular tissue and moisture have been removed, impregnated with a preservative-binder and pressed into shape.

[Claims 2 to 4 not printed in the Gazette.]

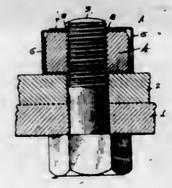
1,270,733. TOBACCO-STEMMER. HENRY S. HENDERSON, Eagle Rock, Va. Filed Dec. 29, 1917. Serial No. 209,522. (Cl. 131—57.)



1. A tobacco stemmer comprising a plate having a V-shaped recess in its edge and a circular opening at the termination of said recess, the edges of said recess being slightly convex and the parts of the plate on each side of the recess lying in the same plane.

2. A tobacco stemmer comprising a plate having a base portion, an intermediate portion extending at right angles to the base portion and a recessed portion extending at an angle from the intermediate portion, said recess being V shaped, and having a round hole at the bottom of the V.

1,270,734. NUT-LOCK. BRUNO W. HENNING, Fresno, Cal., assignor of one-fourth to Donald Robertson, San Francisco, Cal., and one-fourth to George P. Beveridge, Fresno, Cal. Filed May 19, 1910, Serial No. 562,279. Renewed Dec. 3, 1917. Serial No. 205,235. (Cl. 151—30.)

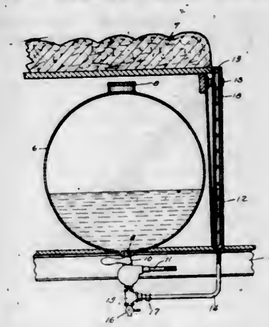


1. In a nut lock, a housing comprising bottom, side and top plates, the bottom plate having its outer wall convexed and the said bottom and top plates having apertures for the bolt.

6. In a nut lock, a housing comprising bottom, side and overlapping top plates, the bottom and top plates having circular openings to receive a bolt, the lower plate being curved downwardly, and said plates being arranged whereby flattening of the bottom plate will cause a movement in opposite directions of the top plates.

[Claims 2 to 5 not printed in the Gazette.]

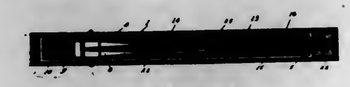
1,270,735. FUEL-GAGE. HENRY HUEBER, Seattle, Wash., assignor to Arnold A. Barkey, Seattle, Wash. Filed Dec. 28, 1916. Serial No. 140,461. (Cl. 73—54.)



In combination with a fuel supply tank supported on the floor of a vehicle and beneath the vehicle seat, an outlet pipe section tapped into the bottom of said tank and extending below the vehicle floor, a T-fitting having one end thereof connected with the lower end of said outlet pipe section, a drain valve connected to the other end of said T-fitting, an engine fuel feed pipe connected to said outlet pipe section between the said tank and said T-fitting, a shut-off valve in said outlet pipe section between the said tank and said engine fuel feed pipe, a substantially vertical tube secured to and in front of said seat with the upper end thereof lying against the front edge of the seat bottom, the bottom of said tube being at the same level as the bottom of said fuel tank, a removably graduated measuring pin of substantially the same length as that of said tube normally disposed within the latter, said measuring pin having a cap secured to the top end thereof and fitting snugly within the top of said tube, and an elbow-

shaped pipe section connecting the lateral branch of said T-fitting with the bottom of said tube whereby the depth of fuel within said tank and said tube will be substantially equal.

1,270,736. SUBMERGED CONCENTRATING-TABLE. WILLIAM A. HUELSDONK, Modesto, Cal. Filed Mar. 2, 1917. Serial No. 151,915. (Cl. 83—88.)

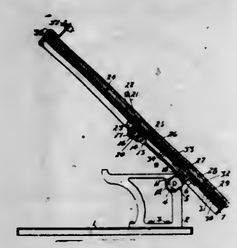


1. A concentrating table mounted for vibratory motion and arranged to be continuously submerged, a receptacle arranged beneath one end of the table, such table having an opening communicating with one end of the receptacle and another opening leading from the receptacle back to the table, the table being provided with a central groove and radiating riffles leading from the second named opening.

2. The combination with a water containing receptacle, of a concentrating table submerged in the water, a concentrate receiving member upon which the table discharges, and a suction pipe disposed adjacent the receiving member and delivering at the feed end of the concentrating table, such suction pipe being spaced a distance from the receiving member to adapt it to remove slimes only.

3. A concentrating table mounted for vibratory motion and arranged to be continuously submerged, a receptacle arranged beneath one end of the table, such table having an opening communicating with one end of the receptacle and another opening leading from the receptacle back to the table, the table being provided with a central groove and radiating riffles leading from the second named opening, the bottom of the receptacle inclining up to the outer end of the second named opening.

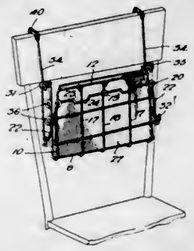
1,270,737. COUCH. ALBERT R. HYATT, Olds, Iowa. Filed July 19, 1915. Serial No. 40,618. (Cl. 5—12.)



Means for enabling an occupant of a couch to vary its inclination comprising an upright, on which the couch is pivotally supported, a fixed worm segment around its pivotal axis as center, a longitudinally extending shaft carried by the couch body, a worm on said shaft engaging said segment, an arm pivoted about a transverse axis below the couch and extending above the couch into a position convenient to be reciprocated by a hand of an occupant thereof, and an operative connection between said arm and the shaft, whereby the reciprocation of the arm rotates the shaft.

1,270,738. CHAIR. CALVIN D. JONES, Muskegon, Mich. Filed Jan. 12, 1918. Serial No. 211,641. (Cl. 155—3.)

1. A foldable seat comprising a support including a bottom frame, a rear frame and a front frame, a brace terminally connecting the front frame with the rear frame, means for supporting the same upon a chair back, and means formed integral with the front frame and adapted to bind against portions of the bottom frame for holding the seat in supporting position.



2. A foldable seat comprising a support including a bottom, rear and front frames, a brace terminally connected to the terminals of the front and rear frames, a hanger, and means formed integral with the rear frame for detachably and slidably receiving the hanger and adapting the hanger to be connected thereto for supporting the seat in suspended position upon a chair back.

[Claims 3 and 4 not printed in the Gazette.]

1,270,739. POWDER-PUFF. BERNARD HENRY KARMEN, New York, N. Y. Filed Dec. 29, 1917. Serial No. 209,461. (Cl. 15—72.)



1. A powder puff comprising a body composed of two flanged sections having their flanges telescoping, a pile cloth piece stretched over one section, a back cloth piece stretched over the other section, the edges of the cloth pieces entering between the flanges in the same direction and clamped between such flanges, and a handle connected with the said body.

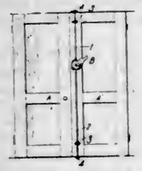
4. A powder puff comprising a body composed of two flanged sections having their flanges telescoping and one section having a large opening in its bottom, a pile cloth piece stretched over the section having the opening, a back cloth piece, the edges of the cloth pieces being clamped between the flanges, a handle formed by a ribbon doubled on itself and passing through the back cloth piece and the associated section of the body, and the ends of the ribbon being clamped between the said flanges, and a washer arranged adjacent the back cloth piece and perforated for receiving the looped portion of the handle ribbon, the edges of the perforation being formed with teeth to bite into the ribbon.

5. A powder puff comprising a body, a doubled ribbon extending into the body and anchored therein, the doubled portion forming a handle, and a perforated disk through which the handle projects, the edge of the perforation being formed with teeth to bite into the ribbon whereby the disk is anchored thereon.

[Claims 2 and 3 not printed in the Gazette.]

1,270,740. LOCKING-BOLT-OPERATING DEVICE. LYMAN G. KEYES, National Military Home, Kans. Filed Apr. 17, 1918. Serial No. 229,092. (Cl. 16—63.)

1. A device of the class described comprising a casing having an arcuate track, a plate pivoted on the casing, a bolt extending into the casing, a connection between the plate and bolt, said plate being open at a point adjacent the track, a detent mounted outside the plate and having members extending through the plate to engage with the track, a handle pivoted outside the plate and having a lost motion connection therewith, and interengaging means between the handle and detent for oscillating the latter at the end of the movement of the handle in either direction for engaging the lugs of the detent with the ends of the track, said lugs being slidable on the track during the movement of the handle with the plate.

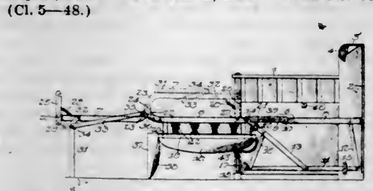


2. A device of the class described comprising a bolt, a bolt-throwing member, a supporting element, a stud on the element and on which the member turns, a handle connected with the stud to turn around the same as a center, a lost motion connection between the member and handle, said handle having a chamber, a detent fulcrumed on the member and disposed in the chamber of the handle, interengaging means between the detent and handle, whereby the movement of the latter tilts the detent, and spaced means on the said element with which the detent automatically engages at the end of the movement of the handle in either direction for preventing movement of the bolt except for the movement of the handle.

3. A device of the class described comprising a bolt, a bolt-throwing member, a supporting element, a stud on the element and on which the member turns, a handle connected with the stud to turn around the same as a center, a lost motion connection between the member and handle, said handle having a chamber, a detent fulcrumed on the member and disposed in the chamber of the handle, interengaging means between the detent and handle, whereby the movement of the latter tilts the detent, spaced means on the said element with which the detent automatically engages at the end of the movement of the handle in either direction for preventing movement of the bolt except by the movement of the handle, and a spring disposed in the chamber of the handle and engaging the detent for yieldingly holding the same in its locking position.

4. A device of the class described comprising a bolt, a bolt-throwing member, a supporting element, a stud on the element and on which the member turns, a handle connected with the stud to turn around the same as a center, a lost motion connection between the member and handle, said hadle having a chamber, a detent fulcrumed on the plate and disposed in the chamber of the handle, interengaging means between the detent and handle, whereby the movement of the latter tilts the detent, spaced means on the said element with which the detent automatically engages at the end of the movement of the handle in either direction for preventing movement of the bolt except by the movement of the handle, and stops for limiting the movement of the handle.

1,270,741. SOFA-BED. CHARLES J. KINDEL, Wilmette, Ill., assignor to Grand Rapids Trust Company, Grand Rapids, Mich. Filed Jan. 2, 1912. Serial No. 668,946. (Cl. 5—48.)



1. The combination, with a sofa-bed frame, of opposite fixed supports at the front of the same, a mattress-support comprising a main-frame formed in two rigid pivotally connected sections the front one of which is pivoted at opposite sides to the said fixed supports, whereby it is adapted to assume a vertical position and its companion section a horizontal position within the base of the sofa-bed frame, a foot-frame, an intermediate-frame, means for pivotally connecting said frames and the front section of the folding main-frame at their meeting-edges, whereby they are adapted to fold one upon the other within the base of the sofa-bed frame and to unfold into bed-form both successively and continuously in the same direction, and a movable means within the base of the sofa-bed frame for supporting the sectional main-frame when elevated and for guiding the same into and out of said base when the bed is folded and unfolded.

3. The combination, with a sofa-bed frame, supporting-means at the opposite sides of the said frame, a folding mattress-support adapted to fold within the base of the sofa-bed frame and comprising a rear main-frame composed of two rigid pivotally connected sections the front section of which is pivoted to the said opposite supporting-means, the two sections being adapted to fold at an angle to each other within said base, an intermediate frame foldably connected at its rear edge to the front edge of the outer section of the main-frame, a foot-frame foldably connected to the outer edge of the intermediate-frame, whereby said main-frame, intermediate-frame, and foot-frame are adapted to open and close successively and continuously in the same direction, and whereby, when folded, the foot-frame will lie between the rear main-frame and the intermediate-frame and the said main-frame will be positioned at the bottom of the series, and a pair of levers pivoted in the base of the sofa-frame and to the rear section of the main-frame and adapted to guide the latter and its companions when opening and closing and to support said main-frame when elevated.

5. In a sofa-bed, the combination with a sofa-frame, of a folding mattress-support comprising a series of frames, the meeting-ends of the two side-bars of the two outermost frames, when the latter are in bed-form, being upwardly disposed and pivoted together at a point above the plane of the bed, whereby the outer frame may be folded over and above the adjacent frame, and means for automatically locking the two frames together in their folded and spaced apart relation.

7. In a sofa-bed, the combination with the sofa-frame, of a folding mattress-support comprising frames, the meeting-ends of the side-bars of the two outermost frames, when the frames are in bed-form, being upwardly disposed and pivoted together at a point above the plane of the bed, whereby, the outer frame may be folded over and above the innermost of the two frames, means for locking the two frames in their folded and spaced apart relation, legs pivoted to the sides of the outermost frame, links connected to the legs below the outermost frame, and means for pivotally connecting the rear ends of the links in advance of and below the pivotal points of the two frames, whereby when the outermost frame is folded rearward upon the innermost frame, the legs will automatically fold over and upon the upper side of the outermost frame.

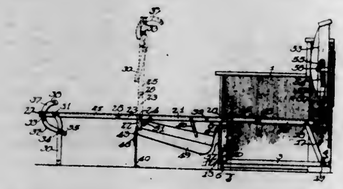
9. The combination of foldable bed-sections, a catch secured to one of the sections and having a stop, a pin located on another of the sections coacting with the catch and stop to maintain the sections when folded in spaced relation with respect to each other, and a spring continuously operating in a manner tending to maintain the catch and pin in engagement while the sections are folded.

[Claims 2, 4, 6, and 8 not printed in the Gazette.]

1,270,742. DIVANETTE. CHARLES J. KINDEL, Grand Rapids, Mich., assignor to Grand Rapids Trust Company, Grand Rapids, Mich. Filed Feb. 19, 1912, Serial No. 678,556. Renewed Mar. 14, 1918. Serial No. 222,512. (Cl. 5—51.)

1. The combination, in a sofa-bed, of a plurality of folding bed-sections adapted to be extended and supported in bed-form or folded within the frame of the sofa, supporting legs for the outermost section, and a comon means

for locking the outermost section and the adjacent section together when folded and for locking the legs in operative position when said sections are unfolded.



3. The combination, in a sofa-bed, of a plurality of folding bed-sections adapted to be extended and supported in bed-form or folded within the frame of the sofa, pivoted supporting-legs for the outermost section, links intermediately pivoted on the outermost section and terminating at their upper ends in engaging ends, loose connections between the lower ends of said links and the legs, and means on the adjacent section for engaging said engaging-ends of the links when the sections are folded.

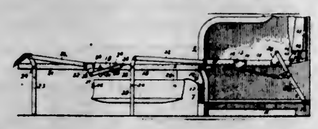
6. The combination, in a sofa-bed, of a sofa-frame, a mattress-support, consisting of a foldable head-section mounted therein, a middle-section pivotally secured to the head-section, a foldable foot-section pivotally secured to the middle-section and adapted to fold over and upon the middle-section and the foot and middle sections to fold over and upon the head section, a locking-member mounted on the free-end of said foot-section and adapted to engage said middle-section and hold these two sections securely together, legs carried by the foot-section, and means for locking said legs and locking-member together.

9. The combination, in a sofa-bed, of a sofa-frame, a mattress-support, comprising a foldable head-section mounted in the sofa-frame, a middle-section pivotally secured to the head-section, a foldable foot-section pivotally secured to the middle-section and foldable over and upon said middle-section and these two sections foldable over and upon the head-section, whereby, when said mattress-support is thus folded, the said foot-section is positioned between its two companion sections, a sofa-seat, means for movably supporting the same upon the middle-section when the latter is folded and for suspending it when unfolded, and means for lowering the folded mattress-support within the base of the sofa-frame and beneath the seat.

10. The combination, in a sofa-bed, of a mattress-supporting frame having relatively foldable sections, and a leg foldably attached to one of said sections, a member having connection with said leg and the section to which it is attached and automatically operable by a relative movement of the leg and section to engage or release a part of another of said sections when said sections are in predetermined positions of their relative folding movements.

[Claims 2, 4, 5, 7, and 8 not printed in the Gazette.]

1,270,743. SETTEE-BED. CHARLES J. KINDEL, Grand Rapids, Mich., assignor to Grand Rapids Trust Company, Grand Rapids, Mich., a Corporation of Michigan. Filed July 14, 1915. Serial No. 39,769. (Cl. 5—51.)

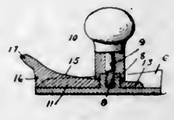


1. In a sofa-bed, the combination with a main-frame, of a folding-bed-frame comprising a spacing-section, a fixed pivotal support for the front end of the same, an inner head-section pivotally connected to the rear end of the spacing-section, opposite upwardly disposed extensions carried by the head-section, opposite downwardly disposed extensions carried by the head-section in advance of the upwardly disposed sections, opposite supporting-links pivoted at their lower ends in the main-frame and at their upper ends to said upwardly disposed extensions at points above the head-section and helical springs connecting the front downwardly disposed extenaions and the supporting-links.

2. In a sofa-bed, the combination with a main-frame, of a pair of opposite, stationary, forwardly curved standards located at the front of the main-frame, a spacing-section pivoted at its front end to said standards, a head-section in rear of and pivoted to the spacing-section, a pair of supporting-links pivoted at their lower ends to the main-frame and at their upper ends to the head-section, and springs connected to intermediate points of the said links and at their front ends to the head-section eccentrically with the pivot points between the spacing and head-sections.

3. In a sofa-bed, the combination with a main-frame, of a rear head-section, links for supporting the same, a spacing-section loosely connected at its rear edge to the front edge of the head-section, means for supporting the front edge of the spacing-section, a middle-section connected pivotally at its rear edge with the front edge of the spacing-section, opposite legs intermediately pivoted to the opposite sides of the middle-section, a pair of leg operating links pivoted at their front ends to the upper ends of the legs and at their rear ends to the spacing-section eccentrically with relation to its front supports, short links depending from the middle-section in rear of the supporting-legs, and a sofa-seat pivotally connected at its rear inverted edge to the lower ends of said links and in front of the same pivotally connected to said supporting-legs.

1,270,744. PLANE ATTACHMENT. JOSEPH O. LANGFORD, El Paso, Tex., assignor of one-half to Henry Mohr, El Paso, Tex. Filed Apr. 26, 1917. Serial No. 164,679. (Cl. 145—19.)

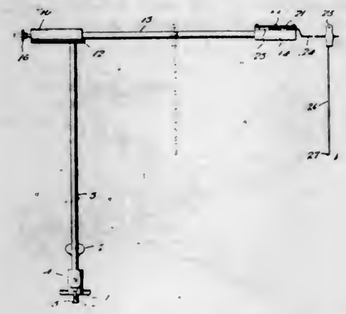


The herein described attachment for a plane whose stock comprises a flat bottom plate and upstanding side walls, the same consisting of a boss rising from said bottom plate and having a threaded cavity, and a knob having a threaded shank for engaging said cavity; combined with a guard plate having a restricted rear end with an opening passing over said boss, straight parallel side edges engaging the inner faces of said side walls, undercut shoulders forward of said edges resting upon the upper edges of the walls at the front ends of the latter, a transversely rounded front end flush with the front end of the bottom plate, and above it an overhanging flange, the whole for use substantially as described.

1,270,745. MUSIC-LEAF TURNER. WALKER LEE, Bigprairie, Ohio. Filed Nov. 17, 1917. Serial No. 202,550. (Cl. 84—135.)

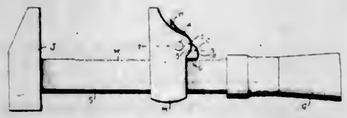
1. A music leaf turner comprising a clamp, a tube attached to the clamp, a spring pressed rod located in the tube, a leaf turning means mounted on the tube and including a spring for actuating the same, a set-screw for detachably securing the leaf turning means to the tube, the leaf turning means being engageable by the rod to hold the same at a state of rest.

2. A music leaf turner comprising a tube, a spring pressed rod located in the tube and provided with a notch, means engageable in the notch for holding the said rod at a retracted position, a head carried by the tube, a lever fulcrumed in the head and pivotally connected with the rod, a fork member pivoted on the lever, a pin carried by the head and received between the branches of the



fork member, an arm carried by the fork member and extending through the head and leaf engaging means carried by the arm.

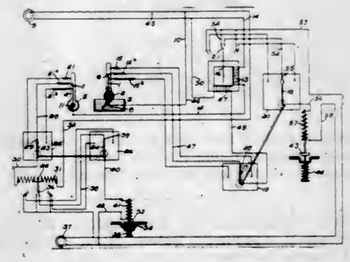
1,270,746. WRENCH. ROBERT B. QUINN, Columbus, Ohio, assignor of one-half to Tonkie A. Quinn, Charleston, W. Va. Filed Apr. 10, 1918. Serial No. 227,766. (Cl. 81—134.)



1. A wrench, in combination with a shank provided with a rigid jaw, a movable jaw slidably engaged with the shank and capable of slight rocking movement independently of the shank, spaced ears carried by the movable jaw outwardly of the shank, a catch pivotally engaged between the ears, the working end of the catch and the adjacent face of the shank being provided with interlocking teeth, the inner marginal portions of the ears of the movable jaw being rounded, the working end of the catch being provided with oppositely directed lugs arranged for contact with the rounded portions of the ears, the contacting faces of the lugs being curved correspondingly to the rounded faces of the ears whereby pressure is imposed directly upon the working end portion of the catch for maintaining the same locked to the shank when pull is imposed upon the wrench and the jaws engaged with the work, and means for constantly urging the working end of the catch toward the shank.

2. A wrench, in combination with a shank provided with a rigid jaw, a movable jaw slidably engaged with the shank and capable of slight rocking movement independently of the shank, spaced ears carried by the movable jaw outwardly of the shank, a catch pivotally engaged between the ears, the working end of the catch and the adjacent face of the shank being provided with interlocking teeth, the inner marginal portions of the ears of the movable jaw being rounded, the working end of the catch being provided with oppositely directed lugs arranged for contact with the rounded portions of the ears, the contacting faces of the lugs being curved correspondingly to the rounded faces of the ears whereby pressure is imposed directly upon the working end portion of the catch for maintaining the same locked to the shank when pull is imposed upon the wrench and the jaws engaged with the work, and means for constantly urging the working end of the catch toward the shank, said catch being pivoted with the movable jaw by a pin carried by the jaw and disposed through an opening in the catch, the opening in the catch being of a diameter slightly in excess of the diameter of the pin.

1,270,747. SYSTEM FOR EFFECTING HUMIDITY CONTROL. ANTHONY SILVA SANTOS, West Roxbury, Mass., assignor to Spray Engineering Company, Boston, Mass., a Corporation of Massachusetts. Filed June 21, 1917. Serial No. 176,082. (Cl. 236—27.)



1. A system for effecting temperature and humidity control comprising wet and dry bulb thermometers, and a series of contacts for each thermometer, a selective resistance for each contact, a selective temperature switch for each series of resistances of the dry bulb thermometer, a humidity switch for each set of resistances of the wet bulb thermometer, and valves operatively associated with said switches and said contacts, thermometers and resistances.

2. A system for effecting temperature and humidity control comprising wet and dry bulb thermometers, and a series of contacts for each thermometer, a selective resistance for each contact, and temperature and humidity controllers in circuit with said thermometers, contacts and resistances.

12. A system for effecting temperature and humidity control comprising wet and dry bulb thermometers and a series of contacts for each thermometer, a selective resistance for each contact, a humidity controller and a temperature controller in circuit respectively with said wet and dry bulb thermometers and each having a switch, a manually positionable switch for the humidity controller, a manually positionable switch for said temperature controller, coils adapted to be energized respectively by said controller, switches governed by said coils, and circuits adapted to be closed by said switches, and valves adapted to be operated upon the closing of said circuits.

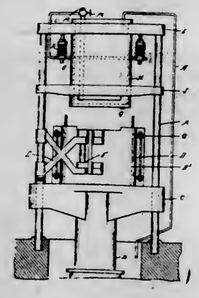
18. A system for effecting temperature and humidity control comprising wet and dry bulb thermometers, an electric circuit having a series of contacts for each thermometer, selective means associated with each of said contacts for effecting a change in the strength of the current of the circuit having said contacts, and temperature and humidity controllers in circuit with said thermometers, contacts and selective means.

[Claims 3 to 11 and 13 to 17 not printed in the Gazette.]

1,270,748. MACHINE FOR FORMING HOLLOW ARTICLES OF CALCIUM RESINATE. JAMES M. TEAHEN, Detroit, Mich. Filed Nov. 6, 1916. Serial No. 129,843. (Cl. 18—16.)

4. In a machine for molding hollow articles, the combination with the outer mold and core, of a cover surrounding said core and adapted to close the space between the same and the outer mold, said cover having a depending portion at one side and the outer mold being correspond-

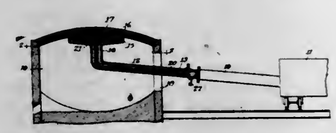
ingly cut away at its top to receive said portion, and means for detachably securing a member to said depending



portion of the cover to permit embedding said member in the plastic material filling the mold cavity.

[Claims 1 to 3 not printed in the Gazette.]

1,270,749. MEANS FOR REPAIRING FURNACES. NICHOLAS F. ACKERMAN, Duluth, Minn. Filed Sept. 6. 1917. Serial No. 190,076. (Cl. 25—131.5.)



1. In mechanism of the class described, means which is movable with respect to a furnace and which includes a fluid cooled hollow head for supporting a portion of the furnace being repaired.

2. In mechanism of the class described, means which is movable with respect to a furnace and which includes a hollow head for supporting a portion of the furnace being repaired, and means for supplying a cooling medium to said hollow head for cooling purposes.

3. In mechanism of the class described, means which is movable with respect to a furnace and which forms a support for a portion of the furnace being repaired, and cooling means for said first mentioned means.

4. In mechanism of the class described, means movable with respect to a furnace including a hollow supporting head, and a water supply operatively connected to said hollow head for cooling purposes.

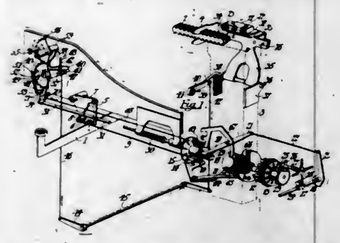
5. In mechanism of the class described, means which is movable with respect to a furnace and which includes a hollow supporting head, and a pipe in said hollow head from which water may be supplied to the head for cooling purposes.

[Claims 6 to 8 not printed in the Gazette.]

1,270,750. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Nov. 25, 1912. Serial No. 733,244. (Cl. 235—62.)

2. In a combined typewriting and computing machine, the combination with numeral keys and a computing device, of a traveling carriage, a tappet on said carriage, an arm moved by said tappet, means controlled by said arm to connect said keys to said computing device, and means for moving said arm differently by said tappet to lock said keys against operation at a selected letter-space in the travel of said carriage.

4. In a combined typewriting and computing machine, the combination with numeral keys and a computing device, of a blade operated by each numeral key, a member in which said blade swings, so that when one blade is operated no other numeral key can be operated, and a blade controlled by the typewriter carriage for preventing the operation of any other of said blades at any letter-space adjustably determined in the travel of said carriage.

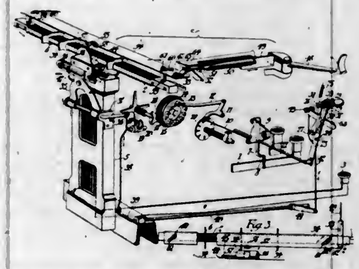


9. In a combined typewriting and computing machine, the combination with numeral keys and a computing device, of a traveling carriage, a tappet on said traveling carriage, a cam operated by said tappet, and rollers on said cam operated by said tappet to increase the swing of said cam.

18. The combination with a typewriter carriage, of printing keys, computing devices connectible to said keys, a cam, a dog on said carriage to be effective on said cam, means controlled by said cam to connect said computing devices to said keys, and devices on said cam whereby said dog is effective on said cam to make said keys inoperable at certain points only.

[Claims 1, 3, 5 to 8, 10 to 17, and 19 to 31 not printed in the Gazette.]

1,270,751. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed Nov. 29, 1912. Serial No. 733,948. (Cl. 235—62.)



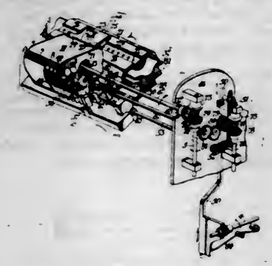
4. In a combined typewriting and computing machine, the combination with numeral keys and a computing device, of a traveling carriage, an arm moved by said traveling carriage for altering the relation of said numeral keys to said computing device, a line space lever for said carriage, and means operated by said line-space lever for causing said arm to remain quiet during the return motion of said carriage.

9. In a combined typewriting and computing machine, the combination with numeral keys and a computing device, of a traveling carriage, a rack bar on said carriage having toothless ends, pillars on said toothless ends, and a deflector bar sliding on said pillars.

22. The combination with a swinging frame, of a traveling typewriter carriage, two cam plates on said frame, a tappet on said carriage effective on said cam plates, means for effecting relative adjustment of said plates to lengthen or shorten the cam, a shifter bar to carry said plates clear of said tappet, and an arm on said frame forming part of one of said plates for engagement with said shifter bar.

[Claims 1 to 3, 5 to 8, and 10 to 21 not printed in the Gazette.]

1,270,752. COMBINED TYPE-WRITING AND COMPUTING MACHINE. GUSTAVE O. DEGENER, New York, N. Y., assignor to Underwood Computing Machine Company, New York, N. Y., a Corporation of New York. Filed June 25, 1913. Serial No. 775,621. (Cl. 235—59.)



2. In a combined typewriting and computing machine, the combination with a typewriter carriage and a computing machine carriage, of a V-shaped locking bar at every space on said computing machine carriage in which computing is likely to be done, a lug comprising V-shaped sides on the frame of the machine, guides on the frame of the machine, and a plunger traveling in said guides to carry said locking members to closely engage said lug and positively center the computing machine carriage during the computing operation.

15. In a computing machine, the combination with a traveling carriage and a series of detents, of extensions of said detents, a plunger for locking said carriage against travel, and a lug coöperating with said extensions to make said lock effective.

17. The combination with a front-strike typewriting machine having a traveling carriage and a transverse front bar some distance in front of the printing point, of a computing carriage slidable along said front bar, a main bar forming part of said computing carriage and channeled to partly embrace said front bar, a totalizer adapted to be attached to said main bar, and a coöperating tongue and groove for alining said totalizer on said main bar.

26. In a computing machine, the combination with a traveling carriage, of a totalizer on said carriage, a master wheel for said totalizer, a long resilient shaft carrying said master wheel, and a journal for said shaft at one end only, to permit it to swing to adapt itself to said totalizer.

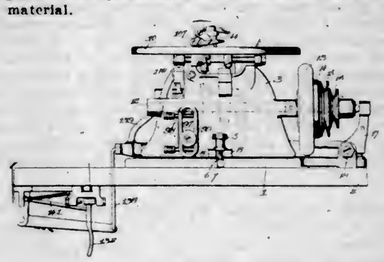
[Claims 1, 3 to 14, 16, 18 to 25, 27, and 28 not printed in the Gazette.]

1,270,753. FOLDING-MACHINE. PERLEY R. GLASS, Brookline, Mass., assignor to P. R. Glass Company, Boston, Mass., a Corporation of Massachusetts. Filed Oct. 12, 1912. Serial No. 725,381. (Cl. 12—54.)

1. A machine of the character described comprising means for progressively folding the edge of a piece of material, means for pressing the folded edge upon the body of the material and means for increasing such pressure automatically during the passage of the material through the machine.

5. A machine for progressively folding the margin of a piece of sheet material having pressing mechanism and folding mechanism in combination with a gage having a curved face, a pivoted presser located above said gage and a spring for holding said presser and gage in contact.

26. A machine for progressively folding and plaiting the convexly curved margin of flexible material comprising means engaging said flexible material to feed it, a stationary member shaped to cause the margin of the material as said material is fed past it to be bent upwardly with the edge of said material uppermost, a movable finger acting upon the margin so bent to form an upstanding pucker therein and a presser acting to swing the bent margin with its upstanding pucker down upon the body of the material.

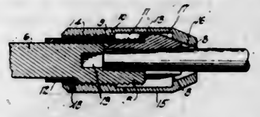


27. A machine for progressively folding and plaiting the convexly curved margin of flexible material, comprising means for curving upwardly the margin of the material with respect to the body thereof, movable means for forming a pucker in said upwardly curved margin, said upwardly curved puckered margin being unsupported and out of contact with the body of the material, and means for contacting with said pucker in said upwardly curved margin and pressing it down upon the body of the material in the form of a plait.

32. A machine for progressively folding the margin of a piece of flexible material comprising a stationary member past which the material is fed to curve upwardly the margin of said material, a knife to snip said upwardly curved margin, means for vibrating said knife in a path located entirely above the plane of the body of the material, and a reciprocating presser, said knife being located between said stationary member and said presser.

[Claims 2 to 4, 6 to 25, 28 to 31, and 33 to 37 not printed in the Gazette.]

1,270,754. BIT-CHUCK. HARRY E. PARKER, New Britain, Conn., assignor to The Stanley Rule & Level Company, New Britain, Conn., a Corporation of Connecticut. Filed Nov. 12, 1917. Serial No. 201,420. (Cl. 279—56.)



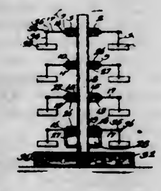
1. A bit chuck comprising a stock having an externally screw-threaded head and a relatively smooth shank in rear of said head, said head being longitudinally slotted to receive the chuck jaws and having passages extending from the inner ends of said slotted portions to the relatively smooth shank, chuck jaws seated in said slots, a positioning ring freely slidable on the shank of the stock, arms carried by said ring and extending through the passages aforesaid into engagement with the respective chuck jaws, and a jaw closing sleeve engaged on the screw threaded head of the stock.

2. A bit chuck comprising a stock having an externally screw-threaded head and a relatively smooth shank in rear of said head, said head being longitudinally slotted to receive the chuck jaws and having passages extending from the inner ends of said slotted portions to the relatively smooth shank, chuck jaws seated in said slots, a positioning ring freely slidable on the shank of the stock,

arms carried by said ring and extending through the passages aforesaid into engagement with the respective chuck jaws, a jaw closing sleeve engaged on the screw threaded head of the stock, and a stop screw carried by the jaw closing sleeve normally overlying the smooth shank of the stock and engaging with the threaded head thereof to limit the outward movement of the sleeve on the head.

3. A bit chuck comprising a stock having an exteranlly screw-threaded head and a relatively smooth shank in rear of said head, said head being longitudinally slotted to receive the chuck jaws and having passages extending from the inner ends of said slotted portions to the relatively smooth shank, chuck jaws seated in said slots, a positioning ring freely alidable on the shank of the stock, arms carried by said ring and extending through the passages aforesaid into engagement with the respective chuck jaws, a jaw closing sleeve engaged on the screw-threaded head of the stock and beveled jaw-closing shoulders on the stock engaging the inner end portions of the chuck jaws.

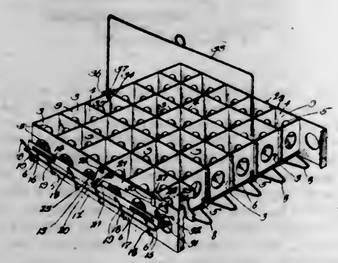
1,270,755. MACHINERY FOR TREATING EGGS. OSCAR F. HOLMBERG, Chicago, Ill., assignor of one-half to Charles Trabing, Chicago, Ill. Filed Mar. 23, 1917. Serial No. 156,862. (Cl. 99—2.)



1. An endless track consisting of channel irons with their two parallel sides arranged in a horizontal position, vertical ledges extending from said sides and providing openings therebetween, trucks arranged to travel within said channel irons, rods extending from said trucks through said openings, a chain and the like connecting said trucks, and means for imparting movement to said trucks along said track.

[Claims 2 and 3 not printed in the Gazette.]

1,270,756. EGG-TURNER. OSCAR FRITHIOF HOLMBERG, Chicago, Ill., assignor of one-half to Charles Trabing, Chicago, Ill. Filed Jan. 29, 1917. Serial No. 145,135. (Cl. 99—2.)



1. The combination with a partitioned egg container having a cell or space for each egg, of a resilient bottom support for each said cell or space, means for supporting said supports and for releasing them to permit eggs in the container to drop by the force of gravity therefrom.

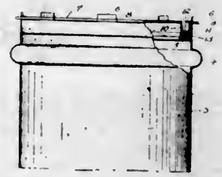
[Claims 2 to 4 not printed in the Gazette.]

1,270,757. METHOD OF FILLING HOLES IN METAL PARTS. EMIL BORMAN, Chicago, Ill. Filed Mar. 6, 1917. Serial No. 152,682. (Cl. 22—203.)



The process described which consists in treating scores or recesses in a cylinder or the like to a liquid comprising dilute nitric and hydrochloric acids with zinc dissolved therein, filling the score or recess with tin, lead, bismuth, cobalt and zinc, then heating the filling and adjacent walls of the cylinder, and finally removing the excess filling material.

1,270,758. CAN. JAMES H. WILSON, Chicago, Ill., assignor to Wilson & Bennett Manufacturing Company, Chicago, Ill., a Corporation of Illinois. Filed Jan. 25, 1915. Serial No. 4,226. (Cl. 220—60.)



2. A can comprising a body portion having an integrally formed folded annular flange adjacent to the top, the upper surface of said flange being at substantially right angles to the walls of the can, the upper edge of the body portion being provided with a plurality of projections, a gasket engaging with said flange, a cover having openings for receiving said projections, said cover having an inwardly extending annular portion engaging with said gasket, said projections being arranged to be bent to hold the cover in position with the gasket compressed between the flange and cover.

[Claim 1 not printed in the Gazette.]

1,270,759. MANUFACTURE OF GLYCOLS. HAROLD HIBBERT, Pittsburgh, Pa. Original application filed Feb. 23, 1915, Serial No. 9,774. Divided and this application filed Oct. 15, 1915. Serial No. 55,934. (Cl. 23—24.)

1. The process of producing a glycol mixture, which comprises subjecting oil gas to a temperature within the range of about 600° to 900° C., treating the resulting gaseous mixture with chlorin to convert the unsaturated derivatives into the corresponding chlorin compounds, and saponifying said chlorin compounds by heating the mixture in the presence of aqueous carbonate solution, under pressure, and thereby producing a mixture consisting essentially of ethylene, propylene and butylene glycols.

2. The process of producing a glycol mixture, which comprises chlorinating a mixture of unsaturated hydrocarbons of the ethylene series consisting essentially of ethylene, propylene and butylene, and saponifying the chlorin compounds thus obtained by treatment with an aqueous alkali metal carbonate solution as saponifying agent, thereby producing a mixture consisting essentially of ethylene, propylene and butylene glycols.

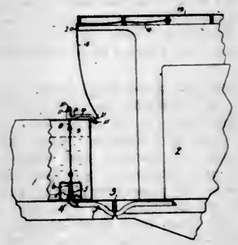
3. The method of producing a glycol mixture, which comprises cracking oil gas and thereby producing a mixture of unsaturated ethylene derivatives and of saturated hydro-carbons, chlorinating the unsaturated hydro-carbons of the ethylene series and thereby producing mixtures of the corresponding dichlorids, and saponifying the dichlorids with a solution of an alkaline carbonate, under pressure, and thereby producing a mixture of glycols.

4. The method of producing a glycol mixture, which comprises chlorinating a mixture of oil gas hydrocarbons of the ethylene series, and saponifying the chlorin compounds thus obtained by treatment with a solution of sodium carbonate, under pressure, and thereby producing a mixture of glycols of the ethylene series.

6. The method of producing glycols which comprises chlorinating hydrocarbons of the ethylene series to form dichlorids and saponifying the dichlorids by treatment with an aqueous solution of sodium carbonate, under pressure, and thereby producing the glycols.

[Claim 5 not printed in the Gazette.]

1,270,760. AUTOMATIC LOCOMOTIVE-TANK-VALVE RELEASE. CHARLES W. IBACH, Tacoma, Wash. Filed Mar. 30, 1916. Serial No. 87,750. (Cl. 137—139.)



1. In combination, a valve, means tending to close the valve, a device operatively connected to said valve and adapted in one position of adjustment to hold the valve open and in another position to permit the said means to close the valve, a spring secured to said device, and a cable releasably secured by said spring to said device and adapted on actuation to move said device from the first named to the second position to effect closure of the valve.

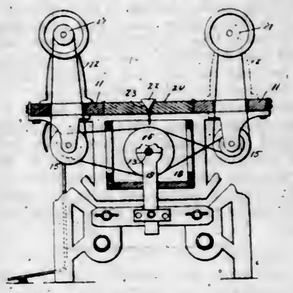
2. In combination, a valve, means acting to close said valve, a holding and releasing device operatively connected to said valve and comprising a stem and an arm projecting substantially at a right angle from one end of the stem, the other end of said stem being offset in a direction opposite to that in which said arm extends, said arm adapted in one adjustment of said device to hold the valve open, and in another adjustment to permit the valve to close under action of said closing means, a spring carried by the offset end of said stem, and a cable releasably secured by said spring to said device and adapted to actuate said device to effect a closure of the valve.

1,270,761. DRIVING MECHANISM OF POWER-OPERATED SEWING-MACHINES. SAMUEL F. STEIN, Williamsport, Pa. Filed Dec. 19, 1917. Serial No. 207,887. (Cl. 74—21.)

1. As an improvement in power mechanism for sewing machines, the combination of a table supporting a series of sewing machines and having a depression, a driving shaft located in such depression, driving wheels on said shaft, and means for transmission of power from said wheels to sewing machines supported on the table top.

2. As an improvement in power mechanism for sewing machines, the combination of a table supporting a series of sewing machines and having a depression, a driving shaft located in such depression, driving wheels on said shaft, means for transmission of power from said wheels to sewing machines supported on the table top, and openable covers for said depression above said wheels.

4. As an improvement in power mechanism for sewing machines, the combination of a table supporting a series of sewing machines and having a depression, a driving shaft located in such depression, driving wheels on said shaft, means for transmission of power from said wheels to sewing machines supported on the table top, bearings in said depression for said driving shaft, and means for supplying oil to said bearings from the upper side of the table.



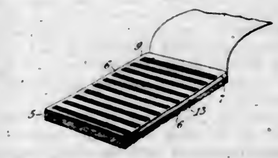
5. As an improvement in power mechanism for sewing machines, the combination of a table supporting a series of sewing machines and having downwardly projecting walls from the table top spaced apart, a driving shaft located in the space between such walls, driving wheels on said shaft, and means for transmission of power from said wheels to sewing machines supported on the table top.

6. As an improvement in power mechanism for sewing machines, the combination of a table supporting a series of sewing machines, the table having an opening through its top, a driving shaft located below said opening and accessible through the same, driving wheels on said shaft, and means for transmission of power from said wheels to sewing machines supported on the table top.

[Claim 3 not printed in the Gazette.]

REISSUES.

14,488. WRITING-TABLET. GEORGE E. DAVIS, Vista, Cal. Filed July 17, 1917. Serial No. 181,143. Original No. 1,211,297, dated Jan. 2, 1917, Serial No. 71,763, filed Jan. 12, 1916. (Cl. 283—45.)



1. A writing tablet having a plurality of sheets of paper and having a guide sheet of a greater width, said guide sheet having guiding provisions adapted to be visible through one of said sheets of paper, the edges of the guide sheet protruding beyond the tablet sheets being bent angularly to prevent any accidental lateral creeping movement of the guide sheet from between the tablet sheets.

2. A writing tablet having a plurality of sheets of paper and having a guide sheet of a greater width, said guide sheet having guiding provisions adapted to be visible through one of said sheets of paper, the edges of the guide sheet protruding beyond the tablet sheets being bent angularly to prevent any accidental lateral creeping movement of the guide sheet from between the tablet sheets, the said angularly bent portions of the guide sheet

further serving as guide flanges for accurately positioning the guide sheet between the sheets of the tablet.

3. A guide sheet for writing tablets having a series of broad, dark, equally-spaced bands thereon, said bands being visible through one of the sheets of paper when in position for use, and the bands being substantially as broad as the spaces between them.

4. A writing tablet having a plurality of sheets of paper and having a guide sheet, said guide sheet having a series of broad, dark equally-spaced lines thereon, said lines being visible through one of said sheets of paper when in position for use, and the lines being substantially as broad as the spaces between them.

5. A guide sheet for writing paper having a series of broad dark bands thereon and a series of alternately arranged broad light bands, the dark bands being visible through a superposed sheet of paper when in position for use, and both said dark and light bands being of sufficient breadth to permit a superposed sheet to receive writing within the spaces immediately above either the dark or light bands.

14,489. METHOD OF PRESERVING FRUITS AND OTHER ORGANIC SUBSTANCES. HELEN CECILIA MARGARET FRANKS, Brooklyn, N. Y., assignor, by mesne assignments, to Franks & Co., Inc., a Corporation of Delaware. Filed Mar. 18, 1918. Serial No. 223,243. Original No. 1,232,271, dated July 3, 1917, Serial No. 164,120, filed Apr. 24, 1917. (Cl. 99—8.)

1. The process of preserving fruits and vegetables and other organic substances in a suitable container by means of introducing therein CO_2 at such pressure sufficient to make the substance give up substantially all oxygen or air on or in the particles and molecules of such substance and container, driving off such eliminated oxygen and replacing therefor substantially pure CO_2.

2. The process of preserving fruits and other organic substances comprised in successively subjecting the article to CO_2 under pressure, alternating with the withdrawal of the pressure to below atmospheric until substantially all free oxygen or air on or in the particles of such organic substance and in a container thereof is displaced by substantially pure CO_2.

3. The process of preserving fruits, vegetables and other organic substances consisting in subjecting the substances to successive charges of CO_2 gas at pressures of substantially 60 pounds per square inch and intermediate such charges exhausting the pressure to below atmospheric.

4. In the preparation of fruits and vegetables to preserve the same, the process herein described, consisting in twice subjecting the fruits or vegetables to CO_2 gas at a pressure between 60 and 70 pounds per square inch for twenty minutes to one hour respectively, and after each application of the CO_2 subjecting the fruits or vegetables to a vacuum of 16 inches of mercury and finally sealing them in a vacuum.

5. The process of preserving fruits and vegetables, which consists in inclosing in a tight chamber a container charged permanently with the fruit, the container having an open communication with the atmosphere of the chamber and means adapted for hermetically sealing the same, forcing CO_2 into the chamber to a pressure between 60 and 70 pounds per square inch, maintaining such pressure for at least ten minutes, then very slowly discharging the CO_2 and the air mixed therewith, to atmospheric pressure, then exhausting the chamber very gradually, then very gradually for about 15 minutes renewing the CO_2 to a pressure between 60 and 70 pounds per square inch and maintaining the pressure of such CO_2 upon the fruit for at least one hour, then very slowly discharging the gas and mingled air from the chamber, and excluding the air therefrom, and sealing the container within the chamber before removal therefrom.

6. In the treatment of fruits and vegetables in a plurality of containers simultaneously within a single chamber, the containers being permanently charged with the articles to be treated and constructed to be sealed, and having independent open communication with the atmosphere in the chamber, that process which consists in subjecting the entire contents of the chamber to CO_2 at a slowly generated pressure between 60 and 70 pounds per square inch, maintaining such pressure not less than ten minutes, slowly discharging such gas and air mingled therewith, very slowly exhausting the chamber to a vacuum of 16 inches of mercury, then supplying CO_2 to this exhausted chamber, carrying the pressure very gradually to at least 60 pounds per square inch, maintaining such pressure for at least one hour, slowly discharging the gas in the chamber and again exhausting the chamber to a vacuum of at least 16 inches, and finally closing the containers within the said chamber before removal therefrom, to protect their contents from the atmosphere.

7. The process of preserving fruits and vegetables, which consists in subjecting the fruits and vegetables in a tight chamber, first, to an atmosphere of CO_2 under a pressure of about 60 pounds per square inch and afterward discharging such pressure and subjecting the fruit to nitrogen gas at a pressure of not less than 20 pounds.

8. The process of preserving fruits and vegetables, which consists in inclosing the container, permanently charged with the fruit, in a tight chamber, forcing CO_2 into the chamber to a pressure of 60 to 70 pounds and maintaining such pressure for three hours, discharging the CO_2 and mingled air from the chamber and exhausting the chamber to at least one-half the atmospheric pressure, then forcing nitrogen at not less than 20 pounds pressure per square inch into the chamber and maintaining such pressure of nitrogen gas for three hours, then discharging the nitrogen gas and partially exhausting the chamber, and sealing the receptacle in such partial vacuum before removal from the chamber.

9. The process of preserving fruits and vegetables, which consists in inclosing in a tight chamber a container permanently charged with the fruit, the container having an open communication with the atmosphere of the chamber and means adapted for hermetically sealing the same, forcing CO_2 into the chamber to a pressure between 60 and 70 pounds per square inch, maintaining such pressure for ten or twenty minutes, then very slowly discharging CO_2 and the air mixed therewith to atmospheric pressure, then exhausting the chamber very gradually, to 16 inches mercury, then very gradually during a period of fifteen minutes renewing the CO_2 to a pressure between 60 and 70 pounds per square inch and maintaining the pressure of such CO_2 upon the fruit for one hour, then for a period of fifteen minutes slowly discharging the gas and mingled air to atmospheric pressure, the reduction in pressure being steady and uniform to prevent injury to the tissues of the fruit, then renewing the CO_2 at a pressure of 60 to 70 pounds per square inch and maintaining such pressure to operate upon the fruit three hours, then discharging the gas and mingled air, and forcing nitrogen gas into the chamber to a pressure of 20 pounds per square inch and maintaining such pressure for three hours, then removing the nitrogen gas and creating a vacuum of sixteen inches of mercury and sealing the container in such vacuum.

TRADE-MARKS

OFFICIAL GAZETTE, JUNE 25, 1918.

(PUBLISHED JULY 16, 1918.)

The following trade-marks are published in compliance with section 6 of the act of February 20, 1905, as amended March 2, 1907. Notice of opposition must be filed within thirty days of this publication.

Marks applied for "under the ten-year proviso" are registrable under the provision in clause (b) of section 5 of said act as amended February 18, 1911.

As provided by section 14 of said act, a fee of ten dollars must accompany each notice of opposition.

Ser. No. 93,816. (CLASS 12. CONSTRUCTION MATERIALS.) AMERICAN ENCAUSTIC TILING CO. LTD., Zanesville, Ohio; Maurer, N. J., and New York, N. Y. Filed Mar. 24, 1916.

CANTERBURIC

Particular description of goods.—Faience Clay Tiles for the Exterior and Interior Surfaces of Walls, Floors, and Ceilings.

Claims use since July 1, 1915.

Ser. No. 95,411. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) B. A. BERRY, Toledo, Ohio. Filed May 25, 1916.



Particular description of goods.—Lard.

Claims use since July, 1914.

Ser. No. 98,281. (CLASS 11. INKS AND INKING MATERIALS.) WATERS-WALCH MFG. CO., St. Louis, Mo. Filed Sept. 27, 1916.



Particular description of goods.—Type-Writer Ribbons, Carbon-Paper, Type-Writer-Ribbon Ink, Writing Fluid, Fountain-Pen Ink, Drawing-Ink, and Ink for Rubber-Stamp Pads.

Claims use since May 13, 1912.

Ser. No. 100,657. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) WILLIAM TUCKER, New York, N. Y. Filed Jan. 16, 1917.



Particular description of goods.—Grass-Seeds.

Claims use since February, 1915.

Ser. No. 101,641. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ESSANAR COMPANY, INC., New York, N. Y. Filed Feb. 24, 1917. Under ten-year proviso.

A Royal Game of India

Particular description of goods.—Board and Counter Games.
Claims use since 1869.

Ser. No. 101,642. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) ESSANAR COMPANY, INC., New York, N. Y. Filed Feb. 24, 1917. Under ten-year proviso.

PARCHEESI

Particular description of goods.—Board and Counter Games.
Claims use since 1869.

Ser. No. 102,967. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) SPERRY & BEALE COMPANY, Brooklyn, N. Y. Filed Apr. 13, 1917.



Particular description of goods.—Stair-Pads, Carpet-Linings, Rug Linings and Paddings.
Claims use since Mar. 30, 1917.

Ser. No. 102,968. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) SPERRY & BEALE COMPANY, Brooklyn, N. Y. Filed Apr. 13, 1917.

HAUR-LITELY

Particular description of goods.—Stair-Pads, Carpet-Linings, Rug Linings and Paddings.
Claims use since Mar. 30, 1917.

Ser. No. 103,306. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) SUPERIOR FABRIC PATCH CO., Midlothian, Tex. Filed Apr. 25, 1917.

LOX-IT

Particular description of goods.—Tire-Repair Outfit.
Claims use since May 16, 1916.

Ser. No. 103,700. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) MINNEAPOLIS BREWING COMPANY, Minneapolis, Minn. Filed May 10, 1917.

REX NUTRIO

Particular description of goods.—A Non-Alcoholic Cereal Beverage Containing Malt.
Claims use since Apr. 25, 1917.

Ser. No. 103,798. (CLASS 38. PRINTS AND PUBLICATIONS.) ROGERS AND MANSON COMPANY, Portland, Me., and Boston, Mass. Filed May 14, 1917.

THE ARCHITECTURAL FORUM

Particular description of goods.—A Monthly Publication.
Claims use since Jan. 1, 1917.

Ser. No. 104,769. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) CALIFORNIA PACKING CORPORATION, San Francisco, Cal. Filed June 30, 1917.

KALIPAK

Particular description of goods.—Dried Fruits.
Claims use since June 19, 1917.

Ser. No. 105,740. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS AND PARTS THEREOF.) THE MARVEL ACCESSORIES MANUFACTURING COMPANY, Cleveland, Ohio. Filed Aug. 20, 1917.



Particular description of goods.—Chain-Stretching Tools, Valve-Grinders, and Wrenches.
Claims use since Sept. 15, 1914.

Ser. No. 106,614. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) CARAVEL COMPANY, New York, N. Y. Filed Oct. 5, 1917.



Particular description of goods.—Dyestuffs and Beeswax.
Claims use since May 1, 1916.

Ser. No. 106,860. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) C. A. & E. B. HAWKINS, Peach Bottom township, York county, Pa. Filed Oct. 19, 1917.

QUAK-AL-NUNK

Particular description of goods.—Fresh Peaches and Apples.
Claims use since August, 1914.

Ser. No. 107,049. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WILLIAM B. JOHNSON, Atlanta, Ga. Filed Oct. 31, 1917.



The picture shown in the drawing is fanciful.
Particular description of goods.—A Dry-Powder Dough-Batch Ingredient Consisting of Gelatinized Corn-Starch and Malted Barley.
Claims use since Oct. 26, 1917.

Ser. No. 107,270. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) GEORGE W. SNYDER, Racine, Wis. Filed Nov. 9, 1917.



Particular description of goods.—Roasted and Unroasted Breakfast Cereals.
Claims use since Jan. 1, 1914.

Ser. No. 107,607. (CLASS 1. RAW OR PARTLY-PREPARED MATERIALS.) BENNO BORZYKOWSKI, Cleveland, Ohio. Filed Nov. 26, 1917.

BORVISK

Particular description of goods.—Raw Artificial Silk.
Claims use since about Sept. 15, 1917.

Ser. No. 107,692. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) GILBERT I. STADEKER, Chicago, Ill. Filed Nov. 30, 1917.

SEE-SAFE

Particular description of goods.—An Automobile-Wind-Shield Wiper.
Claims use since Sept. 15, 1917.

Ser. No. 107,922. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) BOWDEN WIRE LIMITED, Willesden Junction, London, England. Filed Dec. 13, 1917.

BOWDENAMEL

Consisting of the word "Bowdenamel."
Particular description of goods.—Spiral Wire and Like Flexible Members in the Nature of a Flexible Tube or Shaft for Power-Transmission and other Purposes.
Claims use since August, 1908.

Ser. No. 107,924. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) BOWDEN WIRE LIMITED, Willesden Junction, London, England. Filed Dec. 13, 1917.

BOWDENSOLO

Consisting of the word "Bowdensolo."
Particular description of goods.—Spiral Wire and Like Flexible Members in the Nature of a Flexible Tube or Shaft, Either Tinned, Enameled, or Otherwise Treated, for Power-Transmission and other Purposes.
Claims use since September, 1905.

Ser. No. 107,925. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) BOWDEN WIRE LIMITED, Willesden Junction, London, England. Filed Dec. 13, 1917.

BOWDENOIR

Consisting of the word "Bowdenoir."
Particular description of goods.—Spiral Wire and Like Members in the Nature of a Flexible Tube or Shaft, Either Enameled, Oxidized, Blacked, Tinned, or Otherwise Treated, for Power-Transmission and other Purposes.
Claims use since July, 1905.

Ser. No. 107,926. (CLASS 13. HARDWARE AND PLUMBING AND STEAM-FITTING SUPPLIES.) BOWDEN WIRE LIMITED, Willesden Junction, London, England. Filed Dec. 13, 1917.

BOWDENITE

Consisting of the word "Bowdenite."

Particular description of goods.—Spiral Wire and Like Members in the Nature of a Flexible Tube or Shaft for Power-Transmission and other Purposes.

Claims use since March, 1903.

Ser. No. 107,988. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ANDREW W. O'MALLEY, Wilkes-Barre, Pa.. Filed Dec. 15, 1917. Under ten-year proviso.

DR. ALEXANDER'S Lung Healer

Particular description of goods.—A Preparation for the Treatment of Colds, Sore Throat, Coughing, Croup, Hoarseness, Bronchitis, Whooping-Cough, and Bronchial Asthma.

Claims use since January, 1895.

Ser. No. 108,020. (CLASS 34. HEATING, LIGHTING, AND VENTILATING APPARATUS, NOT INCLUDING ELECTRICAL APPARATUS.) THE OMOLITE COMPANY, INC., Jamestown, N. Y. Filed Dec. 17, 1917.

RAYDEX

Particular description of goods.—Metal Screens for Headlights.

Claims use since Dec. 4, 1917.

Ser. No. 108,194. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) BOSCO & COMPANY INC., New York, N. Y. Filed Dec. 28, 1917.

GOLD LABEL

No claim being made to the exclusive use of a label colored gold.

Particular description of goods.—Olive-Oil.

Claims use since Nov. 20, 1917.

Ser. No. 108,232. (CLASS 38. PRINTS AND PUBLICATIONS.) ERWIN H. MANN, Minneapolis, Minn. Filed Dec. 31, 1917.

The Service Bulletin

Particular description of goods.—A Weekly Advertising Publication.

Claims use since Dec. 1, 1917.

Ser. No. 108,280½. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) LOUIS J. BRONSTON, New York, N. Y. Filed Jan. 3, 1918.

Tru-Val

Particular description of goods.—Handkerchiefs.

Claims use since Dec. 15, 1917.

Ser. No. 108,526. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY LIMITED, New Orleans, La. Filed Jan. 18, 1918.

Friendship

Particular description of goods.—Candy.

Claims use since Nov. 19, 1917.

Ser. No. 108,527. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY LIMITED, New Orleans, La. Filed Jan. 18, 1918.

FASHION

Particular description of goods.—Candy.

Claims use since May 10, 1912.

Ser. No. 108,528. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY LIMITED, New Orleans, La. Filed Jan. 18, 1918.

Independence

Particular description of goods.—Candy.

Claims use since Nov. 19, 1917.

Ser. No. 108,529. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY LIMITED, New Orleans, La. Filed Jan. 18, 1918.

Fascination

Particular description of goods.—Candy.

Claims use since Nov. 16, 1917.

Ser. No. 108,566. (CLASS 29. BROOMS, BRUSHES, AND DUSTERS.) TRI-CONTINENTAL CORPORATION, Buffalo, N. Y. Filed Jan. 21, 1918.

TRI-CO. UNIVERSAL

Particular description of goods.—Wind-Shield Cleaners.

Claims use since June 13, 1917.

Ser. No. 108,660. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACKSON'S MUSHROOM COMPANY, Chicago, Ill. Filed Jan. 26, 1918.



The lining for color shown on the drawing indicates the color green.

Particular description of goods.—Fresh Mushrooms.

Claims use since Jan. 1, 1900.

Ser. No. 108,745. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) JACOBS CANDY COMPANY LIMITED, New Orleans, La. Filed Feb. 1, 1918.

Melody of Sweets

Particular description of goods.—Candy.

Claims use since Nov. 20, 1917.

Ser. No. 108,884. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) HERBERT F. L. FUNKE CO. INC., New York, N. Y. Filed Feb. 8, 1918.

ROMAX

Particular description of goods.—Steel Balls and Bearings.

Claims use since Aug. 17, 1917.

Ser. No. 108,922. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IDAHO MEDICINE CO., Rexburg, Idaho. Filed Feb. 9, 1918.

JE

Particular description of goods.—A Remedy for Enlarged Glands.

Claims use since Nov. 28, 1917.

Ser. No. 108,956. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) MILAN FRANCIS PRATT, Rochester, N. Y. Filed Feb. 12, 1918.

BI-NESIA

Particular description of goods.—A Preparation to Correct an Acid Condition of the Stomach.

Claims use since Feb. 8, 1917.

Ser. No. 108,977. (CLASS 15. OILS AND GREASES.) COPEMAN LABORATORIES, INC., Flint, Mich. Filed Feb. 13, 1918.

LUBRI-CAP

Particular description of goods.—Grease Put Up in the Form of Cartridges.

Claims use since the 15th day of October, 1917.

Ser. No. 109,021. (CLASS 2. RECEPTACLES.) THE CLARK MANUFACTURING COMPANY, Boston, Mass. Filed Feb. 16, 1918.

MARY ELIZABETH

Particular description of goods.—Various Styles of Tourist-Cases, Toilet-Cases, Washcloth-Cases, and Sponge-Cases Made of Cretonne, Canvas, Khaki, Cotton, and Silk Fabric, Some of Which are Rubber Lined or Lined with Rubberized Material and Some Not, Such Cases Being Adapted to be Carried in a Hand-Bag or Suitcase and Constructed to Contain Various Small Articles, Such as Comb and Brush, Tooth-Brush, Manicure Articles, Shaving Accessories, &c.

Claims use since January, 1912.

Ser. No. 109,114. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE FREDMAN MILLING & MANUFACTURING CO., Minneapolis, Minn. Filed Feb. 19, 1918.

Fremo

Particular description of goods.—Pearl-Barley, Cereal Breakfast Food, Buckwheat-Flour, Barley-Flour, and Cereal Breakfast Food Composed of Barley and Buckwheat Flour.

Claims use since Jan. 1, 1915.

Ser. No. 109,119. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE WENDT-BRISTOL CO., Columbus, Ohio. Filed Feb. 20, 1918.

IOTONE

Particular description of goods.—An Alterative for the Treatment of Eczema, Scrofula, Syphilis, Asthma, Bronchitis, Goiter, Rheumatism, and Specific Blood Disorders.

Claims use since about Jan. 1, 1913.

Ser. No. 109,142. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SOCIÉTÉ CHIMIQUE DES USINES DU RHONE (ANCIENNEMENT GILLIARD P. MONNET ET CARTIER), Paris, France. Filed Feb. 20, 1918.

RHODIONE

Particular description of goods.—Perfumery.
Claims use since July, 1916.

Ser. No. 109,157. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) MULTIKRAFT INCORPORATED, Rochester, N. Y. Filed Feb. 21, 1918.



Particular description of goods.—Games and Toys—Namely, Horses, Wagons, Sleds, Automobiles, Cannons, and Cannons and Target, Battleships, Forts, Encampments, Wooden Animals, Metal Animals, Coaster-Wagons, Guns, Fire-Engines, Hook and Ladders, Hose-Carts, Building-Blocks, Metal and Wood Savings-Banks, and Games of Skill in Which Targets, Cannon, and Guns are Employed, Ring-Toss, and Throwing-Bombs.
Claims use since Feb. 5, 1918.

Ser. No. 109,241. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) SHIGETARO HIRASAWA, Tokyo, Japan. Filed Feb. 27, 1918.



Particular description of goods.—Salts of Ichthyolic Acid, Potassium Chlorate, Potassium Ferrocyanid, Iodin, Iodoform, Caffein, Potassium Bichromate, Potassium Ferricyanid, and Potassium Iodite.
Claims use since May 12, 1916.

Ser. No. 109,283. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WILLIAM H. SCHULLER, Portland, Oreg. Filed Feb. 28, 1918.

Schuyler

Particular description of goods.—Ointment for Treating Goiters.
Claims use since Feb. 1, 1916.

Ser. No. 109,363. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) OSCAR C. HOPPE, Milwaukee, Wis. Filed Mar. 4, 1918.



The trade-mark consisting of a portrait of myself.
Particular description of goods.—A Liniment for Burns, Bruises, Cuts, Insect-Bites, Scalds, or to Allay Inflammation.
Claims use since Feb. 23, 1918.

Ser. No. 109,367. (CLASS 2. RECEPTACLES.) GUSTAVE LIDSEEN, Chicago, Ill. Filed Mar. 4, 1918.



Particular description of goods.—Force-Feed Oil-Cans.
Claims use since August, 1911.

Ser. No. 109,399. (CLASS 32. FURNITURE AND UPHOLSTERY.) LOUIS JACOBS, Chicago, Ill. Filed Mar. 6, 1918.

X-RAY

Particular description of goods.—Mattresses.
Claims use since Jan. 8, 1918.

Ser. No. 109,402. (CLASS 36. MUSICAL INSTRUMENTS AND SUPPLIES.) LYON & HEALY, Chicago, Ill. Filed Mar. 6, 1918.

Candelectra.

Particular description of goods.—Pianos.
Claims use since about January, 1918.

Ser. No. 109,463. (CLASS 50. MERCHANDISE NOT OTHERWISE CLASSIFIED.) T. R. GOODLATTE & SONS, New York, N. Y. Filed Mar. 9, 1918.

FLEX-LITE

Comprising the words "Flex-Lite."
Particular description of goods.—Oiled and Treated Cotton Piece Goods to be Used as a Substitute for Window-Glass.
Claims use since Jan. 1, 1918.

Ser. No. 109,479. (CLASS 21. ELECTRICAL APPARATUS, MACHINES, AND SUPPLIES.) W. R. OSTRANDER & Co., New York, N. Y. Filed Mar. 9, 1918.

OSTRANDER

Particular description of goods.—Annunciators, Batteries, Battery-Connectors, Battery-Cabinets, Battery and Combination Switches, Electric Bells and Gongs, Electric Sockets, Electric Door-Openers, Floor and Outlet Boxes, Electric Fire-Alarms, Push-Buttons, Electric Bell and Gong Signal Systems, Electric Tank-Alarms, Telephones, Vestibule-Telephones.
Claims use since Apr. 9, 1912.

Ser. No. 109,513. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) JOHN ZYNDA, Detroit, Mich. Filed Mar. 11, 1918.

PIWO

Particular description of goods.—Non-Alcoholic Maltless Carbonated Beverages of a Corn Nature Sold as a Soft Drink.
Claims use since Mar. 2, 1918.

Ser. No. 109,539. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) THE LACTEX PROCESS COMPANY, Seekonk, Mass. Filed Mar. 13, 1918.

LACTEX

Consists of the word "Lactex."
Particular description of goods.—Lacquer.
Claims use since Dec. 1, 1917.

Ser. No. 109,702. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) RICHARDSON CORPORATION, Rochester, N. Y. Filed Mar. 21, 1918.

LIBERTY

Particular description of goods.—Combination Beverage Carbonating and Dispensing Apparatus.
Claims use since Jan. 15, 1918.

Ser. No. 109,710. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. L. CUCCIA FRUIT CO., Los Angeles, Cal. Filed Mar. 22, 1918.

BOY BLUE

Particular description of goods.—Fresh Oranges, Lemons, and Grape-Fruit.
Claims use since Feb. 9, 1918.

Ser. No. 109,711. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) P. L. CUCCIA FRUIT CO., Los Angeles, Cal. Filed Mar. 22, 1918.

MARIGOLD

Particular description of goods.—Fresh Oranges, Lemons, and Grape-Fruit.
Claims use since Feb. 9, 1918.

Ser. No. 109,770. (CLASS 35. BELTING, HOSE, MACHINERY PACKING, AND NON-METALLIC TIRES.) MCDEVITT AND GREENSPAN, Chicago, Ill. Filed Mar. 25, 1918.

COO-COO

Particular description of goods.—Rubber Tires.
Claims use since Mar. 11, 1918.

Ser. No. 109,822. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) SYRACUSE SMELTING WORKS, Brooklyn, N. Y. Filed Mar. 26, 1918.

HYTIN

Particular description of goods.—Type-Metal Alloys.
Claims use since Nov. 28, 1917.

Ser. No. 109,845. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) ISIDORE HOROVITZ, Savannah, Ga. Filed Mar. 28, 1918.

Puro-Vegeline

Particular description of goods.—A Medicine, in Tablet Form, for Constipation, Indigestion, Headache, Biliousness, Sluggish Liver, and an Intestinal Cleanser.
Claims use since Nov. 12, 1916.

Ser. No. 109,866. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) HERCULES ELECTRIC STEEL CORPORATION, New York, N. Y. Filed Mar. 29, 1918.

MATCHLESS

Consisting in the word "Matchless."

Particular description of goods.—Bar-Steel, and Tool-Steel Especially Adapted for the Manufacture of Dies.

Claims use since about Feb. 1, 1918.

Ser. No. 109,867. (CLASS 14. METALS AND METAL CASTINGS AND FORGINGS.) HERCULES ELECTRIC STEEL CORPORATION, New York, N. Y. Filed Mar. 29, 1918.

URITE

The trade-mark consisting in the word "Urite."

Particular description of goods.—High-Speed Tool-Steel, in Bar, Rod, and other Forms, Adapted for Use in the Making of Metal-Working Tools.

Claims use since about the 1st day of February, 1918.

Ser. No. 109,871. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) KEYSTONE NOVELTY COMPANY, Greenville, Pa. Filed Mar. 29, 1918.

MENTHO-NOVA

Particular description of goods.—Ointments and Salves Used to Treat Asthma, Burns, Bruises, Bronchitis, Brain-Fag, Coughs, Colds, Catarrh, Croup, Cuts, Corns, Cold-Sores, Chilblains, Chapped Hands, Deafness, Eczema, Earache, Frosted Feet, Headache, Hay-Fever, Itch, Insect-Bites, Ivy-Poison, Neuralgia, Nervous Headache, Piles, Pimples, Pleurisy, Pneumonia, Rheumatism, Sore Throat, Skin Diseases, Sunburn, Sores, Scalds, Sprains, Tetter, Tonsillitis, Toothache, and Ulcers.

Claims use since December, 1913.

Ser. No. 109,876. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) W. R. ROACH & Co., Hart, Mich. Filed Mar. 29, 1918.



Particular description of goods.—Canned Evaporated Milk.

Claims use since 1894.

Ser. No. 109,895. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) AMERICAN STEEL WOOL MFG. CO. INC., New York, N. Y. Filed Apr. 1, 1918.



The trade-mark consists of a red, white, blue, and yellow design in rectangular parallel form, the upper and lower background being yellow and the center design consisting of parallel diagonal red, white, and blue oblong spaces.

Particular description of goods.—Steel-Wool Used for Grinding and Polishing Purposes.

Claims use since Jan. 1, 1918.

Ser. No. 109,925. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) WALTER PHELPS SCHAAP, Cincinnati, Ohio. Filed Apr. 2, 1918.

INDU

Particular description of goods.—A System Cleanser and Tonic Used for the Treatment of Kidneys, Liver, Stomach, and Intestinal Trouble, and Nerve-Tablets.

Claims use since June 14, 1917.

Ser. No. 110,001. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) ADAMS BROS., New York, N. Y. Filed Apr. 5, 1918.

BIG 12

Particular description of goods.—Chewing-Gum.

Claims use since Mar. 1, 1918.

Ser. No. 110,026. (CLASS 28. JEWELRY AND PRECIOUS-METAL WARE.) INTERNATIONAL SILVER COMPANY, Meriden and Bridgeport, Conn. Filed Apr. 6, 1918.

HE

Particular description of goods.—Silver-Plated Knives, Forks, Spoons, and Ladles.

Claims use since on or about the 1st day of January, 1887.

Ser. No. 110,034. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) POTTER & WRIGHTINGTON, Boston, Mass. Filed Apr. 6, 1918.

1915

Particular description of goods.—Cake and Pastry Flour.

Claims use since Mar. 1, 1912.

Ser. No. 110,084. (CLASS 7. CORDAGE.) AMERICAN CORE-TWINE COMPANY, Boston, Mass. Filed Apr. 10, 1918.

PIONEER

Particular description of goods.—Twines, Clothes-Lines, and Seaming-Cords.

Claims use since Mar. 25, 1918.

Ser. No. 110,096. (CLASS 37. PAPER AND STATIONERY.) LIBERTY PAPER CO., New York, N. Y. Filed Apr. 10, 1918.

LIBERTY

Particular description of goods.—Tape-Moistening Machines.

Claims use since July 20, 1914.

Ser. No. 110,115. (CLASS 37. PAPER AND STATIONERY.) HAMILTON CARD & PAPER HOUSE, INC., New York, N. Y. Filed Apr. 11, 1918.

HIAWATHA

Particular description of goods.—Lithographing and Printing Paper, Type-Writing Paper, and Envelops.

Claims use since Jan. 1, 1917.

Ser. No. 110,162. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) MARTIN CUNNINGHAM, New York, N. Y. Filed Apr. 13, 1918.

EM-C-LAC

Particular description of goods.—A Polishing Preservative in the Nature of Furniture-Polish.

Claims use since Jan. 8, 1918.

Ser. No. 110,178. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) REGENT SALES CO., INC., Brooklyn, N. Y. Filed Apr. 13, 1918.

GAS-NOX

Particular description of goods.—A Tablet for Indigestion and Hyperacidity of the Stomach.

Claims use since Feb. 1, 1918.

Ser. No. 110,244. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE HARRIS COMPANY, INC., New York, N. Y. Filed Apr. 16, 1918.



Particular description of goods.—Cotton Piece Goods.

Claims use since 1900.

Ser. No. 110,248. (CLASS 42. KNITTED, NETTED, AND TEXTILE FABRICS.) THE HARRIS COMPANY, INC., New York, N. Y. Filed Apr. 16, 1918.

GOLD LEAF

Particular description of goods.—Cotton Piece Goods.

Claims use since 1895.

Ser. No. 110,250. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) LOOS & DILWORTH, Philadelphia, Pa. Filed Apr. 16, 1918.

OXYNATED BASIC

Consists of the words "Oxynated Basic."

Particular description of goods.—A Softening and Cleansing Agent for Textile and Knit Fabrics and Materials.

Claims use since about July 9, 1917.

Ser. No. 110,295. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) A. J. HILBERT & CO., INC., Milwaukee, Wis. Filed Apr. 18, 1918.

Revelation

Particular description of goods.—Extract Perfumes, Toilet Waters, Face and Talcum Powders, Face-Creams.
Claims use since Jan. 20, 1918.

Ser. No. 110,342. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) G. BATCHELLER HALL CO., Seattle, Wash. Filed Apr. 20, 1918.

O-FINE-O

Particular description of goods.—Canned Salmon.
Claims use since January, 1916.

Ser. No. 110,362. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE SQUIRREL HOUSE, INC., Seattle, Wash. Filed Apr. 20, 1918.



No claim being made to the representation of the nuts *per se* apart from the mark as shown.
Particular description of goods.—Salted Nuts.
Claims use since Nov. 1, 1916.

Ser. No. 110,366. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) WALTER BAKER & COMPANY, LTD., Boston, Mass. Filed Apr. 22, 1918. Under ten-year proviso.

CINQUIÈME

Particular description of goods.—Sweet Chocolate.
Claims use since 1886.

Ser. No. 110,374. (CLASS 38. PRINTS AND PUBLICATIONS.) GULF PUBLISHING COMPANY, INC., Houston, Tex. Filed Apr. 22, 1918.

COAST GULF OIL NEWS

Particular description of goods.—Weekly Magazines.
Claims use since Oct. 14, 1916.

Ser. No. 110,467. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) CAMERON MACHINE COMPANY, Brooklyn, N. Y. Filed Apr. 27, 1918.

CAMACHINE

Particular description of goods.—Machines and Parts Thereof for Slitting, Rewinding, Cutting, and Perforating Flexible Materials.
Claims use since Feb. 28, 1918.

Ser. No. 110,469. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) THE COOPER MEDICINE COMPANY, Dayton, Ohio. Filed Apr. 27, 1918.

HYPOLAC

Particular description of goods.—A Preparation for Headache, Colds, Neuralgia, and Nervousness.
Claims use since Mar. 21, 1918.

Ser. No. 110,514. (CLASS 23. CUTLERY, MACHINERY, AND TOOLS, AND PARTS THEREOF.) THE BUCKEYE MANUFACTURING COMPANY, Anderson, Ind. Filed Apr. 29, 1918.

Trundaar

Particular description of goods.—Tractors.
Claims use since September, 1917.

Ser. No. 110,528. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) J. B. GREEN, Houston, Tex. Filed Apr. 29, 1918.

TexOrange

Applicant disclaims the word "Orange" apart from the mark shown in the drawing.
Particular description of goods.—A Non-Alcoholic Non-Intoxicating Fruit-Syrup Beverage and Sold as a Soft Drink.
Claims use since Mar. 9, 1918.

Ser. No. 110,529. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) J. B. GREEN, Houston, Tex. Filed Apr. 29, 1918.

TexCherry

Applicant disclaims the word "Cherry" apart from the mark shown in the drawing.
Particular description of goods.—A Non-Alcoholic Non-Intoxicating Fruit-Syrup Beverage and Sold as a Soft Drink.
Claims use since Mar. 9, 1918.

Ser. No. 110,541. (~~CLASS 45.~~ BEVERAGES, NON-ALCOHOLIC.) NORTH ONTARIO PACKING COMPANY, Los Angeles, Cal. Filed Apr. 29, 1918.

Cal-ora

Particular description of goods.—A Non-Alcoholic Non-Intoxicating Orange-Juice Beverage Sold as a Soft Drink.
Claims use since about Apr. 1, 1918.

Ser. No. 110,545. (CLASS 48. MALT BEVERAGES, EXTRACTS, AND LIQUORS.) RUDOLPH STECHER BREWING CO., Murphysboro, Ill. Filed Apr. 29, 1918.

Oasis

Particular description of goods.—A Non-Intoxicating Non-Alcoholic Cereal Malt Beverage.
Claims use since June 11, 1917.

Ser. No. 110,595. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) G. BATCHELLER HALL CO., Seattle, Wash. Filed May 2, 1918.

DOMINANCE

Particular description of goods.—Canned Salmon.
Claims use since January, 1916.

Ser. No. 110,606. (CLASS 46. FOODS AND INGREDIENTS OF FOODS.) THE NULOMOLINE COMPANY, New York, N. Y. Filed May 2, 1918.

Nulocrystal

Particular description of goods.—Sugar-Syrups.
Claims use since Apr. 4, 1918.

Ser. No. 110,634. (CLASS 11. INKS AND INKING MATERIALS.) REMINGTON TYPEWRITER COMPANY, Ilion and New York, N. Y. Filed May 3, 1918.

Premier

Particular description of goods.—Type-Writer Ribbons and Carbon-Paper.
Claims use since about 1897.

Ser. No. 110,638. (CLASS 39. CLOTHING.) CAMMEYER, New York, N. Y. Filed May 4, 1918. Under ten-year proviso.

CAMMEYER'S TRUE-FORM

Particular description of goods.—Boots and Shoes of All Descriptions.
Claims use since July 17, 1888.

Ser. No. 110,640. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed May 4, 1918.

SUPREME

Particular description of goods.—Fishing-Tackle—Namely, Reels, Poles, Lines, Sinkers, Floats, Hooks, and Spinners.
Claims use since Aug. 11, 1916.

Ser. No. 110,641. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed May 4, 1918.

GOLDEN WEST

Particular description of goods.—Fishing-Tackle—Namely, Reels, Poles, Lines, Sinkers, Floats, Hooks, and Spinners.
Claims use since Sept. 8, 1910.

Ser. No. 110,642. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE ENTERPRISE MANUFACTURING COMPANY, Akron, Ohio. Filed May 4, 1918.

INTEROCEAN

Particular description of goods.—Fishing-Tackle—Namely, Reels, Poles, Lines, Sinkers, Floats, Hooks, and Spinners.
Claims use since June 26, 1916.

Ser. No. 110,651. (CLASS 17. TOBACCO PRODUCTS.) TOBACCO PRODUCTS CORPORATION, New York, N. Y. Filed May 4, 1918.

COCOON

Particular description of goods.—Cigars, Cigarettes, Smoking and Chewing Tobacco.
Claims use since Feb. 15, 1918.

Ser. No. 110,652. (CLASS 17. TOBACCO PRODUCTS.) TOBACCO PRODUCTS CORPORATION, New York, N. Y. Filed May 4, 1918.



Particular description of goods.—Cigars, Cigarettes, Smoking and Chewing Tobacco.
Claims use since Feb. 15, 1918.

Ser. No. 110,702. (CLASS 39. CLOTHING.) J. J. GROVER'S SONS, Lynn, Mass. Filed May 6, 1918.

Sister Tolma

Particular description of goods.—Women's and Misses' Boots and Shoes Made Wholly or in Part of Leather and Cloth.
Claims use since Apr. 7, 1916.

Ser. No. 110,727. (CLASS 17. TOBACCO PRODUCTS.) THE AMERICAN TOBACCO CO., New York, N. Y. Filed May 7, 1918.

HAPPY HIT

Particular description of goods.—Smoking and Chewing Tobacco and Cigarettes.
Claims use since May 3, 1918.

Ser. No. 110,728. (CLASS 45. BEVERAGES, NON-ALCOHOLIC.) LEO BAUM, Milwaukee, Wis. Filed May 7, 1918.

Du Du

Particular description of goods.—Non-Alcoholic Non-Intoxicating Temperance Maltless Beverages Sold as Soft Drinks.
Claims use since Apr. 15, 1918.

Ser. No. 110,757. (CLASS 37. PAPER AND STATIONERY.) PORTLAND LABEL CO., INC., Milwaukie, Oreg. Filed May 7, 1918.

KINZELL

Particular description of goods.—Prescription-Blanks.
Claims use since Dec. 20, 1917.

Ser. No. 110,775. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) JAMES J. BONNER, Boston, Mass. Filed May 9, 1918.

FEET-OX-GEN

Particular description of goods.—A Preparation for the Treatment of the Feet.
Claims use since January, 1913.

Ser. No. 110,778. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) A. GLIDEWELL, Fayetteville, Tenn. Filed May 9, 1918.



Particular description of goods.—Playing-Cards.
Claims use since Apr. 15, 1918.

Ser. No. 110,780. (CLASS 6. CHEMICALS, MEDICINES, AND PHARMACEUTICAL PREPARATIONS.) IMPERIAL DYEWOOD COMPANY, INCORPORATED, Glens Falls, N. Y. Filed May 9, 1918.



Particular description of goods.—Dyestuffs.
Claims use since about March, 1917.

Ser. No. 110,788. (CLASS 39. CLOTHING.) THE SCHULMAN COMPANY, INC., New York, N. Y. Filed May 9, 1918.



Particular description of goods.—Norfolk Coats, Sack-Coats, Long Trousers, Riding-Breeches, Web Trouser-Belts, Canvas Leggings, Military Uniforms, Mackinaw Coats.
Claims use since January, 1918.

Ser. No. 110,833. (CLASS 16. PAINTS AND PAINTERS' MATERIALS.) E. I. DU PONT DE NEMOURS & COMPANY, Wilmington, Del. Filed May 11, 1918.

CARPO

Consisting of the word "Carpo."
Particular description of goods.—Ready-Mixed Paint.
Claims use since Nov. 6, 1917.

Ser. No. 110,862. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) BURR HART, Detroit, Mich. Filed May 13, 1918.

HARTS

Particular description of goods.—A Compound for Cleaning Fabrics and Painted and Varnished Surfaces.
Claims use since Mar. 12, 1918.

Ser. No. 110,867. (CLASS 4. ABRASIVE, DETERGENT, AND POLISHING MATERIALS.) MAGIC LEATHER TREATMENT CO., Detroit, Mich. Filed May 13, 1918.

OVER THE TOP

Particular description of goods.—Leather-Dressing.
Claims use since Apr. 9, 1918.

Ser. No. 110,946. (CLASS 39. CLOTHING.) BEACON FALLS RUBBER SHOE CO., Beacon Falls, Conn. Filed May 17, 1918.

Win-the-War

Comprising the words "Win-the-War".
Particular description of goods.—Leather, Fabric, and Rubber Boots and Shoes.
Claims use since Apr. 10, 1918.

Ser. No. 110,949. (CLASS 39. CLOTHING.) CROWN GLOVE COMPANY, New York, N. Y. Filed May 17, 1918.

Doubletex

Comprising the word "Doubletex."
Particular description of goods.—Fabric Gloves.
Claims use since Jan. 15, 1918.

Ser. No. 110,961. (CLASS 17. TOBACCO PRODUCTS.) THE MILLER CIGAR CO., Wheeling, W. Va., and Bealls-ville and Woodsfield, Ohio. Filed May 17, 1918.

HELVA

Particular description of goods.—Cigars.
Claims use since May 2, 1916.

Ser. No. 111,062. (CLASS 39. CLOTHING.) JACOB EICHWALD, New York, N. Y. Filed May 20, 1918.

Benora

Particular description of goods.—Children's Dresses.
Claims use since Jan. 1, 1917.

Ser. No. 111,065. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE MANHATTAN RUBBER MFG. CO., New York, N. Y. Filed May 20, 1918.

MASTER

"Master."
Particular description of goods.—Billiard-Cushions.
Claims use since Jan. 15, 1918.

Ser. No. 111,078. (CLASS 17. TOBACCO PRODUCTS.) FRISHMUTH BRO. & COMPANY, INCORPORATED, Philadelphia, Pa. Filed May 21, 1918.

Pals

Particular description of goods.—Cigarettes.
Claims use since Oct. 24, 1917.

Ser. No. 111,109. (CLASS 39. CLOTHING.) THE DANIEL HAYS COMPANY, Gloversville, N. Y. Filed May 22, 1918.

Superseam

Particular description of goods.—Leather Gloves.
Claims use since about Feb. 12, 1918.

Ser. No. 111,118. (CLASS 39. CLOTHING.) F. NEUGASS & COMPANY, New York, N. Y. Filed May 22, 1918.



Particular description of goods.—Infants' and Children's Coats.
Claims use since Feb. 1, 1918.

Ser. No. 111,129. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed May 23, 1918.

CLIPPER

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 12, 1918.

Ser. No. 111,130. (CLASS 37. PAPER AND STATIONERY.) J. C. BLAIR COMPANY, Huntingdon, Pa. Filed May 23, 1918.

CO- -ED

Particular description of goods.—Paper for Writing and Printing Purposes, Drawing-Paper, Pencil-Paper, Envelops, Writing-Tablets, Pencil-Tablets, Drawing-Tablets, Spelling-Tablets, and Blank Books.
Claims use since Feb. 12, 1918.

Ser. No. 111,146. (CLASS 22. GAMES, TOYS, AND SPORTING GOODS.) THE CELLULOID COMPANY, Newark, N. J., and New York, N. Y. Filed May 23, 1918.

IVALEUR

Particular description of goods.—Dominoes, Checkers, Dice, Dice-Cups, Poker-Chips, Parlor-Balls, Game-Markers, Billiard-Markers, Umpire-Indicators, Pool-Triangles, Hand or Toy Whistles, and Rattles. The Said Articles are Made of Compounds of Pyroxylin.
Claims use since Dec. 11, 1917, on dominoes, dice, parlor-balls, and hand or toy whistles; since Dec. 20, 1917, on checkers, dice-cups, poker-chips, game-markers, and rattles; since Jan. 4, 1918, on billiard-markers; since Jan. 5, 1918, on umpire-indicators, and since Jan. 12, 1918, on pool-triangles.

TRADE-MARK REGISTRATIONS GRANTED

JUNE 25, 1918.

122,051. PALM-SEED KERNELS, INDIA-RUBBER, BALL-RUBBER, PASTE RUBBER, IVORY, AND GUM-COPAL. AFRICAN ASSOCIATION LIMITED, Liverpool, England.
Filed November 19, 1917. Serial No. 107,456. PUBLISHED APRIL 9, 1918.

122,052. ALUMINUM KITCHEN COOKING UTENSILS—NAMELY, KETTLES, SAUCEPANS, FRYPANS, PERCOLATORS, COFFEE-POTS, TEAPOTS, COMBINATION SETS, AND ROASTERS. ALUMINUM PRODUCTS COMPANY, La Grange, Ill.
Filed June 28, 1917. Serial No. 104,725. PUBLISHED MARCH 19, 1918.

122,053. WOOD-PRESERVER FOR PRESERVING TIMBERS OF ALL KINDS. AMERICAN TAR PRODUCTS COMPANY, Wilmington, Del., and Chicago, Ill.
Filed October 1, 1917. Serial No. 106,527. PUBLISHED APRIL 9, 1918.

122,054. COTTON PIECE GOODS. APPLETON COMPANY, Lowell, Mass.
Filed February 9, 1918. Serial No. 108,911. PUBLISHED MARCH 26, 1918.

122,055. COTTON PIECE GOODS. APPLETON COMPANY, Lowell, Mass.
Filed February 9, 1918. Serial No. 108,908. PUBLISHED MARCH 26, 1918.

122,056. COTTON PIECE GOODS. APPLETON COMPANY, Lowell, Mass.
Filed February 9, 1918. Serial No. 108,909. PUBLISHED MARCH 26, 1918.

122,057. COTTON PIECE GOODS. APPLETON COMPANY, Lowell, Mass.
Filed February 9, 1918. Serial No. 108,912. PUBLISHED MARCH 19, 1918.

122,058. COTTON PIECE GOODS. APPLETON COMPANY, Lowell, Mass.
Filed February 9, 1918. Serial No. 108,910. PUBLISHED MARCH 26, 1918.

122,059. CANDIES. BEECH-NUT PACKING CO., Canajoharie, N. Y.
Filed November 27, 1917. Serial No. 107,627. PUBLISHED APRIL 9, 1918.

122,060. COTTON SEWING-THREAD AND COTTON YARN. M. BRODSKY & CO., INC., New York, N. Y.
Filed February 2, 1918. Serial No. 108,767. PUBLISHED MARCH 26, 1918.

122,061. BREAD. BURNY BROS., Chicago, Ill.
Filed December 13, 1917. Serial No. 107,932. PUBLISHED APRIL 9, 1918.

122,062. INNER TUBES FOR RUBBER TIRES. BUTLER BROTHERS, New York, N. Y.
Filed January 17, 1918. Serial No. 108,497. PUBLISHED APRIL 9, 1918.

122,063. FRESH GRAPES. THE CALIFORNIA FRUIT EXCHANGE, Sacramento, Cal.
Filed October 23, 1917. Serial No. 106,906. PUBLISHED MARCH 26, 1918.

122,064. AUTOMOBILE-TIRES OF RUBBER AND FABRIC. CARLISLE CORD TIRE COMPANY, INC., New York, N. Y.
Filed October 23, 1917. Serial No. 106,905. PUBLISHED JANUARY 22, 1918.

122,065. SELF-RISING WHEAT-FLOUR. CENTENNIAL MILL CO., Memphis, Tenn.
Filed January 31, 1918. Serial No. 108,707. PUBLISHED MARCH 26, 1918.

122,066. BALANCED FOOD DERIVED PARTLY FROM SOY-BEANS IN THE FORM OF FLOUR OR MEAL. CEREO COMPANY, Tappan, N. Y.
Filed December 5, 1917. Serial No. 107,763. PUBLISHER MARCH 26, 1918.

122,067. PILE FABRICS SOLD AS PIECE GOODS. COLLINS & AIKMAN COMPANY, Jersey City, N. J., and Philadelphia, Pa.
Filed December 26, 1917. Serial No. 108,139. PUBLISHED MARCH 26, 1918.

122,068. POPCORN. CHARLES CRETORS, Chicago, Ill.
Filed October 15, 1917. Serial No. 106,766. PUBLISHED APRIL 9, 1918.

122,069. CERTAIN NAMED FOODS. THE CUDAHY PACKING COMPANY, Chicago, Ill., and Omaha, Nebr.
Filed September 9, 1916. Serial No. 97,869. PUBLISHED FEBRUARY 19, 1918.

122,070. CANNED PEPPERS. THE CURTIS CORPORATION, Bloomington and Long Beach, Cal.
Filed January 21, 1918. Serial No. 108,568. PUBLISHED MARCH 26, 1918.

122,071. LOAD-CARRYING WHEELS. DETROIT PRESSED STEEL COMPANY, Detroit, Mich.
Filed February 9, 1918. Serial No. 108,917. PUBLISHED APRIL 2, 1918.

122,072. RUBBER HOSE, RUBBER BELTING, AND ASBESTOS PACKING. DOMINION ASBESTOS AND RUBBER CORPORATION, New York, N. Y.
Filed January 24, 1918. Serial No. 108,610. PUBLISHED MARCH 19, 1918.

122,073. MONTHLY PERIODICALS. THOMAS A. EDISON, INCORPORATED, West Orange, N. J.
Filed May 16, 1917. Serial No. 103,862. PUBLISHED APRIL 9, 1918.

122,074. AEROPLANE-PROPELLERS. FLOTTORP MANUFACTURING COMPANY, Chicago, Ill.
Filed January 18, 1918. Serial No. 108,516. PUBLISHED MARCH 5, 1918.

122,075. STEEL TUBES. THE ELYRIA IRON AND STEEL COMPANY, Cleveland, Ohio.
Filed February 18, 1918. Serial No. 109,055. PUBLISHED MARCH 26, 1918.

122,076. FOOT AND BATH TABLETS. BERNARD B. FORQUER, Joliet, Ill.
Filed November 21, 1917. Serial No. 107,502. PUBLISHED APRIL 9, 1918.

122,077. MACARONI, SPAGHETTI, AND NOODLES. THE FOULDS MILLING COMPANY, Chicago, Ill., and Cincinnati, Ohio.
Filed April 19, 1917. Serial No. 103,109. PUBLISHED MARCH 26, 1918.

122,078. PREPARATION FOR BILIOUSNESS. JAMES H. FRIBLEY, Bourbon, Ind.
Filed January 22, 1918. Serial No. 108,585. PUBLISHED APRIL 9, 1918.

122,079. LIVE STOCK—VIZ., LIVE HOGS AND POULTRY. WM. P. GERST, Alton, Iowa.
Filed December 15, 1917. Serial No. 107,982. PUBLISHED APRIL 9, 1918.

122,080. CANNED ROE OR A PRODUCT PREPARED FROM CANNED ROE. GORTON-PEW FISHERIES CO., Gloucester, Mass.
Filed February 9, 1918. Serial No. 108 920. PUBLISHED APRIL 9, 1918.

122,081. CANNED ROE OR A PRODUCT PREPARED FROM CANNED ROE. GORTON-PEW FISHERIES CO., Gloucester, Mass.
Filed February 9, 1918. Serial No. 108,919. PUBLISHED APRIL 9, 1918.

122,082. FEVER-TONIC. JESSIE GREEN, Tampa, Fla.
Filed October 4, 1917. Serial No. 106,599. PUBLISHED APRIL 9, 1918.

122,083. COATS, OVERALLS, AND WORK-SHIRTS. HEIDENHEIM BROS., New York, N. Y., and New Orleans, La.
Filed May 4, 1917. Serial No. 103,533. PUBLISHED MARCH 19, 1918.

122,084. FABRIC WOVEN OF WORSTED YARN, WOOLEN YARN, AND SILK. HOLDEN-LEONARD CO., New York, N. Y.
Filed January 14, 1918. Serial No. 108,454. PUBLISHED MARCH 26, 1918.

122,085. SHADE-CLOTHS OF SIZED AND OIL-PAINTED FABRICS. INTERSTATE SHADE CLOTH CO., Hoboken, N. J.
Filed December 17, 1917. Serial No. 108,013. PUBLISHED MARCH 19, 1918.

122,086. SALT. INDEPENDENT SALT CO., New York, N. Y.
Filed January 30, 1918. Serial No. 108,694. PUBLISHED APRIL 9, 1918.

122,087. PRINTED BOOKS, PERIODICALS PUBLISHED MONTHLY, PAMPHLETS, AND CIRCULARS USED BETWEEN THE DIFFERENT UNITS OF THE ASSOCIATION FOR THE FURTHERANCE OF ITS OBJECTS. INTERNATIONAL BROTHERHOOD OF STEAM SHOVEL AND DREDGE MEN, Chicago, Ill.
Filed January 31, 1918. Serial No. 108,714. PUBLISHED APRIL 9, 1918.

122,088. EXTRACTS OF THE PARAGUAYAN TEA-PLANT, (ILEX PARAGUAENSIS.) J. F. MACADAM & CO., Buenos Aires, Argentina.
Filed September 26, 1917. Serial No. 106,454. PUBLISHED DECEMBER 11, 1917.

122,089. HEADACHE-TABLETS. DANIEL H. MELOCHE, Detroit, Mich.
Filed May 28, 1917. Serial No. 104,124. PUBLISHED APRIL 9, 1918.

122,090. CANNED OR PRESERVED FISH. JOSEPH HOWARD MERCIAN, New York, N. Y.
Filed December 22, 1917. Serial No. 108,104. PUBLISHED APRIL 9, 1918.

122,091. CANNED OR PRESERVED FISH AND PEPPERS. JOSEPH HOWARD MERCIAN, New York, N. Y.
Filed December 22, 1917. Serial No. 108,102. PUBLISHED APRIL 9, 1918.

122,092. CANNED OR PRESERVED FISH. JOSEPH HOWARD MERCIAN, New York, N. Y.
Filed December 22, 1917. Serial No. 108,103. PUBLISHED APRIL 9, 1918.

122,093. AUTOMOBILES AND MOTOR-TRUCKS. THE NASH MOTORS COMPANY, Kenosha, Wis.
Filed June 29, 1917. Serial No. 104,765. PUBLISHED JANUARY 29, 1918.

122,094. PRINTED BOOKLETS OR PAMPHLETS AND CIRCULARS. THE NATIONAL BANK OF COMMERCE IN ST. LOUIS, St. Louis, Mo.
Filed December 15, 1917. Serial No. 107,996. PUBLISHED APRIL 2, 1918.

122,095. CANNED SARDINES. NEPTUNE SEA FOOD COMPANY, San Diego, Cal.
Filed February 12, 1918. Serial No. 108,964. PUBLISHED APRIL 9, 1918.

122,096. HAIR-DYE. NEVER-TEL LABORATORIES COMPANY, Kansas City, Mo.
Filed February 5, 1918. Serial No. 108,836. PUBLISHED APRIL 9, 1918.

122,097. COMPOUND OF SORGHUM AND CORN-SYRUP. NEW ORLEANS COFFEE CO., LTD., New Orleans, La.
Filed December 28, 1917. Serial No. 108,200. PUBLISHED APRIL 9, 1918.

122,098. SALVES AND OINTMENTS FOR FEVER-SORES, CHAPPED HANDS, WOUNDS, CUTS, BURNS, SCALDS, ITCH, PILES, RUNNING SORES, CRACKED HANDS, BRUISES, HEADACHES, SORE FEET, &c. PETER NIELSEN, Seattle, Wash.
Filed June 4, 1917. Serial No. 104,251. PUBLISHED APRIL 9, 1918.

122,099. EVAPORATED MILK. THE OATMAN CONDENSED MILK CO., Dundee, Ill.
Filed November 24, 1917. Serial No. 107,590. PUBLISHED FEBRUARY 5, 1918.

122,100. CREAMERY-BUTTER. OTTAWA CONDENSING CO., Ottawa, Kans.
Filed June 3, 1916. Serial No. 95,613. PUBLISHED APRIL 9, 1918.

122,101. COTTON PIECE GOODS. PACIFIC MILLS, Lawrence and Boston, Mass.
Filed October 31, 1917. Serial No. 107,059. PUBLISHED APRIL 9, 1918.

122,102. EMBROIDERY-YARNS. FRANK F. PELS CO., New York, N. Y.
Filed January 17, 1917. Serial No. 100,681. PUBLISHED DECEMBER 25, 1917.

122,103. AEROPLANES. A. V. ROE & CO. LTD., Manchester, England.
Filed October 16, 1917. Serial No. 106,793. PUBLISHED APRIL 2, 1918.

122,104. MALTLESS CEREAL BEVERAGES SOLD AS SOFT DRINKS. SCHOENHOFEN COMPANY, Chicago, Ill.
Filed February 21, 1918. Serial No. 109,161. PUBLISHED MARCH 26, 1918.

122,105. OINTMENT USED FOR ECZEMA. THOMAS SLEVIN, Woodstock, Ill.
Filed June 18, 1917. Serial No. 104,496. PUBLISHED APRIL 9, 1918.

122,106. CANNED FRUITS AND CANNED BERRIES. SODUS PACKING CO., INC., Sodus, N. Y.
Filed July 24, 1917. Serial No. 105,239. PUBLISHED DECEMBER 4, 1917.

122,107. CHOCOLATES, LEMON DROPS, WILD-CHERRY DROPS, PEPPERMINT DROPS, HARD CANDIES, FRUIT DROPS, TOFFY. SOLO MANUFACTURING COMPANY, New York, N. Y.
Filed January 31, 1918. Serial No. 108,727. PUBLISHED MARCH 12, 1918.

122,108. GAS-DRIVEN AUTOMOBILE-HEATERS. NATHAN LOUIS SHATEN, Camden, N. J.
Filed December 15, 1917. Serial No. 107,993. PUBLISHED APRIL 2, 1918.

122,109. OIL-LAMPS, OIL-LANTERNS, OIL-STOVES, AND OIL-HEATERS. STANDARD OIL COMPANY OF NEW YORK, New York, N. Y.
Filed July 14, 1917. Serial No. 105,052. PUBLISHED MARCH 19, 1918.

122,110. PRINTERS' BLANKETS. J. STANLEY CORWIN, New York, N. Y.
Filed January 14, 1918. Serial No. 108,446. PUBLISHED MARCH 19, 1918.

122,111. PREPARATION FOR CLEANING THE SCALP OF THE HEAD AND PRESSING AND CLEANING THE HAIR. MRS. MINNIE STARNES, St. Louis, Mo.
Filed October 13, 1917. Serial No. 106,762. PUBLISHED APRIL 9, 1918.

122,112. BUNTING. STEWART & SPARRY, New York, N. Y.
Filed January 14, 1918. Serial No. 108,463. PUBLISHED APRIL 2, 1918.

122,113. METALLIC PACKING. JOSEPH G. STROCK, Pittsburgh, Pa.
Filed August 11, 1917. Serial No. 105,607. PUBLISHED APRIL 9, 1918.

122,114. BABBITT METAL. SYRACUSE SMELTING WORKS, Brooklyn, N. Y.
Filed June 28, 1916. Serial No. 96,218. PUBLISHED MARCH 19, 1918.

122,115. SELF-RISING FLOUR. CHARLES TIEDEMANN MILLING CO., O'Fallon, Ill.
Filed May 7, 1917. Serial No. 103,617. PUBLISHED AUGUST 7, 1917.

122,116. ANIMAL-TRAPS. C. B. TRUMBLE, Syracuse, N. Y.
Filed December 27, 1917. Serial No. 108,189. PUBLISHED MARCH 19, 1918.

122,117. CANNED SARDINES. CHARLES EDWARD VAN LANDINGHAM, Los Angeles, Cal.
Filed February 12, 1918. Serial No. 108,969. PUBLISHED MARCH 26, 1918.

122,118. PISTON PACKING-RINGS. VULCAN MACHINE & TOOL COMPANY, St. Louis, Mo.
Filed February 14, 1918. Serial No. 109,006. PUBLISHED MARCH 26, 1918.

122,119. NEWSPAPER PUBLISHED DAILY AND SUNDAY. THE WASHINGTON TIMES COMPANY, Washington, D. C.
Filed November 9, 1917. Serial No. 107,272. PUBLISHED MARCH 26, 1918.

122,120. COFFEE SUBSTITUTES—NAMELY, CHICORY. MRS. J. WILLIOT FILS, La Garenne-Colombes, France.
Filed November 11, 1916. Serial No. 99,264. PUBLISHED APRIL 9, 1918.

DECISIONS

OF THE

COMMISSIONER OF PATENTS

AND OF

UNITED STATES COURTS IN PATENT CASES.

COMMISSIONER'S DECISIONS.

EX PARTE THOMAS.

Decided May 18, 1918.

1. RULE 75, CONSTRUED AND APPLIED—ANTICIPATION AND PRIOR INVENTION DISTINGUISHED.

A patent which discloses an invention in controversy and was granted after the filing of an application therefor, (or other reduction to practice,) on an application filed earlier, does not establish anticipation of that invention. The bar which it establishes, if any, is that of prior invention, as of the date of filing the application on which it was granted.

2. SAME—REQUISITES OF PATENT CITED.

Such a patent establishes the bar of prior invention against the patentability to another inventor of any invention to which it contains claims, irrespective of their scope or of the scope of claims made by such other inventor. It also establishes that bar when it does not contain claims to the invention in controversy, *provided* that invention is germane to the invention to which it does contain claims. The invention in controversy is germane to the invention claimed in the patent when it is in substance included in that tangible subject-matter upon which the claims in the patent are based.

3. SAME—NECESSITY OF PATENT.

To complete the establishment of the bar of prior invention by the filing of an allowable application which discloses the invention in controversy and does not contain claims to it, but does contain claims to which it is germane, it is necessary that such application shall have matured into a patent.

4. SAME—PATENT MUST SHOW THE VERY INVENTION IN CONTROVERSY.

Such a patent in order to establish the bar must disclose the very invention in controversy, whether or not what it discloses would be sufficient to negative patentable novelty of the invention in controversy if it were available to show anticipation.

5. SAME—FORCE OF LIMITATIONS.

If a claim to the invention in controversy includes limitations which are not embraced in the tangible subject-matter upon which the claims in such a patent are based and if those limitations state material and substantial parts of that invention, the patent does not establish the bar of prior invention, even though the difference did not require invention; but if the limitations merely state the operative environment of the invention in controversy then they do not state "material and substantial" parts of that invention and the patent does establish the bar.

6. SAME—TO WHAT CASES APPLICABLE.

An application should be rejected on such a patent if an interference in fact, based upon the claims in the application and the subject-matter disclosed in the patent which is germane to the invention claimed therein, the counts of which might be broader than or otherwise different from the claims in the application, provided they did not omit a material and substantial feature of those claims, would exist if both were applications, irrespective of the claims in the patent.

APPEAL from Examiners-in-Chief.

ELECTRIC-LAMP SOCKET.

Messrs. Howson & Howson and *Mr. William Abbe* for the applicant.

NEWTON, *Commissioner:*

This is an appeal from the decision of the Examiners-in-Chief affirming the action of the Primary Examiner finally rejecting claims 1, 2, 3, 7, and 8, under Rule 75, upon the patent to Barr, No. 1,066,783, July 8, 1913, granted on an application filed April 26, 1911.

The decision requires consideration of the validity and proper application of the pertinent provisions of Rule 75.

DEFINITIONS.

For the purposes of this decision the distinction is constantly maintained between "anticipation" and "priority," the former term meaning the existence in the prior art of something which precludes the novelty of the invention in controversy, the latter term meaning the earlier date of invention of the invention in controversy by one of two or more rival inventors. The term "prior art" is herein used as meaning that material of invention which may, if of anticipatory character, defeat the right of an inventor to patent protection solely because of its existence prior to the date of his invention. For the sake of brevity I have adopted the intrinsically inaccurate term "copending patent" to denote a patent granted after the filing of the application for the invention in controversy or other reduction to practice of that invention on an application earlier filed.

THE REQUISITES OF ANTICIPATION.

An invention is not anticipated unless the prior art contains some invention so nearly like it that, in view of all pertinent facts, the difference did not require invention, which was completed or perfected and knowledge of which was accessible to the public prior to the date of its completion. Completion of an invention requires reduction to practice, actual or constructive. Constructive reduction to practice is accomplished when an allowable application has been filed complete in the Patent

Office. It has reference to questions pertaining to proceedings necessary to obtain a patent and to the trial of an issue of priority between applications while they remain within the jurisdiction of the Patent Office, which may be here neglected, and to the question concerning completion of the invention to which it relates. Proof of completion of the invention is *prima facie* when the application is found allowable. It is subject to review as evidence of a fact. Knowledge of an anticipating invention must be accessible to the public. It anticipates only inventions which were completed after such accessibility accrued.

PRIORITY BETWEEN PATENTS WHICH CLAIM THE INVENTION IN CONTROVERSY.

In the decision on a question of priority that inventor is held to be the first inventor who first reduced the invention in controversy to practice or who first conceived that invention and was diligent in reducing it to practice. An application which has matured into a patent and contains claims to a given invention is presumptive proof of the perfection of that invention by the patentee at the date of the application. An issue of priority, which means priority of right to patent protection, may be raised between a plurality of such patents. In this case completion of the proof of constructive reduction to practice by each patentee relates back to the date of the application, being treated as evidence of the fact that he completed the invention at least as early as that date. The legal right of each patentee dates from the fact of his completion of the invention. An issue which is, in fact, that of priority between patents may be raised in any litigation which involves the validity of a patent under the fourth of the defenses which are authorized by the statute, viz:

that he (the patentee of the patent in suit) was not the original and first inventor or discoverer of any material and substantial part of the thing patented,

under which no patent is valid if another patent discloses and claims the same subject-matter of invention, irrespective of the scope of the claims, and if the date of invention by the patentee of that patent antedates the date of invention by the patentee of the patent in suit.

EFFECT OF A PATENT WHICH DISCLOSES BUT DOES NOT CLAIM A GIVEN INVENTION AS EVIDENCE OF THE FACT THAT THAT INVENTION WAS PERFECTED AT THE DATE OF FILING THE APPLICATION ON WHICH IT WAS GRANTED.

It is manifest that a patent which discloses but does not claim a given invention is equally good evidence of the fact that that invention was perfected when the application on which it was granted was filed, provided the disclosure of that invention in the application as filed was quite clear, and that it should have the same effect so far as it is regarded merely as evidence. An application which clearly discloses a given invention without claiming it, which application has been found allowable as a whole and has matured into a patent, constitutes complete presumptive documentary evidence, under the general law of evidence, to show the fact that an inventor who produced a like invention after it was filed "was not the original and first inventor." The presumption of perfection of an invention, whether claimed or not, at the date of filing an application clearly disclosing it upon which a patent has been granted is a sufficient basis for decision, so far as the question concerns the evidence showing that fact.

EFFECT OF A PATENT WHICH DISCLOSES BUT DOES NOT CLAIM A GIVEN INVENTION IN CONFERRING UPON THE PUBLIC THE RIGHT OF A RIVAL INVENTOR AS AGAINST ANOTHER INVENTOR WHO DOES CLAIM THAT INVENTION, RAISING AN ISSUE OF PRIORITY.

But so far as the question concerns the defeat of a legal right or the establishment of a legal right some further considerations are involved.

If we had merely to consider the terms authorizing the fourth defense found in the statute, literally construed, adequate evidence of the fact of perfection of an invention identical in character with the invention in controversy at the date of filing of the application on which a patent which disclosed it was granted would be conclusive to sustain that defense as of that date. The question whether such evidence of the perfection of an invention so nearly like the invention in controversy that the difference required no invention would also sustain that defense is embraced in a discussion hereinafter. The question presents itself, what is the bearing upon the bar of prior invention of the rule, which is well settled with reference to anticipation, that knowledge of the anticipating invention must be accessible to the public? The bare fact, shown by an application on file in the Patent Office, that the prior invention was perfected at a certain date is not sufficient. It must also appear that that application, if it does not claim the invention, has become a patent. At what date must the granting of that patent occur in order to defeat the right of the inventor of the invention in controversy to patent protection?

When two applications are copending, both of which claim the same invention, there are two inventors each of whom has established his legal right to patent protection on that invention, subject to the possibly superior right of the other.

But what is the real difference between an application which claims a given invention and one which does not but might claim it with reference to prior invention? With reference to an issue of priority between conflicting claims, the difference is that between an applicant who asserts his right and one who does not. If an applicant does not assert his right, having one, he abandons it to the public. (*Miller* v. *Brass Co.*, 104 U. S., 350, 352; 21 O. G., 201; *Mahn* v. *Harwood*, 112 U. S., 354, 360, 361; 30 O. G., 657; *Underwood* v. *Gerber*, 149 U. S., 224, 230; 63 O. G., 1063; *Millett & Reed* v. *Duell, Com.*, 18 App. D. C., 186; 96 O. G., 1241.) An applicant who might claim a patentable invention in an allowable application which discloses it

has established his legal right to patent protection on that invention by filing the application. To obtain a patent covering that invention, in the absence of an interference, he has only to take his own. If he does not take his own, his right inures to the public. It may well be considered that when an application which discloses and might claim an invention but does not claim it and one which both discloses and claims it are copending these are in fact conflicting applications and that when both of these applications have matured into patents there are, in fact, conflicting patents, one of which represents the interest of the public, the public having succeeded to the right of the inventor who did not claim it. It is a reasonable interpretation of the intent of the statute in authorizing the fourth defense to suppose that it was enacted to provide for that case, among others.

The copending patent which discloses but does not claim the invention in controversy is a definite publication of its disclosure, with a definite assertion of right to patent protection on a certain stated portion of that disclosure, which involves an abandonment to the public by obvious logical implication of whatever right to patent protection may be embraced in that disclosure but omitted from the inventor's assertion of right, so far as he is capable of such abandonment. This abandonment to the public follows upon the establishment of legal right in the inventor by perfection of the invention disclosed, coupled with due proceedings required to obtain a patent. The disclosure in a patent is a unitary whole, all parts of which are related in some way to the subject-matter claimed. (See *Drewson* v. *Hartje Mfg. Co.*, 131 Fed. Rep., 734, 739, and *Jackson Spring Co.* v. *Adler*, 243 Fed. Rep., 386, 388; 246 O. G., 1032.) The analogy of the right of the public thus acquired to the right of the patentee to what is included in his assertion of his right seems to be perfect. Since the right of the patentee dates from the perfection of his invention, the right of the public should date from the same event. In this case, as well as in the case of a patent which claims the invention in controversy, the public does not need the consideration which it would receive for granting a patent on the invention in controversy. If one patent has been granted on a given invention, the grant of a second patent on the same invention would be a grant for which the public has received no valuable consideration. Similarly if the public has knowledge of a given invention through its disclosure in a patent which does not claim it and has succeeded to the right of the patentee who might have claimed it the grant of a patent claiming that invention would be a grant for which the public has received no valuable consideration; but the succession of the public to the right of the inventor is not perfected until a patent has been granted, because it depends upon the logical implication of abandonment, which does not occur until the patent has been granted and published. The public has only an inchoate right to an invention disclosed but not claimed in a pending application, which may or may not be perfected. Such an application does not put the question of priority in issue on behalf of the inventor, and it cannot put that question in issue on behalf of the public, because the abandonment upon which the right of the public depends has not occurred. Therefore a pending application does not support the bar of prior invention unless it contains claims to the invention in controversy, when it puts the question of priority in issue as between rival inventors. Furthermore, not only the right of the public to an invention disclosed but not claimed in an application, but also the interest of the public in the defeat of a claim by another inventor to patent protection on that invention, whether claimed or not, fails to accrue until a patent is granted on that application. So long as knowledge of an invention disclosed in an application is not accessible to the public the interest of the public is served by the grant of a patent to another inventor covering that invention, in the same way as if there existed no knowledge of it by any one other than the patentee. In that case the public receives the normal valuable consideration for the grant of a patent. For the same reason that accessibility of knowledge of the invention to the public is essential to the defense of anticipation it is essential to the defense of prior invention, although in the latter case it may be effective with reference to a different date.

But this reasoning is applicable only to a copending patent in which the invention in controversy or so much of it as the public may have become entitled to might have been claimed. In *Miller* v. *Eagle Mfg. Co.* (151 U. S., 186, 198; 66 O. G., 845) the Supreme Court said:

The result of the foregoing and other authorities is that no patent can issue for an invention actually covered by a former patent, especially to the same patentee, although the terms of the claims may differ; that the second patent, although containing a broader claim, more generical in its character, than the specific claims contained in the prior patent, is also void; but that where the second patent covers matter described in the prior patent, essentially distinct and separable from the invention covered thereby, and claims made thereunder, its validity may be sustained.

In the last class of cases it must distinctly appear that the invention covered by the later patent was a separate invention, distinctly different and independent from that covered by the first patent; in other words, it must be something substantially different from that comprehended in the first patent. It must consist in something more than a mere distinction of the breadth or scope of the claims of each patent.

I construe this decision as meaning that the claims in a valid second patent must be addressed to subject-matter of invention which is not germane to the claims in the first patent. So far as the tangible subject-matter of invention upon which the claims in the first patent are founded includes what is not embraced in the claims in that patent the implication of abandonment to the public occurs; but so far as the first patent discloses subject-matter quite independent of that upon which its claims are founded that implication does not occur. To this extent I consider that the authorities sustain the proposition that an issue of priority can only be raised between conflicting cases—cases conflicting when their claims pertain to common tangible

subject-matter of invention which may be conceived more or less generically or according to different points of view. I think that this view harmonizes with the general tenor of the decisions hereinafter discussed as bearing upon the question concerning conflicting claims.

ANALYSIS OF DECISIONS WHICH HOLD THAT A PATENT SUSTAINS THE DEFENSE OF ANTICIPATION BY PRIOR ART ONLY WHEN IT WAS GRANTED PRIOR TO THE DATE OF COMPLETION OF THE INVENTION IN CONTROVERSY.

It is held that the first branch of the third statutory defense—

that it (the invention in suit) had been patented or described in some printed publication prior to his (the patentee of the patent in suit) supposed invention or discovery thereof—

is sustained by a patent only when the date of its grant is prior to the date of invention by the patentee of the patent in suit. This is agreed to by all decisions pertinent to the topic. The following decisions state that rule, but go no further: *Bates* v. *Coe*, (98 U. S., 31, 33, and 34; 15 O. G., 337,) so far as what it actually decided goes, as several subsequent decisions have interpreted it; *Kelleher* v. *Darling*, (C. D., 1878, 381, 383, and 387;) *Anderson* v. *Collins*, (122 Fed. Rep., 451, 458;) *Eck* v. *Kutz*, (132 Fed. Rep., 758, 764;) *Ajax Metal Co.* v. *Brady Brass Co.*, (155 Fed. Rep., 409, 415;) *Union Typewriter Co.* v. *Smith & Bros.*, (173 Fed. Rep., 288, 291;) *Gray Telephone Co.* v. *Baird Mfg. Co.*, (174 Fed. Rep., 417, 421;) *Turner Brass Co.* v. *Appliance Co.*, (203 Fed. Rep., 1001, 1002;) *General Electric Co.* v. *Allis-Chalmers Co.*, (190 Fed. Rep., 165, 170;) *Johns-Pratt Co.* v. *Froeman Co.*, (201 Fed. Rep., 356, 360, and 204 Fed. Rep., 288;) *Vacuum Engineering Co.* v. *Dunn*, (209 Fed. Rep., 219, 220;) *Alvord* v. *Smith & Watson Iron Works*, (216 Fed. Rep., 150, 154;) *Goessling Box Co.* v. *Gumb*, (243 O. G., 241.) Some, but not all, of these decisions turned on or involved in an essential way a question of pleading. That a copending patent is not a part of the prior art is stated in several of the decisions above cited and in *Diamond Drill Co.* v. *Kelly Bros.*, (120 Fed. Rep., 282, 286, and 123 Fed. Rep., 882;) *Sundh Co.* v. *Interborough Co.*, (198 Fed. Rep., 94, 97;) *Thomson-Houston Co.* v. *Ohio Brass Co.*, (130 Fed Rep., 542, 546;) *Horton Co.* v. *White Lily Co.*, (213 Fed. Rep., 471, 476,) contrary to which, expressly or by implication, are *ex parte Eddleblute*, (C. D., 1890. 124, Mitchell, Com.;) *Millett & Reed* v. *Duell*, *supra*; *Dowson* v. *Hartje Co.*, *supra*; *Electric Co.* v. *Westinghouse Co.*, (171 Fed. Rep., 84, 87;) *Twentieth Century Co.* v. *Loew Co.*, (243 Fed. Rep., 373, especially 386,) and *Lemley* v. *Dobson*, (243 Fed. Rep., 391, 395; 246 O. G., 1203.) That—

the filing of an application without evidence of open use affords no element of publicity,

and is for that reason of itself no complete proof of anticipation, is definitely held in *Thomson-Houston Co.* v. *Ohio Brass Co.*, *supra*; *General Electric Co.* v. *Allis-Chalmers Co.*, *supra*; *Vacuum Engineering Co.* v. *Dunn*, *supra*; *Alvord* v. *Smith & Watson Iron Works*, *supra*, and *Sundh Co.* v. *Interborough Co.*, *supra*, in all of which the anticipatory effects of patents were passed upon, and in *Brown* v. *Guild* (6 O. G., 392, 395;) *Northwestern Fire Extinguisher Co.* v. *Philadelphia Co.*, (6 O. G., 34, 37,) and *Lyman Ventilating Co.* v. *Lalor*, (15 Fed. Cas., 1163, 1164,) in which applications which had not matured into patents were considered.

From the foregoing authorities it appears that the weight of authority is to the effect that a patent does not show anticipation back of the date of its grant. Whenever, in consequence of pleading or otherwise, the deciding tribunal considers the real question to be decided to be that of anticipation, it decides that a patent is an anticipation only from the date of its grant, except, among the cases cited herein, in the Commissioner's decision in *ex parte Eddleblute*, in the decision in the Court of Appeals of the District of Columbia upon an application in *Millett & Reed* v. *Duell*, in the five cases decided in the sixth circuit, and in *Hillard* v. *Fisher Co.* (159 Fed. Rep., 439, 441) by the court of appeals in the second circuit. The excepted decisions all regard the question to be decided as arising under the fourth statutory defense, but do not hold that that defense is not a defense of anticipation.

DECISIONS WHICH, IF ANY, HOLD THAT A COPENDING PATENT WHICH DISCLOSES BUT DOES NOT CLAIM THE INVENTION IN CONTROVERSY IS INSUFFICIENT TO SHOW PRIOR INVENTION.

There are some decisions concerning which it may be questioned whether they do not positively decide or at least contain dicta to the effect that a copending patent which does not claim the invention in controversy is insufficient to show prior invention. Most of the decisions pertinent to this whole subject say little or nothing about whether the patent relied upon to sustain the defense of prior invention does or does not claim the invention in controversy; but it cannot be doubted that a patent which does claim that invention would sustain that defense whenever the requisite associated facts appear.

The decision of the Supreme Court in *Bates* v. *Coe*, *supra*, actually decided only that a copending patent does not support the defense of anticipation; but it contains a discussion of copending patents which were cited, among others, against the patent in suit, as applicable with equal effect to both of the defenses of anticipation and of prior invention. A patent in order to sustain the defense of anticipation must be granted before the date of invention of the invention in controversy. The implication of the Court's mode of treating these patents is that the same must be true of a patent which would sustain the defense of prior invention; but this mode of treatment had reference to the patents before the Court in the case at bar, which did not disclose the same invention as that which was claimed in the patent in suit in the sense in which the two inventions could be involved in an issue of priority. This was held by the Court to be the fact, as it obviously was from the evidence considered. *Those* patents would have the same application to both defenses, and the position of the Court amounts to a dictum going as far as that, but no further.

In *Howes* v. *McNeal* (4 Fed. Rep., 151; 17 O. G., 799) the circuit court, deciding a motion to admit certain file-wrappers in evidence, held as follows:

The object of introducing as evidence such file wrappers is stated to be to show that the inventions described in the several patents were made at dates as early as the oaths to the specifications. That is not the proper way to show the reduction to practice and use of the inventions claimed to be prior, so as to invalidate the plaintiff's patent. That must be shown by direct evidence of the construction and use of the machines. Nothing from the Patent Office can be admitted in evidence of earlier dates than the patents. All such evidence would be hearsay and secondary. A patent is allowed, by statute, to speak as a public grant; but the preliminary papers are merely the declarations of third persons not parties to this suit, or connected with them in interest or title. The evidence is not competent.

This decision is directly against the admissibility of the file of the application to show the date of perfection of the invention disclosed in the patent granted thereon or for any other purpose. In view of the later or even some earlier decisions this decision is no proof of the law on points pertinent to the present inquiry because it would prove too much. It is contrary to many other decisions, among which may be particularly cited *Barnes Automatic Sprinkler Co.* v. *Walworth Mfg. Co.*, (60 Fed. Rep., 605.)

American Roll Paper Co. v. *Weston*, (45 Fed. Rep., 686, 690,) although it cites *Howes* v. *McNeal*, *supra*, as the authority for its decision, only decides that three specified patents the disclosures in which differed from the invention of the patent in suit so much that, as the court held, they would not anticipate it, whatever their dates, failed to *anticipate* for the further reason that they were granted after the date of the application for the patent in suit. Apart from its citation of *Howes* v. *McNeal* as authority an argument in effect precisely like that above applied to *Bates* v. *Coe* applies to this case.

In *Thomson-Houston Electric Co.* v. *Ohio Brass Co.*, *supra*, the following paragraph occurs:

References are also made to certain patents which are subsequent to those in suit, although their applications appear to have been filed prior to the issue of these patents (the patents in suit). The study of the prior art in a patent case is necessary in order to prevent the unlawful appropriation of the invention of another, when that invention had become public. An application prior to the patent in suit can have weight only if there has been some actual use of the invention, so that there may be elements of publicity. Such an application cannot be said to be a part of the prior art unless this element of publicity is present.

It does not appear what was the precise situation presented with reference to the patents here referred to. The decision was addressed to the question of anticipation and contained no reference to the defense of prior invention. It decides that no patents of the class referred to are in point on the issue of anticipation for lack of publicity at the dates of perfection of the inventions claimed in the patents in suit.

In *Leonard* v. *Maxwell Co.*, recently decided, a certified copy of which has been filed, the case decided involved the validity of a patent against which was cited a copending patent. The court found that the patent cited as a bar and the application on which it was granted failed to disclose the invention claimed in the patent in suit. This patent would not sustain the defense of prior invention on any theory maintained by any of the authorities pertinent to that defense. Judged by the facts dealt with and the conclusion reached that the patent in suit was valid, this decision is well within the law as agreed to by all of the authorities. In its enunciation of the principles applied it is, as understood, more extreme than any other which I have found in the direction of holding that a patent of this class is not a bar to the inventor's right to patent protection. Apart from this extremity in the statement of the principles involved the decision is in line with those which hold that such a patent is not in point on the question of anticipation. The patent cited was not a good reference under any conditions. Regarding the facts presented and the conclusion favorable to the validity of the patent in suit, an argument like that above applied to *Bates* v. *Coe* is applicable to this case. The patent cited would have, in fact, the same bearing or lack of bearing upon both defenses. I quote the following from the decision, and note in particular the claim to consistency with *Sundh Co.* v. *Interborough Co.*, *supra*:

But Leonard and Field are not conflicting inventors, conflict is measured by claims; and no suggestion is made that Field claims anything Leonard got, nor *e converso*, nor (in my opinion) is it possible to postulate the claims in suit in Field's disclosures, nor any of Field's claims on those of Leonard.

Consequently, the legal question is not whether Field invented *and claimed* something Leonard's assignee is suing on, but whether anything that Field knew and had permitted to be made known in May, 1909, was something in the presumed light of which, Leonard acted in the month named; or in other words, whether in that month Field had added anything to the sum of human knowledge. Clearly he had not done this, for his pending application was a private communication to the Commissioner. Therefore, the file wrapper was not competent, for the purpose announced.

On authority, I think the foregoing consistent with *Sundh Co.* v. *Interborough Co.*, (198 Fed. Rep., 94;) *Vacuum Co.* v. *Dunn*, (209 Fed. Rep., 219,) and cases cited.

This is construed to mean that in order to raise an issue of priority between patents under the fourth statutory defense both patents must claim the invention in controversy; but it is noted that this construction is not compelled by the terms of the decision. Had it been possible to postulate Leonard's claims on Field's disclosures, other conditions remaining as stated in the first-quoted paragraph, the case presented would have been different from that which the court passed upon, and a decision in that case which held the patents to be conflicting need not be inconsistent with this decision.

DECISIONS WHICH HOLD THAT THE RESTRICTION OF THE PROOF OF INVENTION BY A PATENT TO THE DATE OF ITS GRANT IS CONFINED TO THE THIRD STATUTORY DEFENSE.

It is definitely held in some decisions that the restriction of the proof of invention by a patent to

the date of the grant of the patent is confined to the third statutory defense, setting up prior patenting or publication. This restriction could not apply to an issue of priority which involved conflicting claims. Obviously the rule should be the same if there is an issue of priority at all. If there can be an issue of priority without conflicting claims, the restriction should not apply to it. (*Westinghouse* v. *Chartiers Valley Gas Co.*, 43 Fed. Rep., 582, 588; *Barnes Sprinkler Co.* v. *Walworth Co., supra; Diamond Drill Co.* v. *Kelly Bros., supra; Turner Brass Co.* v. *Appliance Co., supra; Sundh Co.* v. *Interborough Co., supra; Horton Mfg. Co.* v. *White Lily Mfg. Co., supra; Lemley* v. *Dobson, supra.*) *Leonard* v. *Maxwell Co.* is to the contrary unless the claims conflict. In these cases conflicting claims appeared in the facts in *Westinghouse* v. *Chartiers Co.*, *Barnes Co.* v. *Walworth Co.*, and *Sundh Co.* v. *Interborough Co.*, and analogous claims appeared in *Diamond Co.* v. *Kelly Bros.;* but I do not see that either of these decisions makes the fact of conflicting or analogous claims essential. In the other cases, except *Leonard* v. *Maxwell Co.*, it does not appear whether there were conflicting claims or not. The question concerning the importance of conflicting claims is embraced in a discussion hereinafter.

DECISIONS WHICH HOLD THAT THE APPLICATION UPON WHICH A PATENT WAS GRANTED IS EVIDENCE ADMISSIBLE UNDER THE GENERAL LAW OF EVIDENCE, TENDING TO SHOW THAT THE INVENTION DISCLOSED IN THAT PATENT WAS COMPLETED AT THE DATE OF FILING THE APPLICATION, AND THUS TO SUSTAIN THE DEFENSE OF PRIOR INVENTION.

The application upon which a patent was granted is evidence tending to show that the invention disclosed in that patent was perfected at the date of the application, having the same status as any other evidence, (deriving no additional force from the fact that the invention is disclosed in a patent,) and such evidence supports, to the extent of its force under the general law of evidence, the fourth statutory defense. (*Kearney* v. *Lehigh Valley R. Co.*, 32 Fed. Rep., 320, 322; *Westinghouse* v. *Chartiers Valley Gas Co., supra; Barnes Sprinkler Co.* v. *Walworth Co., supra; Millett & Reed* v. *Duell, supra; Thomson-Houston Co.* v. *Ohio Brass Co., supra; Drewson* v. *Hartje Co., supra; Hillard* v. *Fisher Typewriter Co., supra; Electric Controller & Supply Co.* v. *Westinghouse Electric & Mfg. Co., supra; Sundh Co.* v. *Interborough Co., supra; Twentieth Century Machinery Co.* v. *Loew Mfg. Co., supra; Jackson Cushion Spring Co.* v. *Adler, supra; Lemley* v. *Dobson, supra.*) Even an application which did not mature into a patent is admissible evidence for what it may be worth, directly or collaterally, in conjunction with other evidence, to show the fact that a given invention was perfected at a certain date. (*Brown* v. *Guild, supra; Northwestern Fire Extinguisher Co.* v. *Philadelphia Co., supra.*)

DECISIONS BEARING ON THE THREE IMMEDIATELY-FOLLOWING PROPOSITIONS.

Three propositions which are nearly related are each supported by a series of decisions. I wish to consider them together. I will state each, with the corresponding decisions, and then discuss the decisions.

First. The application upon which a patent cited against the invention in controversy was granted is sufficient to prove that an invention clearly disclosed in it was perfected at the date when it was filed, so that it will sustain, as of that date, the defense "that he" (the patentee of the patent in suit) "was not the original and first inventor or discoverer of any material and substantial part of the thing patented." (*Kearney* v. *Lehigh Valley R. Co., supra; Westinghouse* v. *Chartiers Co., supra; ex parte Eddleblute, supra; Pope Mfg. Co.* v. *Gormully & Jeffery Mfg. Co.*, 144 U. S. 238, 244; *Barnes Sprinkler Co.* v. *Walworth Co., supra; Millett & Reed* v. *Duell, supra; Diamond Drill Co.* v. *Kelly Bros., supra; Drewson* v. *Hartje Co., supra; Hillard* v. *Fisher Typewriter Co., supra; Electric Controller & Supply Co.* v. *Westinghouse Co., supra; Sundh Co.* v. *Interborough Co., supra; Twentieth Century Co.* v. *Loew Co., supra; Jackson Co.* v. *Adler, supra; Lemley* v. *Dobson, supra.*)

Second. A patent in order to sustain the defense of prior invention at the date of filing the application on which it was granted must disclose the very invention in controversy, whether what it discloses be sufficient to negative novelty of the invention in controversy if it were perfected after the date of its grant or not. (*Bates* v. *Coe, supra; Diamond Drill Co.* v. *Kelly Bros., supra; Sundh Co.* v. *Interborough Co., supra; Leonard* v. *Maxwell Co., supra.* Contra, *Lemley* v. *Dobson Co., supra*, and the other decisions of the Circuit Court of Appeals in the Sixth Circuit cited therein, as interpreted therein.)

Third. Where the question decided is merely that of prior invention and does not involve an issue of priority between conflicting claims, the decisions do not usually show by their terms whether the patent relied upon to sustain the defense does or does not claim the invention in controversy. They do not turn upon that point. They turn upon the point of disclosure, and disclosure is always the fact definitely stated. This is true even in those cases in which the existence of conflicting or analogous claims appears among the facts stated by the court. I have found only one decision—*Leonard* v. *Maxwell Co.*—in which it is positively held that in order to sustain the defense of prior invention the patent relied upon must contain claims which conflict with those to the invention in controversy. I have found two or three decisions in which the contrary was positively held. In *Hillard* v. *Fisher Co., supra*, it was not held in terms but by apparently necessary implication of the facts stated. In *Twentieth Century Co.* v. *Loew Co., supra*, the dictum on page 386

so states, in effect. *Millett & Reed* v. *Duell, supra*, contains the statement, pertinent to the disposition of the case, which involved the issue of prior invention, that a patent does not fail to show a bar—

> because it does not claim the invention, since the failure to claim simply implies that he (the inventor of the invention disclosed) abandoned it to the public or that he regarded it as already well known in the art.

The truth is, not that there are decisions in any considerable number which decide positively that the existence of conflicting claims in the patents compared is or is not necessary, but that the question very rarely appears at all in the decisions, except when they are directed to the very question of priority between conflicting claims, obviously because the judges have not regarded it as material. I interpret the pertinent decisions as meaning that, subject to certain conditions, a patent granted after the date of perfection of the invention in controversy on an application filed before that date sustains the defense of prior invention, irrespective of whether it claims that invention or not. (*Kearney* v. *Lehigh Valley R. Co., supra; Barnes Sprinkler Co.* v. *Walworth Co., supra; Millett & Reed* v. *Duell, supra; Diamond Drill Co.* v. *Kelly Bros., supra; Drewson* v. *Hartje Co., supra; Hillard* v. *Fisher Typewriter Co., supra; Electric Controller Co.* v. *Westinghouse Co., supra; Sundh Co.* v. *Interborough Co., supra; Twentieth Century Co.* v. *Loew Co., supra; Lemley* v. *Dobson Co., supra.* Contra, *Leonard* v. *Maxwell Co., supra.*)

The bearing of *Bates* v. *Coe* on the proposition that a patent in order to sustain the defense of prior invention at the date of filing the application on which it was granted must disclose the very invention in controversy, whether what it discloses be sufficient to negative novelty of the invention in controversy if it were perfected after the date of its grant or not, is stated above.

Kearney v. *Lehigh Valley R. Co.* supports the first of the three propositions above stated by reasonable implication. In it the following is stated:

> But the complainants contend that their patent, though dated a month later than Smith's is not anticipated by it, inasmuch as their application was sworn to Dec. 31, 1870, and was filed in the Patent Office Jan. 5, 1871, two months before the date of Smith's patent. The time of filing of Smith's application is not shown. The relative priority of inventions is determined, first, by the dates of the respective patents therefor. But this is not conclusive. Evidence outside of the patents may be given to prove priority. The date of the application, if it described the invention sufficiently, is conclusive evidence that the invention was made prior to such date. The complainants, therefore, have shown that their invention was made prior to the date of Smith's patent, and no evidence has been offered to show that Smith's invention was made prior to that time. The presumptions arising from the course of business in the Patent Office are not sufficiently certain and precise to countervail the effect of the complainant's evidence. We may therefore lay the last Smith patent out of view.

This clearly decides, first, that an invention is not anticipated unless by an invention which was completed before it (the former) was completed; second, that the filing of an allowable application is completion of the invention; third, that where the question concerns the "priority" of one of two or more patents over the other or others the invention of the "prior" patent can be carried back to the date of the application on which it was granted. The question remains, what must appear in the "prior" patent to raise the issue of priority? In the case treated the patent to Smith was a patent for an invention of the kind claimed in the patent in suit. It does not appear what were the claims in that patent; nor does it appear that the court considered the claims in that patent or anything in that patent other than its disclosure material.

The Office view is stated in *ex parte Eddleblute* and in *Millett & Reed* v. *Duell*. A patent granted after the filing of the application claiming the invention in question on an application earlier filed is a reference for whatever it in any way clearly discloses, like any other reference, until the date of the invention in question is carried back of the date of such application. The contents of such a reference patent are in effect part of the prior art.

In *Westinghouse* v. *Chartiers Valley Gas Co.* the rule giving the application full effect to show date of invention, so as to sustain the defense of prior invention, was fully upheld and applied directly in the decision of the case; but the application so treated claimed the invention in controversy. I regard this as a case involving conflicting claims.

Barnes Automatic Sprinkler Co. v. *Walworth Mfg. Co.* decides that the defense of prior invention can be sustained by a patent which disclosed the invention as of the date of its application, affirming a decision of the circuit court, in which it was said:

> The public notice of the device must be carried back to the date of the application,

expressly distinguishing from what was directly decided in *Bates* v. *Coe*, stating that the rule stated in that decision applied only to the third and not to the fourth defense, upon the ground that the record of the application is admissible under "the ordinary rules of evidence" and is sufficient evidence. In fact, the patent in suit and the patent relied upon to sustain the defense were conflicting patents. The like relation subsisted between the patents treated in the decision cited as authority—viz., *Western Electric Co.* v. *Sperry Electric Co.*, (59 Fed. Rep., 295;) but this authority was cited as an extreme case, which would come within the rule in *Bates* v. *Coe*, if that rule were applied to the fourth defense. It does not appear from the terms of the decision that the relation between the patents was essential to it. It was also true that the invention disclosed in the patent relied upon to sustain the defense was "the very invention" claimed in the patent in suit; but the decision is not in terms made to depend upon that fact.

I think that the key to the interpretation of the entire series of decisions cited herein, read together, is found in *Diamond Drill & Machine Co.* v. *Kelly Bros.* In this case it is held that a patent is not an anticipation of any invention perfected before the date of its grant. The distinction between the defense of anticipation and that of prior in-

vention is distinctly stated. A patent which would sustain the defense of prior invention would not necessarily sustain the defense of anticipation. Under the defense of anticipation the question concerns sufficient novelty to require invention. Under that of prior invention the question concerns identity of invention. The patent (to Maier) relied upon to defeat the patent in suit disclosed and presumably claimed a bed-spring, and the patent in suit (to Jackson) claimed a belt-fastener, the disclosure, and probably the claim in the former and the claim in the latter, including common subject-matter which constituted the novelty in both articles. The decision held that Maier would not anticipate Jackson were the date of Maier's patent such that his disclosure would be available for anticipation, but that even if that disclosure would be sufficient for anticipation it was insufficient for prior invention because the inventions were not the same. It does not appear from the decision that what Maier claimed was considered material or would be material if the defense of prior invention were in issue.

A case decided nearly ten years later may be conveniently discussed next, because the position taken in it is fundamentally similar.

The decision in *Sundh Electric Co.* v. *Interborough Rapid Transit Co.*, which overruled the decision of the circuit court by Judge Hazel, (published in 222 Fed. Rep., 334,) upon the ground of prior invention, states, so far as it goes in a somewhat extended discussion, what I conceive to be the net meaning of all the authorities on the subject read together, but in a case in which the patent showing prior invention claimed the invention in controversy.

The invention in controversy and that disclosed in the copending patent were so similar that there could be no doubt of anticipation if the latter were part of the prior art; but it was held not to be in the prior art. The copending patent does not sustain the defense of anticipation; but it does sustain the defense of prior invention by showing the fact of invention by the patentee at the date of filing his application. The court adds:

> In order to maintain this fourth defense it must, of course, appear that the invention of the patent in suit and the invention of the prior application are the same. Thus in *Diamond Drill Co.* v. *Kelly, supra*, the patent in suit dealt with a belt fastener, the prior application with a bed-spring. That court held that even though it should be found that these were analogous arts, and that the presence of either in a prior field of art left no room for invention in the production of the other, it could not be said that both had invented the same thing. But it does not follow that the two devices must be Chinese copies of each other to warrant the application of this particular defense.

The decision does not in its terms make the fact that the prior inventor claimed the invention essential, although that fact fully appears in its terms. Apparently the ground upon which the fourth defense was sustained was the fact of disclosure of the invention in controversy.

In *Hillard* v. *Fisher Co.* the court examined the record of the application of a patent cited to show prior invention to see what it disclosed prior to the date of completion of the invention claimed in the patent in suit, which examination obviously proceeded without reference to the claims in the patent cited, the stated results pertaining exclusively to the disclosure. The court in effect decided that the application of the patent cited was admissible evidence to show that the invention in controversy was completed at the date of filing the application on which it was granted. Were it sufficient to show that fact it would prove prior invention, irrespective of what it claimed. This was a case in which the filing of the application did not constitute reduction to practice because of defects in the application. The question considered was obviously whether the fourth defense—prior invention—was sustained; but the court called it a question as to "anticipation," not applying the distinction between "anticipation" and "priority." By obviously sufficient presumption founded on the facts as stated by the court this may be taken as a decision positively holding that an application which did not claim the invention in controversy will, other necessary conditions being given, sustain the defense of prior invention.

There remains to be considered the series of decisions rendered by the Circuit Court of Appeals in the Sixth Circuit, beginning with *Drewson* v. *Hartje Paper Mfg. Co., supra.*

In the late case, (June, 1917,) *Lemley* v. *Dobson-Evans Co., supra*, a decision was rendered of which the following are the essential features in point: A copending patent does not sustain the third statutory defense, but does sustain the fourth, being evidence admissible under the general law of evidence and showing the fact of prior invention. No reference is made to the question whether the patent regarded as showing a bar claims the invention in controversy or not. The bar is that of anticipation, the distinction as applied to such a case between "anticipation" and "priority" being definitely discarded. A sufficient pleading of the fourth defense is necessary, but need not necessarily be a pleading in terms. Clearly the "anticipation" occurs if the difference between the inventions compared does not involve invention. The claims in suit were held anticipated by patents, including copending patents, which would not otherwise have been pertinent. The distinction in that respect made in *Diamond Drill Co.* v. *Kelly Bros., supra*, and in *Sundh Co.* v. *Interborough Co., supra*, is not applied. The restriction upon the effect of a patent related to the patent in suit as above stated is in every aspect confined to the third defense. The patent so related is a part of the prior art. The following decisions by the same court are cited in support of the rule "that a patent, the filing date of which antedated the filing date of the patent in suit, was, *prima facie*, anticipatory:" *Drewson* v. *Hartje Paper Mfg. Co., supra; Electric Controller & Supply Co.* v. *Westinghouse Electric and Mfg. Co., supra; Twentieth Century Machinery Co.* v. *Loew Mfg. Co., supra*, and *Jackson Spring Cushion Co.* v. *Adler, supra.*

In *Pope Mfg. Co.* v. *Gormully & Jeffery Mfg. Co., supra*, cited in *Lemley* v. *Dobson*, the Supreme Court said, in the midst of a discussion of several patents by which the claims of the patent in suit were limited in scope, on page 244:

> There was also a patent issued to one Smith upon the same day the Peters patent (the patent in suit) was issued, namely, November 20, 1877, but upon an application filed September 1, 1917, prior to Peters's application, and, therefore, anticipating Peters's patent, in which was represented, etc.—

proceeding to describe Smith's disclosure, which differed considerably in specific features from the invention of Peters.

I quote the following paragraph from *Drewson* v. *Hartje Paper Mfg. Co.:*

> In the absence of other evidence, the invention of the patent is presumed to be identical with that disclosed by the application. (*Loom Co.* v. *Higgins*, 105 U. S., 580, 594.) Symons applied for his patent January 17, 1895—several months before the date of the filing of the Drewson application. The date of the first application, in the absence of any other evidence of the date of an invention, must be taken as establishing the date of the first invention. It follows, therefore, that the patent to Symons not only has the earlier issue date, but *prima facie* covers the earlier invention, and was therefore entitled to be regarded as an anticipating patent. The apparatus covered by the later patent to Drewson is the apparatus of the earlier Symons patent, with a cooler added. The addition of a water jacket to the U-shaped tube of Symons was not invention. It was, at most, the application of an old device to the same use in a different industry.

If, as was likely enough, the Symons patent contained claims to the pertinent part of its disclosure, the decision in no way makes that fact material. It says nothing about whether the invention in controversy or any part of it was claimed or not by Symons, but refers to what his patent "disclosed." The statement in the decision that—

> the patent to Symons • • • *prima facie covers* the earlier invention—

must be read with the statement that—

> the invention of the patent is presumed to be identical with that *disclosed* by the application.

It would seem that this decision is authority for the proposition that the invention disclosed in the application and the patent is to be taken as a unitary whole, with reference to which the claims are drawn.

Electric Controller & Supply Co. v. *Westinghouse Electric & Mfg. Co.* does not discuss the subject at length, but contains the following:

> If, therefore, the two applications (related to each other as in *Lemley* v. *Dobson Evans Co.*) disclose substantially the same subject-matter, in the absence of any other evidence of the date of invention, the date of the first application would *prima facie* be taken as the date of the first invention. (*Drewson* v. *Hartje Paper Mfg. Co.*, 131 Fed. Rep., 734, 739.) The prominent element of Davis (the patentee of the patent alleged to sustain the defense) invention and patent is the reversing switch. Neither of the patent claims (in Davis's patent) embraces conducting sleeves (a prominent element in the claims in suit) whether insulated or not (claimed as insulated in one of the two claims in suit) carried by the axle, or curved conducting strips carried by the sleeves (included in both claims in suit). The skeletonized metal sleeve construction is thus entirely lacking, so far as the patent claims are concerned. Nor is such construction shown by the specifications, except as Figure 4, etc.—

followed by a discussion showing that the illustration in Fig. 4 was insufficient. Thus the court examined Davis's patent in a way to agree with the above analysis of *Lemley* v. *Dobson*, finding it by such examination to be an insufficient reference.

In *Twentieth Century Machinery Co.* v. *Loew Mfg. Co.*, it was held that an earlier-filed abandoned application by the patentee of the patent in suit was admissible evidence of the invention by that patentee at its date, and the patentee was given the benefit of the date of his earlier application as to so much of the subject-matter of the patent in suit as was disclosed in said earlier application. The court added:

> And as matter of law we see no difference between the right of a defendant to show the time of conception of an unpatented anticipating device, as also diligence in reducing it to practice, and the right of a plaintiff to do this in respect of a patented device. • • • It cannot be that a patentee can escape the defenses either that he "unjustly obtained the patent for that which was in fact invented by another, who was using reasonable diligence in adapting and perfecting the same" (second par., 4,929), or that "he was not the original and first inventor or discoverer of any material and substantial part of the thing patented" (fourth par., *id.*), whether the anticipating object is patented or unpatented. The statute makes no distinction in this regard; it is the fact of prior invention, not the nature of the right under which the invented device is held, that the statute treats as a defense.

In *Jackson Cushion Spring Co.* v. *Adler* the issue was one of priority between patents both claiming the invention in controversy; but the court held that the copending patent which showed prior invention was a part of the prior art. As interpreted in *Lemley* v. *Dobson*, the decision that the copending patent was part of the prior art and that it sustained the defense of prior invention was not limited to the case in which it claimed the invention in controversy.

I think that the group of decisions by the Circuit Court of Appeals of the Sixth Circuit, even with such support as may be derived from the remark made by the Supreme Court in *Pope Co.* v. *Gormully Co.* and from *Hillard* v. *Fisher Co.*, are opposed to a greater weight of authority so far as they decide that the fourth defense is a defense of anticipation and that a patent not granted before the date of perfection of the invention in controversy is a part of the prior art and so far as they ignore the essential difference in the natures of the defenses of anticipation and priority and fail to recognize that the latter defense requires a degree of resemblance between the invention in controversy and the invention disclosed in the patent supposed to show prior invention which need not always subsist between the invention in controversy and an anticipating invention. In so deciding, these decisions neglect the element of publicity, considering the subject as if it involved only one of the two questions pointed out in the foregoing analysis—that which concerns the evidence of a fact. The necessity of publicity of a previous invention before the establishment of the legal right to patent protection in order to defeat that right by anticipation is supported by a great volume of authority. The decisions opposed, in the particulars stated, to the decisions in this group not only outnumber those in the group, but admit of being combined with nearly all other decisions which are in any way related to the subject in the construction of a self-consistent and tenable theory.

Furthermore, the logical conclusion of the reasoning in this group of sixth circuit decisions is that applications which have been forfeited and abandoned (about two hundred and fifty thousand in number) are available as references; but it was

decided in the *Corn-Planter Patent Case* (23 Sup. Ct. Rep., Wall., p. 181) that such applications are not valid references:

> It (abandoned application) can only have a bearing on the question of prior invention or discovery. If upon the whole of the evidence it appears that the alleged prior invention or discovery was only an experiment and was never perfected or brought into actual use, but was abandoned and never revived by the alleged inventor, the mere fact of having unsuccessfully applied for a patent therefor, cannot take the case out of the category of unsuccessful experiments.

But I think that the decisions in this group support with much force and with the weight of authority of the highest repute the proposition that prior invention may be shown by a patent which does not claim the invention in controversy. I think that that proposition is essential to the construction of a tenable theory consonant with the net meaning of all the decisions read together.

SUMMARY.

An invention is not patentable if it has been anticipated. Anticipation involves as essential elements completion of a like invention and accessibility of knowledge of the anticipating invention to the public before the completion of the invention in controversy. Anticipation occurs when an invention of anticipatory character has been patented or described in a printed publication or has been otherwise known or used in such a way that knowledge of it is accessible to the public before the completion of the invention in controversy; but the statute provides another bar to the right to patent protection, known as "prior invention." This rests upon a different foundation of fact, which is the previous invention of the invention in controversy by some one other than the claimant whose right to patent protection is in question, who, if any one, is entitled to patent protection on that invention. The defense founded upon this bar raises an issue of priority. The statute does not say that in order to sustain the defense of prior invention it is necessary for the prior inventor to claim the invention in controversy. It simply sets up as a bar the fact of prior invention. In the light of all of the decisions read together I construe the statutory provision as meaning that the bar of prior invention is established when the prior inventor has received a patent, when it is operative as of the date when he established his legal right to patent protection, whatever he may have done with that right. I have not found any decision, aside from *Leonard* v. *Maxwell Co.*, which distinctly holds that the defense of prior invention applies only when the prior inventor claims the invention in controversy. I have found decisions in which the situation to which that defense was found applicable involved claims to the invention in controversy by the alleged prior inventor. In such cases there can be no question as to the applicability of the defense. In other cases either the fact that the invention in controversy was claimed by the alleged prior inventor does not appear at all or it does not appear in any way that that fact was involved in the question considered by the court.

An issue of priority is presented when two or more patentees have conflicting claims. The same question of fact, having the same bearing upon the right to patent protection in question, may arise under the terms of the statute when there are no conflicting claims. The issue is still an issue of priority.

The reason for the rule last stated is found in the succession of the public to the right of the inventor who neglected to claim the invention, which succession is supported by the authorities above cited to that effect; but the direct basis of the rule as applied by most of the decisions which deal with prior invention is the statute itself, which provides for an issue of priority as distinguished from an issue of anticipation, without limiting the defense authorized to cases which involve conflicting claims. According to what I consider the better-authorized opinion one practical effect of the distinction is that, when the issue is that of priority, in order to sustain the defense the inventions compared must be "the same" according to criteria more or less different from those applied when the issue is that of anticipation. Priority concerns identity of invention, while anticipation concerns the presence of patentable difference. Two practical effects of the distinction are, first, anticipation is not subject to abandonment; second, knowledge of the prior invention need not be accessible to the public at the date of completion of the invention in controversy. The defense of prior invention proceeds upon the supposition that a legal right has been established and not abandoned which is antagonistic to the right of the inventor of the invention in controversy. If the prior inventor does not claim the invention, the public succeeds to his right at the date of patent, but not until then. At this point the patent becomes one of anticipation as distinguished from priority. The application not claiming the invention in controversy is thoroughly similar to the application claiming it so far as proof of the pertinent facts is concerned. The claiming application involves a conflict of rights of inventors to which accessibility of knowledge of the invention in controversy to the public is not pertinent. One not claiming it shows identically the same state of facts so far as the requirements of the defense of prior invention stated in the statute are concerned and should have the same effect when a patent is granted.

TREATMENT OF APPLICATIONS.

What should be the effect of the theory here propounded upon the treatment of applications under Rule 75? In view of all of the authorities and in view of the reasons upon which the theory is grounded it would be going too far in the direction of rejecting applications to say that an application should be rejected in all cases on a copending patent if it disclosed the invention claimed so nearly that the difference did not require invention. The rule stated in *Diamond Drill Co.* v. *Kelly Bros.* and *Sundh Co.* v. *Interborough Co.* that the prior invention must be "the very invention" in controversy necessarily results from the fact that the issue is an issue of priority; but *Sundh Co.* v. *Interborough Co.*, after stating that rule, adds:

> But it does not follow that the two devices must be Chinese copies of each other to warrant the application of this particular defense.

Rejection under Rule 75 when the invention in controversy and the prior invention shown are not identical is authorized by a number of the decisions above cited, and, as here conservatively stated, it is opposed by none. I look upon the existing practice in declaring interferences as a convenient standard for comparison. Perfect resemblance is not and ought not to be required for the institution of an interference; but there is not, when one of the conflicting cases is a patent, the opportunity to secure the expression of conflicting subject-matter in identical or nearly identical claims which exists in the case of interfering applications, and the propriety of rejection under Rule 75 does not depend upon the same relation between claims that is requisite for the declaration of an interference under the present practice. I consider that an application should be rejected on a copending patent, under Rule 75, if an interference in fact, based upon the claims in the application and the subject-matter disclosed in the patent which is germane to the invention claimed therein, the counts of which might be broader than or otherwise different from the claims in the application, provided they did not omit a "material and substantial" feature of those claims, would exist if both cases were applications, irrespective of the claims in the patent.

The dominating question is, to what is the public entitled upon all grounds, including the abandonment completed by the grant of the copending patent? Subject-matter disclosed but not claimed therein may or may not be, in fact, a part of the virtually known art anterior to the date of the application on which it was granted. If it is, the public is of course entitled to it. If it is not, the public is entitled to it by virtue of the patentee's abandonment, which occurs if he might have claimed it. He might have claimed any patentably novel subject-matter clearly disclosed in the application upon which his patent was granted which is germane to what he did claim.

That subject-matter is germane which is included in the tangible subject-matter upon which the claims are founded. Such germane subject-matter belongs to the public whether patentably novel or not. It may be represented by a concept of the invention disclosed which was acquired by a view of that invention from a point of view either different from or identical with that taken by the draftsman of the claims. In the former case it could be formulated in a claim more or less dissimilar to but not necessarily broader than any claim in the patent. In either case it could be formulated in a claim broader than any claim in the patent, unless the patentee has made the broadest possible claim, in which event the question now being considered would not arise with reference to that portion of the invention. In either case a claim stating the revised concept of the invention could be suggested, if its subject-matter were patentably novel, under the conditions above stated, to both applicants, if the patent were an application. A claim in the application which states the revised concept without additional limitations should then be rejected under Rule 75. If the claim in question states the revised concept of the invention claimed in the patent with additional limitations, the further question arises whether those limitations state a "material and substantial" part of the invention in controversy. If they do not, the showing of prior invention comes within the terms of the statute. If they do, prior invention of the invention stated in the claim is not shown. If a copending patent discloses an invention upon which claims therein are founded some revised concept of which is identical with subject-matter embraced in the invention in controversy, prior invention is shown to the extent of that revised concept, and if the claim to the invention in controversy contains no limitation distinguishing it from that concept which states a "material and substantial" part of the invention in controversy prior invention is shown. The question raised by distinguishing limitations is not identical with the question whether the difference required invention, in however many instances the answers to the two questions would be found the same. If the answers are the same, they are reached upon different grounds. If a "material and substantial" part of the applicant's inventive idea is embraced in the distinguishing limitations, a copending patent is not available as a reference, for then its effect, if any, would be to show, not prior invention, but anticipation; but if the distinguishing limitations have reference only to the operative environment in which the applicant proposed to realize his inventive idea they do not "obviate the showing of prior invention."

THE PENDING APPLICATION.

The invention claimed in the pending application consists of a switch mechanism comprising four terminals and an intervening switch suitably arranged to control the current to an electric lamp, an inclosing casing provided with an aperture and a cover, an indicator within the cover, which is separate from any part of the switch, bearing legends which are visible through the aperture, and mechanism for actuating the indicator from the switch, all mounted upon the socket for the lamp. It appears from applicant's specification that the construction and arrangement of his terminals, switch, casing, and lamp-socket, in combination substantially as shown by him, are old, so that his invention consists in adding to that old combination a separate indicator within the casing, with mechanism for actuating it from the switch, and providing an aperture in the casing.

The patent to Barr discloses a switch mechanism comprising four corresponding terminals and an intervening switch somewhat differently arranged, which could obviously be used and probably was intended by the inventor to be used to control the current to one or more electric lamps, an inclosing casing provided with a cover and an aperture, the carrier for the spring-arms of the switch being provided with legends which are visible through the aperture, whereby it performs the additional function of an indicator, all mounted upon a suitable base, which is not a lamp-socket. Barr transformed one of the elements of his switch into an indicator, so that it would perform the function of an indicator while still performing its function as a part of the switch.

The question whether a patentable difference exists between these inventions is not involved in the problem presented and is not decided. The question to be decided is, did Barr establish a right to claim the invention claimed by applicant by reducing to practice the invention disclosed in his patent?

No doubt a single generic concept is applicable to both of the inventions to be compared; but none of the appealed claims states that generic concept. All include the lamp-socket and all include the indicator as an element other than the switch. The fact that the base upon which applicant's mechanism is mounted is a lamp-socket may not be in itself a really material feature of his invention; but the indicator of applicant is a separate element, which he has added to an old combination. In the search for a way in which the indicating function could be introduced into that combination his mind took a certain direction. So far as the indicating feature of Barr's invention is concerned, his mind took a different direction. Remembering that the question does not concern a difference requiring invention, but identity of invention, it appears to me that comparison of the inventions brings out the fact that they are not the same within the meaning of the statute.

The decision of the Examiners-in-Chief is therefore reversed.

ADJUDICATED PATENTS.

(U. S. C. C. A. N. Y.) Design patent, No. 49,593, for ornamental electric-lighting fixtures comprising a bell-shaped canopy having a straight lower edge, below which is suspended in close proximity a hemispherical bowl having a straight upper edge, *Held* invalid for anticipation. *Bayley & Sons* v. *Standard Art Glass Co.*, 249 Fed. Rep., 478.

(U. S. D. C. Iowa.) The Smith patent, No. 803,721, for a mixing-machine, *Held* valid, but not infringed. *T. L. Smith Co.* v. *Cement Tile Machinery Co.*, 249 Fed. Rep., 481.

Interference Notices.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., June 17, 1918.

The Star Manufacturing Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Fiske Brothers Refining Co., of 24 State street, New York, N. Y., for registration of a trade-mark and trade-mark registered October 7, 1890, No. 18,494, to The Star Manufacturing Co., of Dock street, Easton, Pa., and a notice of such declaration sent by registered mail to said The Star Manufacturing Co. at the said address having been returned by the post-office undeliverable; notice is hereby given that unless said The Star Manufacturing Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

DEPARTMENT OF THE INTERIOR,
UNITED STATES PATENT OFFICE,
Washington, D. C., July 2, 1918.

Five Points Chemical Co., their assigns or legal representatives, take notice:

An interference having been declared by this Office between the application of Harriet W. Belden, of 322 West Twenty-fifth street, Minneapolis, Minn., for registration of a trade-mark and trade-mark registered January 24, 1893, No. 22,373, to Five Points Chemical Co., of Rolla, Mo., and a notice of such declaration sent by registered mail to said Five Points Chemical Co. at the said address having been returned by the post-office undeliverable, notice is hereby given that unless said Five Points Chemical Co., their assigns or legal representatives, shall enter an appearance therein within thirty days from the first publication of this order the interference will be proceeded with as in case of default.

This notice will be published in the OFFICIAL GAZETTE for three consecutive weeks.

R. F. WHITEHEAD,
First Assistant Commissioner.

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TO THE

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DIGEST

OF THE

DECISIONS OF THE COMMISSIONER OF PATENTS AND OF THE UNITED STATES COURTS.

JUNE, 1918.

[Decisions of the Court of Appeals of the District of Columbia are indicated by a star (*) and of the United States courts of appeals by the letter [d.]

ANTICIPATION.

See Priority of Invention.

RULE 75 CONSTRUED AND APPLIED—ANTICIPATION AND PRIOR INVENTION DISTINGUISHED.

A patent which discloses an invention in controversy and was granted after the filing of an application therefor, (or other reduction to practice,) on an application filed earlier, does not establish anticipation of that invention. The bar which it establishes, if any, is that of prior invention, as of the date of filing the application on which it was granted. [*Ex parte* Thomas, 839.

BAR TO PATENT.

See Anticipation; Claims; Priority of Invention, 2, 3, 4.

CLAIMS.

See Interference; Priority of Invention, 2, 3.

FORCE OF LIMITATIONS.

If a claim to the invention in controversy includes limitations which are not embraced in the tangible subject-matter upon which the claims in such a patent are based and if those limitations state material and substantial parts of that invention, the patent does not establish the bar of prior invention, even though the difference did not require invention; but if the limitations merely state the operative environment of the invention in controversy then they do not state "material and substantial" parts of that invention and the patent does establish the bar.
[*Ex parte* Thomas, 839.

COMMERCIAL SUCCESS.

See Invention, 2; Particular Patents.

CONSTRUCTION OF RULES.

See Anticipation.

DATE OF FILING APPLICATION.

See Anticipation.

DISCLOSURE OF INVENTION.

See Anticipation; Interference; Particular Patents; Priority of Invention, 3,4.

EARLIER AND LATER APPLICATIONS.

See Anticipation.

EMPLOYER AND EMPLOYEE.

See Priority of Invention, 1.

EVIDENCE.

See Invention, 2; Priority of Invention, 1.

FUNCTION.

See Invention, 1.

INFRINGEMENT.

See Particular Patents.

INTERFERENCE.

See Anticipation; Claims; Priority of Invention.

TO WHAT CASES APPLICABLE.

An application should be rejected on such a patent if an interference in fact, based upon the claims in the application and the subject-matter disclosed in the patent which is germane to the invention claimed therein, the counts of which might be broader than or otherwise different from the claims in the application, provided they did not omit a material and substantial feature of those claims, would exist if both were applications, irrespective of the claims in the patent. [*Ex parte* Thomas, 839.

INVENTION.

See Claims; Particular Patents.

1. NEW USE OF OLD DEVICE.

The transfer of elastic features previously used in drawers or overalls to union-suits, when they are subjected to different strains and do not perform precisely the same functions, and therefore do not produce the same result, may constitute patentable invention.
[dGlobe Knitting Works *v.* Segal *et al.*, 223.

2. EVIDENCE OF INVENTION—POPULAR RECOGNITION.

Where the question of invention is close, as it usually is when the thing done is simple, the thing achieved, its recognition by the art, and the demand for it by those who use it are matters properly to be put in the scale and weigh in favor of invention. [dId.

LIMITATION OF CLAIMS.

See Claims.

NEW RESULTS.

See Invention, 1; Particular Patents.

NEW USE.

See Invention, 1.

OLD DEVICES.

See Invention, 1; Particular patents.

PARTICULAR PATENTS.

CLARKE—NO. 1,035,819—UNION-SUIT—VALIDITY AND INFRINGEMENT.

The Clarke patent, No. 1,035,819, for an improvement in knit underwear of the type known as "union-suits," while not covering a broad invention by the use of a new material in a new way, produced new results in such garments of a useful character, measured by the increased comfort they afford the wearer and the popular demand they created, and discloses patentable invention; also *Held* infringed. [4Globe Knitting Works *v.* Segal *et al.*, 228.

PATENT AND APPLICATION.

See Interference; Priority of Invention, 2.

PRACTICE IN THE PATENT OFFICE.

See Anticipation; Claims; Interference; Priority of Invention, 2, 3, 4.

PRIORITY OF INVENTION.

See Anticipation; Claims.

1. REDUCTION TO PRACTICE—EMPLOYER AND EMPLOYEE.

Evidence considered and found sufficient to prove priority for M. by reason of certain testimony to the effect that when he reduced the invention to practice he was acting independently and not under the direction of G., the senior party. [3McAfee *v.* Gray, 675.

2. REQUISITES OF PATENT CITED.

Such a patent establishes the bar of prior invention against the patentability to another inventor of any invention to which it contains claims, irrespective of their scope or of the scope of claims made by such other inventor. It also establishes that bar when it does not contain claims to the invention in controversy, *provided* that invention is germane to the invention to which it does contain claims. The invention in controversy is germane to the invention claimed in the patent when it is in substance included in that tangible subject-matter upon which the claims in the patent are based. [*Ex parte* Thomas, 839.

3. NECESSITY OF PATENT.

To complete the establishment of the bar of prior invention by the filing of an allowable application which discloses the invention in controversy and does not contain claims to it, but does contain claims to which it is germane, it is necessary that such application shall have matured into a patent. [Id.

4. PATENT MUST SHOW THE VERY INVENTION IN CONTROVERSY.

Such a patent in order to establish the bar must disclose the very invention in controversy, whether or not what it discloses would be sufficient to negative patentable novelty of the invention in controversy if it were available to shew anticipation. [Id.

REDUCTION TO PRACTICE.

See Anticipation; Priority of Invention, 1.

REJECTION OF APPLICATIONS.

See Interference.

SCOPE OF CLAIMS.

See Priority of Invention, 2.

TESTIMONY.

See Priority of Invention, 1.

VALID PATENTS.

See Particular Patents.

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ALPHABETICAL LIST OF PATENTEES

TO WHOM

PATENTS WERE ISSUED DURING THE MONTH OF JUNE, 1918.

A. G. Spalding & Bros. (See Reach, Milton B., assignor.)
Abarca, Enrique, San Juan, Porto Rico. Apparatus for grooving sugar-cane-crushing rollers. No. 1,270,681; June 25; v. 251; p. 799.
Abbe, George C., Lansdowne, assignor to The Baldwin Locomotive Works, Philadelphia, Pa. Electric locomotive. No. 1,269,596; June 18; v. 251; p. 561.
Abel, John F., Burlington, Iowa. Attachment for carbureters. No. 1,269,140; June 11; v. 251; p. 321.
Abercrombie, Charles M., Bridgeport, Conn., assignor to The Singer Manufacturing Company. Sewing-machine. No. 1,268,809; June 11; v. 251; p. 229.
Ackerman, Nicholas F., Duluth, Minn. Means for repairing furnaces. No. 1,270,749; June 25; v. 251; p. 816.
Ackerman, Paul. (See Clark, Ackerman, and Cansfield.)
Acme Steel Goods Company. (See Fork, William C., assignor.)
Adams, George E., assignor of one-third to D. Alexander and one-third to H. O. Williams, Salt Lake City, Utah. Phonograph-disk-record holder and ejector. No. 1,270,584; June 25; v. 251; p. 773.
Adams, James W., and O. H. Egge, Spreckels, Cal. Process and apparatus for mixing dry lime with liquids. No. 1,269,994; June 18; v. 251; p. 586.
Adams, Richard H., Cobalt, Ontario, Canada. Percussive rock-drilling apparatus. No. 1,269,147; June 11; v. 251; p. 281.
Adams & Westlake Co., The. (See Hamm, William S., assignor.)
Adams, William J., Mobile, Ala. Tire-armor. No. 1,269,362; June 11; v. 251; p. 362.
Adelsperger, Charles C., and G. O. Stuck, assignors to Union City Body Company, Union City, Ind. Concealed seat for automobiles. No. 1,268,800; June 4; v. 251; p. 207.
Adkins, Frank A. (See Wilsey and Green, assignors.)
Adreon, Robert E., St. Louis, Mo. Automobile-steering-wheel lock. No. 1,270,088; June 18; v. 251; p. 610.
Advance Pump & Compressor Company. (See Flinn, Claude A., assignor.)
Aeolian Company, The. (See Shaw, Charles H., assignor.)
Ahldin, David, New York, N. Y. Automatic-locking coupling connection. No. 1,269,038; June 11; v. 251; p. 291.
Aho, Tahvan E., Crosby, Minn. Stand for shoemakers. No. 1,270,682; June 25; v. 251; p. 799.
Aikin, William P., Watertown, N. Y., assignor to International Burr Corporation. Expanding mandrel. No. 1,270,089; June 18; v. 251; p. 611.
Aker, Albert E., Eldorado, Kans. Dust-cap for tire-valves. No. 1,270,253; June 25; v. 251; p. 681.
Akers, Axel, Chicago, Ill. High-pressure strainer and method for cleaning or exchanging the strainer-baskets. No. 1,269,571; June 18; v. 251; p. 469.
Aktiebolaget Ljungström Angturbin. (See Ljungström, Birger and F., assignors.)
Aktiebolaget Ljungström Angturbin. (See Ljungström, Fredrik, assignor.)
Aldrich, Paul R., assignor, by mesne assignments, to A. McKenzie, Chicago, Ill. Roller bolster-bearing. No. 1,270,000; June 18; v. 251; p. 611.
Alexander, Daniel, *et al.* (See Adams, George E., assignor.)
Alexander, Minnie, *et al.* (See Gasser, William B., assignor.)
Alexander, Wilson H., Philadelphia, Pa. Shipping-jacket. No. 1,268,201; June 4; v. 251; p. 87.
Alexanderson, Ernst F. W., Schenectady, N. Y., assignor to General Electric Company. Electrical system of power transmission. No. 1,268,662; June 4; v. 251; p. 168.
Alfreds, Torris H., assignor to The P. & M. Co., Chicago, Ill. Rail-anchor. No. 1,270,360; June 25; v. 251; p. 710.
Alleman, Grant E., Shoemakersville, Pa. Coal-washing trough. No. 1,268,531; June 4; v. 251; p. 131.
Allen, Harry C. (See Dodge and Allen.)
Allen, Thomas B., Toronto, Canada, assignor to The Carborundum Company, Niagara Falls, N. Y. Making aluminous abrasives. No. 1,268,532; June 4; v. 251; p. 132.
Allen, Thomas B., Toronto, Canada, assignor to The Carborundum Company, Niagara Falls, N. Y. Aluminous abrasive. No. 1,268,533; June 4; v. 251; p. 132.
Allenbaugh, Samuel, Gallion, Ohio. Closure for burial-vaults. No. 1,269,572; June 18; v. 251; p. 469.
Allsteadt, John E. (See Christopher, Keith, Allsteadt, Elnsel, and Pelander.)
Althouse, Charles S., Reading, Pa. Singeing stockings. No. 1,269,148; June 11; v. 251; p. 322.
Altorfer, Alpheus W., Roanoke, Ill. Driving mechanism. No. 1,269,573; June 18; v. 251; p. 470.
Altvater, Clarence A., Ogden, Alberta, Canada. Automobile traction-wheel attachment. No. 1,268,417; June 4; v. 251; p. 99.
Alvey-Ferguson Company, The. (See Alvey, John M., assignor.)
Alvey, John M., Louisville, Ky., assignor to The Alvey-Ferguson Company, Oakley, Cincinnati, Ohio. Conveyer. No. 1,268,663; June 4; v. 251; p. 169.
Always Ready Ironing Board Co. (See Magarrell, William E., assignor.)
American Brake Company, The. (See Burton, Thomas L., assignor.)
American Electrical Heater Company. (See Kuhn and Hand, assignors.)
American Optical Company. (See Bugbee, Lucian W., assignor.) (Reissue.)
American Optical Company. (See Cady, Henry C., assignor.)
American Optical Company. (See Gordon, Robert L., assignor.)
American Optical Company. (See Tully and Herbert, assignors.)
American Products Company. (See Hodge and Ruggles, assignors.)
American Shop Equipment Co. (See Tierney, James S., assignor.)
American Sleeve-Valve Motor Company. (See Williams and Witt, assignors.)
American Stay Company. (See Merrick, Frank W., assignor.)
American Telephone and Telegraph Company. (See Toomey, John F., assignor.)
American Tool Works Company, The. (See Robinson and Sosa, assignors.)
American Water Heater Company. (See Stewart, William F., assignor.)
Amo, Earl J., Malone, N. Y. Curtain-bracket. No. 1,268,810; June 11; v. 251; p. 229.
Amphion Piano Player Company, The. (See Doman, Lewis B., assignor.)
Amundson, Amund, Bellingham, Wash. Handle for cross-cut-saws. No. 1,268,664; June 4; v. 251; p. 169.
Andersen, Albert, assignor to Automatic Electric Company, Chicago, Ill. Automatic telephone system. No. 1,269,245; June 11; v. 251; p. 350.
Anderson, Andrew G., Boston, assignor to Carr Fastener Company, Cambridge, Mass. Stud-and-socket fastener. No. 1,268,665; June 4; v. 251; p. 169.
Anderson, Calvert E., Rockport, Ind. Track for hay-distributers. No. 1,268,418; June 4; v. 251; p. 99.
Anderson, George C., Springfield, Ill. Game apparatus. No. 1,269,995; June 18; v. 251; p. 586.
Anderson, Louis, Chicago, Ill. Shock-former for harvesting-machines. No. 1,269,516; June 11; v. 251; p. 422.
Anderson, Martin E., assignor to Jacob Harsh Company, De Kalb, Ill. Tank-heater. No. 1,268,202; June 4; v. 251; p. 88.
Anderson, Robert H., Ambler, Pa., assignor to Asbestos Shingle, Slate & Sheathing Company. Apparatus and process for making sheets, slabs, and similar articles. No. 1,268,203; June 4; v. 251; p. 38.
Anderson, Vincent G., Thief River Falls, Minn., assignor to F. C. Austin, Chicago, Ill. Dipper-dredge. No. 1,269,149; June 11; v. 251; p. 322.
Anderson, William M., assignor to The Hydro Ventilator Company, Minneapolis, Minn. Ventilated water-closet bowl. No. 1,268,534; June 4; v. 251; p. 132.
Andrew, George V., Harvard, Ill. Milking-machine. No. 1,270,091; June 18; v. 251; p. 611.

Andrews, Bernard R., Braintree, Mass. Apparatus for drying material. No. 1,268,535; June 4; v. 251; p. 132.

Anello, Francesco P., and G. Pocoroba, Newark, N. J. Signal system for vehicles and the like. No. 1,269,246; June 11; v. 251; p. 350.

Angier, Edward H. (See Wheildon, William M., assignor.)

Annis, John E. (See Moomaw, Henry E., assignor.)

Ansco Company. (See Topliff, Bornmann, and Clark, assignors.)

Anthony, John L., and W. S. Bradford, Haynes, Ark. Gasolene-gun. No. 1,269,574; June 18; v. 251; p. 470.

Anthracite Separator Company. (See Becker, John H., assignor.)

Appelbaum, Joseph, assignor to Twin Blade Co., Inc., New York, N. Y. Cloth-cutting knife. No. 1,270,683; June 25; v. 251; p. 799.

Archibald, William A., and H. W. Thom, Tyler, Pa.; said Thom assignor to said Archibald. All-water rheostat. No. 1,268,666; June 4; v. 251; p. 169.

Armstrong, Cedric J. B., Cobalt, Ontario, Canada, assignor to Metals Recovery Company, Augusta, Me. Process of and apparatus for concentrating ores. No. 1,269,150; June 11; v. 251; p. 322.

Armstrong Cork Co. (See Busch, Herman F., assignor.)

Armstrong, Frederick W., Clinton, Ind. Adjustable coal-boring auger. No. 1,270,092; June 18; v. 251; p. 612.

Armstrong, Harry Y., assignor to United Sealing Machine Company, Springfield, Mass. Envelop-sealing machine. No. 1,269,671; June 18; v. 251; p. 498.

Armstrong, Harry Y., assignor to United Sealing Machine Company, Springfield, Mass. Envelop-machine. No. 1,269,672; June 18; v. 251; p. 498.

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Armstrong, Louis E., Pensacola, Fla. Torpedo trap or guard. No. 1,268,419; June 4; v. 251; p. 99.

Arndt, Franklin E., assignor of one-half to D. C. Boyd, Galion, Ohio. Engine-manifold. No. 1,268,312; June 4; v. 251; p. 69.

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Arrow Electric Company, The. (See Gates, Frederic P., assignor.)

Arsem, William C., and J. G. E. Wright, Schenectady, N. Y., assignors to General Electric Company. Making silicic acid or hydrated silica. No. 1,270,093; June 18; v. 251; p. 612.

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Arton, John A., Chicago, Ill. Sofa-bed. No. 1,269,772; June 18; v. 251; p. 527.

Arundel, Hubert. (See Higginson and Arundel.)

Asbestos Shingle, Slate & Sheathing Company. (See Anderson, Robert H., assignor.)

Ashline, Ira, *et al.* (See Wheeler, Harry J., assignor.)

Aslin, Frederick C., Woodford Green, England. Wallet or case for dollar-bills, passports, or the like. No. 1,269,247; June 11; v. 251; p. 351.

Atlas Auto Specialties Corporation. (See Magness, John C., assignor.)

Atlas Manufacturing Company. (See Billingsley, Percy L., assignor.)

Atwell, George M. (See Stilwill, Fred W., assignor.)

Atwood, Harry C., assignor to Durkee-Atwood Co., Minneapolis, Minn. Tire-patch. No. 1,268,536; June 4; v. 251; p. 132.

Atwood, Seth B., Rockford, Ill. Adjustable buffer and antirattler for doors. No. 1,269,575; June 18; v. 251; p. 470.

Aulson, John W., Lynn, assignor to Merrow Machine Co., Salem, Mass. Blacking-machine. No. 1,270,684; June 25; v. 251; p. 799.

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Auto Specialties Manufacturing Company. (See Kiehler, Frederick, assignor.)

Automatic Carburetor Co. (See Church, Edmund S., assignor.)

Automatic Electric Company. (See Andersen, Albert A., assignor.)

Automatic Electric Company. (See Fales, Edward D., assignor.)

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Automatic Exploder Company. (See Schraga, Ernest H., assignor.)

Autosales Gum & Chocolate Company. (See Grover, Albert D., assignor.)

Averill, Georgene, New York, N. Y. Doll. No. 1,269,363; June 11; v. 251; p. 382.

Avery, Henry C. (See McCorkindale and Avery.)

Avilla, Philip, San Francisco, Cal. Internal-combustion engine. No. 1,270,585; June 25; v. 251; p. 773.

Axe, Roy T., assignor to O. M. Edwards, Syracuse, N. Y. Weather-strip. No. 1,268,420; June 4; v. 251; p. 99.

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Bacheldor, William. (See Holland, Carringer, and Bacheldor.)

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Bader, Gustav A., Rochester, N. Y. Front sight for firearms. No. 1,268,537; June 4; v. 251; p. 132.

Bader, Louis C., assignor of one-half to M. J. Detmer, Chicago, Ill. Gas-burning heater. No. 1,269,517; June 11; v. 251; p. 423.

Baehr, Hermine, Baltimore, Md. Sterilizer. No. 1,270,095; June 18; v. 251; p. 612.

Bailey, James B., Knoxville, Tenn. Wrench. No. 1,268,538; June 4; v. 251; p. 133.

Bain, William H., St. Louis, Mo. Shoe with ankle-brace. No. 1,269,518; June 11; v. 251; p. 423.

Bair, Clarence L., Detroit, assignor to Auto Specialties Manufacturing Co., St. Joseph, Mich. Removable goose-neck-iron. No. 1,269,364; June 11; v. 251; p. 383.

Bair, Edward E., and J. E. Stout, Hanover, Pa.; said Stout assignor to said Bair. Electromagnetic valve for gas-lighting systems. No. 1,268,913; June 11; v. 251; p. 257.

Baird, Leon J., and C. G. Lay, Elmira, N. Y. Seal-lock. No. 1,269,248; June 11; v. 251; p. 351.

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Baker, George R., London, England. Machine for dividing dough and like plastic substances. No. 1,270,097; June 18; v. 251; p. 613.

Baker, George S. (See White and Baker.)

Baker, Linnaeus E., Fort Wayne, Ind., assignor to Wayne Oil Tank and Pump Company. Indicator for dispensing apparatus. No. 1,270,098; June 18; v. 251; p. 613.

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Baker, Webster E. B., York, assignor to H. W. Stokes, Philadelphia, Pa. Bottle-cap. No. 1,269,773; June 18; v. 251; p. 527.

Baldwin, Clarence A., and M. Swenson, Bloomfield, Conn. Calk. No. 1,269,897; June 18; v. 251; p. 562.

Baldwin Company, The. (See Gally, Robert A., assignor.)

Baldwin, James L., Chicago, Ill. Traveling and elevating parcel-carrier. No. 1,270,099; June 18; v. 251; p. 613.

Baldwin Locomotive Works, The. (See Abbe, George C., assignor.)

Ball & Ball Carburetor Company. (See Ball, Frank H. and F. O., assignors.)

Ball, Ewart M., Eagle Pass, Tex. Cutlery-sharpener. No. 1,269,898; June 18; v. 251; p. 562.

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Ball, Harry V., Montreal, Quebec, Canada, assignor to R. Hoe and Co., New York, N. Y. Driving mechanism for web-printing machines. No. 1,269,675; June 18; v. 251; p. 499.

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Ball, Herman F., Englewood, N. J., assignor to Franklin Railway Supply Company, Wilmington, Del. Locomotive and tender connection. No. 1,268,539; June 4; v. 251; p. 133.

Ballman, Edwin C., assignor of one-half to S. A. Whitten, St. Louis, Mo. Method and apparatus for determining the field strength of dynamo-electric machines. No. 1,270,100; June 18; v. 251; p. 614.

Balmos, Edward J., Devine, Tex. Foot-rail and tonneau truck attachment for passenger-cars. No. 1,268,811; June 11; v. 251; p. 229.

Balough, Charles, Springfield, assignor to The Hercules Motor Manufacturing Company, Canton, Ohio. Pressure-governor. No. 1,268,421; June 4; v. 251; p. 100.

Bancroft, Francis. (See Hickey, Joseph A., assignor.)

Banner, Otto, Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Regulating mechanism for centrifugal compressors. No. 1,268,079; June 4; v. 251; p. 3.

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Barber-Colman Company. (See Colman, Howard D., assignor.)

Barber, Howard M., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y. Sheet associating and folding machine. No. 1,269,039; June 11; v. 251; p. 292.

Barber, Howard M., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y. Sheet collecting, associating, and folding machine. No. 1,269,040; June 11; v. 251; p. 292.

Barber, Howard M., Stonington, Conn., assignor to C. B. Cottrell & Sons Company, New York, N. Y. Sheet collecting, associating, and folding machine. No. 1,269,041; June 11; v. 251; p. 292.

Barger, Clyde T., Hayes, Ill. Horse-collar. No. 1,270,588; June 25; v. 251; p. 774.

Barker, Wendell A., Chicago, Ill. Clutch-operating means. No. 1,270,255; June 25; v. 251; p. 681.

Barkey, Arnold A. (See Hueber, Henry, assignor.)

Barnes, Frederick W., assignor to Eastman Kodak Company, Rochester, N. Y. Motion-picture apparatus. No. 1,269,366; June 11; v. 251; p. 383.

Barnes, John L., Los Angeles, Cal. De- and re-capper for shotgun-shells. No. 1,269,249; June 11; v. 251; p. 352.

Barnes, John S., Detroit, Mich. Wire fence. No. 1,269,774; June 18; v. 251; p. 527.

Barney, William A. and W. J., Detroit, Mich. Time-indicator for mail-boxes. No. 1,268,667; June 4; v. 251; p. 170.

Barney, William J. (See Barney, William A. and W. J.)

Barr, Morris A., Ardmore, Pa. Rack. No. 1,268,313; June 4; v. 251; p. 69.

Barrère, Robert B., Berkeley, Cal. Soap-holding attachment for faucets. No. 1,268,668; June 4; v. 251; p. 170.

Barrett, John B. (See Brodstrom, Gustaf A., assignor.)

Barrick, Oliver W., and J. E. Speicher, Altoona, Pa. Automobile toy. No. 1,269,250; June 11; v. 251; p. 352.

Barron, William L., New York, N. Y., and F. E. Osol, Elizabeth, N. J., assignors to The Singer Manufacturing Company. Presser-foot-lifting mechanism for sewing-machines. No. 1,269,775; June 18; v. 251; p. 528.

Barry, Walter H., and T. E. Collins, Chicago, Ill. Rolling shutter. No. 1,268,914; June 11; v. 251; p. 257.

Barstow, Edwin O., assignor to The Dow Chemical Company, Midland, Mich. Treating brine. No. 1,270,589; June 25; v. 251; p. 775.

Bartlett, Percy H., Philadelphia, Pa. Meter and instrument support. No. 1,269,996; June 18; v. 251; p. 586.

Barton, Henry L., assignor of one-third to J. B. Green and one-third to G. M. McRoberts, Gary, Ind. Grading-machine. No. 1,268,314; June 4; v. 251; p. 70.

Barton, Louis E., Malta, Ill. Snow-plow. No. 1,269,367; June 11; v. 251; p. 388.

Barton, William F., Salt Lake City, Utah. Steering-wheel heater. No. 1,269,776; June 18; v. 251; p. 528.

Baruch, Sydney N., San Francisco, Cal. Electric-cable-protecting apparatus. No. 1,270,362; June 25; v. 251; p. 711.

Basel, Eli A., Kansas City, Mo. Water-circulator. No. 1,270,101; June 18; v. 251; p. 614.

Bassick Co., The. (See Cummins, Norman W., assignor.)

Batcheider, Frank R., Worcester, Mass., assignor to Universal Patents Company. Woven carrier. No. 1,268,787; June 4; v. 251; p. 203.

Batcheider, John E., Jackson, Cal. Automatic dirigible headlight for motor-vehicles. No. 1,270,363; June 25; v. 251; p. 711.

Bates, Adelmer M., assignor to Bates Valve Bag Company, Chicago, Ill. Machine for filling barrels, bags, and packages. No. 1,269,777; June 18; v. 251; p. 528.

Bates, Albert J., Chicago, Ill., assignor to Bates Expanded Steel Truss Co., Wilmington, Del. Heating-furnace. No. 1,268,080; June 4; v. 251; p. 3.

Bates, Charles E., Chester, Pa. Armor for pneumatic tires. No. 1,270,482; June 25; v. 251; p. 745.

Bates Expanded Steel Truss Co. (See Bates, Albert J., assignor.)

Bates Valve Bag Company. (See Bates, Adelmer M., assignor.)

Bätjer, Henry H. (See Maimin and Bätjer.)

Baumann, Gottfried, assignor to Hans Renold Limited, Manchester, England. Driving-chain. No. 1,269,997; June 18; v. 251; p. 587.

Baumann, Karl, Urmston, England, assignor, by mesne assignments, to The Westinghouse Electric & Manufacturing Company. Steam-turbine. No. 1,269,998; June 18; v. 251; p. 587.

Baur, Hugo J., Chicago, assignor, by mesne assignments, to W. P. Butler, Berwyn, Ill. Fare-register. No. 1,268,669; June 4; v. 251; p. 170.

Bayard, Theophile, Chicago, Ill. Convertible bench. No. 1,268,540; June 4; v. 251; p. 133.

Baylay, Frank, Newton, British Columbia, Canada, assignor of one-third to A. T. Downing, Boston, Mass. Stock-indicator. No. 1,269,151; June 11; v. 251; p. 325.

Bayles, Lewis C., Easton, Pa., assignor to Ingersoll-Rand Company, Jersey City, N. J. Fluid-operated percussive tool. No. 1,268,081; June 4; v. 251; p. 3.

Bayton, Arthur, Manila, Philippine Islands. Gold-saving device. No. 1,268,670; June 4; v. 251; p. 170.

Beach, George E., Glenrock, Wyo. Automatic alarm. No. 1,268,422; June 4; v. 251; p. 100.

Bead Chain Manufacturing Company, The. (See Gagnon, William J., assignor.)

Beal, Will R. (See Jordan and Beal.)

Beall, Hiram A., Kansas City, Mo. Burglar-alarm for automobiles. No. 1,268,915; June 11; v. 251; p. 258.

Beaman, Lora E. (See Thompson, Alfred, assignor.)

Beard, James C., Binghamton, N. Y., assignor to Lewis M. Weed Co. Inc. Legging. No. 1,270,364; June 25; v. 251; p. 711.

Beard, Oscar C., Los Angeles, Cal., assignor of one-fourth to R. P. Beard, Union, W. Va. Internal-combustion engine. No. 1,270,245; June 18; v. 251; p. 552.

Beard, Richard P. (See Beard, Oscar C., assignor.)

Beardsley, Robert F., assignor to Kalamazoo Corset Company, Kalamazoo, Mich. Strip-cutting machine. No. 1,269,368; June 11; v. 251; p. 384.

Beasley, John T., Blakely, Ga. Peanut-digger. No. 1,269,550; June 11; v. 251; p. 431.

Beattey, Earle J. R., assignor to Universal Optical Corporation, Providence, R. I. Eyeglass-mounting. No. 1,270,590; June 25; v. 251; p. 775.

Beaumont, Orpheus, Puketeraki, New Zealand. Life-saving jacket. No. 1,270,686; June 25; v. 251; p. 800.

Bechman, Henry F., assignor to Duplex Printing Press Company, Battle Creek, Mich. Metal-pump. No. 1,270,483; June 25; v. 251; p. 745.

Bechtel, John, Sr., Earlham, Iowa. Fan. No. 1,268,423; June 4; v. 251; p. 100.

Beck, Charles W., Detroit, Mich., assignor to The Beck-Frost Corporation. Terminal. No. 1,268,812; June 11; v. 251; p. 229.

Beck Duplicator Company. (See Saliger, Alois B., assignor.)

Beck-Frost Corporation, The. (See Beck, Charles W., assignor.)

Becker, John H., Hazleton, Pa., assignor to Anthracite Separator Company. Adjustable spiral separator. No. 1,270,365; June 25; v. 251; p. 711.

Becker, Julius, Racine, Wis. Single-phase motor. No. 1,269,152; June 11; v. 251; p. 325.

Becker, Julius, assignor to J. P. Mentzer, Chicago, Ill. Storage battery. No. 1,269,778; June 18; v. 251; p. 528.

Becker, Raymond A., and T. E. Maddex, Hillsboro, Ill. Insulator-thimble. No. 1,268,315; June 4; v. 251; p. 70.

Beckwith, Sidney F. (See Spainhour, James S., assignor.)

Beckwith, Walter, Los Angeles, Cal. Motion-picture reel. No. 1,269,999; June 18; v. 251; p. 587.

Beckwith, Walter C., Fostoria, Ohio. Apparatus for raising sunken vessels. No. 1,268,082; June 4; v. 251; p. 4.

Beeghley, Leonard, Kingsley, Iowa. Vine-cutter. No. 1,269,042; June 11; v. 251; p. 293.

Beek, Max, New York, N. Y. Cushion-tire and making the same. No. 1,270,591; June 25; v. 251; p. 775.

Beers, Floyd J., and C. E. Stamp, Lowman, N. Y. Automatic draft-regulator for heaters. No. 1,268,424; June 4; v. 251; p. 101.

Behrend, Bernard A. (See Field and Behrend.)

Belden, Edward H., assignor to Packard Motor Car Company, Detroit, Mich. Motor-vehicle. No. 1,268,088; June 4; v. 251; p. 4.

Belfils, Georges, Paris, France. Alternating-current generator and group-converter. No. 1,270,687; June 25; v. 251; p. 800.

Bell, Arthur, Nyack, N. Y. Adjustable crutch. No. 1,270,102; June 18; v. 251; p. 614.

Bell, Morris F., Fulton, Mo. Foot-rest. No. 1,270,103; June 18; v. 251; p. 615.

Bell, Schuyler C., Santa Fe, assignor of one-half to S. C. Bell, Belen, N. Mex. Fish-screen for irrigating-ditches. No. 1,269,779; June 18; v. 251; p. 529.

Bell, Stella C. (See Bell, Schuyler C., assignor.)

Bell, William I. (See Brueggeman, Frank, assignor.)

Bend, Charles M., St. Paul, assignor to Minnesota Manufacturing Association, North St. Paul, Minn. Spiral chute. No. 1,270,366; June 25; v. 251; p. 712.

Benecke, Adelbert O., Boston, Mass., assignor to General Electric Company. Dash-pot for measuring instruments. No. 1,269,519; June 11; v. 251; p. 423.

Benedict, Adelbert R., South Tacoma, Wash. Punch-press for removing ax and hammer handles. No. 1,268,541; June 4; v. 251; p. 134.

Benjamin Electric Manufacturing Company. (See Dean, William W., assignor.)

Benjamin, George H., New York, N. Y. Continuous tunnel-kiln. No. 1,268,204; June 4; v. 251; p. 38.

Benjamins, Israel, Bathbeach, assignor to A. A. Strauss, New York, N. Y. Machine for mixing flour and other materials. No. 1,268,813; June 11; v. 251; p. 230.

Benner, Raymond C. (See French and Benner.)

Benson, Jarome F., Lorenzo, Tex. Holder for sliding doors and windows. No. 1,268,671; June 4; v. 251; p. 171.

Benson, Robert L., Chicago, Ill. Gas-burner. No. 1,269,676; June 18; v. 251; p. 499.

Benson, Virginia B., River Forest, Ill. Flat-iron. No. 1,269,677; June 18; v. 251; p. 499.

Benton, Henry C., and J. R. Yost, Huntington, W. Va. Automobile-puller. No. 1,270,104; June 18; v. 251; p. 615.

Bergens, William J., assignor to Universal Faucet Company, Muskegon, Mich. Universal faucet. No. 1,268,316; June 4; v. 251; p. 70.

Bergeron, Louis E. (See Brinck, Hans, assignor.)

Berns, Edward H., and G. Dans, Monroe, Mich. Toaster. No. 1,270,592; June 25; v. 251; p. 776.
Bernson, Victor E., Salem, Mass. Ladder-rigging. No. 1,269,369; June 11; v. 251; p. 384.
Berriman, Edward C., Chicago, Ill. Shoulder-yoke. No. 1,268,084; June 4; v. 251; p. 4.
Bet, Maxim M., West Moose Jaw, Saskatchewan, Canada. Weapon. No. 1,268,205; June 4; v. 251; p. 38.
Bettendorf Company, The. (See Reading, Arthur K., assignor.)
Bettinardi, Isidoro, and A. Talpo, Chicago, Ill. Automatic electrically-operated railway-gate. No. 1,269,043; June 11; v. 251; p. 291.
Beveridge, George P., *et al.* (See Henning, Bruno W., assignor.)
Billingsley, Percy L., assignor to Atlas Manufacturing Company of Orlando, Orlando, Fla. Lifting-jack. No. 1,269,153; June 11; v. 251; p. 323.
Bilton, Ernest C., New York, N. Y. Composition of matter for cleaning. No. 1,270,105; June 18; v. 251; p. 615.
Bimson, Alfred G., Berthoud, Colo. Beet-harvester. No. 1,268,085; June 4; v. 251; p. 4.
Binnie, Alexander, New Plymouth, New Zealand. Life-saving pillow. No. 1,270,367; June 25; v. 251; p. 712.
Binnie, Alexander, New Plymouth, New Zealand. Life-saving mattress. No. 1,270,368; June 25; v. 251; p. 712.
Bird, George B., Hillsburg, assignor of one-half to N. V. Boulden, Sheridan, Ind. Adjustable fence-guard. No. 1,269,551; June 11; v. 251; p. 431.
Bird, Reginald W. (See Clapp, Albert L., assignor.)
Biscayart, Jules D., assignor of one-half to F. Cailleteau, Atlanta, Ga. Can-opener. No. 1,270,593; June 25; v. 251; p. 776.
Bishop, Charles F., assignor to North East Electric Company, Rochester, N. Y. Illustrating phenomena. No. 1,270,369; June 25; v. 251; p. 713.
Bishop Company, The. (See Bishop, Frederick R., assignor.)
Bishop, Frederick R., assignor to The Bishop Company, Inc., North Attleboro, Mass. Eyeglass-holder. No. 1,270,106; June 18; v. 251; p. 615.
Bissell, Carl H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Casing for electrical appliances. No. 1,268,425; June 4; v. 251; p. 101.
Bissell, Carl H., assignor to Crouse-Hinds Company, Syracuse, N. Y. Automatic switch. No. 1,268,426; June 4; v. 251; p. 102.
Bissell Carpet Sweeper Company. (See Mason, Francis C., assignor.)
Bixby, Gordon C. (See Judd, Charles W., assignor.)
Black, Paul H., Algona, Iowa. Pail-holder. No. 1,268,916; June 11; v. 251; p. 258.
Blackstone, William E., Buchtel, Ohio. Pumping apparatus. No. 1,268,917; June 11; v. 251; p. 258.
Blair Engineering Company. (See Blair, Thomas S., Jr., assignor.)
Blair Engineering Company. (See Davison, Orin H., assignor.)
Blair, Thomas S., Jr., assignor to Blair Engineering Company, Chicago, Ill. Reversing apparatus for regenerative furnaces. No. 1,269,154; June 11; v. 251; 324.
Blake, Lincoln, Hayward, Cal. Single-delivery match-safe. No. 1,268,317; June 4; v. 251; p. 71.
Blanchard, Jean, Bordeaux, France. Velocipede. No. 1,268,918; June 11; v. 251; p. 259.
Blau, Fritz, Charlottenburg, Germany, assignor to General Electric Company. Manufacture of incandescent lamps. No. 1,269,520; June 11; v. 251; p. 423.
Blaw-Knox Company. (See Knox, Luther L., assignor.)
Bleach Process Company. (See Wheeler, Frank G., assignor.)
Bielle, Albert, Dayton, Ohio. Device for handling crackers and the like. No. 1,268,919; June 11; v. 251; p. 259.
Bliesener, Willis J. (See Park, James M., assignor.)
Bloede, Victor G., Baltimore, Md. Composition of matter to be used for the manufacture of envelops and the gumming of paper. No. 1,268,672; June 4; v. 251; p. 171.
Bloede, Victor G., Catonsville, Md. Process of manufacturing vegetable glue. No. 1,269,678; June 18; v. 251; p. 500.
Blomstrom, Lowell C., Detroit, Mich. Taper-gage. No. 1,268,814; June 11; v. 251; p. 230.
Bloom, Edgar J., Timn, Ohio. Accelerator auxiliary pedal. No. 1,269,780; June 18; v. 251; p. 529.
Blumenberg, Henry, Jr., Oro Grande, assignor to Golden State Portland Cement Company, Los Angeles, Cal. Fertilizer. No. 1,270,688; June 25; v. 251; p. 800.
Blumenberg, Moxley, Portland, Me., by judicial change of name to M. Hill. Motion-picture screen. No. 1,269,552; June 11; v. 251; p. 431.
Blunt, Arthur E., Wendell, Idaho. Gate. No. 1,268,427; June 4; v. 251; p. 102.
Board, Robert V. (See Redecker, Charles, assignor.)
Boardman, John L., Butte, Mont. Stretcher. No. 1,270,107; June 18; v. 251; p. 615.
Bogstrand, Ole K., Brooklyn, N. Y. Ship's engine-room signal. No. 1,268,086; June 4; v. 251; p. 5.
Bohannan, Robert S., Ensley, Ala., assignor to National Steel Products Company. Guard-rail structure. No. 1,268,087; June 4; v. 251; p. 5.
Bolander, Jacob, Toronto, Ontario, Canada. Bag-holder. No. 1,269,577; June 18; v. 251; p. 471.
Bolt, Rufus R., Canton, Ohio. Nut-lock. No. 1,270,108; June 18; v. 251; p. 616.
Bolton, Frederick J. E., Lorraine, N. D. Binder attachment. No. 1,269,781; June 18; v. 251; p. 529.
Bond, Edgar M., Worcester, Mass. Ice-harvesting machinery. No. 1,268,088; June 4; v. 251; p. 6.
Bonderson, John, Emerson, Nebr. Hydraat. No. 1,269,044; June 11; v. 251; p. 291.
Boning, Augustus, London, England. Mounting of pictures. No. 1,270,370; June 25; v. 251; p. 713.
Bonney, Henry G., Philadelphia, Pa. Wrench. No. 1,270,484; June 25; v. 251; p. 746.
Bonora, Menotti, Turin, Italy. Primary battery. No. 1,269,679; June 18; v. 251; p. 500.
Boode, Magnus, Lacombe, Alberta, Canada. Feed-grinding machine. No. 1,269,899; June 18; v. 251; p. 562.
Boos, Henry. (See Boos, Orlando J., H., and H.)
Boos, Horace. (See Boos, Orlando J., H., and H.)
Boos, Orlando J., H., and H., Los Angeles, Cal. Tray-discharge for conveyers. No. 1,270,000; June 18; v. 251; p. 587.
Boos, Orlando J., H., and H., Los Angeles, Cal. Conveyer mechanism. No. 1,270,001; June 18; v. 251; p. 588.
Booth, Edwin F., Milwaukee, Wis. Shirt. No. 1,269,251; June 11; v. 251; p. 352.
Borbeck, Martin, assignor of one-half to H. A. Meyer and E. A. Burgess, Sioux City, Iowa. Self-filling fountain-pen. No. 1,268,206; June 4; v. 251; p. 39.
Borman, Emil, Chicago, Ill. Filling holes in metal parts. No. 1,270,757; June 25; v. 251; p. 818.
Bornmann, Carl. (See Topliff, Bornmann, and Clark.)
Borsse, Anton A., assignor of one-half to G. Pirc, Sheboygan, Wis. Detachable utensil-handle. No. 1,268,089; June 4; v. 251; p. 6.
Borsse, Anton A., and G. Pirc, Sheboygan, Wis. Dirigible headlight. No. 1,270,256; June 25; v. 251; p. 682.
Boston Fastener Company. (See Jackson, Samuel B., assignor.)
Botenstein, Charles E., Chicago, Ill. Screw-slotting machine. No. 1,269,370; June 11; v. 251; p. 384.
Both, Tonjes A. (See Haynes and Both.)
Bota, Paul, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Box for holding ampullæ, phials, and the like. No. 1,268,920; June 11; v. 251; p. 259.
Botsko, John, East Akron, Ohio. Portable car-bumper. No. 1,268,090; June 4; v. 251; p. 6.
Boulden, Nathan V. (See Bird, George B., assignor.)
Boundbrook Engine & Mfg. Co. (See Hensley, William T., assignor.)
Boursier, Henriette, New York, N. Y. Domestic heater. No. 1,268,428; June 4; v. 251; p. 102.
Bowman, Harvey, *et al.* (See Peterson, Charlie, assignor.)
Bowman, Walter H., Philadelphia, Pa., assignor to The S. S. White Dental Manufacturing Company. Artificial tooth. No. 1,269,521; June 11; v. 251; p. 424.
Bowser, Allen A., Fort Wayne, Ind. Multiple-piston-registering measure. No. 1,270,002; June 18; v. 251; p. 588.
Boyd, Abram H., Aspinwall, assignor to B. B. & B. Trunk Company, Pittsburgh, Pa. Wardrobe-trunk. No. 1,268,207; June 4; v. 251; p. 39.
Boyd, David C. (See Arndt, Franklin E., assignor.)
Boyd, Harry M., Fort Myers, Fla. Axle-drive. No. 1,268,208; June 4; v. 251; p. 39.
Boyd, John F., and J. Frazier, Rushville, Ind. Attachment for grain-drills. No. 1,270,109; June 18; v. 251; p. 616.
Boyer, Charles A., assignor to The Hugro Manufacturing Company, Warsaw, Ind. Clothes-line reel. No. 1,270,257; June 25; v. 251; p. 682.
Boyer, Jesse, assignor of one-third to H. Drage, Massillon, Ohio. Direction-signal. No. 1,268,673; June 4; v. 251; p. 171.
Brace, Richard A., assignor to White Mop Wringer Company, Fultonville, N. Y. Mop-wringer. No. 1,268,921; June 11; v. 251; p. 259.
Braden, Robert D., assignor to Oxweld Acetylene Company, Chicago, Ill. Acetylene-generator. No. 1,270,258; June 25; v. 251; p. 682.
Bradford, Joseph W., King, Tex. Controlling mechanism for windmills. No. 1,269,900; June 18; v. 251; p. 562.
Bradford, William S. (See Anthony and Bradford.)
Brady, James M., New York, N. Y. Hand-rail. No. 1,268,209; June 4; v. 251; p. 39.
Brand, George P., New York, N. Y. Mechanical sheet-controlling means. No. 1,269,045; June 11; v. 251; p. 294.
Brandon, Ralph M., Los Angeles, Cal. Pipe-tongs. No. 1,270,371; June 25; v. 251; p. 713.
Braselton, Chester H., and F. M. Carroll, Dayton, Ohio, assignors, by mesne assignments, to Wolverine Spark Plug Company, Inc. Spark-plug. No. 1,269,782; June 18; v. 251; p. 530.
Braselton, Chester H., Detroit, Mich., and F. M. Carroll, New York, N. Y., assignors to Wolverine Spark Plug Company, Inc., Detroit, Mich. Spark-plug. No. 1,269,783; June 18; v. 251; p. 530.
Braucher, Peter S. (See Rice, William L., assignor.)
Brazeal, Hulen, Harrison, Ark. Automatically-operated farm-gate. No. 1,268,815; June 11; v. 251; p. 230.

Bredenberg, Alfred, Champlain, N. Y., assignor of one-half to The Sheridan Iron Works, and one-half to T. W. & C. B. Sheridan Company. Bookbinding-machine. (Reissue.) No. 14,485; June 11; v. 251; p. 440.
Breece, Dole I., Alma, Mich. Beet-topper. No. 1,269,371; June 11; v. 251; p. 385.
Breirather, Ignatz, Plymouth, Wis. Lock. No. 1,270,372; June 25; v. 251; p. 713.
Breil, Julius J., New York, N. Y. Button-placing device for sewing-machines. No. 1,270,594; June 25; v. 251; p. 776.
Breneman, Joseph T., Rust, Cal. Combined harvester. No. 1,269,522; June 11; v. 251; p. 424.
Brennan, Jennie V., Trenton, N. J. Tie-slide. No. 1,269,372; June 11; v. 251; p. 385.
Brewer, James E. (See Vanderkleed and Brewer.)
Briant Manufacturing Company. (See Chatfield, George L., assignor.)
Bricker, Havel, and E. Fisher, Pittsford, Mich. Power device. No. 1,270,110; June 18; v. 251; p. 616.
Brinck, Hans, Los Angeles, Cal., assignor of forty-nine one-hundredths to L. R. Bergeron, Chicago, Ill. Cutting device for opening plaster casts on the bodies of injured. No. 1,269,373; June 11; v. 251; p. 385.
Brinton, William F., Washington, Iowa. Road-grader. No. 1,270,259; June 25; v. 251; p. 682.
British Westinghouse Electric & Manufacturing Company, The. (See Scanes, Arthur E. L., assignor.)
Brittain, George E., assignor to I. L. Keith, Haverhill, Mass. Sole-press. No. 1,270,111; June 18; v. 251; p. 616.
Brixey, Austin D., New York, N. Y. Projected-light screen. No. 1,269,046; June 11; v. 251; p. 294.
Brock, John M., Brooklyn, N. Y. Acetylene-lamp. No. 1,269,047; June 11; v. 251; p. 294.
Brockett, Bluford W., *et al.* (See Ray, Rudolph W., assignor.)
Brockhouse, Walter J., *et al.* (See Wheeler, Harry J., assignor.)
Brodstrom, Gustaf A., Portsmouth, Pa., assignor to J. B. Barrett, Alexandria, Va. Aiming device. No. 1,269,374; June 11; v. 251; p. 386.
Bronder, Gaston A., Brooklyn, N. Y. Three-cylinder gas or vapor engine. No. 1,270,485; June 25; v. 251; p. 746.
Brooks, John C., Paterson, N. J., assignor of one-half to O. T. Waite, Oshkosh, Wis. Woven fabric. No. 1,268,788; June 4; v. 251; p. 203.
Brooks, John C., Paterson, N. J., assignor to O. T. Waite, Oshkosh, Wis. Loom. No. 1,269,375; June 11; v. 251; p. 386.
Brophy Engineering Company, The. (See Neracher, Carl A., assignor.)
Brown, Alexander T., assignor to The Brown-Lipe Gear Company, Syracuse, N. Y. Compensating-gearing. No. 1,268,429; June 4; v. 251; p. 102.
Brown & Bigelow. (See Neal, William E., assignor.)
Brown, Charles S. (See Dargin, Ernest P., assignor.)
Brown, Claude F., assignor to Heco Envelope and Paper Company, Chicago, Ill. Envelop-machine. No. 1,268,674; June 4; v. 251; p. 172.
Brown, Frank D. (See Watts and Brown.)
Brown, George F., Helena, Mont. Box. No. 1,268,318; June 4; v. 251; p. 71.
Brown, Hanson & Boettcher. (See Willis, George M., assignor.)
Brown, Howard M. (See Howard and Brown.)
Brown, Jerry F., Sterling City, Tex. Fence attachment. No. 1,270,112; June 18; v. 251; p. 617.
Brown, John H., Chicago, Ill. Resilient heel and anchoring-washer therefor. No. 1,269,155; June 11; v. 251; p. 324.
Brown, John W., and W. Hess, Philadelphia, Pa.; said Hess assignor to said Brown. Sheet-metal-seaming machine. No. 1,270,373; June 25; v. 251; p. 714.
Brown, Joseph C., Clark, Wyo. Guard-finger. No. 1,270,689; June 25; v. 251; p. 800.
Brown-Lipe Gear Company, The. (See Brown, Alexander T., assignor.)
Brown, Marvin H., assignor to H. J. McGinnis, R. O'Connor, B. M. Vigoureux, San Francisco, and C. P. Eggleston, Oakland, Cal. Fuel heater and mixer. No. 1,269,252; June 11; v. 251; p. 352.
Brown, Robert M., London, England. Carbureting apparatus for internal-combustion engines. No. 1,270,486; June 25; v. 251; p. 746.
Brown, Samuel, Grand Rapids, Ohio. Liquid-supply-regulating device for cream-separators. No. 1,269,254; June 11; v. 251; p. 353.
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Gearing for mowing-machines. No. 1,270,487; June 25; v. 251; p. 747.
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Mower. No. 1,270,488; June 25; v. 251; p. 747.
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Mower. No. 1,270,489; June 25; v. 251; p. 748.
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Mowing-machine. No. 1,270,490; June 25; v. 251; p. 748.
Brown, Theophilus, assignor to Deere & Company, Moline, Ill. Mower. No. 1,270,491; June 25; v. 251; p. 748.
Brown, Thomas D., New York, N. Y., assignor to Sonora Phonograph Corporation. Filing-cabinet. No. 1,270,260; June 25; v. 251; p. 683.
Brown, Thomas R., Sparkill, N. Y., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Car and electric coupling control. No. 1,269,253; June 11; v. 251; p. 352.
Brueggeman, Frank, assignor of one-half to W. I. Bell, Chicago, Ill. Lighting-fixture. No. 1,270,261; June 25; v. 251; p. 683.
Brunker, George N., Pocatello, Idaho. Dirigible headlight. No. 1,268,675; June 4; v. 251; p. 172.
Brunswick-Balke-Collender Company, The. (See Nystrom, Martin, assignor.)
Brunswick-Balke-Collender Company, The. (See Treiber, Theodore R., assignor.)
Bryan, Rembert L., Zephyrhills, Fla. Implement for tightening wire fences. No. 1,268,922; June 11; v. 251; p. 260.
Bryant Electric Company, The. (See Thomas, George B., assignor.) (Reissue.)
Bryant, John O. (See Morris and Bryant.)
Bryant, Richard S., Akron, assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Rim for vehicle-wheels. No. 1,268,210; June 4; v. 251; p. 40.
Bryant, Richard S., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Rim for vehicle-wheels. No. 1,268,211; June 4; v. 251; p. 40.
Bryant, Richard S., deceased, O. H. Jobski, Cleveland, and J. H. Griswold, East Cleveland, administrators, assignors to The Standard Welding Company, Cleveland, Ohio. Machine for sizing transplit rims. No. 1,268,789; June 4; v. 251; p. 204.
Buchanan, John, Stoke-Coventry, England. Piston for use in internal-combustion engines. No. 1,270,374; June 25; v. 251; p. 714.
Buchholz, Anna, executrix. (See Buchholz, Charles H., assignor.)
Buchholz, Charles H., deceased; A. Buchholz, executrix, Cleveland, Ohio. Filling-machine. No. 1,268,923; June 11; v. 251; p. 260.
Buchner, Warren J., and R. F. North, Glendive, Mont. Compressed-air jack. No. 1,268,816; June 11; v. 251; p. 231.
Buckland, Alfred L., Mariette, Minn. Sugar-dispenser. No. 1,270,262; June 25; v. 251; p. 683.
Bugbee, Lucian W., assignor to American Optical Company, Southbridge, Mass. Edging-machine. No. 1,269,680; June 18; v. 251; p. 500.
Bugbee, Lucian W., assignor to American Optical Company, Southbridge, Mass. Cutter. (Reissue.) No. 14,486; June 18; v. 251; p. 255.
Bull, Lionel, Libertyville, assignor of one-half to G. R. Linn, Chicago, Ill. Vacuum-pump. No. 1,269,376; June 11; v. 251; p. 386.
Bullivant, Cisco, assignor of one-half to W. W. Zent, Spokane, Wash. Tire-rim-reducing device. No. 1,268,542; June 4; v. 251; p. 134.
Bullock, Edward W. (See Gleason and Bullock.)
Bumgardner, George L., assignor of one-half to H. A. Patrige, Gridley, Kans. Vehicle-coupling. No. 1,269,377; June 11; v. 251; p. 386.
Bunch, Lemuel T., Charleston, S. C. Molding-face cutter. No. 1,269,378; June 11; v. 251; p. 387.
Bunker, Frank P., North Manchester, Ind. Brick-mold. No. 1,268,676; June 4; v. 251; p. 172.
Burch, Herbert A., Kalamazoo, Mich. Tire. No. 1,268,924; June 11; v. 251; p. 260.
Burd Ring Sales Company. (See Cobe, Harry H., assignor.)
Burgedorff, Raymond N., Denver, Colo. Means for propelling bicycles or similar machines. No. 1,269,681; June 18; v. 251; p. 501.
Burger, Abraham B., Portland, Oreg. Bicycle-lock. No. 1,270,690; June 25; v. 251; p. 801.
Burger, Clarence W. (See Silverberg and Burger.)
Burger, Otto R. (See Gollinge, Alexander, assignor.)
Burgess, E. A., *et al.* (See Borbeck, Martin, assignor.)
Burget, William B., Kansas City, Mo. Vending-machine. No. 1,268,212; June 4; v. 251; p. 40.
Burk, Maurice, *et al.* (See Finnigan, James H., assignor.)
Burke, Lot F., Schenectady, N. Y. Motor-cycle. No. 1,269,379; June 11; v. 251; p. 387.
Burke, Michael J., assignor of one-fourth to M. Coyne, Bakersfield, Cal. Sleeve-holder. No. 1,270,113; June 18; v. 251; p. 617.
Burke, Rua E., Spokane, Wash. Fluid-container. No. 1,269,901; June 18; v. 251; p. 562.
Burkey, Henry T., Tulsa, Okla. Electric fish-stop. No. 1,269,380; June 11; v. 251; p. 387.
Burkhardt, Jacob R., assignor to The Springfield Metallic Casket Company, Springfield, Ohio. Burial-casket. No. 1,268,091; June 4; v. 251; p. 6.
Burkhart Corporation. (See Henry, Ferdinand G., assignor.)
Burkitt, Floyd A., assignor to The Recording and Computing Machines Company, Dayton, Ohio. Fare-box. No. 1,270,375; June 25; v. 251; p. 714.
Burnett, Orbid W., assignor of one-half to J. L. Welsh, Laclede, Mo. Apparatus for stretching wire. No. 1,269,381; June 11; v. 251; p. 388.
Burnham, George A., Saugus, assignor to S. B. Condit, Jr., Brookline, Mass. Circuit-breaker and switch. No. 1,269,156; June 11; v. 251; p. 324.

Burnip, William, Chase River, British Columbia, Canada. Sled-runner for automobiles. No. 1,269,255; June 11: v. 251; p. 353.
Burns, Domer A., Miller, Ark. Combined roller and harrow. No. 1,268,319; June 4; v. 251; p. 71.
Burns, Domer A., Miller, Ark. Coupling attachment. No. 1,268,320; June 4; v. 251; p. 72.
Burns, Thomas F., Oklahoma, assignor of one-half to R. P. Cruse, Anadarko, Okla. Music-turner. No. 1,270,114; June 18; v. 251; p. 617.
Burnson, Erick H., Wahpeton, N. D. Wrench. No. 1,270,263; June 25; v. 251; p. 683.
Burnstone, Hirsh, assignor of one-half to H. Grubin, Brooklyn, N. Y. Ash-sifter. No. 1,268,092; June 4; v. 251; p. 7.
Burridge, Francis O., executor. (See Burridge, Lee S.)
Burridge, Lee S., deceased; F. O. Burridge, executor, as signor, by mesne assignments, to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,268,790; June 4; v. 251; p. 204.
Burrill, Robert T., Winchester, N. H. Rail-tie. No. 1,270,691; June 25; v. 251; p. 801.
Burton, Thomas L., assignor to The American Brake Company, St. Louis, Mo. Brake-head-balancing device. No. 1,269,256; June 11; v. 251; p. 353.
Burton, Thomas L., assignor to The American Brake Company, St. Louis, Mo. Brake head and shoe balancing device. No. 1,269,257; June 11; v. 251; p. 353.
Busch, Herman F., Millvale, assignor to Armstrong Cork Co., Pittsburgh, Pa. Spinning and drawing roll for textile operations. No. 1,269,682; June 18; v. 251; p. 501.
Busch-Sulzer Bros.-Diesel Engine Company. (See Verhey, Hubert C., assignor.)
Bush, Charles A., assignor to Oshkosh Manufacturing Company, Oshkosh, Wis. Mixing-machine. No. 1,268,093; June 4; v. 251; p. 7.
Bush, Le Grand C., Binghamton, assignor to International Time Recording Company of New York, Endicott, N. Y. Interlocking door system. No. 1,270,264; June 25; v. 251; p. 684.
Butcher, Lowell R., Holstein, Iowa. Stock drinking-fountain. No. 1,269,048; June 11; v. 251; p. 294.
Butler, David H., assignor to The Inlaid Company, Inc., Providence, R. I. Picture-securing device. No. 1,269,382; June 11; v. 251; p. 388.
Butler, Perl H., Weatogue, Conn. Cooking utensil. No. 1,268,677; June 4; v. 251; p. 172.
Butler, Walter H., Douglasville, Ga. Guard for drinking-glasses. No. 1,269,902; June 18; v. 251; p. 563.
Butler, William P. (See Baur, Hugo J., assignor.)
Butler, William P. (See Johnson, Jay M., assignor.)
Butter Serving Machine Company. (See Straight, Bennett D., assignor.)
Button, William S., Riverside, Cal. Canteen-mouthpiece. No. 1,270,092; June 25; v. 251; p. 801.
Bye, Andrew, Butte, Mont. Hinge for casement-windows. No. 1,268,678; June 4; v. 251; p. 172.
Bye, Edwin A. (See Mayer and Bye.)
Bygrave, Leonard C., assignor to The Relay Automatic Telephone Company, Limited, London, England. Means for connecting electric lines. No. 1,269,903; June 18; v. 251; p. 563.
Byrd, Joseph E., Mount Olive, N. C. Receptacle. No. 1,268,321; June 4; v. 251; p. 72.
Bystrom, John, Chicago, Ill. Loose-leaf binder. No. 1,270,246; June 18; v. 251; p. 653.
C. B. Cottrell & Sons Company. (See Barber, Howard M., assignor.)
C. C. Blake, Incorporated. (See Foster, Edward E., assignor.)
Cadillac Motor Car Company. (See Parker, Clark W., assignor.)
Cady, Elisha J., Chicago, Ill. Saturation of porous fabrics. No. 1,268,430; June 4; v. 251; p. 103.
Cady, Henry C., assignor to American Optical Company, Southbridge, Mass. Ophthalmic mounting. No. 1,269,383; June 11; v. 251; p. 388.
Caen, George, Sr., San Antonio, Tex. Gasolene and oil filter. No. 1,268,431; June 4; v. 251; p. 103.
Cahall, William H., Racine, Wis. Boiler. No. 1,268,679; June 4; v. 251; p. 173.
Callieteau, Fernand. (See Biscayart, Jules D., assignor.)
Caillouette, Auguat H., Nashville, Tenn. Oil-burner. No. 1,269,258; June 11; v. 251; p. 354.
Caldwell, Edwin M., Edgewood, assignor to Davol Rubber Company, Providence, R. I. Nursing-nipple. No. 1,270,693; June 25; v. 251; p. 801.
Callow, John M., Salt Lake City, Utah, assignor to Metals Recovery Company, Augusta, Me. Concentrating ores. No. 1,269,157; June 11; v. 251; p. 324.
Cameron, George A., and J. McKay, Stewart, British Columbia, Canada. Brush-cutting knife. No. 1,270,492; June 25; v. 251; p. 749.
Cameron, Thomas W., Hora Hora Valley, Whangarei, New Zealand. Bottle-stopper. No. 1,268,213; June 4; v. 251; p. 40.
Campana, George G., assignor, by mesne assignments, of one-half to The Thomas Lasting Wave Co., New York, N. Y. Hair-curler. No. 1,269,158; June 11; v. 251; p. 324.
Campau, Lawrence M., Detroit, Mich. Tie-pin holder. No. 1,269,578; June 18; v. 251; p. 471.
Campbell, Ada H., Atlanta, Ga. Educational appliance. No. 1,269,384; June 11; v. 251; p. 388.
Campbell Architectural Iron Co. (See Elliott, Irving H., assignor.)
Campbell Bros. Manufacturing Company, The. (See Fischer, Charles E., assignor.)
Campbell, Colin, Rutherford, N. J. Adjustable surface grate-bar. No. 1,270,694; June 25; v. 251; p. 801.
Campodonico, John J., Stockton, Cal. Vehicle-air-cushion compressor. No. 1,270,493; June 25; v. 251; p. 749.
Canda, Ferdinand E., New York, N. Y. Grate and grate-bar therefor. No. 1,269,579; June 18; v. 251; p. 471.
Canfield, William P., *et al.* (See McCormick, Oscar C., assignor.)
Cansfield, Charles E. (See Clark, Ackerman, and Cansfield.)
Capata, George, Gary, Ind. Shoe. No. 1,269,385; June 11; v. 251; p. 388.
Carborundum Company, The. (See Allen, Thomas B., assignor.)
Carling, Rose S., Los Angeles, Cal. Combination arch-support. No. 1,270,003; June 18; v. 251; p. 588.
Carlson, Albert, Chicago, Ill. Tail-gate lock. No. 1,270,695; June 25; v. 251; p. 802.
Carlson, Axel S., Jerome, Ariz. Nut-lock. No. 1,269,386; June 11; v. 251; p. 389.
Carlson, Charles A., Stillman Valley, Ill. Barrel-stand. No. 1,270,696; June 25; v. 251; p. 802.
Carlson, Frederick E., and J. F. Lamb, assignors to Landers, Frary & Clark, New Britain, Conn. Circuit-coupling for electrical apparatus. No. 1,269,784; June 18; v. 251; p. 530.
Carlson, Hilmer, Chicago, Ill. Refrigerator. No. 1,268,791; June 4; v. 251; p. 203.
Carlson, Walter C., Milwaukee, Wis., assignor to Stokes & Smith Company, Summerdale, Philadelphia, Pa. Machine for applying flies to paper boxes. No. 1,269,259; June 11; v. 251; p. 354.
Carpenter, George F. (See Zieaing and Carpenter.)
Carpenter, Hezekiah, Haxtum, Colo. Rewinder for motion-picture films. No. 1,270,115; June 18; v. 251; p. 617.
Carr, Edward G., Oakland, Cal. Subgrade-scraper. No. 1,268,925; June 11; v. 251; p. 260.
Carr Fastener Company. (See Anderson, Andrew G., assignor.)
Carringer, James R. (See Holland, Carringer, and Bacheldor.)
Carroll, Frank H., Los Angeles, Cal. Gas control for autos. No. 1,268,214; June 4; v. 251; p. 41.
Carroll, Fred M. (See Braselton and Carroll.)
Carscadin, Charles A., assignor to National Car Equipment Company, Chicago, Ill. Draw-bar-yoke key. No. 1,270,116; June 18; v. 251; p. 617.
Carson, Joseph P., assignor to Carson Manufacturing Corporation, Richmond, Va. Safety cranking device for motor-vehicles. No. 1,268,543; June 4; v. 251; p. 134.
Carson Manufacturing Corporation. (See Carson, Joseph P., assignor.)
Carter, Daniel, assignor of one-half to J. D. B. McNeice and A. J. Merrifield, Toronto, Ontario, Canada. Gas lighting and extinguishing apparatus. No. 1,269,049; June 11; v. 251; p. 295.
Caser, William P., Oshkosh, Wis. Sash-tool. No. 1,268,215; June 4; v. 251; p. 41.
Casper, Edward A., and J. K. Symonds, Dunlap, Ill. Device for feeding slop or swill. No. 1,269,580; June 18; v. 251; p. 472.
Cates, Dafford D., Memphis, Tenn. Carbureter-controlling mechanism. No. 1,268,680; June 4; v. 251; p. 173.
Cates, Lorwin N., St. Louis, Mo. Tooth-brush. No. 1,268,544; June 4; v. 251; p. 134.
Cathcart, Frank H., Trenton, N. J., assignor, by mesne assignments, to Safety First Manufacturing Company, Incorporated, Alexandria, Va. Water-column and gage-cock. No. 1,269,050; June 11; v. 251; p. 295.
Cathrill, Jack, assignor to L. R. Fenn, Hollywood, Cal. Electric lamp. No. 1,269,904; June 18; v. 251; p. 563.
Catharner, Joe, *et al.* (See Dugan, Joseph A., assignor.)
Catlin, Thomas S. (See Catlin, Winfield, assignor.)
Catlin, Winfield, Rockville, assignor of one-half to T. S. Catlin, Guion, Ind. Sanitary milk-pail. No. 1,268,792; June 4; v. 251; p. 205.
Caton, Irwin L., Asheville, N. C. Desk attachment for tables. No. 1,268,926; June 11; v. 251; p. 261.
Catucci, Pliny, Newark, N. J., assignor, by mesne assignments, to Otto Heineman Phonograph Supply Co., Inc., New York, N. Y. Spring-motor-winding spindle. No. 1,270,265; June 25; v. 251; p. 684.
Cavanagh, James, Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe. No. 1,268,432; June 4; v. 251; p. 103.
Century Storage Battery Company. (See Land, Edmund, assignor.)
Chabala, John, Cuddy, Pa. Car-brake. No. 1,270,377; June 25; v. 251; p. 715.
Chadwick, Lee S., East Cleveland, assignor to The Cleveland Metal Products Company, Cleveland, Ohio. Safety-burner. No. 1,268,216; June 4; v. 251; p. 41.
Chamin, Horatio C. (See Grabill, John F., assignor.)
Chalender, Thomas W., Garwood, Idaho. Saw-set. No. 1,268,681; June 4; v. 251; p. 173.

Chamberlain, Minor E., St. Louis, Mo. Mold. No. 1,268,682; June 4; v. 251; p. 173.
Chambley, Alexander. (See Stacker, Ernest C., assignor.)
Chandler, James A. (See Manuel, William H., assignor.)
Chapman, Byron V., Newberry, S. C. Arm-shield. No. 1,270,697; June 25; v. 251; p. 802.
Chapman, Ralph W., assignor to T. M. Chapman's Company, Oldtown, Me. Sinusoidal-wave generator. No. 1,268,545; June 4; v. 251; p. 135.
Chappaite, Joseph E., Philadelphia, Pa., assignor to E. L. Mansure Company, Chicago, Ill. Fringe. No. 1,268,817; June 11; v. 251; p. 231.
Chappell, Howard F., assignor to Mineral Products Corporation, New York, N. Y. Recovering potassium sulfate and alumina from alunite. No. 1,268,433; June 4; v. 251; p. 104.
Chappell, Howard F., assignor to Mineral Products Corporation, New York, N. Y. Treatment of insoluble alumina. No. 1,270,266; June 25; v. 251; p. 684.
Chappell, Thomas S., assignor to McKenna Brass and Manufacturing Company, Pittsburgh, Pa. Display-stand. No. 1,270,004; June 18; v. 251; p. 588.
Charlberg, Theodore E., Moline, Ill. Screen-fastener. No. 1,270,117; June 18; v. 251; p. 618.
Charles J. Tagliabue Manufacturing Co. (See Roesch, Alfred, assignor.)
Charley, Walter G. (See Russell and Charley.)
Chasnoff, Joseph, *et al.* (See Preston, Edward, assignor.)
Chatfield, Charles B., Grand Rapids, Mich. Road construction. No. 1,269,785; June 18; v. 251; p. 531.
Chatfield, George L., assignor to Briant Manufacturing Company, Indianapolis, Ind. Ball-release for game apparatus. No. 1,270,595; June 25; v. 251; p. 776.
Chemical Development Company. (See McElroy, Karl P., assignor.)
Cheney, Charles G., Tacoma, Wash. Device for locating and raising sunken vessels. No. 1,269,523; June 11; v. 251; p. 424.
Cheney, George H., Spokane, Wash. Pan-counterweight. No. 1,269,051; June 11; v. 251; p. 296.
Cheney, Howell, South Manchester, Conn. Neckband portion for neckties and producing the same. No. 1,270,376; June 25; v. 251; p. 715.
Cheney, Robert J. (See Nees, Louis, assignor.)
Chorebanian, Hampar E., Newburyport, Mass. Fender for vehicles. No. 1,269,786; June 18; v. 251; p. 531.
Christensen, Merton V., Hendricks, Minn. Runner for wheelbarrows. No. 1,270,495; June 25; v. 251; p. 749.
Christians, George W., Chattanooga, Tenn. Hydraulic jet-pump. No. 1,269,387; June 11; v. 251; p. 389.
Christiansen, Barney, Slater, Iowa. Pneumatic engine-starter. No. 1,268,434; June 4; v. 251; p. 104.
Christiansen, Charles J., *et al.* (See Johannessen and Waage, assignors.)
Christiansen, Holger, Erie, Pa. Garment-fastener. No. 1,270,494; June 25; v. 251; p. 749.
Christmann, Daniel P., Delta, Ohio. Artificial hand. No. 1,268,546; June 4; v. 251; p. 135.
Christopher, Columbus C., G. L. Keith, J. E. Allsteadt, E. D. Elnsel, Hastings, and C. G. Pelander, Holdrege, assignors to Hastings Equity Grain Bin Manufacturing Co., Hastings, Nebr. Corn-crib. No. 1,268,435; June 4; v. 251; p. 104.
Church, Edmund S., assignor to Automatic Carburetor Co., Chicago, Ill. Fuel-feed system for explosive-engines. No. 1,269,787; June 18; v. 251; p. 531.
Church, Harold D., assignor to Packard Motor Car Company, Detroit, Mich. Hydrocarbon-motor. No. 1,270,596; June 25; v. 251; p. 777.
Churchill, William, assignor to Corning Glass Works, Corning, N. Y. Cover-glass for automobile-headlights. No. 1,269,788; June 18; v. 251; p. 532.
Cimaglia, Arthur C., Mount Vernon, N. Y. Working-drawer for jewelry workers. No. 1,270,496; June 25; v. 251; p. 749.
Clapp, Albert L., Braintree, assignor to R. W. Bird, Framingham, Mass. Fibrous material and making the same. No. 1,269,905; June 18; v. 251; p. 563.
Clark, Albert H. (See Pare and Clark.)
Clark, Charles H., Crafton, Pa. Dump-car-door-operating device. No. 1,270,005; June 18; v. 251; p. 589.
Clark, Daniel E., Lynn, Mass. Making fertilizer. No. 1,268,683; June 4; v. 251; p. 174.
Clark, Ezra C. (See Topliff, Bornmann, and Clark.)
Clark, Farley G., P. Ackerman, and C. E. Cansfield, assignors to The Toronto Power Company Limited, Toronto, Ontario, Canada. Electric-heater element. No. 1,269,052; June 11; v. 251; p. 296.
Clark, Farley G., P. Ackerman, and C. E. Cansfield, assignors to The Toronto Power Company Limited, Toronto, Ontario, Canada. Electrically-heated tank or reservoir. No. 1,269,053; June 11; v. 251; p. 296.
Clark, Farley G., and A. T. Stuart, assignors to The Toronto Power Company Limited, Toronto, Ontario, Canada. Chemically extracting pure metals from their ores at a temperature lower than the fusing-point of the metals to be extracted. No. 1,269,054; June 11; v. 251; p. 297.
Clark, Frederick J., Syracuse, N. Y. Base-ball-game device. No. 1,268,436; June 4; v. 251; p. 105.
Clark, Israel L., Riverside, R. I. Papering-board. No. 1,270,006; June 18; v. 251; p. 589.
Clark, Willett F., Phoenix, Ariz. Igniter for internal-combustion engines. No. 1,268,322; June 4; v. 251; p. 72.
Clarke, Algernon E., Grand Rapids, Mich. Elevator-lock. No. 1,268,094; June 4; v. 251; p. 7.
Clarke, Cecil M., Chicago, Ill. Manufacturing sheathing material. No. 1,269,906; June 18; v. 251; p. 564.
Clause, William L., Pittsburgh, Pa., assignor to Pittsburgh Plate Glass Company. Leer. No. 1,268,217; June 4; v. 251; p. 41.
Claypool, Harry F., East St. Louis, Ill. Bolt-puller. No. 1,269,683; June 18; v. 251; p. 501.
Cleaves, Harold E., and F. W. Horton, Washington, D. C. Treating ores. No. 1,268,323; June 4; v. 251; p. 72.
Cleveland Metal Products Company, The. (See Chadwick, Lee S., assignor.)
Cleveland Stone Company, The. (See Hampton, John W., assignor.)
Cleveland Tractor Company, The. (See White, Rollin H., assignor.)
Clough, Lee, assignor to The Firestone Tire & Rubber Company, Akron, Ohio. Solid tire. No. 1,268,437; June 4; v. 251; p. 105.
Cloyed, Curtis A., Cedar Vale, Kans. Crank attachment. No. 1,270,007; June 18; v. 251; p. 589.
Cloyd, Oliver H., Peoria, Ill., assignor, by mesne assignments, to Crown Tire & Rubber Company, Ralston, Nebr. Tire and making the same. No. 1,270,247; June 18; v. 251; p. 653.
Cluett, Peabody & Co. (See Kennedy, Richard O., assignor.)
Clydesdale, James, Weehawken, N. J. Protective-armor belt for pneumatic tires. No. 1,269,388; June 11; v. 251; p. 389.
Cobarubia, Frank, Sacramento, Cal. Returning hoop. No. 1,270,378; June 25; v. 251; p. 715.
Cobb, Henry Z., Winchester, Mass., assignor to Revere Rubber Company. Making resilient balls and apparatus therefor. No. 1,270,008; June 18; v. 251; p. 589.
Cobb, Henry Z., Winchester, Mass., assignor to Revere Rubber Company. Ball-winding machine. No. 1,270,009; June 18; v. 251; p. 590.
Cobe, Harry H., Boston, Mass., assignor to Burd Ring Sales Company, Buffalo, N. Y. Separable fastener. No. 1,268,927; June 11; v. 251; p. 261.
Cochran, Eugene, Cleveland, Ohio. Lamp-globe fixture. (Reissue.) No. 14,478; June 4; v. 251; p. 210.
Cochran, Joseph, New Orleans, La. Tractor. No. 1,268,324; June 4; v. 251; p. 73.
Coe, Charles T., Kearney, N. J. Turbine fan-blower. No. 1,268,095; June 4; v. 251; p. 7.
Coffield, James L., Dayton, Ohio. Gearing for washing-machines. No. 1,270,379; June 25; v. 251; p. 715.
Coffin, Albert T., El Paso, Tex. Device for closing spouts of cans. No. 1,269,389; June 11; v. 251; p. 389.
Coffman, Herbert, Nazareth, Pa. Juice-asepticizing process. No. 1,270,698; June 25; v. 251; p. 802.
Cohen, Wolf, Fort Worth, Tex. Oil-tank protector. No. 1,270,497; June 25; v. 251; p. 750.
Colburn, Sophia, Fort Worth, Tex. Thimble. No. 1,270,699; June 25; v. 251; p. 803.
Colby, Ora A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Percolator-heater. No. 1,268,928; June 11; v. 251; p. 261.
Cole, Charles C. (See Kruse, Theodore H., assignor.)
Cole, Elnathan, assignor to Cole Manufacturing Company, Los Angeles, Cal. Gas-radiator. No. 1,269,907; June 18; v. 251; p. 564.
Cole Manufacturing Company. (See Cole, Elnathan, assignor.)
Cole, Philip H., Shanghai, China, assignor to W. R. McCanne, trustee, Rochester, N. Y. Reinforced-concrete pole-base. No. 1,268,325; June 4; v. 251; p. 73.
Collier, Arthur T., St. Albans, England. Change-speed and reversing gear. No. 1,269,524; June 11; v. 251; p. 424.
Collins, James F., Providence, R. I. Treating decayed spots and cavities in living trees. No. 1,270,010; June 18; v. 251; p. 590.
Collins, Thomas E. (See Barry and Collins.)
Collis Co., The. (See Collis, Oliver D., assignor.)
Collis, Oliver D., assignor to The Collis Co., Clinton, Iowa. Cement-reinforcement. No. 1,269,553; June 11; v. 251; p. 432.
Colman, Howard D., assignor to Barber-Colman Company, Rockford, Ill. Winder. No. 1,268,684; June 4; v. 251; p. 174.
Columbia Conditioning Company. (See Heidler, Ernst, assignor.)
Columbia Envelope Co. (See Henderson, John, assignor.)
Compagnie Générale des Etablissements Pathé Frères, Phonographe et Cinématographe. (See Ivatts, Ernest A., assignor.)
Condit, Sears B., Jr. (See Burnham, George A., assignor.)
Conklin, Bruce, London, England. Rotary engine, pump, compressor, and the like. No. 1,270,498; June 25; v. 251; p. 750.
Conklin, Charles D., Judson, Minn. Incubator-frame. No. 1,270,700; June 25; v. 251; p. 803.
Conley, George W., Wheaton, Ill. Belt-buckle. No. 1,268,326; June 4; v. 251; p. 73.
Connecticut Electric Manufacturing Company, The. (See Haynes and Both, assignors.)
Conniff, William E., assignor of one-half to E. J. Cutting, Kansas City, Mo. Reinforced-plaster body. No. 1,268,929; June 11; v. 251; p. 261.

Conover, Claude A., Newburgh, N. Y. Pencil-sharpener. No. 1,270,119; June 18; v. 251; p. 613.
Conrad, Leonard, Pasadena, Cal. Adjustable cradle. No. 1,268,327; June 4; v. 251; p. 73.
Conran, William F., Brooklyn, N. Y. Fitting for stand-pipe systems. No. 1,269,908; June 18; v. 251; p. 564.
Consolidated Car-Heating Company. (See Farmer and Jansen, assignors.)
Consolidated Mining & Smelting Company of Canada, The. (See Hamilton, Edward H., assignor.)
Consolidated Railway Electric Lighting and Equipment Co. (See Kennedy, Patrick, assignor.)
Continental Can Company. (See Warme and Taliaferro, assignors.)
Converse, Atherton D., Winchendon, Mass. Child's vehicle. No. 1,269,260; June 11; v. 251; p. 354.
Converse, Francis B., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Machine and method for applying rubber treads to pneumatic tires. No. 1,270,380; June 25; v. 251; p. 716.
Conway, Julian C., Rogerstown, Tex. Automatic stacker and unloading barge. No. 1,270,120; June 18; v. 251; p. 618.
Conwell, Walter L., Montclair, N. J., assignor to Elicon Company, New York, N. Y. Slidable metallic door. No. 1,270,011; June 18; v. 251; p. 590.
Conwell, Walter L., Montclair, N. J., assignor to Elicon Company, New York, N. Y. Metallic door. No. 1,270,012; June 18; v. 251; p. 591.
Conwell, Walter L., Montclair, N. J., assignor to Elicon Company, New York, N. Y. Sectional cast-metal door with interchangeable parts. No. 1,270,013; June 18; v. 251; p. 591.
Conwell, Walter L., Montclair, N. J., assignor to Elicon Company, New York, N. Y. Metallic door with interlocking parts. No. 1,270,014; June 18; v. 251; p. 592.
Cook, Dwight C., Philadelphia, Pa. Direction-indicator for automobiles. No. 1,269,261; June 11; v. 251; p. 355.
Cook, Fred A., Longview, Ill. Hinge. No. 1,270,499; June 25; v. 251; p. 750.
Cook, James M., Anaheim, Cal. Corner-finisher for irrigation. No. 1,270,597; June 25; v. 251; p. 777.
Cook, John E., Little River, S. C. Manicuring implement. No. 1,268,930; June 11; v. 251; p. 262.
Cooley, Fred W., assignor to J. J. Gerber, Minneapolis, Minn. Distributing-spout. No. 1,268,218; June 4; v. 251; p. 42.
Cooley, Fred W., assignor to J. J. Gerber, Minneapolis, Minn. Distributing-spout. No. 1,268,219; June 4; v. 251; p. 42.
Coolidge, William D., Schenectady, N. Y., assignor to General Electric Company. Electric-resistance furnace. No. 1,268,685; June 4; v. 251; p. 174.
Coons, Burton C., Rochester, N. Y. Paring-machine. No. 1,269,390; June 11; v. 251; p. 388.
Cooper, Orange J., Lamar, Colo. Motion-picture camera for color photography. No. 1,269,391; June 11; v. 251; p. 390.
Cooper, Robert A. and W., East Smethport, Pa. Automatic wood-gas-regulating valve for destructive-wood-distillation plants. No. 1,269,392; June 11; v. 251; p. 390.
Cooper, Thomas L. B., London, England. Electric motor. No. 1,269,909; June 18; v. 251; p. 564.
Cooper, William. (See Cooper, Robert A. and W.)
Cope, Burton G., Orrville, Ohio. Antiskid device for automobile-wheels. No. 1,268,931; June 11; v. 251; p. 262.
Cope, Joseph H., Windsor, Colo. Sweep-rake. No. 1,269,393; June 11; v. 251; p. 390.
Cope, Thomas S. and W. H., Coeur d'Alene, Idaho. Exhausting device for depurators. No. 1,269,910; June 18; v. 251; p. 565.
Cope, William H. (See Cope, Thomas S. and W. H.)
Copeman Development Company. (See Copeman, Lloyd G., assignor.)
Copeman, Lloyd G., Flint, Mich. Grease-cup. No. 1,269,159; June 11; v. 251; p. 325.
Copeman, Lloyd G., assignor to Copeman Development Company, Flint, Mich. Grease-capsule. No. 1,269,160; June 11; v. 251; p. 325.
Copper Products Company. (See Huggins, Nathaniel, assignor.)
Cornelius, Charles C., Grove City, Pa. Wall for buildings. No. 1,270,381; June 25; v. 251; p. 716.
Corning Glass Works. (See Churchill, William, assignor.)
Corona Typewriter Company. (See Mosher, Charles P., assignor.)
Correll, Percy E., Adelaide, South Australia, Australia. Construction of tents. No. 1,270,701; June 25; v. 251; p. 803.
Corrigan, Frank P., Cleveland, Ohio. Extension-bandage. No. 1,268,932; June 11; v. 251; p. 262.
Corrow, Thomas, Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Rounding and channeling machine. No. 1,269,055; June 11; v. 251; p. 297.
Costello, William P., Great Falls, Mont. Nursery-chair. No. 1,270,702; June 25; v. 251; p. 803.
Cottingham, Arthur H., Union, S. C. Bobbin-stripper. No. 1,270,763; June 25; v. 251; p. 803.
Cotton, Walter H., Chicago, Ill. Draft-gear for railway-cars. No. 1,270,598; June 25; v. 251; p. 777.
Couch Bros. Manufacturing Co. (See Couch, Walter D., assignor.)
Couch, Charles A., assignor, by mesne assignments, to Fuel Economy Company, Springfield, Mass. Gas-mixing device. No. 1,270,015; June 18; v. 251; p. 592.
Couch, Walter D., assignor to Couch Bros. Manufacturing Co., Atlanta, Ga. Support for jail-hammocks. No. 1,270,399; June 25; v. 251; p. 777.
Court, Clarence W., assignor to W. P. Murphy, Chicago, Ill. Drop-end gondola car. No. 1,268,547; June 4; v. 251; p. 135.
Courtney, John, Albany, Oreg. Beet-harvesting machine. No. 1,269,789; June 18; v. 251; p. 532.
Cox, Charles E., Venice, assignor of one-fourth to B. F. Crossman, Los Angeles, Cal. Machine-drill. No. 1,270,121; June 18; v. 251; p. 618.
Cox, Elmer T., San Francisco, and W. E., Oakland, Cal. Steering mechanism. No. 1,268,933; June 11; v. 251; p. 262.
Cox, James W., Wilmette, assignor to Pacific Flush Tank Company, Chicago, Ill. Electric switch. No. 1,269,884; June 18; v. 251; p. 501.
Cox, William E. (See Cox, Elmer T. and W. E.)
Coyle, Joseph L., Smithers, British Columbia, Canada. Egg-box. No. 1,269,394; June 11; v. 251; p. 390.
Coyne, Martin. (See Burke, Michael J., assignor.)
Crabbe, Henry J., assignor to The Grasselli Chemical Company, Cleveland, Ohio. Pickling compound. No. 1,268,818; June 11; v. 251; p. 231.
Crahill, William L., and W. E. Wiley, Battle Creek, Mich. Hose-clamp. No. 1,268,934; June 11; v. 251; p. 262.
Craig, Wordie, Ione, Ark. Grapple for well-buckets. No. 1,268,686; June 4; v. 251; p. 174.
Craighead, James R., Schenectady, N. Y., assignor to General Electric Company. Demand-measurement. No. 1,269,525; June 11; v. 251; p. 425.
Cramer, Stuart W. (See Hodge, William B., assignor.)
Cramp, William T., Poughkeepsie, N. Y. Toy. No. 1,270,122; June 18; v. 251; p. 619.
Crandall, Henry F., Racine, Wis. Fishing-rod support. No. 1,268,096; June 4; v. 251; p. 8.
Crandall, Henry F., Racine, Wis. Fish-lure. No. 1,268,097; June 4; v. 251; p. 8.
Crane, Charles H., Kansas City, Mo. Nut-lock. No. 1,269,011; June 18; v. 251; p. 565.
Crane, Tobias L., Tyrone, N. Mex. Pulp-filter. No. 1,268,935; June 11; v. 251; p. 263.
Crane, William H., Poughkeepsie, N. Y., assignor to Moline Plow Company. Elevator-support for harvesters. No. 1,269,101; June 11; v. 251; p. 325.
Crane, William H., Poughkeepsie, N. Y., assignor to Moline Plow Company. Butt-adjuster mechanism for grain-binders. No. 1,270,016; June 18; v. 251; p. 593.
Cranston, Arthur, Washington, D. C. Window-cleaner. No. 1,269,395; June 11; v. 251; p. 391.
Crawford, Jesse C., Pittsburgh, Pa. Indexing, marking, and binding device. No. 1,269,396; June 11; v. 251; p. 391.
Crawford, Thomas, Bristol, England. Ambulance-stretcher vehicle. No. 1,270,383; June 25; v. 251; p. 717.
Crawford, Thomas J., Ottawa, Ill. Vise. No. 1,269,263; June 11; v. 251; p. 355.
Crecelius, Lawrence P., Cleveland, Ohio. Rail-bond. No. 1,268,328; June 4; v. 251; p. 73.
Creery, Roy V., Racine, Wis. Cycle rain-coat and cover. No. 1,270,704; June 25; v. 251; p. 804.
Creighton, Elmer E. F., Schenectady, N. Y., assignor to General Electric Company. Protective device. No. 1,269,526; June 11; v. 251; p. 425.
Criest, Frank, Sharpsville, Pa. Walking doll. No. 1,269,056; June 11; v. 251; p. 297.
Criner, Harry J., Burlington, Iowa, assignor to Hampton Planter Company. Clutch mechanism. No. 1,269,057; June 11; v. 251; p. 297.
Crismon, Kenneth A., Salt Lake City, Utah. Paste-tube holder. No. 1,270,267; June 25; v. 251; p. 684.
Crisp, Henry L., and B. T. Harrison, Jayton, Tex. Fish-screen. No. 1,269,058; June 11; v. 251; p. 298.
Croad, John, Gosport, England. Spanner for the removal of sparking-plug valve-caps of internal-combustion engines. No. 1,270,705; June 25; v. 251; p. 804.
Crompton & Knowles Loom Works. (See Crossland, George, assignor.)
Crompton & Knowles Loom Works. (See McGuiness, Benjamin F., assignor.)
Crompton & Knowles Loom Works. (See Richardson, Oscar W., assignor.)
Crompton & Knowles Loom Works. (See Ryon, Eppa H., assignor.)
Crompton, Randolph, Chatham, and W. E. Woodman, Worcester, Mass. Magazine for weft-replenishing looms. No. 1,270,707; June 25; v. 251; p. 804.
Crompton, Randolph, Chatham, Mass. Warp stop-motion for looms. No. 1,270,708; June 25; v. 251; p. 805.
Crosby, Gorham, Glen Ridge, N. J., assignor to Gould Coupler Company. Electrical system of distribution. No. 1,268,438; June 4; v. 251; p. 105.
Cross, August, Jersey City, N. J. Multiple aerofoil construction. No. 1,270,601; June 25; v. 251; p. 778.
Crossland, George, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Positive shuttle-motion for looms. No. 1,268,098; June 4; v. 251; p. 8.
Crossman, Burnham F. (See Cox, Charles E., assignor.)
Crouse-Hinds Company. (See Bissell, Carl H., assignor.)

Crowdus, Walter A., Chicago, Ill. Storage battery. No. 1,269,162; June 11; v. 251; p. 326.
Crowell, Charles W., Salisbury, N. C. Steam-boiler and appliances. No. 1,270,017; June 18; v. 251; p. 593.
Crown Tire & Rubber Company. (See Cloyd, Oliver H., assignor.)
Crownfield, David, Cambridge, Mass. Light-distributing device. No. 1,270,268; June 25; v. 251; p. 685.
Cruse, Robert P. (See Burns, Thomas F., assignor.)
Culver, George W. (See Culver, Lewis O., assignor.)
Culver, Lewis O., assignor of one-third to G. W. Culver, Fortyfort, Pa. Bottle-stopper. No. 1,268,936; June 11; v. 251; p. 263.
Cummins, Norman W., assignor to The Bassick Co., Bridgeport, Conn. Lubricator. No. 1,269,685; June 18; v. 251; p. 501.
Cunningham, Norval, Pennsboro, W. Va. Package-tie. No. 1,268,937; June 11; v. 251; p. 263.
Curtain, Andrew F., Medford, Mass. Flushing-valve. No. 1,270,018; June 18; v. 251; p. 598.
Curtiss Aeroplane and Motor Corporation. (See Curtiss, Glenn H., assignor.)
Curtiss, Glenn H., Buffalo, N. Y., assignor to Curtiss Aeroplane and Motor Corporation. Hydroaeroplane-pontoon. No. 1,269,397; June 11; v. 251; p. 391.
Curtiss, Glenn H., Buffalo, N. Y., assignor to Curtiss Aeroplane and Motor Corporation. Convertible running-gear. No. 1,269,570; June 11; v. 251; p. 437.
Cutler-Hammer Mfg. Co., The. (See Henderson, Clark T., assignor.)
Cutler-Hammer Mfg. Co., The. (See Henderson and Stevens, assignors.)
Cutler-Hammer Mfg. Co., The. (See Horton, Albert J., assignor.)
Cutler-Hammer Mfg. Co., The. (See Stevens, William C., assignor.)
Cutting, Edward J. (See Conniff, William E., assignor.)
Cuttle, Francis, Riverside, Cal. Apparatus for removing debris from streams. No. 1,268,329; June 4; v. 251; p. 74.
Cycle-Flyer Company, The. (See Westerfield, Granville G., assignor.)
D & W Fuse Company. (See Downes and Patton, assignors.)
D'Arden, William, San Jose, Cal. Cap-screw lock. No. 1,269,059; June 11; v. 251; p. 298.
D'Olier, Henry, Jr., Bridgeport, Conn. Light-distribution chart. No. 1,268,440; June 4; v. 251; p. 106.
D'Orville, Theodore L. R., Twickenham, England. Internal-combustion engine. No. 1,269,264; June 11; v. 251; p. 355.
Danse, Rudolph J., Milwaukee, Wis. Gas-burner attachment for hot-air or hot-water furnaces. No. 1,270,019; June 18; v. 251; p. 594.
Daigle, Elizabeth. (See Daigle, Firmin, assignor.)
Daigle, Firmin, Daigle, assignor to E. Daigle, Millinocket, Me. Potato-cultivator. No. 1,268,687; June 4; v. 251; p. 175.
Daimler-Motoren-Gesellschaft. (See Daimler, Paul, assignor.)
Daimler-Motoren-Gesellschaft. (See Daimler and Friz, assignors.)
Daimler, Paul, Cannstatt, and M. Friz, assignors to Daimler-Motoren-Gesellschaft, Stuttgart-Untertürkheim, Germany. Mechanism for controlling driving means. No. 1,269,581; June 18; v. 251; p. 472.
Daimler, Paul, Cannstatt, assignor to Daimler-Motoren-Gesellschaft, Stuttgart-Untertürkheim, Germany. Lubricating device. No. 1,269,582; June 18; v. 251; p. 472.
Dain, Joseph, assignor to Dain Manufacturing Company of Iowa, Ottumwa, Iowa. Hay-loader. No. 1,270,123; June 18; v. 251; p. 619.
Dain Manufacturing Company of Iowa. (See Dain, Joseph, assignor.)
Daizell, William K., Barcaldine, Queensland, Australia. Multicylinder rotary internal-combustion engine for aeroplanes and the like. No. 1,270,500; June 25; v. 251; p. 750.
Danhoffer, Joseph, Youngstown, Ohio. Wire-cutter attachment. No. 1,269,790; June 18; v. 251; p. 532.
Daniel, Willie C., Louisa, Va. Mud-block. No. 1,269,398; June 11; v. 251; p. 391.
Danielsen, William A., Palatine, Ill. Flush-tank valve. No. 1,269,163; June 11; v. 251; p. 326.
Danner, Edward, Toledo, Ohio. Forming glass articles. No. 1,269,791; June 18; v. 251; p. 532.
Danovaro, Giovanni, Welland, Ontario, Canada. Torpedo-guard. No. 1,270,020; June 18; v. 251; p. 594.
Danyzz, Jean, Sevres, France. Metallic derivative of dioxydiaminoarsenobenzene. No. 1,269,792; June 18; v. 251; p. 533.
Danz, George. (See Berns and Danz.)
Dargin, Ernest P., assignor of one-half to C. S. Brown, Los Angeles, Cal. Flushing apparatus for garbage-chutes. No. 1,269,793; June 18; v. 251; p. 533.
Darker, Alfred H., London, assignor to J. Stone & Company Limited, Deptford, England. Dynamo. No. 1,268,330; June 4; v. 251; p. 74.
Darling, J. Frank, New York, N. Y. Display-rack. No. 1,270,709; June 25; v. 251; p. 805.
Dausmann, Charles, Brooklyn, N. Y. Printing-press. No. 1,269,794; June 18; v. 251; p. 533.
Davenport, George E., Camden, N. J. Hand-controlled hydraulic press. No. 1,269,060; June 11; v. 251; p. 298.
David Watkins Dairyman's Manufacturing Company. (See Nicoll, William R., assignor.)
Davidson, Benjamin H. Tampa, assignor of one-half to W. H. Kendricks, Hillsborough county, Fla. Internal-combustion engine. No. 1,270,124; June 18; v. 251; p. 619.
Davidson, Harry O., assignor to The Hydraulic Pressed Steel Company, Cleveland, Ohio. Sewer-form. No. 1,269,164; June 11; v. 251; p. 326.
Davis, Fred M., assignor of one-third to Pullman Couch Company, Chicago, Ill., one-third to Gold Furniture Company, and one-third to Kroehler Manufacturing Company. Sofa-bed. No. 1,268,099; June 4; v. 251; p. 8.
Davis, Fred M., assignor to Pullman Couch Company, Chicago, Ill. Sofa-bed. No. 1,270,384; June 25; v. 251; p. 717.
Davis, George E., Vista, Cal. Writing-tablet. (Reissue.) No. 14,488; June 25; v. 251; p. 819.
Davis, Hugh, assignor to Eastman Kodak Company, Rochester, N. Y. Lamp-house for projection-cameras. No. 1,270,260; June 25; v. 251; p. 685.
Davis, John T., Alameda, assignor of one-half to J. Rothschild, San Francisco, Cal. Emulsifying apparatus. No. 1,269,399; June 11; v. 251; p. 392.
Davis, Robert W., East Orange, N. J. Universal joint. No. 1,270,602; June 25; v. 251; p. 778.
Davis, Robert W., East Orange, N. J. Propulsion of vessels. No. 1,270,603; June 25, v. 251; p. 778.
Davis, Stephen J., assignor of one-fourth to W. P. Jordan, Willimantic, Conn. Metal shingle. No. 1,269,583; June 18; v. 251; p. 473.
Davison, Orin H., assignor to Blair Engineering Company, Chicago, Ill. Reversing apparatus for regenerative furnaces. No. 1,269,165; June 11; v. 251; p. 326.
Davol Rubber Company. (See Caldwell, Edwin M., assignor.)
Dawn, Norman, Venice, Cal. Cinematographic-picture composition. No. 1,269,061; June 11; v. 251; p. 298.
Dawson, Sidney, assignor of one-half to W. Robertson, Chicago, Ill. Grease-cup. No. 1,268,688; June 4; v. 251; p. 175.
Dayton, James M., assignor, by mesne assignments, to The Torrington Company, Torrington, Conn. Ignition system for gas-engines. No. 1,269,062; June 11; v. 251; p. 298.
Dayton Manufacturing Company, The. (See Kirby and Scullin, assignors.)
De Laval, Carl G., Orange, N. J., assignor to Henry R. Worthington. Centrifugal pump. No. 1,269,063; June 11; v. 251; p. 299.
De Laval, Carl G., Orange, N. J., assignor to Henry R. Worthington, New York, N. Y. Frangible clamping-piece for frost-proof meters. No. 1,269,064; June 11; v. 251; p. 299.
De Lorme, Alfred C., Newark, N. J., assignor to Splitdorf Electrical Company. Interrupter mechanism for ignition-dynamos. No. 1,270,385; June 25; v. 251; p. 718.
De Mott, Theron W., Oxford, Wis. Vending-machine. No. 1,268,331; June 4; v. 251; p. 74.
De Voe, Albert H., Westfield, N. J., assignor to The Singer Manufacturing Company. Rotary-hook sewing-machine. No. 1,269,686; June 18; v. 251; p. 502.
Dean, William W., assignor, by mesne assignments, to Benjamin Electric Manufacturing Company, Chicago, Ill. Switch. No. 1,269,400; June 11; v. 251; p. 392.
Dean, William W., Stamford, Conn., assignor to Splitdorf Electrical Company, Newark, N. J. Magneto-electric machine. No. 1,268,689; June 4; v. 251; p. 175.
Dearborn Truck Co. (See Melton, Lloyd L., assignor.)
Deardorff, Ray P., Buffalo, N. Y. Arc-lamp regulation for headlights. No. 1,268,548; June 4; v. 251; p. 136.
Dearinger, John, Versailles, Ind. Railway-gate. No. 1,268,690; June 4; v. 251; p. 176.
Decb, Henry, assignor to Mercer Tire Company, Trenton, N. J. Apparatus for making inner tubes for tires. No. 1,270,604; June 25; v. 251; p. 779.
Deck, Louis, Fort Wayne, Ind., assignor to McCord and Company, Chicago, Ill. Terminal check-valve for force-feed lubricating systems. No. 1,270,125; June 18; v. 251; p. 620.
Deere & Company. (See Brown, Theophilus, assignor.)
Defiance Machine Works. (See Ensign, George A., assignor.)
Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined typewriting and computing machine. No. 1,270,237; June 18; v. 251; p. 650.
Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined typewriting and computing machine. No. 1,270,750; June 25; v. 251; p. 816.
Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined typewriting and computing machine. No. 1,270,751; June 25; v. 251; p. 816.
Degener, Gustave O., assignor to Underwood Computing Machine Company, New York, N. Y. Combined typewriting and computing machine. No. 1,270,752; June 25; v. 251; p. 817.

Delacourte, Alberto F., assignor to Società Anonima Italiana Gio Ansaldo & Co., Genoa, Italy. Producing gas and phosphatic fertiliser material. No. 1,269,795; June 18; v. 251; p. 534.

Delaney, Thomas W., St. Paul, Minn. Driving and steering gear for vehicles. No. 1,269,401; June 11; v. 251; p. 392.

Delaplain, Carl L., Mansfield, Ark. Rotary hoe. No. 1,270,710; June 25; v. 251; p. 805.

Delehanty, John J., Norwood, Ohio. Rigid pipe-union. No. 1,270,021; June 18; v. 251; p. 594.

Deneke, William, Covington, Ky. Stretcher and casket support. No. 1,268,938; June 11; v. 251; p. 263.

Denley, William H., Birmingham, England. Manufacture of files and saws. No. 1,268,819; June 11; v. 251; p. 231.

Denver Rock Drill Manufacturing Company, The. (See Smith, William A., assignor.)

Depew, Paul, Boston, and W. A. Hilliard, Malden, Mass. Liquid measuring and dispensing apparatus. No. 1,268,820; June 11; v. 251; p. 231.

Depollier, Charles L., Brooklyn, N. Y. Watchcase. No. 1,268,821; June 11; v. 251; p. 232.

Deppermann, Hermann, Nowawes-Neuendorf, Germany. Covering thread-buttons. No. 1,269,402; June 11; v. 251; p. 392.

Detmer, Martin J. (See Bader, Louis C., assignor.)

Detwiler, Forest V., Chicago, Ill. Cooking apparatus. No. 1,270,386; June 25; v. 251; p. 718.

Dewar, James, London, and A. Liebmann, Weybridge, England, assignors to The Procter and Gamble Company, Cincinnati, Ohio. Preparation and production of catalysts. No. 1,268,692; June 4; v. 251; p. 178.

Dewson, Edward H., New York, N. Y., assignor to The Westinghouse Air Brake Company, Wilmerding, Pa. Car-brake mechanism. No. 1,269,263; June 11; v. 251; p. 355.

Diamond Manufacturing Company. (See Neuman, Hugo, assignor.)

Diamond Match Company, The. (See Schumacher and Winters, assignors.)

Diamond State Fibre Company. (See McIntosh, James, assignor.)

Dianovszky, John, Sr., Passaic, N. J. Hinge. No. 1,269,403; June 11; v. 251; p. 393.

Dice, Agnew T., Jr. (See Seeders, Irwin A., assignor.)

Dickey, Aaron F., Somerset, Pa. Gearing. No. 1,268,693; June 4; v. 251; p. 176.

Dickinson, Edgar D., Schenectady, N. Y., assignor to General Electric Company. Ship propulsion. No. 1,269,404; June 11; v. 251; p. 393.

Dickinson, Harry S., Moline, Ill., assignor to Moline Plow Company. Wheeled plow. No. 1,269,166; June 11; v. 251; p. 327.

Dietrich, Charles. (See Kempinski, Albin, assignors.)

Dilg, Charles H. J., Rye, N. Y. Shield for bearings. No. 1,269,405; June 11; v. 251; p. 393.

Dillingham, Frederick A., assignor to The Troy Carriage Sunshade Company, Troy, Ohio. Hinge. No. 1,268,793; June 4; v. 251; p. 205.

Dinsmoor, Luther. (See Smith and Dinsmoor.)

Dittman, Samuel E., New York, N. Y., assignor to Miehle Printing Press & Manufacturing Company, Chicago, Ill. Gripper attachment for printing-presses. No. 1,269,687; June 18; v. 251; p. 502.

Dittmar, Elmer C., Williamsport, Pa. Flooring. No. 1,268,694; June 4; v. 251; p. 177.

Dixon, Thomas J., Madison, Wis. Tube-expander. No. 1,269,688; June 18; v. 251; p. 502.

Dockray, Henry V., assignor to H. V. Dockray Brass & Iron Company, Zanesville, Ohio. Shaking and dumping device for furnace-grates. No. 1,270,126; June 18; v. 251; p. 620.

Dodds, Ethan I. (See Flannery and Dodds.)

Dodds, Ethan I. (See Flannery, Dodds, and Landgraf.)

Dodds, Ethan I. (See Flannery, Stafford, and Dodds.)

Dodge Brothers. (See Dodge and Allen, assignors.)

Dodge, Edwin S., Boston, Mass. Dwelling-house. No. 1,268,439; June 4; v. 251; p. 105.

Dodge, John F., Detroit, and H. C. Allen, Highland Park, assignor to Dodge Brothers, Detroit, Mich. Enameling apparatus. No. 1,268,778; June 4; v. 251; p. 200.

Dods, Andrew, Mimico, Ontario, Canada. Voussoirs for the construction of circular and arch masonry. No. 1,269,065; June 11; v. 251; p. 299.

Doerfler, Alfred M., Medford, Mass. Demountable rims for wheels. No. 1,270,022; June 18; v. 251; p. 594.

Dohm, Otto B., Blaine, Wash. Mechanism for packing cans. No. 1,270,501; June 25; v. 251; p. 751.

Dolan, Halley C., assignor of one-half to M. J. McLeod, Detroit, Mich. Signal. No. 1,268,695; June 4; v. 251; p. 177.

Dom, Alexander, assignor to The Samuel C. Tatum Company, Cincinnati, Ohio. Rack attachment for ledgers. No. 1,269,167; June 11; v. 251; p. 327.

Doman, Lewis B., East Syracuse, assignor to The Amphion Piano Player Company, Syracuse, N. Y. Self-playing musical instrument. No. 1,269,406; June 11; v. 251; p. 393.

Doman, Lewis B., East Syracuse, assignor to The Amphion Piano Player Company, Syracuse, N. Y. Pneumatic self-playing musical instrument. No. 1,269,407; June 11; v. 251; p. 393.

Donald, Robert, London, England. Respirator or inhaler. No. 1,268,696; June 4; v. 251; p. 177.

Donning Carbureter Corporation. (See Donning, George W., assignor.)

Donning, George W. Stamford, Conn., assignor to Donning Carbureter Corporation, Esopus, N. Y. Carbureter. No. 1,269,689; June 18; v. 251; p. 502.

Dooley, Frank P., Chicago, Ill. Wire mattress. No. 1,268,939; June 11; v. 251; p. 264.

Dorset, Marion, Washington, D. C., and R. R. Henley, Takoma Park, Md. Refining defibrinated-blood antitoxin. No. 1,270,270; June 25; v. 251; p. 685.

Dorset, Marion, Washington, D. C., and R. R. Henley, Takoma Park, Md. Separation of blood-serum. No. 1,270,271; June 25; v. 251; p. 685.

Dosenbach, Benjamin H., Butte, Mont. Concentrating ores. No. 1,268,940; June 11; v. 251; p. 264.

Douglass, James S., Jr., Canandaigua, N. Y. Steam-injector for internal-combustion engines. No. 1,268,220; June 4; v. 251; p. 43.

Dow Chemical Company, The. (See Barstow, Edwin O., assignor.)

Downes, Louis W., and R. C. Patton, assignors to D & W Fuse Company, Providence, R. I. Fuse. No. 1,270,272; June 25; v. 251; p. 686.

Downey, Richard F., Milwaukee, and W. Murdoch, West Allis, Wis. Truck-loader. No. 1,269,527; June 11; v. 251; p. 425.

Downham, Thomas S., Toronto, Ontario, Canada. Automatic-release coupling. No. 1,270,605; June 25; v. 251; p. 779.

Downing, Agnes T. (See Baylay, Frank, assignor.)

Downing, Philip B., Everett, Mass. Desk appliance. No. 1,269,584; June 18; v. 251; p. 473.

Doyle, James S. (See Hedley and Doyle.)

Drage, Harmon. (See Boyer, Jesse, assignor.)

Drake, Ira C., Rochester, Wash. Undercutter-guide. No. 1,269,408; June 11; v. 251; p. 394.

Drange, Carl E. (See Scott and Drange.)

Draper Corporation. (See Stimpson, Edward S., assignor.)

Dreffein, Henry A., Chicago, Ill. Gas-washer. No. 1,268,100; June 4; v. 251; p. 9.

Dreiling, Charles E., Henderson, Ky. Grapple. No. 1,268,822; June 11; v. 251; p. 232.

Drew, James C., New Orleans, La. Lifting attachment for automobiles. No. 1,268,101; June 4; v. 251; p. 9.

Driver-Harris Company. (See Henderson, John C., assignor.)

Driver, Le Roy E., Dumont, Tex. Plow-cleaning attachment. No. 1,268,823; June 11; v. 251; p. 232.

Drum, Charles E., Detroit, Mich., assignor to Springfield Body Corporation of New York, New York, N. Y. Conveyer-truck. No. 1,270,502; June 25; v. 251; p. 751.

Drumm, George L. (See Drumm, John B., assignor.)

Drumm, John B., Winslow, Ariz., assignor of forty-nine one-hundredths to G. L. Drumm, Barstow, Cal. Electric-light-extension device. No. 1,268,102; June 4; v. 251; p. 10.

Drummond, William, Manteno, Ill., assignor to The "New-Way" Motor Company, Lansing, Mich. Adjusting device for harvesting-machines and the like. No. 1,268,698; June 4; v. 251; p. 177.

Ducorron, Charles A. F., assignor to Homer Laughlin Engineers Corporation, Los Angeles, Cal. Transmission control. No. 1,268,699; June 4; v. 251; p. 177.

Ducorron, Charles A. F., assignor to Homer Laughlin Engineers Corporation, Los Angeles, Cal. Lubricating system. No. 1,270,606; June 25; v. 251; p. 779.

Dudley, Howard M., Philadelphia, Pa. Skein-dyeing machine. No. 1,268,441; June 4; v. 251; p. 106.

Duerson, Lafe, *et al.* (See Metcalfe, Isaiah, assignor.)

Duerson, La Rue, *et al.* (See Metcalfe, Isaiah, assignor.)

Duffy, Dora E., Chicago, Ill. Device for diffusing excessive shoulder-flesh. No. 1,269,690; June 18; v. 251; p. 503.

Duffy, James P. B. (See Murphy, Thomas J., assignor.)

Dugan, Joseph A., assignor of one-half to W. A. Vinson and J. Cathriner, Houston, Tex. Fuse-plug. No. 1,268,824; June 11; v. 251; p. 232.

Duggan, William T., Cleveland, Ohio. Interchangeable and removable truck-body. No. 1,269,265; June 11; v. 251; p. 356.

Dugger, Huston R., Murphy, Tex. Demountable rim. No. 1,270,711; June 25; v. 251; p. 805.

Dukelow, George A. (See Hitchcock, Ervin H., assignor.)

Dunavan, George, Mount City, Kans. Corn-cultivator. No. 1,268,332; June 4; v. 251; p. 75.

Dunaway, Guy I. (See Graeber, Dunaway, and Graeber.)

Dunbar, Daniel J., Philadelphia, Pa. Retaining means for window-sashes. No. 1,270,387; June 25; v. 251; p. 718.

Dunbar, Francis W., Chicago, Ill., assignor by mesne assignments, to Kellogg Switchboard & Supply Company. Telephone-exchange system. No. 1,270,127; June 18; v. 251; p. 620.

Dunbar, Francis W., Manchester, Vt., assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Telephone system. No. 1,270,128; June 18; v. 251; p. 621.

Dunblazier, Charles I., Moline, Ill. Beet-topping device. No. 1,270,503; June 25, v. 251; p. 751.

Dunham, Bert G., Chicago, Ill., assignor, by mesne assignments, to Western Electric Company, Incorporated. Automatic telephone-exchange system. No. 1,268,221; June 4; v. 251; p. 43.

Dunham, Bert G., Hawthorne, N. J., assignor to Western Electric Company, Incorporated, New York, N. Y. Telephone-exchange system. No. 1,270,388; June 25; v. 251; p. 719.

Dunham, Everett E., Seattle, Wash. Clamping-bolt. No. 1,269,912; June 18; v. 251; p. 565.

Dunham, Millard L., New York, N. Y. Producing lapped joints in piston-rings. No. 1,269,409; June 11; v. 251; p. 394.

Dunkley, James A., Luxora, Ark. Nut-lock. No. 1,268,700; June 4; v. 251; p. 178.

Dunlap, Herbert E., Wheeling, W. Va. Removable-head steel barrel. No. 1,268,550; June 4; v. 251; p. 136.

Dunlap, William A., Pittsburgh, Pa. Tray and frame. No. 1,270,273; June 25; v. 251; p. 686.

Dunleavy, Frank J., San Francisco, Cal. Buckle. No. 1,269,066; June 11; v. 251; p. 300.

Dunlop Rubber Company, The. (See Macbeth, Colin, assignor.)

Dunn, David, Philadelphia, Pa. Rain-conductor. No. 1,270,274; June 25; v. 251; p. 686.

Dunn, Emanuel W., Oakland, Cal. Orchard-heater. No. 1,270,712; June 25; v. 251; p. 805.

Dunn, Harvey A. (See Fessenden and Dunn.)

Dunn, Joseph F., New York, N. Y. Clock. No. 1,270,706; June 25; v. 251; p. 804.

Dunning, William E., assignor to The McCaskey Register Company, Alliance, Ohio. Manifolding-book. No. 1,269,796; June 18; v. 251; p. 534.

Dunstan, George E. (See Goodman, Herman, assignor.)

Duplex Printing Press Company. (See Bechman, Henry P., assignor.)

Durkee-Atwood Co. (See Atwood, Harry C., assignor.)

Durning, Thomas F., Newark, N. J. Crate. No. 1,269,410; June 11; v. 251; p. 394.

Dutcher, Lewis B., Oswego, N. Y. Automobile-tire implement. No. 1,269,585; June 18; v. 251; p. 473.

Dwiggins, John W., Marion, assignor to Parrish-Alford Fence & Machine Company, Knightstown, Ind. Machine for making wire fabric. No. 1,270,129; June 18; v. 251; p. 622.

Dwyer, Joseph F., Seattle, Wash. Device for dispensing tickets. No. 1,268,222; June 4; v. 251; p. 43.

Dyer, George F., and E. B. Schwenk, Seattle, Wash. Jackplane. No. 1,270,023; June 18; v. 251; p. 594.

Dyke, Darrell F., Chicago, Ill., assignor to The Seng Company. Corner-lock for bedsteads. No. 1,269,691; June 18; v. 251; p. 503.

E. Horton & Son Company. (See Woodford and Rockwell, assignors.)

E. C. Tecktonius Manufacturing Company. (See Tecktonius, Emil C., assignor.)

E. F. Houghton & Co. (See Pressell, George W., assignor.)

E. I. du Pont de Nemours Powder Company. (See Hill, Roy L., assignor.)

E. I. du Pont de Nemours Powder Company. (See Richards, Walter W., assignor.)

E. I. du Pont de Nemours Powder Company. (See Turner, Thomas J., assignor.)

E. L. Mansure Company. (See Chappatte, Joseph E., assignor.)

E. and T. Fairbanks and Company. (See Lachance, Modeste J., assignor.)

Eachel, Emerson C. Montclair, N. J., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,269,797; June 18; v. 251; p. 534.

Eastman Kodak Company. (See Baker, Thomas, assignor.)

Eastman Kodak Company. (See Barnes, Frederick W., assignor.)

Eastman Kodak Company. (See Davis, Hugh, assignor.)

Eastman Kodak Company. (See Fisher, Austin C., assignor.)

Eastman Kodak Company. (See Folmer, William F., assignor.)

Eastman Kodak Company. (See Harmon, John S., assignor.)

Eastman Kodak Company. (See Kroedel, Robert, assignor.)

Eastman Kodak Company. (See Marks, Paul J., assignor.)

Eastman Kodak Company. (See Riggs, Garshon A., assignor.)

Eastman Kodak Company. (See Ruttan, Alfred A., assignor.)

Eaton, George M., Pittsburgh, Pa., assignor to Westinghouse Electric & Manufacturing Company. Locomotive. No. 1,268,942; June 11; v. 251; p. 264.

Eaton, Thomas H., Keysport, Ill. End-gate fastener. No. 1,268,943; June 11; v. 251; p. 265.

Eberhardt, Henry E., assignor to Newark Gear Cutting Machine Co., Newark, N. J. Mechanical movement. No. 1,268,551; June 4; v. 251; p. 137.

Ecaubert, Frederic, New York, N. Y. Dental-floss device. No. 1,268,944; June 11; v. 251; p. 265.

Eckfeldt, Frederick W., Norristown, assignor to John T. Lewis & Bros. Company, Philadelphia, Pa. Removable closure for containers. No. 1,270,236; June 18; v. 251; p. 650.

Ecklebarger, Zena, Goshen, Ind. Tone-arm. No. 1,269,266; June 11; v. 251; p. 356.

Economic Machinery Company. (See Ekvall and Stake, assignors.)

Economy Fuse & Manufacturing Company. (See Eustice, Alfred L., assignor.)

Eddy, George A., Cleveland, Ohio. Safety device for printing-presses. No. 1,268,552; June 4; v. 251; p. 137.

Edelen, Charles, Bardstown, Ky. Demountable rim. No. 1,270,130; June 18; v. 251; p. 622.

Edmonds, John P., Scottsboro, Ala. Float or signal-buoy for sunken vessels. No. 1,269,798; June 18; v. 251; p. 534.

Edmunds, Simeon G., Bluestem, Wash. Spring-separator. No. 1,269,799; June 18; v. 251; p. 534.

Educo Company, The. (See Gauntt, Newton C., assignor.)

Edward G. Budd Manufacturing Company. (See Ledwinka, Joseph, assignor.)

Edwards, Amos, *et al.* (See Van Meeteren, Harry W., assignor.)

Edwards, Charles H., Saginaw, Mich. Roll-holder. No. 1,269,411; June 11; v. 251; p. 395.

Edwards, Elliott D. (See Edwards, Frederick W. and E. D.)

Edwards, Frederick W. and E. D., Sydney, New South Wales, Australia. Spring for road-vehicles. No. 1,269,800; June 18; v. 251; p. 535.

Edwards, Frederick W. and E. D., Sydney, New South Wales, Australia. Vehicle suspension device. No. 1,269,801; June 18; v. 251; p. 535.

Edwards, Oliver M. (See Axe, Roy T., assignor.)

Edwards, Oliver M., Syracuse, N. Y. Window and sash therefor. No. 1,270,607; June 25; v. 251; p. 779.

Edwards, William H., Grand Rapids, Mich. Loose-leaf book. No. 1,270,713; June 25; v. 251; p. 806.

Effrig, Anthony F., Perkasie, Pa. Drinking-fountain. No. 1,270,504; June 25; v. 251; p. 751.

Egan, William P., and J. J. Sheehan, Lynn, Mass. Apparatus for treating coated fabrics. No. 1,268,941; June 11; v. 251; p. 264.

Egge, Otto H. (See Adams and Egge.)

Eggleston, C. P., *et al.* (See Brown, Marvin H., assignor.)

Ehrhardt, Frederick H., Wichita, Kans. Combined book and hat holder. No. 1,268,701; June 4; v. 251; p. 178.

Eichelberger, Christian, Shickley, Nebr. Auto lifting-jack and tire-saver. No. 1,269,267; June 11; v. 251; p. 356.

Ellersgaard, Asger, assignor to Link-Belt Company, Chicago, Ill. Clam-shell excavator. No. 1,269,802; June 18; v. 251; p. 535.

Elmer, William, New York, N. Y. Bullet-proof garment. No. 1,268,223; June 4; v. 251; p. 44.

Elnsel, Ephraim D. (See Christopher, Keith, Allsteadt, Elnsel, and Pelander.)

Elrich, Joseph. (See Elrich, Ludwig and J.)

Elrich, Ludwig and J., assignors to Maschinenfabrik Gustav Elrich, Hardheim, Germany. Measuring and conveying device for concrete and other material. No. 1,268,553; June 4, v. 251; p. 137.

Eltapenc, Fredrick, Binghamton, N. Y. Cas cut-off for buildings. No. 1,270,389; June 25; v. 251; p. 719.

Ekvall, Arvid P., and H. Stake, assignors to Economic Machinery Company, Worcester, Mass. Can-labeling machine. No. 1,268,442; June 4; v. 251; p. 106.

Elam, William E., Washington, D. C. Shoe-blacking device. (Reissue.) No. 14,484; June 11; v. 251; p. 440.

Electro Dental Manufacturing Company. (See Schramm, Adolph W., assignor.)

Elektro-Osmose Aktiengesellschaft (Graf Schwerin Gesellschaft). (See Schwerin, Botho, assignor.)

Elgin Tractor Corporation. (See Waite, Harry C., assignor.)

Elicon Company. (See Conwell, Walter L., assignor.)

Elliott-Fisher Company. (See Foothorap, Harry A., assignor.)

Elliott, Irving H., assignor to Campbell Architectural Iron Co., Inc., New York, N. Y. Casement-window. No. 1,268,554; June 4; v. 251; p. 138.

Elliott, William E., Liverpool, England, assignor to Mergenthaler Linotype Company. Typographical composing and distributing machine. No. 1,270,275; June 25; v. 251; p. 686.

Ellis, Carleton, Montclair, N. J., assignor, by mesne assignments, to National Carbon Company, Long Island City, N. Y. Organic-manganese-compound depolarizer. No. 1,269,913; June 18; v. 251; p. 565.

Ellis, Carleton, Montclair, N. J., assignor to National Carbon Company, Long Island City, N. Y. Polyacid-of-manganese-dioxid depolarizer. No. 1,269,916; June 18; v. 251; p. 566.

Ellis, Carleton, and A. A. Wells, Montclair, N. J., assignors, by mesne assignments, to National Carbon Company, Long Island City, N. Y. Making conducting hydrated black manganese dioxid. No. 1,269,914; June 18; v. 251; p. 565.

Ellis, Carleton, and A. A. Wells, Montclair, N. J., assignor to National Carbon Company, Long Island City, N. Y. Making manganese dioxid. No. 1,269,915; June 18; v. 251; p. 566.

Ellis, James T. T., Southern Pines, N. C. Tramway-carriage. No. 1,270,131; June 18; v. 251; p. 622.

Ellsworth, Henry W., Montvale, N. J. Bookbinding. No. 1,269,586; June 18; v. 251; p. 473.

Elmen, George P., and G. Sharpnack, Lincoln, Nebr.; said Sharpnack assignor to said Elmen. Vibrator. No. 1,269,803; June 18; v. 251; p. 536.

Elmore, James, and C. W. Joy, Miller, Nebr. Concrete burial-vault. No. 1,270,132; June 18; v. 251; p. 623.
Elrod, Cyrus W., Kansas City, Mo. Check-marker. No. 1,269,692; June 18; v. 251; p. 504.
Elwertoski, Antoni, Dumont, N. J., assignor of one-third to T. Szalewicz, Fort Edward, N. Y. Furniture-caster. No. 1,270,390; June 25; v. 251; p. 720.
Elyria Enameled Products Company, The. (See Goecke, Rudolf F., assignor.)
Emerman, Adolph, Cleveland, Ohio. Note-pad attachment for telephones. No. 1,270,183; June 18; v. 251; p. 623.
Emmet, William L. R., Schenectady, N. Y., assignor to General Electric Company. Ship propulsion. No. 1,270,134; June 18; v. 251; p. 623.
Emmons, Walter E., Hudson, N. H. Figure toy. No. 1,267,702; June 4; v. 251; p. 178.
Empire Cream Separator Company. (See Macartney, Arthur C., assignor.)
Empire Cream Separator Company. (See Warnock, Robert, assignor.)
Emura, Umejiro. (See Hayashi and Emura.)
Enameled Steel Specialties Company. (See Morell, George P., assignor.)
Endres, Michael, New Philadelphia, Ohio. Fruit and vegetable drier. No. 1,269,412; June 11; v. 251; p. 395.
Enell, Otto E., Jersey City, N. J. Centrifugal filtering and clarifying apparatus. No. 1,269,067; June 11; v. 251; p. 360.
Engelbert, Charles. (See Sanuy and Engelbert.)
Engelbrekt, Gustaf, Superior, Wis. Turbine-motor for use with compressed air. No. 1,268,945; June 11; v. 251; p. 265.
English, Frederick J., and G. Flock, assignors of one-third to H. Jacobson, New York, N. Y. Automatic automobile-signal. No. 1,270,714; June 25; v. 251; p. 806.
Enos, Charles W., Peabody, Mass. Gage-cock. No. 1,269,587; June 18; v. 251; p. 474.
Enright, John W., New Orleans, La. Stationary chemical-mixing fire-extinguisher system. No. 1,270,135; June 18; v. 251; p. 623.
Ensign, George A., assignor to Defiance Machine Works, Defiance, Ohio. Bow-turning machine. No. 1,268,703; June 4; v. 251; p. 179.
Entz Motor Car Corporation. (See Stanley, Robert W., assignor.)
Epstein, Hyman, New York, N. Y. Railway freight-car. No. 1,268,555; June 4; v. 251; p. 138.
Erdman, George, Hudson, N. Y., assignor to Gifford-Wood Company. Conveyer. No. 1,269,588; June 18; v. 251; p. 474.
Ericson, Charles, *et al.* (See Peterson, Charlie, assignor.)
Ericson, Frithiof G., Toronto, Ontario, Canada. Landing-gear construction of aeroplanes. No. 1,268,333; June 4; v. 251; p. 75.
Ersin, Harold O., Anoka, Minn. Bed-bottom. No. 1,270,608; June 25; v. 251; p. 780.
Ervin, Fred, Sioux Falls, S. D. Device for pulling automobiles out of mud-holes. No. 1,269,268; June 11; v. 251; p. 356.
Esmarian, Garabed. (See Kafafian and Esmarian.)
Essex, Harry. (See Smith and Essex.)
Essick, William W., Reading, Pa. Lens-block. No. 1,268,556; June 4; v. 251; p. 138.
Etsel, Frank E., Montclair, N. J. Damper-controller. No. 1,268,443; June 4; v. 251; p. 107.
Eustice, Alfred L., assignor to Economy Fuse & Manufacturing Company, Chicago, Ill. Inclosed safety-fuse. No. 1,270,391; June 25; v. 251; p. 720.
Evans, Cadwallader, Jr., Scranton, Pa. Means for transferring loose material. No. 1,268,557; June 4; v. 251; p. 138.
Evans, Charles F. (See McCarter, Charles, assignor.)
Evans, Owen B. (See Rusby and Evans.)
Evans, William J., Dayton, Iowa. Combined driving and steering wheel. No. 1,269,068; June 11; v. 251; p. 300.
Evenson, Adolph O., Duluth, Minn. Hand-truck. No. 1,270,024; June 18; v. 251; p. 595.
Everett, Arthur C., Boston, Mass. Power transmission. No. 1,268,334; June 4; v. 251; p. 75.
Ewertz, Eric H., Wollaston, Mass. Sled. No. 1,270,276; June 25; v. 251; p. 687.
Ezell, Uberto D., Kimball, Tex. Block and tying mechanism for baling-presses. No. 1,268,444; June 4; v. 251; p. 107.
Ezra, Samuel B., Hartford, Conn. Drawing-board support. No. 1,270,609; June 25; v. 251; p. 780.
F. D. Kees Manufacturing Company. (See Kees, Frederick D., assignor.)
Fageol, Rollie E., Oakland, and C. A. Smith, San Francisco, Cal. Tread for tractor-wheels. No. 1,268,445; June 4; v. 251; p. 108.
Fagerlund, Arthur, and E. Sunila, Brooklyn, N. Y. Concrete-mold. No. 1,268,704; June 4; v. 251; p. 179.
Fahrenwald, Frank A., Cleveland, Ohio. Treating rubber. No. 1,269,168; June 11; v. 251; p. 327.
Faile, Edward H., Larchmont Manor, N. Y. Inner lining for pneumatic tires. No. 1,269,693; June 18; v. 251; p. 504.
Fairbanks, Schock and Company. (See Stafford, Lac F., assignor.)
Fairchild, Samuel P., Sheridan, Mont. Folding vehicle-step. No. 1,268,335; June 4; v. 251; p. 75.
Fairchild, Samuel P., Sheridan, Mont. Automobile cranking device. No. 1,268,336; June 4; v. 251; p. 76.
Faires, William C., Mount Gilead, Ohio. Tire-valve. No. 1,269,694; June 18; v. 251; p. 504.
Fairfax, James E., assignor of one-half to D. W. Gaston, Jr., Aiken, S. C. Wall-plaster. No. 1,269,695; June 18; v. 251; p. 504.
Faisst, Bernhard, Silica, Ark. Power-winch for automobile-trucks. No. 1,269,804; June 18; v. 251; p. 536.
Falx, John and S., San Francisco, Cal. Combination-tool. No. 1,268,558; June 4; v. 251; p. 138.
Falx, Samuel. (See Falx, John and S.)
Fales, Edward D., La Grange, assignor to Automatic Electric Company, Chicago, Ill. Two-wire automatic and manual telephone-exchange trunking system. No. 1,270,277; June 25; v. 251; p. 687.
Falkenwalde, Oscar, Baltimore, Md. Engine-starter. No. 1,268,705; June 4; v. 251; p. 179.
Falls, William A., Detroit, Mich. Spring structure. No. 1,270,238; June 18; v. 251; p. 650.
Faltermayer, Harry, Philadelphia, Pa. Circuit-controlling apparatus. No. 1,269,269; June 11; v. 251; p. 357.
Farb, Pincus, Newark, N. J., assignor to Sonora Phonograph Corporation. Sound-modifier for talking-machines. No. 1,270,278; June 25; v. 251; p. 687.
Farley, Jesse K., Jr., Kenilworth, Ill. Carton. No. 1,269,169; June 11; v. 251; p. 327.
Farmer, Thomas, Jr., New York, and E. D. Jansen, assignors to Consolidated Car-Heating Company, Albany, N. Y. Automatic deflector for electric car-heaters. No. 1,269,589; June 18; v. 251; p. 474.
Farquhar, James B., Vancouver, British Columbia, Canada. Muffle. No. 1,269,270; June 11; v. 251; p. 357.
Farris, Frank H., Medford, Okla. Book-support. No. 1,268,946; June 11; v. 251; p. 265.
Farwell, Clara, *et al.* (See Wabers, Henry H., assignor.)
Farwell, Croyden J., *et al.* (See Wabers, Henry H., assignor.)
Faulkner, Herbert W., Ryan, Cal., assignor to Pacific Coast Borax Company, Reno, Nev. Separating borates from their gangue. No. 1,269,170; June 11; v. 251; p. 328.
Fauver, Edgar, and D. C. Kenan, Middletown, Conn. Foot-ball dummy. No. 1,269,559; June 11; v. 251; p. 434.
Fawcett, Joseph C., Ben Lomond, Ark. Penholder-receptacle. No. 1,268,224; June 4; v. 251; p. 44.
Fecker, Gottlieb, assignor to The Warner and Swasey Company, Cleveland, Ohio. Range-finder. No. 1,269,171; June 11; v. 251; p. 328.
Felberbaum, Max, Baltimore, Md. Combination-garment. No. 1,269,806; June 18; v. 251; p. 536.
Feldkamp, Frederick A., Newark, N. J. Fuse-cartridge. No. 1,268,807; June 4; v. 251; p. 209.
Fegley, Thomas J., and G. O. Leopold, assignors to North Bro's. M'f'g. Co., Philadelphia, Pa. Vise. No. 1,268,559; June 4; v. 251; p. 136.
Fegley, Thomas J., and G. O. Leopold, assignors to North Bro's Mfg. Co., Philadelphia, Pa. Vise. No. 1,269,271; June 11; v. 251; p. 357.
Feldman, Reuben J., *et al.* (See Gasser, William B., assignor.)
Fell, Clarence T., Winnipeg, Manitoba, Canada. Funnel. No. 1,268,947; June 11; v. 251; p. 266.
Felland, Melvin J., Great Falls, Mont. Ship-armor. No. 1,270,715; June 25; v. 251; p. 806.
Felt, Charles R. (See Larson, Anton S., assignor.)
Fenn, Libbie R. (See Cathrill, Jack, assignor.)
Ferguson, George E., assignor to W. E. Silverthorne, New York, N. Y. Treating fibrous materials. No. 1,268,446; June 4; v. 251; p. 108.
Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing composition having low freezing-point. No. 1,270,392; June 25; v. 251; p. 720.
Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Composition having a low freezing-point. No. 1,270,393; June 25; v. 251; p. 720.
Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing composition having a low freezing-point. No. 1,270,394; June 25; v. 251; p. 721.
Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing composition having a low freezing-point. No. 1,270,395; June 25; v. 251; p. 721.
Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing composition having a low freezing-point. No. 1,270,396; June 25; v. 251; p. 721.
Ferguson, George E., New York, N. Y., assignor to Pyrene Manufacturing Company. Fire-extinguishing composition having a low freezing-point. No. 1,270,397; June 25; v. 251; p. 721.
Ferrari, Antonio, Collinsville, Ill. Fume-arrester for smelting plants. No. 1,268,447; June 4; v. 251; p. 108.
Ferres, Jeffrey T., Los Angeles, Cal. Tension mechanism for paper-rolls, &c. No. 1,270,279; June 25; v. 251; p. 688.

Ferris, John A., Chicago, Ill. Fence-gate. No. 1,268,948; June 11; v. 251; p. 266.
Fesler, Milton A. (See Stancliffe, Cecil W., assignor.)
Fessenden, Everett W., and H. A. Dunn, Lynn, Mass. Insole for boots and shoes. No. 1,269,528; June 11; v. 251; p. 425.
Fessenden, Reginald A., Brookline, Mass. Method and apparatus for agricultural engineering. No. 1,268,949; June 11; v. 251; p. 266.
Fessenden, Reginald A., Brookline, Mass., assignor to Submarine Signal Company, Portland, Me. Method and apparatus for transmitting and receiving sound-waves through ground. No. 1,270,398; June 25; v. 251; p. 721.
Field, Allan B., West Cliff-on-Sea, England, and B. A. Behrend, Boston, Mass., assignors to Westinghouse Electric and Manufacturing Company. Coil-retaining means. No. 1,269,590; June 18; v. 251; p. 475.
Field, Bernard. (See Grinberg and Field.)
Field, J. W. (See Peters, Walter J., assignor.)
Field, Oscar S., Elizabeth, N. J., assignor to Hall Switch & Signal Co. Contact-finger. No. 1,269,917; June 18; v. 251; p. 566.
Field, William M., *et al.* (See Vanderkleed and Brewer, assignors.)
Fields, John M, San Francisco, Cal. Shadow-dial compass. No. 1,270,505; June 25; v. 251; p. 752.
Fietsch, Herman, Jr., assignor of one-half to Bueckheim Bros. & Eckstein, Chicago, Ill. Moisture-proof paper package or carton. No. 1,269,918; June 18; v. 251; p. 566.
Finley, Fannie, Chaffee, Mo. Patient's transporting and treating apparatus. No. 1,270,136; June 18; v. 251; p. 624.
Finnigan, James H., assignor of one-third to C. C. Hansen and one-third to M. Burk, Noxon, Mont. Screw-driver. No. 1,269,413; June 11; v. 251; p. 395.
Firestone Tire & Rubber Company, The. (See Clough, Lee, assignor.)
Fisch, William F. L., Birmingham, Ala. Heating means for baking ovens. No. 1,268,337; June 4; v. 251; p. 76.
Fischer, Charles E., West Harrison, Ind., assignor to The Campbell Bros. Manufacturing Company, Harrison, Ohio. Planter. No. 1,269,591; June 18; v. 251; p. 475.
Fischer, Frank, Paterson, N. J. Repeating jacquard-cards. No. 1,268,825; June 11; v. 251; p. 252.
Fisher, Austin C., assignor to Eastman Kodak Company, Rochester, N. Y. Folding camera. No. 1,268,950; June 11; v. 251; p. 266.
Fisher, Estell. (See Bricker and Fisher.)
Fisk Rubber Company, The. (See Lambson, De Witt C., assignor.)
Flie, Cephas V., assignor of one-half to W. W. Watt, Charlotte, N. C. Flush-valve. No. 1,270,506; June 25; v. 251; p. 752.
Fittering, Silas M., Fulton, Ind. Display-cabinet. No. 1,269,414; June 11; v. 251; p. 395.
Fitzpatrick, John F. (See Novotny, Frank S., assignor.)
Flack, Ferdinand J., East Chicago, Ind. Automobile-lock. No. 1,268,225; June 4; v. 251; p. 44.
Flannery Bolt Company. (See Flannery and Dodds, assignors.)
Flannery Bolt Company. (See Flannery, Dodds, and Landgraf, assignors.)
Flannery Bolt Company. (See Flannery, John R., assignor.)
Flannery Bolt Company. (See Flannery, Stafford, and Dodds, assignors.)
Flannery, John R., assignor to Flannery Bolt Company, Pittsburgh, Pa. Manufacture of stay-bolts. No. 1,268,952; June 11; v. 251; p. 267.
Flannery, John R., and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,268,953; June 11; v. 251; p. 267.
Flannery, John R., and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure for boilers. No. 1,268,826; June 11; v. 251; p. 233.
Flannery, John R., and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Manufacture of stay-bolts for boilers. No. 1,268,951; June 11; v. 251; p. 267.
Flannery, John R., E. I. Dodds, and F. K. Landgraf, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,268,828; June 11; v. 251; p. 233.
Flannery, John R., B. E. D. Stafford, and E. I. Dodds, assignors to Flannery Bolt Company, Pittsburgh, Pa. Stay-bolt structure. No. 1,268,827; June 11; v. 251; p. 233.
Flannery, Stephen A., San Francisco, Cal. Safety apparatus for elevators. No. 1,270,716; June 25; v. 251; p. 806.
Fleishel, Stella S., New York, N. Y. Convertible garment-form. No. 1,268,560; June 4; v. 251; p. 136.
Fleming, George, Nelson, British Columbia, Canada. Beehive. No. 1,270,507; June 25; v. 251; p. 752.
Fleming, Nathaniel C., Coldwater, Kans. Finger-armor. No. 1,268,103; June 4; v. 251; p. 10.
Fletcher, John, Douglaston, assignor to Operaphone Manufacturing Corporation, New York, N. Y. Sound-record. No. 1,269,696; June 18; v. 251; p. 505.
Flexible Metal Hose Company Limited. (See Forth, Charles, assignor.)
Flick, William S., and G. A. Lambert, Anderson, Ind. Hinge. No. 1,268,104; June 4; v. 251; p. 10.
Flinn, Claude A., assignor to Advance Pump & Compresser Company, Battle Creek, Mich. Automatic vacuum-maintaining apparatus. No. 1,269,697; June 18; v. 251; p. 505.
Flint, Dutee W., *et al.* (See Johannessen and Waage, assignors.)
Flintkote Company, The. (See Overbury, Frederick C. assignor.)
Floback, August B., South Shields, England. Device for sharpening knives, scissors, and like cutting implements. No. 1,269,272; June 11; v. 251; p. 357.
Flock, George. (See English and Flock.)
Flood, Harry J., Chicago, Ill. Brick-press. No. 1,268,226; June 4; v. 251; p. 44.
Flowers, Henry F., New York, N. Y. Dumping-car. No. 1,268,829; June 11; v. 251; p. 233.
Flowers, Henry F., New York, N. Y. Dumping-car. No. 1,268,830; June 11; v. 251; p. 234.
Floyers, Sumpter L., Burns, Oreg. Coin-controlled lock for lockers. No. 1,270,717; June 25; v. 251; p. 807.
Flume Improvement Company, The. (See Hardesty, Rudd, assignor.)
Fogg, Charles F., New York, N. Y. Weighing-scale. No. 1,270,508; June 25; v. 251; p. 752.
Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic camera. No. 1,270,280; June 25; v. 251; p. 688.
Folmer, William F., assignor to Eastman Kodak Company, Rochester, N. Y. Camera-back. No. 1,270,281; June 25; v. 251; p. 688.
Food Sterilization Company. (See Witzel, Joseph R., assignor.)
Foothorap, Harry A., assignor to Elliott-Fisher Company, Harrisburg, Pa. Platen and platen equipment for typewriting machines. No. 1,268,954; June 11; v. 251; p. 267.
Ford, Harry R., Jacksonville, Fla. Reversible hanging shelf. No. 1,270,718; June 25; v. 251; p. 807.
Ford, Silas M., St. Paul, Minn. Manufacturing prepared roofing. No. 1,268,105; June 4; v. 251; p. 10.
Forde, Harry, Toronto, Ontario, Canada. Pasteuriser coil-brush. No. 1,270,137; June 18; v. 251; p. 624.
Fork, William C., assignor to Acme Steel Goods Company, Chicago, Ill. Machine for making corrugated-metal fasteners. No. 1,268,831; June 11; v. 251; p. 234.
Forman, Joseph, Baltimore, Md. Machine for making hand buttonhole-stitches. No. 1,269,415; June 11; v. 251; p. 395.
Forman, Joseph, Walbrook, Md. Buttonhole-sewing machine. No. 1,269,416; June 11; v. 251; p. 396.
Forsberg, Daniel, Brooklyn, N. Y. Necktie-holder. No. 1,268,338; June 4; v. 251; p. 76.
Forsseberg, Carl F. W., Brooklyn, N. Y. Radial sound-amplifier. No. 1,270,610; June 25, v. 251; p. 781.
Forsyth Brothers Company. (See Forsyth, George H., assignor.)
Forsyth, George H., assignor to Forsyth Brothers Company, Chicago, Ill. Vehicle-wheel. No. 1,269,172; June 11; v. 251; p. 328.
Forth, Charles, assignor to Flexible Metal Hose Company Limited, Ottawa, Ontario, Canada. Switch-stand. No. 1,269,069; June 11; v. 251; p. 301.
Forth, Charles, assignor to Flexible Metal Hose Company Limited, Ottawa, Ontario, Canada. Switch-lever. No. 1,269,070; June 11; v. 251; p. 301.
Foss, Benjamin Q. P., assignor to The Foss International Ore Reduction Company, San Francisco, Cal. Amalgamator. No. 1,270,399; June 25; v. 251; p. 721.
Foss International Ore Reduction Company, The. (See Foss, Benjamin Q. P., assignor.)
Foster, Edgar, Vicksburg, Miss. Railway-signal. No. 1,269,919; June 18; v. 251; p. 566.
Foster, Edward E., Beverly, assignor to C. C. Blake, Incorporated, Boston, Mass. Last-making machine. No. 1,269,273; June 11; v. 251; p. 358.
Foster, Edward E., Beverly, Mass. Cam-path-generating machine. No. 1,269,920; June 18; v. 251; p. 567.
Foster, Olin O., Oxford, Mass. Umbrella-repair cap. No. 1,268,227; June 4; v. 251; p. 44.
Foster, Walter L., Whittier, Cal. Automatic pump control for boiler-feed. No. 1,270,138; June 18; v. 251; p. 624.
Fonkes, Philip, Pittsburgh, Pa. Splice-joint. No. 1,269,698; June 18; v. 251; p. 505.
Four Drive Tractor Company, The. (See Simmons, Jesse C., assignor.)
Fowler, Alfred L. (See Jacobson and Fowler.)
Fowler Car Company, The. (See Fowler, William E., Sr., assignor.)
Fowler, Walter, Doncaster, England. Ball-bearing. No. 1,270,400; June 25; v. 251; p. 722.
Fowler, William E., Sr., assignor to The Fowler Car Company, Chicago, Ill. Car-floor construction. No. 1,268,339; June 4; v. 251; p. 77.
Fowler, William E., Sr., assignor to The Fowler Car Company, Chicago, Ill. Running-board. No. 1,268,340; June 4; v. 251; p. 77.
Fox, Catherine A., Chicago, Ill. Ventilating-closure for window-openings and the like. No. 1,268,228; June 4; v. 251; p. 45.
Frambach, Mathew J., assignor of one-half to G. A. Bomey, Melvin, Iowa. Antiskidding device for automobiles. No. 1,269,921; June 18; v. 251; p. 567.

Francis Keil and Son. (See Hansen, Herman, assignor.)
Frank, Francis X., Walkerton, Ontario, Canada. Bicycle-sled. No. 1,268,229; June 4; v. 251; p. 45.
Franke, Adolf, Grunewald, near Berlin, assignor to Siemens & Halske, A. G. Berlin, Germany. Telephone system. No. 1,268,106; June 4; v. 251; p. 10.
Franklin, Henry L., Goose Creek, Tex. Well-shooting torpedo. No. 1,270,719; June 25; v. 251; p. 807.
Franklin Railway Supply Company. (See Ball, Herman F., assignor.)
Franklin Railway Supply Company. (See Martin, Frederick W., assignor.)
Franks & Co. (See Franks, Helen C. M., assignor.) (Reissue.)
Franks, Helen C. M., Brooklyn, N. Y., assignor, by mesne assignments, to Franks & Co., Inc. Preserving fruits and other organic substances. (Reissue.) No. 14,489; June 25; v. 251; p. 820.
Franz, Otto E. P., New York, N. Y. Vehicle foldable top. No. 1,269,592; June 18; v. 251; p. 475.
Frascola, Antonio D., El Reno, Okla. Shoe-fastener. No. 1,269,274; June 11; v. 251; p. 358.
Frazier, John. (See Boyd and Frazier.)
Frazier, Samuel D., Carrizo Springs, Tex. Square. No. 1,268,230; June 4; v. 251; p. 45.
Freborg, Charles, Kankakee, Ill. Player-piano construction. No. 1,268,448; June 4; v. 251; p. 109.
Frech, Charles, Steelton, Ontario, Canada. Automatic valve. No. 1,270,282; June 25; v. 251; p. 688.
Fredrickson, John, and F. A. Risberg, Chicago, Ill. Sample-mounting machine. No. 1,268,955; June 11; v. 251; p. 267.
Freese, Carl J., Elyria, Ohio. Paper-box handle. No. 1,268,706; June 4; v. 251; p. 180.
Freese, Reuben. (See Hill, Joseph C., assignor.)
Frehrs, Hermann, Lübeck, Germany. Means for forming paper bags. No. 1,268,107; June 4; v. 251; p. 11.
French, Alfred W., Chicago, Ill. Scaffold. No. 1,270,401; June 25; v. 251; p. 722.
French, George W., Jr., Danvers, Mass. Apparatus for guiding cloth. No. 1,268,956; June 11; v. 251; p. 268.
French, Harry F., and R. C. Benner, Fremont, Ohio, assignors, by mesne assignments, to National Carbon Company, Inc. Making a battery-depolarizer. No. 1,269,173; June 11; v. 251; p. 329.
Friedley-Voshardt Company. (See Schoettle, Charles, assignor.)
Friedman, James S. (See Kornstein, Ulrich, assignor.)
Fritsch, Edward J., and R. W. Nazel, assignors to J. Nazel, Philadelphia, Pa. Fluid-power hammer. No. 1,268,231; June 4; v. 251; p. 45.
Fritz, Philip, Grand Rapids, Mich. Ice-cream-dispensing machine. No. 1,269,699; June 18; v. 251; p. 505.
Fritz, William, Philadelphia, Pa. Lettering and decorating device. No. 1,269,174; June 11; v. 251; p. 329.
Friz, Max. (See Daimler and Friz.)
Frost & Chadwick Co. (See Frost, John A., assignor.)
Frost, John A., Brockton, Mass., assignor to Frost & Chadwick Co., Concord, N. H. Oil-can. No. 1,269,554; June 11; v. 251; p. 432.
Fuel Economy Company. (See Couch, Charles A., assignor.)
Fulford, Harry, Cranston, R. I. Face-protector. No. 1,270,139; June 18; v. 251; p. 625.
Fuller, Franz A., assignor to The J. E. Mergott Company, Newark, N. J. Cigar-cutter. No. 1,269,593; June 18; v. 251; p. 476.
Fuller, John N., Philadelphia, Pa. Electric boiler. No. 1,270,140; June 18; v. 251; p. 625.
Fuller, Julius R., Kansas City, Mo. Dress-fastener. No. 1,270,141; June 18; v. 251; p. 625.
Fuller, William W., Charleston, S. C. Car-wheel. No. 1,269,417; June 11; v. 251; p. 396.
Fullerton, Clarence A., New York, N. Y. Window-frame. No. 1,268,108; June 4; v. 251; p. 11.
Fulton Company, The. (See Fulton, Weston M., assignor.)
Fulton, Weston M., assignor to The Fulton Company, Knoxville, Tenn. Making corrugated walls. No. 1,270,402; June 25; v. 251; p. 722.
Furber, Frederick M., Revere, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Mechanical movement. No. 1,268,832; June 11; v. 251; p. 234.
Furlow, Floyd C., Montclair, assignor to Otis Elevator Company, Jersey City, N. J. Elevator-controlling system. No. 1,268,109; June 4; v. 251; p. 11.
Furlow, Floyd C., Montclair, assignor to Otis Elevator Company, Jersey City, N. J. Hydraulic elevator. No. 1,268,110; June 4; v. 251; p. 12.
Furlow, Floyd C., Montclair, assignor to Otis Elevator Company, Jersey City, N. J. System of control for electric elevators. No. 1,268,111; June 4; v. 251; p. 12.
Furman, George B., East Orange, N. J. Spraying device. No. 1,268,232; June 4; v. 251; p. 46.
Furman, George B., East Orange, N. J. Water-distilling apparatus. No. 1,268,233; June 4; v. 251; p. 46.
Furstonburg, Henry B., Shreveport, La. Locomotive driving-box and controlling connection therefor. No. 1,270,403; June 25; v. 251; p. 722.
Gabrielson, John B., and G. E. Swenson, Springville, N. Y. Spring-tire. No. 1,268,957; June 11; v. 251; p. 268.
Gadecki, Frank, Mystic, Iowa. Gun. No. 1,269,922; June 18; v. 251; p. 567.
Gage, Lorenzo R., Sr., Hoquiam, Wash. Gold-dredge. No. 1,270,142; June 18; v. 251; p. 625.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Bead-chain. No. 1,270,143; June 18; v. 251; p. 626.
Gagnon, William J., assignor to The Bead Chain Manufacturing Company, Bridgeport, Conn. Jump-ring coupling. No. 1,270,720; June 25; v. 251; p. 807.
Gahl, Rudolf, Miami, Ariz. Recovering metals from solution. No. 1,269,418; June 11; v. 251; p. 396.
Gallimore, James J., Detroit, Mich. Tool for boring polygonal holes. No. 1,270,144; June 18; v. 251; p. 626.
Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Musical-instrument valve. No. 1,269,529; June 11; v. 251; p. 425.
Gally, Robert A., assignor to The Baldwin Company, Cincinnati, Ohio. Music-sheet-regulator throw-out. No. 1,269,071; June 11; v. 251; p. 301.
Galvin, John A., Spalding, Nebr. Wheel. No. 1,270,252; June 18; v. 251; p. 654.
Gamble, Joseph W., Carpentersville, Ill. Balance-plate or oscillating member. No. 1,268,808; June 4; v. 251; p. 210.
Gamewell Fire Alarm Telegraph Company, The. (See King, George E., assignor.)
Gammeter, John R. (See Martin, Christian H., assignor.)
Ganiard, Henry E. (See Saile and Ganiard.)
Garford Manufacturing Company, The. (See Manson, Ray H., assignor.)
Gargett, George I., Alma, Mich. Motor-vehicle drive mechanism. No. 1,269,530; June 11; v. 251; p. 426.
Gargett, George I., Alma, Mich. Changeable-speed bevel-gearing. No. 1,269,531; June 11; v. 251; p. 426.
Garnett, Herbert, Toledo, Ohio. Respirator. No. 1,270,404; June 25; v. 251; p. 723.
Gartley, Lorne E., Coffeyville, Kans. Child's coaster. No. 1,268,449; June 4; v. 251; p. 109.
Garwood, John W., Lawton, Okla. Baling-press. No. 1,270,145; June 18; v. 251; p. 626.
Gasser, William B., assignor of one-fourth to A. Schoch, one-eighth to M. Alexander, and one-eighth to R. J. Feldman, Chicago, Ill. Bolt and nut lock. No. 1,269,532; June 11; v. 251; p. 426.
Gaston, David W., Jr. (See Fairfax, James E., assignor.)
Gates, Frederic P., assignor to The Arrow Electric Company, Hartford, Conn. Electric switch. No. 1,269,419; June 11; v. 251; p. 397.
Gathright, Josiah B., Louisville, Ky. Automobile license-tag. No. 1,269,923; June 18; v. 251; p. 567.
Gathright, Josiah B., Louisville, Ky. Hose-coupling. No. 1,269,924; June 18; v. 251; p. 567.
Gauger, Frank A. (See Rutz and Gauger.)
Gauntt, Forest G., Fort Wayne, Ind., assignor to W. J. Savage Company, Knoxville, Tenn. Bag-cleaner. No. 1,268,450; June 4; v. 251; p. 109.
Gauntt, Newton C., assignor to The Educo Company, Spokane, Wash. Collapsible book-holder. No. 1,269,925; June 18; v. 251; p. 568.
Gauthier and Clarke. (See Gauthier, Henry J., assignor.)
Gauthier, Henry J., assignor to Gauthier and Clarke, Plainfield, N. J. Rotary gas-engine. No. 1,268,561; June 4; v. 251; p. 136.
Gay, Herman T., assignor of four-tenths to J. F. Nauman, Baltimore, Md. Newspaper-holder. No. 1,270,611; June 25; v. 251; p. 781.
Gebhardt, Edwin, Norwood, Ohio. Detachable button. No. 1,268,833; June 11; v. 251; p. 235.
Geer, William S., Burbank township, Kandiyohi county, Minn. Harvester-reel. No. 1,270,146; June 18; v. 251; p. 627.
Gehnrich, Hermann, assignor to Gehnrich Indirect Heat Oven Company, Brooklyn, N. Y. Wall connection for ovens. No. 1,268,707; June 4; v. 251; p. 180.
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General Electric Company. (See Alexanderson, Ernst F. W., assignor.)
General Electric Company. (See Arsem and Wright, assignors.)
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General Electric Company. (See Blau, Fritz, assignor.)
General Electric Company. (See Coolidge, William D., assignor.)
General Electric Company. (See Craighead, James R., assignor.)
General Electric Company. (See Creighton, Elmer E. F., assignor.)
General Electric Company. (See Dickinson, Edgar D., assignor.)
General Electric Company. (See Emmet, William L. R., assignor.)
General Electric Company. (See Gray, George F., assignor.)
General Electric Company. (See Halliwell, Reginald F., assignor.)
General Electric Company. (See Holcombe, William E., assignor.)
General Electric Company. (See Huberich, Henry R., assignor.)
General Electric Company. (See Larson and Shapter, assignors.)
General Electric Company. (See London, William J. A., assignor.)
General Electric Company. (See Matthews, Howard D., assignor.)

General Electric Company. (See Montsinger, Vincent M., assignor.)
General Electric Company. (See Murphy, Edwin J., assignor.)
General Electric Company. (See Orange, John A., assignor.)
General Electric Company. (See Parkhurst, Leon F., assignor.)
General Electric Company. (See Sargent, Howard R., assignor.)
General Electric Company. (See Smith, Arthur R., assignor.)
General Electric Company. (See Steenstrup, Christian, assignor.)
General Electric Company. (See Van Keuren, William L., assignor.)
General Engineering Company. (See Genter, Albert L., assignor.)
General Fireproofing Company, The. (See White, Herbert E., assignor.)
General Motors Corporation. (See Tressler, Guy D., assignor.)
General Research Laboratories. (See Moisant, Alfred J., assignor.)
General Rubber Company. (See Slocum, Edward M., assignor.)
General Wire Tie Company. (See Nessling, Edwin V., assignor.)
General Wire Tie Company. (See Warwick and Nessling, assignors.)
Genter, Albert L., assignor of one-half to The General Engineering Company, Salt Lake City, Utah. Filtering process. No. 1,269,700; June 18; v. 251; p. 506.
Geraghty, Helen L., Ishpeming, Mich., assignor of one-third to O. J. Lidberg, Grand Rapids, Minn. Combined cap and hand-bag. No. 1,269,594; June 18; v. 251; p. 476.
Gerber, James J. (See Cooley, Fred W., assignor.)
Gerold, Walter, Milwaukee, Wis. Auxiliary air-supply device for internal-combustion engines. No. 1,268,112; June 4; v. 251; p. 13.
Gerpheide, Harold J., South Bend, Ind. Timer for gas-engines. No. 1,269,806; June 18; v. 251; p. 536.
Gesell, Carlos I., Mamaroneck, N. Y. Rust prevention. No. 1,269,926; June 18; v. 251; p. 568.
Gibbons, James W., Boston, Mass. Measuring device. No. 1,269,595; June 18; v. 251; p. 476.
Gibbons, Willis A., Flushing, N. Y., assignor to The Goodyear's India Rubber Glove Manufacturing Company. Process of forming aeroplane structural elements. No. 1,269,420; June 11; v. 251; p. 397.
Gibbs, Walter A., Wilmington, Del. Animal-trap. No. 1,269,596; June 18; v. 251; p. 476.
Gibson, Albert T., Chicago, Ill., assignor to United States Spot Ground Corporation, Omaha, Nebr. Floor and wall screed-anchors. No. 1,270,405; June 25; v. 251; p. 723.
Gibson, Harvey V., Peoria, Ill. Clutch. No. 1,270,721 June 25; v. 251; p. 807.
Gieratz, Charles, assignor to Protective Board Company, Milwaukee, Wis. Punch-board. No. 1,270,509; June 25; v. 251; p. 753.
Gifford-Wood Company. (See Erdman, George, assignor.)
Giglio, Peter, New York, N. Y. Holding device for vibrators. No. 1,269,421; June 11; v. 251; p. 397.
Gilbert, Henry F., Delhi, N. Y. Clothes-pin. No. 1,268,708; June 4; v. 251; p. 181.
Gilbert, John H. (See Peak, Edwin, assignor.)
Gilbert, Lewis R., New York, N. Y., assignor to G. R. Webb, Baltimore, Md. Automatically-acting multiple-record-supporting table. No. 1,269,175; June 11; v. 251; p. 329.
Gilbertson, Edward C., Norma, N. D. Wire-stretcher. No. 1,269,072; June 11; v. 251; p. 302.
Gill, John O., Barnesboro, Pa. Electric-light fixture. No. 1,270,025; June 18; v. 251; p. 595.
Gill, Joseph, Summer Bridge, Dacre, England. Machinery for the manufacture of laid cords and ropes. No. 1,269,533; June 11; v. 251; p. 427.
Gill, Willis H., Grandview, Wash. Spray-pole. No. 1,268,709; June 4; v. 251; p. 181.
Gilles, Pierre P., Springfield, Mass. Carbureter. No. 1,269,176; June 11; v. 251; p. 329.
Gilles, Pierre P., Springfield, Mass. Carbureter. No. 1,269,177; June 11; v. 251; p. 329.
Gillespie, John J., Boston, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Grinding-machine. No. 1,268,341; June 4; v. 251; p. 77.
Gillette, Amos H., assignor to F. M. Simons and W. J. Simons, Atlantic City, N. J. Combination vehicle-top. No. 1,269,073; June 11; v. 251; p. 302.
Gillette, Isaac W., Lewiston, Idaho. Valve for train-pipes. No. 1,270,722; June 25; v. 251; p. 808.
Gilmor, Horatio G., Washington, D. C. Anticreeper for rails. No. 1,268,958; June 11; v. 251; p. 269.
Ginaca, Camille A. J., Hornitos, Cal. Belt-fastener. No. 1,268,451; June 4; v. 251; p. 109.
Ginevra Macaroni Mold Company. (See Tanzi, Guido, assignor.)
Glander, Charles E., Jersey City Heights, N. J. Trap-nest. No. 1,270,283; June 25; v. 251; p. 689.
Glass, Perley R., Brookline, assignor to P. R. Glass Company, Boston, Mass. Folding-machine. No. 1,270,753; June 25; v. 251; p. 817.
Gleason, James E., and E. W. Bullock, assignor to Gleason Works, Rochester, N. Y. Reversing clutch mechanism. No. 1,269,701; June 18; v. 251; p. 506.
Gleason Works. (See Gleason and Bullock, assignors.)
Globe Art Mfg. Company. (See Weiss, Samuel W., assignor.)
Goecke, Rudolf F., assignor to The Elyria Enameled Products Company, Elyria, Ohio. Kettle-jacket connecting means. No. 1,270,284; June 25; v. 251; p. 689.
Goecke, Rudolf F., assignor to The Elyria Enameled Products Company, Elyria, Ohio. Fluid-jacketed kettle. No. 1,270,406; June 25; v. 251; p. 723.
Goheen, Frank L., Grouse, Idaho. Telephone system. No. 1,270,723; June 25; v. 251; p. 808.
Gold Furniture Company *et al.* (See Davis, Fred M., assignor.)
Gold Medal Camp Furniture Manufacturing Company. (See Peterson, Peter H., assignor.)
Golden State Portland Cement Company. (See Blumenberg, Henry, Jr., assignor.)
Goldman, Rutherford G. (See Harris and Goldman.)
Goldstein, Joseph. (See Plisco, Joseph, assignor.)
Gollinge, Alexander, assignor of forty one-hundredths to O. R. Burger, New York, N. Y. Steam-boiler attachment. No. 1,270,147; June 18; v. 251; p. 627.
Gollub, Matthew, Philadelphia, Pa. Hair-pin. No. 1,268,959; June 11; v. 251; p. 269.
Gonick, Max, New York, N. Y. Safety collar-button. No. 1,268,342; June 4; v. 251; p. 78.
Good, George E., Rochelle, Ill. Band-saw mill. No. 1,270,285; June 25; v. 251; p. 689.
Good, Robert, Jr., Washington, Pa. Apparatus for delivering glass from furnaces or the like. No. 1,269,597; June 18; v. 251; p. 477.
Goode Anti-Skid Chain Manufacturing Company. (See Poling, Fred C., assignor.)
Goodhart, Louis, assignor to One Wheel Truck Company, St. Louis, Mo. Driving-gear for vehicles. No. 1,268,960; June 11; v. 251; p. 269.
Goodlake, Frederick D., Memphis, Tenn. Riveting-machine. No. 1,270,148; June 18; v. 251; p. 627.
Goodman, Albert H., Oakland, Oreg. Poison-wheat distributer. No. 1,270,510; June 25; v. 251; p. 753.
Goodman, Herman, assignor of one-half to G. E. Dunstan, Cleveland, Ohio. Spool-holder for sewing-machines. No. 1,268,234; June 4; v. 251; p. 47.
Goodrum, Charles L., assignor to Western Electric Company, Incorporated, New York, N. Y. Message-register circuits for machine-switching telephone-exchange systems. No. 1,269,702; June 18; v. 251; p. 506.
Goodwin, John F., Charlestown, Mass. Abutment for vehicle-springs. No. 1,268,562; June 4; v. 251; p. 140.
Goodwin, John W., Neodesha, Kans. Metal form for constructing silo and other cement walls. No. 1,269,807; June 18; v. 251; p. 537.
Goodyear, Watson E., Philadelphia, Pa. Shock-absorber. No. 1,268,452; June 4; v. 251; p. 110.
Goodyear's India Rubber Glove Manufacturing Company, The. (See Gibbons, Willis A., assignor.)
Gordon, Robert L., assignor to American Optical Company, Southbridge, Mass. Lens. No. 1,269,422; June 11; v. 251; p. 397.
Gordon, Russel P., Lakevista, Colo. Sling-trip. No. 1,269,074; June 11; v. 251; p. 302.
Gorham, Edwin T., assignor to Wilmarth & Morman Company, Grand Rapids, Mich. Grinding-machine. No. 1,268,961; June 11; v. 251; p. 270.
Gosso, Alton E., Chicago, Ill. Outdoor bed. No. 1,268,113; June 4; v. 251; p. 13.
Goud, Lyman B., Wheeling, W. Va. Device for manually moving automobiles. No. 1,270,724; June 25; v. 251; p. 809.
Gould, Augustus W., Seattle, Wash. Railway-tie. No. 1,268,235; June 4; v. 251; p. 47.
Gould, Augustus W., Seattle, Wash. Concrete aggregate and preparing the same. No. 1,268,236; June 4; v. 251; p. 47.
Gould Coupler Company. (See Crosby, Gorham, assignor.)
Gould Coupler Company. (See Jepson, John W., assignor.)
Gouldbourn, Joseph, Leicester, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Heel-trimming machine. No. 1,270,511; June 25; v. 251; p. 753.
Government of the United States. (See Wells, Sidney D., assignor.)
Grabill, John F., assignor of one-half to H. C. Chaffin, Flora, Ill. Eccentric-mounting. No. 1,269,075; June 11; v. 251; p. 303.
Graeber, Alfred P. (See Graeber, Dunaway, and Graeber.)
Graeber, Charles F., G. I. Dunaway, and A. P. Graeber, Lytton, Iowa. Wagon end-gate. No. 1,270,026; June 18; v. 251; p. 595.
Graham, Grant. (See Heule and Graham.)
Graham, John T., Halstead, England. Carbureter. No. 1,269,423; June 11; v. 251; p. 398.
Grainger, Joseph, and W. H. Strohm, Toronto, Ontario, Canada. Motor-vehicle jack. No. 1,270,407; June 25; v. 251; p. 723.
Grand Rapids Refrigerator Company. (See Leonard and Winters, assignors.)
Grand Rapids Trust Company. (See Kindel, Charles J., assignor.)
Grant, Edward C., Ottawa, Ontario, Canada. Box. No. 1,270,286; June 25; v. 251; p. 690.

Grasselli Chemical Company, The. (See Crabbe, Henry J., assignor.)

Grasselli Chemical Company, The. (See Ziesing and Carpenter, assignors.)

Grassi, Sebastiano, Ridgefield, Conn. Mill. No. 1,269,424; June 11; v. 251; p. 398.

Gratton, John, San Francisco, Cal. Street-roller. No. 1,270,725; June 25; v. 251; p. 809.

Gravell, James H., New York, N. Y. Cleaning metals. No. 1,268,237; June 4; v. 251; p. 47.

Gray, Budd D., and R. F. Runge, Philadelphia, Pa., assignors to The Hess-Bright Manufacturing Company. Forming grooves in bearing-rings, &c. No. 1,269,808; June 18; v. 251; p. 537.

Gray, Edward E., Piano, Ill., assignor to Gray Pneumatic Gear Shift Company. Emergency-lever. No. 1,270,408; June 25; v. 231; p. 724.

Gray, George F., Schenectady, N. Y., assignor to General Electric Company. Protective device. No. 1,269,534; June 11; v. 251; p. 427.

Gray, Halla F., Denver, Colo. Carpet-washing machine. No. 1,268,962; June 11; v. 251; p. 270.

Gray, Halla F., Denver, Colo. Carpet-cleaning machine. No. 1,268,963; June 11; v. 251; p. 270.

Gray, John T., Great Falls, Mont. Telephone hook-switch and cut-out. No. 1,269,425; June 11; v. 251; p. 398.

Gray Pneumatic Gear Shift Company. (See Gray, Edward E., assignor.)

Gray, Thomas L., Marshfield, Oreg. Composite vessel. No. 1,268,453; June 4; v. 251; p. 110.

Greaza, Charles N., St. Paul, Minn., assignor of one-fourth to C. Rosenberger, New York, N. Y. Tooth-powder can and brush-holder. No. 1,270,512; June 25; v. 251; p. 754.

Green, Frank W. and N., Oshkosh, Wis. Automobile-headlight. No. 1,269,426; June 11; v. 251; p. 398.

Green, Frederick D., Brantford, Ontario, Canada. Folding vehicle-top. No. 1,268,834; June 11; v. 251; p. 235.

Green, John B., *et al.* (See Barton, Henry L., assignor.)

Green, Nicholas. (See Green, Frank W. and N.)

Green, Walter H. (See Wilsey and Green.)

Green, William M., Evanston, Ill. Camera. No. 1,270,612; June 25; v. 251; p. 781.

Greenberg, Louis, *et al.* (See Olson, Gustaf, assignor.)

Greenbowe, James W., West Hoboken, N. J. Cleaning device. No. 1,268,343; June 4; v. 251; p. 78.

Greenfield, Elmer R., Wattsburg, Pa. Rock and log puller. No. 1,269,427; June 11; v. 251; p. 398.

Greenleaf, William B., and E. S. Roe, assignors to The Markham Air Rifle Company, Plymouth, Mich. Air-gun. No. 1,268,238; June 4; v. 251; p. 47.

Greenwell, Glenn F., Glendale, Ky. Screen. No. 1,270,287; June 25; v. 251; p. 690.

Gregory, James T., Washington, D. C. Airplane safety device. No. 1,268,710; June 4; v. 251; p. 181.

Greiner, Otto, New York, N. Y., assignor to Otis Elevator Company, Jersey City, N. J. Safety device. No. 1,268,114; June 4; v. 251; p. 13.

Gressle, Charles W., assignor, by mesne assignments, to The Standard Parts Company, Cleveland, Ohio. Flange-rolling mechanism. No. 1,268,239; June 4; v. 251; p. 47.

Greulich, Richard, Ludwigshafen-on-the-Rhine, Germany, and H. Lickfett, Rjukan, Telemarken, Norway, assignors to Gebrüder Giulini, G. m. b. H., Ludwigshafen-on-the-Rhine, Germany. Manufacture of metal nitrogen compounds. No. 1,268,240; June 4; v. 251; p. 48.

Greuter, Charles R., Saugus, Mass. Carbureter. No. 1,269,809; June 18; v. 251; p. 537.

Griffith, Charles A., Park City, Tenn. Railway. No. 1,268,344; June 4; v. 251; p. 78.

Griffith, Ralph R., Minneapolis, Minn. Wheel. No. 1,268,241; June 4; v. 251; p. 48.

Griffith, Ralph R., Minneapolis, Minn. Split pulley. No. 1,268,242; June 4; v. 251; p. 48.

Griffiths, Daniel, Pittsburgh, Pa. T-square. No. 1,268,711; June 4; v. 251; p. 181.

Grimes, Lester A., Orange, N. J. Forming soldered fusible links. No. 1,269,428; June 11; v. 251; p. 399.

Grimshaw, William, Glenellyn, Ill. Fire-extinguisher. No. 1,268,454; June 4; v. 251; p. 110.

Grinberg, Adolph J., now by change of name A. J. Grinnell, New York, N. Y., and B. Field, Plymouth, Mass. Treating organic matter for fertilizer purposes. No. 1,268,563; June 4; v. 251; p. 140.

Grinnell, Adolf J. (See Grinberg and Field.)

Grinstead, Christopher T. (See Powell, James R., assignor.)

Griswold, James H., *et al.*, administrators. (See Bryant, Richard S., assignor.)

Groat, Joseph E., Webster, Mass., assignor to B. A. Corbin and Son Company. Apparatus for treating shoes. No. 1,269,429; June 11; v. 251; p. 399.

Groat, Luther E., assignor, by mesne assignments, of one-half to himself and one-half to A. E. Ziegler, Los Angeles, Cal. Elevator-door-actuating device. No. 1,269,927; June 18; v. 251; p. 563.

Grob, Armin, and J. Würgler, assignors to Society of Chemical Industry in Basle, Basel, Switzerland. Condensation product of gallocyanin dyestuffs with amins and making same. No. 1,268,455; June 4; v. 251; p. 110.

Groce, Rodney R., Parkersburg, W. Va. Measuring device. No. 1,270,149; June 18; v. 251; p. 628.

Grochli, Joseph A., New York, N. Y. Embroidering-machine. No. 1,268,243; June 4; v. 251; p. 48.

Grogan, Edward W., Byers, Tex. Quick-adjusting wrench. No. 1,269,275; June 11; v. 251; p. 358.

Grover, Albert D., New York, N. Y., assignor to Autosales Gum & Chocolate Company. Coin-controlled vending-machine. No. 1,268,564; June 4; v. 251; p. 140.

Gruber, Archibald B., San Bernardino, Cal. Push-button latch. No. 1,270,288; June 25; v. 251; p. 690.

Grubin, Herman. (See Burnstone, Hirsh, assignor.)

Grzech, Peter, Dunellen, N. J. Bolt-operating device. No. 1,269,430; June 11; v. 251; p. 399.

Guarantee Liquid Measure Company. (See MacKenzie, James A., assignor.)

Guest, Alfred W. F., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical casting-machine. No. 1,269,598; June 18; v. 251; p. 477.

Guffy, Julius, Peoria, Ill. Bale-tie counter. No. 1,270,289; June 25; v. 251; p. 690.

Guilini, G. m. b. H., Gebruder. (See Greulich and Lickfett, assignors.)

Gulf Refining Company. (See Smith and Essex, assignors.)

Gumprecht, William L., Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,268,565; June 4; v. 251; p. 141.

Gunning, John, Wallace, Idaho, assignor of one-half to J. Walsh, Butte, Mont. Nail-puller. No. 1,269,555; June 11; v. 251; p. 432.

Gurries, Henry A., Palo Alto, Cal. Bench-stop. No. 1,269,703; June 18; v. 251; p. 507.

Gustavson, Frank A., Seekonk, Mass. Ventilator and air-purifying apparatus. No. 1,270,613; June 25; v. 251; p. 781.

Guthrie, Charles B., Charleston, W. Va. Car-top. No. 1,269,431; June 11; v. 251; p. 399.

Gutzler, Alfred J., *et al.* (See Trumble, Milon J., assignor.)

Gwin, Andrew J., assignor of one-half to A. F. Gwin, Winnfield, La. Crank-holder for automobiles. No. 1,270,513; June 25; v. 251; p. 754.

Gwin, Annie F. (See Gwin, Andrew J., assignor.)

Gyzander, Arne K., Westbrook, Me. Manufacturing sodium hydrosulfite. No. 1,270,150; June 18; v. 251; p. 628.

H. Brinton Company. (See Larkin, Walter, assignor.)

H. Maimin Co. (See Maimin and Bittjer, assignors.)

H. V. Dockray Brass & Iron Company. (See Dockray, Henry V., assignor.)

Haas, Philip J., Omaha, Nebr. Combination portable sanitary closet and seat. No. 1,270,409; June 25; v. 231; p. 724.

Haas, William, and T. McAlexander, Raub, Ind. Valve for internal-combustion engines. No. 1,268,835; June 11; v. 251; p. 235.

Haber, Fritz, and R. Leiser, Berlin-Dahlem, Germany. Method and apparatus for testing gases. No. 1,269,599; June 18; v. 251; p. 478.

Hacker, Horace W., Chicago, Ill. Proofing-baker. No. 1,270,410; June 25; v. 231; p. 724.

Haddock, Roderick W., Independence, Oreg. Ore-separating device. No. 1,269,704; June 18; v. 251; p. 507.

Haefely, Emil, Basel, Switzerland. Heater for central heating systems. No. 1,270,514; June 25; v. 251; p. 754.

Hagemann, Carl, Leverkusen, near Cologne, Germany, assignor to Synthetic Patents Co., Inc., New York, N. Y. Gray azo dyes. No. 1,270,290; June 25; v. 251; p. 691.

Hagerty, James, Mount Lebanon, Pa. Sled. No. 1,268,836; June 11; v. 251; p. 235.

Hahn, Herman J., Napoleon, Ohio. Corn-husker. No. 1,268,345; June 4; v. 251; p. 78.

Hahn, John, Los Angeles, Cal. Well equipment. No. 1,268,964; June 11; v. 251; p. 271.

Haines, George T., and B. W. Smith, assignor to Multikraft Inc., Rochester, N. Y. Toy. No. 1,268,115; June 4; v. 251; p. 13.

Haley, Edgar L., Crofton, Ky. Fishing-rod. No. 1,270,726; June 25; v. 251; p. 809.

Hall, Frank H., Boston, Mass. Saw-filing machine. No. 1,269,706; June 18; v. 251; p. 508.

Hall, James H., Chicago, Ill. Lacing-hook. No. 1,269,076; June 11; v. 251; p. 303.

Hall Switch & Signal Co. (See Field, Oscar S., assignor.)

Hall, William B., Chicago, Ill., assignor to Union Railway Equipment Co. Refrigerator-car. No. 1,268,566; June 4; v. 251; p. 141.

Hall, William J., assignor of one-half to C. Mills, Cincinnati, Ohio. Folding box. No. 1,269,706; June 18; v. 251; p. 508.

Halliwell, Reginald F., Rugby, England, assignor to General Electric Company. Elastic-fluid engine. No. 1,269,535; June 11; v. 251; p. 427.

Halseth, Henry E., Aurora, Minn. Bracelet. No. 1,268,965; June 11; v. 251; p. 271.

Hamann, Charles, Portchester, N. Y. Bottle-washer. No. 1,269,077; June 11; v. 251; p. 303.

Hamblin & Russell Manufacturing Company. (See Ryerson, Eugene H., assignor.)

Hamilton, Alston. (See Hamilton, James B. and A.)

Hamilton, Edward H., Trail, British Columbia, Canada, assignor to The Consolidated Mining & Smelting Company of Canada, Limited, Toronto, Ontario, Canada. Electrolytic tank for electrochemical reactions. No. 1,269,078; June 11; v. 251; p. 303.

Hamilton, James B., Hoboken, and A. Hamilton, Sandy Hook, N. J. Firearm. No. 1,269,178; June 11; v. 251; p. 330.

Hamilton, John M., Los Angeles, Cal. Shock-absorbing antifriction-spring. No. 1,268,966; June 11; v. 251; p. 272.

Hamm, William S., Hubbard Woods, Ill., assignor to The Adams & Westlake Co. Binder for lenses. No. 1,268,567; June 4; v. 251; p. 142.

Hammerstein, Oscar, New York, N. Y. Apparatus for applying protective wrappers to cigars. No. 1,269,600; June 18; v. 251; p. 478.

Hammond, George F., Montecito, Cal. Automatic switch. No. 1,269,079; June 11; v. 251; p. 304.

Hampton, John W., Berea, assignor to The Cleveland Stone Company, Cleveland, Ohio. Grinding-machine. No. 1,268,967; June 11; v. 251; p. 272.

Hampton Planter Company. (See Criner, Harry J., assignor.)

Hamrock, Frank J., Homestead, Pa. Vehicle-wheel. No. 1,269,810; June 18; v. 251; p. 537.

Hand, Charles J., Palisades Park, N. J. Folding car-step. No. 1,269,928; June 18; v. 251; p. 568.

Hand, Jay A. (See Kuhn and Hand.)

Haney, Adam H., Chillicothe, Ohio. Combined costumer and wardrobe. No. 1,268,346; June 4; v. 251; p. 78.

Hans Renold Limited. (See Baumann, Gottfried, assignor.)

Hanscom, Frank Z., Elmhurst, Ill. Tooth. No. 1,268,968; June 11; v. 251; p. 272.

Hansen, Axel D., Camillus, N. Y. Autographic camera. No. 1,269,432; June 11; v. 251; p. 400.

Hansen, Charles R., Cedar Rapids, Iowa. Combined steam and hot-air heating system for buildings. No. 1,270,027; June 18; v. 251; p. 595.

Hansen, Christ C., *et al.* (See Finnigan, James H., assignor.)

Hansen, Herman, assignor to Francis Keil and Son, New York, N. Y. Electric switch. No. 1,268,568; June 4; v. 251; p. 142.

Hansen, John S., Brockton, Mass., assignor to O. A. Miller Treeing Machine Company, Portland, Me. Machine for ironing or treeing boots or shoes. No. 1,268,837; June 11; v. 251; p. 236.

Hanstein, Henry, Poughkeepsie, N. Y. Knife construction. No. 1,270,727; June 25; v. 251; p. 809.

Hardesty, Rudd, assignor to The Flume Improvement Company, Denver, Colo. Sheet-metal flume. No. 1,269,433; June 11; v. 251; p. 400.

Hardin, Glenn S., *et al.* (See Hutsell, Thomas A., assignor.)

Harding, Robert J., Lambeth, London, England. Tool-holder for capstan and the like lathes. No. 1,268,969; June 11; v. 251; p. 272.

Harger, John S., Nyack, N. Y. Tractor attachment for motor-trucks. No. 1,268,116; June 4; v. 251; p. 14.

Harlé, Frédéric A. H., Paris, France. Mechanism for controlling movement. No. 1,268,712; June 4; v. 251; p. 182.

Harling, Gustaf, Stockholm, Sweden. Chuck. No. 1,269,434; June 11; v. 251; p. 400.

Harlow, Kenneth F., and C. E. Mathews, Beloit, Wis. Power-transmission mechanism. No. 1,268,838; June 11; v. 251; p. 236.

Harmon, John S., assignor to Eastman Kodak Company, Rochester, N. Y. Film-spool. No. 1,270,614; June 25; v. 251; p. 782.

Harnly, David H., assignor to The Protecto Manufacturing Company, Chicago, Ill. Weather-strip. No. 1,270,151; June 18; v. 251; p. 628.

Harr, Jesse M., Washington, D. C. Egg-shipping package. No. 1,268,347; June 4; v. 251; p. 79.

Harriman, Ernest C., Northampton, Mass. Hemstitching attachment. No. 1,270,728; June 25; v. 251; p. 810.

Harriman, Louis H., trustee. (See York, Timothy S., assignor.)

Harris, Charles R., and R. G. Goldman, Los Angeles, Cal. Rotary motor. No. 1,268,794; June 4; v. 251; p. 206.

Harris, John, Lakewood, Ohio. Heater. No. 1,268,456; June 4; v. 251; p. 111.

Harris, Orlan A., Long Prairie, Minn. Stool. No. 1,270,729; June 25; v. 251; p. 810.

Harris, Rebecca, Newark, N. J. Army and Navy pillow kit. No. 1,269,276; June 11; v. 251; p. 358.

Harris, Taylor T., *et al.* (See Parker, Glover O., assignor.)

Harris, Varlan M., Chicago, Ill. Means for controlling electric current. No. 1,268,348; June 4; v. 251; p. 79.

Harrison, Ben T. (See Crisp and Harrison.)

Harrison, John T., Asbury Park, N. J. Non-refillable bottle. No. 1,270,152; June 18; v. 251; p. 628.

Harriss, Walter H., Oakland, Cal. Adjusting means. No. 1,270,615; June 25; v. 251; p. 782.

Harstad, Thomas O., Windom, Minn. Shield for corn-cultivators. No. 1,268,117; June 4; v. 251; p. 14.

Hart, Frederick A., Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,270,411; June 25; v. 237; p. 724.

Hart, John, Brunnerton, Greymouth, New Zealand. Hat-fastener. No. 1,268,569; June 4; v. 251; p. 142.

Hartford Rubber Works Co., The. (See Taft, Ryland L., assignor.)

Hartford Suspension Company. (See Mastrangel, Louis, assignor.)

Hartline, William A., Penns Grove, N. J. Attachment for pens. No. 1,268,970; June 11; v. 251; p. 273.

Hartman, Samuel P., Kansas City, Mo. Can-opening device. No. 1,269,277; June 11; v. 251; p. 359.

Haslup, Edward W., Bronxville, N. Y., and B. A. Peacock, Philadelphia, Pa.; said Peacock assignor to said Haslup. Producing potassium and phosphorus compounds. No. 1,270,515; June 25; v. 251; p. 754.

Haslup & Peacock. (See Peacock, Samuel, assignor.)

Hastings Equity Grain Bin Manufacturing Co. (See Christopher, Keith, Allsteadt, Einsel, and Pelander, assignors.)

Hatch, William A., Cleveland, Ohio. Picture-mounting. No. 1,268,839; June 11; v. 251; p. 237.

Hattendorf, William C., Schaumburg township, Cook county, Ill. Convertible automobile-body. No. 1,269,929; June 18; v. 251; p. 569.

Haughton, George W., assignor of two-fifths to J. T. Riday, Philadelphia, Pa. Spring-oiling device. No. 1,268,570; June 4; v. 251; p. 142.

Hausberg, Ernest. (See Rawls, Paul C., assignor.)

Hawley, Joseph C., Blacksburg, Va. Suit of armor. No. 1,269,930; June 18; v. 251; p. 569.

Hayashi, Takakazu, and U. Emura, Tokyo, Japan, assignors of fifty one-hundredths to Kwanto Lanso Kabushiki Kaisha, Ltd., Tokyo, Japan. Process of treating phosphoric acid to be used as a clarifier. No. 1,269,080; June 11; v. 251; p. 304.

Haydon, Sue S., Harrodsburg, Ky. Folding washstand. No. 1,270,730; June 25; v. 251; p. 810.

Hayes Manufacturing Company. (See Kimball, John T., assignor.)

Haynes, Charles M., Newark, N. J. Wheel and making the same. No. 1,269,179; June 11; v. 251; p. 330.

Haynes, Howard H., Bridgeport, and T. A. Both, Stratford, Conn., assignors to The Connecticut Electric Manufacturing Company. Ground-clamp. No. 1,268,457; June 4; v. 251; p. 111.

Hazelton, Fred S., *et al.* (See Van Meter, John N., assignor.)

Hazelton, William J., Pontiac, Mich. Life-boat. No. 1,270,616; June 25; v. 251; p. 782.

Headley, Henry, *et al.* (See Van Meeteren, Harry W., assignor.)

Healy, Joseph F., Irene, S. D. Automatically-controlled watering-fountain. No. 1,270,731; June 25; v. 251; p. 811.

Heane, Arthur, Blayney, New South Wales, Australia. Gas-compression plant. No. 1,268,840; June 11; v. 251; p. 237.

Heard, Thomas M., Jr., Sioux City, Iowa. Eyeglasses and spectacles. No. 1,270,516; June 25; v. 251; p. 754.

Hearst, William R. (See Webb, Fenner H., assignor.)

Hecht, Solomon S., assignor of one-half to N. A. Tonkonogy, New York, N. Y. Separable fastener. No. 1,268,349; June 4; v. 251; p. 79.

Heco Envelope and Paper Company. (See Brown, Claude F., assignor.)

Hedley, Frank, Yonkers, and J. S. Doyle, Mount Vernon, N. Y. Street-sweeping apparatus. No. 1,268,571; June 4; v. 251; p. 143.

Hedman, Carl M., assignor to Hedman Manufacturing Company, Chicago, Ill. Check-protector. No. 1,270,517; June 25; v. 251; p. 755.

Hedman Manufacturing Company. (See Hedman, Carl M., assignor.)

Hedrick, Floyd C., Kentland, Ind. Card-holder. No. 1,270,412; June 25; v. 251; p. 725.

Heflin, Le Roy. (See Smith and Heflin.)

Hegeman, Benjamin A., Jr. (See Hillman, Edward D., assignor.)

Hegstrom, Elmer E. (See Olson, Oscar L., assignor.)

Heidlberg, Fritz, *et al.* (See Vanderkleed and Brewer, assignors.)

Heidler, Ernst, Garfield, N. J., assignor to Columbia Conditioning Company, Inc., New York, N. Y. Sponging, setting, and finishing fabrics. No. 1,270,153; June 18; v. 251; p. 628.

Heim, Charles B., Marco, Ind. Tire-vulcanizer. No. 1,270,154; June 18; v. 251; p. 629.

Hejna, William J. (See Yirava and Hejna.)

Heller, William J., Eaton, Pa. Ready-made decoration. No. 1,270,518; June 25; v. 251; p. 755.

Hellgren, Tobias R., Aurora, Ill. Centering and squaring chuck. No. 1,268,458; June 4; v. 251; p. 111.

Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Locomotive. No. 1,268,971; June 11; v. 251; p. 273.

Hellmund, Rudolf E., Pittsburgh, Pa., assignor to Westinghouse Electric and Manufacturing Company. System of control. No. 1,269,601; June 18; v. 251; p. 479.

Hellmund, Rudolf E., Swissvale, Pa., assignor to Westinghouse Electric and Manufacturing Company. Locomotive. No. 1,269,602; June 18; v. 251; p. 479.

Helm, Virgil L., assignor of three-sixteenths to J. J. Parker, three-sixteenths to E. R. Purdy, and four-sixteenths to H. K. McCollum, Fort Worth, Tex. Liquid-fuel-measuring tank. No. 1,270,291; June 25; v. 251; p. 691.

Helmick Foundry Machine Company. (See Helmick, Frederic, assignor.)

Helmick, Frederic, assignor to Helmick Foundry Machine Company, Fairmont, W. Va. Roller-bearing mine-car wheel. No. 1,270,155; June 18; v. 251; p. 629.

Helmold & Bro., J. F. (See Helmold and Lorch, assignors.)

Helmold, Richard, and H. Lorch, assignors to J. F. Helmold & Bro., Chicago, Ill. Machine for cutting and trimming sheet-metal strips. No. 1,269,081; June 11; v. 251; p. 304.

Hemen, Frank J., Seattle, Wash. Axle safety device. No. 1,269,180; June 11; v. 251; p. 330.

Hendee, Lem E., Milwaukee, Wis. Insulator-support. No. 1,268,972; June 11; v. 251; p. 273.

Hendee Manufacturing Company. (See Jacobson, Edward B., assignor.)

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,269,278; June 11; v. 251; p. 359.

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,269,563; June 11; v. 251; p. 435.

Henderson, Clark T., Milwaukee, Wis., and W. C. Stevens, New York, N. Y., assignors to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,269,564; June 11; v. 251; p. 435.

Henderson, Clark T., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Driving mechanism. No. 1,270,028; June 18; v. 251; p. 596.

Henderson, George A., St. Albans, W. Va. Fibrous composition and making the same. No. 1,270,732; June 25; v. 251; p. 811.

Henderson, Gordon R., Tifton, Ga. Clothes-rack. No. 1,270,156; June 18; v. 251; p. 629.

Henderson, Henry S., Eagle Rock, Va. Tobacco-stemmer. No. 1,270,733; June 25; v. 251; p. 811.

Henderson, John, assignor to Columbia Envelope Co., Chicago, Ill. Shirt-wrapper. No. 1,269,707; June 18; v. 251; p. 508.

Henderson, John C., Washington, D. C., assignor to Driver-Harris Company, Harrison, N. J. Box for treating metallic articles by heat. No. 1,270,519; June 25; v. 251; p. 755.

Henderson, John C., Washington, D. C., assignor to Driver-Harris Company, Harrison, N. J. Means for heat-treating metallic articles. No. 1,270,520; June 25; v. 251; p. 755.

Henley, Louis, Rome, N. Y. Siding for boat-hulls. No. 1,268,244; June 4; v. 251; p. 49.

Henley, Robert R. (See Dorset and Henley.)

Henning, August E., Santa Ana, Cal. Automobile recording apparatus. No. 1,269,217; June 11; v. 251; p. 343.

Henning, Bruno W., *et al.* (See Jacobsen, Jacob, assignor.)

Henning, Bruno W., Fresno, assignor of one-fourth to D. Robertson, San Francisco, and one-fourth to G. P. Beveridge, Fresno, Cal. Nut-lock. No. 1,270,734; June 25; v. 251; p. 811.

Henry, Augustus M., New York, N. Y. Amusement device. No. 1,269,279; June 11; v. 251; p. 359.

Henry, Ferdinand G., Philadelphia, Pa., assignor to Burkhart Corporation, Buffalo, N. Y. Clutch. No. 1,268,350; June 4; v. 251; p. 79.

Henry R. Worthington, Inc. (See De Laval, Carl G., assignor.)

Hensley, William T., Boundbrook, N. J., assignor, by mesne assignments, to Bound Brook Engine & Mfg. Co. Combined engine-starter clutch and fly-wheel. No. 1,269,708; June 18; v. 251; p. 508.

Henthorn, Benjamine, Osawatomie, Kans. Milk-can lock. No. 1,268,841; June 11; v. 251; p. 237.

Herbert, Pitt H. (See Tully and Herbert.)

Hercules Gas Engine Company, The. (See McMullen and Woodruff, assignors.)

Hercules Motor Manufacturing Company, The. (See Balough, Charles, assignor.)

Herd, Carl P., Kewanee, Ill. Mold. No. 1,269,603; June 18; v. 251; p. 479.

Herink, Henry J., assignor to The Relay Automatic Telephone Company, Limited, London, England. Telephone system. No. 1,269,181; June 11; v. 251; p. 330.

Heritage, William H., Philadelphia, Pa. Dowelling-jig. No. 1,269,811; June 18; v. 251; p. 538.

Herlbauer, Joseph J., Richmond Hill, N. Y. Automobile-truck. No. 1,269,435; June 11; v. 251; p. 400.

Herring, R. E., *et al.* (See Sturrock, George A., assignor.)

Herring, Grace G., *et al.* (See Sturrock, George A., assignor.)

Herz, Alfred. (See Schweitzer and Herz.)

Hess-Bright Manufacturing Company, The. (See Gray and Runge, assignor.)

Hess, Edward B., Brooklyn, assignor to Royal Typewriter Company, Inc., New York, N. Y. Platen and pressure feed means. No. 1,270,292; June 25; v. 251; p. 692.

Hess, William. (See Brown and Hess.)

Heuer, Benjamin O., Donnelly, Minn. Automobile-puller. No. 1,268,572; June 4; v. 251; p. 143.

Heuer, William, Wonewac, Wis. Twine-oiler. No. 1,269,604; June 18; v. 251; p. 479.

Heule, Everett J., and G. Graham, assignors to Webster Manufacturing Company, Superior, Wis. Tray attachment for high chairs. No. 1,270,029; June 18; v. 251; p. 596.

Heyl, Firm of Cornelius. (See Hintz, Ernst, assignor.)

Heyman, Knut W., Stockholm, Sweden. Ball-bearing. No. 1,269,436; June 11; v. 251; p. 401.

Heyman, Michael, Cincinnati, Ohio. Necktie. No. 1,270,413; June 25; v. 251; p. 725.

Heywood Brothers and Wakefield Company. (See Watkins, Edward G., assignor.)

Hibbert, Harold, Pittsburgh, Pa. Manufacture of glycols. No. 1,270,759; June 25; v. 251; p. 818.

Hicke, Frederick H., La Crosse, Wis. Gage for liquid-containing tanks. No. 1,269,709; June 18; v. 251; p. 509.

Hickey, Joseph A., Philadelphia, Pa., assignor of one-half to F. Bancroft, Merchantsville, N. J. Manufacturing abrading-disks. No. 1,268,842; June 11; v. 251; p. 238.

Hickey, Walter J., Oil City, La. Valve. No. 1,269,280; June 11; v. 251; p. 360.

Hicks, Daniel L., Hicksville, N. Y. Demountable and interchangeable wheel for motor-cycles. No. 1,269,437; June 11; v. 251; p. 401.

Hicks, Raye E., Merna, Nebr. Revoluble water-cooled valve and igniter for combustion-motors. No. 1,269,812; June 18; v. 251; p. 538.

Hicatzman, Artbur H., assignor of one-half to W. A. Snyder, Baltimore, Md. Grease-gun. No. 1,269,488; June 11; v. 251; p. 401.

Higgins, Elmer E., Redcliff, Alberta, Canada. Dust pan and carrying box. No. 1,268,843; June 11; v. 251; p. 238.

Higginson, Joseph, and H. Arundel, Stockport, England, assignors to Stewart Warner Speedometer Corporation, Chicago, Ill. Liquid-fuel-supply apparatus for internal-combustion engines. No. 1,270,157; June 18; v. 251; p. 630.

High Speed Engine Corporation. (See Randolph, Leonard M., assignor.)

Hill, Clement V., Trenton, N. J. Ventilator. No. 1,268,973; June 11; v. 251; p. 274.

Hill, George S., Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Thread-holder. No. 1,269,082; June 11; v. 251; p. 304.

Hill, George S., Strafford, N. H., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sewing-machine. No. 1,269,710; June 18; v. 251; p. 509.

Hill, Joseph C., assignor of one-half to R. Freese, Aransas Pass, Tex. Adjustable rocker for baby-carriages. No. 1,269,605; June 18; v. 251; p. 479.

Hill, Morton S., Brooklyn, N. Y. Tool-holder. No. 1,270,158; June 18; v. 251; p. 630.

Hill, Moxley. (See Blumenberg, Moxley.)

Hill, Roy L., Chester, Pa., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Process of producing aromatic hydrocarbons. No. 1,269,439; June 11; v. 251; p. 402.

Hill, Sidney J., Minneapolis, Minn. Cord-fastener. No. 1,270,030; June 18; v. 251; p. 596.

Hill, Walter L., Wichita, Kans. Spark-plug. No. 1,270,521; June 25; v. 251; p. 756.

Hilliard, Walter A. (See Depew and Hilliard.)

Hillman, Edward D., Larchmont, N. Y., assignor to B. A. Hegeman, Jr., North Plainfield, N. J. Hopper-car. No. 1,268,118; June 4; v. 251; p. 14.

Hindley, Harold D. (See Hindley and Stanford.)

Hindley, Leonard A. and H. D., and W. Stanford, Bourton, England; said Stanford assignor to said Leonard A. and said H. D. Hindley. Manufacture of horseshoes. No. 1,269,813; June 18; v. 251; p. 539.

Hine, Samuel K., *et al.* (See McCormick, Oscar C., assignor.)

Hintz, Ernst, Wiesbaden, assignor to Firm C. Heyl, Worms, Germany. Drying varnished patent-leather. No. 1,269,931; June 18; v. 251; p. 569.

Hirota, Hyakutaro, Los Angeles, Cal. Massage device. No. 1,268,573; June 4; v. 251; p. 143.

Hirsch, Jerome, New Orleans, La. Ice-cream freezer. No. 1,268,713; June 4; v. 251; p. 182.

Hitchcock, Ervin H., assignor of one-half to G. A. Dukelow, Wabun, New Ontario, Canada. Combined seeder and fertilizer-distributer. No. 1,269,814; June 18; v. 251; p. 539.

Hix, Alfred G. O., Los Angeles, Cal. Combination inside and outside micrometer-calipers. No. 1,269,932; June 18; v. 251; p. 569.

Hjermstad, Martin M., Kenyon, Minn. Anchoring device. No. 1,268,459; June 4; v. 251; p. 112.

Hoag, Samuel W., *et al.* (See Hutsell, Thomas A., assignor.)

Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Head for barrels and the like. No. 1,268,460; June 4; v. 251; p. 112.

Hodge, Arthur J., and H. B. Ruggles, Pasadena, Cal., assignors to American Products Company, St. Louis, Mo. Barrel-head seal. No. 1,268,461; June 4; v. 251; p. 112.

Hodge, William B., assignor to S. W. Cramer, Charlotte, N. C. Automatic control for humidifying apparatus. No. 1,270,159; June 18; v. 251; p. 630.

Hoefer, Benjamin C., Kansas City, Mo. Coin-delivering machine. No. 1,268,462; June 4; v. 251; p. 112.

Hoefer, George J., Stapleton, N. Y. Weeping doll. No. 1,268,714; June 4; v. 251; p. 182.

Hoepner, George, Chicago, Ill. Needle-guide for sewing-machines. No. 1,269,711; June 18; v. 251; p. 509.

Hoexter, Samuel J., Kalamazoo, Mich. Phonograph. No. 1,269,536; June 11; v. 251; p. 427.

Hoexter, Seymour L., and L. E. Shaw, New York, N. Y.; said Shaw assignor to said Hoexter. Apparatus for throwing grenades. No. 1,270,293; June 25; v. 251; p. 692.

Hoff, Edward R., Brooklyn, N. Y. Artificial tooth. No. 1,269,440; June 11; v. 251; p. 402.

Hoff, Olaf C., *et al.* (See Johannessen and Waage, assignors.)

Hoffman, Addison F., and W. M. Parkin, Pittsburgh, Pa. Method of treating waste pickle liquor. No. 1,269,441; June 11; v. 251; p. 402.

Hoffman, Addison F., Pittsburgh, Pa. Producing by-products from waste pickle liquor. No. 1,269,442; June 11; v. 251; p. 403.

Hoffman, Addison F., Pittsburgh, Pa. Pickling process and bath. No. 1,269,443; June 11; v. 251; p. 403.

Hoffman, Clemence, Newport, Mich. Folding crate. No. 1,268,715; June 4; v. 251; p. 182.

Hofman, Bertha V. (See Hofman, Charles, assignor.)

Hofman, Charles, assignor, by mesne assignments, to B. V. Hofman, Rochester, N. Y. Shipping-box. No. 1,270,294; June 25; v. 251; p. 692.

Hogeboom, Clarence J., Boston, assignor to S. W. Prussian, Brookline, Mass. Power plant for autotrucks and the like. No. 1,268,119; June 4; v. 251; p. 15.

Hogg, Robert L., Charleston, S. C. Engine-starter. No. 1,270,160; June 18; v. 251; p. 630.

Hogue, Homer E., Venice, Cal. Crank-hanger. No. 1,268,351; June 4; v. 251; p. 80.

Holland, Albert, Fargo, N. D. Display-rack. No. 1,268,245; June 4; v. 251; p. 49.

Holt, Charles S., Chicago, Ill. Bed. No. 1,270,414; June 25; v. 251; p. 725.

Holcombe, William E., Schenectady, N. Y., assignor to General Electric Company. Dynamo-electric machine. No. 1,269,537; June 11; v. 251; p. 428.

Holden, Edward R., Los Angeles, Cal. Electrochemical precipitation of metals. No. 1,269,565; June 11; v. 251; p. 435.

Holden, May A., administratrix. (See Nein, William C., assignor.)

Holinger, Emil F., Jersey City, N. J., assignor to The M. W. Kellogg Company, New York, N. Y. Pipe-bending machine. No. 1,268,844; June 11; v. 251; p. 238.

Holland, William W., Alton, J. R. Carringer and W. Bacheldor, Woodriver, Ill. Chain-grate stoker. No. 1,268,845; June 11; v. 251; p. 238.

Holliday, Clarence E., Duncan, Nebr. Current distributer and timer. No. 1,268,716; June 4; v. 251; p. 183.

Hollingshed, Newton, Seattle, Wash. Switch. No. 1,269,444; June 11; v. 251; p. 403.

Hollis Automatic Traction Jack Company. (See Hollis, Otis A., assignor.)

Hollis, Otis A., assignor to Hollis Automatic Traction Jack Company, Pittsburgh, Pa. Vehicle-tire. No. 1,269,182; June 11; v. 251; p. 331.

Holmberg, Oscar F., assignor of one-half to C. Trabing, Chicago, Ill. Machinery for treating eggs. No. 1,270,755; June 25; v. 251; p. 818.

Holmberg, Oscar F., assignor of one-half to C. Trabing, Chicago, Ill. Egg-turner. No. 1,270,756; June 25; v. 251; p. 818.

Holmes, Edward, Monmouth, Ill. Disk-grinder. No. 1,269,933; June 18; v. 251; p. 570.

Holst, Englebardt W., Boston, Mass., and G. Wright, Schenectady, N. Y., assignors to General Electric Company. Shade-mounting. No. 1,270,617; June 25; v. 251; p. 782.

Holt, Eugene and L., Burlington, N. C. Beam dyeing-machine. No. 1,269,934; June 18; v. 251; p. 570.

Holt, Lafayette. (See Holt, Eugene and L., assignors.)

Holton, Charles H., Baltimore, Md. Electrically-lighted satchel. No. 1,268,846; June 11; v. 251; p. 238.

Homan, Frank W., Philadelphia, Pa. Shoe. No. 1,269,281; June 11; v. 251; p. 360.

Homer Laughlin Engineers Corporation. (See Ducorron, Charles A. F., assignor.)

Hooper, Dorothy, Nahant, Mass. Life-saving raft. No. 1,269,445; June 11; v. 251; p. 403.

Hopkins, Charles E., Taunton, Mass. Machine for making stereotype printing-plates. No. 1,268,463; June 4; v. 251; p. 113.

Hoppes, William C., Dawson, Nebr. Disk-sharpener. No. 1,268,974; June 11; v. 251; p. 274.

Horn, Joe, Los Angeles, Cal. Rubber-set riffle for ore-concentrators and the like. No. 1,270,618; June 25; v. 251; p. 783.

Horton, Albert J., White Plains, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Motor-controller. No. 1,268,574; June 4; v. 251; p. 143.

Horton, Albert J., White Plains, N. Y., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Controller. No. 1,269,183; June 11; v. 251; p. 331.

Horton, Frederick W. (See Cleaves and Horton.)

Hotpoint Electric Heating Company. (See Meredith, Wynn, assignor.)

Hottenroth, Frederick W., New York, N. Y. Tread attachment for vehicle-wheels. No. 1,269,446; June 11; v. 251; p. 403.

Hough, James F., Southport, England. Tricycle specially applicable for invalids or the like. No. 1,269,815; June 18; v. 251; p. 539.

House, Henry A., Bridgeport, Conn. Connecting device, particularly for sectional barrel-heads. No. 1,268,352; June 4; v. 251; p. 80.

Hovas, John N., Chicago, Ill. Shock-absorber. No. 1,269,606; June 18; v. 251; p. 480.

Hover, John J., Denver, Colo. Wind-shield for automobiles. No. 1,269,447; June 11; v. 251; p. 404.

Howard, Frank W., and H. M. Brown, New York, N. Y. Umbrella-runner. No. 1,268,353; June 4; v. 251; p. 80.

Howard, Frank W., New York, N. Y. Umbrella-runner. No. 1,268,354; June 4; v. 251; p. 81.

Howard, Jewell, Stratford, Tex. Communion-service cabinet. No. 1,268,120; June 4; v. 251; p. 15.

Howard, John E., Davenport, Wash. Folding bed for automobiles. No. 1,268,717; June 4; v. 251; p. 183.

Howard and Sons, W. G. (See Howard, William M., assignor.)

Howard, William D. M., San Francisco, Cal. Oil-burner. No. 1,269,282; June 11; v. 251; p. 360.

Howard, William D. M., San Francisco, assignor of one-half to H. Leap, Camp Meeker, Cal. Automatic gearless power transmission. No. 1,269,935; June 18; v. 251; p. 571.

Howard, William M., assignor to W. G. Howard and Sons, Blackville, S. C. Device for babbitting connecting-rods. No. 1,269,936; June 18; v. 251; p. 571.

Howell, William C. (See Smith, Newton H., assignor.)

Howley, Edward J., Struthers, Ohio. Game. No. 1,269,184; June 11; v. 251; p. 332.

Hoyt, Worthington, *et al.* (See Ray, Rudolph W., assignor.)

Hubbard, Charles W., Weston, Mass. Machine for packaging tubular thread masses. No. 1,269,816; June 18; v. 251; p. 539.

Hubbell, Harvey, Bridgeport, Conn. Stopping attachment for talking-machines. No. 1,268,121; June 4; v. 251; p. 15.

Huberich, Henry R., Cleveland, Ohio, assignor to General Electric Company. Adjustable lamp-fixture. No. 1,269,538; June 11; v. 251; p. 428.

Hubert, Henry J., assignor to J. T. Milliken, St. Louis, Mo. Capsule-machine. No. 1,269,448; June 11; v. 251; p. 404.

Hubinger, George M., assignor to Star Detachable Towel-Holder Co., Milwaukee, Wis. Towel-dispensing device. No. 1,268,246; June 4; v. 251; p. 49.

Hubler, John, Brandon, Wis. Scutching-machine. No. 1,268,975; June 11; v. 251; p. 274.

Hudler, Charles L., St. Louis, Mo. Hydroaeroplane. No. 1,268,779; June 4; v. 251; p. 201.

Hudson, Charles H. (See Pinkerton, Edward E., assignor.)

Hudson, Edward, assignor to E. and W. S. Hudson, Leeds, England. Fastening of railway-rails to sleepers. No. 1,268,464; June 4; v. 251; p. 113.

Hudson, Walter S. (See Hudson, Edward, assignor.)

Hueber, Henry, assignor to A. A. Barkey, Seattle, Wash. Fuel-gage. No. 1,270,735; June 25; v. 251; p. 811.

Huelsdonk, William A., Modesto, Cal. Submerged concentrating-table. No. 1,270,736; June 25; v. 251; p. 812.

Huff, Russell, assignor to Packard Motor Car Company, Detroit, Mich. Motor-oiling system. No. 1,270,619; June 25; v. 251; p. 783.

Huggins, Nathaniel, New York, N. Y., assignor, by mesne assignments, to Copper Products Company. Process and apparatus for electrodeposition. No. 1,268,465; June 4; v. 251; p. 114.

Hughes, Edward H., Canton, Ohio. Aerial torpedo. No. 1,269,185; June 11; v. 251; p. 332.

Hughes, Howard R., New York, N. Y. Method of and apparatus for forming and enlarging or cavating bores. No. 1,269,449; June 11; v. 251; p. 404.

Hugro Manufacturing Company, The. (See Boyer, Charles A., assignor.)

Humbert, William H., Louisville, Ky. Cycle-lock. No. 1,270,415; June 25; v. 251; p. 725.

Hume, James H., assignor to James Howden & Company, Limited, Glasgow, Scotland. Closure or door. No. 1,269,283; June 11; v. 251; p. 360.

Hume, James H., assignor to James Howden & Company, Limited, Glasgow, Scotland. Closure or door. No. 1,269,284; June 11; v. 251; p. 360.

Hunter, William F., Blaine, Kans. Wire-fastener for posts. No. 1,268,466; June 4; v. 251; p. 114.

Huntoon, Charles F., Chicago, Ill. Truck-bolster. No. 1,269,817; June 18; v. 251; p. 540.

Hurd, Benjamin W., assignor of one-third to G. E. Mesecar, Sierra Madre, Cal. Fuel-indicator for internal-combustion engines. No. 1,268,718; June 4; v. 251; p. 183.

Hurlbut, Frank A., Kansas City, Mo. Water-back construction for furnaces. No. 1,269,083; June 11; v. 251; p. 304.

Hussey, Thomas O., Brooklyn, assignor of one-half to The National City Bank, New York, N. Y. Desk. No. 1,269,084; June 11; v. 251; p. 305.

Husted, Allan S., Chicago, Ill. Internal-combustion engine. No. 1,270,295; June 25; v. 251; p. 692.
Huston, Daisy D., Deepwater, Mo. Educational apparatus. No. 1,269,713; June 18; v. 251; p. 510.
Hutchinson, Francis G. (See Hutchinson, Merrill F. and F. G.)
Hutchinson, Merrill F. and F. G., Clearwater, Kans. Hay and bundle loader. No. 1,268,122; June 4; v. 251; p. 16.
Hutsell, Roy E., *et al.* (See Hutsell, Thomas A., assignor.)
Hutsell, Thomas A., assignor of one-fourth to G. S. Hardin, one-fourth to S. W. Hoag, and one-fourth to R. E. Hutsell, Spokane, Wash. Internal-combustion engine. No. 1,269,937; June 18; v. 251; p. 572.
Hyatt, Albert R., Olds, Iowa. Couch. No. 1,270,737; June 25; v. 251; p. 812.
Hyatt, John W., Orange, N. J. Juice-extracting machine. No. 1,268,247; June 4; v. 251; p. 50.
Hyde, Elbert L., *et al.* (See Ray, Rudolph W., assignor.)
Hydraulic Pressed Steel Company, The. (See Davidson, Harry O., assignor.)
Hydro Ventilator Company, The. (See Anderson, William M., assignor.)
Ibach, Charles W., Tacoma, Wash. Automatic locomotive-tank-valve release. No. 1,270,760; June 25; v. 251; p. 819.
Ideal Aerator Company. (See Williams, Charles L., assignor.)
Ingersoll-Rand Company. (See Banner, Otto, assignor.)
Ingersoll-Rand Company. (See Bayles, Lewis C., assignor.)
Inland Company, The. (See Butler, David H., assignor.)
Innes, Harry C., Cincinnati, Ohio. Wood paving-block and pavement. No. 1,268,123; June 4; v. 251; p. 16.
International Burr Corporation. (See Aikin, William P., assignor.)
International Curtis Marine Turbine Company. (See Newton, Earle R., assignor.)
International Harvester Corporation. (See Johnston, Edward A., assignor.)
International Pavement Company. (See Upham, Preston, assignor.)
International Time Recording Company of New York. (See Bush, Le Grand C., assignor.)
Irwin, Herbert G., Spur, Tex. Vacuum-energized make-and-break spark-plug. No. 1,268,719; June 4; v. 251; p. 183.
Isgett, Stephen E., Gilbert, La. Furnace-door for brick-kilns. No. 1,269,450; June 11; v. 251; p. 405.
Iskols, Anatol D., Schenectady, N. Y. Hydraulic thrust-bearing. No. 1,268,575; June 4; v. 251; p. 144.
Ivatts, Ernest A., assignor to Compagnie Générale des Etablissements Pathé Frères, Phonographe et Cinématographe, Paris, France. Recording and reproducing phonograph. No. 1,269,607; June 18; v. 251; p. 480.
Ives, Frederic E., Philadelphia, Pa. Color photography. No. 1,268,847; June 11; v. 251; p. 239.
J. Stone & Company. (See Darker, Alfred H., assignor.)
J. E. Mergott Company, The. (See Fuller, Franz A., assignor.)
J. H. Sager Company. (See Sager, James H., assignor.)
J. T. Slocomb Co. (See Slocomb, John T., assignor.)
Jackman, Charles W. and M. M., Waterloo, Ind. Rotary pump. No. 1,268,248; June 4; v. 251; p. 50.
Jackman, Miles M. (See Jackman, Charles W. and M. M.)
Jackson, Burnice V., Birmingham, Ala. Car-replacer. No. 1,270,161; June 18; v. 251; p. 630.
Jackson, Carrie I., Pepin, Wis. Corn-planter. No. 1,269,451; June 11; v. 251; p. 405.
Jackson Compressor Company, The. (See Jackson, Henry O., assignor.)
Jackson, Henry O., assignor to The Jackson Compressor Company, Denver, Colo. Check-valve. No. 1,268,720; June 4; v. 251; p. 184.
Jackson, Richard, Jr., Canton, Ohio. Shoulder-pad and the like. No. 1,270,031; June 18; v. 251; p. 596.
Jackson, Samuel B., Atlantic, assignor to Boston Fastener Company, Boston, Mass. Fastener-attaching machine. No. 1,268,355; June 4; v. 251; p. 81.
Jacob Harsh Company. (See Anderson, Martin E., assignor.)
Jacobs, Arthur E., Cleveland, Ohio. Three-coin-register bank. No. 1,269,608; June 18; v. 251; p. 480.
Jacobs, Hannah and H., New York, N. Y. Hair-waving apparatus. No. 1,268,848; June 11; v. 251; p. 239.
Jacobs, Harry. (See Jacobs, Hannah and H.)
Jacobsen, Jacob, assignor of one-third to W. Samuels and one-third to B. W. Henning, San Francisco, Cal. Rotary pump. No. 1,270,522; June 25; v. 251; p. 756.
Jacobson, Carl I., and A. L. Fowler, Los Angeles, Cal. Pressure connection and gage. No. 1,268,467; June 4; v. 251; p. 114.
Jacobson, Edward B., Pittsfield, assignor to Hendee Manufacturing Company, Springfield, Mass. Induction-coil. No. 1,268,468; June 4; v. 251; p. 114.
Jacobson, Harry. (See English and Flock, assignors.)
Jaeger, Otto, Elkins Park, Pa., assignor to H. S. Kelsey, Boston, Mass. Dispensing device. No. 1,268,249; June 4; v. 251; p. 50.
Jaeger, Otto, Elkins Park, Pa., assignor to H. S. Kelsey, Boston, Mass. Disk-dispensing device. No. 1,268,250; June 4; v. 251; p. 51.
Jahna, Emil R., Macon, Ga., assignor to J. H. Woolling, Indianapolis, Ind. Concrete-roofing-tile machine or mold. No. 1,269,818; June 18; v. 251; p. 540.
James, Andrew, Stamford, Conn. Portable desk. No. 1,269,452; June 11; v. 251; p. 405.
James Howden & Company. (See Hume, James H., assignor.)
Janousek, Joseph E. (See Krum and Janousek.)
Jansen, Ernest D. (See Farmer and Jansen.)
Jay, Webb, Chicago, Ill. Vacuum feed device for elevating liquid. No. 1,268,780; June 4; v. 251; p. 201.
Jay, Webb, Chicago, Ill. Sight-feed and dirt-screen for vacuum feed devices. No. 1,270,162; June 18; v. 251; p. 631.
Jeffrey Manufacturing Company, The. (See Liggett, William K., assignor.)
Jeffries, William O., Boston, assignor of one-half to A. F. Viano, Somerville, Mass. Tire. No. 1,269,938; June 18; v. 251; p. 572.
Jeffs, Lewis A., Salt Lake City, Utah. Making alloys of phosphorus. No. 1,268,849; June 11; v. 251; p. 239.
Jennings, Archer B., Meriden, Conn. Tool-chest. No. 1,268,124; June 4; v. 251; p. 16.
Jensen, Clarence S., Vienna, S. D. Liquid-gage. No. 1,268,356; June 4; v. 251; p. 81.
Jensen, Hans, assignor to The Jensen-Salsbery Laboratories, Inc., Kansas City, Mo. Dilator. No. 1,268,576; June 4; v. 251; p. 144.
Jensen, Jens O., New York, N. Y. Process of and apparatus for preparing crude oil for distillation. No. 1,268,721; June 4; v. 251; p. 184.
Jensen, Lawrence H., St. Charles, Ill. Differential pump. No. 1,268,850; June 11; v. 251; p. 240.
Jensen-Salsbery Laboratories, The. (See Jensen, Hans, assignor.)
Jepson, John W., Buffalo, N. Y., assignor to Gould Coupler Company. Electrical system of distribution. No. 1,269,460; June 4; v. 251; p. 115.
Jepson, John W., Depew, N. Y., assignor to Gould Coupler Company. Emergency lighting system. No. 1,269,712; June 18; v. 251; p. 509.
Jerram, Arthur E. and F. B. Keall, Leicester, England, assignors, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Tacking mechanism. No. 1,268,357; June 4; v. 251; p. 82.
Jeske, Samuel A., Jamestown, N. D. Grain-separator. No. 1,269,085; June 11; v. 251; p. 305.
Jesurun, Edward, Palo Alto, and R. Lyttle, Los Angeles, Cal. Universal direction-control headlights. No. 1,270,163; June 18; v. 251; p. 631.
Jeune, Aubrey E., Toronto, Ontario, Canada. Electric-fixture canopy. No. 1,270,296; June 25; v. 251; p. 693.
Jobski, Otto H., *et al.*, administrator. (See Bryant, Richard S.)
Johannessen, Johan E., Brooklyn, and O. A. Waage, New York, N. Y., assignors of one-third to D. W. Flint, Providence, R. I., one-ninth to J. A. Sether, one-ninth to O. C. Hoff, and one-ninth to C. J. Christiansen, Brooklyn, N. Y. Mechanism for the operation of submarine armament. No. 1,270,164; June 18; v. 251; p. 631.
Johanson, Emil G., Chicago, Ill. Press. No. 1,269,186; June 11; v. 251; p. 332.
John T. Lewis & Bros. Company. (See Eckfeldt, Frederick W., assignor.)
John Wanamaker Philadelphia. (See Tily and Rehfus, assignors.)
Johnson, Alex J., Nicolet Island, Minneapolis, Minn. Cutter-head. No. 1,268,722; June 4; v. 251; p. 184.
Johnson, Arthur, Burton, Ohio. Saw-filing gage. No. 1,270,032; June 18; v. 251; p. 597.
Johnson Automatic Sealer Company. (See Johnson, Harry L., assignor.)
Johnson, Charles L., San Jose, Cal. Device for teething infants. No. 1,268,470; June 4; v. 251; p. 115.
Johnson, Charles S., Marcy, N. Y. Knife-clip. No. 1,268,251; June 4; v. 251; p. 51.
Johnson, Clarence V., Yates Center, Kans. Wind-shield attachment. No. 1,270,165; June 18; v. 251; p. 632.
Johnson, Francis T., Chicago, Ill. Ironing-machine. No. 1,270,297; June 25; v. 251; p. 693.
Johnson, Frederick, Warba, Minn. Railway-car brake. No. 1,269,086; June 11; v. 251; p. 305.
Johnson, Harry E. (See Sigler, Charles B., assignor.)
Johnson, Harry L., assignor to Johnson Automatic Sealer Company, Limited, Battle Creek, Mich. Wrapping-machine. No. 1,270,410; June 25; v. 251; p. 726.
Johnson, Jay M., Chicago, assignor to W. P. Butler, Berwyn, Ill. Ticket and coin fare box. No. 1,268,723; June 4; v. 251; p. 185.
Johnson, John, Honolulu, Hawaii. Resilient wheel. No. 1,269,187; June 11; v. 251; p. 332.
Johnson, Joseph M., Reading, assignor of one-half to S. S. Johnson, Harrisburg, Pa. Indicator. No. 1,268,125; June 4; v. 251; p. 16.
Johnson, Oscar A., Napoleon, N. C. Wrench. No. 1,269,188; June 11; v. 251; p. 333.
Johnson, Richard, Proctor, Vt. Film-holding spool. No. 1,268,724; June 4; v. 251; p. 185.
Johnson, Samuel S. (See Johnson, Joseph M., assignor.)
Johnson, Walter C., Colemans Hatch, England. Fencing. No. 1,269,819; June 18; v. 251; p. 540.
Johnston, Edward A., Chicago, Ill., assignor to International Harvester Corporation. Steering device for traction-engines. No. 1,269,609; June 18; v. 251; p. 481.
Johnston, Henry B., Handsworth, Birmingham, England. Pedal driving-gear for cycles and the like. No. 1,268,851; June 11; v. 251; p. 240.

Johnston, William, Dayton, Ohio. Fountain shaving-brush. No. 1,268,976; June 11; v. 251; p. 275.
Jones, Arthur P. (See Jones, Herbert and A. P.)
Jones, Cable B., Whitewood, S. D. Wire-gate fastener and tightener. No. 1,268,471; June 4; v. 251; p. 115.
Jones, Calvin D., Muskegon, Mich. Chair. No. 1,270,738; June 25; v. 251; p. 812.
Jones, Chesney L., Oakland, N. J. Soap tablet. No. 1,268,126; June 4; v. 251; p. 17.
Jones, Ella H., trustee. (See Wyckoff, Joseph E., assignor.)
Jones, Harry C., Larchmont, N. Y. Automatic shutter device. No. 1,268,577; June 4; v. 251; p. 144.
Jones, Herbert and A. P., Swansea, Wales. Hat-shape retainer. No. 1,268,977; June 11; v. 251; p. 275.
Jones, Joseph W., Pelham, assignor to Jones Motrola, Inc., New York, N. Y. Winding device for spring-motors. No. 1,268,358; June 4; v. 251; p. 82.
Jones, Lawrence. (See Miller, Samuel C., assignor.)
Jones, Luther P., Russellville, assignor of one-half to C. Womble, Franklin county, Ala. Swinging cradle. No. 1,270,417; June 25; v. 251; p. 726.
Jones Motrola, Inc. (See Jones, Joseph W., assignor.)
Jones, Walter, Daylight, Tenn. Sanitary pillow. No. 1,270,298; June 25; v. 251; p. 693.
Jordan, Alcan C., and W. R. Beal, Arkansas City, Kans. Oil-burner. No. 1,268,359; June 4; v. 251; p. 82.
Jordan, Robert E., Chicago, Ill. Hog-dehairing structure. No. 1,270,239; June 18; v. 251; p. 650.
Jordan, William P. (See Davis, Stephen J., assignor.)
Jorgensen, Olav E., Copenhagen, Denmark. Internal-combustion engine. No. 1,269,454; June 11; v. 251; p. 406.
Joy, Charles W. (See Elmore and Joy.)
Judd, Charles W., assignor to G. C. Bixby, Lowell, Mass. Lever-press. No. 1,270,620; June 25; v. 251; p. 783.
K. W. Ignition Company, The. (See Williams, Joseph A., assignor.)
Kadel, Byers W., Roanoke county, and J. A. Pilcher, Roanoke, Va. Railway-car. No. 1,268,725; June 4; v. 251; p. 185.
Kadel, Byers W., Roanoke county, Va. Railway-car. No. 1,268,726; June 4; v. 251; p. 186.
Kadish, Halbert L. (See Kadish, Victor H., assignor.)
Kadish, Victor H., assignor of one-half to H. L. Kadish, Milwaukee, Wis. Recovering fertilizing material from tannery waste liquids. No. 1,269,189; June 11; v. 251; p. 333.
Kaempf, Fred E., Gladstone, Mich. Condiment-holder. No. 1,270,418; June 25; v. 251; p. 726.
Kafafian, Krikor, and G. Esmarian, Paterson, N. J. Vehicle-wheel. No. 1,268,252; June 4; v. 251; p. 51.
Kahn, Edward C., Milwaukee, Wis. Liquid-fuel burner. No. 1,269,190; June 11; v. 251; p. 333.
Kahn, Edward C., Milwaukee, Wis. Liquid-fuel burner. No. 1,269,191; June 11; v. 251; p. 333.
Kahn, Edward C., Milwaukee, Wis. Liquid-fuel burner. No. 1,269,192; June 11; v. 251; p. 334.
Kaiser, John A., Detroit, Mich. Detachable rubber heel. No. 1,270,523; June 25; v. 251; p. 756.
Kalamazoo Corset Company. (See Beardsley, Robert F., assignor.)
Kalamazoo Loose Leaf Binder Co. (See Wiggington, George P., assignor.)
Kane, Catherine J., Arlington, N. J. Curtain-rod for beds. No. 1,270,524; June 25; v. 251; p. 756.
Kane, Thomas H., Youngstown, Ohio., assignor to Trussed Concrete Steel Company, Detroit, Mich. Hinge for continuous sashes. No. 1,269,939; June 18; v. 251; p. 572.
Kann, William L., Pittsburgh, Pa. Apparatus for grinding and smoothing glass. No. 1,269,455; June 11; v. 251; p. 406.
Karatsu, Tokumitsu, Los Angeles, Cal. Esthesiometer. No. 1,269,820; June 18; v. 251; p. 540.
Kardell, Henry W., St. Louis, Mo., assignor to Kardell Tractor & Truck Company. Traction-plow. No. 1,270,525; June 25; v. 251; p. 756.
Kardell Tractor & Truck Company. (See Kardell, Henry W., assignor.)
Karmen, Bernard H., New York, N. Y. Powder-puff. No. 1,270,739; June 25; v. 251; p. 812.
Kaufman, Frank J., Columbus, Ohio, assignor to National Binding Machine Company. Work-holder for the sealing of cartons. No. 1,269,821; June 18; v. 251; p. 541.
Kaupke, Lee H., assignor to Rock Island Plow Company, Rock Island, Ill. Disk harrow. No. 1,270,299; June 25; v. 251; p. 693.
Keall, Frank B. (See Jerram and Keall.)
Keen, Lewis C., and J. M. Klevan, Philadelphia, Pa. Phonograph-needle. No. 1,270,526; June 25; v. 251; p. 757.
Kees, Frederick D., assignor to F. D. Kees Manufacturing Company, Beatrice, Nebr. Calf-weaner. No. 1,268,253; June 4; v. 251; p. 51.
Keiner, Henry A., Richmond Hill, and P. Nussbaum, Brooklyn, N. Y., assignors to Keiner-Williams Stamping Company. Safety or blow-off valve. No. 1,269,940; June 18; v. 251; p. 572.
Keiner-Williams Stamping Company. (See Keiner and Nussbaum, assignors.)
Keiper, Frank, Rochester, assignor of one-half to G. R. Van Orden, Morton, N. Y. Insect-catcher. No. 1,268,127; June 4; v. 251; p. 17.
Keiper, Henry B., Lancaster, Pa. End-thrust bearing. No. 1,269,087; June 11; v. 251; p. 306.
Keith, Alexander E., Chicago, Ill., assignor, by mesne assignments, to Automatic Electric Company. Automatic party-line telephone-exchange system. No. 1,269,453; June 11; v. 251; p. 405.
Keith, Gilbert L. (See Christopher, Keith, Allsteadt, Einsel, and Pelander.)
Keith, Irving L. (See Brittain, George E., assignor.)
Kelley, Sidney E., Westfield, Mass. Game apparatus. No. 1,269,941; June 18; v. 251; p. 573.
Kellogg Switchboard & Supply Company. (See Dunbar, Francis W., assignor.)
Kellogg Switchboard and Supply Company. (See Paterson, Samuel, assignor.)
Kellogg Switchboard and Supply Company. (See Schoenwolf, Fred, assignor.)
Kellum, Orlando E., Los Angeles, Cal. Continuous phonograph, kinetograph, or the like. No. 1,268,472; June 4; v. 251; p. 115.
Kelly, Grover C., Buffalo, N. Y. Knockdown table and the like. No. 1,269,193; June 11; v. 251; p. 334.
Kelly, Martin P., Scranton, Pa. Disinfectant-holder. No. 1,269,088; June 11; v. 251; p. 306.
Kelsey, Harry S. (See Jaeger, Otto, assignor.)
Kempinski, Albin, Corona, N. Y., assignor of one-half to C. Dietrich. Target. No. 1,269,942; June 18; v. 251; p. 573.
Kempler, Philip, Newburgh, N. Y. Ash-sifter. No. 1,270,166; June 18; v. 251; p. 632.
Kenan, Dan C. (See Fauver and Kenan.)
Kendig, Julian H., Pittsburgh, Pa. Safety appliance for flying-machines. No. 1,270,419; June 25; v. 251; p. 726.
Kendricks, W. H. (See Davidson, Benjamin H., assignor.)
Kennedy, Charles W., Clarence, Mo. Four-wheel drive mechanism. No. 1,270,167; June 18; v. 251; p. 632.
Kennedy, David S., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Type or matrix. No. 1,268,578; June 4; v. 251; p. 144.
Kennedy, Julian, Pittsburgh, Pa. Manipulator for rolling-mills. No. 1,268,579; June 4; v. 251; p. 145.
Kennedy, Patrick, Brooklyn, assignor to Consolidated Railway Electric Lighting and Equipment Co., New York, N. Y. Dynamo suspension on car-trucks. No. 1,269,822; June 18; v. 251; p. 541.
Kennedy, Richard O., assignor to Cluett, Peabody & Co., Inc., Troy, N. Y. Collar. No. 1,270,168; June 18; v. 251; p. 633.
Kennedy, Walter J., New York, N. Y. Envelop and letter-paper pad. No. 1,269,610; June 18; v. 251; p. 481.
Kennington, William O., Detroit, Mich., assignor to Remy Electric Company, Anderson, Ind. Distributer-cap for ignition apparatus. No. 1,268,473; June 4; v. 251; p. 116.
Kerr, Perry W., Seattle, Wash. Non-refillable bottle. No. 1,269,456; June 11; v. 251; p. 407.
Kester, Marcus, Olney, Ill. Velocipede. No. 1,270,169; June 18; v. 251; p. 633.
Kestner, Paul, Lille, France. Steam-boiler. No. 1,270,621; June 25; v. 251; p. 783.
Ketteman, John E., Toledo, Ohio. Push-button switch. No. 1,269,611; June 18; v. 251; p. 482.
Keyes, Lyman G., National Military Home, Kans. Locking-bolt-operating device. No. 1,270,740; June 25; v. 251; p. 812.
Khoubesserian, Hagop H., Boston, Mass. Automatic train-stopping apparatus. No. 1,268,727; June 4; v. 251; p. 186.
Kidder, Elwin H., Chicago, Ill. Grain-car-door-opening mechanism. No. 1,268,580; June 4; v. 251; p. 146.
Kidder, Frank W., *et al.* (See Van Meter, John N., assignor.)
Kieckhefer Box Company. (See Walker, Emery L., assignor.)
Kiehler, Frederick, Detroit, assignor to Auto Specialties Manufacturing Company, St. Joseph, Mich. Vehicle-top bow-holder. No. 1,269,823; June 18; v. 251; p. 541.
Kiesel, William F., Jr., Altoona, Pa. Locking device. No. 1,268,852; June 11; v. 251; p. 240.
Kilby Frog & Switch Company. (See Yolton, Robert E., assignor.)
Kilgore, John G., Dayton, Tex. Drill-bit. No. 1,268,474; June 4; v. 251; p. 116.
Killgore, Hiram S., Eldon, Mo. Photographic-film holder. No. 1,269,457; June 11; v. 251; p. 407.
Kimack, Peter, St. Louis, Mo. Combined railway-rail and joint. No. 1,269,714; June 18; v. 251; p. 510.
Kimack, Peter, St. Louis, Mo. Combined rail anticreeper, tie plate, and brace. No. 1,269,715; June 18; v. 251; p. 510.
Kimball, John T., assignor to Hayes Manufacturing Company, Detroit, Mich. Embossing-press. No. 1,268,360; June 4; v. 251; p. 83.
Kindel, Charles J., Wilmette, Ill., assignor to Grand Rapids Trust Company, Grand Rapids, Mich. Sofa-bed. No. 1,270,741; June 25; v. 251; p. 813.
Kindel, Charles J., assignor to Grand Rapids Trust Company, Grand Rapids, Mich. Divanette. No. 1,270,742; June 25; v. 251; p. 813.

Kindel, Charles J., assignor to Grand Rapids Trust Company, Grand Rapids, Mich. Settee-bed. No. 1,270,743; June 25; v. 251; p. 814.
King, Edward, and F. Welsh, Granville, Ohio. Pipe-coupling. No. 1,270,300; June 25; v. 251; p. 694.
King, George E., Newton, assignor to The Gamewell Fire Alarm Telegraph Company, Newton Upper Falls, Mass. Winding device. No. 1,269,194; June 11; v. 251; p. 334.
King, Josephine, assignor of one-fourth to A. J. Waffen, Iron River, Mich. Churn. No. 1,268,728; June 4; v. 251; p. 186.
King, Victor L., West Point, Miss. Refrigerating and hardening cabinet. No. 1,269,716; June 18; v. 251; p. 511.
Kingsbury, Albert, Pittsburgh, Pa. Thrust-bearing. No. 1,270,622; June 25; v. 251; p. 784.
Kingsbury, Edward J. (See Kingsbury, Harry T. and E. J.)
Kingsbury Gas-Electric Motor Car Company. (See Kingsbury, John M., assignor.)
Kingsbury, Harry T. and E. J., Keene, N. H. Talking-machine. No. 1,269,089; June 11; v. 251; p. 306.
Kingsbury, John M., New York, N. Y. Electromagnetic valve. No. 1,270,170; June 18; v. 251; p. 633.
Kingsbury, John M., assignor to Kingsbury Gas-Electric Motor Car Company, Great Falls, Mont. Electric-vehicle wheel. No. 1,270,420; June 25; v. 251; p. 727.
Kingsbury, John M., assignor to Kingsbury Gas-Electric Motor Company, Great Falls, Mont. Electric-vehicle construction. No. 1,270,421; June 25; v. 251; p. 727.
Kingsbury, John M., assignor to Kingsbury Gas-Electric Motor Car Company, Great Falls, Mont. Electric-vehicle wheel. No. 1,270,527; June 25; v. 251; p. 757.
Kinnear, Robert L., Clydebank, Scotland. Gland. No. 1,268,978; June 11; v. 251; p. 275.
Kirby, John, Jr., Dayton, and T. Scullin, Cleveland, assignors to The Dayton Manufacturing Company, Dayton, Ohio. Metal sash. No. 1,268,581; June 4; v. 251; p. 145.
Kirk, Walter I., assignor to Lyon & Healy, Chicago, Ill. Pedal attachment for pianos and the like. No. 1,269,717; June 18; v. 251; p. 511.
Kirk, Walter I., assignor to Lyon & Healy, Chicago, Ill. Ball-bearing for harps. No. 1,269,718; June 18; v. 251; p. 511.
Kirk, Walter I., assignor to Lyon & Healy, Chicago, Ill. Bench-bracket. No. 1,269,719; June 18; v. 251; p. 512.
Kirkwood, Abraham L., Blocker, Tex. Combination motion-picture and sound-reproducing mechanism. No. 1,268,720; June 4; v. 251; p. 187.
Kiso, Henry K., New York, N. Y. Envelop. No. 1,268,730; June 4; v. 251; p. 187.
Kistler, Samuel L., Los Angeles, Cal. Cementing wells. No. 1,269,090; June 11; v. 251; p. 306.
Kitchell, Joseph G., Haddam, Conn. Picture and making the same. No. 1,269,458; June 11; v. 251; p. 407.
Kleffel, Harrison E., New York, N. Y. Mechanical stoker. No. 1,270,171; June 18; v. 251; p. 633.
Klein, Harry H., New York, N. Y. Hair-waver. No. 1,270,623; June 25; v. 251; p. 784.
Klevan, John M. (See Keen and Klevan.)
Klipfel Manufacturing Co. (See Swan, John H., assignor.)
Klippert, Edward T., Detroit, Mich. Releasing-hook for life-boats. No. 1,268,361; June 4; v. 251; p. 83.
Klok, Carl R., Chicago, Ill., assignor, by mesne assignments, to United Table-Bed Company. Folding bed. No. 1,270,528; June 25; v. 251; p. 757.
Knierlemen, George, Atco, N. J. Brooder. No. 1,268,853; June 11; v. 251; p. 240.
Knight, Richard D., Providence, R. I. Match-receptacle. No. 1,269,285; June 11; v. 251; p. 361.
Knoerr, Fred, Chicago, Ill. Refrigerating apparatus. No. 1,269,612; June 18; v. 251; p. 482.
Knollmann, George F., Evansville, Ind. Adjustable mirror for boilers. No. 1,270,624; June 25; v. 251; p. 784.
Knott, Eustace R., Sharon, Mass. Popcorn brick and bar cutting machine. No. 1,268,854; June 11; v. 251; p. 241.
Knowles, Edward S., San Francisco, Cal. Fish-hook. No. 1,270,033; June 18; v. 251; p. 597.
Knox, Luther L., Bellevue, assignor to Blaw-Knox Company, Pittsburgh, Pa. Annealing-box. No. 1,268,582; June 4; v. 251; p. 146.
Knox, Luther L., Bellevue, assignor to Blaw-Knox Company, Pittsburgh, Pa. Annealing-pot. No. 1,268,583; June 4; v. 251; p. 146.
Knox, Orville M., Knoxboro, N. Y. Pole. No. 1,270,625; June 25; v. 251; p. 784.
Knudsen, Jacob B., Chicago, Ill. Packless swing-joint. No. 1,270,172; June 18; v. 251; p. 634.
Knue, Louis H., *et al.* (See Ransdall, Harry W., assignor.)
Kocourek, Henry, Jersey City, N. J., assignor to L. H. La Chance and M. Taylor, administrators. Primer for internal-combustion engines. No. 1,270,626; June 25; v. 251; p. 785.
Koechlin, Isaac, Levallois-Perret, assignor to Societe Anonyme Des Automobiles & Cycles Peugeot, Paris, France. Disk clutch. No. 1,270,529; June 25; v. 251; p. 758.
Konczewski, Ignacy, Cleveland, Ohio. Horseshoe-calk. No. 1,269,824; June 18; v. 251; p. 542.
Konsynski, Benjamin B., Hammond, Ind. Match-box. No. 1,270,301; June 25; v. 251; p. 694.
Kopke, William F., Dayton, Ohio. Resilient wheel. No. 1,269,286; June 11; v. 251; p. 361.
Kornstein, Ulrich, assignor of one-half to J. S. Friedman, New York, N. Y. Detachable heel. No. 1,268,731; June 4; v. 251; p. 187.
Kossmann, John H., St. Louis, Mo. Railway-rail joint. No. 1,268,732; June 4; v. 251; p. 187.
Kossmann, John H., St. Louis, Mo. Resilient tire. No. 1,269,720; June 18; v. 251; p. 512.
Kotts, Garrett W., Hope, N. D. Lightning-arrester. No. 1,268,733; June 4; v. 251; p. 187.
Kotze, Frank C., Newark, N. J. Vehicle-tire. No. 1,269,459; June 11; v. 251; p. 407.
Kraft, William. (See Schulz and Kraft.)
Kramer, Andrew A., Kansas City, Kans. Fluid-dispensing-tank construction. No. 1,269,460; June 11; v. 251; p. 408.
Kramer, Dorothy A., *et al.* (See Kramer, Ernest A. and H., assignors.)
Kramer, Ernest A., and H. Kramer, deceased, J. D. Kramer, executor, assignors of one-sixth to E. A. Kramer, one-sixth to J. D. Kramer, and one-sixth to M. Kramer, Grant Park, one-sixth to H. Kramer, Jr., Crete, one-sixth to D. A. Kramer, Chicago, Ill., and one-sixth to F. W. Kramer, Kingdon, Cal. Animal-releasing device. No. 1,270,173; June 18; v. 251; p. 634.
Kramer, Fred W., *et al.* (See Kramer, Ernest A. and H., assignors.)
Kramer, Henry. (See Kramer, Ernest A. and H.)
Kramer, John D., executor. (See Kramer, Ernest A. and H.)
Kramer, Marguerite, *et al.* (See Kramer, Ernest A. and H., assignors.)
Kremelberg, Gertrude M., Pittsfield, Mass. Water-cooling device. No. 1,268,362; June 4; v. 251; p. 83.
Krewson, Isaac, Cheltenham, Pa. Spanner-key. No. 1,269,461; June 11; v. 251; p. 408.
Kroedel, Robert, assignor to Eastman Kodak Company, Rochester, N. Y. Developing apparatus for photographic films. No. 1,270,302; June 25; v. 251; p. 694.
Kroehler Manufacturing Company *et al.* (See Davis, Fred M., assignor.)
Krudop, Donald G., Manhattan, Kans. Bar-bell. No. 1,270,034; June 18; v. 251; p. 597.
Krum, William H., and J. E. Janousek, Chicago, Ill. Convertible chair. No. 1,268,979; June 11; v. 251; p. 273.
Krumholz, August, Chicago, Ill. Metal joint and welding the same. No. 1,268,980; June 11; v. 251; p. 275.
Krupp, James, Milwaukee, Wis. Turning and stopping signal for motor-vehicles. No. 1,270,174; June 18; v. 251; p. 634.
Kruse, Theodore H., Arvada, assignor of one-half to Clarence C. Cole, Denver, Colo. Berry-picker. No. 1,269,091; June 11; v. 251; p. 307.
Kucharski, Konstanty, Thurber, Tex. Motor-plow. No. 1,270,627; June 25; v. 251; p. 785.
Kuehn, Frederich W., St. Louis, Mo. Writing implement. No. 1,270,035; June 18; v. 251; p. 597.
Kuhn, Frank, and J. A. Hand, assignors to American Electrical Heater Company, Detroit, Mich. Handle and terminal connection for electrically-heated instruments. No. 1,270,303; June 25; v. 251; p. 695.
Kuhn, Frank, and J. A. Hand, assignors to American Electrical Heater Company, Detroit, Mich. Soldering-iron stand. No. 1,270,304; June 25; v. 251; p. 695.
Kuhn, Harry A., Pittsburgh, Pa. Mining coal. No. 1,268,584; June 4; v. 251; p. 146.
Kuntny, Gregor, Trenton, N. J., assignor to The Trenton Brass and Machine Co. Flush-valve. No. 1,269,721; June 18; v. 251; p. 512.
Kurtz, Charles L., Columbus, Ohio. Means for supplying air to gas-engines. No. 1,268,128; June 4; v. 251; p. 17.
Kwanto Lanso Kabushiki Kaisha, Ltd. (See Hayashi and Emura, assignors.)
Kwiatkowski, Michal, New York, N. Y., assignor of one-half to P. Kwiatkowski, Chicago, Ill. Metallic railway-tie. No. 1,269,092; June 11; v. 251; p. 307.
Kwiatkowski, Piotr. (See Kwiatkowski, Michal, assignor.)
La Bauve, Henry J., Austin, Tex. Combined automobile-wheel and flexible tire. No. 1,269,613; June 11; v. 251; p. 482.
La Chance, Leander H., *et al.*, administrators. (See Kocourek, Henry, assignor.)
La Chapelle, Euclid I., Brockton, Mass. Machine for separating shoes and lasts. No. 1,269,093; June 11; v. 251; p. 307.
La Chapelle, Fred N., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Needle. No. 1,269,094; June 11; v. 251; p. 308.
La Rouche, Joseph H., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Apron for shoe-sewing machines. No. 1,269,097; June 11; v. 251; p. 308.
La Vercombe, Harley H., Detroit, Mich. Re-forming reamers. No. 1,268,365; June 4; v. 251; p. 84.
Lacey Manufacturing Corporation. (See Vreeland, Walter G., assignor.)

Lachance, Modeste J., assignor to E. and T. Fairbanks and Company, St. Johnsbury, Vt. Compensating pendulum-weight mechanism for dial-scales. No. 1,268,855; June 11; v. 251; p. 241.
Lackman, Alexander, New York, N. Y. Fermenting sulfite liquor. No. 1,269,287; June 11; v. 251; p. 361.
Ladd, William B., Kingston, Tenn. Automobile-cowl attachment. No. 1,269,462; June 11; v. 251; p. 408.
Lalond, Matthias. (See Soucy, Elzeard O., assignor.)
Lamb, Joseph F. (See Carlson and Lamb.)
Lambe, John B., Graettinger, Iowa. Pipe-cutter. No. 1,270,175; June 18; v. 251; p. 635.
Lambert, George A. (See Flick and Lambert.)
Lambson, De Witt C., Springfield, assignor to The Fisk Rubber Company, Chicopee Falls, Mass. Braking device for elevating-trucks. No. 1,269,095; June 11; v. 251; p. 308.
Lamont, James H., Beloit, Wis. Stand for musical instruments. No. 1,268,363; June 4; v. 251; p. 84.
Land, Edmund, Detroit, Mich., assignor to Century Storage Battery Company. Storage-battery cover. No. 1,269,096; June 11; v. 251; p. 308.
Landers, Frary & Clark. (See Carlson and Lamb, assignors.)
Landers, Frary & Clark. (See Warner, Alonzo A., assignor.)
Landgraf, Frederick K. (See Flannery, Dodds, and Landgraf.)
Landoll, Rupert X., Carthagena, Ohio. Circular-saw machine. No. 1,269,288; June 11; v. 251; p. 361.
Lang, James S., Boston, Mass. Shock-absorber. No. 1,269,289; June 11; v. 251; p. 361.
Langdon, John J., Pueblo, Colo. Bookcase. No. 1,269,825; June 18; v. 251; p. 542.
Langford, Joseph O., assignor of one-half to H. Mohr, El Paso, Tex. Plane attachment. No. 1,270,744; June 25; v. 251; p. 814.
Langille, Ernest A., San Francisco, Cal. Combined step and extension ladder. No. 1,269,463; June 11; v. 251; p. 408.
Langsenkamp, William, Jr., trustee. (See Miller, Frank S., assignor.) (Reissue.)
Lanier, John. (See Young, George H., assignor.)
Lapedes, Abraham, New York, N. Y. Sweeper attachment for motor-vehicles. No. 1,268,555; June 4; v. 251; p. 146.
Lapp, Herbert F., Cleveland, Ohio. Collapsible billiard and pool table. No. 1,269,614; June 18; v. 251; p. 483.
Lapp, John S., assignor to The Locke Insulator Mfg. Co., Victor, N. Y. Strain-clamp for aerial cables. No. 1,269,981; June 11; v. 251; p. 276.
Larick, Harry C., and S. M. Stough, Frankfort, Ind. Adjustable chain wrench. No. 1,268,129; June 4; v. 251; p. 17.
Larkin, Walter, assignor to H. Brinton Company, Philadelphia, Pa. Stop-motion. No. 1,269,464; June 11; v. 251; p. 408.
Larrabee, Albert E., Bristol, Va. Navigating apparatus. No. 1,270,176; June 18; v. 251; p. 635.
Larson, Anton S., assignor of one-half to C. R. Felt, Ibapah, Utah. Wire-stretcher. No. 1,268,364; June 4; v. 251; p. 84.
Larson, Carl W., and G. H. Shapter, Erie, Pa., assignors to General Electric Company. Storage-battery locomotive. No. 1,270,628; June 25; v. 251; p. 785.
Larson, George H., Aurelia, Iowa. End-gate fastener. No. 1,269,615; June 18; v. 251; p. 483.
Laskawy, Peter. (See Zaremba, Frank, assignor.)
Latta, Milton N., Valentine, Nebr. Road-making machine. No. 1,269,098; June 11; v. 251; p. 308.
Lauter Company. (See Lynde, Frank G., assignor.)
Lavalle, Peter J. (See Parr, George T., assignor.)
Lavalle, Peter J. (See Ulrich, William C., assignor.)
Lawton, Jason L., Buffalo, N. Y. Egg-beater. No. 1,268,586; June 4; v. 251; p. 146.
Lay, Charles G. (See Baird and Lay.)
Lay, William C., Nacogdoches, Tex. Brush. No. 1,268,734; June 4; v. 251; p. 188.
Layman, Hebron B., assignor of one-fourth to F. E. Lonas, New York, N. Y. Chain. No. 1,268,254; June 4; v. 251; p. 52.
Layne & Bowler Corporation. (See Wintroath, John A., assignor.)
Layne, Ollyn A., Los Angeles, Cal. Separator for wells. No. 1,268,366; June 4; v. 251; p. 84.
Layton, William, Sea Girt, N. J. Resilient wheel. No. 1,269,465; June 11; v. 251; p. 409.
Leap, Harry. (See Howard, William D. M., assignor.)
Leary, John H., Jr. (See Wright and Leary.)
Leavitt, John E., Boston, Mass. Means of exchange. No. 1,268,476; June 4; v. 251; p. 116.
Le Bozec, Leon, Bacon-les-Bruyères, France. Automatic valve. No. 1,269,616; June 18; v. 251; p. 483.
Le Clair, Joseph R., assignor of one-half to F. A. Perry, Wyandotte, Mich. Window-cleaning device. No. 1,270,629; June 25; v. 251; p. 786.
Leclaire, Alfred, Maisonneuve, Quebec, Canada. Napkin and towel holder. No. 1,270,036; June 18; v. 251; p. 597.
Lederer, Charles, Sr., Pierce, Nebr. Lawn-mower attachment. No. 1,270,177; June 18; v. 251; p. 635.
Ledoux, John W., Swarthmore, Pa. Fluid-meter. No. 1,268,130; June 4; v. 251; p. 18.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Transmission-gearing. No. 1,268,131; June 4; v. 251; p. 18.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Multiple spot-welding machine. No. 1,269,617; June 18; v. 251; p. 483.
Ledwinka, Joseph, assignor to Edward G. Budd Manufacturing Company, Philadelphia, Pa. Pressed-steel truck-wheel. No. 1,270,306; June 25; v. 251; p. 696.
Lee, Benjiman R., Chattanooga, Tenn. Demountable rim. No. 1,268,367; June 4; v. 251; p. 85.
Lee, Benjiman R., Chattanooga, Tenn. Type-writer attachment. No. 1,268,368; June 4; v. 251; p. 85.
Lee, Daisy G., Clermont, Fla. Playing-cards. No. 1,269,099; June 11; v. 251; p. 309.
Lee, Ronald A., Woollahra, near Sydney, New South Wales, Australia. Boot-heel-lift magazine. No. 1,269,826; June 18; v. 251; p. 542.
Lee, Walker, Bigprairie, Ohio. Music-leaf turner. No. 1,270,745; June 25; v. 251; p. 814.
Leedy Manufacturing Company. (See Wanamaker, Charles B., assignor.)
Lehtinen, George E., East Jaffrey, N. H. Aeronautical compass. No. 1,270,178; June 18; v. 251; p. 635.
Leibbrandt, Bertha, Santa Cruz, Cal. Treating grain for beverages. No. 1,269,100; June 11; v. 251; p. 309.
Leich Electric Company. (See Leich, Oscar M., assignor.)
Leich, Oscar M., assignor to Leich Electric Company, Genoa, Ill. Telegraph system. No. 1,269,539; June 11; v. 251; p. 428.
Leiser, Richard. (See Haber and Leiser.)
Leist, Jean I., Brooklyn, N. Y. Composition for repelling rodents and insects. No. 1,270,630; June 25; v. 251; p. 786.
Lejeune-Saconney, Charles, and T. Testu, Nice, France. Handle-bar with universal control for bicycles and motor-cycles. No. 1,269,101; June 11; v. 251; p. 309.
Lemassena, Clement F., Newark, N. J. Reel for tape-measures. No. 1,269,466; June 11; v. 251; p. 409.
Leng, Edward H., Montclair, N. J. Collapsible go-cart. No. 1,268,856; June 11; v. 251; p. 241.
Lent, Henry E., Park Rapids, Minn. Bottle. No. 1,270,305; June 25; v. 251; p. 695.
Lenz, Paul R. H., Los Angeles, Cal. Oil-burner. No. 1,268,587; June 4; v. 251; p. 147.
Lenzen, John, Paterson, N. J. Fastener or tie device. No. 1,268,132; June 4; v. 251; p. 18.
Leonard, George I., Chicago, Ill., assignor to Leonard Valveless Engine Company. Engine. No. 1,270,037; June 18; v. 251; p. 597.
Leonard, Harry C., and A. F. Winters, assignors to Grand Rapids Refrigerator Company, Grand Rapids, Mich. Refrigerator-latch. No. 1,269,467; June 11; v. 251; p. 409.
Leonard, Henry M., Topeka, Kans. Hog-trough. No. 1,269,943; June 18; v. 251; p. 573.
Leonard, Howard M., Jackson, Mich. Gearing. No. 1,269,944; June 18; v. 251; p. 573.
Leonard, Hugh J., Big Lake, Ark. Coupling for harness and the like. No. 1,269,618; June 18; v. 251; p. 484.
Leonard Valveless Engine Company. (See Leonard, George I., assignor.)
Leonard, Wilbur A., Woodmont, Conn. Die-head. No. 1,269,468; June 11; v. 251; p. 410.
Leopold, George O. (See Fegley and Leopold.)
Lepper, John L., Milwaukee, Wis. Machine for cutting corn-pads. No. 1,269,619; June 11; v. 251; p. 484.
Lerch, William G., and C. P. Whisler, assignors to The Miller Rubber Company, Akron, Ohio. Heel-trimmer. No. 1,268,477; June 4; v. 251; p. 117.
Lesher, Robert W., Northumberland, Pa. Conveyer attachment for threshing-machines. No. 1,268,857; June 11; v. 251; p. 242.
Letroteur, Maurice, Paris, France. Interconnected reversing mechanism and clutch. No. 1,268,735; June 4; v. 251; p. 188.
Leve, Robert E., New York, N. Y. Sewing-machine lamp. No. 1,269,469; June 11; v. 251; p. 410.
Levine, William, Princeton, N. J. Surgical tourniquet. No. 1,269,620; June 18; v. 251; p. 484.
Levy, Joseph, Brooklyn, N. Y. Handle for jointed containers. No. 1,269,470; June 11; v. 251; p. 410.
Lewinson, Jerome, New York, N. Y. Easel-carton. No. 1,269,621; June 18; v. 251; p. 484.
Lewis, Fredrick T., and E. E. Samuelson, Chippewa Falls, Wis. Feeding-rack. No. 1,269,827; June 18; v. 251; p. 542.
Lewis, Gail B., Notus, Idaho. Wire-clamp. No. 1,268,478; June 4; v. 251; p. 117.
Lewis, George G., Philadelphia, Pa. Beverage-urn. No. 1,268,858; June 11; v. 251; p. 242.
Lewis, Isabel L., Syracuse, N. Y. Dish and silverware drainer. No. 1,270,631; June 25; v. 251; p. 786.
Lewis, Lloyd V., Edgewood borough, assignor to The Union Switch and Signal Company, Swissvale, Pa. Speed-controlling apparatus for railway-vehicles. (Reissue.) No. 14,481; June 11; v. 251; p. 437.
Lewis M. Weed Co. (See Beard, James C., assignor.)
Lewis, Paul M., Velpen, Ind. Combination furniture. No. 1,269,102; June 11; v. 251; p. 309.

Leyes, Charles J., Jersey City, N. J. Apparatus for treating certain mineral or chemical products. No. 1,270,307; June 25; v. 251; p. 696.

Leyh, Henry, Bertha, Minn. Washbasin-bracket. No. 1,268,256; June 4; v. 251; p. 52.

Liberty Aeroil Burner. (See Rider, Herbert E., assignor.)

Lichtenstein, Alexander, Brooklyn, N. Y. Dumping-car. No. 1,268,588; June 4; v. 251; p. 147.

Lickfett, Herbert. (See Greulich and Lickfett.)

Lidberg, Oscar J. (See Geraghty, Helen L., assignor.)

Liebknecht, Otto, Frankfort-on-the-Main, Germany, assignor to The Roessler & Hasslacher Chemical Co., New York, N. Y. Electrolytic process of making alkali perborates. No. 1,268,369; June 4; v. 251; p. 85.

Liebmann, Adolf. (See Dewar and Liebmann.)

Liggett, William K., assignor to The Jeffrey Manufacturing Company, Columbus, Ohio. Crusher. No. 1,268,479; June 4; v. 251; p. 117.

Lightell, Adam, assignor of one-half to J. Murray, New Orleans, La. Spike-driving machine. No. 1,268,736; June 4; v. 251; p. 188.

Likins, Charles W., Oakland, Cal. Paper-hanging tool. No. 1,270,530; June 25; v. 251; p. 758.

Lindgren, Bror J., assignor to The Toledo Machine & Tool Company, Toledo, Ohio. Drawing-press. No. 1,268,370; June 4; v. 251; p. 85.

Lindquist, Ernest W., Lawrence, Mass. Save-all. No. 1,270,422; June 25; v. 251; p. 727.

Link-Belt Company. (See Eilersgaard, Asger, assignor.)

Link, Eugene B. (See Royer, William B., assignor.)

Linn, George R. (See Bull, Lionel, assignor.)

Linn, Holman H., Morris, N. Y. Tractor. No. 1,270,531; June 25; v. 251; p. 759.

Linotype and Machinery Limited. (See Pearce and Spence, assignors.)

Lippincott, Carrie A. (See Lippincott, John W., assignor.)

Lippincott, John W., assignor of one-half to C. A. Lippincott, Little Rock, Ark. Partitioning and stabilizing appliance. No. 1,270,532; June 25; v. 251; p. 759.

List, Ezra J. (See Watts and Brown, assignors.)

Littlefield, Augustine F., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Fastener-setting machine. No. 1,269,622; June 18; v. 251; p. 485.

Livermore, Homer F., Brookline, Mass. Loom-temple. No. 1,268,737; June 4; v. 251; p. 188.

Ljungström, Birger and F., Stockholm, Sweden, assignors to Aktiebolaget Ljungströms Angturbin. Elastic-fluid turbine. No. 1,269,541; June 11; v. 251; p. 429.

Ljungström, Fredrik. (See Ljungström, Birger and F.)

Ljungström, Fredrik, Stockholm, Sweden, assignor to Aktiebolaget Ljungströms Angturbin. Elastic-fluid turbine. No. 1,269,540; June 11; v. 251; p. 429.

Ljungstrom, Knute E., Washington, D. C. Beard-softener. No. 1,270,635; June 25; v. 251; p. 787.

Lloyd, Richard W., Verndale, Minn. Coupling and steering device for vehicles. No. 1,270,179; June 18; v. 251; p. 635.

Lobl, Frederick, Boston, Mass. Container. No. 1,269,103; June 11; v. 251; p. 310.

Lockbridge, Elbert E., Springfield, Mass. Valve for water-closets and other uses. No. 1,270,423; June 25; v. 251; p. 728.

Lockridge, Elbert E., Springfield, Mass. Valve. No. 1,270,424; June 25; v. 251; p. 728.

Lockard, Theodore E., Marshalltown, Iowa. Ice-card holder. No. 1,269,828; June 18; v. 251; p. 543.

Locke, Edna W., Lewisburg, Ohio. Game. No. 1,270,632; June 25; v. 251; p. 786.

Locke Insulator Mfg. Co., The. (See Lapp, John S., assignor.)

Lockport Machine Company. (See Perry, James, assignor.)

Lockwood, Vernon G., Saugerties, N. Y. Tool for detaching puppet-valves of motors. No. 1,268,480; June 4; v. 251; p. 117.

"Locomobile" Company of America, The. (See Riker, Andrew L., assignor.)

Locomotive Stoker Company. (See Ryan, Edward, assignor.)

Logsdon, James E., Joplin, Mo. Minnow-trap. No. 1,269,623; June 18; v. 251; p. 485.

Lok, Karl H. (See Lok, Walter C. and K. H.)

Lok, Walter C. and K. H., Toledo, Ohio. Automobile-signal. No. 1,270,633; June 25; v. 251; p. 786.

Lomas, Earl P. C., Butte, Mont. Type-writer attachment. No. 1,268,859; June 11; v. 251; p. 243.

Lombard Carburetor Company. (See Lombard, Nathaniel, assignor.)

Lombard, Nathaniel, assignor to Lombard Carburetor Company, Worcester, Mass. Clutching mechanism. No. 1,270,533; June 25; v. 251; p. 759.

Lonas, F. E. (See Layman, Hebron B., assignor.)

London, William J. A., Springfield, Mass., assignor to General Electric Company. Elastic-fluid turbine. No. 1,268,738; June 4; v. 251; p. 189.

Long, Arthur D., Fairfield, Iowa. Wagon-rack. No. 1,268,982; June 11; v. 251; p. 276.

Longrod, Peter L., assignor to F. H. Van Eenwyk, East Williamson, N. Y. Can-filling machine. No. 1,268,739; June 4; v. 251; p. 189.

López de Lara, Guadalupe, Guadalajara, Mexico. Food product and making the same. No. 1,268,860; June 11; v. 251; p. 243.

Lorch, Henry. (See Helmold and Lorch.)

Lord & Taylor. (See Tucker, Wilson H., assignor.)

Lorenz, William A., Hartford, Conn. Condiment-bottle. No. 1,268,740; June 4; v. 251; p. 189.

Lorimer, George W., Piqua, Ohio. Phonograph. No. 1,270,534; June 25; v. 251; p. 760.

Lovell, John L. (See Riley and Lovell.)

Loystad, August, Algona, Iowa. Harrow. No. 1,268,861; June 11; v. 251; p. 243.

Lowe, Ernest A., North Plainfield, assignor to Lowe Manufacturing Company, Plainfield, N. J. Fire-door-releasing mechanism. No. 1,269,556; June 11; v. 251; p. 432.

Lowe Manufacturing Company. (See Lowe, Ernest A., assignor.)

Lowe, William A. J., and G. W. Overstreet, Bristol, Tenn. Adjustable window shade and curtain support. No. 1,270,634; June 25; v. 251; p. 787.

Lowell, Walter E., New York, N. Y. Bilge-pump for motor-boats. No. 1,269,290; June 11; v. 251; p. 362.

Lowes, Ralph C., Peoria, Ill. Rubbing-post for animals. No. 1,270,425; June 25; v. 251; p. 729.

Lowres, George J., Newark, N. J. Slip-on removable lens-rims for spectacles, &c. No. 1,269,624; June 18; v. 251; p. 485.

Lucas, Abraham N., Milwaukee, Wis. Headlight-cover. No. 1,268,133; June 4; v. 251; p. 19.

Luebbert, Joseph, and L. Stephany, Philadelphia, Pa. Detachable non-skid device for vehicle-wheels. No. 1,268,257; June 4; v. 251; p. 52.

Lum, Walter O., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Automatic starter. No. 1,269,625; June 18; v. 251; p. 485.

Lumley, Joseph A., Chicago, Ill. Knee pad and protector. No. 1,269,829; June 18; v. 251; p. 543.

Luppino, Joseph, Brooklyn, N. Y. Davenport sofa-bed. No. 1,269,830; June 18; v. 251; p. 543.

Luther, William M., San Francisco, Cal. Fruit slicing and spreading machine. No. 1,269,291; June 11; v. 251; p. 362.

Lynde, Frank G., assignor to Lauter Company, Newark, N. J. Pneumatic motor. No. 1,270,426; June 25; v. 251; p. 729.

Lyon & Healy. (See Kirk, Walter L., assignor.)

Lyttle, Rowland. (See Jesurun and Lyttle.)

M. C. Peters Mill Co. (See Shamblen, Lester B., assignor.)

M. W. Kellogg Company, The. (See Hollinger, Emil F., assignor.)

M. T. R. Manufacturing Company, The. (See McKenzie, John L., assignor.)

Maag, Max, Zurich, Switzerland. Gear-cutting machine. No. 1,270,183; June 18; v. 251; p. 636.

MacDougall, Archibald J., and G. N. Middleton, assignors to The Toronto Power Company, Limited, Toronto, Ontario, Canada. Electrolytic apparatus. No. 1,269,566; June 11; v. 251; p. 436.

MacKenzie, James A., assignor to Guarantee Liquid Measure Company, Rochester, Pa. Apparatus for elevating liquid. No. 1,268,594; June 4; v. 251; p. 149.

MacKinnon, Archibald, Tuckahoe, N. Y. Window construction. No. 1,269,475; June 11; v. 251; p. 411.

MacMaster, John J. (See Schwander, Jacob N., assignor.)

MacMillan, Daniel W., Providence, R. I. Making ear-wire screws. No. 1,268,862; June 11; v. 251; p. 243.

MacRae, Hugh, Wilmington, N. C. Still or retort. No. 1,268,742; June 4; v. 251; p. 189.

Macartney, Arthur C., assignor to Empire Cream Separator Company, Bloomfield, N. J. Pulsator for milking-machines. No. 1,270,429; June 25; v. 251; p. 730.

Macbeth, Colin, Birmingham, assignor to The Dunlop Rubber Company, Limited, Westminster, England. Wheel for road-vehicles. No. 1,269,543; June 11; v. 251; p. 429.

Macbeth, George and M., Sefton Park, Liverpool, England. Cash-register. No. 1,269,473; June 11; v. 251; p. 411.

Macbeth, Malcolm. (See Macbeth, George and M.)

Macdonald, James, New York, N. Y. Powder-container. No. 1,269,474; June 11; v. 251; p. 411.

Macdonald, Murdock, Cleveland, Ohio. Holder for tickets and the like. No. 1,269,723; June 18; v. 251; p. 513.

Mace, C. W. (See Mountain, Thomas O., assignor.)

Madden, John D., Fall River, Mass. Stamp-vending machine. No. 1,268,372; June 4; v. 251; p. 86.

Maddex, Thomas C. (See Becker and Maddex.)

Madison, Oliver C., Omaha, Nebr. Toy pistol. No. 1,270,535; June 25; v. 251; p. 760.

Madsen, Chresten T., Oakland, Cal. Plastic material. No. 1,269,946; June 18; v. 251; p. 574.

Madson, Philip, Lemmon, S. D. Lock. No. 1,268,743; June 4; v. 251; p. 190.

Magarrell, William E., assignor to Always Ready Ironing Board Co., Los Angeles, Cal. Combined table and ironing-board. No. 1,270,184; June 18; v. 251; p. 637.

Magness, John C., assignor to Atlas Auto Specialties Corporation, New York, N. Y. Carbureter attachment. No. 1,269,104; June 11; v. 251; p. 310.

Magnuson, Mathias, Chicago, Ill. Necktie-holder. No. 1,268,744; June 4; v. 251; p. 190.

Maguire, Thomas F. (See Shuyler, Millard F., assignor.)

Maher, Charles A., Wallowa, Oreg. Cleaning device. No. 1,270,536; June 25; v. 251; p. 760.

Mailloux, Frank W., Wellesley Hills, Mass. Auto-lock. No. 1,268,137; June 4; v. 251; p. 19.

Maimin, Hyman, and H. B. Bitjer, New York, N. Y., assignors to H. Maimin Co. Inc. Knife-sharpener for cloth-cutting machines. No. 1,268,373; June 4; v. 251; p. 86.

Main, Fred F., Chicago, Ill., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Computing-machine. No. 1,268,138; June 4; v. 251; p. 20.

Majewski, Frank, Chicago, Ill. Riding-horse for boys' toys. No. 1,270,638; June 25; v. 251; p. 787.

Maki, Simon R., Ishpeming, Mich. Combined trunk and dresser. No. 1,269,196; June 11; v. 251; p. 335.

Malacos, Peter, Wheeling, W. Va. Pneumatic tire. No. 1,269,628; June 18; v. 251; p. 486.

Malcom, John W., Bunn, Ark. Sewing-awl. No. 1,270,639; June 25; v. 251; p. 788.

Malleable Iron Fittings Company, The. (See Pickop, George B., assignor.)

Malm, Axel C. V., and F. H. Poorman, assignors to The Malm Machine Company, Dayton, Ohio. Device for trimming gaskets and the like. No. 1,270,038; June 18; v. 251; p. 598.

Malm Machine Company, The. (See Malm and Poorman, assignors.)

Maloni, Beshara I., Salt Lake City, Utah. Portable vulcaniser. No. 1,269,629; June 18; v. 251; p. 486.

Manfeldt, Fred W., New Haven, Conn. Wheeled toy. No. 1,270,542; June 25; v. 251; p. 762.

Mangold, Edward M., Seaside Park, N. J. Cistern-cleaner. No. 1,269,105; June 11; v. 251; p. 310.

Manley, Charles E., Maricopa, Cal. Soap-holder. No. 1,268,595; June 4; v. 251; p. 150.

Manning, Floyd J., San Francisco, Cal. Brake attachment for automobiles. No. 1,269,294; June 11; v. 251; p. 363.

Manson, Ray H., assignor to The Garford Manufacturing Company, Elyria, Ohio. Automobile or motor-cycle horn. No. 1,268,863; June 11; v. 251; p. 243.

Manuel, William H., assignor of one-half to J. A. Chandler, Terre Haute, Ind. Armor for pneumatic tires. No. 1,268,258; June 4; v. 251; p. 53.

Mapes, Lewis C. (See Olsen and Mapes.)

Marathon Company. (See Metcalf, Alpha H., assignor.)

Marconi Wireless Telegraph Company of America. (See Shoenberg, Isaac, assignor.)

Marcus, Israel, Winthrop, Mass. Resistance-coil. No. 1,268,374; June 4; v. 251; p. 87.

Mark, Harrison A., Oshkosh, Nebr. Washing and separating materials. No. 1,269,947; June 18; v. 251; p. 574.

Markham Air Rifle Company, The. (See Greenleaf and Roe, assignors.)

Markham, Edwin G. J., Watrus, Saskatchewan, Canada. Goggles. No. 1,270,640; June 25; v. 251; p. 788.

Marks, Paul J., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic shutter. No. 1,270,311; June 25; v. 251; p. 697.

Marks, Paul J., assignor to Eastman Kodak Company, Rochester, N. Y. Shutter-actuating device. No. 1,270,537; June 25; v. 251; p. 760.

Marley, George A. J. (See Murray and Marley.)

Marsden, Mark W., Philadelphia, Pa. Treating vegetable fiber. No. 1,269,476; June 11; v. 251; p. 412.

Marsh-Capron Manufacturing Company. (See Mosby, Alfred D., assignor.)

Marsh, Willard E., Fort Worth, Tex. Foldable tent-bed. No. 1,270,249; June 18; v. 251; p. 654.

Marshall, George, Los Angeles, Cal. Nail-stripper device. No. 1,269,544; June 11; v. 251; p. 430.

Marsico, Jerard R., Brooklyn, N. Y., assignor to The Sparks-Withington Company, Cleveland, Ohio. Mechanical horn. No. 1,269,477; June 11; v. 251; p. 412.

Marston, Frank L., Portland, Me. Fluid-pressure brake system. No. 1,269,478; June 11; v. 251; p. 412.

Martell, Albert A., assignor to The Taft-Peirce Manufacturing Company, Woonsocket, R. I. Method and apparatus for accurately aligning bearings. No. 1,269,832; June 18; v. 251; p. 544.

Martell, Albert A., assignor to The Taft-Peirce Manufacturing Company, Woonsocket, R. I. Connecting-rod reamer and the like. No. 1,269,833; June 18; v. 251; p. 544.

Martin, Albert W., Worcester, Mass., assignor to Wire Goods Company. Power-operated wire-working tool. No. 1,268,139; June 4; v. 251; p. 20.

Martin, Alfred, assignor of one-half to W. J. Sandberg, Chicago, Ill. Loose-leaf binder. No. 1,269,479; June 11; v. 251; p. 413.

Martin, Charles E., Mansfield, Ohio. Bending corrugated material. No. 1,268,745; June 4; v. 251; p. 190.

Martin, Christian H., Columbus, assignor to J. R. Gammeter, Akron, Ohio. Piano-bench. No. 1,269,948; June 18; v. 251; p. 574.

Martin, Emanuel A., Pittsburgh, Pa. Tool-guard. No. 1,270,430; June 25; v. 251; p. 731.

Martin, Frederick W., Bayside, assignor to Franklin Railway Supply Company, New York, N. Y. Ball-and-socket joint. No. 1,268,259; June 4; v. 251; p. 53.

Martin, Frederick W., New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del. Automatic wedge for driving-boxes. No. 1,268,746; June 4; v. 251; p. 191.

Martin, Frederick W., New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del. Driving-box wedge device. No. 1,268,747; June 4; v. 251; p. 191.

Martin, Frederick W., New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del. Driving-box hub-lubricator. No. 1,268,748; June 4; v. 251; p. 191.

Martin, Frederick W., New York, N. Y., assignor to Franklin Railway Supply Company, Wilmington, Del. Automatic driving-box wedge. No. 1,268,781; June 4; v. 251; p. 201.

Martin, Harry, and J. R. White, Milford, Utah. Cap for valves. No. 1,270,641; June 25; v. 251; p. 788.

Martin, Mary, Santa Barbara, Cal. Washboard. No. 1,269,480; June 11; v. 251; p. 413.

Martin, Thomas P., Jr., Oklahoma, Okla. Paper-currency wrapper. No. 1,270,642; June 25; v. 251; p. 788.

Martin, William W., Pittsburgh, Pa. Smoke-purifier. No. 1,269,724; June 18; v. 251; p. 513.

Martinez, Ygnacio. (See Navarrete and Martinez.)

Marvel Accessories Manufacturing Company, The. (See Rose, Samuel L., assignor.)

Maschinenfabrik Gustav Eirich. (See Eirich, Ludwig and J., assignors.)

Mason, Francis C., assignor to Bissell Carpet Sweeper Company, Grand Rapids, Mich. Vacuum-cleaner. No. 1,268,988; June 11; v. 251; p. 277.

Massuere, Mark H., Cheyenne, Wyo. Fluid transmission. No. 1,270,643; June 25; v. 251; p. 789.

Mastrangel, Louis, West Hoboken, assignor to Hartford Suspension Company, Jersey City, N. J. Ratchet-and-pawl actuating mechanism. No. 1,268,989; June 11; v. 251; p. 278.

Materna, Joe, St. Cloud, Minn. Bottle-capping machine. No. 1,268,864; June 11; v. 251; p. 244.

Mathes, John, Marion, Iowa. Rotary engine. No. 1,268,782; June 4; v. 251; p. 202.

Mathews, Charles E. (See Harlow and Mathews.)

Matthes, Walter F., Austin, Tex. Sifting-machine. No. 1,270,185; June 18; v. 251; p. 637.

Matthews, Howard D., Schenectady, N. Y., assignor to General Electric Company. Protective device. No. 1,269,481; June 11; v. 251; p. 413.

Matthews, Joseph, Plymouth, Pa. Safety mine-cage device. No. 1,268,260; June 4; v. 251; p. 53.

Mattingly, Romanus J., Zurich, Kans. Computing-machine. No. 1,270,644; June 25; v. 251; p. 789.

Maxim, Howard F., Locke Mills, Me. Railway-tie. No. 1,269,949; June 18; v. 251; p. 574.

May, George D., St. Louis, Mo. Applicator for live stock. No. 1,269,725; June 18; v. 251; p. 513.

Mayer Brothers Company. (See Mayer and Bye, assignors.)

Mayer, Louis and E. A. Bye, assignors to Mayer Brothers Company, Mankato, Minn. Gearing for tractors. No. 1,268,783; June 4; v. 251; p. 202.

McAdams, Joseph V., Tablerock, Wyo. Flash-candle. No. 1,268,589; June 4; v. 251; p. 147.

McAlexander, Talbert. (See Haas and McAlexander.)

McCaleb, Robert C., Chicago, Ill. Razor-sharpening machine. No. 1,269,831; June 18; v. 251; p. 544.

McCanne, W. Roy, trustee. (See Cole, Philip H., assignor.)

McCarter, Charles, assignor of one-half to C. F. Evans, Decatur, Ill. Car-mover. No. 1,269,471; June 11; v. 251; p. 410.

McCaskey Register Company, The. (See Dunning, William E., assignor.)

McClearen, William M., Dinuba, Cal. Fastening device. No. 1,269,626; June 18; v. 251; p. 486.

McCloskey, Leo, Maidstone, Ontario, Canada. Tractor. No. 1,270,480; June 25; v. 251; p. 744.

McCollum, H. K., *et al.* (See Heim, Virgil L., assignor.)

McCord and Company. (See Deck, Louis, assignor.)

McCord and Company. (See McIntosh, Robert L., assignor.)

McCorkindale, William, and H. C. Avery, Holyoke, Mass. Paper-package. No. 1,270,248; June 18; v. 251; p. 653.

McCormick, Oscar C., Cleveland, assignor of one-fourth to J. E. Moyer, Akron; one-fourth to S. K. Hine, Girard; one-eighth to J. W. Wright, Youngstown, Ohio; and one-eighth to W. P. Canfield, Pittsburgh, Pa. Drier. No. 1,268,983; June 11; v. 251; p. 276.

McCormick, Oscar C., Cleveland, assignor of one-fourth to J. E. Moyer, Akron; one-fourth to S. K. Hine, Girard; one-eighth to J. W. Wright, Youngstown, Ohio; and one-eighth to W. P. Canfield, Pittsburgh, Pa. Machine for forming articles of plastic material. No. 1,268,984; June 11; v. 251; p. 277.

McCoy, James P. A., Wilkinsburg, Pa., assignor to Westinghouse Electric and Manufacturing Company. Hardening phenolic condensation products. No. 1,269,627; June 18; v. 251; p. 486.

McCoy, Marion M., Dawson, N. Mex., assignor of one-half to G. A. Will, St. Louis, Mo. Internal-combustion engine. No. 1,269,195; June 11; v. 251; p. 334.

McCoy, Wilber A., Pittsburgh, Pa. Game apparatus. No. 1,268,741; June 4; v. 251; p. 189.

McCreary, Arthur R., Kansas City, Mo. Advertising device. No. 1,270,427; June 25; v. 251; p. 730.

McCune, Royal L., Vero, Fla. Agricultural implement. No. 1,270,180; June 18; v. 251; p. 636.

McCurley, Orel J., Kissimmee, Fla. Axle-nut lock. No. 1,268,985; June 11; v. 251; p. 277.

McDaniel, Ross H., Peru, Ind. Electric-light extension. No. 1,270,636; June 25; v. 251; p. 787.
McDonald, George F., St. Louis, Mo. Combined hat, coat, and trousers rack. No. 1,268,371; June 4; v. 251; p. 85.
McDonald, John I., St. Joseph, Mo. Combination-garment. No. 1,269,945; June 18; v. 251; p. 573.
McDougall, Alexander, Duluth, Minn. Ship-hatch. No. 1,270,428; June 25; v. 251; p. 730.
McDowell, Lamont A., Racine, Wis. Automobile-door ventilator. No. 1,268,986; June 11; v. 251; p. 277.
McElroy, Karl P., Washington, D. C., assignor to Chemical Development Company. Hygroscopic composition. No. 1,268,135; June 4; v. 251; p. 19.
McElveen, Aaron, Stilson, Ga. Puzzle. No. 1,270,181; June 18; v. 251; p. 636.
McEwen, Willard M., *et al.* (See Olson, Gustaf, assignor.)
McGann, Owen J., Wattsville, assignor of one-half to G. Sinclair, Hanoverton, Ohio. Valveless rotary internal-combustion engine. No. 1,269,722; June 18; v. 251; p. 512.
McGeary, Richard H., Allegheny, Pa. Fluid-pressure brake. No. 1,269,472; June 11; v. 251; p. 411.
McGinnis, H. J., *et al.* (See Brown, Marvin H., assignor.)
McGregor, Allan L., Chicago, Ill. Automobile-bumper. No. 1,268,590; June 4; v. 251; p. 148.
McGuiness, Benjamin F., Saundersville, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Loom-shuttle. No. 1,268,136; June 4; v. 251; p. 19.
McIntosh, James, Norristown, assignor to Diamond State Fibre Company, Bridgeport, Pa. Indurated product. No. 1,269,292; June 11; v. 251; p. 363.
McIntosh, Robert L., assignor to McCord and Company, Chicago, Ill. Force-feed lubricating system. No. 1,270,182; June 18; v. 251; p. 636.
McKay, James. (See Cameron and McKay.)
McKenna Brass and Manufacturing Company. (See Chappell, Thomas S., assignor.)
McKenzie, John L., Beech Grove, assignor to The M. T. R. Manufacturing Company, Indianapolis, Ind. Bearing-casing for valve-stems and similar movable parts. No. 1,268,591; June 4; v. 251; p. 148.
McKenzie, Allen. (See Aldrich, Paul K., assignor.)
McKnight, Clarence D., San Francisco, Cal. Device for attaching plows to vehicles. No. 1,269,293; June 11; v. 251; p. 363.
McLaughlin, William J., and W. R. Nicoll, assignors to Minnetonna Company, Owatonna, Minn. Agitator and ripener. No. 1,268,592; June 4; v. 251; p. 149.
McLeod, Kenneth K., St. Paul, Minn. Teat-cup. No. 1,270,308; June 25; v. 251; p. 696.
McLeod, Malcolm J. (See Dolan, Halley C., assignor.)
McManigal Grateless Furnace Company, The. (See McManigal, Robert D., assignor.) (Reissue.)
McManigal, Robert D., Logan, assignor to The McManigal Grateless Furnace Company, Columbus, Ohio. Draft-air-heating system for furnaces. (Reissue.) No. 14,480; June 4; v. 251; p. 211.
McMullen, Earle W., assignor to Simmons Company, Kenosha, Wis. Metal coating. No. 1,268,987; June 11; v. 251; p. 277.
McMullen, Vincent E., and W. E. Woodruff, assignors to The Hercules Gas Engine Company, Evansville, Ind. Internal-combustion engine. No. 1,268,593; June 4; v. 251; p. 149.
McNabb, Floyd R., and R. M. Skinner, San Francisco, Cal. Alarm for combination-locks. No. 1,269,542; June 11; v. 251; p. 429.
McNeice, James D. B., *et al.* (See Carter, Daniel, assignor.)
McQueney, John, Manheim, Pa. Window-shade holder. No. 1,270,637; June 25; v. 251; p. 787.
McRoberts, George M., *et al.* (See Barton, Henry L., assignor.)
McWane, James R., Birmingham, Ala. Pipe-joint. No. 1,270,309; June 25; v. 251; p. 696.
McWhorter, Milton, Playas, N. Mex. Apparatus for compressing elastic fluids. No. 1,270,310; June 25; v. 251; p. 697.
Meile, John, East St. Louis, Ill. Vehicle-signal. No. 1,268,749; June 4; v. 251; p. 191.
Meis, Ernst, Peru, Ill. Vehicle. No. 1,270,312; June 25; v. 251; p. 698.
Melton, Lloyd L., assignor to Dearborn Truck Co., Chicago, Ill. Motor-vehicle. No. 1,268,261; June 4; v. 251; p. 53.
Ménard, Hubert C., St. Maurice, France. Transmission mechanism. No. 1,268,750; June 4; v. 251; p. 192.
Menasco, Charles J., assignor of one-half to H. A. Moseley, Birmingham, Ala. Internal-combustion engine. No. 1,270,481; June 25; v. 251; p. 745.
Mendenhall, John J., Raiford, Fla. Heat-insulating container. No. 1,269,197; June 11; v. 251; p. 335.
Mengedoht, Carl H., Seattle, Wash. Door-opener. No. 1,269,545; June 11; v. 251; p. 430.
Mentzer, John P. (See Becker, Julius, assignor.)
Mercer, Henry H., Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass. Channeling-machine. No. 1,269,295; June 11; v. 251; p. 363.
Mercer, Henry H., Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass. Channeling-machine. No. 1,269,296; June 11; v. 251; p. 364.
Mercer, Henry H., Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass. Channeling-machine. No. 1,269,297; June 11; v. 251; p. 364.
Mercer, Henry H., Claremont, N. H., assignor, by mesne assignments, to Sullivan Machinery Company, Boston, Mass. Turning device for channeling and other like machines. No. 1,269,298; June 11; v. 251; p. 364.
Mercer Tire Company. (See Dech, Henry, assignor.)
Meredith, George S. (See Sault, Thomas B., assignor.)
Meredith, Wynn, San Francisco, assignor to Hotpoint Electric Heating Company, Ontario, Cal. Thumb-rest. No. 1,269,106; June 11; v. 251; p. 310.
Mergenthaler, Eugene G., Baltimore, Md. Safety-razor. No. 1,269,299; June 11; v. 251; p. 365.
Mergenthaler Linotype Company. (See Elliott, William E., assignor.)
Mergenthaler Linotype Company. (See Guest, Alfred W. F., assignor.)
Mergenthaler Linotype Company. (See Kennedy, David S., assignor.)
Mergenthaler Linotype Company. (See Rogers, John R., assignor.)
Meriam, Joseph B., and H. W. Price, Cleveland, Ohio. Mixing-valve. No. 1,269,482; June 11; v. 251; p. 413.
Merrick, Frank W., assignor to American Stay Company, Boston, Mass. Skiving-machine. No. 1,268,751; June 4; v. 251; p. 192.
Merrifield, Albert J., *et al.* (See Carter, Daniel, assignor.)
Merrow Machine Co. (See Aulson, John W., assignor.)
Mershon, Ralph D., New York, N. Y. Welding metals. No. 1,269,726; June 18; v. 251; p. 514.
Merz, John E., Indianapolis, Ind. Shock-absorbing coupling. No. 1,270,186; June 18; v. 251; p. 637.
Mesecar, George E. (See Hurd, Benjamin W., assignor.)
Metals Recovery Company. (See Armstrong, Cedric J. B., assignor.)
Metals Recovery Company. (See Callow, John M., assignor.)
Metcalf, Alpha H., assignor to Marathon Company, Attleboro, Mass. Knitting-needle. No. 1,268,752; June 4; v. 251; p. 193.
Metcalfe, Isaiah, Lancaster, assignor of one-fifth to J. R. Sebastian, one-fifth to L. Duerson, and one-fifth to L. Duerson, Richmond, Ky. Nut-lock. No. 1,268,481; June 4; v. 251; p. 118.
Metropolitan Sewing Machine Corporation. (See Weis, John P., assignor.)
Metz, Alexander E., New York, N. Y. Milling-machine. No. 1,269,727; June 18; v. 251; p. 514.
Meyer, Ejnar A., Clifton, Bristol, England. Pressing yeast. No. 1,268,865; June 11; v. 251; p. 244.
Meyer, Frederick W., Jersey City, N. J. Revolving illuminated sign for water-tanks, &c. No. 1,268,375; June 4; v. 251; p. 87.
Meyer, Henry A., *et al.* (See Borbeck, Martin, assignor.)
Meyer, Theodore A., *et al.* (See Ransdall, Harry W., assignor.)
Michael, Edward. (See Porter, Jesse R., assignor.)
Michaelsen, C. O. and W. P., Minneapolis, Minn., assignors to Michaelsen Machinery Company. Mineral-concentrator. No. 1,269,198; June 11; v. 251; p. 335.
Michaelsen Machinery Company. (See Michaelsen, Charles O. and W. P., assignors.)
Michaelsen, William P. (See Michaelsen, Charles O. and W. P.)
Michaud, Onesime E., St. Louis, Mo., assignor of one-half to F. A. Muller, McGehee, Ark. Roller-bearing. No. 1,269,834; June 18; v. 251; p. 545.
Middleton, Guy N. (See MacDougall and Middleton.)
Miehle Printing Press & Manufacturing Company. (See Dittman, Samuel E., assignor.)
Miehle, Robert, Chicago, Ill. Tripping mechanism for printing-presses. No. 1,268,262; June 4; v. 251; p. 54.
Miessner, Benjamin F., West Lafayette, Ind., and W. O. Miessner, Milwaukee, Wis. Electric music-chart. No. 1,268,376; June 4; v. 251; p. 87.
Miessner, William O. (See Miessner, Benjamin F. and W. O.)
Mihelakos, Leonidas K., Chicago, Ill. Tie. No. 1,270,645; June 25; v. 251; p. 789.
Millenaar, Pieter M., Lutherville, Md. Milk-pail. No. 1,269,950; June 18; v. 251; p. 574.
Miller, Althea, New York, N. Y. Calendar. No. 1,270,431; June 25; v. 251; p. 731.
Miller, Ethel E., Cleveland, Ohio. Aerial top. No. 1,270,313; June 25; v. 251; p. 698.
Miller, Frank S., deceased, Indianapolis, Ind., assignor, by mesne assignments, to W. Langsenkamp, Jr., trustee. Air-lift-pump booster. (Reissue.) No. 14,479; June 4; v. 251; p. 210.
Miller, George B., Gloversville, N. Y. Coal-car cover. No. 1,270,646; June 25; v. 251; p. 789.
Miller, Harold C., Saginaw, Mich. Universal indicator. No. 1,269,728; June 18; v. 251; p. 514.
Miller, Herbert G., The Dalles, assignor of one-half to Pacific Evaporator Company, Portland, Oreg. Slicing-machine. No. 1,270,039; June 18; v. 251; p. 598.
Miller, Herbert G., The Dalles, Oreg. Coring-tool. No. 1,270,040; June 18; v. 251; p. 598.
Miller, Herbert G., The Dalles, assignor to Pacific Evaporator Company, Portland, Oreg. Slicing-machine. No. 1,270,041; June 18; v. 251; p. 598.

Miller, Lulu H., Brooklyn, N. Y. Apparatus for folding gauze for surgical dressings, &c. No. 1,268,596; June 4; v. 251; p. 150.
Miller, Martin L., Gwynneville, Ind. Animal-catcher. No. 1,270,647; June 25; v. 251; p. 790.
Miller, Ralph E., Parshall, N. D. Swivel connection. No. 1,270,538; June 25; v. 251; p. 761.
Miller Rubber Company, The. (See Lerch and Whisler, assignors.)
Miller, Samuel C., assignor to L. Jones, Louisville, Ky. Collapsible container. No. 1,269,483; June 11; v. 251; p. 414.
Miller, William J., Detroit, Mich. Mixer. No. 1,270,539; June 25; v. 251; p. 762.
Millholland, William K., Indianapolis, Ind. Stop mechanism for machine-tool turrets. No. 1,270,187; June 18; v. 251; p. 638.
Milliken, John T. (See Hubert, Henry J., assignor.)
Mills, Charles. (See Hall, William J., assignor.)
Mills, Herbert S. (See Sandell, Henry K., assignor.)
Mills, William S., Florence, S. C. Grease-trap. No. 1,270,648; June 25; v. 251; p. 790.
Mindell, William, *et al.* (See Preston, Edward, assignor.)
Miner, James H., Lumberton, Miss. Flange-lubricator. No. 1,269,300; June 11; v. 251; p. 365.
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Mineral Products Corporation. (See Chappell, Howard F., assignor.)
Minnesota Manufacturing Association. (See Bend, Charles M., assignor.)
Minnetonna Company. (See McLaughlin and Nicoll, assignors.)
Miskin, Arthur R., Idaho Falls, Idaho. Earth-scraper. No. 1,269,484; June 11; v. 251; p. 414.
Moakler, John W., East Worcester, N. Y. Shaft-driven pivotal hub. No. 1,268,866; June 11; v. 251; p. 244.
Mochon, Mary L., Lead, S. D. Gauze-roller. No. 1,270,188; June 18; v. 251; p. 638.
Modern, Samuel, New York, N. Y. Sleeping doll. No. 1,268,753; June 4; v. 251; p. 193.
Moehn, Oscar W., Burlington, Iowa. Phonograph-light. No. 1,269,836; June 18; v. 251; p. 545.
Moeller, Emil, Chicago, Ill. Mangle. No. 1,268,990; June 11; v. 251; p. 278.
Moffitt, Mansfield M., San Antonio, Tex. Hair-drying apparatus. No. 1,269,837; June 18; v. 251; p. 545.
Mohr, Henry. (See Langford, Joseph O., assignor.)
Moisant, Alfred J., New York, N. Y., assignor, by mesne assignments, to General Research Laboratories. Filter No. 1,270,042; June 18; v. 251; p. 599.
Mojonnier Bros. Co. (See Mojonnier, Julius J., assignor.)
Mojonnier, Julius J., Oak Park, Ill., assignor to Mojonnier Bros. Co., Portland, Me. Flask-holder. No. 1,268,867; June 11; v. 251; p. 244.
Molinari, Ettore. (See Quartieri and Molinari.)
Moline Plow Company. (See Crane, William H., assignor.)
Moline Plow Company. (See Dickinson, Harry S., assignor.)
Moline Plow Company. (See Wallace, Benjamin B., assignor.)
Molloy, John J., Georgetown, Mass. Flexible wooden shoe-sole. No. 1,270,189; June 18; v. 251; p. 638.
Momentum Brake Corporation. (See Morgan, Porter S., assignor.)
Monitor Controller Company. (See Whittingham, George H., assignor.)
Monosmith, Olney B., Lorain, Ohio. Carbureter. No. 1,270,432; June 25; v. 251; p. 731.
Montgomery, Henry S., and H. A. Tobelmann, Ajo, Ariz. Electrolytic starting-sheet suspender. No. 1,269,485; June 11; v. 251; p. 415.
Montgomery, James T., *et al.* (See Preston, Edward, assignor.)
Montreuil, Francis H., Chicago, Ill., assignor to Warren Webster & Company. Conserving-valve. No. 1,268,597; June 4; v. 251; p. 150.
Montsinger, Vincent M., Pittsfield, Mass., assignor to General Electric Company. Temperature-indicator. No. 1,269,546; June 11; v. 251; p. 430.
Moomaw, Henry E., Salem, Va., assignor to J. E. Annis, Chattanooga, Tenn. Juvenile vehicle. No. 1,269,107; June 11; v. 251; p. 311.
Moore, Dorus W., Fultonville, N. Y. Bale-tag. No. 1,269,630; June 18; v. 251; p. 487.
Moore, Edwin A., Philadelphia, assignor of one-half to H. S. Palm, Reading, Pa. Dump-wagon. No. 1,268,598; June 4; v. 251; p. 151.
Moore, Floyd N., Peoria, Ill. Direction-indicating signal for automobiles. No. 1,269,838; June 18; v. 251; p. 545.
Moore, Thomas F., assignor to Moore Trench Machine Company, Westfield, N. J. Trenching apparatus. No. 1,270,240; June 18; v. 251; p. 651.
Moore Trench Machine Company. (See Moore, Thomas F., assignor.)
Morell, George P., assignor to Enameled Steel Specialties Company, Inc., New York, N. Y. Washtub-cover. No. 1,268,754; June 4; v. 251; p. 193.
Morgan, Porter S., Norwalk, Conn., assignor to Momentum Brake Corporation. Brake mechanism. No. 1,269,199; June 11; v. 251; p. 336.
Morgan & Wright. (See Rettell, Joseph, assignor.)
Morgan, William J., Barton, Ohio. Permutation-padlock. No. 1,268,755; June 4; v. 251; p. 193.
Morin, Honore, Auburn, Me. Sole-leveling machine. No. 1,269,486; June 11; v. 251; p. 415.
Morris, Edmund, assignor to Wilmarth Show Case Company, Grand Rapids, Mich. Connecting-piece for the walls of show-cases and the like. No. 1,269,839; June 18; v. 251; p. 546.
Morris, Frederick L., Hamilton, Ontario, Canada. Trolley-wheel and bearing therefor. No. 1,269,951; June 18; v. 251; p. 575.
Morris, George H., London, England, assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Button. No. 1,268,868; June 11; v. 251; p. 245.
Morris, Howard I., assignor to The Savage Tire Company, San Diego, Cal. Tire-carcass-supporting means. No. 1,268,482; June 4; v. 251; p. 118.
Morris, Isaac L., White Plains, N. Y. Trousers. No. 1,270,190; June 18; v. 251; p. 638.
Morris, Lute P. (See Payne, Thompson and Morris.)
Morris, Percy, and J. O. Bryant, assignors to Whitehead, Morris & Company, Limited, London, England. Commercial paper. No. 1,269,487; June 11; v. 251; p. 415.
Morrow, Joseph H., Welland, Ontario, Canada. Poultry feeder and exerciser. No. 1,268,869; June 11; v. 251; p. 245.
Morrow, Samuel W., assignor to U. S. Safety Appliance Company, Baltimore, Md. Safety appliance for automatic hammers. No. 1,269,729; June 18; v. 251; p. 514.
Morse, Elizabeth G., Reading, Mass. Apparatus for drying foodstuffs. No. 1,270,540; June 25; v. 251; p. 762.
Morse, Frederic T., Marceline, Mo. Rail-clip for measuring-tapes. No. 1,269,840; June 18; v. 251; p. 546.
Morse, Lulan S., Oceanpark, Cal. Tire-tread fastener. No. 1,270,191; June 18; v. 251; p. 638.
Mortimer, Charles G., East Orange, N. J. Package-sealing device. No. 1,268,377; June 4; v. 251; p. 88.
Mosby, Alfred D., assignor to Marsh-Capron Manufacturing Company, Chicago, Ill. Forming circular T-section tracks from straight pieces of rail. No. 1,269,631; June 18; v. 251; p. 487.
Moseley, Howard A. (See Menasco, Charles J., assignor.)
Mosher, Charles P., Groton, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,269,200; June 11; v. 251; p. 336.
Mosher, Charles P., Groton, Mass., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,269,201; June 11; v. 251; p. 337.
Mosher, Charles P., Groton, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,269,202; June 11; v. 251; p. 337.
Mosher, Charles P., Groton, N. Y., assignor to Corona Typewriter Company, Inc. Type-writing machine. No. 1,269,203; June 11; v. 251; p. 338.
Mosher, Charles P., Croton, N. Y., assignor to Corona Typewriter Co., Inc. Type-writing machine. No. 1,269,204; June 11; v. 251; p. 338.
Moss, Isidor, Brookline, Mass. Snap-fastener. No. 1,268,870; June 11; v. 251; p. 245.
Moudy, Earl R., Chester, Pa. Fender mechanism. No. 1,269,488; June 11; v. 251; p. 415.
Mountain, Thomas O., El Paso, assignor to C. W. Mace, El Paso county, Tex. Valve-spring lifter. No. 1,269,952; June 18; v. 251; p. 575.
Mousley, John R., Kansas City, Mo. Shock-absorber for motor-cars. No. 1,269,730; June 18; v. 251; p. 515.
Mousley, John R., Kansas City, Mo. Shock-absorber for motor-cars. No. 1,269,731; June 18; v. 251; p. 515.
Moyer, James E., *et al.* (See McCormick, Oscar C., assignor.)
Mueller, Edward H., Hartford, Wis. Match-box. No. 1,268,378; June 4; v. 251; p. 88.
Mueller, John C., St. Louis, Mo. Wall-coping. No. 1,270,541; June 25; v. 251; p. 762.
Muir, James A., Morristown, N. J. Beating-engine. No. 1,269,841; June 18; v. 251; p. 546.
Muller, Fritz A. (See Michaud, Onesime E., assignor.)
Muller-Thym, Bernard, Kansas City, Mo. Sanctuary-lamp. No. 1,269,732; June 18; v. 251; p. 515.
Multikraft Inc. (See Haines and Smith, assignors.)
Mundell, Charles N., Los Angeles, Cal. Actuating mechanism for nut-crushers. No. 1,269,632; June 18; v. 251; p. 487.
Murdoch, William. (See Downey and Murdoch.)
Murphy, Edwin J. Schenectady, N. Y., assignor to General Electric Company. Control for turret-lathes and the like. No. 1,269,489; June 11; v. 251; p. 416.
Murphy, John S., Brooklyn, N. Y. Roof-latch. No. 1,270,043; June 18; v. 251; p. 599.
Murphy, Robert N., Ottawa, Ontario, Canada. Sanitary trap. No. 1,268,379; June 4; v. 251; p. 88.
Murphy, Thomas J., assignor of one-half to J. P. B. Duffy, Rochester, N. Y. Alternating-current rectifier. No. 1,268,795; June 4; v. 251; p. 206.
Murphy, Walter P. (See Court, Clarence W., assignor.)
Murray, Albert, Birmingham, and G. A. J. Marley, Edgbaston, Birmingham, England. Walking or progressing toy. No. 1,269,490; June 11; v. 251; p. 416.
Murray, Howard J., Brooklyn, N. Y. Electric gear-shifting mechanism. No. 1,268,263; June 4; v. 251; p. 54.
Murray, Howard J., Brooklyn, N. Y. Safety controlling device. No. 1,268,264; June 4; v. 251; p. 54.
Murray, Howard J., Brooklyn, N. Y. Reciprocating motor. No. 1,268,265; June 4; v. 251; p. 55.

Murray, Howard J., Brooklyn, N. Y. Gear-shifting device. No. 1,268,266; June 4; v. 251; p. 55.
Murray, Howard J., Brooklyn, N. Y. Automatic electric gear-shift. No. 1,268,267; June 4; v. 251; p. 56.
Murray, Howard J., New York, N. Y. Safety controlling device. No. 1,268,268; June 4; v. 251; p. 56.
Murray, Howard J., Brooklyn, N. Y., and W. S. Rugg, Pittsburgh, Pa. Gear-synchronizer. No. 1,268,269; June 4; v. 251; p. 56.
Murray, James. (See Lightell, Adam, assignor.)
Murray, James J., New York, N. Y. Airplane. No. 1,269,547; June 11; v. 251; p. 430.
Murray, James J., New York, N. Y. Airplane construction. No. 1,270,649; June 25; v. 251; p. 790.
Murray, Thomas E. (See Woodrow, Harry R., assignor.)
Murray, Thomas E., New York, N. Y. Engine-housing. No. 1,270,044; June 18; v. 251; p. 599.
Murray, Thomas E., New York, N. Y. Welding the butt end of a tube to a plate of thin metal having an opening. No. 1,270,045; June 18; v. 251; p. 599.
Murray, Thomas E., New York, N. Y. Adapter device for pipes and boxes. No. 1,270,046; June 18; v. 251; p. 600.
Murray, Thomas E., New York, N. Y. Vehicle-wheel. No. 1,270,047; June 18; v. 251; p. 600.
Murray, Thomas E., New York, N. Y. Electric fuse-plug. No. 1,270,048; June 18; v. 251; p. 600.
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Murray, Wylie E., St. Louis, Mo. Cigarette-holder. No. 1,269,491; June 11; v. 251; p. 416.
Mussey, William H., Hollis, N. Y. Trap-door-operating mechanism. No. 1,269,557; June 11; v. 251; p. 433.
Muzzy, John, Warba, Minn. Sleigh-pole attachment. No. 1,269,633; June 18; v. 251; p. 487.
Myers, Hubert A., Toledo, Ohio. Spark-plug. No. 1,268,380; June 4; v. 251; p. 89.
Myers, Isaac N., Glendale, Cal. Friction transmission-gear. No. 1,270,651; June 25; v. 251; p. 791.
Naber, Moses H., Chicago, Ill. Shock-absorber. No. 1,269,301; June 11; v. 251; p. 365.
Nagel, Theodore, Arlington, Md. Change-speed gear. No. 1,268,140; June 4; v. 251; p. 20.
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Napoli, Eugene, New York, N. Y. Cap for containers. No. 1,269,953; June 18; v. 251; p. 575.
Nash, Charles J., Chicago, Ill., assignor to Universal Draft Gear Attachment Co. Draft-arm. No. 1,268,991; June 11; v. 251; p. 278.
Nathan, Leopold, Zurich, Switzerland. Apparatus for cleaning carbonic acid. No. 1,268,872; June 11; v. 251; p. 245.
Nathusius, Hans, Friedenshütte, Kreis Beuthen, Germany. Electrode for use in electric furnaces and for other purposes. No. 1,268,483; June 4; v. 251; p. 118.
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National Binding Machine Company. (See Kaufman, Frank J., assignor.)
National Car Equipment Company. (See Carscadin, Charles A., assignor.)
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National Carbon Company. (See Ellis and Wells, assignors.)
National Carbon Company. (See French and Benner, assignors.)
National Carbon Company. (See Shaw, William, assignor.)
National Carbon Company. (See Walker, George W., assignor.)
National City Bank, The. (See Hussey, Thomas O., assignor.)
National Pneumatic Company. (See Rowntree, Harold, assignor.)
National Spring & Wire Company. (See Stevens, Robert L., assignor.)
National Steel Products Company. (See Bohannan, Robert S., assignor.)
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Nazel, John. (See Nazel, Ralph W., assignor.)
Nazel, Ralph W. (See Fritsch and Nazel.)
Nazel, Ralph W., assignor to J. Nazel, Philadelphia, Pa. Fluid-power hammer. No. 1,268,270; June 4; v. 251; p. 57.
Neahr, Will C., assignor to The Protective Signal Manufacturing Company, Denver, Colo. Railway-crossing signal. No. 1,268,381; June 4; v. 251; p. 89.
Neal, William A., Lewisburg, W. Va. Resilient tire for automobile-wheels. No. 1,269,842; June 18; v. 251; p. 546.
Neal, William E., assignor to Brown & Bigelow, St. Paul, Minn. Ready-reference calendar. No. 1,268,599; June 4; v. 251; p. 151.
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Needham, Richard E., Youngstown, Ohio. Invalid's bed. No. 1,270,192; June 18; v. 251; p. 639.
Neely, Frank C., Clarinda, Iowa. Stanchion. No. 1,270,314; June 25; v. 251; p. 698.
Nees, Louis, assignor of one-half to R. J. Cheney, Minneapolis, Minn. Window frame and sash. No. 1,270,433; June 25; v. 251; p. 731.
Neff, Louis C., Brooklyn, N. Y. Collar-spreader. No. 1,269,205; June 11; v. 251; p. 338.
Neiman, Howard S., Brooklyn, N. Y. Wind-shield. No. 1,269,634; June 18; v. 251; p. 488.
Nein, William C., assignor of one-third to M. A. Holden, administratrix, and one-third to T. W. Varley, New York, N. Y. Train stop and signaling device. No. 1,269,567; June 11; v. 251; p. 436.
Nelon, Harry A., Charlottesville, Va. Canning corn. No. 1,269,848; June 18; v. 251; p. 547.
Nelson, Alfred, Chicago, Ill. Floor-scraper. No. 1,268,873; June 11; v. 251; p. 246.
Nelson, Arthur W., Williamsport, Pa. Loose pulley. No. 1,268,382; June 4; vol. 251; p. 89.
Nelson, August, Minneapolis, Minn. Mop. No. 1,268,271; June 4; v. 251; p. 57.
Nelson, Erik W., New Rochelle, N. Y. Cam-movement. No. 1,268,874; June 11; v. 251; p. 246.
Nelson, Leon J., Omaha, Nebr. Band-iron connector. No. 1,270,193; June 18; v. 251; p. 639.
Nelson, Peter E., Luverne, N. D. Chain-link. No. 1,269,733; June 18; v. 251; p. 515.
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Neracher, Carl A., New York, N. Y., assignor to The Brophy Engineering Company, Cleveland, Ohio. Means for propelling bicycles and the like. No. 1,269,558; June 11; v. 251; p. 433.
Nessling, Edwin V. (See Warwick and Nessling.)
Nessling, Edwin V., assignor to General Wire Tie Company, Chicago, Ill. Machine for tying objects with wire. No. 1,268,383; June 4; v. 251; p. 89.
Neuman, Hugo, Ford City, Ontario, Canada, assignor to Diamond Manufacturing Company, Detroit, Mich. Tube-cutting machine. No. 1,269,635; June 18; v. 251; p. 488.
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"New-Way" Motor Company. (See Drummond, William, assignor.)
Newark Gear Cutting Machine Co. (See Eberhardt, Henry E., assignor.)
Newlander, Olaf, Bridgeport, Conn. Gear-cutting machine. No. 1,269,493; June 11; v. 251; p. 417.
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Newsom, John F. and J. B., Palo Alto, Cal. Protective caisson for ships. No. 1,270,544; June 25; v. 251; p. 762.
Newton, Earle R., assignor to International Curtis Marine Turbine Company, New York, N. Y. Elastic-fluid turbine. No. 1,268,272; June 4; v. 251; p. 57.
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Nicholas, Askin M., Torrington, Bismuth, via Deepwater, New South Wales, Australia. Apparatus for separating liquids from solids. No. 1,268,274; June 4; v. 251; p. 58.
Nichols, John C., West Liberty, Iowa. Stock-feeding trough. No. 1,269,108; June 11; v. 251; p. 311.
Nicole, Paul, Lausanne, Switzerland. Instrument for dividing lengths according to the golden section. No. 1,268,756; June 4; v. 251; p. 194.
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Nicoll, William R., Owatonna, Minn., assignor to David Watkins Dairyman's Manufacturing Company. Butter-printer. No. 1,268,609; June 4; v. 251; p. 151.
Niebling, Joseph, Woodcliff Lake, N. J. Fastener for file-binders. No. 1,268,757; June 4; v. 251; p. 194.
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Nielsen, Niels D., Elyria, Ohio. Agitating means. No. 1,268,602; June 4; v. 251; p. 152.
Nielson, John D., Lyndhurst, N. J. Game apparatus. No. 1,269,494; June 11; v. 251; p. 417.
Nigh, Omar I., Washington, D. C. Electric-lighting system and control. No. 1,269,954; June 18; v. 251; p. 575.
Nissle, Charles J., Brady, Tex. Signaling device for automobiles. No. 1,270,434; June 25; v. 251; p. 731.
Nikolow, George, New York, N. Y. Device for coring apples. No. 1,268,758; June 4; v. 251; p. 194.
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Noland, Claire A., Monroe City, Mo. Invalid elevating and conveying device. No. 1,269,734; June 18; v. 251; p. 515.
Norby, Olaus O., Detroit, Minn. Quack-grass digger. No. 1,268,992; June 11; v. 251; p. 279.
Norring, Sigurd A. E., Brooklyn, and V. C. Thorne, New York, N. Y., assignors to Schlosinger Radium Co. Luminous indicating device and means for attaching same. No. 1,269,636; June 18; v. 251; p. 489.

Norris, Frank M., Los Angeles, Cal. Ignition system. No. 1,269,495; June 11; v. 251; p. 417.
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North, Raymond F. (See Buchner and North.)
Norton, Clifton R., United States Army. Drive mechanism for motor-vehicles. No. 1,270,650; June 25; v. 251; p. 791.
Norton Company. (See Saunders, Lewis E., assignor.)
Norton Company. (See Saunders and White, assignors.)
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Novotny, Frank S., assignor of one-half to J. F. Fitzpatrick, St. Paul, Minn. Single-trigger mechanism for double-barrel guns. No. 1,268,760; June 4; v. 251; p. 195.
Noyes, Ethell, Kensington, London, England. Hair-clasp. No. 1,268,875; June 11; v. 251; p. 246.
Nussbaum, Peter. (See Keiner and Nussbaum.)
Nutting, Perley G., Rochester, N. Y. Range-finder. No. 1,270,545; June 25; v. 251; p. 763.
Nybak, Olaf, Rashaw, Alberta, Canada. Sugar-dispensing apparatus. No. 1,270,194; June 18; v. 251; p. 639.
Nystrom, Martin, assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Vertical file for talking-machines. No. 1,268,141; June 4; v. 251; p. 21.
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O'Connor, John F., Chicago, Ill., assignor to W. H. Miner, Chazy, N. Y. Rocker side bearing. No. 1,268,993; June 11; v. 251; p. 279.
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O'Grady, John M., Chicago, Ill. Rotary motor. No. 1,270,546; June 25; v. 251; p. 763.
O'Hara, James B., Elkton, S. D. Oil-can. No. 1,268,604; June 4; v. 251; p. 153.
O'Neil, Robert E., Kansas City, Mo. Automobile bracing attachment. No. 1,269,955; June 18; v. 251; p. 575.
Obert, Casin W., Brooklyn, N. Y. Automobile attachment. No. 1,269,844; June 18; v. 251; p. 547.
Obser, Adolph, Newark, N. J. Manufacture of leather. No. 1,268,876; June 11; v. 251; p. 246.
Odening, Anthony, Calumet, Mich. Rain-alarm. No. 1,270,652; June 25; v. 251; p. 791.
Orden, Frederick H., Newark, N. J. Rotary steam-engine. No. 1,269,735; June 18; v. 251; p. 516.
Ogilvy, David J., Cincinnati, Ohio. Carbon-pigment base and making same. No. 1,268,142; June 4; v. 251; p. 21.
Ogren, Axel E., Derby, Conn. Tap and die holder. No. 1,270,051; June 18; v. 251; p. 601.
Ohde, George, Jr., and W., Manning, Ohio. Molding-display cabinet. No. 1,269,208; June 11; v. 251; p. 339.
Ohde, William. (See Ohde, George, Jr., and W.)
Ohlmer, Friedrich, Griesheim, near Frankfort-on-the-Main, Germany. Continuous process for recovering lead or zinc or both metals from their ores or from slag in the form of metal fumes, whereby the charge is mixed with fuel. No. 1,269,110; June 11; v. 251; p. 311.
Okrassa, Roberto F. E., Antigua, Guatemala. Boiler. No. 1,270,195; June 18; v. 251; p. 640.
Olasz, Jozsef, Aliquippa, Pa. Nutcracker. No. 1,268,484; June 4; v. 251; p. 118.
Oldham, Joseph. (See Toomey and Oldham.)
Oleen, Olof H. (See Oleen, William A. and O. H.)
Oleen, William A. and O. H., Columbia City, Oreg. Door opening and closing mechanism. No. 1,270,052; June 18; v. 251; p. 601.
Oler, Henry D., Middletown, N. Y. Fluid-gage shield. No. 1,268,994; June 11; v. 251; p. 279.
Oline, Arthur, Minden, Nebr. Staple extractor or puller. No. 1,269,845; June 18; v. 251; p. 547.
Oliver, Thomas B., Montgomery, Tenn. Combination farming implement. No. 1,269,111; June 11; v. 251; p. 312.
Olmsted, George C., Minneapolis, Minn. Automatic intermittent control for internal-combustion engines. No. 1,269,637; June 18; v. 251; p. 489.
Olmsted, Osmond W., Hartford, Conn., assignor, by mesne assignments, to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,268,605; June 4; v. 251; p. 153.
Olsen, Charles A., and L. C. Mapes, Sioux Falls, S. D. Clothes-line and fastening device. No. 1,268,606; June 4; v. 251; p. 153.
Olson, Gustaf, assignor of one-half to L. Greenberg and one-sixth to W. M. McEwen, Chicago, Ill. Driving mechanism for electric fans. No. 1,269,209; June 11; v. 251; p. 340.
Olson, Oscar E., Flint, Mich. Automobile-door latch. No. 1,269,846; June 18; v. 251; p. 547.
Olson, Oscar L., assignor of two-thirds to E. E. Hegstrom, Braham, Minn. Hitching device. No. 1,268,796; June 4; v. 251; p. 206.
One Wheel Truck Company. (See Goodhart, Louis, assignor.)
Operaphone Manufacturing Corporation. (See Fletcher, John, assignor.)
Orange, John A., Schenectady, N. Y., assignor to General Electric Company. Condenser for projection apparatus. No. 1,269,496; June 11; v. 251; p. 418.
Orme, Harry A., Washington, D. C. Self-feeding soldering-iron. No. 1,268,877; June 11; v. 251; p. 246.
Orr, Nathaniel M., and G. D. Snider, Blacksburg, Va. Detachable-bladed razor. No. 1,269,497; June 11; v. 251; p. 418.
Osborne, William J., Walla Walla, Wash. Husking apparatus. No. 1,268,384; June 4; v. 251; p. 90.
Osgood, Lafayette E., Endeavor, Pa. Bottle-cap remover. No. 1,270,315; June 25; v. 251; p. 698.
Oshkosh Manufacturing Company. (See Bush, Charles A., assignor.)
Osley, Willard A., Springfield, Mass. Hose-band. No. 1,268,761; June 4; v. 251; p. 195.
Osol, Fritz E. (See Barron and Osol.)
Osterberg, August F. (See Osterberg, Henry G. and A. F.)
Osterberg, Henry G., Brighton, Mass., and A. F. Osterberg, Auburn, N. Y. Candy-coating machine. No. 1,270,316; June 25; v. 251; p. 698.
Ostheimer, Adam, Cleveland, Ohio. Automatic thermostatic control for incubators. No. 1,269,112; June 11; v. 251; p. 312.
Otis Elevator Company. (See Furlow, Floyd C., assignor.)
Otis Elevator Company. (See Greiner, Otto, assignor.)
Otto Heineman Phonograph Supply Co. (See Catucci, Pliny, assignor.)
Otto, Herman, Grass Lake, Mich. Work-holder. No. 1,270,653; June 25; v. 251; p. 792.
Overbury, Frederick C., New York, N. Y., assignor to The Flintkote Company, Boston, Mass. Covering for roofs and side walls. No. 1,270,654; June 25; v. 251; p. 792.
Overstreet, George W. (See Lowe and Overstreet.)
Owen, Oscar L., assignor to The Whitin Machine Works, Whitinsville, Mass. Scavenger for spinning-machines. No. 1,269,847; June 18; v. 251; p. 547.
Owens, Heman E., West Clarksville, N. Y. Rotary harrow. No. 1,270,317; June 25; v. 251; p. 699.
Oxweld Acetylene Company. (See Braden, Robert D., assignor.)
Ozerowicz, Alexander, Hamtramck, Mich. Lock for motor-vehicles. No. 1,269,638; June 18; v. 251; p. 489.
P. & M. Company, The. (See Alfreds, Torris H., assignor.)
P. & M. Company. (See Preston, Frederick A., assignor.)
P. R. Glass Company. (See Glass, Perley P., assignor.)
Pacheco, Frederico, Brooklyn, N. Y. Swimming device. No. 1,268,762; June 4; v. 251; p. 195.
Pacific Coast Borax Company. (See Faulkner, Herbert W., assignor.)
Pacific Evaporator Company. (See Miller, Herbert G., assignor.)
Pacific Flush Tank Company. (See Cox, James W., assignor.)
Package Machinery Company. (See Smith and Phelon, assignors.)
Packard Motor Car Company. (See Belden, Edward H., assignor.)
Packard Motor Car Company. (See Church, Harold D., assignor.)
Packard Motor Car Company. (See Huff, Russell, assignor.)
Page, Roy J., Franklin, Nebr. Indicator. No. 1,270,655; June 25; v. 251; p. 792.
Paige, Arthur E., Philadelphia, Pa. Mechanism for making bifocal lenses. No. 1,269,568; June 11; v. 251; p. 437.
Paine, Mathew H., Glenellyn, and W. S. Williams, Chicago, Ill. Toggle-bolt. No. 1,269,302; June 11; v. 251; p. 365.
Palm, Henry S. (See Moore, Edwin A., assignor.)
Palmatier, Marshall J., Globe, Ariz. Carbureter. No. 1,270,547; June 25; v. 251; p. 764.
Palmer, Charles S., Pittsburgh, Pa. Process of and apparatus for making natural-gas substitute. No. 1,268,763; June 4; v. 251; p. 196.
Palmer, Herbert R., Cleveland, Ohio. Glare-controlling device for lamps. No. 1,269,548; June 11; v. 251; p. 430.
Palmer, Herbert R., Cleveland, Ohio. Lamp. No. 1,269,549; June 11; v. 251; p. 431.
Palmero, Louis M., Seguin, Tex. Tire-heater. No. 1,270,196; June 18; v. 251; p. 640.
Palmgren, Carl A., Chicago, Ill. Filing device. No. 1,268,143; June 4; v. 251; p. 21.
Panoulias, Panayiotis D. (See White and Baker, assignors.)
Pape, Herman G., assignor to R. A. Schoenberg, New York, N. Y. Duplex switch. No. 1,268,485; June 4; v. 251; p. 119.
Paramount Safety Paper Co. (See Schmidt, Ernest E., assignor.)
Pardon, Frank H., Owensboro, Ky. Rotary engine. No. 1,269,303; June 11; v. 251; p. 366.
Pare, Frederick W., Nottingham, and A. H. Clark, Lincoln, England; said Clark assignor of one-half of the whole to said Pare. Bobbin and carriage of twist-lace machines. No. 1,268,144; June 4; v. 251; p. 21.
Park, James M., assignor of one-half to W. J. Bliesener, Rock Island, Ill. Car-plane or the like. No. 1,269,569; June 11; v. 251; p. 437.
Parker, Arthur L., Cleveland, Ohio. Control system for automobiles. No. 1,268,764; June 4; v. 251; p. 196.
Parker, Clark W., assignor to Cadillac Motor Car Company, Detroit, Mich. Transmission mechanism. No. 1,270,318; June 25; v. 251; p. 699.
Parker, George A., Linoleumville, N. Y. Window-cleaner. No. 1,270,197; June 18; v. 251; p. 640.

Parker, Glover O., assignor of one-third to T. T. Harris, Bentonville, Ark., and one-third to W. M. Scott, Baltimore, Md. Ship propulsion and the like. No. 1,268,765; June 4; v. 251; p. 196.

Parker, Harry E., assignor to The Stanley Rule & Level Company, New Britain, Conn. Bit-chuck. No. 1,270,754; June 25; v. 251; p. 817.

Parker, J. J., *et al.* (See Heln, Virgil L., assignor.)

Parker, Russell, assignor to Parker, Stearns & Co., Brooklyn, N. Y. Making rubber balls. No. 1,269,848; June 18; v. 251; p. 548.

Parker, Stearns & Co. (See Parker, Russell, assignor.)

Parkhurst, Leon F., Schenectady, N. Y., assignor to General Electric Company. Electric water-heater. No. 1,270,198; June 18; v. 251; p. 640.

Parkin, William M. (See Hoffman and Parkin.)

Parks, Dennis. (See Wolfe and Parks.)

Parmelee, Charles H., Seattle, Wash. Water-tube boiler. No. 1,269,849; June 18; v. 251; p. 548.

Parmenter, William W., Redford, Mich. Power-frame. No. 1,269,736; June 18; v. 251; p. 516.

Parmeter, Edward P., assignor to Rood Construction Company, Grand Rapids, Wis. Rope-socket. No. 1,268,995; June 11; v. 251; p. 279.

Parobl, Theodore, Dundee Lake, N. J. Shoe. No. 1,269,737; June 18; v. 251; p. 516.

Parr, George T., assignor to P. J. Lavalle, St. Paul, Minn. Aerial-insulation-repairing device. No. 1,269,956; June 18; v. 251; p. 576.

Parr, Tom D., London, England. Recovering the vapor of volatile liquids. No. 1,269,639; June 18; v. 251; p. 489.

Parrish-Afford Fence & Machine Company. (See Dwiggins, John W., assignor.)

Parsons, Harold K., Southbridge, Mass. Eye-protector. No. 1,269,498; June 11; v. 251; p. 418.

Parton, Clarence E. S., Lampasas, Tex. Stove-lid and damper. No. 1,269,850; June 18; v. 251; p. 548.

Paterson, May H. (See Paterson, William and M. H.)

Paterson, Samuel, Kenton, Manitoba, Canada, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Supervisory control-circuits for telephone systems. No. 1,269,499; June 11; v. 251; p. 418.

Paterson, William and M. H., Oakland, Cal. Automobile-tractor. No. 1,269,113; June 11; v. 251; p. 312.

Patrige, Harry A. (See Bumgardner, George L., assignor.)

Patten, Ernest L., Malden, Mass. Machine for cutting soles. No. 1,270,319; June 25; v. 251; p. 700.

Patterson, Ben, assignor to The Patterson-Sargent Company, Cleveland, Ohio. Carrying device for receptacles. No. 1,269,738; June 18; v. 251; p. 516.

Patterson-Sargent Company, The. (See Patterson, Ben, assignor.)

Patton, Ralph C. (See Downes and Patton.)

Patzner, Eugene, Fountain City, Wis. Swivel-hinge-gate opener and closer. No. 1,269,114; June 11; v. 251; p. 318.

Paulsen, Frederick, Minneapolis, Minn. Tire-core. No. 1,269,500; June 11; v. 251; p. 419.

Payton, Lewis A., Haskew, Okla. Fluid-pump. No. 1,269,739; June 18; v. 251; p. 517.

Paulsen, Harry, New York, N. Y. Roller-skate. No. 1,268,885; June 4; v. 251; p. 90.

Paull, Edward T. (See Stephenson, Leonard D., assignor.)

Payne, Luther M., Campbell, R. A. Thompson, Dallas, and L. P. Morris, Campbell, Tex. Churn. No. 1,268,766; June 4; v. 251; p. 197.

Peacock, Benjamin A. (See Haslup and Peacock.)

Peacock, Samuel, Philadelphia, Pa., assignor to Haslup & Peacock, Inc., New York, N. Y. Removing suspended solids in gases. No. 1,268,486; June 4; v. 251; p. 119.

Peak, Edwin, Centralia, assignor of one-half to J. H. Gilbert, Plant City, Fla. Mosquito net or canopy holder. No. 1,268,767; June 4; v. 251; p. 197.

Pearce, Herbert, and F. Spence, Broadheath, assignors to Linotype and Machinery Limited, London, England. Red-reciprocating mechanism. No. 1,269,210; June 11; v. 251; p. 340.

Pease, Harold C., Schenectady, N. Y. Lamp-screen. No. 1,268,145; June 4; v. 251; p. 22.

Pedo, Emil E., Cleveland, Ohio. Window-screen. No. 1,270,656; June 25; v. 251; p. 792.

Peerless Motor Car Company, The. (See Wadsworth, George R., assignor.)

Pelander, Charles G. (See Christopher, Keith, Allsteadt, Einsel, and Pelander.)

Pennington, Phil M., Bellevue, Tex. Cut-out device for windmills. No. 1,270,320; June 25; v. 251; p. 700.

Perlman, Louis H., New York, N. Y. Wheel. No. 1,270,435; June 25; v. 251; p. 732.

Perlman, Louis H., New York, N. Y. Demountable rim. No. 1,270,548; June 25; v. 251; p. 764.

Pernek, Thomas, Sr., Hartford, Conn. Automatic extinguisher. No. 1,269,501; June 11; v. 251; p. 419.

Pernula, Andrew, Oneida, Wash. Spring-wheel. No. 1,270,199; June 18; v. 251; p. 640.

Perrin, John G., Detroit, Mich. Speedometer-drive. No. 1,270,549; June 25; v. 251; p. 764.

Perrin, Roger W., assignor to Theatre Vending Machine Corporation, New York, N. Y. Vending-machine. No. 1,269,502; June 11; v. 251; p. 419.

Perry, Felix A. (See Le Clair, Joseph R., assignor.)

Perry, James, Somerville, Mass., assignor to Lockport Machine Company, New York, N. Y. Bottom-forming mechanism for paper bags. No. 1,269,503; June 11; v. 251; p. 419.

Peter, Albert, St. Louis, Mo. Sewer-trap. No. 1,269,640; June 18; v. 251; p. 490.

Peters, Walter J., Raleigh, W. Va., assignor of one-half to J. M. Field, Norton, Va. Key-indicator for pianos and organs. No. 1,270,657; June 25; v. 251; p. 793.

Peterson, Charlie, assignor of one-fourth to H. Bowman, Florence, and one-fourth to C. Ericson, Commonwealth, Wis. Airship. No. 1,270,200; June 18; v. 251; p. 641.

Peterson, Henry E., Seattle, Wash. Box-press. No. 1,270,201; June 18; v. 251; p. 641.

Peterson, Peter H., assignor to Gold Medal Camp Furniture Manufacturing Company, Racine, Wis. Collapsible cot. No. 1,269,641; June 18; v. 251; p. 490.

Pettis, John H., Jamestown, N. Y. Portable folding scaffold. No. 1,268,607; June 4; v. 251; p. 153.

Pfeiffer, Otto G., Salt Lake City, Utah, assignor, by mesne assignments, to St. Louis Washing Machine Company. Washing-machine. No. 1,268,784; June 4; v. 251; p. 202.

Phelon, Arthur E. (See Smith and Phelon.)

Phillips, Herbert L. (See Phillips, Preston D., assignor.)

Phillips, Preston D., Bullard, Tex., assignor of one-half to H. L. Phillips, Washington, D. C. Peanut-harvester. No. 1,270,202; June 18; v. 251; p. 641.

Pickop, George B., New Haven, assignor to The Malleable Iron Fittings Company, Branford, Conn. Making vibrator-bodies. No. 1,268,487; June 4; v. 251; p. 119.

Pierce, John, Milton, Mass. Lacing-book-setting machine. No. 1,268,878; June 11; v. 251; p. 247.

Pifer, George N., assignor, by mesne assignments, to T. E. Stewart, trustee, Cleveland, Ohio. Automatic photographic apparatus. No. 1,270,203; June 18; v. 251; p. 642.

Pilcher, John A. (See Kadel and Pilcher.)

Pilcher, Newton R., Amarillo, Tex. Transmission-gearing. No. 1,268,608; June 4; v. 251; p. 154.

Pilling, Henry. Chorlton-cum-Hardy, England. Cylinder for uniflow steam-engines. No. 1,268,801; June 4; v. 251; p. 208.

Pinegar, Clifton, Steprock, Ark. Horseshoeing-stool. No. 1,270,204; June 18; v. 251; p. 642.

Pinkerton, Edward E., assignor of one-half to C. H. Hudson, Chicago, Ill. Box. No. 1,268,146; June 4; v. 251; p. 22.

Pinkney, Bryan D., Cincinnati, Ohio. Mixing-machine. No. 1,269,740; June 18; v. 251; p. 517.

Plosecki, Michael, Baltimore, Md. Life-saving raft. No. 1,268,147; June 4; v. 251; p. 22.

Pirc, George. (See Borsse, Anton A., assignor.)

Pirc, George. (See Borsse and Pirc.)

Pitfield, Emlen P., Cambridge, Mass. Molding-machine. No. 1,268,768; June 4; v. 251; p. 197.

Pittman, Seneca A., Center, assignor of one-half to O. H. Arnold, Jr., Athens, Ga. Ditching attachment for turning-plows. No. 1,268,148; June 4; v. 251; p. 22.

Pittsburgh Plate Glass Company. (See Clause, William L., assignor.)

Plauschinat, Alfred E., Philadelphia, Pa. Spring-gun. No. 1,269,851; June 18; v. 251; p. 549.

Plautz, Albert A. (See Zarling, William, assignor.)

Plisco, Joseph, assignor of one-half to J. Goldstein, Roanoke, Va. Detachable heel. No. 1,269,852; June 18; v. 251; p. 549.

Plumb, James P., Wood Green, London, England. Crutch. No. 1,269,504; June 11; v. 251; p. 420.

Plummer, Clarence H., Kewaunee, Wis. Pea-viner. No. 1,269,211; June 11; v. 251; p. 341.

Pocoroba, Giuseppi. (See Anello and Pocoroba.)

Polar, Johan. (See Woods and Polar.)

Poling, Fred C., Menlo, assignor to Goode Anti-Skid Chain Manufacturing Company, Des Moines, Iowa. Antiskid device for tires. No. 1,270,550; June 25; v. 251; p. 764.

Pomeroy, Flora, San Francisco, Cal. Automatic mail-dumping device. No. 1,269,853; June 18; v. 251; p. 549.

Pongracz, Gyorgy, Ohley, W. Va. Padlock. No. 1,270,205; June 18; v. 251; p. 642.

Poole, Arthur F., Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,268,785; June 4; v. 251; p. 203.

Poole, Charles A., Jersey City, N. J. Tiltable post. No. 1,269,212; June 11; v. 251; p. 341.

Poole, Clifford O., Balcom, Ill. Ratchet-nut-turning machine. No. 1,268,275; June 4; v. 251; p. 58.

Poole, Lucia M., San Jose, Cal. Mop-head. No. 1,268,769; June 4; v. 251; p. 198.

Poorman, Frank H. (See Malm and Poorman.)

Popper, Isaac C., New York, N. Y. Detachable handle. No. 1,270,206; June 18; v. 251; p. 642.

Porter, Alvin H. (See Winters and Porter.)

Porter, Jesse R., assignor of one-half to E. Michael, Buffalo, N. Y. Cultivator-blade. No. 1,270,321; June 25; v. 251; p. 700.

Porter, Maurice E. (See Victel and Porter.)

Poschadel, Leonard R., Milwaukee, Wis. Pneumatic tire. No. 1,269,505; June 11; v. 251; p. 420.

Potter, James C., Pawtucket, R. I. Turret-lathe. No. 1,268,386; June 4; v. 251; p. 90.

Pottier, Napoleon B., Charleston, W. Va. Toy pistol. No. 1,269,854; June 18; v. 251; p. 549.

Powell, James R., assignor of one-half to C. T. Grinstead, Glasgow, Ky. Photographic-printing device. No. 1,268,609; June 4; v. 251; p. 154.

Power, James T., Springfield, Ill. Swing-spout compression-faucet. No. 1,269,213; June 11; v. 251; p. 341.

Prange, Herman C., Crocketts Bluff, Ark., and F. D. Smith, Jackson, Mo. Device for stretching coon-skins. No. 1,268,610; June 4; v. 251; p. 154.

Pratt, Alvaro A., Los Angeles, Cal. Flood control. No. 1,268,770; June 4; v. 251; p. 198.

Pratt, Duane C., Edgerton, Wis. Lock-nut. No. 1,268,149; June 4; v. 251; p. 23.

Preble, Edwin N., Beverly, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Stamping-machine. No. 1,269,642; June 18; v. 251; p. 490.

Prescott, Eugene L. (See Prescott, Lester E. and E. L.)

Prescott, Lester E. and E. L., South Tacoma, Wash. Automobile-signal. No. 1,269,214; June 11; v. 251; p. 342.

Pressell, George W., assignor to E. F. Houghton & Co., Philadelphia, Pa. Cementation compound and making same. No. 1,269,957; June 18; v. 251; p. 576.

Preston, Agnes A., Brooklyn, N. Y. Suspension device for umbrellas and the like. No. 1,270,207; June 18; v. 251; p. 643.

Preston, Edward, assignor of one-fourth to J. T. Montgomery, one-fourth to J. Chasnoff, one-twelfth to W. Mindell, and one-sixth to C. Wilkerson, Sedalia, Mo. Grinder. No. 1,269,506; June 11; v. 251; p. 420.

Preston, Frederick A., Highland Park, assignor to P. & M. Company, Chicago, Ill. Anticreeper. No. 1,268,996; June 11; v. 251; p. 280.

Price, Howard W. (See Meriam and Price.)

Price, Jessie E., Los Angeles, Cal. Shoe-heel. No. 1,269,958; June 18; v. 251; p. 576.

Pringle, John H., Sac City, Iowa. Stove-magazine. No. 1,269,959; June 18; v. 251; p. 576.

Procter and Gamble Company, The. (See Dewar and Liebmann, assignors.)

Proctor, Olin S., New York, N. Y. Cable-clamp. No. 1,269,507; June 11; v. 251; p. 421.

Protective Board Company. (See Gieratz, Charles, assignor.)

Protective Signal Manufacturing Company. (See Neahr, Will C., assignor.)

Protecto Manufacturing Company, The. (See Harnly, David H., assignor.)

Prouty, Theodore C., Aurora, Ill., assignor, by mesne assignments, to The Van Sicklen Company. Speed-indicator. No. 1,269,215; June 11; v. 251; p. 342.

Prouty, Theodore C., Aurora, Ill., assignor, by mesne assignments, to The Van Sicklen Company. Odometer. No. 1,269,216; June 11; v. 251; p. 342.

Province, Benjamin, Kent, Ohio. Curtain-pole. No. 1,269,508; June 11; v. 251; p. 421.

Provost, Peter, Milwaukee, Wis. Treating grain. No. 1,269,741; June 18; v. 251; p. 517.

Pruett, Truman C., Covington, Ky. Cutting device. No. 1,268,997; June 11; v. 251; p. 280.

Prussian, Samuel W. (See Hogeboom, Clarence J., assignor.)

Pryor, John A., East Orange, N. J. Center attachment for chains. No. 1,270,208; June 18; v. 251; p. 643.

Przednowek, Wojciech, Cromwell, Manitoba, Canada. Conveyer. No. 1,269,960; June 18; v. 251; p. 577.

Pullen, Raymond R., Oceanic, N. J. Display device for flags. No. 1,268,488; June 4; v. 251; p. 119.

Pullman Couch Company *et al.* (See Davis, Fred M., assignor.)

Purdy, E. R., *et al.* (See Helm, Virgil L., assignor.)

Purdy, Milton E., South Carrollton, Ky. Operating mechanism for churns. No. 1,268,611; June 4; v. 251; p. 155.

Putnam, John A., Hardin, Mont. Means for locating sunken vessels. No. 1,270,209; June 18; v. 251; p. 643.

Pyle-National Company. (See Young, Otis W., assignor.)

Pyrene Manufacturing Company. (See Ferguson, George E., assignor.)

Quade, Frank H., Jr., Fresno, Cal. Automatic paper-feed for printing-machines. No. 1,269,304; June 11; v. 251; p. 366.

Quade, Frank H., Jr., Fresno, Cal. Automatic feed-controlling mechanism for printing-machines. No. 1,269,305; June 11; v. 251; p. 366.

Quantz, Albert T., Rock Hill, S. C. Weaving. No. 1,268,612; June 4; v. 251; p. 155.

Quartieri, Ferdinando, and E. Molinari, Milan, Italy. Bursting charge for projectiles. No. 1,270,322; June 25; v. 251; p. 700.

Quinn, Corbett L., assignor of one-fourth to Z. J. Quinn, one-fourth to L. H. Quinn, and one-fourth to J. W. Quinn, Pink Hill, N. C. Axle-lubricating device. No. 1,270,658; June 25; v. 251; p. 793.

Quinn, James W., *et al.* (See Quinn, Corbett L., assignor.)

Quinn, Leman H., *et al.* (See Quinn, Corbett L., assignor.)

Quinn, Robert B., Columbus, Ohio, assignor of one-half to T. A. Quinn, Charleston, W. Va. Wrench. No. 1,270,746; June 25; v. 251; p. 815.

Quinn, Tonkie A. (See Quinn, Robert B., assignor.)

Quinn, Zenon J., *et al.* (See Quinn, Corbett L., assignor.)

R. Hoe and Co. (See Ball, Harry V., assignor.)

R. Hoe and Co. (See White, Bruce C., assignor.)

Rabenseifner, Adolf J., Olmitz, Kans. Rail connection. No. 1,268,276; June 4; v. 251; p. 58.

Radcliffe, Carlton R., New York, N. Y. Power-transmitting apparatus. No. 1,270,323; June 25; v. 251; p. 701.

Radebaugh, Gustav H., Urbana, Ill. Work-scheduling apparatus. No. 1,268,613; June 4; v. 251; p. 155.

Ramelli, Sebastian H., Los Angeles, Cal. Crude-oil expander. No. 1,270,210; June 18; v. 251; p. 643.

Rand, James H., Jr., North Tonawanda, N. Y. Card-index. No. 1,268,489; June 4; v. 251; p. 119.

Rand, June B., Los Angeles, Cal. Cap. No. 1,268,614; June 4; v. 251; p. 155.

Randall, Tom P. (See Smith, Letha B., assignor.)

Randolph, Leonard M., assignor to High Speed Engine Corporation, Newark, N. J. Rotary engine. No. 1,268,771; June 4; v. 251; p. 198.

Rankert, Charles M., Spokane, Wash. Toy. No. 1,268,998; June 11; v. 251; p. 280.

Ransdall, Harry W., assignor of one-third to T. A. Meyer and one-third to L. H. Knue, Indianapolis, Ind. Lathe-turret. No. 1,268,277; June 4; v. 251; p. 59.

Ransom, Henry N., New York, N. Y. Railway-motor lubrication. No. 1,268,615; June 4; v. 251; p. 156.

Rathbun, Henry E., Worcester, Mass. Porch-shade. No. 1,268,490; June 4; v. 251; p. 120.

Rauch, George F., Bijou Hills, S. D. Device for fastening overshoes or rubbers to shoes. No. 1,268,616; June 4; v. 251; p. 156.

Ravier, Sylvain L., Paris, France. Work such as retaining-walls, piers, and wharfs. No. 1,270,659; June 25; v. 251; p. 793.

Rawls, Paul C., Kansas City, Mo., assignor to E. Hausberg, Charles City, Iowa. Electrically-operated typewriter. No. 1,268,491; June 4; v. 251; p. 120.

Ray, Albert D., *et al.* (See Ray, Rudolph W., assignor.)

Ray, Rudolph W., assignor of five-tenths to A. D. Ray, four-tenths to W. Hoyt, and one-tenth to B. W. Brockett and E. L. Hyde, Cleveland, Ohio. Oil-bolt. No. 1,268,999; June 11; v. 251; p. 281.

Raybestos Co., The. (See Simpson, Sumner, assignor.)

Reach, Milton B., Springfield, Mass., assignor, by mesne assignments, to A. G. Spalding & Bros., Jersey City, N. J. Dummy rifle. No. 1,270,436; June 25; v. 251; p. 732.

Read, Charles, Richmond Hill, N. Y. Garment-fastener. No. 1,268,278; June 4; v. 251; p. 59.

Reading, Arthur K., Davenport, assignor to The Bettendorf Company, Bettendorf, Iowa. Underframe for cars. No. 1,270,324; June 25; v. 251; p. 701.

Ream, Louis M., Thompson, Conn. Reinforcing member for tire-beads and making same. No. 1,270,053; June 18; v. 251; p. 601.

Reber, Emil, assignor to Society of Chemical Industry in Basle, Basel, Switzerland. Monoazo dyestuffs of the pyrazolone series able to be chromated and making same. No. 1,270,325; June 25; v. 251; p. 701.

Rebert, Charles L. E., Los Angeles, Cal. Detachable shirt-cuff. No. 1,270,660; June 25; v. 251; p. 793.

Recording and Computing Machines Company, The. (See Burkitt, Floyd A., assignor.)

Rectenwald, John J., Logan, Ohio. Running-board saddle. No. 1,269,306; June 11; v. 251; p. 367.

Redecker, Charles, assignor of one-half to R. V. Board, Louisville, Ky. Door construction for convertible automobile-bodies. No. 1,269,307; June 11; v. 251; p. 367.

Reed, Andrew H., Kansas City, Mo. Harrow. No. 1,268,150; June 4; v. 251; p. 23.

Reed, Edwin E., Guthrie, Okla. Valve-grinder. No. 1,268,617; June 4; v. 251; p. 156.

Reed, Frederick W., South Bend, Ind. Embossing attachment for printing-presses. No. 1,268,618; June 4; v. 251; p. 156.

Reed, Lowerre B., Rutherford, N. J. Pneumatic saddle-post and pump. No. 1,270,661; June 25; v. 251; p. 794.

Reed, William H., Portland, Oreg. Dredging apparatus. No. 1,268,387; June 4; v. 251; p. 91.

Reeder, Purley L., Alton, Ill. Combined pitch-gage. No. 1,269,509; June 11; v. 251; p. 421.

Reese, Charles C., San Francisco, Cal. Loaf-sugar-packing machine. No. 1,269,115; June 11; v. 251; p. 313.

Reeves, Herbert K., London, England. Grating, defibrating, or pulping machine. No. 1,268,619; June 4; v. 251; p. 157.

Rehfuss, John G. (See Tily and Rehfuss.)

Rehfuss, Martin G. (See Tily and Rehfuss.)

Rehwaldt, William D., Germania, Wyo. Water-gate. No. 1,269,855; June 18; v. 251; p. 550.

Reichelt, Ernest A., Lorquon, Victoria, Australia. Four-wheel drive for motor-vehicles. No. 1,268,279; June 4; v. 251; p. 59.

Reifsnyder, James D., and W. A. Weightman, Philadelphia, assignors to Stokes & Smith Company, Summerdale, Philadelphia, Pa. Catalogue-wrapping machine. No. 1,269,308; June 11; v. 251; p. 367.

Reilly, Peter F., Briarcliff Manor, N. Y. Toilet for railway-cars. No. 1,270,211; June 18; v. 251; p. 643.

Reimuller, Dagmar H., Morris Plains, N. J. Luting or cementing composition. No. 1,269,116; June 11; v. 251; p. 313.

Relay Automatic Telephone Company, The. (See Bygrave, Leonard C., assignor.)

Relay Automatic Telephone Company, The. (See Herink, Henry J., assignor.)

Remy Electric Company. (See Kennington, William O., assignor.)

Renaud, Felix D., Chicago, Ill. Duplex flashing-block. No. 1,270,662; June 25; v. 251; p. 794.

Rendle, Adolph, New York, N. Y. Annunciator. No. 1,269,856; June 18; v. 251; p. 550.

Rennerfelt, Ture G., Katrineholm, Sweden. Ball-bearing. No. 1,269,117; June 11; v. 251; p. 313.
Renstrom, Edward L., Gulch, Colo. Measuring instrument. No. 1,268,620; June 4; v. 251; p. 157.
Repp, John H., Albany, N. Y. Adjustable rope-clutch. No. 1,268,621; June 4; v. 251; p. 158.
Reppin, Walter, Newark, N. J. Spark-plug. No. 1,270,437; June 25; v. 251; p. 732.
Rettell, Joseph, Detroit, Mich., assignor to Morgan & Wright. Strip-applying device. No. 1,268,151; June 4; v. 251; p. 23.
Revere Rubber Company. (See Cobb, Henry Z., assignor.)
Reynolds, Edward C., New York, N. Y. Search-light holder. No. 1,268,622; June 4; v. 251; p. 158.
Reynolds, John N., Greenwich, Conn., assignor to Western Electric Company, Incorporated, New York, N. Y. Call-finder for automatic and semi-automatic telephone systems. No. 1,270,326; June 25; v. 251; p. 701.
Rhodes, Herbert M., Natches, Miss. Seed-harvesting machine. No. 1,269,742; June 18; v. 251; p. 517.
Rhoer, Gouverneur C., Little Rock, Ark. Umbrella-lock. No. 1,270,054; June 18; v. 251; p. 602.
Rice, William L., assignor of one-half to himself and one-half to P. S. Braucher, Reading, Pa. Soft-metal alloy and making same. No. 1,269,000; June 11; v. 251; p. 281.
Richard, Charles D., New York, N. Y. Hourly taximeter. No. 1,269,369; June 11; v. 251; p. 368.
Richards, George, London, England. Milling screw-threads. No. 1,269,857; June 18; v. 251; p. 550.
Richards, Harry W., Baltimore, Md. Automatic safety railway system. No. 1,268,879; June 11; v. 251; p. 247.
Richards, Walter W., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Artificial leather and producing the same. No. 1,270,055; June 18; v. 251; p. 602.
Richardson, Archibald N. W., Sydney, New South Wales, Australia. Multicylinder internal-combustion engine. No. 1,269,858; June 18; v. 251; p. 550.
Richardson, Edward E., Toledo, Ohio. Throttling-valve. No. 1,270,327; June 25; v. 251; p. 702.
Richardson, James M., Highland Park, Mich. Bulb for electric headlights. No. 1,269,510; June 11; v. 251; p. 421.
Richardson, John M., Milwaukee, Wis. Davenport. No. 1,269,643; June 18; v. 251; p. 490.
Richardson, John M., Milwaukee, Wis. Cushion-seat. No. 1,270,551; June 25; v. 251; p. 765.
Richardson, Oscar W., assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop-motion. No. 1,268,152; June 4; v. 251; p. 23.
Richardson, Thomas A., Verona borough, and E. Woodings, Oakmont borough, assignors to Verona Tool Works, Pittsburgh, Pa. Lifting-jack. No. 1,269,644; June 18; v. 251; p. 490.
Richeson, Joseph S., Oronoco, Va. Stand. No. 1,270,212; June 18; v. 251; p. 644.
Richmond, Clarence M., Bellingham, Wash. Fish-hook retainer. No. 1,269,743; June 18; v. 251; p. 518.
Riday, Joseph T. (See Haughton, George W., assignor.)
Rider, Herbert E., Brooklyn, N. Y., assignor, by mesne assignments, to Liberty Aeroil Burner, Inc. Vaporizing-tube. No. 1,269,001; June 11; v. 251; p. 281.
Riedler, Alois, Berlin, Germany. Piston for internal-combustion engines. No. 1,270,663; June 25; v. 251; p. 794.
Ries, Ferdinand, New York, N. Y. Diamond-grinder. No. 1,269,002; June 11; v. 251; p. 281.
Riggs, Garshom A., assignor to Eastman Kodak Company, Rochester, N. Y. Photographic-film spool. No. 1,269,003; June 11; v. 251; p. 282.
Riker, Andrew L., Bridgeport, Conn., assignor to The "Locomobile" Company of America, New York, N. Y. Internal-combustion engine. No. 1,268,622; June 4; v. 251; p. 158.
Riley, Fred E., Livermore Falls, Me. Automatic grindstone-dresser. No. 1,268,624; June 4; v. 251; p. 158.
Riley, John D., and J. L. Lovell, Conneaut, Ohio. Plastic packing composition. No. 1,270,056; June 18; v. 251; p. 602.
Riley, Joseph J., Toledo, Ohio. Automatic automobile-protector. No. 1,269,744; June 18; v. 251; p. 518.
Ring, Sidney H., Clatskanie, Oreg. Music-holder. No. 1,269,859; June 18; v. 251; p. 551.
Ringe, John C., Bridgeport, Conn., assignor to The Singer Manufacturing Company. Sewing-machine. No. 1,269,118; June 11; v. 251; p. 314.
Ringlund, Gustaf A., Minneapolis, Minn. Oil-pan heater. No. 1,269,310; June 11; v. 251; p. 368.
Risberg, Fred A. (See Fredrickson and Risberg.)
Riter-Conley Manufacturing Company. (See Warner, Arthur W., assignor.)
Rivers, Thomas M., Kissimmee, Fla. Tidal hydraulic-power plant. No. 1,268,625; June 4; v. 251; p. 159.
Rixson, Oscar C., New Rochelle, N. Y. Cremorne-bolt. No. 1,269,311; June 11; v. 251; p. 369.
Roach, Christopher J., Middletown, Conn. Chisel-handle. No. 1,268,871; June 11; v. 251; p. 245.
Roath, William S., Akron, Ohio. Direct-return valve for steam-heating systems. No. 1,268,280; June 4; v. 251; p. 59.
Robbins, George M., Newark, N. J. Aeroplane, hydroplane, and the like. No. 1,269,645; June 18; v. 251; p. 491.
Roberge, Joseph I., assignor to Waterbury Clock Co., Waterbury, Conn. Rod-gong for striking-clocks. No. 1,269,511; June 11; v. 251; p. 421.
Robertson, Donald, *et al.* (See Henning, Bruno W., assignor.)
Robertson, George P., Bethesda, Md. Stretching-pliers. No. 1,268,626; June 4; v. 251; p. 159.
Robertson, Peter. (See Robertson, William, assignor.)
Robertson, William. (See Dawson, Sidney, assignor.)
Robertson, William, Oakmont, Pa., assignor of one-half to P. Robertson, New Hartford, N. Y. Golf-club. No. 1,269,745; June 18; v. 251; p. 518.
Robertson, William P., New York, N. Y. Electrically-heated cup or container. No. 1,269,646; June 18; v. 251; p. 491.
Robeson, William B., Port Huron, Mich. Mattress. No. 1,269,746; June 18; v. 251; p. 518.
Robinson, Albert E., and A. M. Sosa, assignors to The American Tool Works Company, Cincinnati, Ohio. Ball-bearing. No. 1,268,153; June 4; v. 251; p. 24.
Robinson, Charles E., Orange, Cal. Oiling device. No. 1,268,281; June 4; v. 251; p. 60.
Rock Island Plow Company. (See Kaupke, Lee H., assignor.)
Rockford Tool Company. (See Sundstrand, Gustaf D., assignor.)
Rockstead, Martin, Chicago, Ill. Gage device. No. 1,269,512; June 11; v. 251; p. 421.
Rockwell, Olin S. (See Woodford and Rockwell.)
Roe, Ernest S. (See Greenleaf and Roe.)
Roesch, Alfred, assignor to Charles J. Tagliabue Manufacturing Co., Brooklyn, N. Y. Temperature-controlling device. No. 1,270,438; June 25; v. 251; p. 732.
Roesch, Georges, Paris, France. Float-reservoir for carburetors. No. 1,270,213; June 18; v. 251; p. 644.
Roessler & Hasslacher Chemical Co., The. (See Liebknecht, Otto, assignor.)
Rogers, John R., Brooklyn, N. Y., assignor to Mergenthaler Linotype Company. Typographical machine. No. 1,270,328; June 25; v. 251; p. 702.
Rogers, Lebbeus H., New York, N. Y. Method of and apparatus for treating oil-shale. No. 1,269,747; June 18; v. 251; p. 519.
Rogers, Walter, West Annapolis, Md. Shutter-operating device. No. 1,270,439; June 25; v. 251; p. 733.
Romey, George A. (See Frambach, Mathew J., assignor.)
Rood Construction Company. (See Parmeter, Edward P., assignor.)
Rood, Harold C., Bridgeport, Conn. Man's garter. No. 1,270,057; June 18; v. 251; p. 602.
Roos, Henry W., Cincinnati, Ohio. Clamping mechanism. No. 1,268,880; June 11; v. 251; p. 247.
Root, Alva E., Pleasanton, Kans. Internal-combustion engine. No. 1,269,119; June 11; v. 251; p. 314.
Root, Ralph R., Cleveland, Ohio. Handy lamp. No. 1,268,154; June 4; v. 251; p. 24.
Root, Ralph R., Cleveland, Ohio. Connector. No. 1,269,748; June 18; v. 251; p. 519.
Rose, Samuel I., assignor to The Marvel Accessories Manufacturing Company, Cleveland, Ohio. Composition fuel. No. 1,270,664; June 25; v. 251; p. 794.
Rose, William, Gainsborough, England. Sheet feeding and gumming apparatus. No. 1,268,627; June 4; v. 251; p. 159.
Rosenberger, Karl. (See Greasa, Charles N., assignor.)
Rosenthal, Herman, New York, N. Y. Coat-hanger. No. 1,268,881; June 11; v. 251; p. 248.
Ross, Frank A., assignor to Stewart-Warner Speedometer Corporation, Chicago, Ill. Odometer-resetting device. No. 1,269,218; June 11; v. 251; p. 343.
Ross, James A., Chicago, Ill. Grate for garbage-burners. No. 1,268,492; June 4; v. 251; p. 121.
Ross, John C., Akron, Ohio. Force-feed lubricator. No. 1,270,440; June 25; v. 251; p. 733.
Ross, Wallace E., Northville, Mich. Water-heater. No. 1,270,552; June 26; v. 251; p. 765.
Roth, Frank J., San Francisco, Cal. Tractor-wheel. No. 1,268,493; June 4; v. 251; p. 121.
Rothermel, Curtis J., Philadelphia, Pa., assignor, by mesne assignments, to Signode System, Inc., Chicago, Ill. Tensional joint. (Reissue.) No. 14,482; June 11; v. 251; p. 439.
Rothschild, Joseph. (See Davis, John T., assignor.)
Rouge, John, New York, N. Y. Air-brush. No. 1,270,553; June 25; v. 251; p. 765.
Rovensky, Frank G., assignor of one-third to W. H. Scott and one-third to S. Schragenheim, Toledo, Ohio. Sounding toy. No. 1,269,312; June 11; v. 251; p. 369.
Rowland, William S., assignor to The Stanley Works, New Britain, Conn. Annealing apparatus and process. No. 1,268,155; June 4; v. 251; p. 24.
Rowley, James F., Chicago, Ill. Hinge-joint for artificial limbs. No. 1,269,004; June 11; v. 251; p. 282.
Rowntree, Harold, Kenilworth, Ill., assignor to National Pneumatic Company, New York, N. Y. Control mechanism for automatically-operating apparatus. No. 1,268,156; June 4; v. 251; p. 25.
Roy, Joseph, Woonsocket, R. I. Game apparatus. No. 1,270,441; June 25; v. 251; p. 733.

Royal Typewriter Company. (See Hess, Edward B., assignor.)
Royer, Reuben G., *et al.* (See Spitz, John B., assignor.)
Royer, Walter G., *et al.* (See Spitz, John B., assignor.)
Royer, William B., assignor of one-half to E. B. Link, Baltimore, Md. Adjustable wrist-pin and bearing therefor. No. 1,268,282; June 4; v. 251; p. 60.
Ruark, Milton J., Baltimore, Md. Corporation-cock. No. 1,270,329; June 25; v. 251; p. 703.
Rubel, Maurice, Chicago, Ill. Combined shipping box or carton and vase for natural flowers and the like. No. 1,270,554; June 25; v. 251; p. 765.
Rudolph, Ivar L., Washington, D. C. Umbrella. No. 1,268,283; June 4; v. 251; p. 60.
Rueckheim Bros. & Eckstein. (See Fletsch, Herman, Jr., assignor.)
Rugg, Walter S. (See Murray and Rugg.)
Ruggles, Henry B. (See Hodge and Ruggles.)
Ruggles, William B., Bayonne, N. J. Mixer and drier. No. 1,269,120; June 11; v. 251; p. 314.
Rukes, Charles F., Palo Alto, Cal. Beet-topper. No. 1,268,888; June 4; v. 251; p. 91.
Runge, Robert F. (See Gray and Runge.)
Runsvold, Martin S., and N. Nelsskog, Everett, Wash. Automatic fire-extinguisher system. No. 1,270,442; June 25; v. 251; p. 734.
Rusby, John M., and O. B. Evans, assignors to The United Gas Improvement Company, Philadelphia, Pa. Manufacture of gas. No. 1,268,628; June 4; v. 251; p. 159.
Rusby, Joseph H., Nutley, N. J. Breast-drill. No. 1,268,157; June 4; v. 251; p. 25.
Rusby, Joseph H., Nutley, N. J. Electric switch. No. 1,269,121; June 11; v. 251; p. 314.
Rusby, Joseph H., Nutley, N. J. Chuck. No. 1,270,443; June 25; v. 251; p. 734.
Rusby, Joseph H., Nutley, N. J. Chuck. No. 1,270,444; June 25; v. 251; p. 734.
Russ, Henry M., Stockton, Kans. Attachment for sweep-rakes. No. 1,268,882; June 11; v. 251; p. 248.
Russell, Albert E., Windsor, and W. G. Charley, Melbourne, Victoria, Australia. Hub of vehicle-wheels. No. 1,268,629; June 4; v. 251; p. 160.
Russell, Andrew J., and E. Van Allen, New York, N. Y. Non-refillable bottle. No. 1,269,313; June 11; v. 251; p. 369.
Russell, Frank K., Dallas, Tex. Leather-working machine. No. 1,268,158; June 4; v. 251; p. 25.
Russell, William A., Yonkers, N. Y. Air-valve. No. 1,268,883; June 11; v. 251; p. 248.
Ruth, Joseph P., Jr., Denver, Colo. Aerating device. No. 1,268,630; June 4; v. 251; p. 160.
Ruttan, Alfred A., assignor to Eastman Kodak Company, Rochester, N. Y. Cut-film holder. No. 1,270,330; June 25; v. 251; p. 703.
Rutz, Julius F., and F. A. Gauger, Milwaukee, Wis. Flash-igniter and simmerer. No. 1,268,889; June 4; v. 251; p. 91.
Rutzen, August C., Cleveland, Ohio. Airship. No. 1,268,494; June 4; v. 251; p. 121.
Ryan, Albert J., Cincinnati, Ohio, assignor to Ryan Ideal Stain and Blacking Company, Lynn, Mass. Box material for box-toes or the like for shoes. No. 1,269,647; June 18; v. 251; p. 491.
Ryan, Albert J., Cincinnati, Ohio, assignor to Ryan Ideal Stain and Blacking Company, Lynn, Mass. Box-toe-treating apparatus. No. 1,269,648; June 18; v. 251; p. 492.
Ryan, Edward, Chicago, Ill., assignor to Locomotive Stoker Company, Pittsburgh, Pa. Locomotive-tender. No. 1,270,214; June 18; v. 251; p. 644.
Ryan Ideal Stain and Blacking Company. (See Ryan, Albert J., assignor.)
Ryan, John F., New Rochelle, N. Y. Tape-handling machine. No. 1,269,749; June 18; v. 251; p. 519.
Ryan, John P., Worcester, Mass. Hydraulic apparatus. No. 1,268,884; June 11; v. 251; p. 248.
Ryan, Richard, Cleveland, Ohio, and T. Smith, Wheeling, W. Va. Composition for bricks, blocks, posts, and the like. No. 1,269,649; June 18; v. 251; p. 492.
Ryerson, Eugene H., assignor to Hamblin & Russell Manufacturing Company, Worcester, Mass. Egg-whip. No. 1,268,284; June 4; v. 251; p. 61.
Ryon, Eppa H., Waltham, assignor to Crompton & Knowles Loom Works, Worcester, Mass. Warp stop-motion. No. 1,268,159; June 4; v. 251; p. 26.
S. Sternau & Co. (See Ball, Henry P., assignor.)
S. M. P. Wood Heel Company. (See Sharpneck, Eliel L., assignor.)
S. S. White Dental Manufacturing Company, The. (See Bowman, Walter H., assignor.)
Saal, Henry G., Chicago, Ill. Shaft-bearing. No. 1,269,750; June 18; v. 251; p. 519.
Sabel, Oscar B., Chicago, Ill. Window-ventilator. No. 1,269,314; June 11; v. 251; p. 370.
Sadgebury, Herman F., Dayton, Ohio, assignor, by mesne assignments, to Wolverine Spark Plug Company, Inc. Spark-plug. No. 1,269,860; June 18; v. 251; p. 551.
Sadgebury, Herman F., Dayton, Ohio, assignor, by mesne assignments, to Wolverine Spark Plug Company, Inc. Spark-plug attachment for pumps. No. 1,269,861; June 18; v. 251; p. 551.
Sadgebury, Herman F., Dayton, Ohio, assignor to Wolverine Spark Plug Company, Inc., Detroit, Mich. Spark-plug. No. 1,269,862; June 18; v. 251; p. 552.
Safepack Paper Mills. (See Schenkelberger, Albert F., assignor.)
Safety First Manufacturing Company. (See Cathcart, Frank H., assignor.)
Sager, James H., assignor to J. H. Sager Company, Rochester, N. Y. Locking means for steering-wheels. No. 1,270,058; June 18; v. 251; p. 603.
Salle, Will W., and H. E. Ganiard, Le Roy, N. Y. Atomizer. No. 1,269,122; June 11; v. 251; p. 315.
Saliger, Alois B., New York, N. Y., assignor to Heck Duplicator Company. Duplicator. No. 1,270,331; June 25; v. 251; p. 703.
Sammons, Thomas A., Dayton, Ohio. Automatic cut-off valve and faucet mechanism. No. 1,268,160; June 4; v. 251; p. 26.
Sampson, Charles H., Rochester, N. Y. Artificial eye and method of fitting the same. No. 1,268,885; June 11; v. 251; p. 249.
Samuel C. Tatum Company, The. (See Dom, Alexander, assignor.)
Samuels, William; *et al.* (See Jacobsen, Jacob, assignor.)
Samuelson, Elmer E. (See Lewis and Samuelson.)
Sandberg, William J. (See Martin, Alfred A., assignor.)
Sandell, Henry K., assignor to H. S. Mills, Chicago, Ill. Metal composition. No. 1,268,495; June 4; v. 251; p. 121.
Sander, Juel, Oldham, S. D. Rod for end-gates. No. 1,268,496; June 4; v. 251; p. 121.
Sanders, Carleton E., Passaic, N. J. Apparatus for forming shaped articles. No. 1,269,219; June 11; v. 251; p. 343.
Sanders, Carleton E., Passaic, N. J. Forming shaped articles. No. 1,269,220; June 11; v. 251; p. 344.
Sanford, Hugh W., Knoxville, Tenn. Railway. No. 1,268,390; June 4; v. 251; p. 91.
Sanguinetti, Henry, Bakersfield, Cal. Pumping power. No. 1,269,961; June 18; v. 251; p. 577.
Santos, Anthony S., West Roxbury, assignor to Spray Engineering Company, Boston, Mass. System for effecting humidity control. No. 1,270,747; June 25; v. 251; p. 815.
Sanuy, Anthony D., and C. Engelbert, Fort Totten, N. Y. Oiling device for trombone-slides. No. 1,270,215; June 18; v. 251; p. 645.
Sargent & Company. (See Shaw, John H., assignor.)
Sargent & Company. (See Voight, Henry G., assignor.)
Sargent, Howard R., Schenectady, N. Y., assignor to General Electric Company. Wiring system. No. 1,270,555; June 25; v. 251; p. 766.
Sauerman, Henry B., Chicago, Ill. Excavating-shovel. No. 1,268,161; June 4; v. 251; p. 26.
Sauerman, Henry B., Chicago, Ill. Excavating apparatus. No. 1,269,221; June 11; v. 251; p. 344.
Sauermann, Gustave O., Kenesaw, Nebr. Automatically-operated door. No. 1,269,962; June 18; v. 251; p. 577.
Sault, Thomas B., assignor of one-half to G. S. Meredith, Milwaukee, Wis. Lathe-tool. No. 1,269,315; June 11; v. 251; p. 370.
Saunders, Cecil L., Ithaca, N. Y. Cleaning device. No. 1,270,216; June 18; v. 251; p. 645.
Saunders, Lewis E., and R. H. White, Niagara Falls, N. Y., assignors to Norton Company, Worcester, Mass. Preparing aluminous abrasives. No. 1,269,222; June 11; v. 251; p. 344.
Saunders, Lewis E., Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass. Purifying aluminous materials. No. 1,269,223; June 11; v. 251; p. 344.
Saunders, Lewis E., Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass. Purifying aluminous materials. No. 1,269,224; June 11; v. 251; p. 344.
Savage Tire Company, The. (See Morris, Howard I., assignor.)
Savels, John. (See Nixon and Savels.)
Scalbom, Oscar L., Chicago, Ill. Signal. No. 1,268,162; June 4; v. 251; p. 26.
Scanes, Arthur E. L., Ashton-on-Mersey, England. Gage. No. 1,268,497; June 4; v. 251; p. 122.
Scanes, Arthur E. L., Ashton-on-Mersey, assignor to The British Westinghouse Electric & Manufacturing Company, Limited, London, England. Pump or compressor. No. 1,268,498; June 4; v. 251; p. 122.
Schaab, John J., St. Louis, Mo. Safety attachment for garment-pockets. No. 1,268,499; June 4; v. 251; p. 122.
Schade, Wilbert C., Meadville, Pa. Iron casting. No. 1,269,963; June 18; v. 251; p. 577.
Schaefer, Frederic, Pittsburgh, Pa. Method of forming pin-eyes in metal bars. No. 1,270,059; June 18; v. 251; p. 603.
Schaeffer, Calvin A., Brentwood, Md. Folding-chair. No. 1,268,631; June 4; v. 251; p. 160.
Schaffer, John C., Tiffin, Ohio. Feeding device. No. 1,270,332; June 25; v. 251; p. 704.
Scharf, George, Crown Point, Ind. Fastening device for doors, &c. No. 1,270,060; June 18; v. 251; p. 603.
Scharlie, John, Janesville, Wis. Post-hole auger. No. 1,270,556; June 25; v. 251; p. 766.
Schauffelberger, Emile, Putney, London, England. Flexible coupling. No. 1,268,632; June 4; v. 251; p. 161.
Schenk, Tamis C., Amsterdam, assignor to J. W. A. de Wild, Rotterdam, Netherlands. Clamping device for the connection of poles, balks, and the like. No. 1,269,964; June 18; v. 251; p. 577.

Schenkelberger, Albert F., Quincy, assignor to Safepack Paper Mills, Brockton, Mass. Reinforced impervious paper and making same. No. 1,270,250; June 18; v. 251; p. 654.
Schepmoes, Lindsley, Hasbrouck Heights, N. J. Decorative blocks. No. 1,268,391; June 4; v. 251; p. 92.
Scheuer, Alwin J., New York, N. Y. Hand-bag. No. 1,268,633; June 4; v. 251; p. 161.
Schilling, George W., Philadelphia, Pa. Device for removing gear-wheels, &c. No. 1,268,285; June 4; v. 251; p. 61.
Schilling, Louis F., Salem, Ohio. Bed-spring fabric. No. 1,269,316; June 11; v. 251; p. 370.
Schiavin, Ernest E., Wrenshall, Minn. Fountain scrubbing-brush. No. 1,270,217; June 18; v. 251; p. 645.
Schlegel, Charles P., assignor to Schlegel Manufacturing Co., Rochester, N. Y. Robe-strap. No. 1,268,500; June 4; v. 251; p. 122.
Schlegel Manufacturing Co. (See Schlegel, Charles P., assignor.)
Schlegl, Emrich, Astoria, N. Y. Tool-holder. No. 1,269,317; June 11; v. 251; p. 370.
Schlosinger Radium Co. (See Norring and Thorne, assignors.)
Schmidt, Charles F., St. Louis, Mo. Automobile safety-lock and emergency-brake. No. 1,268,772; June 4; v. 251; p. 199.
Schmidt, Ernest E., Boston, Mass., assignor to Paramount Safety Paper Co., Chicago, Ill. Safety-paper. No. 1,269,863; June 18; v. 251; p. 552.
Schneider, Anthony, Whippany, N. J. Cigar-box. No. 1,268,164; June 4; v. 251; p. 27.
Schneider, Anthony, Whippany, N. J., assignor to Seidenberg & Co. (Inc.), New York, N. Y. Lined cigar-box. No. 1,268,163; June 4; v. 251; p. 27.
Schneider, Eberhard, New York, N. Y. Flexible shaft for moving-picture cameras. No. 1,270,061; June 18; v. 251; p. 603.
Schneider, George, Cleveland, Ohio. Automobile-lock. No. 1,269,318; June 11; v. 251; p. 370.
Schneider, John B., Cape Girardeau, Mo. Shears. No. 1,269,319; June 11; v. 251; p. 371.
Schobert, John, Duluth, Minn. Window-hanger. No. 1,269,864; June 18; v. 251; p. 552.
Schoch, Albert, *et al.* (See Gasser, William B., assignor.)
Schoellkopf, William, Cleveland, Ohio. Spring-cushioned automobile-wheel. No. 1,270,445; June 25; v. 251; p. 734.
Schoenberg, L. A. (See Weber, Ralph B., assignor.)
Schoenberger, Ralph A. (See Pape, Herman G., assignor.)
Schoenwolf, Fred, assignor to Kellogg Switchboard and Supply Company, Chicago, Ill. Relay-buzzer. No. 1,269,005; June 11; v. 251; p. 282.
Schoettle, Charles, Phillips, Wis., assignor to Friedley-Voshardt Company, Chicago, Ill. Safety bull-leader. No. 1,270,537; June 25; v. 251; p. 766.
Schofield, Frederick C., Washington, D. C., assignor to The Tobacco Stemming Machine Company, Baltimore, Md. Tobacco-stemming machine. No. 1,268,392; June 4; v. 251; p. 92.
Scholz, Emil M., New York, N. Y. Playing-cards. No. 1,269,320; June 11; v. 251; p. 371.
Schraga, Ernest H., assignor to Automatic Exploder Company, Salt Lake City, Utah. Automatic exploder. No. 1,268,634; June 4; v. 251; p. 161.
Schramm, Adolph W., Riverton, N. J., assignor to Electro Dental Manufacturing Company, Philadelphia, Pa. Chair. No. 1,268,886; June 11; v. 251; p. 249.
Schroeder, Albert F., Cleveland, Ohio. Reinforcing device. No. 1,268,887; June 11; v. 251; p. 249.
Schulz, Carl F., Jersey City, N. J. Engine-fuel-supply system. No. 1,270,446; June 25; v. 251; p. 735.
Schulz, Frederick L., and W. Kraft, Toledo, Ohio. Terminal box. No. 1,270,062; June 18; v. 251; p. 604.
Schumacher, Henry C., and W. A. Winters, Barberton, Ohio, assignors to The Diamond Match Company, Chicago, Ill. Machine for making match-box shucks. No. 1,270,333; June 25; v. 251; p. 704.
Schumacher, John and J. E., Los Angeles, Cal. Apparatus for handling plaster-board or the like. No. 1,270,334; June 25; v. 251; p. 704.
Schumacher, Joseph E. (See Schumacher, John and J. E.)
Schumacher, Joseph E., Los Angeles, Cal. Plaster-board. No. 1,268,802; June 4; v. 251; p. 208.
Schuth, Edward D., *et al.* (See Singleterry, Carter W., assignor.)
Schuth, William F., *et al.* (See Singleterry, Carter W., assignor.)
Schragenheim, Sigmund, *et al.* (See Rovensky, Frank G., assignor.)
Schwab, Bernard J., Miami, Ariz. Hinge. No. 1,268,393; June 4; v. 251; p. 93.
Schwander, Jacob N., Baltimore, Md., assignor to J. J. MacMaster, Rochester, N. Y. Shoe. No. 1,270,218; June 18; v. 251; p. 645.
Schwartz, Samuel. (See Whitener, Robert L., assignor.)
Schwarz, Bismarck R., Minneapolis, Minn. Ring-sizing tweezers. No. 1,269,321; June 11; v. 251; p. 371.
Schwarz, Mabel L. (See Schwarz, William T., assignor.)
Schwarz, William T., assignor to M. L. Schwarz, Syracuse, N. Y. Teeter. No. 1,270,219; June 18; v. 251; p. 646.
Schweitzer, Edmund O., and A. Herz, Chicago, Ill. Fuse device. No. 1,270,335; June 25; v. 251; p. 705.
Schwenk, Earl B. (See Dyer and Schwenk.)
Schwerin, Botho, assignor to Elektro-Osmose Aktiengesellschaft (Graf Schwerin Gesellschaft), Berlin, Germany. Purifying fluids. No. 1,269,006; June 11; v. 251; p. 282.
Schwerin, Samuel J., Willamette, Oreg. Wire-nail machine. No. 1,268,286; June 4; v. 251; p. 61.
Schwinn, Frank W., Chicago, Ill. Kick-starter mechanism. No. 1,268,501; June 4; v. 251; p. 123.
Sciannamea, Julius, New York, N. Y. Desk. No. 1,269,225; June 11; v. 251; p. 344.
Scott, David J., *et al.*, executors. (See Scott, Walter C., assignor.)
Scott, David J., *et al.*, executors. (See Scott and Drange, assignors.)
Scott, David J., and C. E. Drange, assignors to I. and D. J. Scott, executors of W. Scott, Plainfield, N. J. Bed-motion for printing-machines. No. 1,269,865; June 18; v. 251; p. 553.
Scott, Frank Y., Elizabeth City, N. C. Pea-harvester. No. 1,270,448; June 25; v. 251; p. 735.
Scott, Isabella, *et al.*, executors. (See Scott, Walter C., assignor.)
Scott, Isabella, *et al.*, executors. (See Scott and Drange, assignors.)
Scott, Robert W., Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated. Stop-motion device. No. 1,270,063; June 18; v. 251; p. 604.
Scott, Robert W., Boston, Mass., assignor, by mesne assignments, to Scott & Williams, Incorporated. Defective-needle alarm for knitting-machines. No. 1,270,064; June 18; v. 251; p. 604.
Scott-Snell, Charles, Ridgway, Wimbledon, assignor of one-half to Sibleys Limited, London, England. Apparatus for compressing gas or air. No. 1,270,447; June 25; v. 251; p. 735.
Scott, Walter C., Plainfield, N. J., assignor to I. Scott and D. J. Scott, executors. Plate-printing machine. No. 1,268,165; June 4; v. 251; p. 27.
Scott, William, Medford, Mass. Carbureter. No. 1,270,558; June 25; v. 251; p. 766.
Scott, William H., *et al.* (See Rovensky, Frank G., assignor.)
Scott, William M., *et al.* (See Parker, Glover O., assignor.)
Scott & Williams. (See Scott, Robert W., assignor.)
Scullin, Terrance. (See Kirby and Scullin.)
Sebastian, John R., *et al.* (See Metcalfe, Isaiah, assignor.)
Sebring, Bert A., Arvada, Colo. Motor-vehicle signaling device. No. 1,268,287; June 4; v. 251; p. 62.
Secor, John A., Laporte, Ind. Internal-combustion engine. No. 1,269,007; June 11; v. 251; p. 282.
Sedaj, John, Kenosha, Wis. Folding table. No. 1,269,008; June 11; v. 251; p. 283.
See, James W., Hamilton, Ohio. Signal for street intersections. No. 1,268,288; June 4; v. 251; p. 62.
Seidenberg & Co. (See Schneider, Anthony, assignor.)
Seiders, Irwin A., assignor of one-half to himself and one-half to A. T. Dice, Jr., Reading, Pa. Locomotive. No. 1,269,322; June 11; v. 251; p. 372.
Sejnoha, Richard, Wolsey, S. D. Machine for sealing bread-wrappers and the like. No. 1,269,866; June 18; v. 251; p. 553.
Seng Company, The. (See Dyke, Darrell F., assignor.)
Seng Company, The. (See Weyer, Theodore G., assignor.)
Sepulveda, Hipolito, *et al.* (See Workman, Peyton H., assignor.)
Sether, Johan A., *et al.* (See Johannessen and Waage, assignors.)
Sexton, Arthur E. (See Swalm and Sexton.)
Seymour, Dudley S., Oak Park, assignor to Union Special Machine Company, Chicago, Ill. Needle-lever support for sewing-machines. No. 1,269,650; June 18; v. 251; p. 492.
Shaak, George S., Avon, Pa. Advertising device. No. 1,270,220; June 18; v. 251; p. 646.
Shade, William P., Hollidaysburg, Pa. Power-generating apparatus. No. 1,270,221; June 18; v. 251; p. 646.
Shamblen, Lester R., assignor to M. C. Peters Mill Co., Omaha, Nebr. Rotary cutter. No. 1,268,394; June 4; v. 251; p. 93.
Shank, Thomas M., Bidwell, Ohio. Grain-cleaning device. No. 1,269,226; June 11; v. 251; p. 345.
Shankland, Duncan, Glasgow, Scotland. Traction-coupling. No. 1,269,651; June 18; v. 251; p. 492.
Shapter, George H. (See Larson and Shapter.)
Sharp, Howard O., assignor to West Side Foundry Company, Troy, N. Y. Oil-guard for pumps, engines, &c. No. 1,268,502; June 4; v. 251; p. 123.
Sharpnack, George. (See Elmen and Sharpnack.)
Sharpnack, Eliel L., Winthrop, Mass., assignor to S. M. P. Wood Heel Company. Heel for boots and shoes. No. 1,270,449; June 25; v. 251; p. 736.
Shatalroe, Clifford, Indianapolis, Ind. Fly-catcher. No. 1,270,222; June 18; v. 251; p. 646.
Shattuck, Abbie M., New York, N. Y. Game. No. 1,269,323; June 11; v. 251; p. 372.
Shaver, William R., Covington, Va. Combined bevel-protractor. No. 1,269,324; June 11; v. 251; p. 372.
Shavitch, Vladimir, Carmel, Cal. Inner tube. No. 1,270,223; June 18; v. 251; p. 646.
Shaw, Charles H., Babylon, N. Y., assignor to The Aeolian Company. Sound-box. No. 1,269,965; June 18; v. 251; p. 578.

Shaw, James W., Chicago, Ill. Motor-truck attachment. No. 1,269,009; June 11; v. 251; p. 283.
Shaw, John H., assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,268,503; June 4; v. 251; p. 123.
Shaw, Louis E. (See Hoexter and Shaw.)
Shaw, Walter, Dedham, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Shoe. No. 1,269,652; June 18; v. 251; p. 492.
Shaw, William, Lakewood, Ohio, assignor, by mesne assignments, to National Carbon Company, Inc. Sorting and gaging apparatus. No. 1,269,010; June 11; v. 251; p. 283.
Shea, James W., Sr., Hankinson, N. D. Power manure-lander. No. 1,268,395; June 4; v. 251; p. 93.
Sheehan, John J. (See Egan and Sheehan.)
Sheffer, Thomas B., Ashton, Idaho. Animal-trap. No. 1,268,166; June 4; v. 251; p. 28.
Shelton, John W., Tucson, Ariz., assignor to Tucson Steam Laundry Co. Fabric stretching and drying apparatus. No. 1,269,751; June 18; v. 251; p. 520.
Shelton, William G., New York, N. Y. Driving mechanism. No. 1,269,752; June 18; v. 251; p. 520.
Shepard, Artemas P., Fresno, Cal. Apparatus for treating raisins. No. 1,269,966; June 18; v. 251; p. 578.
Sheridan Iron Works, The, *et al.* (See Bredenberg, Alfred, assignor.) (Reissue.)
Sherman, John Q., Dayton, Ohio. Autographic register. No. 1,268,888; June 11; v. 251; p. 249.
Shettler, Leon T., Los Angeles, Cal. Universal wind-shield. No. 1,268,773; June 4; v. 251; p. 199.
Shignon, Nathan A., New York, N. Y. Refractometer. No. 1,270,336; June 25; v. 251; p. 705.
Shoecraft, Leon W., Raymond, S. D. Fence-post. No. 1,268,167; June 4; v. 251; p. 28.
Shoenberg, Isaac, London, England, assignor to Marconi Wireless Telegraph Company of America, New York, N. Y. Method for multiplying the frequency of electric currents. No. 1,269,011; June 11; v. 251; p. 284.
Shope, David F., Portland, Oreg. Waterproofing and ornamenting objects. No. 1,270,450; June 25; v. 251; p. 736.
Shuff, William H., Kansas City, Mo. Artificial bait known as plugs or wood minnows. No. 1,268,635; June 4; v. 251; p. 162.
Shum, Orie C., Bedford, Iowa. Fuel-vaporizer. No. 1,269,753; June 18; v. 251; p. 520.
Shuman, Frank G., Chicago, Ill. Tag-holder for pricing systems. No. 1,269,867; June 18; v. 251; p. 553.
Shuyler, Millard F., assignor of one-half to T. F. Maguire, St. Louis, Mo. Nut-lock. No. 1,270,224; June 18; v. 251; p. 647.
Sibleys Limited. (See Scott-Snell, Charles, assignor.)
Siderman, Louis, Detroit, Mich. Necktie-holder. No. 1,268,396; June 4; v. 251; p. 93.
Siebel, Frederick P., assignor to Siebel Institute of Technology, Chicago, Ill. Bread-making. No. 1,269,754; June 18; v. 251; p. 521.
Siebel Institute of Technology. (See Siebel, Frederick P., assignor.)
Siemens & Halske, A. G. (See Franke, Adolf, assignor.)
Siewert, Lawrence C., Trempealeau, Wis. Oil-can. No. 1,270,337; June 25; v. 251; p. 705.
Sigler, Charles B., assignor of one-third to H. E. Johnson, Knightstown, Ind. Game-board. No. 1,268,397; June 4; v. 251; p. 93.
Signode System. (See Rothermel, Curtis J., assignor.) (Reissue.)
Sigurdson, Eirikur H., Winnipeg, Manitoba, Canada. Mechanical movement. No. 1,268,289; June 4; v. 251; p. 62.
Silberrad, Oswald, Buckhurst Hill, England. Sulfur dye. No. 1,268,803; June 4; v. 251; p. 208.
Sill, John H., Towanda, Pa. Combined chair and table. No. 1,269,967; June 18; v. 251; p. 578.
Silva, Joaquin F., Central Lutgardita, Cuba. Apparatus for unloading railway-cars. No. 1,268,504; June 4; v. 251; p. 123.
Silverberg, Harry, and C. W. Burger, Washington, D. C., assignors of one-fourth to said Burger and three-fourths to said Silverberg. Buttonhole-cutting machine. No. 1,268,398; June 4; v. 251; p. 94.
Silverthorne, William E. (See Ferguson, George E., assignor.)
Simmons Company. (See McMullen, Earle W., assignor.)
Simmons Forced Draft Company. (See Simmons, Lee H., assignor.)
Simmons, Jesse C., assignor to The Four Drive Tractor Company, Big Rapids, Mich. Tractor-gearing. No. 1,269,755; June 18; v. 251; p. 521.
Simmons, Lee H., Goldsboro, N. C., assignor to Simmons Forced Draft Company. Forced-draft furnace-grate. No. 1,270,065; June 18; v. 251; p. 604.
Simmons, Oliver G., Rochester, N. Y. Hobbing-cutter. No. 1,269,123; June 11; v. 251; p. 315.
Simon, Frank M., *et al.* (See Gillette, Amos H., assignor.)
Simons, William J., *et al.* (See Gillette, Amos H., assignor.)
Simpson, Earl J., Schenectady, N. Y. Game-board. No. 1,269,560; June 11; v. 251; p. 434.
Simpson, Sumner, assignor to The Raybestos Co., Bridgeport, Conn. Clutch-facing. No. 1,270,559; June 25; v. 251; p. 767.
Sincare, Antonio C., Winthrop, Mass. Folding steering-wheel. No. 1,268,505; June 4; v. 251; p. 124.
Sincare, Antonio C., Winthrop, Mass. Pivoted steering-wheel. No. 1,268,506; June 4; v. 251; p. 124.
Sinclair, George. (See McGann, Owen J., assignor.)
Sindt, John C., Peetz, Colo. Packer-rim. No. 1,270,560; June 25; v. 251; p. 767.
Singer, Alexander, Peekskill, N. Y. Chair attachment. No. 1,269,325; June 11; v. 251; p. 372.
Singer Manufacturing Company, The. (See Abercrombie, Charles M., assignor.)
Singer Manufacturing Company, The. (See Barron and Osol, assignors.)
Singer Manufacturing Company, The. (See De Voe, Albert H., assignor.)
Singer Manufacturing Company, The. (See Ringe, John C., assignor.)
Singleterry, Carter W., Downers Grove, assignor of one-fourth to E. D. Schuth and one-fourth to W. F. Schuth, Chicago, Ill. Clothes-drier. No. 1,269,012; June 11; v. 251; p. 284.
Sinjem, Ingvald, Hayfield, Minn. Adjustable bed. No. 1,269,868; June 18; v. 251; p. 554.
Sinkes, Roscoe C., Chicago, Ill. Apparatus for manufacturing ice. No. 1,268,168; June 4; v. 251; p. 28.
Sinsabaugh, Charles F., South Waverly, Pa., assignor of one-third to C. A. Taylor, Sayre, Ind. Valve-rod clamp. No. 1,268,636; June 4; v. 251; p. 162.
Skelly, Bernard H., Bridgeport, Conn. Lubricator. No. 1,269,869; June 18; v. 251; p. 554.
Skiff, Frank S., Portland, Oreg. Amalgamating apparatus. No. 1,268,399; June 4; v. 251; p. 94.
Skilliman, Anna L., Pluckemin, N. J. Paper-clip. No. 1,270,451; June 25; v. 251; p. 736.
Skinner, Richard M. (See McNabb and Skinner.)
Slater, Guy P., Tulsa, Okla. Derrick. No. 1,269,326; June 11; v. 251; p. 373.
Slocomb, Frank F., Philadelphia, Pa. Leather-staking machine. No. 1,268,637; June 4; v. 251; p. 162.
Slocomb, John T., assignor to J. T. Slocomb Company, Providence, R. I. Micrometer-gage. No. 1,269,756; June 18; v. 251; p. 521.
Slocum, Edward M., Medan, Sumatra, Dutch East Indies, assignor to General Rubber Company. Process and apparatus for treating latex. No. 1,268,638; June 4; v. 251; p. 162.
Slocum, Edward M., Medan, Sumatra, Dutch East Indies, assignor to General Rubber Company. Process for treating latex and products obtained thereby. No. 1,268,639; June 4; v. 251; p. 163.
Slonaker, Robert L., Wheeling, W. Va. Antiglare attachment for headlights. No. 1,270,225; June 18; v. 251; p. 647.
Slusher, Berry, Roark, Ky. Hand-planter. No. 1,270,665; June 25; v. 251; p. 795.
Small, Dora E., Norwood, Ohio. Toy. No. 1,269,968; June 18; v. 251; p. 579.
Smiley, Robert R., Goodman, Wis. Conveyer-lag. No. 1,269,013; June 11; v. 251; p. 285.
Smirl, Orin W., Wilsey, Kans. Mail-delivering apparatus. No. 1,268,400; June 4; v. 251; p. 94.
Smith, Albert R., Bellows Falls, Vt. Car-record. No. 1,268,889; June 11; v. 251; p. 250.
Smith, Allen, Jr., of the U. S. Army. Hat-strap. No. 1,269,227; June 11; v. 251; p. 345.
Smith, Arthur B., Eden, N. Y. Nailing-strip for concrete fence-posts. No. 1,270,452; June 25; v. 251; p. 736.
Smith, Arthur R., Schenectady, N. Y., assignor to General Electric Company. Power system. No. 1,270,561; June 25; v. 251; p. 766.
Smith, Burton W. (See Haines and Smith.)
Smith, Charles A. (See Fageol and Smith.)
Smith, David J., Finsbury Park, London, and C. Towl, Forest Gate, England. Automatically operated and controlled gas-generator. No. 1,268,290; June 4; v. 251; p. 63.
Smith, Dillon F., and H. Essex, assignors to Gulf Refining Company, Pittsburgh, Pa. Making aluminum chlorid. No. 1,270,226; June 18; v. 251; p. 647.
Smith, Earl C., Augusta, Ga. Agricultural machine. No. 1,270,453; June 25; v. 251; p. 737.
Smith, Edward G., Albury, New South Wales, Australia. Shoe-drier. No. 1,270,666; June 25; v. 251; p. 795.
Smith, Elmer L., and A. E. Phelon, assignors to Package Machinery Company, Springfield, Mass. Wrapping-machine. No. 1,269,969; June 18; v. 251; p. 579.
Smith, Frank A., Chicago, Ill. Dime-bank. No. 1,269,870; June 18; v. 251; p. 554.
Smith, Frank D. (See Prange and Smith.)
Smith, Fred E., and L. Heflin, Fairfax, Okla. Sounder for telegraph-circuits. No. 1,268,890; June 11; v. 251; p. 250.
Smith, George B., New Canaan, Conn. Storm-window. No. 1,270,227; June 18; v. 251; p. 647.
Smith, Guy W., and L. Dinsmoor, Paonia, Colo. Grain-shocking mechanism. No. 1,268,169; June 4; v. 251; p. 28.
Smith, Harry J., New York, N. Y. Apparatus for making ice. No. 1,270,455; June 25; v. 251; p. 737.
Smith, Henry C., Philadelphia, Pa. Shade-bracket. No. 1,270,454; June 25; v. 251; p. 737.
Smith, Ira M., Seattle, Wash. Shoe. No. 1,269,228; June 11; v. 251; p. 345.

Smith, James C., San Francisco, Cal. Cutting and abrasive implement. No. 1,269,653; June 18; v. 251; p. 493.

Smith, Jesse M., Pittsburgh, Pa. Blow-out patch. No. 1,269,124; June 11; v. 251; p. 315.

Smith, Launcelot E. (See Zuiver, Cornelis, assignor.)

Smith, Letha B., Portland, assignor of one-half to T. P. Randall, Oregon City, Oreg. Skirt-marker. No. 1,270,251; June 18; v. 251; p. 654.

Smith, Mark, assignor to Taylor Garnett Evans & Co. Limited, Reddish, near Stockport, England. Printing-machine. No. 1,269,327; June 11; v. 251; p. 373.

Smith, Michael, Passaic, N. J. Method and apparatus for manufacturing tires, hose, and the like. No. 1,269,229; June 11; v. 251; p. 345.

Smith, Newton H., Hamilton, Ill., assignor of one-half to W. C. Howell, Keokuk, Iowa. Earth-boring tool. No. 1,269,970; June 18; v. 251; p. 580.

Smith, Oscar A., assignor, by mesne assignments, to The National-Acme Company, Cleveland, Ohio. Set-screw. No. 1,269,971; June 18; v. 251; p. 580.

Smith, Patrick, Foresthill, Cal. Fastening means for tire-grips. No. 1,269,328; June 11; v. 251; p. 373.

Smith, Richard E., Lima, Ohio. Washing-machine. No. 1,269,513; June 11; v. 251; p. 422.

Smith, Samuel W., Cedarville, Cal. Head-gate. No. 1,270,228; June 18; v. 251; p. 648.

Smith, Theodore. (See Ryan and Smith.)

Smith, Willard A., Melrose, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Attaching shank-eyed buttons. No. 1,269,125; June 11; v. 251; p. 315.

Smith, William A., assignor to The Denver Rock Drill Manufacturing Company, Denver, Colo. Rock-drill sharpener. No. 1,270,667; June 25; v. 251; p. 795.

Smock, Claude V., Portland, Oreg. Mechanism for opening and closing doors. No. 1,268,401; June 4; v. 251; p. 95.

Snedigar, Elzo E., assignor of one-half to A. W. Wells, Sioux Pass, Mont. Check-row-planter attachment. No. 1,268,291; June 4; v. 251; p. 63.

Snider, Charles A., Boise, Idaho. Pattern-drafting machine. No. 1,270,338; June 25; v. 251; p. 706.

Snider, George D. (See Orr and Snider.)

Snigo, James J., Pittsburgh, Pa. Armor for pneumatic tires. No. 1,268,402; June 4; v. 251; p. 95.

Snyder, William A. (See Hleatzman, Arthur H., assignor.)

Società Anonima Italiana Gio Ansaldo & Co. (See Delacourt, Alberto F., assignor.)

Societe Anonyme Des Automobiles & Cycles Peugeot. (See Koechlin, Isaac, assignor.)

Society of Chemical Industry in Basle. (See Bots, Paul, assignor.)

Society of Chemical Industry in Basle. (See Grob and Würgler, assignors.)

Society of Chemical Industry in Basle. (See Reber, Emil, assignor.)

Sohn, John W., Roxborough, assignor to A. T. Baker & Company, Manayunk, Philadelphia, Pa. Pile fabric. No. 1,270,229; June 18; v. 251; p. 648.

Sohn, John W., Roxborough, assignor to A. T. Baker & Company, Manayunk, Philadelphia, Pa. Pile fabric. No. 1,270,230; June 18; v. 251; p. 648.

Sommers, Sylvester A., Saginaw, Mich. Device for removing fibers from match-sticks. No. 1,269,329; June 11; v. 251; p. 373.

Sonora Phonograph Corporation. (See Brown, Thomas D., assignor.)

Sonora Phonograph Corporation. (See Farb, Pincus, assignor.)

Söraas, Ingvar, Indre Aalvik, Hardanger, Norway. Process of dissociating waste lye from the sulfite-cellulose manufacture. No. 1,268,774; June 4; v. 251; p. 199.

Sorley, Hartvig, Macomb, Ill. Aeroplane. No. 1,269,871; June 18; v. 251; p. 555.

Sorley, Hartvig, Macomb, Ill. Propelling mechanism for aeroplanes. No. 1,269,872; June 18; v. 251; p. 555.

Sorley, Hartvig, Macomb, Ill. Carriage structure for aeroplanes. No. 1,269,873; June 18; v. 251; p. 555.

Sosa, Augustus M. (See Robinson and Sosa.)

Soucy, Elzeard O., assignor of one-half to M. Lalond, Rush City, Minn. Poultry drinking-fountain. No. 1,269,874; June 18; v. 251; p. 556.

Spainhour, James S., assignor of one-half to S. F. Beckwith, Hempstead, N. Y. Aeroplane. No. 1,270,339; June 25; v. 251; p. 706.

Sparks, Shelby C., Kansas City, Mo. Display-card. No. 1,268,170; June 4; v. 251; p. 29.

Sparks-Withington Company, The. (See Marsico, Jerard R., assignor.)

Spaulding, Ferdinand O., Fairfield, Me. Dust-pan. No. 1,270,340; June 25; v. 251; p. 706.

Spaulding, Morton M., North Adams, Mass. Brake. No. 1,268,507; June 4; v. 251; p. 124.

Spaulding, Roy L., Helena, Mont. Attachment for dental engines. No. 1,268,171; June 4; v. 251; p. 29.

Speicher, Joseph E. (See Barrick and Speicher.)

Spence, Charles L., Sturgis, Mich. Manifolding-book. No. 1,270,066; June 18; v. 251; p. 605.

Spence, Fred. (See Pearce and Spence.)

Spencer, Arthur C., Washington, D. C. Brick and the like and making the same. No. 1,269,331; June 11; v. 251; p. 374.

Spicker, Frederick C. (See Stevens and Spicker.)

Spiegel, Edward, Brooklyn, N. Y. Shirt-collar. No. 1,270,067; June 18; v. 251; p. 605.

Spitz, John B., assignor of one-fourth to W. G. Royer and three-eighths to R. G. Royer, Elgin, Ill. Variable-speed-transmission mechanism. No. 1,270,562; June 25; v. 251; p. 767.

Splitdorf Electrical Company. (See De Lorme, Alfred C., assignor.)

Splitdorf Electrical Company. (See Dean, William W., assignor.)

Spoor, Cora J., and P. A. Trautman, Des Moines, Iowa. Educational device. No. 1,270,668; June 25; v. 251; p. 795.

Spray Engineering Company. (See Santos, Anthony S., assignor.)

Spreen, Orville J., St. Louis, Mo. Shoe-fastener. No. 1,270,341; June 25; v. 251; p. 706.

Springer, Heinrich H., Copenhagen, Denmark. Tightening apparatus for molding-boxes. No. 1,269,332; June 11; v. 251; p. 374.

Springfield Body Corporation of New York. (See Drum, Charles E., assignor.)

Springfield Metallic Casket Company, The. (See Burkhardt, Jacob R., assignor.)

Sroke, Mike, Lackawanna, N. Y. Wire-cutting bayonet for firearms. No. 1,269,126; June 11; v. 251; p. 316.

St. Clair, John C., Johnstown, Pa. Wire-annealing furnace. No. 1,269,973; June 18; v. 251; p. 580.

St. John, William, New York, N. Y. Composition of matter. No. 1,268,404; June 4; v. 251; p. 96.

St. Louis Washing Machine Company. (See Pfeiffer, Otto G., assignor.)

St. Louis Welding & Manufacturing Company. (See Wirth, William M., assignor.)

Stacker, Ernest C., assignor of one-half to A. Chambley, Philadelphia, Pa. Air-brush. No. 1,268,403; June 4; v. 251; p. 95.

Stacy, Charlis H. B., Foxboro, Mass. Figure wheeled toy. No. 1,270,456; June 25; v. 251; p. 737.

Stafford, Benjamin E. D. (See Flannery, Stafford, and Dodds.)

Stafford, Lac F., assignor to Fairbanks, Schock and Company, Minneapolis, Minn. Shell-plug. No. 1,269,875; June 18; v. 251; p. 556.

Stafford, Walter K., Newton, Mass. Nut-lock. No. 1,269,972; June 18; v. 251; p. 580.

Stake, Herman. (See Ekvall and Stake.)

Stamp, Clarence E. (See Beers and Stamp.)

Stancliffe, Cecil W., Toronto, Ontario, Canada, assignor to M. A. Fesler, Oakland, Cal. Indicator. No. 1,268,292; June 4; v. 251; p. 63.

Standard Parts Company, The. (See Bryant, Richard S., assignor.)

Standard Parts Company, The. (See Gressle, Charles W., assignor.)

Standard Welding Company, The. (See Bryant, Richard S., assignor.)

Standish, John F., Winthrop, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for operating on heels. No. 1,269,654; June 18; v. 251; p. 493.

Stanford, William. (See Hindley and Stanford.)

Stanger, Nathan, Malden, Mass. Rail-guard. No. 1,268,775; June 4; v. 251; p. 199.

Stanislawski, Joseph, Hammond, Ind. Wire-cutting attachment for bayonets. No. 1,268,172; June 4; v. 251; p. 29.

Stanley, Robert W., Cleveland, Ohio, assignor to Entz Motor Car Corporation. Brush-holder. No. 1,268,293; June 4; v. 251; p. 63.

Stanley Rule & Level Company, The. (See Parker, Harry E., assignor.)

Stanley Works, The. (See Rowland, William S., assignor.)

Stansbery, Warren H., Grand Haven, Mich. Double-ended crochet-hook and shield. No. 1,269,014; June 11; v. 251; p. 285.

Star Detachable Towel-Holder Co. (See Hubinger, George M., assignor.)

Starch, Benjamin. (See Starch, Emil and B.)

Starch, Emil and B., La Crosse, Wis. Milking-machine. No. 1,269,015; June 11; v. 251; p. 285.

Staszko, Bazyli, Hatfield, Mass. Snow-plow. No. 1,269,016; June 11; v. 251; p. 285.

Staszko, Bazyli, Hatfield, Mass. Curtain-hanger. No. 1,270,669; June 25; v. 251; p. 795.

Stauft, Daniel B., Uniontown, Pa. Gang-drill for cutting coal. No. 1,270,231; June 18; v. 251; p. 648.

Stearns, William F., Exeter, N. H. Insect-destroyer. No. 1,268,640; June 4; v. 251; p. 163.

Stecker, Alfred J., assignor to F. Wardell, Detroit, Mich. Electric switch. No. 1,268,173; June 4; v. 251; p. 29.

Steele, Cornelious M., *et al.* (See Workman, Peyton H., assignor.)

Steele, James R., assignor to Steele Rail Anchor Company, Owego, N. Y. Rail-fastening. No. 1,269,561; June 11; v. 251; p. 434.

Steele Rail Anchor Company. (See Steele, James R., assignor.)

Steenstrup, Christian, Schenectady, N. Y., assignor to General Electric Company. Elastic-fluid turbine. No. 1,270,232; June 18; v. 251; p. 649.

Steffens, Fred, St. Joseph, Mo. Car. No. 1,269,017; June 11; v. 251; p. 285.

Stein, Samuel F., Williamsport, Pa. Driving mechanism of power-operated sewing-machines. No. 1,270,761; June 25; v. 251; p. 819.

Steinberger, Louis, Brooklyn, N. Y. Strain-insulator provided with detachable and adjustable arcing means. No. 1,270,457; June 25; v. 251; p. 737.

Stenwick, Albert O., Red Wing, Minn. Block of clay or concrete for sewers, &c. No. 1,268,294; June 4; v. 251; p. 64.

Stephany, Ludwig. (See Luebbert and Stephany.)

Stephens, Lavinia, Englewood, N. J. Winding device. No. 1,268,174; June 4; v. 251; p. 30.

Stephenson, Leonard D., assignor of one-third to E. T. Paull, New York, N. Y. Wheel for motor-cycles. No. 1,268,641; June 4; v. 251; p. 163.

Sterling, Guy, Salt Lake City, Utah. Treating potassium-bearing silicates to obtain potassium sulfate. No. 1,268,508; June 4; v. 251; p. 124.

Stevens, Frank, and F. C. Spicker, Roundup, Mont. Pump-operating device. No. 1,270,068; June 18; v. 251; p. 605.

Stevens, Lyman S., Baltimore, Md. Apparatus for proportioning the charge of fuel and air in internal-combustion engines. No. 1,269,757; June 18; v. 251; p. 522.

Stevens, Robert L., assignor to National Spring & Wire Company, Albion, Mich. Cushion. No. 1,269,018; June 11; v. 251; p. 286.

Stevens, William C. (See Henderson and Stevens.)

Stevens, William C., Summit, N. J., assignor to The Cutler-Hammer Mfg. Co., Milwaukee, Wis. Electric switch. No. 1,269,655; June 18; v. 251; p. 493.

Stevenson, Thomas A. M., Winston-Salem, N. C. Smelting-furnace. No. 1,269,974; June 18; v. 251; p. 580.

Stewart, Annie L., South Auburn, Nebr. Stove-lock. No. 1,268,175; June 4; v. 251; p. 30.

Stewart, John K., deceased, Chicago, Ill.; J. B. Stewart, executrix, Northport, N. Y. Drive-chain. No. 1,269,656; June 18; v. 251; p. 494.

Stewart, Julia B., executrix. (See Stewart, John K.)

Stewart, T. E., trustee. (See Pifer, George N., assignor.)

Stewart Warner Speedometer Corporation. (See Higginson and Arundel, assignors.)

Stewart-Warner Speedometer Corporation. (See Ross, Frank A., assignor.)

Stewart, William A., San Francisco, Cal. Condiment-holder. No. 1,269,127; June 11; v. 251; p. 316.

Stewart, William C., Swampscott, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Sole-leveling machine. No. 1,268,295; June 4; v. 251; p. 64.

Stewart, William F., assignor to American Water Heater Company, St. Louis, Mo. Gas-burner. No. 1,269,333; June 11; v. 251; p. 374.

Stewart, William J., Chicago, Ill. Vehicle-hub. No. 1,270,069; June 18; v. 251; p. 605.

Stickney, Burnham C., Elizabeth, N. J., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,270,241; June 18; v. 251; p. 651.

Stickney, Burnham C., Elizabeth, N. J., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,270,242; June 18; v. 251; p. 651.

Stickney, Burnham C., Elizabeth, N. J., assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,270,243; June 18; v. 251; p. 652.

Stilwill, Fred W., assignor of one-half to G. M. Atwell, Chicago, Ill. Calculating-machine. No. 1,269,876; June 18; v. 251; p. 556.

Stimpson, Edward S., assignor, by mesne assignments, to Draper Corporation, Hopedale, Mass. Battery-feed for looms. No. 1,269,975; June 18; v. 251; p. 581.

Stockinger, Rude, Manitowoc, Wis. Electric vibrator. No. 1,270,342; June 25; v. 251; p. 707.

Stokes, Henry W. (See Baker, Webster E. B., assignor.)

Stokes & Smith Company. (See Carlson, Walter C., assignor.)

Stokes & Smith Company. (See Reifsnyder and Weightman, assignors.)

Stommel, Hugo, Red Bank, N. J. Tile-coating apparatus. No. 1,268,891; June 11; v. 251; p. 250.

Stone, James C., Russellville, Ala. Excavating-tooth. No. 1,270,670; June 25; v. 251; p. 796.

Stone, John N., Gowanda, N. Y. Knockdown sheet-metal locker. No. 1,268,509; June 4; v. 251; p. 125.

Stoorman, Max, New York, N. Y. Rotary tooth-brush. No. 1,270,233; June 18; v. 251; p. 649.

Storjohann, Henry, Garwin, Iowa. Hog-oiler. No. 1,270,234; June 18; v. 251; p. 649.

Stough, Samuel M. (See Larick and Stough.)

Stout, Frank F. (See Stout, Wilson D. and F. F.)

Stout, James E. (See Bair and Stout.)

Stout, Wilson D. and F. F., Los Angeles, Cal. Direction-signal for motor-vehicles. No. 1,270,563; June 25; v. 251; p. 768.

Stoute, Richard A., Branksmere, Barbados, British West Indies. Shaft-tip. No. 1,268,405; June 4; v. 251; p. 96.

Straight, Bennett D., assignor, by mesne assignments, to Butter Serving Machine Company, Inc., Rochester, N. Y. Butter-server. No. 1,268,510; June 4; v. 251; p. 125.

Strauss, Albert A. (See Benjamins, Israel, assignor.)

Strauss, Joseph B., Chicago, Ill. Suspension lift-bridge. No. 1,269,976; June 18; v. 251; p. 581.

Streit, Carl F., Cincinnati, Ohio. Bed corner-iron. No. 1,269,977; June 18; v. 251; p. 581.

Strens, Emilio de Gazzada, Italy. Steam-boiler. No. 1,268,549; June 4; v. 251; p. 136.

String, Joseph S., East Orange, N. J. Service tap-valve for gas-mains. No. 1,268,511; June 4; v. 251; p. 125.

Stringes, Ernest J., Chicago, Ill. Railway-rail. No. 1,269,657; June 18; v. 251; p. 494.

Strohm, William H. (See Grainger and Strohm.)

Stuart, Alexander T. (See Clark and Stuart.)

Stuart, Alexander T., assignor to The Toronto Power Company Limited, Toronto, Ontario, Canada. Electrode. No. 1,269,128; June 11; v. 251; p. 315.

Stubbs, Orace V., Buda, Tex. Boll-weevil exterminator. No. 1,269,334; June 11; v. 251; p. 374.

Stuck, George O. (See Adelsperger and Stuck.)

Stukart, Hendrik, assignor to U. S. Slicing Machine Company, Laporte, Ind. Power mechanism for slicing-machines. No. 1,268,176; June 4; v. 251; p. 30.

Stull, Jacob H., Fremont, Ohio. Rail-joint. No. 1,268,296; June 4; v. 251; p. 54.

Sturrock, George A., Port Townsend, Wash., assignor of one-fourth to R. E. and G. G. Herring, San Francisco, Cal. Hand seed-planter. No. 1,269,877; June 18; v. 251; p. 557.

Stutz, John C., McCleary, Wash. Door-stacking machine. No. 1,268,177; June 4; v. 251; p. 30.

Stutz, John C., McCleary, Wash. Truck. No. 1,268,178; June 4; v. 251; p. 30.

Submarine Signal Company. (See Fessenden, Reginald A., assignor.)

Suess, John B., Seattle, Wash. Lens for automobile-headlights. No. 1,269,978; June 18; v. 251; p. 581.

Sullivan Machinery Company. (See Mercer, Henry H., assignor.)

Sundstrand, Gustaf D., assignor to Rockford Tool Company, Rockford, Ill. Bevel-gear generator. No. 1,268,512; June 4; v. 251; p. 126.

Sunila, Emil. (See Fagerlund and Sunila.)

Sunnen, August, Mexico, Mo. Automobile-radiator protector. No. 1,268,892; June 11; v. 251; p. 251.

Sutcliffe, Willis J., Waterloo, Iowa. Actuating means for radiator-protectors. No. 1,268,297; June 4; v. 251; p. 65.

Sutherland, Alexander K., assignor to The Trumbull Electric Manufacturing Company, Plainville, Conn. Push-button switch. No. 1,268,804; June 4; v. 251; p. 209.

Swain, Charles E., Telstad, Mont. Weeding-machine. No. 1,269,129; June 11; v. 251; p. 316.

Swalm, William E., and A. E. Sexton, Los Angeles, Cal. Apparatus for treating photographic prints and the like. No. 1,268,406; June 4; v. 251; p. 96.

Swan, John H., assignor to Klipfel Manufacturing Co., Chicago, Ill. Indicator for thermostats. No. 1,269,758; June 18; v. 251; p. 252.

Swanson, Carl R., Marshall, Minn. Floating equipment. No. 1,268,179; June 4; v. 251; p. 31.

Swanson, Olof, Kindersley, Saskatchewan, Canada. Plow. No. 1,268,893; June 11; v. 251; p. 251.

Swanson, Starley S., Bellevue, Ohio. Fertilizer-distributer. No. 1,270,070; June 18; v. 251; p. 606.

Swanson, Starley S., Bellevue, Ohio. Feeding mechanism for fertilizer-distributers. No. 1,270,071; June 18; v. 251; p. 606.

Swartz, John L., Akron, Ohio. Cushion-tire and producing the same. No. 1,268,298; June 4; v. 251; p. 65.

Sweeney, Edward, Norristown, Pa. Artificial limb. No. 1,268,642; June 4; v. 251; p. 163.

Sweezey, Robert J., Cliftondale, Mass. Angle-finder. No. 1,270,564; June 25; v. 251; p. 768.

Swenson, Gustaf E. (See Gabrielson and Swenson.)

Swenson, Martin. (See Baldwin and Swenson.)

Symonds, John K. (See Casper and Symonds.)

Synthetic Patents Co. (See Hagemann, Carl, assignor.)

Synthetic Patents Co. (See Walther, Hans, assignor.)

Syred, Frank W., High Wycombe, England. Expanding table. No. 1,270,458; June 25; v. 251; p. 738.

Szalewicz, Tomasz. (See Elwertoski, Antoni, assignor.)

Szmyt, Franciszek, Bayonne, N. J. War protecting-suit. No. 1,269,019; June 11; v. 251; p. 286.

Szmyt, Franciszek, Collinsville, Okla. Bullet-shield. No. 1,270,343; June 25; v. 251; p. 707.

T. A. Willson & Co. (See Willson, Frederick, assignor.)

T. M. Chapman's Sons' Company. (See Chapman, Ralph W., assignor.)

T. W. & C. B. Sheridan Company, *et al.* (See Bredenberg, Alfred, assignor.) (Reissue.)

Tactkian, Stephen, New York, N. Y. Measuring device for fluid-tanks. No. 1,269,020; June 11; v. 251; p. 286.

Tactkian, Stephen, New York, N. Y. Camera. No. 1,269,021; June 11; v. 251; p. 286.

Tadini, Gerome F., New York, N. Y. Coupling. No. 1,269,335; June 11; v. 251; p. 375.

Taft-Peirce Manufacturing Company, The. (See Martell, Albert A., assignor.)

Taft, Ryland L., Hartford, Conn., assignor to The Hartford Rubber Works Co. Bead-trimming machine. No. 1,270,459; June 25; v. 251; p. 738.

Taliaferro, John C. (See Warme and Taliaferro.)

Talpo, Adolfo. (See Bettinardi and Talpo.)

Tammen, Tamme R., Parkersburg, Iowa. Calendar. No. 1,268,407; June 4; v. 251; p. 96.

Tanaka, Kichizo, Nakashima Gun, Aichi Ken, Japan. Degumming silk, silk waste, and the like. No. 1,268,513; June 4; v. 251; p. 126.
Tanzi, Guido, assignor to Ginevra Macaroni Mold Company, St. Louis, Mo. Die construction. No. 1,269,878; June 18; v. 251; p. 557.
Tate, Samuel G., assignor to Union Special Machine Company, Chicago, Ill. Thread-laying mechanism for sewing-machines. No. 1,268,894; June 11; v. 251; p. 251.
Taylor, Alpha O., Binecreek, W. Va. Calipers. No. 1,269,336; June 11; v. 251; p. 375.
Taylor, Arthur B., Detroit, Mich. Chain. No. 1,270,460; June 25; v. 251; p. 739.
Taylor, Cecil A. (See Sinsabaugh, Charles F., assignor.)
Taylor Garnett Evans & Co. (See Smith, Mark, assignor.)
Taylor, Martin, *et al.*, administrators. (See Kocourek, Henry, assignor.)
Teahen, James M., Detroit, Mich. Machine for forming hollow articles of calcium resinate. No. 1,270,748; June 25; v. 251; p. 815.
Teason, Adam G., St. Louis, Mo. Vehicle-curtain. No. 1,269,337; June 11; v. 251; p. 375.
Tecktonius, Emil C., assignor to E. C. Tecktonius Manufacturing Company, Racine, Wis. Lug. No. 1,270,461; June 25; v. 251; p. 739.
Tegoll, August, San Francisco, Cal. Apparatus for drying and the like. No. 1,268,797; June 4; v. 251; p. 207.
Tell, Edward E. von, Gottenborg, Sweden. Means for securing ships'-hatch tarpaulins or similar flexible coverings. No. 1,268,189; June 4; v. 251; p. 33.
Templeton, William G., Colorado Springs, Colo., assignor, by mesne assignments, to Toledo Scale Company, Toledo, Ohio. Weighing-scale. No. 1,269,759; June 18; v. 251; p. 522.
Tennent, Melvin G., Sedro-Woolley, Wash. Wheel-rim. No. 1,269,879; June 18; v. 251; p. 557.
Tepper, Charles E., Rochester, N. Y. Core-making machine. No. 1,269,230; June 11; v. 251; p. 345.
Terlecky, John, Easton, Pa. Figure wheeled toy. No. 1,270,344; June 25; v. 251; p. 707.
Teschan, Walter F., Milwaukee, Wis. Concrete-distributing machine. No. 1,267,643; June 4; v. 251; p. 164.
Testa, Luigi, Grafton, W. Va. Grease-cellar for locomotives. No. 1,269,330; June 11; v. 251; p. 374.
Testu, Théodule. (See Lejeune-Seconney and Testu.)
Teter, Charles K., assignor to The Teter Manufacturing Company, Cleveland, Ohio. Pharyngeal inhaler. No. 1,270,565; June 25; v. 251; p. 768.
Teter Manufacturing Company, The. (See Teter, Charles K., assignor.)
Tew, James D., Akron, Ohio, assignor to The B. F. Goodrich Company, New York, N. Y. Soft-base vulcanizing-tube. No. 1,270,345; June 25; v. 251; p. 707.
Thacker, Harvey A., Leavenworth, Kans. Explosive bomb. No. 1,270,072; June 18; v. 251; p. 606.
Theatre Vending Machine Corporation. (See Perrin, Roger W., assignor.)
Thibault, Origene A., Victoriaville, Quebec, Canada. Papier-mâché toy animal and the like and making same. No. 1,270,346; June 25; v. 251; p. 707.
Thiem, Louis, Toledo, Ohio. Leak-locating detector for pneumatic tires. No. 1,270,073; June 18; v. 251; p. 606.
Thom, Harold W. (See Archibald and Thom.)
Thomas, George B., assignor to The Bryant Electric Company, Bridgeport, Conn. Snap-switch cover. (Reissue of design.) No. 14,483; June 11; v. 251; p. 440.
Thomas, George B., assignor to The Bryant Electric Company, Bridgeport, Conn. Electric switch. No. 1,270,671; June 25; v. 251; p. 796.
Thomas, Herbert M., London, England. Advertising device. No. 1,268,895; June 11; v. 251; p. 252.
Thomas, Imogen N., Troy, N. Y. Charging-fitting for beverage-carbonators. No. 1,269,130; June 11; v. 251; p. 317.
Thomas Lasting Wave Co., The. (See Campana, George G., assignor.)
Thompson, Albert J., Dunn Center, N. D. Vehicle-wheel hub. No. 1,269,131; June 11; v. 251; p. 317.
Thompson, Alfred, Detroit, Mich., assignor of fifty-one one-hundredths to L. E. Beaman, Chicago, Ill. Carbureter. No. 1,268,299; June 4; v. 251; p. 65.
Thompson, Enoch, Stafford, Kans. Combined auto puller and jack. No. 1,268,896; June 11; v. 251; p. 252.
Thompson, Robert A. (See Payne, Thompson, and Morris.)
Thomson, Jennie L., Tunkhannock, Pa. Means for teaching the alphabet and spelling. No. 1,270,566; June 25; v. 251; p. 769.
Thorne, Victor C. (See Norring and Thorne.)
Thueringer, Stephen, Makoti, N. D. Drinking-cup. No. 1,270,462; June 25; v. 251; p. 739.
Tiemann, Harry D., Madison, Wis. Dry-kiln. No. 1,268,180; June 4; v. 251; p. 31.
Tierney, James S., Brooklyn, N. Y., assignor to American Shop Equipment Co., Chicago, Ill. Furnace. No. 1,269,132; June 11; v. 251; p. 317.
Tily, Stephen R., Bala, M. O., and J. G. Rehfuss, assignors to John Wanamaker, Philadelphia, Philadelphia, Pa. Dating and mutilating machine. No. 1,269,979; June 18; v. 251; p. 582.
Timken-Detroit Axle Company, The. (See Weaver, Robert B., assignor.)
Tirrell, Warren, Brockton, Mass. Composite outer sole. No. 1,268,408; June 4; v. 251; p. 96.
Tobacco Stemming Machine Company, The. (See Schofield, Frederick C., assignor.)
Tobelmann, Henry A. (See Montgomery and Tobelmann.)
Toledo Machine & Tool Company, The. (See Lindgren, Bror J., assignor.)
Toledo Scale Company. (See Templeton, William G., assignor.)
Tonkonogy, Nathaniel A. (See Hecht, Solomon S., assignor.)
Tonolli, John P., Duluth, Minn. Adjustable crutch. No. 1,270,463; June 25; v. 251; p. 739.
Toomey, John, and J. Oldham, North Adams, Mass. Square and miter device. No. 1,270,464; June 25; v. 251; p. 740.
Toomey, John F., New York, N. Y., assignor to American Telephone and Telegraph Company. Automatic switching means. No. 1,270,465; June 25; v. 251; p. 740.
Topliff, George W., C. Bornmann, and E. C. Clark, assignors to Ansco Company, Binghamton, N. Y. Automatic film-winding camera. No. 1,268,805; June 4; v. 251; p. 209.
Toronto Power Company Limited, The. (See Clark, Ackerman, and Cansfield, assignors.)
Toronto Power Company Limited, The. (See Clark and Stuart, assignors.)
Toronto Power Company, The. (See MacDougall and Middleton, assignors.)
Toronto Power Company Limited, The. (See Stuart, Alexander T., assignor.)
Torrington Company, The. (See Dayton, James M., assignor.)
Tourrell, Maurice, Nantes, France. Variable-speed apparatus. No. 1,269,338; June 11; v. 251; p. 375.
Towl, Charles. (See Smith and Towl.)
Townsend, Daniel H., Memphis, Tenn. Sliding-door hanger. No. 1,269,133; June 11; v. 251; p. 318.
Townsend, Francis M., *et al.* (See Trumble, Milon J., assignor.)
Trabing, Charles. (See Holmberg, Oscar F., assignor.)
Trautman, Paul A. (See Spoor and Trautman.)
Travis, Homer H., Columbus, Ohio. Headlight. No. 1,270,672; June 25; v. 251; p. 796.
Treiber, Theodore R., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Table. No. 1,268,181; June 4; v. 251; p. 31.
Treiber, Theodore R., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Metal table. No. 1,268,182; June 4; v. 251; p. 31.
Treiber, Theodore R., assignor to The Brunswick-Balke-Collender Company, Chicago, Ill. Metallic table. No. 1,268,183; June 4; v. 251; p. 31.
Trenaman, Harry C., Hamilton, Ontario, Canada. Composition for waterproofing leather articles. No. 1,269,658; June 18; v. 251; p. 494.
Trenton Brass and Machine Co., The. (See Kuntzy, Gregor, assignor.)
Tressler, Guy D., Flint, assignor to General Motors Corporation, Detroit, Mich. Self-lubricating universal joint for motor-vehicle transmission-shafts. No. 1,268,897; June 11; v. 251; p. 252.
Tripe, Ferdinand J., San Bernardino, Cal. Oil container and register. No. 1,269,022; June 11; v. 251; p. 287.
Trimble, Arthur G., Pittsburgh, Pa. Ornamental pin or badge. No. 1,270,347; June 25; v. 251; p. 708.
Trotter, James, Chicago, Ill. Draft-regulating device for locomotives. No. 1,268,300; June 4; v. 251; p. 66.
Trowbridge, Emery E., Kansas City, Mo. Pavement. No. 1,268,184; June 4; v. 251; p. 31.
Trowbridge, William H., Newark, N. J. Hedge-trimmer. No. 1,269,880; June 18; v. 251; p. 557.
Troy Carriage Sunshade Company, The. (See Dillingham, Frederick A., assignor.)
Truitt, Owen K., Garrett Park, Md. Pinwheel. No. 1,268,644; June 4; v. 251; p. 164.
Trumble, Milon J., assignor of one-third to F. M. Townsend and one-third to A. J. Gutzler, Los Angeles, Cal. Crude-petroleum and natural-gas separator. No. 1,269,134; June 11; v. 251; p. 318.
Trumbull Electric Manufacturing Company, The. (See Sutherland, Alexander K., assignor.)
Trundy, Charles P., Boston, Mass. Sound-box for phonographs. No. 1,269,659; June 18; v. 251; p. 494.
Trussed Concrete Steel Company. (See Kane, Thomas H., assignor.)
Tsutsui, Harry R., Los Angeles, Cal. Turn-table. No. 1,268,409; June 4; v. 251; p. 97.
Tucker, Wilson H., Montclair, N. J., assignor to Lord & Taylor. Cold-storage installation. No. 1,268,301; June 4; v. 251; p. 66.
Tuckfield, George A., Independence, Mo. Calendar-support. No. 1,268,898; June 11; v. 251; p. 252.
Tucson Steam Laundry Co. (See Shelton, John W., assignor.)
Tufte, Emma, Berkeley, Cal. Paint. No. 1,269,980; June 18; v. 251; p. 582.
Tully, George L., and P. H. Herbert, assignors to American Optical Company, Southbridge, Mass. Goggles. No. 1,269,981; June 18; v. 251; p. 582.
Turner, John K., assignor to L. Turner, Portland, Oreg. Concentrator. No. 1,269,760; June 18; v. 251; p. 523.
Turner, Lillie. (See Turner, John K., assignor.)

Turner, Nettie V., New Smyrna, Fla. Tatting-hook and attaching means therefor. No. 1,269,660; June 18; v. 251; p. 495.
Turner, Thomas J., assignor to E. I. du Pont de Nemours Powder Company, Wilmington, Del. Producing artificial leather. No. 1,269,339; June 11; v. 251; p. 376.
Twin Blade Co. (See Appelbaum, Joseph, assignor.)
U. S. Safety Appliance Company. (See Morrow, Samuel W., assignor.)
U. S. Slicing Machine Company. (See Stukart, Hendrik, assignor.)
Ulp, Alfred R., Richmond, Va. Folding table. No. 1,270,568; June 25; v. 251; p. 769.
Ulrich, George H., Ladysmith, Wis. Cutter for second-growth saplings and the like. No. 1,269,881; June 18; v. 251; p. 558.
Ulrich, William C., assignor of one-half to P. J. Lavalle, St. Paul, Minn. Insulation-repairing device. No. 1,269,514; June 11; v. 251; p. 422.
Umberto, Umbertino, Ottawa, Ill. Motor-cycle course-indicator. No. 1,268,645; June 4; v. 251; p. 164.
Underwood Computing Machine Company. (See Degener, Gustave O., assignor.)
Underwood Computing Machine Company. (See Eachel, Emerson C., assignor.)
Underwood Computing Machine Company. (See Gumprecht, William L., assignor.)
Underwood Computing Machine Company. (See Hart, Frederick A., assignor.)
Underwood Computing Machine Company. (See Main, Fred F., assignor.)
Underwood Computing Machine Company. (See Olmsted, Osmond W., assignor.)
Underwood Computing Machine Company. (See Stickney, Burnham C., assignor.)
Underwood Computing Machine Company. (See Wright, Walter, assignor.)
Underwood Typewriter Company. (See Burridge, Lee S., assignor.)
Underwood Typewriter Company. (See Wernery, Lester A., assignor.)
Union City Body Company. (See Adelsperger and Stuck, assignors.)
Union Railway Equipment Co. (See Hall, William B., assignor.)
Union Special Machine Company. (See Seymour, Dudley S., assignor.)
Union Special Machine Company. (See Tate, Samuel G., assignor.)
Union Special Machine Company. (See Willis, Harry L., assignor.)
Union Switch and Signal Company, The. (See Lewis, Lloyd V., assignor.) (Reissue.)
United Electric Apparatus Company. (See Ziegler, Alfred A., assignor.)
United Gas Improvement Company, The. (See Rusby and Evans, assignors.)
United Sewing Machine Company. (See Armstrong, Harry Y., assignor.)
United Shoe Machinery Corporation. (See Cavanagh, James, assignor.)
United Shoe Machinery Corporation. (See Corrow, Thomas, assignor.)
United Shoe Machinery Corporation. (See Furber, Frederick M., assignor.)
United Shoe Machinery Corporation. (See Gillespie, John J., assignor.)
United Shoe Machinery Corporation. (See Gouldbourn, Joseph, assignor.)
United Shoe Machinery Corporation. (See Hill, George S., assignor.)
United Shoe Machinery Corporation. (See Jerram and Keall, assignors.)
United Shoe Machinery Corporation. (See La Chapelle, Fred N., assignor.)
United Shoe Machinery Corporation. (See La Rouche, Joseph H., assignor.)
United Shoe Machinery Corporation. (See Littlefield, Augustine F., assignor.)
United Shoe Machinery Corporation. (See Morris, George H., assignor.)
United Shoe Machinery Corporation. (See Preble, Edwin N., assignor.)
United Shoe Machinery Corporation. (See Shaw, Walter, assignor.)
United Shoe Machinery Corporation. (See Smith, Willard A., assignor.)
United Shoe Machinery Corporation. (See Standish, John F., assignor.)
United Shoe Machinery Corporation. (See Stewart, William C., assignor.)
United Shoe Machinery Corporation. (See Wentworth, Pearl J., assignor.)
United Shoe Machinery Corporation. (See Winkley, Erastus E., assignor.)
United States Spot Ground Corporation. (See Gibson, Albert T., assignor.)
United Table-Bed Company. (See Klok, Carl R., assignor.)
Universal Draft Gear Attachment Co. (See Nash, Charles J., assignor.)
Universal Faucet Company. (See Bergens, William J., assignor.)
Universal Optical Corporation. (See Beattey, Earle J. R., assignor.)
Universal Patents Company. (See Batchelder, Frank R., assignor.)
Upham, Preston, Boston, Mass., assignor to International Pavement Company, Hartford, Conn. Press. No. 1,270,569; June 25; v. 251; p. 769.
Upton, George W., Warren, Ohio. Life-preserver. No. 1,269,982; June 18; v. 251; p. 582.
Urbin, Adolf P. C., Jr., Mount Vernon, N. Y. Liquid-fountain. No. 1,268,646; June 4; v. 251; p. 165.
Van Allen, Erwin. (See Russell and Van Allen.)
Van Assche, Albert E., Dearborn, Mich. Oil-burner. No. 1,268,514; June 4; v. 251; p. 126.
Van Brunt, Tunis, Kansas City, Mo. Bundle-topper. No. 1,269,761; June 18; v. 251; p. 523.
Van Buren, Charles M., Paterson, N. J. Toy sailing-craft. No. 1,270,466; June 25; v. 251; p. 740.
Van Decar, George W., Troy, N. Y. Neck and wrist wear. No. 1,270,673. June 25; v. 251; p. 797.
Van Eenwyk, Frank H. (See Longrod, Peter I., assignor.)
Van Keuren, William L., North Bergen, N. J., assignor to General Electric Company. Leading-in conductor. No. 1,268,647; June 4; v. 251; p. 165.
Van Meeteren, Harry W., assignor of one-third to A. Edwards and one-third to H. Headley, Birmingham, England. Mode of and means for assembling pneumatic or elastic tires in relation to rims or wheels. No. 1,268,185; June 4; v. 251; p. 32.
Van Meter, John N., assignor of one-third to F. W. Kidder and one-third to F. S. Hazelton, Norton, Kans. Thermostatic safety-valve. No. 1,268,648; June 4; v. 251; p. 165.
Van Ness, Henry E., Elmira, N. Y. Coasting-sprocket. No. 1,270,570; June 25; v. 251; p. 770.
Van Orden, George R. (See Keiper, Frank, assignor.)
Van Sicklen Company, The. (See Prouty, Theodore C., assignor.)
Van Tassel, George, Cedar Rapids, Iowa. Safety steering mechanism. No. 1,269,136; June 11; v. 251; p. 318.
Vanderkleed, Charles E., Collingswood, N. J., and J. E. Brewer, Norristown, assignors of one-fifth to W. M. Field, Haverford, one-fifth to H. J. Verner, Bryn Mawr, Pa., and one-fifth to Fritz Heidlberg, Jersey City, N. J. Treating threads of cellulosic material and the threads so produced. No. 1,269,340; June 11; v. 251; p. 376.
Vandewater, Daniel, Riverton, Wash. Grinding attachment for lathes. No. 1,268,186; June 4; v. 251; p. 32.
Vanmeter, Cyrus L., Macomb, Ill. Means for operating throw-boards. No. 1,269,135; June 11; v. 251; p. 318.
Varley, Thomas W., *et al.* (See Nein, William C., assignor.)
Veenstra, Abram, Paterson, N. J. Level. No. 1,270,074; June 18; v. 251; p. 607.
Velde, Ernest A., Cedar Rapids, Iowa. Gardening-frame. No. 1,268,649; June 4; v. 251; p. 166.
Velk, Mike, Boswell, Pa. Bomb-throwing machine. No. 1,268,187; June 4; v. 251; p. 32.
Verbitsky, Simon, St. Clair, Pa. Safety-top for mine-cars. No. 1,269,983; June 18; v. 251; p. 582.
Verhey, Hubert C., assignor to Busch-Sulzer Bros.-Diesel Engine Company, St. Louis, Mo. Combustion-engine pump mechanism. No. 1,269,882; June 18; v. 251; p. 558.
Verner, Harry J., *et al.* (See Vanderkleed and Brewer, assignors.)
Vernia, Sylvester A., Indianapolis, Ind. Gun. No. 1,269,661; June 18; v. 251; p. 495.
Verona Tool Works. (See Richardson and Woodings, assignors.)
Vest, Joseph R. (See Benton and Vest.)
Viano, Arthur F. (See Jeffries, William O., assignor.)
Victel, Olaf A., and M. E. Porter, Tolley, N. D. Automobile-lifting appliance. No. 1,270,571; June 25; v. 251; p. 770.
Videla, Pedro, Santiago, Chile. Hydraulic motor. No. 1,270,674; June 25; v. 251; p. 797.
Vogelsang, Arthur, Waterbury, Conn., assignor to Waterbury Button Company, Button. No. 1,270,467; June 25; v. 251; p. 741.
Vigoureux, E. M., *et al.* (See Brown, Marvin H., assignor.)
Vincent, Edward H., Detroit, Mich. Shiftable steering-wheel. No. 1,269,341; June 11; v. 251; p. 376.
Vincent, William J., Cardiff, Wales. Rotary hydraulic apparatus. No. 1,268,515; June 4; v. 251; p. 126.
Vinson, William A., *et al.* (See Dugan, Joseph A., assignor.)
Voelker, Carl V., Wilkes-Barre, Pa. Dry closet. No. 1,270,075; June 18; v. 251; p. 607.
Vogt, Axel S., Altoona, Pa. Track-scale. No. 1,269,231; June 11; v. 251; p. 346.
Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,270,468; June 25; v. 251; p. 741.
Voight, Henry G., New Britain, assignor to Sargent & Company, New Haven, Conn. Lock. No. 1,270,469; June 25; v. 251; p. 741.
Volz, George, assignor to Volz-Guild Company, Inc., Buffalo, N. Y. Railway-rail. No. 1,268,188; June 4; v. 251; p. 33.

Volz-Guild Company. (See Volz, George, assignor.)
Von Baldass, Max, New York, N. Y. Glove. No. 1,268,516; June 4; v. 251; p. 127.
Von Beaulieu, Albert, Owego, N. Y. Babbitting-fixture. No. 1,269,137; June 11; v. 251; p. 319.
Vreeland, Walter G., assignor to Lacey Manufacturing Corporation, Chattanooga, Tenn. Resilient attachment for well-casings. No. 1,269,232; June 11; v. 251; p. 346.
Vukosav, Mike P., West Oakland, Cal. Life-saving apparel. No. 1,268,806; June 4; v. 251; p. 209.
W. J. Savage Company. (See Gauntt, Forest G., assignor.)
W. R. Ostrander & Company. (See Wurster, George B., assignor.)
Waage, Osborne A. (See Johannessen and Waage.)
Wabers, Henry H., Wautoma, Wis., assignor of one-fourth to C. J. Farwell and C. Farwell. Potato separator and grader. No. 1,269,342; June 11; v. 251; p. 376.
Wacker, Aloysius, Pierz, Minn. Pump-jack. No. 1,269,343; June 11; v. 251; p. 377.
Wacker, George W., Rutherford, N. J., assignor to National Carbon Company Inc., New York, N. Y. Electrical system for motor-vehicles. No. 1,269,344; June 11; v. 251; p. 377.
Wade, George, Longport, England. Stopping device for bottles and the like. No. 1,268,899; June 11; v. 251; p. 253.
Wadsworth, George R., Boston, Mass., assignor to The Peerless Motor Car Company, Cleveland, Ohio. Fastening and locking means for the hoods of automobiles. No. 1,269,023; June 11; v. 251; p. 287.
Wadsworth, William H., Chickasha, Okla. Railway-tie. No. 1,269,345; June 11; v. 251; p. 377.
Waehler, Raymond C., Lomira, Wis. Cattle-stanchion. No. 1,269,346; June 11; v. 251; p. 378.
Waffen, August J. (See King, Josephine, assignor.)
Waggoner, Lloyd B., San Diego, Cal. Envelop-moistener. No. 1,270,470; June 25; v. 251; p. 741.
Wahl Company, The. (See Poole, Arthur F., assignor.)
Wahl Company, The. (See Wahl, John C., assignor.)
Wahl, John C., Chicago, Ill., assignor, by mesne assignments, to The Wahl Company, Wilmington, Del. Calculating-machine. No. 1,270,471; June 25; v. 251; p. 741.
Waite, Harry C., Piqua, Ohio, assignor, by mesne assignments, to Elgin Tractor Corporation. Traction-tread device for tractor-wheels. No. 1,268,517; June 4; v. 251; p. 127.
Waite, Ossian T. (See Brooks, John C., assignor.)
Waitt, George L., Buffalo, N. Y. Hinge for journal-boxes and the like. No. 1,270,076; June 18; v. 251; p. 607.
Walker, Emery L., assignor to Kleckhefer Box Company, Milwaukee, Wis. Package-sealing machine. No. 1,270,572; June 25; v. 251; p. 770.
Walker, Samuel, Jerome, Ariz. Wheeled scraper. No. 1,269,347; June 11; v. 251; p. 378.
Walker, William J., Lacrosse, Wash. Attachment for harvester-headers. No. 1,268,302; June 4; v. 251; p. 66.
Wall, Arthur L., Boonville, N. C. Acetylene-gas generator. No. 1,268,650; June 4; v. 251; p. 166.
Wall, August A., Brooklyn, N. Y. Terminal clamp for coil-winding machines. No. 1,270,077; June 18; v. 251; p. 607.
Wallace, Benjamin B., Poughkeepsie, N. Y., assignor to Moline Plow Company. Wheel-plow. No. 1,269,138; June 11; v. 251; p. 319.
Wallace, Lewis R., Waltham, Mass., assignor to Nevens-Wallace Train Control Company. Train-stop mechanism. No. 1,269,662; June 18; v. 251; p. 495.
Walls, Alexander G., assignor to Walter McGee & Son, Limited, Paisley, Scotland. Pump. No. 1,270,573; June 25; v. 251; p. 775.
Walsh, James. (See Gunning, John, assignor.)
Walter, Henry, Sanders, Idaho. Caster. No. 1,268,651; June 4; v. 251; p. 166.
Walter McGee & Son. (See Walls, Alexander G., assignor.)
Walther, Hans, Leverkusen, near Cologne, Germany, assignor to Synthetic Patents Co., Inc., New York, N. Y. Cotton material with white-effect threads and making it. No. 1,270,348; June 25; v. 251; p. 708.
Walton, James, Phoenicia, N. Y. Electric flasher. No. 1,268,652; June 4; v. 251; p. 166.
Wanamaker, Charles B., assignor to Leedy Manufacturing Company, Indianapolis, Ind. Tensioning device for tympani. No. 1,269,984; June 18; v. 251; p. 583.
Wannt, John, Pittsburgh, Pa. Swimming device. No. 1,268,303; June 4; v. 251; p. 67.
Wanner, Albert, Jr., New York, N. Y. Umbrella and similar stand. No. 1,268,190; June 4; v. 251; p. 33.
Wanner, Edwin P., New York, N. Y. Table, stand, and the like. No. 1,268,191; June 4; v. 251; p. 34.
Wappler Electric Company. (See Wappler, Reinhold H., assignor.)
Wappler, Reinhold H., New York, N. Y., assignor to Wappler Electric Company, Inc. Refracting stereoscope. No. 1,269,663; June 18; v. 251; p. 495.
Wardell, Fred. (See Stecker, Alfred J., assignor.)
Wardman, Hallock, Racine, Wis. Hacksaw-machine. No. 1,269,883; June 18; v. 251; p. 558.
Ware, Howard T., El Paso, Tex. Adjustable support. No. 1,269,664; June 18; v. 251; p. 496.
Warga, George, Hoboken, N. J. Puzzle. No. 1,269,233; June 11; v. 251; p. 347.
Warme, Iver F., Syracuse, N. Y., and J. C. Taliaferro, Baltimore, Md., assignors to Continental Can Company, Incorporated, Syracuse, N. Y. Filled-can-closing apparatus. No. 1,270,078; June 18; v. 251; p. 607.
Warminski, Piotr, Baltimore, Md. Projectile and cannon. No. 1,269,884; June 18; v. 251; p. 559.
Warminski, Piotr, Baltimore, Md. Observation device. No. 1,269,885; June 18; v. 251; p. 559.
Warner, Alonzo A., assignor to Landers, Frary & Clark, New Britain, Conn. Grinding-disk. No. 1,269,762; June 18; v. 251; p. 523.
Warner, Arthur W., Sewickley, assignor to Riter-Conley Manufacturing Company, Pittsburgh, Pa. Control mechanism for gas-generating apparatus. No. 1,270,472; June 25; v. 251; p. 742.
Warner and Swasey Company, The. (See Fecker, Gottlieb, assignor.)
Warner, John H., assignor to The Warner Spinner-Novelty Company, Dayton, Ohio. Combination ornament and heat-indicator for horseless vehicles. No. 1,269,234; June 11; v. 251; p. 347.
Warner Spinner-Novelty Company, The. (See Warner, John H., assignor.)
Warnock, Robert, assignor to Empire Cream Separator Company, Bloomfield, N. J. Pulsator for milking-machines. No. 1,270,473; June 25; v. 251; p. 742.
Warren, Ambrose G., Beverly, N. J. Dust-collector. No. 1,268,304; June 4; v. 251; p. 67.
Warren, Levi B., Butternut, Mich. Cream-skimming device. No. 1,269,348; June 11; v. 251; p. 378.
Warren Webster & Company. (See Montreuil, Francis H., assignor.)
Warwick, Rogers M., and E. V. Nessling, assignors to General Wire Tie Company, Chicago, Ill. Feed device for machines for tying objects with wire. No. 1,268,305; June 4; v. 251; p. 67.
Wasson Engineering and Supply Company. (See Wasson, Frank A., assignor.)
Wasson, Frank A., Milwaukee, Wis., assignor to Wasson Engineering and Supply Company, Santa Rosa, Cal. Roller-bearing. No. 1,269,235; June 11; v. 251; p. 347.
Wastie, Edward B., Billings, Mont. Advertising-display device. No. 1,269,024; June 11; v. 251; p. 287.
Waterbury Button Company. (See Vogelsang, Arthur, assignor.)
Waterbury Clock Co. (See Roberge, Joseph L., assignor.)
Waterbury Mfg. Co. (See Zinno, Frank D., assignor.)
Waterholter, Herman, Portland, Oreg. Hay and cotton trier. No. 1,270,349; June 25; v. 251; p. 708.
Waterman, Ebenezer S., Walla Walla, Wash. Changeable-speed mechanism. No. 1,269,885; June 18; v. 251; p. 583.
Watkins, Edmond M., New York, N. Y. Base-ball game apparatus. No. 1,269,886; June 18; v. 251; p. 559.
Watkins, Edward G., Gardner, Mass., assignor to Heywood Brothers and Wakefield Company. Chair. No. 1,270,350; June 25; v. 251; p. 708.
Watkins, Ernest, La Fayette, Ind. Music-leaf turner. No. 1,269,349; June 11; v. 251; p. 378.
Watson, Elmer E., Hamilton, Ohio. Interchangeable-key lock. No. 1,268,900; June 11; v. 251; p. 253.
Watson, George, London, England. Refuse-destructor. No. 1,270,574; June 25; v. 251; p. 771.
Watson, William A., Malden, Mass. Metal player. No. 1,269,763; June 18; v. 251; p. 524.
Watt, Walter W. (See Fite, Cephas V., assignor.)
Watts, John H., and F. D. Brown, assignors to E. J. List, Havana, Ill. Shaft-log. No. 1,270,244; June 18; v. 251; p. 652.
Watts, Julius R., Atlanta, Ga. Book-mark. No. 1,269,025; June 11; v. 251; p. 288.
Wayne Oil Tank and Pump Company. (See Baker, Linnaeus E., assignor.)
Weaver Company. (See Weaver, Victor M., assignor.)
Weaver, Ira A., assignor to The Weaver Manufacturing Company, Springfield, Ill. Bucket-pump. No. 1,268,518; June 4; v. 251; p. 127.
Weaver, James J., Galveston, Tex. Hinge construction. No. 1,269,764; June 18; v. 251; p. 524.
Weaver, Jesse T., Jackson, Mich. Automobile-signal. No. 1,268,519; June 4; v. 251; p. 128.
Weaver Manufacturing Company, The. (See Weaver, Ira A., assignor.)
Weaver, Robert B., assignor to The Timken-Detroit Axle Company, Detroit, Mich. Worm-drive rear axle. No. 1,268,192; June 4; v. 251; p. 34.
Weaver, Victor M., Harrisburg, Pa., assignor to Weaver Company. Process of purification. No. 1,269,236; June 11; v. 251; p. 348.
Webb, Fenner H., Los Angeles, Cal., assignor to W. R. Hearst, New York, N. Y. Machine for forming fudge-blocks. No. 1,268,520; June 4; v. 251; p. 128.
Webb, George R. (See Gilbert, Lewis R., assignor.)
Weber, Ralph B., assignor to L. A. Schoenberg, St. Charles, Mo. Lifting-jack. No. 1,268,410; June 4; v. 251; p. 97.
Webster Manufacturing Company. (See Heule and Graham, assignors.)
Weightman, William A. (See Reifsnyder and Weightman.)
Weil, Charles L., Port Huron, Mich. Closure for discharge-apertures in packages. No. 1,268,901; June 11; v. 251; p. 253.
Weill, Daniel, Camaguey, Cuba. Tie-clasp. No. 1,269,887; June 18; v. 251; p. 559.

Weinfeld, Alexander, New Orleans, La. Railway-ticket. No. 1,269,026; June 11; v. 251; p. 288.
Weis, John P., Nyack, N. Y., assignor, by mesne assignments, to Metropolitan Sewing Machine Corporation, Dover, Del. Seam structure for garments. No. 1,269,986; June 18; v. 251; p. 583.
Wels, William, Perham, Minn. Curb-block. No. 1,269,888; June 18; v. 251; p. 560.
Weiss, Samuel W., assignor to Globe Art Mfg. Company, Newark, N. J. Lock. No. 1,269,665; June 18; v. 251; p. 496.
Welch, Robert L., Williams, Cal. Submarine-growth cutter. No. 1,269,139; June 11; v. 251; p. 320.
Weller, Frederick, New York, N. Y. Dumb-waiter safety device. No. 1,270,079; June 18; v. 251; p. 608.
Wells, Albert A., Detroit, Mich. Telephone timer and switch. No. 1,270,080; June 18; v. 251; p. 608.
Wells, Albert W. (See Snedigar, Elzo E., assignor.)
Wells, Alfred A. (See Ellis and Wells.)
Wells, Sidney D., Madison, Wis., dedicated, by mesne assignments, to the Government of the United States. Manufacture of paper-pulp. No. 1,268,193; June 4; v. 251; p. 35.
Wells, Sidney D., Madison, Wis., dedicated, by mesne assignments, to the Government of the United States. Manufacture of paper-pulp. No. 1,269,350; June 11; v. 251; p. 379.
Welsh, Frank. (See King and Welsh.)
Welsh, John L. (See Burnett, Orbid W., assignor.)
Wendellius, Gustaf W., Cleveland, Ohio. Folding clothes-rack. No. 1,269,351; June 11; v. 251; p. 379.
Wentworth, Pearl J., Fort Thomas, Ky., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Folding-machine. No. 1,268,306; June 4; v. 251; p. 68.
Wepler, Newman A., Valley Station, Ky. Four-leaf-clover game. No. 1,270,075; June 25; v. 251; p. 797.
Werden, Frederick O., Philadelphia, Pa. Lumber-piler. No. 1,269,987; June 18; v. 251; p. 584.
Wernery, Lester A., Brooklyn, assignor to Underwood Typewriter Company, New York, N. Y. Type-writing machine. No. 1,268,521; June 4; v. 251; p. 128.
Wertin, John S., Cokedale, Colo. Friction-clutch for shafts. No. 1,269,765; June 18; v. 251; p. 524.
Weser Bros. (See Weser, John A., assignor.)
Weser, Elsie L., administratrix. (See Weser, John A.)
Weser, John A., deceased; E. L. Weser, administratrix, assignor to Weser Bros. Inc., New York, N. Y. Automatic controlling device for the motors of pneumatics. No. 1,270,382; June 25; v. 251; p. 713.
West Side Foundry Company. (See Sharp, Howard O., assignor.)
West, Wade H., Pandora, Tex. Peanut-digger. No. 1,268,902; June 11; v. 251; p. 253.
Westerfield, Granville G., assignor to The Cycle-Flyer Company, Des Moines, Iowa. Cycle-flier. No. 1,269,988; June 18; v. 251; p. 584.
Western Electric Company. (See Dunham, Bert G., assignor.)
Western Electric Company. (See Goodrum, Charles L., assignor.)
Western Electric Company. (See Reynolds, John N., assignor.)
Westinghouse Air Brake Company, The. (See Brown, Thomas R., assignor.)
Westinghouse Air Brake Company, The. (See Dewson, Edward H., assignor.)
Westinghouse Electric & Manufacturing Company, The. (See Baumann, Karl, assignor.)
Westinghouse Electric and Manufacturing Company. (See Colby, Ora A., assignor.)
Westinghouse Electric & Manufacturing Company. (See Eaton, George M., assignor.)
Westinghouse Electric and Manufacturing Company. (See Field and Behrend, assignors.)
Westinghouse Electric and Manufacturing Company. (See Hellmund, Rudolf E., assignor.)
Westinghouse Electric and Manufacturing Company. (See Lum, Walter O., assignor.)
Westinghouse Electric and Manufacturing Company. (See McCoy, James P. A., assignor.)
Westness, Louis J., Milwaukee, Wis. Sash-cord holder. No. 1,268,194; June 4; v. 251; p. 35.
Weyer, Theodore G., Chicago, Ill., assignor, by mesne assignments, to The Seng Company. Bed-davenport. No. 1,269,766; June 18; v. 251; p. 525.
Whaley, Basil H., Brook, Ind. Hog-oiler. No. 1,269,352; June 11; v. 251; p. 379.
Wheeler, Edward H., Hartford, Conn. Buckle. No. 1,268,412; June 4; v. 251; p. 97.
Wheeler, Frank G., assignor to Bleach Process Company, Appleton, Wis. Electrolyte-feeding device. No. 1,269,666; June 18; v. 251; p. 496.
Wheeler, Harry J., assignor to I. Ashline and W. J. Brockhouse, Kansas City, Mo. Knockdown basket-stand. No. 1,270,575; June 25; v. 251; p. 771.
Wheeler, James A., Somerset county, N. J. Fireproof floor. No. 1,268,307; June 4; v. 251; p. 68.
Wheildon, William M., Ashland, assignor to E. H. Angier, Framingham, Mass. Reinforced paper and making the same. No. 1,269,140; June 11; v. 251; p. 320.
Whetton, Thomas H., Hamilton, Ontario, Canada. Window-blind. No. 1,268,413; June 4; v. 251; p. 98.
Whetstone, Alfred, Mount Carmel, Pa. Window or door screen. No. 1,268,653; June 4; v. 251; p. 167.
Whisler, Chauncey P. (See Lerch and Whisler.)
White, Birdora H., Chicago, Ill. Garment-supporter. No. 1,268,308; June 4; v. 251; p. 68.
White, Bruce C., Woonsocket, R. I., assignor to R. Hoe and Co., New York, N. Y. Web-feeding mechanism. No. 1,268,134; June 4; v. 251; p. 19.
White, Bruce C., assignor to R. Hoe and Co., New York, N. Y. Cleaning device for printing-machine inking mechanism. No. 1,269,767; June 18; v. 251; p. 525.
White, Eber B., South Bend, Ind. Valve-grinding tool. No. 1,268,309; June 4; v. 251; p. 68.
White, Edward, Hawthorne, N. J. Blanket washing and drying machine. No. 1,270,351; June 25; v. 251; p. 708.
White, Edwin L., Brooklyn, N. Y. Lighting-fixture. No. 1,270,081; June 18; v. 251; p. 609.
White, George, Jersey City, N. J.; G. S. and G. R. Baker, London, England, assignors to P. D. Panoulias, Jersey City, N. J. Apparatus for decorating confectionery and the like. No. 1,268,195; June 4; v. 251; p. 35.
White, Herbert E., assignor to The General Fireproofing Company, Youngstown, Ohio. Expanded-metal product. No. 1,268,903; June 11; v. 251; p. 254.
White, James, Tampa, Fla. Dividers. No. 1,269,027; June 11; v. 251; p. 288.
White, James L., and S. C. Baker, Southampton, N. Y. Grease-gun. No. 1,268,654; June 4; v. 251; p. 167.
White, John P. F., Washington, D. C. Receptacle-closure. No. 1,268,904; June 11; v. 251; p. 254.
White, John R. (See Martin and White.)
White, Mark B., Hanover, Ill. Winding-machine. No. 1,268,905; June 11; v. 251; p. 254.
White Mop-Wringer Company. (See Brace, Richard A., assignor.)
White Motor Company, The. (See White, Rollin H., assignor.)
White Motor Company, The. (See Williams, Fred H., assignor.)
White, Ray H. (See Saunders and White.)
White, Ray H., Niagara Falls, N. Y., assignor to Norton Company, Worcester, Mass. Producing crystalline alumina. No. 1,269,141; June 11; v. 251; p. 320.
White, Rollin H., Cleveland Heights Village, assignor, by mesne assignments, to The White Motor Company, Cleveland, Ohio. Motor-vehicle. No. 1,268,411; June 4; v. 251; p. 97.
White, Rollin H., South Euclid, assignor to The Cleveland Tractor Company, Euclid, Ohio. Agricultural machine. No. 1,269,028; June 11; v. 251; p. 288.
White, Rollin H., Cleveland Heights, assignor to The Cleveland Tractor Company, Euclid, Ohio. Track-laying tractor. No. 1,270,576; June 25; v. 251; p. 771.
Whitehead, Morris & Company. (See Morris and Bryant, assignors.)
Whitener, Robert L., assignor of one-half to S. Schwartz, Charlotte, N. C. Match-stand. No. 1,269,768; June 18; v. 251; p. 525.
Whitin Machine Works, The. (See Owen, Oscar L., assignor.)
Whitney, Leslie D., San Mateo, Cal. Hydraulic press. No. 1,269,769; June 18; v. 251; p. 526.
Whitten, Samuel B., Wilcox, Wash. Fire-escape. No. 1,269,353; June 11; v. 251; p. 379.
Whitten, Stahl A. (See Ballman, Edwin C., assignor.)
Whittingham, George H., Pikesville, assignor to Monitor Controller Company, Baltimore, Md. Starter for electric motors. No. 1,270,235; June 18; v. 251; p. 649.
Widness, Lawrence J., Brooklyn, N. Y. Garment stretcher and presser. No. 1,270,676; June 25; v. 251; p. 797.
Wiese, Henry O., Perry, Iowa. Traction-wheel. No. 1,270,474; June 25; v. 251; p. 743.
Wigginton, George P., assignor to Kalamazoo Loose Leaf Binder Co., Kalamazoo, Mich. Binder device. No. 1,270,082; June 18; v. 251; p. 609.
Wilcke, George C., Findlay, Ohio. Step-ladder. No. 1,269,142; June 11; v. 251; p. 320.
Wild, Johannes W. A. de. (See Schenk, Tamis C., assignor.)
Wiley, William E. (See Crabill and Wiley.)
Wilkenson, Fredrik, Gottenborg, Sweden. Picture-frame. No. 1,270,475; June 25; v. 251; p. 743.
Wilkerson, Claude, *et al.* (See Preston, Edward, assignor.)
Wilkinson, Randolph N., Huntington, W. Va. Child's vehicle. No. 1,268,310; June 4; v. 251; p. 69.
Will & Baumer Co., The. (See Zimmer, Frederick F., assignor.)
Will, G. A. (See McCoy, Marion M., assignor.)
Williams, Alva J., Seattle, assignor to Williams Oil Control Transmission Company, Pierce county, Wash. Oil-control transmission. No. 1,269,029; June 11; v. 251; p. 289.
Williams, Charles L., Laurens, N. Y., assignor, by mesne assignments, to Ideal Aerator Company, Inc. Aerator and cooler. No. 1,269,143; June 11; v. 251; p. 320.
Williams, Fred H., assignor, by mesne assignments, to The White Motor Company, Cleveland, Ohio. Wagon-body. No. 1,269,667; June 18; v. 251; p. 497.
Williams, Fred L., San Francisco, Cal. Combination ignition and fuel-injecting system. No. 1,269,989; June 18; v. 251; p. 585.

Williams, George H., Los Angeles, Cal. Corset. No. 1,269,030; June 11; v. 251; p. 289.
Williams, Hammond O., *et al.* (See Adams, George E., assignor.)
Williams, James A., Roxbury, Mass. Ventilating and cooling apparatus. No. 1,270,352; June 25; v. 251; p. 709.
Williams, Joseph A., assignor to The K. W. Ignition Company, Cleveland, Ohio. Starter. No. 1,268,414; June 4; v. 251; p. 98.
Williams, Louis N. D., Ogontz, Pa. Hosiery. No. 1,270,083; June 18; v. 251; p. 609.
Williams, Louis N. D., Ogontz, Pa. Uniting knitted webs. No. 1,270,084; June 18; v. 251; p. 609.
Williams, Martin L., South Bend, Ind., and S. E. Witt, Chicago, Ill., assignors, by mesne assignments, to American Sleeve-Valve Motor Company. Gas-engine. No. 1,268,522; June 4; v. 251; p. 129.
Williams Oil Control Transmission Company. (See Williams, Alva J., assignor.)
Williams, Oscar L., Coosada, Ala. Planter. No. 1,270,577; June 25; v. 251; p. 771.
Williams, Robert P., Winder, Ga. Press for plow-scrapers. No. 1,268,655; June 4; v. 251; p. 167.
Williams, Sidney J., Kensington, London, England. Ignition apparatus for use with internal-combustion engines. No. 1,269,889; June 18; v. 251; p. 560.
Williams, William F., Miami, Ariz. Multiple-signature machine. No. 1,268,523; June 4; v. 251; p. 129.
Williams, William G., Columbus Junction, Iowa. Chiropractic operating-table. No. 1,269,354; June 11; v. 251; p. 380.
Williams, Winfield S. (See Paine and Williams.)
Williamson, James, Newport News, Va. Blading turbines. No. 1,269,144; June 11; v. 251; p. 321.
Williamson, William A., Newark, N. J. Can-opener. No. 1,269,031; June 11; v. 251; p. 289.
Williford, Jacob V., Mount Vernon, Ill. Call-bell clock. No. 1,268,656; June 4; v. 251; p. 167.
Willis, George M., Chicago, Ill., assignor to Brown, Hanson & Boettcher. Engine-starter. No. 1,268,776; June 4; v. 251; p. 199.
Willis, George M., Chicago, Ill., assignor to Brown, Hanson & Boettcher. Transmission mechanism. No. 1,268,777; June 4; v. 251; p. 200.
Willis, Harry L., assignor to Union Special Machine Company, Chicago, Ill. Folder for sewing-machines. No. 1,268,415; June 4; v. 251; p. 98.
Willson, Frederick, assignor to T. A. Willson & Co., Inc., Reading, Pa. Spectacles. No. 1,269,990; June 18; v. 251; p. 585.
Wilmarth & Morman Company. (See Gorham, Edwin T., assignor.)
Wilmarth Show Case Company. (See Morris, Edmund, assignor.)
Wilsey, Irven H., and W. H. Green, assignors of one-half to said Green and one-half to F. A. Adkins, Chicago, Ill. Heat-ratio indicator. No. 1,268,196; June 4; v. 251; p. 36.
Wilson & Bennett. (See Wilson, James H., assignor.)
Wilson, Frank E., London, England. Switch. No. 1,269,237; June 11; v. 251; p. 348.
Wilson, James H., assignor to Wilson & Bennett Manufacturing Company, Chicago, Ill. Can. No. 1,270,758; June 25; v. 251; p. 818.
Wilson, Samuel M., East Durham, N. C. Mail-catcher. No. 1,268,311; June 4; v. 251; p. 69.
Wilson, Samuel R., Philadelphia, Pa. Pavement-painter. No. 1,268,524; June 4; v. 251; p. 130.
Wiltshire, William H., Gillespieville, Ohio. Gravel-bottom for wagon-beds. No. 1,270,085; June 18; v. 251; p. 610.
Winfield, Thomas C., Wanstead, England. Means for preventing shocks by the axles of tramway and railway vehicles. No. 1,269,238; June 11; v. 251; p. 348.
Winkler, Maud M., Schenectady, N. Y. Signal-lamp. No. 1,269,032; June 11; v. 251; p. 290.
Winkley, Erastus E., Lynn, Mass., assignor, by mesne assignments, to United Shoe Machinery Corporation, Paterson, N. J. Machine for sorting shoe-stock. No. 1,270,476; June 25; v. 251; p. 743.
Winslow, Marion H., Terre Haute, Ind. Track-scale. No. 1,268,197; June 4; v. 251; p. 36.
Winter, Rudolph G., Milwaukee, Wis. Screen-door catch. No. 1,268,657; June 4; v. 251; p. 168.
Winters, Alexander. (See Leonard and Winters.)
Winters, Alexander F., and A. H. Porter, assignors to Winters & Stryker, Grand Rapids, Mich. Safety appliance for punch-presses. No. 1,270,578; June 25; v. 251; p. 772.
Winters & Stryker. (See Winters and Porter, assignors.)
Winters, William A. (See Schumacher and Winters.)
Wintroath, John A., assignor to Layne & Bowler Corporation, Los Angeles, Cal. Bearing. No. 1,268,906; June 11; v. 251; p. 255.
Wintroath, John A., Los Angeles, Cal., assignor to Layne & Bowler Corporation. Bearing. No. 1,268,907; June 11; v. 251; p. 255.
Wire Goods Company. (See Martin, Albert W., assignor.)
Wirth, William M., assignor to St. Louis Welding & Manufacturing Company, St. Louis, Mo. Separable demountable rim. No. 1,268,525; June 4; v. 251; p. 130.
Wirth, William M., assignor to St. Louis Welding and Manufacturing Company, St. Louis, Mo. Demountable rim for wheels. No. 1,269,526; June 4; v. 251; p. 130.
Wisdom, Thomas G., Admire, Kans. Feeder for threshing-machines. No. 1,269,033; June 11; v. 251; p. 290.
Witt, Samuel E. (See Williams and Witt.)
Witzel, Joseph R., Philadelphia, Pa., assignor to Food Sterilization Company. Bacteria destruction by pressure. No. 1,269,562; June 11; v. 251; p. 434.
Witzenmann, Emil, Pforzheim, Germany. Spiral metallic hose. No. 1,270,579; June 25; v. 251; p. 772.
Wochner, William H., Falls City, Nebr. Detachable automobile-body. No. 1,270,086; June 18; v. 251; p. 610.
Wolf, George F., Baltimore, Md. Paper holder and cutter. No. 1,270,580; June 25; v. 251; p. 772.
Wolf, Joseph B., Melrose, Iowa. Auxiliary supporting device for engine-casings. No. 1,269,890; June 18; v. 251; p. 560.
Wolfe, William, and D. Parks, St. Louis, Mo. Machine for cutting pieced lifts and for building heel-blanks therefrom. No. 1,268,908; June 11; v. 251; p. 255.
Wolter, Ferdinand R., Minneapolis, Minn. Mop-holder. No. 1,270,353; June 25; v. 251; p. 709.
Wolverine Spark Plug Company. (See Braselton and Carroll, assignors.)
Wolverine Spark Plug Company. (See Sadgebury, Herman E., assignor.)
Womble, Charles. (See Jones, Luther P., assignor.)
Wood, Frank M., Portland, Oreg. Vehicle-signal. No. 1,269,241; June 11; v. 251; p. 349.
Wood, Henry A. W., assignor, by mesne assignments, to Wood Newspaper Machinery Corporation, New York, N. Y. Machine for finishing and cooling stereotype-plates. No. 1,269,239; June 11; v. 251; p. 348.
Wood, Henry A. W., assignor to Wood Newspaper Machinery Corporation, New York, N. Y. Machine for cooling stereotype-plates. No. 1,269,240; June 11; v. 251; p. 348.
Wood Newspaper Machinery Corporation. (See Wood, Henry A. W., assignor.)
Wood, William H., Media, Pa. Railway construction. No. 1,268,528; June 4; v. 251; p. 130.
Wood, William W., Tacoma, Wash. Waterproof glue. No. 1,270,477; June 25; v. 251; p. 744.
Woodford, Clarence F., Windsor Locks, and O. S. Rockwell, Warehouse Point, assignors to E. Horton & Son Company, Windsor Locks, Conn. Lathe-chuck. No. 1,268,198; June 4; v. 251; p. 36.
Woodford, Clarence F., Windsor Locks, and O. S. Rockwell, Warehouse Point, assignors to E. Horton & Son Company, Windsor Locks, Conn. Chuck. No. 1,269,991; June 18; v. 251; p. 585.
Woodhead, Daniel, Evanston, Ill. Mounting for translating devices. No. 1,269,355; June 11; v. 251; p. 380.
Woodhead, Daniel, Evanston, Ill. Mounting for translating devices. No. 1,269,356; June 11; v. 251; p. 380.
Woodings, Emanuel. (See Richardson and Woodings.)
Woodman, William E. (See Crompton and Woodman.)
Woodrow, Harry R., assignor to T. E. Murray, New York, N. Y. Metal vehicle-wheel. No. 1,269,992; June 18; v. 251; p. 585.
Woodruff, Wayland E. (See McMullen and Woodruff.)
Woodrum, Earl, Glencove, Wash. Picking-bag. No. 1,270,354; June 25; v. 251; p. 709.
Woods, Samuel J., Newport, R. I., and J. Polar, Cleveland, Ohio. Resilient tire. No. 1,268,527; June 4; v. 251; p. 130.
Woodside, Fred, and D. Wright, Dillon, Mont. Current-rectifier. No. 1,269,891; June 18; v. 251; p. 560.
Woodworth, Howard P., Bay City, Mich. Drive for motor-vehicles. No. 1,269,034; June 11; v. 251; p. 290.
Woolcott, Carl, and H. M., Harrisburg, Ill. Device for handling non-flowing materials. No. 1,269,668; June 18; v. 251; p. 497.
Woolcott, Harry M. (See Woolcott, Carl, and H. M.)
Woolley, Albert H., San Francisco, Cal. Baker's peel. No. 1,268,658; June 4; v. 251; p. 168.
Woolling, Joseph H. (See Jahna, Emil R., assignor.)
Woolsey, Charles A., Minneapolis, Minn. Box. No. 1,269,242; June 11; v. 251; p. 349.
Wordingham, George, Milwaukee, Wis. Shirt-waist and skirt hanger. No. 1,268,416; June 4; v. 251 p. 99.
Workman, Peyton H., assignor of one-third to C. M. Steele and one-third to H. Sepulveda, Santa Ana, Cal. Signaling means. No. 1,269,035; June 11; v. 251; p. 291.
Wostal, Oscar. (See Zeratsky and Wostal.)
Wright, Albert C., and J. H. Leary, Jr., Westcliffe, Colo. Gate-latch. No. 1,269,145; June 11; v. 251; p. 321.
Wright, Doss. (See Woodside and Wright.)
Wright, George, Chatham, Ontario, Canada. Land-roller. No. 1,270,087; June 18; v. 251; p. 610.
Wright, Gilbert. (See Holst and Wright.)
Wright, James G. E. (See Arsem and Wright.)
Wright, Jesse A., Seaford, Del. Signaling device. No 1,270,355; June 25; v. 251; p. 709.
Wright, John L., Chicago, Ill. Game and game apparatus. No. 1,268,659; June 4; v. 251; p. 168.
Wright, John W., *et al.* (See McCormick, Oscar C., assignor.)
Wright, Melvin T., Boyd, Tex. Peanut-planting attachment. No. 1,269,357; June 11; v. 251; p. 381.

Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,269,993; June 18; v. 251; p. 585.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Computing attachment for type-writers. No. 1,269,892; June 18; v. 251; p. 560.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,270,478; June 25; v. 251; p. 744.
Wright, Walter, assignor to Underwood Computing Machine Company, New York, N. Y. Combined type-writing and computing machine. No. 1,270,479; June 25; v. 251; p. 744.
Wurdack, William, St. Louis, Mo. Metering panel-board and cabinet therefor. No. 1,269,770; June 18; v. 251; p. 526.
Würgler, Jakob. (See Grob and Würgler.)
Wurster, George B., Tuckahoe, assignor to W. R. Ostrander & Company, New York, N. Y. Automatic circuit-breaker. No. 1,270,356; June 25; v. 251; p. 709.
Wyckoff, Joseph E., assignor to E. H. Jones, trustee, Los Angeles, Cal. Apparatus for gathering vegetable matter from irrigation-canals. No. 1,269,515; June 11; v. 251; p. 422.
Wyland, John W., Harlan, Kans. Grain-transferring device. No. 1,269,358; June 11; v. 251; p. 381.
Wymore, William W., Marmarth, N. D. Nut-lock. No. 1,270,357; June 25; v. 251; p. 710.
Yassukovitch, Michel S., New York, N. Y. Antifreezing hydrant. No. 1,270,677; June 25; v. 251; p. 797.
Yatter, Sam, Chicago, Ill. Coat. No. 1,269,036; June 11; v. 251; p. 291.
Yingling, Frank B., Hamilton, Ohio. Tile-press. No. 1,268,909; June 11; v. 251; p. 256.
Yirava, Charles R., and W. J. Hejna, Cleveland, Ohio. Trolley-pole head. No. 1,269,037; June 11; v. 251; p. 291.
Yolton, Robert E., assignor to Kilby Frog & Switch Company, Birmingham, Ala. Tongue-switch structure. No. 1,269,771; June 18; v. 251; p. 526.
York, Timothy S., assignor to L. H. Harriman, trustee, Haverhill, Mass. Demountable wheel-rim. No. 1,268,798; June 4; v. 251; p. 207.
York, Timothy S., assignor to L. H. Harriman, trustee, Haverhill, Mass. Collapsible rim. No. 1,268,799; June 4; v. 251; p. 207.
Yoshino, Yoshitada, Los Angeles, Cal. Envelop. No. 1,269,669; June 18; v. 251; p. 497.
Young, George H., New London, Wis., assignor to J. Lanier, Manistique, Mich. Filing-cabinet for desks. No. 1,269,243; June 11; v. 251; p. 349.
Young, Irvin L., Chicago, Ill. Envelop-making machine. No. 1,270,581; June 25; v. 251; p. 772.
Young, John C., Pittsburgh, Pa. Handle for automobile-jacks. No. 1,269,359; June 11; v. 251; p. 381.
Young, Otis W., assignor to Pyle-National Company, Chicago, Ill. Engine reversing-gear. No. 1,269,893; June 18; v. 251; p. 561.
Young, Thomas C., Glendale, Cal. Electrothermal hydroether cone. No. 1,268,529; June 4; v. 251; p. 131.
Young, Troy W., Hamilton, Tex. Boll-weevil destroyer. No. 1,268,660; June 4; v. 251; p. 168.
Youngblood, David F., San Antonio, Tex. Locking and operating system for jail-doors. No. 1,269,244; June 11; v. 251; p. 350.
Zajac, Marcin, Chicopee, Mass. Torpedo-guard. No. 1,268,661; June 4; v. 251; p. 168.
Zalauka, Frank, Hartford, Conn. Shock-absorber. No. 1,270,582; June 25; v. 251; p. 773.
Zanone, Richard J., New Albany, Ind. Automatic scales. No. 1,269,360; June 11; v. 251; p. 381.
Zaremba, Frank, Maywood, assignor of one-half to P. Laskawy, Chicago, Ill. Foldable bed. No. 1,270,358; June 25; v. 251; p. 710.
Zarling, William, assignor of one-half to A. A. Plautz, Milwaukee, Wis. Foldable game. No. 1,270,359; June 25; v. 251; p. 710.
Zavarkin, Maxim, East Brimfield, Mass. Aluminum shoe. No. 1,268,199; June 4; v. 251; p. 37.
Zavarkin, Maxim, East Brimfield, Mass. Concrete tie. No. 1,269,894; June 18; v. 251; p. 561.
Zavarkin, Maxim, East Brimfield, Mass. Balloon. No. 1,270,678; June 25; v. 251; p. 798.
Zelle Tractor Company. (See Zelle, William C., assignor.)
Zelle, William C., St. Louis, Mo., assignor, by mesne assignments, to Zelle Tractor Company, Wilmington, Del. Control for motor-vehicles. No. 1,268,910; June 11; v. 251; p. 256.
Zent, Walter W. (See Bullivant, Cisco, assignor.)
Zeratsky, August W., and O. Wostal, La Crosse, Wis. Teat-cup. No. 1,269,361; June 11; v. 251; p. 382.
Ziegler, Agda E. (See Groat, Luther E., assignor.)
Ziegler, Alfred A., assignor to United Electric Apparatus Company, Boston, Mass. Electromagnet. No. 1,268,200; June 4; v. 251; p. 37.
Ziesing, Richard, Cleveland, Ohio, and G. F. Carpenter, Clarksburg, W. Va., assignors to The Grasselli Chemical Company, Cleveland, Ohio. Cleaning apparatus for retorts. No. 1,268,911; June 11; v. 251; p. 256.
Zimmer, Frederick F., assignor to The Will & Baumer Co., Syracuse, N. Y. Candle-molding machine. No. 1,268,530; June 4; v. 251; p. 131.
Zinno, Frank D., assignor to Waterbury Mfg. Co., Waterbury, Conn. Stirrer for molten-brass mixtures. No. 1,270,583; June 25; v. 251; p. 773.
Zublin, Wilhelm, Winterthur, Switzerland. Hot-water-heating installation. No. 1,269,670; June 18; v. 251; p. 498.
Zuiver, Cornelis, London, assignor of one-half to L. E. Smith, South Shields, England. Furnace. No. 1,270,679; June 25; v. 251; p. 798.
Zuiver, Cornelis, London, assignor of one-half to L. E. Smith, South Shields, England. Furnace. No. 1,270,680; June 25; v. 251; p. 799.
Zwillinger, Bernhard, New York, N. Y. Apparatus for converting beehive-ovens into by-product coke-ovens. No. 1,269,895; June 18; v. 251; p. 561.

ALPHABETICAL LIST OF PATENTEES OF DESIGNS.

A. F. Way Company. (See Loehrig, William C., assignor.)
Anderson, Oscar B. (See Glaznon and Anderson.)
Angiulli, Luigi, New York, N. Y., and E. T. Monteleone, Jersey City, N. J. Casing for signal apparatus. No. 52,106; June 18; v. 251; p. 656.
Avery, Walter J., Cambridge, Mass. Lamp-body. No. 52,107; June 18; v. 251; p. 656.
Baita, Stuart G., assignor to Hudson Motor Car Company, Detroit, Mich. Automobile-body. No. 52,108; June 18; v. 251; p. 657.
Ball, James W., Logansport, Ind., assignor to F. R. Greene, Chicago, Ill. Computing-scale casing. No. 52,109; June 18; v. 251; p. 657.
Baxter, John B., assignor to Covert Manufacturing Co., Troy, N. Y. Rope-thimble. No. 52,110; June 18; v. 251; p. 657.
Bechtold, William S., Newark, N. J. Mirror, brush, or similar toilet article. No. 52,111; June 18; v. 251; p. 657.
Belmont, Ralph A. (See Schoenberg, Ralph A.)
Blatzek, Alfred C., Milwaukee, Wis. Commercial container of toilet preparations. No. 52,068; June 4; v. 251; p. 212.
Boye Needle Company, The. (See Flannery, John L. J., assignor.)
Bruder, Edmund, Chicago, assignor to H. I. Koppelman, Wilmette, Ill. Casing of a dispenser for grit-soap and the like. No. 52,069; June 4; v. 251; p. 213.
Covert Manufacturing Company. (See Baxter, John B., assignor.)
Delmonico, Charles C., Morristown, N. J. Button, badge, or emblem. No. 52,070; June 4; v. 251; p. 213.
Dominick & Haff. (See Hebbard, Harrison, assignor.)
Dunn, Frank M., Oakland, Cal., assignor to United States Glass Company, Pittsburgh, Pa. Soda-goblet. No. 52,093; June 11; v. 251; p. 442.
Dunn, Frank M., Oakland, Cal., assignor to United States Glass Company, Pittsburgh, Pa. Ice-cream goblet. No. 52,094; June 11; v. 251; p. 443.
Flannery, John L., Jr., assignor to The Boye Needle Company, Chicago, Ill. Display card or mounting. No. 52,071; June 4; v. 251; p. 213.
Ford, E. Ainslie, G. L. Pew, and E. J. Kelly, New York, N. Y. Book-stop or similar article. No. 52,072; June 4; v. 251; p. 213.
Glagnon, Joseph E., Philadelphia, and O. B. Anderson, Chester, assignors to Keystone Type Foundry, Philadelphia, Pa. Printer's-case stand. No. 52,095; June 11; v. 251; p. 443.
Greenberg, Sol., Chicago, Ill. Hat or similar article. No. 52,112; June 18; v. 251; p. 657.
Greene, Frank R. (See Ball, James W., assignor.)
Hawthorne, Ellsworth A., Bridgeport, Conn. Lamp-casing. No. 52,073; June 4; v. 251; p. 213.
Hebbard, Harrison, East Orange, N. J., assignor to Dominick & Haff, New York, N. Y. Handle for a spoon, fork, or similar article. No. 52,113; June 18; v. 251; p. 657.
Hodges, Charles J., assignor to The Long-Wear Rubber Company, Elyria, Ohio. Vehicle-tire. No. 52,114; June 18; v. 251; p. 658.
Holstein, Adolph M., Syracuse, N. Y. Border ornament for furniture, caskets, and interior and exterior decorations. No. 52,074; June 4; v. 251; p. 213.
Holstein, Adolph M., Syracuse, N. Y. Manufactured pediment figure for furniture and caskets and for interior and exterior decorations. No. 52,075; June 4; v. 251; p. 214.
Holstein, Adolph M., Syracuse, N. Y. Manufactured figure for brackets for furniture and caskets and for interior and exterior decorations. No. 52,076; June 4; v. 251; p. 214.

Holstein, Adolph M., Syracuse, N. Y. Manufactured figure for furniture and casket decorations and for interior and exterior decorations. No. 52,077; June 4; v. 251; p. 214.

Holstein, Adolph M., Syracuse, N. Y. Furniture, casket, interior, or exterior decoration. Nos. 52,096–8; June 11; v. 251; p. 443.

Holstein, Adolph M., Syracuse, N. Y. Manufactured figure for furniture and casket decorations and for interior and exterior decorations. No. 52,099; June 11; v. 251; p. 443.

Hudson Motor Car Company. (See Baits, Stuart G., assignor.)

Kelly, Edward J. (See Ford, Pew, and Kelly.)

Keystone Type Foundry. (See Glagnon and Anderson, assignors.)

Koppelman, Harold I. (See Bruder, Edmund, assignor.)

Loehrig, William C., assignor to A. F. Way Company, Inc., Hartford, Conn. Adjustable stock-support. No. 52,100; June 11; v. 251; p. 444.

Long-Wear Rubber Company, The. (See Hodges, Charles J., assignor.)

Majestic Company, The. (See Triggs, James M., assignor.)

Manley, Thomas F., East Liverpool, Ohio. Convertible receptacle for hot water and a fountain-syringe. No. 52,078; June 4; v. 251; p. 214.

Marcus, Siegfried, Philadelphia, Pa. Lens. No. 52,079; June 4; v. 251; p. 214.

Matthews, Kenneth F., assignor to The R. L. Kenyon Company, Waukesha, Wis. Phonograph-cabinet. Nos. 52,101–3; June 11; v. 251; p. 444.

McKee Glass Company. (See Smith, Maurice A., assignor.)

Monteleone, Ernest T. (See Angiulli and Monteleone.)

New York Stamping Company. (See Wojidkow, Louis, assignor.)

Pew, Gertrude L. (See Ford, Pew, and Kelly.)

Pisarro, Theodore, Brooklyn, N. Y. Pair of overalls. No. 52,115; June 18; v. 251; p. 658.

Powell, Earl C., Chester, W. Va. Crochet-ball holder. No. 52,104; June 11; v. 251; p. 444.

Pratt, Benjamin H., Milwaukee, Wis. Vehicle-tire. No. 52,116; June 18; v. 251; p. 658.

R. L. Kenyon Company, The. (See Matthews, Kenneth F., assignor.)

Rixson, Oscar C., New Rochelle, N. Y. Door-hinge. No. 52,117; June 18; v. 251; p. 658.

Rosen, Nathan, New York, N. Y. Lamp-hood. No. 52,080; June 4; v. 251; p. 214.

Rudert, Paul, Tarentum, Pa. Sound-box. No. 52,081; June 4; v. 251; p. 215.

Russell, Mary L., New York, N. Y. Article of manufacture. No. 52,118; June 18; v. 251; p. 658.

Schoenberg, Ralph A., now, by judicial change of name, R. A. Belmont, New York, N. Y. Casing for an electric switch. No. 52,119; June 18; v. 251; p. 658.

Schweitzer, Ernest J. (See Wagner and Schweitzer.)

Schwinn, Frederick, Attleboro, Mass. Spoon, fork, or similar article. No. 52,082; June 4; v. 251; p. 215.

Silverman, Joseph, Chicago, Ill. Bent-wood chair. No. 52,083; June 4; v. 251; p. 215.

Smith, Frederick, Brooklyn, N. Y. Flag, pennant, sign, emblem or article of a similar nature. No. 52,084; June 4; v. 251; p. 215.

Smith, Grant E., Poughkeepsie, N. Y. Automobile steering-wheel. No. 52,120; June 18; v. 251; p. 659.

Smith, Maurice A., assignor to McKee Glass Company, Jeannette, Pa. Glass bowl. No. 52,121; June 18; v. 251; p. 659.

Speitel, William, New York, N. Y. Paper-cutter or similar article. No. 52,105; June 11; v. 251; p. 444.

Stein, Joseph, Denver, Colo. Thermos receptacle. No. 52,085; June 4; v. 251; p. 215.

T. A. Willson & Co. (See Willson, Frederick, assignor.)

Triggs, James M., assignor to The Majestic Company, Huntington, Ind. Duplex register. No. 52,086; June 4; v. 251; p. 215.

United States Glass Company. (See Dunn, Frank M., assignor.)

Valenta, Frank, Pineville, Minn. Teething device. No. 52,087; June 4; v. 251; p. 216.

Vasbinder, Samuel R., Fulton, Ill. Tire-casing. No. 52,122; June 18; v. 251; p. 659.

Wagner, Robert G., and E. J. Schweitzer, Los Angeles, Cal. Chandelier for a lighting-fixture. Nos. 52,088–91; June 4; v. 251; p. 216.

Whiting & Davis Company. (See Wiener, Henry, assignor.)

Wiener, Henry, New York, N. Y., assignor to Whiting & Davis Company, Plainville, Mass. Frame for a hand-bag. No. 52,092; June 4; v. 251; p. 216.

Willson, Frederick, assignor to T. A. Willson & Co., Inc., Reading, Pa. Nose-bridge and brace-piece for spectacles. No. 52,123; June 18; v. 251; p. 659.

Wojidkow, Louis, assignor to New York Stamping Company, Brooklyn, N. Y. Carrier for casseroles and like containers. No. 52,124; June 18; v. 251; p. 659.

ALPHABETICAL LIST OF REGISTRANTS OF TRADE-MARKS.

A. V. Roe & Co. Ltd., Manchester, England. Aeroplanes. No. 122,103; June 25; v. 251; p. 836.

African Association Limited, Liverpool, England. Palm-seed kernels, rubber, ivory, and gum-copal. No. 122,051; June 25; v. 251; p. 835.

Agnew, Elmer J., Pontiac, Ill. Yeast. No. 121,843; June 11; v. 251; p. 457.

Aksala Company, Syracuse, Nebr., and Chicago, Ill. Anti-freezing liquid for automobile-radiators and gas-engines. No. 121,844; June 11; v. 251; p. 457.

Albert D. Howlett Company, Boston, Mass. Certain named paints and painters' materials. No. 121,897; June 11; v. 251; p. 458.

Alexander, L. R., Fort Worth, Tex. Preparation for dandruff, falling hair, and scalp diseases. No. 121,847; June 11; v. 251; p. 457.

Allen, George H., Clinton, N. Y. Hulled corn, dried and canned. No. 122,000; June 18; v. 251; p. 671.

Aluminum Products Company, Lagrange, Ill. Aluminum kitchen cooking utensils. No. 122,052; June 25; v. 251; p. 835.

American Boiler Life Company, Boston, Mass. Chemical composition for certain named purposes. No. 121,845; June 11; v. 251; p. 457.

American Macaroni Co., The, Milwaukee, Wis. Macaroni, noodles, spaghetti, and vermicelli. No. 122,001; June 18; v. 251; p. 671.

American Olive Company, Los Angeles, Cal. Canned tomato sauce and canned olives. No. 121,846; June 11; v. 251; p. 457.

American Tar Products Company, Wilmington, Del., and Chicago, Ill. Wood-preserver for preserving timbers. No. 122,053; June 25; v. 251; p. 835.

Apothecaries Hall Company, Waterbury, Conn. Certain named chemicals, medicines, and pharmaceutical preparations. No. 122,002; June 18; v. 251; p. 671.

Appleton Company, Lowell, Mass. Cotton piece goods. Nos. 122,054–8; June 25; v. 251; p. 835.

Athol Manufacturing Company, Athol, Mass. Sleeping-bags or pockets. No. 121,848; June 11; v. 251; p. 457.

Atlantic Macaroni Co., The, Long Island City, N. Y. Macaroni, vermicelli, noodles. No. 122,003; June 18; v. 251; p. 671.

Auerbach & Sons, D., New York, N. Y. Candles and chocolates. No. 122,004; June 18; v. 251; p. 671.

Baltimore Bargain House, Baltimore, Md. Unbleached sheeting. No. 122,005; June 18; v. 251; p. 671.

Barber Asphalt Paving Company, The, Philadelphia, Pa. Bituminous road-oil and liquid asphalt. No. 121,850; June 11; v. 251; p. 457.

Barnes, James, Waterloo, Sydney, New South Wales, Australia. Corned beef. No. 121,855; June 11; v. 251; p. 457.

Barnsley & Sons, Geo., Sheffield, England. Certain named metals and metal castings and forgings. No. 121,851; June 11; v. 251; p. 457.

Barrett Company, The, New York, N. Y. Tarry coating for roads and other surfaces. Nos. 121,852–4; June 11; v. 251; p. 457.

Beech-Nut Packing Co., Canajoharie, N. Y. Candies. No. 122,059; June 25; v. 251; p. 835.

Big Four Canning Company, Stanley, Wis. Canned peas and sauer-kraut. No. 122,007; June 18; v. 251; p. 671.

Big Wizard Chemical Co., The, Cincinnati, Ohio. Certain named abrasive, detergent, and polishing materials. No. 121,856; June 11; v. 251; p. 457.

Birdsey-Somers Company, New York city, N. Y. Brassières. No. 122,008; June 18; v. 251; p. 671.

Blatchford's Calf Meal Factory, Waukegan, Ill. Certain named foods. No. 121,857; June 11; v. 251; p. 457.

Boericke & Tafel, Philadelphia, Pa. Preparations for treating certain named diseases. No. 121,858; June 11; v. 251; p. 457.

Bowden, James J., Sr., Atlanta, Ga. Mineral ore. No. 121,859; June 11; v. 251; p. 457.

Boyee Extract Co., Inc., New York, N. Y. Flavoring extracts for food purposes. No. 122,010; June 18; v. 251; p. 671.

Brockton Public Market, Brockton, Mass. Canned fruits, vegetables, and salmon. No. 122,011; June 18; v. 251; p. 671.

Brown, Joseph H., Chicago, Ill. A liniment and an ointment. No. 121,860; June 11; v. 251; p. 457.

Bryan, Harold E., Angola, Ind. Stock condition-powder and worm-destroyer. No. 121,861; June 11; v. 251; p. 457.

Burd, Roy A., Louisville, Ky. Half-hose. No. 122,012; June 18; v. 251; p. 671.

Burger, Iwan, New York, N. Y. Canned sardines. No. 122,013; June 18; v. 251; p. 671.

Burny Bros., Chicago, Ill. Bread. No. 122,061; June 25; v. 251; p. 835.

Busch & Jolles Inc., Savannah, Ga. Solvent turpentine for paints and varnishes. No. 121,862; June 11; v. 251; p. 457.

Busch & Jolles Inc., Savannah, Ga. Spirits of turpentine. No. 121,863; June 11; v. 251; p. 457.

Butler Brothers, New York, N. Y. Inner tubes for rubber tires. No. 122,062; June 25; v. 251; p. 835.

C. Tennant Sons & Co. of New York, New York, N. Y. Steel wire. No. 121,969; June 11; v. 251; p. 460.

California Fruit Exchange, The, Sacramento, Cal. Fresh grapes. No. 122,063; June 25; v. 251; p. 835.

Calima Canning Co., Los Angeles, Cal. Canned tomatoes with purée from trimmings. No. 121,865; June 11; v. 251; p. 457.

Calima Canning Co., Los Angeles, Cal. Canned Lima beans. No. 121,866; June 11; v. 251; p. 457.

Camo Corporation, New York, N. Y. Motion-picture machines. No. 121,867; June 11; v. 251; p. 457.

Carbolineum Wood Preserving Company, New York, N. Y. Wood-preservatives. No. 121,868; June 11; v. 251; p. 457.

Carlisle Cord Tire Company, Inc., New York, N. Y. Automobile-tires of rubber and fabric. No. 122,064; June 25; v. 251; p. 835.

Carson, Pirie, Scott & Co., Chicago, Ill. Hosiery. No. 122,014; June 18; v. 251; p. 671.

Castle Brothers, San Francisco, Cal. Prunes, dried peaches, apricots, pears, &c., raisins. No. 122,015; June 18; v. 251; p. 671.

Centennial Mill Co., Memphis, Tenn. Self-rising wheat-flour. No. 122,065; June 25; v. 251; p. 835.

Cereo Company, Tappan, N. Y. Balanced food derived partly from soy-beans. No. 122,066; June 25; v. 251; p. 835.

Chapman Manufacturing Company, Winchester, Mass. Spinning-spindles. No. 121,869; June 11; v. 251; p. 457.

Charles E. Lynch Shoe Mf'g. Co. Inc., The, Poughkeepsie and New York, N. Y. Leather boots and shoes. No. 121,914; June 11; v. 251; p. 459.

Charles Tiedemann Milling Co., O'Fallon, Ill. Self-rising flour. No. 122,115; June 25; v. 251; p. 837.

Chicago Bearings Co., Chicago, Ill. Bearings for shafting and axles. No. 121,871; June 11; v. 251; p. 457.

Chicago Pneumatic Tool Co., Chicago, Ill. Pneumatic hammers, riveters, and rock-drills. No. 121,872; June 11; v. 251; p. 458.

Collins & Aikman Company, Jersey City, N. J., and Philadelphia, Pa. Pile fabrics sold as piece goods. No. 122,067; June 25; v. 251; p. 835.

Commercial Camera Company, Providence, R. I. Photographic paper. No. 121,876; June 11; v. 251; p. 458.

Converse Rubber Shoe Co., Malden, Mass. Boots and shoes made of rubber and fabric. No. 122,016; June 18; v. 251; p. 671.

Cooper-Bell Varnish Co., Chicago, Ill. Enamels. No. 121,873; June 11; v. 251; p. 458.

Corwin, J. Stanley, New York, N. Y. Printers' blankets. No. 122,110; June 25; v. 251; p. 836.

Cramer, James M., San Francisco, Cal. Automobile and furniture polishes. No. 121,874; June 11; v. 251; p. 458.

Crane, Clarence A., Cleveland, Ohio. Chocolates. No. 121,875; June 11; v. 251; p. 458.

Cretors, Charles, Chicago, Ill. Popcorn. No. 122,068; June 25; v. 251; p. 835.

Cudahy Packing Company, The, Chicago, Ill., and Omaha, Nebr. Certain named foods. No. 122,069; June 25; v. 251; p. 835.

Curtis Corporation, The, Bloomington and Long Beach, Cal. Canned fish. No. 121,877; June 11; v. 251; p. 458.

Curtis Corporation, The, Bloomington and Long Beach, Cal. Canned peppers. No. 122,070; June 25; v. 251; p. 835.

De Cordova, Charles, New York, N. Y. Tea. No. 121,878; June 11; v. 251; p. 458.

Defiance Machine Works, The, Defiance, Ohio. Certain named metal-working machinery. No. 121,879; June 11; v. 251; p. 458.

Detroit Pressed Steel Company, Detroit, Mich. Load-carrying wheels. No. 122,071; June 25; v. 251; p. 835.

Dominion Asbestos and Rubber Corporation, New York, N. Y. Rubber hose and belting, asbestos packing. No. 122,072; June 25; v. 251; p. 835.

Douglass, Stephen A., St. Louis, Mo. Lawn-swings. No. 121,880; June 11; v. 251; p. 458.

Druggists' Supply Corporation, New York, N. Y. Papeteries and writing-tablets. No. 121,881; June 11; v. 251; p. 458.

E. C. Atkins & Company, Indianapolis, Ind. Babbitt metal. No. 121,849; June 11; v. 251; p. 457.

E. H. Harwood & Co., Hoboken, N. J., and New York, N. Y. Children's petticoats. No. 122,024; June 18; v. 251; p. 671.

Economy Scale Remover Company, Chicago Heights, Ill. Automobile-radiator scaling compound and scale-remover. No. 121,882; June 11; v. 251; p. 458.

Ed V. Price & Company, Chicago, Ill. Coats, trousers, vests, outer or over coats. No. 122,040; June 18; v. 251; p. 672.

Elyria Iron and Steel Company, The, Cleveland, Ohio. Steel tubes. No. 122,075; June 25; v. 251; p. 835.

F. & W. Chemical Co., Philadelphia, Pa. Preparation for rheumatism. No. 121,870; June 11; v. 251; p. 457.

Federal Rubber Company, The, Cudahy, Wis. Composition soles and heels. No. 122,018; June 18; v. 251; p. 671.

Ferro-Concrete Paint & Chemical Co., The, St. Louis, Mo. Ready-mixed paints, paste and dry pigments used in the manufacture of paints. No. 121,883; June 11; v. 251; p. 458.

Fliklins, Charles O., Rochester, N. Y. Proprietary remedies for treating certain named diseases. No. 121,884; June 11; v. 251; p. 458.

Fischer & Co., H. G., Chicago, Ill. Certain named dental, medical, and surgical appliances. No. 121,885; June 11; v. 251; p. 458.

Fish Canners' By-Products Company, Seattle, Wash., and Ketchikan, Territory of Alaska. Fish-meal used as poultry and stock food. No. 122,019; June 18; v. 251; p. 671.

Flottorp Manufacturing Company, Chicago, Ill. Aeroplane-propellers. No. 122,074; June 25; v. 251; p. 835.

Foote Mineral Co., Philadelphia, Pa. Tungstic acid. No. 121,886; June 11; v. 251; p. 458.

Foote Mineral Co., Philadelphia, Pa. Magnesium and magnesium compounds. No. 121,887; June 11; v. 251; p. 458.

Forquer, Bernard B., Joliet, Ill. Foot and bath tablets. No. 122,076; June 25; v. 251; p. 835.

Foulds Milling Company, The, Chicago, Ill., and Cincinnati, Ohio. Macaroni, spaghetti, noodles. No. 122,077; June 25; v. 251; p. 835.

Frank F. Pels Co., New York, N. Y. Embroidery-yarns. No. 122,102; June 25; v. 251; p. 836.

Frank W. Whitcher Company, Boston, Mass. Buttons for wearing-apparel. No. 121,990; June 11; v. 251; p. 461.

Fribley, James H., Bourbon, Ind. Preparation for biliousness. No. 122,078; June 25; v. 251; p. 835.

Friedrich & Kempe Co., Inc., Red Wing, Minn. Certain named foods. No. 122,020; June 18; v. 251; p. 671.

Fulper Pottery Company, Flemington, N. J. Certain named crockery, earthenware, and porcelain. No. 121,888; June 11; v. 251; p. 458.

G. Batchelier Hall Co., Seattle, Wash. Canned evaporated milk. No. 122,006; June 18; v. 251; p. 671.

Gates Paper Twine Co., Pleasantville, N. Y. Twine, cable-filling and seaming cords made of paper. No. 121,889; June 11; v. 251; p. 458.

General Basic Products Company, Seattle, Wash. Lime to be used as an element of mortar or the like. No. 121,890; June 11; v. 251; p. 458.

Gerst, Wm. P., Alton, Iowa. Live hogs and poultry. No. 122,079; June 25; v. 251; p. 835.

Gilbert, Orlando C., Spokane, Wash. Preparation for the treatment of teeth and gums to relieve pain and for local-pain relief. No. 121,891; June 11; v. 251; p. 458.

Gordon, Wolf, Cowen Co. Inc., New York, N. Y. Sweetmeat-butter. No. 122,021; June 18; v. 251; p. 671.

Gorton-Pew Fisheries Co., Gloucester, Mass. Canned roe or a product prepared from canned roe. Nos. 122,080–1; June 25; v. 251; pp. 835–6.

Green, Jessie, Tampa, Fla. Fever-tonic. No. 122,082; June 25; v. 251; p. 836.

Guano & Maggio, Inc., Philadelphia, Pa. Alimentary pastes, covering all kinds of macaroni. No. 122,022; June 18; v. 251; p. 671.

H. D. Lee Mercantile Co., The, Salina, Kans., and Kansas City, Mo. Coffee and tea. No. 122,030; June 18; v. 251; p. 672.

Halcomb Steel Company, Syracuse, N. Y. Tool-steel. No. 121,892; June 11; v. 251; p. 458.

Harry Jacobson Company Inc., New York, N. Y. Men's suits, overcoats, trousers, vests, &c. No. 122,026; June 18; v. 251; p. 671.

Heath, Luther J., Baltimore, Md. Skin-lotion. No. 121,893; June 11; v. 251; p. 458.

Heidenheim Bros., New York, N. Y., and New Orleans, La. Coats, overalls, and work-shirts. No. 122,083; June 25; v. 251; p. 836.

Holden-Leonard Co., New York, N. Y. Fabric woven of worsted and woolen yarns and silk. No. 122,084; June 25; v. 251; p. 836.

Holland Shoe Co., Holland, Mich. Leather boots, shoes, and boot and shoe soles. No. 122,023; June 18; v. 251; p. 671.

Home Brewing Co., The, Bridgeport, Conn. Non-intoxicating cereal maltless beverages. No. 121,896; June 11; v. 251; p. 458.

Hurst & Company, John E., Baltimore, Md. Work-shirts, overalls, textile jackets and jumpers. No. 122,025; June 18; v. 251; p. 671.

Hydraulic Pressed Steel Company, The, Cleveland, Ohio. Concrete-forms and parts thereof. No. 121,898; June 11; v. 251; p. 458.

Ide and Company, Geo. P., Troy, N. Y. Men's collars. No. 122,027; June 18; v. 251; p. 671.

Independent Filter Press Co., Inc., New York, N. Y. Filter presses, frames, plates, and parts. No. 121,899; June 11; v. 251; p. 458.

Independent Salt Co., New York, N. Y. Salt. No. 122,086; June 25; v. 251; p. 836.

Innis, Speiden & Co. Inc., New York, N. Y. Leather dressings, seasonings, fillers, and varnish. No. 121,900; June 11; v. 251; p. 458.

International Brotherhood of Steam Shovel and Dredge Men, Chicago, Ill. Printed books, periodicals, pamphlets, and circulars. No. 122,087; June 25; v. 251; p. 836.
Interstate Chemical Co., Jersey City, N. J. Insecticides and fungicides. No. 121,901; June 11; v. 251; p. 458.
Interstate Products Company, Vancouver, Wash. Cider. No. 121,902; June 11; v. 251; p. 458.
Interstate Shade Cloth Co., Hoboken, N. J. Shade-cloths of sized and oil-painted fabrics. No. 122,085; June 25; v. 251; p. 836.
J. R. Watkins Medical Co., The, Winona, Minn. Perfumes, toilet water, and face-powders. No. 121,984; June 11; v. 251; p. 461.
James A. McAteer & Sons, Inc., Pittsburgh, Pa. Compound used in the preparation of jellies and desserts. No. 122,029; June 18; v. 251; p. 672.
Joel T. Painter Company, McKeesport, Pa. Certain named paints and painters' materials. No. 121,940; June 11; v. 251; p. 460.
Johnsen & Kildal, Inc., New York, N. Y. Sauces. No. 122,028; June 18; v. 251; p. 672.
John W. Masury & Son, Brooklyn, N. Y. Varnish. No. 121,918; June 11; v. 251; p. 459.
Johnson Biscuit Company, Sioux City, Iowa. Candies, crackers, and cookies. No. 121,904; June 11; v. 251; p. 459.
Johnson, Ida B., Chicago, Ill. Underwaists. No. 121,903; June 11; v. 251; p. 458.
Julius D. Booth & Son, Inc., New York, N. Y. Dresses. No. 122,009; June 18; v. 251; p. 671.
Karry-Lode Industrial Truck Co., Inc. Long Island City, N. Y. Industrial motor-trucks. No. 121,905; June 11; v. 251; p. 459.
Kato, Seiju, Yokohama, Japan. Tea. Nos. 121,906–7; June 11; v. 251; p. 459.
Keyser Chemical Company, Incorporated, Roanoke, Va. Corn and bunion remedy, liver-pills, &c. No. 121,908; June 11; v. 251; p. 459.
Knorp, Elsie M., San Francisco, Cal. Liquids for stopping hemorrhages. No. 121,909; June 11; v. 251; p. 459.
Krew-Pina Company, The, Waynesburg, Pa. Preparation for treating certain named ailments and diseases. No. 121,910; June 11; v. 251; p. 459.
Lamp, Philip C., Cleveland, Ohio. Compound for cleaning carpets, rugs, and wash-clothes. No. 121,911; June 11; v. 251; p. 459.
Lauber, Carl F., Philadelphia, Pa. Cordial. No. 121,912; June 11; v. 251; p. 459.
Lippincott, Geo. A., Philadelphia, Pa. Food and tonic for plants, flowers, &c. No. 121,913; June 11; v. 251; p. 459.
M. Brodsky & Co., Inc., New York, N. Y. Cotton sewing-thread and yarn. No. 122,060; June 25; v. 251; p. 835.
M. C. Peters Mill Co., Omaha, Nebr. Mixed feed composed of various grains, alfalfa, and molasses. No. 122,038; June 18; v. 251; p. 672.
M. C. Peters Mill Co., Omaha, Nebr. Poultry feed. No. 122,039; June 18; v. 251; p. 672.
M. and T. Buttoff Company, Boston, Mass., and Providence, R. I. Buttons for wearing-apparel. No. 121,864; June 11; v. 251; p. 457.
Macadam & Co., J. F., Buenos Aires, Argentina. Extracts of the Paraguayan tea-plant, (*Ilex Paraguayensis.*) No. 122,088; June 25; v. 251; p. 836.
Maclow Ale & Manufacturing Company, The, Huntington, W. Va. Soft drink. No. 121,915; June 11; v. 251; p. 459.
Macy & Co., R. H., New York, N. Y. Salad-dressing. No. 121,916; June 11; v. 251; p. 459.
Magruder-Wood Chocolate Co., Inc., Syracuse, N. Y. Chocolate candies. No. 122,031; June 18; v. 251; p. 672.
Manuel Caragol & Son, Inc., New York, N. Y. Edible olive-oil. No. 122,032; June 18; v. 251; p. 672.
Marion Steam Shovel Co., The, Marion, Ohio. Electric shovels. No. 121,917; June 11; v. 251; p. 459.
Marquis, Fanny O., New York, N. Y. Balanced food in the form of bread. No. 121,920; June 11; v. 251; p. 459.
Marr, Alexander, Westerly, R. I. Medicated soap. No. 121,919; June 11; v. 251; p. 459.
Meloche, Daniel H., Detroit, Mich. Headache-tablets. No. 122,089; June 25; v. 251; p. 836.
Mercian, Joseph H., New York, N. Y. Canned or preserved fish. No. 122,090; June 25; v. 251; p. 836.
Mercian, Joseph H., New York, N. Y. Canned or preserved fish and peppers. No. 122,091; June 25; v. 251; p. 836.
Mercian, Joseph H., New York, N. Y. Canned or preserved fish. No. 122,092; June 25; v. 251; p. 836.
Metzendorf, Sarah K., New York, N. Y. Babies' bibs. No. 122,033; June 18; v. 251; p. 672.
Meyer & Lange, New York, N. Y. Mustard. No. 121,921; June 11; v. 251; p. 459.
Montana Oil Co., Helena, Mont. Gasolene, kerosene, and lubricating-oil. No. 121,922; June 11; v. 251; p. 459.
Mountford, Alfred, New York, N. Y. Preparation for the treatment of rheumatism. No. 121,923; June 11; v. 251; p. 459.
Murphy Varnish Company, Newark, N. J. Varnishes, enamels, varnish-stains. No. 121,924; June 11; v. 251; p. 459.
N. K. Fairbank Company, The, Union township, near Guttenberg, N. J., and Chicago, Ill. Vegetable-oil product for salads and cooking. No. 122,017; June 18; v. 251; p. 671.
Nash Motors Company, The, Kenosha, Wis. Automobiles and motor-trucks. No. 122,093; June 25; v. 251; p. 836.
National Bank of Commerce in St. Louis, St. Louis, Mo. Printed booklets or pamphlets and circulars. No. 122,094; June 25; v. 251; p. 836.
National Billiard Supply Corporation, Chicago, Ill. Billiard-chalk. No. 121,925; June 11; v. 251; p. 459.
National Builders Company, The, Cleveland, Ohio. Metallic hardeners for concrete. No. 122,034; June 18; v. 251; p. 672.
National Casket Company, New York, N. Y. Casket linings and pillows. No. 121,926; June 11; v. 251; p. 459.
National Oil Products Co., Harrison, N. J. Soluble oils and soluble oil bases, sulfonated, cutting, and drawing oils for lubricating purposes. No. 121,927; June 11; v. 251; p. 459.
Naumburg & Co., M. & W., New York, N. Y. Coats and overcoats. No. 121,928; June 11; v. 251; p. 459.
Nelson Bros. Co., Saginaw, Mich. Internal-combustion engines. No. 121,930; June 11; v. 251; p. 459.
Nelson, R. H., Missoula, Mont. Dentifrice. No. 121,929; June 11; v. 251; p. 459.
Neptune Sea Food Company, San Diego, Cal. Canned sardines. Nos. 121,931–3; June 11; v. 251; p. 459.
Neptune Sea Food Company, San Diego, Cal. Canned sardines. No. 122,095; June 25; v. 251; p. 836.
Never-Tel Laboratories Company, Kansas City, Mo. Hair-dye. No. 122,096; June 25; v. 251; p. 836.
New England Brewing Company, Jersey City, N. J., and Boston, Mass. Certain chemicals, medicines, and pharmaceutical preparations. No. 121,934; June 11; v. 251; p. 459.
New Orleans Coffee Co. Ltd., New Orleans, La. Compound of sorghum and corn-syrup. No. 122,097; June 25; v. 251; p. 836.
Nielsen, Peter, Seattle, Wash. Salves and ointments for fever-sores, chapped hands, cuts, &c. No. 122,098; June 25; v. 251; p. 836.
No Name Hat Manufacturing Company, Orange, N. J., and New York, N. Y. Soft and stiff fur-felt hats. No. 122,035; June 18; v. 251; p. 672.
North British Rubber Co., The, Ltd., Edinburgh, Scotland. Golf-balls. No. 121,935; June 11; v. 251; p. 459.
O'Sullivan Rubber Company, Portland, Me., and New York, N. Y. Rubber soles for boots and shoes. No. 122,037; June 18; v. 251; p. 672.
Oatman Condensed Milk Co., The, Dundee, Ill. Evaporated milk. No. 122,099; June 25; v. 251; p. 836.
Ohio Steam Specialty Co., The, Cleveland, Ohio. Water-columns which carry the water-gage and try-cocks on steam-boilers. No. 121,936; June 11; v. 251; p. 459.
Oppenheimer, Eugene, New York, N. Y. Men's scarfs and neckties. No. 122,036; June 18; v. 251; p. 672.
Oriental Oil Company, Dallas, Tex. Lubricating-grease. No. 121,937; June 11; v. 251; p. 459.
Osborn Paper Company, Marion, Ind. Writing-tablets, composition and student note books, printing and writing papers. No. 121,938; June 11; v. 251; p. 460.
Ottawa Condensing Co., Ottawa, Kans. Creamery-butter. No. 122,100; June 25; v. 251; p. 836.
Owl Drug Company, The, San Francisco, Cal. Toothbrushes. No. 121,939; June 11; v. 251; p. 460.
P. Pastene & Co., Inc., Boston, Mass. Olive-oil. No. 121,942; June 11; v. 251; p. 460.
Pacific Mills, Lawrence and Boston, Mass. Cotton piece goods. No. 122,101; June 25; v. 251; p. 836.
Parfumerie Marceau, Inc., New York, N. Y. Dentifrices. No. 121,941; June 11; v. 251; p. 460.
Peterson, Frank W., Minneapolis, Minn. Liniment for rheumatism and swellings. No. 121,943; June 11; v. 251; p. 460.
Phelps Dodge & Company, New York, N. Y. Copper, lead, zinc, gold, and silver. No. 121,944; June 11; v. 251; p. 460.
Phelps Dodge Corporation, New York, N. Y. Copper, lead, zinc, gold, and silver. No. 121,945; June 11; v. 251; p. 460.
Premier Packing Co., San Diego, Cal. Canned sardines. No. 121,946; June 11; v. 251; p. 460.
R. Hickmott Canning Co., San Francisco and Orwood, Cal. Canned asparagus. Nos. 121,894–5; June 11; v. 251; p. 458.
Radium Dye Company, The, Kansas City, Mo. Preparation for cleaning and brightening white and colored shoes and gloves. No. 121,947; June 11; v. 251; p. 460.
Ravalli Cereal & Flour Mill Company, Missoula, Mont. Wheat biscuit-flour. No. 122,041; June 18; v. 251; p. 672.
Realty Publishing Co., Newark, N. J. Monthly magazine or periodical. No. 121,948; June 11; v. 251; p. 460.
Redmanol Chemical Products Co., Chicago, Ill. Lacquers, varnishes, ready-mixed paints. No. 121,949; June 11; v. 251; p. 460.
Reynolds Corporation, The, Bristol, Tenn. Hand-soap. No. 121,950; June 11; v. 251; p. 460.
Reynolds, Hughes T., Rome, Ga. Paints. No. 121,951; June 11; v. 251; p. 460.
Rocbond Company, Inc., The, Van Wert, Ohio. Stucco composition. No. 121,952; June 11; v. 251; p. 460.

Rosenwald-Wimpfheimer, Inc., New York, N. Y. Hats. No. 122,042; June 18; v. 251; p. 672.
Save-O Co., Inc., The, Hartford, Conn. Chemical compound for preserving rubber. No. 121,953; June 11; v. 251; p. 460.
Schermerhorn, Louis C., Paterson, N. J. Certain named musical instruments and supplies. No. 121,957; June 11; v. 251; p. 460.
Schield, Henry, St. Louis, Mo. Surface cleaner and polisher for automobile-bodies and other enameled surfaces. No. 121,958; June 11; v. 251; p. 460.
Schneider, Elsie, Cleveland, Ohio. Knitting-machines. No. 121,954; June 11; v. 251; p. 460.
Schoenhofen Company, Chicago, Ill. Maltless cereal beverages sold as soft drinks. No. 122,104; June 25; v. 251; p. 836.
Seattle Grocery Co. Inc., Seattle, Wash. Certain named foods. No. 121,955; June 11; v. 251; p. 460.
Shaten, Nathan L., Camden, N. J. Gas-driven-automobile heaters. No. 122,108; June 25; v. 251; p. 836.
Sheinker & Son, W., New York, N. Y. Concentrated syrup for a non-intoxicating fruit beverage. No. 121,959; June 11; v. 251; p. 460.
Sher-A-Coca Bottling Co., Incorporated, Lexington, Ky. Non-alcoholic maltless beverage sold as a soft drink. No. 121,956; June 11; v. 251; p. 460.
Sinclair Refining Company, Chicago, Ill. Lubricating-oils. No. 121,960; June 11; v. 251; p. 460.
Slater & Morrill, Incorporated, South Braintree, Mass. Boots and shoes. No. 122,043; June 18; v. 251; p. 672.
Slavin, Thomas, Woodstock, Ill. Ointment used for eczema. No. 122,105; June 25; v. 251; p. 836.
Smith, Datus C., Blanchard, N. D. Clover, grass, and similar seeds. No. 121,961; June 11; v. 251; p. 460.
Society Maid Hosiery Co. Inc., New York, N. Y. Hosiery. No. 122,044; June 18; v. 251; p. 672.
Sodus Packing Co., Inc., Sodus, N. Y. Canned fruits and berries. No. 122,106; June 25; v. 251; p. 836.
Solo Manufacturing Company, New York, N. Y. Chocolates, lemon drops, hard candies, &c. No. 122,107; June 25; v. 251; p. 836.
Spartan Saw Works, Springfield, Mass. Certain named cutlery, machinery, and tools, and parts thereof. No. 121,962; June 11; v. 251; p. 460.
Standard Oil Company of New York, New York, N. Y. Oil lamps, lanterns, stoves, and heaters. No. 122,109; June 25; v. 251; p. 836.
Star Oil Company, The, Chicago, Ill. Lubricating oils and greases. No. 121,963; June 11; v. 251; p. 460.
Starnes, Minnie, St. Louis, Mo. Preparation for cleaning the scalp and pressing and cleaning the hair. No. 122,111; June 25; v. 251; p. 836.
Stein Brothers Manufacturing Cimpany, Williamsport, Pa. Buttons for wearing-apparel. No. 121,964; June 11; v. 251; p. 460.
Stewart & Sparry, New York, N. Y. Bunting. No. 122,112; June 25; v. 251; p. 836.
Stillman, Louis, New York, N. Y. Coats and suits. No. 121,965; June 11; v. 251; p. 460.
Strock, Joseph G., Pittsburgh, Pa. Metallic packing. No. 122,113; June 25; v. 251; p. 837.
Swift and Company, Chicago, Ill. Nut oleomargarin. No. 121,966; June 11; v. 251; p. 460.
Swift & Company, Chicago, Ill. Chilled and frozen beef, offal, pork, and mutton. No. 122,045; June 18; v. 251; p. 672.
Swiss Manufacturing Company, San Francisco, Cal. Fruit-juice extractors. No. 121,967; June 11; v. 251; p. 460.
Syracuse Smelting Works, Brooklyn, N. Y. Babbitt metal. No. 122,114; June 25; v. 251; p. 837.
T. A. Willson & Co., Inc., Reading, Pa. Eyeglasses. No. 121,994; June 11; v. 251; p. 461.
Tennessee Coal, Iron & Railroad Co., Birmingham, Ala. Annealed and unannealed special tool-steel. No. 121,968; June 11; v. 251; p. 460.
Tepper Briquette Binder, Inc., New York, N. Y. Paint-remover. No. 121,970; June 11; v. 251; p. 461.
Tessicini, Elvira, New York, N. Y. Medicine for nervous, anemic, rheumatic, and stomach diseases. No. 121,971; June 11; v. 251; p. 461.
Thomas A. Edison, Incorporated, West Orange, N. J. Monthly periodicals. No. 122,073; June 25; v. 251; p. 835.
Thomas Co., W. H., Spencer, Iowa. Foot-accelerator being a mechanical device for controlling fuel-supply for internal-combustion engines. No. 121,972; June 11; v. 251; p. 461.
Tide Water Oil Company, Bayonne, N. J., and New York, N. Y. Certain named motor-spirits. No. 121,973; June 11; v. 251; p. 461.
Toone & Wells Ltd., Leicester, England. Certain named clothing. No. 122,047; June 18; v. 251; p. 672.
True's Oil Company, Spokane, Wash. Liquid fuels comprising kerosene, &c., for internal-combustion engines and motors. No. 121,974; June 11; v. 251; p. 461.
Trumble, C. B., Syracuse, N. Y. Animal-traps. No. 122,116; June 25; v. 251; p. 837.
Turner, Alfred C., Boston, Mass. Liquid preparations for hardening, preserving, and waterproofing concrete floors. No. 121,975; June 11; v. 251; p. 461.
Utica Duxbak Corporation, Utica, N. Y. Certain named clothing. No. 122,048; June 18; v. 251; p. 672.
Van Landingham, Charles E., Los Angeles, Cal. Canned sardines. Nos. 121,976–80; June 11; v. 251; p. 461.
Van Landingham, Charles E., Los Angeles, Cal. Canned sardines. No. 122,117; June 25; v. 251; p. 837.
Victor Saw Works, Springfield, Mass. Hacksaws, coping, butchers', band, and jewelers' saws. No. 121,981; June 11; v. 251; p. 461.
Vulcan Machine & Tool Company, St. Louis, Mo. Piston packing-rings. No. 122,118; June 25; v. 251; p. 837.
W. P. Tanner-Gross and Company Inc., New York, N. Y. Wheat-flour. No. 122,046; June 18; v. 251; p. 672.
Walden-Worcester, Inc., Worcester, Mass. Wrenches. No. 121,982; June 11; v. 251; p. 461.
Wallace Company, The, Newark, N. J. Chemical carbon-remover. No. 121,983; June 11; v. 251; p. 461.
Washington Times Company, Washington, D. C. Newspaper published daily and Sunday. No. 122,119; June 25; v. 251; p. 837.
Watson, Leigh F., Chicago, Ill. Electric switches and electrical devices for dimming headlights. No. 121,985; June 11; v. 251; p. 461.
Weber-Schlitz Candy Co., Milwaukee, Wis. Candy known as chocolate nougat bar. No. 122,049; June 18; v. 251; p. 672.
West Virginia Pulp & Paper Co., New York, N. Y. Coated book and magazine paper. No. 121,986; June 11; v. 251; p. 461.
Western Manufacturing Company, Cudahy, Wis. Coloring material for leather. No. 121,987; June 11; v. 251; p. 461.
Wheeling Ceiling & Roofing Co., Wheeling, W. Va. Certain named sheet-metal products. No. 121,988; June 11; v. 251; p. 461.
White Eagle Petroleum Company, The, Chanute, Kans. Certain named oils and greases. No. 121,989; June 11; v. 251; p. 461.
Whiting-Plover Paper Company, Stevens Point, Wis. Writing and printing paper. No. 121,992; June 11; v. 251; p. 461.
Whitney Sporting Goods Company, Denver, Colo. Fishing lines, leaders, flies, rods, &c. No. 121,993; June 11; v. 251; p. 461.
Williams Manufacturing Company, Santa Ana, Cal. Electric search-lights. No. 121,991; June 11; v. 251; p. 461.
Williot fils, J., La Garenne-Colombes, France. Coffee substitutes—viz., chicory. No. 122,120; June 25; v. 251; p. 837.
Winter Park Citrus Growers Association, Winter Park, Fla. Fresh citrus fruits. No. 122,050; June 18; v. 251; p. 672.
Wintersmith Chemical Co., Louisville, Ky. Antimalarial and general tonics. No. 121,995; June 11; v. 251; p. 461.
Wittwer, John J., Sr., Seattle, Wash. Coloring for hair-dressings, such as shampoos. No. 121,996; June 11; v. 251; p. 461.
Yasuda, Sometaro, Los Angeles, Cal. Compound for the treatment of consumption and heart trouble. No. 121,997; June 11; v. 251; p. 461.
Zellerbach Paper Company, San Francisco, Cal. Writing and printing paper, card-stock, and envelops. No. 121,998; June 11; v. 251; p. 461.
Zoes, Christ A., Chicago, Ill. White-kid cleaner. No. 121,999; June 11; v. 251; p. 461.

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Aromint Manufacturing Company, The, Cincinnati, Ohio. "Aromints Licorice." (For Mint Candy.) No. 20,657; June 18; v. 251; p. 673.
Aromint Manufacturing Company, The, Cincinnati, Ohio. "Aromints Cinos." (For Mint Candy.) No. 20,658; June 18; v. 251; p. 673.
Baer and Wilde Co., The, Attleboro, Mass. "Best Buttons for Soft or Stiff Cuffs." (For Pads for Displaying Buttons.) No. 20,659; June 18; v. 251; p. 673.
Blaufuss, George, Napa, Cal. "Saxon." (For Apple Cider.) No. 20,660; June 18; v. 251; p. 673.
Bryson, Thos. J., Macon, Ga. "Eggo, A Pure Rice, Corn, Milk, and Egg Product." (For a Substitute for Eggs.) No. 20,661; June 18; v. 251; p. 673.
Burgess Battery Company, Madison, Wis. "Super Six." (For Electric Batteries.) No. 20,662; June 18; v. 251; p. 673.
California Fig-Nut Co., Orange, Cal. "California Fig Nuts De Luxe." (For a Food Compound.) No. 20,663; June 18; v. 251; p. 673.
Centennial Mill Company, Seattle, Wash. "Klondike Gold." (For Wheat-Flour.) No. 20,664; June 18; v. 251; p. 673.
Centennial Mill Co., Memphis, Tenn. "Centennial." (For Flour.) No. 20,665; June 18; v. 251; p. 673.
Chardeau Company, The, New York, N. Y. "Chardeau." (For Wine.) No. 20,666; June 18; v. 251; p. 673.

Chicago Consolidated Brewing & Malting Co., The, Chicago, Ill. "Salvo." (For a Non-Intoxicating Beverage.) No. 20,667; June 18; v. 251; p. 673.

Crenshaw, William N., Spokane, Wash. "Golden Brown." (For Health-Bread.) No. 20,669; June 18; v. 251; p. 673.

Drug Products Co., The, Inc., New York, N. Y. "Pulvoids, No. 373 Natrium Compound High Tension, Dr. M. C. Thrush." (For Pulvoids Representing a Compound of Potassium Nitrate, Sodium Nitrate, Sodium Bicarbonate, Nitroglycerin, &c. No. 20,670; June 18; v. 251; p. 673.

Hammerschlag Manufacturing Company, The, Garfield, N. J. "Liberty Bread." (For Bread.) No. 20,673; June 18; v. 251; p. 673.

Hewlett-Wilson Beverage Co., Salt Lake City, Utah. "Uta-Fruta Berriju." (For Fruit Beverage.) No. 20,674; June 18; v. 251; p. 673.

Honolulu Cracker Co., Honolulu, Hawaii. "Jolly Traveler." (For Candies.) No. 20,675; June 18; v. 251; p. 673.

Kamm & Schellinger Co., Mishawaka, Ind. "Arrow—'It Hits the Spot.'" (For a Non-Intoxicating Cereal Beverage.) No. 20,676; June 18; v. 251; p. 673.

Manhattan Baking Powder Co., New York, N. Y. "Manhattan." (For Cocoa.) No. 20,677; June 18; v. 251; p. 673.

Middle States Condensed Milk Corp., Canastota, N. Y. "Loyalty." (For Condensed Milk.) No. 20,678; June 18; v. 251; p. 673.

Miller Rubber Co., The, Akron, Ohio. "Miller Standard." (For Cartons Containing Hot-Water Bottles.) No. 20,679; June 18; v. 251; p. 673.

Packard Dressing Co., Stoughton, Mass. "Packard Bright-O." (For Shoe and Leather Dressings.) No. 20,680; June 18; v. 251; p. 673.

Packard Dressing Co., Stoughton, Mass. "Packard Glycerine." (For a Shoe-Dressing.) No. 20,681; June 18; v. 251; p. 673.

Packard Dressing Co., Stoughton, Mass. "Packard Cream-O." (For Shoe and Leather Dressings.) No. 20,682; June 18; v. 251; p. 673.

Packard Dressing Co., Stoughton, Mass. "Packard Clean-O." (For Shoe and Leather Dressing.) No. 20,683; June 18; v. 251; p. 673.

Potter & Wrightington, Boston, Mass. "Boston, 1915." (For Cake and Pastry Flour.) No. 20,684; June 18; v. 251; p. 673.

Re-Juvenating Co., Philadelphia, Pa. "B-Slym." (For a Pharmaceutical Preparation.) No. 20,685; June 18; v. 251; p. 673.

Re-Juvenating Co., Philadelphia, Pa. "Spryng-Dew." (For a Pharmaceutical Preparation.) No. 20,686; June 18; v. 251; p. 673.

Re-Juvenating Co., Philadelphia, Pa. "B-Fluffy." (For a Pharmaceutical Preparation.) No. 20,687; June 18; v. 251; p. 673.

Re-Juvenating Co., Philadelphia, Pa. "Re-Juvenating Cold Cream." (For a Pharmaceutical Preparation.) No. 20,688; June 18; v. 251; p. 673.

Re-Juvenating Co., Philadelphia, Pa. "B-Young." (For a Pharmaceutical Preparation.) No. 20,689; June 18; v. 251; p. 673.

Re-Juvenating Co., Philadelphia, Pa. "Re-Juvenating Tissue Cream." (For a Pharmaceutical Preparation.) No. 20,690; June 18; v. 251; p. 673.

Reaves, Claire, Kansas City, Mo. "Morning Glow Creme." (For a Facial Cream.) No. 20,691; June 18; v. 251; p. 673.

Rex Specialty Co., The, Jersey City, N. J. "Rex Liquid Cement." (For Liquid Cement.) No. 20,671; June 18; v. 251; p. 673.

S. Glemby, Inc., New York, N. Y. "Lovelee." (For Hair-Nets.) No. 20,672; June 18; v. 251; p. 673.

Silverberg Import Co., Inc., New York, N. Y. "Bonnie-B-Buttons." (For Buttons.) No. 20,692; June 18; v. 251; p. 673.

Southern California Fish Co., Port Los Angeles, Cal. "Sunset." (For Canned Sardines.) No. 20,693; June 18; v. 251; p. 673.

Spennetta, Jesse D., Orange, Cal. "Jim Dandy." (For Lemons.) No. 20,694; June 18; v. 251; p. 673.

Spennetta, Jesse D., Orange, Cal. "Jim Dandy." (For Oranges.) No. 20,695; June 18; v. 251; p. 673.

Straits Packing Co., Seattle, Wash., and Skowl Arm, Alaska. "Xtragood." (For Canned Salmon.) No. 20,696; June 18; v. 251; p. 673.

Turney, Burton E., Bridgeport, Conn. "Salvus Dental Cream." (For Dental Cream.) No. 20,697; June 18; v. 251; p. 673.

Vanomar Producers Inc., Van Nuys, Cal. "El Moro." (For Canned Peaches.) No. 20,698; June 18; v. 251; p. 674.

Vanomar Producers Inc., Van Nuys, Cal. "Marian." (For Canned Peaches.) No. 20,699; June 18; v. 251; p. 674.

Vanomar Producers Inc., Van Nuys, Cal. "Redondo." (For Canned Peaches.) No. 20,700; June 18; v. 251; p. 674.

Vanomar Producers Inc., Van Nuys, Cal. "Casa Blanca." (For Canned Peaches.) No. 20,701; June 18; v. 251; p. 674.

Vanomar Producers Inc., Van Nuys, Cal. "Coronado." (For Canned Peaches.) No. 20,702; June 18; v. 251; p. 674.

Vanomar Producers, Inc., Van Nuys, Cal. "La Cañada." (For Canned Apricots.) No. 20,703; June 18; v. 251; p. 674.

Vanomar Producers, Inc., Van Nuys, Cal. "Buena Vista." (For Canned Peaches.) No. 20,704; June 18; v. 251; p. 674.

Van Camp Sea Food Co., San Pedro, Cal. "Cove." (For Canned Sardines.) No. 20,705; June 18; v. 251; p. 674.

Walker Properties Association, Austin, Tex. "Walker's Red Hot Tamales." (For Tamales.) No. 20,706; June 18; v. 251; p. 674.

Walker Properties Association, Austin, Tex. "Walker's Red Hot Chile Con Carne." (For Chilli-Con-Carne.) No. 20,707; June 18; v. 251; p. 674.

William Cluff Company, San Francisco, Cal. "Red Ribbon." (For String-Beans.) No. 20,668; June 18; v. 251; p. 674.

PRINTS.

Bronchal-Ease Company, The, Cincinnati, Ohio. "Bronchal-Ease. (For Bronchal-Ease.) No. 4,900; June 18; v. 251; p. 674.

Columbia Carbon Company, The, Dayton, Ohio. "The Mineral Wax Twins 'Clean' and 'Good.'" (For Carbon-Paper and Type-Writer Ribbons.) No. 4,901; June 18; v. 251; p. 674.

Daniel Hays Company, The, Gloversville, N. Y. "Hays Superseam Gloves." (For Leather Gloves.) No. 4,902; June 18; v. 251; p. 674.

Griggs Cooper & Company, St. Paul, Minn. "Home." (For Food-Products.) No. 4,904; June 18; v. 251; p. 674.

Icy Hot Bottle Company, The, Cincinnati, Ohio. "Icy Hot Soldier Boy." (For Heat-Insulated Bottles and Carafes.) No. 4,905; June 18; v. 251; p. 674.

Icy Hot Bottle Company, The, Cincinnati, Ohio. "Icy Hot Eskimo Boy." (For Heat-Insulated Bottles and Carafes.) No. 4,906; June 18; v. 251; p. 674.

International Rubber Company, The, Denver, Col. "Gates Half Sole Tires." (For Tires.) No. 4,907; June 18; v. 251; p. 674.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "Packing in P. A. Smokejoy Every Little Old Now-and-Again!" (For Smoking-Tobacco.) No. 4,908; June 18; v. 251; p. 674.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "You're smoke-set for keeps when you pick P. A. for your pet-pal!" (For Smoking-Tobacco.) No. 4,909; June 18; v. 251; p. 674.

R. J. Reynolds Tobacco Company, Winston-Salem, N. C. "P. A. is such a peach of a pal!" (For Smoking-Tobacco.) No. 4,910; June 18; v. 251; p. 674.

W. L. Douglas Shoe Co., Brockton and Boston, Mass.; Portland, Me.; New York and Buffalo, N. Y.; Denver, Colo., and Philadelphia, Pa. "W. L. Douglas was frequently required to haul leather and other materials in a wheelbarrow." (For Shoes.) No. 4,903; June 18; v. 251; p. 674.

DISCLAIMER.

Granger, Edward J., Chicago, Ill.; disclaimer filed by patentee. Folding and plaiting machine. No. 1,260,766; disclaimer filed June 24, 1918; v. 251; p. 466.

ALPHABETICAL LIST OF INVENTIONS

FOR WHICH

PATENTS WERE ISSUED DURING THE MONTH OF JUNE, 1918.

Abrading-disks, Manufacturing. J. A. Hickey. No. 1,268,842; June 11; v. 251; p. 238.

Abrasive, Aluminous. T. B. Allen. No. 1,268,533; June 4; v. 251; p. 132.

Abrasives, Making aluminous. T. B. Allen. No. 1,268,532; June 4; v. 251; p. 132.

Abrasives, Preparing aluminous. L. E. Saunders and R. H. White. No. 1,269,222; June 11; v. 251; p. 344.

Acetylene-generator. R. D. Braden. No. 1,270,258; June 25; v. 251; p. 682.

Adjusting means. W. H. Harriss. No. 1,270,615; June 25; v. 251; p. 782.

Advertising device. A. R. McCreary. No. 1,270,427; June 25; v. 251; p. 730.

Advertising device. G. S. Shaak. No. 1,270,220; June 18; v. 251; p. 640.

Advertising device. H. M. Thomas. No. 1,268,895; June 11; v. 251; p. 252.

Advertising display device. E. B. Wastle. No. 1,269,024; June 11; v. 251; p. 287.

Aerating device. J. P. Ruth, Jr. No. 1,268,630; June 4; v. 251; p. 160.

Aerator and cooler. C. L. Williams. No. 1,269,143; June 11; v. 251; p. 320.

Aerial cables, Strain-clamp. J. S. Lapp. No. 1,268,981; June 11; v. 251; p. 276.

Aerial-insulation-repairing device. G. T. Parr. No. 1,269,956; June 18; v. 251; p. 576.

Aerial top. E. E. Miller. No. 1,270,313; June 25; v. 251; p. 698.

Aerial torpedo. E. H. Hughes. No. 1,269,185; June 11; v. 251; p. 332.

Aerofoil construction, Multiple. A. Cross. No. 1,270,601; June 25; v. 251; p. 778.

Aeroplane. H. Sorley. No. 1,269,871; June 18; v. 251; p. 555.

Aeroplane. J. S. Spainhour. No. 1,270,339; June 25; v. 251; p. 706.

Aeroplane, hydroplane, and the like. G. M. Robbins. No. 1,269,645; June 18; v. 251; p. 491.

Aeroplane-propelling mechanism. H. Sorley. No. 1,269,872; June 18; v. 251; p. 555.

Aeroplane structural elements, Forming. W. A. Gibbons. No. 1,269,420; June 11; v. 251; p. 397.

Aeroplanes, Carriage structure for. H. Sorley. No. 1,269,873; June 18; v. 251; p. 555.

Aeroplanes, Landing-gear construction of. F. G. Ericson. No. 1,268,333; June 4; v. 251; p. 75.

Agitating means. N. D. Nielsen. No. 1,268,602; June 4; v. 251; p. 152.

Agitator. N. D. Nielsen. No. 1,268,601; June 4; v. 251; p. 152.

Agitator and ripener. W. J. McLaughlin and W. R. Nicoll. No. 1,268,592; June 4; v. 251; p. 149.

Agricultural implement. R. L. McCune. No. 1,270,180; June 18; v. 251; p. 636.

Agricultural machine. E. C. Smith. No. 1,270,453; June 25; v. 251; p. 737.

Agricultural machine. R. H. White. No. 1,269,028; June 11; v. 251; p. 288.

Aiming device. G. A. Brodstrom. No. 1,269,374; June 11; v. 251; p. 386.

Air-cushion compressor, Vehicle. J. J. Campodonico. No. 1,270,493; June 25; v. 251; p. 749.

Air jack, Compressed-. W. J. Buchner and R. F. North. No. 1,268,816; June 11; v. 251; p. 231.

Airplane. J. J. Murray. No. 1,269,547; June 11; v. 251; p. 430.

Airplane construction. J. J. Murray. No. 1,270,649; June 25; v. 251; p. 790.

Airplane safety device. J. T. Gregory. No. 1,268,710; June 4; v. 251; p. 181.

Airship. A. C. Rutzen. No. 1,268,494; June 4; v. 251; p. 121.

Airship. C. Peterson. No. 1,270,200; June 18; v. 251; p. 641.

Alarm: *See*—
Automatic alarm. Rain-alarm.
Automobile burglar-alarm.

Alkali perborates, Electrolytic process of making. O. Liebknecht. No. 1,268,369; June 4; v. 251; p. 85.

Alloy and making same, Soft-metal. W. L. Rice. No. 1,269,000; June 11; v. 251; p. 281.

Alloys of phosphorus, Making. L. A. Jeffs. No. 1,268,849; June 11; v. 251; p. 239.

Alumina, Producing crystalline. R. H. White. No. 1,269,141; June 11; v. 251; p. 320.

Alumina, Treatment of insoluble. H. F. Chappell. No. 1,270,266; June 25; v. 251; p. 684.

Aluminous materials, Purifying. L. E. Saunders. No. 1,269,223; June 11; v. 251; p. 344.

Aluminous materials, Purifying. L. E. Saunders. No. 1,269,224; June 11; v. 251; p. 344.

Aluminum chlorid, Making. D. F. Smith and H. Essex. No. 1,270,226; June 18; v. 251; p. 647.

Amalgamating apparatus. F. S. Skiff. No. 1,268,399; June 4; v. 251; p. 94.

Amalgamator, B. Q. P. Foss. No. 1,270,399; June 25; v. 251; p. 721.

Ambulance-stretcher vehicle. T. Crawford. No. 1,270,383; June 25; v. 251; p. 717.

Ampullae, phials, and the like, Box for holding. P. Bots. No. 1,268,920; June 11; v. 251; p. 259.

Amusement device. A. M. Henry. No. 1,269,279; June 11; v. 251; p. 359.

Anchoring device. M. M. Hjermstad. No. 1,268,459; June 4; v. 251; p. 112.

Angle-finder. R. J. Sweezey. No. 1,270,564; June 25; v. 251; p. 768.

Animal-catcher. M. I. Miller. No. 1,270,647; June 25; v. 251; p. 790.

Animal-releasing device. E. A. and H. Kramer. No. 1,270,173; June 18; v. 251; p. 634.

Animal-trap. W. A. Gibbs. No. 1,269,596; June 18; v. 251; p. 476.

Animal-trap. T. B. Sheffer. No. 1,268,166; June 4; v. 251; p. 28.

Annealing apparatus and process. W. S. Rowland. No. 1,268,155; June 4; v. 251; p. 24.

Annealing-box. L. L. Knox. No. 1,268,582; June 4; v. 251; p. 146.

Annealing furnace, Wire-. J. C. St. Clair. No. 1,269,973; June 18; v. 251; p. 580.

Annealing-pot. L. L. Knox. No. 1,268,583; June 4; v. 251; p. 146.

Annunciator. A. Rendle. No. 1,269,856; June 18; v. 251; p. 550.

Anticreeper. F. A. Preston. No. 1,268,996; June 11; v. 251; p. 280.

Anticreeper for rails. H. G. Gillmor. No. 1,268,958; June 11; v. 251; p. 269.

Anticreeper, tie plate, and brace, Combined rail. P. Klimack. No. 1,269,715; June 18; v. 451; p. 510.

Antiskid device for automobile-wheels. B. G. Cope. No. 1,268,931; June 11; v. 251; p. 262.

Antiskid device for tires. F. C. Poling. No. 1,270,550; June 25; v. 251; p. 764.

Antiskidding device for automobiles. M. J. Trambach. No. 1,269,921; June 18; v. 251; p. 567.

Antitoxin, Refining defibrinated-blood. M. Dorset and R. R. Henley. No. 1,270,270; June 25; v. 251; p. 685.

Apple-coring device. G. Nikolow. No. 1,268,758; June 4; v. 251; p. 194.

Arch-support, Combination. R. S. Carling. No. 1,270,003; June 18; v. 251; p. 588.

Arm-shield. B. V. Chapman. No. 1,270,697; June 25; v. 251; p. 802.

Armor, Suit of. J. C. Hawley. No. 1,269,930; June 18; v. 251; p. 569.

Atomizer. W. W. Saile and H. E. Ganiard. No. 1,269,122; June 11; v. 251; p. 315.

Auger, Post-hole. J. Scharlie. No. 1,270,556; June 25; v. 251; p. 766.

Auto lifting-jack and tire-saver. C. Eichelberger. No. 1,269,267; June 11; v. 251; p. 356.

Auto-lock. F. W. Mailloux. No. 1,268,137; June 4; v. 251; p. 19.

Auto puller and jack, Combined. E. Thompson. No. 1,268,896; June 11; v. 251; p. 252.

Auto-starter. W. O. Lum. No. 1,269,625; June 18; v. 251; p. 485.

Autographic register. J. Q. Sherman. No. 1,268,888; June 11; v. 251; p. 249.

Automatic alarm. G. E. Beach. No. 1,268,422; June 4; v. 251; p. 100.
Automatic-release coupling. T. S. Downham. No. 1,270,605; June 25; v. 251; p. 779.
Automatic switch. C. H. Bissell. No. 1,268,426; June 4; v. 251; p. 102.
Automatic switch. G. F. Hammond. No. 1,269,079; June 11; v. 251; p. 304.
Automatically-operating apparatus, Control mechanism for. H. Rowntree. No. 1,268,156; June 4; v. 251; p. 25.
Automobile attachment. C. W. Obert. No. 1,269,844; June 18; v. 251; p. 547.
Automobile-body, Convertible. W. C. Hattendorf. No. 1,269,929; June 18; v. 251; p. 569.
Automobile-body, Detachable. W. H. Wochner. No. 1,270,086; June 18; v. 251; p. 610.
Automobile-bodies, Door construction for convertible. C. Redecker. No. 1,269,307; June 11; v. 251; p. 367.
Automobile bracing attachment. R. E. O'Neil. No. 1,269,955; June 18; v. 251; p. 575.
Automobile brake attachment. F. J. Manning. No. 1,269,294; June 11; v. 251; p. 363.
Automobile-bumper. A. L. McGregor. No. 1,268,590; June 4; v. 251; p. 148.
Automobile burglar-alarm. H. A. Beall. No. 1,268,915; June 11; v. 251; p. 258.
Automobile concealed seat. C. C. Adelsperger and G. O. Stuck. No. 1,268,800; June 4; v. 251; p. 207.
Automobile control system. A. L. Parker. No. 1,268,764; June 4; v. 251; p. 196.
Automobile-cowl attachment. W. B. Ladd. No. 1,269,462; June 11; v. 251; p. 408.
Automobile crank-holder. A. J. Gwin. No. 1,270,513; June 25; v. 251; p. 754.
Automobile cranking device. S. P. Fairchild. No. 1,268,336; June 4; v. 251; p. 76.
Automobile direction-indicating signal. F. N. Moore. No. 1,269,838; June 18; v. 251; p. 545.
Automobile direction-indicator. D. C. Cook. No. 1,269,261; June 11; v. 251; p. 355.
Automobile-door ventilator. L. A. McDowell. No. 1,268,986; June 11; v. 251; p. 277.
Automobile-hood fastening and locking means. G. R. Wadsworth. No. 1,269,023; June 11; v. 251; p. 287.
Automobile-jack handle. J. C. Young. No. 1,269,359; June 11; v. 251; p. 381.
Automobile license-tag. J. B. Gathright. No. 1,269,923; June 18; v. 251; p. 567.
Automobile-lifting appliance. O. A. Victel and M. E. Porter. No. 1,270,571; June 25; v. 251; p. 770.
Automobile lifting attachment. J. C. Drew. No. 1,268,101; June 4; v. 251; p. 9.
Automobile-lock. F. J. Flack. No. 1,268,225; June 4; v. 251; p. 44.
Automobile-lock. G. Schneider. No. 1,269,318; June 11; v. 251; p. 371.
Automobile-protector. Automatic. J. J. Riley. No. 1,269,744; June 18; v. 251; p. 518.
Automobile-puller. B. O. Heuer. No. 1,268,572; June 4; v. 251; p. 143.
Automobile-puller. H. C. Benton and J. R. Vest. No. 1,270,104; June 18; v. 251; p. 615.
Automobile-radiator protector. A. Sunnen. No. 1,268,892; June 11; v. 251; p. 251.
Automobile recording apparatus. A. E. Henning. No. 1,269,217; June 11; v. 251; p. 343.
Automobile safety-lock and emergency-brake. C. F. Schmidt. No. 1,268,772; June 4; v. 251; p. 199.
Automobile-signal. W. C. and K. H. Lok. No. 1,270,633; June 25; v. 251; p. 786.
Automobile-signal. L. E. and E. L. Prescott. No. 1,269,214; June 11; v. 251; p. 342.
Automobile-signal. J. T. Weaver. No. 1,268,519; June 4; v. 251; p. 128.
Automobile-signal, Automatic. F. J. English and G. Flock. No. 1,270,714; June 25; v. 251; p. 806.
Automobile signaling device. C. J. Nissle. No. 1,270,434; June 25; v. 251; p. 731.
Automobile steering-wheel lock. R. E. Adreon. No. 1,270,088; June 18; v. 251; p. 610.
Automobile-tractor. W. and M. H. Paterson. No. 1,269,118; June 11; v. 251; p. 312.
Automobile traction-wheel attachment. C. A. Altvater. No. 1,268,417; June 4; v. 251; p. 99.
Automobile-wheel, Spring-cushioned. W. Shoellkopf. No. 1,270,445; June 25; v. 251; p. 734.
Automobile wind-shield. J. J. Hover. No. 1,269,447; June 11; v. 251; p. 404.
Automobiles, Device for manually moving. L. B. Goud. No. 1,270,724; June 25; v. 251; p. 809.
Automobiles, Folding bed for. J. E. Howard. No. 1,268,717; June 4; v. 251; p. 183.
Automobiles out of mud-holes, Device for pulling. F. Ervin. No. 1,269,268; June 11; v. 251; p. 356.
Automobiles, Sled-runner for. W. Burnip. No. 1,269,255; June 11; v. 251; p. 353.
Autotrucks and the like, Power plant for. C. J. Hogeboom. No. 1,268,119; June 4; v. 251; p. 15.
Axle-drive. H. M. Boyd. No. 1,268,208; June 4; v. 251; p. 30.
Axle-lubricating device. C. L. Quinn. No. 1,270,658; June 25; v. 251; p. 793.
Axle safety device. F. J. Hemen. No. 1,269,180; June 11; v. 251; p. 330.
Axle, Worm-drive rear. R. B. Weaver. No. 1,268,192; June 4; v. 251; p. 34.
Babbitting-fixture. A. Von Beaulieu. No. 1,269,137; June 11; v. 251; p. 319.
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Bail-guard. N. Stanger. No. 1,268,775; June 4; v. 251; p. 199.
Bait known as "plugs" or wood minnows, Artificial. W. H. Shuff. No. 1,268,635; June 4; v. 251; p. 162.
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Balloon. M. Zavarkin. No. 1,270,678; June 25; v. 251; p. 798.
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Barrels, bags, and packages, Machine for filling. A. M. Bates. No. 1,269,777; June 18; v. 251; p. 528.
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Battery cover, Storage-. E. Land. No. 1,269,096; June 11; v. 251; p. 308.
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Bearing. J. A. Wintroath. No. 1,268,907; June 11; v. 251; p. 255.
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Bearing, Roller-. F. A. Wasson. No. 1,269,235; June 11; v. 251; p. 347.
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Bearing, Thrust-. A. Kingsbury. No. 1,270,622; June 25; v. 251; p. 784.
Bearings, Method and apparatus for accurately aligning. A. A. Martell. No. 1,269,832; June 18; v. 251; p. 544.

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Bench-bracket. W. I. Kirk. No. 1,269,719; June 18; v. 251; p. 512.
Bench-stop. H. A. Gurries. No. 1,269,703; June 18; v. 251; p. 507.
Bending corrugated material. C. E. Martin. No. 1,268,745; June 4; v. 251; p. 190.
Berry-picker. T. H. Kruse. No. 1,269,091; June 11; v. 251; p. 307.
Bevel-gear generator. G. D. Sundstrand. No. 1,268,512; June 4; v. 251; p. 126.
Bevel-gearing, Changeable-speed. G. I. Gargett. No. 1,269,531; June 11; v. 251; p. 426.
Bevel-protractor, Combined. W. R. Shaver. No. 1,269,324; June 11; v. 251; p. 372.
Beverage-carbonators, Charging-fitting for. I. N. Thomas. No. 1,269,130; June 11; v. 251; p. 317.
Bicycle-lock. A. B. Burger. No. 1,270,690; June 25; v. 251; p. 801.
Bicycle-sled. F. X. Frank. No. 1,268,229; June 4; v. 251; p. 45.
Bicycles and motor-cycles, Handle-bar and universal control for. C. Lejeune-Saconney and T. Testu. No. 1,269,101; June 11; v. 251; p. 309.
Bicycles and the like, Means for propelling. C. A. Neracher. No. 1,269,558; June 11; v. 251; p. 433.
Bicycles or similar machines, Means for propelling. R. N. Burgedorff. No. 1,269,681; June 18; v. 251; p. 501.
Billiard and pool table, Collapsible. H. F. Lapp. No. 1,269,614; June 18; v. 251; p. 483.
Binder attachment. F. J. E. Bolton. No. 1,269,781; June 18; v. 251; p. 529.
Binder device. G. P. Wigginton. No. 1,270,082; June 18; v. 251; p. 609.
Binder, Loose-leaf. J. Bystrom. No. 1,270,246; June 18; v. 251; p. 653.
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Drill-bit.
Blacking device, Shoe-. W. E. Elam. (Reissue.) No. 14,484; June 11; v. 251; p. 440.
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Blind, Window-. T. H. Whetton. No. 1,268,413; June 4; v. 251; p. 98.
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Building-block. Lens-block.
Curb-block. Mud-block.
Decorative block. Paving-block.
Flashing-block.
Blood-serum, Separation of. M. Dorset and R. R. Henley. No. 1,270,271; June 25; v. 251; p. 685.
Blow-out patch. J. M. Smith. No. 1,269,124; June 11; v. 251; p. 315.
Blower, Turbine fan-. C. T. Coe. No. 1,268,095; June 4; v. 251; p. 7.
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Game-board. Plaster-board.
Ironing-board. Washboard.
Panel-board.
Boat: *See*—
Life-boat.
Boat-hulls, Siding for. L. Henley. No. 1,268,244; June 4; v. 251; p. 49.
Bobbin-stripper. A. H. Cottingham. No. 1,270,703; June 25; v. 251; p. 803.
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Steam-boiler.
Boiler. W. H. Cabell. No. 1,268,679; June 4; v. 251; p. 173.
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Boll-weevil destroyer. T. W. Young. No. 1,268,660; June 4; v. 251; p. 168.
Boll-weevil exterminator. O. V. Stubbs. No. 1,269,334; June 11; v. 251; p. 374.
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Cremorne bolt. Toggle-bolt.
Bolt and nut lock. W. B. Gasser. No. 1,269,532; June 11; v. 251; p. 426.
Bolt-operating device, Locking-. L. G. Keyes. No. 1,270,740; June 25; v. 251; p. 812.
Bolt-operating device. P. Grzech. No. 1,269,430; June 11; v. 251; p. 399.
Bolt-puller. H. F. Claypool. No. 1,269,683; June 18; v. 251; p. 501.
Bomb, Explosive. H. A. Thacker. No. 1,270,072; June 18; v. 251; p. 606.
Bomb-throwing machine. M. Velk. No. 1,268,187; June 4; v. 251; p. 32.
Book and hat holder, Combined. F. H. Ehrhardt. No. 1,268,701; June 4; v. 251; p. 178.
Book-holder, Collapsible. N. C. Guntt. No. 1,269,925; June 18; v. 251; p. 568.
Book, Loose-leaf. W. H. Edwards. No. 1,270,713; June 25; v. 251; p. 806.
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Boring polygonal holes, Tool for. J. J. S. Gallimore. No. 1,270,144; June 18; v. 251; p. 626.
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Box: *See*—
- Annealing-box.
- Cigar-box.
- Egg-box.
- Fare-box.
- Folding box.
- Locomotive driving-box.
- Match-box.
- Phonograph sound-box.
- Shipping-box.
- Sound-box.
- Terminal box.
- Toilet-box.

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- Bench-bracket.
- Curtain-bracket.
- Shade-bracket.
- Washbasin-bracket.

Brake: *See*—
- Car-brake.
- Fluid-pressure brake.

Brake. M. M. Spaulding. No. 1,268,507; June 4; v. 251; p. 124.

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Brake-head-balancing device. T. L. Burton. No. 1,269,256; June 11; v. 251; p. 353.

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Brush. W. C. Lay. No. 1,268,734; June 4; v. 251; p. 188.

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- Gas-burner.
- Liquid-fuel burner.
- Oil-burner.
- Safety-burner.

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Butter-server. B. D. Straight. No. 1,268,510; June 4; v. 251; p. 125.

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Button. A. Vogelsang. No. 1,270,467; June 25; v. 251; p. 741.

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Calculating-machine. J. C. Wahl. No. 1,270,471; June 25; v. 251; p. 741.

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Camera, Automatic film-winding. G. W. Topliff, C. Bornmann and E. C. Clark. No. 1,268,805; June 4; v. 251; p. 209.

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Car-brake mechanism. E. H. Dewson. No. 1,269,263; June 11; v. 251; p. 355.

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Car-door-operating device. C. H. Clark. No. 1,270,005; June 18; v. 251; p. 589.

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Car, Hopper-. E. D. Hillman. No. 1,268,118; June 4; v. 251; p. 14.

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Car, Railway-. B. W. Kadel and J. A. Pilcher. No. 1,268,725; June 4; v. 251; p. 185.

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Carbureter-controlling mechanism. D. D. Cates. No. 1,268,680; June 4; v. 251; p. 173.

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Card-holder. F. C. Hedrick. No. 1,270,412; June 25; v. 251; p. 725.

Cards, Playing-. D. G. Lee. No. 1,269,099; June 11; v. 251; p. 309.

Cards, Playing-. E. M. Scholz. No. 1,269,320; June 11; v. 251; p. 371.

Cards, Repeating jacquard-. F. Fischer. No. 1,268,825; June 11; v. 251; p. 232.

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Carpet-washing machine. H. F. Gray. No. 1,268,962; June 11; v. 251; p. 270.

Carriage, Tramway-. J. T. T. Ellis. No. 1,270,131; June 18; v. 251; p. 622.

Carriages, Adjustable rocker for baby-. J. C. Hill. No. 1,269,605; June 18; v. 251; p. 479.

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- Parcel-carrier.
- Woven carrier.

Carton. J. K. Farley, Jr. No. 1,269,169; June 11; v. 251; p. 327.

Cash-register. G. and M. Macbeth. No. 1,269,475; June 11; v. 251; p. 411.

Casket, Burial-. J. R. Burkhardt. No. 1,268,091; June 4; v. 251; p. 6.

Caster. H. Walter. No. 1,268,651; June 4; v. 251; p. 166.

Caster, Furniture-. A. Elwertoski. No. 1,270,390; June 25; v. 251; p. 720.

Catalogue-wrapping machine. J. D. Reifsnyder and W. A. Weightman. No. 1,269,308; June 11; v. 251; p. 367.

Catalysts, Preparation and production of. J. Dewar and A. Liebmann. No. 1,268,092; June 4; v. 251; p. 176.

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- Folding chair.
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Chuck. J. H. Rusby. No. 1,270,444; June 25; v. 251; p. 734.

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Type-writing and computing machine, Combined. G. O. Degener. No. 1,270,751; June 25; v. 251; p. 816.

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Type-writing and computing machine, Combined. W. Wright. No. 1,270,479; June 25; v. 251; p. 744.

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Valve for gas-mains, Service-tap. J. S. String. No. 1,268,511; June 4; v. 251; p. 125.

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Spring-wheel.
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Wheel-rim, Demountable. W. M. Wirth. No. 1,268,526; June 4; v. 251; p. 130.
Wheel-rim, Demountable. T. S. York. No. 1,268,798; June 4; v. 251; p. 207.
Wheel rim, Vehicle-. R. S. Bryant. No. 1,268,210; June 4; v. 251; p. 40.
Wheel rim, Vehicle-. R. S. Bryant. No. 1,268,211; June 4; v. 251; p. 40.
Wheel-tread attachment, Vehicle-. F. W. Hottenroth. No. 1,269,446; June 11; v. 251; p. 403.
Wheel tread, Tractor-. R. B. Fageol and C. A. Smith. No. 1,268,445; June 4; v. 251; p. 108.
Wheels, Traction-tread device for tractor-. H. C. Waite. No. 1,268,517; June 4; v. 251; p. 127.
Wheelbarrow-runner. M. V. Christensen. No. 1,270,495; June 25; v. 251; p. 749.
Winch for automobile-trucks, Power-. B. Faisst. No. 1,269,804; June 18; v. 251; p. 536.
Wind-shield. H. S. Neiman. No. 1,269,634; June 18; v. 251; p. 488.
Wind-shield attachment. C. V. Johnson. No. 1,270,165; June 18; v. 251; p. 632.
Wind-shield, Universal. L. T. Shettler. No. 1,268,773; June 4; v. 251; p. 199.
Winder. H. D. Colman. No. 1,268,684; June 4; v. 251; p. 174.
Winding device. G. E. King. No. 1,269,194; June 11; v. 251; p. 334.
Winding device. L. Stephens. No. 1,268,174; June 4; v. 251; p. 30.
Winding-machine. M. B. White. No. 1,268,905; June 11; v. 251; p. 254.
Winding machines, Terminal clamp for coil-. A. A. Wall. No. 1,270,077; June 18; v. 251; p. 607.
Winding-spindle, Spring-motor. P. Catucci. No. 1,270,265; June 25; v. 251; p. 684.
Windmill-controlling mechanism. J. W. Bradford. No. 1,269,900; June 18; v. 251; p. 562.
Windmills, Cut-out device for. P. M. Pennington. No. 1,270,320; June 25; v. 251; p. 700.
Window and sash therefor. O. M. Edwards. No. 1,270,607; June 25; v. 251; p. 779.
Window, Casement-. I. H. Elliott. No. 1,268,554; June 4; v. 251; p. 138.
Window-cleaner. A. Cranston. No. 1,269,395; June 11; v. 251; p. 391.
Window-cleaner. G. A. Parker. No. 1,270,197; June 18; v. 251; p. 640.
Window-cleaning device. J. R. Le Clair. No. 1,270,629; June 25; v. 251; p. 786.
Window construction. A. MacKinnon. No. 1,269,475; June 11; v. 251; p. 411.
Window-frame. C. A. Fullerton. No. 1,268,108; June 4; v. 251; p. 11.
Window frame and sash. L. Nees. No. 1,270,433; June 25; v. 251; p. 731.
Window-hanger. J. Schobert. No. 1,269,864; June 18; v. 251; p. 552.
Window or door screen. A. Whetstone. No. 1,268,653; June 4; v. 251; p. 167.
Window-screen. E. E. Pedo. No. 1,270,656; June 25; v. 251; p. 792.
Window, Storm-. G. B. Smith. No. 1,270,227; June 18; v. 251; p. 647.
Window-ventilator. O. B. Sabel. No. 1,269,314; June 11; v. 251; p. 370.
Wire-clamp. G. B. Lewis. No. 1,268,478; June 4; v. 251; p. 117.
Wire-cutter attachment. J. Danhoffer. No. 1,269,790; June 18; v. 251; p. 532.
Wire-fabric-making machine. J. W. Dwiggins. No. 1,270,129; June 18; v. 251; p. 622.
Wire-stretcher. E. C. Gilbertson. No. 1,269,072; June 11; v. 251; p. 302.
Wire-stretcher. A. S. Larson. No. 1,268,364; June 4; v. 251; p. 84.
Wire-stretching apparatus. O. W. Burnett. No. 1,269,381; June 11; v. 251; p. 388.
Wire-working tool, Power-operated. A. W. Martin. No. 1,268,139; June 4; v. 251; p. 20.
Wiring system. H. R. Sargent. No. 1,270,555; June 25; v. 251; p. 766.
Work-holder. H. Otto. No. 1,270,653; June 25; v. 251; p. 792.
Work-scheduling apparatus. G. H. Radebaugh. No. 1,268,613; June 4; v. 251; p. 155.
Woven carrier. F. R. Batchelder. No. 1,268,787; June 4; v. 251; p. 203.
Woven fabric. J. C. Brooks. No. 1,268,788; June 4; v. 251; p. 203.
Wrapping-machine. H. L. Johnson. No. 1,270,416; June 25; v. 251; p. 726.
Wrapping-machine. E. L. Smith and A. E. Phelon. No. 1,269,969; June 18; v. 251; p. 579.
Wrench: *See*—
Chain wrench.
Quick-adjusting wrench.

Wrench. H. G. Bonney. No. 1,270,484; June 25; v. 251; p. 746.
Wrench. E. H. Burnson. No. 1,270,263; June 25; v. 251; p. 683.
Wrench. O. A. Johnson. No. 1,269,188; June 11; v. 251; p. 333.
Wrench. R. B. Quinn. No. 1,270,746; June 25; v. 251; p. 815.
Wringer: *See*—
Mop-wringer.
Wrench. J. B. Bailey. No. 1,268,538; June 4; v. 251; p. 133.
Wrist-pin and bearing therefor, Adjustable. W. B. Royer. No. 1,268,282; June 4; v. 251; p. 60.
Writing implement. F. W. Kuehn. No. 1,270,035; June 18; v. 251; p. 597.
Yeast, Pressing. E. A. Meyer. No. 1,268,865; June 11; v. 251; p. 244.
Yoke, Shoulder-. E. C. Berriman. No. 1,268,084; June 4; v. 251; p. 4.

ALPHABETICAL LIST OF DESIGNS.

Article of manufacture. M. L. Russell. No. 52,118; June 18; v. 251; p. 658.
Automobile-body. S. G. Baits. No. 52,108; June 18; v. 251; p. 657.
Automobile steering-wheel. G. E. Smith. No. 52,120; June 18; v. 251; p. 659.
Bag frame, Hand-. H. Wiener. No. 52,092; June 4; v. 251; p. 216.
Book-stop or similar article. E. A. Ford, G. L. Pew, and E. J. Kelly. No. 52,072; June 4; v. 251; p. 213.
Button, badge, or emblem. C. C. Delmonico. No. 52,070; June 4; v. 251; p. 213.
Card or mounting, Display. J. L. Flannery, Jr. No. 52,071; June 4; v. 251; p. 213.
Carrier for casseroles and like containers. L. Wojidkow. No. 52,124; June 18; v. 251; p. 659.
Chair, Bent-wood. J. Silverman. No. 52,083; June 4; v. 251; p. 215.
Chandelier for a lighting-fixture. R. G. Wagner and E. J. Schweitzer. Nos. 52,088–91; June 4; v. 251; p. 216.
Crochet-ball holder. E. C. Powell. No. 52,104; June 11; v. 251; p. 444.
Electric-switch casing. R. A. Schoenberg, now by judicial change of name R. A. Belmont. No. 52,119; June 18; v. 251; p. 658.
Flag, pennant, sign, emblem, or article of a similar nature. F. Smith. No. 52,084; June 4; v. 251; p. 215.
Furniture and casket decorations and for interior and exterior decorations, Manufactured figure for. A. M. Holstein. No. 52,077; June 4; v. 251; p. 214.
Furniture and casket decorations and for interior and exterior decorations, Manufactured figure for. A. M. Holstein. No. 52,099; June 11; v. 251; p. 443.
Furniture and caskets and for interior and exterior decorations, Manufactured pediment figure for. A. M. Holstein. No. 52,075; June 4; v. 251; p. 214.
Furniture and caskets and for interior and exterior decorations, Manufactured figure for brackets for. A. M. Holstein. No. 52,076; June 4; v. 251; p. 214.
Furniture, casket, interior, or exterior decoration. A. M. Holstein. Nos. 52,096–8; June 11; v. 251; p. 443.
Furniture, caskets, and interior and exterior decorations, Border ornament for. A. M. Holstein. No. 52,074; June 4; v. 251; p. 213.
Glass bowl. M. A. Smith. No. 52,121; June 18; v. 251; p. 659.
Goblet, Ice-cream. F. M. Dunn. No. 52,094; June 11; v. 251; p. 443.
Goblet, Soda-. F. M. Dunn. No. 52,093; June 11; v. 251; p. 442.
Hat or similar article. S. Greenberg. No. 52,112; June 18; v. 251; p. 657.
Hinge, Door-. O. C. Rixson. No. 52,117; June 18; v. 251; p. 658.
Hot-water receptacle and a fountain-syringe, Convertible. T. F. Manley. No. 52,078; June 4; v. 251; p. 214.
Lamp-body. W. J. Avery. No. 52,107; June 18; v. 251; p. 656.
Lamp-casing. E. A. Hawthorne. No. 52,073; June 4; v. 251; p. 213.
Lamp-hood. N. Rosen. No. 52,080; June 4; v. 251; p. 214.
Lens. S. Marcus. No. 52,079; June 4; v. 251; p. 214.
Mirror, brush, or similar toilet article. W. S. Bechtold. No. 52,111; June 18; v. 251; p. 657.
Overalls, Pair of. T. Pisarro. No. 52,115; June 18; v. 251; p. 658.
Paper-cutter or similar article. W. Speitel. No. 52,105; June 11; v. 251; p. 444.
Phonograph-cabinet. K. F. Matthews. Nos. 52,101–3; June 11; v. 251; p. 444.
Printer's-case stand. J. E. Glagnon and O. B. Anderson. No. 52,095; June 11; v. 251; p. 443.
Register, Duplex. J. M. Triggs. No. 52,086; June 4; v. 251; p. 215.
Rope-thimble. J. B. Baxter. No. 52,110; June 18; v. 251; p. 657.
Scale casing, Computing-. J. W. Ball. No. 52,109; June 18; v. 251; p. 657.
Signal apparatus, Casing for. L. Angiulli and E. T. Montelcone. No. 52,106; June 18; v. 251; p. 656.
Soap and the like, Casing of a dispenser for grit-. E. Bruder. No. 52,060; June 4; v. 251; p. 213.
Sound-box. P. Rudert. No. 52,081; June 4; v. 251; p. 215.
Spectacles, Nose-bridge and brace-piece for. F. Willson. No. 52,123; June 18; v. 251; p. 659.
Spoon, fork, or similar article. F. Schwinn. No. 52,082; June 4; v. 251; p. 215.
Spoon, fork, or similar article, Handle for a. H. Hebbard. No. 52,113; June 18; v. 251; p. 657.
Stock-support, Adjustable. W. C. Loehrig. No. 52,100; June 11; v. 251; p. 444.
Teething device. F. Valenta. No. 52,087; June 4; v. 251; p. 216.
Thermos receptacle. J. Stein. No. 52,085; June 4; v. 251; p. 215.
Tire-casing. S. R. Vasbinder. No. 52,122; June 18; v. 251; p. 659.
Tire, Vehicle-. C. J. Hodges. No. 52,114; June 18; v. 251; p. 658.
Tire, Vehicle-. B. H. Pratt. No. 52,116; June 18; v. 251; p. 658.
Toilet preparations, Commercial container of. A. C. Blatzek. No. 52,068; June 4; v. 251; p. 212.

ALPHABETICAL LIST OF TRADE-MARKS.

Abrasive, detergent, and polishing materials, Certain named. The Big Wizard Chemical Co. No. 121,856; June 11; v. 251; p. 457.
Acid, Tungstic. Foote Mineral Co. No. 121,886; June 11; v. 251; p. 458.
Aeroplanes. A. V. Roe & Co. No. 122,103; June 25; v. 251; p. 836.
Alimentary pastes. Guano & Raggio. No. 122,022; June 18; v. 251; p. 671.
Antifreezing liquid for automobile-radiators and gas-engines. Aksala Company. No. 121,844; June 11; v. 251; p. 457.
Automobile and furniture polishes. J. M. Cramer. No. 121,874; June 11; v. 251; p. 458.
Automobile-heaters, Gas-driven. N. L. Shaten. No. 122,108; June 25; v. 251; p. 836.
Automobile-radiator sealing compound and scale-remover. Economy Scale Remover Company. No. 121,882; June 11; v. 251; p. 458.
Automobiles and motor-trucks. The Nash Motors Company. No. 122,093; June 25; v. 251; p. 836.
Bags or pockets, Sleeping-. Athol Manufacturing Company. No. 121,848; June 11; v. 251; p. 457.
Balls, Golf-. The North British Rubber Co. No. 121,935; June 11; v. 251; p. 459.
Bearings for shafting and axles. Chicago Bearings Co. No. 121,871; June 11; v. 251; p. 457.
Beef, Corned. J. Barnes. No. 121,855; June 11; v. 251; p. 457.
Beef, offal, pork, and mutton, Chilled and frozen. Swift & Company. No. 122,045; June 18; v. 251; p. 672.
Beverage sold as a soft drink, Non-alcoholic maltless. The Maclow Ale & Manufacturing Company. No. 121,915; June 11; v. 251; p. 459.
Beverage sold as a soft drink, Non-alcoholic maltless. Sher-A-Coca Bottling Company. No. 121,956; June 11; vol. 251; p. 460.
Beverages, Cereal. Schoenhofen Company. No. 122,104; June 25; v. 251; p. 836.
Beverages, Non-intoxicating cereal maltless. The Home Brewing Co. No. 121,896; June 11; v. 251; p. 458.
Bibs, Babies'. S. K. Metzendorf. No. 122,033; June 18; v. 251; p. 672.
Blankets, Printers'. J. S. Corwin. No. 122,110; June 25; v. 251; p. 836.
Boilers, Water-columns which carry the water-gage and try-cocks on steam—. The Ohio Steam Specialty Co. No. 121,936; June 11; v. 251; p. 459.
Booklets or pamphlets and circulars, Printed. The National Bank of Commerce in St. Louis. No. 122,094; June 25; v. 251; p. 836.

Books, periodicals, pamphlets, and circulars, Printed. International Brotherhood of Steam Shovel and Dredge Men. No. 122,087; June 25; v. 251; p. 836.
Boots and shoes. Slater & Morrill. No. 122,043; June 18; v. 251; p. 672.
Boots and shoes and boot and shoe soles, Leather. Holland Shoe Co. No. 122,023; June 18; v. 251; p. 671.
Boots and shoes, Leather. The Charles E. Lynch Shoe M'f'g Co. No. 121,914; June 11; v. 251; p. 459.
Brassières. Birdsey-Somers Company. No. 122,008; June 18; v. 251; p. 671.
Bread. Burney Bros. No. 122,061; June 25; v. 251; p. 835.
Brushes, Tooth-. The Owl Drug Company. No. 121,939; June 11; v. 251; p. 460.
Bunting. Stewart & Sparry. No. 122,112; June 25; v. 251; p. 836.
Butter, Creamery-. Ottawa Condensing Co. No. 122,100; June 25; v. 251; p. 836.
Buttons for wearing-apparel. M and T Button Company. No. 121,864; June 11; v. 251; p. 457.
Buttons for wearing-apparel. Stein Brothers Manufacturing Company. No. 121,964; June 11; v. 251; p. 460.
Buttons for wearing-apparel. Frank W. Whitcher Company. No. 121,990; June 11; v. 251; p. 461.
Candies. Beech-Nut Packing Co. No. 122,059; June 25; v. 251; p. 835.
Candies and chocolates. D. Auerbach & Sons. No. 122,004; June 18; v. 251; p. 671.
Candies, Chocolate. Magruder-Wood Chocolate Co. No. 122,031; June 18; v. 251; p. 672.
Candies, crackers, cookies. Johnson Biscuit Company. No. 121,904; June 11; v. 251; p. 459.
Candy known as chocolate nougat bar. Weber-Schiltz Candy Co. No. 122,049; June 18; v. 251; p. 672.
Canned and dried hulled corn. G. H. Allen. No. 122,000; June 18; v. 251; p. 671.
Canned asparagus. R. Hickmott Canning Co. Nos. 121,894–5; June 11; v. 251; p. 458.
Canned evaporated milk. G. Batcheller Hall Co. No. 122,006; June 18; v. 251; p. 671.
Canned fish. The Curtis Corporation. No. 121,877; June 11; v. 251; p. 458.
Canned fruits and berries. Sodus Packing Co. No. 122,106; June 25; v. 251; p. 836.
Canned fruits, vegetables, and salmon. Brockton Public Market. No. 122,011; June 18; v. 251; p. 671.
Canned Lima beans. Calima Canning Co. No. 121,866; June 11; v. 251; p. 457.
Canned or preserved fish. J. H. Mercian. No. 122,090; June 25; v. 251; p. 836.
Canned or preserved fish. J. H. Mercian. No. 122,092; June 25; v. 251; p. 836.
Canned or preserved fish and peppers. J. H. Mercian. No. 122,091; June 25; v. 251; p. 836.
Canned peas and sauer-kraut. Big Four Canning Company. No. 122,007; June 18; v. 251; p. 671.
Canned peppers. The Curtis Corporation. No. 122,070; June 25; v. 251; p. 835.
Canned roe or a product prepared from canned roe. Gorton-Pew Fisheries Co. Nos. 122,080–1; June 25; v. 251; pp. 835–6.
Canned sardines. I. Burger. No. 122,013; June 18; v. 251; p. 671.
Canned sardines. C. E. Van Landingham. Nos. 121,976–80; June 11; v. 251; p. 461.
Canned sardines. C. E. Van Landingham. No. 122,117; June 25; v. 251; p. 837.
Canned sardines. Neptune Sea Food Company. Nos. 121,931–3; June 11; v. 251; p. 459.
Canned sardines. Neptune Sea Food Company. No. 122,095; June 25; v. 251; p. 836.
Canned sardines. Premier Packing Co. No. 121,946; June 11; v. 251; p. 460.
Canned tomato sauce and canned olives. American Olive Company. No. 121,846; June 11; v. 251; p. 457.
Canned tomatoes with purée from trimmings. Calima Canning Co. No. 121,865; June 11; v. 251; p. 457.
Carbon-remover, Chemical. The Wallace Company. No. 121,983; June 11; v. 251; p. 461.
Casket linings and pillows. National Casket Company. No. 121,926; June 11; v. 251; p. 459.
Chalk, Billiard-. National Billiard Supply Corporation. No. 121,925; June 11; v. 251; p. 459.
Chemical composition for certain named purposes. American Roller Life Company. No. 121,845; June 11; v. 251; p. 457.
Chemicals, medicines, and pharmaceutical preparations, Certain named. Apothecaries Hall Company. No. 122,002; June 18; v. 251; p. 671.
Chemicals, medicines, and pharmaceutical preparations, Certain. New England Brewing Company. No. 121,934; June 11; v. 251; p. 459.
Chocolates. C. A. Crane. No. 121,875; June 11; v. 251; p. 458.
Chocolates, hard candies, &c. Solo Manufacturing Company. No. 122,107; June 25; v. 251; p. 836.
Cider. Interstate Products Company. No. 121,902; June 11; v. 251; p. 458.
Cleaner and polisher for automobile-bodies, &c., Surface. H. Schield. No. 121,958; June 11; v. 251; p. 460.
Cleaner, White-kid. C. A. Zoes. No. 121,999; June 11; v. 251; p. 461.
Cleaning and brightening preparation for white and colored shoes and gloves. The Radium Dye Company. No. 121,947; June 11; v. 251; p. 460.
Cleaning compound for carpets, rugs, and wash-clothes. P. C. Lamp. No. 121,911; June 11; v. 251; p. 459.
Clothing, Certain named. Toone & Wells. No. 122,047; June 18; v. 251; p. 672.
Clothing, Certain named. Utica Duxbak Corporation. No. 122,048; June 18; v. 251; p. 672.
Coating for roads, &c., Tarry. The Barrett Company. Nos. 121,852–4; June 11; v. 251; p. 457.
Coats and overcoats. M. & W. Naumburg & Co. No. 121,928; June 11; v. 251; p. 459.
Coats and suits. L. Stillman. No. 121,965; June 11; v. 251; p. 460.
Coats, overalls, work-shirts. Heidenheim Bros. No. 122,083; June 25; v. 251; p. 836.
Coats, trousers, vests, outer or over coats. Ed. V. Price & Company. No. 122,040; June 18; v. 251; p. 672.
Coffee and tea. The H. D. Lee Mercantile Co. No. 122,030; June 18; v. 251; p. 672.
Coffee substitutes. Mrs. J. Williot fils. No. 122,120; June 25; v. 251; p. 837.
Collars, Men's. Geo. P. Ide and Company. No. 122,027; June 18; v. 251; p. 671.
Coloring material for leather. Western Manufacturing Company. No. 121,987; June 11; v. 251; p. 461.
Compound for the treatment of consumption and heart trouble. S. Yasuda. No. 121,997; June 11; v. 251; p. 461.
Concrete floors, Preparations for hardening, preserving, and waterproofing. A. C. Turner. No. 121,975; June 11; v. 251; p. 461.
Concrete-forms and parts thereof. The Hydraulic Pressed Steel Company. No. 121,898; June 11; v. 251; p. 458.
Concrete-hardeners, Metallic. The National Builders Company. No. 122,034; June 18; v. 251; p. 672.
Condition-powder and worm-destroyer, Stock. H. E. Bryan. No. 121,861; June 11; v. 251; p. 457.
Cooking utensils, Aluminum kitchen. Aluminum Products Company. No. 122,052; June 25; v. 251; p. 835.
Copper, lead, zinc, gold, and silver. Phelps, Dodge & Company. No. 121,944; June 11; v. 251; p. 460.
Copper, lead, zinc, gold, and silver. Phelps, Dodge Corporation. No. 121,945; June 11; v. 251; p. 460.
Cordial. C. T. Lauber. No. 121,912; June 11; v. 251; p. 459.
Cotton piece goids. Appleton Company. Nos. 122,054–8; June 25; v. 251; p. 835.
Cotton piece goods. Pacific Mills. No. 122,101; June 25; v. 251; p. 836.
Crockery, earthenware, and porcelain, Certain named. Fulper Pottery Company. No. 121,888; June 11; v. 251; p. 458.
Cutlery, machinery, and tools, and parts thereof, Certain named. Spartan Saw Works. No. 121,962; June 11; v. 251; p. 460.
Dental, medical, and surgical appliances, Certain named. H. G. Fischer & Co. No. 121,885; June 11; v. 251; p. 458.
Dentifrice. R. H. Nelson. No. 121,929; June 11; v. 251; p. 459.
Dentifrices. Parfumerie Marceau. No. 121,941; June 11; v. 251; p. 460.
Dresses. Julius D. Booth & Son. No. 122,009; June 18; v. 251; p. 671.
Electric switches and electrical devices for causing dimming of headlights. L. F. Watson. No. 121,985; June 11; v. 251; p. 461.
Enamels. Cooper-Bell Varnish Co. No. 121,873; June 11; v. 251; p. 458.
Engines, Device for controlling fuel-supply of internal-combustion. W. H. Thomas Co. No. 121,972; June 11; v. 251; p. 461.
Engines, Internal-combustion. Nelson Bros. Co. No. 121,930; June 11; v. 251; p. 459.
Eyeglasses. T. A. Willson & Co. No. 121,994; June 11; v. 251; p. 461.
Fabric woven of worsted and woolen yarns and silk. Holden-Leonard Co. No. 122,084; June 25; v. 251; p. 836.
Fabrics, Pile. Collins & Aikman Company. No. 122,067; June 25; v. 251; p. 835.
Feed, Mixed. M. C. Peters Mill Co. No. 122,038; June 18; v. 251; p. 672.
Feed, Poultry. M. C. Peters Mill Co. No. 122,039; June 18; v. 251; p. 672.
Filter presses, frames, plates, and parts. Independent Filter Press Co. No. 121,899; June 11; v. 251; p. 458.
Fishing lines, leaders, rods, &c. The Whitney Sporting Goods Company. No. 121,993; June 11; v. 251; p. 461.
Flavoring extracts for food. Boyce Extract Co. No. 122,010; June 18; v. 251; p. 671.
Flour, Self-rising. Charles Tiedemann Milling Co. No. 122,115; June 25; v. 251; p. 837.
Flour, Self-rising wheat-. Centennial Mill Co. No. 122,065; June 25; v. 251; p. 835.
Flour, Wheat-. W. P. Tanner-Gross and Company. No. 122,046; June 18; v. 251; p. 672.
Flour, Wheat biscuit-. Ravalli Cereal & Flour Mill Company. No. 122,041; June 18; v. 251; p. 672.
Food, Balanced. Cereo Company. No. 122,066; June 25; v. 251; p. 835.

Food in the form of bread, Balanced. F. O. Marquis. No. 121,920; June 11; v. 251; p. 459.
Food, Poultry and stock. Fish Canners' By-Products Company. No. 122,019; June 18; v. 251; p. 671.
Foods, Certain named. Blatchford's Calf Meal Factory. No. 121,857; June 11; v. 251; p. 457.
Foods, Certain named. The Cudahy Packing Company. No. 122,069; June 25; v. 251; p. 835.
Foods, Certain named. Friedrich & Kempe Co. No. 122,020; June 18; v. 251; p. 671.
Foods, Certain named. Seattle Grocery Co. No. 121,955; June 11; v. 251; p. 460.
Fruit-juice extractors. Swiss Manufacturing Company. No. 121,967; June 11; v. 252; p. 460.
Fruits, Fresh citrus. Winter Park Citrus Growers Association. No. 122,050; June 18; v. 251; p. 672.
Fuels for internal-combustion engines and motors, Liquid-. True's Oil Company. No. 121,974; June 11; v. 251; p. 461.
Gasolene, kerosene, and lubricating-oil. Montana Oil Co. No. 121,922; June 11; v. 251; p. 459.
Grapes, Fresh. The California Fruit Exchange. No. 122,063; June 25; v. 251; p. 835.
Grease, Lubricating-. Oriental Oil Company. No. 121,937; June 11; v. 251; p. 459.
Hacksaws, coping, butchers', &c., saws. Victor Saw Works. No. 121,981; June 11; v. 251; p. 461.
Hair-dressing coloring. J. J. Wittwer, Sr. No. 121,996; June 11; v. 251; p. 461.
Hair-dye. Never-Tel Laboratories Company. No. 122,096; June 25; v. 251; p. 836.
Hammers and riveters, rock-drills, Pneumatic. Chicago Pneumatic Tool Co. No. 121,872; June 11; v. 251; p. 458.
Hats. Rosenwald-Wimpfheimer. No. 122,042; June 18; v. 251; p. 672.
Hats, Fur-felt. No Name Hat Manufacturing Company. No. 122,035; June 18; v. 251; p. 672.
Hemorrhages, Liquids for stopping. E. M. Knorp. No. 121,909; June 11; v. 251; p. 459.
Hogs and poultry, Live. W. P. Gerst. No. 122,079; June 25; v. 251; p. 835.
Hose, Half-. R. A. Burd. No. 122,012; June 18; v. 251; p. 671.
Hosiery. Carson, Pirie, Scott & Co. No. 122,014; June 18; v. 251; p. 671.
Hosiery. Society Maid Hosiery Co. Inc. No. 122,044; June 18; v. 251; p. 672.
Insecticides and fungicides. Interstate Chemical Co. No. 121,901; June 11; v. 251; p. 458.
Jellies and desserts, Compound used in the preparation of. James A. McAteer & Sons. No. 122,029; June 18; v. 251; p. 672.
Knitting-machines. E. Schneider. No. 121,954; June 11; v. 251; p. 460.
Lacquers, varnishes, paints. Redmanol Chemical Products Co. No. 121,949; June 11; v. 251; p. 460.
Lamps, lanterns, stoves, and heaters, Oil. Standard Oil Company of New York. No. 122,109; June 25; v. 251; p. 836.
Leather dressings, seasonings, fillers, and varnish. Inuls, Spelden & Co. No. 121,900; June 11; v. 251; p. 458.
Lime for mortar, &c. General Basic Products Company. No. 121,890; June 11; v. 251; p. 458.
Liniment and ointment. J. H. Brown. No. 121,860; June 11; v. 251; p. 457.
Liniment for rheumatism and swellings. F. W. Peterson. No. 121,943; June 11; v. 251; p. 460.
Lotion, Skin-. L. J. Heath. No. 121,893; June 11; v. 251; p. 458.
Macaroni, noodles, spaghetti, vermicelli. The American Macaroni Co. No. 122,001; June 18; v. 251; p. 671.
Macaroni, spaghetti, noodles. The Foulds Milling Company. No. 122,077; June 25; v. 251; p. 835.
Macaroni, vermicelli, noodles. The Atlanta Macaroni Co. No. 122,003; June 18; v. 251; p. 671.
Magazine or periodical monthly. Realty Publishing Co. No. 121,948; June 11; v. 251; p. 460.
Magnesium and magnesium compounds. Foote Mineral Co. No. 121,887; June 11; v. 251; p. 458.
Medicine for the treatment of nervous, anemic, rheumatic, and stomach diseases. E. Tessicini. No. 121,971; June 11; v. 251; p. 461.
Metal, Babbitt. E. C. Atkins & Company. No. 121,849; June 11; v. 251; p. 457.
Metal, Babbitt. Syracuse Smelting Works. No. 122,114; June 25; v. 251; p. 837.
Metal-working machinery, Certain named. The Defiance Machine Works. No. 121,879; June 11; v. 251; p. 458.
Metals and metal castings and forgings, Certain named. G. Barnsley & Sons. No. 121,851; June 11; v. 251; p. 457.
Milk, Evaporated. The Oatman Condensed Milk Co. No. 122,099; June 25; v. 251; p. 836.
Motor-spirits, Certain named. Tide Water Oil Company. No. 121,973; June 11; v. 251; p. 461.
Musical instruments and supplies, Certain named. L. C. Schermerhorn. No. 121,957; June 11; v. 251; p. 460.
Mustard. Meyer & Lange. No. 121,921; June 11; v. 251; p. 459.
Newspaper published daily and Sunday. Washington Times Company. No. 122,119; June 25; v. 251; p. 837.
Oil and liquid asphalt, Bituminous road-. The Barber Asphalt Paving Company. No. 121,850; June 11; v. 251; p. 457.
Oil, Edible olive-. Manuel Caragol & Son. No. 122,032; June 18; v. 251; p. 672.
Oil, Olive-. P. Pastene & Co. No. 121,942; June 11; v. 251; p. 460.
Oil product for salads and cooking, Vegetable-. The N. K. Fairbank Company. No. 122,017; June 18; v. 251; p. 671.
Oils and greases, Certain named. The White Eagle Petroleum Company. No. 121,989; June 11; v. 251; p. 461.
Oils and greases, Lubricating. The Star Oil Company. No. 121,963; June 11; v. 251; p. 460.
Oils, Lubricating-. Sinclair Refining Company. No. 121,960; June 11; v. 251; p. 460.
Oils; soluble-oil bases, sulfonated, &c., oils for lubricating purposes, Soluble. National Oil Products Co. No. 121,927; June 11; v. 251; p. 459.
Ointment for eczema. T. Slavin. No. 122,105; June 25; v. 251; p. 836.
Oleomargarin, Nut. Swift and Company. No. 121,966; June 11; v. 251; p. 460.
Ore, Mineral. J. J. Bowden, Sr. No. 121,859; June 11; v. 251; p. 457.
Packing, Metallic. J. G. Strock. No. 122,113; June 25; v. 251; p. 837.
Paint-remover. Tepper Briquette Binder, Inc. No. 121,970; June 11; v. 251; p. 461.
Paints. H. T. Reynolds. No. 121,951; June 11; v. 251; p. 460.
Paints and painters' materials, Certain named. Albert D. Howlett Company. No. 121,897; June 11; v. 251; p. 458.
Paints and painters' materials, Certain named. John T. Painter Company. No. 121,940; June 11; v. 251; p. 460.
Paints, pigments used in the manufacture of paints. The Ferro-Concrete Paint & Chemical Co. No. 121,883; June 11; v. 251; p. 458.
Palm-seed kernels, rubber, ivory, gum-copal, African Association. No. 122,051; June 25; v. 251; p. 835.
Paper, card-stock, envelops, Writing and printing. Zellerbach Paper Company. No. 121,998; June 11; v. 251; p. 461.
Paper, Coated book and magazine. West Virginia Pulp & Paper Co. No. 121,986; June 11; v. 251; p. 461.
Paper twine and cable-filling and seaming cords. Gates Paper Twine Co. No. 121,889; June 11; v. 251; p. 458.
Paper, Writing and printing. Whiting-Plover Paper Company. No. 121,992; June 11; v. 251; p. 461.
Papeteries and writing-tablets. Druggists' Supply Corporation. No. 121,881; June 11; v. 251; p. 458.
Perfumes, toilet water, face-powders. J. R. Watkins Medical Co. No. 121,984; June 11; v. 251; p. 461.
Periodicals, Monthly. Thomas A. Edison, Incorporated. No. 122,073; June 25; v. 251; p. 835.
Petticoats, Children's. E. H. Horwood & Co. No. 122,024; June 18; v. 251; p. 671.
Photographic paper. Commercial Camera Company. No. 121,876; June 11; v. 251; p. 458.
Picture machines, Motion-. Camo Corporation. No. 121,867; June 11; v. 251; p. 457.
Piston packing-rings. Vulcan Machine & Tool Company. No. 122,118; June 25; v. 251; p. 837.
Plants, flowers, &c., Food and tonic for. Geo. A. Lippincott. No. 121,913; June 11; v. 251; p. 459.
Popcorn. C. Cretors. No. 122,068; June 25; v. 251; p. 835.
Preparation for biliousness. J. H. Fribley. No. 122,078; June 25; v. 251; p. 835.
Preparation for cleaning the scalp and pressing and cleaning the hair. Mrs. M. Starnes. No. 122,111; June 25; v. 251; p. 836.
Preparation for dandruff, falling hair, and scalp diseases. L. R. Alexander. No. 121,847; June 11; v. 251; p. 457.
Preparation for rheumatism. F. & W. Chemical Co. No. 121,870; June 11; v. 251; p. 457.
Preparation for the treatment of certain named ailments and diseases. The Krew-Pina Company. No. 121,910; June 11; v. 251; p. 459.
Preparation for treatment of teeth and gums. O. C. Gilbert. No. 121,891; June 11; v. 251; p. 458.
Preparation for use in the treatment of rheumatism. A. Mountford. No. 121,923; June 11; v. 251; p. 459.
Preparations for treating certain named diseases. Boericke & Tafel. No. 121,885; June 11; v. 251; p. 457.
Propellers, Aeroplane-. Flotterp Manufacturing Company. No. 122,074; June 25; v. 251; p. 835.
Prunes, dried fruits, raisins, pitted plums. Castle Brothers. No. 122,015; June 18; v. 251; p. 671.
Remedy for corns and bunions, liver-pills, &c. Keyser Chemical Company. No. 121,908; June 11; v. 251; p. 459.
Remedies for treating certain named diseases, Proprietary. C. O. Filkins. No. 121,884; June 11; v. 251; p. 458.
Rubber and fabric boots and shoes. Converse Rubber Shoe Co. No. 122,016; June 18; v. 251; p. 671.
Rubber hose and belting and asbestos packing. Dominion Asbestos and Rubber Corporation. No. 122,072; June 25; v. 251; p. 835.
Rubber-preserving compound. The Save-O Co. No. 121,953; June 11; v. 251; p. 460.

Rubber soles for boots and shoes. O'Sullivan Rubber Company. No. 122,037; June 18; v. 251; p. 672.
Salad-dressing. R. H. Macy & Company. No. 121,916; June 11; v. 251; p. 459.
Salt. Independent Salt Co. No. 122,086; June 25; v. 251; p. 836.
Salves and ointments. P. Nielsen. No. 122,098; June 25; v. 251; p. 836.
Sauces. Johnsen & Kildal. No. 122,028; June 18; v. 251; p. 672.
Scarfs and neckties, Men's. E. Oppenheimer. No. 122,036; June 18; v. 251; p. 672.
Search-lights, Electric. Williams Manufacturing Company. No. 121,991; June 11; v. 251; p. 461.
Seeds, Clover, grass, &c. D. C. Smith. No. 121,961; June 11; v. 251; p. 460.
Shade-cloths of sized and oil-painted fabrics. Interstate Shade Cloth Co. No. 122,085; June 25; v. 251; p. 836.
Sheet-metal products, Certain named. Wheeling Ceiling & Roofing Co. No. 121,988; June 11; v. 251; p. 461.
Sheeting, Unbleached. Baltimore Bargain House. No. 122,005; June 18; v. 251; p. 671.
Shirts, overalls, textile jackets and jumpers. John E. Hurst & Company. No. 122,025; June 18; v. 251; p. 671.
Shovels, Electric. The Marion Steam Shovel Co. No. 121,917; June 11; v. 251; p. 459.
Soap, Hand-. The Reynolds Corporation. No. 121,950; June 11; v. 251; p. 460.
Soap, Medicated. A. Marr. No. 121,919; June 11; v. 251; p. 459.
Soles and heels, Composition. The Federal Rubber Company. No. 122,018; June 18; v. 251; p. 671.
Sorghum and corn-syrup compound. New Orleans Coffee Co. No. 122,097; June 25; v. 251; p. 836.
Spinning-spindles. Chapman Manufacturing Company. No. 121,869; June 11; v. 251; p. 457.
Steel, Tool-. Halcomb Steel Company. No. 121,892; June 11; v. 251; p. 458.
Steel, Tool-. Tennessee Coal, Iron & Railroad Co. No. 121,968; June 11; v. 251; p. 460.
Stucco composition. The Rocbond Company. No. 121,952; June 11; v. 251; p. 460.
Suits, overcoats, rain-coats, and trousers, Men's. Samuel W. Peck & Co., No. 122,026; June 18; v. 251; p. 671.
Sweetmeat-butter. Gordon, Wolf, Cowen Co. No. 122,021; June 18; v. 251; p. 671.
Swings, Lawn-. S. A. Douglass. No. 121,880; June 11; v. 251; p. 458.
Syrup for a non-intoxicating fruit beverage. W. Sheinker & Son. No. 121,959; June 11; v. 251; p. 460.
Tablets, composition-books, &c., Writing-. Osborn Paper Company. No. 121,938; June 11; v. 251; p. 460.
Tablets, Foot and bath. B. B. Forquer. No. 122,076; June 25; v. 251; p. 835.
Tablets, Headache-. D. H. Meloche. No. 122,089; June 25; v. 251; p. 836.
Tea. C. de Cordova. No. 121,878; June 11; v. 251; p. 458.
Tea. S. Kato. Nos. 121,906–7; June 11; v. 251; p. 459.
Tea-plant extracts, Paraguayan-. J. F. Macadam & Co. No. 122,088; June 25; v. 251; p. 836.
Thread and yarn, Cotton sewing-. M. Brodsky & Co. No. 122,060; June 25; v. 251; p. 835.
Tires, Automobile-. Carlisle Cord Tire Company. No. 122,064; June 25; v. 251; p. 835.
Tires, Inner tubes for rubber. Butler Brothers. No. 122,062; June 25; v. 251; p. 835.
Tonic, Fever-. J. Green. No. 122,082; June 25; v. 251; p. 836.
Tonics, Antimalarial and general. Wintersmith Chemical Co. No. 121,995; June 11; v. 251; p. 461.
Traps, Animal-. C. B. Trumble. No. 122,116; June 25; v. 251; p. 837.
Trucks, Industrial motor-. Karry-Lode Industrial Truck Co. No. 121,905; June 11; v. 251; p. 459.
Tubes, Steel. The Elyria Iron and Steel Company. No. 122,075; June 25; v. 251; p. 835.
Turpentine for paints and varnishes, Solvent. Busch & Jolles. No. 121,862; June 11; v. 251; p. 457.
Turpentine spirits. Busch & Jolles. No. 121,863; June 11; v. 251; p. 457.
Underwaists. I. B. Johnson. No. 121,903; June 11; v. 251; p. 458.
Varnish. John W. Masury & Son. No. 121,918; June 11; v. 251; p. 459.
Varnishes, enamels, and varnish-stains. Murphy Varnish Company. No. 121,924; June 11; v. 251; p. 459.
Wheels, Load-carrying. Detroit Pressed Steel Company. No. 122,071; June 26; v. 251; p. 835.
Wire, Steel. C. Tennant Sons & Co. of New York. No. 121,969; June 11; v. 251; p. 460.
Wood-preserver. American Tar Products Company. No. 122,053; June 25; v. 251; p. 835.
Wood-preservatives. Carbolineum Wood Preserving Company. No. 121,868; June 11; v. 251; p. 457.
Wrenches. Walden-Worcester. No. 121,982; June 11; v. 251; p. 461.
Yarns, Embroidery-. F. F. Pels Co. No. 122,102; June 25; v. 251; p. 836.
Yeast. E. J. Agnew. No. 121,843; June 11; v. 251; p. 457.

ALPHABETICAL LIST OF LABELS.

"Aromints Cinos." (For Mint Candy.) The Aromint Manufacturing Company. No. 20,658; June 18; v. 251; p. 673.
"Aromints Licorice." (For Mint Candy.) The Aromint Manufacturing Company. No. 20,657; June 18; v. 251; p. 673.
"Arrow—'It Hits the Spot.'" (For a Non-Intoxicating Cereal Beverage.) Kamm & Schellinger Co. No. 20,676; June 18; v. 251; p. 673.
"B-Fluffy." (For a Pharmaceutical Preparation.) Re-Juvenating Co. No. 20,687; June 18; v. 251; p. 673.
"B-Slym." (For a Pharmaceutical Preparation.) Re-Juvenating Co. No. 20,685; June 18; v. 251; p. 673.
"B-Young." (For a Pharmaceutical Preparation.) Re-Juvenating Co. No. 20,689; June 18; v. 251; p. 673.
"Best Buttons for Soft or Stiff Cuffs." (For Pads for Displaying Buttons.) The Baer and Wilde Co. No. 20,659; June 18; v. 251; p. 673.
"Bonnie-B-Buttons." (For Buttons.) Silverberg Import Co. No. 20,692; June 18; v. 251; p. 673.
"Boston, 1915." (For Cake and Pastry Flour.) Potter & Wrightington. No. 20,684; June 18; v. 251; p. 673.
"Buena Vista." (For Canned Peaches.) Vanomar Producers. No. 20,704; June 18; v. 251; p. 674.
"California Fig Nuts, De Luxe." (For a Food Compound.) California Fig-Nut Co. No. 20,663; June 18; v. 251; p. 673.
"Casa Blanca." (For Canned Peaches.) Vanomar Producers. No. 20,701; June 18; v. 251; p. 674.
"Centennial." (For Flour.) Centennial Mill Co. No. 20,665; June 18; v. 251; p. 673.
"Chardeau." (For Wine.) The Chardeau Company. No. 20,666; June 18; v. 251; p. 673.
"Coronado." (For Canned Peaches.) Vanomar Producers. No. 20,702; June 18; v. 251; p. 674.
"Cove." (For Canned Sardines.) Van Camp Sea Food Co. No. 20,705; June 18; v. 251; p. 674.
"Eggo. A Pure Rice, Corn, Milk and Egg Product." (For a Substitute for Eggs.) T. J. Bryson. No. 20,661; June 18; v. 251; p. 673.
"El Moro." (For Canned Peaches.) Vanomar Producers. No. 20,698; June 18; v. 251; p. 674.
"Golden Brown." (For Health-Bread.) W. N. Crenshaw. No. 20,669; June 18; v. 251; p. 673.
"Jim Dandy." (For Lemons.) J. D. Spennetta. No. 20,694; June 18; v. 251; p. 673.
"Jim Dandy." (For Oranges.) J. D. Spennetta. No. 20,695; June 18; v. 251; p. 673.
"Jolly Traveler." (For Candies.) Honolulu Cracker Co. No. 20,675; June 18; v. 251; p. 673.
"Klondike Gold." (For Wheat-Flour.) Centennial Mill Company. No. 20,664; June 18; v. 251; p. 673.
"La Canada." (For Canned Apricots.) Vanomar Producers. No. 20,703; June 18; v. 251; p. 674.
"Liberty Bread." (For Bread.) The Hammerschlag Manufacturing Company. No. 20,673; June 18; v. 251; p. 673.
"Lovelee." (For Hair-Nets.) S. Glenby, Inc. No. 20,672; June 18; v. 251; p. 673.
"Loyalty." (For Condensed Milk.) Middle States Condensed Milk Corp. No. 20,678; June 18; v. 251; p. 673.
"Manhattan." (For Cocoa.) Manhattan Baking Powder Co. No. 20,677; June 18; v. 251; p. 673.
"Marian." (For Canned Peaches.) Vanomar Producers. No. 20,699; June 18; v. 251; p. 674.
"Miller Standard." (For Cartons Containing Hot-Water Bottles.) The Miller Rubber Co. No. 20,679; June 18; v. 251; p. 673.
"Morning Glow Creme." (For Facial Cream.) C. Reeves. No. 20,691; June 18; v. 251; p. 674.
"Packard Bright-O." (For Shoe and Leather Dressings.) Packard Dressing Co. No. 20,680; June 18; v. 251; p. 673.
"Packard Clean-O." (For Shoe and Leather Dressing.) Packard Dressing Co. No. 20,683; June 18; v. 251; p. 673.
"Packard Cream-O." (For Shoe and Leather Dressings.) Packard Dressing Co. No. 20,682; June 18; v. 251; p. 673.
"Packard Glycerine." (For a Shoe-Dressing.) Packard Dressing Co. No. 20,681; June 18; v. 251; p. 673.
"Pulvoids, No. 373 Natrium Compound High Tension, Dr. M. C. Thrush." (For Pulvoids Representing a Compound of Potassium Nitrate, Sodium Nitrate, Sodium Bicarbonate, Nitroglycerin, Fluid Extract Crataegus Oxyacantha.) The Drug Products. Co. No. 20,670; June 18; v. 251; p. 673.
"Re-Juvenating Cold Cream." (For a Pharmaceutical Preparation.) Re-Juvenating Co. No. 20,688; June 18; v. 251; p. 673.
"Re-Juvenating Tissue Cream." (For a Pharmaceutical Preparation.) Re-Juvenating Co. No. 20,690; June 18; v. 251; p. 673.

"Red Ribbon." (For String-Beans.) William Cluff Company. No. 20,668; June 18; v. 251; p. 673.
"Rex Liquid Cement." (For a Liquid Cement.) The Rex Specialty Co. No. 20,671; June 18; v. 251; p. 673.
"Rodondo." (For Canned Peaches.) Vanomar Producers. No. 20,700; June 18; v. 251; p. 674.
"Salvo." (For a Non-Intoxicating Beverage.) The Chicago Consolidated Brewing & Malting Co. No. 20,667; June 18; v. 251; p. 673.
"Salvus Dental Cream." (For Dental Cream.) B. E. Turney. No. 20,697; June 18; v. 251; p. 673.
"Saxon." (For Apple Cider.) G. Blaufuss. No. 20,660; June 18; v. 251; p. 673.
"Sprynq-Dew." (For a Pharmaceutical Preparation.) Re-Juvenating Co. No. 20,686; June 18; v. 251; p. 673.
"Sunset." (For Canned Sardines.) Southern California Fish Co. No. 20,693; June 18; v. 251; p. 673.
"Super Six." (For Electric Batteries.) Burgess Battery Company. No. 20,662; June 18; v. 251; p. 673.
"Uta-Fruta Berriju." (For Fruit Beverage.) Hewlett-Wilson Beverage Co. No. 20,674; June 18; v. 251; p. 673.
"Walker's Red Hot Chile Con Carne." (For Chilli-Con-Carne.) Walker Properties Association. No. 20,707; June 18; v. 251; p. 674.
"Walker's Red Hot Tamales." (For Tamales.) Walker Properties Association. No. 20,706; June 18; v. 251; p. 674.
"Xtragood." (For Canned Salmon.) Straits Packing Co. No. 20,696; June 18; v. 251; p. 673.

PRINTS.

"Bronchal-Ease." (For Bronchal-Ease.) The Bronchal-Ease Company. No. 4,900; June 18; v. 251; p. 674.
"Gates Half Sole Tires." (For Tires.) The International Rubber Company. No. 4,907; June 18; v. 251; p. 674.
"Hays Superseam Gloves." (For Leather Gloves.) The Daniel Hays Company. No. 4,902; June 18; v. 251; p. 674.
"Home." (For Food Products.) Griggs, Cooper & Company. No. 4,904; June 18; v. 251; p. 674.
"Icy Hot Eskimo Boy." (For Heat-Insulated Bottles and Carafes.) The Icy Hot Bottle Company. No. 4,906; June 18; v. 251; p. 674.
"Icy Hot Soldier Boy." (For Heat-Insulated Bottles and Carafes.) The Icy Hot Bottle Company. No. 4,905; June 18; v. 251; p. 674.
"P. A. is such a peach of a pal." (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 4,910; June 18; v. 251; p. 674.
"Packing in P. A. Smokejoy Every Little Old Now-and-Again!" (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 4,908; June 18; v. 251; p. 674.
"The Mineral Wax Twins, 'Clean' and 'Good'." (For Carbon-Paper and Type-Writer Ribbons.) The Columbia Carbon Company. No. 4,901; June 18; v. 251; p. 674.
"W. L. Douglas was frequently required to haul leather and other materials in a wheelbarrow." (For Shoes.) W. L. Douglas Shoe Co. No. 4,903; June 18; v. 251; p. 674.
"You're smoke-set for keeps when you pick P. A. for your pet pal." (For Smoking-Tobacco.) R. J. Reynolds Tobacco Company. No. 4,909; June 18; v. 251; p. 674.

DISCLAIMER.

Folding and plaiting machine. E. J. Granger. No. 1,260,766; date of patent Mar. 26, 1918; disclaimer filed June 24, 1918; v. 251; p. 466.

CLASSIFICATION OF PATENTS

JUNE, 1918.

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1— 4: 1,268,355
6: 1,269,544
18: 1,268,357
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2— 9: 1,268,516
11: 1,269,372
1,270,376
1,270,413
34: 1,269,125
41: 1,269,251
1,269,986
60: 1,270,704
61: 1,269,036
67: 1,270,067
1,270,673
69: 1,270,168
73: 1,269,990
74: 1,269,030
79: 1,270,600
82: 1,270,645
84: 1,268,338
94: 1,269,805
104: 1,268,103
1,270,697
106: 1,269,594
108: 1,268,977
118: 1,268,514
130: 1,269,929
143: 1,270,190
144: 1,269,915
145: 1,268,560
149: 1,269,498
1,270,139
1,270,640
151: 1,268,499
190: 1,270,031
3— 7: 1,268,642
12: 1,268,516
13: 1,268,885
4— 5: 1,269,163
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17: 1,270,211
21: 1,268,534
27: 1,270,730
30: 1,269,088
32: 1,270,075
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44: 1,270,136
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